## A Reference Grammar of Puyuma,

# an Austronesian Language of Taiwan 

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## Declaration

Except where otherwise acknowledged in the text, this thesis represents the original research of the author.

Stacy Fang-ching Teng

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#### Abstract

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. The definiteness of the undergoer is an important factor in determining the manifestation of voice in independent clauses. Actor voice clauses are intransitive and are marked no differently from other intransitives, but they have a patient in oblique case. Undergoer voice clauses are always transitive, and the actor is obligatorily marked on verb as genitive pronominal proclitic, but the actor NP with which it agrees (if any) is marked as oblique. Thus Puyuma can be said to have an ergative syntactic organisation in independent clauses. However, complex constructions display accusative properties. Undergoer voice has three variants, transitive 1 (TR1), transitive 2 (TR2), transitive 3 (TR3), according to the semantic role of the undergoer. These correspond to the Patient Voice (PV), Locative Voice (LV), Instrumental/Beneficiary (Conveyance) Voice (I/BV or CV) of conventional Philippinist terminology.

This thesis consists of sixteen chapters. Chapter 1 introduces the language and gives a brief review of the previous studies regarding this language. Chapter 2 describes the phonetics and phonology. Chapter 3 deals with the morphological units and various word formation processes. An overview of Puyuma lexical categories is given in Chapter 4. Chapter 5 analyses Puyuma noun phrase structure. Chapter 6 describes verbal categories, including voice, aspect and mood, and treats morphological classes of intransitive verbs. Chapter 7 deals with transcategorial operations, including verbalisation and nominalisation. Chapter 8 examines the transitivity and argument structure of Puyuma verbal clauses. Re-encoding of


arguments is dealt with in Chapter 9. Chapter 10 provides a discussion of Puyuma clause types. Negative constructions are described in Chapter 11. Chapter 12 treats non-declarative clause types, including imperatives, interrogatives and hortatives. Chapter 13 deals with serial verb constructions. Chapter 14 describes complement clauses and Chapter 15 adverbial clauses. Finally, coordinate constructions are treated in Chapter 16.

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## 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 |
| COMP | complementiser | PASS | passive |
| COP | copular | PERF | perfective |
| CV | conveyance voice | PJ | projective |
| DF | definite | PL | plural |
| DIST | distributive | POSS | possessive |
| DUR | durative | PR | plurality of relations |
| ECL | exclusive | PROG | progressive |
| FREQ | frequentative | PRS | personal |
| GEN | genitive | PSR | possessor |
| ID | indefinite | PV | patient voice |
| IMP | imperative | RECIP | reciprocal |
| IMPF | imperfective | RED | reduplication |
| ICL | inclusive | SG | singular |
| IRR | irrealis | SUP | superlative |
| ITR | intransitive | TOP | topic |
| LK | linker | TR | transitive |
| LOC | locative | VCT | vocative |

## CHAPTIER 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 the terms like "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 still 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.

According to the informants, the word puyuma means "unity, concord", ${ }^{2}$ and was originally the autonym of the Nanwang speech community of Taitung City whose dialect is described in this thesis. 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 January 2006, the total population of Puyuma is $9197 .^{3}$ 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, ${ }^{4}$ they dominated eastern Taiwan during the period when the Chin Dynasty and then Japan ruled Taiwan in the $19^{\text {th }}$ century.

According to Cauquelin (1991b:17), around 1985, the Nanwang dialect was spoken by 1475 persons. Although the ethnic Puyuma population has increased

[^0]according to the statistics, ${ }^{5}$ the number of Puyuma speakers has probably now fallen to less than 1000 .


Map 1: The distributions of Formosan languages (from Gordon 2005) ${ }^{6}$

[^1]Traditionally the Puyuma are said to consist of eight villages, known as pa-fan-sher ("eight aboriginal villages") in Chinese. They are Puyuma (Nanwang), Katipul, Rikavung, Tamalakaw, Kasavakan, Pinaski, Alipai and Ulivelivek. Their locations are shown in Map 2.


Map 2: The location of Puyuma villages (Cauquelin 2004:35) ${ }^{7}$

### 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

[^2]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. And 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 $18^{\text {th }}$ and $19^{\text {th }}$ 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 a different obligation and training at each phase of his life. Boys entered the Takuban "boys' meeting house" at the age of twelve or thirteen and remained there until eighteen or nineteen. The Takuban was divided into six grades, and a boy might be held back from advancing if he was a poor learner. The Takuban was like a training centre, and traditionally, the Puyuma boys had to learn how to build such a house, and then built their own Takuban. The seniority system ${ }^{8}$ was practiced in the Takuban. During this time, 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 Takuban, the young men had to go through another three years of ascetic life in the Palakuan "young men's meeting house". They only had one meal a day, and they wore only a short skirt all year round. They were not allowed to talk to women, and they 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 Takuban and Palakuan standing in the villages, nowadays they mainly serve as tourist attractions.

[^3]
### 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 as follows:


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 $/ \mathrm{b} / \mathrm{I} / \mathrm{d} /$, $/ \mathrm{d} /$ and $/ \mathrm{g} /$ have become fricatives (for example, $/ \mathrm{b} / \rightarrow / \mathrm{v} /$ in Rikavung, Kasavakan, and Katipul; $/ \mathrm{b} / \rightarrow / \beta /$ in Pinaski and Ulivelivek; /d/ $\rightarrow / \mathrm{d} /$, / $\mathrm{d} / \rightarrow / \mathrm{z} /$ and $/ \mathrm{g} / \rightarrow / \mathrm{h} /$ 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 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. The elders communicate with the younger generations most often in Mandarin, ${ }^{9}$ even though their 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.

[^4]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 new 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 ${ }^{10}$ on writing systems in 2003, 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 thesis

[^5]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.

### 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 a 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), 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.

Recently 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 based on three innovations, shown in grey.

### 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

[^6]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), <br> Pinaski, Ulivelivek, <br> Kasavakan, Rikavung, <br> Katipul | Reconstruction of <br> Proto-Puyuma phonetic <br> 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 respectively the number systems and construction markers of the Katipul dialect. Ting (1978) is a historical paper (see above) which reconstructs
the phonological system of Proto-Puyuma based on six 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, he 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 in 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, §10.4.2.1, and §12.3.1.2). Teng (1997) is a Master's thesis on complex sentences. Both theses are based on elicited data, and 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 9 pages) to the grammar of the Nanwang dialect. Teng (2005) is a short paper on the 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.

[^7]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 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.

After I collected text data from different informants and 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 co-occurrence 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 thesis 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 age and sex:

| Chen, De-fu | 1920 | Male |
| :--- | :--- | :--- |
| Chen, Guang-rueng (TakamuLi) | 1938 | Female |
| 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 |

## CHAPATER 2

## $\mathcal{P H O N E T I C S} \mathcal{A} \mathcal{N D} \mathcal{P H} O \mathcal{N O L O G}$ y

### 2.1 An overview of the 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 the syllable structure is given in Figure 2.1. In the figure, $[\sigma]$ 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 / $\mathrm{t} /$, / $\mathrm{d} /$, and /l/ are written as $T, D$, and $L, / \mathrm{y} /$ is written as $n g$, and $/ / /$ is written as ' in the rest of the grammar. ${ }^{1}$

Table 2.1: Consonant Phonemes

|  | bilabial | alveolar | palatal | velar | glottal |
| :--- | :---: | :---: | :---: | :---: | :---: |
| voiceless stops | p | t |  | k | $\mathrm{P}\left(^{\prime}\right)$ |
| voiced stops | b | d |  | g |  |
| voiceless retroflex stop |  | $\mathrm{t}(T)$ |  |  |  |
| voiced retroflex stop |  | $\mathrm{d}(\mathrm{D})$ |  |  |  |
| nasals | m | n |  | $\mathrm{y}(\mathrm{ng})$ |  |
| voiceless fricative |  | s |  |  |  |
| lateral |  | 1 |  |  |  |
| retroflex lateral |  | $\mathrm{l}(\mathrm{L})$ |  |  |  |
| trill |  | r |  |  |  |
| glides | w |  | $\mathrm{j}(y)$ |  |  |

### 2.2.1.1 Stops

There are nine stop phonemes in the Nanwang dialect. While the voiced stops $/ \mathrm{b} / \mathrm{/} / \mathrm{d} /, / \mathrm{g} /$, and / d/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. Also the voiceless retroflex

[^8]stop /t/ is unique among the Formosan languages; except for the neighbouring Tanan Rukai ${ }^{2}$ (which borrowed it from Puyuma) it only occurs in Puyuma. Examples of stops occurring as onset and as coda are given below:

## onset

b baLi "wind", Labeni "salty"
d deru"to cook", idang "blade"
g garem "now", sugay "to push aside"
D Denan "mountain", 'iDang "old"
p pulang " to help", Tepa "to focus"
t tukuD "to support", atel "to drop"
k kuatis "bad", TekeL "to drink"
T Tau "human being", maTangis "to cry" 'ak'ak "crow", $s a$ 'aD "branch"
coda
areb "to leak"
ngaLad "name"
muTerag "to sprinkle"
$t u L u D$ "to hand over"
seLap "to sweep", ngapngap "lick"
apit "to arrange", rutrutan "nipple"
aLak "to take", tiktik "hammer
asaT"high", guTguT"scratch"
$T a ' T a$ ' "lock"

### 2.2.1.2 Nasals

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

## onset

m manay "what, who", rami "root"
n ninik"knife", enay "water"
ng ngisngis"beard", LangiT"sky"

## coda

```
ayam "bird",amTeg "stable"
``` denun "summer" pilang "to lead", sangli "snail"

\footnotetext{
\({ }^{2}\) The information is from Elizabeth Zeitoun (pers. comm.).
}

\subsection*{2.2.1.3 Fricative}

The only fricative in the Nanwang dialect, /s/, is a voiceless alveolar fricative, and it is palatalised as [S] before the high vowel \(/ \mathrm{i} /\) and \(/ \mathrm{u} /\) and realised as [s] elsewhere. For example:
```

/siri/ "goat" }->\mathrm{ [{iri]
/susu/ "breast" }->\mathrm{ [Jufu]
/sagar/ "like" }->\mathrm{ [sagar]

```

\section*{onset}

S
supeng "to kiss", asal "again"

\section*{coda}
takis "to hack", mesmes"to knead"

\subsection*{2.2.1.4 Laterals and trill}

There are three liquids in Puyuma; two laterals (/l/ and /l/) and a trill (/r/). Li (1991) reports that there is no clear [1] in Puyuma dialects; instead it is a fricative lateral [ 5\(]\). He also mentions that the fricative property of [5] 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.

\section*{onset}

1
laman "sympathy", wali "teeth"

Lutung "monkey", buLay "beautiful"
redek "to arrive", deru" "to cook" takar "a stand", birbir "lips"

\subsection*{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 neucleus is a schwa.
\begin{tabular}{lll} 
onset & coda \\
w & wari "day, kawang "to walk" & daw "why" \\
y yuyu "you", ulaya "exist" & apuy "fire"
\end{tabular}

A number of words which I originally thought contained \(/ \mathrm{j} /\) or \(/ \mathrm{w} /\) were later found to contain an underlying \(/ \mathrm{i} / \mathrm{or} / \mathrm{u} /\). 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:

\section*{Glide insertion}
(Obligatory)
mi-alup \(\rightarrow\)
ki-umal \(\rightarrow\)
mu-a-timuL \(\rightarrow\)

High vowel deletion
(Optional)
\begin{tabular}{lll} 
[mijalup] & \(\rightarrow\) & [mjalup] \\
[kijumal] & \(\rightarrow\) & [kjumal] \\
[muwatimul] & \(\rightarrow\) & [mwatimul]
\end{tabular}

Glide insertion is also discussed in §2.5.3.1.

\subsection*{2.2.1.6 Minimal pairs for consonant phonemes}
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{7}{*}{/b/ vs} & /p/ & bu'ut pu'ut & \begin{tabular}{l}
"to stop" \\
"wart"
\end{tabular} \\
\hline & /L/ & abak & "to contain" \\
\hline & & aLak & "to take" \\
\hline & /ng/ & baLad & "to spread" \\
\hline & & ngaLad & "name" \\
\hline & /w/ & bali & "shadow" \\
\hline & & wali & "teeth" \\
\hline \multirow[t]{2}{*}{/p/ vs} & /g/ & supay & "grindstone" \\
\hline & & sugay & "to push aside" \\
\hline
\end{tabular}


\begin{tabular}{|c|c|c|c|}
\hline & & iris & "a crest" \\
\hline & /y/ & iLang & "to grind with a grindstone" \\
\hline & & iLay & "reed" \\
\hline & vs /L/ & Tukul & "to carry on the back" \\
\hline & & TukuL & "to pluck off (grasses)" \\
\hline & /r/ & Demiyal & "to cough" \\
\hline & & Demiyar & "to shine" \\
\hline & /s/ & takil & "a small cup" \\
\hline & & takis & "to slash" \\
\hline & /y/ & dawal & "to inform" \\
\hline & & daway & "to produce" \\
\hline /L/ & vs /k/ & \(t u \mathbf{L} u D\) & "to hand over" \\
\hline & & \(t u \boldsymbol{k} u \mathrm{D}\) & "to support" \\
\hline & /1/ & bulu' & "to throw" \\
\hline & & \(b u \mathbf{L} u^{\prime}\) & "a kind of bamboo" \\
\hline & /s/ & pabekaL & "to make new" \\
\hline & & pabekas & "to run" \\
\hline /r/ & vs I \(/ 1\) & dudur & "the bone of a lower leg" \\
\hline & & dudu' & "coconut" \\
\hline & /y/ & \(b a^{\prime}{ }^{\text {ar }}\) & "a roundworm" \\
\hline & & \(b a ' a y\) & "kudzu vine" \\
\hline /s/ & vs /y/ & beras & "rice" \\
\hline & & beray & "to give" \\
\hline /y/ & vs / w/ & kubay & "legumes" \\
\hline & & kubaw & "a warehouse" \\
\hline
\end{tabular}

The glottal stop does not play a role in differentiating meaning (because there is no minimal pair contrasting / \(\mathrm{P} /\) and zero), and it is sometimes missing from the speech of some speakers in younger generations. \({ }^{3}\) But for older speakers there are subminimal pairs in which sequences with and without glottal stop are in contrast. Thus 'erab 'to burp' has initial /'/, but ekan 'to eat' does not. Intervocalically bu'aw 'beans' has medial /'/ 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 Lita' 'mud' has a final glottal stop, but ama 'father' does not. I still consider it as a phoneme, for morphophonemic reasons.

In Puyuma, there are five intransitive/actor voice affixes, \({ }^{4}\) and three of them \(<e m\rangle,\langle e n\rangle\), and \(m\) - are allomorphs (§2.6.1). The contexts for their distribution can be stated as follows:
\[
\begin{aligned}
& <e m>\rightarrow m-/ \ldots[\text {-consonantal }] \\
& <e m>\rightarrow m e-/ \ldots[+ \text { sonorant }] \\
& <e m>\rightarrow<e m>/ \text { elsewhere }^{5}
\end{aligned}
\]

Thus, if the verb begins with a glottal stop and we did not consider the glottal stop as 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 '<em>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, reTa'-aw would be pronounced wrongly as *reTa-yaw because of the glide insertion rule (§2.5.3.1). More examples are given in Table 2.2.

\footnotetext{
\({ }^{3}\) 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 \(\S 4.2\), 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 (<em>, me- or \(m\)-) or a perfective marker (<in>, ni-, or in-).
}

Table 2.2: The interaction of the glottal stop and affixation
\begin{tabular}{|c|c|}
\hline Intransitive/actor voice affixation & Transitive/undergoer voice affixation \\
\hline \[
\begin{array}{r}
\text { 'erab" "to burp" } \rightarrow \text { ' }<e m>e r a b \\
\\
\left({ }^{*} m \text {-erab }\right)
\end{array}
\] & \(r e T a\) ' "to give up" \(\rightarrow\) reTa'-aw (*reTa-aw) \\
\hline \[
\begin{aligned}
\text { 'etim "to stew" } \rightarrow & \text { '<em>etim } \\
& \left({ }^{*} m \text {-etim }\right)
\end{aligned}
\] & \begin{tabular}{l}
padeLu' "lower the price" \(\rightarrow\) padeLu'-aw \\
(*padeLu-aw)
\end{tabular} \\
\hline Compare: & Compare: \\
\hline ekan "to eat" \(\rightarrow\) m-ekan & tama "to spit" \(\rightarrow\) tama-ay \\
\hline \(a L a k\) "to take" \(\rightarrow\) m-aLak & Tepa "to focus" \(\rightarrow\) Tepa-aw \\
\hline
\end{tabular}

There is also circumstantial evidence for the glottal stop phoneme. Historical-comparatively speaking, the glottal stop in Nanwang dialect systematically corresponds to /h/ or /б/ in cognates in other dialects (Li 1991; Ting 1978). For instance:
\begin{tabular}{lll} 
English & Nanwang dialect & Other dialects \\
house & /ruma?/ & /rumah/; /rumab/ \\
flower & /raput/ & /haput/; /baput/ \\
taro & /buPir/ & /vuhir/; /vusir/
\end{tabular}

\subsection*{2.2.2 Vowels}

The Puyuma vowels are shown in Table 2.3.
Table 2.3: Vowel Phonemes
\begin{tabular}{l|ccc}
\hline & front & central & back \\
\hline high & i & & u \\
mid & & \(\partial(e)\) & \\
low & & a & \\
\hline
\end{tabular}

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 /a/ is restricted. It cannot form a syllable by itself without being accompanied by an onset or a coda and it does not occur in the word-initial and word-final position. A glottal stop is inserted automatically before or after the schwa when the schwa occurs in the word-initial or word-final position. For instance:
puenay [puənaj] "put water" enay [?ənaj] "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 \(/ \mathrm{u} /\) is realised as a mid rounded vowel [ o ] when the following consonant is a velar nasal:
\[
/ \mathrm{u} / \rightarrow[\mathrm{o}] / \ldots[+\mathrm{velar},+ \text { nasal }]
\]

Thus, gung "ox" is pronounced as [goy], and Lutung [lutoy].

Minimal pairs for vowel phonemes are list as follows:
\begin{tabular}{lll} 
/a/ vs \(\quad\) li/ & ama & "father" \\
& ami & "year"
\end{tabular}

\subsection*{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 gray) \({ }^{6}\) are combinations not found in Lin (1984). Lin (1984) reports that the gaps such as \(/ \mathrm{gi} /\), \(/ \mathrm{eT} /\), /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", 'eT'e \(\underline{T}\) "compress, jostle", inuLid "be placed into the coffin", TigTig "shake off", TagTag "pour out", and TegTeg "stake".

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

Combinations /wu/, /yi/, /uw/, and /iy/ are difficult to detect due to the similar quality of glides and their homoganic high vowels. Examples of /yi/ and /wu/ can be attested by 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 Takaw "to steal' < Takaw-u "to steal it".

Table 2.4: Combination of pre-nucleus consonant and vowel
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & \(\boldsymbol{p}\) & \(\boldsymbol{t}\) & \(\boldsymbol{T}\) & \(\boldsymbol{k}\) & \({ }^{\prime}\) & \(\boldsymbol{b}\) & \(\boldsymbol{d}\) & \(\boldsymbol{D}\) & \(\boldsymbol{g}\) & \(\boldsymbol{m}\) & \(\boldsymbol{n}\) & \(\boldsymbol{n g}\) & \(\boldsymbol{s}\) & \(\boldsymbol{l}\) & \(\boldsymbol{L}\) & \(\boldsymbol{r}\) & \(\boldsymbol{w}\) & \(\boldsymbol{y}\) \\
\hline \(\boldsymbol{i}\) & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + \\
\hline \(\boldsymbol{u}\) & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + \\
\hline \(\boldsymbol{a}\) & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + \\
\hline \(\boldsymbol{e}\) & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & - & - \\
\hline
\end{tabular}

\footnotetext{
\({ }^{6}\) Combinations that can be filled in from my own fieldnotes are marked in light gray whereas combinations that are still missing from my own notes are marked in dark gray.
}

Table 2.5: Combination of vowel and post-nucleus consonant
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & \(\boldsymbol{p}\) & \(\boldsymbol{t}\) & \(\boldsymbol{T}\) & \(\boldsymbol{k}\) & \(\cdot\) & \(\boldsymbol{b}\) & \(\boldsymbol{d}\) & \(\boldsymbol{D}\) & \(\boldsymbol{g}\) & \(\boldsymbol{m}\) & \(\boldsymbol{n}\) & \(\boldsymbol{n} \boldsymbol{g}\) & \(\boldsymbol{s}\) & \(\boldsymbol{l}\) & \(\boldsymbol{L}\) & \(\boldsymbol{r}\) & \(\boldsymbol{w}\) & \(\boldsymbol{y}\) \\
\hline \(\boldsymbol{i}\) & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & - & - \\
\hline \(\boldsymbol{u}\) & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & - & + \\
\hline \(\boldsymbol{a}\) & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + \\
\hline \(\boldsymbol{e}\) & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & + & - & - \\
\hline
\end{tabular}

\subsection*{2.3 The Syllable}

\subsection*{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 them seem to have CVC structure. The possible consonant and vowel arrangements for monosyllabic words are given below:
(1) Monosyllabic words:
(C) V (C)
\begin{tabular}{llll} 
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
\end{tabular}

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 vowel. The possible consonant and vowel arrangements of disyllabic are given below:
(2) Disyllabic words:
(C) V (C) (C) V (C)
\begin{tabular}{ccll} 
T 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 \\
D e & n a n & "mountain" & CVCVC \\
s a ng 1 i & "snail" & CVCCV \\
p a k & p a \(k\) & "wing" & CVCCVC
\end{tabular}

No examples of VV and VCCV are found in the corpus. Words of more than two syllables are pretty common in Puyuma, but 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)
\begin{tabular}{llclll} 
& 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 1 & "move" & CVVCVC \\
k & a & ma & 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
\end{tabular}

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).

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 one stem plus one or more affixes or reduplicants. So the word maramilamalamanan is analysed as:

\author{
mara-mi-lama-laman-an \\ SUP-have-RED-mercy-NMZ \\ "the most merciful"
}

\subsection*{2.3.2 Medial consonant clusters}

Most medial consonant clusters are reduplications of monosyllabic words, 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 \(-k k-,-D D-,-m m-,-s s-\), \(-r r-,-p b-,-t D-\), or \(-g k-\) are not found. The possible consonant clusters across syllable boundaries are given in Table 2.6. The 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, and are marked in grey.

Table 2.6: The possible consonant clusters across syllable boundaries

The onset of the following syllable


\subsection*{2.3.3 Schwa apicalisation and reduction}

When it appears after the sibilant \(/ \mathrm{s} /\) in an open syllable, the schwa is apicalised. \({ }^{7}\)
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{2}{|l|}{apicalisation} & \multicolumn{2}{|l|}{non-apicalisation} \\
\hline senay & [spnaj] & ngiseL & [ nis ¢ \({ }^{\text {l }}\) ] \\
\hline semipsip & [spmipsip] & masenkin & [masənkin] \\
\hline seLap & [splap] & benaseng & [bənasəy] \\
\hline asepan & [asppan] & & \\
\hline masemek & [maşmək] & & \\
\hline benabase & [bənabasๆ] & & \\
\hline
\end{tabular}

\footnotetext{
\({ }^{7}\) Sometimes the schwa becomes an apical vowel after/r/. For instance, marengay [marŋjaj], arebu [arŋbu].
}

Schwa deletion optionally occurs in the penultimate syllable of items with three or more syllables. \({ }^{8}\)
```

inapeTan $\rightarrow$ inapTan
penabekas $\rightarrow$ penabkas
Teтера $\rightarrow$ Teтра
kameli $\rightarrow$ kamli
temebul $\rightarrow$ tembul
TemekeL $\rightarrow$ TemkeL
DikeDan $\rightarrow$ DikDan
likeTi $\rightarrow$ likTi

```

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

\subsection*{2.4 Word stress}

\subsection*{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 degree of pitch and longer duration. The pitch contour of DikeDan "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 \(i n a b a=k u\) "I am fine", and it shows that the syllable with the highest degree of pitch is not on the last syllable of inaba; on the contrary, the last syllable ( \(b a\) ) has the lowest degree of pitch. In terms of intensity, the last syllable still carries greater intensity than the first two syllables ( \(i\) and \(n a\) ). Thus, stress is not equated solely with pitch. In addition to pitch and intensity, duration is another signal. In Figure 2.2 through 2.4, the duration of the stressed syllable is longer than other syllables.

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


Figure 2.2: Pitch of DikeDan 'sticky stuff'


Figure 2.3: Intensity of DikeDan '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; and when a suffix is attached to it, the stress shifts to the last syllable of the newly formed word. \({ }^{9}\)
\[
\begin{aligned}
& \text { beray [bəráj] } \rightarrow \text { tu }=\text { beray-ay [tubərajáj] } \\
& \text { tiktik [tiktík] } \rightarrow \text { tu }=\text { pa-tiktik-anay [tupatiktikanáj] }
\end{aligned}
\]

When an enclitic element is attached to a host, the default is that stress falls on the host, as shown in Figure 2.4.
\[
\text { inaba [inabá] } \rightarrow \text { inaba }=k u \text { [inabáku] }
\]

\subsection*{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.

\subsection*{2.5 Morphophonemic rules}

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

\subsection*{2.5.1 Assimilation}

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

\subsection*{2.5.1.2 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 <em> is infixed. The schwa \(/ 2 /\) assimilates to the following vowel. This rule is optional.

\footnotetext{
\({ }^{9}\) The word DikeDan "sticky stuff" is derived from DikeD "sticky" by suffixing -an, and as shown in
}
\begin{tabular}{lll} 
Root & Underlying derived form & Vowel assimilation \\
dirus "to swim" & \(d<e m>\) irus /dəmirus/ & [dimirus] \\
kirim "to economise" & \(k<e m>\) irim /kəmirim/ & [kimirim] \\
tua-"to make" & \(t<e m>\) ua- /təmua/ & [tumuwa] \\
puwar "to escape" & \(p<e n>\) uar /pənuar/ & [punuwar] \\
talam "to try" & \(t<e m>\) alam /təmalam/ & [tamalam]
\end{tabular}

The second type occurs when the schwa in the root is assimilated to the vowel in the prefix. This is also optional.
\begin{tabular}{lll} 
Root & Underlying derived form & Vowel assimilation \\
pesik "to separate" & m-u-pesik/mupəsik/ & [mupusik] \\
ekan "to eat" & m-a-ekan/maəkan/ & [maakan]
\end{tabular}

\subsection*{2.5.1.2 Rounding assimilation}

Unlike vowel harmony, this type of assimilation is triggered by the labial consonants 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 marked in gray.
\begin{tabular}{lll} 
Root & Underlying derived form & Assimilation \\
ekan "to eat" & \(m\)-ekan /məkan/ & [mukan] \\
Tepa "to aim at" & \(T<e m>e p a /\) təməpa/ & [təmupa] \\
beLias "to turn" & \(b<e n>e L i a s / b ə n ə l i a s /\) & [bənulijas] \\
wadi "younger sibling" & mare-wadi /marəwadi/ & [maluwadi] \({ }^{10}\)
\end{tabular}

\footnotetext{
Figure 2.2 and 2.3, the stressed of DikeDan falls on the last syllable, which is another example showing a stress shift after suffixation.
\({ }^{10}\) It is not clear why [r] becomes [l] in this example.
}

\subsection*{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 \(\langle e m\rangle\). The bilabial nasal sound \(/ \mathrm{m} /\) becomes \(/ \mathrm{n} /\) when the infix is affixed to a bilabial stop. For instance:

\section*{Root \\ \(b a\) 'aw "alive, to save" \\ pakan "to feed"}

\section*{Dissimilation}
\(b<e n>a\) 'aw
\(p<e n>a k a n\)

Unlike the assimilation described earlier, this rule is obligatorily. As described in §2.6.1, there are three allomorphs of \(\langle e m\rangle\), namely \(\langle e m\rangle\), \(m e\) - and \(m\)-. Which one occurs is determined phonologically. Among them, \(\langle e m\rangle\) occurs when the initial sound is an obstruent.

\subsection*{2.5.3 Insertion}

\subsection*{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:
\begin{tabular}{ll} 
Underlying derived form & Glide insertion \\
mi-anger /miaŋər/ & [mijayər] \\
ki-umal /kiumal/ & {\([\) kijumal \(]\)} \\
na'u-aw/na?uaw/ & {\([\) na?uwaw] }
\end{tabular}

Also, \([\mathrm{j}]\) is inserted when a stem which ends with /a/ acquires a suffix beginning with \(/ \mathrm{a} /\). However, this process does not apply in prefixation.

\section*{Underlying derived form}
\(T<e m>e p a-a\) /təməpaа/
ka-aw /kaaw/
muka-an /mukaan/

Glide insertion
[təməраја]
[kajaw]
[mukajan]

Compare:
\begin{tabular}{lc}
\(m-\underline{a-a} b a k / m a a b a k /\) & {\([\) maabak \(]\)} \\
\(m-\underline{a-a} L a k / \mathrm{maa} \operatorname{lak} /\) & {\([\) maalak \(]\)}
\end{tabular}

\subsection*{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:
\begin{tabular}{ll} 
Underlying derived form & Schwa insertion \\
mar-kataguin /markataguin/ & [marakataguin]
\end{tabular}

\subsection*{2.5.4 Resyllabification}

Resyllabification happens due to schwa insertion. In schwa insertion, one syllable is added, as in (4).
(4) Schwa insertion
mar-tigir \(\quad \rightarrow \quad\) mare-tigir

\(m \quad a \quad r \quad i \quad i\)
m a
\(r\) e \(\quad\) i

\subsection*{2.6 Allomorphs of <em> and <in>}

Allomorphs of \(\langle e m>\) and \(<i n>\) are presented in separate sections because they cannot be accounted for by a single morphophonemic rule.

\subsection*{2.6.1 Allomorphs of <em>}

The actor voice/intransitive marker \(\langle e m>\) has three allomorphs: \(\langle e m\rangle\), \(m e\)-, or \(m\)-. The choice of allomorph depends on the initial phoneme of the stem.
(i) For stems beginning with a vowel, \(m\) - is prefixed.
\begin{tabular}{ll} 
Stem & Intransitive form \\
ekan "to eat" & m-ekan \\
\(a L a k\) "to take" & \(m\)-aLak
\end{tabular}
(ii) For stems beginning with a nasal sound or a liquid ( \(l, L, n, n g\), or \(r\) ), me- is prefixed.

Stem
na'u "to see"
languy "to swim"
ngernger "be angry"
Ladam "to learn"
reTa' "to give up"

\section*{Intransitive form}
me-na'и
me-languy
me-ngernger
me-Ladam
me-reTa'
(iii) For stems beginning with an obstruent, <em> is infixed. Note that dissimilation occurs when the initial consonant is a bilabial stop (§2.5.2).
\begin{tabular}{ll} 
Stem & Intransitive form \\
tuLuD "to pass to" & \(t<e m>u L u D\) \\
sanan "to get lost" & \(s<e m>\) anan \\
deru "to cook" & \(d<e m>e r u\) \\
bias "hot" & \(b<e n>i a s\) \\
pukpuk "to beat" & \(p<e n>u k p u k\)
\end{tabular}

\subsection*{2.6.2 Allomorphs of <in>}

The 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-.

\section*{Stem}
abak "to pack"
urak "to dance"

\section*{Perfective form}
in-abak
in-urak
(ii) Stems beginning with a nasal sound or a liquid ( \(l, L, n, n g\), or \(r\) ) are prefixed with \(n i\) -

\section*{Stem}
ruma' "house"
Perfective form
laseD "to hide"
ni-ruma'
LipuT "to wrap"
ni-laseD
rames "to make salty"
ni-LipuT
ni-rames
(iii) Stems beginning with an obstruent are infixed with \(\langle\) in \(\rangle\).

\section*{Stem}

TekeL "to drink"
baLi "wind"

\section*{Perfective form}
\(T<i n>e k e L\)
\(b<i n>a L i\)

\section*{С걱TER 3}

\section*{\(\mathcal{M O R P \mathcal { A } O L O G Y}\)}

\subsection*{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 \(\S 3.3\) and \(\S 3.4\) respectively.

\subsection*{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.

\subsection*{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:
\begin{tabular}{lll} 
Prefix & paisu "money" mi-paisu "have money" \\
Suffix & asaT"high" & asaT-an "height"
\end{tabular}
\begin{tabular}{ccc} 
Infix & beray "give" & b<in>eray "things given" \\
Circumfix & sama'house" & sama'-enan'family, \\
relatives"
\end{tabular}

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

\subsection*{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
\begin{tabular}{l|l}
\hline Bound roots & Free roots \\
\hline ma-Tina "big" (*Tina) & kiping "clothes" \\
ka-keser "be strong" (*keser) & suan "dog" \\
ma-rayas "often" (*rayas) & enay "water" \\
\hline
\end{tabular}

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.

\subsection*{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-laDam "to teach", the stem the affix pa- attaches to is -laDam. In ki-pa-laDam "to acquire as knowledge", the stem the affix ki- attaches to is pa-laDam.

\subsection*{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 from one to another 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.

In fact, the boundness 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. As I noted in §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.

\subsection*{3.2.5 Words}

A morphological word consists of a stem (which may be simple or complex: see above) plus one 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.

\subsection*{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 \(=l a\), \(=D i y a\), and \(=d a r\) ). Examples are given below:
(1) \(\boldsymbol{t} \boldsymbol{u}=a L a k-a w \quad n a \quad b a r a s a\)
3.GEN=take-PV DF.NOM stone
"They took the stone."
(2)
\begin{tabular}{lll}
\(s<e m>\) aLeTag \(=\boldsymbol{k} \boldsymbol{u}\) & \(D a\) & enay \\
\(<\) AV \(>\) pour.out \(=1\) S.NOM & ID.OBL & water
\end{tabular}
"I poured out some water."
(3)
sa-sungaL=mi kanu, ama=a

RED-worship=1P.NOM 2S.OBL father=VCT
"We will worship you, Father."
(4) an ma'iDang=la a Tau
when old=PERF ID.NOM person
"When people get old,"
(5)
a
lalak \(=\) mi=Diya

ID.NOM child=1P.ECL.NOM=IMPF
"We were still children."

\subsection*{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 \(t u=\) agrees with the NP kan senayan, and while the full NP is omissible, the clitic \(t u=\) is obligatory.
\begin{tabular}{lcc} 
saLaw & inaba & \(\boldsymbol{t} \boldsymbol{u}=\) Tanguru' \\
very & good & 3.PSR=head \\
"He is very smart." & (Lit. His head is very good.)
\end{tabular}

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 Givon (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 ( \(\S 2.5 .3 .1\) ), apply to affixation but not to cliticisation. Compare the pairs of examples below:

\section*{Glide insertion}

\section*{Affixation}
m-u-a-sabak [muwasabak]
AV-go- \(a\)-inside
"going inside"
\(T<e m>e p a-\boldsymbol{a}\) [təməpaja]
<AV>aim.at-PJ
"aiming at"

\section*{Cliticisation}
\(\boldsymbol{k} \boldsymbol{u}=\boldsymbol{a} L a k-a w\) [kualakaw]
1S.GEN=take-PV
"I took it."
\(a m \boldsymbol{a}=\boldsymbol{a}\) [amaa]
father \(=\mathrm{VCT}\)
"Father,"

\section*{Vowel harmony}

\section*{Affixation}
\begin{tabular}{ll} 
mu-pesik [mupusik] & \(k \boldsymbol{u}=\) senay-aw [kusənajaw] \\
ACAUS-leave & \(1 \mathrm{~S} . \mathrm{GEN}=\) sing-PV \\
"come off" & "I sang it."
\end{tabular}

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

\section*{(i) stem}

Takaw "steal"
Ta-Takaw "will steal"
<em> infixation
\(T<e m>a k a w\) "steal"
\(T<e m>a\)-Takaw "be stealing"
*Ta-T<em>akaw

Ta-Ta-Takaw "steal (again and again)" \(T<e m>a-T a-T a k a w\) "often stealing"
*Ta-Ta-T<em>akaw
<in> infixation
\(k<i n>-i s a T-a n\) "place above"
in-u-k-isaT-an "place one has
gone up to before"
*u-k<in>-isaT-an

However, the infixation never applies to the genitive bound pronouns, and this shows that the genitive bound pronouns are different from affixes.
\(t u=s<i n>a n g a\) "his product"
\(t u=s<\) in \(>a\)-sanga "product he is making"
\(t u=s<\) in \(>a\)-sa-sanga "product he often made"
\[
\begin{aligned}
& { }^{*} t<\text { in> usanga } \\
& *_{t u}=s a-s<i n>\text { anga } \\
& * t u=s a-s a-s<i n>a n g a
\end{aligned}
\]

\subsection*{3.3.2 Nominative bound pronouns}

The 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)
\begin{tabular}{lll}
\(s<e m>a L e T a g=k \boldsymbol{u}\) & \(D a\) & enay \\
\(<\) AV \(>\) pour.out=1S.NOM & ID.OBL & water \\
"I poured out water." & &
\end{tabular}
\(a D i=k \boldsymbol{u} \quad s<e m>a L e T a g \quad D a \quad\) 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."
ameli=ku a puyита
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.
paDek-u=ku
carry.on.back-PV:IMP=1S.NOM
"Carry me on the back."
aDi paDek-u=ku
NEG carry.on.back-PV:IMP=1S.NOM
"Don't carry me on the back."
*aDi=ku paDek-u

\subsection*{3.3.3 Aspect-marking clitics}

There are three aspect-marking enclitics in Puyuma: =la denotes a perfective meaning, =Diya 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.
a. payas=la mar-beLias
right.away=PERF PR-turn
"She returned right away."
b. \(a D i=l a \quad\) makeser mar-beLias m-uka i uma'

NEG=PERF strong PR-turn AV-go LOC farm
"She was not strong enough to return to the farm."
a. ma-uLep=Diya \(k<e m>\)-anger Datu ka-sanan-an

AV-tired=IMPF <AV>get-thought ID.OBL/3.PSR ka-get.lost-NMZ
"She's still worrying that he might get lost."
b. aDi=Diya \(t<\) em>alam me-ranak \(D a \quad\) Tau

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:
\(a D i=k \boldsymbol{u}=\) Diya \(\quad t<e m>\) alam \(\quad m\)-u-isaT \(\quad D a \quad\) sasudang

NEG=1S.NOM=IMPF <AV>try AV-go-up ID.OBL boat
"I have never got on a boat."
an \(a D u=l \boldsymbol{a} \quad\) i, \(k a-r a-r u w a=\boldsymbol{m} \boldsymbol{u}=l \boldsymbol{a} \quad\) uringeT
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.
aDi=la tu=pa-Dua-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."
\[
\begin{array}{lll}
\text { aDi } \quad \text { tu=pa-Dua-i=ku=la} & \text { kantu } & \text { ruma' }  \tag{20}\\
\text { NEG } 3 \mathrm{GEN}=\text { CAUS-come-LV=1S.NOM=PERF } & \text { DF.OBL/3.PSR } & \text { house } \\
\text { "He didn't cause me to come to his house." } & &
\end{array}
\]

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 (bound or free pronouns and vocative marker), 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 in both sentences the aspectual markers can move forward to the position after the first predicate, as in (21b), (22b) and (23b). \({ }^{1}\)
\[
\begin{array}{llll}
\text { a. } \quad \text { an } \quad \text { [m-ekan=ta } \quad \text { ba } a \text { inariyaw }]=l a & i \text {, }  \tag{21}\\
& \text { when [AV-eat=1P.ICL.NOM ID.OBL } & \text { sticky.rice }]=\text { PERF } & \text { TOP } \\
& \text { "When we eat binariyaw," } & &
\end{array}
\]

\footnotetext{
\({ }^{1}\) The informants are unable to tell if there is a meaning difference between (21a) and (21b), and between (22a) and (22b).
}
b. an m-ekan=ta=la Da binariyaw \(i\)
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 \(T<e m>a k a w-a=d a r \quad\) ma-rengay

AV-go <AV>steal-PJ=FREQ AV-tell
"He often went to tell people secretly."
b. m-uka=dar \(\quad T<e m>a k a w-a \quad\) 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).
a.
\begin{tabular}{lllllll}
\(n a\) & sama \(=l \boldsymbol{a}\) & \(n a\) & sayma & \(n a\) & dare & \(i\), \\
DF.NOM & left=PERF & DF.NOM & little & DF.NOM & dirt & TOP
\end{tabular}
tu=riap-anay pia-timuL
3.GEN=sprinkle-CV face-south
"The little dirt left, he sprinkled it to the south."
(25)
b. na sama na sayma \(=1 \boldsymbol{a}\) na dare' \(i\),
c. na sama na sayma na dare' \(=l \boldsymbol{a} \quad i\),
\[
\begin{array}{llll}
\text { a. } \begin{array}{lll}
i D u & n a & \text { walak }=l a \\
i, \\
\text { that.NOM } & \text { DF.NOM } & \text { child=PERF }
\end{array} & \text { TOP } \\
& \text { "that child,..." } & &
\end{array}
\]
b. *iDu=la na walak i,

Sometimes, we may encounter more than one aspectual marker in a clause. In (26a) and (26b), =la and =Diya occur after the predicate as well as after the clause. In (27), it appears twice in an SVC.
\[
\begin{array}{llll}
\text { a. } & \text { ma-ruwa=ku=la } & \text { m-ekan } & D a  \tag{26}\\
& \text { AV-can=1S.NOM=PERF } & \text { AV-eat } & \text { ID.OBL } \\
& \text { many=PERF } \\
\text { "I could already eat a lot." } & & \\
\text { b. } & k<e m>a D i n i=m i=D i y a & D a & \text { ka-kuaLeng-an=Diya } \\
& \text { <AV>here=1P.NOM=IMPF } & \text { ID.OBL } & \text { ka-sick-NMZ=IMPF } \\
& \text { "But we still have some difficulties." }
\end{array}
\]
\begin{tabular}{lll} 
(27) \(\quad\) mu-kalu-kalu' \(=k u=l \boldsymbol{a}\) & siLamu & maTina \(=\boldsymbol{l} \boldsymbol{a}\) \\
ACAUS-RED-*=1S.NOM=PERF & speedy & big=PERF
\end{tabular}
"As a result, I grew up very fast."

\subsection*{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. Its function is to call 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:
\begin{tabular}{lllll} 
ulaya & \(a\) & ma-Tina & niam=bangabang-an & ama=a, \\
exist & ID.NOM & AV-big & 1P.PSR=busy-NMZ & father=VCT \\
"We have a big event (now), Father." &
\end{tabular}
\(\boldsymbol{a m a}=\boldsymbol{a}, \quad\) pulang \(-i=m i\)
father=VCT help-LV:IMP=1P.NOM
"Father, help us."

\subsection*{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, \({ }^{2}\) 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 for demonstratives are: kanDunu "that one (OBL)", kanDunиDипи "that kind of (OBL)".

The distinction between lexicalised reduplication and grammatical reduplication is not always clear. \({ }^{3}\) While some reduplication patterns are typically lexicalised (i.e. fossilised reduplication described in §3.4.1 is typically an instance of lexicalised reduplication), some function to create a new lexical item as well as to serve grammatical functions, i.e. 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. \({ }^{4}\)

\subsection*{3.4.1 Fossilised reduplication}

Fossilised reduplication refers to those cases where a stem consists of two identical elements \(\left(\mathrm{C}_{1} \mathrm{~V}_{1} \mathrm{C}_{2}-\mathrm{C}_{1} \mathrm{~V}_{1} \mathrm{C}_{2}\right.\) or \(\left.\mathrm{C}_{1} \mathrm{~V}_{1} \mathrm{C}_{2} \mathrm{~V}_{2}-\mathrm{C}_{1} \mathrm{~V}_{1} \mathrm{C}_{2} \mathrm{~V}_{2}\left(\mathrm{C}_{3}\right)\right)\). The roots in this

\footnotetext{
\({ }^{2}\) Zeitoun and Wu (2006) mention that in several Formosan languages reduplication of affixes is allowed.
\({ }^{3}\) Lexicalised reduplication derives a new lexical item while grammatical reduplication functions to mark grammatical categories (i.e. aspect and mood).
\({ }^{4}\) Adelaar (2000) distinguishes five major reduplication types: monosyllabic root reduplication, disyllabic root reduplication, rightward reduplication, first syllable reduplication, and \(C a\) - reduplication. Among the five, monosyllabic reduplication is also called lexicalised reduplication. In this thesis, disyllabic root reduplication is used as a subtype of fossilised reduplication, while Adelaar's disyllabic root reduplication corresponds to my disyllabic ( \(C V C V\)-) reduplication.
}
category no longer exist, so a single element may never occur alone. There are two patterns of fossilised reduplication: monosyllabic root and disyllabic root.

\subsection*{3.4.1.1 Monosyllabic root reduplication}

This type of reduplication is formed by reduplicating a monosyllabic \(C V C\) root. Three subtypes can be distinguished according to whether the reduplication process involves infixation.

\section*{(i) Simple monosyllabic root reduplication: \(\mathrm{C}_{1} \mathbf{V}_{1} \mathrm{C}_{2}-\mathrm{C}_{1} \mathrm{~V}_{1} \mathrm{C}_{\mathbf{2}}\)}

Words belonging to this type can be nominal or verbal. The nominal examples include:
\begin{tabular}{ll} 
maymay & "duck" \\
'ak'ak & "crow" \\
'ap'ap & "cobra" \\
dindin & "snails" \\
TabTab & "dandruff" \\
ngisngis & "beard" \\
birbir & "lips" \\
mudmud & "the front teeth" \\
suksuk & "lock" \\
belbel & "banana" \\
lawlaw & "lamp" \\
bangbang & "box"
\end{tabular}

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 onomatopoetic 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 sub-events. Verbal examples include:
\begin{tabular}{ll} 
sipsip & "to lick" \\
betbet & "to tie" \\
pespes & "to massage" \\
pukpuk & "to beat" \\
sabsab & "to wash hands" \\
saksak & "to seek" \\
guTguT & "to scratch the itchy skin" \\
ngitngit & "to bite slowly with the front teeth" \\
rawraw & "to stir" \\
bikbik & "to shake off" \\
langlang & "to bake" \\
tiktik & "to hammer at" \\
taktak & "to carve"
\end{tabular}

Adelaar (2000:35) notes that in Siraya, "except for \(C a\) - 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 \(C V C\) - reduplication based on the reduplicated stem is possible.
\begin{tabular}{llll}
\(t u=\) pes-pespes-ay & kan & ma'iDang & kakuwalan \\
3.GEN=RED-massage-LV & SG.OBL & old & Kakuwalan \\
"The elder Kakuwalan kept massaging him." &
\end{tabular}
tu=tak-taktak-aw \(\quad i \quad m\)-utu-asuLed \(=l a\)
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: \(\mathbf{C}_{1}<\mathbf{a C}>\mathrm{VC}_{2} \mathrm{C}_{\mathbf{1}} \mathrm{VC}_{2}\)

This type adds an \(<a C>\) infix to the reduplicated monosyllabic stem, where \(<a C>\) consists of the low vowel /a/ and a consonant. According to Adelaar (2000:36), in Siraya, the consonant is always either /r/ or /l/, but in Puyuma, I have
found four variants, three of them liquids: they are \(/ 1 /, / \mathrm{L} /, / \mathrm{r} /\), and \(/ \mathrm{g} /\), and there seems to be no rule governing their distribution. The examples are listed below:
\begin{tabular}{ll}
\(g<a l>\) emgem & "numbness of the tongue" \\
\(b<a l>\) eTbeT & "recurring pains" \\
\(t<a l>\) ustus & "prickle" \\
\(s<a l>\) engseng & "lonely" \\
\(T<a l>\) ebTeb & "nervous" \\
\(b<a L>\) ang \(<a>\) bang & "easy clothes" \\
\(b<a L>\) ukbuk & "easy shoes or pants" \\
\(s<a L>i k s i k\) & "high-spirited" \\
\(s<a r>\) ibsib & "smooth skin" \\
\(T<a r>\) isTis & "noisy" \\
\(T<a g>a g e T a g ~\) & "pour out"
\end{tabular}

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

\section*{(iii) \(<\) a \(>\) infixation}

Two different patterns are found with \(\langle a\rangle\) infixation: \(C V C<a>C V C\) or \(C V<a>C C V C\). Examples in this category include nominal or verbal expressions. Nominal expressions are given below.
\begin{tabular}{ll}
\(b a k<a>b a k\) & "vegetable garden" \\
\(k a T<a>k a T\) & "pants" \\
\(k a y<a>\) kay & "bridge" \\
\(k i<a>\) pkip & "eyelashes" \\
\(k u<a>\) skus & "collarbone"
\end{tabular}

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 \(C V C<a>C V C\).
\begin{tabular}{ll} 
gis \(<a>\) gis & "to shave" \\
ging \(<a>\) ging & "to quake" \\
bik \(<a>b i k\) & "to shake" \\
LiT \(<a>\) LiT & "to roll on the ground" \\
bang \(<a>\) bang & "busy"
\end{tabular}

There are several examples showing that the insertion can be schwa/o/ instead of \(/ \mathrm{a} /\). 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 \(/ \partial /\) instead of \(/ a /\) do not show iterative meaning.
```

sal $<e>$ sal "thin"
sak $<e>$ sak "to get in to search"
sap $<e>$ sap "to unfold"

```

\subsection*{3.4.1.2 Disyllabic root reduplication: \(C_{1} V_{1} C_{2} V_{2}-C_{1} V_{1} C_{2} V_{2}\left(C_{3}\right)\)}

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 \(C V C V\) - reduplication discussed in \(\S 3.4 .3\). 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.
\begin{tabular}{ll} 
keLekeLengan (*keLeng) & "small intestines" \\
kiDukiDu \((* k i D u)\) & "armpits" \\
keLekeLek \(\left({ }^{*}\right.\) keLek \()\) & "to titillate at the armpit" \\
DungaDungaLan (*DungaL) & "Lima bean" \\
kamangkamang (*kamang) & "big spider" \\
tipatipayan (*tipay) & "wild amaranth"
\end{tabular}

There is a pair of example in which the stem and the reduplicated form refer to a different plant. Examples: kamangul "chilli", kamangumangulan "a kind of grass".

A lot of family names and place names are also formed by \(C V C V\) - reduplication.
sigasigaw "personal name" barubaru "family name"

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.

\subsection*{3.4.2 Ca - reduplication \({ }^{5}\)}
\(C a\) - reduplication is an important word formation process in Puyuma and in other Formosan languages. It has at least five unrelated functions. Also Ca reduplication is the only type that can cooccur with another reduplication process. In those cases, Ca - reduplication always occupies the leftmost position. For example: wari "day", wa-wari-wari "everyday".

\subsection*{3.4.2.1 Formal subtypes of \(\mathbf{C a}\) - reduplication}

In Puyuma, \(C a\) - reduplication has two sub-patterns. 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. \({ }^{6}\) Examples: dukur "to pound", da-dukur "will pound"; tiLu' "to tide", ta-tiLu' "rope"; \(u\) Lane "fat", \(u\)-La-Lane "will be fat"; daLekeng "wet", da-La-Lekeng "will be wet". When there is no onset in the first syllable of a disyllabic root (or in the penultimate 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, \(\langle a\rangle\) is inserted before the penultimate syllable. Examples: paeTeng "long", \(p a<a>e\) Teng "will be long"; atel "to drop", a-atel "will drop".

\footnotetext{
\({ }^{5}\) The term \(C a\) - reduplication was coined and the associated processes first extensively discussed by Blust (1998). Ca- reduplication is very productive in many Austronesian languages, and different from other types of reduplication processes to be discussed in the following sections, which usually relate to only one certain function or related functions.
\({ }^{6}\) Although most roots follow the reduplication process discussed, 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 \(k u<a>\) renang. Also, \(\boldsymbol{b}<e n>\boldsymbol{a}\)-beLias is used rather than the expected \(* b<e n>e\) LaLias.
}

Second, for fossilised stems consisting of a reduplicated monosyllabic root with ambi-syllabic consonant clusters, the first-syllable coda plus \(-a\) is infixed 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 \(\langle\mathrm{Ca}\rangle\) from forming a \(C V C\) 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 \(\langle a\rangle\) do not take \(C a\) - reduplication; instead they are infixed with another \(\langle a\rangle\) in the prepenultimate position. For example: ma-LiTaLiT "roll", \(m a-L i<a>\) TaLiT "rolling" (*ma-Li-Ta-TaLiT); bikabik "shake off", \(b<e n>i<a>k a b i k ~ " s h a k i n g ~ o f f " ~\) (* \(b<e n>i-k a-k a b i k)\); sikasik "set off", si<a>kasik"will set off" (*si<ka>kasik). There are exceptions to the generalisations; for example, pukpuk "beat', \(p<e n>u<a>k p u k\) "beating", but * \(p<e n>u k a-k e p u k\); putput "hack", \(p<e n>u<a>\) tput "hacking", but *penutatepuk.

\subsection*{3.4.2.2 Semantic subtypes of \(\mathbf{C a}\) - reduplication \({ }^{7}\)}

\section*{(i) Forming instrumental nouns}
\(C a\) - reduplication is one of the morphological processes that derives an instrumental noun (§7.3.2.4) from a verb. Examples are:
\begin{tabular}{ll} 
tukuD "to support" & \(\boldsymbol{t a}\)-tukuD "pillar" \\
deru "to cook" & \(\boldsymbol{d a}\)-deru-an "cooker" \\
Liyus" to drill"" & La-Liyus"drill" \\
supay "to whet" & \(\boldsymbol{s a}\)-supay-an "whetstone"
\end{tabular}

LangeTi "use a stick to beat a child" La-nga-ngeTi "the stick used to beat children"
salpit "use a tree branch to beat" sa-la-lepit "the branch used to beat"

\footnotetext{
\({ }^{7} C a\) - reduplication optionally occurs in ordinal numbers. For example puka-Da-Dua "the second", < Dua "two"; puka-ta-teLu"the third", <teLu"three". Because it is an optional element in forming ordinal numerals, it is not considered a semantic subtype of Ca - reduplication.
}

\section*{(ii) Indicating progressive aspect or irrealis mood}

Progressive aspect (§6.4.1.2) and future/irrealis mood (§6.3.1.) are marked by \(C a\) - reduplication. Progressive aspect is indicated by \(C a\) - reduplication together with a voice marker; future/irrealis mood is marked by \(C a\) - reduplication of the verb stem. Some examples are listed below, but for more detailed discussion see §6.3 and §6.4.
\begin{tabular}{|c|c|c|}
\hline stem & progressive & irrealis \\
\hline kasu "to bring" & \(\boldsymbol{k}<e m>\boldsymbol{a}\)-kasu & \(\boldsymbol{k a}\)-kasu \\
\hline sanga' 'to produce" & \(\boldsymbol{s}<e m>\boldsymbol{a}\)-sanga & sa-sanga \\
\hline na'u"to see" & me-na-na'u & na-na'u \\
\hline parekep "to constitute" & \(p<\) en>a-ra-rekep & pa-ra-rekep \\
\hline re'ani "to reap" & ma-re-'a-'ani & re-'a-'ani \\
\hline
\end{tabular}

With stative verbs, the notion of inchoativeness is added when the verbs are marked by \(C a\) - reduplication.
\begin{tabular}{ll} 
ma-'iDang "old" & ma-' \(\boldsymbol{a}\)-'iDang "become older" \\
litek "cold" & \(\boldsymbol{l} \boldsymbol{a}\)-litek" "become colder" \\
inaba "good" & i-na-naba"become better" \\
aremeng "dark" & a-ra-remeng "become darker" \\
ilemes "angry" & i-la-lemes "become angry"
\end{tabular}

\section*{(iii)Marking reciprocity}

Although \(C a\) - 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.
\begin{tabular}{ll} 
ma-DuLun "replace" & \(m a-D a-D u L u n " e x c h a n g e " ~\) \\
sulud "to push" & \(m a-s a-\)-sulud "to push each other" \\
pingiT"to grab" & \(m a-p a-p i n g i T " t o ~ g r a b ~ e a c h ~ o t h e r " ~\) \\
kuang "shoot" & \(m a-k a-k u a n g " t o ~ s h o o t ~ e a c h ~ o t h e r " ~\) \\
da'ul"to inform" & \(m a-d a-d a ' u l "\) "to inform each other" \\
dikes" "to hold" & \(m a-d a-d i k e s " t o ~ h o l d ~ t o g e t h e r " ~\)
\end{tabular}

\section*{(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) \(C a-\) or \(C V C V\) - (§3.4.3.1) reduplication, or (iii) both -an and \(C a-\) (or \(C V C V-\) ) reduplication. \({ }^{8}\)
```

lalak "child/children"
wari "day(s)"
basikaw "bamboo(s)"
suan " $\operatorname{dog}(\mathrm{s})$ "
Tau "person(s)"
Tau "person(s)"
wadi "younger sibling(s)"
'aLi "male friend(s)"

```
lalak-an "children"
wari-an "days"
basikaw-an "bamboos"
sua-suan "dogs"
Ta-Tau "everybody"
Ta-Tau-an/Tau-an "human being"
\(\boldsymbol{w a}\)-wadi-an "brothers and sisters"
'aLi-'aLi-an "male friends"

\section*{(v) Forming ordinal numbers}

Ordinal numerals (§4.5.4.3) are mainly derived by prefixing puka- to a numeral base; \(C a\) - reduplication optionally appears in the derived forms and causes no meaning difference.
\begin{tabular}{ll} 
Dua "two" & puka-Da-Dua 'the second" \\
& puka-Dua "the second" \\
teLu "three" & puka-ta-teLu" "the third" \\
& puka-teLu" "the third"
\end{tabular}

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 \(C a\) - 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 thesis, I gloss according to the form but not the meaning/function.

\subsection*{3.4.2.3 A comparison of the \(a\) - morphemes}

In Puyuma, there exist three distinct \(a\) - (or \(\langle a\rangle\) ) morphs; the first one is the allomorph of \(C a\) - (§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 3.1.

When we examine them closely, we find that \(a_{-2}\) and \(C a\) - are in complementary distribution and can be treated as allomorphs too. We find that \(a_{-2}\) occurs in stems consisting of \(u\)-, ki-, \({ }^{9}\) or mi-, and fossilised reduplicated-monosyllable stems with \(\langle a\rangle\), and \(C a\) - appears elsewhere. Unlike \(a-1\), which is defined as the allomorph of \(C a\) - by the phonological environment, \(C a\) - and \(a-2\) are morphologically determined allomorphs. So there are two layers: first, \(C a-\) (marking progressive and irrealis) and \(a_{-2}\) attach to different verbal stems as determined by morphology; then within those verbal stems that take \(C a-, a_{-1}\) appears in certain phonological environments.

In this thesis, \(\boldsymbol{a}_{-1}\) is glossed as "RED", \(\boldsymbol{a}-\mathbf{3}\) 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 \(\langle a\rangle\). Although \(\boldsymbol{a}-\mathbf{1}\) and \(\boldsymbol{a}-\mathbf{2}\) are in complementary distribution and they are functionally alike, I choose not to gloss \(\boldsymbol{a}-\mathbf{2}\) as "RED" but to keep it as \(\langle a\rangle\) because, like \(C a-, \boldsymbol{a}-\mathbf{2}\) '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 \(\boldsymbol{a - 2}\) is an allomorph of \(C a-\), 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).

\footnotetext{
\({ }^{8}\) There seems to be a tendency for human nouns to be formed by \(C a\) - plus -an and non-human nouns by either -an alone or by \(C V C V\) - reduplication (but lalakan is an exception). I assume \(C a\) - plus -an is a circumfix, which denote a collective meaning.
\({ }^{9}\) This is a more complicated in the case of verbs derived from \(k i\) - (§9.6). When \(k i\) - affixes to a nominal root and denotes the meaning of "get something", \(\boldsymbol{a}_{-2}\) 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 \(\boldsymbol{a}_{-1}\) ) is acceptable (although \(\boldsymbol{a}_{-2}\) 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
\begin{tabular}{|c|c|c|c|}
\hline & \(\boldsymbol{a}_{-1}\) & \(\boldsymbol{a - 2}\) & a-3 \\
\hline Distribution & It is the allomorph of \(C a\)-which occurs at the pre-penultimate position when the penultimate syllable does not have a onset & It occurs (i) in a fossilised reduplicated-monosyllable stem with \(\langle a\rangle\) (§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 \(u\) - "go", ki- "get", and \(m i\)-"have". \({ }^{10}\) & It occurs as part of a fossilised root. \\
\hline Examples & \begin{tabular}{l}
a-araw "will rob" \\
\(L u<a>a L u\) "will imitate" \\
\(m-a-u k a\) "going" \\
m-a-elaw "fortune-tell' \\
\(p a<a>e\) Teng "will be long"
\end{tabular} & \begin{tabular}{l}
si \(<a>k<a>\) sik "will set off" (sik<a>sik) \\
\(m a-L i<a>T<a>L i T\) \\
"rolling" \\
( ma-LiT \(<a>L i T\) ) \\
\(m-u\)-a-sabak "going inside’ \\
m-u-a-paTaran "going outside" \\
ki-a-lengaw "listening" \\
ki-a-rami" beginning" \\
mi-a-kiruwan "wearing clothes'
\end{tabular} & \begin{tabular}{l}
gis \(<a>\) gis "to shave" ging \(<a>\) ging "to quake" \\
\(b a k<a>b a k\) "vegetable garden" \\
kay \(<a>k a y\) "bridge" \\
\(k i<a>p k i p\) "eyelashes"
\end{tabular} \\
\hline Functions & Marking progressive, irrealis, reciprocal, plurality/collectivity, and forming instrumental nouns and numerals. & Marking progressive, irrealis & It can not be separated from the stem and has no synchronic function. \\
\hline
\end{tabular}

\subsection*{3.4.3 Disyllabic (CVCV-) reduplication}

\subsection*{3.4.3.1 Form}

In disyllabic reduplication the last two syllables of the stem are reduplicated, and the coda is dropped. For instance:
\[
\begin{array}{lll}
\text { Denan "mountain(s)" } & \rightarrow & \text { Dena-Denan "mountains" } \\
\text { ragumul "fur" } & \rightarrow & \text { ra-gumu-gumul"fluffy" }
\end{array}
\]

Adelaar (2000) and L. M. Chang (1998), in their analyses of Siraya and Thao, distinguish two different categories (which are treated as identical here), according to

\footnotetext{
\({ }^{10}\) See §6.5.1, §6.5.6 and §6.5.7.
}
whether the stem has two syllables or more than two syllables. For those stems with more than two syllables, they 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 \(C a\)-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 \(C V C V\) - 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.

\subsection*{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.

\section*{Examples of nouns:}
\begin{tabular}{ll} 
Denan "mountain" & Dena-Denan "mountains" \\
TaLun "grass" & TaLu-TaLun "field" \\
sa-turik"a row" & sa-turi-turik "each row" \\
uma' "farm" & uma-uma' "field" \\
suan "dog" & sua-suan "many dogs" \\
bati"story; say" & bati-bati-an "mythology" \\
Lima "hand" & matara-Lima-Lima "sign language"
\end{tabular}
ma- 'iDang-an "old person" ragumul "fur"
Takuban "youth's meeting place"
LikuDan "behind"

\section*{Examples of dynamic verbs:}
turus "to follow"
kirim "frugal"
kurut"to count"
ma-rutung "gather"
me-na'u "to see"
m-iway "hunger strike"
m-araw "rob"
mu-asal "change"
m-aLup "hunt"

\section*{Examples of stative verbs:}
\(m a-\) ' \(i D a\) - 'iDang-an "old persons"
ra-gumu-gumul "fluffy"
Ta-kuba-kuban "male youth"
Li-kuDa-kuDan "the last"
turu-turus "keep following"
\(k<e m>\) iri-kirim "to count every need"
kuru-kurut-aw "to limit"
ma-rutu-rutung "gather repeatedly" те-na'и-na'и "keep looking" m-iwa-iway "keep on hunger strike" m-ara-araw "rob again and again" mu-asa-asal "change again and again" m-aLu-aLup "go hunting"
ma-ruwa-ruwa "can"
ma-risa-risan "pretty much the same"
dawi-dawil "very far"
asa-asaT "very tall"
mu-kasa-kasa "staying together"
mi-sasa-sasa "there is only one"
ka-Duwa-Duwan "many"
\(C V C V\) - 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.
\begin{tabular}{ll} 
dirus "to bathe, to swim" & diru-dirus-an "swimming pool" \\
Tima' "to buy" & Tima-Tima'-an "market" \\
TekeL "to drink" & Teke-TekeL-an "place for drinking \\
& \multicolumn{1}{c}{ water" } \\
daway "to produce" & dawa-daway-an "factory"
\end{tabular}
\(C V C V\) - reduplication can replace Ca - reduplication to form reciprocal verbs expressing intensity (§9.3). For example:
ma-pa-pingiT "scratch each other' ma-pingi-pingiT" "fight against each other" ma-sa-saLaw "pass by each other' ma-saLa-saLaw "chase each other"
\(C V C V\) - reduplication is often used to form placenames or personal names. For example kalikali (personal name) is from kali 'stream, brook"; sanusanum (place name) is from sanum "tap".

\subsection*{3.4.4 First syllable reduplication}

First syllable reduplication applies mostly to numerals for counting non-human referents \({ }^{11}\) (§4.5.4.2), although it is not obligatory. However, not all numerals follow the same reduplication pattern. The number 'six' takes \(C a\) - reduplication, and 'seven' and 'nine' take \(C V C V\) - reduplication. The numbers 'one', 'four', and 'eight' are indeterminate, because the reduplication may be analysed as either \(C a-\) or \(C V\) - A list of the numerals from one to nine is given for reference.
\begin{tabular}{|c|c|}
\hline cardinal number & non-human referent \\
\hline 1: sa & sa-sa-a \\
\hline 2: Dua & Du-Dua-a \\
\hline 3: tuLu & \(t u-t u L u-a\) \\
\hline 4: pat & pa-pat-a \\
\hline 5: Lima & lu-luwaT-a \({ }^{\text {I2 }}\) \\
\hline 6: nem & na-nет-a \\
\hline 7: pitu & pitu-pitu-a \\
\hline
\end{tabular}

\footnotetext{
\({ }^{11}\) There is only one example not related to counting words, in which \(C V\) - 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 teтитиап involves reduplication ( not <em> infixation with vowel assimilation) is the forms tетии "your grandparent" and temutaw "his grandparent". See also Table 5.1 in §5.3.2.
mi-Tungul \(D a \quad\) te<mu>mu-an \(D a \quad\) saygu m-alup have-lineage ID.OBL <RED>-grandparent-COL ID.OBL be.good.at AV-hunt "This Likaw had ancestors that were good at hunting."
\({ }^{12}\) The word Lima "five" is only used to refer to the number five; in counting objects, or in any derivations, the base for five is always luwaT.
}
\begin{tabular}{ll} 
8: waLu & wa-walu-a \\
9: iwa & iwa-iwa-a
\end{tabular}

\subsection*{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:
(25) taLugang-gang
sturdy-RED
"He is very sturdy."

\subsection*{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 several subtypes.

\subsection*{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 \(\langle i n\rangle\) (§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).
\begin{tabular}{|c|c|}
\hline bati "to say; word" & \(b<e n>a\)-ba-bati "tale; rumour" \\
\hline kawang "to walk" & \(k<e m>a-k a-k a w a n g\) "walking" \\
\hline senay "to sing" & \(s<e m>a\)-sa-senay "singing" \\
\hline Takaw "to steal " & \(T<e m>a-T a-T a k a w\) "stealing" \\
\hline sing "to sing" & \(s<i n>a\)-sa-senay "songs often sung" \\
\hline saLem "to plant" & \(s<i n>a\)-sa-saLem "something \\
\hline & habitually planted" \\
\hline
\end{tabular}

\subsection*{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 \(C a\) - 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:
\begin{tabular}{ll} 
wari "day" & wa-wari-wari "every day" \\
Tau "person" & Ta-Tau-Tau" "everyone" \\
ruma' "house" & ra-ruma-ruma' "every house" \\
dare' "earth; soil" & da-dare-dare' "the whole land" \\
Tungul "lineage descent" & Ta-Tungu-Tungul "connections"
\end{tabular}

\section*{CHAPPIER 4}

\section*{Lexicła CATEGORIES}

\subsection*{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 made 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 \(\S 4.4\). The closed categories are discussed in \(\S 4.5\).

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 morphosyntatic criteria.

\subsection*{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.
\begin{tabular}{lllll}
\begin{tabular}{llll} 
T<em>akaw & Da & paisu & \(\boldsymbol{i}\) \\
<AV>steal & ID.OBL & money & SG.NOM
\end{tabular} & Isaw \\
& & & &
\end{tabular}
\begin{tabular}{lccll}
\(t u=\) Takaw-aw & \(\boldsymbol{n a}\) & paisu & kan & isaw \\
3.GEN=steal-PV & DF.NOM & money & SG.OBL & Isaw \\
& & & &
\end{tabular}
\begin{tabular}{lllll}
\(t u=\) Takaw- \(\boldsymbol{a y}=\boldsymbol{k} \boldsymbol{u}\) & Da & paisu & kan & isaw \\
3.GEN=steal-LV=1S.NOM & ID.OBL & money & SG.OBL & Isaw \\
"Isaw stole money from me." & & &
\end{tabular}
(4)
\begin{tabular}{lllll} 
tu=Takaw-anay & \(\boldsymbol{i}\) & tinataw & Da & paisu \\
3.GEN=steal-CV & SG.NOM & his.mother & ID.OBL & money \\
& \\
"He stole money for his mother." & & &
\end{tabular}

Actor voice clauses are intransitive and are marked no differently from other intransitives (these markers are glossed 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 verb as 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 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
\begin{tabular}{|l|c|c|c|}
\hline & Pronominal clitics & Free pronouns & NP markers \\
\hline Nominative & \(\sqrt{ }\) & \(\checkmark\) & \(\checkmark\) \\
\hline Genitive & \(\sqrt{ }\) & \(\times\) & \(\times\) \\
\hline Oblique & \(\times\) & \(\checkmark\) & \(\checkmark\) \\
\hline
\end{tabular}

\subsection*{4.3 Distinctions between nouns and verbs}

In discussing lexical categories, it is necessary to distinguish between word level (terminal syntactic categories) and root level (morphological categories). The first issue is addressed in \(\S 4.3 .1\) and the second is elaborated in §4.3.2.

\subsection*{4.3.1 Word level}

\subsection*{4.3.1.1 Two syntactic tests}

Since word classes are terminal syntactic categories, syntactic features provide the basic criteria for determining word classes. Two syntactic tests are utilised in
determining whether a word is verbal or nominal. First, while a verbal element is negated by \(a D i\), a nominal element is negated by ameli, as shown below:
\begin{tabular}{ll} 
aDi & saygu \\
NEG & able
\end{tabular}
"She's not able to."
(6) ameli a suan

NEG ID.NOM dog
"It is not a dog."
(7) *ameli saygu
(8) \({ }^{*} a D i \quad a \quad\) suan

Second, while both nouns and verbs can be preceded by genitive proclitics, \({ }^{1}\) only nouns can co-occur with free possessive pronouns. For example, in (9), kasu-aw and paDek-an are both procliticised by the genitive clitic \(t u=\). While the clitic before paDek-an can be replaced by a free form nantu, the same replacement before kasu-aw is prohibited.
(9) \(\boldsymbol{t} \boldsymbol{u}=k a s u-a w \quad \boldsymbol{t u}=p a D e k-a n\)
3.GEN=take-TR1 3.PSR=back-NMZ
"She took her backpack."
tu=kasu-aw nantu paDek-an
3.GEN=take-TR1 NOM/3.PSR back-NMZ
"She took her backpack."
(11) *nantu kasu-aw tu=paDek-an

NOM/3.PSR take-TR1 3.PSR=back-NMZ

\footnotetext{
\({ }^{1}\) 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.
}

\subsection*{4.3.1.2 Nouns}

\subsection*{4.3.1.2.1 Syntactic functions and features of nouns}

In addition to the co-occurrence 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"" (PIBU, after Croft 2001:257-259), of a noun phrase.
(12) saDu na asi tu=T<in>ekeL
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.
\begin{tabular}{lll}
\(\boldsymbol{t a}=\boldsymbol{t i L i l}\) & kana & yawan \\
1P.PSR=book & DF.OBL & chief \\
"our writing records about chiefs"
\end{tabular}

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 of nouns); 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 \(\S 4.5\).

\footnotetext{
\({ }^{2}\) A PIBU is "the most contentful item that most closely profiles the same kind of thing that the whole constituent profiles". (Croft 2001:257)
}

\subsection*{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 the grammatical functions of noun phrase markers is provided in \(\S 8.2\).

Table 4.2: Noun Phrase Markers in Puyuma
\begin{tabular}{lccccc}
\hline & \multicolumn{2}{c}{ Common nouns } & \multicolumn{2}{c}{ Personal nouns } & Locations \\
& indefinite & definite & singular & plural & \\
\hline Nominative & \(a\) & \(n a\) & \(i\) & \(n a\) & \(i\) \\
Oblique & \(D a\) & \(k a n a\) & \(k a n\) & \(k a n a\) & \(i\) \\
\hline
\end{tabular}

\subsection*{4.3.1.2.3 A subcategorisation of open-class nouns}

Open-class nouns are subcategorized into three classes in terms of their syntactic features: 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 among the three classes of nouns is given in Table 4.3.

Table 4.3: A comparison among the three subclasses of nouns
\begin{tabular}{|l|c|c|c|}
\hline & Personal & Locative & Common \\
\hline \begin{tabular}{l} 
may be modified by a non-restrictive \\
relative clause
\end{tabular} & yes & \(?^{3}\) & yes \\
\hline \begin{tabular}{l} 
may be preceded by a demonstrative/ \\
deictic expression
\end{tabular} & no & yes & yes \\
\hline \begin{tabular}{l} 
may be modified by a restrictive relative \\
clause
\end{tabular} & no & no & yes \\
\hline may be preceded by a personal pronoun & no & no & yes \\
\hline may be modified by a numeral & no & no & yes \\
\hline
\end{tabular}

Because noun phrase structures will be dealt with in detailed 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.
\(t u=p a D e k-a w \quad i\)
3.GEN=carry.on.back-TR1 SG.NOM

\section*{temutaw}
"He carried his grandmother on back."
\begin{tabular}{llll} 
tu=bes-besbes-ay & kan & ma'iDang & kakawalan \\
3.GEN=RED-massage-TR2 & SG.OBL & old & Kakawalan
\end{tabular}
"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."

\footnotetext{
\({ }^{3}\) I have found no example in the corpus showing whether a locative noun can be modified by a non-restrictive relative clause.
}

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.
\begin{tabular}{lllcc} 
a. & \(\boldsymbol{n a n k} \boldsymbol{u}\) & \(\boldsymbol{w a d i}\) & \(i\) & pilay \\
& DF.NOM/1S.PSR & younger.sibling & SG.NOM & Pilay
\end{tabular}
"Pilay is my younger sister."
\begin{tabular}{llll} 
b. & \(\boldsymbol{i} \quad\) baeli & \(i\) & senayan \\
& SG.NOM my.elder.sibling & SG.NOM & Senayan
\end{tabular}
"Senayan is my elder sister."

They 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.
\begin{tabular}{lll} 
a. nanku & senayan \\
& NOM/1S.PSR & Senayan
\end{tabular}
"my Senayan"
\begin{tabular}{llll} 
b. & \({ }^{*} i D u\) & \(i\) & senayan \(^{5}\) \\
& that.NOM & SG.NOM & Senayan \\
& "that Senayan" &
\end{tabular}
\begin{tabular}{lrll} 
a. \(n a\) & mia-Dua & \(i\) & senayan \\
& DF.NOM & PRS-two & SG.NOM
\end{tabular} Senayan

\footnotetext{
\({ }^{4}\) Older-generation kins 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.
\({ }^{5}\) This sentence will be grammatical if it is interpreted as an equational sentence, meaning "Senayan is that one".
}
\begin{tabular}{lllll} 
b. & *na & mia-Dua & \(i\) & baeli \\
& DF.NOM & PRS-two & SG.NOM & my.elder.sibiling \\
& "my two elder brothers" & &
\end{tabular}
\(t u=p a D e k-a w=k u\) kan isaw na
3.GEN=carry.on.back-TR1=1S.NOM

SG.OBL Isaw LK
bangsar
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) \(i\) timuL is the subject, but the noun phrase marker \(i\) in these examples cannot be replaced with \(n a\) (marking nominative) or kana (marking oblique). In (21) and (22) the noun is a stative location, and in (23) it is a goal.
m-uka=ku i/*kana taihok
ITR-go=1S.NOM LOC/DF.OBL Taipei
"I went to Taipei."
ma-kiteng i/*na
timuL
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."

\footnotetext{
\({ }^{6}\) Locative nouns expressing sources are always preceded by kemay "from", with or without \(i\), but never *kemay kana.
}

Like personal nouns, they 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).
(24) *ma-kiteng \(i\) timuL na Dua-a

ITR-small LOC south LK two-NPRS
"The two souths are small."
(25) \({ }^{*} m-u k a=k u \quad i \quad\) baLangaw \(n a \quad b u L a y\)

ITR-go=1S.NOM LOC Taitung LK beautiful
"I went to beautiful Taitung."
(26) m-uka kaDi \(i \quad\) baLangaw

ITR-go here LOC Taitung
"They came here to Taitung."

All locative nouns cannot be preceded by a personal pronoun, as shown in (27a-c), but 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)
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{a.} & *nanku & nguayan \\
\hline & NOM/1S.PSR "my front" & front \\
\hline \multirow[t]{3}{*}{\(a^{\prime}\).} & \(i\) nguayan & kanku \\
\hline & LOC front & 1S.OBL \\
\hline & "in front of me" & \\
\hline \multirow[t]{3}{*}{b.} & *nanku & timuL \\
\hline & NOM/1S.PSR & south \\
\hline & "my south" & \\
\hline \multirow[t]{3}{*}{\(\mathrm{b}^{\prime}\).} & maka-timuL ka & ku \\
\hline & along-south 1S & OBL \\
\hline & "south to me" & \\
\hline
\end{tabular}
\begin{tabular}{lll} 
c. & \({ }^{\text {n nanku }}\) & taihok \\
& NOM/1S.PSR & Taipei \\
& "my Taipei" &
\end{tabular}
(28) a. ulaya i isat kana etu' na paisu exist LOC above DF.OBL table DF.NOM money "The money is on the table."
b. *ulaya i puyuma kana kanataL i
exist LOC Puyuma DF.NOM island SG.NOM
baeli
my.elder.sibling
"*My elder brother is the island's Puyuma."

Common nouns are nouns other than location 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). For example:
\(\begin{array}{llllcccc}\text { (29) } & \text { Dua } & \text { me-nau-a } & \boldsymbol{a} & \text { mia-Dua } & \boldsymbol{a} & \text { Tau } & i, \ldots \\ & \text { come } & \text { ITR-see-PJ } & \text { ID.NOM } & \text { PRS-two } & \text { ID.NOM } & \text { person TOP }\end{array}\)
"Two people came to see...."
(30)
\begin{tabular}{lcccl} 
tu=aLak-aw & \(\boldsymbol{n a}\) & kiping & \(\boldsymbol{n a}\) & \(\boldsymbol{b u L a y}\) \\
3.GEN=take-TR1 & DF.NOM & clothes & DF.NOM & beautiful \\
"They took the beautiful clothes." & & &
\end{tabular}
\begin{tabular}{lcccc} 
saLaw \(=k u\) & sagar & kanDi & kana & suan \\
very=1S.NOM & like & this.OBL & DF.OBL & \(\operatorname{dog}\) \\
"I like this dog very much." & &
\end{tabular}
(32) buLay nanu kabung
beautiful your.NOM 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", kaLi "river", LangiT "sky", ine "sea", Dekal "village". For instance, in (33), LangiT "sky" is the subject and is used as a common noun, but in (34), it is used as a locative noun.
\begin{tabular}{lll} 
(33) & mi-riwanes \(\quad \boldsymbol{n a}\) & Langit \\
& have-rainbow DF.NOM & sky
\end{tabular}
"The sky has a rainbow."
\begin{tabular}{lllll} 
ulaya & \(a\) & ariwanes & \(\boldsymbol{i}\) & LangiT \\
exist & ID.NOM & rainbow & LOC & sky
\end{tabular}
"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.
\begin{tabular}{lll} 
a. \begin{tabular}{ll} 
ma-Tina & \(\boldsymbol{n a}\) \\
& ruma, \\
& ITR-big \\
& "The house is big."
\end{tabular} & \\
& &
\end{tabular}
b. ma-Tina na ruma' na teLu-a

ITR-big DF.NOM house DF.NOM three-NPRS
"The three houses are big."
c. ma-Tina iDi na ruma' na buLay

ITR-big this.NOM DF.NOM house DF.NOM beautiful "This beautiful house is big."
\[
\begin{array}{llll}
\text { a. } & T<e m>e k e L=k u \quad i & \text { ruma' }  \tag{36}\\
& \text { ITR-drink=1S.NOM LOC } & \text { house } \\
& \text { "I drink (wine) at home." } &
\end{array}
\]
\begin{tabular}{lllll} 
b. & \(* T<e m>e k e L=k u\) & \(\boldsymbol{i}\) & ruma' \(n a\) & teLu-a \\
& ITR-drink=1S.NOM & LOC & house DF.NOM & three-NPRS \\
c. & \(* T<e m>e k e L=k u\) & \(\boldsymbol{i}\) & ruma' \(n a\) & buLay
\end{tabular}

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:
\begin{tabular}{|c|c|c|c|c|c|}
\hline a. & \(T<e m>e k e L=t a\) & kantu & & \multicolumn{2}{|l|}{ruma'} \\
\hline & <ITR>drink=1P.ICL.NOM & DF.O & L/3.PSR hound & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{house}} \\
\hline & \multicolumn{3}{|l|}{"We drank in his house."} & & \\
\hline \(a^{\prime}\). & * \(T<e m>e k e L=t a\) & \multicolumn{3}{|l|}{\(\boldsymbol{i}\) kantu} & ruma' \\
\hline & <ITR>drink=1P.ICL.NOM & LOC & DF.OBL/3.PSR & & ouse \\
\hline \multirow[t]{3}{*}{b.} & \(t a=p a-D u a-a w\) & \multicolumn{2}{|l|}{kanta r} & \multicolumn{2}{|l|}{ruma'} \\
\hline & 1P.GEN=CAUS-come-TR1 & DF.O & L/3.PSR hous & \multicolumn{2}{|l|}{house} \\
\hline & \multicolumn{5}{|l|}{"We made them come to our house."} \\
\hline \multirow[t]{3}{*}{b'.} & \({ }^{*} t a=p a-D u a-a w\) & \(i\) & \multicolumn{2}{|l|}{kanta} & ruma \({ }^{\text {, }}\) \\
\hline & 1P.GEN=CAUS-come-TR1 & LOC & \multicolumn{2}{|l|}{DF.OBL/1P.PSR} & house \\
\hline & "We made them come to our & our hou & & & \\
\hline
\end{tabular}

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).
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{a.} & aDi ua-dalep i/k & i/kana & ine & \\
\hline & NEG go-close L & LOC/DF.OBL & sea & \\
\hline & \multicolumn{4}{|l|}{"Don't go close to the sea."} \\
\hline \multirow[t]{3}{*}{b.} & mu-atel \(=k u\) & i/kana & & kali \\
\hline & ACAUS-fall=1S.NOM & LOC/D & & brook \\
\hline & "I fell into the brook." & & & \\
\hline
\end{tabular}

However, when such nouns encode goals after muka "go" and Dua "come", they are always preceded by \(i\), as in (39). \({ }^{7}\)
\begin{tabular}{lll} 
(39) & \(m\)-uka & \(i / *\) kana
\end{tabular}\(\quad\) Dekal

When such nouns denote source (which is always introduced by kemay "from"), they can be preceded by a personal pronoun.
\(\left.\begin{array}{llccc}\text { a. } & \text { p-u-paTaran=ku } & \text { kemay } & \text { i/*kana } & \text { ruma' } \\
& \text { CAUS-go-out=1S.NOM } & \text { from } & \text { LOC/DF.OBL } & \text { house }\end{array}\right]\)\begin{tabular}{llll} 
& "I made it go out from the house." & & \\
b. & p-u-paTaran=ku & kemay & kanta
\end{tabular}

\subsection*{4.3.1.3 Verbs}

Verbs can be sub-divided 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 \(b<e n>i a s\) 'make hot' are respectively monovalent and bivalent verbs derived from the root bias, while bias-aw and \(b<e n>i a s\) 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 \(\S 10.2\).
(i)

Zero-valency or 'ambient' verbs: They do not take any argument.

\footnotetext{
\({ }^{7}\) However, when goals are denoted by common nouns not encoding familiar locations, these nouns are preceded by kana instead of \(i\). For instance:
\begin{tabular}{lclll} 
m-uka \(\quad\) kana & mar-asaT & kana & tu'uT \\
ITR-go DF.OBL & more-high & DF.OBL & pillar \\
"They went to the higher pillar." & &
\end{tabular}
}
\[
\begin{align*}
& a<r a>\text { remeng }=l a  \tag{41}\\
& <\text { RED }>\text { dark=PERF } \\
& \text { "It is getting dark." }
\end{align*}
\]
(ii) Monovalent verbs: They 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.
ma-rimek na ruma'
ITR-dirty DF.NOM house
"The house is dirty." (Stative)
(43)
\(s<e m>a\)-senay \(\quad i \quad\) 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.
\begin{tabular}{llll}
\(t u=a D a s-a w\) & \(i D u\) & \(n a\) & barasa \\
3.GEN=lift.up-TR1 & that.NOM & DF.NOM & stone \\
"They lifted up that stone." & &
\end{tabular}

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.
\(m-a D a s=m i\)
Da Liung
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 \(\S 9.5\) and \(\S 9.6\) respectively. Here the patient NP is in nominative case and the actor (if any) is in the oblique case, as in (47)
(46) mu-TukuL na sa'aD

ACAUS-pick DF.NOM branch
"The branch was picked up by (someone)."
ki-sulu-sulud=ku \(\quad D a \quad\) Tau
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.

\footnotetext{
\({ }^{8}\) I have found no example of beray "give" or pabuLas "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.
}
(48) an tu=beray- \(a y=m u=l a\)
if 3.GEN \(=\) give - TR \(2=2 \mathrm{P} \cdot \mathrm{NOM}=\mathrm{PERF}\)
"If she gives you ladles,"
(49)
\begin{tabular}{lll} 
tu=beray-anay & \(\boldsymbol{n a}\) & \(\boldsymbol{l a} \boldsymbol{a} \boldsymbol{u} \boldsymbol{b}\) \\
3.GEN=give-TR3 & DF.NOM & ladle
\end{tabular}
"She gave them the ladle."
(50)
\begin{tabular}{lllll} 
a. \(k u=\) pabuLas-ay & Da & kabung & \(i\) & Lugi \\
& 1S.GEN=lend-TR2 & ID.OBL & hat & SG.NOM
\end{tabular} Lugi
b. ku=pabuLas-anay kan Lugi na kabung

1S.GEN=lend-TR3 SG.OBL Lugi DF.NOM hat
"I lent the hat to Lugi."

\subsection*{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.
\begin{tabular}{lll} 
senay & \(D a\) & senay \\
sing.IMP & ID.OBL & song
\end{tabular}
"Sing a song!"
a. \(\boldsymbol{t}<\boldsymbol{e m}>\boldsymbol{a}<\boldsymbol{k} \boldsymbol{a}>\boldsymbol{k} \boldsymbol{e s} \boldsymbol{i}=k u\)
\[
\begin{equation*}
<\text { ITR }><\text { RED }>\text { study }=1 \text { S.NOM } \tag{52}
\end{equation*}
\]
"I am studying."
```

b. a t<em>a<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:
\begin{tabular}{|l|l|l|l|}
\hline Root & \multicolumn{1}{|c|}{ Noun } & \multicolumn{1}{|c|}{ Verb (imperative) } & \multicolumn{1}{c|}{ Verb (progressive) } \\
\hline senay & senay "song" & senay "to sing" & semasenay "singing" \\
\hline takesi & temakakesi "student" & takesi"to study" & temakakesi "studying" \\
\hline
\end{tabular}

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, i.e. 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 the \(t<e m>a k e s i\) 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.

\footnotetext{
\({ }^{9}\) Himmelmann (forthcoming) describes a parallel mismatch in Tagalog.
}
\begin{tabular}{lcl} 
takesi \(\quad i\) & sabak! \\
study.IMP \(\quad\) LOC & inside \\
"Study inside!" &
\end{tabular}

Likewise, the root ngaLad 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).
\begin{tabular}{lcccll} 
tu=ngaLad & kan & tетии & i, amau & \(i\) \\
3.PSR=name & SG.OBL & your.grandparent & TOP & COP & SG.NOM
\end{tabular}
kalikali
Kalikali
"Your grandmother's name is Kalikali."
(55) mi-ngaLad Da matang
have-name ID.OBL Matang
"It is called Matang."

Similarly, the root saLem 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).
\begin{tabular}{lcl} 
saLem & \(D a\) & bini \\
plant & ID.OBL & seed \\
"Plant a seed!" &
\end{tabular}
\(s a D u \quad t u=s<i n>a L e m-a n\)
many \(\quad 3 . \mathrm{PSR}=<\) 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 co-occur with either ma- or \(k a\) - 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) \(\boldsymbol{m a}\)-'iDang \(=k u\)

ITR-old=1S.NOM
"I am old.'
\begin{tabular}{lcc}
\(s<e m>\)-senay & \(n a\) & ma-'iDang-an \\
\(<\) ITR \(>\) RED-sing & DF.NOM & ITR-old-NMZ \\
& & \\
"The old persons are singing." &
\end{tabular}

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)
\begin{tabular}{lllll} 
tawasi & V & to brush & N & brush \\
tabukul & V & to catch sth with a net & N & net \\
elaw & V & to practice divination & N & \begin{tabular}{l} 
the bamboo used to \\
practice divination
\end{tabular} \\
kuang & V & to shoot & N & gun \\
abak & V & to contain & N & container \\
kutang & V & to spear & N & spear \\
dawak & V & to poison & N & poison
\end{tabular}
(ii) verbs and their related undergoer nouns
\begin{tabular}{lllll} 
sama & V & to leave sth & N & sth left \\
sabung & V & to compensate & N & compensation
\end{tabular}
(iii) verbs and their related result nouns
\begin{tabular}{llll} 
'udal & V & to rain & N \\
rain \\
senay & V & to sing & N \\
song \\
bati & V & to tell & N \\
tale \\
buang & V & to make a hole & N \\
hole \\
runi & V & to sound & N
\end{tabular} sound.
(iv) others (mostly nouns and their related properties, or a body part and the action typically related to it)
\begin{tabular}{|c|c|c|c|c|}
\hline lalak & V & young & N & child \\
\hline kuaLeng & V & ill & N & illness \\
\hline paDek & V & to carry on back & N & back \\
\hline
\end{tabular}

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.

\subsection*{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-'iDang "old" in (60) and ma-ragan "get up" in (61). The two verbs are both marked by the same intransitive marker. Syntactically, both ma'iDang and maragan function as a predicate, and both of them take a pronominal and an aspectual clitic.
(60) \(\boldsymbol{m a}\)-'iDang=ku=la

ITR-old=1S.NOM=PERF
"I'm old."
(61) \(\quad\) ma-ragan \(=k u=l a\)

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:
\begin{tabular}{|l|l|}
\hline \multicolumn{1}{|c|}{ Stative } & \multicolumn{1}{c|}{ Dynamic } \\
\hline\(m a\)-' \(i D a n g\) "old" & ma-ragan "get up" \\
\hline ma-' \(i\)-'iDang "getting old" & ma-ra-ragan "getting up" \\
\hline\(k a\) - \(i\)-' \(i\) 'iang "will get old" & ra-ragan "will get up" \\
\hline
\end{tabular}

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).
\begin{tabular}{|c|c|c|c|c|}
\hline \(k<a>a D u=\) Diya & nantu & lang & [ \(n a\) & pa-pulang] \\
\hline <a>there=IMPF & DF.NOM/3.PSR & company & DF.NOM & RED-help \\
\hline
\end{tabular}
\begin{tabular}{lrll} 
(63) ulaya a & lalak & {\([a\)} & ma-keser] \\
exist ID.NOM & child & ID.NOM & ITR-strong
\end{tabular}

However, there is a comparative/superlative prefix mara- which can prefix to stative verbs but not to dynamic verbs. For instance, mara-ma-'iDang "older", mara-ma-keser "stronger", but not *mara-ma-ragan and *mara-pulang. But 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).

\subsection*{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 thesis.

\subsection*{4.5.1 Personal pronouns}

\subsection*{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
\begin{tabular}{|l|l|l|l|l|l|l|l|l|}
\hline \multicolumn{2}{|c|}{\begin{tabular}{l} 
number/person \\
\cline { 4 - 9 } \\
case
\end{tabular}} & \multicolumn{4}{|c|}{ Singular } & \multicolumn{4}{c|}{ Plural } \\
\cline { 3 - 9 } & \(1^{\text {st }}\) & \(2^{\text {nd }}\) & \(3^{\text {rd }}\) & \(1^{\text {st }} \mathrm{ICL}\) & \(1^{\text {st }} \mathrm{ECL}\) & \(2^{\text {nd }}\) & \(3^{\text {rd }}\) \\
\hline \multirow{3}{*}{\(\mathbf{N O M}\)} & Subj. & \(=k u\) & \(=y u\) & --- & \(=t a\) & \(=m i\) & \(=m u\) & --- \\
\cline { 2 - 9 } & \begin{tabular}{l} 
Poss of \\
Subj.
\end{tabular} & \(k u=\) & \(n u=\) & \(t u=\) & \(t a=\) & \(n i a m=\) & \(m u=\) & \(t u=\) \\
\hline GEN & \(k u=\) & \(n u=\) & \(t u=\) & \(t a=\) & \(m i=\) & \(m u=\) & \(t u=\) \\
\hline
\end{tabular}

In the nominative column, 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 possessors 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 the verbal elements and refer to the non-subject actor. Compare the two proclitic pronouns in (64):
\(\boldsymbol{k} \boldsymbol{u}=\) rungas-aw \(\quad \boldsymbol{k} \boldsymbol{u}=k i r u a n\)
1S.GEN=take.off-TR1 1S.PSR=clothes
"I took off my clothes."

The first \(k u=\) (1S.GEN) attaches to the verb and denotes the non-subject actor, while the second \(k u=\) (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).
a lalak \(=\boldsymbol{k} \boldsymbol{u}=\) Diya
ID.NOM child=1S.NOM=IMPF
"I was still a child."
\begin{tabular}{lll} 
(66) \begin{tabular}{ll} 
mu-atel \(=\boldsymbol{k} \boldsymbol{u}\) & \(D a\) \\
ACAUS-fall=1S.NOM & ID.OBL
\end{tabular}\(\quad\) water \\
& "I fell to the water." &
\end{tabular}

\subsection*{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 \(k u\), and is glossed as NOM/1S.PSR; the form kanku consists of \(k a n\) and \(k u\) and is glossed as DF.OBL/1S.PSR; the form Daku consists of \(D a\) and \(k u\) and is glossed as ID.OBL/1S.PSR. The longer forms in the oblique category, i.e. kananku or Dananku, consist of a noun phrase marker and a nominative possessor pronoun (kan + nanku; \(D a+n a n k u)\) are glossed in the same way (i.e. kananku DF.OBL/1S.PSR; Dananku ID.OBL/1S.PSR).

Table 4.5: Puyuma free pronouns
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline & & & & Singular & & & & ral & \\
\hline & & & \(1^{\text {st }}\) & \(2^{\text {nd }}\) & \(3^{\text {rd }}\) & \(1^{\text {st }}\) ICL & \(1^{\text {st }}\) ECL & \(2^{\text {nd }}\) & \(3^{\text {rd }}\) \\
\hline \multicolumn{3}{|l|}{NOM (Poss of Subj)} & nanku & nanu & nantu & nanta & naniam & пепети & nantu \\
\hline \multirow{3}{*}{OBL} & \begin{tabular}{l}
Poss \\
of
\end{tabular} & DF & \begin{tabular}{l}
kanku \\
kananku
\end{tabular} & \begin{tabular}{l}
kanu \\
kananu
\end{tabular} & \begin{tabular}{l}
kantu \\
kanantu
\end{tabular} & \begin{tabular}{l}
kanta \\
kananta
\end{tabular} & \begin{tabular}{l}
kaniam \\
kananiam
\end{tabular} & \begin{tabular}{l}
kanemu \\
kananemu
\end{tabular} & \begin{tabular}{l}
kantu \\
kanantu
\end{tabular} \\
\hline & ubj & ID & \begin{tabular}{l}
Daku \\
Dananku
\end{tabular} & \begin{tabular}{l}
Danu \\
Dananu
\end{tabular} & \begin{tabular}{l}
Datu \\
Danantu
\end{tabular} & \begin{tabular}{l}
Data \\
Dananta
\end{tabular} & \begin{tabular}{l}
Daniam \\
Dananiam
\end{tabular} & \begin{tabular}{l}
Danemu \\
Dananemu
\end{tabular} & \begin{tabular}{l}
Datu \\
Danantu
\end{tabular} \\
\hline & \multicolumn{2}{|l|}{Non-subj} & kanku & kanu & kantaw & kanta & kaniam & kanemu & kantaw \\
\hline \multicolumn{3}{|l|}{NEU} & kuiku & уиуи & taytaw & taita & mimi & тиіти & --- \\
\hline
\end{tabular}

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):
\begin{tabular}{llllll} 
(67) & taita & \(i\), & \(k<a>a D u=t a\) & \(i\) & \(t a i h o k\) \\
& 1.ICL.NEU & TOP & \(<\) RED \(>\) there=1.ICL.NOM & LOC & Taipei
\end{tabular}
"As for us, we are living in Taipei."
\begin{tabular}{llll} 
(68) amau taytaw & \(n a\) & \(s<e m>a\)-senay \\
COP & 3S.NEU & DF.NOM & \(<\) ITR \(>\) RED-sing
\end{tabular}
"It is him who was singing."

The neutral pronouns are also used as a reply to an interrogative sentence starting with i manay "who".
(69)

Q: \(\quad i\)
SG.NOM who
"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)
\begin{tabular}{ll} 
tu=tusuk-aw & taytaw \\
3GEN=spear-TR1 & 3S.NEU
\end{tabular}
"He speared himself."
"He himself speared it."

They optionally appear in a verbal construction to denote a third person nominative argument. For instance:
\begin{tabular}{llll} 
ku=pabuLas-ay & \(D a\) & kabung & taytaw \\
1S.GEN=lend-TR2 & ID.OBL & hat & 3S.NEU \\
"I lent him a hat.' & & &
\end{tabular}
\begin{tabular}{lrl} 
sa<'eru>'eru & misasa=la & taytaw \\
<RED>laugh & one=PERF & 3S.NEU \\
"She kept laughing alone." &
\end{tabular}

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 \(t u=\), refuting this hypothesis.
\begin{tabular}{lll}
\(t u=p a-\) 'a-'arum-ay & \(n u=k i r u a n\) & taytaw \\
3.GEN=CAUS-RED-dry-TR2 & 2S.PSR=clothes & 3S.NEU \\
"He himself is drying your clothes." &
\end{tabular}

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.
tu=reTa-anay nantu basak kana ma'iDang-an
3.GEN=put.down-TR3 DF.NOM/3.PSR bag

"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 \(t u=\).

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:
\[
\begin{array}{lrl}
\text { m-uai=yu } & \text { mi-kataguin } & \text { kanku }  \tag{76}\\
\text { ITR-willing.to=2S.NOM } & \text { have-spouse } & \text { 1S.OBL } \\
\text { "Are you willing to marry me?" } &
\end{array}
\]
\begin{tabular}{lll}
\(k<e m>a-a=k u=D i y a\) & \(p a-k a-l a D a m\) & kanmu \\
\(<\) ITR \(>\) say-PJ=1S.NOM=IMPF & CAUS-ka-know & 2 P.OBL \\
"I am speaking to inform you." & &
\end{tabular}

The possessors of non-subjects are further subcategorized into two classes in terms of definiteness of the possessed nouns. For example:
\begin{tabular}{llll} 
(78) sagar & \(k u<\) rena \(>\) renang & kantu & wadi \\
like & \(<\) RED \(>\) follow & DF.OBL/3.PSR & younger.sibling
\end{tabular}
"She likes following her brothers."
\begin{tabular}{llllll} 
(79) & sagar & m-ekan & Data & \(b<\) in>eray & Da \\
& like & ITR-eat & ID.OBL/1P.PSR & \(<\) PERF \(>\) give & ID.OBL
\end{tabular}
"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.

\subsection*{4.5.2 Temporal nouns}

There are only a few temporal nominals in Puyuma, listed below:
\begin{tabular}{ll} 
aDu/aDunu & "then" \\
andaman & "tomorrow; days later" \\
adaman & "yesterday; days before" \\
garem & "now; today" \\
garemay & "later"
\end{tabular}

They 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:
\begin{tabular}{lll} 
nantu & \(k a-s i<a>k a s i k-a n\) & andaman \\
DF.NOM/3.PSR & \(\mathrm{ka}-<\mathrm{a}>\) set.out-NMZ & tomorrow
\end{tabular}
"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 Da ma'iDang:
\begin{tabular}{lllll} 
palu & \(\boldsymbol{D a}\) & \(\boldsymbol{m a}\)-'iDang, & \(a D i\) & ma-laDam \\
demarcate & ID.OBL & ITR-old & NEG & ITR-know
\end{tabular} "(Even) Until they were old, they didn't understand."
\begin{tabular}{lccc} 
(82) \begin{tabular}{ll} 
palu & garem,
\end{tabular}\(a D i=k u\) & \(m a-l a D a m\) \\
demarcate & now & \(\mathrm{NEG}=1 \mathrm{~S} . \mathrm{NOM}\) & ITR-know
\end{tabular}

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:
\(k a-k u d a=m i\)
RED-how=1P.ECL.NOM \(\quad\) garem?
"What should we do now?"

\subsection*{4.5.3 Deictic expressions}

\subsection*{4.5.3.1 An overview}

The major functions of demonstratives 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 subcategorized 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.
\begin{tabular}{lllll}
\(a D i=\) Diya & me-redek & iDu & \(n a\) & paisu \\
NEG=IMPF & ITR-arrive & that.NOM & DF.NOM & money
\end{tabular}
"That money has not arrived yet." (Pronominal demonstrative)
\begin{tabular}{llll} 
me-redek=ta=la & \(\boldsymbol{k a D i}\) & \(i\) & puyuma \\
ITR-arrive=1P.ICL.NOM=PERF & here & LOC & Puyuma
\end{tabular}
"We've arrived at Puyuma." (Locational demonstrative)
\begin{tabular}{lll} 
kemay & \(\boldsymbol{k} \boldsymbol{a D} \boldsymbol{u}=l a\), & m-utu-yawan=la \\
from & then=PERF & ITR-become-chief=PERF
\end{tabular}
"From then on, he became a chief." (Temporal demonstrative)
\begin{tabular}{lll}
\(\boldsymbol{k}<\boldsymbol{m}>\) aDini \(=\) mi=Diya & Da & ka-kuaLeng-an \\
\(<\) ITR \(>\) here=1P.ECL.NOM=IMPF & ID.OBL & ka-sick-NMZ \\
"We still have difficulties." (Verbal demonstrative)
\end{tabular}

The above sentences show that all demonstratives have a retroflex stop /D/ followed by a high vowel \(/ \mathrm{i} /\) or \(/ \mathrm{u} /\), with \(/ \mathrm{i} /\) encoding proximal and \(/ \mathrm{u} /\) distal.

\subsection*{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
\begin{tabular}{lllll}
\hline & & Proximal & Medial & Distal \\
\hline Nominative & singular & iDi, iDini & iDu, iDunu & iDiyu \\
& plural & naDi, naDini & naDu, naDunu & naDiyu \\
Oblique & singular & kanDi, kanDini & kanDu, kanDunu & kanDiyu \\
& plural & kanaDi, kanaDini & kanaDu, kanaDunu & kanaDiyu \\
\hline
\end{tabular}

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).
\begin{tabular}{ll} 
ba-bati=Diya & \(\boldsymbol{k} \boldsymbol{a n D u}\) \\
RED-say=IMPF & that.OBL
\end{tabular}
"Say something about that.
(89) amau iDu tu=suan

COP that.NOM 3.PSR=dog
"His dog is that one."
(90)
\begin{tabular}{lllll}
\(t u=t u b a n g-a w\) & naDu & \(n a\) & Tau & \(i\), \\
3.GEN=answer-TR1 & those.NOM & DF.NOM & person & TOP \\
& & & &
\end{tabular}

\subsection*{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 the small NPs, the demonstrative and the other small NPs are in the same case, as in (91) and (92).
(91) iDi na barasa i, kemay isuwa aw
\begin{tabular}{llllll} 
this.NOM & DF.NOM stone TOP from where and \\
muama & kaDini & & & & \\
why & here & & & &
\end{tabular}
"This stone, where is it from and why is it here?"
\begin{tabular}{llllll} 
(92) & igeLa \(=k u\) & kanDi & kana & suan & \(D a\) \\
embarrassed=1S.NOM & this.OBL & DF.OBL & dog & ID.OBL \\
\(a D i=k u\) & maruwa & \(b<e n>a\) 'aw & & \\
NEG=1S.NOM & can & \(<\) ITR \(>\) save \\
& II felt embarrassed about this dog that I couldn't save it."
\end{tabular}

Demonstratives are also subcategorized 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).
\begin{tabular}{lllll} 
iDu \(\boldsymbol{n a}\) & walak & \(i\), & \(t u=p a D e k-a w\) & \(i\) \\
that.NOM DF.NOM & child & TOP & 3.GEN=carry-TR1 & SG.NOM \\
temutaw & & & &
\end{tabular}
his.grandparent
"The child, he carried his grandmother on back."
(94) aDi \begin{tabular}{lllll} 
m-иa'i & pa-kurenang naDu & \(\boldsymbol{n a}\) & lalak
\end{tabular}
"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 tiDul "wasp" and kiaumalan "question" are plural.
\begin{tabular}{llllll} 
(95) \(\boldsymbol{i D} \boldsymbol{u}\) & \(\boldsymbol{n a}\) & \(\boldsymbol{t i D u l}=l a\) & \(\boldsymbol{i}\), & \(T<e m>\) epa & \(m\)-ubii \\
that.NOM & DF.NOM & wasp=PERF & TOP & <ITR>aim.at & ITR-fly \\
kana & idenan & & & \\
DF.OBL & brightness & & & &
\end{tabular}
"These wasps, they flew to the brightness."
\begin{tabular}{lllll} 
saygu & \(t<\) em>ubang & kanDi & kana & \(\boldsymbol{t e L} \boldsymbol{u} \boldsymbol{u} \boldsymbol{a}\) \\
able & \(<\) ITR \(>\) answer & this.OBL & ID.OBL & three-NPRS
\end{tabular}
\(\boldsymbol{k i}<\boldsymbol{a}>\boldsymbol{u m a l - a n}\)
\(<\) 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.
\begin{tabular}{llll} 
iDu nantu & walak=la & i, unian & Da \\
that.NOM DF.NOM/3.PSR & child=PERF & TOP without & ID.OBL \\
a-akan-an & & & \\
RED-eat-NMZ & & &
\end{tabular}
"Those her children, they didn't have food."

\footnotetext{
\({ }^{10}\) 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.
}
\begin{tabular}{llllll} 
(98) & naniam & suan \(=l a\) & \(i\), & kemay \(i\) & LikuDan, \\
DF.NOM/1P.PSR & \(\operatorname{dog}=\) PERF & TOP & from & LOC & behind \\
& & & & & \\
tu=ranak-aw & \(n a D u\) & \(n a\) & & sua-suan \\
3.GEN=attack-TR1 & those.NOM & DF.NOM & RED-dog \\
"Our dog, from behind, it attacked those dogs."
\end{tabular}

\subsection*{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 \(/ \mathrm{u} /\) 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 \(i D u\) or \(i D u n u\) 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:
\begin{tabular}{lllll} 
iDu & \(n a\) & \(T<e m>e p a\) & \(k a D i n i\), & iDunu \\
that.NOM & DF.NOM & \(<\) ITR>aim.at & here & that.NOM
\end{tabular}
\begin{tabular}{llll}
\(i\), & \(a\) & \(b a l u y a b u y\) & \(k<e m>a=t a\) \\
TOP & ID.NOM & baluyabuy & \(<\) ITR \(>\) say \(=1\) P.ICL.NOM
\end{tabular}
"That one that faces here, that one, a baluyabuy as we said."

\footnotetext{
\({ }^{11}\) In fact the addressee was standing by the informant all the time during the recording.
}


In these two sentences, iDiyu or naDiyu 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 \(i D u\) and long form \(i D u n u\) 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.
\begin{tabular}{lcccl} 
(101) & Diyama & iDini \(i\), & \(t<e m>a t u r u ~ k a n a ~\) & Tau
\end{tabular} kana

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 showing the long form has another NP following it. On the other hand, most short forms have an NP following them. For example:
\begin{tabular}{llll} 
(102) iDunu & \(i\), & nanku & ruma \\
that.NOM & TOP & DF.NOM/1S.PSR & house \\
& "That one is my house." &
\end{tabular}
\begin{tabular}{llll} 
(103) & \(\boldsymbol{i D} \boldsymbol{u}\) & \(\boldsymbol{n a}\) & \(\boldsymbol{b a t i}\) \\
& \(i\), \\
that.NOM & DF.NOM & tale & TOP \\
& "That tale...." & &
\end{tabular}

Puyuma speakers lengthen the high front medial vowel of a demonstrative (eg. \(i D i: y u)\) in the distal category to emphasise a long distance. The longer the vowel, the longer the distance.

\subsection*{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 kaDi and kaDini "here", \(k a D u\) and kaDunu "there", and kaDiyu "further away".

Spatial deictics do not distinguish case and number. They may be used independently or with another locative NP following them. For example:
\begin{tabular}{lll} 
palu & \(\boldsymbol{k a D i}\) & \(i\), \\
until & here & TOP
\end{tabular}
"When he arrived here,..."
\begin{tabular}{lrr} 
m-inaTay & \(\boldsymbol{k a D u} \boldsymbol{t u} \quad t \quad k<\) in \(>\) ieDeng-an \\
ITR-die & there & \(3 . \mathrm{PSR}=<\) PERF \(>\) lie-NMZ
\end{tabular}
"It died there on its bed."

If there is a locative NP following it, the locative noun phrase marker is sometimes missing. For example:
\begin{tabular}{lllll} 
m-u-asal=mi & Dua & kaDi & \(\boldsymbol{i}\) & pabulu \\
ITR-go-move=1P.NOM & come & here & LOC & Pabulu \\
"We moved here in Pabulu." & & &
\end{tabular}
\begin{tabular}{lllll} 
tu=kibulas-aw & Da & Tau & kaDi & pabulu \\
3.GEN=borrow-TR1 & ID.OBL & person & here & Pabulu \\
"It was borrowed by a person from Pabulu."
\end{tabular}

\subsection*{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 \(a D u / a D u n u\), the other \(k a D u / k a D u n u\). 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.
\(\boldsymbol{a D u n u}=\) Diya kaDi
then=IMPF here
"At that time, in the village,"
(109) kemay kaDu=la,
from then=PERF
"From then on,"

\subsection*{4.5.3.5 Verbal deictics}

There are several verbal deictics, and they are derived from spatial deictics. One of them, \(k a D u\), which can be translated as "be there", is very productive in expressing existential/possessive/locative meaning (§10.4.). For instance:

ne-nem-a?
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 \(<e m>\) infixed, e.g. \(k<e m>a D i, k<e m>a D i n i, k<e m>a D u\), and \(k<e m>a D u n u\). These forms are seldom used as a predicate. Only one example was found.
\[
\begin{array}{llcc}
\text { (111) } & \boldsymbol{k}<\boldsymbol{e m}>\boldsymbol{a D i n i}=m i=\text { Diya } & \text { Da } & \text { kakuaLengan } \\
& <\text { ITR }>\text { be.here }=1 \text { P.ECL.NOM=IMPF } & \text { ID.OBL } & \text { difficulty }
\end{array}
\]
"We still have difficulties."

More often, verbal deictics with \(\langle e m>\) appear in a modifying construction. But it is difficult to give them a clear meaning; they mean vaguely "a kind of". For example:
\begin{tabular}{lllll} 
tu \(u\) sareteb- \(a w\) & \(n a\) & \(\boldsymbol{k}<\boldsymbol{e m}>\boldsymbol{a D} \boldsymbol{u}\) & \(n a\) & rami \\
3.GEN=cut.off-TR1 & DF.NOM & \(<\) ITR>there & DF.NOM & root \\
& & & &
\end{tabular}
\begin{tabular}{lllll} 
uliya & \(a\) & \(\boldsymbol{k}<\boldsymbol{e m}>\boldsymbol{a D u}\) & \(a\) & LingaTa \\
exist & ID.NOM & \(<\) ITR \(>\) there & ID.NOM & gourd
\end{tabular}
"There was such kind of gourd."

They 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). \({ }^{12}\)

\footnotetext{
\({ }^{12}\) 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.
}
```

(114) pana'an $i$, $a D i=l a \quad k<e m>a D i \quad D a \quad$ asaT-an
in.fact TOP NEG=PERF <ITR>here ID.OBL high-NMZ
"In fact, it is not this high."
asuwa=Diyan $\quad i, \quad a \quad$ Takuban $\quad i, \quad a D i=l a$ when=IMPF TOP ID.NOM youth.house TOP NEG=PERF
$\boldsymbol{k}<\boldsymbol{e m}>$ aDini $D a \quad$ buLay
$<$ ITR $>$ here ID.OBL beautiful
"Long time ago, a youth house, it is not this beautiful."

```

```

(117) an

| an | $\boldsymbol{k}<\boldsymbol{e} \boldsymbol{m}>\boldsymbol{a D i n i}$ | pa-ra-ragan=ta=Diyan | $i$, |
| :--- | :--- | :--- | :--- |
| if | $<$ ITR $>$ here | CAUS-RED-erect=1P.ICL.NOM=IMPF | TOP |

puari=ta $i, \quad k a-r a-r u w a ~ D a ~ s a-b u L a n ~ m a k u ~$
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."

```

\subsection*{4.5.3.6 Demonstratives in discourse}

When demonstratives are used to refer to linguistic entities in discourse, two types may be distinguished: anaphoric demonstratives and discourse deictic demonstratives. Diessel (1999:19) observes that anaphoric demonstratives are "coreferential with a noun phrase in the preceding discourse; they keep track of prior participants." Discourse deictic demonstratives, 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 iDunu "that" is coreferential with the noun phrase tu=ruma' "her house", and in (119) kanDu "that" is coreferential with the noun kana lalak "child".
\begin{tabular}{lllllll} 
maumau & \(\boldsymbol{t u = r u m a}\), & \(a\) & mi-a-puran & \(i\) \\
only & her.NOM-house & ID.OBL have-a-betelnut & LOC \\
puyuma, & na \(\quad\) Duma=Diya & i, & unian & Da & \\
Puyuma & DF.NOM other=IMPF & TOP & without & ID.OBL
\end{tabular}
mi-a-puran. iDunu i, nanku ruma,
have-a-betelnut 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. \({ }^{13}\)
\begin{tabular}{lllcl} 
mu-atel & \(t u=\) tangtang & kanDu & kana & ma'iDang \\
ACAUS-fall & 3.PSR=box & that.OBL & DF.OBL & old
\end{tabular}
aw maya-maya \(=\) Diya \(i, \quad t u=p u a r-a y=l a\)
and RED-search=IMPF TOP 3.GEN=escape-TR2=PERF
kana lalak. aDi=la paka-LeLep iDu
DF.OBL child NEG=PERF MOOD-chase that.NOM
na ma'iDang kanDu

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) \(k<e m>a D u\) "be there" is freely translated as "this being so".

\footnotetext{
\({ }^{13}\) 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.
}
\begin{tabular}{llllll}
\(k a D u=l a\) & \(a\) & ngai & \(" t<e m>\) engeD \(=t a\) & \(D a\) & unan \\
be.there=PERF & ID.NOM & word & \(<\) ITR \(>\) kill=1P.NOM & ID.OBL snake
\end{tabular}
\begin{tabular}{lllll}
\(i\), & \(m a-l e g i\) & \(m-u\)-Dekal & kema. & \(\boldsymbol{k}<\boldsymbol{e} \boldsymbol{m}>\boldsymbol{a D} \boldsymbol{u}\) \\
TOP & ITR-taboo & ITR-go-village & say & \(<\) ITR \(>\) there
\end{tabular}
\begin{tabular}{llllll}
\(a w\), & me-redek \(=l a\) & \(n a\) & \(n g a i\) & \(i\) & Dekal \\
and & ITR-reach=PERF & DF.NOM & word & LOC & village
\end{tabular}
"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."

\subsection*{4.5.4 Numerals}

\subsection*{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.

\section*{One to ten}
\begin{tabular}{ll} 
sa "one" & nem "six" \\
Dua"two" & pitu"seven" \\
teLu"three" & waLu" "eight" \\
pat"four" & iwa"nine" \\
Lima "five"14 & puLu"ten"
\end{tabular}

\section*{Above ten}
```

puLu-sa "eleven"
puLu-Dua"twelve" Dua-puLu"twenty"

```

\footnotetext{
\({ }^{14}\) It seems that Lima "five" is only used to refer to the number five; in counting objects, or in any derivations, the base for five is always luwaT.
}
\[
\begin{array}{ll}
\text { puLu-teLu "thirteen" } & t e L u-p u L u \text { "thirty" } \\
\text { puLu-pat "fourteen" } & \text { pat-puLu"forty" } \\
\text { puLu-luwaT" "fifteen" } & \text { luwaT-puLu "fifty" }
\end{array}
\]

\subsection*{4.5.4.2 Cardinal numerals}

Different strategies are used when these 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 undergo \(C V\) or \(C V C V\) - reduplication. For example:
(121) unian

Da pa-pat-a
ami \(D a\)
Takuban
without
ID.OBL RED-four-NPRS
year ID.OBLboys'.house
"There is no four-year-old boys' house." (No Takuban would be older than four years)
\begin{tabular}{lllll}
\(k a D u=l a\) & \(n a\) & palakuan & \(n a\) & ne-nem-a \\
there=PERF & DF.NOM & men's.house & DF.NOM & RED-six-NPRS \\
"There are six men's houses already." & &
\end{tabular}
\begin{tabular}{lllcc}
\(t<e m>\) engeD \(=k u\) & Da & pitu-pitu-a & Da & Lutung \\
\(<\) ITR \(>\) kill=1S.NOM & ID.OBL & RED-seven-NPRS & ID.OBL & monkey \\
"I killed seven monkeys." & & &
\end{tabular}
\begin{tabular}{llll} 
p-u-paTaran & Da & \(\boldsymbol{t e L u - a}\) & \(k i<a>\) umal-an \\
CAUS-go-out & ID.OBL & three-NPRS & \(<\) RED \(>\) ask-NMZ
\end{tabular}
"He gave out three questions."

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

\footnotetext{
\({ }^{15}\) According to Li (2006), most Formosan languages make such a distinction.
\({ }^{16}\) Except for \(s a\) "one", which sometimes precliticizes to the noun it modifies without suffixing -a. For example: sa-elung "a bundle", sa-buLan "one month."
}


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 co-exists 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:
```

mukeTep "ten"
makabeTaan "twenty" makapitu "seventy"
makatelun 'thirty" makawaLu "eighty"
makapetel "forty" makaiwa "ninety"
makaluwaT"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 + misama "remain" \(+D a+\) (RED-)UNITS-classifier

For instance:
```

mukeTep misama Da sa-a "eleven"
mukeTep misama Da Dua-a "twelve"
makabeTaan misama Da waLu-waLu-a "twenty-eight"
makatelun misama Da na-nem-a "thirty-six"

```

Some examples are given below:
\begin{tabular}{lllrll} 
(127) \begin{tabular}{l} 
an mukeTep
\end{tabular} & misama mi-ka-Dua & Da & Dua-a \\
when ten & remain & have-ka-two & ID.OBL & two-NPRS
\end{tabular}
"When they are twelve years old,..."
('Twelve' can be literally translated as 'ten and for the second number that remains two'.)
(128) na mukeTep mi-sama Da walu-walu-a

DF.NOM ten have-remain ID.OBL RED-eight-NPRS
\(t u=a m i \quad k a n a \quad b a b a y a n \quad i\),
3.PSR =year 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 + Da + sama

For instance:
mukeTep kara-sa Da sama "eleven"
```

mukeTep kara-Dua Da sama "twelve"
makapitu kara-teLu Da sama "seventy-three"

```

For example:
\begin{tabular}{llllcc} 
ulaya & a & mukeTep & kara-sa & Da & sama \\
exist & ID.NOM & ten & kara-one & ID.OBL remain
\end{tabular}
\(a \quad\) Tau-an
ID.NOM person-NMZ
"There are eleven persons." (Lit. The persons remained are ten and one.)

Some informants use the same strategy to modify both personal and non-personal nouns. For example:
\begin{tabular}{lcclcc} 
(130) & mukeTep & mi-sama & \(D a\) & ne-nem- \(a\) & \(D a\) \\
ten & remain & ID.OBL & RED-six-NPRS & ID.OBL & walak \\
& & & & &
\end{tabular}
\begin{tabular}{lccccl} 
mukeTep & mi-sama & \(D a\) & ne-nem- \(a\) & \(D a\) & gung \\
ten & remain & ID.OBL & RED-six-NPRS & ID.OBL ox \\
"sixteen oxen" & & & &
\end{tabular}

When counting how many times an event occurs, par- is prefixed to the base. For instance:
(132) karuwa=mi=la kilengaw \(D a\) par-teLun \({ }^{17}\), par-luwaT
can=1P.NOM=PERF listen ID.OBL par-three par-five
"We could have listened for three or five times."

\footnotetext{
\({ }^{17}\) It is not clear why in this case \(t e L u\) "three" becomes teLun.
}

\subsection*{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 \(C a\) - reduplicated (§3.4.2). For example:
(133) \(D u a=l a \quad m-u\)-sabak-a kana puka-ta-teLu wa-dunun-an come=PERF ITR-go-inside-PJ DF.OBL ORD-RED-three go-phase-NMZ "They went to the third phase."
\begin{tabular}{llll} 
puka-teLu & \(i\), & \(a\) & babayan \\
Ord-three & TOP & ID.NOM & female
\end{tabular}
"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:
\begin{tabular}{llll} 
(135) & mukeTep & puka-enem & \(n a\) \\
ten & ORD-six & DF.NOM & tiLil \\
& & book
\end{tabular}

\subsection*{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 characteristics. The following list gives an overview of the forms and functions of these words:
\begin{tabular}{|l|l|l|}
\hline daw & "why" & Interrogative adverb \\
\hline ala & "maybe" & Epistemic adverb \\
\hline ela & "rashly" & Manner adverb \\
\hline
\end{tabular}
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.
daw ma-laDam=ku \(\quad D a \quad\) kemay isuwa
why ITR-know=1S.NOM ID.OBL from where
"Why would I know where it is from?"
(137) *daw=ku ma-laDam Da kemay isuwa
\begin{tabular}{lll} 
ala mar-adalep=ta=Diyan & kana & sanasan \\
maybe RECIP-close=1P.ICL.NOM=IMPF & DF.OBL & Green.Island \\
"Maybe we were still close to Green Island." &
\end{tabular}
(139) *ala=ta mar-adale=Diyan 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 \(n u=t a r a m a-a w\)
why 2 S.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:
\begin{tabular}{llllll} 
ala & \(k<e m>u d a\) & nay & \(i\), & \(n a\) & \(m u-\) sama \(=l a\) \\
maybe \(<\) ITR \(>\) how & or & TOP & DF.NOM & ACAUS-leave=PERF
\end{tabular}
i, sasaya=la iDu na suan
TOP 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:
$a D i=t a \quad s<e m>a$-sanga ela

NEG-1P.ICL.NOM RED<ITR>-build rashly
"We are not building rashly."

| $a D i=t a$ | $m-u-<a>-k a s a-k a s a$ | ela | $m$-ieDeng |
| :--- | :---: | :--- | :---: |
| NEG=1P.ICL.NOM ITR-go<A>RED-together | rashly | ITR-sleep |  |
| "We will not get together rashly to sleep." |  |  |  |

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 (§13.4.3) with the verb denoting the action. For example:
puraket=ta
diligently=1P.ICL.NOM
$s<e m>a n g a$
$<$ ITR $>$ build
"We built diligently."

[^9]
### 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-La'uD nay, piya-timuL, 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 clausal-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.
ma-ulid=ta $\quad d<e m>a w a y$, maku?
ITR-don't.know=1P.NOM <ITR>make tag
$k u<a>$ renang $=t a \quad D a$ saygu ma'iDang
<a>follow=1P.ICL.NOM
ID.OBL can
ID.OBL
old
"We didn't know how to build (a Takuban), did we? We followed those old people who know how to build."

| $a D i=k u$ | karuwa | m-u-isaT, | maku? | $a w$, |
| :--- | :---: | :---: | :--- | :---: |
| 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 l'll ask my brother to do the work (for me)."

| mara-asaT | $n a$ | pasara'aD, | maku? aw | tu=aLak-aw |
| :--- | :--- | :--- | :--- | :--- |
| more-high | DF.NOM | Pasara'aD | tag | and | 3.GEN=take-TR3

"The Pasara'aD family are in a higher position, aren't they, and so they took it."

### 4.5.7 Topic markers

In this thesis, 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 $m u$. They are always followed by a pause, as demonstrated below:

```
(150) na sasaya tu=pa'uayan i, ta=keTeng-aw
    DF.NOMone 3.PSR=custom TOP 1P.ICL.GEN=bring-TR1
    "Another custom, we bring them out."
\begin{tabular}{lllll} 
(151) \(i D i\) & \(n a\) & barasa \(\boldsymbol{m u}\), & \(a\) & redean \\
& this.NOM & DF.NOM & stone TOP & ID.NOM
\end{tabular} 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 textbooks, $i$ appears only in Nanwang dialect, while $m u$ 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. (152) and (153) show examples of temporal and locative adjuncts being topicalised. Topicalization of arguments is described in §8.4.1.3, and topicalization of adverbial clauses is dealt with in Chapter 15.
asuwa=Diyan $i, \quad$ ulaya $a$ when=IMPF TOP exist ID.OBL one ID.OBL village "Long time ago, there was a village."
(153) i sabak kana paTungTungan $i$, puka-i $D a$ tiDul 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 $=l a$, the imperfective marker $=$ Diya, and the frequentative marker $=$ dar. Examples are given below:

| $t u=a L a k-a w=l a$ | mi-kataguin | kana | yawan |
| :--- | :--- | :--- | :--- |
| 3GEN=take-TR1=PERF | have-spouse | DF.OBL | chieftain |

"She was taken to marry to the chieftain."
ma-uLep $=$ Diya $\quad k<e m>i$-anger $\quad$ Datu ka-sanan-an
ITR-tired=IMPF <ITR>get-thought ID.OBL/3.PSR ka-get.lost-NMZ
"She's still worrying that he might get lost."

| Dua=dar | $i$ | takesi-an | $m-a y a-a$ | $k a n k u$ |
| :--- | :--- | :--- | :--- | :--- |
| come=FREQ | LOC | study-NMZ | ITR-seek-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 as marking the aspects is described in §6.4.2.

### 4.5.9 Conjunctions

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

| aw | "and/then" | conjoins noun phrases and clauses |
| :--- | :--- | :--- |
| kan/an/ane ${ }^{19}$ | "when/if" | conjoins clauses |

[^10]| aтипа | "but" | conjoins clauses |
| :--- | :--- | :--- |
| Diyama | "so" | conjoins clauses |
| laba | "so that" | conjoins clauses |

The conjunctions aw, amuna, and Diyama are placed between the elements they conjoin, while the kan/an/ane is usually placed in the first of the elements it conjoins.
(157)

| mara-asaT | $n a$ | pasara'aD | aw | $t u=a L a k-a w$ |
| :--- | :--- | :--- | :--- | :--- |
| more-high | Pl.NOM | pasara'aD | and | $3 . G E N=$ take-TR1 |
|  |  |  |  |  |
| $n a$ | barasa |  |  |  |
| DF.NOM | stone |  |  |  |

"The Pasara'D family were higher (in terms of social status), so they took the stone."

| karuwa $=$ ta $=$ Diyan | $s<e m>$ anga <br> can=1P.NOM=IMPF | Da <br> $<$ ITR $>$ produce |
| :--- | :--- | :--- |
| ID.OBL |  |  |

"We can also produce containers for rice and food."
(159)
ane adalep $=t a=l a \quad D a \quad$ basibasi
when near=1P.NOM=PERF ID.OBL monkey.hunting.festival
aDi m-uai m-ekan na Lutung

NEG ITR-willing.to ITR-eat DF.NOM monkey
"When monkey-hunting festival is coming, (we hunted some monkeys), the monkeys are not willing to eat."

| saLaw unian | Da | akan-an, | Diyama=la | $n a$ |
| :--- | :---: | :---: | :---: | :--- |
| very without | ID.OBL | eat-NMZ | so=PERF | DF.NOM |

Conjunctions can be further sub-categorised 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 phonologically peculiar; they always have a rising intonation and are always followed by a pause. Some examples are given below:
ta! exclamation expressing the speaker's not knowing the event in the earlier proposition
iwua! exclamation showing the speaker's surprise
$i!\quad$ exclamation expressing the speaker's doubt
ah! exclamation showing the speaker's sudden realisation at something

## Сユ⿱乛龰 $\mathcal{A P T E R} 5$

## $\mathcal{N O}$ UN $\mathcal{P H} \mathcal{R} \mathcal{A S E}$ STRUCIURE

## 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）．

[^11](i) $\mathrm{NP} \rightarrow \quad \mathrm{np},(\mathrm{np})^{*^{2}}$

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

(iv) $\quad \mathrm{NP}_{\text {OBL }} \rightarrow\left\{\begin{array}{l}\mathrm{Nmkr}_{\mathrm{OBL}}+\mathrm{XP} \\ \mathrm{Dem}_{\mathrm{OBL}}\end{array}\right\}$
(v) $\quad \mathrm{VP}_{\text {ITR }} \rightarrow(\mathrm{NEG}+) \mathrm{V}_{\mathrm{ITR}}{ }^{*} \quad\left(+\mathrm{NP}_{\text {OBL }}\right)$

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

## Rule (i): $\mathbf{N P} \rightarrow \mathbf{n p},(\mathbf{n p})^{*}$

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

(1b)



1S.PSR dog
"my dog"

[^12](2)


Rule (ii): $\mathbf{n p} \rightarrow\left\{\begin{array}{l}\mathbf{N m k r}+\mathbf{X P} \\ \text { Dem }\end{array}\right\}$
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).
sagar $=k u \quad \boldsymbol{k a n D u}$
like=1S.NOM those.OBL
"I like those."


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 maTina na suan or na suan na maTina, and in (4) are naDunu na maLuwadi na ma'inayan or naDunu na ma'inayan na maLuwadi.

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 maTina na suan "the big dog", suan "dog", the PIBU, denotes the kind of referent to which "na maTina na suan" belongs. On the other hand maTina "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-Tepa $s<e m>a n g a$
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 $n a$ in (2), the threefold occurrence of the nominative noun phrase marker $n a$ in (4), the threefold occurrence of the oblique noun phrase marker $D a$ (6a), and the twofold occurrence of the nominative noun phrase marker $a$ in (6b).
a. me-na'u=ku Da maTina Da uTeuTem Da suan ITR-see=1S.NOM ID.OBL big ID.OBL black ID.OBL dog "I saw a big black dog."

| b. amau | $\boldsymbol{a}$ | Denan | $\boldsymbol{a}$ | 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."
$\begin{array}{llllll}\text { b. } & \text { manu } & \text { maran } & \boldsymbol{a} & \text { icu } & \boldsymbol{a} \\ \text { Intej } & \text { exactly } & \text { NOM } & \text { this } & \text { LK } & \text { female }\end{array}$
"Then it turned out to be exactly this girl."
(8) Tagalog (Kroeger 1993:182-183)
a. Kaya $=n g$ bumili si=Manuel $\underline{n g}=b a g o=n \boldsymbol{g}$ 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 GEM=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), which, in addition to marking the possessive relation, also marks the case of the element following it. Thus, $t u=$ is a possessor pronoun functioning as Nmkr in (9).

kalikali

| $\boldsymbol{t u}=$ walak | kan | kalikali |
| :--- | :---: | :---: |
| 3.PSR=child | SG.OBL | Kalikali |

"Kalikali's child"

Rule (iii): XP $\rightarrow\left\{\begin{array}{l}\mathbf{N}+ \\ \left.\mathbf{N u m}^{+}+\left\{\left\{\begin{array}{l}\mathbf{N P}_{\text {OBL }} \\ \mathbf{N P}_{\text {ITRR }}\end{array}\right\}\right]\right\}\end{array}\right.$
An XP may be either a noun or 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 (Da kawi in (10); this marks the possessor
as indefinite), or by a possessor pronoun alone ( $k u=$ in (1b)), or by both a possessor pronoun and an oblique-marked NP ( $t u=$ and kan kalikali in (9)).

$D a \quad s a ' a D \quad$ Da kawi
ID.OBL branch ID.OBL tree
"tree's branches"
(11)


na teLu-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 tree 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.


| $n a D u$ | $n a$ | $D u a-a$ | $k a n$ | $l u g i$ |
| :--- | :---: | :---: | :---: | :---: |
| those.NOM | DF.NOM | two-NPRS | SG.OBL | Lugi |
| "those two of Lugi's" |  |  |  |  |


| $n a D u$ | $n a$ | mia-Dua | $i$ | LikuDan |
| :--- | :--- | :--- | :---: | :---: |
| 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 $\mathrm{NP}_{\mathrm{OBL}}$ 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 nominalization with an infix $\langle i n>$ is used when a transitive (undergoer voice) clause ( $\S 4.2$ and $\S 8.4 .4$ ) 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).

na in-abak-an kana walak na paDakan
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.
(16)


| $n a$ | Tau | $n a$ | ma-ra-rengay |
| :--- | :---: | :---: | :---: |
| DF.NOM | person | DF.NOM | ITR-RED-say |
| "the person who's talking" |  |  |  |

(17)


Da Duma Da suan $D a$ saygu me-Lilu,
ID.OBL other ID.OBL dog ID.OBL can ITR-hunt
"other dogs that are capable of hunting"

## Rule (iv): $\quad \mathbf{N P}_{\text {OBL }} \rightarrow\left\{\begin{array}{l}\mathbf{N m k r}_{\text {OBL }}+\mathbf{X P} \\ \mathrm{Dem}_{\text {OBL }}\end{array}\right\}$

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).


$$
\begin{array}{lcc}
\text { tu }=\text { ngaLad } & \text { kana } & \text { ma-ra-rengay } \\
\text { 3.PSR=name } & \text { DF.OBL } & \text { ITR-RED-talk } \\
\text { "the name of (the one) who is talking" }
\end{array}
$$

In (18), the XP under $\mathrm{NP}_{\text {OBL }}$ is an actor voice/intransitive verb mararengay "talking". The same slot could be filled by a numeral, e.g. miaDua "two", and then the clause would become $t u=n g a L a d$ kana miaDua "the names of the two (persons)". Or, it could be filled by a noun, e.g. walak "child", and the clause would become tu=ngaLad kana walak "the child's name".
(19)


Example (20) shows how Rule (iii) and (iv) lead to recursion of XP and NP NabL (expressing the possessive relations).

(v) $\quad \mathrm{VP}_{\mathrm{ITR}} \rightarrow(\mathrm{NEG}+) \mathrm{V}_{\mathrm{ITR}}{ }^{*} \quad\left(+\mathrm{NP}_{\mathrm{OBL}}\right)$

A $\mathrm{VP}_{\text {ITR }}$ 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 $\mathrm{NP}_{\mathrm{OBL}}$ encoding the undergoer of the $\mathrm{VP}_{\text {ITR }}$, as shown in (21).

| (21) | $\underline{i D i}$ | \{na | $\boldsymbol{a D i}$ kiberay | $\boldsymbol{D a}$ | $\boldsymbol{b i n a}\}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | this.NOM | DF.NOM | NEG get | ID.OBL | seed |
|  | "This person, who didn't get seeds...." |  |  |  |  |

Again, the order among the small NPs within one large NP is not fixed.

### 5.1.2 The functional extension of $n a$ 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-laDam kanaDi na teLu-a-ami

1P.NEU LK CAUS-RED-teach these.OBL LK three-NPRS-year "We, who teach these third graders,"

| m-uka | ma-rengay-a $\quad$ kanaDu | na | kur-dikes=Diya |  |
| :--- | :--- | :--- | :--- | :--- |
| ITR-go | ITR-tell-PJ | those.OBL | LK | get-hold=IMPF |
| kanDu | kana kiakarunan |  |  |  |
| that.OBL | 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 $n a$ 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 $n a$ in (22) and (23) on the other. Does the absence of a distinct linker represent the normal situation, such that a functional extension of $n a$ 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 $n a$ as a linker, as an innovation.

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


| *a. me-na' $u=k u$ | Da maTina | na | uTeuTem | na | suan |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ITR-see=1S.NOM | ID.OBL big | LK | black | LK | dog |
| "I saw a big black dog." |  |  |  |  |  |


| *b. amau | $\boldsymbol{a}$ | Denan | $\boldsymbol{n a}$ | ma-kiteng |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| COP | ID.NOM | mountain | LK | ITR-small |  |  |  |
| "It was a small mountain." |  |  |  |  |  |  |  |

Second, as mentioned earlier $n a$ 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 $\mathrm{NP}_{\text {OBL }}$ 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. However, 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 $\mathrm{NP}_{\text {OBL }}$, which expresses a possessive relationship, not a modifying relations.

| 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) shows.
a. $t<$ em $>a$-takesi $i \quad$ senayan
$<$ ITR $>$ RED-study SG.NOM Senayan
"Senayan is studying."

[^13]| b. | ${ }^{*} t<$ em $>$ a-takesi | $i$ | senayan | $n a$ | buLay |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $<$ ITR $>$ RED-study | SG.NOM | Senayan | DF.NOM | beautiful |
|  | "The beautiful Senayan is studying." |  |  |  |  |

(28) taita na $t<e m>$ ara-Puyuma

1P.NEU DF.NOM <ITR>speak-Puyuma
"we, who speak Puyuma,"
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 $n a$. This suggests that $n a$ in these cases functions as a linker, as in (22) and (23) above.

ala $i$ manay na pa-takesi kanDu
maybe SG.NOM who DF.NOM CAUS-study those.OBL
"Maybe there is someone who can teach those (students)."

[^14]
### 5.1.4 Locative NPs

The rewrite rules of locative NPs are given in (vi) to (viii).
(vi) $\quad \mathbf{N P}_{\text {LOC }} \rightarrow \quad \mathbf{n p}_{\text {LOC }}\left(+\mathrm{np}_{\text {LOC }}\right)$
(vii) $\quad \mathbf{n p}_{\text {LOC }} \rightarrow\left\{\begin{array}{l}\mathbf{N m k r}_{\text {LOC }}+\mathbf{N}^{\prime}{ }_{\text {LOC }} \\ \mathrm{Dem}_{\text {LOC }}\end{array}\right\}$
(viii) $\quad \mathbf{N}^{\prime}{ }_{\text {LOC }} \rightarrow\left\{\begin{array}{l}\mathbf{N}_{\text {placename }} \\ \mathbf{N}+\mathbf{N P}_{\text {OBL }}\end{array}\right\}$

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 $\mathrm{np}_{\text {LOC }}$, but $\mathrm{np}_{\text {LOC }}$ 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 placename (e.g. i puyuma "in Puyuma"), or a noun denoting a familiar location (e.g. $i$ ruma' "at home"), a direction (e.g. i Daya "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 $n p_{\text {Loc }}$ in the $\mathrm{NP}_{\text {Loc }}$.


## Chapter 5: Noun phrase structure

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.

i sabak kana Tabak
LOC inside DF.OBL box
"inside of the box"
(32)


### 5.2 Case, definiteness, and plurality

The case and definiteness of a noun is signalled either by a possessive pronoun or by a noun phrase marker preceding the noun. Puyuma distinguishes three cases: nominative, genitive, and oblique ( $\S 4.2$ and $\S 8.2$ ). 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:
mu-LeLep $D a \quad$ kuaLeng-an i nanali

ACAUS-chase ID.OBL difficult-NMZ SG.NOM my.mother
"My mother was infected with a disease." 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."
$t u=$ karat $-a w=k u$
Da
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 (§3.5.3.2), as in (36), by suffixation of -an (37), or by both (38).
$t u=l a s a D-a w=d a r \quad i \quad$ TaLu-TaLun
3.GEN=hide-TR1=FREQ LOC RED-grass
"She hid it in the field."
ma-la-lemes naDu na lalak-an
ITR-RED-disappear those.NOM DF.NOM child-PL
"Those children were going to disappear."
(38) $s a D u \quad k u=$ 'ali-'ali-an
many $\quad$ 1S.PSR=RED-male.friend-PL
"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.

Within 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; that is, one's possession of one's goods is transferable to someone else. On the other hand, 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 $\mathrm{NP}_{\text {obl }}$.

### 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).

| a. nantu | ngaLad |
| :--- | :--- | :--- |
| DF.NOM/3.PSR name |  |
| "his/her/their name(s)" |  |
| b. tu=ngaLad |  |
| 3.PSR=name |  |
| "his/her/their name(s)" |  |
| kanta |  |
| 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 $\mathrm{NP}_{\mathrm{OBL}}$ (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 $\mathrm{NP}_{\text {obl }}$ following the possessum, as in (41) and (42). Sometimes, a third-person possessor only occurs once as an NP $\mathrm{NPBL}_{\mathrm{OBL}}$, as in (43); this is only possible when both the possessum and the possessor are indefinite.
tu=tiyal kana unan
3.PSR =belly DF.OBL snake
"the snake's belly"
tu=walak kan kalikali
3.PSR =child SG.OBL Kalikali
"Kalikali's child"
(43) $D a \quad s a a^{\prime} a D \quad D a \quad k a w i$

ID.OBL branch ID.OBL tree
"branches of trees"

The pronoun (Nmkr) before the possessum carries the case of the possessum, and the $\mathrm{NP}_{\mathrm{OBL}}$ 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 | Tabak |
| :--- | :--- | :--- | :--- | :--- |
| LOC | inside | DF.OBL box |  |
|  | "inside the box; the box's interior" |  |  |


| na | daLan | $i$ | nguayan | kanmu | ruma' |
| :--- | :---: | :---: | :---: | :---: | :---: |
| DF.NOM $\quad$ 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 | maTa-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 occurs with only the few noun roots shown below (pronouns shown in bold face).

Table 5.1: Inalienable Possession in Nanwang Puyuma

|  | $1^{\text {st }}$ singular | $2^{\text {nd }}$ singular/plural | $3^{\text {rd }}$ singular/plural |
| :--- | :--- | :--- | :--- |
| grandparent | muli $^{5}$ | temuи | temutaw |
| father | namali | temama | temamataw |
| mother | nanali | taina | tinataw |
| older sibling | baeli | baeu | baetaw |

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:
$\boldsymbol{t} \boldsymbol{u}=$ wadi $\quad n a \quad$ babayan
3.PSR =younger.sibling DF.NOM female
"their younger sister"

[^15]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).
$\boldsymbol{t a}=t e<m u w a>m u w a n$
1P.PSR $=<$ RED $>$ grandparent
"our grandparents (ancestors)"

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=Diya i, uliya kaDu-a a maLu-wadi.
when=IMPF TOP exist live-PJ ID.NOM RECIP-younger.sibling
$i \quad$ temamataw $i, \quad m-u k a \quad i \quad$ TaLun
SG.NOM their.father TOP ITR-go LOC grass
"A long time ago, there were two brothers. Their father went to the field (hunting)."
tu=ruma' kan teтии
3.PSR =house $\quad$ SG.OBL your.grandparent
"your grandmother's house."

Like many Austronesian languages, Puyuma uses the same words, $m u$ or temuwan, to denote both grandparent and grandchild. When one of these words is

[^16]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 $=y u$

COP 3.PSR=grandchild=2S.NOM
"You are her grandson."
(53) $m$-uka=mи m-uTangi-a kan tетии $i$

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:

```
a-uka=ku me-na'и-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:
karanangtanta "each of our own, our respective"
karanangпети/karanangтиути "each of your (pl.) own, your respective" karanangtantaw "each of their own, their respective"

These pronouns incorporate elements that look similar to common pronouns, such as ta, neти, тиути, 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:
an muLaLiaban $i$ ameli na karanangtantaw when sea.worship TOP NEG.COP DF.NOM DIST:their na palakuan

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?)

| an $\quad p<e n>$ iya $=t a$ | leibai $^{7} \quad$ i, | $m$-uberek $=t a$ |
| :--- | :--- | :--- |
| 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 | $\boldsymbol{D a}$ | mia-pat | $\boldsymbol{D a}$ | walak |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | have-child | ID.OBL | PRS-four | ID.OBL | child |
|  | "She has four children." |  |  |  |  |

[^17]| (58) | mi-suan=mi | Da | suan | Da | sa-a |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | have-dog=1P.NOM | ID.OBL | $\operatorname{dog}$ | 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 $D a$ is optional. When the second $D a$ is omitted, the order is fixed: the numeral must precede the PIBU.
p-u-paTaran $D a \quad$ teLu-a (Da) 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".
(60) aDi m-a-uka $D a \quad$ lu-luwaT-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 "some" and "many" are stative verbs in Puyuma. They can function as a verbal predicate, as in (61), or they function as a small NP within a big NP, as in (62).
(61) sayma na paisu
little DF.NOM money
"The money is little."

| sama na | sayma na | dare' $i$, |
| :--- | :--- | :--- |
| be.left DF.NOM | little DF.NOM | earth TOP |
| "Little land is left." |  |  |


| pabuwa=la | Da | manay | Da $\boldsymbol{a} \boldsymbol{a} \boldsymbol{u}$ |
| :--- | :--- | :--- | ---: | :--- |
| 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 $t<$ em>ubang na lalak peniya
can $\quad$ ITR $>$ answer DF.NOM child all
"All the children can answer."
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:

[^18](67) naDu ma-Dua na maLu-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, which is either the small NP denoting the PIBU or the small NP denoting the numeral but never the demonstrative, is almost always marked by the nominative marker $n a$, no matter the NP is marked for nominative or oblique case. Thus:

| igeLa $=$ ku $=$ dar | kanDi kana | Du-Dua-a |
| :--- | :--- | :--- |
| embarrassed=1S.NOM=FREQ | these.OBL DF.OBL | RED-two-NPRS |
| $\boldsymbol{n a} / * \boldsymbol{k a n a}$ |  |  |
| 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) kanDu na mia-Dua na maLu-wadi
those.OBL DF.NOM PRS-two DF.NOM RECIP.sibling
"those two brothers"

In (68) and (69) again, $n a$ 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 $\quad k u=T a n g u r u \quad D a \quad$ bakis
3.GEN=CAUS-hang-TR2 1S.PSR=head ID.OBL basket
$\{\underline{D a} \quad$ mi-abak $\quad D a \quad$ sieLas $\}$
ID.OBL have-pack ID.OBL sand
"He (the doctor) hung on my head a basket which contained some sand."

sieLas
(71)
\{nantu $\quad p<$ in>uatel-an kana tangtang\} na

DF.NOM/3.PSR <PERF>drop-NMZ DF.OBL box DF.NOM
dare' $i$, mi-ngaLad $=l a \quad D a \quad$ matang $k<e m>a$
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.
a. na inaba na Tau

DF.NOM good DF.NOM person
"the good person"
b. na ma-ra-rengay na Tau

DF.NOM ITR-RED-tell DF.NOM person "the person who's talking"
(73) inaba na Tau
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 Tau na pu<a>raket $i$, puraket $s<e m>a n g a$

DF.NOMperson DF.NOM <a>careful TOP careful <ITR>make "The people who are careful make (the spears) carefully."

| (75)amau $\boldsymbol{a}$ <br> COP Denan | $\boldsymbol{a}$ | ma-kiteng | $k<e m>a$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 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 derederan DF.OBL have-a-spear "We speared them with the derederan which have spears (on top)."

| $k u<a>$ renang=ta | Da | saygu | Da | ma'iDang |
| :--- | :--- | :--- | :--- | :---: |
| $<$ 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).
*ta=tusuk-aw kana derederan mi-a-kutang
1P.ICL=spear-TR1 DF.OBL spear have-a-spear
"We speared them with the spear which have spears (on top)."

| $* k u<a>$ renang $=t a$ | sayg $u$ | Da | ma'iDang |
| :--- | :--- | :--- | :---: |
| $<$ 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 $\S 5.1 .2$, the case role of the NP is indicated by the first small NP (by its noun phrase marker or genitive pronoun), the rest of the small NPs are marked by $n a$.

| ala $\boldsymbol{i}$ | manay $\boldsymbol{n a}$ | pa-takesi | kanDu |
| :--- | :--- | :--- | :--- |
| maybe SG.NOM | who | DF.NOM | CAUS-teach |
| that.OBL |  |  |  |

"Maybe there is someone who can teach that."

| *ala $\boldsymbol{i}$ | manay $\boldsymbol{i}$ | pa-takesi | kanDu |
| :--- | :--- | :--- | :--- |
| 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.

[^19]
## Postnominal external RCs:

m-atek $\quad D a \quad$ basikaw $\quad\{D a \quad$ beLakas $\}$
ITR-chop
ID.OBL bamboo
ID.OBL
long
"He chopped a/some long bamboo/bamboos."
(83) kurenang $=l a \underline{D a} \quad$ Tau $\{D a \quad$ mi-ruma' $=l a\}$
follow=PERF ID.OBL person ID.OBL have-house=PERF
"One (can) keep up with those who have families."

## Prenominal external RCs:

| m-uka | \{kana $\quad$ mar-asaT\} | kana | tu'uT |  |
| :--- | :---: | :--- | :--- | :--- |
| 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-timuL 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

| arii | $\{n a$ | mi-Tepa | $s<e m>$ anga $\}$ |
| :--- | :--- | :--- | :--- |
| fast | DF.NOM | have-focus | $<$ ITR $>$ make |

"Those who have professional skill in doing this are fast."
(87) kiumal=ta $\{D a \quad$ mi-alup $\} \quad\{D a \quad$ mi-a-kelep kaDini $\}$
ask $=1$ P.NOM ID.OBL have-hunt ID.OBL have-a-nest here
"We asked (some God) 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.
na suan na maTina na uTeuTem

DF.NOM dog DF.NOM big DF.NOM black
"the big black dog(s)"
(89) na maTina na uTeuTem na suan
(90) na matina na suan na uTeuTem

### 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) term and use $\mathrm{NP}_{\text {rel }}$ to refer to the position in the RC , and to use $\mathrm{NP}_{\mathrm{mtx}}$ to refer to the position in the matrix clause. For example, in "I beat the man who stole my bike" $\mathrm{NP}_{\text {rel }}$ is in the agent position, and $\mathrm{NP}_{\mathrm{mtx}}$ is in the patient position.

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

## Actor

```
ane kirTebung=ta
when meet=1P.ICL.NOM ID.OBL old-NMZ ID.OBL ITR-carry
Da ma'iDang-an {Da ma-sangal
Da basak}
ID.OBL sack
```

"When we meet elders who carry packages on their shoulders...."

Patient
ala amuna saDu $\{t u=T<i n>e k e L-a n\} \quad$ na asi
maybe because many $3 . \mathrm{PSR}=<$ PERF $>$ drink-NMZ DF.NOM milk "Maybe because the milk he drank is a lot."

## Instrument

| $t u=l a s D-a w=d a r$ | $i$ | TaLu-TaLun | \{nantu |  |
| :--- | :--- | :--- | ---: | :--- |
| 3GEN=hide-TR1=FREQ | LOC | RED-grass | NOM/3.PSR |  |
| in-abak-an | kana | walak \} | na | paDekan |
| 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' $i, \quad m i-n g a L a d=l a \quad D a \quad m a t a n g \quad k<e m>a$
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 (92) is manifested as a finite clause. In this sentence, $\mathrm{NP}_{\text {rel }}$ is the actor of the RC. In the other three sentences, the RCs are all nominalizations.

An argument of the nominalised verb other than the $\mathrm{NP}_{\text {rel }}$ is manifested as a possessor, i.e. as a possessor pronoun, criticised or free, and sometimes as an $\mathrm{NP}_{\mathrm{ObL}}$. Thus the actor in (92) is encoded as a possessor clitic ( $t u=$ ), the actor in (93) as a free possessor pronoun (nantu) and the theme/patient as an NP $\mathrm{NObL}^{\text {(kana walak), and the }}$ patient/theme in (94) as both a free possessor pronoun (nantu) and an $\mathrm{NP}_{\text {ObL }}$ (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, as has been shown in §5.1.2, a non-restrictive RC has to be marked with $n a$, 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.

| an | ma-ruwa=ta ki-ma-Dayar | $\underline{t a i t a}$ | \{na |  |
| :--- | :--- | :--- | :--- | :--- |
| when | ITR-can=1P.NOM | get-ITR-discuss | 1P.NEU | LK |


| $t<$ em>ara-puyuma | $n a$ | paseket $\}$ | $i, \quad$ ala |
| :--- | :--- | :---: | :--- | :--- |
| $<$ ITR $>$ speak-Puyuma | DF.NOM | clear | TOP maybe |

ma-laDam kilengaw
ITR-know listen
"If we, those who speak Puyuma clearly, can converse, maybe they can understand (Puyuma)."

| Dua $=k u$ | $k i-a-e d e k-a$ | kanmu | \{na | ulaya |
| :--- | :--- | :--- | :--- | :--- |
| come=1S.NOM | get-a-bless-PJ | 2P.OBL | LK | exist |

kaDi Takuban\}
here Takuban
"I came to ask for blessings from you, who live here in the Takuban."
(97) $\underline{i D i}$ \{na aDi kiberay kan tayban $D a$ 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 $n a$ in its use as a linker (cf. §5.1.2).

### 5.7 Coordinate NPs

A fuller discussion of NP coordination is provided in $\S 16.3 .1$.

Two strategies are employed in coordinate NPs: the kay strategy is used to coordinate two personal nouns, and the $a w$ 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 $a w$ is used, each individual noun must be marked separately for case.

| ma-ruwa-ruwa $=$ ta | kire-eTeb | kaDi kana |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ITR-RED-can=1P.NOM | get-object.of.courtship | here DF.OBL |  |  |
| babayaan? $\quad k<e m>a$ | $n a D u$ | na | sabayan |  |
| servant | $<$ ITR $>$ say | those.NOM | PL.NOM | Sabayan |
| kay | kakubaw |  |  |  |

KAY Kakubaw
"'How can we find a spouse here among the servants?' Sabayan and Kakubaw said."
(98) $i$

| $\boldsymbol{i}$ | namali | $\boldsymbol{a} \boldsymbol{w}$ | $\boldsymbol{i}$ | $\boldsymbol{b a e l i}$ |
| :--- | :---: | :---: | :---: | :--- |
| SG.NOM | my.father | and | SG.NOM | my.older.sibling |
| "my father and my elder brother" |  |  |  |  |

## САААㄱPIER 6

## SUBJECT CHOICE, MOOD $\mathcal{A N D} \mathcal{A S P E C T}$

### 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/nonfuture 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


This table presents only those categories that are manifested by verbal morphology. Other modal/aspectual categories that are not expressed by verbal morphology (i.e. some aspectual notions are manifested by clitics) or do not encode subject choice alternations (i.e. some mood categories are expressed by pronouns or affixes and they do not show subject choice alternations) will be discussed in the relevant sections (i.e. aspectual clitics are discussed in §6.4.2; the modal formatives $t i=$ and paka- are discussed in $\S 6.3 .2 .2$, and $\S 6.3 .2 .3$ respectively.)

I describe the subject choice system in §6.2. The categories of mood and aspect are described in $\S 6.3$ and $\S 6.4$ respectively. There are seven classes of verbs in which the verbal derivations are manifested differently. An account of these different classes of verbs in terms of their verbal derivations is presented in $\S 6.5$, which is followed by a description of the functions of $k a$ - 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 $\mathrm{PV}, \mathrm{LV}$ and CV are all transitive, whilst AV is intransitive. The voices are illustrated in the following elicited sentences:

| T<em>akaw | Da | paisu | $\boldsymbol{i}$ | isaw |
| :--- | :--- | :--- | :--- | :--- |
| $<$ AV $>$ steal | ID.OBL | money | SG.NOM | Isaw |
|  |  |  |  |  |


| $t u=$ Takaw-aw | $\boldsymbol{n a}$ | paisu | kan | isaw |
| :--- | :---: | :--- | :---: | :---: |
| 3.GEN=steal-PV | DF.NOM | money | SG.OBL | Isaw |
| "Isaw stole the money." |  |  |  |  |


| $t u=$ Takaw- $\boldsymbol{a} \boldsymbol{y}=\boldsymbol{k} \boldsymbol{u}$ | Da | paisu kan | isaw |
| :--- | :--- | :--- | :--- |
| 3.GEN=steal-LV=1S.NOM | ID.OBL | money SG.OBL | Isaw |
| "Isaw stole money from me." |  |  |  |


| tu=Takaw-anay | $\boldsymbol{i}$ | tinataw | Da | paisu |
| :--- | :--- | :--- | :--- | :--- |
| 3.GEN=steal-CV | SG.NOM | his.mother | ID.OBL | money |
|  |  |  |  |  |
| "He stole money for his mother." |  |  |  |  |

It is often claimed by Austronesianists, i.e. 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 the affix on 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 (i.e. Ross and Teng 2005a; Yeh 2004) reveal that there is no one-to-one correspondence between the different undergoer-voice affixes and the semantic role of the subject that a given affix marks.

[^20]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).
$t u=$ salpit-ay=ku
3.GEN=flog-LV=1S.NOM
"He flogged me."
(6) $t u=$ Takaw-ay=ku $\quad D a \quad$ paisu
3.GEN=steal-LV=1S.NOM ID.OBL money
"He stole money from me."
(7)
$t u=u$-sabak-ay nanta Dekal
3.GEN=go-inside-LV DF.NOM/1P.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 (9-10), an instrument (11), a conveyed theme (12-13), or something whose semantic role is difficult to decide, as in (14) and (15).

| $n u=b a ' i T-a n a y=k u$ <br> 2S.GEN=burn-CV=1S.NOM | ID.OBL $\quad$ grass |
| :--- | :---: |
| "Have you burned some grass for me?" |  |

tu=tara-payran-anay=ta $t<$ em>ubang
3.GEN=speak-Taiwanese-CV=1P.ICL.NOM <AV>answer
"They answered us in Taiwanese."

| ta=LipuT-anay | $\boldsymbol{n a}$ | bira' | Da | kuraw |
| :--- | :---: | :--- | :--- | :--- |
| 1P.ICL.GEN=wrap-CV | DF.NOM | leaf | ID.OBL | fish |
| "We wrapped fish with the leaf." |  |  |  |  |

an tu=baLi-anay na Takuban $i$, mu-Tereb when 3.GEN=wind-CV DF.NOM youth.house TOP ACAUS-fell "When the youth house was blown by wind, it fell."
tu=atel-anay na ma'iDang-an $i$ Dena-Denan
3.GEN=throw-CV DF.NOMold-NMZ LOC RED-mountain
"They threw the old person out into the mountains."
ku=lukluk-anay na kinsas 1S.GEN=wrestle-CV DF.NOM policeman
"I wrestled with the policeman."
tu=Tukul-anay tu=Dakur
3.GEN=carry.on.back-CV
3.PSR=back
"He hunched his back."

The above examples show that the voice affix does not correlate highly with Patient, Locative, or Conveyance.

There exist asymmetries between AV clauses on the one hand and PV/LV/CV (undergoer voice, often called non-actor voices or NAV by Formosanists) 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. $\langle e m\rangle, m$-, $m e-$, $m a-$ ). 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 $\mathrm{PV}, \mathrm{LV}$, 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, and in the following example, the subject na tiLil "the book" is swept away in (16), but is only swept on the surface in (17).

| $k u=s e L a p-\boldsymbol{a} \boldsymbol{w}=l a$ | $n a$ | $t i L i l$ |
| :--- | :--- | :--- |
| 1S.GEN=sweep-PV=PERF | DF.NOM | book |

"I've swept the books away."

| $k u=$ seLap- $a y$ | $n a$ | tiLil |
| :--- | :--- | :--- |
| 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 it is promoted to the subject position in (21).

| $k u=L i p u T-a w$ | $n a$ | kuraw | $D a$ | bira' |
| :--- | :--- | :--- | :--- | :--- |
| 1S.GEN=wrap-PV | DF.NOM fish | ID.OBL leaf |  |  |

"I wrapped the fish with leaves."
(19) $k u=$ LipuT-anay $D a \quad$ kuraw na bira'

1S.GEN=wrap-CV ID.OBL fish DF.NOM leaf
"I wrapped fish with the leaves.

| $k u=$ Takaw-aw | $n a$ | paisu | kan | isaw |
| :--- | :--- | :--- | :--- | :--- |
| 1S.GEN=steal-PV | DF.NOM | money | SG.OBL | Isaw |
|  |  |  |  |  |


| $k u=$ Takaw-ay | $D a$ | 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 ( $\mathrm{PL}^{\mathrm{OBL}}$ ) and other adjuncts is made in §8.4.1.7.

### 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 $\S 6.3 .2$, 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

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subject choice ("voice") in many Formosan languages. Take the verb Takaw "steal" as an instance:

|  |  | ITR (AV) | TR1 (PV) | TR2 (LV) | TR3 (CV) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Realis | Unmk | T<em>akaw | Takaw-aw | Takaw-ay | Takaw-anay |
|  | PROG | $\boldsymbol{T}<\boldsymbol{e m}>\boldsymbol{a}$-Takaw | Ta-Takaw-aw | Ta-Takaw-ay | Ta-Takaw-anay |
|  | DUR | $\boldsymbol{T}<\boldsymbol{e m}>\boldsymbol{a}$-Ta-Takaw | Ta-Ta-Takaw-aw | Ta-Ta-Takaw-ay | Ta-Ta-Takaw-anay |
| Irrealis |  | Ta-Takaw | Ta-Takaw-i |  | Ta-Takaw-an |

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 $\langle e m\rangle$, 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:

| $t u=$ Ta-Takaw-i | $i D u$ | $n a$ | paLiDin |
| :--- | :--- | :--- | :--- |
| 3.GEN=RED-steal-TR2 | that.NOM | DF.NOM | car |
| "He will steal that car." |  |  |  |


| tu=ba-bulu-an | $n a$ | 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 give us the future implication; they also denote intention and desire.

Irrealis modality can also have non-future reference. In the following two examples, it is used in counterfactual contexts:
(24) an me-na'u=ku kantaw $a D u \quad i$, $a D i=k u$ 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 $\S 12.2$. 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 also examine the usage of the special first person genitive pronoun $t i=$ 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 use to express hortative mood, as in (26) and (27).
(26) mare-babuLas-a=ta

RECIP-borrow-PJ=1P.ICL.NOM
"Let's exchange!"

```
T<em>ekeL-a=ta
<ITR>drink-PJ=1P.ICL.NOM
" Let's drink! "
```

Second, 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:

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| Dua-Dua | me-na'u- $\boldsymbol{a}$ | $a$ | Tau |
| :--- | :--- | :--- | :--- |
| RED-come | ITR-see-PJ | ID.NOM | person |

"Many people came to see."
(29)

| ala $\quad m$-uka | kurapet- $\boldsymbol{a}$ | $n a D u$ | $n a$ | samaya |
| :--- | :--- | :--- | :--- | :--- | :---: |
| maybe ITR-go | unite-PJ | those.NOM | DF.NOM | some |
| na | Dekal |  |  |  |

DF.NOM village
"Maybe this portion of the villages went and united together."

### 6.3.2.2 The pronominal clitic $\boldsymbol{t}=$

In addition to the basic genitive pronominal proclitics (\$4.5.1.1), there is one more genitive enclitic, $t i=$, which is used to code desiderative mood. It is only used for those events where the agent is first person singular.
$\boldsymbol{t}=$ =pa-karun-ay $\quad i \quad$ baeli $i \quad$ 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."

```
\(\boldsymbol{t i}=\) kilengeT-aw \(=\) Diya \(\quad k<e m>a\)
1S.GEN=confirm-TR1=IMPF <ITR>say
```

"He said, 'I want to confirm it."

From the above examples we see that $t i=$ 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 $t i=$ 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 $\quad i$, |
| :--- | :--- | :--- | :--- |
|  | if | wrong=2S.NOM | ITR-again TOP |

$t i=k a-D a-D e k i=y u$
1S.GEN=ka-RED-scold=2S.NOM
"If you do it wrong again, I will scold you."
$a D i \quad t i=t a-t e n g e D=y u$
Danu

NEG 1S.GEN=RED-punish=2S.NOM
ID.OBL/2S.PSR
$b<i n>a-b e T a '-a n$
$<$ 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 $t i=k a-D a-D e k i-i=y u$ and $t i=t a-t e n g e D-\boldsymbol{i}=y u$ are both acceptable, but they cannot identify any difference between them. More research is needed to pin down the function and meaning of $t i=$ more exactly.

### 6.3.2.3 paka- ${ }^{2}$

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:

| $a D i=l a$ | paka-LeLep | $i D u$ | $n a$ | ma'iDang |
| :--- | :--- | :--- | :--- | :--- |
| NEG=PERF | MOOD-chase | that.NOM | DF.NOM | old |

"The old person wanted to chase (them), but was not able to."
aDi paka-tenges $D a \quad$ kawi

NEG MOOD-bind ID.OBL timber
"He wanted but was unable to bind the timber."

[^21]
### 6.4 Aspect

Aspect may be signalled by aspectual clitics or by verbal morphology in Puyuma. There are three aspectual clitics, $=l a$ (marking perfective), $=$ Diya (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 $C a$ - reduplication (§3.4.2) or $a$ affixation (§3.4.2.3 and §6.5) are typically used to indicate progressive aspect. ${ }^{3}$ Verb forms with serial reduplication ( $\mathrm{Ca}-\mathrm{Ca}$ - reduplication, §3.4.6.1) are typically used to express durative aspect. A voice-marked stem with $C a$ - 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 Takaw "to steal":

|  |  | ITR (AV) | TR1 (PV) | TR2 (LV) | TR3 (CV) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Unmarked | T<em>akaw | Takaw-aw | Takaw-ay | Takaw-anay |  |
|  | PROG. | $\boldsymbol{T}<\boldsymbol{e m}>\boldsymbol{a}$-Takaw | Ta-Takaw-aw | Ta-Takaw-ay | Ta-Takaw-anay |
|  | DUR. | $\boldsymbol{T}<\boldsymbol{e m}>\boldsymbol{a}$-Ta-Takaw | Ta-Ta-Takaw-aw | Ta-Ta-Takaw-ay | Ta-Ta-Takaw-anay |

### 6.4.1.1 Unmarked forms

Verbs unmarked for aspect are formed by 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.

[^22]| (36) | ma-kiteng | $i$ | pilay |
| :--- | :--- | :--- | :--- |
|  | ITR-small $\quad$ SG.NOM | Pilay |  |

Ambiguity seldom occurs, because we usually get the appropriate reading from either the context or from a temporal adjunct or an aspectual marker. But 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'и $D a \quad$ ипап $i \quad$ ита'

ITR-see ID.OBL snake LOC farm
"He saw a snake on the farm."

| $t u=a D a s-a \boldsymbol{w}$ | $t u=d<i n>a d u k u r$ | $D a$ | Tau |
| :--- | :---: | :--- | :--- |
| 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 $C a$ - reduplication (or $a$ - affixation). This construction typically marks progressive aspect in the usual sense, as in (40) to (42).

| $\boldsymbol{s}<\boldsymbol{e m}>$ a-senay | $i$ | walegan |
| :--- | :---: | :--- |
| $<$ ITR $>$ RED-sing | SG.NOM | Walegan |
|  |  |  |
| "Walegan is/was singing." |  |  |


| $t u=\boldsymbol{l a}-l a u \boldsymbol{D}-\boldsymbol{a} \boldsymbol{w}$ | $n a$ | tiLil | kanDiu | kana walak |
| :--- | :---: | :---: | :--- | :--- |
| 3.GEN=RED-float-PV | DF.NOM book | there | DF.OBL child |  |

"The children are/were floating the books there."

ITR-go-a-home=1P.NOM
"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 $=l a$
dark=PERF
"It's dark already."
(44) $\quad a<r a>$ remeng $=l a$
$<$ RED $>$ dark $=$ PERF
"It's getting dark already."

| $k a D u=m i$ | $i$ | baLangaw |
| :--- | :--- | :--- |
| there=1P.ECL.NOM | LOC | Taitung |

"We live in Taitung." (Taitung is our permanent residence.)

| $k<a>a D u=m i$ | $i$ | baLangaw |
| :--- | :--- | :--- |
| $<a>$ 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):

| $p<e n>u<a>k p u k$ | $D a$ | walak |
| :--- | :--- | :--- |
| $<$ ITR $><$ a $>$ beat | ID.OBL | child |

"He is/was beating a child."
"He has the habit of beating children."

| m-a-ekan $\quad D a$ | kuraw |
| :--- | :--- |
| ITR-RED-eat ID.OBL fish |  |
| "He is/was 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 that 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. $s<e m>a$-sa-sanay < senay "sing". This construction typically encodes a process continuing for an appreciable time.

$$
\begin{array}{ll}
T<e m>a-T a-T e k e L=k u & \text { Da eraw }  \tag{51}\\
<\text { ITR }>\text { RED-RED-drink=1S.NOM } & \text { ID.OBL } \\
& \text { wine } \\
\text { "I have been drinking wine (for a long time)." }
\end{array}
$$

$$
\begin{equation*}
\text { me-ra-ra-reTa' }=k u \quad D a \quad \text { tiLil } \tag{52}
\end{equation*}
$$

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).

$$
\begin{array}{lll}
* T<e m>a-T a-T e k e L=k u & D a & \text { puaTemel }  \tag{53}\\
<\text { ITR }>\text { RED-RED-drink=1S.NOM } & \text { ID.OBL } & \text { medicine } \\
\text { "I have been keeping to take medicine." } &
\end{array}
$$

| *me-ra-ra-reTa'=ku | $D a$ | kiakarunan |
| :--- | :--- | :--- |
| ITR-RED-RED-put.down=1S.NOM ID.OBL | job |  |

"I have been keeping to put down jobs."

Stative verbs can appear in the durative form with the meaning "getting X-er and X-er".
$\begin{array}{ll}m e-r a-r a-r e T a & t u=D a D e k \\ \text { ITR-RED-RED-put.down } & 3 . P S R=\text { body }\end{array}$
"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 $=l a$, $=D i y a$, and $=d a r$ are described in $\S 3.3 .3$ and $\S 4.5 .8$. 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 it typically marks perfective aspect, as shown in (56) and (57).
$n u=s e L a p-a y=l a \quad n a \quad k i<a>e D e n g-a n ?$
2S.GEN $=$ sweep-TR2 $=$ PERF DF.NOM get $<\mathrm{a}>$ bed-NMZ
"Have you swept the room?"
(57)

| $m$-uberek=la | $n a$ | Tau |
| :--- | :--- | :--- |
| ITR-return=PERF | DF.NOM | person |

"The person has returned."

In the sentences above, the perfective meaning comes from the marker $=l a$, and according to the informant, =la occurs obligatorily if there is a perfective indication. However, $=l a$ 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) buLay na ruma'
beautiful DF.NOM house
"The house is clean."

| buLay=la | $n a$ | ruma' |
| :--- | :--- | :--- |
| beautiful=PERF | DF.NOM | house |
| "The house has become clean." |  |  |

Furthermore, $=l a$ can also appear in irrealis clauses (60), in clauses with progressive (61) or durative (62) verb forms, or in imperative clauses (63). For example:
(60) aru
$\boldsymbol{k} \boldsymbol{u}<\boldsymbol{a}>$ renang $=\boldsymbol{m i}=\boldsymbol{l} \boldsymbol{a}^{4}$
Da Tau
will $<\mathrm{a}>$ follow=1P.ECL.NOM=PERF
ID.OBL person
"We will (be able to) catch up with others."
(61) an m-a-ekan=la naDu na sariapan $i$,
when $\mathrm{ITR}<$ RED $>$ eat $=$ PERF those.NOM DF.NOM colleague TOP
$t u=k a s u-a w \quad t u=p a D a k a n$
3.GEN=take-TR1 3.PSR=basket
"When those colleagues were eating, she took her basket with her."

[^23]"When we were listening to the witch."
(63) $a$
an tu=pa-TekeL-ay=mu Daku la'ub
when 3.GEN=CAUS-drink-TR2=2P.NOM ID.OBL/1S.PSR ladle
i, $\quad$ TekeL=la
TOP drink= PERF
"If she makes you drink water with my ladle, drink it."
$=l a$ can also appear after nominal predicates, as in (64).
(64) $a$

| $a$ | buLabuLayan=la | $n a$ | walak |
| :--- | :--- | :--- | :--- |
| ID.NOM | lady=PERF | DF.NOM | child |

"The child became a lady."

### 6.4.2.2 =Diya

Like =la the clitic =Diya, 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:

| an | $\boldsymbol{a D i = D i y a}$ | ma-laDam | i, | sagar | m-ekan | Data |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| when | NEG=IMPF | ITR-know | TOP | like | ITR-eat | ID.OBL/1P.PSR |

$b<$ in>eray $D a \quad$ akan-an $i$, m-ekan
$<$ PERF $>$ give ID.OBL eat-NMZ TOP ITR-eat
"When they hadn't realised, and because they liked to eat what we gave them to eat, they ate."

In addition to "not yet", this combination, $a D i$ plus $=D i y a$, 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) it expresses the meaning of "not yet", but the meaning of "never" in (67).

$$
\begin{array}{lrlcc}
a D i=k u=\text { Diya } & \boldsymbol{t}<\text { em }>\text { alám } & \text { m-u-isaT } & \text { Da } \quad \text { sasudang }  \tag{66}\\
\text { NEG=1S.NOM=IMPF } & <\text { ITR>try } & \text { ITR-go-up } & \text { ID.OBL boat } \\
\text { "I have not got on a boat." } & &
\end{array}
$$

(67) $a D i=k u=D i y a \quad t<e m>a ́ l a m ~ m-u-i s a T \quad D a \quad$ sasudang
"I've never got on a boat."

The clitic =Diya also often appears after a projective verb form, as in (68). In (69), =Diya occurs in an imperative clause. In these two sentences, =Diya adds a politer flavour to the requests (§12.2.2).

| $\boldsymbol{k}<\boldsymbol{e} \boldsymbol{m}>\boldsymbol{a}-\boldsymbol{a}=\boldsymbol{k} \boldsymbol{u}=$ Diya | pa-ka-laDam | kanmu |
| :--- | :--- | :--- |
| $<$ ITR $>$ say-PJ=1S.NOM=IMPF | CAUS-ka-know | 2 S.OBL |

"Let me say (this) to inform you."
(69) beray-i=Diya Danu ni-ranger-an iDu
give-TR2=IMPF ID.OBL/2S.PSR PERF-thought-NMZ that.NOM

| na | kur-dikes | kanDi | kana | ki-a-karun-an |
| :--- | :--- | :--- | :---: | :---: |
| DF.NOM | kur-hold | this.OBL | DF.OBL | get-a-work-NMZ |

"Give your thought to that person who is responsible for this business."

The clitic = Diya 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-isaT=Diya kaDi i sanasan i,
will CAUS-go-a-up=IMPF here LOC Sanansan TOP
"When they were about to land on Sanansan,"
When =Diya 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 it
provides a temporal frame or a condition for the event in the main clause to take place.
(71) an $p a<r a>r a g a n=t a=$ Diya $i$,
when $<$ RED $>$ build=1P.NOM=IMPF TOP
"When we are still building (a youth house),"
(72)

| an | $m$-u-ami-ami=mi=Diya | $i$, | $k a D u$ |
| :--- | :--- | :--- | :--- |
| when | ITR-go-RED-north=1P.NOM=IMPF | TOP | there |

$i \quad$ danawLenges
SG.NOM DanawLenges
"Whenever we go north, DanawLenges is there."

The clitic =Diya can also follow a predicate nominal phrase to indicate that the status is persistent. For example:

| $a$ | lalak=mi=Diya |
| :--- | :--- |
| ID.NOM | child=1P.ECL.NOM=IMPF |

"We were still children."

Finally, =Diya 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,

| asua=Diyan $^{5}$ | $i$, | uliya | $k a D u$ | $a$ | maLu-wadi |
| :--- | :--- | :--- | :--- | :--- | :--- |
| when=IMPF | TOP | exist | there | ID.NOM | RECIP-younger.sibling |
| "Long time ago, there were two brothers." |  |  |  |  |  |

[^24]
### 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) it occurs in a realis clause unmarked for aspect; in (76) it appears after a progressive verb form.

| Dua=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."


| 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, and examples are shown in the seven tables below. $C a$ - 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 $C a$ - 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.

### 6.5.1 Intransitive verbs with <em> and its allomorphs in the realis

| Stem | Realis |  | Irrealis | Imperative |
| :---: | :---: | :---: | :---: | :---: |
|  | Unmarked | Progressive |  |  |
| kasu "bring" | $k<e m>a s u$ | $k<e m>a$-kasu | ka-kasu | kasu |
| DimuT"catch" | $D<e m>$ imuT | $D<e m>a-D i m u T$ | Da-DimuT | DimuT |
| $b u ' u T$ "stop" | $b<e n>u$ 'uT | $b<e n>a-b u ' u T$ | $b a-b u ' u T$ | bu'uT |
| pilang "bring" | $p<e n>$ ilang | $p<e n>a-p i l a n g$ | pa-pilang | pilang |
| reput "cut" | me-reput | me-ra-reput | ra-reput | reput |
| $n a ' u$ "see" | те-na'и | те-па-па'и | na-na'и | na'u |
| aLak "take" | m-aLak | m-a-aLak | a-aLak | aLak |
| $u$-sabak "get in" | m-u-sabak | m-u-a-sabak | u-a-sabak | u-sabak |
| u-ngesal "start" | m-u-ngesal | m-u-a-ngesal | u-a-ngesal | $u$-ngesal |

The distribution of $<e m>$ and its allomorphs is phonologically determined (§2.6.1.) as can be observed from the four subclasses of verbs in Table 6.2. 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 $a L a k$, but $a$ - is inserted after $u$-.

### 6.5.2 Intransitive verbs with no affix other than $\mathbf{C a}$ - reduplication

| Stem | Realis |  | Irrealis | Imperative |
| :--- | :---: | :---: | :---: | :---: |
|  | Unmarked | Progressive |  |  |
| beray" "give" | beray | ba-beray | ba-beray | beray |
| pulang "help" | pulang | pa-pulang | pa-pulang | pulang |
| kurenang "follow" | kurenang | $k u<a>$ renang | $k u<a>$ renang | kurenang |

### 6.5.3 Intransitive verbs with realis ma-

| Stem | Realis |  | Irrealis | Imperative |
| :--- | :---: | :---: | :---: | :---: |
|  | Unmarked | Progressive |  |  |
| rengay "tell" | ma-rengay | ma-ra-rengay | ra-rengay | rengay |
| re'ani "harvest" | ma-re'ani | ma-re $<{ }^{\prime} a>{ }^{\prime} a n i$ | re<' $a>{ }^{\prime} a n i$ | re'ani |

6.5.4 Intransitive verbs with no realis affix and irrealis/imperative $\boldsymbol{k a}$ -

The function of $k a$ - is discussed in $\S 6.6$.

| Stem | Realis |  | Irrealis | Imperative |
| :--- | :---: | :---: | :---: | :---: |
|  | Unmarked | Progressive |  |  |
| saeru"laugh" | saeru | $s a<a>e r u$ | $k a-$-s $a<a>e r u$ | $k a$-saeru |
| aremeng "dark" | aremeng | $a<r a>$ remeng | $k$ - $a<r a>$ remeng | $k$-aremeng |
| inaba"good" | inaba | $i<n a>n a b a$ | $k a-i<n a>n a b a$ | $k a-$ inaba |

6.5.5 Intransitive verbs with realis $\boldsymbol{m a}$ - and irrealis/imperative $\boldsymbol{k a}$ -

This class of verbs consists of those that have bound roots (§3.2.2).

| Stem | Realis |  | Irrealis | Imperative |
| :--- | :--- | :--- | :--- | :--- |
|  | Unmarked | Progressive |  |  |
| -Deki "scold" | ma-Deki | ma-Da-Deki | ka-Da-Deki | ka-Deki |
| -Tangis "cry" | ma-Tangis | ma-Ta-Tangis | ka-Ta-Tangis | ka-Tangis |
| -ruwa "can" | ma-ruwa | ma-ra-ruwa | ka-ra-ruwa | ka-ruwa |

### 6.5.6 Denominal intransitive verbs taking realis $m i$ - and irrealis/imperative $\mathbf{p i}$ -

| Stem | Realis |  | Irrealis | Imperative |
| :--- | :---: | :---: | :---: | :---: |
|  | Unmarked | Progressive |  |  |
| walak"child" <br> mi-walak "have <br> children <br> kiping "clothes" <br> mi-kiping "wear <br> clothes" mi-walak | mi-a-walak | pi-a-walak | pi-walak |  |

This class of verbs shows an alternation between $m i$ - and $p i$-, and takes $a$ - rather than $C a$ - reduplication.

### 6.5.7 Intransitive verbs derived with $k i$ -

| Stem | Realis |  | Irrealis | Imperative |
| :---: | :---: | :---: | :---: | :---: |
|  | Unmarked | Progressive |  |  |
| lengaw "sound" | ki-lengaw | ki-a-lengaw | ki-a-lengaw | ki-lengaw |
| ki-lengaw "listen" |  |  |  |  |
| umal "question" | ki-umal | ki-a-umal | ki-a-umal | ki-umal |
| ki-umal "ask" |  |  |  |  |
| beray "give" | ki-beray | ki-a-beray | ki-a-beray | ki-beray |
| ki-beray "beg" |  |  |  |  |
| $t u L u D$ "pass" | $k i-t u L u D$ | ki-a-tuLuD | ki-a-tuLuD | ki-tuLuD |
| $k i-t u L u D$ "receive" |  |  |  |  |

This category of verbs has two subdivisions: denominal and deverbal. The two subcategories have different syntactic features, discussed in §9.6.

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 |  |  |
| kasu "bring" | $k<e m>$ asu | $k<$ em>a-kasu | ka-kasu | kasu |
| beray "give" | beray | ba-beray | ba-beray | beray |
| rengay "tell" | ma-rengay | ma-ra-rengay | ra-rengay | rengay |
| aremeng "dark" | aremeng | $a<$ ra>remeng | k-a<ra>remeng | k-aremeng |
| -Deki "scold" | ma-Deki | ma-Da-Deki | ka-Da-Deki | ka-Deki |
| kiping "clothes" <br> mi-kiping "wear <br> clothes" | mi-kiping | mi-a-kiping | pi-a-kiping | pi-kiping |
| lengaw "sound" <br> ki-lengaw <br> "listen" | ki-lengaw | ki-a-lengaw | ki-a-lengaw | ki-lengaw |

### 6.6 A note on $\mathrm{Ka}^{-6}$

The uses of the prefix $k a$ - have attracted the attention of linguists studying Formosan languages. A summary of the earlier analyses ${ }^{7}$ 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 $k a$ - indicates stativity. They demonstrate that dynamic and stative verbs exhibit different morphological alternations and that $k a$ - is the non-realis counterpart of realis stative $m a$ - and $\emptyset$. They claim that "both $m a$ - and $k a$ - are stem-forming affixes that appear on stative verbs: $k a$ - occurs exclusively in nonfinite verb stems, $m a$ - (and $\sim \varnothing$ ) in finite verb stems."

[^25]In Puyuma, the occurrence of $k a$ - seems not to be as predictable as in Zeitoun and Huang's data. As they have demonstrated, $k a$ - 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 subcategorized 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 $k a$ - is used to mark stativity in nonfinite constructions, in Puyuma it is not unusual for $k a$ - to co-occur with verbs that are semantically dynamic. These verbs either have $m a$ - or zero in the realis intransitive form. For instance:

| a. $\boldsymbol{k} \boldsymbol{a}$-Da-Datikul | b. $\boldsymbol{m} \boldsymbol{a}$-Datikul |
| :--- | :---: |
| ka-RED-fight | ITR-fight |
| "They might fight." | "They fought." |

a. $\boldsymbol{t u}=\boldsymbol{k a}$-saeru- $\boldsymbol{a y}=k u$
3.GEN=ka-laugh-TR2=1S.NOM
"He laughed at me."
a. $a D i \quad \boldsymbol{k a}-D a-D e k i-i=k u$
b. saeru
laugh
"He laughed."

NEG ka-RED-scold-TR2 $=1$ S.NOM
"Don't scold me."
b. $\boldsymbol{m a}$-Da-Deki

ITR-RED-scold
"He's scolding."

Semantically speaking, the above verbs -Datikul "fight", -Deki "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 -'iTiL "stingy" and -biring "jealous" in the following examples.

| saLaw | $\boldsymbol{m a}$-' 'iTiL |
| :--- | :--- |
| very | ITR-stingy |

"They are very stingy."

| $t u=\boldsymbol{k} \boldsymbol{a}-$ ' iTiL- $\boldsymbol{a} \boldsymbol{w}$ | $i$ | 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 $=k u$

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, like litek "cold" and daLekeng "wet" are not marked by $k a$ - in constructions where we might expect it to occur. For instance:
lite $k=l a \quad$ na irupan
cold=PERF DF.NOM dish
"The dish has become cool."

| litek-u | $n a$ | irupan |
| :--- | :--- | :--- |
| cold-TR1 | DF.NOM | dish |

"Cool down the dish."
daLekeng ku=kiruan
wet 1S.PSR=clothes
"My clothes are wet."

```
aDi \(k u=\) daLekeng- \(i \quad n u=k i r u a n\)
NEG 1S.GEN=wet-TR2 2S.PSR=clothes
```

"I didn't wet your clothes."

Furthermore, with some verbs, $k a$ - 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, $k a$ - is used in imperative transitives but not in declarative transitives. ${ }^{8}$
(88) riksis na ruma'
dirty DF.NOM house
"The house is dirty."
(89) aDi ka-riksis-i

NEG ka-dirty-TR2
"Don't make it dirty."

| $a D i$ | $k u=r i k s i s-i$ | $n a$ | $r u m a$ |
| :--- | :--- | :--- | :--- |
| 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 $k a$ - is that the stems prefixed with the intransitive stative $m a$ - or zero can be subcategorized into two groups which cut across the categories in $\S 6.5 .4$ and $\S 6.5 .5$. In the first group, each stem has only one intransitive form (monovalent), as in §6.5.4 and §6.5.5, and in the second group, each stem can form two intransitives, one with $m a$ - or zero as in $\S 6.5 .4$ and $\S 6.5 .5$, which is monovalent, and the other with an allomorph of $\langle e m\rangle$, which is bivalent, thus patterning with the verbs in $\S 6.5 .1$.

Stems in the first group are prefixed with $k a$ - in forms other than the realis intransitive. For example:

[^26]| Stem | realis | irrealis/imperative |
| :--- | :--- | :--- |
| -remeng "silent" | ma-remeng | $k a$-ra-remeng/ka-remeng |
| -sepel "upset" | ma-sepel | $k a$-sa-sepel/ka-sepel |
| -keser "strong" | ma-keser | $k a-$ ka-keser/ka-keser |
| buLay "beautiful" | buLay | $k a$-ba-buLay/ka-buLay |
| saDu "many" | saDu | $k a$-sa-saDu/ka-saDu |
| sabeLaw "hungry" | sabeLaw | $k a$-sa<ba>beLaw/ka-sabeLaw |

(91) ka-remeng
ka-silent
"keep quiet!" (Intransitive imperative)
(92) $\boldsymbol{k a}$-saDu-i $n u=n i-a n g e r-a n$
ka-many-TR2:IMP 2S.PSR=PERF-thought-NMZ
"Put more expressions." (Transitive imperative)

| pa-ka-sa-saDu $\quad t u=u L e p-a n$ | Dananiam | Tau |
| :--- | :--- | :--- | :--- |
| CAUS-ka-RED-many 3.PSR =tired-NMZ | ID.OBL/1P.PSR | person |

i sabak
LOC inside
"It added more hardship to our family." (Causative)
(94) $\boldsymbol{k a}-s a<b a>b e L a w=y u$
ka-<RED $>$ hungry=2S.NOM
"You might be hungry." (Irrealis)

| ka-sa-sepel | $i$ | tinataw |
| :--- | :---: | :--- |
| ka-RED-upset | SG.NOM | his.mother |
| "His mother will be upset." |  |  |

In the second group, two different intransitive verbs are derived. A list of some examples is given below:

| Stem | Monovalent | Bivalent |
| :---: | :---: | :---: |
| ba'aw | $b a ' a w$ "alive" | $b<e n>a ' a w$ "save" |
| bias | bias "hot" | $b<e n>i a s ~ " m a k e ~ h o t " ~$ |
| deru | ma-deru "cooked" | $d<e m>$ eru "cook" |
| sede' | ma-sede' "absent" | $s<e m>e d e$ ' "resign" |
| bu'uT | $m a-b u ' u T$ "extinguished" | $b<e n>u$ 'uT"stop" |
| $b a^{\prime}{ }^{\prime} T$ | $m a-b a ' i T$ "burned" | $b<e n>a ' i T$ "burn" |
| bikbik | ma-bikbik "float" | $b<e n>i k b i k$ "wave" |
| binga ${ }^{\text {, }}$ | ma-binga' 'troublesome" | $b<e n>$ inga' "bother" |

Stems in this category are not prefixed with $k a$ - 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:

| mar-ka-ba'iT | $a$ | ruma' | $a$ | $s a D u$ |
| :--- | :--- | :--- | :--- | :--- |
| RECIP-ka-burn | ID.NOM | house | ID.NOM | many |
| "It (the fire) burned many houses." |  |  |  |  |
| pa-ka-binga'=ta | Da | Tau |  |  |
| CAUS-ka-trouble=1P.NOM | ID.OBL | person |  |  |
| "We caused others troubles." |  |  |  |  |

Descriptions of the roles of $k a$ - in a causative construction and in a reciprocal construction are given in $\S 9.2 .1 .1$ and $\S 9.3 .3$ respectively.

## CHAPPIER 7

## $\mathcal{T R A N S S A S E G O R I A L}$ OPERATIONS

### 7.1 Introduction

This chapter discusses the morphological operations that change the grammatical category of a word. In Chapter 4, we see that Puyuma open word classes consist of nouns and verbs, and in $\S 4.3$ we discuss 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 pinungaLad. 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
$t u=p<$ in $>u$-ngaLad $\quad D a \quad$ matang
3.PSR $=<$ PERF $>$ CAUS-name ID.OBL Matang
"(The place) where the lime was dropped, is called Matang."

$$
\begin{array}{ccc}
\text { Root } & \text { Stem } & \text { Word } \\
n g a L a d ~(\mathrm{~N}) & \rightarrow & \text { pu-ngaLad }(\mathrm{V}) \rightarrow \\
\text { "name" } & & \text { "to give a name" }
\end{array}
$$

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 |
| :---: | :---: | :---: | :---: | :---: |
| isaT $(\mathrm{N}) \rightarrow \boldsymbol{k}$-isaT-an ${ }^{\boldsymbol{l}}(\mathrm{N}) \rightarrow \boldsymbol{u}$-kisaTan $(\mathrm{V}) \rightarrow \boldsymbol{p}$-ukisaTan $(\mathrm{V}) \rightarrow$ - in $^{\text {¢ }}$-ukisaTan $(\mathrm{N})$ |  |  |  |  |
| "up" | ove" | pof" |  |  |

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 $C a$ - reduplication can function as a nominaliser in ta-tiLu "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.

[^27]
### 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.

| $k i-$ "to get" | $k i-\quad a p u T$ "to pick flowers" |
| :---: | :---: |
|  | ki-kuraw "to fish" |
| kur-"to expose to, be together" | kur-kadaw "to bask in the sun" |
|  | kur-'udal "to get wet in the rain" |
|  | kur-paDek "to ride, to get to someone's back" |
| mi- "to have; to wear" | mi-kataguin "have a spouse" |
|  | mi-kiping "wear clothes" |
| $m$-utu-"to become" | mutu-Denan "become a mountain" |
|  | mutu-yawan "become a leader" |
| ma-tara- "to bring; to carry" | ma-tara-kamuT "to bring a knife" |
| "to cultivate" | ma-tara-uma' "to farm" |
| $m-u$ - "to go" | $m$-u-sabak "go inside" |
|  | $m$-u-ami "go to north" |
| m-uri- "to mix with" | m-uri-'udal-an "to be in the rain" |
| $p a$ - "to cause to have" | pa-susu "to breast-feed" |
|  | pa-kadaw "to bask in the sun" |
| pia-"to face" | pia-la'uD "to face to the east" |
|  | pia-timuL "to face to the south" |
| para- "to be fond of" | para-abay "to be fond of rice cake" |
|  | para-babayan "to be fond of women" |


| $t<e m>$ ara-" "to speak a language" | $t<e m>$ ara-puyuma "speak Puyuma" |
| :--- | :--- |
|  | $t<e m>$ ara-balaka "speak a foreign |
| language" |  |

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) $t<e m>a r a-p a y r a n=k u$
$<$ ITR $>$ use-Taiwanese $=1$ S.NOM
"I speak Taiwanese."
(3)
$t u=t a r a-p a y r a n-a n a y=t a \quad t<e m>u b a n g$
3.GEN=use-Taiwanese-TR3=1P.NOM <ITR $>$ answer
"They answered us in Taiwanese."
(4) aDi m-utu-Tau paseket

NEG ITR-become-person seriously
"He has not become a man completely."
(5)

| ta=p-utu-yawan-aw | $i$ | Lugi |
| :--- | :--- | :--- |
| 1P.GEN=CAUS-become-chief-TR1 | SG.NOM | Lugi |
| "We made Lugi become the chief." |  |  |

### 7.3 Nominalisation

Nominalisation forms a nominal element from a non-nominal element. Recall that in $\S 4.3 .3 .1$ 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 discussion of the two syntactic tests (negation and the coocurrence of a possessive free pronouns) in §4.3.3.1 is essential in determining the status of $\langle$ in $\rangle$,
which is a 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 $\langle i n\rangle$ as a nominal perfective marker is treated in §7.3.1 and §7.3.2.3. Then 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, which is 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 $<i n>$ (or its allomorph $n i$-) is infixed or prefixed to verbs to indicate the 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 $<i n>$ cannot take a nominative pronoun enclitic like verbs do, as shown in (8).

| $T<e m>a k a w=y u$ | $D a$ | paisu |
| :--- | :--- | :--- |
| $<$ ITR $>$ buy $=2$ 2S.NOM | ID.OBL | money |
| "You stole money." |  |  |

$t u=$ Takaw-ay $=\boldsymbol{y} \boldsymbol{u} \quad D a \quad$ paisu
3.GEN=steal-TR2=2S.NOM ID.OBL money
"He stole money from you."
a. $\quad * T<\boldsymbol{i n}>a k a w=\boldsymbol{y} \boldsymbol{u}$
Da
paisu
$<$ PERF $>$ steal $=2$ S.NOM
ID.OBL
money
b. $\quad{ }^{t} u=T<$ in $>$ akaw $=y u$
3.GEN $=<$ PERF $>$ steal $=2$ S.NOM

On the other hand, while words infixed with $\langle i n>$ can be preceded by a clitic pronoun (9), or a free pronoun (10), like nouns can, verbs are never preceded by free pronouns, as in (12).

| $\boldsymbol{k} \boldsymbol{u}=T<\boldsymbol{i n}>$ ima | $n a$ | tiLil |
| :--- | :--- | :--- |
| 1S.PSR $=<$ PERF $>$ buy | DF.NOM | book |

"The book is my buying." (= "This is the book I bought.")
nanku $\quad T<$ in>ima $n a \quad$ tiLil
NOM/1S.PSR <PERF>buy DF.NOM book
"The book is my buying."
nanku tiLil
"My book"

| a. | *nanku | T<em>ima | Da | tiLil |
| :--- | :--- | :--- | :--- | :--- |
|  | NOM/1S.PSR | <ITR>buy | ID.OBL | book |
| b. | *nanku | Takaw-ay |  |  |
|  | NOM/1S.PSR | steal-TR2 |  |  |

In §8.3.2 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 $\langle i n>$ 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); $k u=T<i n>i m a$ in (9) corresponds to nanku
$T<$ in>ima in (10), and it is better analysed as "my buying", not "I bought". Further investigation shows that elements infixed with $<i n>$ are optionally suffixed with the nominaliser -an when the derived noun denotes the patient of the event.

| $\boldsymbol{n a n k} \boldsymbol{u} / \boldsymbol{k} \boldsymbol{u}=T<$ in $>$ ima-an | na | tiLil |
| :--- | :---: | :---: |
| 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:
aDi=ku ma-laDam Datu ngai
NEG=1S.NOM ITR-know ID.OBL/3.PSR language
"I don't know their language."
(15) ameli nantu ni-laDa-laDam 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 $a D i$ instead of ameli, as shown below. gerundive nominals are treated in §7.3.5.

| wa-aLak | $D a$ | paTungTungan | $D a$ | $\boldsymbol{a D i}=$ Diya |
| :--- | :--- | :---: | :--- | :--- |
| go-take | ID.OBL | drum | ID.OBL | NEG=IMPF |
| $\boldsymbol{b}<\boldsymbol{i n}>$ arekep-an | $D a$ | $k a L i T$ |  |  |
| <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-La-Linay-an (< ma-Linay "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 |
| :--- | :--- | :--- | :--- |
| karun | ki-karun/ki-karun"work" | ki<a>karun-an"job" | $<a>^{2}+-a n$ |
| u-uma | $m$-u-uma/u-uma "go to farm" | u-a-uma-an"farming" | $<a>+$-an |
| raip | me-raip/raip "sow" | raip-an"sowing" | $-a n$ |
| Deki | ma-Deki/ka-Deki"condemn" | Deki-an"condemnation" | $-a n$ |
| sangaL | $s<e m>a n g a L / s a n g a L " r e j o i c e " ~$ | $s<e m>a n g a L-a n$ | $-a n$ |
| engaD | $m$-engaD/engaD"breathe" | angaD"breath" | stem modification |

Table 7.1 shows three major formation processes. In the first type, the morpheme $-a n$ is suffixed to the progressive/irrealis verb form. In the second type,

[^28]-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 angaD is resulting from the schwa deletion (i.e. a-engaD $\rightarrow$ angaD).

Note that the formation process used with a particular verb seems to be 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, as shown by the example in Table 7.1, ra'ip-an "sowing" is contrary to the generalisation. Furthermore, when -an is suffixed to stative verbs, it is sometimes suffixed to a root without an intransitive marker (e.g. Deki-an "condemnation"), and sometimes to the intransitive form of the verb (e.g. $s<e m>a n g a L-a n " a p p r e c i a t i o n ")$.

Examples of their usages are given below:
a.

| $\boldsymbol{k} \boldsymbol{i}<\boldsymbol{a}>\boldsymbol{k} \boldsymbol{a r} \boldsymbol{n} \boldsymbol{n}=y u$ | isuwa ? |
| :--- | :--- |
| $<\mathrm{a}>$ work $=2$ S.NOM | where |

"Where are you working?"
b. ulaya $k u=\boldsymbol{k} \boldsymbol{i}<\boldsymbol{a}>\boldsymbol{k} \boldsymbol{a r u n - a n}$
exist $\quad 1 \mathrm{~S} . \mathrm{PSR}=<\mathrm{a}>$ work-NMZ
"I have a job." (Lit. My job exists.)
a. mиата=ta ma-Deki kanпи
why=1P.NOM ITR-condemn 2S.OBL
"Why should we condemn you?"
b. unian Da Deki-an kanDu kana suan
without ID.OBL condemn-NMZ that.OBL DF.OBL dog
"She did not have any condemnation towards the dog."

Table 7.2: State nouns

| Root | Intransitive/Imperative | Derived noun | Formatives |
| :--- | :--- | :--- | :--- |
| asaT | asaT/ka-asaT"high" | asaT-an"height" | $-a n$ |
| buLay | buLay/ka-buLay"beautiful" | buLay-an"beauty" | $-a n$ |
| kuaLeng | kuaLeng/ka-kuaLeng <br> "difficult, sick" | $\boldsymbol{k a}$-kuaLeng-an "difficulty", | $k a-+-a n$ |
| sanan | ma-sanan/ka-sanan"lost" | $\boldsymbol{k a}$-sanan-an"being lost" | $k a-+-a n$ |
| igeLa | igeLa/k-igeLa"ashamed" | $\boldsymbol{k} i<\boldsymbol{a}>g e L a-a n "$ "shame" | $k-+<a>+-a n$ |
| -inaTay | m-inaTay/k-inaTay"die" | ki<a>naTay-an "imminent <br> death" | $k-<a>+-a n$ |

Basically, verbs in this category are stative verbs and they show an alternation between ma-/ठ (in realis intransitive construction) and $k a$ - (elsewhere). The alternation of $m a-/ \varnothing$ and $k a$ - was described in §6.6.

From the examples given above, we see that some state nouns are formed by suffixing -an to the root, and some are formed by suffixing -an to the $k a$ - form. The choice is lexically determined. Note also that some state nouns are derived from the progressive/irrealis form. For example:
a. igeLa=ku
shamed=1S.NOM
"I am embarrassed."
b. $\quad a$
$k-i<a>g e L a-a n$
iDi
ID.NOM $\mathrm{k}-<\mathrm{a}>$ shame-NMZ this.NOM
"This is a shame."
(20)
a. m-inaTay=la na suan

ITR-die=PERF DF.NOM dog
"The dog has died."
$\begin{array}{lr}\text { b. ala Datu } & \boldsymbol{k} \text { - } \boldsymbol{i}<\boldsymbol{a}>\boldsymbol{n a T a y} \text {-an } \\ & \text { maybe ID.OBL/3.PSR } \\ & \text { "Maybe because of its imminent death, " }\end{array}$

### 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 |
| :---: | :---: | :---: | :---: |
| takesi | $t<e m>a k e s i / t a k e s i ~ " s t u d y " ~$ | $\boldsymbol{t}<\boldsymbol{e m}>\boldsymbol{a}$-takesi "student" | PROG. form |
| keDeng | $k<e m>e D e n g / k e D e n g$ "pull" | $\boldsymbol{k}<\boldsymbol{e m}>\boldsymbol{a}-k e D e n g$ "leader" | PROG. form |
| bangsar | bangsar/ka-bangsar "handsome" | bangsar-an "young men" | -an |
| - 'iDang | ma- 'iDang/ka- 'iDang "old" | ma-'iDang-an "old person" | -an |
| buLay | buLay/ka-buLay "beautiful" | buLa-buLay-an "young women" | $C V C V-+-a n$ |

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:
a. buLay
iDi
na ruma,
beautiful this.NOM DF.NOM house
"This house is beautiful."

| b. $\quad$ buLa-buLay-an=la | $n a$ | 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 end with -er/-or in English belong to the first category. "Teachers" refers to those who teach for a living or who professionals in teaching, 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 the very occasion" is in (23).
a mi-Tepa $\quad b<e n>$ a-base $\quad i \quad$ pilay

From these examples, we see that agents of characteristic activities are usually manifested with the help of the verb mi-Tepa "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:
$\boldsymbol{s}<\boldsymbol{e m}>\boldsymbol{a}$-salpit $=k u$
$<$ ITR $>$ RED-beat $=1$ S.NOM
"I am beating."
indang $=k u \quad$ kana Tau $\{k a n a \quad \boldsymbol{s}<\boldsymbol{e m}>\boldsymbol{a}$-salpit $\}$
afraid=1S.NOM DF.OBL person DF.OBL <ITR $>$ RED-beat "I am afraid of the person who is beating (somebody)."
(26) indang $=k u \quad\{k a n a \quad s<e m>a$-salpit $\}$
"I am afraid of the beater."
"I am afraid of the one who is beating."

In (25), kana $s<e m>a$-salpit is a relative clause modifying the PIBU kana Tau. But when the PIBU kana Tau 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-Tepa "have a share" construction, as described above). So:

$$
\begin{align*}
& t<e m>a<k a>k e s i=k u  \tag{27}\\
& <\text { ITR }><\text { RED }>\text { study }=1 \mathrm{~S} . \mathrm{NOM} \\
& \text { "I am studying." }
\end{align*}
$$

$$
\begin{array}{ll}
a & t<e m>a<k a>k e s i=k u  \tag{28}\\
\text { ID.NOM } & <\text { ITR }><\text { RED }>\text { study }=1 \text { S.NOM }
\end{array}
$$

"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 |
| :--- | :--- | :--- |
| base "wash" | mi-Tepa benase "person making a <br> living by washing clothes" | benabase "the one who's washing <br> clothes" |
| maresiuk"cook" | mi-Tepa maresiuk "chef" | mararesiuk "the one who's cooking" |
| takesi "study" | tematakesi "student","the one who's 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 $\langle i n\rangle$ or $C a$ - 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", kiumal-an "question". Those infixed 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 $C a$ - reduplication denote an irrealis meaning; for instance da-dirus-an "things that are going to be washed". Sometimes, we find $C a$ - reduplication and <in> cooccur to derive a new noun. In those cases, there is often an imperfective or frequentative meaning. For example: $d<i n>a$-daway-an "half-done product"; $s<i n>a$-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 |
| :---: | :---: | :---: | :---: |
| ekan | m-ekan/ekan "eat" | akan-an "food" | -an, stem modification |
|  |  | ni-ekan(-an) "food having been eaten" | $<i n>+-a n$ |
|  |  | $\boldsymbol{a}$-akan-an "food going to be eaten" | $C a-+-a n$ |
| daway | $d<e m>a w a y / d a w a y$ "produce" | $d<$ in>away(-an) "product" | $<i n>+-a n$ |
|  |  | $\boldsymbol{d}<\boldsymbol{i n}>\boldsymbol{a}-$ daway(-an) "semi-product" | $C a-+<i n>+-a n$ |
| rengay | ma-rengay/rengay | ni-rengay-an "things said" | $<i n>+-a n$ |
|  |  | ra-rengay-an "things to be said" | $C a-+-a n$ |
| senay | $s<e m>$ enay/senay "sing | $s<$ in>enay-an "songs sung" | $<i n>+-a n$ |
|  |  | sa-senay-an "songs to be sung" | $C a-+-a n$ |
|  |  | $\boldsymbol{s}<\boldsymbol{i n}>\boldsymbol{a}$-sa-senay "songs often sung" | $C a-+<i n>+C a-$ |

Examples of their use follow:
a. ulaya $k u=$ ra-rengay-an a saya
exist 1S.PSR=RED-say-NMZ ID.NOM one
"I have one thing to say."
b. $i D i \quad k u=n i-r e n g a y-a n \quad i$,
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 $C a$ - reduplication, or both. Note that $<i n>$ is never used as a formative in this category.

Table 7.6: Instrumental nouns

| Root | Intransitive/Imperative | Derived noun | Formatives |
| :---: | :---: | :---: | :---: |
| -Linay | ma-Linay/ka-Linay "amuse" | $\boldsymbol{k a}$-La-Linay-an "toy" | $k a-+C a-+-a n$ |
| Taba | $T<e m>a b a / T a b a$ "roast" | Ta-Taba-an "grid" | $C a-+-a n$ |
| litek | pa-litek/pa-litek "make cold" | pa-la-litek-an "cooler; air conditioner" | $C a-+-a n$ |
| sarekuD | $s<e m>\text { arekuD/sarekuD }$ <br> "support" | sarekuD-an "stick" | -an |
| aleb | aleb/aleb "close" | aleb-an "door" | -an |
| tiLu' | $t<e m>i L u$ '/tiLu' "tide" | $\boldsymbol{t a}$-tiLu' "rope" | $C a-$ |
| $t u k u D$ | $\begin{aligned} & t<e m>u k u D / t u k u D \\ & \text { "withstand" } \end{aligned}$ | $\boldsymbol{t a - t u k u D ~ " p i l l a r " ~}$ | Ca- |

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 $\quad$ Da <br> brush $\quad$ ID.OBL | kiping <br> clothes |  |
| :--- | :--- | :--- | :--- |
|  | "Brush the clothes!" |  |  |
| (31) | $T<e m>$ ima' $=k u$ | Da | 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 precategorial, and examples such as tawasi, kuang, and tabukul are precategorial 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 "often" > marayarayas "plain"). Basically, four types of locative noun can be distinguished: those only suffixed with -an, those taking $C a$ - reduplication (or $\langle a\rangle$ infixation), those taking $C V C V$ - reduplication, and those having the $<i n>$ infix.

Table 7.7: Locative nouns

| Root | Intransitive/Imperative | Derived noun | Formatives |
| :---: | :---: | :---: | :---: |
| alup | alup/alup "hunt" | alup-an "hunting place" | -an |
| takesi | $t<e m>a k e s i / t a k e s i ~ " s t u d y " ~$ | takesi-an "school" | -an |
| dirus | $d<e m>$ irus/dirus <br> "wash; play with water" | da-dirus-an "bath room" diru-dirus-an "swimming pool" | $\begin{aligned} & C a-+-a n \\ & C V C V-+-a n \end{aligned}$ |
| daway | $d<e m>a w a y / d a w a y$ "produce" | dawa-daway-an "studio; factory" | $C V C V-+-a n$ |
| -Linay | ma-Linay/ka-Linay "amuse" | ka-Lina-Linay-an "amusement park" | $k a-+C V C V-+-a n$ |
| palu | palu/palu "demarcate" | pa-palu-an "boundary" | $C a-+-a n$ |
| bekas | bekas/ka-bekas "run" | $\boldsymbol{k}<\boldsymbol{i n}>\boldsymbol{a}$-bekas-an "path having been run" | $k a-+<i n>+-a n$ |
| -eDeng | m-ieDeng/k-ieDeng "sleep" | $\boldsymbol{k}$-i<a>eDeng-an "bed" | $C a-+-a n$ |
|  |  | $\boldsymbol{k}<\boldsymbol{i n}>$ ieDeng-an "place slept before" | $k-+<i n>+-a n$ |
| -rayas | ma-rayas "flat" | ma-raya-rayas "flat land" | CVCV- |

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 $C V C V$ - 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 $m$-ieDeng "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 $=k u$ i $\boldsymbol{k}-\boldsymbol{i}<\boldsymbol{a}>\boldsymbol{e D}$ Deng-an

NEG.exist=1S.NOM LOC <a>sleep-NMZ
"I wasn't in bed."
Dua=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 $k a D u$ "be there" and m-ieDeng "lie down, sleep" respectively, and they can denote any place where the named action has previously taken place.
m-uka $\quad t<$ em $>$ ungu-tungur-a

## Datu <br> $k<i n>a D u-a n$

ITR-go <ITR>RED-pop.in.and.look-PJ ID.OBL/3.PSR <PERF>there-NMZ "It went pop in and looked at the place where it used to live."
tu=kasu-aw kantu k-<in>ieDeng-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 $\langle i n\rangle$ and all other types. While locative nouns without $<i n>$ 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 $n a$ or $D a$. This suggests that the two types of locative nouns, with or without <in>, are syntactically different. Those with $\langle i n>$ 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 $k a$--an "a period of time", regardless of whether the verb is dynamic or stative, as shown in the first three examples (sangal, saLem, and buLay) in Table 7.8. Dynamic temporal nouns (e.g. berek and redek in Table 7.8) formed by $C a$ - (with -an) reduplication have an irrealis reading, whereas those formed with $<i n>$ (with -an) have a perfective reading.

Table 7.8: Temporal nouns

| Root | Intransitive/Imperative | Derived noun | Formatives |
| :---: | :---: | :---: | :---: |
| sangaL | $s<e m>a n g a L / s a n g a L$ "rejoice" | ka-sangaL-an "time to rejoice" | $k a-+-a n$ |
| saLem | $\begin{aligned} & s<e m>a L e m / \text { saLem } \\ & \text { "sow" } \end{aligned}$ | ka-saLem-an "time to sow" | $k a-+-a n$ |
| buLay | buLay/ka-buLay <br> "beautiful" | ka-buLay-an "time of being beautiful" | $k a-+-a n$ |
| berek | ma-berek/berek "leave" | ba-berek-an "time to leave" | $C a-+-a n$ |
|  |  | $b<i n>e r e k-a n$ "time left" | $<i n>+-a n$ |
| redek | ma-redek/redek "arrive" | ra-redek-an "time to arrive" | $C a-+-a n$ |
|  |  | ni-redek-an "time arrived" | $<i n>+-a n$ |
| -sikasik | ma-sikasik/ka-sikasik "start off" | $k a-s i<a>k a s i k-a n$ "time to start off" | $k a-+\langle a\rangle+-a n$ |
|  |  | $k<i n>a$-sikasik-an "time started off" | $k a-+<i n>+-a n$ |

(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."

| 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 | $\begin{aligned} & \text { AGT } \\ & \text { (D) } \end{aligned}$ | $\begin{aligned} & \text { AGT } \\ & \text { (SG) } \end{aligned}$ | $\begin{aligned} & \text { PAT } \\ & \text { (D) } \end{aligned}$ | $\begin{aligned} & \text { INST } \\ & \text { (D) } \end{aligned}$ | $\begin{aligned} & \text { INST } \\ & \text { (S) } \end{aligned}$ | $\begin{aligned} & \text { LOC } \\ & \text { (D) } \end{aligned}$ | $\begin{aligned} & \mathrm{LOC} \\ & \text { (S) } \end{aligned}$ | $\begin{aligned} & \text { TEMP } \\ & \text { (D) } \end{aligned}$ | TEMP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -an | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |  |
| ka-an |  | $\checkmark$ |  |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |
| Ca- + -an | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
| $k a-C a-+-a n$ |  |  |  |  |  |  | $\checkmark$ |  |  |  | $\checkmark$ |
| $\langle i n>+-a n$ |  |  |  |  | $\checkmark$ |  |  |  | $\checkmark$ | $\checkmark$ |  |
| $k a-<i n>-a n$ |  |  |  |  |  |  |  | $\checkmark$ |  |  | $\checkmark$ |
| CVCV-an |  |  |  | $\checkmark$ |  |  |  |  |  |  |  |
| ka-CVCV-an |  |  |  |  |  |  |  |  | $\checkmark$ |  |  |
| Ca- |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |
| Ca-<in>-an |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |
| Ca-<in>Ca- |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |
| CVCV- |  |  |  |  |  |  |  |  | $\checkmark$ |  |  |
| PROG. form |  |  | $\checkmark$ |  |  |  |  |  |  |  |  |

Except for patient nouns, nouns can be derived from both dynamic and stative verbal roots. In the patient nouns category, $-a n$ is omissible if $\langle i n\rangle$ 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, $C a$ - reduplication is used to denote irrealis and progressive meaning, whereas $C V C V$ - 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 they denote perfective (marked by <in> alone) imperfective (marked by <in> plus $C a$-) or frequentative (marked by <in> plus $C V C V$-) aspect. Recall in $\S 6.4 .2$, in verbal constructions, the same aspectual categories, perfective, imperfective and frequentative, are not signalled by verbal morphology but are expressed by aspectual clitics $=l a,=$ Diya and $=d a r$ respectively. Thus, nominalisations express aspectual and modal categories by morphology alone while in verbal constructions some categories are expressed by morphology and some are 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 |  |
| $\varnothing$ | $<i n>$ | $C a-<i n>$ | $C V C V-$ | $C a-<i n>-C a-$ | $C a-$ |

### 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 $i k a$ - is often accompanied by $C a$ - 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:


### 7.3.4.2 $y a-$

This prefix is related to the expression of possession, and it usually cooccurs with a possessive pronouns, as shown below:
(40) saDu nu=ya-beray
many 2S.PSR=ya-give
"What you give is a lot."

The nominaliser $y a$ - 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) $s a D u \quad n u=b<$ in>eray
many $\quad 2 \mathrm{~S} . \mathrm{PSR}=<\mathrm{PERF}>$ 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-Duma-an "other places; nonlocal" $<$ Duma "other".

Compare (42) and (43).
$t u=l u l u y-a w \quad D a \quad$ Duma $D a \quad$ suan $i \quad$ nanali
3.GEN=chase-TR1 ID.OBL other ID.OBL dog SG.NOM my.mother "Other dogs chased after my mother."

| $a D i=t a=D i y a$ | me-nau | $i$ | si-Duma-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 $<i n>$ is present, $-a n$ is optional. Consider the following sentences:


In the above sentences, the derived nouns $k<i n>a$-sagar-an and Ta-Tuak-an take arguments, and they seem to possess both nominal and verbal properties. They are very similar to the English gerundive nominals demonstrated in the following sentences:

## a. He killed the dog.

b. $\quad$ iis 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, $C V C V$ - 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. But 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 $a D i$ is used with gerundive nominals showing that they are verbal constructions.

| wa-aLak | Da | paTungTungan | Da | $\boldsymbol{a}$ Di=Diya |
| :--- | :---: | :---: | :--- | :--- |
| go-take | ID.OBL | drum | ID.OBL | NEG=IMPF |
| $\boldsymbol{b}<$ in>arekep- $\boldsymbol{a n}^{3}$ | $D a$ | kaLiT |  |  |
| $<$ 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:

| $k<e m>$ irami $=$ ku $=l a$ | Da | kiakarunan | Daku |
| :--- | :--- | :---: | :---: |
| $<$ ITR $>$ start $=1$ S.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, as shown in (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

[^29](44) and (45). For instance, in (48), the gerundive nominal Daku 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.

## CHAPTER 8

## $\mathcal{T}$ R $\mathcal{A N S S I I V I T Y ~}$

### 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 intransive 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 TukuL "pick off" carries an actor voice (ITR) affix <em> in (1) and an undergoer voice (TR1) affix $-a w$ in (2). ${ }^{2}$ The two verb forms $T<e m>u k u L$ and $T u k u L$-aw are thus equally marked morphologically.

[^30]| $\boldsymbol{T}<\boldsymbol{e m}>\boldsymbol{u} \boldsymbol{k} \boldsymbol{L} \boldsymbol{L}=k u$ | $D a$ | $s a^{\prime} a D$ |
| :--- | :--- | :---: |
| $<$ ITR $>$ pick $=1$ S.NOM | ID.OBL | branch |

"I picked off (some) tree-branches."
(2)

| $k u=\boldsymbol{T u} \boldsymbol{k} \boldsymbol{u} \boldsymbol{L}-\boldsymbol{a} \boldsymbol{w}$ | $n a$ | $s a^{\prime} a D$ |
| :--- | :--- | :--- |
| 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 is the subject, marked nominative, and the other is marked oblique) is transitive or intransitive, and this question in term is related 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. $s a^{\prime} a D$ "branch" in (1)) is a core argument or not.

In (1) $s a$ ' $a D$ "branch" is an argument required by the semantics of the verb TemukuL "pick", so it is not an adjunct. However, it is oblique-marked. If $s a$ ' $a D$ is analysed as an oblique argument, then this clause is intransitive (the only core argument is $=k u$ ' $I$ "); if it is analysed as a core argument, then this clause is transitive (with two core arguments $=k u$ and $s a^{\prime} a D$ ).

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

[^31]these languages, ${ }^{4}$ there is relatively little discussion about how to decide whether a given argument is core or not in the study of the 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 $\S 8.2$, the case marking of nouns and pronouns is explored, and in $\S 8.3$ 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.

[^32]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 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) |  | Dua nantu |
| ---: | :--- |
|  | come DF.NOM/3.P |
|  |  |
|  | Her child came." |

(4) ma-ba'iT na paTaka

ITR-burn DF.NOM meat
"The meat was burnt."
(5)

| $T<e m>a k a-T a k a w=k u$ | $D a$ | akan-an |
| :--- | :--- | :--- |
| $<$ ITR $>$ RED-steal=1S.NOM | ID.OBL | eat-NMZ |
| "I stole food repeatedly." |  |  |

ku=Tekab-aw na basikaw

1S.GEN=cut.open-TR1 DF.NOM bamboo
"I cut the bamboo open."

[^33]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).

| $\boldsymbol{t u}=$ bes-besbes-ay | $\boldsymbol{k a n}$ | $\boldsymbol{k} \boldsymbol{a k a w a l a n}$ |
| :--- | :--- | :--- |
| 3.GEN=RED-massage-TR2 | SG.OBL | Kakawalan |

"Kakawalan kept massaging him." (Non-subject actor)

```
tu=bes-besbes-ay kantu walak
```

3.GEN=RED-massage-TR2 DF.OBL/3.PSR child
"Her child kept massaging her."

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=Takaw-anay Da paisu i tinataw
3.GEN=steal-TR3 ID.OBL money SG.NOM his.mother
"He stole money for his mother." (Indefinite patient)

| $t u=$ pa-langlang-anay | $\boldsymbol{k a n a}$ | $\boldsymbol{a p u y}^{7}$ |
| :--- | :--- | :--- |
| 3.GEN=CAUS-dry-TR3 | DF.OBL | fire |

"They made it dry with the fire." (Adjunct)

[^34]| tu=Takaw-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):

| T<em>akaw | Da | paisu | $i$ | isaw |
| :--- | :--- | :--- | :--- | :--- |
| <ITR>steal | ID.OBL | money | SG.NOM Isaw |  |
|  | "Isaw stole money." |  |  |  |


| $t u=$ Takaw-aw | $n a$ | paisu | kan | isaw |
| :--- | :---: | :--- | :--- | :--- |
| 3.GEN=steal-TR1 | DF.NOM | money | SG.OBL | Isaw |
| "Isaw stole the money." |  |  |  |  |



| tu=Takaw-anay | $i$ | tinataw | Da | paisu |
| :--- | :--- | :--- | :--- | :--- |
| 3.GEN=steal-TR3 | SG.NOM | his.mother | ID.OBL | money |
| "He stole money for his mother." |  |  |  |  |

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 an oblique argument, as in (16).
(16) $\mathrm{V}^{\mathrm{AV}}\left(\mathrm{NP}^{\mathrm{OBL}}\right) \quad\left(\mathrm{NP}^{\mathrm{NOM}}\right)$
$p<e n>a n g u T \quad \underline{D a}$ 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 co-referential 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.
a. $\quad \operatorname{Pron}_{\mathrm{i}}{ }^{\mathbf{G E N}}=\mathbf{V}^{\mathrm{UV}} \quad\left(\mathbf{N P}^{\mathrm{NOM}}\right) \quad\left(\mathbf{N P}_{\mathrm{i}}{ }^{\mathbf{O B L}}\right)$

| $\underline{t u}=k a-a w=\underline{k} \boldsymbol{u}$ | $\underline{k a n}$ | nanali |
| :--- | :--- | :---: |
| 3.GEN=tell-TR1=1S.NOM | SG.OBL | my.mother |

"My mother told me."
b. $\quad \operatorname{Pron}_{\mathrm{i}}{ }^{\mathrm{GEN}}=\mathrm{V}^{\mathrm{UV}} \quad\left(\mathrm{NP}^{\mathrm{NOM}}\right) \quad\left(\mathbf{N P}_{\mathrm{j}}{ }^{\mathrm{OBL}}\right) \quad\left(\mathrm{NP}_{\mathrm{i}}{ }^{\mathbf{O B L}}\right)$
$\underline{t u}=T a k a w-a y=\underline{k} \boldsymbol{u} \quad \underline{D a} \quad$ 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. itinataw 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. Da dare' in (16b), $=k u$ in (17a) and Da paisu in (17b);

[^35]the less-patient-like undergoer argument (LPL), in a three-participant clause, e.g. $=k u$ in (17b).

ACT and PL in turn have two possible case markings in different constructions, as shown in Table 8.2.

Table 8.2: A mapping of clause types and role/case of arguments

|  |  | ACT | PL | LPL |
| :--- | :---: | :---: | :---: | :---: |
| One participant clause | AV | NOM | ---- | ---- |
|  | AV | NOM | OBL | ---- |
|  | UV | GEN <br> (OBL) | NOM | ---- |
|  | AV | NOM | OBL | (adjunct) |
|  | UV: TR1 | GEN <br> (OBL) | NOM | (adjunct) |
|  | UV: TR2, <br> TR3 | GEN <br> (OBL) | OBL | NOM |

Recall that in $\S 6.2$, 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 itinataw in (16a) and na markataguin in (16b), and genitive in a UV clause (optionally with a coreferential oblique-marked NP ), as $t u=$ (which agrees with kan tinataw) in (17a).

The PL is marked nominative in a TR1 clause, like $=k u$ in (17a), but oblique in an actor voice clause (Da dare' in (16b)) or a three-participant TR2/TR3 clause (Da paisu in (17b)).

The LPL is marked nominative in a three-participant TR2/TR3 clause, like $=k u$ 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: $\mathrm{ACT}^{\mathrm{NOM}}, \mathrm{ACT}^{\mathrm{GEN}}, \mathrm{PL}^{\mathrm{NOM}}$, PL ${ }^{\text {OBL }}$, and LPL ${ }^{\text {NOM }}$. 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. Then transitivity of actor and undergoer clauses is dealt with in $\S 8.4 .2$, which 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 discussion), but they are used here, following Arka (2005) to test for core syntactic status.

### 8.4.1.1 Coreferencing clitics on 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 $\left(\mathrm{ACT}^{\mathrm{GEN}}\right)$, and the nominative enclitic, which refers to the subject $\left(\mathrm{ACT}^{\mathrm{NOM}}, \mathrm{PL}^{\mathrm{NOM}}\right.$, and $\mathrm{LPL}{ }^{\mathrm{NOM}}$ ), are core arguments. The nouns buwang "hole", walak "child", and paisu "money" in (19), (20) and (21) respectively are all marked for oblique case. In (20) walak is coreferenced by a genitive bound pronoun and is a core argument ( $\mathrm{ACT}^{\mathrm{GEN}}$ ). The nouns buwang in (19), an adjunct, and paisu in (21), a PL ${ }^{\text {OBL }}$, are not coreferenced by a bound pronoun and are by this criterion not core.
tu=laseD-aw kana buwang $i$ temutaw
3.GEN=hide-TR1 DF.OBL hole SG.NOM his.grandparent
"He hid his grandmother in the hole."
$\boldsymbol{t u}=p a D e k-a w \quad i \quad$ temutaw kana walak
3.GEN=carry.on.back-TR1 SG.NOM his.grandparent DF.OBL child
"The child carried his grandmother on his back."
tu=Takaw-anay Da paisu inataw
3.GEN=steal-TR3 ID.OBL money SG.NOM his.mother
"He stole money for his mother." (Indefinite patient)
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:
(22)
a. sagar $=k u \quad D a \quad$ suan
like=1S.NOM ID.OBL dog
"I like dogs."
b. sagar Da 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 $\mathrm{ACT}^{\mathrm{NOM}}, \mathrm{ACT}^{\mathrm{GEN}}$, and $\mathrm{PL}^{\mathrm{NOM}}$ are controllers, as shown in (23), (24) and (25) respectively. In (23) $=k u$ is the subject, and in (24) $t u=$ is the non-subject actor, but each of them is coreferential with the deleted subject of the second verb.
(23) kurudung=ku mieDeng kana tutui
lean.against=1S.NOM sleep DF.OBL puppy
"I leant against the puppy to sleep."
$\boldsymbol{t u}=$ Lugas-aw me-na'u
3.GEN=lift.up-TR1 ITR-see
"He lifted it up to see."

| $t u=b a u-b a u i-a w=k u$ | $m-u k a$ | $i$ | takesi-an |
| :--- | ---: | :--- | :--- |
| 3.GEN=RED-push-TR1=1S.NOM ITR-go | LOC | study-NMZ |  |
| "She kept pushing me to go to school." |  |  |  |
|  |  |  |  |
| PL $^{\text {OBL }}$ and LPL |  |  |  |

[^36]ma-tara-paDek=kui $\quad$ Da $\boldsymbol{w a l a k}_{j} \quad$ me-languy $_{i /{ }^{*} j}$
ITR-take-carry.on.back=1S.NOM ID.OBL child ITR-swim
"I carried a child on my back swimming."

| $t u_{i}=$ Takaw- $\boldsymbol{a y}=\boldsymbol{k} \boldsymbol{u}_{j}$ | Da | paisu | $T<e m>$ ima $^{\prime}{ }_{i /{ }^{\prime} j}$ | Da |
| :---: | :---: | :---: | :---: | :---: |
| $3 \mathrm{GEN}=$ steal-TR2=1S.NOM | ID.OBL | money | $<$ ITR $>$ buy | ID.OBL |
| kiping |  |  |  |  |
| 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, temporal, and so on, i.e. a clausal adjunct (§4.5.7). However, with regard to arguments, only arguments denoting the subject ( $\mathrm{ACT}^{\mathrm{NOM}}, \mathrm{PL}^{\mathrm{NOM}}$, and LPL ${ }^{\mathrm{NOM}}$ ) or the non-subject actor ( $\mathrm{ACT}^{\mathrm{GEN}}$ ) can be put in topic position. For instance, in (29b), the argument in the topic position, DaDungaw, is $\mathrm{ACT}^{\mathrm{NOM}}$. In (30b), DikeTan "sticky rice" is PL ${ }^{\text {NOM }}$. In (31b), bira' "leaf" is LPL ${ }^{\text {NOM }}$.
a. aDi mi-kataguin i DaDungaw

NEG have-spouse SG.NOM DaDungaw
"DaDungaw didn't have a spouse."
$\begin{array}{llllll}\text { b. } & \boldsymbol{i} & \text { DaDungaw } & i, & a D i & \text { mi-kataguin } \\ & \text { SG.NOM } & \text { DaDungaw } & \text { TOP } & \text { NEG } & \text { have-spouse }\end{array}$
"DaDungaw, she didn't have a spouse."
(30)
a.

| ta=iLang-aw | Da | enay | $\boldsymbol{n a}$ | DikeT-an |
| :--- | :--- | :---: | :--- | :--- |
| 1P.GEN=grind-TR1 | ID.OBL | water | DF.NOM | sticky-NMZ |

"We grind the sticky with water."
b. na DikeT-an $i, \quad t a=i L a n g-a w \quad D a \quad$ enay

DF.NOM sticky-NMZ TOP 1P.GEN=grind-TR1ID.OBL water "The sticky rice, we grind it with water."
a. ta=LipuT-anay $D a$ kuraw na bira'

1P.GEN=wrap-TR3 ID.OBL fish DF.NOM leaf "We wrapped fish with the leaves."
b. na bira' $i$, ta=LipuT-anay Da kuraw

DF.NOM leaf TOP 1P.GEN=wrap=TR3 ID.OBL fish
"The leaves, we use them to wrap fish."
In (32a), $\mathrm{ACT}^{\mathrm{GEN}}$ 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 (32b).

| a. $\boldsymbol{t u}=$ paDek-aw $\quad i$ | temutaw | kana walak |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 3GEN=carry-TR1 SG.NOM | his.grandparent | DF.OBL child |
|  | "The child carried his grandmother on back." |  |  |

b. $i D u$ walak $i$, tu=paDek-aw $i$
that.NOM DF.NOM child TOP 3GEN=carry-TR1 SG.NOM
temutaw
his.grandparent
"That child, he carried his grandmother on back and went to throw her to the mountains."
$\mathrm{PL}^{\mathrm{OBL}}$ may not be topicalised, as shown in (33b).
a. $T<$ em>ikeL $\boldsymbol{D a} \quad$ sa'ab
$<$ ITR $>$ pick ID.OBL branch
"She picked up some branches."

| b. | $\boldsymbol{n a} / \boldsymbol{D a} \boldsymbol{a} \boldsymbol{a} \boldsymbol{a D}$ | $i$, | $T<$ em>ikeL |
| :--- | :--- | :--- | :--- |
|  | 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, $\mathrm{ACT}^{\mathrm{NOM}}$, $\mathrm{PL}^{\mathrm{NOM}}$, and LPL ${ }^{\mathrm{NOM}}$, can be modified by peniya "all".

| karuwa | $t<e m>$ ubang | na | lalak | peniya |
| :--- | :--- | :---: | :---: | :--- |
| can | $<$ ITR>answer | DF.NOM | child | all |

"All the children can answer."
ta $=$ kan- $a w=l a$ peniya na kuraw

1P.GEN=eat-TR1=PERF all DF.NOM fish
"We have eaten all the fish."
(36)

| tu=LipuT-anay | $\boldsymbol{n a}$ | $\boldsymbol{b i r a}$ | peniya | Da | kuraw |
| :--- | :--- | :--- | :--- | :--- | ---: |
| 3GEN=wrap-TR3 | DF.NOM | leaf | all | ID.OBL | fish |

"She used all the leaves to wrap fish."
If the clause includes both $\mathrm{ACT}^{\mathrm{GEN}}$ (expressed by an oblique-marked NP and coreferenced by a genitive clitic) and $\mathrm{PL}^{\mathrm{NOM}}$, two readings are possible, i.e. peniya can modify either argument.

| $t u=k a n-a w$ | $n a$ | 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."
$\mathrm{PL}^{\mathrm{OBL}}$ and adjuncts are not modified by peniya. In (38), peniya modifies bira' "leaf" (LPL ${ }^{\mathrm{NOM}}$ ), not kuraw "fish" ( $\mathrm{PL}^{\mathrm{OBL}}$ ).

| tu=LiupT-anay | $\underline{n a} \quad$ bira' | peniya | Daraw <br> 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 $\mathrm{PL}^{\mathrm{OBL}}$ 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 (39b) $\mathrm{ACT}^{\mathrm{NOM}}$ is raised, in (40b) $\mathrm{ACT}^{\mathrm{GEN}}$, in (41b) $\mathrm{PL}^{\text {NOM }}$, and in (42b) LPL ${ }^{\text {NOM }}$.
a. ma-laDam=ku [Da m-ekan Da kuraw i pilay]

ITR-know=1S.NOM COMP ITR-eat ID.OBL fish SG.NOM Pilay
"I know that Pilay eats fish."
b. ma-laDam=ku kan pilay [Da m-ekan Da kuraw] ITR-know=1S.NOM SG.OBL Pilay COMP ITR-eat ID.OBL fish "I know that Pilay eats fish."
a. $\quad m a-l a D a m=k u$$\quad\left[\begin{array}{lll}D a & \underline{u}_{i}=L i p u T-a w=l a & n a \\ \text { ITR-know=1S.NOM } & \text { COMP } & \text { 3.GEN=wrap-TR1=PERF }\end{array} \quad\right.$ DF.NOM
kuraw kan nanali $i_{\text {] }}$
fish SG.OBL my.mother
"I know that my mother has wrapped the fish."

[^37]| b. | ma-laDam=ku | kan | nanali | $[D a$ |
| :--- | :--- | :--- | :--- | :--- |
| ITR-know=1S.NOM | SG.OBL | my.mother | COMP |  |
|  |  |  |  |  |
| $\boldsymbol{t u}=$ LipuT- $a w=l a$ | $n a$ | kuraw |  |  |

(41)
a. ma-laDam=ku [Da tu=LipuT-aw na kuraw

ITR-know=1S.NOM COMP 3.GEN=wrap-TR1 DF.NOM fish

Da bira']
ID.OBL leaf
"I know that the fish was wrapped in a leaf."
b. ma-laDam=ku kana kuraw [Da tu=LipuT-aw

ITR-know=1S.NOM DF.OBL fish COMP 3.GEN=wrap-TR1

Da bira']
ID.OBL leaf
"I know that the fish was wrapped in a leaf."
(42)
a. ma-laDam=ku [Da tu=LipuT-anay Da kuraw

ITR-know=1S.NOM COMP 3.GEN=wrap-TR3 ID.Ob fish
na bira']
DF.NOM leaf
"I know that the leaf was used to wrap fish."
b. ma-laDam=ku kana bira' [Da tu=LipuT-anay

ITR-know=1S.NOM DF.OBL leaf COMP 3.GEN=wrap-TR3

Da kuraw]
ID.OBL fish
"I know that the leaf was used to wrap fish."
In (43) an PL ${ }^{\text {OBL }}$ may not be raised to the matrix clause.

| a. | $m a-l a D a m=k u$ | [Da tu=LipuT-anay |  | Da kuraw |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ITR-know=1S.NOM |  | P 3.GEN=wrap- | ID.O | fish |
|  | na bira'] |  |  |  |  |
|  | DF.NOM leaf |  |  |  |  |
|  | "I know that the leaf was used to wrap fish." |  |  |  |  |
| b. | *ma-laDam $=k u$ |  | kuraw [Da | ${ }^{\prime}=$ Lip | T-anay |
|  | $n a \quad b i r a]$ |  |  |  |  |

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 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\times$ | $\checkmark$ |
| control in SVCs | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\times$ | ? |
| topicalization | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\times$ | $\checkmark$ |
| being modified by peniya | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\times$ | $\checkmark$ |
| raised from complement | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\times$ | $\checkmark$ |

Table 8.3 shows that oblique-marked PL cannot launch any of the syntactic processes. This means that, of the five argument encodings, $\mathrm{PL}^{\mathrm{OBL}}$ can be regarded as non-core, whilst the other four encodings are core arguments.

### 8.4.1.6 $\mathrm{PL}^{\text {OBL }}$ vs adjunct

Should a PL ${ }^{\text {OBL }}$ be treated as an adjunct? No, for the following two reasons. First, while PL is required by verbal valency, an adjunct is not. Second, the definiteness of an 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 (44) and (45).
a.
an $\quad T<e m>e k e L=t a$
Da eraw i
when $<$ ITR $>$ drink $=1$ P.NOM
ID.OBL wine TOP
"When we drink wine,"
$\begin{array}{llccl}\text { b. } & \text { an } & T<e m>e k e L=t a & \text { kana } & \text { eraw } \\ i, \\ \text { when } & <\text { ITR>drink=1P.NOM } & \text { DF.OBL } & \text { wine } & \text { TOP }\end{array}$
a. tu=kiwiT-ay $i \quad$ temamataw Da paTaka
3.GEN=grab-TR2 SG.NOM their.father ID.OBL meat
"They grabbed meat from their father."
$\begin{array}{lllrlc}\text { b. } & { }^{*} \text { tu=kiwiT-ay } & i & \text { temamataw } & \text { kana } & \text { pataka } \\ & \text { 3.GEN=grab-TR2 } & \text { SG.NOM } & \text { their.father } & \text { DF.OBL } & \text { meat }\end{array}$

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 (44) and (46), or from TR2/TR3 to TR1, as shown in (45) and and (47).

| $t a=$ TekeL-aw | $n a$ | eraw |
| :--- | :--- | :--- |
| 1P.GEN=drink-TR1 | DF.NOM | wine |

"We drank the wine."

| tu=kiwiT-aw | $n a$ | paTaka |
| :--- | :--- | :--- |
| 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, Tabak "box" and tatiLu "string" can be either definite or indefinite.
tu=abak-aw na buLa-buLay-an kana/Da Tabak
3.GEN=pack-TR1 ID.NOM RED-beautiful-NMZ DF.OBL/ID.OBL box
"They packed the girl into the/a box."

| tu=betbet-aw | $\boldsymbol{k a n a} / \mathbf{D a}$ | $\boldsymbol{t a t i L u}$ | $n a$ | Tabak |
| :--- | :--- | :--- | :--- | :--- |
| 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 $\mathrm{PL}^{\mathrm{OBL}}$ 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). In Puyuma texts, as was mentioned in §8.4.1, in an independent clause, if there is a definite PL, then it will be chosen to be the subject, and the sentence will be manifested as UV, thus confirming Hopper and Thompson's observation. For example:

| (50) | $p u k a=k u$ | Da | 'apuT |
| :---: | :---: | :---: | :---: |
|  | add=1S.NOM | ID.OBL | flower |
|  | "I put some flow | wers." |  |


| $k u=p u k a-a y$ | $\boldsymbol{n a}$ | 'apuT | $D a$ | pakeLing |
| :--- | :--- | ---: | :--- | :---: |
| 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 $\S 8.3$ with regard to their transitivity. We have seen in §8.4.1 that nominative and genitive arguments $\left(\mathrm{ACT}^{\mathrm{NOM}}, \mathrm{PL}^{\mathrm{NOM}}, \mathrm{LPL}^{\mathrm{NOM}}\right.$, and $\mathrm{ACT}^{\mathrm{GEN}}$ ) are core because they are syntactically privileged arguments: they participate in the syntactic operations. Accordingly, the UV templates in (53) are transitive, because there is always a nominative-marked ( $\mathrm{PL}^{\mathrm{NOM}}$ or LPL ${ }^{\mathrm{NOM}}$ ) and a genitive $\left(\mathrm{ACT}^{\mathrm{GEN}}\right.$ ) argument. The actor voice templates in (52), on the other hand, are intransitive.

Example (52a) has only a nominative argument and is thus intransitive. The oblique argument in (52b) is $\mathrm{PL}^{\mathrm{OBL}}$ and therefore non-core, leaving just the nominative as a core argument, so (52b) is also intransitive.
a. $\mathbf{V}^{\mathrm{AV}} \quad\left(\mathbf{N P}^{\mathrm{NOM}}\right)$
$m a-{ }^{-}{ }^{\prime} T i L=y u$
ITR-stingy=2P.NOM
"You are stingy."
b. $\mathbf{V}^{\mathrm{AV}}\left(\mathbf{N P}^{\mathrm{OBL}}\right)\left(\mathbf{N P}^{\mathrm{NOM}}\right)$
$p<$ en>anguT Da dare' na mar-kataguin
<ITR>grab ID.OBL soil DF.NOM RECIP-spouse
"The couple grabbed some soil."
a. $\operatorname{Pron}_{\mathrm{i}}{ }^{\mathbf{G E N}}=\mathbf{V}^{\mathbf{U V}}\left(\mathbf{N P}^{\mathrm{NOM}}\right) \quad\left(\mathbf{N P}_{\mathbf{i}}{ }^{\mathbf{O B L}}\right)$

| $t u=k a-a w=k u$ | $i$ | nanali |
| :--- | :--- | :--- |
| 3.GEN=tell-TR1=1S.NOM | SG.NOM | my.mother |

"My mother told me."
b. $\quad \operatorname{Pron}_{\mathrm{i}}{ }^{\mathbf{G E N}}=\mathrm{V}^{\mathrm{UV}} \quad\left(\mathbf{N P}^{\mathrm{NOM}}\right) \quad\left(\mathrm{NP}_{\mathrm{j}}{ }^{\mathrm{OBL}}\right) \quad\left(\mathrm{NP}_{\mathrm{i}}{ }^{\text {OBL }}\right)$
$t u=$ Takaw-ay=ku Da 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 (52b) and (53b). 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 (52a) and (53a) because of the seemingly intermediate status of the oblique-marked patient. In Dixon's (1994:120-124) terminology the templates in (52b) and (53b) 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 $\mathrm{NP}_{\text {rel }}$ is the actor, the RC must be an actor voice clause (§5.6.3), which in turn may cause the oblique PL to be definite.

Second, there are some verbs that have no corresponding transitive forms and are always appear in intransitive forms. For example, for some verbs, such as masepel "disappoint', 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 $k a$-sarepa-ay. For example:

$$
\begin{array}{lll}
\text { a. } & \text { sarepa }=k u \quad \text { kantu } & \text { ngai }  \tag{54}\\
\text { satisfy=1S.NOM } & \text { DF.OBL/3.PSR } & \text { word } \\
& \text { "I am satisfied with his words." } &
\end{array}
$$

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 ( 55 to 56), cognition (57 to 58), and psychological states (59 to 62). In other words, the semantics of these actor voice verbs are different from their corresponding undergoer
voice forms (i.e. "see" vs "watch over" in (55); "hear" vs "listen to" in (56); "know" vs "recognise" in (57)).
a. me-na'u=k

ITR-see $=1 \mathrm{~S} . \mathrm{NOM}$ kana
DF OBL

| sinsi | $i$ | $d a L a n$ |
| :--- | :--- | :--- |
| teacher | LOC | road |

"I saw the teacher on the street."
$\begin{array}{llllll}\text { b. } & k u=n a ' u-a y & n a & \text { sinsi } & \left({ }^{*} i\right. & d a L a n) \\ & \text { 1S.GEN=see-TR2 } & \text { DF.NOM } & \text { teacher } & & \end{array}$
"I watched over (took care of) the teacher."
"*। watched over the teacher on the street."
a. kilengaw=ta kantu
hear=1S.NOM DF.OBL/3.PSR
senay kana sinsi
song DF.OBL teacher
"We heard the teacher's song."
b. an tu=turu-ay=yu kana sinsi $i$,
when 3GEN=exhort-TR2=2S.NOM DF.OBL teacher TOP
kilengaw-i
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
"*| listened to the plane."
a. ma-laDam=yu kanDu na Tau?

ITR-know=1S.NOM that.OBL LK person
"Do you know the person?"
b.

| $t u=k a-l a D a m-a y=k u$ | $k a n$ | pilay |
| :--- | :--- | :--- |
| 3 GEN=ka-know-TR2=1S.NOM | SG.OBL | Pilay |
| "Pilay recognized me." |  |  |


| a. | $m a-u L i d=k u$ | $k a n u$ |
| :--- | :--- | :--- |
|  | ngai |  |
|  | ITR-don't.know=1S.NOM | DF.Obl/2S.PSR |$\quad$ word

b. $\quad n u=k a-u L i d-a y=k u$

2S.GEN=ka-don't.know-TR2=1S.NOM
"You didn't inform me."

| a. | masupeng $=k u$ | $k a n$ | nanali |
| :--- | :--- | :--- | :--- |
|  | miss $=1 \mathrm{~S} . \mathrm{NOM}$ | SG.OBL | my.mother |
|  | "I miss my mother." |  |  |

b. $k u=$ supeng-ay $i$

1S.GEN=kiss-TR2 SG.NOM my.mother
"I kissed my mother."
(60)
a. igela $=k u$
embarrassed=1S.NOM
"I felt embarrassed (toward you)."
b. $\quad k u=k$-igela- $a y=y u$

1S.GEN=ka-respect-TR2=2S.NOM
"I respect you."
(61)
$\begin{array}{llc}\text { a. } & \text { sagar }=k u & k a n u \\ & \text { like }=1 \mathrm{~S} . \mathrm{NOM} & 2 \mathrm{~S} . \mathrm{OBL}\end{array}$
"I like you." (without any specific reason)
b. $\quad k u=k a$-sagar- $a w=y u$

1S.GEN=ka-like-TR1=2S.NOM
"I cosset you." (because of a specific reason)
(62)
a. indang $=k u$
afraid=1S.NOM $2 \mathrm{~S} . O B L$
"I am afraid of you." (without a specific reason)

| b. | *indang=ku kana kakuwaLengan |  |  |
| :--- | :--- | :--- | :--- |
|  | afraid=1S.NOM | DF.OBL | disease |

Although the actor voice verbs listed from (55) to (62) allow a definite oblique PL, these clauses are nevertheless intransitive because there is only one core argument. In (63a) the oblique-marked PL sinsi "teacher" of the perception verb kilengaw 'hear' cannot be the controller of $s<e m>$ enay "sing". Only when the PL sinsi is the subject, as in (63c), can it be the controller. Similarly, in (64a) 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.

|  | *kilengaw $=$ ku | kana | sinsi | $s<e m>$ enay |
| :---: | :---: | :---: | :---: | :---: |
| a. | hear=1S.NOM | DF.OB | teacher | $<$ ITR>sing | "I heard the teacher sing."

b. kilengaw $=k u \quad D a \quad s<e m>a$-senay na sinsi hear=1S.NOM COMP <ITR>RED-sing DF.NOM teacher "I heard the teacher singing."

| c. | $k u=k i l e n g a w-a y$ | $\boldsymbol{n a}$ | sinsi | $s<$ em>enay |
| :--- | :--- | :--- | :--- | :--- |
|  | 1S.GEN=hear-TR2 | DF.NOM | teacher | $<$ ITR>sing |

"I listened to the teacher's singing."

| a. $\quad{ }^{\text {indang }}=k u$ |  |
| :--- | :--- |
|  | afraid $=1 \mathrm{~S} . \mathrm{NOM}$ |


| $\boldsymbol{k a n}$ | isaw | m-u-dalep |
| :--- | :---: | :--- |
| SG.OBL | Isaw | ITR-go-near |

"I am afraid of Isaw's approaching."

| b.indang $=k u$ kan isaw | ki-dalep |  |  |
| :--- | :--- | :--- | :--- |
| afraid=1S.NOM | SG.OBL | Isaw | PASS-near |
| "I am afraid of being approached by Isaw." |  |  |  |

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 (65).
a. ma-laDam=ku $\quad[D a \quad$ m-ekan Da kuraw ilepilay $]$ ITR-know=1S.NOM COMP ITR-eat ID.OBL fish SG.NOM Pilay "I know that Pilay eats fish."
b. ma-laDam=ku kan pilay [Da m-ekan Da kuraw] ITR-know=1S.NOM SG.OBL Pilay COMP ITR-eat ID.OBL fish "I know that Pilay eats fish."

In (65b) pilay is an instance of definite oblique-marked PL, because the verb malaDam "know" does not have a (same-meaning) transitive form, as shown in (57).

Examples in (66) show that if the raised argument is definite, the complement-taking verb appears in its transitive form.
(66)

| a. | me-na'u=ku | [Da | $t u=T a-T a k a w-a w$ | na |
| :---: | :---: | :---: | :---: | :---: |
|  | ITR-see=1S.NOM | COMP | 3.GEN=RED-steal-TR1 | DF.NOM |
|  | kuraw kan | isaw] |  |  |
|  | fish SG.OBL | Isaw |  |  |

b. ku=na'u-ay isaw $\quad[D a \quad t u=T a-T a k a w-a w$

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 (67a) and (67b). If the definite PL is not the second person, as in (67c), it will be the subject.
$\left.\begin{array}{lllll}\text { a. } & \text { sa-sungaL=mi } \quad \text { kanu (Or } s<e m>u n g a L-a=m i ~ k a n u) ~\end{array}\right)$

### 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.

$$
\begin{array}{ll}
s<\boldsymbol{e m}>a L e T a g=k u & \text { Da enay }  \tag{68}\\
<\mathbf{A V}>\text { pour.out }=1 \mathrm{~S} . \mathrm{NOM} & \text { ID.OBL water } \\
<\mathbf{I T R}>\text { pour.out }=1 \mathrm{~S} . \text { NOM } & \text { ID.OBL water } \\
\text { "I poured out some water." }
\end{array}
$$

(69)

| $k u=s a L e T a g-a \boldsymbol{w}$ | $n a$ | enay | $i$ | $b a b u L u$ |
| :--- | :--- | :--- | :--- | :--- |
| 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." |  |  |  |  |


| $k u=$ saLeTag-ay | $D a$ | enay | $n u=$ Tanguru' |
| :--- | :--- | :--- | :--- |
| 1S.GEN=pour.out-LV | ID.OBL | water | 2 2S.PSR=head |
| 1S.GEN=pour.out-TR2 | ID.OBL | water | your.NOM=head |
| "I poured some water on your head." |  |  |  |

(71) $k u=$ saLeTag-anay $=l a \quad n a$ 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 is introduced in Ross and Teng (2005a), and has been adopted in this thesis 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:

| (72) | m-atel | $i$ | Denan | iDi | na | walak |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ITR-throw | LOC | mountain | this.NOM | DF.NOM | child |  |

ma-atel $\boldsymbol{k u}=\boldsymbol{p a i s u}$
ITR-throw $1 \mathrm{~S} . \mathrm{PSR}=$ money
"My money was gone (disappeared)."

$$
\begin{align*}
& m a-' i T i L=y \boldsymbol{u}  \tag{74}\\
& \text { ITR-stingy=2P.NOM }
\end{align*}
$$

"You are stingy."

In the above sentences, the semantic roles of the nominative NP are very different. In (72), the nominative NP is the actor, while in (73) and (74) the nominative NP is not, and to gloss the marker $m a$ - 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."

## (75) 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 (76a-76b)) is used when A or S is relativised, and a different strategy (gerund, as in (76c)) is used when an O is relativised.

| a. | $k<a>a D u=$ Diya | nantu | lang | [na |
| :--- | :--- | :--- | :--- | :--- |
|  | $<\mathrm{a}>$ there=IMPF | DF.NOM/3.PSR company | DF.NOM | will |
| 'a-'aDas | kantaw] |  |  |  |
|  | RED-lift.up | $3 . O B L$ |  |  |
|  | "There is his friend who will lift him up." |  |  |  |

b. tu=aLak-aw na sababa [na saLaw Dekan] 3.GEN=take-TR11 DF.NOM cloth DF.NOM very wide "He took the cloth which was very wide."
c. m-uka k<em>ururus-a kana geLiT [kantu

ITR-go <ITR>drag-PJ DF.OBL thorn DF.OBL/3.PSR
$t<$ in>a'ta'-an kantu 'aLi'aLian]
<PERF>spread-NMZ DF.OBL/3.PSR male.friend
"He went dragging the thorns which were spread out by his friends."

## 

## $\mathcal{R E}-\mathcal{E N C O D I N G}$ OF $\mathcal{A R G U \mathcal { M E N T S }}$

### 9.1 Introduction

This chapter deals with five operations that re-encode core arguments. These operations are: causative, reciprocal, reflexives, 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 thesis 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, and the causee becomes the undergoer/PL, the undergoer of the caused event the LPL (§8.3) of the causative verb. In the reciprocal ( $\S 9.3$ ) constructions 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

[^38]the oblique position. Table 9.1 provides a summary of these operations and the corresponding encodings of arguments. ${ }^{2}$

Table 9.1: Re-encoding of arguments

| Verb types | Transitive clause | Intra | tive clause |
| :---: | :---: | :---: | :---: |
| Dynamic | Root-TR: <br> NOM: Undergoer <br> GEN: Actor | monovalent intransitive \& extended intransitive | ITR-Root : <br> NOM: Actor <br> (OBL: Undergoer) |
|  |  | anti-causative | mu-Root: <br> NOM: Undergoer <br> (OBL: Actor) |
|  | ----- | passive | ki-Root <br> NOM: Undergoer <br> (OBL: Actor) |
|  | ----- | reciprocal | ma-RED-Root <br> NOM:Actor/Undergoer |
| (Cognitive) <br> $+$ <br> Stative | ka-Root-TR: <br> NOM: Experiencer <br> GEN: Actor | reciprocal | mar-(ka-)Root <br> NOM: Experiencer |
|  |  | monovalent intransitive | ITR-Root: <br> NOM: Experiencer |
| Causative | pa-(ka-)Root-TR <br> NOM: Undergoer/actor of the caused event <br> GEN: Actor of the causative event | extended <br> intransitive | pa-Root <br> NOM: Actor of the causative event |
|  |  | reciprocal | mar-pa-Root <br> NOM:Actor/Undergoer |

[^39]
### 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.

### 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 $p a-^{3}, p$-, or $p u$ - to a non-causative stem. ${ }^{45}$ For example,

Non-causative
kasu "bring"
TekeL "drink"

Causative
pa-kasu "make sb. bring"
pa-TekeL "make sb. drink"

[^40]Non-causative stems are not restricted to verbs. Sometimes the stem is a noun. Causative verbs and their formation are initially subcategorized according to whether the stem which the causative marker attached to is a noun or a verb.

Verbs in this category are formed by prefixing pa- to nominal stems.

| bali "shadow" | pa-bali "to put in the shadow" |
| :--- | :--- |
| baLi "wind" | pa-baLi" "to cause wind" |
| seber "bud" | pa-seber "to make buds" |
| kadaw "sun" | pa-kadaw" to spread out with the sun" |
| Tepa "goal" | pa-Tepa "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 $k a$ - in imperative/irrealis constructions, and those without $k a$ (§6.5). Verbs with $k a$ - in the imperative/irrealis constructions are affixed with ma(or Ø) in the corresponding intransitive construction. I first show examples of verbs with $k a$ - together with their causative counterparts, and then examples of verbs without $k a$-. Examples of causatives which do not follow this pattern are given at the end.

## (i) Causatives with $k a$ - in the imperative/irrealis form:

| imperative form | causative form |
| :---: | :---: |
| $k a-T i n a " b e ~ b i g " ~$ | pa-ka-Tina "to make sth./sb. big" |
| ka-keser "be strong" | pa-ka-keser "to make sb. strong" |
| $k a$-'itu "be wounded (by spirits)" | pa-ka-'itu "to cause sb. wounded by spirit" |
| ka-inaba' "be good" | pa-ka-inaba' 'to make sth./sb. good" |
| ka-asaT"be tall" | pa-ka-asaT" ${ }^{\text {make sth./sb. tall" }}$ |
| ka-uringeT "be brave" | pa-ka-uringeT "to make sb. brave" |
| ka-buLay "be clean/beautiful" | pa-ka-buLay "to make sth./sb. clean/beautiful" |

$k$-ingdan "be afraid" ka-kuaLeng "be sick" ka-bekaL "be new"
pa-ka-ingdan "to cause sb. afraid" pa-ka-kuaLeng "to cause sb. sick" pa-ka-bekaL "to renew"

## (ii) Causatives without $k a$ - in the imperative form:

imperative form
'aw'aw "call"
kilengaw "listen"
karun "work"
Dua "come"
dirus "wash"
TekeL"drink"
u-sabak "get into"
aLak "take"

## causative form

$p a-$ 'aw' $a w$ "to make sb. call"
pa-kilengaw "to make sb. listen"
pa-karun "to make sb. work"
pa-Dua "to make sb. come"
pa-dirus "to make sb. wash"
$p a$-TekeL "to make sb. drink"
$p$-u-sabak "to make sb. get into"
pa-aLak "to make sb. take"
(iii) Causatives not formed from imperative forms:

| imperative form | causative form |
| :---: | :---: |
| ka-Liay "be drunk" | pa-Liay "to make sb. drunk" |
| ka-dawak "be poisoned" | pa-dawak "to poison sb." |
|  | pa-risan "to make sth./sb. identical" |
| $k a$ - 'udal "to rain" | $p a$-'udal "to make rain" |
|  | pa-ka-'udal "to pray for rain" |
| ka-laDam "to know" | $p a-l a D a m$ "to teach sb." |
|  | pa-ka-laDam "to present, to show" |
| ka-tia "to dream" | pa-tia "to send message through |
|  | dreams" |
|  | pa-ka-tia "to cause sb. to dream" |

```
\(k\)-alupe "to sleep" \({ }^{6}\)
ka-litek"be cold"
p-alupe "to pamper sb."
                                    pa-k-alupe "to cause sb. to sleep well"
                                    pa-litek "to make sth. 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, -Liay "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 -Liay

| -Liay | Dynamic | Stative |
| :--- | :--- | :--- |
| Intransitive | ${ }^{\text {me-Liay }}$ | ma-Liay |
| Imperative | ${ }^{\text {LLiay }}$ | ka-Liay |
| Irrealis | ${ }^{\text {LLa-Liay }}$ | ka-La-Liay |
| Causative | pa-Liay | ${ }^{\text {pa }}$ pa-ka-Liay |

Table 9.3: (Possible) derivations of dawak

| dawak | Dynamic | Stative |
| :--- | :--- | :--- |
| Intransitive | ${ }^{* d<e m>a w a k}$ | ma-dawak |
| Imperative | ${ }^{\text {ddawak }}$ | $k a$-dawak |
| Irrealis | $*$ da-dawak | $k a$-da-dawak |
| Causative | pa-dawak | ${ }^{\text {pa }}$-ka-dawak |

As time went by, one form was lost, and thus the irregularity arose. This hypothesis is supported by the derivations of bu'uT"stop" and sanan "get lost" given in Table 9.4 and Table 9.5:

[^41]Table 9.4: Verbal derivations of bu'uT

| $\boldsymbol{b u}$ 'uT | Dynamic | Stative |
| :--- | :--- | :--- |
| Intransitive | $b<e n>u ' u T$ "to stop sth" | $m a-b u ' u T$ "cease" |
| Imperative | $b u$ ' $u T$ "to stop' | $k a-b u$ 'uT"to cease" |
| Irrealis | $b a-b u ' u T$ "will stop" | $k a-b a-b u ' u T$ "will cease" |
| Causative | $p a-b u ' u T$ "cause sb. to stop" | $p a-k a-b u ' u T$ "cause sth to cease" |

Table 9.5: Verbal derivations of sanan

| sanan | Dynamic | Stative |
| :--- | :--- | :--- |
| Intransitive | $s<e m>$ anan "lose one's way" | ma-sanan "get lost" |
| Imperative | sanan | $k a$-sanan |
| Irrealis | sa-sanan | $k a$-sa-sanan |
| Causative | pa-sanan "make sb. get lost" | pa-ka-sanan "cause sb. to get lost" |

Examples of sanan and its derivations are given in (3)-(6).
(3) an $\boldsymbol{s}<\boldsymbol{e m}>\boldsymbol{a n a n}=y u \quad D a \quad$ daLan $i \quad$ TaLan
"If you lost your way in the field..."
(4) ka-sa-sanan $D a \quad d a L a n$
ka-RED-get.lost ID.OBL road
"He will get lost."
(5) $t u=\boldsymbol{p a}$-sanan- $a w=k u$
3.GEN=CAUS-lose.one's.way-TR1=1S.NOM
"He made me get lost."
(6) $k u=a s a L-a w$ pinutungan pa-ka-sa-sanan

1S.GEN=move-TR1 DF.NOM knot CAUS-ka-RED-get.lost
Da 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 $k a$-), the one with $k a$ - denotes indirect causation, while the one without $k a$ - indicates direct causation. But 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 co-exist with the causative marker pa-, the intransitive marker $m a$ - (or $m$-, <em>, me-), is incompatible with the causative marker $p a-.^{7}$ The four subject choice alternations of the verb talam "to try" and their causative counterparts are shown below:

|  | non-causative | causative |
| :--- | :--- | :--- |
| ITR | t<em>alam | pa-talam |
| TR1 | talam-aw | pa-talam-aw |
| TR2 | talam-ay | pa-talam-ay |
| TR3 | talam-anay | pa-talam-anay |

Note that there is no *pa-t<em>alam.

### 9.2.1.2 Subject choice and case markings 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

[^42]nominative (and thus it is a transitive clause). 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 symbolized as:

CAUSE $(\mathrm{X}, \mathrm{P})=\mathrm{X}$ causes P
So,
CAUSE (John, drink (Mary, wine)) = John caused Mary to drink wine.

For example:

| $t u=p a-T e k e L-a y=m u$ | $D a$ | enay | $i$, |
| :--- | :--- | :--- | :--- |
| 3.GEN=CAUS-drink-TR2=2P.NOM | ID.OBL | water | TOP | "If she made you drink water,"

CAUSE (she ${ }_{\text {GEN }}$, drink ( you $_{\text {NOM }}$, water obl ))

| tu=p-uka-anay=ku | kana | paLiangaLungan |
| :--- | :--- | :--- |
| 3.GEN=CAUS-go-TR3=1S.NOM | DF.OBL | band |
| "They sent me to the band." |  |  |
| CAUSE (they ${ }_{\text {GEN }}$, go (I $\mathbf{I}_{\text {NOM }}$, the band ${ }_{\text {OBL }}$ )) |  |  |

As mentioned earlier, the definiteness of the causee plays a more 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 $\quad D a$ manay $D a$ beLeTenganan
CAUS-RED-up=2S.NOM
ID.OBL
what
ID.OBL ancient
"Can you build something ancient?"
CAUSE (you ${ }_{\text {NOM }}$, up (something ${ }_{\text {obL }}$ ))

| $p-u$-paTaran | $D a$ | $t u L u-a$ | $k i<a>$ umal-an |
| :--- | :--- | :--- | :--- |
| CAUS-Mot-out | ID.OBL | three-NPRS | $<$ RED $>$ ask-NMZ |

"He brought out three questions."
CAUSE (he NOM , out (three questions obl ))
(11)
pa-ragan Da Takuban
CAUS-up ID.OBL bachelors'.house
"They built a Takuban."
CAUSE (they ${ }_{\text {NOм }}$, up ( Takuban $_{\text {OBL }}$ ))
(12) pa-karun Da bangsaran $s<e m>a n g a \quad D a \quad$ Tabak

CAUS-work ID.OBL young.man <ITR>make ID.OBL box
"She had some young men make a box."

## CAUSE (her mother ${ }_{\text {NOM }}$, 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:

| $t u=$ pa-talam-ay | $a$ | suan | $i$, |
| :--- | :--- | :--- | :--- |
| 3.GEN=CAUS-try-TR2 | ID.NOM | $\operatorname{dog}$ | TOP |

"He made a dog try."
CAUSE (he GEN , try ( $\left.\operatorname{dog}_{\text {Nom }}\right)$ )
(14)

| $t u=p-u$-sabak-aw | tiDul | kana | paTungTungan |
| :---: | :---: | :---: | :---: |
| 3.GEN=CAUS-go-inside-TR1 ID.NOM | wasp | DF.OBL | drum |
| "He put a wasp into the drum." |  |  |  |
| CAUSE (he ${ }_{\text {GEN }}$, inside ( wasp $_{\text {NOM }}$ )) |  |  |  |


| $a D i$ | $t u=p a-k a-l a D a m-i$ | $a$ | $T a u$ |
| :--- | :--- | :--- | :--- |
| NEG | 3.GEN=CAUS-ka-know-TR2 | ID.NOM | person |

"She didn't let others know.

## CAUSE (she GEN , know (others ${ }_{\text {NOM }}$ ))

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:


```
tu=pa-TekeT-ay Da kadepu'
3.GEN=CAUS-stick-TR2
ID.OBL paper
"He stuck a paper on it.
CAUSE (hegen, stick (it (iNOM, paperobl))
```

| $t a=p a-l a ' u D-a n a y$ | $i$ | $k a l i$ |
| :--- | :--- | :--- |
| 1P.GEN=CAUS-float-TR3 | LOC | river |

"We let it float in the river."
CAUSE ( we $_{\text {GEN }}$, float ( $\mathrm{it}_{\text {NOM }}$ )

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 can hardly find a reason for the choice of undergoer subject. For instance, in the following examples,
the same verb, $-u k a$ "go" in (19) and (20), and talam "try" in (21) and (22), is manifested in different undergoer choices.

| $t u=p-u k a-a w=k u$ | $k a n a$ | paLiangaLungan |
| :--- | :--- | :--- |
| 3.GEN=CAUS-go-TR1=1S.NOM | DF.OBL | band |
| "They sent me to the band." |  |  |
| CAUSE (they ${ }_{\text {GEN }}$, go (l $\left.\mathbf{I}_{\text {NOM }}\right)$ ) |  |  |


| $t u=p-u k a-a n a y=k u$ | $k a n a$ | isin |
| :--- | :--- | :--- |
| 3.GEN=CAUS-go-TR3=1S.NOM | DF.OBL | doctor |

"They caused me to be taken to the doctor."
CAUSE (they GEN , go ( $\left.\mathrm{I}_{\text {NOM }}\right)$ )
(21)

| $t u=$ pa-talam-anay=Diya | Da | basikaw |
| :--- | :---: | :---: |
| 3.GEN=CAUS-try-TR3=IMPF | ID.OBL | bamboo |
| "He made them try again with a bamboo." |  |  |
| CAUSE (he ${ }_{\text {GEN }}$, try (they $\mathbf{y N O M}_{\text {Nomboobl }}$ )) |  |  |

$t u=$ 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 ${ }_{\text {NOM }}$ ))

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 $p a$-. For instance:
(23) $t u=p a s i s i-a y=k u$
3.GEN=force-TR2=1S.NOM CAUS-work
"She forced me to work."

| tu=aiseL-aw | pa-TekeL | Da | '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 $p a$ - in (25).

| $t u=b a u-b a u i-a w=k u$ | $\boldsymbol{m}$ - $\boldsymbol{u k} \boldsymbol{a}$ | $i$ | 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, $\operatorname{mar}(e)-$ or $m a-R E D-$, to the stem. Which one to occur depends mainly on the stativity/dynamicity of the verb. A stative verbal stem carries mare- to form a reciprocal verb and a dynamic stem $m a-R E D-$. For example,
laman "pity" mare-ka-laman "have pity on each other"
turus 'follow", ma-ta-turus "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 under lies 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.
$\boldsymbol{m a - d a}-d a^{\prime} u l=m u$ ?
ma-Ca-inform=2P.NOM
"Did you inform each other?"
aDi pa-Da-DuLun Danemu kiruan
NEG pa-RED-change ID.OBL/2P.PSR clothes
"Don't exchange your clothes!"

[^43]There are two possible analyses of the reciprocal markers. One may analyse the PR markers as bimorphemic $m a-C a$ - and $p a-C a-$, or as monomorphemic $m a C a$ - and $p a C a$-. 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 pain the reciprocal form $p a$-Ca- has nothing to do with causatives, and if the marker is analyzed as $p a-C a$-, it is identical with the progressive form of some causative verbs. ${ }^{9}$

Table 9.6: Formations of reciprocals

| Root | Imperative | Perfective | Progressive | Reciprocal |
| :--- | :--- | :--- | :--- | :--- |
| be'eL "to bite" | be'eL | $b<e n>e ' e L$ | $b<e n>a-b e ' e L$ | ma-ba-be'eL |
| se'er "to stare" | se'er | $s<e m>e ' e r$ | $s<e m>a-$-se'er | ma-sa-se'er |
| sangal"be happy" | sangal | $s<e m>$ angal | $s<e m>a$-sangal | ma-sa-sangal |
| da'ul "to inform" | da'ul | $d<e m>a ' u l$ | $d<e m>a-d a ' u l$ | ma-da-da'ul |
| -Deki "to scold" | $k a$-Deki | ma-Deki | ma-Da-Deki | mar-ka-Deki |
| -Lingay "to play" | $k a$-Lingay | ma-Lingay | ma-La-Lingay | ------ |
| -supen "to miss" | $k a$-supen | ma-supen | ma-sa-supen | mar-ka-supen |
| -Tangis "to cry" | ka-Tangis | ma-Tangis | ma-Ta-Tangis | mar-ka-Tangis |

From the above table, it seems that which reciprocal marking a verb takes depends on the actor marker the verb takes. So, those verbs taking <em> in the perfective construction will take $m a-C a$ - in the reciprocal construction; those verbs that take $m a$ - in the perfective 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, $m a C a$-, 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 sub-events. In such cases, the reciprocal is marked by maCVCV-. Compare the reciprocal markings in the following examples.

[^44](28) mapa-pingiT

PR-scratch
"They scratched each other."
(29) ma-pingi-pingiT
ma-CVCV-scratch
"They were fighting each other."
(30) masa-saLaw

PR-pass
"They passed by each other."
(31) ma-saLa-saLaw
ma-CVCV-pass
"They chased each other."

This will then suggest that for dynamic reciprocal verbs, there is always reduplication involved, either Ca - or $C V C V$ - reduplication. This in turn indicates that the PR marker should be analysed as $m a-R E D-$

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, $m a-C a$-, when it co-occurs with certain verb roots, denotes a plurity 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 $m a-C a-$ and $p a-C a-$ as $m a . C a-$ and $p a . C a-$, meaning PR "plurality of relations", 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 ${ }^{\mathbf{1 0}}$ |
| :--- | :--- | :--- |
| Dynamic verbs | $\operatorname{ma-Ca-}{ }^{I 1}$ | pa-Ca- |
| Causativised verbs | $\operatorname{mar}\left(e^{I 2}\right)-p a-$ | $\operatorname{par}(e)-p a-$ |
| Stative verbs | $\operatorname{mar}(e)-(k a-)$ | $\operatorname{par}(e)-(k a-)$ |

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 $\S 6.6$ and §7.3.3). Examples (32)-(34) illustrate the dynamic/causative/stative distinction in Puyuma.
(32) Dynamic verbs:
a. ma.da-dikes $D a \quad$ 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 | Datu | uringeT-an |
| :---: | :--- | :--- | :--- |
| often | PR-CAUS-try | ID.OBL/3.PSR | brave-NMZ |

"They often try each other's bravery."

[^45](34) Stative verbs:
a. kaimayay $i$ LikuDan $i$, 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,"

$\begin{array}{ll}\text { b. } & a D i=t a\end{array} \quad$ par-ka-inaba
"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; saLaw "pass" is dynamic as well, and both dynamic and stative markings are used by different informants.

| ma.da-dalep | $a$ | turak |
| :--- | :--- | :--- |
| PR-close | ID.NOM | pillar |

"The pillars are close to each other."
(36) mar-baretuk

PR-pitch
"They pitched at each other."
mar-saLaw=ta kaDini
PR-pass=1P.NOM here
"We passed by each other here."
(38) ma.sa-saLaw

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 reciprocality 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 the situation where successive events are undertaken by the same type of Initiator. For instance:

| mar-ka-la-la'uD | $a$ | Tau |
| :--- | :--- | :--- |
| PR-ka-Ca-drown | ID.NOM | person |

"People kept getting drowned."

| mar-pa-raga-ragan=la | $D a$ | palakuan |
| :--- | :--- | :--- |
| 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, where two or more participants are together involved in a situation. For example:

| ma.sa-sangal=ta $\quad$ Datu | 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!" |  |  |  |  |


| wa-ruma' $=t a=l a$ | 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:

| mar-ka-saDu | $t u=T a u=l a$ |
| :--- | :--- |
| PR-ka-many | 3.PSR=person=PERF |

"There are more and more people."

```
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 $\mathrm{B}, \mathrm{B}$ 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.

| tu=par-ta-taDar-aw | $n a$ | 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 sub-events from a common origin, and reversive, which involves reverse directionality of sub-events. Only the reversive type is found in Puyuma.

| payas | mar-beLiyas | $m-u k a$ | $m-a y a-a$ | kantu |
| :--- | :---: | :---: | :---: | :---: |
| right.away | PR-turn | ITR-go | ITR-find-PJ | DF.OBL/3.PSR |
| wadi |  |  |  |  |
| younger.sibling |  |  |  |  |
| "They returned right away to go find their younger sister." |  |  |  |  |


| ta=par-beLiyas-aw $\quad i$ | 'ine-'ine' |
| :--- | :---: |
| 1P.GEN=PR-turn-TR1 | LOC |
| "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 PR marker examined (about 50 tokens), only three are in undergoer voice, and none of these three denotes reciprocal meaning. Sentence (48) is a collective situation, (49) a chaining situation, and (50) is a distributive situation.

| ta $a=$ par-beLias- $a w$ | $i$ | 'ine-'ine' |
| :--- | :---: | :---: |
| 1P.GEN=PR-turn-TR1 | LOC | RED-sea |

"Let us bring her back to the sea."

| $t u=$ par-ta-taDar-aw | $n a$ | basikaw |
| :--- | :--- | :--- |
| 3.GEN=PR-RED-pile.up-TR1 | DF.NOM | bamboo |
| "They piled up the bamboos." |  |  |

$$
\begin{align*}
& \text { tu=par-ka-Dua-aw m-inaTay kaniam Tau }  \tag{50}\\
& \text { 3.GEN=PR-ka-two-TR1 ITR-die } \\
& \text { DF.OBL/1P.PSR person } \\
& \text { LOC }
\end{align*} \text { house }
$$

### 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 illustrated below:

|  | wadi "younger siblings" | maLu-wadi "be brother and sister" |
| :---: | :---: | :---: |
|  | temama "(your) father, uncle" | mar-temama "be father and son" |
|  | taina "(your) mother, aunt" | mar-taina "be mother and daughter" |
|  | temuwan "grandparent, grandchild" | mar-temuwan "be grandparent and grandchild" |
|  | kataguin "spouse" | mar-kataguin "be husband and wife" |
|  | $a L i$ "male friend" | mare-aLi "be male friends" |
|  | anay "female friend" | mare-anay "be female friends" |
| (51) | $m$-asal=Diya m-a-uka | i puyuma naDu |
|  | ITR-again=IMPF ITR-RED-go | LOC Puyuma those.NOM |
|  | na maLu-wadi |  |
|  | DF.NOM RECIP-younger.siblin |  |
|  | "The two brothers wanted to go to | Puyuma again." |
| (52) | ma-Da-Dayar naDu | 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 DaDek "body". Examples are:
(53) saLaw ma-sime' Datu DaDek
very ITR-careful ID.OBL/3.PSR body
"He's taking good care of himself."

| sime-sime' $-u$ | $n u=$ DaDek |
| :--- | :--- |
| RED-careful-TR1.IMP | 2 S.PSR $=$ body |

"Take care of yourself."

| tu=iaruna'-aw | $t u=$ DaDek | $D a$ | puaTemeL |
| :--- | :---: | :---: | :--- |
| 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 (cf. $\S 4.5 .1 .2$ ), 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.
$\boldsymbol{k} \boldsymbol{u}=n a$ 'и-ay kuiku
1S.GEN=look-TR2 1S.NEU
"I looked at myself." (Reflexive)
"I myself looked at it." (Emphatic)

### 9.5 Anti-causatives ${ }^{13}$

An anti-causative verb is prefixed with $m u$ - in Puyuma. Like a transitive clause an anti-causative clause has the undergoer as its subject. Unlike the actor of a transitive clause, which is manifested as 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).

| $m u-l a ' u D$ | $n a$ | $k a w i$ |
| :--- | :---: | ---: |
| ACAUS-float | ID.OBL | timber |
| "The timber is floating (on the water)." |  |  |


| mu-puar | na | suan | $D a$ | paleTuTukan |
| :--- | :---: | :---: | :---: | :---: |
| ACAUS-escape | DF.NOM | $\operatorname{dog}$ | ID.OBL | firecracker |
| "The dog was frightened away because of firecrackers." |  |  |  |  |

In Puyuma there are two different $m u$ - prefixes, which behave differently morphosyntactically, although they have been treated as the same morpheme/formative in earlier studies. ${ }^{14}$ The first $m u$ - is bimorphemic, consisting of $m$ - "intransitive marker" plus $u$ - "motion prefix". ${ }^{15}$ The second $m u$ - is an anti-causative prefix. ${ }^{16}$ The differences between the two categories of prefixes can be summarized as follows:

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 $m u$ - usually have a counterpart taking $\langle e m\rangle$.
2. Semantically, motion verbs derived by affixing $m-u$ - have a very clear sense of motion. Verbs taking $m u$ - have a passive-like sense.

[^46]3. In intransitive sentences, the subject of $m-u$ - motion verbs is always the actor; on the contrary, the subject of anti-causative $m u$ - verbs is always the patient.

### 9.5.1 mu- as an anti-causative marker

From the data collected, about 60 out of 400 verbs in the corpus take both $m u$ and $\langle e m\rangle$, with a semantic and syntactic contrast.

A pair of examples showing the anti-causative $m u$ - verbs and their <em> counterparts derived from the same stem are given below:

"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 TaLun "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 paleTuTukan "firecracker" in (58).
(60) mu-ba'iT na TaLun

ACAUS-burn DF.NOM grass
"The grass was burned."
$\boldsymbol{n u}=\boldsymbol{b a} \boldsymbol{i} \boldsymbol{T} \boldsymbol{-} \boldsymbol{a} \boldsymbol{w}=\boldsymbol{l} \boldsymbol{a} \quad$ na TaLun?
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 anti-causative construction instead of a transitive clause? The importance of volitionality can be observed from the following elicited sentences. In sentence (62), which is a $m u$ 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.

| $k u=s<$ in $>$ aLem | $n a$ | 'apuT | $i$, |
| :--- | :---: | :---: | :--- |
| 1S.PSR $=<$ PERF $>$ plant | DF.NOM | flower | TOP |


| mu-dupa | $D a$ | gung |
| :--- | :--- | :--- |
| ACAUS-step | ID.OBL | ox |

"The flowers I planted, they were stepped on by an ox."

| $k u=a L a D-a w$ | $n a$ | 'apuT | $i$, |
| :--- | :---: | :---: | :--- |
| 1S.GEN=surround-TR1 | DF.NOMflower | TOP |  |
| $t u=$ dupa'-aw | $D a$ | gung |  |
| 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 $m u$-subuk "cover" non-volitionally.

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 bimorphemic intransitive motion marker

Blust (2003b:452) mentions that $m u$ - 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"; isaT "up, above": $m u$-isaT "ascend". Evidence for treating $m u$ - 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 $m u$ - involves two morphological processes and should be analyzed as $m-u$ -

| an | m-u-sabak | $i$ | ruma' | $i$ |
| :--- | :--- | :---: | :---: | :---: |
| when | ITR-go-inside | LOC | house | TOP |

"When he went into the house,"
$\boldsymbol{t u}=\boldsymbol{u}$-sabak-ay $\quad D a \quad$ unan $\quad$ tu $=r u m a$,
3.GEN=Mot-inside-TR2 ID.OBL snake 3.PSR=house
"A snake went into their house."

| (67) | aDi | $\boldsymbol{u}$-sabak | $i$ | Dekal |
| :--- | :--- | :--- | :---: | :---: |
| NEG | go-inside | LOC | village |  |
|  | "Don't go into the village." |  |  |  |


| $i$ | LikuDan | $i$, | m-u-ngesal | $i D u$ |
| :--- | :--- | :--- | :--- | :---: |
| LOC | behind | TOP | ITR-go-start.point | that.NOM |

na kia-Da'ing
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 a 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 $k i$-, which can prefix to nominal or verbal stems to derive verbs. The derivations of $k i$ - 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 kiis grammaticalised from [ki-+ nominal stem] "get N". For this reason I will describe [ki-+ nominal stem] first in §9.6.1 and then passive $k i$ - 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 <br> Derived verbs

| I. | 'apuT "flower" | ki-'apuT"to pick flowers" |
| :---: | :---: | :---: |
|  | kawi "wood" | ki-kawi "to hack woods" |
|  | kuraw "fish" | ki-kuraw "to fish" |
|  | paisu "money" | ki-paisu "to get/extort money" |

$\begin{array}{ll}\text { II. lengaw "sound' } & \text { ki-lengaw "to listen" } \\ & \text { Tanguru' "head" }\end{array} \quad$ ki-Tanguru' "to behe
$\qquad$

Verbs in the first category only appear in intransitive sentences, and the same forms are used in imperative and declarative sentences.
(70) $k i-{ }^{\prime}$ 'apuT=ku=la
get-flower=1S.NOM=PERF
"I've picked flowers."
(71) ki-'apuT
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"; $k<e m>i$-anger "think about, want; ITR", ki-anger-aw "TR1". Examples of transitive forms are given below:
$t u=k i-l e n g a w-a y \quad i \quad$ tinataw
3.GEN=ki-sound-TR2 SG.NOM his.mother
"He listened to his mother."
$t u=k i-a n g e r-a \boldsymbol{w} \quad t u=p i-a m a n a y-a n$
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 <em> in declarative intransitive sentences. Compare (70) and (71) with (74) and (75):

| $\boldsymbol{k i}$-lengaw $=k u$ | kanDunu | kana | ma-'iDang-an |
| :--- | :--- | :--- | :--- |
| ki-sound=1S.NOM | those.OBL | DF.OBL | ITR-old-NMZ |
| "I heard from those elders." |  |  |  |


| an | $\boldsymbol{k}<\boldsymbol{e m}>\boldsymbol{i}$-anger $=t a$ | $i$, |
| :--- | :--- | :--- |
| 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 summarizes the above observations about the subcategories of kiverbs derived from nominal stems.

Table 9.7 Categories of $\boldsymbol{k i}$ - verbs derived from nominal stems

|  | I | II | III |
| :--- | :---: | :---: | :---: |
| can take $<e m>$ in ITR | No | No | Yes |
| have ITR/TR alternations | No | Yes | Yes |

### 9.6.2 $\mathbf{k i}$ - verbs derived from verbal stems

When $k i$ - attaches to a verbal stem it conveys a passive meaning. For instance:

## Verbal stem

bekas "interrogate"

## Derived verbs

ki-bekas "be interrogated"

| tenges "tie up" | ki-tenges "be tied up" |
| :--- | :--- |
| tarama "bully", | $k i$-tarama "be bullied" |
| baluk "wake" | $k i$-baluk "be woken up" |
| ba'aw "alive" | $k i$-ba'aw"to ask for help" |
| $d a ' u l " i n f o r m " ~$ | $k i-d a ' u l "$ "be informed" |


| (76) | Dua | $\boldsymbol{b}<\boldsymbol{e n}>\boldsymbol{e} \boldsymbol{k} \boldsymbol{a s}-\boldsymbol{a}$ | $i$ |
| :--- | :--- | :--- | :--- |
|  | come | $<$ ITR>interrogate-PJ | SG.NOM | Tugi

## "Tugi came to interrogate."

| $m-u k a \quad i$ | Tau-Tau, | $m$ - uka | ki-bekas-a |
| :--- | :--- | :--- | :--- |
| ITR-go LOC | RED-person | ITR-go | PASS-interrogate-PJ |
| "He went to others; he went to get interrogated." |  |  |  |


| $\boldsymbol{t}<\boldsymbol{e m}>$ enges | $D a$ | arebu' |
| :--- | :--- | :--- |
| $<$ ITR $>$ tie.up | ID.OBL | hair |

"She tied up her hair."
belakas tu=arebu', ki-tenges Da Tau
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 (§9.6.2). But here, the subject is the patient.

In terms of argument structure, the ki- passive construction is similar to the $m u$ anticausative construction (§9.5.2), where both demote the actor to the oblique position. The difference between the two involves the volition/intention of the patient. In a $m u$ - 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 $m u$ - anticausative construction, and in the transitive construction:

| $\boldsymbol{k} \boldsymbol{i}$-sulu-sulud=ku | $D a$ | Tau |
| :--- | :--- | :--- |
| PASS-RED-push=1S.NOM | ID.OBL | person |

"I got pushed by others." (I need others to push me.)
(81) tu='eT'eT-anay $i$, mu-sulud na katengaDaw-an
3.GEN=jostle-TR3 TOP ACAUS-push DF.NOM sit-NMZ
"He jostled, and so the chair was pushed away."

| ku=sulud-aw | $n a$ | katengaDaw-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 | ki-passive | $m u$ - anticausative |
| :---: | :---: | :---: | :---: |
| actor | + | - | - |
| patient | - | + | - |

Another difference between the $m u$ - construction and the $k i$ - construction is that the subject (the patient) in the ki- construction is usually animate. ${ }^{17}$

The fact that there is a volitional patient in a ki- construction can be observed from the following sentences. In the 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.

[^47]ma-ranger ki-da'ul
Tau
ITR-want PASS-informed
ID.OBL
person
"He wanted to be informed by others." (He wouldn't take action until being informed.)
$\boldsymbol{m}$-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).

| ki-lase $D=k u$ | kantaw |
| :--- | ---: |
| ki-hide $=1 \mathrm{~S} . \mathrm{NOM}$ | $3 . O B L$ |
| "I hide at his place." |  |

Finally, for verbs denoting "giving/receiving", ki- changes the direction of the action. For instance:

| beray "give" | ki-beray "get; beg" |
| :--- | :--- |
| $p a-b u L a s ~ " l e n d "$ | $k i-b u L a s "$ "borrow" |
| $t u L u D "$ "pass something to" | $k i-t u L u D "$ "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 $\quad \boldsymbol{t u}=\boldsymbol{b e r a y} \boldsymbol{- a y =}=\boldsymbol{m} \boldsymbol{u}=l a$ | $D a$ | la'ub |  |
| :--- | :--- | :--- | :--- |
| if $\quad 3 . \mathrm{GEN=}=$ give-TR2=2P.NOM=PERF | ID.OBL | ladle |  |
| "If she gives you ladle." |  |  |  |
|  | (Giver: Gen ; Receiver: Nom) |  |  |

[^48]| beray $=\boldsymbol{k} \boldsymbol{u}=l a$ | $D a$ | paisu |
| :--- | :--- | :--- |
| give $=1 \mathrm{~S} . \mathrm{NOM}=$ PERF | ID.OBL | money |

"I've given money."
(Giver: Nom ; Receiver: ---)
(88)

| an | $\boldsymbol{k i}$-a-beray=ku | $D a$ | 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) $i D i$ na aDi ki-beray kan tayban $D a$ 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 $k i$ - is used, the receiver (instead of the giver) exercises his/her will to make the action carried out.

## CHAPTER 10

## CLAUSE TYPES

### 10.1 Introduction

In this chapter, clause types are described in terms of their internal structures, especially 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 belong to 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), some have either an anticausative or a passive verb derived from a bivalent verb ( $\S 9.5$ and $\S 9.6$ ).

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 crosslinguistically, 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 $\S 10.3$, 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

Because 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. And while the patient subject of an anticausative is unvolitional, the patient subject of a passive at least exercises a degree of intention. Verbs in ambient, monovalent and extended intransitive clauses (marked in grey) 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 $(t u=)$ and the nominative undergoer $(=k u$ in (1) and nantu sarekuDan in (2)).
$t u=$ sapana ${ }^{\prime}-a w=k u$
3.GEN=fake-TR1=1S.NOM
"He fooled me."
(2)

| tu=Turi-anay | nantu | sarekuDan | Da | daLan |
| :--- | :--- | :--- | :--- | :--- |
| 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 $k a$ - 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.

| ma-Liay | $i$ | baeli |
| :--- | :--- | :--- |
| ITR-drunk | SG.NOM | my.older.sibling |
| "My brother was drunk." |  |  |

(4) $\boldsymbol{k a}$-La-Liay $=y u$
ka-RED-drunk=2S.NOM
"You will be drunk."

| ma-ragan | $i$ | nanali | $i$, |
| :--- | :--- | :--- | :--- |
| ITR-move.up | SG.NOM | my.mother | TOP |

"When my mother got up, "
(6) $r a-r a g a n=k u$

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.

| m-aLak $\quad$ Da dinun | $n a$ | babayan |
| :--- | :---: | :---: | :---: | :---: |
| <ITR>take $\quad$ ID.OBL tub | DF.NOM | woman |
| "The woman took a tub." |  |  |


| $T<e m>a k a w ~$ | Da | paisu | $i$ |
| :--- | :--- | :---: | :---: |
| <ITR $>$ steal | ID.OBL | money | SG.NOM | Isaw

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:


### 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.
mu-sapana' $=k u$
ACAUS-fake=1S.NOM
"I was fooled."
mu-sede $\quad D a \quad$ daLan tu=dare ${ }^{\text {e }}$

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 $=k u$ | $D a$ |
| :--- | :--- | :---: |
|  | ki-RED-push=1S.NOM | ID.OBL |$\quad$ person

### 10.2.4 Ambient clauses

Ambient clauses are clauses with no arguments. They typically refer to weather conditions. For instance:

| an | $\boldsymbol{k} a$-' $\boldsymbol{u}$ dal | $i$, | ta=betbet-anay | kaDiyu |
| :--- | :--- | :--- | :--- | :--- |
| when | ka-rain | TOP | 1P.GEN=tie-TR3 | there | "When it rained, we tied it there."

$$
\begin{align*}
& \text { aremeng=Diya } \quad i, \quad t u=p i-T e \text { 'ep- } a w=t a  \tag{16}\\
& \text { dark=IMPF }
\end{align*} \quad \text { TOP } \quad 3 . G E N=\text { have-company-TR1=1P.NOM }
$$

### 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 nonreferential (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:
$a \quad k-i<a>n d a n g-a n \quad i D i$
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 $i D i$ "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, as tipul in (20), or a nominalised verb, as 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 | $n a$ | 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:

| ameli | $a$ | $s<$ em>eneng 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) $a$

ID.NOM RED-beautiful-NMZ=PERF DF.NOM
"The child became a young woman."
(25)
a lalak=ku=Diya
ID.NOM child=1S.NOM=IMPF
"I was still a child."

Very often, the subject is placed in the topic position. For example:

| $\boldsymbol{n a}$ | mara-'iDa-'iDang | $\boldsymbol{i}$, | $\boldsymbol{a}$ | ma'inayan |
| :--- | :--- | :--- | :--- | :--- |
| DF.NOM | SUP-RED-old | TOP | ID.NOM | male |

"The eldest is a boy."

| $\boldsymbol{i} \boldsymbol{D} \boldsymbol{u}$ | $\boldsymbol{i}$, | $a$ | Dekal |
| :--- | :--- | :--- | :--- |
| that.NOM | TOP | ID.NOM | village |

"That 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 naDu

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 iDi $n a$ <br> COP this.NOM DF.NOM | unan $n a$ | snake DF.NOM | ITR-eat |
| :--- | :--- | :--- | :--- | :--- |
|  | "The one that ate is this snake." |  |  |

It is very rare for the 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).

| $\boldsymbol{n a}$ | $\boldsymbol{p} \boldsymbol{u}-\boldsymbol{k} \boldsymbol{a}-$ LikuDan | m-inaTay | $\boldsymbol{i}$, | amau | $i$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| DF.NOM | CAUS-ka-behind | ITR-die | TOP | COP | SG.NOM | namali

my.father
"The one who died last was my father."

| masa-se'er | Datu | kiruan | kaDi | maka-saT 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.

[^49]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:
$k u=s a-$ sede-an
1S.PSR=RED-interval-NMZ
iDini
this.NOM
"This is my holidays."

| (33) iDunu | $i$, | nanku | ruma' |
| :--- | :--- | :--- | :--- |
| that.NOM $\quad$ TOP | DF.NOM/1S.PSR | house |  |
|  | "That 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:

| aтau | kuiku | $n a$ | $s<e m>a$-senay |
| :--- | :--- | :--- | :--- |
| COP | 1S.NEU | DF.NOM | $<$ ITR $>$ RED-sing |

"The one who was singing is me."
(35) ${ }^{*} a m a u=k u \quad n a \quad s<e m>a$-senay

### 10.4 Locative/existential/possessive ${ }^{2}$ clauses

### 10.4.1 An overview

The second set of major nonverbal clauses is those that employ a copula verb ulayauliya. ${ }^{3}$ 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

[^50]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.

| ulaya | $a$ | ma'iDang | $i$ | puyuma |
| :--- | :--- | :--- | :--- | :--- |
| exist | ID.NOM | old | LOC | Puyuma |

"There was an old man in Puyuma."
(Existential construction)

| ulaya $k u=i D u s$ $a$ | $k<e m>a D i$ |  |
| :--- | :--- | :--- | :--- |
| exist $\quad$ 1S.PSR =spoon | ID.OBL | $<$ ITR $>$ here |
| "I have such kinds of spoons." |  |  |
| (Possessive construction) |  |  |


| ulaya | $i$ | temuи | $i$ | puyuma |
| :--- | :--- | :--- | :--- | :--- |
| exist | SG.NOM | your.grandparent | LOC | Puyuma |

"Your grandmother is in Puyuma."
(Locative construction)

[^51]

| unian $=k u$ | $D a$ | walak |
| :--- | :---: | ---: |
| exist:NEG=1S.NOM | ID.OBL | child |

"I don't have children."
(Negative possessive construction)

| $m$ - $u$-ruma'=la | $i$, | unian | $t u=$ walak | $k<e m>a$ |
| :--- | :---: | :---: | :---: | :---: |
| ITR-go-house=PERF | TOP | exist:NEG | 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 co-occur with temporal/aspectual markers, and 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 $=y u$ is attached to unian; the imperfective aspectual marker Diya in (43) and the perfective aspectual marker $l a$ in (44) co-occur with ulaya and unian; and in (45) unian undergoes partial reduplication to denote an irrealis meaning.

```
an unian=yu Da angaD-an
when exist:NEG=2S.NOM ID.OBL breathe-NMZ
"When you have no breath,...."
```

laba ma-laDam-a $\quad$ ulaya=Diya mu-ba'aw
so.that ITR-know-PJ ID.OBL exist=IMPF ACAUS-live
tu=walak
3.PSR = child
"So that she can know that her child is still alive."

| unian $=\boldsymbol{l} \boldsymbol{a}$ | $D a$ | keDang | ki-karun |
| :--- | :--- | :--- | :--- |
| exist:NEG=PERF | ID.OBL | strength | get-job |

"They don't have strength to work."
$a D i=m i \quad$ u<na>nian $\quad D a \quad$ akan-an
NEG=1P.NOM <RED>exist:NEG 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., these characteristics are not necessarily diagnostic of verbhood in Puyuma. For example, in Puyuma, aspectual markers can co-occur 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 §3.5.2 and §3.5.3).

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 $a D i$, the negator used to negate a
verbal predicate (see §4.3.3.1), as exemplified in (45) and (46). Thus the status of ulaya and unian as copula verbs can be confirmed.

| (46) | $a D i \quad u<n a>n i a n$ | $i D i$ | $n a$ | barasa' |
| :--- | :--- | :--- | :--- | :--- |
| NEG $<$ RED>exist:NEG | 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 $k a D u$ "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'iDang in 34), and the other refers to a location (i puyuma in 36). The locative NP is optional.

### 10.4.2.1 Marking of case and definiteness

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).

| ulaya $\boldsymbol{a}$ ma'iDang $\boldsymbol{i}$ <br> exist ID.NOM old LOC <br> Puyuma    |  |
| :--- | :--- | :--- | :--- | :--- |
| "There's an old man in Puyuma." |  |


| (48) | unian | $\boldsymbol{D a}$ | akan-an |
| :--- | :--- | :--- | :--- |
|  | exist:NEG | 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:

| ulaya | $i$ | ukak |
| :--- | :--- | :--- |
| exist | SG.NOM | Ukak |

"Ukak is here/there." or "Ukak exists/is alive."
(50) unian $i$ ukak
exist:NEG 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 $D a$ is used, as in (54).

| (51) ulaya | $\boldsymbol{a}$ | aLiwanes |
| :--- | :--- | :--- |
| exist | ID.NOM | rainbow |

"Rainbows exist." (There is such a thing as a rainbow.)
(52) ?unian a aLiwanes ${ }^{6}$
exist:NEG ID.NOM rainbow
"There is no such thing as a 'rainbow'."

| (53) ulaya | $\boldsymbol{a}$ | kuraw | $i$ | kali |
| :--- | :--- | :--- | :--- | :--- |
|  | exist | ID.NOM | fish | LOC |
| river |  |  |  |  |


| (54) | unian | $\boldsymbol{D a}$ | kuraw | $i$ |
| :--- | :--- | :--- | :--- | :--- |
| exist:NEG | ID.OBL | fish | LOC | river |
|  | "There are no fish in the river." |  |  |  |

According to Tan, aLiwanes "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 aLiwanes "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.

[^52]| (55)? unian a kuraw i kali |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| exist:NEG | 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 $D a$ is considered unacceptable by some informants, and unnatural by others. What we can be sure of is that in natural speech, only $D a$ 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 $D a$ (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, 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:

| uliya $\quad$ kaDi $\quad i \quad$ ami $\quad$ a | saLaw buLay |  |  |  |
| :--- | :--- | :--- | :--- | :--- | ---: |
| exist here LOC | north | ID.NOM | very | beautiful |
| "There is a very beautiful girl in the north." |  |  |  |  |


| uliya | kaDu | a | maLu-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.

| asuwa=Diyan $i$, | ulaya | $\boldsymbol{a}$ | saya | $\boldsymbol{a}$ | Dekal. |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 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."

| ulaya | $\boldsymbol{a}$ | mare-temuwan. | $i$ | temutaw $=l a$ |  |  |
| :--- | :--- | :---: | :--- | :---: | :--- | :--- |
| exist | ID.NOM | RECIP-grandchild | SG.NOM | grandparent=PERF |  |  |
| $i$, | unian $=l a$ | $D a$ |  | keDang, | $i D u$ | $n a$ |
| TOP | exist:NEG=PERF | ID.OBL | strength | that | DF.NOM |  |

walak $i$ tu=paDak-aw i temutaw
child TOP 3.GEN=carry.on.back-TR1 SG.NOM grandparent

| $m-a-u k a=l a$ | $m-a t e l-a$ | $i$ | Denan |
| :--- | :--- | :--- | :--- |
| ITR-RED-go=PERF | 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 temии "your grandparent" is definite and takes the nominative phrase marker $i$.

| (60) | ulaya | $i$ | temu |  |  | puyuma |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | exist | SG.NOM | your | andparent | LOC | Puyuma |
|  | "Your grandmother is in Puyuma." |  |  |  |  |  |
| (61) | $m-u-r$ | ma' $=1 a$ | $i$, | unian | tu=walak |  |
|  | ITR-go-house=PERF TOP exist:NEG |  |  |  | 3.PSR=child |  |

Of about 60 tokens with ulaya/unian, only five occur in a locative construction. Speakers prefer to use another verb, $k a D u$ "there, live" ( $\S 10.4 .6 .1$ ), 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.

| ulaya | i manay | $i$ | sabak? |
| :--- | :--- | :--- | :--- | :--- |
| exist SG.NOM | who | LOC | inside |
| "Who's inside?" |  |  |  |

(63)

| (ulaya) | $\underline{i}$ | baeli |
| :--- | :--- | :--- |
| exist | SG.NOM | my.older.sibling |
| "My brother." |  |  |


| ulaya | $i$ | baeli | $i$ | sabak |
| :--- | :--- | :--- | :--- | :--- |
| exist | SG.NOM | my.older.sibling | LOC | inside |

"My brother is inside."

| ulaya | $\frac{i}{l}$ 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:

| ulaya isuwa tu=kiaeDengan | kana | yawan |
| :--- | :--- | :--- |
| exist where 3.PSR=bed | DF.OBL | leader |
| "Where is the leader's bed?" |  |  |


| ulaya isuwa naDu | $n a$ | 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 (i.e. Tom has a book) and the "be" possessive (i.e. 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' | iDипи |
| :---: | :---: | :---: | :---: |
|  | 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). For example:

| ulaya | $\boldsymbol{k} \boldsymbol{u}=\boldsymbol{i D} \boldsymbol{u} \boldsymbol{s}$ | $a$ | $k<e m>a D i$ |
| :--- | :--- | :--- | :--- |
| exist | 1S.PSR=spoon | ID.NOM | $<$ ITR $>$ here |
| "I have this kind of spoon." |  |  |  |


| (70) unian=ku $\quad$ Da | daLan | m-uka i | taywan |
| :--- | :--- | :--- | :--- | :--- |
| exist:NEG=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. iDus "spoon" is preceded by $k u=$, a definite nominative possessor), and is indefinite in a negative sentence (i.e. daLan "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."

| uliya | $t u=$ legian | $D a$ | 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):


| saya | $a$ | daLan | kemay $i$ | timuL, $b a<$ sika $>$ sikaw |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| one | ID.NOM | road | from | LOC | south | $<$ RED $>$ bamboo |

iDu na daLan, unian Da daLan Da Duma that.NOM DF.NOM road exist:NEG 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.

| ta=tiLil | kanDu | kana | yawan, ulaya |
| :--- | :--- | :--- | :--- | :--- |
| 1P.PSR = book | that.OBL | DF.OBL leader exist |  |

This sentence can be interpreted as locative or possessive. The third person pronoun $t u=$ may refer to ta=tiLil "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 | $\boldsymbol{a}$ | paisu | $i$ | papaTaran |
| :--- | :--- | :--- | :--- | :--- |
| exist | ID.NOM | money | LOC | table |

"There is money on the table." (Existential)

| (77) unian | $\boldsymbol{D a}$ | paysu | $i$ | papaTaran |
| :--- | :--- | :---: | :---: | :--- |
| exist:NEG | ID.OBL | money | LOC | table |
|  | "There is no money on the table." | (Existential) |  |  |


| (78) | ulaya | $\boldsymbol{k} \boldsymbol{u}=$ paysu |
| :--- | :--- | :---: |
| exist | $1 \mathrm{~S} . \mathrm{PSR}=$ money |  |
|  | "I have money." (Possessive) |  |

(79) unian=ku Da paysu
exist:NEG=1S.NOM ID.OBL money
"I don't have money." (Possessive)
(80) ulaya ku=paysu (i papaTaran)
exist $\quad 1 \mathrm{~S} . \mathrm{PSR}=$ money $\quad$ LOC table
"My money is there (on the table)." (Locative)
(81) unian $\boldsymbol{k} \boldsymbol{u}=p a y s u$ (i papaTaran)
exist:NEG 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 kaDu"there"

The demonstrative locative (§4.5.3.3) kaDu "there" has a similar function to "there" in the English existential construction. In (82) $k a D u$ is used as a demonstrative.
(82) $m$ - $a L a k=t a \boldsymbol{a} \boldsymbol{u} D a \quad$ ki-a-beray-an $D a \quad$ bini ${ }^{\prime}$

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) $k a D u$ appears twice. The first $k a D u$ is a verb, meaning "live" or "be there". The second $k a D u$ is a locative.
$\begin{array}{ll}\boldsymbol{k} \boldsymbol{a} \boldsymbol{D} \boldsymbol{u}=m i=l a & \boldsymbol{k} \boldsymbol{a} \boldsymbol{D} \boldsymbol{u} \\ \text { there=1P.NOM=PERF } & \text { there }\end{array}$
"We then stayed/lived there."

A similar usage is seen in (84).

| $\boldsymbol{k} \boldsymbol{a} \boldsymbol{D} \boldsymbol{u}=k u$ | $i$ | saninin $\quad i$, |  |
| :--- | :--- | :--- | :--- |
| there=1S.NOM | LOC | neighbouring TOP |  |
| "I was next to it." |  |  |  |

Zeitoun et al. (1999:21), following Tan (1997), say that kaDu only occurs in a locative construction. This claim is contradicted by the following sentences. In (85)
$k a D u$ introduces new information to the discourse, and in (86) it asserts the occurrence of a saying.

| $\boldsymbol{k} \boldsymbol{a D} \boldsymbol{D} \boldsymbol{a}$ | miaDua | $a$ | maLu-wadi |
| :--- | :--- | :--- | :--- |
| there ID.NOM two | ID.NOM | RECIP-younger.sibling |  |
| "There were two brothers." |  |  |  |

$\boldsymbol{k a D u}=l a \quad a \quad n g a i \quad$ " $t<e m>e n g e D=t a \quad D a \quad k<e m>a D i n i$ there=PERF ID.OBL word $<$ ITR $>$ kill=1P.NOM ID.OBL $<$ ITR $>$ here
na unan $i$, ma-legi m-u-Dekal"
DF.NOM snake TOP ITR-taboo ITR-go-village
"There is a saying 'we killed such snake, so it is a taboo for us to enter the village.'"

Like ulaya/unian, when $k a D u$ asserts the existence of a theme, the theme is indefinite; when it indicates the location of a theme, the theme is marked definite.

| $a D u \quad i$, | $k a D u=l a$ | $\boldsymbol{n a}$ | palakuan | $n a$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| then TOP there=PERF | DF.NOM | palakuan | DF.NOM |  |
| ne-nem-a? |  |  |  |  |
| RED-six-NPRS |  |  |  |  |

"At that time, were the six palakuans already there?"

| kaDu=la | $\boldsymbol{a}$ | ma'iDang | me-na'u | Da | maka- |
| :--- | :--- | :--- | :--- | :--- | :--- |
| there=PERF | ID.NOM | old | ITR-see | ID.OBL | along- |
|  |  |  |  |  |  |
| Talu-TaLun |  |  |  |  |  |
| RED-grass |  |  |  |  |  |
| "There's an old man who saw their wondering around." |  |  |  |  |  |

$k a D u$ seldom expresses possessive meaning, and it may only express abstract and inanimate possession. Only a few examples are found in the corpus.

| (89) | an $\quad k a D u$ | naniam | $k a-k u a L e n g-a n ~$ |
| :--- | :--- | :--- | :--- |
| if | there | DF.NOM/1P.PSR | ka-sick-NMZ |

When $k a D u$ 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 kemaDini "here" expresses a possessive meaning. In this example the theme is marked as indefinite oblique. More examples are needed to clarify the status of kemaDini as an existential predicate.

| $\boldsymbol{k}<\boldsymbol{e m}>$ aDini=mi=Diya | Da | ka-kuaLeng-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 $k a D u$, which is used in existential/locative/possessive constructions, mi- verbs carry possessive/existential but not locative meaning. For example:
mi-walak $\quad D a \quad$ mia-pat $\quad D a \quad$ walak
have-child ID.OBL PRS-four ID.OBL child
"She had four children."
an $\quad \boldsymbol{m i}-\boldsymbol{a s} \boldsymbol{u w a}=k u$
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 $k a D u$, 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) aDi mi-kataguin $i$,

NEG have-spouse TOP
"She didn't have a spouse,"
$\boldsymbol{t u}=\boldsymbol{p i - k a t a g u i n - a y} \quad$ kan LegeLege
3.GEN=have-spouse-TR2 SG.OBL LegeLege
"He was married to LegeLege."
$m i$ - verbs that express "have N " may be infixed with $\langle a\rangle$ (§6.4.1 and §6.5.6) to indicate "many, plentifulness".
(96) $\quad$ mi-a-ruma' $=k u$
have-a-house $=1 \mathrm{~S} . \mathrm{NOM}$
"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) aDi mi-a-kuraw iDi 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-iDus=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:
mi-kiping "to wear clothes"
mi-kabung "to wear a hat"
mi-seki "to grow nails"
mi-su'ang "to grow horns"
mi-suan "to keep a dog"
mi-walak "to have a child, to bear a child"
mi-kataguin "to have a spouse, to be married"

## CHAPATER 11

## $\mathcal{N E G \mathcal { A } I V E}$ 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 $a D i$ and unian are asymmetric, as shown in (1) and (3). The structural differences are in clitic order, verb forms, 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. aDi inaba

NEG good
"It's not good."
c. TekeL
drink
"Drink!"
d. aDi Ta-TekeL

NEG RED-drink
"Don't drink!"
(2)

| a. | $a$ | Tau | $a$ | inaba |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | ID.NOM | person | ID.NOM | good |  |
|  | "He is a good person." |  |  |  |  |
| b. ameli | $a$ | Tau | $a$ | inaba |  |
|  | NEG | ID.NOM | person | ID.NOM | good |
|  | "He is not a good person." |  |  |  |  |

(3)


| a. | $\boldsymbol{m a - l a D a m}=m i$ | Datu | ngaLad | $k a n D u$ |
| :---: | :---: | :---: | :---: | :---: |
|  | ITR-know=1P.NOM | ID.OBL/3.PSR | name | that.OBL |
|  | kana suan |  |  |  |
|  | DF.OBL dog |  |  |  |
|  | "We knew that dog' | s name." |  |  |
| b. | ma-uLid $=$ mi | Datu | ngaLad |  |
|  | ITR-don't.know | 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, aDi and ameli are instances of analytic negation, whereas unian and mauLid, which are the negative counterparts of ulaya "exist" and malaDam "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: $a D i$ is used in verbal clauses; unian is used to introduce a negative existential/possessive/locative sentence; in sentences with a nominal predicate, ameli is used. Because negative constructions with ameli and unian are also discussed in $\S 10.3$ and $\S 10.4$, in this chapter, the focus will be on the constructions introduced by $a D i$.

In the following sections, $\S 11.2$ deals with the negator $a D i$ in verbal clauses, and $\S 11.3$ treats the negator ameli in nominal clauses. The use of the lexical negators unian and mauLid is described in $\S 11.4$ and $\S 11.5$ 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 $\S 8.3$ 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).
a. $\quad \mathrm{VERB}^{\mathrm{ITR}}\left(=\mathrm{PRO}^{\mathrm{NOM}}\right)$

## Intransitive

b. $\quad \mathrm{PRO}^{\mathrm{GEN}}=\mathrm{VERB}^{\mathrm{TR}}\left(=\mathrm{PRO}^{\mathrm{NOM}}\right)$

## Transitive

In the negative intransitive construction, the negator $a D i$ precedes the verb, and if there is a nominative proclitic, it is attached to the negator, not the verb, as shown in (7):
(6) a. ingdan Da suan
afraid ID.OBL dog
"He is afraid of dogs."

| b. aDi | ingdan | Da | suan |
| :--- | :--- | :--- | :--- |
|  | NEG | afraid | ID.OBL |$\quad$ dog

"He is not afraid of dogs."
(7)

| a. | ingdan $=\boldsymbol{k} \boldsymbol{u}$ | $D a$ | suan |
| :--- | :--- | :--- | :--- |
|  | afraid=1S.NOM | ID.OBL | dog |
|  | "I am afraid of dogs." |  |  |

[^53]| b. | $\boldsymbol{a} \boldsymbol{D i = k} \boldsymbol{u}$ | ingdan | Da |
| :--- | :---: | :--- | :---: | | suan |
| :--- |
| NEG=1S.NOM |
| "I am not afraid of dogs." |

In the negative transitive construction, however, the nominative enclitic does not attach to the negator $a D i$ but remains encliticised to the verb, as in ( 8 b ) and (9b).
a. $\quad t u=p a-k a-l a D a m-\boldsymbol{a} \boldsymbol{w}=\boldsymbol{k} \boldsymbol{u}$
3.GEN=CAUS-ka-know-TR1=1S.NOM
"She let me know."
b. aDi $\quad$ tu=pa-ka-laDam-i=ku

NEG 3.GEN=CAUS-ka-know-TR2=1S.NOM
"She didn't let me know."
(9)
a. tu=beray-ay=ku Da paisu kan nanali
3.GEN=give-TR2=1S.NOM ID.OBL money SG.OBL my.mother "My mother gave me some money."
b. aDi tu=beray- $\boldsymbol{i}=\boldsymbol{k} \boldsymbol{u} \quad D a \quad$ 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:
a. $a \operatorname{Di}\left(=\mathbf{P R O}^{\text {NOM }}\right) \quad$ VERB $^{\text {ITR }}$
Negative intransitive
b. $\quad a D i \quad \mathrm{PRO}^{\mathrm{GEN}}=\mathrm{VERB}^{\mathrm{TR}}\left(=\mathbf{P R O}^{\text {NOM }}\right)$
Negative transitive

### 11.2.2 Negation and mood

The negative verbal construction is different from the affirmative construction also in terms of verbal morphology.

In $\S 6.2$ 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 briefly repeated 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) | $M-V$ | $V-a w$ | $V-a y$ | $V$-anay |
|  | Irrealis | $C a-V$ | $C a-V-i$ |  | $C a-V-a n$ |
| Non-indicative (Imperative) |  | $V$ | $V-u$ | $V-i$ | $V-a n$ |

Table 11.2 Puyuma verbal morphology (Negative clauses)

|  |  | ITR | TR1 | TR2 | TR3 |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Indicative | Realis (Neutral) | $M-V$ | $V-i$ | $V-a n$ |  |
|  | Irrealis | $C a-V$ | $C a-V-i$ | $C a-V-a n$ |  |
| Non-indicative (Imperative) |  | $C a-V$ | $C a-V-i$ | $C a-V-a n$ |  |

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 pakalaDam "let sb. 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 $=k u$

$$
\begin{aligned}
& \text { RED-help=1S.NOM } \\
& \text { "I will help." }
\end{aligned}
$$

> b. $a D i=k u \quad$ pa-pulang
> NEG=1S.NOM RED-help
> "I am not going to help."
a. tu=pa-paDek-i=ku
3.GEN=RED-carry.on.back-TR2=1S.NOM
"He will carry me on his back."
b. aDi tu=pa-paDek-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 $C a$ - reduplication, as shown in (13b) and (14b). And as in the realis construction, the distinction between TR1 and TR2 collapses in the negative construction.
a. an tu=pa-TekeL-ay=mu $\quad D a$ enay $i$,
if 3.GEN=CAUS-drink-TR2=2P.NOM ID.OBL water TOP

## TekeL

drink
"If she makes you drink water, drink it."
b. aDi Ta-TekeL

NEG RED-drink
"Don't drink."
(14) a. pilang-u m-u-ruma'
bring-TR1 ITR-go-house
"Bring her home."

| b. | $a D i \quad$ pa-pilang-i | $m-u-r u m a '$ |
| :--- | :--- | :--- |
|  | NEG RED-bring-TR2 | ITR-go-house |
|  | "Don't bring her home." |  |

It was observed in $\S 8.4 .3$ that TR1 is used when the nominative argument is more affected by the action. The observation 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).
aDi bangabang- $i=k u$
NEG bother-TR2=1S.NOM
"Don't bother me."

$$
\begin{equation*}
a D i \quad p-u-k-i s a T-a n=k u \tag{16}
\end{equation*}
$$

NEG CAUS-go-ka-up-TR3=1S.NOM
"Don't lift me up."

### 11.2.3 The lexical category of $a D i$

This section addresses the lexical categorisation of the negator $a D i$. Is $a D i$ a noun, a verb, or an adverb? I will show that $a D i$ does not fit into any of the these categories.
aDi cannot be a noun, because a noun must be preceded by a noun phrase marker or a pronominal element to indicate its case role. The negator $a D i$, however, is never preceded by such an element.
$a D i$ is not a verb either, as is shown by the following two pieces of evidence. First, unlike verbs, the negator $a D i$ 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) simultaneously encodes realis mood.

| a. | $a D i \quad$ ra-rengay $\quad D a$ | $s a D u$ |  |
| :--- | :--- | :--- | :--- |
|  | NEG RED-say ID.OBL | many |  |
|  | "He won't say too much." |  |  |
| b. | $a D i \quad$ ma-rengay |  |  |
|  | NEG ITR-say |  |  |
|  | "He didn't say." |  |  |

Second, if $a D i$ were a verb, then the combination of $a D i$ 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 §4.4.5 a small adverbial category is proposed, whose members differ somewhat from each other in their behaviour. Like $a D i$, 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, $a D i$ would fit into this category quite well. However, $a D i$ can host pronominal clitics (§11.2.1) and aspectual clitics, such as =la "perfective", =dar "frequentative" and =Diya "imperfective", whereas none of the adverbs discussed in §4.4.5 attracts clitics.

| $t u=k<$ in $>a$-rareger-an |  |  | $i$, | $a D i=l a$ | makeser |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{equation*} \text { 3.PSR=<PERF }>\text {-frighten-NMZ } \tag{18} \end{equation*}$ |  |  | TOP | NEG=PERF | strong |
| mare-beliyas | $m-u k a$ | $i$ |  |  |  |
| RECIP-turn | ITR-go | LOC |  |  |  |

"Because of her being frightened, she didn't have the strength to return to the farm."
(19)

| $\boldsymbol{a} D \mathbf{i}=$ Diya | $t<e m>$ alam | me-ranak | Da | Tau |
| :--- | :--- | :--- | :--- | :--- |
| NEG=IMPF | $<$ ITR>try | ITR-attack | ID.OBL | person |

"It has never tried to attack people."

The evidence indicates that $a D i$ 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 $\S 10.3$ 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. $\quad a$
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."

| a. amau | ta=ngai | $t u=n i-l a D a-l a D a m-a n ~$ |
| :--- | :--- | :--- | :--- |
| COP | 1P.PSR=language | 3.PSR=PERF-RED-know-NMZ |
|  | "What they've learned is our language." |  |

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 copular 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 the negator aDi, ameli can attract a nominative clitic. In such cases, the order of predicate and subject is rearranged, as shown in (20) and (22).

| a. | $\boldsymbol{a} \quad$ payran=ta |  |  |
| :--- | :--- | :--- | :--- |
|  | ID.NOM $\quad$ Taiwanese=1P.NOM |  |  |
|  | "We are Taiwanese." |  |  |
| b. | ameli=ta | $a$ | payran |
|  | NEG=1P.NOM $\quad$ ID.NOM | Taiwanese |  |
|  | "We are not Taiwanese." |  |  |

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 kanDi tangaw?
have-child this.OBL Tangaw
"She had a baby with Tangaw?"

A: ameli, mi-walak kan tangawLanges
NEG have-child DF.OBL TangawLanges
"No, she had a baby with TangawLanges."

However, sometimes informants use $a D i$, 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 $a D i$, which does not encode mood, ameli may be prefixed with $k a$ - to indicate irrealis.

| ka-ameli | $a$ | Tau 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 $\S 10.4$. The negative construction introduced by unian is lexical

[^54]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 gray.

Table 11.3: The asymmetries in affirmative and negative existential/possessive/locative clauses

|  | Existential |  | Possessive |  | Locative |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Aff | Neg | Aff | Neg | Aff | Neg |
| Case marking | 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 construction. The reader is referred to Chapter 10 for detailed description.


| a. | ulaya $i$ | tетии | $i$ | риуита |
| :---: | :---: | :---: | :---: | :---: |
|  | exist SG.NOM | your.grandparent | LOC | Puyuma |
|  | "Your grandmother is in Puyuma." |  |  |  |
| b. | unian $=$ ku | kiaeDenga |  |  |
|  | without=1S.NOM | LOC bed |  |  |
|  | "I wasn't in bed." |  |  |  |

### 11.5 The negative item mauLid

The last negative item discussed in this chapter is mauLid "not know". Like unian "not exist", mauLid is a lexical item which incorporates negation into its meaning. In an affirmative clause, malaDam "know; understand" is used. For instance:

| daw ma-laDam=ku $\quad$ Da | kemay | isuwa |
| :--- | :--- | :--- | :--- |
| why ITR-know=1S.NOM ID.OBL | from | where |
| "How did I know where it was from?" |  |  |

ma-uLid=ku $\quad D a \quad$ aтипа $i<$ 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-uLid=ta d<em>away

ITR-don't.know=1P.NOM <ITR>produce
"We didn't know how to build (a Takuban)."
mauLid has imperative/irrealis forms ka-uLid/ka-a-ulid. And like malaDam "know", mauLid can have a sentence-like complement (as in (29)) or form a SVC with the verb following it (as in (30)). Thus, mauLid is clearly a verb. Serial verb constructions and complementation are described respectively in Chapters 13 and 15.

Compared with the other negative items, the distribution of mauLid is rather restricted. Indeed, the same meaning can be expressed by the negator $a D i$ and malaDam "know", as (31) and (32) show.
$a D i=m i \quad m a-l a D a m \quad$ Datu
NEG=1P.NOM ITR-know ID.OBL/3.PSR name
"We didn't know its name."

| $\boldsymbol{m a}$-uLid=mi | Datu | ngaLad |
| :--- | :--- | :---: |
| 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: The grammatical characteristics of the negative items

|  |  | word class | host of clitics | lexical or <br> analytic | symmetric <br> or <br> asymmetric |
| :--- | :--- | :--- | :--- | :--- | :--- |
| aDi | realis | irrealis | particle <br> $(\S 11.2 .3)$ | only <br> nominative <br> actor clitics <br> and aspectual <br> clitics | analytic |

Chapter 11: Negative constructions

## CHAPIER 12

## $\mathcal{N O N}$-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, as is claimed by Payne (1997:294), "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 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) $a n \quad t u=p a-T e k e L-a y=m u \quad$ Daku la'ub
when 3.GEN=CAUS-drink-TR2=2P.NOM ID.OBL/1S.PSR ladle

## i, $\quad$ TekeL=la

TOP drink=PERF
"If she makes you drink with my ladle, then drink."
(2) aw $i$ sabak kana pa-TungTung-an i, puka-i
and LOC inside DF.OBL CAUS-sound-NMZ TOP put-TR2:IMP

Da tiDul Da samaya, aw pa-TekeT-i=la
ID.OBL wasp ID.OBL some and CAUS-stick-TR2:IMP=PERF

Da kadepu,
ID.OBL paper
"And inside the drum, put some wasps, and seal it with paper."

[^55]An imperative verb is typically not inflected for most of the grammatical categories associated with the 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) suggests 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 imperative. In Puyuma, however, the manifestation of person and the verbal affixation of an imperative verb differ from Sadock and Zwicky's observations of most of the languages they discussed.

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.

| pilang-u | $\boldsymbol{i}$ | temuи | $m-u k a$ |
| :--- | :--- | :--- | :--- |
| take-TR1:IMP | SG.NOM | your.grandmother | ITR-go |

$i$ Dena-Denan
LOC RED-mountain
"Take your grandmother to the mountains."
(4) $a D i \quad k a-p a-p a r u-i=k \boldsymbol{u}$

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) | $a D i$ | $a-u k a$ |
| :--- | :--- |
|  | NEG |$\quad$ RED-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 $C a$ - 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 | d<em>irus | dirus |
| Transitive 1 | dirus-aw | dirus- $\boldsymbol{u}$ |
| Transitive 2 | dirus-ay | dirus- $\boldsymbol{i}$ |
| Transitive 3 | dirus-anay | dirus-an |

Table12.2: Negative declarative vs negative imperative

|  | Negative declarative | Negative imperative |
| :--- | :--- | :--- |
| Intransitive | $\boldsymbol{d}<\boldsymbol{e m}>$ irus | $\boldsymbol{d} \boldsymbol{a}$-dirus |
| Transitive 1 | dirus- $\boldsymbol{i}$ | $\boldsymbol{d} \boldsymbol{a}$-dirus- $\boldsymbol{i}$ |
| Transitive 2 | dirus- $\boldsymbol{i}$ | $\boldsymbol{d} \boldsymbol{a}$-dirus- $\boldsymbol{i}$ |
| Transitive 3 | dirus-an | $\boldsymbol{d a}$-dirus-an |

### 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 well accepted.
(6) $a w i$ sabak kana pa-TungTung-an $i$, and LOC inside DF.OBL CAUS-sound-NMZ TOP

| puka-i | $D a$ | tiDul | $D a$ | samaya, | aw |
| :--- | :--- | :--- | :--- | :--- | :--- |
| put-TR2:IMP | ID.OBL | wasp | ID.OBL | some | and |


| pa-TekeT- $\boldsymbol{i}=\boldsymbol{l} \boldsymbol{a}$ | $D a$ | kadepu |
| :--- | :---: | :--- |
| CAUS-stick-TR2:IMP=PERF | ID.OBL | paper |

"And inside the drum, put some wasps, and seal it with papers."
(7) $u a u<$ Ta $>$ Tangi
go $<$ RED $>$ play
"Go visit her!"
(8) $a D i \quad k a-D a-D e k i-i=k u$

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 =Diya, as in (9) or the addressee is topicalised and marked by an addressing clitic marker $=a$, as in (10).

| beray- $i=$ Diya  Danu ni-ranger-an <br> give-TR2=IMPF ID.OBL/2S.PSR PERF-thought-NMZ that.NOM |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| na | kur-dikes | kanDi | kana | ki-a-karun-an |
| DF.NOM | kur-hold | this.OBL | DF.OBL | get-a-work-NMZ |
| "Give your thought to that person who is responsible for this business." |  |  |  |  |

(10) ama=a, beray- $i=m i \quad D a \quad$ ma-ruwa- $a=m i$
father=VCT give-TR2:IMP=1P.NOM COMP ITR-can-PJ=1P.Excl.NOM
aTebung Da lalak Da ka-ruwa kurenang kaniam
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 an traditional building.
(11) ba-bati=yu=Diya Da ulaya isuwa tu=kiaeDeng-an

RED-tell=2S.NOM=IMPF ID.OBL exist where 3.PSR=sleep-NMZ
"You tell (us) where his sleeping place is."
pa-ra-ragan=yu Da manay=Diya Da beLeTenganan
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 =Diya "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 $t a=$ or $=t a$. 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).

[^56](13)

| $i$ | temutaw $=l a \quad i$, | $" i D u$ | $n a$ |
| :--- | :--- | :--- | :--- |
| SG.NOM | grandma=PERF TOP | that.NOM | DF.NOM |


| kawi | $i$, | $\boldsymbol{t a}=\boldsymbol{p a - l a} \boldsymbol{\prime} \boldsymbol{u D - a n a y}$ | $i$ | kali, | tu=rami |
| :--- | :---: | :--- | :--- | :--- | :--- |
| wood | TOP | 1P.GEN=CAUS-float-TR3 | LOC | river | 3.PSR=root |

$i$, kinguwayan=dar mu-la'uD, tu=Ludus $i$,
TOP before=often ACAUS-float 3.PSR=end TOP

| kiaLikuDan-an=dar" | $k<e m>a$ | $i$ | temutaw |
| :--- | :--- | :--- | :--- |
| after=FREQ | $<$ ITR $>$ say | SG.NOM | his.grandmother |

"His grandma (said), 'This timber, we it floated down the river, and its root floated 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. One example is shown in (14).


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 $t a=$. For example:
ane $k i r-T e b u n g=t a \quad$ ma-'iDang-an $D a$
when get-encounter-1P.ICL.NOM ID.OBL ITR-old-NMZ ID.OBL
ma-sangal $D a \quad$ basak $i, \quad \boldsymbol{t a}=a r a w-a y$,

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 $=t a / t a=$ "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 $t a=$ 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 $=t a / t a=$ 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 morphosyntatically and pragmatically from an affirmative imperative. Morphosyntactically, as mentioned in §11.2.2, verbs in prohibitive sentences usually undergo $C a$-reduplication to indicate irrealis mood, and the undergoer voice forms of such verbs are somewhat different from those in basic imperatives.
(16) TekeL
drink
"Drink!"
(17) aDi $\quad$ Ta-TekeL

NEG RED-drink
"Don't drink!"
(18)

| pilang-u | $m$-u-ruma' |
| :--- | :--- |
| bring-TR1:IMP | ITR-go-house |
| "Bring her home!" |  |

(19) aDi pa-pilang-i m-u-ruma'

NEG RED-bring-TR2:IMP ITR-go-house
"Don't bring her home."

Unlike an affirmative imperative, whose use is restricted due to the politeness factor, a prohibitive sentence does not have a politeness restriction.

### 12.3 Interrogative constructions

An interrogative construction is a grammatical form used prototypically 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) $Q$ : $n u=r u m a$, $i$, 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", like 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 rising before falling, as indicated in the following examples.

| $k a D u=y u \quad i$ | ruma, | ma-Linay? |
| :--- | :--- | :--- |
| live=2S.NOM LOC | house | ITR-play |

"Did you play at home?"

| aiwa, | $k a D u=k u$ | $i$ | ruma, | ma-Linay |
| :--- | :--- | :--- | :--- | :--- |
| 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 copular verb amau (§ 10.3.4) to the end of the sentence as a question tag. I infer that the function of amau is to express the speaker's 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

[^57]about. Phonologically, a biased yes-no question ends with rising intonation. For instance:

| $Q:$ | $i D u \quad n u=n g a L a d$ | $i$, | $a$ | $k i a L i k u D a n=l a$ |
| :--- | :--- | :--- | :--- | :--- |
|  | that.NOM 2 S.PSR=name | TOP | ID.NOM | afterwards=PERF |

$t u=p<i n>u-n g a L a d$

3.PSR=put<PERF>-name

COP
"Your name, isn't it given afterwards?"

| A: $a$ | LikuDan | $a$ | $p<$ in>u-ngaLad | kanDu |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 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 (§4.4.8), as shown in (24) and (25).

| $a D i=k u$ | $k a r u w a$ | m-u-isaT, | maku? aw, |
| :--- | :---: | :---: | :---: | :---: |
| NEG=1S.NOM | can | ITR-go-up | tag and |

"I cannot get up, can I? So l'll ask my brother to do the work (for me)."
(25) mara-asaT na pasara'aD, maku? aw tu=aLak-aw

SUP-high DF.NOM Pasara'aD tag and 3.GEN=take-TR3
"The Pasara'aD family is in a higher position, isn't it, and so they took it."

[^58]
### 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 $a D i$ "not" standing for a negative answer (27), but sometimes other material (an echo verb) is added, as shown in (26).


The situation is more complicated when a negative question is asked. In such cases, both aiwa "yes" and $a D i$ "no" are acceptable, but an echo answer is needed. For example:

[^59](28) $Q: a D i=y u \quad a-u k a$ ?

NEG=2S.NOM RED-go
"Won't you go?"

A1: aiwa, $a-u k a=k u$
Yes RED-go=1S.NOM

A2: $\quad a D i, \quad a-u k a=k u$
NEG RED-go=1S.NOM
"Yes, l'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 (33) 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 anDi" "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:

[^60]| Q: | an | $m$-uka | muLaLiaban | $n a D u$ | $n a$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | when | ITR-go | sea.worship | those.NOM | DF.NOM |


| $m$-u-ami | $i$, | pa-pakan | $D a$ | $d \boldsymbol{a} w a ?$ |
| :--- | :--- | :--- | :--- | :--- |
| ITR-go-north | TOP | Ca-feed | ID.OBL | millet |


"When those who went north do the seaworship, they offered
millet, or, was it rice?"

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 proforms belongs to, namely, nominal, adverbial, verbal, and 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 (§4.3.3.2.3). It can be the grammatical subject in a verbal sentence, as in (30), or the nominal predicate in a classifying
sentence (§10.3.1), 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?"

| $\boldsymbol{a}$ | manay | tu=edad kana | kuTem |
| :--- | :--- | :--- | :--- |
| ID.NOM | what | $3 . \mathrm{PSR}=$ colour DF.OBL | cloud |

"What color is the cloud?"

In information questions manay stays in the usual noun phrase position. For example:

| "ta=pu-ngaLad-anay | $\boldsymbol{k a n}$ | manay?" | $k<e m>a$ |
| :--- | :--- | :--- | :--- |
| 1P.GEN=put-name-TR3 | DF.OBL | what | $<$ ITR>say |

"They said, 'what name should we give him?"
(33) lalak=ku=Diyan i, ma-laDam=ku Da 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 | $\boldsymbol{n a}$ | isuwa | $n u=$ kalipang |
| :--- | :--- | :--- | :--- |
| COP | DF.NOM | which | 2S.PSR=umbrella |
|  | "Which one is your umbrella?" |  |  |

[^61]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?"

$$
\begin{array}{ll}
\text { ulaya }=y u & \text { isuwa? }  \tag{35}\\
\text { Exist=2S.NOM } & \text { where } \\
\text { "Where are you?" } &
\end{array}
$$

| ulaya $=k u$ | $\boldsymbol{i}$ | baLangaw |
| :--- | :--- | :--- |
| exist=1S.NOM | LOC | Taitung |
| "l'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.

[^62]
### 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 $\quad t u=p u-n g a L a d-a y=k u$ $D a$ <br> why 3.GEN=put-name-TR2=1S.NOM | ID.OBL | Luba'ib? |
| :--- | :--- | :--- | :--- |
|  | "Why did they give me the name Luba'ib?" |  |

### 12.3.3.3 Verbal interrogatives

Puyuma has two verbal interrogatives: kuda "how?" and muama "why?". Like ordinary verbs, kuda occurs in sentence-initial position, it has a voice alternation, and it also 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).

| $\boldsymbol{k}<\boldsymbol{e} \boldsymbol{m}>\boldsymbol{u} \boldsymbol{d} \boldsymbol{a}-\boldsymbol{k} \boldsymbol{u} \boldsymbol{d} \boldsymbol{a}=m u$ | $T<e m>$ ungul? |
| :--- | :--- |
| $<$ ITR $>$ RED-how=2P.NOM | $<$ ITR $>$ connect |
| "How do you connect?" |  |

In (39) the root is reduplicated to indicate repetition of action, and it is marked by the intransitive infix <em>. In (40) kuda undergoes reduplication to express the irrealis meaning, and in (41) it is marked by the undergoer subject-choice suffix -aw.
$\boldsymbol{k} \boldsymbol{a}-\boldsymbol{k} \boldsymbol{u} \boldsymbol{d} \boldsymbol{a}=k u=l a$
RED-how=1S.NOM=PERF if
"If such things happen, what shall I do?"

| ta=kuda-aw | $n a$ | $b a L i$ | $n a$ | 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 <em>, which conveys the more dynamic meaning, while in (42) the verb is prefixed by $m a$-, which indicates a stative.

```
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 ways of dealing with things; sometimes, its dynamic form is used to ask for degree (as in (43)), and sometimes for the kinds (as in (44)).

| $\boldsymbol{k}<\boldsymbol{e m}>\boldsymbol{u d a}$-kuda | tu=aLuDan-an | na | barasa? |
| :--- | :---: | :--- | :--- |
| <ITR>RED-how | 3.PSR=heavy-NMZ | DF.NOM | stone |
| "How heavy the stone is?" |  |  |  |


| sagar $=y u$ | $D a$ | $\boldsymbol{k}<\boldsymbol{e m}>\boldsymbol{u} \boldsymbol{d a}$ - $\boldsymbol{k} \boldsymbol{u} \boldsymbol{d a}$ | Da | 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 mиата 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.

| $\boldsymbol{m} \boldsymbol{u}<\boldsymbol{a m a}>\boldsymbol{a m a}$ | $i D i$ | $n a$ | bangsaran? |
| :--- | :--- | :--- | :--- |
| <RED>why | this.NOM | DF.NOM | man |
| "Why is this man always here?" |  |  |  |


| muama $=y u=l a$ | Dua | kire $<$ Tupu $>$ Tupung $-a$ |
| :--- | :--- | :--- |
| why=2S.NOM=PERF | come | $<$ RED $>$ meet.and.greet-PJ |

"Why did you come meet and greet?"

### 12.3.3.4 Interrogative numeral

In §4.5.4.2 it was pointed out that a distinction is made between 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 mипитa is used, as in (48).
miasama nu=wadi na babayan?
how.many 2S.PSR=younger.sibling DF.NOM female
"How many sisters do you have?"

| munuma | a | basikaw-an |
| :--- | :--- | :--- |
| how.many | ID.NOM | bamboo-COL |

"How many bamboos are there?"

Questions like "how old" and "what time" also utilise mипита. For instance:

| munuma $=l a$ | $n u=a m i$ | garem? |
| :--- | :--- | :--- |
| how.many=PERF | $2 \mathrm{~S} . \mathrm{PSR}=$ 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).

| 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.

| samaya | tu $=$ dapal | $D a$ | garang? |
| :--- | :---: | :---: | :--- |
| some | 3.PSR=foot | ID.OBL | crab |
| "How many feet does a crab have?" |  |  |  |

samaya wari-an $\quad$ an $\quad$ sa-Liyus-an
some $\quad$ 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 $t a=/=t a$, as in (54), (55) and (56), or by both. For example:
mare-babuLas-a=ta
RECIP-borrow-PJ=1P.ICL.NOM
"Let's exchange!"
$T<e m>e k e L-\boldsymbol{a}=\boldsymbol{t} \boldsymbol{a}$
$<$ ITR $>$ drink-PJ=1P.ICL.NOM
"Let's drink! "

| $\boldsymbol{t} \boldsymbol{a}=b i L i n-a w$ | $k<e m>a$ |
| :--- | :--- |
| 1P.ICL.GEN=leave-TR1 | $<$ ITR $>$ say |

"They said, 'let's leave him."
$\begin{array}{lll}k<e m>a-\boldsymbol{a}=k u=\text { Diya } \quad \text { pa-ka-laDam } & \text { kanmu } \\ \text { ITR-tell-PJ=1S.NOM=IMPF CAUS-ka-know } & \text { 2P.OBL } \\ \text { "I want to say (something) to inform you." } & \end{array}$

The verb in a negative hortative sentence undergoes $C a$ - 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-renay "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 those sentences is based on the context and on intonation.
$a D i=t a \quad m a-r a-r e n g a y$
NEG=1P.ICL.NOM ITR-RED-tell
"Let's not tell."
$a D i=t a \quad r a-r e n g a y$
NEG=1S.ICL.NOM RED-tell
"We won't tell."

## CHAPTER 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), point 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: ${ }^{2}$

[^63](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.
(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 $\S$ 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 $=t a \quad m$-uka pulang- $a \quad m$-asal
run=1P.ICL.NOM ITR-go help-PJ ITR-again
"We ran to help again."

[^64]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 $\S 13.1$ 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 $\S 13.2 .2$, 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 |
|  |  | ACT \& 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-eat ${ }^{5}$ |
| "We went north to worship." |  |

(4) Liyus-u=ku pia-La'uD
turn-TR1:IMP=1S.NOM face-east
"Turn me to face the east."
(5)

| $\boldsymbol{t} \boldsymbol{u}=$ Ta-Tual-ay | me-na'u | $i$ | sabak |
| :--- | :---: | :--- | :--- |
| 3.GEN=RED-open-TR2 | ITR-see | LOC | inside |
| "They open it to look inside." |  |  |  |

$\boldsymbol{t u}=$ pilang-aw itemutaw m-и-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.

| a. | kurerutung $=\boldsymbol{k} \boldsymbol{u}$ | m-ieDeng | kana | tutuy |
| :--- | :--- | :--- | :--- | :--- |
| be.next.to=1S.NOM | ITR -sleep | DF.OBL | puppy |  |
|  | "I leant against the puppy to sleep." |  |  |  |

[^65]b. *kurerutung mi-eDeng=ku kana tutuy

| a. | $\boldsymbol{t u}=$ =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 $=k u / t u=$ 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.
a. kurerutung=ku, m-ieDeng=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."

The different translations given in (7)-(8) and (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, 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:

| a. | Dua-Dua | me-na'u- $a$ | $\boldsymbol{a}$ | Tau |
| :--- | :--- | :--- | :--- | :--- |
| RED-come | ITR-see-PJ | ID.NOM | person |  |

b. Dua-Dua a Taи me-na'и-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 allow to intervene between the verbs is when V1 acts as an intensifier and expresses the meaning "very". For instance:

| a. pakameli | ma-sepel | $\boldsymbol{n a}$ | walak | kanDu |
| :--- | :--- | :--- | :--- | :--- | :--- |
| very | ITR-sorry | DF.NOM | child | that.OBL |
|  | "The child is very sorry about that." |  |  |  |

In a same-subject II SVC, the shared arguments can appear either between two verbs or after V2, as shown in (12).
$\begin{array}{lllcc}\text { a. } & t u=\text { 'eT'eT-anay } & \text { mu-sulud } & \boldsymbol{n a} & \text { katengaDawan } \\ & \text { 3.GEN=jostle-TR3 } & \text { ACAUS-push } & \text { DF.NOM } & \text { chair }\end{array}$
"The chair was jostled and pushed away."
b. tu='eT'eT-anay na katengaDawan mu-sulud

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):
a. tu=Ta-Tual-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=Ta-Tual-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 $t u=$, 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.

> a. tu=kibuLas-aw Da Tau iababulu 3.GEN=borrow-TR1 ID.OBL person LOC Pabulu m-uka m-alup-a ITR-go ITR-hunt-PJ
> "People from Pabulu borrow it (the dog) to go hunting."
> b. tu=kibuLas-aw m-uka m-alup-a Da Tau 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.

| a. | tu=pilang-aw itemutaw | kana walak |
| :---: | :---: | :---: |
|  | 3.GEN=bring-TR1 SG.NOM his.grandparent | DF.OBL child |
|  | Dua i timuL |  |
|  | ITR.come LOC south |  |
|  | "The child brought his grandmother here to the south." |  |
| b. | tu=pilang-aw kana walak Dua i timuL | $i$ temutaw |
| c. |  | kana walak |
| a. | tu=pulang-ay i nanali kan | pilay $b<e n>a s e$ |
|  | 3.GEN=help-TR1 SG.NOM my.mother SG.OBL | Pilay <ITR>wash |
|  | "Pilay helped my mother wash clothes." |  |
| b. |  | nanali |
| c. |  | 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-TekeL-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.
a.
m-uka ki-pa-TekeL-a
Da enay
ITR-go get-CAUS-drink-PJ
ID.OBL water
"They went to ask for water to drink."
b. ${ }^{*} m-u k a$ Da enay ki-pa-TekeL-a

| a.tu $=$ Lugas-ay Datu | 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 Datu 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 in SVCs. The main findings are summarised in Table 13.2.

Table 13.2: The manifestation of verbal categories in SVCs

|  | Mood |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Transitivity |  | Indicative |  | Non-indicative |  | Aspect |  | NEG |
|  | TR | ITR | Realis | Irrealis | IMP | PJ | PROG | DUR |  |
| V1 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| V2 | $\times$ | $\checkmark$ | $\checkmark$ | $\times$ | $\times$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\times$ |

### 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) | $\boldsymbol{k a}$-ruwasta=la | $\boldsymbol{b}<$ en $>$ arsa | kana | unan |
| :---: | :---: | :---: | :---: | :---: |
|  | ka-can=1P.NOM=PERF | $<$ ITR $>$ slash | DF.OBL | snake |
|  | "We can slash the snake." |  |  |  |
| (20) | $\boldsymbol{t a}=\boldsymbol{b a r s a} \boldsymbol{a} \boldsymbol{w} \boldsymbol{w}$ | unan |  |  |
|  | 1P.GEN=slash-TR1 D | OM snake |  |  |
|  | "We slashed the snake." |  |  |  |

Aikhenvald (2003:80) 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.

[^66](21) $D a$-Dua=mu $k i-p a-l a D a m-a \quad D a \quad k a k u a y a n a n$

RED-come=2P.NOM PASS-CAUS-know-PJ ID.OBL tradition
"You will come to get knowledge about traditions."

| $* D a-D u a$ | $k i-a-p a-l a D a m-a$ |
| :--- | :---: |
| 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) Liyus-u piya-La'uD
turn-TR1:IMP face-east
"Turn it to the east!"
(24) aDi 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 $-a$.
(25) $m$-uka=dar $\quad T<e m>a k a w-a \quad D a \quad$ asepan

ITR-go=FREQ <ITR>steal-PJ ID.OBL sugarcane
"They often went to steal sugarcanes."

### 13.2.2.3 Aspect

Huang (2000:164-165) and Teng (1997:26) state that in Puyuma the aspectual and modal frames are indicated via V1 exclusively. However, I have found quite a few examples in which V2 are 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 ITR marker), and in (27), a repetitive meaning is signalled by CVCV reduplication.
puari $\quad \boldsymbol{k}<\boldsymbol{e m}>\boldsymbol{a}$-kawang $\quad$ tu $=$ wadi
slow $\quad<$ ITR $>$ RED-walk 3.PSR=younger.sibling
"Their younger sister was walking slowly."

```
g<em>ilgil 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 $=l a$ is sometimes attached to V2, as shown in (28) and (29).
(28) aw sa<'eru>'eru mi-sasa=la taytaw
and $\quad<$ RED $>$ laugh ITR.have-one=PERF 3S.NEU
"And she laughed and laughed by herself."
(29)

| $k a r u w a$ | $m-u b i i=l a$ |
| :--- | :--- |
| can | ITR-fly=PERF |
| "He can fly already." |  |

### 13.2.2.4 Negation

The negator $a D i$ never precedes the second verb. In other words, it is impossible for V2 to be negated separately.

| $\boldsymbol{a} \boldsymbol{D i = t a}$ | $\boldsymbol{k}<\boldsymbol{e m}>\boldsymbol{a}$-kasu | Da | bekaL-an $\boldsymbol{m}$ - $\boldsymbol{u}$-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 are underlined in the examples

### 13.3.1 SVCs vs complement clauses

Complementation is discussed in Chapter 14. The differences between a complement clause and an SVC are that: (i) a complement clause is always introduced by the complementiser $D a$, 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).

| $\underline{\text { ma-laDam }} \quad[\boldsymbol{D a}$ | ala | $\underline{\text { m-inaTay }}$ | tu=walak] |  |
| :--- | :--- | :--- | :--- | :--- |
| ITR-know | COMP | maybe | ITR-die | $3 . \mathrm{PSR}=\mathrm{child}$ |


| $t u=p a-L a d a m-a w$ | $n a D u$ | $n a$ | lalak | [Da |
| :--- | :---: | :---: | :---: | :--- |
| 3.GEN=CAUS-know-TR1 those.NOM | DF.NOM | child | COMP |  |

 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."
pakameli ma-sepel kan temutaw [Da aru
very ITR-sorry SG.OBL his.grandparent COMP will

| $\underline{k i}<a>$ naTay $=l a$ | $i$, | $\underline{\text { ma-uLep }}$ | $\underline{k<e m>\text { iyanger }]}$ |
| :--- | :--- | :--- | :--- |
| $\mathrm{k}<\mathrm{a}>$ 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."

$$
\begin{align*}
& \text { igeLa=ku=dar } \quad\left[\begin{array}{llll}
D a & a D i=k u & \underline{\text { maruwa }} & \left.\frac{b<e n>a ' a w}{}\right] \\
\text { embarrassed=1S.NOM=FREQ COMP NEG=1S.NOM can } & & <\text { ITR>save } \\
\text { "I often felt embarrassed that I couldn't save it." }
\end{array}\right. \tag{34}
\end{align*}
$$

### 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 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.

| $t u=t i k u s-a y$, | (aw) | $t u=k e r e t-a y$ | $t u=p a ' a$ |
| :--- | :--- | :---: | :---: |
| 3.GEN=tide-TR2 | and | 3.GEN=cut-TR2 | 3.PSR=leg |

"They (the Puyuma) tide them (the Tipul), and they (the Puyuma) and cut their (the Tipul) legs."

```
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
Daniam 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:

| $a D i$ | $\boldsymbol{m}$-ua'i | $\boldsymbol{m}$-ieDeng |
| :--- | :--- | :--- |
| NEG | ITR-willing.to | ITR-sleep |

"It (the dog) was not willing to lie down."
$\begin{array}{lllll}\text { aDi=Diya } & \boldsymbol{t}<\boldsymbol{e} \boldsymbol{m}>\boldsymbol{a l a m} & \boldsymbol{k}<\boldsymbol{e} \boldsymbol{m}>\boldsymbol{a r a t} & \text { Da } & \text { lalak } \\ \text { NEG=IMPF } & <\text { ITR>-try } & <\text { ITR>bite } & \text { ID.OBL } & \text { child }\end{array}$
naniam
suan
DF.NOM/1P.PSR dog
"Our dog has never tried to bite kids."
(40) karuwa b<en>u'uT Da aru a-araw kanta Dekal
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).
aDi m-ua'i mu-pesi-pesik Datu
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."
"Lit. It (the dog) kept running after my mother."
$a D i=$ Diyan $\quad i, \quad$ maruwa=la $\quad \boldsymbol{k}<\boldsymbol{e m}>\boldsymbol{a}$-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:

$$
\begin{array}{ll}
p<e n>i y a^{7}=t a & p a-r a g a n  \tag{43}\\
<\text { ITR }>\text { finish }=1 \text { P.NOM } & \text { CAUS-up }
\end{array}
$$

"We finish building it up."

| m-ungsal $=l a$ | 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.

[^67]
### 13.4.3 Modificational SVCs ${ }^{8}$

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 (i.e. Starosta 1988; Huang 1995; and Chang 2006a, 2006b) that concepts that in other languages would be encoded as adverbial modifiers are in Formosan languages often encoded as verbs, usually forming an SVC construction in which V2 denotes the main event and V1 the modifying concept. In $\S 4.5 .5$, a closed word class, "adverbs", is distinguished. I have demonstrated how those 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 (i.e. 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.

This 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.

The 'adverbial' V1s either encode the degree to which V2 is true, i.e. saLaw 'very' in (45) and pulabus 'almost' in (46), or the internal temporal structure of the event denoted by V2, i.e. marayas 'often' in (47), payas 'immediately' in (48), masal 'again' in (49), and paeTeng 'for a long time' in (50), or the actor's attitude towards the action of V2, i.e. pasiesi 'reluctant' in (51) and paseket 'serious' in (52).

[^68]$\boldsymbol{s a L a w} \boldsymbol{w}^{9}=t a \quad$ ma-uLep
very=1P.NOM ITR-tired
"We were very tired."
pula-pulabus $=k u \quad$ m-inaTay
RED-almost=1S.NOM ITR-die
"I almost died."
marayas $=k u \quad t<e m>$ engeD $\quad D a \quad$ Dipung
often=1S.NOM <ITR>-attack ID.OBL Japanese
"I often attacked the Japanese."
(48) pa-payas=yu m-inaTay

RED-right.away ITR-die
"You will die immediately."
$\boldsymbol{m}$-asal ${ }^{\mathbf{1 0}}=l a \quad D u a \quad i, \quad k u<a>$ renang $=k u$
ITR-again=PERF ITR.come TOP <a>follow=1S.NOM
"When they come again, I will follow."
(50) paeTeng kiumal kanku
a.long.time ITR.ask 1S.OBL
"He asked me for a long time."
pasiesi=ta m-ekan
reluctantly=1P.NOM ITR-eat
"We ate reluctantly."

[^69](52) paseket ki-karun
seriously ITR.get-job
"He worked seriously."

Notice that in (46), if the subject is manifested as a free NP, as in (53), it cannot intervene between saLaw and V2 (see also §13.2.1).
a. saLaw ma-uLep $\boldsymbol{i}$
very ITR-tired SG.NOM

## nanali

my.mother
"My mother was very tired."
b. *saLaw i nanali ma-uLep

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 indicates that they are possibly (becoming) adverbs, and this makes them exceptional among the other modificational SVCs. ${ }^{11}$

| an | kur-panana=yu=Diya | m-asal | $i$, |
| :--- | :---: | :--- | :--- |
| if | get-hurt=2S.NOM=IMPF | ITR-again | TOP |
| "If you get hurt again," |  |  |  |

aDi m-utu-Tau paseket

NEG ITR-become-person completely
"It has not been completely shaped."

| $a D i$ | tu=na'u-i | $n a$ | 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), it can be used transitively, as in (58), it can attract clitics, as in (57), and it can stand on its own.

| (57) | $\boldsymbol{p a}<\boldsymbol{s} \boldsymbol{a}>\boldsymbol{s e k e t}=k u$ | Da | ruma' |
| :---: | :---: | :---: | :---: |
|  | $<$ RED $>$ seriously=1S.NOM | M ID.OBL | house |
|  | "I will concentrate on (building) the house." |  |  |
| (58) | tu=paseket-ay na | nantu | kiakarunan |
|  | 3.GEN=seriously-TR2 D | DF.NOM/3.PSR | job |
|  | "He concentrated on his | s 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 |
| :--- | :--- |
| saLaw" "very" | sasaLaw |
| puLabus"almost" | puLaLabus |
| marayas"often" | kararayas |
| payas"right away" | papayas |
| masal "again" | aasal |
| paeTeng "for a long time" | paaeTeng |
| paseket"completely, seriously" | pasaseket |

$t u=a s a l-a w=D i y a$
3.GEN $=$ again-TR1=IMPF
"He did/tried it again."

[^70]\[

(60) $$
\begin{array}{ll}
a D i=t a & p<e n>a<a>e \text { Teng } \\
\text { NEG=1P.NOM } & <\text { ITR }><\text { a }>\text { long.time } \\
\text { "Let's not stay for a long time." }
\end{array}
$$
\]

In addition to paseket 'seriously' in (58) and asal 'again' in (59), paeTeng 'for a long time' in (61) and pulabus 'almost' in (62) can take transitive forms. For instance:
(61) $t u=$ paeTeng- $a y=k u$
kiumal
3.GEN=a.long.time-TR2 $=1$ S.NOM ITR.ask
"I was asked (by him/her/them) for a long time."
(62) $k u=p u l a b u s-a w \quad p$-inaTay

1S.GEN=almost-TR1 CAUS-die
"I almost kill 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.

b. ku=paeTeng-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.
paseket ki-karun
seriously get-job
"He worked seriously."

| 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-Daya "face west", piya-isaT" "face up", and piya-Taran "face out", as shown in (66) and (67).
(66) tu=riap-anay piya-timuL $i$, m-utu-kekeng
3.GEN=scatter-TR2 face-south TOP ITR-become-plain
"He scattered it to the north, and it became a plain."
(67) Liyus-u piya-La'uD
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 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) $a D i=t a \quad k<e m>a-k a s u \quad D a \quad$ bekaL-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."
$t u=p a D e k-a w \quad$ tu $=$ wadi $\boldsymbol{m}$ - $\boldsymbol{r u m a} \boldsymbol{a}$
3.GEN=carry.on.back-TR1 3.PSR=younger.sibiling ITR-go-house "He (the elder) carried his younger brother on 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:
$p<e n>a n g u T$ Da dare', aw piya-Daya 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,..."
$m-u$-ami=ta pa-ekan

ITR-go-north=1P.NOM CAUS-eat
"We went to north to worship."


The two verbs muka "go" and Dua "come" behave differently from the other directional purposive SVCs in that V2 in this construction takes a projective marker $-a(\S 6.3 .2 .1)$.
(73) $\begin{array}{llllc}a w & a D i=k u & k a r u w a & \text { m-uka } & \boldsymbol{b}<\boldsymbol{e n}>\boldsymbol{a} \text { 'aw- } \boldsymbol{a} \quad i, \\ \text { and } & \text { NEG=1S.NOM } & \text { can } & \text { ITR-go } & <\text { ITR>-save-PJ TOP }\end{array}$ "And I couldn't go to save it."

| Da-Dua=mu $\quad \boldsymbol{k i}$-pa-laDam-a | Da | 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 Dua "come" also denote deictic meaning, indicating the action is to be carried out "away from" and "toward" the speaker.

| payas | mar-beLias | $\boldsymbol{m}$-uka | $\boldsymbol{m}$-aya-a | kantu |
| :--- | :--- | :--- | :---: | :---: |
| right.away | RECIP-turn | ITR-go | ITR-find-PJ | DF.OBL/3.PSR |

wadi
younger.sibiling
"They returned right away to go find their sister."

| Dua=dar | $i$ | takesi-an | m-aya-a | kanku |
| :--- | :--- | :--- | :--- | :--- |
| come=FREQ | LOC | study-NMZ | ITR-seek-PJ | 1S.OBL |

"It often came to the school to look for me."
Durative aspect may occur in V2, but still the projective marker - $a$ cannot be omitted. For example:
(77) muama=yu=la Dua kire-Tepu-Tupung-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 the posture.
(78) gerelepan na gung m-ekan Da TaLun lower.the.head DF.NOM ox ITR-eat ID.OBL grass
"The ox lowered its head to eat grass."
(79)

| kurudung=ku | m-ieDeng | 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.
$t u=$ tara-baylang-anay $=t a \quad t<e m>u b a n g$
3.GEN=use-Taiwanese-TR3=1P.NOM <ITR $>$ answer
"They use Taiwanese to answer us."

| mi-TaTingaL=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) | $i D u$ | na | walak=la | $i$, | kurenang=la |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | that.NOM | DF.NOM | child=PERF | TOP | follow=PERF |
|  | $\boldsymbol{s}<$ em>anga |  |  |  |  |
|  | $<$ ITR $>$ make |  |  |  |  |
|  | "That child did as she said." |  |  |  |  |
| (83) | $t i=p a-m a T a '-a y=y u \quad m a-r e n g a y ~$ |  |  |  |  |
|  | 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, 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 $p a-/ p-/ p u$ - (§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.
$\boldsymbol{t u}=\boldsymbol{p u}$-lawad-aw mu-La'uD kana enay kaDi
3.GEN=CAUS-flood-TR1 ACAUS-drown DF.OBL water here
ami
north
"They drowned her in the water here in the north."
$\boldsymbol{t u}=\boldsymbol{p a}$-laDam-aw $\quad D a \quad$ LangeTi 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-Tereb
3.GEN=shake-TR1 ACAUS-fall
"It (the wind) shook (the tree) down."

| $\boldsymbol{t} \boldsymbol{u}=\boldsymbol{b} \boldsymbol{a} \boldsymbol{u}-\boldsymbol{b a} \boldsymbol{u} \boldsymbol{i}-\boldsymbol{a} \boldsymbol{w}=\boldsymbol{k} \boldsymbol{u}$ | $\boldsymbol{m}-\boldsymbol{u} \boldsymbol{k} \boldsymbol{a}$ | $i$ | 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.

| sagar | m-ekan | Data | $b<$ in>eray | Da | akan-an |
| :--- | :--- | :--- | :--- | :--- | :--- |
| like | ITR-eat | ID.OBL/1P.PSR | $<$ PERF $>$ give | ID.OBL | eat-NMZ |

"They like to eat the food we gave."
$\boldsymbol{k a}$-uLid=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-Tepa "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 in repetitive aspect, as shown in (92) and (93).

| mi-Tepa | pa-kan | kanDu | kan | Darungaw |
| :--- | :--- | :--- | :--- | :--- |
| have-aim | CAUS-eat | that.OBL | SG.OBL | Darungaw |
| "It was aiming to worship Darungaw." |  |  |  |  |


| payas $=k u$ | $m-u k a$ | $i$ | taybak ki-karun- $a$ | $D a$ |
| :--- | :--- | :--- | ---: | :--- |
| right.away=1S.NOM | ITR-go | LOC | Taipei get-job-PJ | ID.OBL |

mi-Tepa $k<e m>$ uru-kuruT $\quad D a \quad$ seikitan
have-aim <ITR>RED-dig ID.OBL coal
"I went to Taipei right away to work as a mineworker."
(93) a mi-Tepa $b<e n>a$-base $i \quad$ 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." But lexicalisation seems not to be very productive in Puyuma, and (94) is the only idiomatic lexicalisation I have found. Here the sequence of ma-uLep "tired" and ki-anger "have a thought" has been lexicalised in the sense of "worry (that something might happen)".

| $\boldsymbol{m a} \boldsymbol{a} \boldsymbol{u L e} \boldsymbol{p}=$ Diya | $\boldsymbol{k}<\boldsymbol{e} \boldsymbol{m}>\boldsymbol{i}$-anger | Datu | kasanan-an |
| :--- | :--- | :--- | :--- |
| ITR-tired=IMPF | $<$ ITR>-get-thought | ID.OBL/3.PSR | get.lost-NMZ |
| "She's still worrying that he might get lost." |  |  |  |

## CHAPIER 14

## COMPLEMENS 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 $=y u \quad D a$ angaD-an i, getiL kaDini if not.exist=2S.NOM ID.OBL breathe-NMZ TOP pinch here "If you are out of breath, pinch here."
(2) ala m-inaTay 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."

$$
\begin{array}{llccc}
\text { ma-laDam } & \text { Da } a l a & \text { m-inaTay } & \text { tu=walak }  \tag{3}\\
\text { ITR-know } & \text { COMP } & \text { maybe } & \text { ITR-die } & \text { 3.PSR=child } \\
\text { "She knew that maybe her child was dead." }
\end{array}
$$

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) subcategorizes 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 SVCs (as in (6)).

| (4) | ma-laDam | $\boldsymbol{D a}$ | $\boldsymbol{a l a}$ | m-inaTay | $\boldsymbol{t u}=\boldsymbol{w a l a k}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | ITR-know | COMP | maybe | ITR-die | $3 . \mathrm{PSR}=$ child |

"She knew that maybe her child was dead."

[^71]\[

$$
\begin{array}{llll}
\text { ma-uLep=Diya } & k<e m>\text { i-anger } & \text { Datu } & \text { ka-sanan-an } \\
\text { ITR-tired=IMPF } & <\text { ITR>get-thought } & \text { ID.OBL/3.PSR } & \text { ka-stray-NMZ } \\
\text { "She's still worrying about his possibly getting lost." } & \tag{6}
\end{array}
$$
\]

| ma-ranger | $\boldsymbol{m}$-araw | $\boldsymbol{k a n D u}$ | kana | Dekal |  |  |  |
| :--- | :--- | :---: | :--- | :--- | :---: | :---: | :---: |
| ITR-want | ITR-rob | that.OBL | DF.OBL | village |  |  |  |
| "They wanted to rob that village." |  |  |  |  |  |  |  |

Of the three, SVCs and nominalisation 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 type 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. Nominalisation 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 $\S 14.2$.2 and $\S 14.2 .3$ I will discuss the two less productive strategies of nominalisation and SVCs. §14.3 will discuss types complement-taking verb.

### 14.2.1 Complement clauses

### 14.2.1.1 Complementiser Da

A complementiser is usually a word, a particle, an affix, or a clitic whose function is to help identify as a complement the construction it associates with. ${ }^{2}$ A sentence-like complement is always introduced by $D a$ in Puyuma, which is also an

[^72]indefinite oblique noun phrase marker (§4.3.3.2.2). ${ }^{3}$ Compare the uses of $D a$ in the following sentences. In (7) Da precedes a noun, and in (8) it precedes a clause. $D a$ is glossed as "ID.OBL" when it precedes a noun, and "COMP" when it precedes a clause.
(7) $k<$ em>uruT Da 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-laDam | $\boldsymbol{D a}$ | ala | m-inaTay |
| :--- | :--- | :--- | :--- | :--- |
| 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 $\mathrm{S}, \mathrm{A}, \mathrm{O}$ 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 (4) and (5) both verbs are intransitive; the only core argument in each sentence is the actor, and thus the elements marked by $D a$ 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:

```
\(\boldsymbol{t u}=s u L u d-a n a y=\boldsymbol{t a} \quad D \boldsymbol{a} \quad\) kurenang \(=l a \quad D a\)
    3.GEN=push-TR3=1P.NOM COMP follow=PERF ID.OBL
    Tau maTina
    person big
    "They pushed us to grow up with others."
```

[^73]In this sentence the verb is transitive, and the two core arguments are the genitive actor $t u=$ and the nominative undergoer $=t a$; the complement clause $D a$ clause is oblique.

### 14.2.1.2 The behaviour of verbs in complement clauses

There is no restriction on the voice on 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:

| ma-Da-Dayar | $n a D u$ | $n a$ | miaDua | $n a$ |
| :--- | :--- | :--- | :--- | :--- |
| ITR-RED-discuss | those.NOM | DF.NOM | two | DF.NOM |



RECIP-marry COMP ITR-go-far-PJ=1P.NOM=PERF here
"The couple were saying to each other, 'let's get away from here."

| $\boldsymbol{t u}=\boldsymbol{p a}$-Ladam-aw $\boldsymbol{w}$ | nantu lalak | [Da |
| :---: | :---: | :---: |
| 3.GEN=CAUS-know-TR1 those.NOM | DF.NOM/3.PSR child | COMP |
| $\boldsymbol{t u}=\boldsymbol{p a - T e k e L - a y = m u ~} \quad$ - $\boldsymbol{l}^{\text {a }}$ | enay $i, \quad a D i$ | Ta-TekeL] |
| 3GEN=CAUS-drink-TR2=2P.NOM ID | OBL water TOP NEG | RED-drink |
| "She reminded her children, 'If she a drink.'" | ks you to drink water, |  |

In (10) both the matrix verb maDaDayar "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 paLadamaw "to let know" and the verb in the complement clause paTekeLay "to let drink" are manifested as transitive because both of them have a definite undergoer (walak "child" in the matrix clause, and $=m u$ "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. So even when the matrix verb is manifested as realis mood a verb in the complement can be manifested as irrealis.

| (12) | $i D u$ | $n a$ | walak $=l a$ | $i$, | pameli | ma-sepel |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | that.NOM | DF.NOM | child=PERF | TOP | very | ITR-sorry |


| kan | temutaw | Da aru | $\boldsymbol{k} \boldsymbol{k} \boldsymbol{i}<\boldsymbol{a}>\boldsymbol{n a T a y}=\boldsymbol{l a}$ | $i$, |
| :--- | :--- | :--- | :--- | :--- | :--- |
| SG.OBL | his.grandma | COMP will | $\mathrm{ka}-<\mathrm{a}>$ die=PERF | TOP |


| ma-uLep $=$ Diya | $k<e m>i$-anger | Datu $\quad k a$-sanan-an |
| :--- | :--- | :--- | :---: |
| ITR-tired=IMPF | $<$ 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."
tu=kiumal-ay Da 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):

| $a D i \quad k$ | ka-a-uLep | $k<e m>i$-anger | Da | $a D i=y u$ |
| :---: | :---: | :---: | :---: | :---: |
| NEG k | ka-RED-tired | $<$ ITR $>$ get-thought | COMP | NEG=2S.NOM |
| ka-ruwa | $a \quad k i-k a D u$ | $u$ kanDu | kana | ruma' |
| ka-can | get-live | that.OBL | DF.OBL | 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.

[^74]
### 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 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 mention 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 (12) suan "dog" is both the subject of the main predicate na'u "see" and the complement predicate pinaTay "kill". Recall that there is no third person nominative bound pronoun, and thus there is no relevant deletion for us to detect.

| $k u=n a ' u-n a ' u-a y$ | $\boldsymbol{n a}$ | suan $\quad[D a$ |
| :--- | :--- | :--- | :--- |
| 1S.GEN=RED-see-TR2 | DF.NOM | dog COMP |
| $t u=p-$ inaTay-aw | $D a$ | kia-suan] |
| 3.GEN=CAUS-die-TR1 | ID.OBL | get-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 $=t a$ is both an argument in the matrix clause and in the complement clause.

| tu=suLud-anay=ta $\quad\left[\begin{array}{lll}\text { Da } & \text { kurenang=la } & D a\end{array}\right.$ | Tau |  |  |
| :--- | :--- | :--- | :--- |
| 3.GEN=push-TR3=1P.NOM COMP | follow=PERF | ID.OBL | person |
| ma-Tina $]$ |  |  |  |
| ITR-big |  |  |  |
| "They pushed us to grow up with others." |  |  |  |

Noonan (1985:66) says that the application of equi 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/S/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 $=k u$ can be omitted.

| igeLa=ku=dar | kanDi | kana | suan | [Da |
| :--- | :---: | :---: | ---: | :--- |
| embarrassed=1S.NOM=FREQ this.OBL | DF.OBL | dog | COMP |  |
| aDi=ku | ma-ruwa | $\left.b<e n>a^{\prime} a w\right]$ |  |  |
| NEG=1S.NOM | ITR-can | $<$ ITR $>$ save |  |  |

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 where 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.
(18) ma-laDam=ku kan pilay $i\left[D a \quad m\right.$-ekan $D a$ kuraw $\left.\emptyset_{i}^{\text {NoM }}\right]$ ITR-know=1S.NOM SG.OBL Pilay COMP ITR-eat ID.OBL fish "I know that Pilay eats fish."

[^75]```
ma-laDam=ku kana kuraw i [Da tu=LipuT-aw 焐 NoM
ITR-know=1S.NOM DF.OBL fish COMP 3.GEN=wrap-TR1
Da 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. it 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-laDam=ku kan nanali $\boldsymbol{i}_{\boldsymbol{i}} \quad\left[\mathrm{Da} \quad \boldsymbol{t u}_{\boldsymbol{i}}=\right.$ LipuT-aw=la

ITR-know=1S.NOM SG.OBL my.mother COMP 3.GEN=wrap-TR1=PERF na kuraw $\left.\varnothing_{i}^{O B L}\right]$

DF.NOM fish
"I know that my mother has wrapped the fish."
(21) *ma-laDam=ku Da kuraw ${ }_{i} \quad[D a \quad$ tu=LipuT-anay

ITR-know=1S.NOM ID.OBL fish COMP 3.GEN=wrap-TR3
na bira' $\left.\boldsymbol{\varnothing}_{i}{ }^{\text {OBL }}\right]$
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 | $[D a$ | me-reTa $\quad \varnothing$ | $i$ | takesian $]$ |
| :--- | :--- | :--- | :--- | :--- | ---: |
|  | until=1S.NOM | COMP | ITR-put.down | LOC | school |

"Until I finished my study."

In (22) the nominative clitic $=k u$ is not an argument in the matrix clause, but is an argument to the predicate mereTa "put down" in the complement clause.

Table 14.1 is a brief summary of the above discussion.

Table 14.1: syntactic processes in complementation

|  | $\mathrm{ACT}^{\mathrm{NOM}}$ | $\mathrm{ACT}^{\text {OBL }}$ | $\mathrm{UG}^{\text {NOM }}$ | $\mathrm{UG}^{\text {OBL }}$ |
| :--- | :---: | :---: | :---: | :---: |
| Equi deletion | $\checkmark$ | $\boldsymbol{x}$ | $\mathbf{x}$ | $\mathbf{x}$ |
| Clitic climbing | $\checkmark$ | $\boldsymbol{x}$ | $\mathbf{x}$ | $\mathbf{x}$ |
| Raising | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\mathbf{x}$ |

### 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.
$\begin{array}{llll}\text { ma-uLep }=\text { Diya } & k<e m>\text { i-anger } & \text { Datu } & \boldsymbol{k} \boldsymbol{a} \text {-sanan-an } \\ \text { ITR-tired=IMPF } & <\text { ITR }>\text { get-thought } & \text { ID.OBL/3.PSR } & \text { ka-stray-NMZ }\end{array}$
"She's still worrying about his getting lost."
ma-uLi-uLid=ta [Da ka-kuda-an

ITR-RED-don't.know=1P.NOM ID.OBL RED-how-NMZ
Data ki-a-ma-Dayar-an Da Tau]
ID.OBL/1P.PSR
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 $\langle a\rangle$ in kiamaDayaran "get a conversation" also gives an irrealis reading. In (25) the infix $<$ in $>$ (§7.3.1) and $C a$ - reduplication (§3.5.2) give a perfective and irrealis reading respectively.

[^76]| pakumau | Datu | $s<\boldsymbol{i n}>$ a-saLem | aw | Datu |
| :--- | :--- | :--- | :--- | :--- |
| confirm | ID.OBL/3.PSR | $\mathrm{RED}<$ PERF $>$ sow | and | ID.OBL/3.PSR |

ika-u<La>Lane
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.


Da eraw
ID.OBL wine
"He persuaded me to drink wine."

| $t u=$ rengarengay- $a w=k u \quad$ | $D a$ | pa-ka-aDi-an ${ }^{7}$ |
| :--- | :--- | :--- |
| 3.GEN=persuade-TR1=1S.NOM | ID.OBL | CAUS-ka-NEG-NMZ |
| $T<e m>e k e L ~$ $D a \quad$ eraw  <br> $<$ ITR $>$ drink ID.OBL wine  |  |  |
| "He persuaded me not to drink wine." |  |  |

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).

[^77]me-nga-ngara
Daku
ka-inaba-an
ITR-RED-wait
ID.OBL/1S.PSR
ka-good-NMZ
"He was waiting for my getting well."

| me-nga-ngara=ku | Datu | ka-inaba-an | $\boldsymbol{k a n}$ |
| :--- | :--- | :--- | :---: |
| ITR-RED-wait=1S.NOM | ID.OBL/3.PSR | ka-good-NMZ | SG.OBL |

pilay
Pilay
"I was waiting for Pilay's getting well."
(30)
ma-rengay- $a=k u=$ Diya $\quad D a \quad$ tua-abay-an Da
ITR-tell-PJ=1S.NOM=IMPF ID.OBL make-rice.cake-NMZ ID.OBL

## binariyaw

binariyaw
"I'll tell about the making of binariyaw rice cake."

In (28), the actor of the nominalised complement is ' $I$ ', and is manifested as an oblique possessive pronoun Daku "my"; in (29) the actor is "Pilay", and in addition to an oblique possessive pronoun Datu "her/his/their", the NP kan pilay follows the nominalised complement. The patient of the nominalised predicate in (29) is binariyaw, which is marked by the oblique noun phrase marker $D a$.

### 14.2.3 The SVC complementation strategy

The characteristics and types of SVCs are discussed in Chapter 13. Dixon mentions 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 $D a$ clause complement. For instance:

| ma-ranger | m-araw | kanDu | kana | Dekal |
| :--- | :--- | :--- | :--- | :--- |
| ITR-want | ITR-rob | that.OBL | DF.OBL | village |
| "They wanted to rob that village." |  |  |  |  |


| ma-ranger=ku | $\boldsymbol{D a} \quad$ 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 $=k u$, 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 the discussion, only those types that that are more productive in Puyuma and have been thoroughly discussed in the literature are discussed. Table 14.2 is a summary of the types of complement-taking verbs following Noonan (1985) and their types of complementation strategy.

Table 14.2: Types of complement-taking 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 clause.
(33) me-na'u Da ma-la-lemes=la naDu na lalak ITR-see COMP ITR-RED-disappear=PERF those.NOM DF.NOM child "She saw the children were going to disappear."

| $k u=n a ' u-n a ' u-a y$ | $n a$ | suan | $D a$ | $t u=p-i n a T a y-a w$ |
| :--- | :--- | :--- | :--- | :--- |
| 1S.GEN-RED-see-TR2 | DF.NOM | dog | COMP | 3.GEN=CAUS-die-TR2 |

Da 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 $D a \quad$ 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?'"

| ma-Da-Dayar | $n a D u$ | $n a$ | miaDua | $n a$ |
| :--- | :--- | :--- | :--- | :--- |
| ITR-RED-discuss | those.NOM | DF.NOM | two | DF.NOM |

mar-kataguin $\quad \boldsymbol{D} \boldsymbol{a} \quad m$-u-dawil- $\boldsymbol{a}=\boldsymbol{t} \boldsymbol{a}=l a \quad$ kaDini
RECIP-marry COMP ITR-go-far-PJ=1P.NOM=PERF here
"The couple were discussing (and saying), 'Let us 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 $=y u$, and first person inclusive pronoun $=t a$ respectively.

The only utterance verbs found to take a nominalised complement are bati "tell (a story)" and marengay "tell, recount". For example:

$$
\begin{array}{lcl}
b<e n>a-b a t i=k u=D i y a & D a k u & k<i n>a-b a \text { 'aw-an }  \tag{37}\\
<\text { ITR }>\text { RED-tell=1S.NOM=IMPF } & \text { ID.OBL } / 1 S . P S R & <\text { PERF }>\text { ka-live-NMZ } \\
\text { "I'm telling about my life." } & &
\end{array}
$$

[^78]| ma-rengay- $a=k u=D i y a$ | $D a$ | tua-abay-an | $D a$ |
| :--- | :---: | :--- | :--- |
| ITR-tell-PJ=1S.NOM=IMPF | ID.OBL | make-rice.cake-NMZ | ID.OBL |
| binariyaw |  |  |  |
| binariyaw |  |  |  |
| "'l'l tell about the making of binariyaw 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-inaTay iDu na suan $k<e m>a$ dog TOP right.away ITR-die that.NOM DF.NOM dog <ITR>say "Sigasigaw was afraid, and he made a dog try on it, and it was said that the dog died right away."
(40) "iDi $i, \quad n u=k a-l a-l a D a m-a n \quad m$-u-ruma'
this.NOM TOP 2S.PSR=ka-RED-know-NMZ ITR-go-house
$i$ ruma'" tu=ka-aw i,
LOC house 3.GEN=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 clausal final position, and it seems that the verb and the direction 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, as in (41).

```
pakupana'an=ku Da amau a Tau a inaba'
believe=1S.NOM COMPCOP 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 $D a$ sagar $s<e m>e n a y ~ a w ~ m$-uarak
true COMP like $<$ ITR $>$ sing and ITR-dance
"It's true that she likes to sing and dance."
(43) kamawan $D a \quad t u=p a-k a-D u a-a w \quad$-inaTay kaniam
resemble COMP 3.GEN=CAUS-ka-two-TR1 ITR-die DF.OBL/1P.PSR
Tau i ruma,
person LOC house
"It's like it caused half of my family to die."
(44) kamawan $D a \quad p<$ in $>a$-Lada-Ladam
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:

$$
\begin{array}{lc}
\boldsymbol{p}<\boldsymbol{e} \boldsymbol{n}>\boldsymbol{i d y a}^{9}=t a & \text { pa-ragan }  \tag{45}\\
<\text { ITR }>\text { finish=1P.NOM } & \text { CAUS-erect } \\
\text { "We finished building (a building)." }
\end{array}
$$

[^79]```
(46)
\begin{tabular}{lllllc}
\(n a\) & \(a D i\) & \(p u<a>\) raket & \(i\), & palu & \(D a\) \\
DF.NOM & NEG & \(<\) a>concentrate & TOP & demarcate & COMP
\end{tabular}
    ma-'iDang, aDi=Diya ma-laDam
    ITR-old 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 readers may suspect that palu may not be 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 $=k u$ is an argument of mereTa "put down; finish".
palu=ku $\quad D a \quad$ me-reTa $i$ takesian
demarcate $=1$ S.NOM COMP ITR-put.down LOC school
"Until I finished my study."
$\boldsymbol{k} \boldsymbol{u}=$ palu-anay=Diya kaDi ku=ngai
1S.GEN = demarcate - TR3 $=$ IMPF here $1 \mathrm{~S} . \mathrm{PSR}=$ 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 about 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

[^80]actors of the complement predicate and the main predicate are the same, as shown in (49) and (50).
(49) ma-laDam Da ala m-inaTay tu=walak

ITR-know COMP maybe ITR-die 3.PSR=child
"She knew that maybe her child was dead."
(50) ma-laDam=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.
(51) ma-ranger $D a \quad p a-k u<a>$ renang $D a \quad$ Tau

ITR-want COMP CAUS-<a>follow ID.OBL person
"They hope that they can catch up with others."

| ma-ranger | m-araw | kanDu | kana | Dekal |
| :--- | :--- | :--- | :--- | :--- |
| 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.

| ma-ruwa- $a=k u$ | $m$ - $u L a$ 'esi |
| :--- | :--- |
| ITR-can-PJ=1S.NOM | ITR-succeed |
| "(I wish) I can succeed." |  |


| $a D i-a$ | Dua | $n a$ | $a l a$ |
| :--- | :--- | :--- | :--- |
| 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).
sagar ku<rena>renang kantu
like $<$ RED $>$ follow DF.OBL/3.PSR
wadi younger.sibling
"She liked going along with her brothers."
pameli ma-sepel kan temutaw Da aru
very ITR-sorry DF.OBL his.grandmother COMP will
$k i<a>n a T a y=l a \quad i, \quad m a-u L e p \quad k<e m>i$-anger
$<$ a $>$ die $=$ PERF TOP ITR-tired $<$ ITR $>$ get-thought
"He was very sorry for her grandmother that she's going to die but still worries."
$\underline{\text { ma-uLep=Diya } \quad \boldsymbol{k}<e m>\text { i-anger } \quad \text { Datu ka-sanan-an }}$
ITR-tired=IMPF <ITR>get-thought ID.OBL/3.PSR ka-get.lost-NMZ
"She's 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. $\S 9.2 .1$ ) 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.
ta=pa-Dua-aw kanta ruma,
1P.GEN=CAUS-come-TR1 DF.OBL/1P.PSR house
"We let them come to our house."

| $t u=\boldsymbol{b} \boldsymbol{a} u-b a \boldsymbol{u} \boldsymbol{i}-\boldsymbol{a} \boldsymbol{w}=k u$ | $m-u k a$ | $i$ | 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.

| pa-laDam- $u=k u$ | $D a$ | $t a-t i l i L-a n$ |
| :--- | :---: | :--- |
| 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 a illocutionary act. In (62) there is equi-deletion, as described in § 14.2.1.3.
(61) $t u=p a-L a d a m-a w n a D u$ nantu lalak $D a$
$\begin{array}{lrllll}\text { 3.GEN=CAUS-know-TR1 } & \text { those.NOM } & \text { DF.NOM/3.PSR child } & \text { COMP } \\ t u=p a-T e k e L-a y=m u ~ & D a & \text { enay } \quad i, \quad a D i & \text { Ta-TekeL }\end{array}$ 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)
$t u=s u L u d-a n a y=t a \quad D a \quad$ kurenang $=l a \quad D a \quad$ Tau
3.GEN=push-TR3=1P.NOM COMP follow=PERF ID.OBL person maTina
big
"They pushed us to grow up with others."

## CHAPIER 15

## $\mathcal{A D V E R B I A L}$ 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. Because in Puyuma both adverbial and coordinate constructions can code causal, conditional, temporal, and sequential relations between two events, 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-asaT na pasara'aD, aw, tu=aLak-aw
more-high DF.NOM Pasara'aD and 3.GEN=take-TR1
na barasa
DF.NOM stone
"The Pasara'aD family has a higher status, so they took the stone."

| an | $a D i=$ Diya | ma-laDam, | sagar | m-ekan | Data |
| :--- | :--- | :--- | :--- | :--- | :--- |
| when | NEG=IMPF | ITR-know | like | ITR-eat | ID.OBL/1P.PSR |

$b<$ in>eray $\quad D a \quad$ akan-an $\boldsymbol{i}$, m-ekan
$<$ REAL $>$ give ID.OBL eat-NMZ TOP ITR-eat
"When they didn't know and they liked the food we gave them, they ate."

a. | $k a-a<r a>r e ' e T=t a \quad$ an |
| :--- |
| $k a-<R E D>c r o w d e d=1 P . N O M ~$ |$\quad$ when many=1P.NOM

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, 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. ${ }^{2}$

| an $\quad s<$ em $>a$-sang $a=t a$ | $D a$ | derederan | $i$, |
| :--- | :--- | :--- | :--- | :--- |
| 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."
an tu=baLi-anay $i$, mu-Tereb
when 3.GEN=wind-TR3 TOP ACAUS-fall
"The wind blew, (so) it fell."

| an | sayma=ta | $i$, | $t a=k a-k i t e n g-a w$ |
| :--- | :--- | :--- | :--- |
| when | small=1P.NOM | TOP | 1P.GEN=ka-small-TR1 |

"If we are small in number, we would make it (youth house) small."

[^81]The subordinator an also has two free variants kan and ane, ${ }^{3}$ but of the three, an is the most common 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. 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 §8.3.1.

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.

| $m-u-$ ruma' $=l a \quad i$, | unian | $t u=$ walak |
| :--- | :--- | :--- | :--- |
| ITR-go-house=PERF TOP | not.exist | 3.PSR=child |
| "When he went home, his children were not there." |  |  |


| $t a=k a-a s a T-a w$ | $i$, | indang=ta | $D a$ | $a b u y$ |
| :--- | :--- | :--- | :--- | :--- |
| 1P.GEN=ka-high-TR1 | TOP | afraid=1P.NOM | ID.OBL | fire |

"We made it high because we were afraid of fire."
9)

| unian <br> not.e | $\begin{align*} & =\text { Diya }  \tag{9}\\ & \text { ist }=\mathrm{IMPF} \end{align*}$ | Da <br> ID.OBL | Tau Da person ID.OB | mangusi <br> L sneeze | ki-karun=ta <br> get-job=1P.NOM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $i$, | $i \quad$ | LikuDan | $k a D u=l a$ | $a$ | mangusi |
| TOP | LOC | behind | exist=PERF | ID.NOM | sneeze |
| $i$, | $a D i=t a=$ |  | m-indang |  |  |
| TOP | NEG=1 | P.NOM=PER | F ITR-afra |  |  |

"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."

[^82]The majority of adverbial clauses are marked by the topic marker alone. In a sample of six different texts, 100 out of 149 (67.1\%) adverbial clauses are marked with the topic marker alone; 38 out of $149(25.5 \%)$ are marked by both an and $i$; only 11 out 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. If adverbial clauses occur in both sentence-initial and sentence-final position, he claims, 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 according with Diessel's prediction, adverbial clauses occur in both sentence-initial and -final position. However, of the 149 tokens examined, only 4 adverbial clauses (around 2.7\%) follow the main clause. And when the adverbial clause follows the main clause, it usually denotes a temporal or conditional relation. For instance:

| ma-Tangis $=k u$ | an | ma-rengay $=k u$ | $k a n D u$ |
| :--- | :--- | :--- | :--- |
| ITR-cry=1S.NOM | when | ITR-tell=1S.NOM | that.OBL |

"I cried whenever I talked about this."
$k a-a<r a>r e ' e T=t a$ an kaDuwan=ta
$\mathrm{ka}<\mathrm{RED}>$ crowded=1P.NOM when many=1P.NOM
"If we are larger in number, it is very crowded for us."

| (12) | $n a$ | $b a L a k e n i T$ | $i$, | $m-u$-paTaran | kan |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | ka-'udal |  |  |  |  |
| DF.NOM | bat | TOP | ITR-go-outside | when | ka-rain |

pa-ka-nguayan
CAUS-ka-front
"The bat, it shows up before it rains."

Givon (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 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.

[^83]
### 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. Zeitoun ${ }^{5}$ (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) | $n a$ | baLakeniT | $i$, | $m$-u-paTaran $\boldsymbol{k a n}$ | $\boldsymbol{k} \boldsymbol{a}$-'udal |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | DF.NOM | bat | TOP | ITR-go-out | when |

## pa-ka-nguayan

CAUS-ka-front
"The bats, they show up before it rains."

| pa-ka-nguayan | Datu | ba-burek-an | kan |
| :--- | :---: | :--- | :--- |
| CAUS-ka-front | ID.OBL/3.PSR | RED-return-NMZ | SG.OBL |
| nanali | $i$, | $b<e n>a s e=k u=$ Diya | Daku |
| my.mother | TOP | $<$ ITR $>$ wash $=1$ S.NOM=IMPF | ID.OBL/1S.PSR |

kiruan
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 $k a$ - and the reduplication of verb stem in (13) and (14). 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:

| $a D i=k u=D i y a n$ | $m-u k a$ | $i$ | balaka | $i$, |
| :--- | :---: | :--- | :--- | :--- |
| NEG=1S.NOM=IMPF | ITR-go | LOC | oversea | TOP |
| pa-takesi=ku | $D a$ |  | tiLin |  |
| CAUS-study=1S.NOM | 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.

### 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 LikuDan expressing 'behind’ is utilised to indicate "after", as in (16).

[^84]\[

$$
\begin{equation*}
m \text {-uarak=ta=Diya } \quad k a D u \text {, aw } m-u-r u m a '=t a, \tag{16}
\end{equation*}
$$

\]

ITR-dance=1P.NOM=IMPF there and ITR-go-home=1P.NOM

$$
\text { i } \quad \text { LikuDan=la } \quad i, \quad \text { me-nga-ngara=ta } \quad \text { Datu }
$$

LOC behind=PERF TOP ITR-RED-wait=1P.NOM ID.OBL/3.PSR

$$
\text { itatubang } \quad \text { kana } \quad \text { makasaT }
$$

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).

| $\boldsymbol{p}<\boldsymbol{e n}>\boldsymbol{i} \boldsymbol{y} \boldsymbol{a}=l a$ | pa-ragan | $i$ | maka-dare' | $i$, |
| :--- | :--- | :--- | :--- | :--- |
| $<$ ITR $>$ finish=PERF | CAUS-up $\quad$ LOC | along-earth | TOP |  |
| pa-ragan $=l a$ | $i \quad$ maka-saT |  |  |  |
| CAUS-up=PERF | LOC | along-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.

| piya $^{6}$ | $g<e m>a T i$ | $n a$ | pasara'aD | i, | payas |
| :--- | :--- | :--- | :---: | :--- | :--- |
| finish | $<$ ITR $>$ pick | PL.NOM | Pasara'aD | TOP | right.away |

$g<e m>a T i \quad n a \quad$ raera'
$<$ ITR $>$ pick Pl.NOM Raera'
"After the Pasara'aD family pick (the plant), the Raera' family pick right away."

[^85]Sometimes, the sequence of two successive events is not overtly specified. In the texts, such sequences are often conjoined by the coordinator $a w$ or are simply juxtaposed. In a few examples, the successive events are linked by the topic marker $i$. For example:

| m-aya-aya | $i$, | $t u=a T u b u n g-a y=k u$ |
| :--- | :--- | :--- |
| ITR-RED-search | TOP | 3.GEN $=$ meet-TR2 $=1 \mathrm{~S} . \mathrm{NOM}$ |

"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). 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 (20) and (21) consists of palu and its complement, and is marked as topic.

| palu=ku | $D a$ | me-reTa' $i$ | takesi-an |
| :--- | :---: | :--- | :--- |
| demarcate =1S.NOM COMP | ITR-give.up LOC | study-NMZ |  |

kana palibak i, ma-uLep $k<e m>i$ i-anger
DF.OBL first TOP ITR-tired <ITR $>$ get-thought
$i \quad$ nanali
SG.NOM my.mother
"At the time I graduated from primary school, my mother started to be very worried."
(21)

| palu=ku | $D a$ | $m-u k a$ | $i$ | takesi-an | $\boldsymbol{i}$, |
| :--- | :--- | :--- | :--- | :--- | :--- |
| decarmate=1S.NOM | COMP | ITR-go | LOC | study-NMZ | TOP |
| $a D i=k u$ | $m-a-u k a$ |  | 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 $=k u$ 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.

| $m-u$-asal=mi | Dua $\quad i \quad$ puyuma=la | $i$, |
| :--- | :--- | :--- | :--- |
| ITR-go-change=1P.NOM | come LOC Puyuma=PERF | TOP |
| $a D i=m i=\boldsymbol{l a}$ | mar-pa-na'u |  |
| NEG=1P.NOM=PERF | RECIP-CAUS-see |  |
| "Since we moved to Puyuma, we've never seen each other again." |  |  |


| $t u=D<i n>u a-a n=l a$ | $n a$ | mar-kataguin |
| :--- | :--- | :--- |
| 3.PSR=<PERF $>$ come-NMZ=PERF | DF.NOM | RECIP-spouse |


| $i$, | mu-basuk | $a$ | mar-ka-meni-meni |
| :--- | :--- | :--- | :--- |
| TOP | ACAUS-happen | ID.NOM | RECIP-ka-RED-different |

Da manay=Diya
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 is in the "when" clause is in non-progressive aspect, as in (26) and (27).

| an | $k i<a>b u L a s$ | Da | manay | $i$, | saLaw | ma-'iTiL |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| when $<$ a $>$ borrow | ID.OBL | what | TOP | very | ITR-stingy |  |

"Whenever they were borrowing whatever things, people were very stingy in lending money."
(25)

| $\boldsymbol{a n}$ | m-a-ekan $\quad n a D u$ | $n a$ | sa-ra'ip-an |
| :--- | :--- | :---: | :--- |
| when | ITR-RED-eat those.NOM | DF.NOM | one-work-NMZ |

$i$, tu=kasu-aw tu=paDekan m-u-laseD $i$
TOP 3.GEN=take-TR1 3.PSR=backpack ITR-go-hide LOC

TaLu-TaLun
RED-grass
"While those colleagues were eating, she took her backpack to hide it in the field."

| $i D i$ | $n a$ | barasa $i$, | an | $m$-u-asal |
| :--- | :--- | :--- | :--- | :--- |
| this.NOM | DF.NOM | stone TOP | when | ITR-go-change |

a Tau, tu=aDas-aw, tu=kasu-aw $i$
ID.NOM person 3.GEN=lift-TR1 3.GEN=take-TR1 LOC
saninin
neighbouring
"This stone, when people moved, they lifted it and took it to another place."
(27) ane adalep $=t a=l a$ kia-Lutung Da basibasi
when close=1P.NOM=PERF hunt-monkey ID.OBL festival
$i$, aDi m-ua'i m-ekan na Lutung
TOP 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, as in (28). The clause expressing the reason always precedes the clause expressing the result.

| mara-ma'iDang | $n a$ | Tipul, | $\boldsymbol{a} \boldsymbol{w}$ | 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.

| $t a=k a-a s a T-a w$ | $i$, | indang=ta | $D a$ | 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 $i$ timuL i, aDi=ta kaDuwan
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)."

| $k a<$ Duwa $>$ Duwan=ta | $n a$ | $m-a-a k a n$ | $\boldsymbol{i}$, |
| :--- | :---: | :---: | :--- |
| $<$ RED $>$ many=1P.NOM | DF.NOM | ITR-RED-eat | TOP |
| ma-ara-araw $=t a=l a$ |  | 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 situation. 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.


| an | ma-Tina | $i$, | $s a D u$ |
| :--- | :--- | :--- | :--- |
| when | ITR-big | TOP | many |

"If (the youth house) is big, (the bamboos we need) are many."
(34) an unian $=y u \quad D a \quad$ angaD-an i, getiL kaDini when without=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 $C a$ - reduplication (§3.4.2), $k a$ - marker (§6.6), or affixation of $\langle a\rangle$ (§3.4.2.3)) on the verb.

| an | maranger $=y u$ | mi-temuwan | $i, \quad a \quad$ manay |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| if | want=2S.NOM | have-grandchild | TOP | ID.NOM what |

$\boldsymbol{k} \boldsymbol{a}-k u a=t a$
RED-say=1P.NOM
"If you want to have (adopt) a grandson, what can we say?"
(36) an $k u<a>r e n a n g ~ D a \quad a-u k a-a n \quad i \quad$ Tipul
if $\quad<a>$ follow $\quad$ ID.OBL RED-go-NMZ LOC Tipul
$i$, aDi pa-pilang-i m-u-ruma'
TOP NEG RED-bring-TR2 ITR-go-house
"If she wants to follow to go to Tipul, don't bring her home."
(37) an aDi ta=TaLa-TaLaw-i $i$,
if NEG 1P.GEN=RED-frame-TR2:IMP TOP
$\boldsymbol{k a}$-uLid=ta $\quad m$-u-sabak
ka-don't.know=1P.NOM ITR-go-inside
"If we don't make a frame, we won't be able to get in."
(38) ka-a-are'e $T=t a$ an kaDuwan=ta
ka-a-crowd=1P.NOM when many=1P.NOM
"If we are many in number, it will be too crowded for us."

## САААРTIER 16

## COORDINATIION

### 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." The discussion of coordination is not confined to coordination of clauses, but also includes 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 the 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 constituents coordinated 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 and there must be a pause after the conjunction. 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) $k<e m>$ irami mar-baLiu $<$ ITR $>$ start RECIP-contact


DF.OBL westerner and DF.OBL

Lutiya
Chin.dynasty
"They started to have contact with the westerners and the Chin government."
(2) $\overrightarrow{t u=\text { TimuT-aw, }}$
$\xrightarrow[\text { tu =pisakuri'-aw, }]{ }$
$\overrightarrow{t u=p a ' e p i t a u-a w, ~}$
3.GEN=catch-TR1 3.GEN=slave-TR1 3.GEN=slap.in.the.face-TR1
tu=pa-karun-ay,
3.GEN=CAUS-job-TR2
$\xrightarrow[\text { tu=pa-Tekeb-aw }]{\longrightarrow}$
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 bamboos."

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)

(4)

| na | ni-reput-an | $\underline{\boldsymbol{t u}=\boldsymbol{L} \boldsymbol{u d} \boldsymbol{u s},}$ | $\underline{\boldsymbol{t} \boldsymbol{u}=\boldsymbol{r a m i} \boldsymbol{i}}$ |
| :--- | :--- | :--- | :--- |
| 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 an 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).

| $\boldsymbol{n a} \boldsymbol{a}$ | sa-sunan | $\boldsymbol{n a}$ | dawa | $\underline{n a}$ | ni-resiyuk |
| :--- | :---: | :--- | :--- | :--- | :--- |
| DF.NOM | RED-offer | DF.NOM | millet | DF.NOM | PERF-cook |
| "the cooked millet for offering" |  |  |  |  |  |


| maumau | $\boldsymbol{n} \boldsymbol{a}$ | $\boldsymbol{p a s a r a} \boldsymbol{a} \boldsymbol{D}$, | $\boldsymbol{n} \boldsymbol{a}$ | raera, |
| :--- | :--- | :--- | :--- | :--- |
| only | DF.NOM | Pasara'aD | DF.NOM | Raera |
| $\boldsymbol{n a}$ | $\boldsymbol{m i a s a m a}$ | $\boldsymbol{n a}$ | $\boldsymbol{t e m a r a m a \boldsymbol { a }}$ |  |
| DF.NOM | one | DF.NOM | witch |  |

"Only the Pasara'aD 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 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.

| na | puran | $i$, | tu=ale'el-an | $D a$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| DF.NOM | betelnut | TOP | 3.PSR=chew-NMZ | ID.OBL |

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), amипа conjoins two clauses. Both coordinators go between the constituents it connects. The elements conjoined in the following sentences are underlined.

| $a D i=k u$ | ra-rengay | $k a n D u$ | $k a n a$ | $n i-r e b u w a-a n$ |
| :--- | ---: | :--- | :--- | :--- |
| NEG=1S.NOM | RED-tell | those.OBL | DF.OBL | PERF-origin-NMZ | $k a D i \quad i \quad$ panapanayan aw $k a D i \quad i \quad$ ma'iDang here LOC Panapanayan and here LOC Ma'iDang "I won't talk about the origin in Panapanayan and in Ma'iDang."


| $t u=k a-l a D a m-a w=l a$ | $\boldsymbol{a w}$ | $t u=k i u m a l-a y$ | $i$ |
| :--- | :--- | :--- | :---: |
| 3.GEN=ka-know-TR1=PERF | and | 3.GEN=ask-TR2 | SG.NOM |
| temutaw |  |  |  |

his.grandparent
"He knew about it, and he asked his grandmother."
(10)

| uliya | $k a D i$ | $i$ | $a m i$ | $a$ | saLaw buLay, | amuna |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| exist here | LOC | north | ID.NOM | very | beautiful | but |

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 $a w / a m u n a$ is obligatory.

When there are more than two coordinands, often only the last coordinator is retained. For example,

"Check its sowing, its buds, and how the weeds grow."
(12)

| pu-a-bini, | me-la-latuD, | $\boldsymbol{a} \boldsymbol{w}$ | $\underline{m e-r e<a>a n i}$ |
| :--- | :--- | :--- | :--- |
| 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-Da-Dayar |  | $n a D u$ | na | miaDua | na |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ITR-RED-discuss |  | those.NOM | DF.NOM | two | DF.NOM |
|  | mar-kataguin | Da | $m$-u-d | awil- $a=t a=$ |  | kaDini |
|  | RECIP-marry | ID.O | OBL ITR-go | o-far-PJ=1 | $\mathrm{M}=$ PERF | here |
|  | $\begin{aligned} & k<e m>a, \\ & <\text { ITR }>\text { say } \end{aligned}$ | $a w$, | $t u=u$-isaT-ay $\quad t u=$ |  | $u=i n-u$-isaT-an |  |
|  |  | and | 3.GEN=goup-TR2 ID.OBL/3.PSR=PERF-go-up-NMZ |  |  |  |
|  | na | taleb |  |  |  |  |
|  | DF.NOM | raft |  |  |  |  |

"The couple were discussing (and saying), 'Let us 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 kemaDu (§4.5.3.5) and together they form a fixed expression. In this case, the pause is after $a w$, not before it.

| $\boldsymbol{k}<\boldsymbol{e m}>\boldsymbol{a D} \boldsymbol{u}=l \boldsymbol{a}$ | $\boldsymbol{a w}$, | mi-walak=la | $i$, | $a D i$ |
| :--- | :--- | :---: | :--- | :--- | :--- |
| <ITR>there=PERF | and | have-child=PERF | TOP | NEG |
| $t u=p a-k a-l a D a m-i$ |  | $a$ | Tau |  |
| 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 English speakers use more sentence-initial coordinators than writers 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 (14)-(17)) or by pronouns of the same case (as in (18)).

(16)

| $\boldsymbol{i} \quad$ namali, | aw | $\underline{i}$ | baeli |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| SG.NOM my.father | and | SG.NOM | my.older.sibling |  |
| "My father and my brother" |  |  |  |  |
| $k<e m>a s u=t a$ | $\underline{\boldsymbol{D a}}$ | eraw, | $\underline{\boldsymbol{D a}}$ | irupan |
| $<$ LITR>bring=1P.NOM | ID.OBL wine | ID.OBL | dishes |  |
| "We brought some wine and some dishes." |  |  |  |  |

(18) kaDi i panapanayan, aw kaDi iomadang here LOC Panapanayan and here LOC Ma'iDang "Here in Panapanayan and in Ma'iDang."

| ta=bakbak-aw | nantu | are'eT-an, |
| :--- | :--- | :--- |
| 1P.GEN=disentangle-TR1 | DF.NOM/3.PSR | squeeze-NMZ |

## tu=sepal-an,

 nantu $\quad k<$ in $>a-$ unian-an3.PSR $=$ sad-NMZ DF.NOM/3.PSR <PERF>ka-not.exist-NMZ
$\begin{array}{llll}\text { Datu } & \text { Tau } & i & \text { sabak }\end{array}$
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:

| kuiku | aw | $\frac{\text { taytaw }}{}$ | i, | mare-kataguin |
| :--- | :--- | :--- | :--- | :--- |
| 1S.NEU | and | 3.NEU | TOP | RECIP-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:

| $m$-u-a-ruma' $=m i$ | $\boldsymbol{k} \boldsymbol{a} \boldsymbol{y}$ | nanali, | aw |
| :--- | :--- | :--- | :--- |
| ITR-go-house=1P.ECL.NOM | KAY | $\underline{\boldsymbol{i}}$ |  |
| my.mother | and | SG.NOM |  |

## baeli

my.elder.sibling
"We went home with my mother and my elder sister."

In this example, there are three coodinands, $=m i$, nanali, and baeli. While $=m i$ 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 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 $n a$, which indicates the personal noun is plural (§4.3.1.2.2). For example:

| $t u=p u$-apuT-ay, | $t u=p u$-kiping-ay, |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 3.GEN=CAUS-flower-TR2 | 3.GEN=CAUS-clothes-TR2 |  |  |  |
| $t u=p u$-dare-ay | $D a$ | akan-an | $\underline{\boldsymbol{n a}}$ | [namali |
| 3.GEN=CAUS-earth-TR2 | ID.OBL | eat-NMZ | PL.NOM | my.father |

## kay baeli]

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 $i$ (marking singular personal noun) instead of $n a$, as in (23), and this in turn suggests that kay is more like a comitative marker. For example:
(23) ta=temuwamuwan i aduLumaw kay aduLusaw

1P.PSR=ancestor SG.NOM AduLumaw KAY AduLusaw
"Our ancestors AduLumaw and AduLusaw."

In fact, even in the same text, the speaker sometimes uses $n a$ and $i$ interchangeably in a kay-construction. For example, the following two sentences are

[^86]taken from the same text; in (24) the first noun phrase is preceded by $n a$, but in (25) the first noun phrase is preceded by $i$.

| (24) | $\boldsymbol{n a}$ | demalasaw | $\boldsymbol{k} \boldsymbol{a} \boldsymbol{y}$ | tayban | mi-anger |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | PL.NOM | Demalasaw | KAY | Tayban | have-thought |

"Demalasaw and Tayban thought..."
(25) $\boldsymbol{i}$ tayban kay demalasaw tu=ki-anger-aw

SG.NOM Tayban KAY Demalasaw 3.GEN=get-thought-TR1
iDini na lemak
this.NOM DF.NOM thing
"Tayban and Demalasaw remembered this thing."

As well as being an additive conjunction, $a w$ 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 $n a$ occurs three times, there are only two noun phrases. The first coordinand is an NP with a modifier (in which there is no pause between the NP and the modifier).

| Diyama | $\boldsymbol{n a} \boldsymbol{a} \boldsymbol{n i - r e a n i}$ | $\boldsymbol{n} \boldsymbol{a}$ | dawa, | aw |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| so | DF.NOM | PERF-reap | DF.NOM | millet | and |
| $\boldsymbol{n a}$ | Lumay |  |  |  |  |
| 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.

[^87]
### 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 temporal/causal priority.

| mi-ka-kuwang-an=Diyan | $a$ | Tau, aw |  |
| :--- | :--- | :--- | :--- |
| have-RED-shoot-NMZ=IMPF | ID.NOM | person and |  |
| tu=kuwang-aw | $a$ | Tau, aw | tu=paTepel-aw |
| 3.GEN=shoot-TR1 | ID.NOM | person and | 3.GEN=mistake-TR1 |

$a \quad$ Tau, aw tu=paTepel-aw $t<e m>a k i s \quad a \quad$ Tau
ID.NOM person and 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, TalinTin aw ulingul

DF.NOM straw.mat TOP cool and fragrant
"The straw mat is cool and fragrant."
(29) $\quad$ та $a=a, \quad \boldsymbol{n u}=\boldsymbol{n a} \boldsymbol{\prime} \boldsymbol{u}-\boldsymbol{a} \boldsymbol{y}=\boldsymbol{m i}, \quad \underline{\boldsymbol{n}}=$ =kilengaw- $\boldsymbol{a} \boldsymbol{y}$
father=VCT 2S.GEN=see-TR2=1P.NOM 2S.GEN=listen-TR2
naniam kia'anum
DF.NOM/1P.PSR petition
"Father, you look after us, and you listen to our petitions."
$t \boldsymbol{t a}=\boldsymbol{b a n b a n}-a w$,
$t a=b a k b a k-a w$
nantu
1P.GEN=release-TR1 1P.GEN=disentangle-TR1 DF.NOM/3.PSR
are'eT-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-Liya-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 $i$

ITR-jump and 3.PSR=younger.brother follow LOC
LikuDan
behind
"He jumped, and then his younger brother followed behind."

Also very frequent is implied consequence, as in (32) and (33).

| mu-Tepa | tu=Dekal | $\boldsymbol{a w}$ | mar-ka-la-la'uD |
| :--- | :--- | :--- | :--- |
| ACAUS-aim | 3.PSR=village | and | RECIP-ka-RED-drown |
| $a$ | Tau |  |  |
| ID.NOM | person |  |  |

"The village was targeted (by a typhoon), and people were drowned one by one (as a result)."

| saLaw | igeLa $\quad$ pa-ka-la-laDam | $D a$ | Tau, aw |
| :--- | :---: | :---: | :--- | :--- |
| very | embarrassed CAUS-ka-RED-know | ID.OBL | person and |

$t u=$ lase-laseD-aw $\quad t u=t i y a l=d a r$
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 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.
$t u=a L u-a w \quad \underline{i D u}$ na buLabuLayan, $t u=a b a k-a w$
3.GEN=lift-TR1 that.NOM DF.NOM girl 3.GEN=pack-TR1

| $\left[\begin{array}{ll}\text { ] } & \text { kana }\end{array}\right.$ | Tabak |  |
| :--- | :--- | :--- |
| [that girl] | DF.OBL | box |

"They lifted up the girl and packed her into the box."

a. $\boldsymbol{k} \boldsymbol{u}=p u k p u k-a w i \quad$ pilay, aw $p<e n>u w a r=\boldsymbol{k} \boldsymbol{u}$ 1S.GEN=beat-TR1 SG.NOM Pilay and <ITR>run.away=1S.NOM "I beat Pilay and then ran away."
b. $\boldsymbol{k} \boldsymbol{u}=p u k p u k-a w$ 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 $=k u$ 'I like" is omitted in the second clause, and in (39) and (40) muka is omitted in the second clause.
(38) paru-ma-Tina $=k u=l a \quad i$, sagar $=k u \quad s<e m>$ enay gradual-ITR-big $=1 \mathrm{~S} . \mathrm{NOM}=$ PERF $\quad$ TOP $\quad$ like $=1 \mathrm{~S} . \mathrm{NOM}<$ ITR $>$ sing aw [ ] m-uarak
and ITR-dance
"When I grew up, I liked singing and (I liked) dancing."
(39) $t u=d a u l-a w=k u=l a \quad D a \quad$ kemay maka-saT $D a$
3.GEN=call.on-TR1=PERF ID.OBL from along-up ID.OBL
seihu m-uka $b<e n>a-b a t i-a, \quad[\quad$ 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 $[\quad] \quad$ mi-walak-a $=l a \quad i$,

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).

| uliya | $k a D i$ | $i$ | ami | $a$ | saLaw buLay | amuna |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| exist | here | LOC | north | ID.NOM | very | beautiful |$\quad$ but

## Appendix I

A list of transcribed texts used in the thesis ${ }^{1}$

|  | Title | speakers | genre | length (approx.) |
| :--- | :--- | :--- | :--- | :--- |
| 1 | A prayer to the <br> ancestors | Chen, De-fu | prayer | 1 min |
| 2 | Monkey ritual | Chen, De-fu | narrative | 10 min |
| 3 | How to build a <br> Takuban (youth's <br> meeting house) |  <br> Lin, Zhi-mei \& a <br> male | procedure + <br> conversation | 33 min |
| 4 | A tale of two brothers | Chen, <br> Guang-rueng | folktale | 15 min |
| 5 | The teaching of the <br> elders | Chen, <br> Guang-rueng | teaching | 4 min |
| 6 | The origin of our tribe | Chen, <br> Guang-rueng | narrative | 5 min |
| 7 | A tale of DaDengaw | Chen, <br> Guang-rueng | folktale | 35 min |
| 8 | The history of Puyuma | Chen, <br> Guang-rueng | narrative | 25 min |
| 9 | The duty of the Puyuma <br> women | Chen, <br> Guang-rueng | narrative | 13 min |
| 10 | Isaw's story | Lin, Hao-xun | narrative | 22 min |
| 11 | Kuma (Isaw's pet) | Lin, Hao-xun | narrative | 12 min |
| 12 | A smart grandmother | Lin, Hao-xun | folktale | 17 min |
| 13 | How to make <br> binariyaw (a traditional <br> dish) | Lin, Hao-xun <br> procedure | 5 min |  |
| 14 | Isaw's dream | Lin, Hao-xun | narrative | 2 min |
| 15 | The convention of <br> puaTangi (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 |
| 20 | The origin of the wasps | Lin, Qing-mei | folktale | 8 min |
| 21 | The change the river | Lin, Qing-mei | narrative | 10 min |
| 22 | A conversation |  <br>  <br> visitors | conversation | 4 min |
| 23 | The training in <br> Takuban | Lin, Zhi-cheng | narrative | 15 min |

[^88]| 24 | A heartless mother | Tseng, Xiou-hua | folktale | 13 min |
| :--- | :--- | :--- | :--- | :--- |
| 25 | Sea worship |  <br> Lin, Hao-xun | conversation | 48 min |
| 26 | A sermon |  <br> 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-ulane-an "one's fat figure ", < ulane "fat"
$\boldsymbol{k} \boldsymbol{a}$ - "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-luwaT"five times", < luwaT"five"
$\boldsymbol{k i}$ - "to get something"; "to be V-ed (volitionally)" (§9.6)
ki-'apuT "to pick flowers", < 'apuT"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-Tubung "to bump into, to meet unexpectedly", < Tubung "meet"
kir-' $e T e b$ "to be equal to", < 'eTeb "companion"
kir-ngiTa "to be shoulder to shoulder", < ngiTa "shoulder"
kir-baLibaLi "to face the wind", <baLi "wind"
kitu- "to become"
kitu-buLay "to dress up; to become a young lady", < buLay "beautiful"
kitu-bangsar "to become a matured young man", < bangsar "handsome"
$\boldsymbol{k u r}$ - "be exposed to; be together (passively)"
kur-turus "to be followed closely", < turus "follow"
kur-panana "to get hurt", < panana "hurt"
$k u r-a b a k$ "to be trapped", < abak "to contain, to pack"
kur-na'u "obvious", < na'u"to see"
$\boldsymbol{m}$ - "actor voice affix/intransitive affix" (§6.2 and §8.4.4)
$\boldsymbol{m a}$ - "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- 'iDang "older", < - 'iDang "old"
$\boldsymbol{\operatorname { m a r } ( e ) -}$ "reciprocal; plurality of relations" (§9.3)
mi-"to have; to use" (§10.4.6.2)
$\boldsymbol{m} \boldsymbol{u}$ - "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"

[^89]```
    pu-bini' "sow" < bini' "seed"
    pu-kiping "put clothes on sb." < kiping "clothes"
    pu-ngaLad "give a name to sb." < ngaLad "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-aLa-aLak "to pretend to take something", < aLak "to take"
    si-uLi-uLid "to pretend not to understand", < -uLid "do not know"
tara- "to use (an instrument), to speak (a language)"
    t<em>ara-puyuma "speak Puyuma",
tinu-"to simulate"
    tinu-ma'iDang "the ones who imitate the elders", < ma'iDang "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-Dekal"to form a village", < Dekal "village"
u-"to go"
    u-sabak "go inside", < sabak"inside"
    u-isaT"go up", < isaT"above"
ya-"to belong to "
    ya-timuL "belong to the south", < timuL "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)
asaT-an "height", <asaT "high"
akan-an "food", < akan"eat"
sa-sede-an "holiday", < sede "interrupt"
-an "collective/plural marker"
ma'iDang-an "old people", < ma'iDang "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"
$D<$ in $>$ ekal-anan "the whole villagers", $<$ Dekal "village"
$\boldsymbol{k a} \boldsymbol{-} \boldsymbol{a n}$ "a period of time"
ka-saLem-an "the cultivating season", $<$ saLem "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-Tau-an "the way families were formed; society", < Tau "person"
$\boldsymbol{s a - a n}$ "people doing things together" sa-ra'ip-an "people doing sowing together" $<r a$ 'ip "sow"
sa--enan "people belonging to the same community"
sa-ruma'-enan "relatives", < ruma' "house; home"
sa-Dekal-enan "villagers", < Dekal "village"
si-an "nominaliser" (§7.3.4.3)
si-Duma-an "nonlocal", $<$ Duma "other"
Ca-an "collectivity, plurality" (or CVCV-an)
wa-wadi-an "brothers and sisters", < wadi "younger sibling"
$m a-\quad i D a-\quad i D a n g-a n " o l d ~ p e r s o n s ",<m a-\quad i D a n g$ "old"

Appendix II

## Appendix III

## 1: The grandmother and the grandson (Narrative)

(1) asuwa=Diyan $i$, ulaya a saya a Dekal 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'iDang=la au aw unian=la
when old=PERF ID.NOM person and exist.NEG=PERF

| Da | keDang | ki-karun | $i$, |
| :--- | :--- | :--- | :--- |
| ID.OBL | strength | get-job | TOP |

"When a person got old and without the strength to work,"
(4)

| tu=atel-anay | $i$ | Dena-Denan | $a w$ |
| :--- | :--- | :--- | :--- |
| 3.GEN=throw-TR3 | LOC | RED-mountain | and |

tu=paka<lawa>lawa-aw palu $D a^{l}$ m-inaTay
3.GEN $=<$ RED $>$ give.up-TR1 until COMP ITR-die
"they were thrown out into the mountains and left until they died."
(5) $i D u \quad$ Dekal $i$, amuna unian $D a$ that.NOM DF.NOM village TOP but exist.NEG ID.OBL
akan-an aw
eat-NMZ and
"That village, they were short of food."

[^90]| saLaw unian | $D a$ | akan-an |
| :--- | :--- | :--- |
| very | exist.NEG | ID.OBL |$\quad$ eat-NMZ

(7) Diyama=la na sa-Dekal-an i, $k<e m>$ iri-kirim so=PERF DF.NOM whole-village TOP $<$ ITR $>$ RED-be.sparing.with Da akan-an
ID.OBL eat-NMZ
"So, the whole village was sparing with food."
(8) Diyama=la na unian=Diya Da keDang
so=PERF DF.NOM exist.NEG=IMPF ID.OBL strength
ki-karun $i, \quad t u=$ atel-anay $i \quad$ Dena-Denan
get-job TOP 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 RECIP-grandchild
"There was a family that had a grandma and a grandson."
(10) $i \quad$ temutaw $=l a$, unian $=l a \quad D a \quad$ keDang SG.NOM his.grandparent=PERF exist.NEG=PERF ID.OBL strength "The grandma had no strength."

| $i D u$ | $n a$ | walak | $i$, | $t u=p a D e k-a w$ | $i$ |  |
| :--- | :--- | :---: | :--- | :---: | :--- | :--- |
| that.NOM | DF.NOM | child | TOP | 3.GEN=carry-TR1 | SG.NOM |  |
| temutaw | $m-a-u k a=l a$ |  |  | $m$-atel- $a$ | $i$ | Denan |
| his.grandma | 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 aDi=Diyan i, T<em>ikeL Da sa'aD ITR-start.off and NEG=IMPF TOP <ITR>pick ID.OBL branch Da kawi

ID.OBL tree
"They started off, and no for a long time, she picked branches from trees."
(13) aw aDi=Diyan $i, \quad T<e m>u k u L \quad D a \quad$ TaLun $i \quad d a L a n$ and NEG=IMPF TOP <ITR>pluck ID.OBL grass LOC road "And, not for a long time, she plucked grasses off on the road."

| $t u=k a-l a D a m-a n$ | $D a$ | daLan |
| :--- | :--- | :--- |
| 3.PSR=ka-know-NMZ | ID.OBL | road |

"It was her way of knowing the route."
$i D u \quad$ na walak $i, \quad t u=k a-l a D a m-a w=l a$
that.NOM DF.NOM child TOP 3.GEN=ka-know-TR1=PERF
aw tu=kiumal-ay temutaw
and 3.GEN=ask-TR2 SG.NOM his.grandma
"That child, he realised, and he asked his grandma,"
(16)

| "iDi | $i$, | $n u=k a-l a-l a D a m-a n$ | $m$-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

NEG if.by.any.chance when ID.NOM astray=2S.NOM
$i \quad$ TaLun, an $s<e m>a n a n=y u \quad i \quad$ TaLun
LOC grass when <ITR>stray=2S.NOM LOC grass
"No, in case you go astray or lose your way in the wild,"

| Diyama=la $T<e m>i k e L=k u$$\quad D a$ | sa'aD | Danu |  |
| :--- | :--- | :--- | :--- | :--- |
| so=PERF | $<$ ITR>pick=1S.NOM ID.OBL | branch | ID.OBL/2S.PSR |
| ka-la-laDam-an |  |  |  |
| ka-RED-know-NMZ |  |  |  |

(19) $i D u \quad$ walak $=l a \quad i$, pameli ma-sepel that.NOM DF.NOM child=PERF TOP very ITR-sorry
kan temutaw $D a$ aru $k-i<a>n a T a y=l a \quad i$,

SG.OBL his.grandma COMP will $\mathrm{k}-<\mathrm{a}>$ die $=$ PERF TOP
ma-uLep=Diya $k<e m>$ i-anger $\quad$ Datu ka-sanan-an
ITR-tired=IMPF <ITR>get-thought ID.OBL/3.PSR ka-stray-NMZ
"That child, he was very sorry that his grandma was going to die, but she was still worrying that he might get lost."
(20)

| $i D u$ | $n a$ | walak=la | $i$, | laman=la | kan |
| :--- | :--- | :--- | :--- | :--- | :--- |
| that.NOM | DF.NOM | child=PERF | TOP | pity=PERF | SG.OBL |


| temutaw | aw | $t u=p a D e k-a w$ | mare-beLiyas $m$-u-ruma' |
| :--- | :--- | :--- | :--- |
| his.grandma | and | $3 . G E N=$ 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 $k<e m>$ uruT $D a$ buwang $i$ sabak kantu
and $<$ ITR $>$ dig ID.OBL hole LOC inside ID.OBL/3.PSR
ruma'
house
"and he dug a hole inside their house,"
(22) aw tu=laseD-aw kana buwang $i$ temutaw
and 3.GEN=hide-TR1 DF.OBL hole SG.NOM grandma
"and he hid his grandma in the hole."
(23)

$k a<e m>D u \quad a w, \quad$ ulaya a Duma a Dekal
$<$ ITR $>$ there and exist ID.NOM other ID.NOM village "So it was, and there was another village,"

| ma-ranger <br> ITR-want | m-araw |  | kanDu | kana | Dekal |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ITR-rob |  | that.OBL | DF.O | village | and |
| p-u-paTaran |  | Da | teLu- |  | $k i<a>$ | al-an |
| CAUS-go-ou |  |  | L three- | PPRS | <a>ask | NMZ | "that wanted to rob that village, and they announced three questions."

(26) "an maruwa=mu $t<e m>u b a n g ~ k a n D i \quad k u=k i<a>u m a l-a n$
if $\quad$ can $=2$ P.NOM $<$ ITR $>$ answer this.OBL $\quad 1 \mathrm{~S} . \mathrm{PSR}=<$ a $>$ ask-NMZ
$i$, $a D i=k u=l a$ tenger $D=l a \quad$ kanmu"
TOP NEG=1S.NOM=PERF RED-invade=PERF 2P.OBL
$t u=k a-a w$
3.GEN=say-TR1
"(Their leader) told them, 'If you can answer my questions, I won't invade you."
(27) $a w, n a \quad$ sa-sa-a $t u=k i<a>$ umal-an $i$, and DF.NOM RED-one-NPRS 3.PSR $=<a>$ ask-NMZ TOP

| amau | $n a$ | $k a w i$ | $n a$ | $k a T e b e$, | $n a$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| COP | DF.NOM | wood | DF.NOM | thick | DF.NOM |


| ni-reupt-an | $t u=L u d u s$ | $t u=r a m i$ | $i, \quad " k a-k a r u w a=m u$ |
| :--- | :--- | :--- | :--- | :--- |
| PERF-cut-NMZ | $3 . P S R=$ end | $3 . \mathrm{PSR}=\mathrm{root}$ | TOP $\quad$ ka-can=2P.NOM | ma-laDam na isuwa tu=Ludus tu=rami" tu=ka-aw

ITR-know DF.NOM which 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."

| $i D u$ | $n a$ | kawi $\quad i$, | ma-risan | kaTebe |
| :--- | :--- | :--- | :--- | :--- |
| that.NOM | DF.NOM | wood TOP | ITR-same | thick |

"That timber, both ends are the same thickness."

| unian | $D a \quad m i<$ sasa $>$ sasa | karuwa | $t<$ em $>$ ubang |
| :--- | :--- | :--- | :--- |
| exist.NEG | ID.OBL $\quad<$ RED $>$ one | can | $<$ ITR $>$ answer |

kanDu kana sa<Dekal>an
that.OBL DF.OBL whole-village
"In the whole village, there was one who could answer."
(30)

| $i D u$ | $n a$ | walak $=l a$ | $i$, | $t u=k i u m a l-a y=l a$ |
| :--- | :--- | :--- | :--- | :--- |
| that.NOM | DF.NOM | child=PERF | TOP | 3.GEN=ask-TR2=PERF |
| $i$ | temutaw |  |  |  |
| SG.NOM | his.grandmother |  |  |  |

"That child, he asked his grandmother."
(31) $i \quad$ temutaw $=l a \quad i, \quad$ "iDu $n a$ SG.NOM his.grandma=PERF TOP that.NOM DF.NOM kawi $i, \quad$ ta=pa-la'uD-anay $i \quad k a l i, \quad t u=r a m i$ wood TOP 1P.GEN=CAUS-float-TR3 LOC river 3.PSR=root
$i$, kinguwayan=dar $\quad m u-l a ' u D, \quad t u=L u d u s \quad i$,
TOP before=FREQ ACAUS-float 3.PSR=end TOP
$k i<a>-L i k u D a n-a n=$ dar ${ }^{\prime} \quad k<e m>a \quad i \quad$ temutaw
after=often $\quad<$ ITR $>$ say $\quad$ SG.NOM his.grandmother "His grandma, she said, 'This timber, if we floated it in the river, its root would float to the front, its end to the rear.'"

| $i D u$ | $n a$ | walak=la $\quad i$, | tu=rengay-aw=la |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| that.NOM | DF.NOM | child=PERF |  |  |  | TOP | 3.GEN=tell-TR1=PERF |
| $n a$ | ma'iDang | $i$ | Dekal |  |  |  |  |
| DF.NOM | old | LOC | village |  |  |  |  |

"That child, he told the elder in the village,"

| $a w$ | $t u=t u b a n g-a w$ | $n a D u$ | $n a$ | ma-ranger |
| :--- | :--- | :--- | :--- | :--- |
| and | 3.GEN=answer-TR1 | those.NOM | DF.NOM | ITR-want |

m-araw Da Dekal i, "pamau!" $k<e m>a$ ITR-rob ID.OBL village TOP correct $<$ ITR $>$ say "and he answered those who wanted to rob the village, 'Correct!' they said."
aw saLaw $s<e m>a n g a l ~ i D u \quad$ na $\quad$ iDang
and very <ITR>happy that.NOM DF.NOM old
i Dekal
LOC village
"And the elder in the village was very pleased."
$\begin{array}{llllc}\text { (35) } a w & p-u \text {-paTaran=la } & n a & p u k a-D a-D u w a & n a \\ \text { and } & \text { CAUS-go-outside=PERF } & \text { DF.NOM } & \text { ORD-RED-two } & \text { DF.NOM }\end{array}$

| $k i<a>$ umal-an | $i$, | "na | pa-TungTung-an | $i$, |
| :--- | :---: | :---: | ---: | :---: |
| $<$ a $>$ ask-NMZ | TOP | DF.NOM | CAUS-sound-NMZ | TOP |

an ta=kuda-kuda-aw i, karuwa ma-runi
when 1P.GEN=RED-how-TR1 TOP can ITR-make.sound pa-TungTung taytaw iDu na pa-TungTung-an"
CAUS-sound 3.NEU that.NOM DF.NOM CAUS-sound-NMZ
$t u=k a-a w$
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."

| aw na | sa<Dekal>an |  | unian | Da |
| :---: | :---: | :---: | :---: | :---: |
| and DF.NOM | whole-village | TOP | exist.NEG | ID.OBL |
| $m i<$ sasa $>$ sasa | karuwa | $t<e m$ | ubang |  |
| $<$ RED>one | can | $<$ ITR | answer |  |

"And there was no one in the whole village that could answer,"

| $a w$, | $i D u$ | $n a$ | $w a l a k=l a$ | $i$, | $m-u k a$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| and | that.NOM | DF.NOM | child=PERF | TOP | ITR-go |


| kiumal-a | kan | temutaw |
| :--- | :--- | :--- |
| ask-PJ | SG.OBL | his.grandmother |

"and so, that child, he went to ask his grandmother."

| $" k<e m>a D u$ | $k<e m>a D u$ | $k<e m>a, "$ | $t u=k a-a w$ |
| :--- | :--- | :--- | :--- |
| $<$ ITR $>$ there | $<$ ITR $>$ there | $<$ ITR>say | 3.GEN=say-TR1 |

$i \quad$ temutaw
SG.NOM his.grandmother
"He told his grandma, 'They said such and such..."
(39) $i \quad$ temutaw $=l a \quad i$, "wa aLak Da

SG.NOM his.grandma=PERF TOP go take ID.OBL pa-TungTung-an $\quad D a \quad a D i=D i y a \quad b<$ in>arekep-an CAUS-sound-NMZ ID.OBL NEG=IMPF <PERF>assemble-NMZ Da kaLiT

ID.OBL skin
"His grandmother, 'Go and take a drum that hasn't has the skin put on it.'"
(40) aw $i$ sabak kana pa-TungTung-an $i$, puka- $i$ and LOC inside DF.OBL CAUS-sound-NMZ TOP put-TR2:IMP Da tiDul Da samaya, aw pa-TekeT-i=la ID.OBL wasp ID.OBL some and CAUS-stick-TR2:IMP=PERF Da kadepu'

ID.OBL paper
"And inside the drum, put some wasps, and seal it with paper."

| $i D u$ | $n a$ | walak=la | $i$, | $k u r e n a n g=l a$ |
| :--- | :--- | :--- | :--- | :--- |
| that.NOM | DF.NOM | child=PERF | TOP | follow=PERF |

$s<e m>a n g a$,
$<$ ITR>make
"That child, he did what she said."

| $t u=p-u$-sabak- $a w$ | $a$ | tiDul | kana |
| :--- | :--- | :--- | :--- |
| 3.GEN=CAUS-go-inside-TR1 | ID.NOM | wasp | DF.OBL |

pa-TungTung-an $i$ sabak
CAUS-sound-NMZ LOC inside
"He put some wasps inside the drum."

| $a w$ | $t u=p a-T e k e T-a y$ | $D a$ | kadepu' |
| :--- | :--- | :--- | :--- |
| and | 3.GEN=CAUS-stick-TR2 | ID.OBL | paper |

"And he sealed the drum with paper."

| $i D u$ | $n a$ | $t i D u l=l a$ | $i$, | $T<$ em>epa | m-ubii |  |
| :--- | :--- | :---: | :--- | :---: | :---: | :---: |
| that.NOM | DF.NOM | wasp=PERF | TOP | $<$ ITR>aim.at | ITR-fly |  |
| kana | idenan | aw | $s<$ em>aLeTap-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."

| kamawan | $D a$ | pa-Tung $<$ angu $>$ Tung | $n a$ |
| :--- | :--- | :--- | :---: |
| similar | ID.OBL | CAUS-<RED $>$ sound | DF.NOM |

pa-TungTung-an
CAUS-sound-NMZ
"The sound was like the drum beating."
(46) aw tu=ka-aw iDu nantu ma'iDang $i$
and 3.GEN=say-TR1 that.NOM DF.NOM/3.PSR old LOC
Dekal
village
"And he told their elder in the village."
(47)

| $a w$ | $t u=t u b a n g-a w$ | $n a D u$ | $n a$ | $T a u \quad i$, |
| :--- | :--- | :--- | :--- | :--- |
| and | 3.GEN=answer-TR1 | those.NOM | DF.NOM | person TOP |

"pamau" $k<e m>a$
correct $\quad<$ ITR $>$ say
"And he answered those people: ‘Correct!" they said."
saLaw $s<e m>$ angal iDu ma'iDang
very <ITR>happy that.NOM DF.NOM old
"The elder was very pleased."
(49)

| $n a$ | puka-teLu | $n a$ | $k i<a>u m a l-a n \quad i$, |
| :--- | :--- | :--- | :--- |
| DF.NOM | ORD-three | DF.NOM | $<a>$ ask-NMZ TOP | ulaya $a \quad$ Dua-a $a \quad b a$, $\quad$ ma-risan ma-Tina exist ID.NOM two-NPRS ID.NOM horse ITR-sameITR-big tu=pinuDaDekan, ulaya a saya $i$, lalak 3.PSR=body exist ID.NOM one TOP young $t u=a m i-a n$

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)
$\left.\begin{array}{llllll}\text { "kudakudayaw } i, & k a-l a-l a D a m=t a & n a & \text { isuwa } & \\ \text { how } & \text { TOP } & \text { ka-RED-know=1P.NOM } & \text { DF.NOM which }\end{array}\right]$ "He asked, 'How do we know which is young and which is old?"
(51) unian $D a \quad$ Tau $D a \quad$ karuwa $t<e m>u b a n g$ exist.NEG ID.OBL person ID.OBL can <ITR>answer "No one could answer."

| amau=la | $i D u$ | $n a$ | walak | $m$ - $u k a=$ Diya |
| :--- | :--- | :--- | :--- | :--- |
| COP=PERF | that.NOM | DF.NOM $\quad$ child | ITR-go=IMPF |  |

"That child went to ask his grandmother."

| aw | $i$ |  | temutaw | $i$, | "na | kinuwayan |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| and | SG.NOM | grandma | TOP | DF.NOM | before |  |

"And his grandma said, 'The one that eats grass first is the child."

| (54) | $i D u$ | $n a$ | mara-'iDang $i$, | me-ngara kana |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| that.NOM | DF.NOM | more-old | TOP | ITR-wait DF.OBL |

```
aw m-uka=la t<em>ubang-a i, "pamau"k<em>a
and ITR-go=PERF}<\mathrm{ ITR>answer-PJ TOP correct <ITR>say
```

"And he went and answered: 'Correct!' they said."
(56) aw saygu $t<e m>u b a n g$ kanDi kana teLu-a and can $<$ ITR $>$ answer these.OBL DF.OBL three-NPRS
$k i<a>$ umal-an
<a>ask-NMZ
"And he was able to answer those three questions."

| $a w$ | $" a D i-a=k u=l a$ | $t<e m>e n g e D$ |
| :--- | :--- | :--- |
| and | NEG-PJ=1S.NOM=PERF | <ITR>invade |

"And (the leader) said, 'I will never invade you."

| $a w$ | $n a$ | ma'iDang | $k a D i$ | Dekal $i$, | saLaw |
| :--- | :--- | :--- | :--- | :--- | :--- |
| and | DF.NOM old |  | here | village TOP | very |

"The elder in the village, he was very pleased that the child could answer everything."
(59)
aw tu=kiumal-ay iDu na walak and 3.GEN=ask-TR2 that.NOM DF.NOM child "sagar=yu Da $k<e m>u d a-k u d a \quad D a \quad p a-k a-s a g a r$ like=2S.NOM ID.OBL $<$ ITR $>$ RED-how ID.OBL CAUS-ka-like $t i=b e r a y-a y=y u " t u=k a-a w$ 1S.GEN=give-TR2=2S.NOM 3.GEN=say-TR1 "And he asked that child, 'I will give you whatever kind of reward you like,.' he said."
(60) iDu na walak i, "ulaya ku=ra-rengay-an that.NOM DF.NOMchild TOP exist 1S.PSR=RED-say-NMZ a saya

ID.NOM one
"The child said, 'I have something to say.'"
(61)

| $i D i$ | $k u=t<$ in $>$ ubang-an |  | i, | amau |
| :--- | :---: | :---: | :---: | :---: |
| this.NOM | 1S.PSR=<PERF $>$ answer-NMZ | TOP | COP |  |
| $t u=p<$ in $>a$-laDam | kan |  | muli |  |
| 3.PSR=CAUS $<$ PERF $>$-know | SG.OBL | my.grandparent |  |  |

"My answers were told (me) by my grandmother."
(62) $i \quad$ muli $i$, $k u=l a s e D-a w ~ i ~ r u m a ' ~$

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 $D a \quad$ pa-ka-sagar $i$, $a D i$
if get-a-give=1S.NOM ID.OBL CAUS-ka-like TOP NEG
$k a-D a-D e k i-i=k u$
ka-RED-scold-TR2:IMP=1S.NOM
"If I can ask for a reward, it is that you don't scold me"

| $k u=b<i n>a-b e T a$ '-an | kanmu |
| :--- | :--- |
| 1S.PSR=RED $<$ PERF $>-l i e-N M Z ~$ | $2 P . O B L$ |

"for lying to you."
(65) $a w$ na ma'iDang=la $i$, "muama=ta
and DF.NOM old=PERF TOP where=1P.NOM
ma-Deki kanu
ITR-scold 2S.OBL
"And the elder said, 'How would we scold you?"'

| $n u=t<i n>u b a n g-a n$ |  |  | $i$, | karuwa | $b<e n>u^{\prime} u T$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2 \mathrm{~S} . \mathrm{PSR}=<$ PERF $>$ answer-NMZ |  |  | TOP | can | $<$ ITR>stop |
| Da COMP | aru | a-araw | kanta |  | Dekal |
|  | will | RED-rob | DF.O | L/IP.PSR | village |

"Your answers were able to stop them robbing our village."
(67) an $k<e m>a D u \quad i, \quad a D i \quad t i=t a-t e n g e r D=y u$
when <ITR>there TOP NEG 1S.GEN=RED-attack=2S.NOM
Danu $\quad b<i n>a-b e T a a^{\prime}-a n$
ID.OBL/2S.PSR RED<PERF>-lie-NMZ
"So I won't punish you for your lies."
(68) $i$ temuи $i$, inaba tu=Tanguru'

SG.NOM your.grandparent TOP good 3.PSR=head
"Your grandmother, her brain is good."
(69) karuwa b<en>a'aw kanta Dekal
can <ITR>save DF.OBL/1P.PSR village
"She was able to save our village."
$\begin{array}{lllll}\text { (70) } & a D i & \text { atel-an } & i & \text { Denan=la } \\ & \text { NEG } & \text { throw-TR3:IMP } & \text { LOC } & k<e m>a \\ \text { mountain=PERF } & <\text { ITR>say }\end{array}$
"Don't throw her out into the mountains.' he said."
(71) aw aDi tu=atel-an $i \quad$ Denan=la and NEG 3.GEN=throw-TR3 LOC mountain=PERF
"And she won't be thrown out into the mountains."

## 2: The processes of making rice cakes (Instructions)

(1)

| ma-rengay- $a=k u=$ Diya | $D a$ | tua-abay-an |
| :--- | :--- | :--- |
| ITR-tell-PJ=1S.NOM=IMPF | ID.OBL | make-rice.cake-NMZ ID.OBL |
| binariyaw |  |  |
| binariyaw |  |  |

"l'll tell about the making of binariyaw rice cake."
(2) $n a \quad$ binariyaw $i$, $a \quad s<$ in $>$ anga

DF.NOM binariyaw TOP ID.NOM <PERF>produce
Da DikeTan
ID.OBL sticky.rice
"The binariyaw, it is a kind of sticky rice product."
(3)

"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 when make-rice.cake=1P.NOM TOP <ITR>handful=1P.NOM
$D a$ sa-kepeL, aw ta=tua-emu-aw $D a$ ID.OBL one-handful and 1P.GEN=make-shape-TR1 ID.OBL $d u<$ runi $>$ runi $=l a \quad i, \quad$ ta=puka-ay $\quad D a \quad$ pa-LubeLub $<$ RED $>$ mud $=$ PERF TOP 1P.GEN=add-TR2 ID.OBL CAUS-mix $i$ sabak $D a$ kalang $D a$ paTaka, Da in-iyam-an, LOC inside ID.OBL crab ID.OBL meat ID.OBL PERF-salt-NMZ "When we make rice cake, we grab a handful (of sticky rice), and we make it muddy, and then we add a filling of crab, meat, preserved vegetable inside it."

| an | $p a-p u k a=t a$ | $C a$ | kalang | $i$, |
| :--- | :--- | :---: | :---: | :--- |
| when | RED-add=1P.NOM | ID.OBL | crab | TOP |
| $m$ - $a$ - $a y a=t a$ | $D a$ | kalaayan | $p a-$ LubeLub |  |
| ITR-RED-find=1P.NOM | ID.OBL | suitable | CAUS-mix |  |


| Datu | ika-Ta-Tina-an | mu-LibuT |
| :--- | :--- | :--- |
| ID.OBL/3.PSR | ika-RED-big-NMZ | ACAUS-wrap |

"If we are adding crabs, we have to find a suitable size as (filling) mixture for the wrapping."
aw, ta=ringring-aw na

and 1P.GEN=stir.fry-TR1 DF.NOM | CAUS-ka-Labeni na |
| :--- |
| Calty DF.NOM |

(7) $n a \quad$ binariyaw $i$, ta=LibuT-anay $D a \quad$ Labilu

DF.NOM binariyaw TOP 1P.GEN=wrap-TR3 ID.OBL Labilu
Da mangede,
ID.OBL tender
"The binariyaw, we wrap it with tender Labilu ${ }^{2}$."
(8) $n a \quad p<i n>a-L i b u T-a n \quad D a \quad$ Labilu $i$,

DF.NOM <PERF>CAUS-wrap-NMZ ID.OBL Labilu TOP
tu $=k a-a D i-a n \quad T<e m>e k e T$ kana bira' kana rengas
3.GEN=ka-NEG-NMZ <ITR>stick DF.OBL leaf DF.OBL rengas ${ }^{3}$
"The thing wrapped in Labilu won't stick to the rengas leaf."
(9) aw $i \quad$ paTaran $i$, $t a=L i b u T-a w=l a \quad D a$
and LOC outside TOP 1P.GEN=wrap-TR1=PERF ID.OBL
bira' Da rengas aw ta=betbet-aw
leaf ID.OBL rengas and 1P.GEN=tide-TR1
"And on the outside, we wrap it with a rengas leaf and then tie it."
(10)
$\begin{array}{lcll}t u=k a-a D i-a n & m u-t e s t e s & a n & t a=d e r u-a w \\ \text { 3.GEN=ka-NEG-TR3 } & \text { ACAUS-melt } & \text { when } & \text { 1P.GEN=cook-TR1 }\end{array}$
Da enay
ID.OBL water
"It won't melt when we boil it in water."
(11) an aru pa-puka=ta Da pa-Lubelub Da
when will RED-add=1P.NOM ID.OBL CAUS-mix ID.OBL
paTaka Da Labeni i,
meat ID.OBL salty TOP
"Before we add in salted meat filling,"

[^91](12)

| $n a$ | $p a T a k a$ | $i$, | $t a=i y a m-a y=D i y a$ | $D a$ |
| :--- | :--- | :--- | :--- | :--- |
| DF.NOM | meat | TOP | 1P.GEN=salt-TR2=IMPF | ID.OBL |

one ID.OBL day-NMZ and 1P.GEN=cut-TR1 ID.OBL ma-ra-ruwa-an pa-LubuLub kana binariyaw ITR-RED-can-NMZ CAUS-mix DF.OBL binariyaw "we preserve the meat with salt for one day, and we cut it to a suitable (size) for the filling of the binariyaw."

| $a w$ | $t u=i k a-T a-T i n a-a n$ | $k a n a$ | binariyaw | $i$, |
| :--- | :--- | :--- | :--- | :--- | :--- |
| and | 3.PSR=ika-RED-big-NMZ | DF.OBL | binariyaw | TOP |
| ta=na'u-ay | $t u=b i r a$ | kana | rengas | Da |
| 1P.GEN=see-TR2 | 3.PSR=leaf | DF.OBL | rengas | ID.OBL |
| $k<e m>u d a-k u d a$ | $t u=i k a-T a-T i n a-a n ~$ |  |  |  |
| $<$ 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)

| $n a$ | rengas | $i$, | ulingul | $t u=b a L i$ |
| :--- | :---: | :--- | :--- | :--- |
| DF.NOM | rengas TOP | fragrant | 3.PSR=smell |  |
| kir-pauwa | Da | abay | Da | binariyaw |
| get-right | ID.OBL rice.cake | ID.OBL | binariyaw |  |

"The smell of the rengas is sweet: it is right for binariyaw rice cake."
(15)

| $a n$ | $m$-ekan=ta | $D a$ | binariyaw $=l a$ | $i$, |
| :--- | :--- | :---: | :--- | :--- |
| when | ITR-eat=1P.NOM | ID.OBL | binariyaw=PERF | TOP |

ulingul $\quad t u=b a L i$
fragrant 3.PSR=smell
"When we eat binariyaw, its smell is fragrant."

Appendix III
(16) iDini $i$, tu=pauwa-an Da tua-abay-an
this.NOM TOP 3.PSR==right-NMZ ID.OBL make-rice.cake-NMZ

| Da | binariyaw |
| :--- | :--- |
| ID.OBL | binariyaw |

"This is the recipe for making binariyaw rice cake."

## 3: Part of a prayer

(1)

| ki-a-anun=mi=Diya | kanu, | ama $=a$, | kanDu |  |
| :--- | :---: | :---: | :---: | :--- |
| get-a-bless=1P.ECL.NOM=IMPF | 2S.OBL | father=VCT | that.OBL |  |
|  |  |  |  |  |
| kananu | ya-beray | kaniam | kana |  |
| DF.OBL/2S.PSR | NMZ-give | 1P.OBL | DF.OBL |  |
| wa-wari-wari <br> RED-RED-day |  |  |  |  |
| "Father, we praise you for what you give us everyday;" |  |  |  |  |

(2) $n u=y a$-beray kaniam na ka-ameTek-an

2S.PSR=NMZ-give 1P.OBL DF.NOM ka-peaceful-NMZ
"(For) the peace you give us,"
(3) $n u=y a$-beray kaniam na ka-la-laDam-an

2S.PSR =NMZ-give 1P.OBL DF.NOM ka-RED-know-NMZ
$D a \quad$ manay $k e m a=m i \quad i$,
ID.OBL what say=1P.NOM TOP
"the wisdom you give us,"
(4)
sa-sungaL=mi kanu, $\quad a m a=a$,
RED-worship=1P.ECL.NOM 2S.OBL father=VCT
"Father, we will worship you."
(5) garem i, uliya naniam $k i<a>a m i-a n$
now TOP exist DF.NOM/1P.PSR <a>petition-NMZ
kanu $\quad a m a=a$
2S.OBL father=VCT
"Now we have some petitions to you, Father."
(6) $i \quad$ isaw, $t u=k<i n>$ irami-an mieDeng kaDi

SG.NOM Isaw 3.PSR=<PERF $>$ begin-NMZ lie here
$i$ kiaeDengan, palu garem,
LOC bed until now
"Isaw, since his starting to lie on the bed until now,"
nu=ya-'aLaw kan isaw, nu=ya-laman
2S.PSR=NMZ-protect SG.OBL Isaw 2S.PSR =NMZ- sympathise
kan isaw i, unian=mi Da palu-an
SG.OBL Isaw TOP exist.NEG=1P.NOM ID.OBL demarcate-NMZ
Da $s<e m>a n g a L-a n \quad$ kanu
ID.OBL <ITR>appreciate-NMZ 2S.OBL
"(Because of ) your protection over Isaw, your sympathy for Isaw, our appreciation to you is boundless."

| $s<e m>$ angaL- $a=m i=$ Diya | 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 have the most sympathy."
(10) an kaDu naniam ka-kuaLeng-an, ki-a-anun=mi
if there DF.NOM/1P.PSR ka-sick-NMZ get-a-bless=1P.NOM
kanu, $\quad a m a=a$
2S.OBL father=VCT
"If we have difficulties, we pray to you, Father."
(11)
ulaya a ma-Tina 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-aLak=la kemay $i$ maka-saT SG.NOM Isaw TOP ACAUS-get=PERF from LOC along-above
na ka-ra-ruwa pasekaD kanantu $k<$ in>i-anger-an
DF.NOM ka-RED-can achieve DF.OBL/3.PSR<PERF>get-thought-NMZ
Datu a-uka-an m-u-isaT Da 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 $k a$-si $<a>k a s i k=m i=l a, \quad p<e n>a-p a d a n=m i=l a$
will $\mathrm{ka}-<\mathrm{a}>$ start $=1 \mathrm{P} . \mathrm{NOM}=\mathrm{PERF}<\mathrm{ITR}>$ RED-prepare $=1 \mathrm{P} . \mathrm{NOM}=\mathrm{PERF}$ Daniam a-uka-an
ID.OBL/1P.PSR RED-go-NMZ
"We will start off soon, and we are preparing for our journey."
$k<e m>a$ Dini $=m i=$ Diya $\quad$ Da $\quad k a-k u a L e n g-a n=D i y a$ $<$ ITR $>$ here $=1$ P.NOM=IMPF ID.OBL ka-sick-NMZ=IMPF "But we still have some difficulties."
(15) aDi p<en>auwa naniam 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)
$k a<a>$ Du $=$ Diya nantu lang na
$<\mathrm{a}>$ there $=$ IMPF DF.NOM/3.PSR company DF.NOM
pa-pulang na aru ka-keser '<em>aDas na aru
RED-help DF.NOM will RED-strong <ITR>-lift DF.NOM will pa-paDek kan isaw
RED-carry 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."
m-a-aya=mi=Diya Da 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."
ama $=a, \quad$ pulang- $i=m i$
father=VCT help-TR2:IMP=1P.NOM
"Father, help us."
(20) beray- $i=m i \quad D a$ maruwa- $a=m i$ aTebung $D a$
give-TR2:IMP=1P.NOM ID.OBL can-PJ=1P.NOM meet ID.OBL
lalak Da karuwa kurenang kaniam
child ID.OBL can follow 1P.OBL
"Help us that we can find someone who can go with us."
(21) aw, ki-a-ami=mi kanu, $\quad a m a=a$
and get-a-bless=1P.NOM 2S.OBL father=VCT
"And, father, we ask for your blessing."
(22)

| naniam | $k a-k a-k a w a n g-a n$ | $n a$ | paisu | $i$, |  |
| :--- | :---: | :---: | :---: | :---: | :--- |
| DF.NOM/1P.PSR | ka-RED-walk-NMZ | DF.NOM | money | TOP |  |
| $a D i=m i=$ Diya | ma-laDam | $D a$ | ulaya | $i$ | isuwa |
| NEG=1P.NOM=IMPF | ITR-know COMP | exist | LOC | where |  |
| "Our travel expenses, we still don't know where they are." |  |  |  |  |  |

(23) aDi p<en>auwa=Diya naniam paisu..

NEG <ITR>enough=IMPF DF.NOM/1P.PSR money
"We don't have enough money . . ."

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[^0]:    ${ }^{1}$ The thirteen groups are Amis, Atayal, Bunun, Paiwan, Rukai, Puyuma, Tsou, Saisiyat, Thao, Sakizaya, Kavalan, Truku, and Yami. 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, personal communication). Saaroa and Kanakanavu are grouped with Tsou by the government, but they constitute in fact three distinct languages. The fifteenth (not including Sakizaya) Formosan language is Pazeh, which only has one speaker left at the time of writing.
    ${ }^{2}$ Zeitoun and Cauquelin (2006:653-663) show that the word puyuma can be analysed as pu-'uma, meaning "send to the field".
    ${ }^{3}$ 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 6000.
    ${ }^{4}$ The total population of Formosan ethnic groups in Taiwan was 465,463 in January 2006; the Amis makes up 157,055 of these, Paiwan 78,034 , Bunun 45,871 , and Rukai 10,517 . They are all larger than Puyuma in terms of both population and residential area.

[^1]:    ${ }^{5}$ The total population in 1985 was about 6000.

[^2]:    ${ }^{6}$ Puyuma is spelt as "Pyuma" on the map, which is unfortunately an error. Furthermore, Kanakanavu has the alternative spelling "Kanakanabu" on the map.

[^3]:    ${ }^{7}$ The names of the Puyuma tribes are spelt as "Kasabakan", "Ulibulibuk", and "Rikabung" in the map. But since $/ \mathrm{b} /$ has become $/ \mathrm{v} /$ in these dialects (cf. §1.2.3), I spell them as "Kasavakan", "Ulivelivek", and "Rikavung" in this thesis.
    ${ }^{8}$ The seniority system is the tradition of granting privileges and authorities to those who have entered the Takuban 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.

[^4]:    ${ }^{9}$ In Papulu, Taiwanese seems to be used more often than Mandarin is.

[^5]:    ${ }^{10}$ This conference and the following workshops were held with an 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 $l l$ by others. The transcription of the glottal stop is inconsistent, and the high vowels are sometimes transcribed as glides.

[^6]:    ${ }^{12}$ The fifteen languages include Amis, Atayal, Saisiyat, Pazeh, Seediq, Bunun, Rukai, Tsou, Paiwan, Puyuma, Yami, Kavalan, Kanakanavu, Saaroa and Favorlang.

[^7]:    ${ }^{13}$ For example, Huang et al. (1997a ; 1997b; 1999), and Zeitoun et al. (1999).

[^8]:    ${ }^{1}$ The orthography adopted here was the conventional usage in the village ten years ago. It is different from the version recently adopted by the government, in which retroflex stops $/ \mathrm{t} / \mathrm{and} / \mathrm{d} /$ are written as $t r$ and $d r$, but $l r$ stands for $/ l /$, and $/ / /$ is written as $l$. Logically speaking we would expect $l r$ to stand for the retroflex lateral $/ / /$ instead of $/ 1 /$. The reason for not adopting the official version in this thesis is to avoid the potential confusion that $l r$ stands for a sound that has nothing to do with the curling of the tongue.

[^9]:    ${ }^{18}$ 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.

[^10]:    19 These two forms are free variations.

[^11]:    ${ }^{1}$ 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．

[^12]:    ${ }^{2}$ 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'.

[^13]:    ${ }^{3}$ Another possibility is that among all the NP markers, only kana consists of two syllables. It is likely that the first syllable of kana is dropped in those cases where we have a distinct form for the linker.

[^14]:    ${ }^{4}$ 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 Da. There is no distinction of number for manay "who", and no definite/indefinite distinction for manay "what".

[^15]:    ${ }^{5}$ Tsuchida (1995:799-802) points out that the first person singular genitive form - $l i$ in Puyuma is very peculiar. While $u$ and taw show some resemblance to the common pronouns $n u=/=y u, m u=/=m u$, or nantaw, -li looks totally different from $k u=/=k u$. However, this same form $-l i$ also occurs in Rukai (cf. Zeitoun 1997a, 2007), which is spoken to the west and the south of Puyuma. There is no genitive form *- $k u$ observed in any Rukai dialect, and Tsuchida assumes that $-l i$ is a borrowing from Rukai. The origin of this set of pronouns, and especially the first person singular pronoun-li, deserves more investigation.

[^16]:    ${ }^{6}$ Some informants also made the same claim when I was eliciting forms.

[^17]:    ${ }^{7}$ The word leibai is a borrowing from Taiwanese and is used as a verb in this sentence.

[^18]:    ${ }^{8}$ The word peniya is also used in serial verb constructions (§13.4.2) denoting the termination of an action. For example:
    $p<e n>$ iya $=k u=l a \quad$ ma-rengay
    $<$ ITR $>$ finish $=1$ S.Nom=PERF ITR-tell
    "I've finished my talk."

[^19]:    ${ }^{9}$ 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".

[^20]:    ${ }^{1}$ The capital $M$ here represents various alternants, including $\langle e m>, m e-, m$-, $m a$ - and zero affix, whose occurrence depends on both phonological environments (§2.6.1) and semantics. The capital $V$ here represents the verb stem.

[^21]:    ${ }^{2}$ 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.

[^22]:    ${ }^{3}$ See also $\S 3.5 .2 .3$ for a discussion of the allomorphs of $C a$ - and their distributions.

[^23]:    ${ }^{4}$ 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".

[^24]:    ${ }^{5}=$ Diyan is an allomorph of =Diya. The allomorphic distribution needs further research.

[^25]:    ${ }^{6}$ 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.
    ${ }^{7}$ The prefix $k a$ - 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).

[^26]:    ${ }^{8}$ An examiner suggested that a potentive category (cf. Himmelmann 2004, 2006) to explain the irregular occurrence of $k a-$, 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 $k a$ - 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.

[^27]:    ${ }^{1}$ The circumfix $k$--an is an allomorph of ki--an, which attaches to a locative noun to derive a new locative noun.

[^28]:    ${ }^{2}$ For ki- verbs, progressive and irrealis constructions are manifested by the same form. Thus, $k i<a>k a r u n$ can be interpreted as progressive or irrealis. See also §6.5.

[^29]:    ${ }^{3}$ 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-ngaLad | Da | kuma |
    | :--- | :---: | ---: |
    | $<$ PERF $>$ CAUS-name | ID.OBL | Kuma |
    | "Its being named Kuma..." |  |  |

[^30]:    ${ }^{1}$ 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 markdeness, 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.

[^31]:    ${ }^{3}$ 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, while 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.

[^32]:    ${ }^{4}$ 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: e.g. 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 $(2003,2005)$ accesses 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.

[^33]:    ${ }^{6}$ The free pronoun nantu in (3) can be replaced by a bound pronoun $t u=$.

[^34]:    ${ }^{7}$ 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.

[^35]:    ${ }^{8}$ Puyuma and Tsou are the only two examples among Formosan languages.

[^36]:    ${ }^{9}$ LPL ${ }^{\text {NOM }}$ can not 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, i.e. "she stole money for me to buy clothes."

[^37]:    ${ }^{10}$ The word $p<e n>$ iya has two meanings: first, it means "finish" when it occurs as V1 of an SVC (\$13.4.2); second, it means "all" in other situations.

[^38]:    ${ }^{1}$ 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 $\S 6.2$ and $\S 8.3$.

[^39]:    ${ }^{2}$ 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.

[^40]:    ${ }^{3}$ There are two homophonous prefixes $p a$ - in Puyuma. One is causative, the other $p a$-, together with $C a$ - reduplication, signals plurality of relations (§9.3.2). Second, while the $p a-k a$-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 pakaas a bimorphemic prefix $p a-k a$ - and reconstruct $k a$ - as a stative marker in PAn. The Puyuma examples favour Zeitoun and Huang's analysis. However, in Puyuma the semantic distinction between $p a$ - and $p a-k a$ - is not as clear-cut as in the account of other Formosan languages given by these authors. The function of $k a$ - is discussed in $\S 6.6$.
    ${ }^{5}$ The forms $p a$ - and $p$ - are allomorphs: $p$ - attaches to stems that begin with /a/, and $p a$ - elsewhere. The occurrence of $p u$-is more restricted and needs more research. However, this $p u$-should not be confused with $p-u$ - (causative plus motion, e.g. $p$ - $u$-sabak "make sb. go inside"). In the case of the $p u$ causative, $p u$ - attaches to a verbal or a nominal stem and the prefix $p u$ - can not be further analysed into $p-u$ - (e.g. pu-ngaLad "to give a name to" < ngaLad "name", *u-ngaLad); 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".

[^41]:    ${ }^{6}$ 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.

[^42]:    ${ }^{7}$ There are only two examples in my data which show pa-cooccurring with actor voice marker; pa-ka-ma-keser "make strong", and pa-ka-s<em>angaL "to make happy, to award". I have no explanation for these.

[^43]:    ${ }^{8}$ These languages are: Paiwan (Mudan), Puyuma (Nanwang), Saisiyat (Tungho), Pazeh, Atayal (Mayrinax), Amis (Changpin), Thao, Tsou, Kavalan, and Yami.

[^44]:    ${ }^{9}$ 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.

[^45]:    ${ }^{10}$ 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 $m a$ - as the reciprocal marker.
    ${ }^{12}$ If the root begins with a vowel, mare- is prefix, and if the root begins with a consonant, mar- is attached. However, some informants insert a schwa automatically to avoid the consonant cluster.

[^46]:    ${ }^{13}$ This term was first introduced by Nedjalkov and Sil'nickij (1969). See Haspelmath (1987) for more details on anticausatives.
    ${ }^{14}$ Starosta (1995) reconstructs PAn * $m u$ - as "actor focus" and * $u$ - derived motion verbs "go to N" from place nouns. Blust (2003b:451), on the other hand, reconstructs PAn * $m u$ - "motion prefix". Blust's discussion of * $m u$ - is mainly based on the examples from Thao (Blust 2003a) and Puyuma (Cauquelin 1991a and Tsuchida 1980).
    ${ }^{15}$ Although the examples in $\S 9.5 .2$ confirm Starosta's reconstruction of *u-, Blust's observation that $m u$ - is different from actor voice marker *-um- is also true.
    ${ }^{16}$ Verbs that are prefixed with anticausative $m u$ - do not have modal and aspectual forms.

[^47]:    ${ }^{17}$ 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.

    | $a D i$ | muai | $k i-l a ' u D$ | $n a$ | $k a w i$ |
    | :--- | :--- | :--- | :---: | :--- |
    | NEG | willing.to | PASS-wash.away | DF.NOM | timber |

[^48]:    "The timber can't be washed away."

[^49]:    ${ }^{1}$ amau has an irrealis form kamau, which seems to be the only evidence for treating it as a copular verb.

[^50]:    ${ }^{2}$ Possessive relations can be expressed predicatively or adnominally. In this section we are only concerned with predicative possession. Adnominal possession is discussed in $\S 5.3$.
    ${ }^{3}$ These two forms seem to be in free variation; certain speakers favour one, and some other speakers favour the other.

[^51]:    ${ }^{4}$ 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.

[^52]:    ${ }^{6}$ The question mark indicates that it is acceptable to some informants but is a bad sentence.

[^53]:    ${ }^{1}$ There is no third person nominative enclitic pronoun.

[^54]:    ${ }^{2}$ For a positive response, aiwa is used. For example:
    Q: an aDi=ta=Diya p-u-paTaran Da bekaL-an i, aDi=ta
    when NEG=1P.NOM= IMPF CAUS-go-outside ID.OBL new-NMZ TOP NEG=1P.Nom
    $m$-u-ami $\quad k<e m>a$ ?
    ITR-go-north <ITR>say
    "If we haven't taken our new rice, we can't go north?"
    A: aiwa, aDi=ta=Diyan muLaLiaban
    Yes, NEG=1P.NOM=IMPF sea.worship
    "Yes, because we haven't done sea-worship."

[^55]:    ${ }^{1}$ Verbal morphology of imperative construction is also briefly mentioned in $\S 6.3 .2$ and $\S 11.2 .2$.

[^56]:    ${ }^{2}$ 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."

[^57]:    ${ }^{4}$ 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 question from declarative sentences."

[^58]:    ${ }^{5}$ Huang et al. (1999:645) and Tan (1997:107) also briefly discuss this type. 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.

[^59]:    ${ }^{6}$ 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.

[^60]:    ${ }^{7}$ The word $a n D i$ is evidently formed from an $a D i$, "when not".

[^61]:    ${ }^{8}$ 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 Daku tinalek"-"who's the one that has eaten my rice."

[^62]:    ${ }^{9}$ It is noted by Huang et al. (1999:663) that in many other Formosan languages, the interrogative word "which" also means "where".

[^63]:    ${ }^{1}$ 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).

[^64]:    ${ }^{3}$ 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 SVCs is the 'subordination condition', 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 SVC (Crowley 2002:12, Bril 2004:2, Durie 1997:291, Aikhenvald 1999:470).

[^65]:    ${ }^{5}$ pakan means 'feed', but it has the sense of 'worship' in this context.

[^66]:    ${ }^{6}$ 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, 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.

[^67]:    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 clausal-initial position; it can either precede or follow the NP it modifies.
    (a) karuwa $t<e m>$ ubang 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."

[^68]:    ${ }^{8}$ 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.

[^69]:    ${ }^{9}$ The root saLaw has two meanings; in addition to conveying the meaning 'very', it also means 'surpass, overtake'. For example:

    | $s a L a w-i$ | $n a$ | $p a L i D i n$ |
    | :--- | :--- | :--- |
    | 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 ngaLad kan namali
    3GEN=change-TR1 DF.NOM/1S.PSR name SG.OBL my.father
    "My father changed my name."

[^70]:    ${ }^{11}$ 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.

[^71]:    ${ }^{1}$ 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 just have a non-core function.

[^72]:    ${ }^{2}$ Noonan (1985:47) points out that complementisers are often derived from pronouns, conjunctions, adpositions or case markers.

[^73]:    ${ }^{3}$ As well as Puyuma a number of other Formosan languages, such as Paiwan (H.-C. 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.

[^74]:    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".

[^75]:    ${ }^{5}$ This is the case because of the lack of third person nominative bound pronouns.

[^76]:    ${ }^{6}$ 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 $\langle i n\rangle$ ). For a discussion of mood and aspect in nominalisation, see §7.3.3.

[^77]:    ${ }^{7}$ In $\S 11.2 .3$ I have shown that morphosyntactically $a D i$ is neither a verb nor a noun when it appears in a negative verbal construction. In (27), aDi takes a nominaliser -an, and is also marked by ka- and $p a$ - From the corpus, it seems that $a D i$ only takes $-a n$ when it is also marked by $k a$-. There is no *ka-aDi nor *aDi-an.

[^78]:    ${ }^{8}$ There are still some cases in which the complement clauses are not like a direct quote of the speech. For example:
    ma-Da-Dayar ma'inayan $\quad$ Da m-uka ma-salak-a ITR-RED-discuss ID.NOM male ID.OBL ITR-go ITR-celebrate-PJ
    "Males were discussing going to celebrate."

[^79]:    ${ }^{9}$ The verb peniya is also used as a floating quantifier. See also § 13.4.2.

[^80]:    ${ }^{10}$ If there is a volitional actor, palu has to be used transitively, as in (48).

[^81]:    ${ }^{1}$ 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.

[^82]:    ${ }^{3}$ Teng (1997:96-97) mentions that there is another subordinating morpheme $a$, which has a similar function to $a n$; however, this morpheme does not occur in my text corpus.

[^83]:    ${ }^{4}$ 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).

[^84]:    ${ }^{5}$ 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.

[^85]:    ${ }^{6}$ There is a homophonous prefix piya- indicating "to face to" (§13.4.5.1), which attaches only to direction/location nouns, and appears not to be associated with piya 'finish'. For example, piya-Daya "to turn to the west; to face the west".

[^86]:    ${ }^{1}$ 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 a aspectual clitic, and it expresses a comitative meaning.
    andaman $i, \quad \boldsymbol{k a y}=t a=$ Diya $\quad$ a-ka-laDam-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)."

[^87]:    ${ }^{2}$ There are two other ways of indicating "or". anDi "if not" is typically used in alternative question (§12.3.2), and the tag nay "or" (\$4.4.8) often cooccurs with ala "maybe" to express uncertainty.

[^88]:    ${ }^{1}$ The titles are named by myself according to the content of the texts.

[^89]:    ${ }^{1}$ Whether the affix denotes comparative or superlative meaning is depending on the intonation.

[^90]:    ${ }^{1}$ In this sentence, $D a$ functions as a complementiser and introduces the complement clause of the verb palu. See §14.3.4.

[^91]:    ${ }^{2}$ A kind of plant.
    ${ }^{3}$ A kind of plant.

