## A grammar of the Pendau language of central Sulawesi, Indonesia

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# A grammar of the Pendau language of central Sulawesi, Indonesia 

Phil Quick


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## Dedication

This book is dedicated to my father:
Gene Sprague Quick
(Dad, I finished the puzzle without looking at the picture first!)

Also. I dedicate this book to two key Pendau men who made significant contributions to my research, and who were my best friends:

Josep Piri
Ceku Doge

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## Abbreviations and conventions

| 1PL.EXC | first person plural exclusive |
| :--- | :--- |
| 1PL.INC | first person plural inclusive |
| 1SG.IV | first person singular inverse voice |
| 1SG | first person singular |
| 2SG.IV | second person singular inverse voice |
| 2SG | second person singular |
| 3SG | third person singular |
| 2PL | second person plural |
| 3PL | third person plural |
| A | prototypical agent argument or actor |
| AB | absolute case |
| ABL | ablative |
| AGNM | agentive nominaliser |
| ant | anterior feature |
| AREC | alternating reciprocal |
| APPL | applicative |
| assim | assimilation |
| ATEL | atelic aspect |
| ATR | advanced tongue root |
| AVP, PVA | various constituent order sequences, e.g. agent-verb-patient (AVP) |
| AV | active voice |
| BR | back-round |
| CAUS | causative |
| CG | constricted glottis |
| CLSF | classifier |
| CN | common noun marker |
| COM | comitative |


| COMP | completive aspect |
| :--- | :--- |
| cons | consonant feature |
| constr | constricted |
| CONT | continuative aspect |
| COP | copula |
| cor | coronal feature |
| C-Pl | consonant-place |
| DE | denominal (verb class IV) |
| DEL | deliberate |
| DIR | directional |
| DIST | plural distributive aspect |
| DUR | durative aspect |
| DY | dynamic verb (verb class III) |
| EQTV | equative |
| EXC | exclusive |
| EXIS | existential |
| FA | factive (verb class II) |
| GE | genitive case |
| hon. | honorific |
| HPS | harmonic prefix set |
| HSY | hearsay evidential adverb |
| INC | inclusive |
| Ind. | Indonesian |
| INSTR | instrument |
| INTEN | intensification |
| IR | irrealis |
| ITV | iterative aspect |
| IV | inverse voice |
| k.o. | kind of |
| L1, L2 | level 1, level 2 in lexical phonology |
| lat | lateral feature |
| LCM | locomotion (verb class V) |
| ligature, e.g. ng- |  |


| LOC | locative preposition |
| :---: | :---: |
| locN | locative nominalisation -ong |
| MOD | modifying verb |
| MUT | mutual action |
| nas | nasal feature |
| NEG | negative |
| NP | noun phrase |
| NV | non-volitional aspect |
| obstr | obstruent |
| OCP | obligatory contour principle |
| o.sibling | older sibling |
| ONE | numeral one prefix |
| OPPO | opposite |
| P | prototypical patient argument or undergoer |
| PL | plural |
| PLL | Pendau Language Learning Lessons |
| PN | proper noun marker |
| POS | postural (verb class VI) |
| POSS | possessive, possession |
| PP | prepositional phrase |
| PQ | polar question particle |
| PT | primary transitive (verb class I) |
| PUR | purposive serial verb |
| pV(C)- | augmented stem former (SF) prefix type |
| RD | referential distance |
| RE | realis |
| RED | reduplication |
| REL | relic form, e.g. -in- |
| REQ | requestive |
| RFLV | reflexive |
| RM | relative clause marker |
| RSLTV | resultative |
| S | single argument |
| $\mathrm{S}_{\mathrm{A}}$ | intransitive subject $=$ transitive A |


| S $_{P}$ | intransitive subject = transitive P |
| :--- | :--- |
| SCC | strict cycle condition |
| SF | augmenting stem prefix former |
| SG | singular (interlinear glossing) |
| SG | spread glottis |
| s.t. | something |
| son | sonorant feature |
| SP | soft palate |
| SPE | agentive specifier |
| ST | stative verb (verb class VII) |
| str | strident feature |
| TAG | tag, exclamation or question |
| TAM | tense, aspect, and mode |
| TEL | telic aspect (=inchoative) |
| TP | topic persistence |
| TZ | transitiviser |
| UD | undetermined prefix |
| V | verb |
| VP | verb phrase |
| vd. | Voiced |
| vl. | Voiceless |
| V-Pl | vowel place |
| VOC | vocative |
| voi | voice feature |
| WFC | well formedness condition |
| yon. | yonder |
| y.sib. | younger sibling |
| y.sibling | younger sibling |
| $=$ | clitic boundary |

## Interlinear Conventions

Interlinear glossing uses three lines followed by a free translation. The first line uses the language orthography. Proclitics and enclitics are written together with their host word. Word initial glottal stops are not written, however word initial glottal stops are written when a clitic or affix moves the glottal to a medial position, and on the second line which shows the underlying forms. The second line shows formative boundaries and gives the underlying forms. The third line gives the English gloss or technical abbreviation for grammatical categories. As usual the gloss is often a shorthand for a variety of other possible glosses, so that in the free translation there may be a difference in meaning either due to the context, the change due to a derived meaning from other affixes, or because it cannot be conveyed in a sensible way in English. My general rule of thumb for the free translation is normally oriented towards meaning based translation theory, however, because of the special nature of interlinearising constraints, sometimes a more literal translation is given to help understand the Pendau structure.

Another important note is that in some of the examples capital letters in the English translation are used to indicate what the grammatical subject in Pendau actually is. Clauses inflected with inverse voice are usually translated into English as active voice.

## Photographs

The following photographs provide a pictorial glimpse of Pendau life


Loading the boron 'dart'


Soputan ‘blowgun’ demonstration


Lashing down the nabo' 'roof'


Language assistant Ceku gathering folktale information from a Pendau elder


Sangkor the Sulawesi 'babi rusa'


Nabo' 'roof' work


Bulagon 'rattan' lashing from the jungle


On the road to Palu from Sibayu


The traditional pali ‘innoculation’ ceremony culminating after an all night ritual


Returning from the river to the ceremony house to complete the rites


The adat 'traditional laws' specialist fighting an invisible foe as they approach the ceremony house


Musicians playing the drum and gong as the specialist continues his combat before they re-enter the ceremony house; the boys will be circumcised and traditional teeth filing will be performed


The initiates getting dressed up in new clothes and leaving their old clothes behindsymbolic of their innoculation


Phil Quick and Josep Piri, 1998

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### 1.1 The Pendau ethnographic background

Indonesia is an archipelago of about 13,500 islands (3000 inhabited), stretching over 3,000 miles east to west. Sulawesi is the fourth largest island in this archipelago (11th largest in the world); see also Map1. The Pendau live in the isthmus of Central Sulawesi located in a zone just south of the equator stretching northwards to Simatang island (see Map 4). The Pendau live both in coastal areas and the interior mountains. These mountains run down the centre of the isthmus dividing the east and west coasts with peaks up to about 2000 meters. Another prominent


Map 1 Showing Sulawesi and location of the Pendau language in Indonesia geographical feature is the Balaesang Peninsula with its own mountain ridge leading westwards out to sea from the mainland with an extinct volcanic crater near its tip. The Pendau live in these regions scattered in villages, government resettlements, and isolated dwellings. The Pendau population is estimated at about 4500. Today many Pendau live as farmers who harvest coconuts, cacao, and cloves as cash crops. They also occasionally gather products such as sago, rattan, or timber for which they can trade, sell or use for themselves. Some Pendau also work as labourers for plantation owners, or specialise in economic activities such as handling a chainsaw, selling thatched roofs, or blacksmithing.

The history of the Pendau language and ethnic group has only recently begun to be documented. However a probable history can be constructed based on historical documents, language factors and the present situation of the Pendau. One of the earliest historical documents comes from an American Captain (1804 $1^{\text {st }}$ edition; the $18052^{\text {nd }}$ edition was republished as Woodard 1969). Woodard was stranded off the west coast of Sulawesi's isthmus near the equator, on an island now known as Pasoso Island. Along with four other sailors he was captured near the present town of Donggala, and lived for nearly two and a half years there and in the vicinity of Palu, from 1795 onwards until they
escaped to Makassar. Accurate maps drawn by Woodard shows the coastline from Palu Bay northward to Tolitoli (see map 2).


Map 2 West coast of central Sulawesi in 1795 - as sketched by Captain David Woodard (1805)


Figure 1.1. Pirate weapons and merchant perahu at anchor in 1795 (sketch in Woodard 1805)

Although the Pendau are not specifically mentioned, there are some general statements about local tribal groups with items such as ebony blowguns (today the Pendau make theirs from bamboo). The dominant ethnic groups used piratical perahu (see Figures 1.1 and 1.2). ${ }^{1}$ These perahu needed slaves to row their boats (see Figure 1.2). I surmise that the Pendau were preyed upon for slave labour (see Himmelmann 2001 for some discussion of

[^0]this too). In recent history the Pendau and other indigenous ethnic groups have often lived scattered throughout the mountainous areas (Himmelmann 2001). Sago has been the staple food of the Pendau until modern times when rice is gaining acceptance. Some Pendau 'texts' and discussions with older Pendau men indicate that the Pendau have never had a king (in contrast to many other neighbouring groups such as the Kaili). They have viewed themselves as having no class distinctions, although there were hierarchical roles used in decision-making and conflict resolution.


Figure 1.2. A comparison of a merchant perahu and a piratical perahu with possible Pendau slaves in 1795 (sketch in Woodard 1805)

The Pendau have made their living in recent history as swidden agriculturists in combination with hunting, fishing and sago making (and secondarily with some basic gardening of vegetables, dry rice farming, and other root crops). They make thatched-roof houses with split-woven bamboo siding raised off the ground, outrigger canoes, various
hunting weapons, for example, blowguns with poisonous and non-poisonous darts, various spears and shields, woven baskets and assorted fishing tools. They also have sago factories and blacksmiths. Traditional jewellery and utensils are rarely found nowadays as they have mostly been sold or traded off during the recent past and are no longer made. The vast inventory of fish names and words for types of fishing shows that the sea has been an integral part of their tradition for a long time.

Although they were formerly animists, many Pendau people have chosen to practice Christianity, unlike neighbouring language groups who have decided to follow Islam. The Protestant Church has been working in the area for at least fifty years. The traditional religion of animism still plays an important role in Pendau life. Although the majority of the Pendau people are registered as Christians according to government regulations, many features of the animistic religion are still practised. Muslim pockets of Pendau are scattered around and within the central population of Pendau speakers and in the fringe areas further north of the Balaesang subdistrict.

Apparently between 1925-1935 the earliest Dutch-trained Manado (Indonesian) evangelists (perhaps Sangir) arrived from the Manado area of North Sulawesi. One story has it that the first Pendau man was baptised with coconut milk where the original church was built on the Balaesang Peninsula. Some intermarriage between various Manado ethnic groups and Pendau may have served to strengthen the introduction of Christianity into the Pendau area. During World War II the Japanese occupied Indonesia, and grew cotton in the Pendau area. Older Pendau men remember the occupation, the difficult times it brought, and even some Japanese (I have heard one Pendau man recite Japanese words and sing a Japanese war song). Although Islam had been in the Pendau area before Christianity was established, other ethnic groups such as the Balaesang and Dampelas groups accepted a formal religion (Islam) long before most Pendau were ready to. The Pendau maintain that the pig could not be given up as a food item and they used this as a reason to continue their animism.

With Indonesia independence from the Dutch came the legal requirement to adopt a formal religion, and animism was not viewed as acceptable. So over time the majority of the Pendau population (at least in the Balaesang subdistrict, and probably in the Dampelas subdistrict as well) have registered as Christians. Shamans and other animistic religious and cultural experts among the Pendau still practise a portion of their former traditional beliefs.

Quick (1989a) describes the inoculation rite of passage (also see Chapter 18 for an analysis of adat prayers performed during one of these rites, as well as various textual studies related to the ethnography of Pendau). Rebecca Quick (1996) provides a detailed analysis of the kinship system of Pendau as well as an exhaustive summary of the kin terms in Pendau.


Map 3 The Tomini-Tolitoli language area


Map 4 Area where Pendau is spoken

### 1.2 Pendau in the context of Sulawesi linguistics

### 1.2.1 Sulawesi linguistics

Pendau is in the Sulawesi group called Tomini-Tolitoli (Himmelmann 2001). ${ }^{2}$ The Tomini-Tolitoli group has been a significant gap in the knowledge of Sulawesi languages.

The best overview of the linguistic situation and documentation produced in Sulawesi is given by Noorduyn (1991a; see also Noorduyn 1991b for a short technical overview, but which also has little to say about the Tomini-Tolitoli languages). Sneddon (1995) provides a historical sketch of linguistic research in Sulawesi, and reviews each of the language groups. Mead $(1998,1999)$ also provides a recent overview of Sulawesi linguistics in the context of the Southeast Sulawesi province. (See also Mead (1999:179180) for a map showing fourteen linguistic regions in Sulawesi.) The number of languages in a group and the number of linguistic groups vary according to each of the four major references on the Sulawesi languages: Adriani and Kruyt (1914), Esser (1938), Salzner (1960a, 1960b), and Sneddon (1983).

Sneddon (1993, 1995) proposes that the indigenous languages of Sulawesi are constituted of nine microgroups. ${ }^{3}$ He states that the Tomini group (=Tomini-Tolitoli) is one microgroup (see $\S 1.2 .2$ below for some discussion on basically the same group which Himmelmann refers to as the Tomini-Tolitoli group).

Both van den Berg $(1995,1996)$ and Mead $(1997,1998)$ propose that several of the Sulawesi language groups constitute what they call the Celebic supergroup. Although the idea of a Celebic proto-language is probably heading in the right direction, a lot of research still needs to be carried out, and the newer data coming in now from the Tomini-Tolitoli languages has not yet been able to be assessed in detail.

### 1.2.2 The Tomini-Tolitoli group

Himmelmann (2001) has more recently surveyed the entire Tomini-Tolitoli group and has concluded that there are eleven languages (see Map 3). Tomini-Tolitoli is still a tentative subgroup. Within Tomini-Tolitoli Himmelmann proposes two subgroups, Tomini and Tolitoli. The Tomini subgroup is further tentatively divided by Himmelmann into the Northern Tomini languages and the Southern Tomini languages. He lists Pendau with the Southern Tomini languages, (1) illustrates Himmelmann's tentative classification.

[^1](1) Tolitoli Subgroup

Totoli
Boano
$\begin{array}{ll}\text { Tomini Subgroup } & \\ \text { Northern Tomini } & \text { Southern Tomini } \\ \text { Ampibabo-Lauje } & \text { Balaesang } \\ \text { Lauje } & \text { Dampelas } \\ \text { Dondo } & \text { Pendau } \\ \text { Tialo } & \text { Taje }\end{array}$
Tajio

Wumbu et al. (1986) state there are 4200 Pendau speakers in the Balaesang subdistrict of the Donggala District (based on census figures). However, it is likely that this figure includes speakers in other subdistricts. In 1991 the Balaesang's official subdistrict head stated publicly that 10-11 percent of the Balaesang's 22,000 population consisted of Pendau speakers (public address-September 1991). The figure of approximately 2200 appears to be the more accurate estimate of the population of Pendau speakers in the Balaesang district, with probably another 2000 scattered in several other subdistricts. This figure is further indirectly supported by data recorded in 1987 by the Gereja Protestant Indonesia Donggala (GPID) Tambu Church District X which shows there were 1183 Pendau members from nine villages in the Kecamatan Balaesang (from 1988 field notes gathered from Rev Bangkalang pers. comm.). This figure only reflects adult baptised members. Himmelmann (2001) states there are approximately 3200 Pendau speakers (and notes this does not include speakers mentioned by McKenzie (1991) on the east coast of the Central Sulawesi isthmus). Himmelmann (2001) gives a list of Pendau areas that he visited in his comprehensive survey of the Tomini-Tolitoli languages, and lists many of the smaller Pendau areas outside of the central Pendau 'homeland.' Himmelmann (2001:22) states:

The situation for Pendau is much more complex than that for most of the other languages, since the Pendau live in small, often isolated communities all the way up between Balaesang and Dampal Utara.

In addition to the scattered locations of Pendau further north of the Balaesang subdistrict (which Himmelmann 2001 mentions; see also Map 4), the Pendau are more concentrated in or near the following villages or hamlets: Ketong, Siwia, Lewonu, ${ }^{4}$ Walandano, Tambu, Abo, Siweli, Malawa, Roras, Sibayu, Pinayor, Awesang, Moromu, Pomolulu, Palau, Navuong (a small interior location about one hour's walk into the mountains east of Pinayor). Of these, some Pendau speakers claim that the centre of the Pendau-speaking area is Malawa (where I conducted my field research in 1997-1998). ${ }^{5}$

[^2]A few small groups of Pendau live a little further south in the Sirenja subdistrict including a tiny coastal hamlet called Pasir Putih (part of the Lende village), and inland from Tompe in the hamlet Sibado was a small group of three or four families that an SIL survey team came across in 1988 when doing a Tajio survey (see McKenzie 1991:21). So the Sirenja subdistrict can be considered to be the lower southern boundary of the Pendauspeaking area.

Most of the Pendau live along the west coast, which reflects the geography-a range of mountains goes north and south splitting the east and west coasts. This has resulted in few Pendau speakers living on the eastern coast; those I know of, such as those living in Ranang (near Kasimbar) and Silutong ${ }^{6}$ (west from Tada in Kecamatan Tinombo), are in the mountain region away from the coast.

Most of the other scattered locations of Pendau speakers north of the Balaesang Kecamatan and the few other locations on the east coast in the Tinombo Kecamatan are listed in Himmelmann (2001). Combining my data with Himmelmann (2001) and McKenzie (1991) results in Figure 1.3. ${ }^{7}$ This Figure represents the map iconically by showing the split between the west and east coasts and the language locations from north to south. Hyphens between location names indicate that Pendau speakers are either in or near one or more of these locations. The highest concentration of speakers is in and near the Kecamatan Balaesang which is where I conducted my field research.

[^3]| NORTH |  |
| :--- | :--- |
| WEST | EAST |
| Kecamatan Dampal Utara \& |  |
| Kecamatan Dampal Selatan |  |
| Villages/Hamlets: |  |
| Mimbala-Bambapula-Banagan |  |
| Total = 420 +/- | Kecamatan Tinombo |
| Kecamatan Dampelas \& | Villages/Hamlets: |
| Kecamatan Sojol |  |
| Villages/Hamlets: |  |
| Pani'i-Sioyong, Parisan-Simontomu | Total = 565 +/- |
| Pangalaseang |  |
| Bou-Pesik-Lenju areas |  |
| Total = 550 +/- | Kecamatan Ampibabo |
| Kecamatan Balaesang | Villages/Hamlets: |
| Villages/Hamlets: | Kasimbar-Ranang |
| Ketong-Siwia, | Posona ${ }^{8}$ |
| Walandano-Lewonu, | Total = 100 +/- |
| Tambu, Abo, Siweli-Malawa, Sibayu- |  |
| Pinayor-Roras-Navuong, Pomolulu-- |  |
| Awesang-Palau |  |
| Total = 2200 +/- |  |
| Kecamatan Sirenja |  |
| Villages/Hamlets: |  |
| Pasir Putih (Lende) |  |
| Sibado |  |
| Total = 100 or less | SOUTH |
| Total All Locations ${ }^{9}=3935$ |  |
| 1986 Census figures = 4200 (Wumbu et al. 1986) |  |

Figure 1.3. Relative population by geographic location of Pendau speakers (shaded area shows central region with highest population)

### 1.2.3 Previous research on Pendau

The first reference to the Pendau language is by Riedel (1868:43) where he refers to the Pendau language as To Malasasch (Dutch for To Malasa):

Bewesten Taada Kasimbar en Toriboeloe wonen op de aldaar aanweizige hoogvlakten de Alifoeroe-stammen To Malasa genaamd, welke eene afzonderlijke taal bezitten.

[^4]> West of Taada Kasimbar and Toribulu, living on the high plateaus are the Alifuru tribes called To Malasa, and they have a separate language. (Unofficial translation by John Bowden)

The language map (Riedel 1868) prefacing this article identifies To Malasasch as language number fifteen in the interior location of the Sulawesi isthmus. Since the western side of his map is clearly less accurate than the eastern side, it is clear that the cartographers were not aware that this is the narrowest part of the isthmus. This implies that the Pendau were also on the western coast where the majority of them live today (since reducing the land area brings the interior closer to the coast). Therefore the portrayal of the location of the main Pendau-speaking area corresponds very well with the central Pendau-speaking region today (most subsequent language maps do not depart from Riedel's first description). Unfortunately Riedel (1868) doesn't provide any data for Pendau.

Adriani and Kruyt (1914:169ff) confirm Riedel's map as accurately indicating the location of the Pendau area, as illustrated by the following translation from Adriani and Kruyt: ${ }^{10}$

> A bigger area has tajio or ajio, that is spoken along the coast from Kawu-kawu till Tinombo, so from 020 S till $025^{\prime} \mathrm{N}$. This language can be called Kasimbar [=Tajio], after the most important trading town in this language area. Between these same latitudinal degrees the ndau language is spoken in the interior, the language of the To Umalasa people, which can therefore be called Umalasa [=Pendau]. The area of this language was already fairly correctly indicated by Riedel and copied on the language map of Holle-Brandes-Jonker. (unofficial translation provided by van den Berg)

Salzner's language map (1960a:14, 1960b Map 21) also displays the same general interior location for Pendau as Riedel (1868) and Adriani and Kruyt (1914). Salzner refers to Pendau as Umalasa and in parentheses after this as Nda'u (I don't know why the apostrophe or glottal stop symbol appears here but nowhere else in the literature). ${ }^{11}$ Barr and Barr (1979, Map V, p. 69) also refer to Pendau as Ndau and place Pendau in the interior region, similar to Riedel and the others above. Barr and Barr do not provide a word list of Pendau, and offer little new information on it, except to note that the two villages Walandano and Sibayu in the Balaesang subdistrict have Pendau speakers. In the language maps produced by Wurm and Hattori (1983), and as compiled by Sneddon (1983), Pendau (under the name Ndau) is incorrectly represented as occurring only on one island location, Simatang, off the west coast of Central Sulawesi. It is true that some Pendau speakers are there (at least as stated in Himmelmann 2001:24), but these have all intermarried with Bajau speakers.

Adriani (1913:612) first mentions the Pendau language in a list of Tomini languages, and states that several Tomini languages including Oemalasa (=Pendau) have the word aniong 'rice'.

Adriani and Kruyt's (1914) is the first publication to list some Pendau data as well as to offer some general information on the language. It includes some phonological and grammatical remarks. At that time Adriani and Kruyt (1914) referred to the Pendau

[^5]cultural group as To Umalasa, and the language as Ndau. They also refer to both the language and culture as Umalasa in this publication. Noorduyn (1991a:72) states:

The name Umalasa is reported not to be used or recognized locally. It is in fact an abusive term of Bugis origin, derived from the word tomalasa 'sick people’.

From this it can be concluded that to malasa was an exonym, since it is clear that the languages in the Tomini-Tolitoli group (see Himmelmann 2001) and the languages in the Kaili-Pamona group (Barr and Barr 1979) frequently derive their names from the negative word which is used for a particular language or dialect (see $\S 14.2$ for discussion of ndau 'no').

Adriani and Kruyt (1914) list twenty-two Pendau words which illustrate final consonants (see $\S 2.4 .2$ for actual consonant distribution in Pendau today). They claim that Pendau has no final k and compare cognates such as ayu 'wood' with the Malay cognate kayu. They state (unofficial English translation by van den Berg pers. comm.): 'The fact that k is lacking among final consonants is to be attributed to the tendency in Umalasa to drop the k in pronunciation, as is clear from the examples ...' This statement is incorrect. Firstly, words such as ayu are actually /'ayu/ phonemically. The initial glottal stop varies between [?] and creaky voice on the initial vowel, making it difficult to hear on glottal initial words (see $\S 2.6 .3$ and Quick 2000a, 2002b). Secondly, there is a word final unreleased k in Pendau and k does alternate with word initial glottal stops depending on the morphophonemics of the particular word. Note the word 'omung 'bring' in (2) for example (see discussion and other examples in §3.5.5 and Quick 2000a, 2000b).

| M-pong-komung | $\varnothing$ 'omung | ni-'omung |
| :--- | :--- | :--- |
| IR-SF/PT-bring | IMP-bring | IV/RE-bring |

Thirdly, there are some words that do begin with k , such as kova 'carry'. These may be more recently borrowed as they are less common or reflect a different stratum within Pendau. This phonological alternation will be further described in §3.5.5.

In addition to the twenty-two words listed in Adriani and Kruyt there are twenty-four other words used to illustrate reduplication and examples of words not found in the 'Toraja languages' (that is, Kaili-Pamona group). It is clear they were working with insufficient data as they cite only the 'articles' (that is, noun phrase markers) $n u$ and si, whereas Pendau also has ni. The si form is mistakenly cited as the genitive form, whereas the ni and nu noun phrase markers may be genitive when linking nouns (see §7.5.1 and §7.6.4 for more discussion). It is strange that they only describe the inverse voice prefix ra- (they call it 'impersonal passive'), whereas Pendau has three phonological alternations: $r a-$, re-, and ro-. ${ }^{12}$ It is not surprising they missed the complex vowel harmony. Being familiar with Kaili-Pamona languages would have conditioned them to look for the ra-form rather than to observe the vowel harmony patterns. However, they list no-doyo 'stupid', neitong, 'black', and *na-bou 'new' (actually no-bou), the last either being a transcription error, preconditioning from a Kaili language, or a more recent change in Pendau.

After Adriani and Kruyt's (1914) initial comments the first major publication on Pendau is Quick (1991a), which deals with the nasal-obstruent phonology problem (see §2.5.3). A description of the Pendau phonology (Quick 1989b and revised later in Quick

[^6]1992) was made available in an official (but unpublished) government report (Quick and Quick 1991) along with a copy of the nasal-obstruent phonology problem (from Quick 1991a, and revised in Quick 1991b), a work paper on the inoculation rite of passage ceremony (Quick 1989a), the first interlinearised text on Pendau, and the Pendau language learning lessons: A pedagogical field guide to Pendau (Quick 1989c with two cassette tapes, abbreviated as PLL). The latter provides the first attempt at analysing the grammar of Pendau systematically, using substitution drills, vocabulary items, and various grammar notes made during the first year of field work. Himmelmann provides a first sketch of the phonologies of all the Tomini-Tolitoli languages including Pendau, and shows Pendau on his language map (1991:50).

Sneddon (1993:13) mentions Pendau's final consonants and misconstrues Himmelmann's $(1991,1997)$ data on paragogic vowels. He states that Pendau has echo vowels, but this is not the case (at least not in the central Pendau speaking homeland area). It does however have vowel harmony in certain prefixes. The harmonic prefix sets (HPS) will be discussed comprehensively in $\S 3.5 .7$ (see also Quick 2000b). Contrary to most Sulawesi languages, Pendau does not exhibit any tendency to lose final consonants, nor any other phonological behaviour that would indicate that open syllables are being formed. It is in fact more in line with the Saluan languages which Sneddon clearly states do not follow the general Sulawesi pattern of drift towards open syllables. Pendau does however have epenthetic vowels to prohibit consonant sequences between words and enclitics. This is possibly germane to Sneddon's discussion, and the epenthetic vowels will be discussed in §2.4.4.

In a study on Proto Kaili-Pamona, Masyhuda (1971:5) lists Umalasa (=Pendau) as a Tomini language. In Kaseng et al. (1979:9) Pendau is erroneously stated to be a dialect of Balaesang. They compare twenty-three words between Balaesang and a number of other Central Sulawesi languages, however many of these words were clearly not Pendau words, and some were similar or the same as found in Pendau. Most of the differences correlate with the Balaesang words in Himmelmann (2001), so it is doubtful that any contact was made with actual Pendau speakers in their work. ${ }^{13}$ SIL archives contain Swadesh word lists (100 words) for Pendau from several villages which were informally surveyed circa 1981 by D. Barr, R. Busenitz, and M. Martens, and some informal reports describing Pendau language locations and some sociological information. Pendau as a language and ethnic group is mentioned in a list of ten suku terasing 'isolated ethnic groups' (Departmen Pendidikan dan Kebudayaan:1982/1983). Wumbu et al. (1986) give a more recent Swadesh 100 word list. McKenzie (1991) reports on the Tajio survey of 1988 where one word list ${ }^{14}$ was taken from a Pendau man in a mixed Tajio-Pendau resettlement, in Ranang (on the east coast, opposite Tambu on the west coast). ${ }^{15}$ He reports on the lexicostatical comparison of Tajio dialects, Pendau and Tialo (a Lauje dialect).

The Sulawesi travel guide edited by Volkman and Caldwell (1990:43) gives a language map of Sulawesi but does not show the Pendau language. However one of the articles in the guide by Acciaoili and Muller (1990:162) does mention briefly the Pendau language along with several other ethnic groups and their current status.

[^7]
### 1.2.4 Other languages in the Pendau area

As well as being the national language, Indonesian is the trade language which serves to unify the diverse ethnic groups found in the Pendau language area. ${ }^{16}$ Indigenous groups in and surrounding the Pendau language area include: Balaesang, Dampelas, Tajio, and Rai (Kaili). Mandar and Bugis are older immigrant communities originally from South Sulawesi. Bajau is also an older immigrant group from the southern Philippines, but found in isolated communities around various parts of Indonesia as well.

In addition there are several recent immigrant ethnic groups: Pamona (Bare'e), Toraja, Manado Malay (that is, speakers from the Manado area; see Sneddon 1993 for discussion of Manado Malay as an independent language), Javanese, and Balinese. A large number of government transmigration projects (since at least the early 1980s) near the centre of the Pendau-speaking area (in Dampelas subdistrict) has brought about an increased use of Indonesian in interactions between the local Sulawesi speakers and the non-Sulawesi immigrants as the lingua-franca. These languages add a dimension of complexity to language use in the Pendau area. See Figure 1.4 for an abstract sketch of the linguistic situation from a Pendau-centric viewpoint. The larger circles indicate languages which influence more of the Pendau population; whereas the smaller circles indicate languages that impact only some of the Pendau population.


Figure 1.4. Pendau-centric view of the current language contact situation

[^8]Since Rai (Kaili) was the former trade lingua franca, many Pendau are capable of interacting with Rai speakers (rarely the other way around). Pendau who live near the Balaesang language area probably know some Balaesang. Pendau who live near Dampelas speakers can speak some Dampelas.

### 1.2.5 The sociolinguistic status of the Pendau

The degree of endangerment varies from one language to another, but all the TominiTolitoli languages can be considered to be endangered (see Himmelmann 1996c, 2001). Pendau is still a moderately strong language, but largely because of contact with Indonesian a shift in use is already noticeable. Although children still learn to speak Pendau and use it every day, the use of Indonesian in primary school education and in other public circumstances, as well as being the usual medium between Pendau and nonPendau has already caused the traditional Pendau vocabulary of young Pendau speakers to diminish. The most noticeable influence is the heavy lexical borrowing of Indonesian words when they do not know the Pendau equivalent, or to demonstrate their Indonesian knowledge in a Pendau context. Most Pendau speakers are bilingual to some degree in Indonesian (or the Malay Manado variety), and are frequently multilingual in at least one other language that they come into contact with. The introduction of television and the availability of video programs have increased exposure to Indonesian dramatically during the past ten years. This has influenced and increased the bilingual capabilities of many more Pendau speakers. Part of the shift from Pendau to Indonesian is due to more consistent public education for Pendau speakers for grades one through six. Although increasingly more Pendau speakers are gaining access to higher grades, it takes great effort to achieve a high school education as the few Pendau speakers who have done it have had to live in the provincial capital Palu (which requires an economic advantage which most Pendau up until now have not had). The domains that Indonesian are commonly used in are: governmental, religious, marketplace and other social events where there are mixed languages. During the last fifteen years the government has made many areas of Pendau that were formerly isolated much more accessible due to many new roads and bridges. This has resulted in increased contact with non-Pendau speakers which in turn has resulted in the need to use a lingua-franca, usually Indonesian.

There are a few cases I have heard of and observed where parents have purposely chosen not to speak to their children in Pendau so that their future prospects via Indonesian might be better (this is not common though). Many Pendau have often hidden the fact that they are Pendau and have identified with a more prestigious language group when possible. Pendau speakers of mixed ethnicity almost always report the more prestigious identity when necessary. Some of this has begun to change with the recent publications that have begun to appear on the Pendau language, and as vernacular literacy has begun to be encouraged. The strength of Pendau usage is also affected by how much contact a particular community has with non-Pendau speaking people. One of the most isolated hamlets, Siwia (part of Ketong village), has about fifty Pendau people. Indonesian is rarely used within the village, and until recently many Pendau people there were still monolingual.

Another occasion when I was recording Pendau riddles during a funeral-memorial service in Lewonu, after about the seventh riddle in Pendau some of the contributors began to give riddles mixed in Indonesian and Pendau. And by the tenth riddle it was all in Indonesian. Traditionally all would have been performed in Pendau. In contexts like this it is difficult to tell whether the more adept bilingual speakers are trying to impress the less
adept bilingual speakers, or whether they are adapting to other less fluent Pendau speakers. I have noticed in my conversations with younger Pendau speakers that sometimes they don't understand some traditional common Pendau words that I have learned. In my opinion this is usually because they use a common Indonesian word as a substitute.

This shift towards using Indonesian to replace Pendau is also reflected in the attitudes of many adult speakers who say their children just can't speak good Pendau any more (although this is usually hyperbole as their children can speak Pendau, but their usage has varying degrees of Indonesian interspersed in their speech). This also reflects the culture change that is going on as the Pendau leaders struggle to address their traditional authority and roles. Some Pendau leaders are looking for avenues to help strengthen their traditional cultural values and language for the following generations. The local government has recently begun to encourage the Pendau, and other local language groups, to develop their language and culture so that their language can be used alongside Indonesian.

Intermarriage between Pendau and other ethnic groups sometimes has resulted in the children only learning the non-Pendau parent's language and/or a concentration of Indonesian. This results in some adults that I have met who either can't speak Pendau or are minimally bilingual/multilingual in Pendau. There does seem to be a trend in the Balaesang region to intermarry with Christians from other ethnic groups that have large Christian populations (for example, the most common are with ethnic groups from Poso area, Toraja area, and Manado area). I have also met some non-Pendau who have become bilingual in Pendau because their spouses are Pendau.

There are no known dialects within the Pendau region. ${ }^{17}$ That said, there are of course differences in various regions which appear to be largely lexical choices influenced by different languages. Another variation that has been mentioned anecdotally is identifying other Pendau speakers by their 'rhythm' or intonation pattern. For example, a Pendau man on the mainland will say he can tell people are from the peninsula by the way they speak (that is, their rhythm). One grammatical difference that sometimes appears is a te- prefix (homophonous with the non-volitional te- prefix, §13.4.2.2) in place of a stem former peprefix (see $\S 7.5 \cdot 2.1 .2$ and $\S 7.5 \cdot 2.4 .1$ ). This may be a difference of an informal versus formal register respectively. The prefix te- clearly appears in my data in a few places, but frequently native speakers have asked me to change it to $p e$ - when I have been reviewing the data with them. In addition to this, as is characteristic in many other Sulawesi languages, the first person inclusive pronouns may be used to differentiate informal versus formal attitudes when addressing another person. The first person inclusive plural pronoun ito (or $=t o$ ) is used to honourifically address a single person (see §7.3.1,), that is, they serve functionally as a special second singular personal pronoun in these contexts. Informal use would be to use the regular second singular forms ' $o o$ ( or $=m u$ ). The pseudoreflexive pronoun 'alae 'body, self' may also be used with this pronoun in the same context (see §7.3.4).

### 1.3 Methodology and theoretical background

The methodology for this thesis is based on standard linguistic field methods. I gathered the primary data over a period of about ten years from 1988 until 1998. The primary periods of field work were during 1988-1989, 1991-1992, and 1997-1998 which

[^9]totals about two years of field work in Pendau villages. However, this does not include time that I spent with Pendau speakers off and on when we were based in the provincial capital of Palu. I often made short trips to Pendau villages or on several occasions we would have Pendau people stay in our home in Palu (from several days up to a month). Some of the data includes information gathered by my wife Rebecca Quick who has been working with me in a joint linguistic program overseen by SIL in conjunction with various Indonesian organisations. In our first years we focused on language learning and developing a tentative orthography in Pendau.

Text collection is the primary basis of the analysis and description of Pendau presented here. At least seventy texts form the primary corpus for the description of this work (see Appendix 1 for details of these texts and other sources). A secondary source is the translation of the gospel of Mark (as well as other Bible portions that are in various draft forms). However, these translated texts have never been used as primary sources, and have been used purely as supplemental sources of examples of morphosyntactic cases that occur infrequently or rarely in the main text corpus, and/or when especially clear examples of a topic enhance the presentation and/or analysis.

The traditional method of recording and transcribing the texts was followed. In the process of working with Pendau we have been training indigenous Pendau people to write stories in their own language, and to help in the transcription of texts with the goal of publishing vernacular literature. Two Pendau men who have contributed most of the native authored written stories were Mesak Doge and Yosep Piri (also both of whom were my main language helpers and language mentors). Their stories were also used in this analysis. Some of the recorded stories were transcribed by Mesak Doge and edited by him and/or Yosep Piri. I consider all of their stories, as well as the stories by other authors that they have edited, to be of the highest quality in my corpus. In addition to the recorded texts about two and a quarter hours of Pendau conversation and illustrative situations of various cultural activities were recorded in video format. Only a very small portion of this has been transcribed, and it was included in the text corpus. Certain linguistic questions have been reviewed with the use of this video footage as well.

Since 1988 I have been compiling a database of the Pendau lexicon. The computer program Shoebox has provided a means of integrating linguistic analyses so that the lexicon could be expanded and improved with every text that was added or worked on.

The purpose of my nine-month field trip in 1997-1998 was to answer specific linguistic questions and address the gaps in the data that I had up to that time and to concentrate on becoming a fluent speaker of Pendau, as well as to gather more texts and update the lexicon database (this increased from about 3200 main entries to 4000 entries). Although some elicitation was done based on predictions made from morphosyntactic patterns (for example, if directionals occurred on the inverse, then it could be tested to see if they also occurred in the active voice), generally elicitation and checking of individual sentences was based on patterns found in texts and within a context of a story or situation. Some data was gained from informal conversations in Pendau (and sometimes rechecked at a later time to confirm specific patterns or pronunciations, etc.).

This work is a basic description of Pendau that relies heavily on textual examples to illustrate the use of each pattern. The theories that underlie different sections are quite varied, but are chosen because I feel that they best explain or have been successful in providing a solution to understanding certain data. At least four theories dominate each of the four major hierarchies that are presented. Generative phonology (along with its large number of modular theories) dominates the phonological presentation, see especially Chapter 3. Lexical phonology (as a module of generative phonology) provides a transition
to some of the morphological description, see Chapter 3 (and see Chapter 4 for discussion of further details on Pendau morphology). At the morphological level, I take a nonmorphemic view and integrate a kind of word and paradigm approach in connection with the lexical phonology, autosegmental phonology, and Pike's matrix theory (especially in analysing the complex stem formers). For the bulk of the description concerns in the typological functional framework provides a means to organise the data. Finally, at the discourse level, I integrate several discourse practitioners' methods with the strongest emphases coming from Longacre and Givón, see Chapters 17 and 18. In Chapter 17 I follow the topic continuity theory that Givón $(1983,1994)$ has developed, and in Chapter 18 I follow Longacre's 'dejargonized' tagmemics approach to discourse analysis.

### 1.4 Typological overview

Pendau has nineteen consonants and five vowels. Pendau is one of the few Sulawesi languages with a full system of syllable final consonants. Vowel harmony in many of the prefixes is the most interesting phonological process in Pendau (where an underlying $o$ fronts to $a$ or $e$ depending on the first vowel of the root or stem; see §3.5.7). Phonetically, the glottal stop is the most interesting feature because it is often manifested as creaky voice on one or more of the contiguous vowels. Pendau is analysed as a pitch-accent language because there is a change in pitch from low to high on the penultimate syllable of a phonological word. Acoustic tests show that there is a pitch change of 10 to 20 Hz within 100 to 150 ms .

Pendau can be considered a VO language, with S occurring more frequently in the initial position than the final position (§17.4.3.2). The alternation reflects a difference in pragmatic markedness (§17.4.3). The grammatical relations subject and object are marked by word order, where the flex position is the subject or pivot, and the rigid position is the object ( $\S 6.4$ and $\S 12.3$ ). Verbal prefixes indicate what semantic role occurs in the subject position (that is, A or P argument).

Subject agreement only occurs with two abilitative verbs ma'ule 'able' and matua 'capable' (the abilitative semi-auxiliary verb precedes the main verb and the subject marking occurs as a genitive pronoun with the abilitative verb as its head, see §14.4.1). The other semi-auxiliary verbs do not take subject marking. The plural distributive infix -ong- requires a plural subject, but this is not plural agreement since the infix is not required when a plural subject is used (see §13.4.1.1.).

Although the syntax is largely classed as an Indonesian-type, there are a number of Philippine-type syntactic features that also appear commonly in Pendau. Pendau has two basic voice orientations: actor and undergoer voice. Either orientation may appear as intransitive or transitive. Every verb is associated with one particular verb class which is either actor oriented or undergoer oriented (the latter being the stative intransitive verb class). However all transitive verbs can also be inflected for transitive undergoer voice, which is called the inverse voice (that is, Pendau has a pragmatic inverse voice system). Intransitive verbs may become transitive by derivation and then the derived verb can be inflected for either active or inverse voice.

Pendau verb classes can be determined by their stem formers ( $\S 4.3$ and Chapter 9). Stem formers are morphologically complex in Pendau, and are used in combination or absence of other formatives to form a variety of morphosyntactic possibilities, including
various nominal derivations, various valency changing functions, and various verbal forms such as imperatives.

Active and inverse verbal clause constructions are almost equal in frequency (§17.4). Discourse topic continuity quantification studies show that the A argument in inverse voice clause constructions is highly topical, and a comparison of the A and P arguments in both active voice and inverse voice clause constructions have a similar profile as expected for transitive clauses (§17.4). The stative verbal construction is shown to have a similar typological profile as the passives typically have (see §17.4.4). Topic continuity statistics also suggest that previous discourse information is important in the choice between active voice or inverse voice. If the referential distance of the undergoer is less than the distance for the actor within the same clause $(\mathrm{P}<\mathrm{A})$ or the referential distance for the actor and undergoer of the same clause is the same $(\mathrm{P}=\mathrm{A})$ then the inverse voice verbal construction will more often be chosen, but if the referential distance of the actor is greater than the undergoer in the same clause ( $\mathrm{A}<\mathrm{P}$ ) then the active voice verbal construction will more often be chosen (see §17.4).

Pendau is a prepositional language. Preposed markers can be both independent words and proclitics. Pendau has two basic pronominal sets: absolute and genitive (see $\S 6.2$ and §7.3.1). The absolute set occurs in every possible position except the few that must be marked as genitive case (and so also occurs in what would be the 'accusative' position in active voice clauses). The genitive case looks remarkably similar to an ergative pattern in the inverse constructions since the agent of verbs that appears in the non-active voice (here called the inverse voice) is marked with the genitive case. The absolute and genitive distinction is also marked on common and proper nouns by article-like noun phrase markers. Pendau also has a partial verbal conjugation system that provides an alternative way of marking first and second pronouns simultaneously by the verbal prefix rather than by the genitive set in the inverse voice verbal construction (§12.4.2 and Figure 12.7 in §12.4.2).

Valency increasing affixes include both applicatives and causatives (see Chapter 10). Instrumental applicatives and locative applicatives can only occur in the inverse voice and promote a third argument to subject position (an augmented stem prefix and an applicative suffix are both required, see $\S 10.3 .3$ ), a kind of system that yields a pair of constructions widely called 'instrument focus' and 'locative focus' in the Philippine area. However in contrast to Philippine languages, Pendau has two other applicatives that may occur in either active or inverse voice (similar to Indonesian -i and -kan, see §10.3.2). In addition to applicatives, causatives appear as various prefixes ( $\S 10.2$ ), and one suffix - $a$ ' doubles as an applicative or a causative depending on the verb root (§10.2.4 and §10.3.4). The requestive prefix forms a special type of causative, and may allow up to four core arguments in its construction (§10.2.5). Resultative prefixes result in detransitivising a clause ( $\S 10.6$ ).

All canonical verb classes require that the verb be prefixed in irrealis or realis mode (§13.2). Various aspectual prefixes may also optionally be used (see §13.3-4). The two major aspectual enclitics contrast completive and continuative aspect (see §13.3). These often interact with the modal prefixes in complex ways that suggest several tense interpretations (see §13.3.2)

Nouns are followed by modifiers such as relative clauses (§15.5), genitive NPs (§7.6.4), etc. Relativised NPs always form the head of a relative clause (§15.5). The head of a relative clause must always be its subject (although the head may be in any syntactic position of the matrix clause). Pendau has no adjective word class (stative verbs fill this function). Stative verbs are sometimes used to modify the head noun (sometimes as part of
a compound noun (§7.4.6 and §7.6.2), and sometimes as a syntactic clause construction with the head noun as the subject). However, in contrast to the post-NP modifiers, NP heads have pre-NP modifiers which are the numerals, quantifiers and classifiers. Both sortal (a closed class) and mensural (an open class) classifiers are used in Pendau (§7.5.2.2). Pendau has a basic three-way deictic demonstrative system (§7.6.3), and these are used to mark the end of a referentially definite noun phrase.

Pendau has four deictic directional verbs: ma'o 'go', mai 'come', mene' 'go up, ascend,' nyau 'go down, descend'. These directional verbs can be used as independent verbs, as a purposive serial verb (when it precedes the main verb), and as a deictic directional serial verb when it follows the main verb.

## 2 Phonetics and basic phonology

### 2.1 Introduction

The sound structure of Pendau has nineteen consonants (twenty consonants are used in the orthography) and five vowels. The syllable structure is maximally [CVC], and the prosodic word requires two syllables minimally with the penultimate syllable receiving stress that can be identified as a rising pitch.

This chapter systematically describes the phonetics and basic phonology following essentially a structuralist approach with some generative theory sprinkled in. The main processes of phonology such as nasal assimilation and other morphophonemic processes are discussed in Chapter 3 in a generative framework. This chapter identifies the phones and phonemes, and problems in determining certain aspects of the phonology. Several phonetic-phonology topics are studied with the aid of instrumental analysis (§2.6). Intonation is described briefly as is its complex interaction with stress ( $\$ 2.7$ ).

### 2.2 Phonemes

The Pendau phonemes are represented by the standard orthographic characters in Figure 2.1 and Figure 2.2 (see $\S 2.3$ for a phonetic description with examples; but note that a phonetic symbol is used as the phonemic character for the digraphs $n y$, $n g$ and for the glottal stop ' and the bilabial fricative $v$ for heuristic reasons only in this chapter). The symbol ' $w$ ' is included here because it is used in the orthography although it is not underlyingly a phoneme (see $\S 3.5 .6$ on glides). Feature geometry and distinctive features for consonants and vowels are discussed in $\S 3.2$.

|  | Labial | Dental- <br> Alveolar | Alveo- <br> Palatal | Velar | Glottal |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Plosives: |  |  |  |  |  |
| $\quad$ voiceless | p | t | c | k |  |
| $\quad$ voiced | b | d | j | g |  |
| nasal | m | n | ny | ng |  |
| fricative | v | s |  |  | h |
| liquid |  | 1 |  |  |  |
| trill |  | r |  |  |  |
| glide | $\mathrm{m})$ |  |  | y |  |

Figure 2.1. Pendau consonant inventory

|  | front | central | back |
| :--- | :---: | :---: | :---: |
| high <br> mid <br> low | i |  | u |
|  | e | a | o |

Figure 2.2. Pendau vowels

### 2.3 Phonetic description

This section provides the phonetic description for each phoneme. The examples are written orthographically (phonemically based) with the phonetic transcription and its gloss. Stress is always on the penultimate syllable and is unmarked since it is not phonemic (see §2.6.2 and §2.7.1 for a discussion of stress). ${ }^{1}$
/p/ [p] Voiceless bilabial plosive only in word initial or word medial positions.

$$
\begin{array}{lll}
\text { pior }^{2} \sim \text { piyor } & {\left[\mathrm{pi}^{\mathrm{j}} \text { or }\right]} & \text { 'twist' } \\
\text { api } & {[\text { api }]} & \text { 'fire' }
\end{array}
$$

[ p '] Word finally it is an unreleased allophone.

$$
\begin{array}{lll}
\text { alap } & \text { [alap'] } & \text { 'take' } \\
\text { ingkirap } & {[\text { inkirap' }]} & \text { 'eyebrow' }
\end{array}
$$

/b/ [b] Voiced bilabial plosive in all word positions. Sometimes in careful or emphatic speech it can be an implosive [6] word initially or word medially.

| babi | [babi] | 'pig', |
| :--- | :--- | :--- |
| bumbu <br> taab | [bumbu] | 'grass' |
| [ta:b] | 'high tide' |  |

/t/ [t] Voiceless apical dental plosive only in word initial or word medial positions.
tinting
titig

| [tintin] |  |
| :--- | :--- |
| [tititig] | 'time' |
| 'embers' |  |

[t $\left.t^{\top}\right] \quad$ Word finally it is an unreleased allophone.

| udut | [udut'] | 'sever', |
| :--- | :--- | :--- |
| tebuat | [tebuat'] | 'above' |

/d/ [d] Voiced alveolar plosive in all word positions. Sometimes in careful or emphatic speech it can be an implosive [ $\alpha^{\alpha}$ ] word initially or word medially.

| ubud   <br> dodondom [ubud] [dodondom] | 'moray eel' <br> dodop | 'morning' |
| :--- | :--- | :--- |
| [dodop] | 'chest' |  |

[^10]/c/ [ t$]$ Voiceless dental sibilant affricate ${ }^{3}$ in word initial and word medial positions (it doesn't occur in word final position). ${ }^{4}$

| cambang | $[\mathrm{t}$ famban $]$ | 'sideburns' |
| :--- | :--- | :--- |
| dacing | [dat t in$]$ | 'weighing scales' |

/j/ [d3] Voiced alveolar sibilant affricate in word initial and word medial positions (it doesn't occur in word final position).
jojo
[d3odzo]
'k.o. pigeon'
toja'
[todzar]
'step on'
$\mathrm{k} /[\mathrm{k}] \quad$ Voiceless velar plosive only in word initial or word medial positions.

| kareva | $[$ kareßa] | 'news' |
| :--- | :--- | :--- |
| kakapi | $[$ kakapi $]$ | 'oyster' |

$\left[\mathrm{k}^{7}\right] \quad$ Word finally it is an unreleased allophone. ${ }^{5}$

| tanduk | [tanduk'] | 'horn' |
| :--- | :--- | :--- |
| bola-bolak | [bola-bolak'] | 'across' |

/g/ [g] Voiced velar plosive in all word positions.
monggagap [mongagap'] 'touch'
atig [ataig] 'arm of outrigger canoe'
gorung [goruy] 'thunder'
$/ /$ [?] Voiceless glottal plosive. This occurs in all word positions, but it may alternatively be pronounced in each of these positions as creaky voice (see below). ${ }^{6}$

| tababa' | $[$ tababai] | 'rhinoceros beetle' |
| :--- | :--- | :--- |
| ma'o | $[\mathrm{maio}]$ | 'go' |
| 'api | $[$ Papi $]$ | 'wing' |

[V] Glottal stop may also manifest itself as creaky voice. Ladefoged and Maddieson (1996:75) state that this is common: 'In the great majority of languages we have heard, glottal stops are apt to fall short of complete closure, especially in intervocalic positions. In place of a true stop, a very compressed form of creaky voice or some less extreme form of stiff phonation may be superimposed on the vocalic stream.' Creaky voice is

[^11]not restricted to intervocalic positions in Pendau. Creaky voice (or laryngealisation) may also occur in vowel initial position or vowel final position (where the glottal stop phonemically precedes or follows these vowels). ${ }^{7}$ Creaky voice is written transcriptionally as [riVuo] where $\underset{\sim}{V}$ indicates the vowel quality continuum of both [i] and [ o ] as creaky voice characteristics are applied in the zone where one vowel transitions into the next vowel (Laver 1994:194-197). More discussion and examples are provided in $\S 2.6 .3$ with the acoustic analysis displays in Appendix 5 showing the sound waves and spectrograms.

| ri'uo | $[$ riVuo $]$ | 'in/by/at there' |
| :--- | :--- | :--- |
| so'uya | $[$ soVuya $]$ | 'why' |


| $\mathrm{v} /[\beta]$ | Voiced bilabial fricative occurs only in word initial and word medial <br> positions. ${ }^{8}$ | $[\beta \mathrm{ea}]$ |
| :--- | :--- | :--- |$\quad$ 'uncooked rice'

/s/ [s] Voiceless apical dental fricative in all word positions.

| sapa | [sapa] | 'what' |
| :--- | :--- | :--- |
| rusa | [rusa] | 'deer' |
| sagatus | [sagatus $]$ | 'one hundred' |

$/ \mathrm{h} / \mathrm{h}] \quad$ Voiceless glottal fricative. Many words which occur with /h/ are borrowed from Indonesian.

| biha | $[$ biha $]$ | 'k.o. taro' |
| :--- | :--- | :--- |
| hanu | $[$ hanu $]$ | 'what's his/her/its name' |
| harap | $[$ harap $]$ | 'hope' |

$/ \mathrm{m} /[\mathrm{m}] \quad$ Voiced bilabial nasal occurs in all word positions.

| manu' | [manui] | 'chicken, bird' |
| :--- | :--- | :--- |
| mami | [mami] | 'our (excl.)' |
| ansam | $[$ ansam $]$ | 'manggo' |

[^12]| [m] | $/ \mathrm{m} /$ is manifested as a syllabic bilabial nasal occurring in word initial position before a homorganic stop [post-lexical]. |  |  |
| :---: | :---: | :---: | :---: |
|  | mbirung mpaa | [mbirung] [mpa:] | 'large flame' 'coconut tree's fruit branch' |
| /n/ [n] | Voiced dental nasal occurs in all word positions, except when preceding an alveolar [d] wherein it is homorganic and becomes an alveolar nasal [n]. |  |  |
|  | nabo' | [nabo?] | 'roof' |
|  | rano | [rano] | 'lake' |
|  | antimun | [antimun] | 'cucumber' |
|  | dodondom | [dodondom] | 'morning' |
| [ n ] | This allophone is a syllabic dental or alveolar nasal occurring only in word initial position before a homorganic obstruent [post-lexical]. |  |  |
|  | $n t a ' u$ | [ntaQu] | 'fruit, or four-legged animal classifier' |
|  | ndau | [ndau] | 'no' |
| /ny/ [n] | Voiced palatal nasal occurs only in word initial or medial positions. |  |  |
|  | nyaa | [na:] | 'don't' |
|  | memenyong | [memenoy] | 'cold' |
| /ng/ [n] | Voiced velar nasal occurs in all word positions. |  |  |
|  | ngisi | [ yisi ] | 'tooth' |
|  | nombongi | [nomboni] | 'fragrant' |
|  | bulang | [bulay] | 'month' |
| $\left[\begin{array}{c} {[\mathrm{n}]} \\ 1 \end{array}\right.$ | This allophone is a syllabic velar nasal occurring in word initial position before a homorganic stop [post-lexical]. |  |  |
|  | ngkaat |  | 'small flame' |
|  | ngkolung | [pkoluy] | 'upper babi rusa tusk' |
| /1/ [l] | The retroflexed lateral allophone may occur in all word positions, except when adjacent to the mid front [e] vowel (however, some speakers may sometimes pronounce these as the [1] allophone). |  |  |
|  | lovu | [loßu] | 'well' |
|  | baal | [ba:l] | 'ball' |
|  |  | [ali] | 'come' |
| [1] | This allophone is a dental alveolar when it precedes or follows the mid front vowel [e], and may occur in all word positions as long as it is adjacent to the [e] vowel. |  |  |
|  | lelenti | [lelentiri] | 'k.o. black ant' |
|  | lelima | [lelima] | 'five' |



[^13]A labial-velar glide is inserted post-lexically (see rules and discussion in §3.5.6.2) following a high or mid back vowel and preceding a low vowel in a V or VC syllable. <w> is not phonemic in these cases, therefore I have not represented it orthographically.
oalu
[ $\mathrm{o}^{\mathrm{w}} \mathrm{a}$ a u ]
'eight'
uat
[ $u^{\mathrm{w}} \mathrm{a} \mathrm{t}^{\mathrm{t}}$ ]
'vein, tendon'

### 2.3.1 Contrast of phonetically similar segments

The following phonetically similar pairs show contrast:

| $l-r$ | alap ${ }^{\text {² }}$ | 'get, take' | arap ${ }^{\text {² }}$ | 'cliff' |
| :---: | :---: | :---: | :---: | :---: |
| s-h | bisa | 'poison' | biha | 'k.o. taro' |
| s-ts | sara | 'fast' | tfara | 'method, way' |
| s-d3 | pusit ${ }^{7}$ | 'pollen' | pud3it ${ }^{\text {T }}$ | 'octopus' |
| ts $-\mathrm{d}_{3}$ | t Solo? | 'cigarette lighter' | d3olo | 'water pitcher' |
| ? - k | Pai | 'call' | kai | 'grandfather' |
| ? - h | alape | 'k.o. hornbill' | niaheraña | 'amazed' |
| $?-\varnothing^{10}$ | Papi | 'wing' | api | 'fire' |
| p-b | pa?i | 'wound' | ba2i | 'head' |
| t - d | tuluy | 'help' | duluy | 'bow of boat' |
| k - g | suka | 'measure' | suga | 'prick, pierce' |
| b- $\beta$ | baja | 'forehead' | ßaja | 'spirit' |
| $\mathrm{n}-\mathrm{y}$ | tunu | 'saliva' | tuju | 'k.o. bog plant' |
| n-n | ene | 'mother' | ene | 'nose' |
| ts - t | tfuay | 'make s.t. from rocks' | tuay | 'pour, sprinkle' |
| $\mathrm{n}-\mathrm{n}$ | ponu | 'full' | ponu | 'loggerhead sea turtle’ |
| j-i | bosoj | 'canoe paddle' ${ }^{11}$ | bosoi | 'rub' |
| u-o | luba | 'hair' | loba | 'healthy growth' |
| i - e | api | 'fire' | ape | 'or' |
| e | apar | 'swamp' | aper | 'fin' |
| o-a | dodap | 'phosphorescent plankton' | dodop | 'chest' |

### 2.4 Syllables

### 2.4.1 Introduction

This section examines the distribution possibilities of consonants in syllables, and the process of resyllabification and epenthesis. The maximal syllable is CVC. The syllable structure in Pendau is described following the Prososdic Morphology Hypothesis (McCarthy and Prince 1995:320). This model requires prosodic units to be used in templates. These units are placed in a prosodic hierarchy, as in (1).

[^14](1)

Prosodic Hierarchy

| PrWd | (Prosodic Word) |
| ---: | :--- |
| $\mid$ | (Foot) |
| F |  |
| $\mid$ | (Syllable) |
| $\sigma$ |  |
| $\mu$ | (Mora) |

Since syllable structure is quantity insensitive in Pendau the mora ( $\mu$ ) will not be used in this description. Pendau has the Disyllabic Foot Type $\sigma \sigma$ (McCarthy and Prince 1995:321). The minimal word (PrWd) in Pendau is governed by both the Foot Binarity Condition and the Prosodic Hierarchy. Examples of minimal words are given in (2), and a sample of unacceptable words is given in (3).
(2)

| boat | 'heavy' |
| :--- | :--- |
| boto | 'speak' |
| oto | 'car' |
| apar | 'swamp' |
| dodop | 'chest' |
| bumbu | 'grass' |
| tinting | 'time' |

*mba, *bo, *at, *bumb, *int

### 2.4.2 Consonant distribution in the syllable

Single consonants can be found in all syllable positions with only a few exceptions as displayed in Figure 2.3 (the X represents the position is filled, + represents a marginal phoneme ${ }^{12}$ ). Figure 2.4 breaks Figure 2.3 down into the actual statistical distribution of single consonant positions in word initial, word medial (in syllable onset and syllable final positions), and word final positions. It is important to note here that consonant clusters are excluded from Figure 2.4. See $\S 2.4 .3$ and $\S 2.5 .3$ for an important discussion of consonant clusters which will include their statistical distribution (Figure 2.8).


Figure 2.3. Segment distribution in syllable onset and coda

[^15]|  | p | t | c | k | b | d | j | g | m | n | ny | y | ng |  |  | s | h |  |  | 1 | r | y | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Word Initial $\sigma$ Onset | 390 | 605 | 23 | 152 | 396 | 101 | 78 | 151 | 227 | 125 | 10 | 0 | 20 |  |  | 473 | 18 | 72 |  | 93 | 165 | 3 | 3326 |
| Word Final <br> $\sigma$ Coda | 32 | 234 | 0 | 24 | 26 | 14 | 0 | 40 | 25 | 187 | 0 | 0 | 652 |  |  | 225 | 0 | 310 |  | 04 | 194 | 11 | 2128 |
| Word Medial <br> $\sigma$ Onset |  | 421 | 9 | 155 | 266 | 157 | 83 | 212 | 227 | 325 | 5 | 5 | 227 |  |  | 333 |  | 18 |  | 56 | 481 | 164 | 4591 |
| Word Medial <br> $\sigma$ Coda | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 |  |  | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 |

Figure 2.4. Statistical distribution of non-clustered consonants in syllable onset and coda (for consonant clusters see Figure 2.8) ${ }^{13}$

The possible syllable patterns have been shown to consist of the unambiguous syllables CV, V, VC, and CVC. This contrasts for example with the neighbouring Kaili languages which have only the open syllables CV and V (for example see Barr and Barr 1988, Evans n.d.). In analysing the Kaili languages, linguists interpret all NC sequences as prenasalised, at least phonologically. Sneddon (1993) discusses the tendency for many Sulawesi languages to have open syllables. Although this is true of a number of TominiTolitoli languages, for example, Lauje, which uses a paragogic vowel to transform consonant coda final words into words with final open syllables (Himmelmann 1997); this is not the case for Pendau. Sneddon notes that the Saluan languages, for example, Balantak, also do not have this 'drift' tendency (Busenitz and Busenitz 1991 gives a phonology description of Balantak). Although currently Pendau shows a synchronic stability to maintain closed syllables with its final consonants, when the statistics in Figure 2.4 are examined it does appear that there may be a weakening of some of the obstruents to appear in word final position. Especially note that the voiced obstruents in word final position have a very low frequency.

Five phonemes, /c, h, ny, v, w/, are rare, numbering less than 100 occurrences each in the lexicon database of about 4000 entries (compare Figures 2.3-5). It is likely that $/ \mathrm{c} /$ and $/ \mathrm{h} /$ are recent borrowings from Malay or Indonesian. Since it is predictable by phonetic rules the $\langle\mathrm{w}\rangle$ is not an underlying phoneme. The /v/ may be simply a low frequency phoneme, or a result of historical changes, since closely languages such as Rai and Ledo of the Kaili group frequently have the bilabial fricative in cognates where Pendau postlexically forms [w], for example, Kaili vani, and Pendau wani 'honey bee'. The phoneme /ny/ should actually have a higher frequency since in texts it would be found any time an active voice prefix mong-/nong- (IR/RE) is prefixed to root or stem beginning with $/ \mathrm{s} /$, for example, sambale => monyambale 'butcher, slaughter'. None of these phonemes occur in coda position (which may also suggest a later date for entry into Pendau). Two of these phonemes, /c, ny/ form a natural class [-anterior, +coronal, -lateral] with / $\mathrm{j} /$.

[^16]

Figure 2.5. Frequency of $\mathbf{2 4 , 3 2 1}$ phonemes in $\mathbf{4 0 0 0}$ word lexicon database by frequency of occurrence

All of the other phonemes seem to have a reasonable spread except for the vowel /a/ (Figure 2.5). I have no explanation for its high frequency in contrast to other phonemes and even to other vowels. A statistical count of phonemes in texts would possibly show a slight difference from a root-based corpus.

The pie chart in Figure 2.6 shows that five phonemes-the vowels-make up about one-third of the occurrences. This isn't really surprising since vowels are the nucleus of syllables and syllables contain no consonant clusters (§2.4.2-4).


Figure 2.6. Frequency of vowels, consonants and glides in lexicon database

Figure 2.7 shows the statistics for common vowel sequences. Vowels are rarely found in sequences of three. In a corpus of about 4000 lexemes only about 20 examples were found, and several of these are suspicious examples from early elicitation sessions Exceptions include lengthened vowels as in paee 'rice', paio 'where', moia 'live', and a few marginal words that are onomatopoeic, such as kuiik 'call pigs', and one of the names for the maleo bird tuae which also may be a name which mimics its cry. Also note that words such as 'ai 'call' can have a sequence of three vowels when the transitiviser $-a$ ' is added to form a benefactive such as ni'aia' 'call for someone' (but there is a nonphonemic glide insertion between the $i$ and $a$, see $\S 3.5 .6 .2$ ).

| Initial / Final | a | e | i | o | u | Total |
| ---: | :---: | :---: | :---: | ---: | ---: | ---: |
| a | 99 | 21 | 111 | 34 | 93 | 358 |
| e | 43 | 40 | 31 | 21 | 7 | 142 |
| i | 87 | 1 | 30 | 31 | 19 | 168 |
| o | 40 | 14 | 33 | 55 | 40 | 182 |
| u | 94 | 10 | 28 | 25 | 73 | 230 |
| Total | 363 | 86 | 233 | 166 | 232 | 1080 |

Figure 2.7. Vowel sequence statistics (26,236 total segments; 3995 lexemes)

### 2.4.3 The distribution and assimilation rule of nasal-obstruent clusters

In Pendau the maximal syllable CVC allows certain consonant clusters, that is, nasalobstruent, to appear in contiguous syllables. The consonant cluster assimilation rule can be represented as in (4).

## Nasal-obstruent cluster assimilation rule ${ }^{14}$



Nasal-obstruent sequences are fairly common word medially (1086 occurrences-some of these may occur more than once in one word), but seldom occur word initially ( 91 words or roots out of about 4000 words or roots). Actual occurrences are displayed in Figure 2.8. The word initial nasal is interpreted as a syllabic nasal. The evidence for this analysis is in §2.5.3.

[^17]|  | mp | mb | nt | nd | ns | nc | nj | yk | yg | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| word initial | 16 | 26 | 15 | 6 | 7 | 0 | 1 | 15 | 5 | 91 |
| word medial | 195 | 229 | 173 | 116 | 60 | 10 | 56 | 182 | 65 | 1086 |

Figure 2.8. Nasal-obstruent sequence statistics from 3991 lexicon database

### 2.4.4 Resyllabification and epenthesis

The resyllabification of pombayar 'payment, payer' after the addition of the suffix -ong 'locative nominaliser' is shown in (5). The /r/ phoneme is the coda of a syllable in pombayar, but it becomes the onset of the following syllable when the -ong suffix is affixed (resyllabification of the suffix occurs at the end of level 3 in the lexical phonology module-see §3.3). Example (5a) shows the syllable structure of pombayar (after going through level 2), and (5b) shows that the onset of syllables is linked first, with the dotted lines showing that the codas of the syllable are linked last.
(5) Resyllabification of pombayar-ong 'place of payment'
a.

 'payment, payer'

In Pendau, vowel epenthesis occurs when an enclitic joins the word post-lexically, and only when the word ends with a consonant creating a phonotactic violation since all enclitics are CV. Since other phonological rules and phonotactic processes are unavailable post-lexically then resyllabification is required. This is resolved by inserting an $/ \mathrm{o} /$ (ascribed by underspecification-see $\S 3.2 .3$ ). So junjung 'house' plus the third singular enclitic nyo becomes junjungonyo 'his/her house'; babi 'pig' plus nyo becomes babinyo 'his/her pig' and does not require epenthesis since there is no phonological violation. ${ }^{15}$ When the epenthetic vowel is in the penultimate syllable it receives stress, as in [junjung ${ }^{1}$ onyo] 'his/her house' (see $\S 2.6 .2$ for the correlation of fundamental frequency and stress, see $\S 2.7$ for further discussion and rule assignment, and see $\S 3.3 .4$ for discussion of stress and epenthesis in the post-lexical level).

[^18]Examples (6)-(8) follow Itó (1989) in the procedures and analysis of representing epenthesis. On the left is the base word junjung 'house', showing how syllabification takes place without affixes, and on the right is the same base word with the third singular nyo enclitic affixed. The steps below follow the Well Formedness Conditions (WFC). These state that associations must be linked to each segment as is demonstrated step by step. First the association line is drawn from each syllable nucleus (which is the vowel). Then maximising onsets are linked (thus the first two steps are shown in (6) below).



In (7) the consonant codas of the base word must be linked to the nearest syllable without crossing association lines. This works too for the first syllable of the affixed word base until we reach the $/ \mathrm{y} /$ segment when the phonotactics are violated (see the lexical phonology in Chapter 3). A syllable node is attached to the consonant $/ \mathrm{y} /$ because it does not fit into the prior syllable nor the following syllable (due to the phonotactic violation).


In (8) the $/ \mathrm{o} /$ vowel is inserted to meet phonotactic criteria. The /o/ vowel is inserted since this is the underspecified vowel (§3.2.3). This occurs post-lexically since enclitics are attached at the syntax level (§3.3.4).

'house'

'his/her house'

Example (9) lists representative samples of roots with final consonants and the use of epenthesis when an enclitic is added.

| (9) | consonant <br> final root | gloss | enclitic and gloss | epenthesis and enclitic |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | lading | 'knife' | ''u | ladingo'u | 'my knife' |
|  | ipag | 'sibling-in-law' | $\begin{aligned} & 1 S G / G E \\ & =\mathrm{mu} \end{aligned}$ | ipagomu | 'your sibling-in-law' |
|  | luit | 'rope' | $2 S G / G E$ $=$ to | luitoto | 'our rope' |
|  | nabo' | 'roof' | $\begin{aligned} & \text { 1PL.INC/GE } \\ & =\text { nyo } \\ & \text { 3SG/GE } \end{aligned}$ | nabo'onyo | 'his/her roof' |
|  | ongkor | 'reward' | $\begin{aligned} & =\text { nyo } \\ & 3 S G / G E \end{aligned}$ | ongkoronyo | 'his/her reward' |



Example (10) contrasts the vowel final root bare 'divide' in a word with the same two enclitics which occur in the following word which has the consonant final root dua' 'arrive, find'. Epenthesis occurs only on the second word. This example also illustrates that aspectual enclitics always follow a pronominal enclitic when both occur in the same word, and that since the enclitic is always a CV syllable the epenthesis only occurs preceding the first enclitic (see also Figure A8.2 in Appendix 8).

Rabaretomo
ro-bare $=$ to $=$ mo
IV/IR-divide=1PL.INC/GE=COMP
po'odua'otomo!
po-' $o$-dua' $=t o=m o$
SF-POSS-arrive=1PL.INC/GE=COMP
'Let's divide our findings now (between the two of us)!'
[nangkait.pin 161]

### 2.5 Questions of phonemic analysis

### 2.5.1 Introduction

Three problems of phonemic analysis are presented in this section:

- Are phonetically long vowels one or two phonemes?
- Are the nasal-obstruent sequences one phoneme or two phonemes? And if they are separate phonemes are they in the same syllable or separate syllables?
- Are all glottal stops phonemic?


### 2.5.2 Phonetically long vowels

Phonetically long vowels are phonologically two vowels. This is confirmed by two tests. First the minimal word is disyllabic (§2.4.1) in all other words without a long vowel, so in words such as [to:] 'person', and [pa:] 'foot', this suggests that the long vowel is best interpreted as a sequence of two phonological vowels. The second test is the movement of penultimate stress when there is the addition of an enclitic. Penultimate stress begins on the latter part of the long vowel, which is acoustically a rising pitch that serves to differentiate the first half of the phonetically long vowel from the second half. The diagrams in (11) show the representation of this (Goldsmith 1990:48, 66-68, Perlmutter 1995:307-309, and Katamba 1993:161), since only a foot (F) can receive stress.

## (11) Long vowels



paanyo 'his/her foot'

### 2.5.3 The interpretation of nasal-obstruent clusters

In this section I consider the interpretation of word initial nasal-obstruent clusters such as occur in ndau 'no', ndueng 'anoa', ngkaat 'flame' (these are Pendau orthographic examples; $n g$ is the orthographic symbol for the velar nasal). Three different interpretations of a nasal obstruent sequence word initially have been made for languages in the Western Malayo-Polynesian area from the Southern Philippines to Central Sulawesi: 1) the prenasalised interpretation (phonetically or phonologically one segment ${ }^{\mathrm{N}} \mathrm{C}$ ), 2) the cluster interpretation in the same syllable (the nasal and obstruent are separate segments of the same syllable onset, $\mathrm{NCV}(\mathrm{C})$ ), and 3) the syllabic nasal interpretation (the nasal is a separate syllable from that in which the following obstruent occurs, for example, N.CV(C)). In Quick (1991a) I presented a brief survey of these three interpretations in languages of the Sulawesi area and gave arguments for interpreting nasal-stop sequences as having a syllabic nasal. ${ }^{16}$

Before I review the evidence from Quick (1991a, 1991b) and introduce additional data which supports the syllabic nasal interpretation, it will be helpful to look at typical words which have nasal-obstruent sequences. The list in Figure 2.9 contrasts word medial NC sequences with word initial NC sequences. ${ }^{17}$

|  | Word Medial |  | Word Initial |  |
| :---: | :---: | :---: | :---: | :---: |
| ng.k | bangkalang | 'river' | ngkaat | 'small flame' |
|  | angkaula | 'spider' | ngkeang | 'great-billed parrot' |
|  | songkolung | 'one babi rusa tusk' | ngkolung | 'upper babi rusa tusk' |
|  | langkai | 'man' | ngkai | 'dear husband' |
| ng.g | mangge | 'uncle' | nggule | 'arthritic cripple' |
|  |  |  | nggaang | 'light' |
| n.s | insang | 'time' | nseo | 'branch, fork (of river, path)' |
|  |  |  | nseo' | 'steep valley' |

[^19]|  | Word Medial |  | Word Initial |  |
| :---: | :---: | :---: | :---: | :---: |
| m.b | sambale | 'butcher' | mboa | 'lie (untruth)' |
|  |  |  | mbiring | 'large flame' |
|  |  |  | mboto | 'self' |
| n.t | santa'u | 'one fruit, tail (CLSF)' | $n t a ' u$ | 'fruit (classifier)' |
|  | neentip | 'itchy' | ntoli | 'dual (classifier)' |
|  | intolu | 'egg' | ntolu | 'egg' |
|  |  |  | ntani | 'different' |
|  |  |  | ntui-ntuing | 'flying fish' |
| n.d | pendau | 'Pendau person' | ndau | 'no' |
|  |  |  | ndaang | 'branch' |
| m.p | ompong | 'stomach' | mpaa | 'cluster of s.t. (classifier)' |
|  |  |  | mpalung | 'bird (species)' |
|  |  |  | трии | 'really' |
| n.j ${ }^{18}$ | enjeliang | 'tree (species)' | njiriang | 'hair stand up on end' |
|  | ngunju | 'mouth' |  |  |

Figure 2.9. Nasal-obstruent examples word initial and word medial in Pendau

In Quick (1991a, 1991b) I hypothesised that a syllabic nasal could be demonstrated from an acoustical analysis of words with this environment, and suggested that stress might be one indication that the nasal was syllabic (at that time some of the data was still unclear). With this in mind I recorded a number of syntactic frames that could be used for this analysis. ${ }^{19}$

These frames include interrogatives, declaratives, and imperatives with unambiguous and ambiguous nasals (those in word initial position preceding an obstruent) in similar environments. I limited the analysis of fundamental frequency largely to the interrogative frames. These had a larger series of examples and tokens which provided a good balance. For comparison I included two similar declarative sentences. By examining the fundamental frequency in tokens between these two sentence types, sentence intonation is less likely to skew the results.

The sentence frames are listed in examples (A) to (C) below. ${ }^{20}$ Example (A) lists the interrogative frames with tokens which begin with the phonological syllabic nasal (N.C). Example (B) lists some interrogative frames but with tokens that begin with a non-syllabic nasal (NV) or have word medial NC sequences. Examples in (C) list two declarative sentences with tokens that have the same root as appears in a couple of instances in example (A), but they have the number one prefix so- (so- is the underlying form with predictable surface alternations sa-, and se-via vowel harmony-see §3.5.7). In all of the examples for (A) to (C) the number of repetitions are listed (either repeated twice (2x) or

[^20]four times (4x)). My language helper was familiar with recording substitution drills for my language learning, so I approached these frames in the same manner. Each sentence was repeated after the first instance, so that the tokens were within a minute of the previous token. As it turns out nearly all of the frames are excellent recordings (the Pendau and English word order are parallel in these examples. The bold font shows the lexeme changed in each frame pattern).

## (A) Interrogatives-NC word initially

So'uya ngkolung ri'uo? (2x)
So'uya ngkaat ri'uo? (2x)
So'uya mbirung ri'uo? (2x)
So'uya mpaa ri'uo? (2x)
So'uya ndueng ri'uo? (2x)
So'uya mbengi ri'uo? (2x)
So'uya ngkeang ri'uo? (2x)
So'uya mpalung ri'uo? (2x)
'How many babi rusa upper teeth are over there?'
'How many small flames are over there?'
'How many large flames are over there?'
'How many clusters are over there?'
'How many anoa are over there?'
'How many nights (were you) over there?'
'How many great-billed parrots are over there?'
'How many birds (species) are over there?'
(B) Interrogatives-NV initially and NC word medially

So'uya nabo' ri'uo? (4x)
'How many roofs are over there?'
So'uya ngisi ri'uo? (4x)
So'uya bangkalang ri'uo? ( 4 x )
So'uya mangge ri'uo? ( 4 x )
So'uya toPendau ri'uo? (4x)
'How many teeth are over there?'
'How many rivers are over there?'
'How many uncles are over there?'
'How many Pendau people are over there?'

## (C) Declaratives-NC word medially ${ }^{21}$

Ha'u mengita songkolung ri'uo. (2x) 'I see one upper babi rusa tooth over there.'
Ha'u mengita sampaa ri'uo. (2x) 'I see one cluster over there.'
The four arguments from Quick (1991a, 1991b) in favour of a syllabic nasal interpretation are listed below along with two additional arguments from the acoustic analysis (\$2.6), and the final seventh topic considering mixed evidence from reduplication:

- Native intuition
- Free variation of NC with VNC
- Prefix shortening
- Syllabification of medial NC clusters
- Stress
- Resyllabification between words in rapid speech
- Mixed evidence from reduplication


### 2.5.3.1 Native intuition

Native intuition makes it clear that word medially the consonant sequences are in separate syllables. When a literate Pendau person is asked how they would cut up a word into syllables they always divide it between the nasal and the obstruent (this contrasts with

[^21]the same type of test in Kaili languages where they are placed into the same syllable by native speakers). To further test this I devised the Singing Syllable Test based on the Indonesian tradition of learning songs according to the do re mi music scale. I tested literate individuals in several villages and explained by example how to find the syllable division of a word by singing it according to the do re mi scale. This test subjects each syllable to a different pitch. I received consistent results of syllables being broken up between consonant sequences. On the test list were a few words beginning with a nasalobstruent sequence. The test subjects would consistently sing the word initial nasal at a different pitch. This is illustrated in (12) and (13).

| ban.ka.lan <br> do.re.mi | 'river' | man.ge <br> do.re.mi | 'uncle' | sam.ba.le <br> do.re.mi | 'butcher' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| n.da.u <br> do.re.mi | 'no' | n.du.en <br> do.re.mi | 'anoa'22 | m.bo.a | 'lie (untruth)' |
|  |  | do.re.mi |  |  |  |

### 2.5.3.2 Free variation of NC with VNC

Two kinds of free variation support this analysis: orthographic variation and free variation in speech. Pendau speakers stated either of two orthographic options was possible. This included /ndau/ 'no' spelled as either <ndau> or <endau> and /mboa/ 'lie' spelled as <mboa> or <emboa>. Variation is found in the two spoken forms of /intolu/ 'egg' as either [ntolu] and [intolu] 'egg'. Pendau speakers regard the latter version as the full form, as is confirmed by the nominal derivation [peintoluon] 'nest'.

### 2.5.3.3 Prefix shortening

Active voice prefixes (M-/N-pong-) are optionally shortened leaving the final nasal to become the initial segment of the word, thus leaving a shortened version of that syllable. Words like mombulagon 'to gather rattan' could be shortened to mbulagon. The root is bulagon 'rattan', and the prefix is normally pronounced as mong- (active voice/irrealis).

### 2.5.3.4 Syllabification of medial NC clusters

The interpretation of syllable boundaries is often based on the distribution of possible consonants. Since most Pendau consonants may appear in word final position, this signifies that it is possible for syllables to end with consonants, including nasals. Pendau differs from many other Sulawesi languages that have only open syllables. It is not surprising then to learn that nasal-obstruent sequences in these languages are interpreted by native speakers to be part of the same syllable. The distribution of nasals in word final position strongly indicates that word internal syllables may also end in nasals. ${ }^{23}$

This argument can be extended to word initial nasal-obstruent sequences. The phonetic nature of a syllabic nasal entails that it may function as a syllable, and so no phonotactic violations occurs either. In addition we can find examples where a prefix is added to a word stem and where by native intuition it is clear that word medially the consonant sequence is split into separate syllables. Compare the examples in (14).

[^22](14) [n.da.u] 'no' [pen.da.u] 'Pendau person, Pendau language'

It follows that the initial nasal could be interpreted as in a different syllable than the following syllable, thus revealing it to be a syllabic nasal. Since syllabic nasals never follow phonemic vowels (in the same word), this suggests that the syllabic nasal desyllabifies when following a vowel (when it becomes part of a prefix).

In the syllabic nasal interpretation I give greatest weight to the existing unambiguous syllable structure. Phonological theory and data strongly suggests that the best interpretation for the syllabic nasal is an underlying VC syllable. It is well known that the VC syllable is universally a weak syllable so it is not surprising to assume an historical vowel collapses in word initial position in some words. The syllabic nasal interpretation allows us to economise and maintain a much simpler phoneme chart.

If we were to assume that Pendau actually has prenasalised stops word initially, then why would the nasal-stop cluster later be separated (by native speaker intuition) when a pe- prefix is add to such words as /ndau/ resulting in /pendau/ 'Pendau person'? This inconsistency is resolved by allowing the initial nasal to be understood to be syllabic in nature and desyllabifying when a prefix is formed in front of it (that is, it is part of the resyllabification process).

### 2.5.3.5 Stress

Another argument for the syllabic nasal interpretation is based on the phonetic realisation of stress and the perceptual correlation that coincides with the syllable boundary. The acoustic evidence shows that stress is indicated by a $\mathrm{L}-\mathrm{H}$ tone contour (§2.6.2). The low part of the tone begins either with the beginning of the penultimate syllable or just prior to the beginning (that is, in a word like ndau 'no' the $\mathrm{L}-\mathrm{H}$ contour is usually within the boundaries of the da syllable, that is, the pitch often has not reached its lowest point until the consonant following the nasal because the pitch is still descending from the previous word). This evidence coincides with the intuitive test used with the Singing Syllable Test. It turns out that this test coincides well with the do re mi scale, since the changing of pitch from one syllable to the next would emphasise this demarcation. See $\S 2.6 .2$ for the acoustic analysis and discussion of rising pitch as the manifestation of penultimate stress.

### 2.5.3.6 Resyllabification across word boundaries in rapid speech

Resyllabification occurs across a word boundary when a phonologically word final glottal stop is manifested as a laryngealisation of a word final vowel in rapid speech. This means that the syllabic nasal becomes the coda of the previous word. For example, in the words mobalu' ndueng 'sell anoas', because the glottal stop is manifested as creaky voice the syllabic nasal may desyllabify and join the previous word so that it is pronounced as [mobalun dueng]. See $\S 2.6 .3$ below for the acoustic analysis and discussion of this.

### 2.5.3.7 Mixed evidence from reduplication

There is some counter-evidence to the previous claims from reduplication that support interpreting the nasal-obstruent sequence as a single phoneme. However the examples from reduplication both support and contradict the syllabic nasal interpretation, as shown in ( $15 \mathrm{a}-\mathrm{i}$ ). The first four examples ( $15 \mathrm{a}-\mathrm{d}$ ) in this list show clear copying of the obstruent and its preceding nasal. However, the fifth example monsale-nsale 'coax and coax' (15e) is a clear example of a copied nasal phoneme in the reduplicant that was from a separate
formative pong-, in which the nasal assimilated to the point of articulation of the dental fricative. Examples $(15 \mathrm{f}-\mathrm{g})$ demonstrate that both possibilities of reduplication with or without the nasal may occur at least in some words. The last two examples (15h-i) have only been found to occur without the nasal reduplicated.
with nasal in reduplicant
a) ntoe-ntoeng
b) no-'o-nggua-ngguang
c) mpili-mpilis
d) mbosi-mbosi'
e) mon-sale-nsale --
f) me-ngkani-ngkani
g) ntani-ntani
h) --
i) --
--
--
without nasal in reduplicant

- 'cry with sadness'
-- 'coach-whip trevally'
-- 'done well'
-- 'coax and coax'
me-ngkani-kani
ntani-tani
n[eng]eng-kee-kee, ${ }^{24}$
ngkilang-kilang


## gloss

'hang and hang'
'cry with sadness'
'coach-whip trevally'
'eat and eat'
'different ones'
'bumpy'
'sob and sob'

Other data such as the reduplication of tani 'different' as tataninyo 'its different (one)' and the formation of words such as positani 'difference, distinction' suggest that for some words such as ntani 'different' the nasal preceding the root is somewhat anomalous (and in this case may have an historical link to a nasal ligature). Other reduplicated words such as om-'ombosi' 'the best' built from the root mbosi' 'good' also show that the nasal is a distinct phoneme (following previous argumentation as well). ${ }^{25}$

It is not surprising that a marginal pattern such as the Pendau nasal-obstruent sequence would have some mixed evidence in how these should be interpreted phonologically. It is possible however to view even the reduplicated counter-examples in line with my syllabic nasal interpretation if one assumes that the nasal is an extrametrical segment (see §3.5.1). The application of this analysis resolves any ambiguity and harmonises what is a potential counter-example with the previous arguments.

### 2.5.3.1 Theoretical explanation of the nasal-obstruent sequence word initially

Syllabic consonants typically derive from a consonant vowel combination (in either sequence). Bell (1978) states from a comparison of eighty-five languages that 'the main process of their formation, which is loss of a vowel and concomitant shift of syllabicity to an adjacent consonant, occurs fairly commonly in favoured environments.' Pike (1947:140) has mentioned that 'syllabic consonants may be analysed as containing a consonant and vowel simultaneously.' Extrapolating from Pike's comment Quick (1991a) posited that the syllabic nasal was an 'allosyllable' which functions emically in the same manner as allomorphs and allophones. Turning to a non-linear theoretical approach it turns out it is not necessary to take this kind of novel approach.

Both Bell's view and Pike's view fit well with current non-linear phonological theory, which would assume that there are no unambiguous consonant sequences, and that there

[^23]are only univalent syllable structures which are posited as the syllable templates (French 1988:6). According to this theory a Pendau word like ndau 'no' would be diagrammed as in Figure 2.10.


Figure 2.10. Nasal-stop non-linear analysis
Katamba (1989:182) demonstrates this type of analysis for French abstract segments and says:

> The theory allows C and V elements to exist at the CV-tier without being linked to consonant or vowel segments. In that event, they do not surface in the phonetic representation-they are not pronounced. But phonological rules affecting the CV-tier would have access to them.

### 2.5.4 Non-phonemic glottal stops

Sometimes a non-phonemic glottal stop is inserted between vowels that are either identical or are both high vowels [i, u], or are both front vowels [i, e], or are both back non-low vowels [ $\mathrm{u}, \mathrm{o}$ ] and when a CV prefix and a vowel initial disyllabic root co-occur (compare to the insertion of non-phonemic glottal stops in Tukang Besi (Donohue 1995:22-25)). One motivation for this may be that the change in pitch on the penultimate syllable tends to contrast its vowel with the preceding syllable's vowel. The pressures of this along with the universal pressure of a vowel initial root to form a CV syllable may all converge to promote the appearance of this non-phonemic glottal stop. Sometimes a nonphonemic glottal stop may also be inserted before a vowel initial word.

More careful pronunciation by speakers indicates that there is no consistent use of glottal stops in these words. Words in which these phonetic glottal stops sometimes occur include: [moorop] ~ [mo?orop] 'hungry', and [reinay] ~ [re?inay] 'eat (IV)'. However for the first example it is clear that the root is orop (with no initial glottal stop), and the stative prefix is mo- (also with no glottal stop in its coda position). One of the tests used to indicate a true phonemic glottal stop is when a glottal stop as in 'omung 'carry, take' follows a nasal and becomes a $k$, as in mongkomung. This can be applied to the root inang 'eat'. When the active voice prefix combination mong- is affixed, the form is [menginang] 'eat (AV)' and not *[mengkinang]. This is a definitive test (when it can be applied) which shows whether or not a glottal stop is phonemic or phonetic.

### 2.6 Acoustic analyses of vowels, stress, and the glottal stop

### 2.6.1 Vowel formants in Pendau

This section describes the physical contrasts between the vowels in Pendau by examining the vowel formants. The formants were determined by interpreting the spectrographs and spectra made with the Speech Analyzer software (version 1.06a). In Figure 2.11 the first two formants for the five Pendau vowels are given. The horizontal lines represent the Hertz frequency for formants one (F1) and two (F2) for each vowel.

These are instances of the formant frequencies from the vowels taken from one sentence from a male Pendau speaker (S1).


Figure 2.11. Frequencies of formant one and two for Pendau vowels
These five Pendau vowels are from the recorded frame So'uya toPendau ri'uo? 'How many Pendau people are over there?' (see $\S 2.5 .3$ for a list of similar sentence frames). Figure 2.12 shows the sound waves, the pitch, and the spectrogram of the vowels. These are illustrated from the two words toPendau ri 'person Pendau at'. These vowels are examined individually, comparing the spectrogram and the spectra of each in Appendix 3.

Figure 2.12 compares three windows. The top window shows the sound waves with the annotation of phones shown above its segment, the second window shows the pitch of the fundamental frequency (see $\S 2.6 .2$ for a discussion of rising pitch on penultimate syllables), and the third window shows the spectrogram of the sounds.


Figure 2.12. Sound waves, pitch and spectrogram of to Pendau ri' 'Pendau people at’

### 2.6.2 The correlation of fundamental frequency and stress in Pendau

### 2.6.2.1 A brief literature review on stress

The consensus in the literature points to three phonetic phenomena that contribute to stress: fundamental frequency, duration, and intensity. Laver (1994:450) remarks that:

The phonetic manifestation of stress varies from language to language with some (such as English) exploiting all four parameters of pitch, loudness, duration and
quality. The majority of languages with phonological stress seem to make use of only three parameters, however. Pitch, loudness and duration alone, without manipulation of phonetic quality are the triplet of phonetic parameters used by most languages that exploit stress as a phonological device.
It appears that loudness has been difficult to identify precisely, and that it may not even be a significant factor. That is not the case for fundamental frequency and duration. It has been demonstrated in a number of studies on intonation and stress that fundamental frequency is often more important than loudness or duration in contributing to the perception of a stressed syllable, with segment/syllable duration being a secondary consideration. Fry (1958:144) states:

It appears likely that so long as the resulting pitch change is easily perceptible to the listener, he tends to judge a higher syllable as more stressed, but the magnitude of the pitch change makes little contribution to his judgement.
Fry's conclusion (compare 1955) has increasingly been confirmed in recent literature (for example, Ladd 1996, Ladefoged 1982:224-225, Laver 1994:450 and Lieberman and Blumstein 1988:154, 198). Laver (1994:450) summarises the view on stress as a feature of prominence:

Other things being equal, one syllable is more prominent than another to the extent that its constituent segments display higher pitch, greater loudness, longer duration or greater articulatory excursion from the neutral disposition of the vocal tract.

### 2.6.2.2 $\mathrm{F}_{0}$ trajectory as the phonetic indication of stress (pitch-accent) in Pendau

The results from this analysis ${ }^{26}$ show that the main phonetic realization of stress as perceived in Pendau is via the fundamental frequency trajectory target increasing $10-20 \mathrm{~Hz}$ within a duration of $100-150 \mathrm{~ms}$, for example, see Figure 2.13. In almost all instances the trajectory is a swift upward slope. The general tendency shows that in most cases the trajectory reaches its peak within 100 ms , and that minimally it climbs to a 10 Hz peak up to a 20 or more Hz increase. This could be viewed as a Low-High ( $\mathrm{L}-\mathrm{H}$ ) tone contour that indicates stress.

This low (L) to high (H) pitch trajectory can be identified as 'pitch-accent', following Laver (1994) and Selkirk (1995). Laver (1994:493) defines 'pitch-accent' thus: ${ }^{27}$

We can adopt the term pitch-accent for any pitch configuration that makes a syllable prominent whether the pitch obtrusion involved is phonetically dynamic

[^24](rising, falling, rising-falling, falling-rising) or phonetically stepping (from or to a given pitch value) in nature.

Selkirk (1995:551) states that pitch-accent 'is simply a tonal entity with a restricted distribution within a word.'

The primary data used for this analysis are the sentence frames used in the phonological problem on nasal-obstruent sequences (§2.5.3) These sentence frames were digitised using SIL's speech analysis software called WINCECIL. ${ }^{28}$ Then the selected frames were segmented for the tokens in focus. After each segment's duration was recorded, the fundamental frequency was recorded for the lowest and highest points within the penultimate syllable (the syllable for stress in Pendau). In some cases the zero point began with the end of the nasal preceding the voiceless obstruent, because the fundamental frequency trace does not show (that is, fundamental frequency is not always picked up on voiceless consonants, so the beginning of these consonants is assumed to be the ending of the previous segment). In a few cases the lowest point occurs very shortly after the syllable onset in which case the beginning, lowest point, and highest point were recorded. These points were then plotted on scatter plot graphs that show the correlation between different tokens of the same word in the same frame type. In some of the graphs, several different words with their tokens are displayed.

Only a few examples show a duration of less than 50 ms . for the penultimate syllable: $27 \mathrm{~ms} ., 35 \mathrm{~ms}$., and 45 ms . However all of these still show an increase of $11 \mathrm{~Hz}-15 \mathrm{~Hz}$. Although the duration is well outside of the norm of most of the data, the increase in Hz is still within the norm of at least a 10 Hz increase. Laver (1994:451) states that 1 Hz is about the threshold of discrimination, so the Pendau increase of at least 10 Hz is easily perceptible:

The just-noticeable difference (the psycho-physical threshold or limen) in pitchdiscrimination between two notes, in the span of fundamental frequencies from 80 to 160 Hz , is of the order of $+/-1 \mathrm{~Hz}$ (Flanagan 1957:534).
Figure 2.13 displays the duration and change in the fundamental frequency in Hz for six similar Pendau tokens. Figure 2.14 shows the token mbirung. The pitch rises by 16 Hz in 99 ms . on the penultimate syllable of mbirung 'large flame' as displayed in Figure 2.14 (token 2 from file 01CF06A2.WAV). This is measured from the beginning of the sound waves for [b] which is at 98 Hz until the pitch peaks at 114 Hz which is before the end of the [i] vowel actually ends (a duration of 99 ms .). Figure 2.15 displays the segment and syllable duration measured with the highlighted grey area showing the penultimate syllable.

[^25]

Figure 2.13. Pendau tokens: mbirung 'large flame’, ngkolung 'upper babi rusa tusk', mpalung 'k.o. bird'


Figure 2.14. Rising pitch on penultimate syllable of mbirung 'large flame'

| $\mathbf{y}$ | $\mathbf{k}$ | $\mathbf{0}$ | $\mathbf{l}$ | $\mathbf{u}$ | $\mathbf{y}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 116 | 55 | 134 | 51 | 128 | 270 |
| 84 | 79 | 122 | 36 | 91 | 235 |
| $\mathbf{m}$ | $\mathbf{b}$ | $\mathbf{i}$ | $\mathbf{r}$ | $\mathbf{u}$ | $\mathbf{y}$ |
| 104 | 38 | 121 | 16 | 133 | 129 |
| 72 | 49 | 101 | 25 | 114 | 198 |
| $\mathbf{m}$ | $\mathbf{p}$ | $\mathbf{a}$ | $\mathbf{l}$ | $\mathbf{u}$ | $\mathbf{y}$ |
| 91 | 82 | 126 | 49 | 212 | 131 |
| 89 | 95 | 122 | 61 | 190 | 327 |


| C | CV | CVC |
| :--- | :--- | :--- |
| 116 | 188 | 450 |
| 84 | 207 | 362 |
| C | CV | CVC |
| 104 | 159 | 278 |
| 72 | 150 | 337 |
| C | CV | CVC |
| 91 | 208 | 393 |
| 89 | 217 | 578 |

Figure 2.15. Syllable duration with penultimate syllable highlighted and contrasted for three words (two tokens each): ngkolung, mbirung, and mpalung

### 2.6.3 The glottal stop in Pendau

The glottal stop phoneme has several possible phonetic manifestations (§2.3). Most of these have no particularly fixed environment that they occur in. They can be thought of as a continuum of phonation types that are prototypically aimed at a complete glottal stop, but may fail in actualising the actual stop. The most common phonetic manifestation of the glottal stop phoneme is a creak or laryngealisation (see Quick 2000a, 2002b). This can occur as a transition between two vowels, as creak on the edge of the first vowel (prevocalic laryngealisation) of a word which begins with the glottal stop phoneme, or as creak on the final vowel (either the entire vowel or the end of the vowel) of a word ending with a phonemic glottal stop.

The data presented in this section comes from three male speakers. The first is the same as used for most of the vowel formants and stress analysis (Mesak Doge, S1). Additional samples are from a folk tale told by siDidi (S2), and from Pendau language learning lessons (PLL) recorded by Quick (1989c). The following examples are by speaker Albert Ottay (S3).

The displays contrast the types of phonetic phonation that occur for the glottal stop phoneme. Figure 2.16 shows a real phonetic glottal stop in which the glottis closes. This example is one token from the frame So'uya nabo' ri'uo? 'How many roofs are over there?'. This has a clear pause between the final glottal stop of nabo' 'roof' and the next word ri'uo 'at over there' as the energy dissipates following the closure of the glottis. Note however that there appears to be a brief creak at the end of the vowel.


Figure 2.16. Glottal stop in nabo' 'roof'
Figure 2.17 and Figure 2.18 compare both the sound waves and the spectrogram for the two glottal stops in nimpadoa'o'u 'I will place it on top of something'. Display of the same word but a different token in Figure 2.18 shows the first glottal stop is a creak for a period of time between the $/ \mathrm{a} /$ and the $/ \mathrm{o} /$ vowels (these tokens are first and second in the order that they were read-note that the first token in a sequence of similar tokens would be pronounced more carefully or slowly and that the male speaker often would read subsequent tokens at a more rapid rate). Note also in Figure 2.18 that the [ o ] between the glottal stop appears to also overlay creak on this vowel. This can be contrasted with the previous [ o ] in the same word which appears to have a more regular pulse in the
spectrogram. Future research will need to examine the aperiodicity (or jitter) between pulses. This can be checked by measuring the irregularity between pulse peaks in the sound waves (Ladefoged, Maddieson, and Jackson 1988, Silverman 1997:247).

In Figure 2.19 the first glottal stop has three clear pulses, whereas the last glottal stop does not show a clear pulsation (ni'aia' moje...'call again' in folk tale by S3).

Figure 2.20 shows a weak glottal stop in the sound waves. At the beginning of the glottal segment there are some irregular sound waves and then they begin to normalise and approach the pattern of the $[\mathrm{u}]$ vowel sound waves. This is a clear contrast to the glottal stop sound wave pattern displayed in Figure 2.16. I conclude from examining the sound waves in combination to listening to the sounds that this is a creaky vowel transition.

The two examples in Figure 2.22 and Figure 2.23 (S1) are the tokens from the frame Ha'u mobalu' ndueng ri'uo 'I sell anoas over there.' The first token in Figure 2.22 shows careful pronunciation with a clear pause before the nasal-stop sequence ndueng 'anoa'. The more rapid speech in the second token of the frame is displayed in Figure 2.23. This example is particularly interesting because the final $/ \mathbf{u}$ / in mobalu is almost entirely in creaky voice mode and the syllabic nasal of ndueng 'anoa' becomes the coda of the previous word's syllable, as displayed in (16).


Figure 2.17. Glottal stops in nimpadoa'o'u (token 1)


Figure 2.18. Glottal stops in nimpada'o'u—creak and non-creak (token 2)


Figure 2.19. Glottal stops in ni'aia' 'call (IV/RE prefix and TZ suffix)
Figure 2.21 shows a distinct change in the sound waves between the [o] vowel and the [u] vowel. Compare this with Figure 2.19 and Figure 2.20.


Figure 2.20. Glottal stop in ri'uo 'at/in (over) there'


Figure 2.21. Glottal stop in so'uya 'why'


Figure 2.22. Glottal stop word final in mobalu' ndueng 'sell anoas'


Figure 2.23. Glottal stop as creaky voice on final vowel in mobalu' ndueng 'sell anoas' (token 2)
(16) Resyllabification of syllabic nasal to preceding word (post-lexical)


### 2.7 Stress and intonation in Pendau

### 2.7.1 Metrical structure of stress in Pendau

In Pendau, primary stress is predictable on the penultimate syllables of words, thus it is not phonemic (see the phonetic details in §2.6.2). There is no secondary stress (see further discussion below). Placement of stress can be described using the Perfect Grid theory (Goldsmith 1990, 1995, Kenstowicz 1994). Two basic rules can be used to predict penultimate stress in Pendau. First the edge of the word is determined, which for Pendau
is the right edge. The prosodic domain is the foot. Secondly the Perfect Grid is applied which scans from right to left based on the End Rule, and then marks are made for three rows. The rules (Goldsmith 1990:193-194) are listed below:

1) End Rule (Final, Foot)
2) Perfect Grid Trough first-every other even grid marked, scanning in Pendau right to left
3) Pendau is not Quantity Sensitive. Therefore only 2 out of 4 metrical grid rules apply: 1) End Rule, and 2) Perfect Grid
4) Stress applies post-lexically

The examples in (17)-(19) demonstrate the prediction of stress placement following the Perfect Grid theory. Rule 1 above identifies the final edge of the word as the place to begin scanning from right to left. Row 0 identifies the nucleus of each syllable (an x identifies this position). Rule 2 is applied and every other even syllable is marked with an x as the word is again scanned from right to left on row 1 . This identifies the nucleus of a prosodic foot. Primary stress can now be identified at Row 2 by scanning for the first prosodic foot nucleus from the end of the word as it is scanned from right to left (and is identified by the syllable with the most marks above it).

(18)

'the crippled one'

'not yet'

Every x on Row 1 marks a potential position for secondary stress. However Pendau does not have secondary stress. ${ }^{29}$ Primary stress is a cumulative prosody and does not leave any room for secondary stress (see the acoustic evidence for stress as a trajectory of rising pitch $\S 2.6 .2$ ). Kager (1995:393) states, 'In the analysis of most unbounded systems, one stress is realised phonetically, while the other "stresses" are merely potential.'
'Line conflation' (following Kager 1995:393 but also compare Kenstowicz 1994:578) provides a technique for eliminating the potential secondary stress ('line' is synonymous with 'row' above):

When two lines are conflated, a constituent on the lower line is preserved only if its head is also the head of a constituent on the next higher line.
Example (20) shows the process of conflation of Row 0 and Row 1 leaving only primary stress on the penultimate syllable.


### 2.7.2 Intonation

Intonation interacts with stress in Pendau since stress is indicated by rising pitch on the penultimate syllable of every word (§2.6.2). Usually the pitch falls after the target height is reached and begins to fall until the penultimate syllable of the next word is reached. Since every word must have this pitch-accent there is always a rise and fall on every word. This presents a problem in determining any 'intonation tune' (Ladd 1996, Hirst and Cristo 1998) which may coincide with particular grammatical constructions such as interrogative, declarative, and imperative constructions.

In Quick (2006) a preliminary distinction between declaratives and interrogatives appears to be that the intonation tune overlays the individual word's pitch-accent so that the general scope of intonation clauses rises as opposed to a falling or declination in

[^26]declarative clauses (based on the analysis of about 100 Pendau samples). This rising would essentially be analogous to up-step in tonal languages in which later low tones may be higher than a previous high tone (so in a Pendau question clause there may actually not be a need for falls, as long as there is always a $\mathrm{L}-\mathrm{H}$ rise for each subsequent word).

I must emphasise that this is still only a conjecture that must wait for more in-depth research on this very interesting topic as it may turn out to be much more complicated than this.

## 3 Lexical phonology and morphophonemics

### 3.1 Introduction

The description of the phonology of Pendau in Chapter 2 was largely based on a structuralist approach, but the emphasis in this chapter utilises insights from the theory of lexical phonology of which many of these theoretical modules are subsumed or complementary (Kenstowicz 1994, Goldsmith 1990, Goldsmith 1995). Phonological processes in Pendau include vowel harmony (Quick 2000b), nasal assimilation, nasal deletion, nasal fronting, glide formation, glide insertion, and voiceless consonant deletion. Reduplication and infixation are described in §3.6.

Phonological theory has become very modular and complex. Modular theories of generative theory are displayed in Figure 3.1 (based on Goldsmith 1995:3). Most of the current modules listed in this chart are utilised in this chapter overtly or implied in some cases.

|  | Phonotactics | Alternations | Contrasts |
| :--- | :--- | :--- | :--- |
| Representations | Austosegmental and <br> metrical structure <br> Prosodic hierarchy | Feature geometry and limits <br> on kinds of assimilation <br> Prosodic morphology | Underspecification <br> theory |
| Levels | Licensing <br> Abstractness <br> Structure-preservation | Issues of stratal organization | Organization of the <br> lexicon |
| Rules | Metrical theory <br> Harmonic rule application <br> Optimality theory | Equation of phonotactics <br> and alternations: strict <br> cyclicity | Structure-building <br> versus structure <br> changing operations |

Figure 3.1. Modular theories in generative phonology (adapted from Goldsmith 1995:3)

### 3.2 Feature geometry and distinctive features

### 3.2.1 Feature geometry

The description of Pendau phonology is enhanced by understanding the theory of feature geometry. The feature geometry employed in this analysis will follow the general consensus as presented in Kenstowicz (1994). Feature geometry models the relationship between phonology and phonetics. The basic model of feature geometry theory used here is given in Figure 3.2.


Figure 3.2. Feature geometry (adapted from Kenstowicz 1994:146; but compare to Kenstowicz 1994:452)

### 3.2.2 Distinctive features of consonants

The consonant phoneme segments are specified by distinctive features in Figure 3.3. Figure 3.4 displays the underspecification of Pendau consonants.

|  | p | t | c | k | b | d | j | g | m | n J | n ! | $\eta$ | $\beta$ | s | 1 | r | h | $?$ | y |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sonorant | - | - | - | - | - | - | - | - | + | + | + + | + | - | - | + | + |  |  | + |
| Consonantal | + | + | + | + | + | + | + | + | + | + | + + | + | + | + | + | + |  |  | - |
| Anterior | + | + | - | - | + | + | - | - | + | + | - - | - | + | + | - | + |  |  | - |
| Coronal | - | + | + | - | - | + | + | - | - | + | + | - | - | + | + | + |  |  | - |
| Strident | - | - | + | - | - | - | + | - | - | - | - - | - | - | + | - | - |  |  | - |
| Continuant | - | - | - | - | - | - | - | - | - | - | - - | - | + | + | + | + |  |  | + |
| Nasal | - | - | - | - | - | - | - | - | + | + | + + | + | - | - | - | - |  |  | - |
| Lateral | - | - | - | - | - | - | - | - | - | - | - - | - | - | - | + | - |  |  | - |
| Voice | - | - | - | - | + | + | + | + | + | + | + + | + | + | - | + | + |  |  | + |
| High |  | - | + | + | - | - | + | + | - | - | + | + | - | - | - | - |  |  | + |
| Low | - | - | - | - | - | - | - | - | - | - | - - | - | - | - | - | - |  |  | - |
| Back | - | - | - | + | - | - | - | + | - | - | + | + | - | - | - | - |  |  | - |
| Spread Glottis | - | - | - | - | - | - | - | - | - | - | - - | - | - | - | - | - | + | - | - |
| Constricted Glottis |  | - | - | - | - | - | - | - | - | - - | - | - | - | - | - | - |  | + |  |

Figure 3.3. Distinctive features of Pendau consonants

|  | p |  | t | c | k | b | d | j | j | g | m | n | n | 1 | $\beta$ |  |  | 1 |  | h |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sonorant |  |  |  |  |  | - | - |  |  | - |  |  |  |  | - |  |  |  | + |  |  |  |  |
| Consonantal |  |  |  |  | + |  |  |  |  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Anterior | $+$ |  | + |  |  | + | + |  |  |  | + | $+$ |  |  | + |  | + |  | + |  |  |  |  |
| Coronal | - |  | $+$ |  |  | - | + |  |  |  | - | + | + |  | - |  |  |  | + |  |  |  |  |
| Strident |  |  | - | + |  |  | - |  | + |  |  |  |  |  |  |  | + |  |  |  |  |  |  |
| Continuant | - |  | - | - | - | - | - |  | - | - |  |  |  |  | + |  | + |  | $+$ |  |  |  |  |
| Nasal |  |  |  |  |  |  |  |  |  |  |  | + | + | + |  |  |  |  |  |  |  |  |  |
| Lateral |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |  |  |  |  |  |
| Voice | - |  | - | - | - | + | + | - | + | $+$ |  |  |  |  | + |  | - |  |  |  |  |  |  |
| High |  |  |  | + | + |  |  |  | + | $+$ |  |  | + | + |  |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Back |  |  |  |  | + |  |  |  |  | + |  |  |  | + |  |  |  |  |  |  |  |  |  |
| Spread Glottis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Constricted Glottis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Figure 3.4. Underspecified Pendau consonants
Example (1) shows the lexical default rules and the post-lexical complement rules for Pendau consonants.
(1) Lexical Rules

Post-Lexical Complement Rules


### 3.2.3 Distinctive features of vowels

The vowels in Pendau can be underspecified as displayed in Figure 3.5. Since a vowel chart can be displayed in several possible ways, the fact that the /o/ is the underlying vowel in vowel harmony and is used in epenthesis was a determining factor in developing this particular underspecification configuration (Steve Parker pers. comm. 1993).

|  | i | e | a | o | u |
| :--- | :--- | :--- | :--- | :--- | :--- |
| high | + |  |  |  | + |
| low |  |  | + |  |  |
| back | - | - |  |  |  |

Figure 3.5. Vowel underspecification in Pendau

Listed in (2) below are the redundancy rules for Pendau vowels. The post-lexical complement rules derive the /o/ in epenthesis (§2.4.4). These also apply to the underlying /o/ when vowel harmony is blocked (§3.5.7.6-7).
(2)

Lexical Rules


Post-Lexical Complement Rules

$$
\begin{aligned}
& \varnothing \\
& \varnothing \\
& \varnothing
\end{aligned} \longrightarrow \begin{gathered}
{[\text {-high }]} \\
{[+ \text { back }]} \\
{[\text {-low }]}
\end{gathered}
$$

### 3.3 Lexical phonology levels (strata) in Pendau

Lexical phonology splits the phonology into two modules: the lexical and the postlexical modules. Phonological processes within the lexical module apply in a cyclic manner. In Figure 3.6 I propose three levels for the Pendau lexical phonology.


Figure 3.6. Levels in Pendau lexical phonology

The Strict Cycle Condition (SCC) and the Elsewhere Condition both apply at all levels within the lexical module. The Elsewhere Condition allows disjunctive phonological rules to apply the more specific or idiosyncratic rules when there is a choice between two rules that would apply. The SCC allows phonological processes to be recycled such as vowel harmony and resyllabification as additional affixes are combined into a word. The SCC is a complex formulation that has solved complex problems in phonology and solves an apparent conflict in Pendau phonological rules as well. Goldsmith provides a simplified statement of the formulation (1990:223; see Kenstowicz 1994:208 for a more formal statement):
...a rule must apply to phonological material at the first chance- the first cycleor else for ever hold its peace, and must never return to that earlier cycle to have an effect.

Each morphological non-root formative (that is, affix) is associated with a particular level and is added at the appropriate level for the word formation process involved. All lexical derivations go through each level (Kenstowicz 1994:214). Each level has phonological rules that interact cyclically with each applicable process for that particular affix (the SCC and Elsewhere Condition constraining the overall procedures). After all phonological processes have been applied for one level then the bracket erasure convention is applied on those formatives which have been affected. The bracket erasure invokes resyllabification where that is applicable. The output of each level is a 'lexical item' (as defined by Kenstowicz 1994:214). Later levels must interact with the new string output as a whole unit. Each of the levels is listed below with a summary of the morphophonemics and processes which occur.

### 3.3.1 Level 1

Earlier levels in the word formation process are assigned affixes closer to the root. Level 1 (L1) in Pendau has the more idiosyncratic processes such as nasal ligature assimilation, the pa-causative, the gu- equative, the infixation of the -um- aspectual infix, etc. These are all affixes close to the root. Nasal assimilation is the only feature changing phonological process in level 1 (note that it also applies in level 2; phonological processes may apply in adjacent levels, see Katamba 1993:140).

### 3.3.2 Level 2

Level 2 (L2) has the greatest number of affixes assigned to it and also has the greatest number of phonological processes which can apply. The affixes assigned to level two are $p V(C)$ - stem formers, causatives $p o_{2^{-}}, p o_{3^{-}}$, the infix -ong- and the reduplication types 1 and 2. Feature changing phonological processes which apply here are vowel harmony (§3.5.7), nasal assimilation (§3.5.4), glottal stop assimilation (§3.5.5), voiceless consonant deletion (§3.5.4), the application of the obligatory contour principle (OCP; §3.5.3), floating autosegment rule (§4.3.4), template copying for reduplication types 1 and 2 (§3.6.1), and glide formation (§3.5.6.1).

### 3.3.3 Level 3

Level 3 (L3) has the least number of affixes assigned to it and only includes the suffixes which includes reduplication type 3. The only feature changing rule in this level is nasal fronting (§3.5.2).

### 3.3.4 Post-lexical level

The attachment of clitics occurs at this level and provides the motivation for assigning stress and epenthesis. The other phonological processes which occur are glide insertion and creaky voice.

### 3.3.5 Motivation for assigning affixes to lexical levels

The motivation for assigning various affixes to each of the levels is summarised in the points below. Sample derivations of some of the interactions are given in §3.4.

- Voiceless consonant deletion applies in some cases and not others, for example, contrast momaguru from M-pong-pa-guru 'teach' with mompalalo' M-pong-po ${ }_{2}$ lalo' 'deepen'. This problem is solved by: 1) separating affixes which take consonant deletion from those that do not delete in separate levels, and 2) the SCC which prevents consonant deletion from occurring on affixes in which an earlier cycle in the same level has applied a process. This means that the causative pamust be in level 1 and the other causatives $p o_{2}$ - and $p o_{3}$ - must be in level 2 . Sample derivations for both cases are given in §3.4.
- Nasal assimilation must apply in level 1 and level 2. It must apply in level 1 in order to work for nasal ligature. It must also occur at level 2 since assimilation blocks vowel harmony from occurring.
- Nasal ligature must apply in level 1 because vowel harmony crosses two consonants which is not true for all other cases.
- Voiceless consonant deletion must occur at level 2 since it does not apply to affixes that occur in level 1.
- Obligatory Contour Principle (OCP) must occur at level 2 since assimilation blocks vowel harmony from applying.
- Glottal assimilation must occur at level 2 since assimilation blocks vowel harmony from occurring.
- Floating autosegment rules must occur at level 2 because the affixes which take vowel harmony occur at this level.
- Vowel harmony must occur at level 2 because all of the other assimilation rules which block it from applying in certain environments occur at this level. Vowel harmony cannot be at level 1 because the rules that apply to nasal ligature requires it to be at a later level.
- The infix -um- must occur in level 1 because it applies to the root before any other affixation is applied.
- The infix -ong-must apply at level 2 because it is only inserted after all other prefixation takes place which occurs at level 2.
- Reduplication types 1 and 2 occur at level 2 because they require other prefixes that occur at level 2 to be finished before they apply.
- Reduplication type 3 occurs at level 3 since all suffixing is completed after all prefixes and infixation has applied.
- Clitics occur post-lexically because they are separate grammatical words.
- Stress is assigned post-lexically because penultimate stress moves to the penultimate syllable and because stress will fall on a syllable created from epenthesis.
- Epenthesis occurs post-lexically because clitics occur here.
- Glide insertion and creaky voice both occur here because they are non-phonemic. They are articulated because of various requirements of their environment.


### 3.4 Sample lexical phonology derivations

This section illustrates only some of the many derivations that may occur in Pendau. I have selected several which highlight some of the interactions between levels as well as those that occur through cycles on the same level. I have not listed all of the possible rules that could apply on each level for expository reasons (see $\S 3.3$ for an overview of the lexical phonology model for Pendau and a listing of affixes and processes that occur in each level).

Examples of word formation processes at level 2 are illustrated in (3). The first cycle applies redundantly to the root or stem, since by virtue of SCC cyclic rules cannot be applied to unaffixed roots (Kenstowicz 1994:208-209). Cycle 2 applies vowel harmony and nasal assimilation processes on the words that will be output as momaresa 'check' and mangabut 'weed, clear'. Blanks (indicated by dashes) are rules inapplicable at that cycle for those formatives. Vowel harmony and nasal assimilation have to be on the same level. If nasal assimilation applied at a previous level to vowel harmony then vowel harmony would be blocked in all words (not just those with underlying consonant sequences) since the bracket erasure convention would erase the affix boundary from the word base, and vowel harmony could never apply. Sample derivations of nasal assimilation, vowel harmony (and blocking), and voiceless consonant deletion are provided in (3).

In Pendau not all voiceless consonants are deleted in the same phonological environment. However, application of the SCC easily provides the conditions for the variation that is otherwise a difficult issue to resolve. The derivation in (4) demonstrates that the harmonic stative causative prefix $\mathrm{po}_{2}{ }^{-}$remains unaffected by the voiceless consonant deletion rule. The roots lalo' 'deep' and ide 'small' are causativised and mean 'deepen' and 'decrease' respectively. Cycle 2 can only refer to information between the [po] [ide] boundaries, and so only vowel harmony applies. Cycle 3 can only refer to information between the [moy] [pe] and the nasal assimilation applies, but then nasal assimilation blocks the vowel harmony from applying (§3.5.7.6-7). Voiceless consonant deletion cannot apply because the segments in [pe] were already affected in an earlier cycle (cycle 2 ).

| (3) | [moy] [paresa] | 'check' | [moy] [abut] | 'clear, weed' | Cycle 1 (Level 2) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ----- |  |  |  | Nasal assimilation Vowel harmony Vl. cons. deletion Glottal stop assim. Glide formation |
|  | ---------------- |  | --------------- |  |  |
|  | -------- |  | --------------- |  |  |
|  | ----------------- |  | -------------- |  |  |
|  | ----- |  | -------- |  |  |



The derivation in (5) shows the interaction between level 1 and level 2 and demonstrates the need for assigning the causative prefix $p a-$ to a different level than the other causative prefixes. Since the voiceless consonant in pa-deletes it cannot be at the same level as the $\mathrm{po}_{2^{-}}$and $\mathrm{po}_{3}{ }^{-}$causative prefixes, because the SCC would prohibit the deletion of this consonant. The assignment of pa- to level 1 supports the lexical phonology model where bracket erasure at the end of a level, level 1 in this case outputs in essence a 'lexical item' and enters the next level as a unit. This will then allow the initial voiceless consonant to delete as it does in words like paresa 'check' (see the derivation in (3)). The causative prefix pa-changes the lexical meaning of guru 'learn' to paguru 'teach' and inang 'eat' to painang 'feed'.

| [mon] [pa] [guru] 'learn' | [moy] [pa] [inay] | 'eat' | Cycle 1 (Level 1) |
| :---: | :---: | :---: | :---: |
|  |  |  | Nasal assimilation |
| [moy] [paguru] | [mon] [painay] |  | Bracket erasure |
|  |  |  | Cycle 1 (Level 2) |
| ---------------- | -------------- |  | Nasal assimilation |
| ------ | ------------ |  | Vowel harmony |
| ----------------- | --------------- |  | V1. cons. deletion |
| ---------------- | --------------- |  | Glottal stop assim. |
|  | -------------- |  | Glide formation |
|  |  |  | Cycle 2 (Level 2) |
| [mom] [paguru] | [mom] [painay] |  | Nasal assimilation |
| (blocked) | (blocked) |  | Vowel harmony |
| [mom] [ aguru] | [mom] [ainay] |  | Vl. cons. deletion |
|  | --------------- |  | Glottal stop assim. |
| ---------------- | -------------- |  | Glide formation |
| [momaguru] 'teach' | [momainay] |  | Bracket erasure |

Level 3 has suffixation affixes, which includes reduplication type 3 assigned to it. Only two phonological processes apply at this level which are nasal fronting of word final nasal velars and template copying for reduplication type 3 . The benefactive and locative suffixes are illustrated in deriving words from tuung 'order' in (6).

| (6) | [nituuy] [i] | 'order (LOC)' | [nituuy] [ap] | 'order (TZ)' | Cycle 1 (Level 3) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Nasal fronting |
|  |  |  |  |  | Cycle 2 (Level 3) |
|  | [nituun] [i] |  | [nituun] [a?] |  | Nasal fronting |
|  | [nituuni] | 'order (LOC)' | [nituuna?] | 'order (TZ)' | Bracket erasure, |

The last step in the output process is the post-lexical or syntactic level. Cliticisation occurs in the syntactic module (Nivens 1992:200). Stress placement has to be at the same level as enclitics, since the enclitics receive penultimate stress and therefore are part of the phonological word. Enclitics often force a phonotactic violation so an epenthetic vowel is inserted at this level as well when resyllabification occurs (after the bracket erasure; epenthesis is described in §2.4.4). This is also where resyllabification between words may occur (§2.4.4). All phonetic rules that apply are based strictly on physical limitations such as glide insertion (certain vowel sequences cannot otherwise be pronounced) and creaky voice (a result of rapid speech, etc.) also occur here.

Going back to level 1 will provide an explanation as to why vowel harmony is blocked by nasal assimilation when there are consonant sequences for the active voice prefixes mong-/nong- but vowel harmony is allowable for those consonant sequences which occur in affixed classifiers and mensurals (§3.5.7.7). So a combination of theoretical insights
from lexical phonology and autosegmental phonology provide a powerful, motivating and elegant solution to the vowel harmony blocking problem.

### 3.5 Morphophonemic processes

### 3.5.1 Introduction

This section describes each of the phonological processes which occur when various formatives co-occur.

### 3.5.2 Nasal fronting

One of the more unusual phonetic alternations in Pendau is between [ n ] and [ y ], where the $[\mathrm{y}]$ is fronted to $[\mathrm{n}]$ in certain environments as shown in (7a). Example (7b) shows that some words have a word final $[\mathrm{n}]$ that does not alternate. The data in (8) illustrates that a final $[\mathrm{y}]$ is not fronted before enclitics. The data in (7) and (8) illustrates that the vowels are not influencing the fronting since $[a, i, o]$ vowels may occur there (see (7a).

| root | gloss | TZ suffix | DIR suffix | 1SG/GE enclitic |
| :---: | :---: | :---: | :---: | :---: |
| a. 'omu! | 'bring' | ni'omuna' | ni'omuni | ni'omипо'u |
| guntug | 'light' | niguntuna' | niguntuni | niguntupo'u |
| tambin | 'extend' | nitambina' | nitambini | nitambiyo'u |
| tuul | 'order' | nituuna' | nituuni | nituupo'u |
| b. bulagon | 'rattan' | nibulagona' | nibulagoni | nibulagono'u |
| rakan | 'boil' | nirakana' | nirakani | nirakano'u |
| logan | 'visit' | nilogana' | nilogani | nilogano'u |
| root |  | nominal circumfix | 3SG/G | enclitic |
| bayar |  | pombayaron | pombay | ополо |
| jaon |  | ponjaonot | ponjao | ооло |

A classical generative rule would be written as in (9) which says the velar nasal becomes a coronal nasal before suffixes (excluding enclitics).

$$
\begin{array}{cl}
\mathrm{C} & \longrightarrow \mathrm{C} /
\end{array} \begin{aligned}
& -\mathrm{V} \mathrm{C} \mathrm{\#}  \tag{9}\\
& {[\text { [-enclitics] }]}
\end{aligned}
$$

While this rule describes where the alternation occurs, it does not provide any phonological motivation for why this occurs. An important clue provided by lexical phonology is that this nasal fronting must occur in a lexical level since the velar nasal is not fronted before an enclitic (which is in the post-lexical level). Since the velar nasal can be assumed to be underspecified (compare with the active voice prefixes such as mong-), I assume that the nasal fronting is due to the filling in of segment features before it would normally apply in the post-lexical level.

### 3.5.3 Nasal deletion before sonorants (Obligatory contour principle)

Nasal deletion occurs according to the obligatory contour principle (OCP). The OCP states that 'adjacent identical elements are prohibited' (McCarthy 1988:88). Any word root or stem with an initial sonorant consonant will invoke this rule when preceded by a nasal prefix. When the nasal assimilation occurs, the OCP is met and the initial consonant is deleted. Vowel harmony is still blocked, as occurs when nasals precede obstruents, as shown in (10)-(12). In each of these examples nasal assimilation occurs first. Following this the vowel harmony rule is blocked. The final rule that occurs is nasal deletion as a result of the OCP constraint. Sometimes this is a result of nasal delinking as in (11)-(12), and includes deleting the subsequent identical consonant formed. In these latter cases the OCP also applies and deletes what could otherwise be a geminate $l$ or $r$.

(11a)



### 3.5.4 Nasal assimilation and voiceless consonant deletion ( $p, t, k, s$ )

In Pendau, as in many other Austronesian languages, the final nasal of a prefix assimilates to a point of articulation homorganic with the initial consonant of the stem/root to which it is attached. Example (13) illustrates nasal assimilation to the following voiced obstruent (the affricate [d3] assimilates the nasal to the same point of articulation as the voiced coronal obstruent [d] below, for example, pong- 'SF/PT' plus jaong 'sew' results in ponjaong 'the sewing place'). Example (14) illustrates nasal assimilation preceding voiceless obstruents and the deletion of these obstruents.
(13) nasal assimilation before voiced stops

(14)


[^27]
### 3.5.5 Glottal assimilation

The data in (15) illustrates that a glottal stop [?] and a voiceless velar stop [k] alternate in specific environments. Note also that the bare root forms are also often the same form used in imperatives. ${ }^{2}$

| root | gloss |
| :--- | :--- |
| 'omung | bring <br> 'ai |
| call |  |
| 'our | shave |
| 'olog | cut, break |
| 'a'ar | scratch |
| ketik | type |
| kikir | file |
| kova | carry |
| kubur | grave, bury |


| AV/IR | IV/IR | IV/RE |
| :--- | :--- | :--- |
| mongkomung | ro'', |  |
| mongkai | ni'omung |  |
| mongkour | ra','our | ni'aia' |
| mongkolog | ro'olog | ni'our |
| mongka'ar | ra'a'ar | ni'olog |
|  |  |  |
| mongetik | reketik | niketik |
| mongikir | rekikir | nikikir |
| N/A | rokova | nikova |
| mongubur | rokubur | nikubur |

Autosegmental phonology once again provides motivation for selecting the glottal stop over the voiceless velar stop [ k$]$ as underlying where the two alternate. Diachronically it is clear that the glottal stop in Pendau, in many words (if not all), is a reflex of *k (see for example Kaili-Pamona languages, Martens n.d.). Positing an underlying *k for glottal stops does not work since there are minimal pairs which show contrast (such as api 'fire' and 'api 'wing'), and there are clear instances of [k] in many other analogous environments. Following an autosegmental approach I will show that the simplest approach is to posit the glottal stop as underlying in the cases where it alternates with [k], and that when [ k ] appears after the velar nasal it is due to a spreading of a point of articulation to the adjacent glottal stop. The rule presented in (16) demonstrates how the point of articulation assimilates the oral point of articulation, that is, dorsal, and assimilates the same feature of constricted glottis, thus resulting in the back velar stop [k].

skelatal
root
cavity
articulator
terminal
[k]

[^28]The paradigm in (15) illustrates that all of the data can be accounted for under this analysis. Underlying $k$ can be contrasted with underlying ? in the environment of active voice prefixes. Underlying $k$ will delete like the other obstruents in its natural class ( $p, t, k$, s) when preceded by the nasal segment (voiceless obstruent deletion rule). ${ }^{3}$ Whenever a [ k ] is found in the surface form following a nasal segment (in this particular boundary) it has to be from an underlying glottal stop. This can also be verified by other affixes which end in a vowel. The glottal stop remains a glottal stop intervocalically. ${ }^{4}$

### 3.5.6 Glides

### 3.5.6.1 Lexical glide formation

In traditional phonemic and classical generative analyses the glides [w, y] have had an ambiguous status under certain conditions in many languages. For Pendau the [y] is seen to be a distinctive segment by means of the minimal pair test (§2.3.1). However both the glides [ $\mathrm{w}, \mathrm{y}$ ] are ambiguous with the high vowels [u, i] when preceding a V or VC syllable. Under autosegmental theory the ambiguity is removed because of the maximising onset of syllable principle (that is, avoiding onsetless syllables, see Kenstowicz 1994:279). This means that the high vowel becomes a consonant due to structural pressure. The rules are shown in (17)-(19). This analysis has significant ramifications for the orthography, since it is assumed under lexical phonology theory that the lexical output provides the best basis for an orthography. ${ }^{5}$ So even though the $/ \mathrm{w} /$ is not an underlying phoneme it is added to the inventory of phonemes to give the total 'lexical' phoneme inventory. ${ }^{6}$

Vowel harmony must occur prior to w-glide formation as it is attested in words affixed with the harmonic numeral one prefix so-, such as so-watu 'one time' and sowani 'one honeybee', and otherwise the vowel in so- should become the low [a] vowel.


[^29]


### 3.5.6.2 Post-lexical glide insertion

The glides [ $\mathrm{w}, \mathrm{y}$ ] may be inserted post-lexically when a high vowel, [ u$]$ or [i], precedes a low vowel [a] (either V or VC syllables), as shown in (20). The glide insertion rule is written like an epenthesis rule, but note that the unspecified vowel is not inserted because the specification of the glide originates from the high vowel.


The palatal laryngeal glide may also be realised post-lexically (see also Figure 3.6) when following a high front vowel [i] and preceding a [-high, +back] vowel, that is either [a] or [ o ], as shown in (21). This is written here phonetically as a raised [j] since it has not been standardised consistently in the orthography in regards to whether it should be written all of the time or not (this is clearly contrasted in the first two words 'ai 'call' when the benefactive suffix - $a$ ' is added). The status of the Pendau phonetic glide can be described as Himmelmann (1991:21) states for Lauje: 'Phonetically, there is often a palatal glide after a front high vowel (/i/). But this does not seem to be distinctive and is thus a purely phonetically motivated epenthetic glide.' Orthographic spelling alternations are signified by the tilde ( $\sim)^{7}$

| ni'aia' |  |  | [ni'ai ${ }^{\text {ja }}$ ? ${ }^{\text {a }}$ | 'call (IV/RE-/-TZ)' |
| :---: | :---: | :---: | :---: | :---: |
| nongkai |  |  | [noykai] | 'call (AV/RE) |
| nomoia | $\sim$ | nomoiya | [nomoi a] | 'live, dwell' |
| paio |  | paiyo | [pai ${ }^{\text {j }}$ o] | 'where' |
| io |  |  | [ $2 \mathrm{i}^{\mathrm{j}} \mathrm{o}$ ] | '3SG' |

[^30]
### 3.5.7 Vowel harmony

### 3.5.7.1 Introduction

Vowel harmony is found in many if not all of the languages in the Tomini-Tolitoli group. Vowel harmony in Pendau is a type of prosodic alignment where certain features of one vowel in the stem/root spread to certain prefixes (it can spread over up to three prefixes from right to left) and one infix (Quick 2000b). ${ }^{8}$ The /o/ vowel of a prefix may front to either /a/ or /e/ depending on the features of the first vowel of the root or stem, or the alignment of features may be viewed equivalently as back-round harmony. ${ }^{9}$ For example the inverse voice prefix ro- (irrealis) when affixed to paresa 'check' becomes raparesa 'someone checks something'.

This section begins by introducing representative examples of vowel harmony for each of the harmonic prefixes. A brief classical generative analysis of the vowel harmony phenomena will follow showing that the features back and rounding can be collapsed into one rule, but that this rule and this approach to the data is unsatisfactory (especially with the harmony blocking environments). The major part of the presentation utilises autosegmental, feature geometry, and lexical phonology theories to describe both the vowel harmony process and the environment in which vowel harmony is blocked. Although initially it appears that vowel harmony is blocked by the sequence of two consonants there is data that also shows vowel harmony spreading past two consonants (such as sa-n-tanga 'half'). This analysis resolves the blocked vowel harmony exception by showing that nasal assimilation and nasal deletion block vowel harmony from spreading at the vowel place (V-Pl) tier to the vocalic tier. Since the Well Formedness Condition (WFC) asserts that lines cannot be crossed, then by adopting the vocalic and vowel place tiers as the appropriate analysis for consonant and vowels then the vowel harmony blocking problem is resolved elegantly (§3.5.7.6-7). Finally, this section will briefly compare Pendau with other Austronesian languages that have vowel harmony, concluding with the suggestion that vowel harmony can help the understanding of some historical problems in Sulawesi languages.

### 3.5.7.2 Vowel harmony data

Prefixes in Pendau can be distinguished by whether they are harmonic or non-harmonic. In order to distinguish between these two groups I will call the harmonic prefixes the 'harmonic prefix set' (HPS). A list of the harmonic prefixes (with the underlying formatives) is provided in (22). Most of the harmonic prefixes are verbal prefixes. There

[^31]are other verbal prefixes which are not harmonic, for example, pe- dynamic verb class, $p o_{1}$ - stem former for denominal and factive verb classes.
(22) Harmonic prefix set (HPS) ${ }^{\mathbf{1 0}}$

| ro- | IV/IR | song- | ONE (verb) |
| :--- | :--- | :--- | :--- |
| mo- | ST/IR | so- | ONE (non-verbs) |
| no- | ST/RE | 'o- | HAVE (possessive) |
| pong- | SF/PT | po'o $_{1^{-}}$ | RSLTV |
| $p o_{2^{-}}$, po'o $_{2^{-}}$ | ST/CAUS |  |  |
| - ong- | DISTR |  |  |

The so- prefix is a numeral prefix used with classifiers and measure nouns. The 'oprefix is used to possess a noun or in combination with other verbal prefixes (§7.4.1). In addition to the harmonic prefixes, there is also one harmonic infix -ong- which marks distributive plurality (since most of the harmonic affixes are prefixes, I will include the infix under the label 'harmonic prefix set').

The underlying vowel o harmonises with certain features of the first vowel of the root or stem and may only become $a$ or $e$. An examination of data with various affixes is necessary in order to determine that the underlying vowel which harmonises is $o$. What is most revealing is a comparison of the Inverse Voice Irrealis prefix (IV/IR) with the Active Voice prefix combinations (IR-AV or RE-AV). ${ }^{11}$ Here I only provide the Irrealis form of the Active Voice since the Realis prefix performs exactly the same way as the Irrealis form. Compare the three sets in (23). In (23a) the roots have vowel initial roots, and in (23b) the roots have voiceless consonant initial roots, and in (23c) the roots have (mostly) voiced consonant initial roots. The prefix ro- (IV/IR) is subject to vowel harmony in all instances, whereas the prefix mong- (AV/IR) combination (underlyingly $M$ - pong-) only undergoes vowel harmony when it occurs with a vowel initial root. In sets (23b)-(23c) the vowel harmony is blocked. Taking all of the data together with the vowel harmony blocking indicates that the correct analysis identifies the $o$ as the underlying vowel in the harmonic prefixes.

|  | Root | Gloss | IV/IR | AV/IR |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| (a)abut 'weed' | raabut | mangabut | vowel |  |  |
| angka | 'steal' | raangka | mangangka | initial roots |  |
| inung | 'drink' | reinung | menginung |  |  |
| ibi' | ''hoose' | reibi' | mengibi' |  |  |
| uras | 'sow' | rouras | monguras |  |  |
| oyot | 'haul, pack' | rooyot | mongoyot |  |  |
|  | ulis | 'peel fruit' | roulisi | mongulisi |  |

[^32]

Two possible ways of analysing this blocking are apparent: that it is blocked by underlying consonant sequences, or that it is blocked by the assimilatory processes that also occur in (23b)-(23c). In §3.5.7.6-7 I will argue for an assimilation blocking account.

Example (24) shows vowel harmony prefixes with numerals, classifiers, measure nouns, nominalised classifiers, stative verbs, stative intensification (in some cases the vowel harmony prefix is in combination with other affixes).

Stative verbs (mo- stative irrealis prefix):

| ma-pangkat | 'tall' | me-empeng | 'short' |
| :--- | :--- | :--- | :--- |
| me-ide | 'small' | mo-onda' | 'hot' |
| mo-oge | 'large' | me-menyong | 'cold' |
| me-itong | 'black' | ma-paris | 'difficult' |
| me-meas | 'white' | ma-lamor | 'easy' |
| mo-doda | 'red' | mo-mbosi' | 'good' |
| mo-bulung | 'green, blue' | mo-boat | 'heavy' |
| me-riri | 'yellow' | ma-nggaang | 'light' |
| ma-dantang | 'long' |  |  |

## Numerals:

| soung | 'one' | sa-gatus | 'one hundred' |
| :--- | :--- | :--- | :--- |
| so-mpulu | 'one ten' | se-ribu | 'one thousand' |

Stative intensification (' $\quad$ - $\sigma_{c}$-):

| sanang | 'happy' | 'a-sa-sanang | 'to be exuberent' |
| :--- | :--- | :--- | :--- |
| pangkat | 'tall' | 'a-pa-pangkat | 'to be the most high' |
| tou' | 'finish' | 'o-to-tou' | 'the end of it all' |
| garang | 'love' | 'a-ga-garang | 'the most loved' |
| dea | 'many' | 'e-de-dea | 'uncountable' |
| gau' | 'event, activity' | 'a-ga-gau'-ong | 'have the most deeds' |

## Classifiers:

| sa-lai | 'one thread-like, hair-like object' |
| :--- | :--- |
| sa-mata | 'one eye, one sharp-pointed object' |
| se-mpe'a | 'one flat hard object' |
| sa-ngkayu | 'one snake-like item, tubular' |
| so-ngkolo | 'one cut or shaped heavy object' |
| so-bua | 'one fruit-like object (larger)' |
| se-ilas | 'one ring-like object' |
| sa-dampe | 'one seed-like object' |
| sa-nta'u | 'one fruit (durian, coconuts, etc.), or one four-legged animal' |

## Nominalised (quantified) classifiers:

pe-sa-mata-ong
pe-so-bua-ong

pe-se-ilas-ong $\quad$| 'one each of a sharp-pointed type object' |
| :--- |
| 'one each of a fruit-like object' |

Measure nouns:

| se-insang | 'one time' | sa-pariama | 'one year' |
| :--- | :--- | :--- | :--- |
| so-ndoung | 'one evening' | so-m-bulang | 'one month' |
| se-mbengi | 'one night' | se-liter | 'one litre' |
| se-eleo | 'one sun, one day' | sa-paak | 'one pack' |
| se-minggu | 'one week' | sa-rabo' | 'one handful' |
| so-bungkus | 'one package' | se-kilo | 'one kilogram/kilometre' |

Infixes are given in example (25) and the infix is shown within brackets. The distributive -ong- infix occurs immediately after the first consonant of the word (this is in contrast with the telic aspectual infix -um- which is inserted after the first consonant of the root).

| Distributive infix -ong- |  |
| :--- | :--- |
| Root | Gloss |
| duling | 'lie down' |
| teule | 'return home' |
| 'omung | 'bring, carry' |
| inum | 'drink' |
| lolo | 'search' |
| lampa | 'walk, travel' |

## Infixation

$n[$ ong]o-po-duling=omo
n[eng]e-teule=mo
m[ong]ong-komung
m[eng]eng-inum
m[eng]e-lolo
n[eng]e-lampa

### 3.5.7.3 A classical generative analysis

This classical generative analysis is instructive in demonstrating precisely what the harmonic prosody is and also shows the inherent weakness of a linear treatment of vowel harmony in Pendau. ${ }^{12}$ Figure 3.7 provides the distinctive features for the Pendau vowels following classical generative phonology. ${ }^{13}$

|  | i | e | a | o | u |
| :--- | ---: | ---: | ---: | ---: | ---: |
| High | + | - | - | - | + |
| Low | - | - | + | - | - |
| Back | - | - | + | + | + |
| Round | - | - | - | + | + |

Figure 3.7. Classical generative phonology vowel chart for Pendau
If the first vowel in a stem is $/ \mathrm{a} /$ then the $/ \mathrm{o} /$ is 'fronted' to give it the same features as $/ \mathrm{a} /$, that is $[-\mathrm{rd}] .^{14}$ The features $[-\mathrm{hi},+\mathrm{bk},+\mathrm{low}]$ are redundant and implied in the remainder of the rule. The following rule (26) could be formulated (ignoring the more complicated environments for the time being).

$$
\begin{align*}
& \underset{\left[\begin{array}{c}
\mathrm{rd} \mathrm{~d} \\
-\mathrm{hi}
\end{array}\right]}{\mathrm{V}} \underset{[-\mathrm{rd}]}{\mathrm{V}} / \mathrm{C} \quad \mathrm{C} \quad(\mathrm{C})+\underset{[-\mathrm{rd}]}{\mathrm{V}} . \tag{26}
\end{align*}
$$

When the first vowel in a stem is /e/ or /i/ then the /o/ is 'fronted' to the same features as /e,i/ that is [-bk]. ${ }^{15}$ Here the important redundant features are [-hi,-rd, -low], as shown in (27).


The two rules above show that in Pendau the vowel harmony agrees in unrounding and backing of [-hi] vowels. When a word has the high back vowel [u] in the initial position no rules are needed since $[0]$ and $[u]$ agree in backness. To capture this natural process we can collapse the two rules above into the rule in (28). Also I add the important condition that some consonant sequences block the vowel harmony, as there does not seem a convenient way to notate those exceptions when only one consonant is allowable at a time for vowel harmony to occur. Further, it should be noted that the vowel in the stem closest to the prefix is the vowel to which the prefix vowel harmonises. The specific prefixes are

[^33]abbreviated as the HPS as there are other prefixes that do not allow vowel harmony. The word initial boundary is not identified as there are cases where vowel harmony may spread iteratively up to three prefixes.


Condition: Some consonant sequences will block the rule.

### 3.5.7.4 An autosegmental analysis of vowel harmony in Pendau

Vowel harmony in Pendau is a type of prosodic alignment where certain features of one vowel in the stem spread to vowels in some prefixes. Cross-linguistically vowel harmony has been found to operate in much the same manner as tone. The Autosegmental Theory can be applied to the analysis of vowel harmony and the result is more revealing and elegant than that yielded by the classical generative approach (§3.5.7.3). The formal rules illustrated in the last section fail to show the spreading process of vowel harmony and to account for the exceptions. Both of these are resolved using autosegmental phonology, underspecification theory, feature geometry, and other modules of lexical phonology as appropriate. Autosegmental theory assumes that there is more than one tier and that each tier may operate independently of the other. The theory assumes a set of universal WFCs and each specific language may have its own specific conditions in addition.

### 3.5.7.5 Vowel harmony data and analysis

In Pendau the harmonising feature is back-round (BR) harmony. ${ }^{16}$ In Pendau this is effectively a kind of 'fronting'. In phonetics the vowels are referred to as front, central, or back. Thus when I refer to vowels 'fronting' I am referring to how the vowels are placed relative to the phonetic vowel space. Since the central [a] vowel is relatively further to the front than the back [o] it can be referred to as 'fronting' relative to the vowel space. But this must also be viewed in context of the [e] alternation. When one views the [a] and [e] alternations together in contrast to the [o], it is plausible to view the relative effect to be a degree of phonetic 'fronting'. Although I am referring to vowel fronting in Pendau, in another sense it is more accurate to refer to the acoustic alignment rather than the physiological position of front versus back. Since this fronting includes the [a] vowel as a degree of fronting this process cannot be referred to as palatalisation.

In the ongoing theoretical development of feature geometry, Odden (1991) developed a model of vowel geometry which shows that the features [back] and [round] might be viewed as one node, see Figure 3.8. Clements and Hume (1995:280) reiterate the soundness of this:

[^34]There is good reason not to analyse vowel assimilation as two separate rules, one spreading backness and another spreading roundness, since, as Odden points out, both rules apply under exactly the same conditions and have exactly the same set of exceptions. The patterning of backness and roundness together to the exclusion of vowel height argues that these features form a single constituent, which we will take to be the vocalic place (or V-place) node (Odden's node labels are somewhat different).
This is supported by the acoustic fact that [back] and [round] correlate with the second formant whereas [high], [low], and [ATR] correlate with the first formant (see Kenstowicz 1994:472, Odden 1991:266).

Although there have been further developments in feature geometry we will begin with Odden's insights as an interim solution as it establishes the basic orientation for what occurs in Pendau vowel harmony. In §3.5.7.6 we examine Pendau vowel harmony in light of further developments in feature geometry and apply the ideas of vowel place and consonant place nodes to solving the vowel harmony blocking problem.


Figure 3.8. Vowel geometry (adapted from Odden 1991:265)
For this analysis I will begin by using BR (back-round) as a useful heuristic to initially demonstrate that each word stem or word base carries the preassociated feature of the back-round node (BR). ${ }^{17}$ Accordingly the following steps would be followed to harmonise the vowel, see example (29) below. First in (29a) the correct preassociation with the Vowel Harmony Tier is drawn. Secondly, since vowel harmony spreads from the root or stem to the prefix the association spreads from right to left (see 29b).
(29)

b.


The rules for the vowel harmony spreading in Pendau can be stated in these three steps:

[^35]| Step one | Every root/stem has $[\mathrm{BR}]$ as a preassociated feature which is <br> associated with the first vowel of the stem/root (indicated by the <br> solid vertical line). |
| :--- | :--- |
| Step two $\quad$If nasal assimilation or glottal assimilation takes place, then <br> vowel harmony is blocked (vowel harmony is blocked in <br> assimilation processes due to the Well Formedness Condition that <br> association lines do not cross; see discussion in §3.5.7.6-7). |  |
| Step three | Prosodic vowel alignment spreads from right to left, so an <br> association line is attached to the vowel(s) of the prefixes <br> (indicated by a broken line). This occurs in level two of the <br> lexical module, and since level two is cyclic, the vowel alignment <br> spreads consecutively to harmonic prefixes to its left. |

In examples (30)-(36) only steps one and two are shown since none of these examples illustrate vowel harmony blocking. Vowel harmony blocking is illustrated and discussed in §3.5.7.6-7. Following notational conventions, step one and step three are usually shown in the same diagram. These are readily distinguished by remembering that a solid line indicates a completed step, and a broken line indicates a step in process. The final surface representation follows on the right side of the last arrow. More complex examples may have multiple arrows to show the iterative process of vowel harmony crossing several syllables and formatives. Additionally, in order to facilitate understanding the vowel harmony process, in these examples the underspecified $o$ is illustrated with a capital $O .^{18}$

When the preassociated vowel harmony tier already has the same BR value, as in (30), there is no change (notice that the BR restricts the vowel from harmonising with [+high]).


Example (31) shows the BR unrounding the $o$ to become a low $a$, in effect fronting it relative to the vowel space.


[^36]Example (31) further illustrates the process where the back-rounded vowel becomes a front vowel.


Example (32) indicates the constraints that despite mixed vowels in the root the primacy must be on the first vowel of the stem or root base in deciding which vowel has the preassociation.


Pendau has several types of derivational prefixes which attach and become part of the stem of the word as far as vowel harmony is concerned (as well as predicted by the lexical phonology theory). The vowel in this prefix becomes the vowel to preassociate the features for the vowel harmony/alignment tier.


Examples (35)-(36) demonstrate that vowel harmony predictably spreads to more than one possible prefix. Example (35) shows harmony of two prefixes with two syllables, and example (36) ${ }^{19}$ shows harmony spreading into two prefixes with three syllables. The language specific spreading from right to left still holds true for a more complicated affix situation. Examples (35)-(36) demonstrate how vowel harmony applies iteratively as each affix applies vowel harmony in its turn.



[^37]

d.


### 3.5.7.6 Further theoretical background for Pendau vowel harmony

This section briefly reviews three case studies that are relevant to the analysis of Pendau vowel harmony. Each of these cases contributes to understanding the dynamics of the theoretical basis in analysing vowel harmony and/or vowel harmony blocking in Pendau. After these studies the four categories of data in which vowel harmony or vowel harmony blocking occurs is reviewed and presented in preparation for the analysis in subsequent sections.

In the Kolami language (Emenau 1955) there is a vowel insertion rule that breaks up non-homorganic consonant clusters. Clements's description and analysis of the Kolami data are remarkably similar in principle to what happens in Pendau vowel harmony (Clements 1991:104). The vowel insertion rule is demonstrated in (37a). Figure 3.9 shows that a vowel's features may spread across an intervening consonant (as may vowel harmony in Pendau).

Kolami (adapted from Clements 1991:104 as cited from Emenau 1955)

| a. | 'break' <br> 'fill' <br> 'make to get up' <br> 'shake' <br> 'sweep' | Imperative | Past | Present | UR (roo |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | kinik | kinik-tan | kink-atun | /kink/ |
|  |  | nindip | nindip-tan | nindp-atun | /nindp/ |
|  |  | suulup | suulup-tan | suulp-atun | /suulp/ |
|  |  | melep | melep-tan | melp-atun | /melp/ |
|  |  | ayak | ayak-tan | ayk-atun | /ayk/ |
| b. | 'boil over' | pon | pookk-tan | pon-atun | /pong/ |
|  | 'bury' | mind | $\min (t)$-tan | mind-atun | /mind/ |



Figure 3.9. Vowel insertion via vocalic node spreading for Kolami (adapted from Clements 1991:104)

The spreading which occurs in Kolami, as represented in Figure 3.9, is exact vowel copy and demonstrates that this spreading may cross a transparent consonant. For Pendau it is only the vocalic features of back-round that spread. The data in (37b) show that the vowel insertion rule is blocked by the homorganic nasal-consonant sequence. This is also the same environment where vowel harmony is blocked in Pendau. Clements (1991:105106) describes why this occurs, and the same arguments are applicable to the vowel harmony blocking in Pendau:

Parenthesized nodes are created by a general interpolation convention (Sagey 1986). As Figure 3 shows [Figure 3.9 in this section-PQ], the vocalic node can spread across the intervening consonant since the consonant is not characterized by a vocalic node of its own, and so cannot create a violation of the NCC (34) [=NoCrossing Condition-PQ].
Feature models lacking the vocalic node cannot account for these facts as successfully. Suppose one were to propose, for example, that it is not the vocalic node that spreads, but the C-place node, and that intervening consonants are underspecified for this node at the time spreading takes place. This analysis would require that spreading takes place only across a predictable place of articulation, such as velars, or anterior coronals, since thie [sic] appropriate place feature would have to be filled in later by a redundancy rule. In fact, however, spreading applies across all places of articulation, including labial, dental, and retroflex. Examples of spreading across labials include tupuk 'gun', tupkul 'guns', tupukt 'onto the gun', from basic /tupk/, and similar examples. It is not possible to predict the place of articulation of the intervening consonant, which must therefore (at least in some cases) have a C-place node.
...It seems, then, that the vocalic node provides us with just the degree of freedom that we need to account for the facts of Kolami without making incorrect predictions. The vocalic node hypothesis allows segregation just where it is needed, to account for the spreading of vowel features across consonants in languages which do not otherwise show evidence of total segregation.

Similar long distance spreading occurs with consonants in Russian and Sanskrit. We will look at the analysis of these two languages as described in Gussenhoven and Jacobs (1998:187-190). These case studies are useful because they help explain what also
happens in vowel harmony and vowel harmony blocking in Pendau, since the same principles and theoretical model can be applied to the Pendau data.

The Russian data in (38a) shows that obstruents must agree in voicing with the rightmost obstruent of any cluster in which the agreeing obstruent occurs (even over a word break). However in (38b) the data shows that an intervening sonorant consonant is transparent to the voice spreading. An adaptation of their diagram follows in Figure 3.10. This demonstrates an important principle for Pendau as well. Pendau vowel harmony and Russian voicing cross transparent consonants. What makes them transparent is that the default rule has not filled in all of the features at this stage of the lexical phonology strata and/or because the node is inactive. For Russian, Gussenhoven and Jacobs (1998:188) state:

The subsequent specification of the feature [+voice] in sonorant segments is achieved by a default rule: Russian does not contrast voiced and voiceless sonorants.

## Russian (Gussenhoven and Jacobs 1998:189 as cited in Kiparsky 1985)

a.

| gorod-k-a <br> mcensk byl | gorotka <br> mcenzg byl | 'little town' <br> 'it was Mcensk' |
| :--- | :--- | :--- |
| iz mcensk-a   <br> ot mzd-y is mcenska od mzdy | 'from Mcensk' <br> 'from the bribe' |  |



Figure 3.10. Russian voicing assimilation with intervening sonorant consonant (adapted from Gussenhoven and Jacobs (1998:188))

Gussenhoven and Jacobs (1998:189-190) describe Sanskrit retroflexion as another example of a consonant that has long distance spreading that is blocked in some contexts. The data that illustrates this is given in (39), and the representation of this process when applied is given in Figure 3.11 and when it is blocked in Figure 3.12. The Sanskrit spreading and blocking are basically the same kind of processes that happen in Pendau vowel harmony and blocking.

| -na | present | Iş-na <br> pass. <br> partic. | 'seek' <br> pur | mrd-na | 'be gracious' <br> bhug--na |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 'bend' |  |  |  |  |  |



Figure 3.11. Sanskrit retroflex spreading applies (adapted from Gussenhoven and Jacobs (1998:189))


Figure 3.12. Sanskrit retroflex spreading blocked (adapted from Gussenhoven and Jacobs (1998:190))

The preceding discussion has paved the way for describing the four categories of vowel harmony data in Pendau that need to be considered: CVC harmonic prefix preceding a vowel initial stem/root, CV harmonic prefix preceding consonant initial stem/root, CV harmonic prefixes preceding a stem/root with initial homorganic CC, and CVC prefix preceding a consonant initial stem/root. In the first three categories vowel harmony applies (Figures 3.13-15) and in the last category vowel harmony is blocked (Figure 3.16).

The case studies presented above identify the same kinds of principles that are at work for vowel harmony and vowel harmony blocking in Pendau. Each of these descriptions takes advantage of feature geometry and makes use of a consonant node that is hierarchically above a vocalic node. There are several competing views about the location of the consonant node and the vocalic node. Quoting Kenstowicz (1994:473):

In the Clements model, the Vocalic node branches into V-Pl and Aperture. This groups vocalic rounding and backness together and isolates height-a natural acoustic parsing since height is primarily reflected in the first formant and backness and rounding in the second formant. On the other hand, the articulatorbased Halle-Sagey model groups backness and height as Dorsal dependents and isolates rounding as a Labial dependent. Odden (1991) discusses a number of cases that appear to support the former partitioning.
Vowel harmony in Pendau may contribute to an understanding of this current issue, as we will see shortly. Clements and Hume (1995:276) further state that back and rounding features can be eliminated in their model:

A further innovation of this model is that the features [labial], [coronal], and [dorsal], occurring under the V-place node in vocoids, are sufficient, by themselves, to distinguish place of articulation in vowels, and replace the traditional features [back] and [round]. In order to fulfil this new and expanded role in the theory, they must be redefined in terms of constrictions rather than articulator movements as such.
The following discussion and Figures 3.13-16 follows Clements (1991), Clements and Hume (1995), and Kenstowicz (1994:469-474) in the feature geometry description and general analysis. Figures 3.13-15 show in diagram form that the vocalic place features may spread leftward to the vowel in the prefix. The vowel place (V-Pl) is not specified (or activated) yet, so a single consonant may be crossed regardless of whether it is in the prefix or in the root or stem (Figures 3.13-14). I will continue to annotate in parentheses, following the Vowel Place ( $\mathrm{V}-\mathrm{Pl}$ ), that it is only the features back-round that are spread. Further research is needed to determine how best to represent back-round or its equivalent at these levels of the feature geometry.


Figure 3.13. Vowel harmony spreading from vowel initial stem/root to a harmonic CVC prefix


Figure 3.14. Vowel harmony spreading from consonant initial stem/root to a harmonic CV prefix

Figure 3.15 shows that vowel harmony spreads across a homorganic consonant cluster that is part of a root or stem. This is an important example as it contrasts with vowel harmony blocking cases in which a similar homorganic consonant cluster blocks the vowel harmony. This is part of the clue to identifying that it is the process of nasal assimilation that blocks vowel harmony from applying. This is because the nasal assimilation and vowel harmony rules apply (or are blocked) in the same cycle and same level. Further discussion of this is in $\S 3.5 .7 .7$. As represented in Figures 3.13-15, the reason that the vowel harmony is not blocked is because the vowel place is not specified (or fully derived) in this stage of the derivation.


Figure 3.15. Vowel harmony spreading past homorganic consonant cluster of the stem or root to a harmonic $C V$ prefix

Figure 3.16 illustrates how and why vowel harmony is blocked. Vowel harmony and nasal assimilation are rules that occur during the same cycle in level 2 of the lexical phonology (see Figure 3.6). When nasal spreading occurs the vowel place for the consonants is activated. In recent developments of feature geometry, consonants and vowels all have a vowel place ( $\mathrm{V}-\mathrm{Pl}$ ) and a consonant place ( $\mathrm{C}-\mathrm{Pl}$ ). This is summarised and supported by Clements and Hume (1995:297-298):

In the preceding sections we have reviewed phonological evidence motivating the feature hierarchy. The later discussion has introduced the idea that the basic organizing principle of the feature hierarchy is the vocal tract constriction. This view is based on two main considerations. First, articulator features, such as [labial], [coronal], and [dorsal], appear best defined in terms of the constrictions formed by the articulators, rather than using the vaguer notion of 'articulator involvement.' Second, the phonological evidence shows that constrictions are represented by specific nodes in the feature hierarchy (oral cavity, vocalic),
themselves defined in terms of dependent nodes representing the constrictions's location (C- and V-place) and degree (continuance, aperture). We have suggested that this view allows for a new and more adequate treatment of such phenomena as vowel-consonant relations, the internal structure of vowels, and the representation of major and minor articulations.
...In particular, we have seen evidence from common processes such as assimilation that oral tract constrictions are comprised of two types: consonantal and vocalic, with the latter embedded under the former. Even when produced simultaneously in consonants with minor articulations, these two types of constriction must be assigned to different tiers, and clearly this fact must reflect considerations other than strictly physiological ones. We suggest that this representational difference reflects a fundamental difference in the cognitive status assigned to vocoids and consonants as part of the competence of all speakers. The difference between consonants and vocoids is not merely a matter of their specification for [ $\pm$ vocoid], but involves a fundamental difference in their feature organization.
...our characterization of consonants and vowels is a unified one in the sense that largely the same set of features is used for both, with the organization of consonants and vowels uniformally oriented around the constriction as the basic unit.

It is also important to observe here that the spreading and blocking occurs before voiceless consonant deletion occurs, as otherwise it would be difficult to explain why vowel harmony crosses other single consonants but does not do so in these cases.


Figure 3.16. Vowel harmony blocked as result of nasal assimilation

### 3.5.7.7 Assimilatory processes that block vowel harmony

We have seen that the nasal assimilation is a kind of spreading (§3.5.4) and that, vowel harmony spreads (§3.5.7.4-5). In this section I continue the discussion from §3.5.7.6 and demonstrate with data from Pendau how nasal assimilation blocks the vowel harmony from spreading. Since the WFC states that association lines cannot cross (McCarthy 1988, Kenstowicz 1994, and Goldsmith 1990) then nasal assimilation creates a context in which vowel harmony is blocked (§3.5.7.6). Following §3.5.7.6 I will indicate that the backround spreading occurs at the Vowel Place (V-Pl) node from which the spreading occurs. For example Kenstowicz (1994:469) says:

Attaching the V-Pl node as a subtree under C-Pl predicts that rules spreading a VPl feature from one vowel to another across an intervening consonant will block when the consonant is specified for the relevant feature as a secondary but not as a
primary articulation. Although this prediction remains to be systematically investigated, there are cases on record that point in the right direction.

Kenstowicz provides us with the theoretical motivation for applying this to vowel harmony blocking in the case of active voice prefixes which result in consonant sequences (also compare discussion in §3.5.7.6). In (40)-(41) the broken lines show assimilation of features taking place. After nasal assimilation has taken place, vowel harmony cannot apply because in the current cycle the association lines cannot be crossed. So vowel harmony is blocked by assimilation of a consonant in the same cycle where vowel harmony would normally apply (compare with $\S 3.5 .4$ and $\S 3.5 .7 .6$ and Figure 3.15). In example (41) the voiceless consonant $[p]$ is deleted immediately after the vowel harmony is blocked in the same cycle ( $\S 3.5 .4$ ) with the voiceless consonant deletion rule.

(41)


Classifiers and some measure nouns are other word classes prefixed by the harmonic prefix so- 'one'. Many classifiers and measure nouns have a problematic nasal that occurs before an obstruent on some words (see (42) for some examples and $\S 7.4 .5$ for further discussion of this nasal ligature). There are two possibilities for the source of this nasal. One is that it is diachronically a genitive linker no longer productive (or marginally productive), and the second alternative is that it is part of the word stem inherently (it
appears that there are instances of both). Some words clearly have environments without the nasal when used as a noun.

| se-m-pea | 'one flat hard object' | so-ndoung | 'one night' |
| :--- | :--- | :--- | :--- |
| sa-n-ta'u | 'one four-legged animal' | so-m-bulang | 'one month' |
| sa-ng-kayu | 'one snake-like object' | se-m-biti | 'one time' |
| sa-n-jangang | 'one handspan' | sa-m-paa | 'one cluster of s.t.', |
| se-n-si'u | 'one cubit' | so-m-buli | 'one branch of s.t.' |
| sa-n-tanga | 'one-half' | so-m-bo'a | 'one plate of s.t.' |
| so-ng-kolo | 'one cut/shaped heavy object' |  |  |

The vowel in so- 'one' always harmonises regardless of the consonant sequence. This is contradictory to previous examples which show that mong- does not take vowel harmony when the root or stem begins with a consonant. However, if we assume that $\eta$ - is a productive prefix, then by assigning it to level 1 and nasal assimilation to level 1 (L1), then it becomes a new stem or 'lexical item' which can then allow vowel harmony to occur in level 2 (L2) without the vowel harmony blocking that occurs from nasal assimilation, as shown in (43), and compare with Figures 3.15-16.

```
[[so][[\eta][pea]]] underlying representation
[[so][mpea]] L1 nasal assimilation, bracket erasure
[sempea] L2 vowel harmony, bracket erasure, resyllabification
sempea surface representation
```


### 3.5.7.8 Non-harmonic active voice prefixes

Although most transitive verb roots that are prefixed with mong-/nong- are subject to vowel harmony, there are some exceptions. Examples (44)-(45) illustrate that the expected vowel harmony rule does not always apply, and the prefix remains nong-. Some verb roots appear to always have an irregular active voice prefix, and some seem to occur according to the speaker's preference.

| A'u | ma'o | nongator | paee | mami | uo | sampe | notou'. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a'u | ma'o | N-pong-ator | paee | mami | 'uo | sampe | no-tou' |
| 1SG/AB | go | RE-SF-deliver rice | 1PL.EXC/GE | yonder | until | ST/RE-finish |  |
| 'I went and delivered our raw rice there until it was finished.' | [paruja.int 031] |  |  |  |  |  |  |


| A'u | nongengkeles | jimo. |
| :--- | :--- | :--- |
| a'u | N-pong-engkeles | jimo |
| 1SG/AB | RE-SF/PT-hate | 3PL/AB |
| 'I hate them.' |  |  |

[EN97-002-51]
Occasionally a verb root may appear with a nang-/mang- prefix which is inconsistent with the vowel harmony rule, as in example (46).

| Ito | manguler. |
| :--- | :--- |
| 'ito | M-pong-uler |
| 1PL.INC/AB | IR-SF/PT-reverse |
| 'Let's back up.' |  |

However examples such as (47) are evidence that the underlying vowel is / o /, since the borrowed Indonesian words do not trigger the expected vowel harmony to occur. The best explanation is that the underlying prefix pong- is used as the default.

| Nenimpis | nongikuti | jalangonyo | ue. |
| :--- | :--- | :--- | :--- |
| no-nimpis | N-pong-ikuti | jalang=nyo | 'uo.ee |
| ST/RE-thin | RE-SF/PT-follow | road=3SG/GE | yonder.huh |
| 'The path of the (clue) is already easy to follow.' | [Lewonu Riddle \#3] |  |  |

The possible explanation for examples such as (46) above in which mang- is used is that this is a Pendau borrowing of the Indonesian meng- prefix. In Indonesian meng- is pronounced with a schwa, which is nearly always pronounced in Pendau as $/ \mathrm{a} /$.

### 3.5.7.9 Vowel harmony exceptions on stative verbs

Occasionally stative prefixes do not follow the normal vowel harmony rules. Sometimes a fixed prefix form occurs for particular roots either as ma-/na- or mo-/no-. Other times the variation seems to occur because of speaker preference (see also vowel harmony exceptions for the active voice prefix mong-/nong- in §3.5.7.8). ${ }^{20}$ Example (48) demonstrates na-roa 'active, lively' from a text, and the elicitation of (49) demonstrates that what should be accepted according to vowel harmony rules is rejected as ungrammatical. Example (50) shows a further text example where vowel harmony is not followed with the word na-sesa=mo.
(48) Too naroa'omo.

Too na-roa'=mo
person ST/RE-active=COMP
'The man was already active.'
[EN97-002.53/cekumom.pin 005]
*Too no-roa'=omo.
[EN97-002.53]

[^38]| Bai | uo | natabus | payangan | uo, | jimo | nasesamo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| bai | 'uo | no-tabus | payangan | 'uo, | jimo | na-sesa=mo |
| like | yonder | ST/RE-penetrate | boat | yonder | 3PL.AB | ST/RE-suffer |


| saba' | dagat | nentamamo | rilalong | nupayangan | uo. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| saba' | dagat | $N$-pe-ntama=mo | $r i=$ lalong | nu=payangan | 'uo |
| because | ocean | RE-SF/DY-enter=COMP | LOC=inside | CN/GE=boat | yonder |

'After the boat was holed, they were suffering because the ocean entered into that boat.'
[mdtext6.txt 058]

### 3.5.7.10 Vowel harmony in Western Malayo-Polynesian languages

Although vowel harmony exists in several Western Malayo-Polynesian languages, there has never been an investigation of the history of this interesting phonological phenomenon or a systematic study or survey. Languages in Sabah, Malaysia, are noted to have vowel harmony. Hurlburt (1988) briefly mentions vowel harmony in Eastern Kadazan where the root vowels are affected by affixes (that is, the root vowel(s) harmonise to a specific vowel in a prefix or a suffix). Boutin (1988a, 1988b, 1994) mentions vowel harmony in Bonggi (also called Banggi) which has some similarities to Pendau and Balantak. Kroeger (1994) mentions vowel harmony in Kimaragang, and it is clear from the pronoun and verbal systems in Sabah that there are a lot of similarities between some Sabah languages and of languages in Central Sulawesi. Balantak, a Saluan language in eastern Central Sulawesi, has vowel harmony in prefixes and suffixes (Busenitz and Busenitz 1991, Busenitz 1994). Lauje and Tialo have similar vowel harmony as Pendau (Whatley n.d., 1984; Himmelmann 1991, 2001, Yoshimura in prep.). Vowel harmony in the Tomini-Tolitoli group is a striking phonological characteristic of the verbal system of many if not all of these languages.

A reconstruction of Proto-Celebic verbal morphology has been proposed by Van den Berg (1995, 1996; see figure 3.17 below; compare also Mead 1997a, 1999). Vowel harmony phenomena should provide a more detailed explanation for the Proto-Celebic verbal marking system. According to van den Berg (1995:4): 'Most modern Celebic languages have verb classes marked by ma-/mo-/me-, some of which appear to have semantic or grammatical correlates (notably transitivity), but usually with a large degree of randomness. Data from the Tomini languages suggest that these classes may have developed from an earlier partial vowel harmony system.'

In the Kaili-Pamona languages it is clear that vowel harmony has littered the prefix system in the Da'a and Ledo (Kaili languages) and left it non-productive (Barr 1988b, Donna Evans pers. comm.). It is hard to imagine that the development of vowel harmony did not take place at an earlier stage which overarches Kaili and the Tomini-Tolitoli groups (again compare Figure 3.17, since the Proto-Celebic affixes are essentially the same as the Kaili affixes). The fact that vowel harmony also appears in several Western Malayo-Polynesian languages outside of Sulawesi suggests either that vowel harmony was an important part of the protolanguage or that there is as yet some unexplained phonological motivation similar to tonogenesis that led to this phenomenon developing independently in a number of related languages. The rapid growth of phonological theory has already made an impact on our understanding of the processes of vowel harmony.

|  | Proto-Celebic | Pendau |
| :--- | :--- | :--- |
| Active voice | mo-/no- <br> ma-/na- <br> me-/ne- | mong-/nong- <br> (mang-/nang-, meng- <br> /neng-) |
| Dynamic | Ø-/Ø- <br> me-/ne- <br> mo-/no- | me-/ne- |
| Stative | Ø-/Ø- <br> ma-/na- <br> mo-/no- | mo-/no- <br> (ma-/na-, me-/ne-) |

Figure 3.17. Some Proto-Celebic verbal prefixes compared with the cognate Pendau prefixes (parentheses indicate Pendau vowel harmony alternations; Proto-Celebic affixes based on van den Berg 1995)

### 3.6 Reduplication and infixation

This section describes reduplication and infixation as structure-building processes.

### 3.6.1 Reduplication

There are several types of grammatical reduplication in Pendau (§7.4.3 and §13.4.1.5) but these can be expressed with only three template types. These types are based on the prosodic structure of syllables (McCarthy and Prince 1995, Katamba 1993:192-197). Templates are mapped from the word base according to the Template Satisfaction Condition (McCarthy and Prince 1995:336). The Template Satisfaction Condition has three constraints: contiguity, anchoring, and maximality. Contiguity means that the template has to copy a non-interrupted sequence of segments (that is, a contiguous string). Anchoring means that either an initial or final segment must be exactly the same in the template as in the word base (depending on whether the template is prefixed or suffixed). Maximality means that the template must be copied to its full potential within the bounds of the prosody specified in the template. The third important principle is the Prosodic Circumscription of Domains. This simply means that targets for morphological interaction can use prosodic units in the description of the rules.

|  | Template Type | root or base gloss | reduplicated form | meaning of reduplication |
| :--- | :--- | :--- | :--- | :--- |
| 1 | 'o- $\sigma_{\mathrm{c}^{-}}$ | sanang <br> 'happy' | 'asasanang <br> 'extremely happy' | intensification, have the most <br> of X |
| 1 | $\sigma_{\mathrm{c}^{-}-\text {so- }}$ | seeleo <br> 'one day' | seseeleo <br> 'every day' | intensification, more than one |
| 1 | so- $\sigma_{\mathrm{c}^{-}}$ | eleo <br> 'day, sun' | seleleo <br> 'same day' | focusing |
| 1 | to- $\sigma_{\mathrm{c}^{-}}$ | langkai <br> 'male, man' | tolalangkai <br> 'the man' | emphatic or highlighting, <br> specific person highlighted |
| 1 | mo- $\sigma_{\mathrm{c}^{-}} \mathrm{po}_{1^{-}}$ | gabu <br> 'cook' | mopopogabu <br> 'cook and cook' | iterative activity |


|  | Template Type | root or base gloss | reduplicated form | meaning of reduplication |
| :--- | :--- | :--- | :--- | :--- |
| 1 | to $=$ mepe- $\sigma_{\mathrm{c}}-$ | baas <br> 'tease' | tomepebabaasi <br> 'who keeps teasing' | iterative |
| 2 | ne- $\sigma \sigma_{\mathrm{c}}-$ | lampa <br> 'walk, travel' | nelampa-lampa <br> 'walked and walked' | iterative aspect or duration |
| 2 | ro- $\sigma \sigma_{\mathrm{c}}-$ | ingkit <br> 'nibble' | reingki-ingkit <br> 'nibbling' | iterative aspect or duration |
| 3 | mong- / $-\sigma_{\mathrm{c}} \sigma$ | abut <br> 'clear away' | mangabut-ngabut <br> 'keep clearing away' | iterative aspect or duration |
| 3 | ro- $/-\sigma_{\mathrm{c}} \sigma=\mathrm{mo}$ <br> 3 | gila <br> 'crazy, fear' | regila-gilamo <br> 'make afraid' | iterative aspect or duration <br> (intensify) |
| 3 | nong- $/-\sigma_{\mathrm{c}} \sigma$ <br> $=\mathrm{mo}-/-\sigma_{\mathrm{c}} \sigma$ | orop <br> 'hungry' | nggalang <br> 'itch' | nongorop-oropomo <br> 'starving' |

Figure 3.18. Examples of template reduplication in Pendau
A $\sigma$ indicates a maximal syllable may occur, that is any of these four syllable types may occur in this position of the template: CVC, VC, CV, V. A $\sigma_{c}$ indicates that only a core syllable of the shape CV can occur in this position of the template (this subscripting follows Nivens 1992). The first two types are prefix types, and the last type is a suffix type (as indicated by the hyphen). These are listed in (51).

## (51) Pendau Reduplication Templates

Template type 1: $\sigma_{\mathrm{c}}{ }^{-}$
Template type 2: $\sigma \sigma_{\mathrm{c}^{-}}$
Template type 3: $-\sigma_{\mathrm{c}} \sigma$
Figure 3.18 below shows representative examples of reduplication in combination with other types of affixation. The meaning of the reduplication in the context of the whole word is listed as well (note that reduplication is written orthographically with a hyphen when the reduplicant is two syllables). See §13.4.1.5 for further examples and discussion of verbal meanings of reduplication, and $\S 7.4 .3$ for further examples and discussion of nominal reduplication.

Template type 1 reduplicates the first CV syllable part of the noun langkai 'man, male'. After the reduplication occurs, then the prefix to- 'specific person (emphatic)' is affixed. The same pattern recurs in all other reduplications in which the CV syllable is reduplicated. However, if another CV affix precedes the reduplicant, it is simply affixed after the reduplicant has been formed, as shown in (52).

## Template 1 Illustrated



Example (53) illustrates how one template captures in its duplicant different disyllabic roots or bases regardless of the shape of the first syllable, and shows that codas on second syllables are not copied.

Template 2 illustrated on various bases


Template 3 reduplication is assumed to be suffixing because there is often a prefix to the base. However, type 3 reduplication becomes difficult to distinguish from rhetorical usage when there are no distinct affixes on the base other than the reduplicant (and whether it is really suffixing or not). In rhetorical usage, repetition of a whole word is used for dramatic effect and often occurs two, three, or more times (see Chapter 17). When there is only one reduplicant it becomes difficult to distinguish between iconic duration of time and grammatical durative or iterative aspect, see (54).

Template 3 illustrated


It appears that template 2 and template 3 are mirror images of each other, and that grammatically they signal the same aspect. What appears to happen is that the speaker may decide that after the base word is formed that he/she wishes to give it iterative or continuous aspect and still has a last chance to do that.

One outstanding problem for the template reduplication is words which begin with a consonant cluster (nasal-obstruent). Since I have interpreted the initial syllable as a syllabic nasal ( $\S 2.5 .3$ ), then the template types 1 and 2 do not work correctly for reduplicated words such as ntoe-ntoeng 'hanging' (compare to loe-loeng 'hanging'); mo-mbi-mbiing. One possible solution is to declare the syllabic nasal as extra-metrical. Prosodic Circumscription allows room to distinguish between the base and residue (Kenstowicz 1994: 633-4) This would mean modifying the templates to include the extrametrical word initial syllable as follows (where capital E is symbolising the extra-metrical segment). The E (syllabic nasal) would be applied appropriately according to the maximisation condition only when it occurs in the word base, as in (55). This extra metrical segment can also apply to template 3 as in the example 'anggalang-nggalang 'to be itchy' (Figure 3.18).

Template type 1: E $_{c_{c}}$
Template type 2: E $\sigma \sigma_{c^{-}}$
Template type 3: $-E \sigma_{\mathrm{c}} \sigma$

### 3.6.2 Infixation

Pendau has three infixes: -um- inchoative or telic aspect (§13.4.1.3), -ong- plural distributive (a harmonic affix; §13.4.1.1.1), and -in- which can be considered to be a relic affix that occurs with only a few words (some are completely lexical and others vary in meaning with the presence or absence of -in-).

The -in- infix occurs always with meng-inang, re-inang 'eat' in active voice and inverse voice irrealis forms. This can be deduced to be a relic infix because other related areal languages such as Lauje have the productive -in- infix for goal focus (cognate to Pendau ni- Inverse Voice). The lexical word 'eat' also has an intransitive counterpart me-ngkani. Based on synchronic phonological processes the pre-Pendau word could be reconstructed as *'ang. The glottal stop becomes a $k$ following a nasal, and the final $n g$ becomes fronted before suffixes resulting in $n$. If -in- was a productive infix in an earlier stage of Pendau then the infix would have been inserted immediately following the glottal stop. The relic infix -in- can be found in one other word, me-in-epe 'hear, listen'.

The -um- infix is inserted immediately after the first consonant of the root. Usually -um- co-occurs with the mo-/no- prefix. This infix is productive primarily with motion verbs and a few others. Examples include: molumolon from lolon 'swim', motumangis from tangis 'cry', moluminjo' from linjo' 'run'.

The infix -ong- is productive across different verb classes, but in contrast to -um-, -ongis inserted after the first nasal consonant of the verbal prefix. This results in mongongkomung from 'omung 'carry, bring' (also see other examples in (25)). The other interesting fact is that it takes vowel harmony, for example, mengelampa from melampa.

# 4 Basic morphology and stem forming morphology 

### 4.1 Introduction

This chapter describes the basic morphology of words (§4.2) and stem forming morphology (§4.3). Lexical phonology (also known as lexical morphology and introduced in Chapter 3) provides the primary descriptive and methodological framework for discussing the morphosyntax of Pendau, while the non-morphemic tenets of the Word and Paradigm Theory are adopted in this thesis.

This grammar assumes that the word is the central form (that is, the 'grammatical word' as defined below in $\S 4.2 .1$ ). Generative theory converges with Word and Paradigm Theory in this respect (Anderson 1992, Aronoff 1994, Katamba 1993, Koch 1990, Matthews 1991), although these two theories differ on whether the 'morpheme' concept is a valid one. This grammar will use the term 'formative' as a neutral term where traditional structuralists have used the term 'morpheme', since it is questionable that the 'morpheme' is a useful concept in describing the morphosyntax of Pendau ('formative' will be defined in §4.2.2).

This chapter is divided into two parts. The first reviews the structure of words and their components, including these formatives: roots, stems, bases, affixes, and clitics. The second introduces and discusses the $p V(C)$ - verb class stem formers and the important role they play in the morphosyntax of Pendau.

### 4.2 Words and components of words in Pendau

### 4.2.1 Criteria for determining Pendau words

In Pendau a phonological word can easily be distinguished as a prosodic unit that must be at least two syllables ( $\S 2.4$ ) and has penultimate stress (that is, it is a specific repeatable type of prosodic unit). This identifies the phonological word boundary on the right edge (§2.6.2 and §2.7.1). To identify the rightmost part of the same transitive verb, penultimate stress provides the primary proof by indicating that the following syllable will end the same word that began with the nong- prefix as in example (1) (nongoli is underlyingly $N$ -pong-oli). Periods denote syllable boundaries in (2).

| Io | nongoli | bau. |
| :--- | :--- | :--- |
| io | $N$-pong-oli | bau |
| 3SG/GE | RE-SF/PT-buy | fish |

'He/she bought fish.'
(2)


Affixes and clitics are bound formatives, that is, they are attached to a word (Katamba 1993:44, 245, and see §4.2.4). Affixes have a strict sequence which indicates right and left boundaries of a word with suffixes and prefixes respectively. Some affixes are restricted to certain grammatical word classes which identify contrastively that there are different word entities (see Chapter 5). For example, the active voice prefix nong- must be the leftmost part of a transitive verb in a main clause (this excludes the proclitic relative marker to=).

Phonotactic constraints can also differentiate the division between words. Certain consonant sequences do not occur in Pendau phonology within a phonological word. If these sequences occur, then this is proof that the particular sequence is separating two phonological words. For example see japing nao 'that cow' in example (3). This example shows a sequence of $n g n$, a sequence which cannot occur word internally. Thus, we know that each consonant belongs to a separate word ng\#n (the cross-hatch \# indicating a word boundary). If these consonants were part of the same word there would be some phonological process that would correct the phonotactic violation, in this case it would probably be assimilation of the preceding nasal (as occurs in many words with the active voice prefix which ends with $n g$-see $\S 3.5 .4$ ), or epenthesis which occurs with enclitics when following a consonant (§2.4.4). Word boundaries are therefore identifiable redundantly in at least some instances, as highlighted in (4).

| Japing | nao | ni-oli $=$ nyo. |
| :--- | :--- | :--- |
| cow | that | IV/RE-buy $=3 S G /$ GE |

'He/She bought that cow.'


Words can also be identified by their position and function within a grammatical clause (for example, substitution tests). Clitics are within the phonological word, but function syntactically as a separate 'grammatical word' (Matthews 1991:218). The 'grammatical word' has morphosyntactic properties which are the manifestation of a specific 'lexeme' in a specific 'word-form'. The 'grammatical word' specifies a particular word class by its properties, and any other associated derivational or inflectional properties that are involved. For example ni-oli=nyo in (4) is prosodically one 'phonological word'. Syntactically it can be seen to have two 'grammatical words' that are separated by the
clitic convention in interlinearising with the equal sign (=). From the point of view of 'grammatical words' =nyo 'he, she, it' is a separate 'grammatical word' from nioli 'bought'.

### 4.2.2 Formatives

Formatives include any identifiable and repeatable phonological component of a word that contributes to the formation of a word. Formatives include any component of the word: root, stem, base, affix, and clitic. The term 'formative' is often used in some linguistic traditions as a synonym of morpheme, or to deal with components of words that defy designation of a morpheme to a particular phonological sequence, for example, cran in cranberry. My use of formative essentially follows Word and Paradigm theory. ${ }^{1}$ For example Anderson (1985:160) states:

> ...we will therefore avoid talking about morphemes; rather, in the analysis of word structure we will talk about minimal subparts of the phonological content of a form as formatives, and elements of the semantic structure of words as roots (or stems), and grammatical categories. In the simplest case a given formative may directly and unequivocally express a single category, but in other instances the relation is more complex.

I will use the term 'formative' as a neutral term (in regards to whether or not the 'morpheme' concept exists or is useful in Pendau) which means the building blocks required to form a particular word. I also include Pike's extended usage of formative ${ }^{2}$ which includes what are traditionally referred to as fused morphemes, or what might be called 'submorphemic' (Pike 1996:4):

When applied to morphology (which is the focus of this paper), a matrix has rows and columns labelled by different sets of semantic functions. The cells at the intersection of rows and columns are filled by phonologically-written grammatical entities, which could be morphemes or morpheme complexes or even submorphemic (but recurring) bits of phonological form. We use the term formative as a cover term for the phonological material entered into a cell of a matrix.

I will return to this non-morphemic usage of formative in $\S 4.3$ and Chapter 9 when discussing verbal morphology. The discussion on formatives in $\S 4.3$ will be especially crucial to an understanding of stem formatives and the verb conjugations, and I will discuss the problem of assigning morphemes to the stem formers.

### 4.2.3 Roots, stems, bases, and stem formers

Roots, stems, and bases are identifiable components of a word to which an affix or clitic may be attached to form a phonological word. Examples are given in (5) and explained below. Roots are the minimal form of a lexeme which may be either bound or an unbound

[^39]root, as in ngkait 'cripple' in (5). ${ }^{3}$ Bound roots of a lexical word can be identified usually by contrasting the same lexeme in the wider paradigm of inflections it occurs in and then removing the form that is always the same. The exception to this is when morphophonemic rules obscure consonants through deletion or modification. In that case an understanding of morphophonemic processes is necessary in order to determine the root. This can be done by comparing the root to other parts of the paradigm for that lexical word where the root is not modified.

| Lexeme | [ngkait] <br> ROOT | 'cripple' |
| :--- | :--- | :--- |
| Inflection | [no] [ngkait] <br> STEM | (affix realis stative verb class prefix) |
| [nangkait] |  |  |$\quad$| 'was crippled' |
| :--- |

Stems are often a combination of a word's lexical root and at least one affix as shown in (5). The affix which combines with the root to form a stem is called a stem former (for example, pong- for the primary transitive verb class). Stem formers may or may not induce a change in the word class (note though that all canonical verbs are assigned to their verb class according to which stem former they take-see §5.6.2 and Chapter 9). A stem former may be required by other affix combinations, in which case the stem former is neutral in its effect on the word, or it can signify a specific derivation or inflection which affects the word. Note that not all affixes are stem formers and that roots may also serve as the stem.

The term 'base' may also be used sometimes (Katamba 1993:45) when the stem former $p V(C)$ - is not a formative in use, as in (5). The Pendau $p V(C)$ - stem formers are used both for inflections and derivations (§4.3), so the term 'stem' or 'augmented stem' will more frequently be used than 'base'.

### 4.2.4 Affixes and clitics in Pendau

Clitics in Pendau are clearly distinguished from independent phonological words by phonological and syntactic criteria. Suffixes and enclitics can be distinguished by different phonological processes. Proclitics are much more difficult to distinguish from prefixes, since there are no phonological processes which can be used as diagnostic evidence.

[^40]The two important rules which distinguish enclitics and suffixes are listed below (see $\S 4.2 .4 .1$ and $\S 4.2 .4 .2$ for further details). A third phonological process, the application of penultimate stress (see $\S 2.6 .2$ for the phonetic details and $\S 3.3 .4$ for the placement of stress post-lexically) applies to both and is listed below to show the contrast and overlap of suffixes and enclitics in Pendau.

- Vowel Epenthesis applies only in the environment of enclitics (§2.4.4)
- Nasal Fronting applies only in the environment of suffixes (§3.5.2)
- Penultimate stress applies the same for enclitics and suffixes and applies to both post-lexically ( $\$ 2.6 .2$ and $\S 3.3$ )
Other prominent features of the clitics and affixes in Pendau are discussed below.


### 4.2.4.1 Affixes in Pendau

Pendau has three types of affixes: prefixes (for example, mong- as in mongkomung 'carry', infixes (for example, $-u m$ - as in molumolon 'swim'), and suffixes (for example, -a' as in niolia' 'bought for someone'). Affixes are non-root formatives which inflect or derive a grammatical word. When a prefix and a suffix appear to provide a derivation simultaneously they may be called a circumfix (e.g pe-/-ong as in periinong 'bathing spot'). A large number of the prefixes and one infix take vowel harmony (see §3.5.7 for the discussion and analysis of vowel harmony). Affixes which take vowel harmony are in the Harmonic Prefix Set (HPS) as opposed to non-harmonic affixes.

Affixes are bound formatives and are restricted to a particular word class (or classes in some cases). Reduplication is viewed as a kind of affixation (see §3.6.1 for the discussion on reduplication) or as compounding (depending on the kind of reduplication).

### 4.2.4.2 Clitics in Pendau

A clitic is a 'grammatical word' that is not a 'phonological word'. Phonological criteria require that a clitic must attach itself to a 'phonological word'. This process creates a new 'phonological word' which contains two (or more) 'grammatical words'. Clitics, therefore, can act and perform the same function as grammatical words, but they are phonologically dependent on another word.

One key characteristic of clitics is their mobility and the fact that often they can occur across several word classes (Spencer 1991:350ff., Katamba 1993:245-250). Another characteristic of clitics is that they have independent syntactic status from their hosts (Spencer 1991, Katamba 1993). In Pendau there are five proclitics which are always attached to a noun phrase, and six enclitics which can be attached to verbs, nouns, and several other words or word classes. The clitics are listed in (6).
(6) $=$ ' $u$ first person singular (genitive)
§7.3.1, §7.6.4, §6.2
$=$ to $\quad$ first person plural inclusive (genitive) $\quad \S 7.3 .1$, §7.6.4, §6.2
$=m u \quad$ second person singular (genitive) §7.3.1, §7.6.4, §6.2
$=$ nyo third person singular (genitive) §7.3.1, §7.6.4, §6.2
$=m o \quad$ completive aspect (COMP) §13.3
=po continuative aspect (CONT) §13.3
si $=\quad$ proper noun marker (absolute) $\quad \S 5.5, \S 7.5 .1$
$n i=\quad$ proper noun marker (genitive) $\quad \S 5.5, \S 7.5 .1, \S 7.6 .4$

| $n u=$ | common noun marker $($ genitive $)$ | $\S 5.5, \S 7.5 .1, \S 7.6 .4$ |
| :--- | :--- | :--- |
| $t o=$ | relative clause marker $(\mathrm{RM})$ | $\S 5.5, \S 15.5$ |
| $r i=$ | general locative oblique $(\mathrm{LOC})$ | $\S 5.5, \S 8.3 .2$ |

Pendau proclitics have a second diagnostic which differentiates them from phonological words. All phonological words have at least two syllables. Since there are no monosyllabic words in Pendau (with the possible exception of the conjunction o 'and'), this means these monosyllabic particles require a host to exist as part of a phonological word.

### 4.3 The $p V(C)$ - verb class stem formers

Pendau has a large number of morphologically similar formatives which appear as: pong-, pony-, pon-, pang-, peng-, po-, pa-, and pe-. Many of these are stem formers used to complete the requirements of a number of clearly distinctive morphosyntactic functions, that is, they derive words based on augmented stems. In referring to the general class of stem formers it will be useful to refer to these collectively as the $p V(C)$ - stem formers, and to the stem formed as 'augmented stem.' A further complication is the presence of vowel harmony which initially camouflages some distinctions, but which in the end actually facilitates determining that the source of the distinctions is based on different verb classes. For example, one verb type is the active voice marked with $M / N$-pong- where the nasal alternation marks irrealis and realis respectively. ${ }^{4}$ Since the mode distinction is not important in this section I will usually refer to the realis mode in discussing the different verb classes.

The pong- prefix-used in primary transitive verbs-has a large number of formative alternations due to vowel harmony and nasal assimilation processes (§3.5.4, §3.5.7, $\S 5.6 .2 .1$ ). However, as described in $\S 3.5 .7$, these prefixes can actually be collapsed into one underlying formative, that is, pong-, and all of the other forms are predictable via phonological rules (except for one prefix which is lexically conditioned). However there are other clear formatives that are distinctly associated with other verb classes, some of which are homophonous with other verb classes' stem formers, and others which are homophonous with other verb classes’ allomorphs (see §5.6.2, Chapter 9, and Quick 1999b). In addition to the $p V(C)$ - verb class based formatives' morphology there are other homophonous formatives which occur as prefixes in similar positions compounding the apparent confusion (for example, causatives). At first sight this presents an extremely baffling panorama, and indeed has not been a simple task to disentangle.

The various verb class prefixes can be reduced to four formatives, pong-, popo-, $\mathrm{po}_{1-}{ }^{-}$ and $p e-.^{5}$ Each verb class uses a particular $p V(C)$ - stem former to form an augmented stem needed to derive one of six distinct grammatical derivations. These four prefix formatives are the recurring shapes used in multiple grammatical derivations, and cannot at this basic level be referred to as 'morphemes'. ${ }^{6}$ In a morphemic view there would be a much longer list of morphemes in which different morphemes have the same homophonous morph as other morphemes.

[^41]Verb classes I-VII are shown in Figure 4.1 (see Chapter 9 for discussion on verb classes). ${ }^{7}$ Listed here are two nominalisation patterns ${ }^{8}$ which work on all but the stative voice and postural verb types. The stative verb can be nominalised with the agentive prefix to- and requires either the realis or irrealis prefix as part of the word stem. The postural verb type theoretically could take the agentive or locative nominalisation patterns, but I have yet to find an example in my data. ${ }^{9}$ The double line between class VI and class VII indicates that the first six classes are actor oriented and class VII is undergoer oriented.

| Verb <br> class | Voice or verb type | Prefixes <br> (irrealis / realis) | Stem prefix | Agentive nominalisation <br> (derivation type 5) | Locative nominalisation (derivation type 4) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I | Primary transitive | M- / N- | $\begin{aligned} & \hline \text { pong- } \\ & \text { (peng-, pang-) } \end{aligned}$ | topongkomung 'carrier, leader' | ponsau'ong <br> 'place to get water' |
| II | Factive | M- / N- | $\mathrm{po}_{1-}$ | topobalu' <br> 'seller' | pogutuong 'deed' |
| III | Dynamic | M- / N- | pe- | topeguru 'student' | peguruong 'lesson' |
| IV | Denominal | M- / N- | $\mathrm{po}_{1-}$ | topojala <br> 'fisherman' | pogombo'ong 'meeting place' |
| V | Locomotion | M- / N- + -um- | $\mathrm{po}_{1}{ }^{-}$ | topotumangis | -- |
| VI | Postural | M-/N- | popo- | -- | -- |
| VII | Stative | $\begin{aligned} & \text { mo- / no- } \\ & \text { (ma-, me- / na-, ne-) } \end{aligned}$ | -- | tonangkait 'cripple' | -- |

Figure 4.1. Verb class stem former prefix template paradigm

### 4.3.1 The $p V(C)$ - stem formative panorama

The panorama of the $p V(C)$ - stem formatives can be sorted according to the verb class of the root (see §4.3, §5.6.2 and Chapter 9). Separate work charts have been made for verbs in classes I-IV and VI (see Charts 1-5 in Appendix 9) which list different grammatical derivations for a number of different verbs for each class. Figure 4.2 reproduces part of Chart 1 for the primary transitive verb class.

[^42]| I | 'buy' | 'carry' | 'draw <br> water' | 'get, take' | 'club' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| root | oli | 'omung | sau' | alap | bolilo |
| AV | nongoli | nongkomung | nonsau' | nangalap |  |
| IV | nioli | ni'omung | nisau' | nalap <br> $\sim$ nipangalap | nibolilo |
| $1 / 2$ instrumental <br> or locative <br> applicative | nipongolia' | nipongkomuni |  | nipangalapi |  |
| 3 imperative | pongoli | pongkomung $\sim$ <br> 'omung |  | pangalap <br> $\sim$ alap |  |
| 4 locative <br> nominaliser | topongoli | topongkomung |  | ponsau'ong | pangalapong |
| 5 agentive <br> nominaliser |  | pongkomung |  | pangalap | pombolilo |
| 6 instrumental <br> nominaliser |  |  |  |  |  |

Figure 4.2. Partial work chart of primary transitive verb class in active/inverse voice and six grammatical derivations (see Appendix 9)

Charts 1-5 in Appendix 9 show work charts for verb classes I-IV and VI illustrating the procedure for identifying and contrasting the patterns of $p V(C)$ - for six distinct grammatical patterns in each verb class. The top row in each chart gives the English gloss for the root in the second row (see Figure 4.2). In Chart 1 the third and fourth rows contrast active voice (AV) and inverse voice (IV) affixation (chart 2 contrasts the dynamic verb construction with the inverse voice construction on the same root, etc.). Rows five to nine are marked with numbers 1-6 and each of these rows illustrates the use of stem formers for six different types of grammatical derivations: instrumental applicative, locative applicative, imperative, locative nominaliser, agentive nominaliser, and the instrumental nominaliser. Each of these distinct derivations uses the formative stem former $p V(C)$ - as an exponent that contributes to the grammatical derivation the specific word becomes depending on the absence or appearance of other formatives. For example, the row label $1 / 2$ (for instrumental and locative applicatives; see also $\S 10.3$ ) shows that the $p V(C)$ - stem former and the inverse voice prefix ni- combines either with the directional suffix $-i$ (in which case the word then determines that the clause will have a locative noun phrase as the pivot or 'focus') or the prefixes combine with the transitiviser applicative $-a$ ' (which determines that the clause will have an instrumental noun phrase as the pivot or 'focus').

The row labelled 3 designates that this grammatical derivation type forms the imperative verb with just the stem former $p V(C)$ - or in some cases with just the root form. Number 4 designates that the stem former $p V(C)$ - in combination with the -ong suffix creates a locative noun (that is, has a locative nominalising derivation). Number 5 similarly designates that the stem former $p V(C)$ - in conjunction with the prefix toproduces an agentive nominalisation of the root. Number 6 designates that the $p V(C)$ stem former can also produce an instrumental nominalisation. Blanks in the chart simply
indicate a lack of textual data to support one part of a paradigm (although more than fifty texts were searched). ${ }^{10}$

One of the most important findings presented in this chapter is that the grammatical derivations listed in Charts $1-5$ as numbers $1,2,3,4,5$, and 6 make up a complicated matrix when verb classes I to IV and VI are integrated ( $\S 4.3 .2$ ). The following sections give one or more examples of the same stem former used in different grammatical derivations.

### 4.3.2 The $p V(C)$ - matrix

In this section I will sort out the verb class $p V(C)$ - formatives according to a complex matrix. The formatives which form verb stems fit into a paradigm which I will discuss below.

Each of the work charts represents one verb class (see Charts 1-5 in Appendix 9) and shows lexical examples of the word forms for several grammatical derivation types. Note that in the charts that there is a very similar pattern for the grammatical derivations $1,2,3$, 4,5 , and 6 (these numbers correlate with the numbering of the grammatical derivation types in §4.3.1). This pattern is captured in Figure 4.3 below. It shows the prefix groupings which exist for these five charts. Each chart is represented in the figure by a rectangle and is labelled with a roman numeral. The roman numerals correlate with the verb classes set out in Figure 4.1 (and in Charts 1-5 in Appendix 9). First, note that the largest rectangle has several smaller rectangles within it. These embedded and overlapping rectangles indicate the existence of a matrix that I will discuss shortly.


Figure 4.3. Grammatical derivation prefix groupings for verb classes i-iv and vi (see Charts 1-5 in Appendix 9; grammatical derivations: 1-instrumental applicative, 2-locative applicative, 3 -imperative, 4-locative nominaliser, 5 -agentive nominaliser, and 6-instrumental nominaliser)

[^43]VERB CLASSES

Grammatical Derivations

|  | I <br> pong- <br> Primary | II <br> $\mathrm{po}_{1-}$ <br> Factive | III <br> pe- <br> Dynamic | IV <br> $\mathrm{po}_{1^{-}}$ <br> Denominal | VI <br> popo- <br> Postural |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | pong- | $\mathrm{po}_{1^{-}}$ | pe- |  | popo- |
| 2 | pong- | $\mathrm{po}_{1^{-}}$ | pe- |  | popo- |
| 3 | pong- | $\mathrm{po}_{1^{-}}$ | pe- | $\mathrm{po}_{1^{-}}$ | popo- |
| 4 | pong- | $\mathrm{po}_{1^{-}}$ | pe- | $\mathrm{po}_{1^{-}}$ | popo- |
| 5 | pong- | $\mathrm{po}_{1^{-}}$ | pe- | $\mathrm{po}_{1^{-}}$ |  |
| 6 | pong- |  | pe- |  |  |
| 1 Instrumental applicativisation 4 Locative nominalisation circumfix <br> 2 Locative applicativisation 5 Agentive nominalisation |  |  |  |  |  |
| 3 Imperatives |  |  |  |  |  |

Figure 4.4. Two-dimensional matrix of verb classes and six grammatical derivations for $p V(C)$ -

Verb classes I and III have all six grammatical derivations (types 1-6) and are represented by the largest rectangle in Figure 4.3. Verb Class II includes grammatical derivation types $1-5$ which is indicated by the second largest rectangle. Verb class IV has only grammatical derivation types 3-5 which is indicated by the smallest vertical rectangle. Class VI has only grammatical derivation types 1-4 which is indicated by the smallest horizontal rectangle.

The gaps in the six work charts show that I haven't been able to complete every word form's paradigm from my corpus, but taking their combinations together support the basic paradigm. In some cases a gap for all lexical words for a particular grammatical derivation may be either accidental or because there is some semantic restriction that disallows a certain verb class to construct that form (for example, instrument cannot be derived from nouns that would be denominalised into a verb).

Next I collapse the $p V(C)$ - formatives from these five charts (classes I-IV and VI) and their verb classes into a two-dimensional matrix (see Figure 4.4). The numbers on the left indicate the grammatical derivations in which those stem formers occur. Along the top row are the verb classes. In this two-dimensional matrix we see something else that persists in every cell. This is the $p$ phoneme. Since there is already a clear alternation between the nasals $m$ and $n$ for irrealis and realis in the language, I suggest that there may actually be a three-way alternation of stops. A second argument for splitting the $\mathrm{m}-\mathrm{n}$ phonemes away from $p V(C)$ - formative(s) is an historical one. The Muna language (van den Berg 1989, 1996) of Southeast Sulawesi has three verb classes based on the vowels $o$, $e$, and $a$. These can be interpreted as reflexes of proto-Celebic verb prefixes *mo-/no-, *ma-/na-, and *me-/ne- (van den Berg 1996, Mead 1997).

In the following discussion I will contrast a morphemic analysis with a non-morphemic analysis (which either treat the 'morpheme' as basic or as non-existent respectively). The latter is also called lexeme-based, for example, in Aronoff 1992. The typical morphemic analysis of Pendau verbal prefixes such as between mong- and nong- would be to treat the irrealis/realis alternation as portmanteau with active voice. However, it is clear that it is only the contrast between the $m$ and $n$ that is necessary to mark the difference between irrealis and realis. So it is quite feasible to consider these as formatives in a non-
morphemic framework, since it is not necessary that formatives be affixes. An examination of the entire verb paradigm shows a three-way contrast between mong-, nongand pong- (and this can be repeated similarly for each of the verb classes). The latter is the stem former for the primary transitive verb class, and seems to disappear in the actor oriented forms of these verbs.

In this analysis, then, I posit that $p o_{1-}$ - underlies mo- in certain words, for example, mogabu underlyingly m-po-gabu. ${ }^{11}$ In order to provide substance to this analysis, and provide motivation for this analysis in Pendau, I will propose that the $M-/ N$ - are floating autosegments (thus getting away from a morphemic commitment). This is described in §4.3.4.

From the morphemic view the main puzzle is in determining what the $p V(C)$ morpheme is for each grammatical derivation. In fact the $p V(C)$ - stem former would be called an 'empty morph' (see Aronoff for example 1992:18, Katamba 1993:38). In a nonmorphemic approach such as Word and Paradigm Theory, it is the combination of formatives (determined by morphological rules) which consists of the morphological operations which form a word that is important. In other words, an augmented stem containing a prefix formative $p V(C)$ - is required by a morphological rule for each grammatical derivation type numbered $1,2,3,4,5$, and 6 . Aronoff (1992) has suggested that Latin is typical of many languages with stems, and demonstrates that it is not necessary to assume that a stem form has meaning (1992:21):

From our current perspective, it is also an enlightening example of the workings of pure morphology, form without meaning.
Aronoff further states that (1992:28-29):
As I noted above, stems are special entities within the morphological system of a language. Strictly speaking, stems have no semantic value, because, as I have argued at some length, they are only forms of lexemes and not meaningful units. They may therefore not participate in the semantic calculus directly as meaningbearing units. As I noted briefly above, stems must also be contrasted with affixes, morphs that are introduced by rules as 'markers' of morphosyntactic categories....

Our discussion so far has centered on the three traditionally recognized basic stem types of Latin verbs. I have tried to show that these stems, whether or not they are listed in the permanent lexicon, have two important properties. First, they are not meaningful. Second, the abstract categories of present, perfect, and 3 stem enjoy a special status in Latin grammar as independent parts of the morphological system of the language. Realization rules of the language refer to these abstract categories and not to specific forms when selecting forms on which to operate.
Following Aronoff, therefore, it is unnecessary to assign a separate morpheme to each one of these grammatical distinctions (which would be further compounded by five verb classes multiplying to the six grammatical derivations resulting in thirty theoretical possibilities), because the $p V(C)$ - formatives are an exponent of the morphological operation (that is, via 'realisation rules').

[^44]
### 4.3.3 Morphological rules

The following is an outline of a rule sequence which could be used in either a lexical morphology approach or a word and paradigm approach (compare to Figure 4.5):

1) The grammatical derivation to be used is chosen, for example, the applicativisation of an instrument noun phrase which becomes the pivot.
2) The $p V(C)$ - stem is chosen based on the lexeme's verb class, for example, class I verbs such as oli 'buy' which would be the pong- prefix. The surface form of $p V(C)$ - is formed based on the intersection of the paradigm vectors, for example, the stem form of oli 'buy' is pong+oli.
3) The co-occurrence of other formatives necessary for the particular grammatical derivations are chosen if applicable, for example, ni + pongoli $+a$ ' and applied in each level of the lexical phonology as appropriate. If actor oriented irrealis or realis $M-/ N$ - is used this follows the same procedures as other prefixes in level 2 of the lexical phonology (see $\S 3.3$ and Figure 3.6), except that an extra process enables the floating autosegment to link to the skeletal structure and the $p$ phoneme to be delinked (as described in §4.3.4).
4) The complete word is formed, for example, nipongolia'.

| Choose stem former based on root |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inverse voice/realis | Primary transitive | Dynamic | Factive or denominal | Postural | Root | Applicative transitiviser |
| ni- | pong- | pe- | $\mathrm{po}_{1-}$ | popo- | oli | -a' |

Figure 4.5. Word formation of nipongolia' 'something used to buy something'

### 4.3.4 The $p V(C)$ - stem formatives: An autosegmental solution to the $m / n / p$ alternations

For Central Sulawesi languages such as the Kaili languages (Kaili-Pamona group), the equivalent forms identified as augmented stem formers in Pendau have usually been identified as a variety of morphemes such as (Barsel 1994, Barr 1988b, Evans n.d.): transitiviser, nominaliser, imperative, antipassive, and reciprocal. Since these descriptions have been based on morphemic theories, usually a tri-prefix set of alternations has been posited, such as mang-/nang-/pang- for active voice clauses. However, as this chapter demonstrates, this morphemic approach has had a number of complications whereas an approach that identifies a multi-functional stem former that may vary in form for different verb classes resolves these complications and uncovers a simpler and more elegant analysis. This section proposes that the irrealis and realis distinction is a binary contrast captured in the two autosegments $M$ - and $N$ - respectively.

Although I may be the first to treat $M$ - and $N$ - as floating autosegments, the idea of an abstract $M$ - can be found in descriptions of some other Western Malayo-Polynesian languages. For example Sarangani Manobo (Philippines) has been analysed by DuBois, Upton and Pike (1980) as having an abstract $M$ - prefix which displaces various consonants (including $p, k, b, q$ ) of several prefixes as well as the initial consonants of some verb stems, and is used to mark the 'subject focus'. This is clearly not a morphophonemic solution. Schachter (1995:949) states that Tagalog has an 'actor-trigger prefix m-' which
when affixed to the stem formers pag- and paN- creates a composite that is often conveniently referred to as mag- and maN-. Mead (1998:192) refers to a description of Kapampangan in which Roswell (1983) describes the active affix as $m$ - which displaces the initial $p$ in the stem former pang-. ${ }^{12}$

In Bornean languages, $\operatorname{Kroeger}(1988,1996)$ for example describes Kimaragang Dusun in which he uses a small $m$ - for nominative voice or active voice (the equivalent function with varying terminology in his respective articles). This $m$ - also has the allomorph -umin specific environments. Kroeger (1988:222) states that, 'when the $m$ - precedes $/ \mathrm{p} /$, the $/ \mathrm{p} /$ is deleted.' This contrasts with his description of the final nasal in the stem former poN- which assimilates to the following root initial consonant. Clayre (1996) also describes $m$ - for a number of other Bornean languages similar to Kroeger's description.

Authors describing Sulawesi languages, such as Barsel (1994) and Himmelmann (2002a, 2002b), have either used a capital $M$ - or $N$ - to refer to a special abstract prefix which does not follow traditional morphophonemic solutions because it is analysed as an underlying form necessary to support the analysis. Himmelmann (2002a:9ff.) uses the symbol $M$ - for various kinds of stem-initial alternations for Austronesian languages which may or may not include a morphophonemic assimilation. Himmelmann (2002b) uses a capital $N$ - and $M$ - for contrasting active voice (or actor focus) with realis and irrealis respectively for Lauje (Tomini-Tolitoli group, Central Sulawesi), Ratahan (Sangiric group, North Sulawesi), and Tagalog (Philippines). Note also that Himmelmann analyses stem formers for Lauje in a similar way as presented in this chapter. Compare also Himmelmann (2001b:83).

The idea that the $M$ - and $N$ - are floating autosegments provides a theoretical basis for understanding why consonants seem to be displaced without what appears to otherwise be any phonological rationale for this to occur, and this may be the first work in an Austronesian language to do so. ${ }^{13}$

In the autosegmental solution proposed here I first assume that the $p V(C)$ - formatives (as well as the posi- and pe'i- formatives) are basic and underlying. This assumption has been determined primarily by examining the verb classes in contrast to the forms found in inverse voice in which the full forms of stem formers often appear (see Chapters 9 and 12). In addition to this diagnostic, when another prefix such as the pe'i- requestive is added the stem former appears in the active voice form as well. The last diagnostic clue which supports the $p V(C)$ - stem former as underlying is the imperative form of verbs, which are formed either as the bare root or with only the $p V(C)$ - stem former and the root.

[^45]The nasal phonemes $m$ - $n$ - are considered to be floating autosegments ${ }^{14}$ which are prefixed at the tier level that links (or docks) to the skeletal tier, and then via a morphological rule ${ }^{15}$ delinks the $p$ phoneme whenever an actor oriented meaning including irrealis or realis is included. ${ }^{16}$ Stative verbs do not have this autosegment. Examples (7)(11) illustrate for verb classes I-IV how the autosegment (indicated by the circled phoneme) is linked to the skeletal tier (marked with Cs and Vs) with a dashed line. Step two delinks the $p$ phoneme, which is indicated by the double short horizontal lines.

## Primary transitive-class I



Factives-class II


[^46](9) Irrealis + requestive + transitive (class I)

(10) Irrealis + requestive + factive root (class II)

(11) Dynamic verbs class III


Denominal verbs class IV

$\longrightarrow$ mojala 'fish with casting net'

## 5 Word classes

### 5.1 Introduction

The use of word classes in this thesis assumes that the 'grammatical word' is better as the basic unit of classification than the 'phonological word' (see definition in §4.2.1). This means that clitics belong to a word class, and that compound words belong to a word class. Affixes do not have word class membership on their own, but when they appear with a stem they may force the stem to shift from one word class (or sub-class) to another.

### 5.2 Word classes in Pendau

Pendau has seven word classes as follows:

1. Nouns
2. Noun modifiers
3. NP markers (case markers and the relative clause marker)
4. Verbs
5. Adverbs
6. Relators (conjunctions and connectors)
7. Interjections

Only two of these classes, noun and verb, are major open classes. The other classes are minor, since they either play roles which centre around a verb or noun phrase, or they deal with clausal relations, and they are usually closed classes. Most Pendau roots obligatorily occur as members of a particular word class. For example, 'olog 'break, snap' must occur prefixed by the stem former pong- in the active voice transitive construction (§5.6.2.1 and Chapter 9). Other indications that word classes exist come from comparing how nouns are typically denominalised on the one hand, and how nouns are formed from stative roots on the other. Denominalisation must occur with the stem former $\mathrm{po}_{1^{-}}$(verbs that are in other verb classes take other stem formers). This denominalisation process can be contrasted with stative roots which derive nouns by conversion (that is, zero derivation). There is no reason to assume this class of words is inherently a special noun class that can be denominalised into stative verbs since there is a productive way to denominalise nouns.

Many languages have a third major open class, that is, adjectives. However words that appear as adjectives in other languages are a part of the stative verb class in Pendau (§5.6.2.7).

### 5.3 Nouns

### 5.3.1 Basic noun criteria

Nouns can be differentiated from verbs by several criteria. Just as words can be identified as words based on substitution tests (van den Berg 1989:41), verbs and nouns can be distinguished by their occurrence in different constituent positions. Specific tests which can be used to identify all nouns are listed below according to clause level criteria, phrase level criteria, and word level criteria. ${ }^{1}$

## Clause level criteria for all nouns:

1. Noun phrases may function as core arguments of a predicate, which includes pivot and non-pivot constituent positions (§6.2).
2. Noun phrases function frequently as the object of an oblique argument (Chapter 8). For example ri=dagat 'in/at the ocean', where ri marks a locative prepositional phrase.

## Phrase level criteria for all nouns:

3. Nouns occur as the head of a noun phrase.
4. Noun phrases may be marked with demonstrative pronouns moo 'this', nao 'that', and иo 'yonder' as the final element of a noun phrase (§7.6.3), including pronouns and proper nouns. For example, bau moo 'this fish' in a simple noun phrase, and in a relative clause: unga to=ro-duta mami moo 'the child to whom we propose (marriage).'
5. Nouns can be modified by quantifiers (§7.5.2.3), classifiers (sortal (§7.5.2.2.1) and mensural (§7.5.2.2.2)), and numerals (§7.5.2.1). These all precede the noun they modify, as shown in these examples: jojoo unga 'all children' (quantifier), so-bua loka 'one banana' (sortal classifier with a numeral 'one' prefix indicated by the hyphen), totolu unga 'three children' (numeral).
6. Nouns can be modified by a restrictive relative clause, which is simultaneously the pivot position (§15.5). An example of loka 'banana' is shown in example (1) in which loka is the non-pivot P argument of the matrix clause, but the P pivot argument of the relative clause.
(1)

| Jari | jimo | nongkomung | loka | toreinang | nijimo. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| jari | jimo | N-pong-'omung | loka | to=ro-inang | nijimo |
| so | 3PL/AB | RE-SF/PT-carry | banana | RM=IV/IR-eat | 3PL/GE |

'So they took bananas that they would eat (later).'

## Word level criteria for all nouns:

7. Nouns may be identified negatively, that is they do not take any verbal prefixes (at least as the outermost prefix) which contrast irrealis and realis (for example, $M$ - and $N$-; see $\S 5.6$, Chapter 9 , and $\S 13.2$ ). For example rapi

[^47]'spouse' can be denominalised with a verbal prefix morapi 'marry'. This includes roots of words which are normally used as stative verbs, for example, which do not take the stative prefix mo-/no-. These are nouns when not affixed this way (§7.4.8).
Specific tests which can be used to identify some nouns are listed below according to phrase level criteria and word level criteria.

## Phrase level criteria for some nouns:

8. Nouns co-occur with noun phrase markers. There are two sets of noun phrase markers, one set for common nouns ( $n u=$ and zero) and one set for proper nouns ( $s i=$ and $n i=$ ) (see Figure 6.3, $\S 5.5, \S 7.5 .1$ and $\S 7.6 .4$ ). For example asu 'dog' (unmarked) and nuasu 'dog' genitively marked.
9. Nouns in genitive phrases are linked by the common noun marker nu= or the proper noun marker $n i=$ (these are simultaneously the genitive marker; see §7.6.4). For example, unga 'child' in unga ni=ama 'the father's child.'

## Word level criteria for some nouns:

10. Nominalised verbs (and other word classes) may take nominal derivational affixes (§7.4.2), for example, agentive nominalisation in topangangka 'thief' (from the verb angka 'steal') and locative nominalisation peabuong 'kitchen' (from the noun $a b u$ 'dust').
In addition to the criteria listed above there are also several sub-classes of nouns. These are discussed in §5.3.2 and §5.3.3.

### 5.3.2 Pronouns

There are three sets of pronouns in Pendau: the personal pronouns, one pseudo-reflexive pronoun, and the demonstrative pronouns.

Personal pronouns are a sub-class of nouns which form their own closed paradigm. There are two sets of personal pronouns, one for the absolute case and one for the genitive (see Figure 6.3 and $\S 6.2$ for discussion).

These two cases parallel the absolute noun phrase markers si=, zero (unmarked nouns), and the genitive noun phrase markers $n i=$, and $n u=$. The genitive set has two functions, one as a genitive linker which typically indicates possession (§7.6.4), and the other as the non-pivot agent of the inverse voice clause construction ( $\S 6.2$ and $\S 12.3-4$ ).

There is only one pseudo-reflexive pronoun, alae 'body, self' (§7.3.4).
There are three demonstrative pronouns: moo 'this, here', nao 'that, there', and uo 'yonder, over there'. When demonstratives are used pronominally they substitute for head nouns to track their antecedents as well as provide referential information (§7.6.3). Demonstratives are also used as noun modifiers which mark deictic referentiality of a noun phrase ( $\S 5.4$ and §7.6.3).

### 5.3.3 Other noun sub-classes

Other noun sub-classes are the vocatives (nouns peripheral to the syntactic structure, for example, ene 'mama'; see §7.3.5) and all of the interrogative pro-forms (for example, sapa
'what'; see §7.3.2 and §16.3) except those affixed with verbal prefixes (for example, mongkuya 'why'; see §16.3.3.3).

### 5.4 Noun modifiers

There are five sub-classes of noun modifiers in Pendau: numerals, quantifiers, sortal classifiers, mensural classifiers, and demonstratives. These all have the characteristic that they can modify the head noun in some way (see Chapter 7). They can also function as independent nouns when there is no head noun. However, it is better to understand the head noun as ellipsed in these cases since, for example, a classifier cannot classify another classifier, etc.

- Pendau numerals are a closed sub-class, but they can be combined into higher numbers in essentially the same manner as the Indonesian numeral system (for example, the number ten combines with the numbers one and two to form eleven and twelve, and so on). The numeral system has two basic structural types (§7.5.2.1): free forms and prefixes. Cardinal numbers one to nine are indicated by a free numeral form (§7.5.2.1.2). Cardinal numbers above nine use prefix forms of one to nine where the base is ten, hundred, thousand, etc. Cardinal number prefixes are also used on classifiers and measure nouns. Cardinal numbers either modify the head noun, or can become the head noun.
Numerals (§7.5.2.1.3) can also take nominalising affixation to create locative ordinal numbers (with the circumfix $p V$ - / -ong; see $\S 7.5 .2 .1 .3$ ) and ordinary ordinal numbers (with the prefix $p V$ - and the optional enclitic $=$ nyo ' 3 SG ').
- The quantifiers (§7.5.2.3) are a very small closed sub-class of words which modify the head noun or may function as a simple head noun: jojoo 'all', soso'uya 'several', ana 'group', ongo 'plural human group', and ntoli 'dual human counterpart'. These words indicate varying quantities from all to some to specific dual noun relationships, and occur either as lexicalised (for example, ntoli the dual human counterpart marker, as in ntoli siama 'father and child') or floating quantifiers (for example, jojoo 'all'; see §7.5.2.3 and §6.4.1.2). Quantifiers are similar to numerals in that they can be used to indicate specific quantitative features of the head noun, but are different from classifiers and measure nouns since the quantifiers cannot take numeral prefixes, and they do not classify nouns according to their specific characteristic (§7.5.2.3). Note that even numerals can be prefixed with other numerals albeit to produce a different numeral.
- Sortal classifiers (§7.5.2.2.1) are a small closed class that usually classify the head noun according to quality, shape, or other similar characteristics, for example, samata 'one long unshaped or sharp pointed object (lit. 'one eye').
- Mensural classifiers (§7.5.2.2.2) are an open class of noun modifiers which quantify or in some way yield a particular measurement of the head noun, for example, so-tompig 'one piece of something'.
- Demonstratives have three modifying functions in Pendau (see also §7.6.3 and see §5.3.2 for the use of demonstratives as pronouns). The demonstratives are moo 'this, that', nao 'that, there', and uo 'yonder'. When these are employed they always locate the NP on a distance continuum and assign definiteness (nouns that are not marked with demonstratives may be either definite or indefinite, see Figure 7.8 and in $\S 7.6 .3$ ). The first way in which demonstratives may be used to modify
an NP is to indicate a pragmatic discourse orientation either cataphorically (moo 'this') or anaphorically (uo 'yonder'); see §7.6.3.3. The second use of demonstratives is as situational references (§7.6.3.1), and the third is for tracking purposes (§7.6.3.2).


### 5.5 Noun phrase markers

The noun phrase markers include all of the proclitics and two free words (see Figure 5.1). All of the noun phrase markers are case forms except for the relative clause marker $t o=$ (§15.5). The case forms can be divided into core case forms and local case forms. The core case forms are split into two groups which follow the same paradigm as the two pronoun sets (Figure 6.3). One case is absolute and the second core case is genitive. The genitive case forms and pronouns are used for possession or for the agent of the inverse voice ( $\S 6.2, \S 7.5 .1, \S 7.6 .3$, and Chapter 12). One genitive case form, $n u=$, can be used to mark common noun possession, and common noun agents of the inverse voice. The $n u=$ form is also used to mark instrument noun phrases (see $\S 8.6$ for a discussion of why this is treated as core rather than oblique). Local case has the three forms sono 'comitative', $r i=$ 'locative', and ila 'ablative' (§8.3.2-4).

Although all NP markers might be thought of as adpositions, only the local case forms will be referred to as 'prepositions' since 1) two of the three local case markers are free words, whereas all other NP markers are all clitics, and 2) because only these three NP markers mark oblique NPs whereas none of the others do.

|  | Core case | Local case <br> 'prepositions' | Relative clause |
| :--- | :--- | :--- | :--- |
| Absolute proper noun | $\mathrm{si}=$ |  |  |
| Genitive proper noun | $\mathrm{ni}=$ |  |  |
| Genitive common <br> noun | $\mathrm{nu}=$ | $\mathrm{nu}=$ | ri |

Figure 5.1. Noun phrase markers

### 5.6 Verbs

### 5.6.1 Basic verb criteria

Although verbs can function as nouns when they are in the noun argument slot, their identity can usually be determined by one or more of the criteria used in identifying a verb. All verbs can be identified on the basis of the following clause level criteria:

## Clause level criteria:

1. Verbs serve as the predicates of clauses (except in verbless clauses $\S 6.5$ ); see §6.6.
2. Verbs subcategorise one or more clausal arguments (§6.6).

The vast majority of 'canonical verbs' may be further identified by a number of word level criteria, but some minor verb sub-classes do not fulfil all of these:

## Word level criteria:

3. If a word carries a verbal prefix which contrasts irrealis and realis modal inflection (Figure 5.2, §5.6.2, Chapter 9, and §13.2) as the outermost prefix, then it must be a verb.
4. Only verbs can simultaneously take irrealis/realis modal inflection and completive/continuative aspectual enclitics (other word classes may take aspectual enclitics but not the modal inflection; see $\S 13.3$ ).
5. Transitive and intransitive verbs may be classified in a conjugated paradigm according to which stem former is used (§4.3, §5.6.2, and Chapter 9).

### 5.6.2 Canonical verb classes

Canonical verbs can occur with irrealis and realis modal prefixes. The canonical verbs can be subcategorised into seven verb classes according to which stem former associates with the verb, or in the case of the stative verbs the lack of a stem former. The stem formers were introduced in §4.3. Figure 4.1 gives an overview of the stem former paradigm. For more details see Chapters 9 and 12.

| Primary major verb classes | Pivot | Irrealis/realis | Stem formers |
| :---: | :---: | :---: | :---: |
| Primary transitive §9.2.2 | A | $\mathrm{M}-/ \mathrm{N}-$ | pong- |
| Factive §9.2.3 |  |  | $\mathrm{po}_{1-}$ |
| Dynamic §9.3.2 |  |  | pe- |
| Denominal §9.3.3 |  |  | $\mathrm{po}_{1}-$ |
| Postural §9.4.1 |  |  | $\text { popo- }{ }^{2}$ |
| Locomotion §9.3.4 |  |  | $\mathrm{po}_{1-}{ }^{-}$ |
| Stative §9.4.2 | P | mo-/no- | -- ${ }^{3}$ |

Figure 5.2. Verb class stem formers
Verb classes can be identified by their underlying stem forming prefix which always begins with the initial $p$ phoneme and can be identified generally as $p V(C)$-. Figure 5.2 demonstrates that all of the primary major verb classes I-VI which are actor oriented (that is, the A is pivot) are actually marked with the nasal formatives $m$ or $n$ (this binary

[^48]opposition always contrasts irrealis and realis modes respectively, see §13.2). Several verb classes use the $M-/ N$ - for actor oriented irrealis/realis since these are prefixed at an abstract level as floating autosegments and displace the $p$ phoneme (note that this is not a morphophonemic solution, see $\S 4.3 .4$ for the autosegmental explanation). Complexities of $p V(C)$ - stem formers, and the matrix used in distinguishing other grammatical functions, will be covered in Chapter 9 (see also §4.3).

### 5.6.2.1 Transitive verbs

Transitive class one verbs are prototypically identified with the harmonic prefix pong-. ${ }^{4}$ The vowel can become $a$ or $e$ depending on the frontedness of the first vowel of the root or stem (see $\S 3.5 .7$ for the vowel harmony processes and vowel harmony blocking which only occurs with this prefix). In addition to vowel harmony the final velar nasal assimilates or deletes according to specific phonological processes (§3.5.3-4). Therefore the pong- prefix has the highest number of allomorphs for any prefix, as illustrated in (2). ${ }^{5}$

## (2) pong-

peng-
pang-
pom-
pon-
pony-
po-
pepe- (lexically conditioned)
Typical transitives, which require two core arguments that are an actor and an undergoer, are shown in (3). These lists contrast the two voices (only showing the irrealis forms here) in which the roots are found in (for more examples see the list in §3.5.7.2, and see $\S 9.2 .2$ ). Note that the underlying form of the active voice is $M$-pong-. Transitive verbs can be inflected in either active voice or inverse voice without a change in transitivity. All other canonical verbs can also be inflected as a transitive inverse voice construction, but note that if the verb is intransitive then it must first become a transitive class verb.
Active voice
mongoyot
monatap
morembas
monyapor
mangangka
mangabut
menginung
menginang
Inverse voice
rooyot
ratatap
rerembas
rasapor
raangka
raabut
reinung
reinang
Root gloss
'haul, pack'
'wash'
'hit, strike'
'spear'
'steal'
'weed, clear away'
'drink'
'eat'

Perception verbs subcategorise the complement clause as a core argument in either transitive or ditransitive clauses (and may be in any of the transitive verb classes; see §15.3).

[^49]
### 5.6.2.2 Factive verbs

In Pendau there is a small class of transitive verbs which are distinguished morphologically from the class I pong- verbs by the use of the non-harmonic class II prefix $p o_{1}$ - stem former.

Verbs which take this prefix loosely fall into a semantic class called factives. Payne (1997:59) describes factive verbs as 'those that describe the coming into existence of some entity, for example, build, ignite, form, gather as in a "crowd gathered," etc.' Example (4) lists some of the more common verbs which take the $p o_{1^{-}}$prefix (underlyingly $M$ - $p o_{1}$-).

```
mo-gabu 'cook'
mo-gutu 'make, create'
mo-mbayu 'pound, grind'
mo-mongi 'request, ask, beg'
mo-'utanya 'ask, question'
mo-balu' 'sell'
```


### 5.6.2.3 Dynamic verbs

Dynamic verbs create transitive or intransitive clauses depending on the specific lexical verb. Dynamic verbs include intransitive because many verbs in this class do not require an object or P argument. They are called dynamic because in most verbs affixed with $M$ $/ N$-pe- the activity is oriented towards the A (or $\mathrm{S}_{\mathrm{A}}$ ) (van den Berg 1989:46). Exceptions are verbs such as lolo 'search' in which the semantics of the verb requires that there be an object searched for. Some nouns may be used as a base in which case then the verb means 'to produce or wear X '. ${ }^{6}$ A list of typical dynamic verbs is given in (5) (see also §9.3.2). Note that the surface form me- actually has the underlying formatives $M$-pe-.

| me-lampa | 'walk/travel' | me-gempang | 'walk (on foot)' |
| :--- | :--- | :--- | :--- |
| me-tubu | 'grow, live' | me-bura | 'speak, say' |
| me-lolo | 'look for, search' | me-raa | '(N) bleed' |
| me-riing | 'bathe' | me-baju | '(N) wear a shirt' |
| me-osa | 'rest' | me-salana | '(N) wear pants' |
| me-ngkani' | 'eat' | me-intolu | '(N) lay eggs' |
| me-gayo | 'use a dip net' |  |  |

### 5.6.2.4 Denominal verbs (verbaliser)

Nouns can become denominal verbs by taking the verbaliser prefix $p o_{1}-$. A verbalised noun means that the A ( or $\mathrm{S}_{\mathrm{A}}$ ) does the 'activity of X '. As with dynamic affixed verbs, denominal verbs can be either intransitive or transitive (again depending on the semantics of the derived verb; see also §9.3.3), although most clause constructions with a denominal verb are syntactically and semantically intransitive. The list in (6) provides a representation of nouns affixed with $M-p o_{1}$-.

[^50]| (6) | mo-asu | 'go hunting (with dogs)', | asu |
| :--- | :--- | :--- | :--- | 'dog',$~$| unga | 'child' |
| :--- | :--- |
| mo-unga | 'give birth (have a child)' |
| mo-sapeda | 'go bicycling' |
| mo-rapi | 'marry' |
| mo-sikola | 'go to school' |
| mo-tagu | 'have a friend(s)' |
| mo-jala | 'go fishing (w/ casting net)' |

### 5.6.2.5 Postural verbs

The postural verbs ${ }^{8}$ carry the prefix popo- (§9.4.1). Postural verb classes are intransitive verbs which typically have the agent move into a particular bodily position. Example (7) lists representative postural verbs, which have the underlying form $M$-popo-.

```
mopo-tundo ' 'sit'
mopo-'oro 'stand'
mopo-duling 'lie, lie down'
mopo-dengke 'squat'
mopo-lupit 'sideways'
mopo-'onjo 'stretch legs out'
mopo-rakab 'lie face down'
mopo-tili 'lean'
mopo-sandeg 'lean'
mopo-'udung 'bow head'
mopo-koub 'bend over, duck head down'
```


### 5.6.2.6 Locomotion verb class

Locomotion verbs carry the stem former $\mathrm{po}_{1^{-}}$(§9.3.4). However the telic aspectual infix -um- always co-occurs with this prefix. Example (8) lists representative locomotion verbs that occur with the prefix $p o_{1^{-}}\left(M-\mathrm{po}_{1}-/ N-\mathrm{po}_{1^{-}}\right)$in combination with the -um- infix (most of these verbs are inherently locomotive, with a few exceptions).

| leep | 'dive' |
| :--- | :--- |
| leap | 'fly' |
| lolon | 'swim' |
| linjo' | 'run' |
| tangis ${ }^{10}$ | 'cry' |
| gugur | 'tremble, shake, wake s.o. up by shaking them' |
| koroit | 'gnash teeth' |
| 'injir | 'stand straight' |
| sandeg | 'lean' |

[^51]| balar | 'straighten' |
| :--- | :--- |
| gelempesing | 'c.o. sound' |
| lengker | 'boil' |
| bungkour | 'crouch' |
| sulag | 'downstream' |
| mpure'/pure' | 'upstream' |
| 'apit | 'following mountain across mid-slope' |

### 5.6.2.7 Stative verb class

The majority of stative verbs include colours, size, shape, quality, etc., that is, the semantic domain that would occur as adjectives in other languages (see Dixon 1977 for an account of the full range of 'semantic' adjectives). Stative verbs describe a state or condition that occurs or exists with the undergoer. Stative verbs are prefixed with the harmonic prefix $\mathrm{mo}_{1^{-}} / \mathrm{no}_{1^{-}}$(with allomorphs $\mathrm{ma}-/ \mathrm{na}$ - and $\mathrm{me}-/ \mathrm{ne}$-), and may occur in irrealis or realis mode respectively (see discussion in §13.2.4). When stative roots are unaffixed they function as nouns (§7.4.8) Typical stative verbs are given in (9).

| ma-pangkat | 'tall' | me-mpeng | 'short' |
| :--- | :--- | :--- | :--- |
| me-ide | 'small' | mo-oge | 'large' |
| me-riri | 'yellow' | mo-doda' | 'red' |
| me-itong | 'black' | me-meas | 'white' |
| mo-bulung | 'green, blue' | mo-mbosi' | 'good' |
| ma-rate' | 'bad, wicked' | ma-dantang | 'long' |
| mo-bou | 'new' | ma-nggaang | 'light' |
| ma-pande | 'clever' | mo-boat | 'heavy' |
| mo-longkang | 'quick' | me-menyong | 'cold' |
| mo-onda' | 'hot' | ma-lamor | 'easy' |
| ma-paris | 'difficult' | ma-lalo' | 'deep' |
| ma-nabu | 'fall' | ma-ate | 'die' |

### 5.6.3 Non-canonical verbs

There are several other verbs (or sets of verbs) that can be assigned their own verb class. These are the existential diang 'to be, there is' ( $\S 6.6 .2 .1, \S 9.6 .2$ ), the copula jari 'become’ (§6.6.3.2, §9.6.1), the possessive 'have' verb (§7.4.1, §9.6.3), the four directional verbs (Chapter 11), and semi-auxiliary verbs (§14.4).

The existential verb diang 'to be, there is' takes no verbal affixation when it is the predicate for an existential clause (note that it can take verbal affixation to derive another class-see §9.6.2.1).

The copula jari 'become' takes a verbal prefix which contrasts irrealis and realis as ma-/na-.

The possessive 'have' verb construction takes the 'o- prefix on a nominal root to form a possessive link with the preceding noun phrase (§6.6.2.2, §9.3.3.2, $\S 9.3 .5, \S 9.6 .3$ and §10.6). ${ }^{11}$

The directional verbs are ma'o 'go', mai 'come', nyau 'go down', and mene' go up. These are not canonical verbs because of the irregularity of these affixed possibilities, and

[^52]because they can have three different major syntactic functions: as a main verb (§11.2), as directional serial verbs (§11.3.2), and as purposive serial verbs (§11.3.3).

Semi-auxiliary verbs are a verb or a verb-like word that aids the meaning of the main verb. There are two types of semi-auxiliary verbs in Pendau: abilitative (for example, ma'ule 'able'; see §14.4.1), and the desiderative verb mo-luar 'want' (§14.4.2). The two abilitative auxiliaries ma'ule 'able' and matua 'capable' are also unique since they require a genitive agent to agree with the subject of the main verb (which is in the absolute case; see §14.4.1.1).

### 5.7 Adverbs

In Pendau, adverbs (§14.2-3) are a closed class of words that modify the verb or an entire clause, that is, they are adjuncts. Schachter (1985:21) states that: 'adverbs function as modifiers of constituents other than nouns.' Pendau adverbs can be divided into two major categories: negative (§14.2) and non-negative (§14.3). The non-negative subclasses include adverbs of degree (for example, bega 'too', see §14.3.1.7), time (for example, bia 'later', see §14.3.2.2), comparative (for example, moje 'again, also', see $\S 14.3 .3 .2$ ), and miscellaneous (for example, kana 'certainly, must', see §14.3.4.1).. The two most common negative words are ndau 'no, not' (§14.2.1) and nyaa 'don't' (§14.2.2).

### 5.8 Relators

Relators are a closed class of words used to connect noun phrases, for example, o 'and', ape 'or', and sono 'with (COM)' (§7.7, §8.3.4), or to link clauses or sentences (§8.3.4, §15.6). These include words for conjoining multiple nouns into one noun phrase, providing temporal relations between clauses, for example, paey 'and then, after that', and enabling a variety of propositional relations such as if-then, but, however, means-purpose, etc (§15.6). Example (10) illustrates the use of a NP level relator.
(10) Io nongkomung tavala o sarampang.

| io | N-pong-'omung | tavala | o | sarampang |
| :--- | :--- | :--- | :--- | :--- |
| 2SG/AB | RE-SF/PT-take | spear | and | 2-pronged.fishing.spear |

'He took his hunting spear and his fishing spear.'
Relators that connect internal sentence relations or external sentence relations create coordinating or co-ranking clauses (Longacre 1985:238). Example (11) illustrates a propositional relation that connects two equally independent clauses (this is the basis of the term 'co-ranking') with the sequential relation paey 'and then'. Also see the discussion in $\S 15.7$ on discourse connectors, which are dependent clauses that also fill the same kind of role as some of the relators, for example, bai uo 'like that, after that'.

| (11) | Omung | mai, | paey | uinang! |
| :--- | :--- | :--- | :--- | :--- |
| 'omung | mai | paey | 'u-inang |  |
|  | carry | come | and.then | 1SG.IV/IR-eat |
|  | 'Bring it here, and then I will eat it!' |  |  |  |

### 5.9 Interjections

Interjections often provide an evaluative or emotive spin on the syntactic clause or situation within which they are expressed. Most interjections have no syntactic constraints as they can appear as stand alone constituents or appear in various positions within a syntactic clause without affecting the syntax of that clause (that is, its removal will not have any syntactic ramifications). They include emotional expressions like bengga bulan 'wow', vocatives like mangge 'uncle', and positive statements like iye 'yes' (onomatopoeic expressions are given in Appendix 6). Some of the more common interjections are listed in (12). The interjections used as question tags are discussed in §16.3.2.1.

| iye | 'yes (confirmation, affirmation, etc.)' |
| :---: | :---: |
| aiyape' | 'who knows?' |
| 'asi, 'asi kuru | 'too bad, pity, please, mercy (lit. poor)' |
| bengga bulan ${ }^{12}$ | 'expresses surprise, shock, or anger (lit. white buffalo or moon buffalo)' |
| ooh | 'a way of reminding s.o. of s.t.' |
| $e e^{\prime}$ | 'uh' |
| hama, ${ }^{13}$ | 'wow, gosh (surprise)' |
| ai, aiii, aiis | 'expresses disappointment, frustration, surprise' |
| ue (from uo eeh) | 'over there, huh?' |
| bee | 'true (a response to affirm something is true, either in agreement with someone's statement or insisting on the veracity of a statement' |
| toop | 'friend (VOC?), you know, isn't it, OK, man' |
| tooh ${ }^{14}$ | 'you know, right, isn't it? (TAG)' |
| nuooh | 'isn't it? (TAG)' |

The word iye 'yes' is used to affirm or confirm and contrasts with the negative ndau 'no' (see negation in $\S 14.2$ ). One typical usage is to use it as an answer to polar questions (see §16.3.2.1-2 for discussion of polar questions), as in (13).
(13) Iye tagu
yes friend/VOC
'Yes friend.'
[ceku01.jdb 006]
Examples (14)-(16) illustrate the use of toop as a special tag or perhaps a vocative that can be translated in English variously as 'friend, you know, isn't it, man, OK'. Example (14) illustrates a very common greeting and reply, in which the reply uses toop (which shows that this is not a tag question). Examples (15)-(16) illustrate the common use of this expression in riddles. However in contrast to these English words, when I have asked my Pendau friends for the meaning of toop there is no equivalent word they can identify in

[^53]Indonesian, but sometimes have offered that it means something like teman 'friend' (and they are quick to point out that this is not the meaning of toop).

## (14)

| 'Sapa | kareva?' | 'Mombosi' | toop!' |
| :--- | :--- | :--- | :--- |
| sapa | kareva | mo-mbosi' | toop |
| what | news | ST/IR-good | TAG |

'What's the news (how are you)?' 'It's good, man!'
[asu2.pin 001]
(15) Rololo toop, rololo!
ro-lolo toop ro-lolo

IV/IR-search TAG IV/IR-search
'Search for it (the answer), man, search for it!'
[Lewonu Riddle \#3]

## (16)

| Seinsangopo, | toop! |
| :--- | :--- |
| so-insang=po | toop |
| ONE-time=CONT | TAG |

'One more time, OK!'
[Lewonu Riddle \#1]
Another common interjection is the word 'asi 'poor, too bad, mercy', as illustrated in (17)-(18). The literal meaning of 'asi is 'poor', as can be identified in the lexeme to=na-kasi-'asi 'the poor person(s)'. A rough equivalent of 'asi (or 'asi kuru is often used, but the word kuru does not appear to have any identifiable meaning) is 'mercy me' (as said in at least one variety of English) or 'dear me'. ${ }^{15}$

| Ila | uo | unga | asi | natarusomo. |
| :--- | :--- | :--- | :--- | :--- |
| ila | 'uo | unga | 'asi | no-tarus=mo |
| ABL | yonder | child(ren) | too.bad | ST/RE=continue=COMP |

'After that, the children, too bad, continued on.'
[miracle1.pin 061]

| So'uya | mbengipo, | asi | mangge? |
| :--- | :--- | :--- | :--- |
| so-'uya | mbengi=po | 'asi | mangge |
| ONE-why | night=CONT | too.bad | uncle/VOC |

'How many more nights, too bad, uncle?'
[horse.pin 1050]
The word aiyape' 'who knows', as illustrated in (19), is a single word utterance that is like the English shrug of the shoulders which means 'I don't know' or 'who knows', etc. This is actually an alternative means of answering questions for which one does not take responsibility for any knowledge of the question.

| Ila | mai | uo | neburamo |
| :--- | :--- | :--- | :--- |
| ila | mai | 'uo | $N$-pe-bura=mo |
| ABL | come | yonder | RE-SF-speak=COMP |


| todeide, | "Sapatonengkani <br> todeide |
| :--- | :--- |
| sapa to $=$ N-pe-ngkani |  |
| small.one | whatRM=RE-SF-eat |

[^54]| $\begin{aligned} & \text { rimoo?" } \\ & r i=m o o \\ & \text { LOC=this } \end{aligned}$ | "Aiy aiya who |  | uti, <br> uti <br> dea | y/VO | ndau ndau NEG | natua'u <br> natua ='u <br> able/RE=1SGGE | nengepe <br> $N$-pong-epe <br> RE-SF-hear |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| suara | nijimo | nya |  | mai." |  |  |  |
| suara | nijimo | nya |  | mai |  |  |  |
| sound | 3PL/GE |  | own | come |  |  |  |

'After that the little one spoke, "What was it that ate here?" "Who knows dear boy, I wasn't able to hear their sound come down here.""
[asu2.pin 024-025]

The word hama' is used to express surprise or amazement, as illustrated in (20).

| Neburamo | panganganta | uo | sono | riLatoadu, "Hama' |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| N-pe-bura=mo | panganganta <br> RE-SF-speak=COMP <br> flesh-eater | 'uo | yonder | sono | COM |
| ri=L. | LOC=L. | hama' |  |  |  |
|  |  |  |  |  | wow |

'The flesh-eater spoke to Latoadu, "Wow dear boy, you are really getting a lot of wood!"" [mdtext13.txt 043]

Example (21) uses the interjection bee 'truly' to affirm that the opposite of what the boy's grandfather has said is true. In the previous sentence the grandfather tells the boy it is not necessary to go check the snare since it would be too soon. The boy counters with bee 'truly' and affirms that his snare must already have a bird caught in it.

| (21) | Neburamo <br> $N$-pe-bura=mo <br> RE-SF-speak=COMP |  | unga unga child | ио 'ио yonder | sono sono COM | sikainyo <br> si=kai=nyo <br> $\mathrm{PN} / \mathrm{AB}=$ grandpa $=3 \mathrm{SG} / \mathrm{GE}$ |  | ио, 'ио yonder |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | "bee, bee truly | kai, <br> kai <br> grandpa/VOC | ito <br> 'ito <br> 1PL.INC/AB |  | mene' mene' go.up | saba' <br> saba' <br> because | sobalo'u <br> sobalo'u <br> snare=1SG/GE |  |
|  | no'ono | тапи'." |  |  |  |  |  |  |
|  | N -po ${ }_{1}$ | no manu' |  |  |  |  |  |  |
|  | RE-SF | iit bird |  |  |  |  |  |  |

'And then the child spoke to his grandfather, "Truly, grandfather, let's go up, because my snare has caught a bird."'
[mdtext15.txt 132]

## 6 Basic clausal syntax

### 6.1 Introduction

Clauses may be classified according to the number and types of arguments and predicates that they take. A predicate may have a verb as its head, but the heads of predicates may also be from different word classes. Arguments in a clause are marked either as absolute case or genitive case (Figure 6.3 and §6.2)

Figure 6.1 summarises the basic structure of the clauses presented in this chapter. These clauses will include verbless clauses (§6.5), existential clauses (§6.6.2.1), copula clauses (§6.6.3.2), intransitive clauses (§6.6.2), transitive clauses (§6.6.3.1), ditransitive clauses (excluded in Figure 6.1, but discussed briefly in §6.6.4), and oblique noun phrases (§6.7). In §6.2 terminology and concepts that will facilitate the discussion in this chapter and elsewhere in this work are introduced. These terms and concepts include the grammatical functions S, A and P, the pivot, the case paradigm, and core versus non-core arguments (grammatical relations of subject, direct object and second objects will be discussed explicitly in §6.4).

|  | Basic |  |  | Clause |
| :--- | :--- | :--- | :--- | :--- |
|  | Core |  |  | Non-core |
| Transitive | NP | V |  |  |
| Intransitive | NP | V |  |  |
| Copula | NP | COP | NP |  |
| Existential | NP | EXIS |  |  |
| Verbless | NP | NP |  |  |
|  | NP |  |  |  |

Figure 6.1. Basic clause structure in Pendau

### 6.2 Pivots, core arguments, and case

Firstly, I examine the pivot NP as contrasted with the non-pivot NP in examples (1)(4). Examples (1) and (2) contrast the nong- and the ni- transitive verb forms. The verbs in these sentences can be interpreted as primary transitive verbs (Andrews 1985), and they represent active voice and inverse voice clause constructions respectively. Transitive clauses which have an agent (A) and a patient (P) argument such as these can be considered to be prototypical transitive constructions (that is, the verbs in these constructions are primary transitive verbs). The two differences in (1) and (2) are the difference in the verbal prefix and the different case marker on the post-verbal arguments
(see $\S 12.3$ for the full discussion of these as active voice and inverse voice respectively). The transitive clauses are contrasted with intransitive clauses in examples (3) and (4). In the free translations the capitalised NP indicates the pivot or subject in Pendau. ${ }^{1}$

| Siama'u | nonuju | siina'u. |
| :--- | :--- | :--- |
| si=ama='u | N-pong-tuju | si=ina='u |
| PN/AB=father=1SG/GE | RE-SF/PT-send | PN/AB=mother=1SG/GE |
| Pivot=A |  | Non-pivot=P |

'MY FATHER sent my mother.'

| (2) Siama'u | nituju | niina'u. |
| :--- | :--- | :--- |
| si=ama='u | ni-tuju | ni=ina='u |
| PN/AB=father=1SG/GE | IV/RE-send | PN/GE=mother=1SG/GE |
| Pivot=P |  | Non-pivot=A |

'My mother sent MY FATHER.'
(3) SiYusup neriing.
si=Yusup $\quad N$-pe-riing
PN/AB=Joseph RE-SF/DY-bathe
Pivot= $\mathbf{S}_{\mathrm{A}}$
'Joseph bathed.'
[EN97-002.46]

```
(4) SiYusup nanabu.
    si=Yusup no-nabu
    PN/AB=Joseph ST/RE-fall
Pivot= SP
    'Joseph fell (down).'
```

All clauses in Pendau single out one nominal phrase as the pivot, see Figure 6.2. ${ }^{2}$ Intransitive clauses have a single argument which is identified symbolically as S (single argument), and is always the pivot. In transitive clauses there are always at least two core arguments. At least two core arguments in a transitive clause can always be correlated with a prototypical agent (A) and a prototypical patient (P). Only one core argument can

[^55]be selected or marked by the syntax as the pivot, although it can be either the A or the P argument (or a third core argument such as Recipient, Instrument, Theme, or Locative). ${ }^{3}$

|  | Basic |  |  | Clause |
| :--- | :--- | :--- | :--- | :--- |
|  | Core |  |  | Non-core |
|  | Pivot |  | NP |  |
| Transitive | NP | V |  |  |
| Intransitive | NP | V |  |  |

Figure 6.2. Typical verbal clause structures in Pendau ${ }^{4}$

The pivot in Pendau can be linked to the 'focused argument' in Philippine-type languages (Dixon and Aikhenvald 1997, Foley and Van Valin 1985:305, Himmelmann 2002a, 2002b, Ross 1995) ${ }^{5}$, although the pivot concept has been applied more broadly than 'focus' and allows a language description to be applied to a wide variety of structural relations (see also Roberts 1995).

The occurrence of two or more transitive clause types in Pendau presents the same kind of problem that has been encountered in Philippine-type languages ${ }^{6}$ (and Western MalayoPolynesian languages in general). The Philippine-type systems have provided an ongoing debate concerning competing analyses (for example, actor focus, goal focus, instrument focus, locative focus, versus active as opposed to various passive types versus ergativity, etc.). ${ }^{7}$ The pivot will be considered below as a candidate for subject-hood in Pendau (§6.4.1). What is clear in Pendau, is that the pivot is indicated by the word order and that the verbal prefix designates which argument (or macrorole) is linked to the pivot (§12.3).

Different linguistic theories agree that there are two important contrasting zones (or layers) in a clause (Figures 6.1-2). ${ }^{8}$ One is the core zone where core arguments of the

[^56]clausal predicate appear and are necessary. ${ }^{9}$ The second zone is the non-core zone which is usually an optional feature of clause constructions. Non-core arguments that occur in this zone are often referred to as oblique nominal phrases, and are usually optional or supplementary to the clausal predicate (although even in Pendau there are some exceptions). ${ }^{10}$

Turning now to noun phrases, Pendau has two pronoun sets and a noun phrase marking system as seen in Figure 6.3. Noun phrases are either common nouns or proper nouns (§7.5.1). There are two sets of pronouns and noun phrase markers, which I will refer to as absolute and genitive. The distribution of the absolute and genitive NPs in Pendau is different from the expected traditional usage. Genitive NPs are used in two distinct syntactic positions (Figure 6.3): 1) genitive noun phrases, and 2) the A argument of inverse voice. ${ }^{11}$ Absolute NPs (note that this is not absolutive) are used in all other core argument positions (that is, 'elsewhere'), including second objects of ditransitive clauses (except instrumental NPs), the objects of prepositional phrases, and in both argument positions of equative clauses and copula clauses.

|  |  | Absolute | Genitive ${ }^{12}$ |
| :--- | :--- | :--- | :--- |
| SG. | $\mathbf{1}$ | $a^{\prime} u / h a^{\prime} u$ | $=' u \quad$ ('u-, no'u-) |
|  | $\mathbf{2}$ | oo | $=m u \quad(m u-)$ |
|  | $\mathbf{3}$ | io | =nyo |
| PL. | $\mathbf{1}$ INC | ito | =to |
|  | $\mathbf{1}$ EXC | ami | mami |
|  | $\mathbf{2}$ | emu | miu |
|  | $\mathbf{3}$ | jimo | nijimo |
| Proper nouns | si= | ni= |  |
| Common nouns | $\varnothing /(u=)$ | nu= |  |

Figure 6.3. Pronouns and noun phrase markers in Pendau
The manner of grouping S , A , and P is often used to determine the grammatical subject in many languages. The S/A grouping is generally known as nominative-accusative, and the S/P grouping is generally known as absolutive-ergative type languages (Dixon 1994, Payne 1997). However, this presents a dilemma in analysing Pendau since there are two basic transitive clauses in Pendau and both S/A and S/P groupings occur.

Since there are two transitive clause types the usual alternatives for using nominative/accusative or ergative/absolutive terminology breaks down in a systematic way. One early attempt that I made to solve this dilemma was to follow the direct/inverse voice system used in Algonquian languages with the associated terms proximate and obviative (Quick 1997a). However, in hindsight this terminology breaks down rather

[^57]quickly due to the same distributional reasons that nominative and ergative terminology does. Although nominative has often been used for the cognate case forms in other Western Malayo-Polynesian languages (for example, Tagalog in Kroeger 1993, Tombonuo in Clayre 1996, Chamorro in Cooreman 1983:432), it would be misleading to use the same terminology for the situation in Pendau. This is because 1) one NP marking set, here called 'absolute', carries very little information about case (since word order handles this in Pendau without ambiguity), and 2) the distinction within each set could be looked at as working functionally more as an article opposition, that is, it is between common nouns and proper nouns. Therefore the term 'absolute' has been adopted (following a suggestion from Avery Andrews, pers. comm.) for identifying the noun phrase marking case (or article) that appears in every other possible position except for the genitive case and its corresponding use to mark agent of the inverse voice. In fact there is a precedent for the use of absolute in Turkish (Lewis 1967). Lewis (1967:28) states: ${ }^{13}$

The simplest form of a noun, with no suffixes, is termed the absolute case; it is used not only for the nominative and vocative but also for the indefinite accusative.

### 6.3 Word order (constituent order)

The four etic transitive word orders AVP/VPA and PVA/VAP can be conflated into two emic word orders if we assume that the similarity of pivot and non-pivot positions (or flex and rigid positions) captures an emic word order pattern (Figure 12.1 and Figure 12.5). The best candidates for these emic word patterns are the grammatical relations subject and object. This would mean that there are two basic transitive patterns we can initially posit as SVO and VOS (the pragmatic differences for the word order differences are discussed in $\S 17.4$; see also Quick forthcoming). These two word orders in fact correlate with the single argument positions of intransitive clauses. We can now equate the abbreviation of single (S) argument with the subject (S) of intransitive clauses with preposed SV and postposed VS word order positions. Evidence and definitions for the grammatical relation of subject and other grammatical relations are presented in the following section.

### 6.4 Grammatical relations in Pendau

The definition and evidence for grammatical relations is presented in the sections below. It is important to note that the grammatical functions S, A, and P are distinct from the grammatical relations subject and object. In addition to identifying subject and object as grammatical relations in Pendau, the second object will be introduced as a third grammatical relation used in ditransitive clauses.

### 6.4.1 Subject

### 6.4.1.1 Types of evidence for subjecthood

The subject can be defined as the syntactic clause's pivot. The initial evidence is provided by the conflation of the etic word order into the emic word order ( $\S 6.3$ and §12.3). This is based on identifying the pivot as a flex position versus the rigid post-verbal

[^58]non-pivot position. This conclusion is reached via the fact that the verb prefix assigns a semantic role to the NP which has variable or a flexible word order position together with the fact that the etic word order difference between active and inverse can be captured or conflated as one emic word order (see $\S 12.3$ for more detailed). This evidence indicates that if there is a VP in Pendau, then the VP must be the verb and its dependent argument in the rigid position (see Quick forthcoming). This also points to the flex position as being the pivot/subject. This notion of subject is supported by what Manning (1996) calls 'grammatical subject' in contrast to the 'a-structure subject'.

Further evidence which supports the identification of a grammatical subject position comes from: ${ }^{14}$ 1) quantifier float (§6.4.1.2), 2) relativisation (§6.4.1.3), 3) equi NP deletion in complement clauses (§6.4.1.4), and 4) distributive infix which requires plural agreement (§6.4.1.5). These will each be discussed in the following sections.

### 6.4.1.2 Quantifier float

Kroeger (1993:22) states that a floating quantifier always quantifies the nominative argument in Tagalog and that 'This same pattern holds true in a number of other Philippine-type languages: floating quantifiers always modify the nominative argument.' And Schachter (1996:4) has stated:

As first observed in Schachter and Otanes (1972), the quantifier lahat 'all' may in certain cases be said to 'float' away from the noun phrase which it is understood as quantifying and occur (with an optional preceding 'linker' morpheme) in a position immediately after the verb. The quantifier in such cases is always understood as quantifying - and thus having floated' away from-the Nominative NP.

This can be also shown to be true in Pendau. The pivot as independently identified by word order and the other tests matches the NP that the floating quantifier in Pendau modifies. Therefore I conclude that the topic and the pivot are the same thing in Pendau. Examples (5) and (6) are originally from the same sentence of a text (slightly modified for heuristic purposes). ${ }^{15}$

| Too | uo | nitinjung | jojoo | nutatambuang. |
| :--- | :--- | :--- | :--- | :--- |
| too | 'uo | ni-tinjung | jojoo | nu=tatambuang |
| person | yonder | IV/RE-sting | all | CN/GE=bumblebee |

'The bumblebees stung all of those people over there.'
[EN98-002.21/fktale.doc by siDidi]

[^59]| (6) | Jojoo | too | uo | niratinjunan | nutatambuang. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| jojoo | too | 'uo | ni-ra-tinjung-an | nu=tatambuang |  |
| all | person | yonder | IV/RE-ITV-sting-ITV | CN/GE=bumblebee |  |

'The bumblebees repeatedly stung all of those people over there.'
[EN98-002.22/fktale.doc by siDidi]
Examples (7) and(8) were elicited and show that jojoo 'all' can be in various word order positions, and maintain the same meaning as in the previous examples. Example (9) demonstrates that jojoo 'all' also modifies the subject of the intransitive construction.

| Jojoo | too | uo | nitinjung | nutatambuang. |
| :--- | :--- | :--- | :--- | :--- |
| jojoo | too | 'uo | ni-tinjung | nu=tatambuang |
| all | person | yonder | IV/RE-sting | CN/GE=bumblebee |

'The bumblebees stung all of those people over there.'

| Nitinjung | jojoo | nutatambuang | too | uo. |
| :--- | :--- | :--- | :--- | :--- |
| ni-tinjung | jojoo | nu=tatambuang | too | 'uo |
| IV/RE-sting | all | CN/GE=bumblebee | person | yonder |

'The bumblebees stung all of those people over there.'
(9) Jimo neriing jojoo.

Jimo $N$-pe-riing jojoo
3PL/AB RE-SF/DY-bathe all
'They all bathed.'
[libur.pin 006]

### 6.4.1.3 Relativisation

Relative clauses are marked by the relative clause marker to $=(\mathrm{RM})$. Relative clauses can take any syntactic shape that a main clause can take (other possibilities will be discussed in §15.5). Any NP in core or non-core argument position can be relativised. Relativised NPs always form the head of a relative clause according to the voice or type of predicate. For example, the head of an active voice clause construction cannot be the P argument, but must be the A argument. This fact of relativisation indicates that the head of a relativised NP has a special grammatical status which will be referred to as the 'pivot'. When this pivot is assigned a syntactic-semantic argument it must be one that is required or allowed by the predicate of the relative clause. The same test for determining the pivot is also often used as evidence for identifying a grammatical subject (see $\S 15.5$ for more details).

The common argument of the matrix clause and the relative clause is the pivot of the relative clause. The pivot of the matrix clause may or may not be the argument it shares with the relative clause. The common argument therefore has one function in the matrix clause as either pivot or non-pivot, and a second function as the pivot of the relativised NP. Example (10) shows that the non-pivot P argument may be relativised and demonstrates that the relative clause is in the inverse voice. Example (11) shows that the relative clause itself can be in active voice (in the text this is a complete sentence).

| (10) | Jari | jimo | nongkomung | loka | [toreinang | nijimo.] |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| jari | jimo | N-pong-'omung | loka | to=ro-inang | nijimo |  |
|  | so | 3PL/AB | RE-SF/PT-carry | banana | RM=IV/IR-eat | 3PL/GE |

'So they took the bananas that they would eat.'
(11) A'u [tonongolinyo vea.]
a'u to=N-pong-oli=nyo vea
1SG/AB RM=RE-SF/PT-buy=3SG/GE raw.rice
'I was the one that bought him/her rice.'
Example (12) shows the pivot of an inverse voice transitive clause is relativised. Example (13) shows the single argument of an intransitive clause is relativised.
(12) Ai alaenyo [toneriri uo nipoyoginyo.]
ai 'alae=nyo to=no-riri 'uo ni-poyog-i=nyo
but body=3SG/GE RM=ST/RE-yellow yonder IV/RE-charcoal-DIR=3PL/GE
'But he covered his yellow (gold) body with charcoal.'
(13) Naate manu' [toniagarang uo.]
no-ate manu' to=ni-agarang 'uo
ST/RE-die chicken RM=IV/RE-love yonder
'The chicken that he loved died.'

### 6.4.1.4 Complements-equi subject deletion

Equi NP deletion can be used to test subjecthood. If the NP of a complement clause is coreferential with a NP in the matrix clause it should be possible to omit the coreferential NP, showing that the NP it cross-references is the subject of the matrix clause.

Examples (14) and (15) demonstrate that the first person pronoun can be omitted from the complement clause since it is clearly coreferential with $A$ ' ' $1 \mathrm{SG}^{\text {' }}$ in the matrix clause. This can be compared to example (16) in which the pronoun io ' 3 SG ' is not coreferential with the participant in the matrix clause, and is required in order to prevent potential ambiguity (note that (14) cannot have the meaning 'him' because it is ungrammatical).

| A'u | meingka | [Ø | raakali | miu.] |
| :--- | :--- | :--- | :--- | :--- |
| a'u | M-pe-ingka | $\varnothing$ | ro-akal-i | miu |
| 1SG/AB | IR-SF/DY-fear | 1SG/AB | IV/IR-deceive-DIR | 2PL/GE |

'I fear that you will deceive me.'
*'I fear that you will deceive him.'
[nagarang 033/EN98-003.9]
(15)

| A'u | meingka | [a'u | raakali | miu.] |
| :--- | :--- | :--- | :--- | :--- |
| a'u | M-pe-ingka | a'u | ro-akal-i | miu |
| 1SG/AB | IR-SF/DY-fear | 1SG/AB | IV/IR-deceive-DIR | 2PL/GE |

'I fear that you will deceive me.'
[EN98-003.9]

```
(16) A'u meingka [io raakali miu.]
a'u M-pe-ingka io ro-akal-i miu
1SG/AB IR-SF/DY-fear 3SG/AB IV/IR-deceive-DIR 2PL/GE
'I fear that you all will deceive him.'
[EN98-003.9]
```

Example (17) contrasts the use of an active voice transitive clause in the complement clause with example (14) which uses an inverse voice transitive clause. In example (17) the pivot jimo ' $3 \mathrm{PL} / \mathrm{AB}$ ' is omitted in the complement clause, and in example (18) the pivot $a$ ' $u$ ' $1 \mathrm{SG} / \mathrm{AB}$ ' is omitted. So in both of these examples the pivot NP is omitted since it is coreferential with the matrix clause's pivot NP. Example (18) shows the matrix clause is an inverse voice clause construction and the complement clause is in the active voice construction in which the null pronoun has to co-refer to the subject of the matrix clause.

(17) | Jimo | melolo | akal |
| :--- | :--- | :--- |
| jimo | M-pe-lolo | akal |
|  | 3PL/AB | IR-SF/DY-search |
| trick |  |  | the

| [Ø | momate | rapi | nigibang.] |
| :--- | :--- | :--- | :--- |
| $\varnothing$ | M-pong-pate | rapi | ni=gibang |
| 3PL/AB | IR-SF/PT-kill | spouse | PN/GE=monitor.lizard |

‘They looked for a way (lit. trick) to kill the monitor lizard's wife.'
[gibang.pin 098/EN98-003.10]

| (18) | A'u | nirait | nijimo | [Ø | nangangka | doi' | nijimo.] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $a ' u$ | ni-rait | nijimo | $\varnothing$ | $N$-pong-angka | doi' | nijimo |
|  | 1SG/AB | IV/RE-accuse | 3PL/GE | 1SG/AB | RE-SF/PT-steal | money | 3PL/GE |
|  | 'They ac | sed me (=Ø) | stealing | their mo |  |  | ugmalei. |

### 6.4.1.5 Distributive infix requires plural argument

The distributive infix -ong- requires that the A or S arguments of a pivot be plural individuals who each participate separately in the action or state of the verb. The distributive infix -ong- is important theoretically because the A or S arguments require agreement with this infix, and this is additional evidence that the A or S is the grammatical subject. Unfortunately, -ong- does not occur in the inverse construction. Examples (19) and (20) show the plural pronoun jimo 'they (3PL.AB)' in clauses with and without the distributive prefix (see §13.4.1.1 for more discussion on distributives).
(19) Jimo melolo bau.
jimo M-pe-lolo bau
3PL/AB IR-SF/DY-search fish
‘They will look for fish.'
[EN97-004.19]
(20) Jimo mengelolo bau
jimo M-[ong]-pe-lolo bau
3PL/AB IR-DIST-SF/DY-search fish
'They each were looking for fish.'
[EN97-004.19]

Examples (21) and (22) contrast an intransitive and a transitive construction which both use -ong-.

| (21) | Tarus | nengelampa | too | dea |
| :--- | :--- | :--- | :--- | :--- |
| tarus | N-[ong]-pe-lampa | too | dea | 'uo |
|  | continue | RE-SF/DY-DIST-travel | person | many | yonder

'(Each person in) the crowd continued walking.' [mdtext4.doc]

| (22) | Jimo | mongongkomung | asu. |
| :--- | :--- | :--- | :--- |
|  | jimo | M-[ong]-pong-'omung | asu |
|  | 3PL/AB | IR-DIST-SF/PT-carry | dog |

‘They each took dogs (to go hunting).'
[EN97-004.19]
Example (23) provides morphological evidence that the $S_{P}$ of a stative verb is a subject. Therefore by analogy of the parallel form and constructions that the P argument of the inverse voice construction has, the P argument may be a grammatical subject

```
(23) Saba' too ri'uo mongoboyong.
    saba' too ri='uo mo-[ong]-boyong
    because person LOC=yonder ST/IR-DIST-naughty
    'Because each of those persons there is naughty.'
```

        [miracle1.pin 144]
    
### 6.4.2 Object

Object can be defined as the core argument which follows the verb in the 'rigid' position. This is expanded in $\S 12.1$ and $\S 12.3-4$. The object can also be identified as the direct object or the first object following Andrews (1985:122-123).

Lexical Functional Grammar (LFG) is one theory that allows the A argument to stand as a core argument in the grammatical object position. Kroeger (1993) demonstrates that Tagalog may have an actor as the non-pivot core argument for voice such as objective voice (this correlates with inverse voice in Pendau). Manning (1996) also makes a similar analysis for several languages. It is interesting that Manning's analysis supports what he calls 'the inverse analysis' (Manning 1996:39). His analysis supports Givón's view (1994) and the direction I have taken in this analysis (see especially Chapter 12). ${ }^{16}$

### 6.4.3 Second object

The second object can be defined as the grammatical relation which is a third core argument which is not the subject or the object. This may variously be expressed by several semantic roles including gift, theme, instrument, etc. Second objects can appear in either active voice or inverse voice clause constructions ( $\S 6.6 .4$ and $\S 10.2-3$ ). ${ }^{17}$ The second object position is more free than the subject and object positions (§10.3.6).

[^60]
### 6.5 Verbless clauses

### 6.5.1 Types of verbless clauses

Pendau has two types of verbless clauses: 1) equative noun clauses (§6.5.2) and 2) prepositional phrases as predicates ( $\S 6.5 .3$ ). Although these clauses have no verb there is a simple predication indicated by the concatenation of two noun phrases. See Figure 6.4 for the structure for the two types of verbless clauses in Pendau.

|  | Subject | Predicate |
| :--- | :--- | :--- |
| Equative clause | Noun phrase | Noun phrase |
| Oblique clause | Noun phrase | Prepositional phrase |

Figure 6.4. Structure of verbless clauses
One test for indicating where the predicate noun phrase begins is the position and use of adverbs. For example, negatives usually precede verbs, so one could designate the following NPs of equative and oblique noun phrases as the predicate (that is, a predicate nominal, see Payne 1997). An alternative is to assume that the predication is simply implied (Andrews 1985:67).

### 6.5.2 Equative noun clauses

Equative clauses simply equate the identity of one noun phrase with that of the other noun phrase (also see §6.6.3.2 for copula clauses that have a similar function). Examples (24)-(27) show each equated NP in brackets.

| $\left[\begin{array}{llll}\text { Tope } & \text { nubuut } & \text { uo }\end{array}\right.$ | $[$ buut | sirunat. $]$ |  |  |
| :--- | :--- | :--- | :--- | :--- |
| tope | nu=buut | 'uo | buut | sirunat |
| name | $\mathrm{CN} / \mathrm{GE}=$ mountain | yonder | mountain | Sirunat |
| 'The name of that mountain is Sirunat Mountain.' |  |  |  |  |

[ceku02.jdb 018]
(25)

| [Amimo | moo | [too | nuPendau.] |
| :--- | :--- | :--- | :--- |
| 'ami $=$ mo | moo | too | nu $=$ Pendau |
| 1PL.EXC/AB=COMP | here | person | CN/GE=Pendau |

'We here are Pendau people.' [jptext8.doc]
(26) Nipeilu nijimo, ["Oo moo] [musu?"]
ni-peilu nijimo 'oo moo musu
IV/RE-say 3PL/GE 2SG/GE here enemy
'They said, "Are you an enemy?'
(27) $\left.\begin{array}{lllll}{[\text { Ai }} & \text { jimo }\end{array}\right] \quad\left[\begin{array}{lll}\text { sura } & \text { topengkani } & \text { manusia. }] \\ \text { ai } & \text { jimo } & \text { sura } \\ \text { to-pe-ngkani } & \text { manusia } \\ \text { but } & \text { 3PL/AB } & \text { only } \\ \text { AGNM-SF/DY-eat } & \text { people }\end{array}\right.$
'But they were only people eaters.'

### 6.5.3 Prepositional phrases as predicates

Prepositional phrases can form 'locative' predicate clauses (Payne 1997:121-123), which in Pendau begin with either the locative ri, the ablative ila, or the comitative sono. These verbless clauses are similar to equative noun phrases in their configurational structure, that is, the subject NP precedes a verbless predicate phrase (see Figures 6.1 and 6.4 and compare to $\S 6.5 .2$ ). The argument noun phrase precedes the prepositional phrase, and the noun phrase in the prepositional phrase identifies the location of the first noun phrase (brackets are used to indicate the different constituents).

### 6.5.3.1 Locative predicates

Locative predicates are given in (28)-(31).
(28) [Joo sura tatambuang dea] [rilalongonyo].
joo sura tatambuang dea ri=lalong=nyo
however only bumblebee many LOC=inside=3SG/GE
'However there were only bumblebees inside it.'
[fktale01.txt 034]
(29) Totolu mbengimo [io] [ri'uo.]
totolu mbengi=mo io ri='uo
three night=COMP 3SG/AB LOC=yonder
'He was there for three nights.'
[horse.pin 1063]
(30) $[$ Ami $]$ ri'uo] sombulang.
'ami ri='uo so-ng-bulang
1PL.INC/AB LOC=yonder ONE-LIG-month
'We were there for one month.'
[jo'ong.int 010]
(31) [Nyaa oo] [ritolo], jaga oo rite'e.
nyaa 'oo ri=tolo jaga 'oo ri=te'e
don't $2 \mathrm{SG} / \mathrm{AB}$ LOC=front guard $2 \mathrm{SG} / \mathrm{AB}$ LOC=back
'Don't you go to the front, you guard the back.'
[horse.pin 348-350]

### 6.5.3.2 Ablative predicates

Ablative predicates are given in (32)-(34).
(32)

| Neburamo | juragang | uo, | ["a'u | moo $]$ | [ila | Mandar | Sendana."] |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| N-pe-bura=mo | juragang | 'uo | a'u | moo | ila | M. | S. |
| RE-SF-speak=COMP | captain | yonder | 1SG/AB here | ABL | M. | S. |  |
| 'The captain spoke, "I am from Mandar Sendana." |  |  | [mdtext15.txt 074] |  |  |  |  |

(33)

| $[$ Sapa | kareva $]$ | [ila | mata | nueleo?] |
| :--- | :--- | :--- | :--- | :--- |
| sapa | kareva | ila | mata | nu $=$ eleo |
| what | news | ABL | eye | CN/GE=sun |

'What's the news from the sun (lit. eye of the sun)?'
[mdtext14.txt 061]

Stories and letters often end with only a noun phrase 'from so-and-so', as in example (34). They indicate the authorship of the letter or story. They can be considered as locative predicates in which the subject that is implied is implicitly the story or letter, for example, 'this letter is from so-and-so'.
(34) Ila siYusup Piri.
ila si=Yusup Piri
ABL PN/AB=Joseph Piri
'From Joseph Piri.'

### 6.5.3.3 Comitative predicates

Comitative predications can be formed in the same way as other obliques, as in (35) and (36). Example (36) illustrates that the comitative predication can be negated.

| $[$ Moo | boto'o'u] | [sono | $e m u]$. |
| :--- | :--- | :--- | :--- |
| moo | boto'='u | sono | $e m u$ |
| this | word=1SG/BE | COM | 2PL/AB |

'This is my word for/to you.'
[nagarang.pin 038]
(36)

| $[$ Siinanyo $]$ | [ndaupo | sono | rapinyo.] |
| :--- | :--- | :--- | :--- |
| si $=$ ina $=$ nyo | ndau $=$ po | sono | rapi $=$ nyo |
| $\mathrm{PN} / \mathrm{AB}=$ mother $=3 \mathrm{SG} / \mathrm{GE}$ | $\mathrm{NEG}=\mathrm{CONT}$ | COM | spouse $=3 \mathrm{SG} / \mathrm{GE}$ |

'His mother was not yet with his spouse.'
[gibang.pin 081]

### 6.6 Verbal clauses

### 6.6.1 Introduction

Verbal clauses are distinct from non-verbal clauses in that the verb subcategorises one or more core arguments, as indicated in Figure 6.5. This section will discuss clauses according to how many arguments may appear within the clause. Single argument clauses (intransitive clauses) will be treated in §6.6.2, and clauses with two arguments (including proper transitive clauses) in $\S 6.6 .3$, and ditransitive clauses in $\S 6.6 .4$. Note that a copula is not a transitive verb but that it patterns with the active voice transitive in that both of its arguments receive absolute case marking (§6.6.3.2). Also note that three of the verb classes, dynamic, denominal, and locomotion, may have either one or two arguments. In Chapter 9 these are called 'verbs with mixed transitivity', since it usually depends on the semantics of the specific verb in the class whether the verb is an intransitive or a transitive. Finally, the directional verbs subcategorise two arguments, but sometimes the second argument that it subcategorises is an oblique phrase.

Pendau has two word orders: SVO/SV and VOS/VS. SVO/SV might be called the neutral word order (following Dixon 1994 and Andrews 1985:72) based on the fact that it is more often cited in elicitation. ${ }^{18}$ Frequency counts show both word orders as occurring significantly, however SVO/SV occurs significantly more often than VOS/VS (§17.4). Typologists should note with caution that at a different level Pendau actually has four basic

[^61]word order possibilities for transitives: AVP, VPA, PVA, and VAP. Other patterns and the rationale for the word order conflation and its relationship to the identification of the pivot are discussed in more detail in Chapter 12.

| Verb type | 1 argument | 2 arguments | 3 arguments |
| :--- | :--- | :--- | :--- |
| Active voice <br> Inverse voice | no | yes | yes |
| Middle voice | no | yes | no |
| Copula | no | yes | no |
| Factive | no | yes | no |
| Dynamic | yes | yes | no |
| Denominal | yes | yes | no |
| Locomotion | yes | yes (or oblique) | no |
| Directional | yes | yes (or oblique) | no |
| Postural | yes | no | no |
| Stative | yes | no | no |
| Possessive 'have' | yes | no | no |
| Existential | yes | no | no |

Figure 6.5. Number of core arguments that verbs subcategorise

### 6.6.2 Intransitive clauses

This section presents an overview of the four types of clauses that have a single argument, each of which can be considered to be an intransitive clause. These are existential clauses (§6.6.2.1), possessive 'have’ clauses (§6.6.2.2), actor oriented intransitives (§6.6.2.3), and undergoer oriented intransitives (§6.6.2.4).

### 6.6.2.1 Existential clauses

Existential clauses use the existential non-affixed verb diang 'is, to be' ${ }^{19}$ and may be interpreted as intransitive clauses since they have a single argument. One of the main functions of diang clauses is to present new or surprising information, or an indefinite noun phrase. Andrews (1985:80) calls this 'presentational articulation.' Examples (37)(41) illustrate the use of existential clauses, and also show that the single argument can be pre-verbal or post-verbal, just like other intransitive clauses.

Diang bulan.
diang bulan
EXIS moon
'There's the moon.'
[horse.pin 730]
(38) Diang sobua avu-avu.
diang so-bua avu-avu
EXIS ONE-CLSF k.o.fish
'There was one fish (species).'
[jptext04.jdb 039]

[^62](39) Ono bai uo ndau diang siopunyo.
ono bai 'иo ndau diang siopu=nyo
if like yonder NEG EXIS owner=3SG/GE
'If that's how it is, then there isn't any owner.'
[jptext05.jdb 028]
(40) Diang moje tetelato.
diang moje tetela=to
EXIS also corn=1PL.INC/GE
'There is also our corn.'
[jptext05.jdb 031]
Examples (41) and (42) also illustrate that an existential clause may have an oblique locative noun phrase. The locative noun phrase is not a locative predicate. However, they do show that the existential verb may require a deictic situation so that they might be thought of as analytic existential locative constructions. T. Laskowske (pers. comm.) says that Seko Padang (a language from South Sulawesi) has a distinct locative existential verb.

$\left.\begin{array}{llllllll}\text { (41) } \begin{array}{llllllll}\text { Too } & \text { ntaninyo } & \text { ndau } & \text { diang } & \text { rimoo. }\end{array} \\ \text { too } & \text { ntani=nyo } & \text { ndau } & \text { diang } & \text { ri=moo } \\ \text { person } & \text { different=3SG/GE } & \text { NEG } & \text { EXIS } & \text { LOC=this }\end{array}\right]$

Example (43) illustrates that a clause can function as the nominal phrase. Example (44) illustrates that in certain discourse contexts the existential verb may be omitted. The presence of the negative ndau 'no' in contexts such as this makes the existential verb diang extremely predictable.
(43) Diang [nolumumpata' bau sombalan bai so'uya insang.]

Diang $N$-po $1_{1}$-[um]-lumpat-a' bau sombalan bai so-'uya insang.
EXIS RE-SF/LCM-TEL-jump-TZ fish sailfish like ONE-why time
'There were sailfish that jumped like several times.' [jptext04.jdb 041]
(44) Tutuunong pabia-bianyo ndaupo.

Tutuunong pabia-bia=nyo ndau=po
swimming.hole first-RED=3SG/GE NEG=CONT
'The swimming hole was not yet there in the beginning.'
[nalalo.pin 154]

### 6.6.2.2 Possessive clauses

Possessive clauses create a simple predication with the prefix 'o- 'have' affixed to a noun base (Comrie 1985:346-347, Heine 1997, Taylor 1999). Although these are interpreted here as minor verbs because a predication is created with this prefix, they also function to derive nouns from verbs. Regardless of whether this prefix combines with a verb or noun root, when an augmented stem forming prefix precedes the stem it is a
denominal prefix ( $\S 9.3 .3 .2$, and $\S 9.3 .5$ ). For nominal derivations using this prefix see §7.4.1, and for attributive (genitive) possession see §7.6.4. Possessive verbs are similar to existential verbs in that there is no modality required. Possessive clauses are structurally similar to equative clauses in that both consist of two coordinate NPs (see Fukuda 1997:54 for examples in Eastern Bontoc), the first of which is the argument (the possessor), and the second is the predicate (the possessee). Possessive predicates all occur with the harmonic prefix ' $o$ - (which has the allomorphs ' $e$ - and ' $a$-, see §3.5.7.2 and §7.4.1). In these clauses, the first NP is a possessor while the second phrase expresses what is possessed (Payne 1997:111-113, 126-127). Examples (45)-(48) illustrate possessive clause constructions with the demarcation of the separate phrases indicated with brackets. ${ }^{20}$
(45) $[A ’ u] \quad\left[\begin{array}{ll}n d a u & e p i s o .]\end{array}\right.$
a'u ndau 'o-piso
1SG/AB NEG HAVE-machete
'I don't have a machete.' [asu2.pin 066]
(46) [Saba' a’u moo] [mono esiama mono esiina.]
saba' a'u moo mono 'o-siama mono 'o-siina
because 1SG/AB this still HAVE-father still HAVE-mothers
'Because I here still have a father and still have a mother.
[horse.pin 766]
(47)

| $[$ Saba' | ito $]$ | [ndau | ounga. $]$ |
| :--- | :--- | :--- | :--- |
| saba' | 'ito | ndau | 'o-unga |
| because | 1PL.INC/AB | NEG | HAVE-child |

'Because we don't have a child.' [nalalo.pin 006]
(48) [Bengkel moje] [ndau otope.]
bengkel moje ndau 'o-tope
girl also NEG HAVE-name
'The girl also didn't have a name.'
[nalalo.pin 129]
The possessive prefix is further illustrated in (49) and (50). Example (50) illustrates the possessive clause functioning as the NP of another clause. ${ }^{21}$
(49) [Ai unga uo] [ndaumo esiina], [ndaumo esiama]. ai unga 'uo ndau=mo 'o-siina ndau=mo 'o-siama
but child yonder NEG=COMP HAVE-mother NEG=COMP HAVE-father
'But the children no longer had a mother, and no longer had a father.' [mdtext13.txt 001]

[^63]| (50) $[[$ Soung | too $]$ | $[$ ebengga $]]$ | nonyambalemo | bengga. | $[[\mathrm{Too}]$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| soung | too | 'o-bengga | N-pong-sambale=mo | bengga | too |
| one | person | HAVE-buffalo | RE-SF-butcher=COMP | buffalo | person |


| [ajaping]] | nonyambalemo | japing. | [[Too] | [amanu']] |
| :--- | :--- | :--- | :--- | :--- |
| 'o-japing | N-pong-sambale=mo | japing | too | 'o-manu' |
| HAVE-cow | RE-SF-butcher=COMP | cow | person | HAVE-chicken |


| nonyambalemo | manu'. | $[[\mathrm{Too}]$ | ['ebembe $]]$ |
| :--- | :--- | :--- | :--- |
| N-pong-sambale=mo | manu' | too | 'o-bembe |
| RE-SF-butcher=COMP | chicken | person | HAVE-goat |
|  |  |  |  |
| nonyambalemo | bembe. |  |  |
| N-pong-sambale=mo | bembe |  |  |
| RE-SF-butcher=COMP | goat |  |  |

'One person having/with a water buffalo butchered a water buffalo. A person having/with a cow butchered a cow. A person having/with a chicken butchered a chicken. A person having/with a goat butchered a goat.'
[miracle1.pin 005-006]

### 6.6.2.3 Actor oriented intransitive clauses

There are four verb classes which have actor oriented intransitive verbs: 1) postural, 2) dynamic, 3) denominal, and 4) locomotion. Only the first class, postural verbs, is intransitive over the whole class, whereas the last three-dynamic, denominal, and locomotion-are mixed, that is some verbs may be intransitive and some may be transitive. Verbs in these three classes vary as to whether they subcategorise one or two arguments (and in fact the second argument in some cases functions like noun incorporation of the verb-see §9.3.6). Intransitive verbs with single arguments are presented in examples (51)-(53).
(51)

| Sampanyo | jimo | neosa. |
| :--- | :--- | :--- |
| sampanyo | jimo | $N$-pe-osa |
| after.that | 3PL/AB | RE-SF/DY-rest |

'After that they rested.' [nangkait.pin 058]
(52) Ila mai uo nelampamo olongian uo
ila mai 'иo $N$-pe-lampa=mo 'olongian 'иo
from come yonder RE-SF/DY-travel=COMP king yonder
'And after that the king left.'
[miracle1.pin 072]
(53) Ito moo no-tagu=mo.
'ito moo N -po ${ }_{1}$-tagu $=$ mo
1PL.INC/AB this RE-SF/DE-friend=COMP
'We here have now become friends.'
[nangkait.pin 003]
Example (54) illustrates both postural and locomotion verb clauses in the same sentence.

| (54) Paey io nopo'oro, | paey | noluminjo' |  |
| :--- | :--- | :--- | :--- | :--- |
| paey io | N-popo-'oro | paey | N-po 1 -[um]-linjo'. |
| and.then | 3SG/AB RE-SF/POS-stand | and.then | RE-SF/LCM-TEL-run |

'And then he stood up, and then he began to run.'

### 6.6.2.4 Undergoer oriented intransitive clauses

Stative verbs form intransitive clauses in which the single argument is the undergoer (that is, the $\mathrm{S}_{\mathrm{P}}$ ). Examples (55)-(57) illustrate typical uses of stative verbs. Example (56) could either be an independent clause or function as a nominal constituent of a larger clause.
(55) Joo jalang ri'uo ndau nombosi'
joo jalang ri='uo ndau no-mbosi'
however road LOC=yonder NEG ST/RE-good,

| marate' | jalang | ri'uo. |
| :--- | :--- | :--- |
| mo-rate' | jalang | ri='uo |
| ST/IR-wicked | road | LOC=yonder |

'However that road is not good, that road is a terrible road.'
(56) Aniong neriri.
aniong no-riri
cooked.rice ST/RE-yellow
'The cooked-rice is yellow.' or: 'Yellow rice.'
(57) Io nanabu ridagat ringanga nuantulang.
io no-nabu ri=dagat ri=nganga nu=antulang
3SG/AB ST/RE-fall LOC=ocean LOC=mouth $\quad \mathrm{CN} / \mathrm{GE}=$ giant.clam
'She fell into the ocean into the mouth of a giant clam.' [gibang.pin 111]

### 6.6.2.5 Undergoer oriented intransitive clauses with adjunct agents

The middle voice construction (§9.4.2.2) uses a stative verb construction (§6.6.2.4) in conjunction with an adjunct agent (58) and (59).

Aniong notou' nijimo.
aniong no-tou' nijimo
cooked.rice ST/RE-finish 3PL/GE
'The cooked-rice was finished by them.'

| (59) | Jari | tomomo'upu | moo | asi |
| :--- | :--- | :--- | :--- | :--- | jomo


| noponu | nulungkeer | nululu' | bu'unyo. |
| :--- | :--- | :--- | :--- |
| no-ponu | nu=lungkeer | nu=lulu' | bu'u=nyo |
| ST/RE-full | CN/GE=slime | CN/GE=limp | bone=3SG/GE |

'So the grandson, too bad, was still full of slime and his bones were limp.'
[tambao 061]
In Pendau an agent (or 'effector') can be considered to somehow 'effect' the state of the verb. Thus the state of the undergoer becomes 'affected' in some way. The main thing to notice here is that the agent in a middle voice clause is marked syntactically the same way as the agent in the inverse voice construction. Although a case is made that the A (or actor) of inverse voice is a core argument syntactically and semantically, for stative verbs with this 'middle voice' it is better to understand the A argument as an adjunct. This point will be discussed in more detail in chapter 9. Although it is not very common, the middle voice is productive (§9.4.2.2).

### 6.6.3 Clauses with two arguments

This section presents two clause types which have two core arguments. These are the transitive clauses (§6.6.3.1) and the copula clauses (§6.6.3.2).

### 6.6.3.1 Transitive clauses

Pendau has two distinct primary transitive clause types, active and inverse constructions. Examples (60) and (61) contrast these respectively with the nong- verb type and the ni- verb type (but the two voice constructions are not restricted to these two prefixes). This section shows examples of basic transitive clauses for both the active voice and the inverse. See Chapter 12 for discussion on voice and the inverse construction.
(60) Ami nonuju jimo.
'ami $N$-pong-tuju jimo
1PL.EXC/AB RE-SF/PT-send 3PL/AB
'We sent them.'

| (61) | Ami | nituju | nijimo. |
| :--- | :--- | :--- | :--- |
|  | 'ami | ni-tuju | nijimo |
|  | 1PL.EXC/AB | IV/RE-send | 3PL/GE |
|  | 'They sent us.' |  |  |

In addition to these two primary transitive clause types (which are associated with the pong- stem former), transitive clauses may also be formed with verb classes which are based on other stem forming classes as well (see §5.6.2 and Chapter 9): $p o_{1}$ - (factive), $p o_{1}$ - (denominal), pe- (dynamic). Any of these verbs can also be inflected with the inverse construction as well (§12.3-4). Whenever Pendau takes the $M-/ N$ - affix the transitive clause is in active voice, see for example (62)-(65).
(62)

| Jari | ila | uo | ami | melolo | rabia | riKamonji'. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| jari | ila | 'uo | 'ami | M-pe-lolo | rabia | ri=Kamonji' |
| so | from | yonder | 1PL.EXC/AB | IR-SF/DY-search | sago | LOC=Kamonji' |

[jo'ong.int 007]
(63)

| Jari | ami | moo | melolo | siina | o | siama | mami. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| jari | 'ami | moo | M-pe-lolo | siina | o | siama | mami |
| so | 1PL.EXC/AB | here | IR-SF/DY-search | mother | and | father | 1PL.EXC/GE |

'So we are looking for our mother and father.'
[poora.pin 419]
(64) Too morapi ungamu nao.
too $\quad$-po ${ }_{1}$-rapi unga $=m u \quad$ nao
person IR-SF/DE-spouse child=2SG/GE that
'Some person will marry your child there.'
[king.pin 051]
(65)

| Bai | иo | $a$ 'u | nosikola | sapariama | ndau | nipene'a'. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| bai | 'uo | $a$ 'u | $N$-po -sikola | so-pariama | ndau | ni-pene'-a' |
| like | yonder | 1SG/AB | DE/RE-school | ONE-year | NEG | IV/RE-ascend-TZ |

'That's when I went to school for a year and I wasn't promoted.' [ceku02.jdb 026]

### 6.6.3.2 Copula clauses

Pendau has one copula verb which is clearly its own verb class (Schachter 1985:55) and is used to form copula clauses ( $\S 9.6 .1$ ). The verb jari 'become' does not fit into any other verb class in Pendau (§5.6.2-3), and it cannot be a stative verb (which the prefix ma-/namost closely resembles) since there are two syntactic arguments that are equated as a single participant. These two arguments are both marked with the same absolute case (which is the same as for active voice transitive clauses, see §6.2 and §12.1-3). Copula clauses use the word jari 'become' with the verbal prefix ma-/na- to differentiate irrealis and realis respectively. These clauses pattern most similarly to equative clauses (§6.5.2), as shown in (66)-(67). Jari is clearly cognate to the Indonesian jadi 'become'.

| (66) | Emu | nao | najari | bot |
| :--- | :--- | :--- | :--- | :--- |
|  | 'emu | nao | na-jari | bot |
|  | 2PL/AB | that | COP/RE-become | slay |
|  |  | 'All of you there have become our slaves. |  |  |
|  |  |  |  |  |
| (67) | Io | majari | olongian. |  |
|  | io | ma-jari | 'olongian |  |
|  | 3SG/AB | COP/IR-become | king |  |

'He will become the king.'

### 6.6.4 Ditransitive clauses

Ditransitive clauses are transitive clauses with three core arguments. ${ }^{22}$ The normal word order for ditransitive clauses is for the third argument to follow the A and P arguments (that is last position of all core arguments). ${ }^{23}$ Exceptions to this will be discussed later in Chapter 10, but elicitation shows that the third argument can be in several other positions (although grammatical these other positions are not normally found in texts) as long as the relative ordering of the A and P is not violated (see $\S 12.3$ for discussion on transitive verbs and the word orders for active voice and inverse voice). Obliques are ancillary arguments not required by the predicate. They normally appear in the final position after all other core arguments (exceptions are topicalisation when an oblique argument is fronted, see §17.2.1).

There are three ditransitive clause constructions in Pendau: 1) inherent clauses (for example, instrument ${ }^{24}$ ), 2) clauses derived through valency changing operations (for example, the benefactive applicative) which add a valence of one (either via causatives or applicatives-see Chapter 10), and 3) complement clauses (§15.3). Instrument (illustrated in examples (68) and (69)) and benefactive clauses (in (70) and (71)) can be found in both active and inverse voice clause constructions. The A and P grammatical functions are marked for the first two arguments. The semantic role of the third argument is indicated by various means which may be marked on the verb with an applicative, with a causative, with the instrument NP marker, or in the case of complement clauses with the subcategorisation required by the complement verb itself. The third argument will be called the second object (see $\S 6.4 .3$ for discussion on the second object as the third grammatical relation). ${ }^{25}$ The annotations in examples (68)-(75) can be interpreted in this way (from top to bottom): the first row identifies the position of etic macroroles; the second role maps the semantic roles for a particular macrorole position; and the third row identifies the emic grammatical relations.

[^64](68)

| SiYusup | monyambale | japing | uo | nupiso. |
| :--- | :--- | :--- | :--- | :--- |
| si=Yusup | M-pong-sambale | japing | 'uo | nu=piso |
| PN/AB=Joseph | IR-SF-butcher | cow | yonder | INSTR=machete |
| A=Pivot |  | P |  | $3^{\text {rd }}$ argument |
| Agent |  | Theme | Instrument |  |
| SUBJECT |  | OBJECT | $\mathbf{2}^{\text {nd }}$ OBJECT |  |

'Joseph will slaughter the cow with a machete.'
(69) Japing uo nisambale niYusup nupiso.
japing 'иo ni-sambale ni=Yusup nu=piso
cow yonder IV/RE-butcher PN/GE=Joseph INSTR=mach
$\mathbf{P}=$ Pivot
Theme
SUBJECT
'Joseph butchered that cow with the machete.'
[EN97-002.35]
(70)

| A'u | mongolia' | io | vea. |
| :--- | :--- | :--- | :--- |
| a'u | M-pong-oli-a' | io | vea |
| 1SG/AB | IR-SF-buy-TZ | 3 3G/AB | raw-rice |
| A=Pivot |  | P | $3^{\text {rd }}$ argument |
| Agent |  | Recipient | Theme |
| SUBJECT | OBJECT | $\mathbf{2}^{\text {nd }}$ OBJECT |  |

'I will buy him/her rice.'
[EN97-003.59]
(71)

| Io | niolia'o'u |
| :--- | :--- |
| io | ni-oli- $a$ '=' $u$ |
| 3SG/AB | IV/RE-buy-TZ=1SG/GE |
| P=Pivot | A |
| Recipient | Agent |
| SUBJECT | OBJECT |

'I bought him/her rice.'
vea.
vea
raw-rice
$3^{\text {rd }}$ argument
Theme
$2^{\text {nd }}$ OBJECT

Benefactives are one kind of applicativisation (TZ), see $\S 10.3 .2 .1$. Two other complex but productive applicative processes are object promoting and only appear in the inverse voice construction (§10.3.3). Both of these applicatives use a stem forming $p V(C)$ - to show that with the use of the $-a^{\prime}$ suffix an instrument NP is promoted to the pivot/subject or with the use of the $-i$ suffix a locative noun phrase is promoted to the pivot/subject (note that this correlates with instrument and locative focus in the Philippine-type languages). ${ }^{26}$ Since the 'old' second object has been promoted to subject, and the A argument is clearly the first object, the P argument acquires the second object grammatical relation by default (see §6.4.3 and §10.2-3 for more discussion).

[^65]
'The grandfather butchered the cow at/by the yonder house.'

Causatives are another means of changing valency (§10.2). Intransitive stative verbs can become transitive verbs (in either active or inverse voice) ${ }^{27}$, and since I have already described the basic syntax of transitives in $\S 6.2-4$ and $\S 6.6 .3 .1$ (but also see $\S 12.3$ ) I will move on to briefly describe causativised transitives which are derived ditransitive clauses. The syntactic structure of causativised transitives looks like that of the benefactive clause (§10.2). The A argument is the causer, the P argument is the causee, and the third argument is the causand. Causative ditransitive clauses can appear in active or inverse voice and have the causand in the final position usually.

| Sirapi' $u$ | nomainang | tagu'u | loka. |
| :--- | :--- | :--- | :--- |
| si=rapi=' $u$ | N-pong-pa-inang | tagu='u | loka |
| PN/AB=spouse=1SG/GE | RE-SF-CAUS-eat | friend=1SG/GE | banana |
| A=Pivot |  | P | $3^{\text {rd }}$ argument |
| Causer |  | Causee | Causand |
| SUBJECT | OBJECT | $\mathbf{2}^{\text {nd }}$ OBJECT |  |
| 'My spouse fed my friend a banana.' |  |  |  |
| [EN97-003.30] |  |  |  |


| Tagu'u | nipainang | nirapi'u | loka |
| :--- | :--- | :--- | :--- |
| tagu='u | ni-pa-inang | ni=rapi='u | loka |
| friend=1SG/GE | IV/RE-CAUS-eat | PN/GE=spouse=1SG/GE | banana yonder |
| P=Pivot | A | $\mathbf{3}^{\text {rd }}$ argument |  |
| Causee | Causer | Causand |  |
| SUBJECT | OBJECT | $\mathbf{2}^{\text {nd }}$ OBJECT |  |
| 'My spouse fed my friend that banana.' | [EN97-003.30] |  |  |

Complement clauses come in a number of different constructions, most of which are subcategorised by speech and perception verbs (§15.3). Since complement clauses are themselves a constituent of a clause they frequently occur in a ditransitive clause, as in (76).

[^66]| Sirapi'u | nepeubua' | unganyo | [mepetuuta' | io.] |
| :---: | :---: | :---: | :---: | :---: |
| si=rapi = 'u | $N$-pepe-ubu-a, | unga=nyo | M-pepe-tuut-a' |  |
| $\mathrm{PN} / \mathrm{AB}=$ spouse $=1 \mathrm{SG} / \mathrm{GE}$ | RE-SF-coax-TZ | child=3SG/GE | IR-SF-follow | 3SG/A |
| 'My wife coaxed her child | follow her.' |  | [EN98- | -003.7] |

### 6.7 Oblique phrases

Obliques are non-core arguments that are marked by one of three local cases with these prepositions (Blake 1994:153-156, §5.5 and §8.1-2): ri='at, in, on, etc. (locative)', sono 'with (comitative)', and ila 'from (ablative)'. Oblique noun phrases normally follow all other core arguments. The exception to this is the fronting of obliques for the topicalisation of an oblique noun phrase, see $\S 17.2$ (note that this is not the same as applicatives which promote locatives and instruments to pivot status). Examples (77) and (78) illustrate comitative phrases, (79) and (80) illustrate locative phrases, and (81)-(83) illustrate ablative phrases.
(77)

| Mangge, | $a ’ u$ | morapi | sono | ungato | nao. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| mangge | $a ’ u$ | M-po 1 -rapi | sono | unga=to | nao |
| uncle/VOC | 1SG/AB | IR-SF-spouse | with | child=1PL.INC/GE | that |

'Uncle, I will marry your (lit. our) child there.'
[mdtext15.txt 069]
(78) Bai uo nodua' sono sirapinyo juragang uo.
bai 'uo $N$-po - -dua' sono si=rapi=nyo juragang 'uo
like yonder RE-SF-arrive with PN/AB-spouse=3SG/GE captain yonder
'So that's how that captain arrived with his wife.'
[mdtext15.txt 084]
(79) Io nemene'omo ribumbungan.
io $\quad N$-pe-mene' $=$ mo $\quad$ ri=bumbungan
3SG/AB RE-SF-climb=COMP LOC=ridgepole
'He/she climbed up the ridgepole.'
[asu2.pin 202]
(80)

| Paey | ratabola'oto | io | uo | rirano. |
| :--- | :--- | :--- | :--- | :--- |
| paey | ro-tabol- $a$ '=to | io | 'uo | ri=rano |
| and.then | IV/IR-throw=1PL.INC/GE | 3SG/AB yonder | LOC=lake |  |

'And then we threw him/her into the lake.'
[ceku01.jdb 075]
(81)

| Taruus | nentuung | simanggenyo | ila | junjung. |
| :---: | :--- | :--- | :--- | :--- |
| tarus | N-pe-ntuung | si=mangge=nyo | ila | junjung |
| continue | RE-SF-descend | $\mathrm{PN} / \mathrm{AB}=$ uncle=3SG/GE | ABL | house |

'Continuing on, his/her uncle descended from the house.'
[horse.pin 1112]
(82) Paey too rumi uo ninabua' ila junjung.
paey too rumi 'uo ni-nabu-a' ila junjung
and.then person giant yonder IV/RE-fall-TZ ABL house
'And then (the water) caused the giant to fall from the house.'
[mdtext11.txt 037]

| (83) | Bai uo | ayu | uo | nipulisa'onyo | ila | palu'anyo. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| bai 'uo $\quad$ 'ayu | 'uo | ni-pulis-a'=nyo | ila | palu'a=nyo |  |  |
| like yonder | wood | yonder | IV/RE-fall.off-TZ=3SG/GE | ABL shoulder=3SG/GE |  |  |
|  | 'So he/she had the wood fall from his/her shoulder.' |  | [mdtext14.txt 046] |  |  |  |

In addition to marking obliques, $r i$ and sono are used in quotation margins to indicate who the person is speaking 'to' or 'with' respectively. Sono can also be used as a conjunction within a noun phrase. Ila 'from' can also be used for higher discourse information. This is done by using ila in an adjunct phrase where it is combined with a demonstrative such as uo 'yonder'. This results in a temporal sequence such as ila uo 'from there, after that'. Ri can also be used for higher discourse to indicate temporal frames in combination with time words such as $R i=$ watu 'at that time'. These uses will be discussed in $\S 15.7$, and Chapters 8 and 18.

## 7 Nominal phrases

### 7.1 Introduction

This chapter describes the structure of nominal phrases (see $\S 5.3$ for a definition of nouns in Pendau). In the broadest view the noun phrase has three basic slots, pre-head modifier, the head, and the post-head modifier, as shown in Figure 7.1.

| Pre-head <br> Modifier | Head | Post-head <br> Modifier |
| :--- | :--- | :--- |

Figure 7.1. Basic noun phrase
Head nouns can be modified or substituted by several minor word classes as well as other noun phrase types. The minor word classes that modify nouns are numerals, classifiers, noun markers (case), quantifiers, and demonstratives. Pronouns, demonstratives, numerals and sortal classifiers can all substitute for the head noun at times. Clauses which can modify the noun are described in Chapters 9 and 15. However genitive phrases are described here as well as compound nouns and various strategies to derive new nouns from word roots or bases (§7.4). This chapter ends with a description of conjoined noun phrases (§7.7).

### 7.2 Nominal phrase word order, attributes, functions, and case

The immediate constituents of a noun phrase fall into four order classes or slots, as shown in Figure 7.2. Each slot consists of mutually exclusive members. Only the head noun or its substitute is obligatory. ${ }^{1}$ This chart does not imply that every combination is possible.

| Pre-head modifiers | Head | Post-head modifiers |  |
| :---: | :---: | :---: | :---: |
| Measure phrase | Nominal | Adverbial phrase |  |
|  |  | Genitive possessor |  |
|  |  | Relative clause | Demonstrative |
| Noun markers |  | Nominal phrase |  |
|  |  | Stative verb |  |
|  |  | Reflexive intensifiers (adjunct) |  |

Figure 7.2. Nominal phrase word order and possible constituents

[^67]Also note that there are exceptions to this constituent order, such as the measure phrase which may follow nouns (numerals always precede sortal classifiers when both are used, but the constituent as a whole phrase can precede or follow the head noun); and numerals may follow pronouns (Figure 7.2 should only be understood as showing the general constituent pattern). It is also important to note that constituents in one column preclude the use of other constituents from the same column. For example, a head noun cannot have both a measure phrase and a noun marker as modifiers.

The head nominal may be substituted by pronouns, demonstratives, numerals, sortal classifiers, quantifier noun phrases, relative clauses, and other complex verbal phrases or verbal clauses. However this substitution may preclude the use of other immediate constituents, for example, a demonstrative is never modified by a demonstrative (so that the alternative to substitution, omission of the head nominal in cases like this, may be the more accurate analysis). When a verb phrase in a complement clause functions as the NP argument then the word order and possible constituents as given in Figure 7.2 do not apply. Two or more noun phrases may also be conjoined by o 'and', ape 'or', and sono 'with'. Examples (1)-(10) illustrate some of the possibilities shown in Figure 7.2.
saa uo
saa 'uo
python yonder
'that python'
(2) bongkarang nijimo uо
bongkarang nijimo 'uo
garden.hut 3PL/GE yonder
'their hut there'
(3)

| togoge nuunga | uo |
| :--- | :--- | :--- |
| togoge $\quad$ nu=unga | 'uo |
| parent $\quad \mathrm{CN} / \mathrm{GE}=\mathrm{child}$ | yonder |
| 'the child's parent there' |  |

(4)

| puu nundaang | nuloka | uo |
| :--- | :--- | :--- |
| puu nu $=$ ndaang | nu $=$ loka | 'uo |
| tree $\mathrm{CN} / \mathrm{GE}$ branch | $\mathrm{CN} / \mathrm{GE}=$ banana | yonder |

'the tree branch of the banana tree over there'
(5)

| ededea | nujunjung | moo |
| :--- | :--- | :--- |
| 'o-de-dea | nu=junjung | moo |
| HAVE-RED-many CN/GE=house | this |  |

'(there were a) number of houses here'
(6)

| sibe'e | nigibang |
| :--- | :--- |
| si=be'e | ni=gibang |
| PN/AB=grandmother | PN/GE=monitor.lizard |

'Mr Monitor Lizard's grandmother'

```
(7) loka toreinang nijimo
loka to=ro-inang nijimo
banana RM=IV/IR-eat 3PL/GE
'bananas that they will eat'
(8) bau meide
bau mo-ide
fish ST/IR-small
'small fish'
(9) jojoo too
jojoo too
all person
    'all people'
(10) tolunta'u japing
    tolu-nta'u japing
    three-CLSF cow
    'three cows'
```

Noun phrases may function as the argument of any predicate (see Chapter 6 for discussion of grammatical relations and Chapter 8 for prepositional phrases and the instrument phrase). In verbless clauses the NP may also function as the predicate (§6.5). Core arguments in Pendau mark their noun phrases according to one of two sets that can be labelled 'absolute' and 'genitive' (see $\S 6.2$ regarding these terms and Figures 6.3 and 7.3 for a review of the case paradigm). However, since word order is a more reliable indicator of the status of a particular syntactic argument, the labels absolute and genitive are more useful for identifying which of the two sets a NP belongs to.

### 7.3 Head nouns

### 7.3.1 Personal pronouns

Personal pronouns substitute for anaphorically mentioned nouns, or in the case of speech act participants, refer to ego or non-ego without prior mention. Figure 7.3 lists the main pronouns. As was noted in $\S 5.5$ and $\S 6.2$, these pronouns fall into two classes according to case markings: 1) absolute, and 2) genitive case. The genitive pronoun set can function either as an agent of a transitive clause or as the possessor of a noun. The latter will be discussed in §7.6.4.

|  |  | Absolute | Genitive |
| :--- | :--- | :--- | :--- |
| SG | $\mathbf{1}$ | a'u $/$ ha'u | $=' u$ |
|  | $\mathbf{2}$ | 'oo | $=m u$ |
|  | $\mathbf{3}$ | io | $=$ nyo |
| PL | $\mathbf{1}$ INC | 'ito | $=$ to |
|  | $\mathbf{1}$ EXC | 'ami | mami |
|  | $\mathbf{2}$ | 'emu | miu |
|  | $\mathbf{3}$ | jimo | nijimo |

Figure 7.3. Pronouns in Pendau

Pronouns may be modified by demonstrative pronouns, numerals, and relative clauses as the examples (11)-(13) suggest (see §7.4.6, §7.6.2 for compound nouns which have a similar post-head modifying structure and compare $\S 13.2 .4)$.
(11) jimo pepitu иo
$3 \mathrm{PL} / \mathrm{AB}$ seven yonder
'the seven of them'
(12) ami moo

1PL/AB here
'those of us here'
(13) Oo [tomepeaka-akali a'u.]
'oo to=M-pepe-aka-akal-i $\quad a^{\prime} u$
2SG/AB RM=IR-SF/PT-RED-trick-DIR 1SG/AB
'You that tried to trick me.'
The second plural pronouns 'ito ( AB ) and =to (GE) can also be used as honorific pronouns which can only mean in this context 'you' (AB) or 'your' (GE). ${ }^{2}$ Examples (14) and (15) show this special usage.


### 7.3.2 Interrogative pro-forms

Only three of the Pendau interrogatives function as pro-forms. These question words are: sapa 'what', si=see / ni=see 'who', and paio 'where'. The syntactic structure of interrogative clauses will be discussed in §16.3. Examples (16)-(19) illustrate typical clauses with these question words.

[^68](16) Moo sapa?
moo sapa
this what
'What's this?'
(17) Sisee tagumu?
si=see tagu=mu
$\mathrm{PN} / \mathrm{AB}=$ who friend=2SG/GE
'Who are your friends?'
[asu2.pin 191]
(18) Ma'o paio oo?
ma’o paio 'oo
go where $2 \mathrm{SG} / \mathrm{AB}$
'Where are you going?'
[horse.pin 638]
(19)

| Sapa | niposibaroi | miu | nao? |
| :--- | :--- | :--- | :--- |
| sapa | ni-posi-baro-i | miu | nao |
| what | IV/RE-MUT-argue-DIR | 2PL/GE | that |

'What are you all there arguing about?'
[ceku01.jdb 042]
Interrogative pro-forms can also be used in non-interrogative mode when the head noun is not known, as in (20). The indefinite forms of interrogative forms are discussed in §16.3.3.4.
$\begin{array}{lllllll}\text { (20) } & \text { Ila uo } & \text { ndau } & \text { diang } & \text { sapa } & \text { nibatia' } & \text { nijimo. } \\ \text { ila } & \text { 'uo } & \text { ndau } & \text { diang } & \text { sapa } & \text { ni-bati-a' } & \text { nijimo } \\ & \text { from yonder } & \text { NEG } & \text { EXIS } & \text { what } & \text { IV/RE-make-TZ } & \text { 3PL/GE }\end{array}$
'After that there wasn't anything they could make.'
[nangkait.pin 114]

### 7.3.3 'Whatchamacallit' pro-forms

The 'whatchamacallit' pro-forms are used in place of specific constituent positions and merely substitute for unknown lexemes or intentionally non-specified lexemes. These forms are: hanana 'whatchamacallit' and sanu or hanu 'umm' or 'whatchamacallit' (sanu can be preceded by the proper noun case marker as in $n i=s a n u)$. Examples (21)-(24) have different words which express 'whatchamacallit' or 'umm'. The interjections in examples (21)-(24) require that they fill a nominal position. The word hanu may vary as sanu (with the same range of use and meaning). Example (24) illustrates the use of sanu in place of a proper noun.

| (21) | Bai | hanana | palan | uo, | palita | uo. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| bai | hanana | palan | 'uo | palita | 'uo |  |
|  | like | 'whatchamacallit' | lantern | yonder | oil.lamp | yonder |

'Like 'whatchamacallit' that lantern, that oil lamp.' [Sibayu Riddle \#2]
$\begin{array}{lll}\text { (22) } & \text { Bai } & \text { rihanu }\end{array} \quad$ risura' $\quad$ nao?
'Like by the 'whatchamacallit', by that letter?'
[Sibayu Riddle \#2]
(23) Bai hanu salo?
like umm floor
'Like umm the floor?' [Sibayu Riddle \#1]
(24)

| Unga | $n i=s a n u$ | sisee | siamamu? |
| :--- | :--- | :--- | :--- |
| unga | $n i=s a n u$ | si=see | siama=mu |
| child | $\mathrm{PN} / \mathrm{GE}=$ 'whatchamacallit' | $\mathrm{PN} / \mathrm{AB}=$ who | father=2SG/GE |

Sisanu sisee siinamu?
si=sanu si=see siina=mu
PN/GE='whatchamacallit' $\mathrm{PN} / \mathrm{AB}=$ who mother=2SG/GE
'Whose child (are you), who is your father? Who is it, who is your mother?'
[poora.pin 544-546]

### 7.3.4 Pseudo-reflexive pronoun alae 'body, self'

Although there are no true reflexive pronouns in Pendau there is a pseudo-reflexive pronoun. The occasional use of alae 'body, self' occurs in a very restricted context (other candidates for reflexive pronouns will be called 'reflexive intensifiers', see §7.6.5). It is clear that when alae 'body' is used with the first singular honorific pronoun enclitic $=t o$, as in (25) that there is a reflexive-like interpretation. ${ }^{3}$ Examples (26) and (27) demonstrate that outside this usage alae functions as a non-reflexive head noun. Notice that in (26) mboto 'self' modifies alaenyo 'his/her body' as a reflexive intensifier.


[^69]```
(27) Ai alae'u ndau mu'ito.
ai 'alae='u ndau mu-'ito
but body=1SG/GE NEG 1SG.IV/IR-see
'But you can't see my (invisible) body.'
```


### 7.3.5 Vocatives

Vocatives are nouns used only in direct speech to address a speech act participant. In Pendau vocatives do not take any noun marker (this can be contrasted to the proper noun marker $s i=$ ). Common examples of vocatives are:

```
(28) ene 'mama'
mama 'mama'
papa 'papa'
ngkai 'dear husband (from langkai 'male, man')'
jongkai 'dear husband (via langkai 'male, man')'
engkel 'dear wife (from bengkel 'female, woman')'
joengkel 'dear wife (via bengkel 'female, woman')'
uti 'dear boy (when not a vocative it means 'penis')'
lei 'dear girl (when not a vocative it means 'vagina')'
mangge 'uncle'
```

Examples (29) and (30) show that the vocatives can appear in different positions in a clause. Vocatives are outside the structure of the clause, since they do not modify anything within the clause, and their removal or placement in other positions would not affect the grammatical structure of the clause.
(29)

Neburamo sigibang,
$N$-pe-bura $=$ mo $\quad s i=$ gibang
RE-SF/DY-speak=COMP PN/AB=monitor.lizard
"eти, ene o papa, ma’opo peduta moje."
'ети ene o papa ma'o=po pe-duta moje
2PL/AB mama and papa go=CONT SF/DY-propose again
'The monitor lizard said, "You, mama and papa, go again and propose (for me again)".'
[gibang.pin 033]
(30) Sapa uo, uti?
sapa 'uo uti
what yonder, dear.boy
'What is over there, dear boy?'
[horse.pin 718]

### 7.3.6 Common nouns with frozen forms si, 'ali, and to

In Pendau some flora and fauna names start with si or ' ${ }^{\prime}{ }^{4}{ }^{4}$. These elements have no discernable function. ${ }^{5}$ There are two possible historical explanations for the recurrent

[^70]partial forms si and ali: 1) the majority are frozen forms (that is, relics) from an earlier time when they were separate meaningful elements (the most likely candidates would be made up of two or three syllables), or 2) some of the forms may be coincidental. The si form does not alternate with ni, and these si words can be preceded by the proper noun marker si if they are personified in a story, thus demonstrating that the initial si cannot be separated from the word.

| sipalo | 'k.o. lizard, clearfin fish (Synodus dermatogenys)' |
| :---: | :---: |
| sigimbaloi | 'k.o. lizard' |
| sileset | 'blue-tailed skink' |
| siindap | 'k.o. Hispid beetle, Brontispa longissima' |
| simonsupit | 'scorpion, vinegaroon, Mastigoproctus giganteus' |
| sididoi | 'preying mantis' |
| siane | 'termite' |
| sidangka | 'water strider' |
| sipaigus | 'whirligig beetle' |
| simpatutus | 'k.o. worm or caterpillar cocoon' |
| sibabanoy | 'lemongrass' |
| siraya | 'k.o. palm tree, Pigafetta filaris' |
| silar | 'Buri palm, Corypha' |
| simbuta | 'k.o. poisonous tree which causes permanent blindness' |
| simintu | 'k.o. vine used to make rope' |
| silo'o | 'k.o. rattan' |
| sirameas ${ }^{6}$ | 'ghost shrimp' |
| silabaang | 'k.o. red male freshwater shrimp' |
| simpokoko | 'k.o. red female freshwater shrimp' |
| sigasa | 'k.o. predatory ocean fish' |
| sinobulung | 'k.o. parrotfish' |
| siinjap | 'freckled or blue-spotted boxfish, Ostracion meleagris' |
| sianjo | 'long-nosed emperor fish, Lethrinus olivaceus' |
| sidontong | 'k.o. saltwater fish' |
| silame | 'pearly-eyed moray eel, Gymnothorax prosopeion' |
| si'umbit | 'red-barred rock cod, dusky-banded rock-cod, Epinephelus fasciatus, Cephalopholis boenack' |
| silubi | 'k.o. freshwater fish' |
| siintu | 'k.o. land turtle' |
| simbulele | 'k.o. "two-headed" snake' |
| sididung | 'flying squirrel' |
| sioluas | 'large male monkey' |

[^71]| simberei | 'large female monkey' |
| :--- | :--- |
| siluntoi | 'a k.o. beach plant' |
| 'alisoso | 'gecko' |
| 'alimamayar | 'luminous millipede' |
| 'alibambang | 'butterfly, butterfly fishes' |
| 'alipapaa | 'grasshopper' |
| 'alipang | 'centipede' |

Another recurrent formative which seems to have become a frozen part of some words is to, as in (31). This is almost certainly historically related to the word too 'person' (via PMP * tau), although in some compounds such as seseng togoge 'tiger (lit. big cat or giant cat)' there is no meaning of person suggested. ${ }^{7}$ Also see the agentive nominalising formatives to-pV(C)- in §7.4.2.3.

```
(31) togoge }\mp@subsup{}{}{8}\quad\mathrm{ 'big one(s), parent'
tomogurang 'elder(s)'
```


### 7.3.7 Topographical deictic nouns

Pendau has two important nouns describing direction towards the ocean, (teriong), or inland (tebuat). Topographical verbs are discussed in §9.7.1. These nouns do not indicate whether the person is going a short distance or a long distance, only the direction in which he/she is going or the position of something relative to the speaker. This direction can be thought of as following a perpendicular line bisecting an imaginary line that parallels the coast. Likewise, in a village situation where houses are situated in a row, the terms tebuat and teriong are used even if the houses are all on a level area, and can be used to refer to an adjacent house, depending if it is closer to the coastline (teriyong) or further away from the coastline (tebuat). ${ }^{9}$

| Io | ma'o | ritebuat. |
| :--- | :--- | :--- |
| io | ma'o | ri=tebuat |
| $3 \mathrm{SG} / \mathrm{AB}$ | go | LOC=inland |

' $\mathrm{He} /$ she is going inland.'

[^72](33) A'u ma’o riteriong.
a'u ma'o ri=teriong
1SG/AB go LOC=ocean.ward
'I am going towards the ocean.'
(34)

| Rapi'u | o | unga'u | bengkel | mene' | jo'ong |
| :--- | :--- | :--- | :--- | :--- | :--- | ritebuat. 1 .

(35) A'u mene' tebuat nao lulu.
a'u mene' tebuat nao lulu
$1 \mathrm{SG} / \mathrm{AB}$ go.up inland that first
'I will go up inland there first.'
[mdtext15.txt 047]

### 7.4 Noun formation possibilities

### 7.4.1 Derived possessive nouns with 'o- 'have'

Prefixing a verb with ' $o$ - derives a noun which means 'to have the state or quality of X ', where X is the verb root, as shown in (36).

| verb root | gloss |
| :--- | :--- |
| akal | 'trick, deceive, lie' |
| dua' | 'arrive' |
| tou' | 'finish' |
| ondong | 'sad' |
| gana' | 'enough' |
| oge | 'big, large' |
| lampa | 'travel (v), go' |
| turu | 'sleep (v)' |
| ontong | 'straight, honest' |
| adal | 'thick' |
| 'alu | 'wrap' |
| paris | 'difficult' |
| dea | 'many' |
| dantang | 'long' |


| derived noun | gloss |
| :--- | :--- |
| 'a-akal | 'lie (n), deceit, deception' |
| 'o-dua' | 'arrival' |
| 'o-tou' | 'end' |
| 'o-ondong | 'sadness' |
| 'a-gana' | 'fulfilled, completion' |
| 'o-oge | 'bigness' |
| 'a-lampa | 'travel (n), journey' |
| 'o-turu | 'sleep (n)' |
| 'o-ontong | 'straightness, honesty' |
| 'a-adal | 'thickness' |
| 'a-'alu-ong | 'package' |
| 'a-paris-ong | 'difficulty' |
| 'e-de-dea | 'number, lots' |
| 'a-da-dantang | 'longest length possible' |

By contrast, whenever the ' $o$ - is prefixed on a noun a possessive 'have' predication is formed ( $\S 6.6 .2 .2, \S 9.3 .3 .2, \S 9.3 .5$ and $\S 10.6$ ). Several tests verify that whenever the ' $o$ derives a new word it is treated as a noun. These include: filling nominal positions, a demonstrative may follow it, it may appear as the object of a prepositional phrase, it may combine with other nominalising affixes, and when deriving an augmented stem formed noun or verb it is a denominal prefix $p o_{1^{-}}(\S 6.6 .2 .2, \S 9.3 .3 .2, \S 9.3 .5$ and $\S 10.6) .{ }^{10}$

[^73]Derived possessive nouns fill nominal positions in a transitive clause, as in examples (37) and (38). In (37) the word 'alu 'wrap' takes the locative nominalising suffix -ong to form the final word. However, it is unclear whether the prefix ' $o$ - and the suffix -ong work as a circumfix here, or whether the prefix derives a new noun based on the locative nominal derivation 'aluong 'place of wrapping' (§7.4.2).

| Paey | nipogutua' | nijimo | aakal | tondau | mombosi'. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| paey | ni-po 1 -gutu-a' | nijimo | 'o-akal | to $=$ ndau | mo-mbosi' |
| and.then | IV/RE-SF-make-TZ | 3PL/GE | HAVE-lie | RM=NEG | ST/IR-good |

'And then they made a deception that wasn't good.'
(38)

| Paey | nibe'asi | nijimo | a'aluong |
| :--- | :--- | :--- | :--- |
| paey | ni-be'as-i | nijimo | 'o-'alu-ong |
| and.then | IV/RE-open-DIR | 3PL/GE | HAVE-wrap-locN |


| tonipengkalei | nijimo |
| :--- | :--- |
| to $=$ ni-pong-'ale-i | nijimo |
| RM=IV/RE-SF-share-DIR | 3PL/GE |

'And then they ${ }_{i}$ opened the package that they $y_{j}$ shared (with them ${ }_{\mathrm{i}}$ ). $\quad$ [natal01.pin 025]
Stative roots can be used as a base to derive possessive nouns, as in example (39), but they seem to have a participle-like sense as part of their meaning (see §9.3.3.2, §9.3.5, $\S 9.4 .2 .5, \S 9.6 .3$, and $\S 10.6$ for further discussion of these verbal derivations). Example (40) shows that a derived possessive 'have' noun may be the object of a prepositional phrase. Example (41) shows that the demonstrative follows the derived noun, and that stative roots often also take the third singular enclitic. Example (42) shows that the possessed nominal 'a-paris-ong 'difficulty' cannot be a verb, in cases like these, since it is the possessee of a genitive noun phrase (§7.6.4).

| Paas | odua' | mami | ribamba | nao, | odua' | nijimo. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| paas | 'o-dua' | mami | ri=bamba | nao | 'o-dua' | nijimo |
| exact | HAVE-arrive | 1PL.EXC/GE | LOC=door | that | HAVE-arrive | 3PL/GE |

'Exactly at our arrival at the (cave) entrance there, they arrived.' [poora.pin 536-537]

| Bia | ri'otou' | nukampung | paey. |
| :--- | :--- | :--- | :--- |
| bia | ri='o-tou' | nu=kampung | paey |
| later | LOC=HAVE-finish | CN/GE=village | then |


| nidua'onyo | manggenyo. |
| :--- | :--- |
| ni-dua'=nyo | mangge=nyo |
| IV/RE-arrive $=3 \mathrm{SG} / \mathrm{GE}$ | uncle $=3 \mathrm{SGE} / \mathrm{GE}$ |
| 'Later at the end of the village then he found his uncle.' |  |

[horse.pin 1110]
predications. Also compare Barr (1988b) for some discussion on $k a$ - in Da'a, and the cognate forms $k a$ and ko- in Muna for a number of similar constructions and meanings (see van den Berg 1989:44-45, 88, 294-303)
$\begin{array}{llll}\text { (41) } \begin{array}{ll}\text { Otou'onyo } & \text { uo } \\ \text { 'o-tou'=nyo } & \text { 'uo }\end{array} & \text { ami } & \text { nipoinungomo } & \text { ni-po } \\ & \text { HAVE-finung=mo }\end{array}$

| nijimo | ogo | moonda'. |
| :--- | :--- | :--- |
| nijimo | ogo | mo-onda' |
| 3PL/GE | water | ST/IR-hot |

'After that ended they made us drink hot water (coffee).'
[jptext03.jdb 022]

## (42)

| Apa | sa'o-sa'o | moo | ito | ri'unte | nu'aparisong. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| apa | sa'o-sa'o | moo | 'ito | ri-'unte | nu='a-paris-ong |
| since | RED-now | this | 1PL.INC/AB | LOC=middle | CN/GE=HAVE-difficult-locN |

'Since we are now in the middle of a difficult situation.'

### 7.4.2 Derived agentive, instrument, and locative nouns

This section discusses several productive affixation strategies that derive nouns from verbs or other nouns. These include agentive, instrument and locative nominalisations. Figure 7.4 shows the stem former $p V(C)$ - used in most of the nominal derivations. The actual form of the $p V(C)$ - stem former is usually based on the inherent verb class that the root or base usually forms or could form (see $\S 4.3$ and Chapter 9 for more discussion). The following sections will demonstrate specific examples.


Figure 7.4. Agentive, instrument, and locative nominalisation patterns

Example (43) shows paradigms for four verb classes, and specifically shows that the $p V(C)$ - stem former is based on the verb class. The use of the $p V(C)$ - stem former in combination with other affixes may derive specific noun formations (see $\S 4.3$ and Chapter 9 for more discussion of the $p V(C)$ - stem formers and the complex matrix based on verb classes).

|  | learn (DY) | cook (FA) | sew (PT) | k.o. fishing (DE) |
| :--- | :--- | :--- | :--- | :--- |
| Verb forms | me-guru | mo-gabu | mon-jaong | mo-banta |
| Instrument | pe-guru | po-gabu | pon-jaong | po-banta |
| Nom. locative | pe-guru-ong | po-gabu-ong | pon-jaon(g)-ong | po-banta-ong |
| Agentive nom. | to-pe-guru | to-po-gabu | to-pon-jaong | to-po-banta |

### 7.4.2.1 Instrument nominalising derivations

Instrumental nouns can be derived by simply prefixing the word's verb class stem former $p V(C)$-, as shown in (44). The actual form of the $p V(C)$ - stem prefix depends on the
verb class of the root or word base (this is described in detail in Chapters 4 and 9). The derived noun is usually an instrument or manner related noun. Adriani and Kruyt (1914) also cite two 'verbal nouns', which I refer to as stem forming instrument derivations. These two forms are ponuda 'dabble stick' (from the root tuda 'plant') and pomanggi 'hoe' (from the root panggi, the gloss is unknown).

| (44)otoi 'know' | po-'otoi | 'knowledge' |  |
| :--- | :--- | :--- | :--- |
| tuda | 'plant' | pa-tuda | 'wooden planting stick' |
| bolilo | 'club' | pom-bolilo | 'club' |
| rembas | 'hit' | po-re-rembas | 'striker' |
| sambale | 'butcher, slaughter' | pony-(s)ambale | 'butchering knife' |
| alap | 'get, take' | pang-alap | 'tool to get s.t.' |
| 'omung | 'carry, bring' | pong-komung | 'tool to carry s.t.' |
| sabe | 'ride' | pe-sabe | 'saddle' |

### 7.4.2.2 Nominal derivations with -ong

Several combinations of the prefix $p V(C)$ - with suffix -ong occur as nominal derivations. These derivations change the state of a noun or a verb to become 'a place to do $\mathrm{X}^{\prime}$ ( X meaning the word base). ${ }^{11}$ So for verb roots the derivation is a nominalisation process while for noun roots the derivation is a change to a different order of noun. The form of the prefix follows the verb class stem former prefix pattern (see Chapters 4 and 9), as shown in (45). The mutual action prefix posi- (§10.4.1.1) can function as a stem former which co-occurs with the locative suffix -ong. This derivation appears to always result in abstract nouns, as shown in (46).

| Root/base | Gloss |
| :--- | :--- |
| abu |  |
| bolos | 'ashes' |
| boto' | 'trade, change' |
| gombo | 'word' |
| intolu | 'meet' |
| jaong | 'egg' |
| linsong | 'sew' |
| mongi | 'container' |
| moia | 'beg' |
| osa | 'rive' |
| ogo | 'rest' |
| 'o-turu | '(hater' |
| lolo | 'search' |
|  |  |
| angga' | 'respect' |
| ampun | 'forgive' |
| turu | 'agree' |


| Derived nouns | Gloss |
| :---: | :---: |
| pe-abu-ong | 'kitchen (place of ashes)' |
| pe-bolos-ong | 's.t. to change' |
| pom-boto'-ong | 'conversation' |
| po-gombo'-ong | 'meeting place' |
| pe-intolu-ong | 'nest (place for eggs)' |
| pon-jaon(g)-ong | 'stitches (place sewn)' |
| po-linson(g)-ong | 'place to collect s.t.' |
| po-mongi-ong | 'request' |
| po-moia-ong | 'living place' |
| pe-osa-ong | 'place to rest' |
| pe-ogo-ong | 'water dish (place for water)' |
| po-'o-turu-ong | 'bed (place to sleep)' |
| pe-lolo-ong | 'thing searched for' |
| posi-angga'-ong | 'honour/respect' |
| posi-ampun-ong | 'forgiveness' |
| posi-turu-ong | 'harmony, peace' |

[^74]Additional combinations with the suffix -ong follow in (47). These include adding the suffix with only the root, with the template 1 reduplication, and with one derivation which uses the stem former and the possessive prefixes.

| unga | 'child' | po-'o-unga-ong | 'birthing room (place to give <br> birth)' |
| :--- | :--- | :--- | :--- |
| sebi | 'side' | sebi-ong | 'side of s.t.' |
| undur | 'sing' | undur-ong | 'song' |
| tuda | 'plant' | tu-tuda-ong | 'vegetable and flower garden' |
| loeng | 'swing' | lo-loen(g)-ong | 'swing, baby swing' |
| tolo | 'front' | to-tolo-ong | 'front thing, genitals' |

Example (48) shows that a nominalised noun can be possessed.

| A'u | nepejagai | periinongonyo | nao. |
| :--- | :--- | :--- | :--- |
| a'u | N-pepe-jaga-i | pe-riing-ong=nyo | nao |
| 1SG/AB | RE-SF-guard-DIR | SF-bathe-locN=3SG/GE | that |

'I have tried to guard his bathing spot there.'

### 7.4.2.3 Agentive nominalisation to-pV(C)-

The nominal prefix to- forms agentive nominalisations from all verb classes and many nominal roots/bases (see §7.4.3.5 for to- combined with reduplicated prefixes). The prefix to- is homophonous with, but clearly distinguishable from, the proclitic relative marker to $=$. The difference can be determined by distributional tests. The proclitic relative marker can move to a variety of word classes, see $\S 15.5$ for examples and discussion of relative clauses. The relative marker to $=$ does not require the $p V(C)$ - stem formers for all relativised clauses that use verb classes with stem formers. Most nouns nominalised with to- produce a 'person who does X activity' where X is the root or word base, as shown in (49) and (50). All verb classes which can take a verb stem former with the $p V(C)$ template require the stem formation when deriving an agentive nominalisation with to-, thus producing the prefix combination to- $p V(C)$-.

| (49) | to-po-asu | 'dog hunter (using dogs)', | asu | 'dog', |
| :---: | :---: | :---: | :---: | :---: |
|  | to-po-raa | 'adat specialist, sacrificer' | raa | 'blood' |
|  | to-pe-lampa | 'person that walks, travels' | lampa | 'walk, travel' |
|  | to-po-'a-lampa | 'person that has walks' | 'a-lampa | 'have walk, travel' |
|  | to-pe-gempang | 'person that walks' | gempang | 'walk by foot' |
|  | to-pe-bura | 'person that speaks, speaker' | bura | 'speak' |
|  | to-po-raga | 'takraw player' | raga | 'chase' |
|  | to-po-tamba' | 'player, takraw player' | tamba' | 'play, engage' |
|  | to-po-banta | 'fisherman (hook and line)' | banta | 'k.o. fishing' |
|  | to-po-botor | 'gambler' | botor | 'gamble' |
|  | to-po-jala | 'fisherman (casting net)' | jala | 'casting net' |
|  | to-po-libo' | 'council members' | libo' | 'place' |
|  | to-po-mintis | 'black smith' | -- | -- |
|  | to-pong-komung | 'carriers, leaders' | 'omung | 'bring, take' |
|  | to-pon-jaong | 'tailor' | jaong | 'sew' |
|  | to-pony-(s)abalo | 'trapper, snare setter' | sabalo | 'snare' |


| to-posi-pate-i | 'warriors, people who kill | pate-i | 'kill'each other' |
| :--- | :--- | :--- | :--- |
| to-posi-tanding | 'contestants, players' | tanding | 'contest' |
| to-po-t[um]angis | 'mourners, cryers' | tangis | 'cry' |
| to-pang-angka | 'thief' | angka | 'steal' |
| to-pe-guru | 'student, one who studies', | guru | 'learn, study' |
| to-pe-pa-guru | 'teacher, one who teaches' | pa-guru | 'teach' |


| Jari nomeilumo <br> jari N-pong-peilu=mo | sigibang, <br> si=gibang |  |
| :--- | :--- | :--- |
| so | RE-SF/PT-said=COMP | PN/AB-monitor.lizard |
|  |  |  |
| 'emu | roporapi | nutopangangka.' |
| 'emu | ro-po-rapi | $n u=$ to-pong-angka |
| 2PL/AB | IV/IR-SF-spouse | CN/GE=AGNM-SF-steal |

'So the monitor lizard said, "A thief will marry you!""
Stative verbs do not take stem formers in order to derive agentive nouns, but they do require the realis/irrealis prefix to form agentive nouns from stative roots. In these cases they form the prefix combinations to-mo-/to-no- (with vowel harmony alternations possible in the stative prefix). Agentive nouns derived from stative verbs result in a 'person who has the condition or state of X meaning', where X is the stative verb root or base, as in (51). But also notice that for generic cases the irrealis is used, as in (52).

| to-na-kasi-asi | 'poor person (RE)', | kasi-asi | 'poor' |
| :--- | :--- | :--- | :--- |
| to-no-rapi | 'married person (RE)', | rapi | 'spouse' |
| to-na-ngkait | 'crippled person (RE)' | ngkait | 'crippled' |
| to-'o-tou'-ong | 'last person' | 'o-tou'-ong | 'last one' |
| to-'e-diang / |  |  |  |
| to-ne'-e-diang | 'rich person (RE)' | 'e-diang | 'to have' |
| to-no-buta | 'blind person (RE)' | buta | 'blind' |

(52)

| ...tomeongkor | meigi | ongkoronyo, |
| :--- | :--- | :--- |
| to-M-pe-ongkor | M-pe-igi | ongkor=nyo |
| AGNM-IR-SF/DY-tired | IR-SF/DY-lose | tired=3SG/GE |


| tomo'orop | meigi | oroponyo... |
| :--- | :--- | :--- |
| to-mo-'orop | M-pe-igi | orop=nyo |
| AGNM-ST/IR-hungry | IR-SF/DY-lose | tired-3SG/GE |

'...tired people will lose their tiredness, and hungry people will lose their hunger...'

### 7.4.3 Nominal reduplication

### 7.4.3.1 Types of reduplication

This section deals with reduplication as a means to derive nouns (see §13.4.1.5 for a discussion of reduplication in verbs). Reduplication in Pendau can be analysed following Barr's (1988a:5) insightful analysis of Da'a in which he describes reduplication as consisting of two basic semantic types: diffuseness and intensification. Reduplication resulting in 'diffuse' meanings is discussed in §7.4.3.2. Reduplication resulting in an
instrument is discussed in §7.4.3.3. The intensive function of reduplication can be divided into three subtypes and is discussed in §7.4.3.4-5.

Reduplication has three structural template types: $\sigma_{c^{-}}$, $\sigma \sigma_{c^{-}}$, and $-\sigma_{c} \sigma$ (see $\S 3.6 .1$ for the general discussion and Figure 3.18 for a comparison of typical usages and meanings). These three templates can be viewed as ways of combining affixes to produce various semantic contrasts (see $\S 7.4 .6$ on reduplication to form lexical compound nouns).

### 7.4.3.2 Diffuseness and non-definiteness of nouns

I use diffuseness here to mean that the basic meaning of the word covers an unspecified multiple of the base or root (which on concrete nouns may indicate plurality). Barr (1988a:5) expresses it this way:

The notion diffuse, then, conveys the meaning of non-singular, non-definite; or said another way, a non-specific number greater than one. This definition distinguishes a notion of plurality different from that found in English, which is non-singular, but definite.

As the list in (53) and the examples in (54) and (55) show, 'plurality' does not capture any of the semantic range of words like tanga-tanga 'midst (unspecified centre)', and sapasapa 'whatever (an indefinite something)', so the idea of 'diffuse' better captures the broad scope of reduplication on various semantic domains of nouns. ${ }^{12}$

| Sapa-sapa | torilalong | nujunjung | moo | raagarotomo. |
| :---: | :---: | :---: | :---: | :---: |
| sapa-sapa | to $=$ ri $=$ lalong | nu=junjung | moo | ro-agar $=$ to $=$ mo |
| RED-what | $\mathrm{RM}=\mathrm{LOC}=$ inside | CN/GE=house | this | IV/IR-split=1PL.INC/GE=COMP |
| 'We will sp | whatever is ins | is house.' |  | [nalalo.pin 057] |

(53)

| unga-unga | 'children' |
| :--- | :--- |
| sampe-sampesuvu' | 'siblings' |
| tua-tuai | 'younger siblings' |
| tagu-tagu | 'friends' |
| bija-bija |  |
| emu-emu | 'ancestors' |
| isi-isi | 'all of you' |
| gau-gau'ong | 'flesh, insides' |
| bunga-bunga | 'actions' |
| sapa-sapa | 'flowers' |
| odo-odo | 'whatever' |
| tanga-tanga | 'monkeys' |
| ntani-ntani | 'midst' |
| dondo-dondom | 'different, differences' |
| mbengi-bengi | 'nights' |

'We will split whatever is inside this house.'

| unga | 'child(ren)' |
| :--- | :--- |
| sampesuvu | 'sibling(s) |
| tuai | 'younger sibling(s)' |
| tagu | 'friend(s)' |
| bija | 'ancestor(s)' |
| emu | '2PL' |
| isi | 'inside(s), flesh' |
| gau' | 'action(s)' |
| bunga | 'flower(s)' |
| sapa | 'what' |
| odo | 'monkey(s)' |
| tanga | 'centre, middle' |
| ntani | 'different' |
| dondom | 'morning(s)' |
| mbengi | 'night(s)' |

[^75]| ...apa | nao | sura | nialap | mami | bunga-bunga | rigii |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |$\quad$ nujunjung.

Examples (56) and (57) contrast two ways to form a large number of monkeys. In (56) a huge number of monkeys is indicated by modifying odo 'monkey(s)' with the numeral derivation nonggatus 'hundreds'. In (57) the reduplicated form odo-odo is used which also means many monkeys.
(56) Ndau nasae ila uo netepasiromo odo uo nonggatus. ndau no-sae ila 'uo ne-te-pasir=mo odo 'uo $N$-pong-gatus NEG ST/RE-long from yonder AV/RE-NV-gather monkey yonder RE-SF-hundred 'Not long after that hundreds of monkeys gathered there.' [turtle.pin 217]

| Nompamulamo | odo-odo | nenginung |
| :--- | :--- | :--- |
| N-pong-pa-mula=mo | odo-odo | N-pong-inung |
| RE-SF-CAUS-begin=COMP | RED-monkey | RE-SF/PT-drink |


| ogo | nuapar | uo. |
| :--- | :--- | :--- |
| ogo | nu=apar | 'uo |
| water | CN/GE=swamp | yonder |

'Then the monkeys began to drink the swamp's water there.' [turtle.pin 227]

### 7.4.3.3 Instrumental noun formation via CV- Reduplication

Blust (1997) shows that Proto Austronesian (PAN) had a productive nominalisation strategy which produces a category he calls 'instrumental nouns' based on a prefix *Ca-. Pendau has several reflexes of such nouns, but the reflex of * Ca - is no longer a productive means to derive instrument or tool words. In Pendau any initial CV- which is reduplicated can derive a noun which means 'kind of tool'. (Compare this to another reduplication type which derives 'intensified' nouns from verbs in §7.4.3.4-5). Also compare with $p V(C)$ stem forming nominalisations in which this is a synchronic productive means to form a word into an instrument, tool, or manner nominal (\$7.4.2.1). Adriani and Kruyt (1914) also discuss briefly the formation of instrument nouns via reduplication, and cite these two words: titilu 'spoon' and dadayu 'paddle, oar'.

| Unreduplicated <br> form <br> tinjo' | Gloss | Reduplicated form | Gloss |
| :--- | :--- | :--- | :--- |
| -- | 'pole' | titinjo' | 'house, post' |
| mo-sa'ul, sa'ul-ong | -- | 'make sago, | dedepel |
| sasa'ul | 'tweezers, tongs' |  |  |
| pangki | sago tree''3 |  | 'sago pounder' <br> (Sibayu Pendau) |
|  | 'hit, pound' | papangki | 'sago pounder' <br> (Malawa Pendau) |

[^76]| Unreduplicated <br> form | Gloss | Reduplicated form | Gloss |
| :--- | :--- | :--- | :--- |
| -- | -- | susurumba <br> so-soran <br> titinjo' | 'bamboo pipe fire starter' |
| -- | -- | 'heirloom' |  |
| tinjo' | 'plant w/ stick' | 'planting stick, post, pole, <br> house post' |  |
| -- | -- | titimbul | 'sago mill water dipper' |
| balango | 'anchor' | babalango | 'anchor, anchored' |
| gulin | 'rudder' | gugulin | 'rudder' |
| linduan | 'mirror' | lilinduan <br> tutuunong | 'mirror' |

### 7.4.3.4 Reduplication that intensifies

### 7.4.3.4.1 Types of reduplication that intensify

Intensification is the other main function of reduplication in Pendau (again following Barr 1988a). 'Intensification' is broad enough to cover several of the functions of reduplication that occur. These include the maximising effect on deriving abstract nouns from stative verbs, delimiting the domain of a base or root, highlighting or emphasising a key participant, and instrumental noun formation.

### 7.4.3.4.2 Nominal based intensification

The prefix so- 'one' can be prefixed on nominal word bases with two possible reduplication strategies. Either the so- itself is reduplicated, or the base is reduplicated. The numeral prefix so- gives the derived word the meaning of 'each, every, several' when it is reduplicated, as in example (58). This is an additional strategy for quantifying nouns (see §7.5.2.3 for discussion of quantifiers). Examples (59) and (60) illustrate the reduplication of the base or part of the base prefixed with so- 'one', which has the effect of focusing on the singularity of the duplicant. In example (59) eleo 'sun, day' is contracted to leo which I gloss as 'day' because the resulting meaning can only mean 'the same day'. Example (61) shows a partial reduplication of the numeral soung 'one' emphasising or focusing on the uniqueness of an entity.
se-se-eleo 'every day' eleo 'day'
so-so-'uya 'several' so-'uya 'how many?'
(59) seleleo
so-le-leo
ONE-RED-day
'the same day'
[EN98-001.4]
(60) Seliolio batuanyo.
so-lio-lio batua=nyo
ONE-RED-same mean=3SG/GE
'They have the same meaning.'
[EN98-001.14]
(61)

```
sosoungonyo
so-soung=nyo
RED-one=3PL/GE
'the one and only one'
```


### 7.4.3.4.3 Combination of possessive 'o- and reduplication of stative roots

A specific type of nominalisation is derived from stative roots by reduplication in combination with the possessive 'o- 'have' (see §7.4.1). The possessive prefix derives a nominal quality or state of the intensified quality or state of the reduplicated stative root. Examples such as 'e-ingka-ingka 'having fears' and 'alampa-lampa 'having a walk, journeys' are probably best treated as diffuse reduplication (see §7.4.3.2).

| 'a-sa-sanang | 'exuberence' | sanang | 'happy' |
| :--- | :--- | :--- | :--- |
| 'a-pa-pangkat | 'to be the most high' | pangkat | 'tall' |
| 'o-to-tou' | 'the end of it all' | tou' | 'finish' |
| 'a-ga-garang | 'the most loved' | garang | 'love' |
| 'a-pa-parasaya | 'faith, belief' | parasaya | 'believe' |
| 'e-li-lino | 'calm, quiet' | lino | 'calm, quiet' |
| 'a-sa-sae | 'very long time' | sae | 'long time' |
| 'e-de-dea | 'number, lots' | dea | 'many' |
| 'a-ga-gaar | 'a great distance' | gaar | 'far' |

(62) Bai uo nireken unga nuangkaula uо
bai 'иo ni-reken unga nu=angkaula 'ио
like yonder IV/RE-count child CN/GE-spider yonder

| sagatus | dampe | ededeanyo | unga | nuangkaula | uo. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| so-gatus | dampe | 'o-de-dea=nyo | unga | nu=angkaula | 'uo |
| ONE-hundred | CLSF | HAVE-RED-many=3SG/GE | child | CN/GE=spider | yonder |

'So after he counted those baby spiders, the number of those baby spiders was one hundred head.'
[mdtext20.txt 036]

### 7.4.3.5 Nominal agentive intensification (specificity or emphasis)

Partial reduplication occurs with agentive nouns to mark emphasis or definiteness (in fact only kinship terms appear to be used this way). By 'agentive' I mean that the marked referent is a potential agent, and may or may not at the time it is marked be a 'semantic agent'.$^{14}$ The building process is parallel to the reduplication pattern which produces intensified statives, but on these kinship nouns it focuses on the specific person mentioned anaphorically in the text or from shared cultural knowledge (the focusing is translated in the English gloss as 'this').

[^77]| tolalangkai | 'this boy, man' | langkai | 'boy, man' |
| :--- | :--- | :--- | :--- |
| tobebengkel | 'this girl, woman' | bengkel | 'girl, woman' |
| tosisiina | 'this mother' | siina | 'mother' |
| tosisiama | 'this father' | siama | 'father' |
| tomomo'upu | 'this grandchild' | mo'upu | 'grandchild' |
| torarapi | 'this spouse' | rapi | 'spouse' |
| totogoge | 'this elder, parent' | togoge | 'elder, parent' |
| totutuai | 'this y. sibling' | tuai | 'younger sibling' |

### 7.4.4 Nominal derivational affixation with si- 'together, jointly'

The prefix si- is used with a few bases in which the derivation seems to mean a plurality of participants acting in unison.

| jojoo | 'all' | si-jojoo | 'all together' |
| :--- | :--- | :--- | :--- |
| tutuu | 'true' | si-tutuu | 'it's really true, indeed, actually' |
| tuvu | 'decide' | si-n-tuvu-i | 'decision, joint decision' |

### 7.4.5 Nasal ligature $\boldsymbol{n g}$ -

The nasal $n g$ - (underlyingly a velar nasal) appears frequently (but not predictably) in three contexts: 1) before mensural classifiers (the $n g$ - occurs between the prefix and the root, for example, so-m-bulang 'one month'), 2) before nouns prefixed by numerals, and 3) noun incorporation (between two words joined together to form one verb, for example, na-sala-n -jalang 'take the wrong road'). The nasal ligature has been identified in numerous other Austronesian languages and sometimes can be clearly identified as a 'genitive linker'. It is likely that the nasal ligature $n g$ - in Pendau is a relic of this linker. It appears idiosyncratically on some words and not others. When the nasal ligature does appear it is always before an obstruent phoneme. For more examples see §3.5.7.7, $\S 7.5 .2 .2 .2, \S 9.7 .8$, and $\S 10.5$ Compare the data in example (63). Note, however, that most mensural nouns which can be identified as recent loans do not have the ligature (for example, metric loans such as kilo 'kilogram, kilometre'). Examples of nasal ligature in nouns with numeral prefixes are in (64) and (65).
sa-ng-kalu, ruo-ng-kalu ('alu)
se-kilo, ruo-kilo
'one package, two packages'
'one kilo, two kilos'
(64)

| Ma'o | sombuut | mai | sombuut | jimo | pepitu | uo. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ma'o | so-ng-buut | mai | so-ng-buut | jimo | pepitu | 'uo |
| go | ONE-LIG-mountain | come | ONE-LIG-mountain | 3PL/AB | seven | yonder |
| 'The seven of them went up one mountain and down another mountain.' |  |  |  |  |  |  |

[poora.pin 012-013]
$\begin{array}{lll}\text { (65) } & \text { Emu } & \text { so'uya } \\ \text { 'emu } & \text { so-'uya } & \text { sontagu? } \\ \text { so-ng-tagu } \\ \text { 2PL/AB } & \text { ONE-why } & \text { ONE-LIG-friend }\end{array}$
'How many friends are in your group? ${ }^{15}$
[poora.pin 090]

[^78]
### 7.4.6 Compound nouns

This section will demonstrate the main range of compound noun formations using the semantic domain of fish names. This area is representative of the vocabulary in other areas of the lexicon. Compound nouns have the same 'Noun plus Noun' structure as genitive noun phrases except that they usually do not have the genitive linker nu (ni is excluded from compounds since they fill the common noun category; see §7.5.1). The first noun $(\mathrm{N} 1)$ in the sequence is usually the head noun (sometimes it is not clear whether the second noun (N2) is modifying the first noun). Example (66) shows a list of six Pendau names for sharks (two are synonyms, but each synonym refers to the same two species), where the generic word for shark is mangibang. Four of the six names for sharks clearly have a head with the second constituent modifying the specific type of shark. In mangibang memeas the second constituent is the stative verb which means 'white', literally 'white shark' (note that the irrealis form always seems to be used, since it seems to be covering the generic status of the lexical item). In mangibang tinumbu, mangiban puteang, and mangibang seseng each of the modifiers is lexically a different animal species. Tinumbu is another fish species called the 'wahoo, mackeral shark (Acanthocybium solandri, Grammatorcynus bilineatus)', the puteang is a bird species called 'pied imperial pigeon (Ducula bicolor)'. The seseng is a 'cat'. The terms bi'ung and sipapi are simply unknown thus far as to their possible meaning except for the shark species.

| N1 | N2 |  |
| :--- | :--- | :--- |
| mangiban | bi'ung | 'hammerhead shark, Sphyrna lewini, Sphyrna blochii' |
| mangiban | sipapi | 'tiger shark, Galeocerdo cuvier' |
| mangiban | tinumbu <br> mangiban <br> puteang | 'sandbar shark, brown shark, Carcharhinus plumbeus' <br> 'great blue, reef white-tip shark, Prionace glauca, |
| mangiban | memeas | Triaenodon obesus (lit. pigeon shark)' <br> 'great blue, reef white-tip shark (lit. white shark), Prionace <br> glauca, Triaenodon obesus' |
| mangibang | seseng | 'catfish shark (lit. cat shark)' |

The genitive linker $n u$ sometimes appears in the names of fish and other animals. The first noun in a compound name typically specifies a higher order category and the second noun indicates a subcategory, in much the same way as binomial Latin names do in biology. The generic name for fish is bau (also used for 'meat, food'), and so bau janggu is literally the 'bearded fish', or in English nomenclature the 'gourami (freshwater) or goatfish species (saltwater)'. Similarly, when the genitive is used with bau nu='uulon literally the 'fish of the sea anemone' or as 'clown fish, Dascyllus trimaculatus'.

Sometimes alternations have been given, for example titig gasang or titig nugasang 'various damselfishes and clown fishes, etc.'. Sometimes noun phrases which would normally take a genitive linker $n u$ do not seem to require it when it has became a permanently identified entity, as in example (67). Compound heads can be modified by a simple noun or by another compound. Example (68) lists a compound for 'spiny eel', in which the head noun has not been identified, but the genitive noun phrase ngisi nubuaya can be translated literally as 'crocodile teeth of'.
po-rembas goong
SF-hit/strike gong
‘flag-tail fish (lit. gong striker), Malacanthus brevirostris’
(68)

| ponjuju | ngisi | nubuaya |
| :--- | :--- | :--- |
| pong-juju | ngisi | nu=buaya |
| SF-?? | teeth | CN/GE=crocodile |

'spiny eel, Macrognathus aculeatus'
Compounds can also be simply lexicalised reduplications. In some instances the unreduplicated form of the word does not occur (see example (69a), and in other cases the reduplicated form differs unpredictably in meaning from the base, as in example (69b).

|  | mpili-mpilis | 'coach-whip trevally, Carangoides amatus' |
| :---: | :---: | :---: |
|  | ntui-ntuing | 'flying fish, Cypselurus simas; Cypsilurus poecilopterus, Exocoetus volitans' |
|  | ntui-ntuing nu=batu | 'butterfly gurnard, flying gurnard, Dactyloptena orientalis' |
|  | paka-paka | 'various groupers and rock-cods' |
|  | tamoa-moang | 'various cardinal fishes' |
| b. | abu-abu | 'various moray eels' |
|  | lugu-lugus | 'various boxfishes' |
|  | robu-robung | 'cornetfish, trumpetfish, Fistularia petimba, Aulostomus chinensis, Fistularia commersonii' |
|  | tanda-tanda | 'various snappers, and juvenile hogfish Badianus (syn. tutudan) bilunulatus, Lutjanus russelli, Lutjanus erenberghi,Lutjanu johnii, Lutjanus fulvilamma, Lutjanus monostigma' |
|  | avu-avu | 'k.o. ocean fish' |

Abu means 'dust, ashes', lugus means 'betelnut, areca nut', robung is a 'large k.o. bamboo' (notice that the fish species are long and slender like bamboo), tanda means 'mark, sign' and is also cognate to Indonesian tanda. Avu, mpilis, ntuing, paka, tamoa, moang have not been identified with any meaning. Note also that the reduplication does not signal any grammatical idea such as diffuseness (§7.4.3.2), nor plurality (a lexical item can be singular or plural depending on the context, just like any other non-reduplicated form such as asu 'dog').

The examples in (70) are typical compounded noun phrases found in folktales and other genres in my corpus. They all illustrate that the N1 is usually more general and the N 2 is more specific or qualifies the N1 in some way. As stated previously, some of these could easily be abbreviated genitive phrases. Others are closer to being interpreted as appositives (§7.4.7), but are considered here to be better candidates of a compound noun phrase. The previous discussion generally applies to these examples as well.

| (a) | tomogurang bengkel tomogurang langkai tomogurang panganganta tomogurang panganganta doruo uo tomogurang topomagar | 'female parent/elder' <br> 'male parent/elder' <br> 'flesh-eating elder' <br> 'those two flesh-eating elders' <br> 'salt-gathering elder' |
| :---: | :---: | :---: |
| (b) | unga bengkel unga langkai | 'girl child' <br> 'male child' |
| (c) | too tomogurang nu=basa Pendau too toponabu <br> too toponjaganyo <br> too topongurus Koprasi | 'Pendau language elders' <br> 'the dropper (of riddles) person' <br> 'his/her guard person' <br> 'the Co-op facilitator' |
| (d) | topongkomung asu toponjaga liang toposavung manu' | 'hunter (lit. dog carriers)' <br> 'cave guardian' <br> 'cock fighting person' |
| (e) | langkai topombulagon langkai topongkomung asu langkai toponyoput | 'male rattan gatherer' <br> 'male hunter (lit. male dog carriers)' <br> 'male blowgun person' |
| (f) | togu junjung togu manu' | 'house owner/master' <br> 'chicken's owner/master' |
| (g) | alingkot tonangkait paa tonangkait mata tonobuta palu'a tonangkait | 'cripple's popliteal space' 'cripple's foot/feet' 'blind man's eye' 'cripple's shoulder' |

### 7.4.7 Appositional nouns

Pendau also has appositional nouns, which can be defined as 'a coreferential noun phrase modifying another one' (David Andersen, pers. comm.). These appositional noun phrases have a similar structure to compound nouns in that the second noun modifies the first noun. However, the modifying noun functions as a second head noun since the first noun can take a genitive pronoun (compounds have genitive pronouns following the second noun) and serves to disambiguate a potentially ambiguous head noun such as rapi 'spouse'. Stories in which the two main participants are the husband and wife are ambiguous without a modifying noun identifying the gender of the spouse, as shown in examples (71) and (72).

$$
\begin{align*}
& \text { rapi=nyo langkai } \quad \text { 'man's wife (lit. spouse of man)' }  \tag{71}\\
& \text { rapi=nyo bengkel }
\end{align*} \text { 'woman's husband (lit. spouse of woman)' }
$$

(72)

| Sirapinyo | langkai | moo | nipatei | nutoo. |
| :--- | :--- | :--- | :--- | :--- |
| si=rapi=nyo | langkai | moo | ni-pate-i | nu=too |
| $\mathrm{PN} / \mathrm{AB}=$ spouse=3SG/GE | male | this | IV/RE-kill-DIR | CN/GE=person |

'The man (lit. person) killed this man's wife.'
[nalalo.pin 132]

### 7.4.8 Stative roots as nouns

Stative roots can be used as nouns when the stative verbal prefix is absent and when they occur in a noun position (for example, subject or object). Example (73) shows the zero derivation of the stative roots mbosi' 'good', rate' 'evil', paris 'difficult', and lamor 'easy' into nouns (other word classes require a stem former which is absent in the class of stative verbs-see Chapter 9).
\(\left.\begin{array}{llllll}Modua' \& temponyo \& io \& morapi \& rootoinyomo, <br>

M-po{ }^{1} -dua' \& tempo=nyo \& io \& M-po 1 -rapi \& ro-otoi=nyo=mo\end{array}\right]\)| IR-SF-arrive | time=3SG/GE | 2 SG/AB | IR-SF-spouse | IV/IR-know=3SG/GE=COMP |
| :--- | :--- | :--- | :--- | :--- |

'When the time came he would marry, and he knew it was for good and evil, difficult or easy.'
[king.pin 024-026]

### 7.4.9 Directional verbs as gerunds

Directional verbs can substitute as a dependent of prepositional clauses with ri. All directional verbs have a special status in Pendau, they have multi-functionality and behave differently from verbs in the major verb classes, and so it is not surprising to see that they can also fill the noun slot in a prepositional phrase (see §11.2 for a discussion of directional verbs). So I will call the directional verbs used in this position gerunds. For example ri=mene' seems to have the meaning of 'the location gone up to', and ri=ma'o 'the location gone to (away from here)', etc. Directional verbs as gerund dependents of the ri prepositional phrase are illustrated in examples (74)-(78).
(74) Oo rima'o ио.
'oo ri=ma'o 'иo
$2 \mathrm{SG} / \mathrm{AB} \quad \mathrm{LOC}=$ go yonder
'You, over there.' [horse.pin 825]
(75) Sura ndau diang rimene' uo apa rimene' uо, ndaumo
sura ndau diang ri=mene' 'иo apa ri=mene' 'иo ndau=mo
only NEG EXIS LOC=go.up yonder since LOC=go.up yonder NEG=COMP

| diang | eleo, ndaumo diang | ndoung, ndaumo | diang | bulang, |  |  |
| :--- | :--- | :--- | :--- | :--- | ---: | :--- |
| diang | eleo | ndau $=$ mo | diang | ndoung | ndau $=$ mo | diang |
| bulang |  |  |  |  |  |  |
| EXIS | sun | NEG $=$ COMP EXIS | night | NEG=COMP EXIS | moon |  |


| ndaumo | diang | bituong. |
| :--- | :--- | :--- |
| ndau $=$ mo | diang | bituong |
| NEG=COMP | EXIS | star |

'There isn't anything up there, because up there, there isn't a sun, there aren't nights, there isn't a moon, and there aren't any stars.'
[horse.pin 831-835]

## (76)

| Jari | io | uo | rima'o | uo |
| :--- | :--- | :--- | :--- | :--- |$\quad$ metatamba'ong

risakampungonyo.
ri=so-kampung=nyo
LOC $=$ ONE-village $=3$ SG/GE
'So he there, went over there courting in that one village.'
[horse.pin 997]
(77)

| Ami | nelampa | rimai | moo. |
| :--- | :--- | :--- | :--- |
| 'ami | $N$-pe-lampa | ri=mai | moo |
| 1PL.EXC/AB | DY/RE-walk | LOC=come | here |
| 'We walked up to come here.' |  |  |  |

[poora.pin 371]

| Ami | ila | mai | gaar. |
| :--- | :--- | :--- | :--- |
| 'ami | ila | mai | gaar |
| 1PL.EXC/AB | ABL | come | far |

'We have come from far away.'
[poora.pin 467]
Prepositional phrases often occur in clause final position, and this can be considered the default or neutral position. Prepositional phrases can precede the verb and other noun phrase constituents. This will be discussed as pragmatic 'fronting' in §17.2.

### 7.5 Pre-head modifiers

The pre-head modifiers include numerals, classifiers, quantifiers, and noun markers. All of the pre-head modifiers, except for the noun markers, are noun measure phrases, and may also occur in the post-head position. ${ }^{16}$ Taking the numerals and classifiers together they occur mutually exclusively with the quantifiers and noun markers, as shown in Figure 7.5. Although the numerals and classifiers could be viewed as quantifiers they are discussed separately (§7.5.2.1-2). Also notice that free numeral forms may directly precede the head nominal.

[^79]| Pre-head modifier |  | Head |
| :--- | :--- | :---: |
| Numeral |  |  |
|  |  |  |
| Numeral <br> prefix | Sortal classifier |  |
|  | Mensural classifier | Nominal |
| Quantifier |  |  |
| Noun markers |  |  |

Figure 7.5. Pre-head modifiers

### 7.5.1 Common nouns and proper nouns

A distinction between proper nouns and common nouns is indicated by noun markers from the absolute or genitive set (Figures 6.3 and 7.3). Figure 7.6 shows how Pendau classifies nouns according to personal names, kinship terms and all the other nouns (kinship names vary as to whether they are marked as proper nouns or common nounsthis is discussed in §7.5.1.1).

| si/ni (Proper nouns) | Personal names |
| :--- | :--- |
|  | Kinship nouns |
| $\varnothing / n u$ (Common noun) |  |
|  | Other nouns |

Figure 7.6. Common and proper nouns

### 7.5.1.1 Proper nouns and markers si, ni

I use the term 'proper nouns' to indicate the Pendau classification which only includes personal names, some kinship terms, personified animals in stories, and the question word sisee/nisee 'who' (see $\S 7.3 .6$ for discussion of si as a frozen form of some nouns). ${ }^{17}$ This class of nouns is distinguished by the fact that a mandatory proper noun marker precedes the proper noun, which can be either si or ni depending on which case is in use ( $\S 5.5, \S 6.2$, $\S 7.5 .1$, and §7.6.4). The marker is si when the proper noun is in the absolute set as in (79)(81), otherwise its parallel marker ni is used in the genitive position as in (82)-(84), or when the proper noun is in a genitive relationship with another noun as in (85) and (86).

| Taruus | nentuung | simanggenyo | ila | junjung. |
| :--- | :--- | :--- | :--- | :--- |
| taruus | $N$-pe-ntuung | si=mangge=nyo | ila | junjung |
| continue | RE-SF/DY-descend | $\mathrm{PN} / \mathrm{AB}=$ uncle=3SG/GE | from | house |
| 'After that his uncle descended from the house.' |  | [horse.pin 1112] |  |  |

(80) SiEda nesabemo rioto.
si=Eda $\quad N$-pe-sabe $=$ mo $\quad$ ri $=$ oto
$\mathrm{PN} / \mathrm{AB}=\mathrm{Eda} \quad$ RE-SF/DY-ride=COMP $\mathrm{LOC}=$ car
'Eda (lit. mouse) rode in a car.'
[Nerlin.pin 006]

[^80]| Sikai | nengitai | sibe'e. |
| :--- | :--- | :--- |
| si=kai | N-pong-ita-i | si=be'e |
| PN/AB=grandfather | RE-SF/PT-see-DIR | PN/AB=grandmother |
| 'The grandfather saw the grandmother.' |  |  |

(82)

| Unga | uo | niangkap | niinanyo | $o$ | niamanyo. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| unga | 'uo | ni-angkap | ni=ina=nyo | $o$ | $n i=a m a=n y o$ |
| child | yonder | IV/RE-hug | PN/GE=mother=3SG/GE | and | PN/GE=father=3SG/G |

(83)

| Nialap | nirapinyo | langkai | rabia | uo. |
| :--- | :--- | :--- | :--- | :--- |
| ni-alap | ni=rapi=nyo | langkai | rabia | 'uo |
| IV/RE-get | PN/GE=spouse=3SG/GE | male | sago | yonder |

'The husband's wife took that sago.'
[mdtext2.txt 043]
(84)

| Unga | uo | nibadai | niinanyo | poyog. |
| :--- | :--- | :--- | :--- | :--- |
| unga | 'uo | ni-bada-i | $n i=$ ina=nyo | poyog |
| child | yonder | IV/RE-makeup-DIR | PN/GE=mother=3SG/GE | charcoal |
| 'His mother painted/covered (her) child there with charcoal.' | [mdtext15.txt 141] |  |  |  |


| Ila | uo | ma'omo | neduta | siina | nigibang |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ila | 'uo | ma'o=mo | N-pe-duta | si=ina | ni=gibang |
| ABL | yonder | go=COMP | RE-SF-propose | $\mathrm{PN} / \mathrm{AB}=$ mother | PN/GE=water.monitor |
|  |  |  |  |  |  |
| o | siamanyo. |  |  |  |  |
| $o$ | si=ama=nyo |  |  |  |  |
| and | $\mathrm{PN} / \mathrm{AB}=$ father=3SG/GE |  |  |  |  |

'After that the water monitor's mother and his father had gone to propose.'
[gibang.pin 019]
(86) Io rijunjung niamanyo.
io ri=junjung $n i=a m a=n y o$
3SG/AB LOC=house $\mathrm{PN} / \mathrm{GE}=$ father $=3 \mathrm{SG} / \mathrm{GE}$
'She was in her father's house'
[maslia.pin 009]

The example in (87) illustrates the parallel forms of ni/si and demonstrates that the alternation doesn't affect the semantic meaning of the word.
(87)

| Absolute case | Genitive case | Gloss |
| :--- | :--- | :--- |
| si=rapi | $n i=r a p i$ | 'spouse' |
| si=papa | $n i=p a p a$ | 'grandpa' |
| si=nene | $n i=n e n e$ | 'grandma' |
| si=Yusup | $n i=Y u s u p$ | 'Joseph' |
| si=be'e | $n i=b e ' e$ | 'grandmother' |
| si=kai | $n i=k a i$ | 'grandfather' |
| si=sanu | $n i=s a n u$ | 'Mr/Ms somebody' |

Kinship terms which are excluded from this list are common nouns marked as $\varnothing / n u$. These are indicated by the use of $n u$ in genitive noun phrases or when the common noun is functioning as the agent in inverse constructions. The split between these kin terms marked with proper noun markers and those marked with common nouns appears to be arbitrary, although impressionistically it appears the more commonly used kin terms are used with proper noun markers. Two kin terms marked as common nouns are in (88).
Absolute case
meniang
ipag

## Genitive case <br> nu=meniang <br> $n u=i p a g$

Gloss<br>'mother-in-law'<br>'brother-in-law'

Many elderly people have names that derive from the names of kinds of animals. In folktales names of personified animals are marked as proper names. Before formal religion became dominant people often named their children after an animal that happened to be in the kitchen ready to eat, or by some other incident that may have happened that day. Thus some personal names such as the following are still not uncommon:

| si=Ndueng | 'Mr/Ms Anoa' ${ }^{18}$ |
| :--- | :--- |
| si=Lamba | 'Mr/Ms Hornbill', |
| si=Duyung | 'Mr/Ms Dugong' |
| si=Pujit | 'Mr/Ms Octopus' |
| si=Urang | 'Mr/Ms Shrimp' |
| si=Kodo | 'Mr/Ms Monkey' ${ }^{19}$ |

It appears that grammatically the proper noun marker is variably a proclitic or an integral part of a word. In one instance it functions as a clitic on a word, and in another as an integral part of the same word. Words in (90) are typical words in which the 'clitic' formative is often found as an internal part of the word. The genitive form ni in these words shows that the clitic is still identifiable.

| siina | niina | 'mother' |
| :--- | :--- | :--- |
| siama | niama | 'father' |
| sia'a | nia'a | 'older sibling' |
| sisee ${ }^{20}$ | nisee | 'who/whom' |
| siopu | -- | 'owner/Lord' |

As a clitic, the si should always appear post-lexically. However, the examples in (91) show that other prefixes may occur preceding the former 'clitic', thus indicating that it has

[^81]already been internalised by the speaker. The hyphens following the si are merely for heuristic purposes and do not imply that it is a prefix.

| to-si-ina | 'that particular mother' | si-ina | 'mother' |
| :--- | :--- | :--- | :--- |
| to-si-si-ina | 'that particular mother' | si-ina | 'mother' |
| se-n-si-ama | 'rooster' | si-ama | 'father' |

There are also some cases such as: bulu nu= siina=nyo 'her mother's fur,' palanga nu=siina=nyo 'her mother's lap.' Note the following examples from texts that clearly show this variation occurring on the same word base ina 'mother'.

| Io | niebilingomo | nusiina | mami. |
| :--- | :--- | :--- | :--- |
| io | ni-ebiling=mo | nu=siina | mami |
| 3SG/AB | IV/RE-leave-COMP | CN/GE=mother | 1PL.EXC/GE |
| 'Our mother had already left him.' |  |  |  |


| Tarus | nijaritaa, | niina | nigibang. |
| :--- | :--- | :--- | :--- |
| tarus | ni-jarita-a, | ni=ina | ni=gibang |
| continue | IV/RE-story-TZ | PN/GE=mother | PN/GE=monitor.lizard |

'And so the monitor lizard's mother told him the story.'

These examples show that Pendau is in the process of reanalysing kin terms. Although most function as proper nouns, the reanalysis in process appears on frequently used common nouns such as ina 'mother' which becomes siina 'mother'. If this process continues then all kin terms would be classed eventually as common nouns.

### 7.5.1.2 Common nouns and the markers nu/Ø

Common nouns are all nouns excluding proper nouns. Common nouns are normally unmarked except for two specific uses in which case they are marked with $n u=: 1$ ) as agent of inverse voice verbs, as in (94), or stative verbs (§9.4.2.2), and 2) when used to link two nouns in a genitive noun phrase, as in (95) (see §7.6.4 for further details).

$$
\begin{array}{llll}
\text { (94) } & \text { A'u } & \text { robolilo } & \text { nutoo. } \\
\text { a'u } & \text { ro-bolilo } & \text { nu=too } \\
& \text { 1SG/AB } & \text { IV/IR-club } & \text { CN/GE=person }
\end{array}
$$

'People will club me.'
[mdtext17.txt 024]

| Paey | nangalap | salo | nujunjung | uo. |
| :--- | :--- | :--- | :--- | :--- |
| paey | N-pong-alap | salo | nu=junjung | 'uo |
| and.then | RE-SF/PT-get | floor | CN/GE=house | yonder |

'And then he took the floor of that house.'
[mdtext11.txt 006]

There are some rare instances of common nouns marked with $u=$ (elicitation shows that they can be used in any syntactic position that the counterpart proper noun marker si is used in, that is, the absolute case), as in examples (96) and (97). Himmelmann has suggested such marking may indicate a highlighted use of nouns (pers. comm.).


### 7.5.2 The measure phrase

The measure phrase is typically made up of word classes that express measurement. These are numerals (§7.5.2.1), classifiers (§7.5.2.2), and quantifiers (§7.5.2.3). Derivational processes which create quantifiers and measure nouns are discussed in §7.5.2.4.

### 7.5.2.1 Numerals

### 7.5.2.1.1 Types of numerals

Numerals in Pendau are of two basic types: cardinals and ordinals. The cardinals can be considered to be the basic set as they are non-derived, and the ordinals are derived. ${ }^{21}$ Numerals can precede or follow the head noun, as in (98) and (99) respectively.

| (98) | Nibagia' | nigibang | pepitu | karung |
| :--- | :--- | :--- | :--- | :--- | moje..

'The water monitor gave (him) seven more sacks.' [gibang.pin 062]

[^82]| (99) | Diang | too | pepitu | nongkomung |
| :--- | :--- | :--- | :--- | :--- |
| diang | too | pepitu | N-pong-’omung | asu |
| EXIS | person | seven | RE-SF-carry | dog |

'Once there were seven men who went hunting (lit. carry) with dogs.' [asu2.pin 002]

### 7.5.2.1.2 Cardinal numerals

The cardinal numbers can appear either as separate words or as prefixes, as shown in (100). The numeral prefixes (one to nine) are used on classifiers and occasionally on a noun, whereas the free forms are usually used directly preceding a noun when a classifier is not used (see $\S 7.5 .2 .2$ for discussion of classifiers). The parentheses in the prefixed types indicates this formative occurs optionally.

|  | Cardinal | Prefix |
| :--- | :--- | :--- |
| 1) | soung | so- |
| 2) | doruo | ruo- |
| 3) | totolu | (to)tolu- |
| 4) | raapat | apa- |
| 5) | lelima | (le)lima- |
| 6) | roonong | ono- |
| 7) | pepitu | (pe)pitu- |
| 8) | oalu | oalu- |
| 9) | sesio | (se)sio- |

Examples (101) and (102) illustrate a cardinal numeral and a prefixed numeral on a classifier respectively. Example (103) is a verbless clause illustrating another common configuration with both a cardinal numeral, as the subject, and a prefix numeral, as the predicate (each equated NP is shown in between brackets). Examples (105) and (105) contrast cardinal numbers used for telling time with a time period of so many hours.

| Pepitu | bamba | nuogo | nidua' | nijimo. |
| :--- | :--- | :--- | :--- | :--- |
| pepitu | bamba | nu=ogo | ni-dua, | nijimo |
| seven | inlet | CN/GE=water | IV/RE-arrive | 3PL/GE |

'They arrived at the seven river inlets.'
[mdtext15.txt 032]
(102) Ni'itonyo taipang samata.
ni-'ito=nyo taipang so-mata
IV/RE-see=3SG/GE mango ONE-CLSF/eye
'He saw one mango tree.'
[nalalo.pin 011]
(103) [Jimo pepitu] [sampayangan.]
jimo pepitu so-ng-payangan
3PL/AB seven ONE-LIG-boat
'They were seven to a boat.'
[mdtext15.txt 001

| (104) Apa | nalabatomo | tinting | lelima | moo. |
| :--- | :--- | :--- | :--- | :--- |
| apa | no-labat $=$ mo | tinting | lelima | moo |
| because | ST/RE-pass=COMP | o'clock | five | this |
| 'Because it was already past five o'clock.' |  |  |  |  |

[jptext07.jdb 056]

| (105) Lelima | jaang | paey | notou' | nisensor. |
| :---: | :--- | :--- | :--- | :--- |
| lelima | jaang | paey | N-po-tou' | ni-sensor |
| five | hour | then | RE-SF-finish | IV/RE-chainsaw |

'After five hours then they finished using the chainsaw.'
[terminal.int 040]
The prefix so- 'one' is a member of the HPS so that the alternations se- and sa- are also found (§3.5.7.2). It should be noted that some members of the cardinal set could be viewed as exhibiting a kind of partial reduplication, where the vowel of the CV formative (first syllable) fits in with the standard vowel harmony rule, for example, le in lelima 'five' (all except for soung and oalu, and a different consonant in doruo 'two', and one initial consonant in raapat 'four' but which lacks any initial consonant in the base apat 'four'). See $\S 3.5 .7$ for vowel harmony rules.

Occasionally a cardinal numeral is prefixed with te- as in (106). This prefix is attested for other numeral derivations as a minor variant with the nominalising stem former pe- (for discussion see $\S 7.5 .2 .4 .1$ and compare the non-volitional aspect prefix te- in §13.4.2.2).

| (106) Biasa | reitai | telelima | manu' |
| ---: | :--- | :--- | :--- |
| biasa | ro-ita-i | te-lelima | manu' |
| usually | IV/IR-see-DIR | SF-five | bird/chicken |

'Usually you will see five birds.'
[videotr.txt 227]
Listed below are representative numbers from ten and above using the basic nine cardinals in combination with the additional counters for tens -mpulu, hundreds -gatus, and thousands -ribu.

| 10) | sompulu | 20) | ruompulu |
| :---: | :---: | :---: | :---: |
| 11) | sompulu soung | 21) | ruompulu soung |
| 12) | sompulu doruo | 22) | ruompulu doruo |
| 13) | sompulu totolu | 30) | (to)tolumpulu |
| 14) | sompulu raapat | 40) | apampulu |
| 15) | sompulu lelima | 50) | (le)limampulu |
| 16) | sompulu roonong | 60) | onompulu |
| 17) | sompulu pepitu | 70) | (pe)pitumpulu |
| 18) | sompulu oalu | 80) | oalumpulu |
| 19) | sompulu sesio | 90) | (se)siompulu |
| 100) | sagatus | 444) | apagatus apampulu raapat |
| 101) | sagatus soung | 555) | limagatus lelimampulu lelima |
| 111) | sagatus sompulu soung | 666) | onogatus onompulu ronong |
| 200) | ruogatus | 777) | pitugatus pitumpulu pepitu |
| 222) | ruogatus ruompulu doruo | 888) | oalugatus oalumpulu oalu |
| 300) | (to)tolugatus | 999) | siogatus siompulu sesio |
| 333) | tolugatus tolumpulu totolu | 1000) | seribu |

Examples (107) and (108) illustrate the combinations of numerals in a sentence.
$\begin{array}{lllll}\text { (107) } & \text { Tapi } & \text { tonipobalu' } & \text { limampulu } & \text { oalu } \\ \text { tata. } \\ \text { tapi } & \text { to=ni-po-balu' } & \text { lima-mpulu } & \text { oalu } & \text { mata } \\ \text { but } & \text { RM=IV/RE-SF-sell } & \text { five-tens } & \text { eight } & \text { CLSF/eye }\end{array}$
'But we sold fifty-eight eyes (of clove seedlings).' [jo'ong.int 004]
(108) Bai uo nireken olinyo tolugatus limampulu ribu rupia. bai иo ni-reken oli=nyo tolu-gatus lima-mpulu ribu rupia like yonder IV/RE-count cost=3SG/GE three-hundred five-tens thousand rupiah 'When (they) finished counting its value was three hundred and fifty thousand rupiahs.'
[jo'ong.int 021]
Cardinal numerals can further derive a nominalised form of the numeral with the circumfix pe- / -ong (see $\S 7.4 .2$ on the common use of $p V(C)$ - stem formative prefixes and -ong suffixes used in various nominalisation derivations). This results in deriving the 'Xth' place, where ' X ' is the cardinal numeral (also see §7.5.2.4.1 for a similar derivational process on classifiers).
(109) 'the Xth place'

| $1^{\text {st }}$ place | pe-soun $(g)$-ong ${ }^{22}$ | $11^{\text {th }}$ place | pe-so-mpulu-soun(g)-ong |
| :--- | :--- | :--- | :--- |
| $2^{\text {nd }}$ place | pe-doru-ong | $12^{\text {th }}$ place | pe-so-mpulu-doruo-ong |
| $3^{\text {rd }}$ place | pe-totolu-ong | $19^{\text {th }}$ place | pe-so-mpulu-seseio-ong |
| $4^{\text {th }}$ place | pe-raapat-ong | $20^{\text {th }}$ place | pe-ruo-mpulu-ong |
| $5^{\text {th }}$ place | pe-lelima-ong | $21^{\text {st }}$ place | pe-ruo-mpulu-soun(g)-ong |
| $6^{\text {th }}$ place | pe-roon-ong | $22^{\text {nd }}$ place | pe-ruo-mpulu-doruo-ong |
| $7^{\text {th }}$ place | po-pepitu-ong | $100^{\text {th }}$ place | pe-sa-gatus-ong |
| $8^{\text {th }}$ place | pe-oalu-ong | $101^{\text {st }}$ place | pe-sa-gatus soun(g)-ong |
| $9^{\text {th }}$ place | pe-sesio-ong | $1000^{\text {th }}$ place | pe-se-ribu-ong |
| $10^{\text {th }}$ place | pe-sompulu-ong | $1001^{\text {st }}$ place | pe-se-ribu-soun(g)-ong |

Example (110) contrasts the cardinal number roonong 'six' with the derived form of peroonong 'sixth' in (111). Example (112) illustrates the derived form of peribuong 'onethousandth' in collecting donated money (in order to find someone with a chainsaw that could be hired to clear a felled tree that obstructed the road).
(110) Olongian uo nongkai bengkel roonong иo nonguba peti uo. 'olongian 'uo $N$-pong-'ai bengkel roonong 'uo $N$-pong-uba peti 'uo king yonder RE-SF-call girl six yonder RE-SF-carrycoffin yonder 'The king there called the six girls there to carry (lit. carry piggyback) that coffin on their backs.'
[mdtext20.txt 290]

[^83]| (111) Nodua' moje unga peroonong | uo. |  |
| :--- | :--- | :--- | :--- | :--- |
| N-po-dua' moje unga pe-roong-ong | 'uo |  |
| RE-SF-arrive again child | SF-six-locN | yonder |
| 'Then the sixth child over there arrived.' |  |  |

[mdtext1.txt 020]


### 7.5.2.1.3 Ordinal numerals

The ordinal numbers are based on the cardinal number bases, but add either a po-, po'o-, $p e ' e$, or $p e$ - prefix preceding the cardinal numeral. The number 'one' may vary between soung and pabia-bia 'at first, first one'. The two lists in example (113) contrast two types of ordinals: (1) a derived numeral noun phrase following a noun head too 'person', and (2) a derived ordinal numeral standing as the head (or the head has been ellipsed). Only one gloss is given for both. Those glossed with both 'person' and 'one' indicates that 'person' is for the first list, and 'one' is for the second list.

## (113) Ordinals ${ }^{24}$

| too soung | pabia-bianyo | 'the $1^{\text {st }}$ person/one' |
| :--- | :--- | :--- |
| too po'odoruonyo | po-'o-doruo(nyo) | 'the $2^{\text {nd }}$ person/one |
| too po'ototolunyo | po-totolu(nyo) | 'the $3^{\text {rd }}$ person/one |
| too porapatonyo | po-raapat(onyo) | 'the $4^{\text {th }}$ person/one |
| too polelimanyo | po-lilima(nyo) | 'the $5^{\text {th }}$ person/one |
| too po'oronongonyo | po-roonong(onyo) | 'the $6^{\text {th }}$ person/one |
| too popepitunyo | po-pepitu(onyo) | 'the $7^{\text {th }}$ person/one |
| too po'oalunyo | po-'o-oalu(nyo) | 'the $8^{\text {th }}$ person/one |
| too po'eseseionyo | po-'e-sesio(nyo) | 'the $9^{\text {th }}$ person/one |
| too po'osompulunyo | po-'o-sompulu(nyo) | 'the $10^{\text {th }}$ person/one' |
| too po'osompulu soung | 'the $11^{\text {th }}$ person' |  |
| too po'osompulu doruo(nyo) |  | 'the $12^{\text {th }}$ person' |
| too po'oruompulu soungonyo |  | 'the $21^{\text {st }}$ person' |
| too posagatusonyo | 'the $100^{\text {th }}$ person' |  |
| too posagatus soung | 'the $101^{\text {st }}$ person' |  |
| too sagatus doruo ${ }^{26}$ | 'the $102^{\text {nd }}$ person' |  |
| too poruosagatusonyo | 'the $200^{\text {th }}$ person' |  |
| too poruogatus doruonyo | 'the $202^{\text {nd }}$ person' |  |

[^84]Examples (114) and (115) show the use of ordinal numbers, unga petotolunyo 'third child' and unga popepitunyo 'seventh child', in two folktales. ${ }^{27}$ Example (116) illustrates the beginning of a numbered sequence of swimming holes along a stream in which the character in this story is looking for his parents and finds their house near the tutunoong popepitunyo 'seventh swimming hole'.

| Paey | unga | petotolunyo | nogintoya | ila | uo. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| paey | unga | pe-totolu=nyo | N-po-gi-ntoya | ila 'uo |  |
| then | child | SF-three=3SG/GE | RE-SF-REL-swing | ABL yonder |  |

'Then the third child swung from there.'
(115) Bia unga popepitunyo niduta, paey nitarima.
bia unga po-pepitu=nyo ni-duta paey ni-tarima
later child SF-seven=3SG/GE IV/RE-propose then IV/RE-receive
'Later when he proposed to the seventh child (daughter), then she accepted.'
[gibang.pin 043]
(116) Tutuunong
tutuunong
swimming.hole
pabia-bianyo ndaupo.
pabia-bia=nyo ndau=po
first=3SG/GE NEG=CONT
Tutuunong pedoruonyo ndaupo.
tutuunong pe-doruo=nyo ndau=po
swimming.hole $\mathrm{SF}-\mathrm{two}=3 \mathrm{SG} / \mathrm{GE} \quad \mathrm{NEG}=\mathrm{CONT}$
'It wasn't at the first swimming hole. It wasn't at the second swimming hole.'
[nalalo.pin 154-155]

### 7.5.2.1.4 Active voice prefix on numerals

The mong-/nong- prefix ${ }^{28}$ can transition numeral bases into a verb which has an adjective-like function within a nominal phrase (its verbal status is further attested by the contrast between irrealis and realis). Since this special verb construction is always used as a nominal constituent in a clause, I will refer to it as a participle. Examples (117)-(119) illustrate the affixation on tens, hundreds, and thousands (which in this usage is always reduplicated). Examples (120)-(125) illustrate numeral prefixing in phrases and clauses.
(117) mompulu-pulu

M-pong-pulu-pulu
IR-SF-RED-tens
'have tens of s.t.'
[horse.pin 153]

[^85](118) monggatu-gatus

M-pong-gatu-gatus
IR-SF-RED-hundreds
'have hundreds of s.t.'
[EN97-002.28]
(119) moribu-ribu

M-pong-ribu-ribu
IR-SF-RED-thousand
'have thousands upon thousands'
[EN97-002.28]
(120) monggatu-gatus pariamamo

M-pong-gatu-gatus pariama=mo
IR-SF-RED-hundreds year=COMP
'Hundreds of years ago.'
[EN97-002.28]
(121) Mompulu-mpulu

M-pong-mpulu-mpulu
pariamamo.
IR-SF-RED-ten year=COMP
'Many tens of years ago.'
[EN97-002.28]
(122) Nompulu-mpulu bua bau naalap mami.

N-pong-mpulu-mpulu bua bau no-alap mami
RE-SF-RED-ten CLSF fish ST/RE-get 1PL.EXC/GE
'Hundreds of fish were caught by us (excl.).'
[EN97-002.28]
$\begin{array}{clll}\text { (123) A'u } & \text { mengitai } & \text { nonggatu-gatus } & \text { bituong. } \\ \text { a'u } & \text { M-pong-ita-i } & \text { N-pong-gatu-gatus } & \text { bituong } \\ \text { 1SG/AB } & \text { IR-SF/PT-see-DIR } & \text { RE-SF-RED-hundreds } & \text { stars }\end{array}$
'I see hundreds and hundreds of stars.'
[EN97-002.29]
(124) Monggatu-gatus pariamamo siYesus naate

M-pong-gatu-gatus pariama=mo si=Yesus no-ate
IR-SF-RED-hundred year=COMP PN/GE=Jesus ST/RE-die
'Jesus died hundreds of years ago.'
[EN97-002.28]
(125) Noribu-ribu botonyo sura soung roongoyo.

N-pong-ribu-ribu boto=nyo sura soung roong=nyo
RE-SF-RED-thousand trunk=3SG/GE only one leaf=3SG/GE
'It has thousands of trunks, but it only has one leaf.'
[tangke01.doc]

### 7.5.2.2 Numeral classifiers

Pendau has two types of numeral classifiers: sortal and mensural. The sortal classifiers are a small closed class and the mensural classifiers are an open class. In a comparative study Aikhenvald (2000:115) describes the semantic difference between these two types as follows:

While sortal classifiers categorize nouns in terms of their inherent properties such as animacy, shape, consistency, mensural classifiers are used for measuring units of countable and mass nouns.

Another distinction between sortals and mensurals in Pendau is that sortals can derive a new quantifier, a special quantificative nominalisation that still classifies the head noun (§7.5.2.4.1). The discourse use of classifiers will be discussed briefly below.

### 7.5.2.2.1 Sortal classifiers

Like Indonesian and many other Western Malayo-Polynesian languages, Pendau has a sortal classifier system in which individual classifiers roughly reflect the size, shape, or some other conspicuous feature of the object in question. These classifiers are preceded by prefixed numbers. The examples in (126) are those sortals which have been identified to date. ${ }^{29}$ These are illustrated with the prefix so- 'one.' Note that vowel harmony applies here.

| (126)Sortal <br> classifier | Literal <br> meaning | Range of nouns <br> applied to | Example <br> nouns | Meaning |
| :---: | :--- | :--- | :--- | :--- |

[^86]| (126)Sortal <br> classifier | Literal <br> meaning | Range of nouns <br> applied to | Example <br> nouns | Meaning |
| :--- | :--- | :--- | :--- | :--- |
|  | 10. so-ngkolo $(g)$ | 'cut, chop, <br> break' | cut or shaped heavy <br> objects; rectangular <br> thick shaped lumber | batu <br> oto <br> garobak <br> payangan | | 'brick' |
| :--- |
| 11. sa-nta'u |

The list in (127) shows the classifier mpe'a with prefixed numbers. Some larger objects or newly introduced objects are unmarked for classification and simply use a numeral, such as soung 'one' for individual units. For example, soung bongkarang 'one garden hut' (contrast with so-junjung 'one house'), soung gareja 'one church', soung payangan 'one canoe', and soung senter 'one flashlight, torch'.

| (1) | se-mpe'a dopi | 'one board' |
| :--- | :--- | :--- |
| (2) | ruo-mpe'a dopi | 'two boards' |
| (3) | totolu-mpe'a dopi | 'three boards' |
| (4) | apa-mpe'a dopi | 'four boards' |
| (5) | lelima-mpe'a dopi | 'five boards' |
| (6) | ono-mpe'a dopi | 'six boards' |
| (7) | pepitu-mpe'a dopi | 'seven boards' |
| (8) | oalu-mpe'a dopi | 'eight boards' |
| (9) | sesio-mpe'a dopi | 'nine boards' |
| (10) | sompulu-mpe'a dopi | 'ten boards' |
| (11) | sompulu se-mpe'a dopi | 'eleven boards' |
| (12) | sompulu ruo-mpe'a dopi | 'twelve boards' |
| (20) | ruo-mpulu-mpe'a dopi | 'twenty boards' |
| (30) | totolu-mpulu-mpe'a dopi | 'thirty boards' |

Examples (128)-(129) illustrate classifiers in some sentences.
(128) Taruus ninabua'o'u lumbag ruonta'u.
taruus ni-nabu-a'='u lumbag ruo-nta'u
continue IV/RE-fall-TZ=1SG/GE young.coconut two-CLSF
'Then I made two young coconuts fall down.'
[maslia.pin 045]

| (129) Bai uo | nireken | unga | nuangkaula | uo | sagatus | dampe |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| bai 'uo | ni-reken | unga | nu=angkaula | 'uo | so-gatus | dampe |
| like yonder | IV/RE-count | child | CN/GE=spider | yonder | ONE-hundred | CLSF/seed |


| ededeanyo | unga | nuangkaula | uo. |
| :--- | :---: | :--- | :--- |
| 'o-de-dea=nyo | unga | nu=angkaula 'uo |  |
| HAVE-RED-many=3SG/GE | child | CN/GE=spider yonder |  |

'So after he counted those baby spiders, the number of those baby spiders was one hundred head.'
[mdtext20.txt 036]

| Unga-unga'u | uo | uolia' | longkung | bulaan |
| :--- | :--- | :--- | :--- | :--- |
| unga-unga='u | 'uo | 'u-oli-a' | longkung | bulaan |
| RED-child=1SG/GE | yonder | 1SG.IV/IR-buy-TZ hanging.baby.cradle | gold |  |


| sagatus | ngkolo. |
| :--- | :--- |
| so-gatus | ngkolo |

ONE-hundred CLSF/shaped
'I will buy one hundred gold hanging baby cradles for my children.' [mdtext20.txt 038]
(131) Narava mai nelampamo jimo santagu
no-rava mai $N$-pe-lampa=mo jimo so-ng-tagu
ST/RE-clear.sky come RE-SF-travel=COMP 3PL/AB ONE-LIG-friend
pitungkolo payangan.
pingolo
seven-CLSF/shaped boats
'When a clear sky came they travelled as one group of seven boats.' [gibang.pin 094]

### 5.7.2.2.2 Mensural classifiers

Most measure nouns require a numeral prefix. The measure nouns ${ }^{31}$ are divided into rough semantic categories in the examples (a-h) below (following van den Berg 1989; loans are indicated by '(Ind.)'). In these examples, the numeral prefix so- 'one' is shown in the left column where a measure noun requires a numeral prefix, as it is the only numeral prefix which takes vowel harmony. Whenever the epenthetic nasal (ligature) occurs it does not interfere with the vowel harmony rule (see §3.5.7.6-7 for the rule and $\S 7.4 .5$ for a discussion of its use). In the second column numeral prefixes for two through nine are represented.

[^87]a. Time

ONE-X
se-insang sa-jaang (jaam)
se-eleo
se-mbengi
se-minggu
so-m-bulang sa-pariama

TWO-X
ruo-insang 'time, (for example, once, twice, etc.)'
ruo-jaang (jaam) 'hour' (Ind.)
ruo-eleo 'day'
ruo-mbengi 'night'
ruo-minggu 'week' (Ind.)
ruo-m-bulang 'month'
ruo-pariama 'year'
b. Parts, sections

ONE-X
sa-gaat
sa-n-tanga
so-ng-koot ('oot)
so-mpuung
so-tompig

## THREE-X

tolu-gaat
tolu-n-tanga
tolu-ng-koot ('oot)
tolu-mpung
tolu-tompig
'section, part'
'half, mid'
'small cut object(s) (from a long object)'
'group(s)'
'piece(s) of s.t.'
c. Lengths

ONE-X
d. Metric

ONE-X
se-kilo
se-liter
sa-garam

FIVE-X
lima-kilo
lima-liter
lima-garam
sa-n-jangang
se-n-si'u
sa-abaa
so-ng-komusong
apa-ng-komusong
$\begin{array}{lll}\text { sa-n-dapa } & \text { apa-n-dapa } & \begin{array}{l}\text { 'fathom, measure between fingertips of two } \\ \text { hands' }\end{array} \\ \text { sa-n-tanga ndapa } & \text { apa-n-tanga ndapa } & \text { 'measure from fingertip to mid-chest (half a }\end{array}$
$\begin{array}{lll}\text { sa-n-dapa } & \text { apa-n-dapa } & \begin{array}{l}\text { 'fathom, measure between fingertips of two } \\ \text { hands' }\end{array} \\ \text { sa-n-tanga ndapa } & \text { apa-n-tanga ndapa } & \text { 'measure from fingertip to mid-chest (half a }\end{array}$
apa-ng-kapi ('api)
apa-lotu
apa-n-tutu'
apa-n-jangang
apa-n-si’u
apa-abaa
'measure from fingertip of one hand to the
fingertip of the other hand, but holding the
'measure from fingertip of one hand to the
fingertip of the other hand, but holding the object means measuring from fist to fist so just short of a fathom'
$\begin{array}{lll}\text { sa-n-dapa } & \text { apa-n-dapa } & \begin{array}{l}\text { 'fathom, measure between fingertips of two } \\ \text { hands' }\end{array} \\ \text { sa-n-tanga ndapa } & \text { apa-n-tanga ndapa } & \text { 'measure from fingertip to mid-chest (half a }\end{array}$
$\begin{array}{lll}\text { sa-n-dapa } & \text { apa-n-dapa } & \begin{array}{l}\text { 'fathom, measure between fingertips of two } \\ \text { hands' }\end{array} \\ \text { sa-n-tanga ndapa } & \text { apa-n-tanga ndapa } & \text { 'measure from fingertip to mid-chest (half a }\end{array}$
$\begin{array}{lll}\text { sa-n-dapa } & \text { apa-n-dapa } & \begin{array}{l}\text { 'fathom, measure between fingertips of two } \\ \text { hands' }\end{array} \\ \text { sa-n-tanga ndapa } & \text { apa-n-tanga ndapa } & \text { 'measure from fingertip to mid-chest (half a }\end{array}$ fathom)' 'length of a wing, measure from fingertip to shoulderblade’
'length of finger joint'
'rung or step of a ladder'
'handspan'
'measure from fingertip to elbow, cubit' 'measure from fingertip to elbow of opposite hand'
hand
'tung or step of a ladder
e. Volumes

ONE-X
sa-saak
so-robung
sa-bambu
sa-paak
sa-karung
sa-ng-kalu ('alu)
so-bungkus
so-gogom
so-gomol, so-ng-
gomol
sa-rabo'

SIX-X
ono-saak
ono-robung
ono-bambu
ono-paak
ono-karung
ono-ng-kalu ('alu)
ono-bungkus
ono-gogom
ono-gomol
ono-rabo'

SEVEN-X
pitu-iting
pitu-m-buli
pibu-m-bo'a
pitu-m-paa
'sack full' (Ind.)
'bamboo-size container' 'bamboo-size container' (Ind.)
'pack full' (Ind.)
'burlap bag full' (Ind.)
's.t. wrapped up, a package or box of s.t.' 'package' (Ind.)
'finger bundle (what can be held between the thumb and index finger, or thumb and middle finger)'
'fistful'
'handful'
'hand of bananas'
'a branch of s.t., as in bananas'
'plate of s.t.'
'hand or cluster (for example, hand of bananas, cluster of coconuts)'
g. Landmark distances

ONE-X
se-leko'
se-litu

## EIGHT-X

oalu-leko'
oalu-litu
'next bend of road or path'
'next bend of river'
h. Miscellaneous

ONE-X
sa-pasang
sa-bata

NINE-X
sio-pasang
--
'pair of s.t.' (Ind.) 'one of a pair'

Examples (132)-(136) illustrate several mensurals in sentences.
(132) Tarapasa nengkanimo ni'inangonyo sanggomol aniong.
tarapasa $N$-pe-ngkani=mo ni-inang=nyo so-ng-gomol aniong force DY/RE-eat=COMP IV/RE-eat-3SG/GE ONE-LIG-fistful cooked.rice 'So (he) was forced to eat, he ate (just) one fistful of cooked-rice.' [asu2.pin 084]
(133) Uolia' sapatu bulaan sagatus pasang.
'u-oli-a' sapatu bulaan so-gatus pasang
1SG.IV/IR-buy-TZ shoe gold ONE-hundred pair
'I will buy one hundred pairs of gold shoes (for them).'
[mdtext20.txt 038]

| (134) | Siama | niLori | nongore | sobua | bau |
| :--- | :--- | :--- | :--- | :--- | :--- |
| siama | ni=L. | N-pong-ore | so-bua | bau | mo-doda', |
| father | CN/GE=L. | RE-SF-pull.two-handed | ONE-CLSF/fruit | fish | ST/IR-red |
| 'Lori's father pulled (lit. pull hand over hand) one red fish up.' | [jptext04.jdb 037] |  |  |  |  |


| (135) Paey | nidapai | nujuragang | luba' uo, | adadantangonyo |
| ---: | :--- | :--- | :--- | :--- |
| paey | ni-dapa-i | nu=juragang | luba' 'uo | 'o-da-dantang=nyo |
| then | IV/RE-fathom-DIR | CN/GE=captain hair | yonder | HAVE-RED-long=3SG/GE |

luba' sandapa o sensi’u
luba' so-ng-dapa o so-ng-si'u
hair ONE-LIG-fathom and ONE-LIG-elbow
'Then the captain measured the hair with his arms stretched out from finger tip to finger tip and the length of that hair was one fathom and one cubit (lit. one elbow) long.'
[mdtext15.txt 064]
$\begin{array}{rllll}\text { (136) Paey } & \text { nialap } & \text { nijimo } & \text { vea } & \text { pituliter. } \\ \text { paey } & \text { ni-alap } & \text { nijimo } & \text { vea } & \text { pitu-liter } \\ \text { then } & \text { IV/RE-get } & \text { 3PL/GE } & \text { uncooked.rice } & \text { seven-litre }\end{array}$
'And then they took seven litres of uncooked rice.'
[poora.pin 338]

### 7.5.2.2.3 The functions of classifiers

Classifiers are not obligatory with nouns. They are used for discourse reasons (Aikhenvald 2000, Daley 1998). Common uses in Pendau include substituting for the noun anaphorically and emphasising a different characteristic of the head noun than expected. Example (137) illustrates the anaphoric use of the mensural classifier onongkoot 'six pieces' substituting for the previous noun sangkayu 'one snake-like object'.
(137) Ila mai uo nodua'omo too mongkomung asu
ila mai 'uo no-dua'=mo too M-pong-'omung asu
from come yonder ST/RE-arrive=COMP person RE-SF/PT-carry dog

| naala | moje | jimo | ai | sangkayu | naalap |
| :--- | :--- | :--- | :--- | :--- | :--- |
| no-ala | moje | jimo | ai | so-ngkayu | no-alap |
| ST/RE-get | again | 3PL/AB | but one-snake | IV/RE-get |  |


| nijimo | uo | jimo | roonong | onongkoot |
| :--- | :--- | :--- | :--- | :--- |
| nijimo | 'uo | jimo | roonong | ono-ng-'oot <br> six-LIG-CLSF |
| 3PL/GE yonder | 3PL/AB | six | six-L |  |
|  |  | ni'omung | nijimo. |  |
| tonatua | ni-'omung | nijimo |  |  |
| to=natua | nis/RE |  |  |  |
| RM=able/RE | IV/RE-carry | 3PL/GE |  |  |

'From there they arrived and then taking the dogs they got something again, they got a snake which the six of them cut up into six pieces so that they were able to carry it.'

In example (138) the special classifier mpanga 'indicates that the meaning of the noun is different from that normally expected for the noun $b a$ ' 'head'.

```
(138)
...joo garuda topepitu-mpanga ba'inyo...
joo garuda to=pepitu-mpanga ba'i=nyo
really griffin RM=seven-branches head=3SG/GE
'...really the griffin which (had) seven branches of its heads...'
```

Contrast the difference in the use of the two classifiers for the same noun ba' 'head' in (139)-(140). When one of the seven heads of the garuda 'griffin-like bird' is singled out the regular classifier is used, but when the unusual description of a seven-headed creature is explained the regular classifier can't be used. Instead the classifier mpanga 'branch, fork' is used to describe a seven-headed creature as having 'branches'.

| ...nodua' | moje | garuda | tosoung | ba'inyo... |
| :--- | :--- | :--- | :--- | :--- |
| no-dua' | moje | garuda | to $=$ soung | ba'i=nyo |
| ST/RE-arrive | more | griffin | RM=one/CLSF | head=3SG/GE |

'...one head of the griffin came again...'
(140) ...ai ndaupo diang ni'ito'u
ai ndau=po diang ni-'ito='u
but NEG=CONT EXIS IV/RE-see=1SG/GE
garuda topepitu-mpanga ba'inyo...
garuda to=pepitu-mpanga ba'i=nyo
griffin RM=seven-branches/CLSF head=3SG/GE
'...but I haven't yet seen the griffin that has seven (branches of) heads...'

### 7.5.2.3 Quantifiers

Quantifiers are a small class of words that operate as noun modifiers in the position preceding the noun. By default quantifiers cannot take a numeral prefix. The two characteristics that distinguish them from other word classes are therefore: 1) they modify a head noun, and 2) they cannot take numeral prefixes (unlike classifiers). Quantifiers can be divided into two categories: 1) lexical, for example, ana 'group', and 2) floating quantifiers. There are only two floating quantifiers: jojoo 'all' and soso'uya 'several'. Lexical quantifiers always precede the head noun and are restricted to certain groups of nouns, and they inherently quantify a specific semantic grouping, as shown in (141).

## Lexical quantifiers

ana
ongo 'group' Ex: ana guru 'students, disciples’

Plural human group marker. Ex: Ongo unga 'children', ongo lei 'young girls', ongo uti 'young boys', ongo tagu 'friends'.
ntoli Dual human 'opposite/counterpart' marker.

In example (142) is the list of the human dual pairings of opposites or natural 'counterparts' (the Pendau word ntoli does not seem to have an equivalent that is easily translated or glossed in English). ${ }^{32}$
(142) Dual human pairing quantifiers

| ntoli tagu | 'buddies' (lit. friend counterpart) |
| :--- | :--- |
| ntoli siama | 'father and child' (lit. father counterpart) |
| ntoli siina | 'mother and child' (lit. mother counterpart) |
| ntoli mo'upu | 'grandparent and grandchild' (lit. grandparent counterpart) |
| ntoli unga | 'father and child, mother and child (lit. child counterpart) |
| ntoirapi | 'husband and wife/couple' |
| jimo ntoli saana' | 'two families, or those two family units' |

Floating quantifiers are illustrated in examples (143)-(146) below:
(143) Jimo neriing jojoo.
jimo $\quad$-pe-riing jojoo
3PL/AB RE-SF/DY-bathe all
'They all bathed.'
[libur.pin 006]
(144) Unganyo pepitu иo jojoo unga bengkel
unga=nyo pepitu 'uo jojoo unga bengkel.
child=3SG/GE seven yonder all child female
'The seven children were all girls.'
[mdtext1.txt 002]
(145) Jimo nengkanimo jojoo.
jimo $N$-pe-ngkani=mo jojoo
3PL/AB RE-SF/DY-eat=COMP all
'All of them already ate.' [mdtext5.txt 005]
(146) soso’uya too
so-so-'uya too
RED-ONE-why person
'several persons' (note: so'uya means 'how many')
Derived quantifiers which mean 'each' are derived from sortal classifiers. See §7.5.2.4 for examples and discussion of derived quantifiers.

[^88]
### 7.5.2.4 Derived quantifiers and measure nouns

### 7.5.2.4.1 Derived quantifiers from sortal classifiers with teso-/-ong and peso-/-ong

One structural distinction between sortal and mensural classifiers is that only sortal classifiers can be used as bases to derive a quantifier. These quantifiers modify the head noun by specifying 'one each of X ' where the ' X ' is the head noun.

The quantificative (distributive) nominalisation circumfix has two variants. The variant circumfix teso-/-ong has appeared from time to time, but it is not yet known whether this is stylistic or a regional difference. My language assistant asserts that the circumfix peso-/ong is the Pendau standard form. The circumfix's prefixes consist of the so- 'one' prefix preceded by pe- or te-. Pe- is also used for building some nominalisations coupled with the suffix -ong. However in this configuration the derived word base is a classifier. Thus the classifiers can be transformed into the quantifier 'each' which can then modify the following noun (see $\S 7.4 .2$ for the same affixation strategy used to derive new nominals from verb and noun bases).

```
(147) Jari jimo pepitu pesounong olut,
    jari jimo pepitu pe-soung-ong 'olut
    so 3PL/AB seven SF-one/CLSF-locN package
    pesamataong piso, peselilasong sing-sing,
    pe-so-mata-ong piso pe-so-lilas-ong sing-sing
    SF-ONE-CLSF-locN knife SF-ONE-CLSF-locN RED-ring
pesamataong tavala.
pe-so-mata-ong tavala
SF-ONE-CLSF-locN spear
```

'So to each of the seven went one of the packages, one of the knives, one of the rings, and one of the spears.'
[nalalo.pin 060-063]

| (148) Jimo | roonong | uo | tesongkoloong | tinibo, |
| :--- | :--- | :--- | :--- | :--- |
| jimo | roonong | 'uo | te-so-ngkolo-ong | tinibo |
| 3PL/AB | six | yonder | SF-ONE-CLSF-locN | sugarcane |
|  |  |  |  |  |
| tesobuaong | loka, | notou' | nengkani |  |
| te-so-bua-ong | loka | no-tou' | N-pe-ngkani |  |
| SF-ONE-CLSF-locN | banana | ST/RE-finish | RE-SF/DY-eat |  |
| llaka | nonupas |  | tinibo | sou-soung |
| loka | N-pong-tupas | tinibo | sou-soung |  |
| banana | RE-SF/PT-cut | sugarcane | RED-one |  |
| nopoduling | jimo | toroonong. |  |  |
| N-popo-duling | jimo | to=roonong |  |  |
| RE-SF/POS-lay | 3PL/AB | RM=six |  |  |

'The six of them each took a piece (lit. one person one cut) of sugarcane and one banana for themselves. After they ate the banana they peeled the sugar cane and each of the six
(children) laid down.'
[poora.pin 071-073]

Example (149) was offered by one language helper as a preference over the textual example in maslia.pin 047 (from another language helper) which was te-sa-nta'u-ong (this is apparently a regional or stylistic variation).

## (149) pesanta'uong.

pe-so-nta'u-ong
SF-ONE-tail/CLSF-locN
'one tail (each)'
[EN97-002-50]

### 7.5.2.4.2 Derived measure nouns

Measure nouns are nouns which express a measurement. The most common measure nouns, apart from numerals, are sortals (§7.5.2.2.1). Apparently all measure nouns must incorporate a numeral in order to denote the measurement. The only known and productive way to produce a non-sortal measure noun is by using the stem former prefix $p o_{1}$ - in combination with a numeral prefix on the base noun insang 'time'. This is similar to how ordinals are formed (§7.5.2.1.3), and frequently has the pronominal and aspectual enclitics attached as well. A typical example is given in (150). ${ }^{33}$
(150) poampainsangonyomo
po-ampa-insang $=n y o=m o$
SF-four-time=3SG/GE=COMP
'his fourth time already'

### 7.6 Post-head modifiers

### 7.6.1 Introduction

This section will discuss only those post-head modifiers that do not include predicates, and noun phrases which can themselves function as a head. So the post-head modifiers discussed here will be limited to stative verb modifiers (§7.6.2), demonstratives (§7.6.3), genitive possessor dependent phrases (§7.6.4), and reflexive intensifiers (§7.6.5). Figure 7.7 shows the constituents and slots of the post-head modifiers.

| Head noun | Verbless predicate |  |
| :--- | :--- | :--- |
|  | Stative verb |  |
|  | Noun phrase | Demonstrative |
|  | Relative clause |  |
|  | Genitive possessor |  |
|  | Reflexive intensifiers (adjunct) |  |

Figure 7.7. Post-head modifiers

[^89]
### 7.6.2 Stative verb modifiers

Stative verbs or their roots are frequently used to modify a noun. Some examples are given in (151).

| (151) | Irrealis prefix |
| :--- | :--- |$\quad$ Gloss


| Stative root <br> without prefix <br> too dea <br> loka dea <br> aki bou | Gloss |
| :--- | :--- |
| too bou | 'many people' |
| alae bou | 'many bananas' |
| kaeng bou | 'new battery' |
| alae sae | 'new body' |
| 'new cloth' |  |
| 'old body' |  |

Stative clauses are sometimes ambiguous, being interpretable either as a clause functioning in a nominal position or as a noun phrase in which the stative verb modifies the head noun, as in (152) and (153). ${ }^{34}$ In a stative clause the nominal argument may precede or follow the stative verb as in (153) and (154). However only stative verbs which follow a noun are sometimes part of a compound noun, as in (154) and (155). There are three tests which help to resolve this ambiguity. First, stative verbs usually use the irrealis form mo- (or its harmonic allomorphs ma- and me-) or no prefix at all in compound formations. The irrealis form is more often used because this indicates a non-specific or generic class for stative verbs (§13.2.4). Secondly, the prefix is frequently dropped off to form either a compound noun or a nominal form of the stative root via conversion (§7.4.8). The form without the prefix always follows the head noun, as in (156) and (157). Some compound nouns optionally omit the genitive linker $n u$ (§7.4.6) for apparently the same reason. Thirdly, a demonstrative or possessive pronoun that immediately intervenes between the head noun and the stative verb indicates it is a stative clause, as in (152) (for example, a demonstrative following both can be interpreted either as a stative clause or as a compound noun).

| (152) [[Nedea] | [odo | uo]] | naate. |
| :--- | :--- | :--- | :--- |
| no-dea | odo | 'uo | no-ate |
| ST/RE-many | monkey | yonder | ST/RE-die |
|  |  |  |  |
|  |  |  |  |

[mdtext6.txt 062]
(153)

| Niitainyo | [nedea | rabia.] |
| :--- | :--- | :--- |
| ni-ita-=nyo | no-dea | rabia |
| IV/RE-see=3SG/GE | ST/RE-many | sago |

'She saw lots of sago.'
[mdtext2.txt 049]

[^90]

On occasion the stative verb may take realis in a compound noun construction as in (158) or as with the term kareva nombosi' 'good news' used in the gospel of Mark.

| (158)Nidua'onyo [too | naate | uo]. |  |
| :--- | :--- | :--- | :--- |
| ni-dua'=nyo | too | no-ate | 'uo |
| IV/RE-arrive=3SG/GE | person | ST/RE-die yonder |  |

'He found dead people over there.'
[miracle1.pin 076]

### 7.6.3 Demonstratives

Himmelmann (1996a:210) delimits a 'true' demonstrative by positive and negative criteria, of which it is sufficient to quote only the positive criterion: 'the element must be in a paradigmatic relation to elements which-when used exophorically-locate the entity referred to on a distance scale: as proximal, distal, etc.' Pendau has three deictic noun modifiers, as shown in example (159). This is a three term deictic system (Anderson and Keenan 1985:282-288). A fourth infrequently encountered word ana 'there' also appears to function as a demonstrative and is discussed in §7.6.3.4. As in Fijian (Dixon 1988:5860), the midterm, nao 'that', is not restricted to an object close to the addressee, but it can also refer to something relatively 'nearby' (this point will be discussed further below). Demonstrative pronouns and demonstrative modifiers in Pendau have the same form (as many languages do-see Himmelmann 1996a:214). Demonstratives may also be reduplicated for varying meanings as shown in (160).

| moo | 'close to speaker' |
| :--- | :--- |
| nao | 'close to addressee, mid-distance' |
| 'иo | 'far from both speaker and addressee' |

(160) Adverbs (§14.3.2,8)
moo-moo 'now'
ио-ио 'now'

Emphatic demonstrative function
momoo 'this one'

The demonstratives are special modifiers used to mark deictic referentiality for noun phrases (Givón 1984, 1990). Marked referentiality in this way implies definiteness (although unmarked nouns can be either definite or indefinite). The deictic demonstratives moo 'this', nao 'that', and 'uo 'yonder' are on a discourse coding continuum (see Figure 7.8, based on Givón 1984:432). Soung 'one' and soso'uya 'several' are used as indefinitereferential noun modifiers (following Givón 1984:432-435). Givón (1984:434) states: "'One" is thus a natural marker for introducing a referential topic into the discourse for the first time.'

|  | $\varnothing$ (zero marking) | Non-referential | Definite or indefinite |
| :---: | :---: | :---: | :---: |
|  | soung 'one' <br> soso'uya 'several' | referential | indefinite |
| Demonstratives | moo 'this' <br> nao 'that' <br> 'uo 'yonder' | referential | definite |

Figure 7.8. Demonstratives in the coding continuum for referentiality and definiteness

Himmelmann (1996a:206) distinguishes four uses of demonstratives: 1) situational, 2) tracking (anaphoric), 3) discourse deictic uses, and 4) recognitional. The first three will be discussed below; the last one has not been identified yet in Pendau.

### 7.6.3.1 Situational uses of demonstratives

One way to locate a head noun in relation to other referential objects is to use a demonstrative. This use of demonstratives locates the spatial position of a head noun within a particular context. This is a situational use of a demonstrative. Common situational uses of demonstratives appear in simple questions such as 'what is this?', as in examples (161)-(162). In cases like these the demonstrative is a pronoun substituting for the nominal item in question. When used this way the clause construction must be an equative clause. The answer to this question would then substitute sapa with a noun such as salo 'floor'- the construction of the answer would be moo salo 'this is a floor'.
(161) Moo sapa?
moo sapa
this what
'What's this?' or: 'This is what?' (pointing to various parts of a house that are within reach of the speaker-in a video scene in which my language helper is asking the house owner what the parts of the house are)
(162) Sapa uo?
sapa 'uo
what yonder
'What's that over there?'
Example (163) contrasts moo 'this' and nao 'that' in the same sentence, in the same context of the story. Examples (164)-(165) illustrate that the nao 'that' is not restricted to the addressee since one monkey is talking to a group of monkeys about what should be done to the captured turtle in their midst $(=n a o)$.

```
(163) Ai a'u moo kai po'oturuongo'u moo
    ai a'u moo kai po-'`o-turu-ong='u moo
    but 1SG/AB this grandpa/VOC SF-HAVE-sleep-locN=2SG/GE this
\begin{tabular}{|c|c|c|c|c|}
\hline riangkunangomo & moo, ара & & \(a^{\prime} u\) & mo'oturu \\
\hline ri \(=\) angkunang \(=\) mo & oo apa & ono & a'u & M-po \({ }_{1}\)-'o-turu \\
\hline LOC=underneath \(=\mathrm{COM}\) & his because & if & 1SG/A & RE-SF-HAVE-sl \\
\hline
\end{tabular}
\begin{tabular}{llllll} 
risalo & \(a^{\prime} u\) & ndau & meteompoturu, & saba' & medea \\
ri=salo & \(a^{\prime} u\) & ndau & me-te-om-po 1 -turu & saba' & mo-dea \\
LOC=floor & 1SG/AB & NEG & AV/IR-NV-REL-SF-sleep & because & ST/IR-many
\end{tabular}
\begin{tabular}{lll} 
tonepe'i'i & risalo & nao. \\
to \(=\)-pepe- i 'i & ri=salo & nao \\
RM=RE-SF-bite & LOC=floor & that
\end{tabular}
```

'But I here, grandfather, my bed here, underneath (the house) here, because if I sleep on the floor I will not be able to fall asleep because there are many creatures that bite me on the floor there.'
[mdtext13.txt 036]
(164) Rara'opoto ulasang nao.
ro-ra'op=to ulasang nao
IV/IR-catch=1PL.INC/GE turtle that
'Let's catch that turtle.'
[ceku01.jdb 073]

| (165) Ito | melampapo | momari-maris | buut | nao. |
| :--- | :--- | :--- | :--- | :--- |
| 'ito | M-pe-lampa=po | M-po | -mari-maris | buut | nao

'We will travel again hurrying up that mountain.' [poora.pin 029]
When moo 'this, here' modifies a pronoun it is always with a first person pronoun. The demonstrative nao 'that, there' is always used with second and third person pronouns, both absolute and genitive. In the case of genitive pronouns it is dependent on which pronoun possesses the head noun. Demonstratives modifying pronouns are illustrated in examples (166)-(167). In contrast to the other two demonstratives uo never occurs with personal pronouns.

| (166) Mangge, | $a ’ u$ | moo | morapi | ungato | nao. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| mangge | $a^{\prime} u$ | moo | M-po 1 -rapi | unga=to | nao |
| uncle/VOC | 1SG/AB | this | IR-SF/DE-spouse | child=1PL.INC | that |

'Uncle I here will marry your (hon., lit. our) child there.' [mdtext15.txt 024]

(167) | Emu nao | botuang | mami. |
| :--- | :--- | :--- |
| 'emu nao | botuang | mami |
| 2PL/AB that | slave | 1PL.EXC/GE |
| 'You there are our slaves.' |  |  |

[mdtext15.txt 019]

### 7.6.3.2 Tracking uses of demonstratives

A demonstrative can substitute for a head noun. It is used to track the anaphoric reference of a noun, similarly to the way pronouns track their antecedents. Example (168) illustrates this (riitu 'there' is not a demonstrative but a preposition-see §8.2).

| Diang | riitu | junjung | sa'ampi | oigi' | uo, | nyaa |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| diang | ritu | junjung | so-'ampi | oigi' | 'uo | nyaa |
| EXIS | LOC=there | house | ONE-side | right | yonder | don't |


| mupesooi, | apa | uo | too |
| :--- | :--- | :--- | :--- |
| mu-pe-soo-i | apa | 'uo | too |
| 2SG.IV/IR-SF/DY-stop-DIR | because | yonder | person |


| marate, | labata' | uo | junjung. |
| :--- | :--- | :--- | :--- |
| mo-rate | labat-a' | 'uo | junjung |
| ST/IR-evil | pass-TZ | yonder | house |

'There is a house on the right side over there, don't you stop (by there), because there is an evil person there, (you must) pass that house.' [asu2.pin 080]

### 7.6.3.3 Discourse deictic uses of demonstratives (anaphoric and cataphoric)

Demonstratives can be used in discourse to refer to previous or future events or statements. Uo 'yonder' is used for anaphoric reference, and moo 'this, here' is usually used for cataphoric reference. Nao 'that, there' can also be used when the anaphoric reference is within the same sentence. Demonstratives in a discourse often occur following an adverb such as bai 'like'. In example (169) bai uo 'like that' refers to the previous sentence in which the monkeys had commented on how tasty the betelnut mixed with the charcoal was. The turtle laughs because through deceit he had the monkeys eat another monkey. A few sentences later, in (170), while the monkeys are still able to hear him, the monkey chants a short cryptic song which is introduced with bai moo 'like this'. Example (171) illustrates the use of bai nao 'like that'. The use of nao in these contexts centres around an addressee (non-first person, see this relationship in §7.6.3.1 or it is centring around something in the immediate present time of a particular context).
(169) Ulasang sura netataa, neinepe odo nebura bai uo. ulasang sura $N$-pe-tataa $N$-pe-in-epe odo $N$-pe-bura bai 'uo turtle only RE-SF-laugh RE-SF-REL-hear monkey RE-SF-speak like yonder 'The turtle just laughed, when he heard the monkeys speak like that.' [turtle.pin 123-124]
$\begin{array}{llllllll}\text { (170) Ulasang moo } & \text { nongundur, } & \text { maa'onyo } & \text { sono } & \text { niolu'inyo } & \text { bai } \\ \text { ulasang moo } & \text { N-pong-undur } & \text { maa'=nyo } & \text { sono } & \text { ni-olu'-i=nyo } & \text { bai } \\ \text { turtle } & \text { this } & \text { RE-SF/PT-song } & \text { say=3SG/GE with } & \text { IV/RE-chant-DIR=3SG/GE like }\end{array}$ 'This turtle sang, he said it while chanting like this: "Bones, your bones, friends. Chewed, and you (pl.) chewed.""
[turtle.pin 127-131]
(171) Oo nyaa mebura bai nao!
'oo nyaa M-pe-bura bai nao
2SG/AB don't DY/IR-speak like that
'Don't (you) speak (to me) like that!'
[troll.int 309]

Example (172) shows a very common use of bai uo that makes a sequential relation between the current clause and the previous clause or previous discourse event ( $\S 15.7$ and $\S 18.2 .1 .1$ ). At other times it indicates that the event denoted by the current clause immediately preceded the event denoted by the next clause.
(172) Bai uo jimo nodua' rigii nutondok
bai 'uo jimo $N$-po-dua' ri=gii nu=tondok like yonder 3PL/AB RE-SF-arrive $\mathrm{LOC}=$ edge $\mathrm{CN} / \mathrm{GE}=$ fence
'And then (lit. like that/yonder) they arrived at the edge of the fence.' [nangkait.pin 089]

### 7.6.3.4 Demonstrative-like ana 'that'

One other demonstrative-like word is ana 'that', as in (173)-(177). ${ }^{35}$ This does not seem to be in common use, but it does occur in some narrated folktales in my database. This word is not part of the demonstrative paradigm. It usually appears before a noun or a directional verb (ma'o 'go' or mai 'come'). It is possibly a marker used to highlight the location with some prominence.
(173) Reinangotomo ana loka riibong.
ro-inang $=$ to $=$ mo ana loka ri=ibong
IV/IR-eat=1PL.INC/GE=COMP that banana LOC=bark.storage.container
'We will eat now those bananas in the bark storage container.' [poora.pin 066]
(174) Ono raayo’onyo obol ana mai moo jimo.
ono ro-ayo'=nyo obol ana mai moo jimo
if IV/IR-smell=3SG/GE smoke that come here 3PL/AB
'If it smells smoke, that is what will bring them here.'
[asu2.pin 199]

[^91](175) Ndau nasae neruutomo ana mai iye raas ribumbungan.
ndau no-sae $N$-pe-ruut=mo ana mai iye raas ri=bumbungan NEG ST/RE-long RE-SF-roar=COMP that come yes thump LOC=ridgepole 'It wasn't long before it roared over here, and yes, it made a thump on the ridgepole.'
[asu2.pin 203]

| Neburamo | siopu niRante | Salaka, |
| :--- | :--- | :--- |
| N-pe-bura=mo | siopu ni=rante | Salaka |
| RE-SF/DY-speak=COMP | owner CN/GE=chain | silver (name) |

"So’uyapo, jimo ana maimo?"
so-'uya $=$ po jimo ana mai=mo

ONE-why $=$ CONT $3 \mathrm{PL} / \mathrm{AB}$ that come=COMP
'The owner of Silver Chain spoke, "How many more of them are coming here now?""
[horse.pin 394-396]

| (177) Apa | diang | jogetonyo | ana | ma'o | ana | mai | totolu | insang. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| apa | diang | joget=nyo | ana | ma'o | ana | mai | totolu | insang | 'Because there he danced the joget dance forward and backwards three times.'

[horse.pin 224]

### 7.6.4 Genitive noun phrases

### 7.6.4.1 Introduction

A genitive noun phrase always consists of at least two parts: the possessee and the possessor. The possessee always precedes the possessor. Two types of possessors are found: those expressed by pronouns and those expressed by full NPs. Pronominal possessors immediately follow the possessee (see Figure 7.9) while a genitive linker intervenes between the possessee and a full NP possessor (Figure 7.10). ${ }^{36}$


Figure 7.9. Tree structure for genitive phrase with pronominal possessor

[^92]

Figure 7.10. Tree structure for genitive phrase with full NP possessor

### 7.6.4.2 Pronominally possessed NPs

Some genitive pronouns are enclitics (178a) while others are free forms (178b); see Figure 7.3 for a comparison of genitive and absolute pronouns. Note that consonant final possessees trigger epenthesis with enclitic pronouns, for example, anes 'meat' becomes anesomu 'your meat' (see §2.4.4).
(178 (a) bau 'fish'
bau='u 'my fish'
bau=mu 'your fish'
bau=nyo 'his fish'
bau=to 'our (inc.) fish'
(178 (b) bau mami 'our (exc.) fish'
bau miu 'your (pl.) fish'
bau nijimo 'their fish'

### 7.6.4.3 Nominally possessed NPs

When possessors are expressed by full NPs a linker intervenes between the possessee and the possessor. Proper nouns (§7.5.1.1) take the linker ni (179) while common nouns (§7.5.1.2) take nu (180). ${ }^{37}$
(179) siama ni=Eko 'Eko's father'
timbala ni=Uria
rapi ni=be'e
siina ni=gibang
'widow of Uriah'
'grandmother's husband'
'Mr Monitor Lizard's mother'
si $=$ rapi ni $=$ gibang
'Mr Monitor Lizard's wife'

[^93](180) bau nu=aravaong
bau nu=dagat
junjung nu=too
dodop nu=seseng
nganga nu= ‘osa
ri=gii nu=junjung
togoge nu=bengkel
jarita nu=bengkel
'the valley fish (fish of the valley)'
'the ocean fish'
'the person's house'
'the cat's chest'
'climbing perch's mouth'
'at the edge of the house'
'the girl's parents'
'the girl's story'

### 7.6.4.4 Complex genitive phrases

Complex possessive/genitive phrases are embedded or nested genitive phrases (see §7.7.2 for discussion on conjoined genitive noun phrases). Both full NP possessors (181) and pronominal possessors (182) can be involved in these structures. However, only one pronominal possessor may be used in any complex genitive NP and it must always be the last one in the series, as in (182)-(183).
(181) ambo' nusiina nuunga ио
ambo' nu=siina nu=unga 'ио
breath $\mathrm{CN} / \mathrm{GE}=$ mother $\mathrm{CN} / \mathrm{GE}=$ child yonder
'the thoughts (lit. breath) of the mother of the child'
(182) bu'u nutagumu
bu'u nu=tagu=mu
bone CN/GE=friend=2SG/GE
'the bones of your friend'
(183) bulu nu'api nupesabeongo'u
bulu nu='api nu=pe-sabe-ong='u
feather $\mathrm{CN} / \mathrm{GE}=$ wing $\mathrm{CN} / \mathrm{GE}=$ SF-ride-locN=1SG/GE
'the feathers of the wings of my flying horse (lit. the place to ride)'

### 7.6.5 Intensifiers mboto 'self' and sumoung 'alone, self'

Pendau has two reflexive words which are used emphatically to modify the head noun or pronoun: mboto 'self' and sumoung 'self, alone'. These reflexives may be referred to as 'intensifiers’ following König and Siemund (1999). Figure 7.11 shows the semantic scope for each of these reflexive intensifiers. A third candidate for a non-emphatic reflexive use, alae 'body' has a restricted usage (see §7.3.4 for the discussion).

|  | Exclusive <br> adverbial <br> intensifier | Inclusive <br> adverbial <br> intensifier | Adnominal <br> intensifier | Use as noun | Second <br> singular <br> honorific |
| :--- | :--- | :--- | :--- | :--- | :--- |
| sumoung ${ }^{38}$ <br> 'alone, self' | yes | no | no | no | no |
| mboto <br> 'self' | no | yes | yes | no | no |
| alae <br> 'body, self' | no | no | no | yes | yes |

Figure 7.11. Semantic functions of reflexive words

König and Siemund (1999) have developed a useful distinction between 'intensifiers' and 'reflexive anaphors'. Although in many languages intensifiers and reflexive anaphors are isomorphic, in Pendau they are not (see Figure 7.11). In Pendau it is useful to follow their semantic description in describing the use of Pendau reflexives as one of three main categories: exclusive adverbial intensifier (184), inclusive adverbial intensifier (185), and adnominal intensifier (186). The first two are adverbial because they modify the noun or pronoun emphatically. König and Siemund (1999:44) describe 'exclusive adverbial intensifiers' as 'roughly paraphrasable by alone, without help' and 'inclusive adverbial intensifiers' as 'similar in meaning to also or too.' As for 'adnominal intensifiers', they further elaborate (1999:44-45):

In contrast to other focus particles or focus markers, which exclude or include alternatives as possible values for the predication in their scope, adnominal intensifiers only take scope over the NP to which they are adjoined and therefore neither include nor exclude alternative values.
(184) Exclusive adverbial intensifying reflexive

| Neburamo | unga uo, "sura | a'u | sumoung, |  |
| :--- | :--- | :--- | :--- | :--- |
| N-pe-bura=mo | unga 'uo | sura | a'u | sumoung |
| RE-SF/DY-speak=COMP | child yonder only | 1SG/AB | self |  |


| apa | $a^{\prime} u$ | moo |  | tonitabola' | niama'u." |
| :---: | :---: | :---: | :---: | :---: | :---: |
| apa | a'u | moo | unga | to=ni-tabol-a' | $n i=a m a=$ ' |
| because | 1SG/AB | this | child | RM=IV/RE-discard-TZ | $\mathrm{PN} / \mathrm{GE}=$ fat |
| 'That ch discarded | spoke, | 's | ly m | myself, because I here | the child |

(185) Inclusive adverbial intensifying reflexive

| A'u | mogabu | mboto. |
| :--- | :--- | :--- |
| a'u | M-po - -gabu | mboto |
| 1SG/AB | IR-SF/FA-cook | self |

'I myself will cook.'

[^94](186) Adnominal reflexive intensifier

| Jari ila | uo | too | dea | uo | nengeteulemo | ma'omo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| jari | ila | 'uo | too | dea | 'uo | $N$-pe-[ong]-teule $=$ mo |$\quad$ ma'o=mo


| junjung | nijimo | mboto. |
| :--- | :--- | :--- |
| junjung | nijimo | mboto |
| house | 3PL/GE | self |

'So after that the (people in the) crowd over there each returned to their own houses.'
[mdtext4.txt 016]
The distribution of sumoung 'alone, self' is similar to mboto 'self' (compare (187) with (190)). Their variable word order position is similar to other adverbs which have a 'floating' behaviour (see §14.5.2). These adverbial intensifiers may 'float' to several word order positions before or after the predicate as long as it follows in a position somewhere after the grammatical subject's head noun. The 'floating' mboto is even further restricted. This is because if it occurs at the end of a noun phrase then it must be interpreted as an adnominal intensifier (see Figure 7.11). Also note that the final velar nasal in sumoung is often omitted as in (188).

| Nipogabu'u | sumoung. |
| :--- | :--- |
| ni-po ${ }^{\text {-gabu }=\text { ' }}$. | sumoung |
| IV/RE-SF-cook=1SG/GE | alone |
| 'I myself cooked (alone).' |  |

[EN98-001.33]
(188) Jari sura $a^{\prime} u$ sumou rimoo.
jari sura $a^{\prime} u$ sumoung ri=moo
so only $1 \mathrm{SG} / \mathrm{AB}$ alone $\mathrm{LOC}=$ here
'So it's only me here.'
[mdtext15.txt 016]
(189) Jari jomo rapinyo bengkel sumoungonyo rijunjuung uo.
jari jomo rapi=nyo bengkel sumoung=nyo ri=junjung 'uo
so just spouse=3SG/GE female alone=3SG/GE LOC=house yonder
'So just his wife was left alone in the house.'
[mdtext14.txt 010]
Examples (190)-(193) show the use of mboto 'self' with the factive verb gabu 'cook'. Examples (185) and (190) contrast the use of mboto in active and inverse voice constructions. Example (191) illustrates the plural distributive infix -ong-, indicating that each person did their own cooking. Example (192) shows that mboto can modify a noun that is not the agent, that is, the adnominal intensifier. However, if mboto precedes the noun, as in (193), then mboto modifies the agent and not the undergoer, that is, an inclusive adverbial intensifying reflexive.

[^95]| (191) Jimo | nongogabumo | mboto. |
| :---: | :--- | :--- |
| jimo | $N$-[ong]-po 1 -gabu $=$ mo | mboto |
| 3PL/AB | RE-DIST-SF/FA-cook=COMP | self |

'They each did their own cooking.'

| (192) Jimo | nongogabumo | vea | mboto. |
| :--- | :--- | :--- | :--- |
| jimo | $N$-[ong]-po $0_{1}$-gabu=mo | vea | mboto |
| 3PL/AB | RE-DIST-SF/FA-cook=COMP | rice | self |

'They each cooked their own rice.'
[EN98-001.34]
(193)

| Jimo | nogabumo | mboto vea. |  |
| :--- | :--- | :--- | :--- |
| jimo | $N$-po $1_{1}$-gabu $=$ mo | mboto | vea |
| 3PL/AB | RE-SF/FA-cook=COMP | self | rice |

'They themselves cooked the rice.'
[EN98-001.34]
Example (194) shows a clear instance of mboto emphasising the undergoer subject (an adnominal intensifier). In this story a little girl has been abandoned by her father. As the girl is looking for food she comes upon a giant's house and takes some of his rice. She does this for several days before the giant realises that some of his rice seems to be missing. The giant begins to wonder who could be taking it as he is certain there is no one else around. He (stupidly) comes to the conclusion that his uti 'penis' has been eating the food and he decides that he must cut it off with his machete (the verb 'olog 'break, snap' is used). After he cuts his penis off, he dies and is discovered dead by the little girl. Example (195) illustrates the final demonstrative moo 'this' is not in the same argument as mboto, and thus demonstrates another use of mboto as an inclusive intensifier.

| (194)Paey | ni'ologinyo | utinyo | mboto. |
| :---: | :--- | :--- | :--- |
| paey | ni'olog- $i=n y o$ | uti $=$ nyo | mboto |
| and.then | IV/RE-break-DIR=3SG/GE | penis=3SG/GE | self |

'And then he cut off his own penis.'
[mdtext11.txt 030]

| (195) Maala | repegutu | mami | mboto | moo. |
| :--- | :--- | :--- | :--- | :--- |
| mo-ala | ro-pe-gutu | mami | mboto | moo |
| ST/IR-may | IV/IR-SF/DY-make | 1PL.EXC | self | this |

'We ourselves are able to make this.'
[videotr.txt 161]
One commonly encountered verb which occurs in the same clause with mboto is otoi 'know', as in (196)-(199) (compare these constructions with the abilitative use of 'know' in §14.4.1). Examples (196)-(197) contrast the second person enclitic with the second person prefix (irrealis) in constructions with mboto 'self'. Examples (198)-(199) contrast the first person prefix (realis) and the first person enclitic and further illustrate this reflexive construction.
(196) Niotoimuто
ni-otoi $=m u=m o \quad$ mboto
IV/RE-know=2SG/GE=COMP self
'You already know (it) yourself.'

Muotoimo mboto.
mu-otoi $=$ mo mboto
2SG.IV/IR-know=COMP self
'You already know (it) yourself.' (or: 'You yourself already know (it).')
(198) No’uotoimo
mboto.
no'u-otoi $=$ mo mboto
1SG.IV/RE-know=COMP self
'I myself already know (it).'
(199) Niotoi’umo mboto.
ni-otoi='u=mo mboto
IV/RE-know=1SG/GE=COMP self
'I myself already know (it).'

### 7.7 Conjoined noun phrases

### 7.7.1 Conjoined NPs and clauses

There are three types of conjoined phrases that are marked, respectively, with o 'and', ape 'or', and sono 'with (COM)'. These can also be used as interclausal conjunctions, see §15.6. Noun markers are obligatory before each conjunct's head noun, as in (200), and they must all either be in the absolute case or all must be in the genitive case, depending on the role of the whole conjoined argument in the clause. ${ }^{39}$
(200) A'u nipiara nikai'u
a'u ni-piara ni=kai='u
1SG/AB IV/RE-raise $\mathrm{PN} / \mathrm{GE}=$ grandfather $=1 \mathrm{SG} / \mathrm{GE}$
o nibe'e'u.
o $n i=b e^{\prime} e=$ 'u
and $\quad \mathrm{PN} / \mathrm{GE}=$ grandmother $=1 \mathrm{SG} / \mathrm{GE}$
'My grandfather and my grandmother raised me.'
[EN97-003.16; cf. ceku01.doc \#2]

As in (201)-(203), o 'and' can join two or more noun phrases, or two clauses, as illustrated in (204)-(205).

| (201) Io | nongkomung | tavala | o | sarampang. |
| :--- | :--- | :--- | :--- | :--- |
| io | N-pong-'omung | tavala | o | sarampang |
| 3SG/AB | RE-SF/PT-take | spear | and | 2-pronged.fishing.spear |

'He took his hunting spear and his fishing spear.'
[troll.int 122]

[^96]
Ape 'or' can conjoin alternate noun phrases of the same argument, as in (206), or clauses (§15.6.6).
(206) Bai bau nudagat, ape bau nuatang.
bai bau nu=dagat ape bau nu=atang
like fish $\mathrm{CM} / \mathrm{GE}=$ ocean or fish $\mathrm{CM} / \mathrm{GE}=$ above
'Like saltwater fish or freshwater fish.'
Example (207) illustrates that sono 'with' can function as a conjunction between noun phrases. (See §8.3.4 for the use of sono as a comitative, and see $\S 15.6 .4$ for the use of sono as an interclausal conjunction for the clausal relation of simultaneous time.)
(207) Io nongkomung atupe pepitu dampe, sono intolu
io $N$-pong-'omung atupe pepitu dampe sono intolu
2SG/AB RE-SF/PT-take rice.cake seven CLSF with egg

| mamanta | sadampe, | sono | lugus | sadampe. |
| :--- | :--- | :--- | :--- | :--- |
| mo-manta | so-dampe | sono | lugus | so-dampe |
| ST/IR-raw | ONE-CLSF | with | betel nut | ONE-CLSF |

'She took seven rice cakes with one raw egg, and with one betelnut.'

### 7.7.2 Conjoined genitive noun phrases

Conjoined genitive noun phrases may either add a possessor to each noun phrase, as in (208), or only to the final noun phrase, as in (209). Usually the final genitive indicates scope for the entire conjoined noun phrase, however there are cases when it is restricted to only the marked noun phrase, as in (210). See §7.6.4 for general discussion on genitive noun phrases.

$$
\begin{array}{llllll}
\text { (208) A'u } & \text { ndaupo } & \text { niotoi } & \text { niina'u } & \text { o } & \text { niama'u. } \\
\text { a'u } & \text { ndau }=\text { po } & \text { ni-otoi } & \text { ni=ina='u } & o & \text { ni=ama='u } \\
\text { 1SG/AB NEG=CONT } & \text { IV/RE-know } & \text { PN/GE=mom=1SG/GE } & \text { and } \mathrm{PN} / \mathrm{GE}=\text { dad=1SG/GE } \\
\text { 'My mother and my father don't know me yet.' } & \text { [horse.pin 1042] }
\end{array}
$$

(209)

| Sikai | o | sibe'e | nijimo | uo | nelampamo. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| si=kai | $o$ | si=be'e | nijimo | 'uo | $N$-pe-lampa=mo |
| PN/AB=grandpa | and | PN/AB=grandma | 3PL/GE | yonder | RE-SF/DY-travel=COMP |

'Their grandpa and grandma over there left (lit. travelled).' [mdtext20.txt 170]
(210)
A'u o siama niLori nelampa ila Malawa.
a'u o siama ni=L. N-pe-lampa ila $M$.
$1 \mathrm{SG} / \mathrm{AB}$ and father CN/GE=L. RE-SF/DY-travel ABL M.
'Lori's father and I travelled from Malawa.
[jptext07.jdb 002]

### 7.7.3 Discontinuous conjoined noun phrases

Conjoined noun phrases occur infrequently as discontinuous constituents. Example (211) shows the conjoined NP as a continuous constituent. Example (212) shows the same constituent separated with one part of the NP preceding the verb and the second half following the A argument.
(211) Nialap nijimo nedea buku o bau.
ni-alap nijimo no-dea buku o bau
IV/RE-get 3PL/GE ST/RE-many shells and fish
'They got a lot of fish and seashells.'
[EN97-003.41]
(212) Nedea buku nialap nijimo o bau.
no-dea buku ni-alap nijimo o bau
ST/RE-many shells IV/RE-get 3PL/GE and fish
'They got a lot of fish and seashells.'
[jptext5.doc; EN97-003.41]

### 7.7.4 Noun phrase strings without conjunctions

A noun series may also occur as a single argument without the use of overt conjunctions, as in (213). Although the nouns in a series may function as a single argument, they are separate noun phrases.

'He gathered all of his siblings, his parents, his children, his spouse from near and far.'
[flktale01.doc]

## 8 Prepositional and instrumental phrases

### 8.1 Introduction

Prepositional phrases are non-core arguments (§6.7), whereas the instrumental phrase will be considered to be a third core argument of a ditransitive clause (§6.6.4). The three basic prepositional phrases and the one instrumental phrase are each marked with a particular noun phrase marker (see Figure 8.1). The focus of this chapter is how prepositional phrases function as oblique noun phrases, and how the instrument phrase functions as a core argument in contrast to these. The preposition (Prep.) is the head of the prepositional phrase ( PP ). The following noun phrase ( NP ) is required by the preposition and is its dependent. The forms of these four noun phrase markers are discussed in §8.2. This discussion will also include complex prepositional phrases and other variations of these forms. Their functions as oblique phrases are discussed in §8.3. Speech margins are another common place in which prepositional phrases are used. The speech verbs in these speech margins subcategorise a prepositional phrase of the person being spoken to. This function is described in $\S 8.4$ (also see $\S 15.4$ ). Section 8.5 describes the rare prepositional incorporation that is found in a few common words, but is otherwise not productive. The function of instrument noun phrases as a core argument is discussed in §8.6. Other uses of the prepositional phrase markers are reviewed and summarised in §8.7.

### 8.2 The forms of prepositional and instrumental noun phrase markers

There are three different prepositional markers and one instrumental noun phrase marker. These forms are listed along with their English glosses and semantic labels in Figure 8.1 The first three mark oblique phrases and they are grouped together as 'local case' markers. However, the fourth case marker (§8.6) conceivably marks a third core argument in ditransitive instrument clauses (see Figure 8.1) which is neither the actor nor the undergoer, that is, it is the instrument (or 'second object' - see $\S 6.6 .4$ and Chapter 10). A fifth preposition, sosono 'together with', is derived from sono 'with', one of the three local case markers, by partial reduplication. All noun phrase markers precede the noun phrases that they mark (see §7.5.1 for other noun phrase markers).

| Local case | 1 | $r i={ }^{1}$ |  | location, destination 'to (at, in, on, by)' | General locative (LOC) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 | ila |  | source <br> 'from' | Ablative <br> (ABL) |
|  | 3 | sono | sono | same space <br> 'with, to' | Comitative ${ }_{1}$ (COM) |
|  |  |  | sosono | along same space 'together with' | Comitative ${ }_{2}$ (COM) |
| Non-local case | 4 | $n u={ }^{2}$ |  | 'with, by means of' | Instrument <br> (INSTR) |

Figure 8.1. Prepositional and instrumental noun phrase markers
Examples (1)-(4) illustrate the use of each of these four case markers.
(1) Locative prepositional noun phrase with ri 'in, at, on, by, etc.'

Jimo noтoiamo rijunjung nu'olongian.
jimo $N$-po $1_{1}$-moia $=$ mo ri=junjung $\quad n u=$ 'olongian
3PL/AB RE-SF-live=COMP LOC=house $\quad \mathrm{CN} / \mathrm{GE}=$ king
'They lived in the king's house.'
[gibang.pin 078]
(2) Ablative prepositional phrase with ila 'from'

| Juragang | uo | nentuung | ila | payanganonyo. |
| :--- | :--- | :--- | :--- | :--- |
| juragang | 'uo | N-pe-ntuung | ila | payangan=nyo |
| captain | yonder | RE-SF/DY-descend | ABL | boat=3SG/GE |

'The captain descended from his boat.'
[mdtext15.txt 009]
(3) Comitative prepositional phrase with sono 'with, to'

| A'u | modua' | sono | oo. |
| :--- | :--- | :--- | :--- |
| $a$ 'u | M-po $1_{1}$-dua' | sono | 'oo |
| 1SG/AB | IR-SF/DE-arrive | COM | 2 2SG/AB |
| 'I will find you.' |  |  |  |

(4) Instrumental noun phrase with $\boldsymbol{n u}$ 'with, by means of'

| SiYusup | monyambale | japing | uo | nupiso. |
| :--- | :--- | :--- | :--- | :--- |
| si=Yusup | M-pong-sambale | japing | 'uo | nu=piso |
| PN/AB=Joseph | IR-SF-butcher | cow | yonder | INSTR=machete |

'Joseph will slaughter the cow with a machete.'
[EN97-002.35]
Typical noun phrases occurring with the preposition ri are given in (5). Any of the other prepositions could in principle be substituted with these. Noun phrases (and

[^97]pronouns) immediately following the prepositional marker have absolute case marking, that is common nouns are unmarked and proper nouns are marked with $s i=$ (see $\S 5.5$ and §7.5.1 ). This can only be detected when a proper noun such as $s i=a m a$ 'father' is used as in $r i=s i=a m a$ 'at/by the father'.

```
ri=dagat
ri=palantar nu=babi
ri=bamba nu=ogo
ri=boto nu=loka uo
ri=ogo=nyo
ri=bonto
ri=odo uo
ri=tagu=nyo odo uo
ri=bau to=diang ri=pale=nyo
```

'at, by the ocean'
'at, by the pig trail'
'at the inlet (lit. mouth of water)'
'at that banana tree's trunk'
'at his/her water'
'at the small pool (oxbow, billabong)'
'by that monkey'
by his friend, that monkey'
'by the fish that's in his/her hand'

Many of the prepositional phrases may also substitute a noun phrase with a deictic demonstrative pronoun (for example, ri=uo 'at that', as in (6)). The lack of specific prepositions is made up for by using ri in combination with locative, time, or directional nouns, as in (6). (Donohue (1995:328) and van den Berg (1989:146-147) describe comparable elements in other Sulawesi languages as 'complex prepositions'.)

| ri=angkung | 'below' |
| :--- | :--- |
| ri=atang | 'on top' |
| ri=lalong | 'in, inside' |
| ri=itu | 'there, beside' |
| ri=uo | 'at that (at that over yonder)' |
| ri=moo | 'here' |
| ri=nao | 'there' |
| ri=tebuat | 'inland' |
| ri=teriyong | 'seaward' |
| ri=paio | 'where' |
| ri=ulu | 'before, at first' |
| ri=watu | 'at that time' |

### 8.3 Prepositional phrases as clausal adjunct phrases

### 8.3.1 Introduction

Any noun phrase can in principle be preceded by a local case preposition. Oblique phrases can perform one of two basic functions in a clause (compare with Donohue 1995:319-320): as a clausal adjunct or as a predicate. Adjunct uses are described in this chapter and prepositional phrases functioning as predicates are discussed in §6.5.3.

All prepositions are spatially oriented, but may be extended to non-physical meanings. The preposition ri 'at, in, on, etc.' orients the noun phrase spatially in a stationary position. This contrasts with the directional deictic preposition ila 'from' which indicates the direction that the item is coming from. Example (7) contrasts these two prepositions in the same sentence. The third preposition is sono 'with (COM)'. In (3) sono refers to an item (person or object) that has a close association with something else. This may indicate the
sameness of space or some abstract connection between the item of the preposition and a core argument noun phrase.


### 8.3.2 General locative preposition ri 'in, at, on, etc.'

The general locative prepositional clitic $r i$ 'in, at, on, by, etc. (LOC)' requires a noun phrase to follow it, as illustrated in (5). It has a range of meanings that is reflected by different English translations of the same word for different contexts, for example, one time $r i=$ dagat might be translated as 'in the ocean', and another time it might be translated 'by the ocean'. Examples (8)-(10) show the most common or canonical usage of the prepositional phrase in the last constituent position of the clause.
(8) Bukengonyo uo nibukaa'onyo rilalong nujunjung
bukeng=nyo 'uo ni-buka-a'=nyo ri=lalong nu=junjung
rattan. $\mathrm{bag}=3 \mathrm{SG} / \mathrm{GE}$ yonder IV/RE-open- $\mathrm{TZ}=3 \mathrm{SG} / \mathrm{GE} \quad \mathrm{LOC}=$ inside $\mathrm{CN} / \mathrm{GE}=$ house
'He opened his rattan bag (for them) inside the house.'
[fktale01.txt 034]

| Paey | $a$ 'u | monuut | ripuri. |
| :--- | :--- | :--- | :--- |
| paey | a'u | M-pong-tuut | ri=puri |
| and.then | 1SG/AB | IR-SF/PT-follow | LOC=behind |

'And then I'll follow you from behind (later).'
[horse.pin 047]
(10) Nasaemo io ri'uo.
no-sae=mo io ri='uo
ST/RE-long=COMP 3SG/AB LOC=yonder
'He was there a long time.'
[horse.pin 077]
Example (11) shows that prepositional phrases normally follow post-verbal subjects (VAP=VOS). Examples (12)-(14) omit the subjects. In (12) the missing subject is repeated as 'they'; in (13) as 'it'. Example (15) shows that the A and P arguments can be covert with only the prepositional phrase having an overt noun phrase.

| (11)Paey ratabola'oto | io | uo | rirano. |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| paey | ro-tabol-a'=to | io | 'uo | ri=rano |
| and.then | IV/IR-throw-TZ=1PL.INC/GE | 3SG/AB | yonder | LOC=lake |

'And then we'll throw him into the lake.' (monkeys talking about the turtle)
[ceku01.jdb 075]
$\begin{array}{lllll}\text { (12) } & \text { Nodua, } & \text { riogo } & \text { toragayo } & \text { nijimo } \\ \text { N-po } 1_{1} \text {-dua } & \text { ri=ogo } & \text { to=ro-gayo } & \text { nijimo } & \text { 'uo } \\ \text { RE-SF/DE-arrive } & \text { LOC=water } & \text { RM=IV/IR-dip.net } & \text { 3PL/GE } & \text { yonder }\end{array}$
'They arrived at the water where they would fish with their dip nets.' [ceku01.jdb 008]
(13)

| Ai ono ndau | diang | udua' | ri'uo, | a'u | ndau | masae. |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ai | ono ndau | diang | 'u-dua' | ri='uo | a'u | ndau | mo-sae |
| but if | NEG | EXIS | 1SG.IV/IR-arrive | LOC=yonder | 1SG/AB | NEG | ST/IR-long |

'But if I don't find it over there, I won't be long.'
[horse.pin 647]
(14) Omung miu mai ria'u!
’omung miu mai ri=a'u
bring/IMP 2PL/GE come LOC=1SG/AB
'You (pl.) bring him to me!'
[nata101.pin 012]
(15) Paey rapasiromo rilogo.
paey ro-pa-siromo ri=logo
and.then IV/IR-CAUS-gather LOC=rice.barn
'And then (we) will gather it into the rice barn.'
[jptext01.jdb 046]

### 8.3.3 Ablative preposition ila 'from'

Examples (16)-(18) show the use of ila 'from' in transitive clauses.
(16)

Tarus niengkata'onyomo urong uo ila
tarus ni-engkat-a'=nyo=mo urong 'uo ila taingan
continue IV/RE-lift-TZ=3SG/GE=COMP pot yonder ABL hearth
'Then she lifted the earthen cooking pot from the stone hearth.' [mdtext14.txt 025]
(17) Paey too rumi uo ninabua' ila junjung.
paey too rumi 'uo ni-nabu-a' ila junjung
and.then person giant yonder IV/RE-fall-TZ ABL house
'And then it (the flood waters) made the giant fall from the house.' [mdtext11.txt 037]
(18) Saba' jimo uo nirampea' nupoiri ila tampanau.
saba' jimo 'иo ni-rampe-a' nu=poiri ila tampanau
because $3 \mathrm{PL} / \mathrm{AB}$ yonder IV/RE-wash.ashore-TZ CN/GE=wind ABL open.water 'Because the wind had washed them ashore from the open sea.' [mdtext20.txt 002]

Examples (19)-(21) show the use of ila 'from' in stative intransitive clauses.
(18)

| Ai | junjung | nijimo | uo | magaar | ila | todea. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ai | junjung | nijimo | 'uo | mo-gaar | ila | to-dea |
| but | house | 3PL/GE | yonder | ST/IR-far | ABL | AGNM-many |

'But their house was far from people (lit. from many people).' [mdtext12.txt 001]
(20) Magaaropo ila mai moo.
mo-gaar=po ila mai moo
ST/IR-far ABL come this
'He is still further from here.'
[asu2.pin 065]

```
(21) Salia uo magaar ila dusunang nijimo.
    salia 'uo mo-gaar ila dusunang nijimo
    party yonder ST/RE-far ABL village 3PL/GE
    'That party is far from their village.'
```

Examples (22) and (23) illustrate the use of ila 'from' in dynamic clauses.

| (22) Tarus $\quad$ 'u | nesoput | ila jimo. |  |
| :--- | :--- | :--- | :--- | :--- |
| tarus $a$ 'u | N-pe-soput | ila jimo |  |
| continue | $1 \mathrm{SG} / \mathrm{AB}$ | RE-SF/DY-deny | ABL $3 \mathrm{PL} / \mathrm{AB}$ |
|  | 'And then I denied it (their accusation) from them.' |  |  |

[bugmalei.int 031]

| Ami | neteule | ila | Donggala | menyau | Lewonu. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ’ami | N-pe-teule | ila | Donggala | me-nyau | Lewonu |
| 1PL.EXC/AB | RE-SF/DY-return | ABL | Donggala | UD/IR-go.down | Lewonu. |

'We returned from Donggala and went down to Lewonu.'
[cekupitu.int 015]

### 8.3.4 Comitative prepositions sono and sosono

This section describes data for the two types of comitatives. Sono 'with, to' indicates a close association of two grammatical items or some other relational identification which links the prepositional phrase and the subject noun phrase together. Sosono 'together with' allows a mutual or joint activity to be linked between the two parties.

### 8.3.4.1 Sono 'with, to'

Example (24) illustrates the use of sono in a transitive clause. Example (25) illustrates the use of sono in a complex sentence. Examples (26) and (27) illustrate the use of sono 'with' in clauses with stative verbs. In stative clauses the preposition sono provides an abstract link or connection between the subject and the party in the prepositional phrase.
(24) Utarima jojoo ono bai oo nonyarakana' sono a'u.
'u-tarima jojoo ono bai 'oo $N$-pong-sarakan-a' sono a'u 1SG.IV/IR-receive all if like $2 \mathrm{SG} / \mathrm{AB}$ RE-SF-surrender-TZ COM $1 \mathrm{SG} / \mathrm{AB}$ 'I will receive it all when you have surrendered (it) to me.'
(25) Sigibang mene' risiinanyo, ndaupo sono rapinyo. si=gibang mene' ri=siina=nyo ndau=po sono rapi=nyo PN/AB-lizard go.up $\mathrm{LOC}=$ mother=3SG/GE $\quad \mathrm{NEG}=\mathrm{CONT}$ COM spouse=3SG/GE
'The water monitor lizard went up to his mother, (he was) not yet with his wife.'

| Apa | ningenomo | ipagoto | nanasu | sono | a'u. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| apa | ningeno=mo | ipag=to | no-nasu | sono | a'u |
| since | just.now=COMP | sibling.in.law=1PL.INC/GE | ST/RE-angry | COM | 1SG/AB |

'Since just now our sibling-in-law was angry with me.' [miracle1.pin 201]

| Peteulepo | molongkang | apa | siamamu |
| :--- | :--- | :--- | :--- |
| pe-teule $=$ po | mo-longkang | apa | si=ama=mu |
| SF-return=CONT | ST/IR-fast | so.that | PN/AB=father=2SG/GE |


| nyaa | manasu | sono emu | unga'u. |
| :--- | :--- | :--- | :--- |
| nyaa | mo-nasu | sono 'emu | unga='u |
| don't | ST/IR-anger | COM 2PL/AB child=1SG/GE |  |

'Go home quickly so that your father doesn't become angry with you my children!'
In contrast to intransitive stative clauses, other intransitive clauses, such as locomotion clauses (§9.3.4) as in (28), have the subject doing the activity along with the party in the prepositional phrase.

| Siinanyo | tarus | notumangis | sono | unganyo | uo. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| siina=nyo | tarus | $N$-po o $_{1}$-[um]-tangis | sono | unga=nyo | 'uo |
| mother=3SG/GE | continue | RE-SF/LCM-TEL-cry | COM | child=3SG/GE | yonder |

'His mother continued to cry with her child there.'
[ceku03.jdb 063]
In example (29) sono is translated as 'of'. The fear the children have of the flesh-eating elders denotes a conceptual link rather than a comitative meaning. ${ }^{3}$

| (29) Ami | neingka | sono | tomogurang | ribuut | nao. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 'ami | N-pe-ingka | sono | tomogurang | ri=buut | nao |
| 1PL.EXC/AB | RE-SF-fear | COM | elder | LOC=mountain | that |

'We are afraid of the elders at the mountain over there.'

Although sono 'with' can be used to mark instruments, its normal meaning is not instrumental but simply means it is the object being held or 'associated' with one of the NP arguments (the distinction between the sono and $n u$ is discussed in §8.6). The true instrumental case marker is $n u$ (see $\S 8.6, \S 6.6 .4$, and $\S 10.3 .1-3$ for more discussion).

```
(30) Io nonyambale babi sono ladingo'u.
    io N-pong-sambale babi sono lading='u
    3SG/AB RE-SF/PT-butcher pig COM knife=1SG/GE
    'He butchered the pig with my knife.'
```


### 8.3.4.2 Sosono 'together, with'

The preposition sosono 'together with' is formally derived from sono 'with' by reduplication of the first syllable. Sosono unifies the subject of the clause with the party of the prepositional phrase so that the activity of the verb is carried out jointly or together.

[^98]| (31) | A'u | mono | modua' | sosono | oo. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| a'u | mono | M-po ${ }_{1}$-dua' | so-sono | 'oo |  |

'Do you all want to be together with us here?'

### 8.3.5 Combinations of prepositions in the same clause

A prepositional phrase can consist of more than one prepositional phrase introduced by the same or different prepositions. Subsequent prepositional phrases are either coordinate to a previous prepositional phrase or it modifies or specifies the noun in the previous prepositional phrase, as in (33) and (34).
(33) Io nanabu ridagat ringanga nuantulang.
io no-nabu ri=dagat ri=nganga nu=antulang 3SG/AB ST/RE-fall LOC=ocean LOC=mouth $\mathrm{CN} / \mathrm{GE}=$ giant.clam
'She fell into the ocean and into the mouth of a giant clam.'
[gibang.pin 111]
(34) Joo io nelampa ripelampaongonyo
joo io $N$-pe-lampa ri=pe-lampa-ong=nyo
however 3SG/AB RE-SF/DY-walk LOC=SF/DY-walk-locN=3SG/GE
ripabia-bianyo.
ri=pabia-bia=nyo
LOC=begin-RED=3SG/GE
'However he travelled the same path (or: journey) as in the beginning.'
[horse.pin 1229]
Example (35) illustrates the sequence of ila and ri in the same clause. Examples (36)(38) illustrate the combination of sono and ri prepositional phrases. The sono precedes prepositional phrases beginning with other prepositions.

| Modua'omo | panganganta | uo ila riogo. |  |
| :--- | :--- | :--- | :--- | :--- |
| M-po $0_{1}$-dua'= $=$ mo | panganganta | 'uo ila | ri=ogo |
| IR-SF/DE-arrive=COMP | flesh-eater | yonder ABL | LOC=water |

'The flesh-eaters came back from the water.'
[mdtext18.txt 077]
(36) Oo pomoiamo sono a'u rimoo.
'oo po $\quad$ o $_{1}$-moia $=$ mo sono $a^{\prime} u \quad$ ri=moo
2SG/AB SF-live=COMP COM 1SG/AB LOC=here
'You live now with me here!'
Jari ami asi neingka sono tomogurang ribuut nao.
jari 'ami ’asi N-pe-ingka sono tomogurang ri=buut nao
so 1PL.EXC/AB too.bad RE-SF-fear with elder LOC=mountain that
'So we, too bad, were afraid of the elders at that mountain.' [poora.pin 520]

| Alea' | oo | uinangomo | sono | bau | ripalemu. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| alea' | 'oo | 'u-inang $=m o$ | sono | bau | $r i=$ pale $=m u$ |
| let | 2SG/AB | 1SG.IV/IR-eat=COMP | with | fish | LOC $=$ hand $=2$ SG/GE |

'Let me eat you along with the fish in your hand.' [troll.int 148]

### 8.3.6 Complex prepositional phrases ('from...to')

Often the ablative preposition ila 'from' is used to mark the beginning point in a chronological, logical, or directional sequence. In examples (39)-(41) the first phrase in the complex prepositional phrase begins with ila as a 'starting point', and the second phrase uses the conjunction sampe 'until' as an axis for the second half of the sequence, which describes the 'end point'. See $\S 15.6 .3$ for use of sampe 'until' as a sequential relator/conjunction.
(39)

| Tagu | ito | mosilumba | ila | uju | moo, |
| :--- | :--- | :--- | :--- | :--- | :--- |
| tagu | 'ito | M-posi-lumba | ila | uju | moo |
| friend | 1PL.INC | IR-MUT-race | from | point | here |

sampe uju rimene' uo.
sampe uju ri=mene' 'иo
until point LOC=go.up yonder
'Friend, let's race from this point until that point up there.' [mdtext8.txt 003]
(40)

| Ami | tarus | negempang | ila | Lombonga |
| :--- | :--- | :--- | :--- | :--- |
| ’ami | tarus | N-pe-gempang | ila | Lombonga |
| 1PL.EXC/AB | continue | RE-SF/DY-walk | ABL | Lombonga |

sampe nodua' riWalandano.
sampe $\quad \mathrm{N}$-po $\mathrm{o}_{1}$-dua' ri=ualandano
until RE-SF/DE-arrive LOC=Walandano
'We continued walking from Lombonga until we arrived in Walandano.'
[cekupitu.int 023]
(41) Saba' ila dondo-dondom sampe nondoung
saba' ila dondo-dondom sampe $N$-po ${ }_{1}$-ndoung
because ABL RED-morning until RE-SF/DE-night
ndau nipainang unga doruo uо.
ndau ni-pa-inang unga doruo 'uo
NEG IV/RE-CAUS-eat child two yonder
'Because from early morning until night, she did not feed those two children.'
[mdtext18.txt 018]

### 8.3.7 Directional verbs functioning as prepositions

Directional verbs are sometimes used in combination with prepositions, as in example (42), and also sometimes seem to function as prepositions, as in (43). See $\S 11.2$ for a discussion of directional verbs.

'And then we will ask what all the parts of this are from the front ridgepole coming down to the steps (lit. ladder).'
[videotr.txt 065]

| (43) | 'u |  | siama | niLori | nelampa | ila |  | Malawa | mene' |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $a^{\prime} u$ | $o$ | ma | ori | $N$-pe-lamp |  |  | alaw | mene' |  |  |
|  |  |  |  | PN/GE= | RE-SF/DY |  |  |  | go.up |  |  |

'Lori's father and I went from Malawa to Palu.' [jptext07.jdb 002]

### 8.3.8 Use of paio 'where' with locative and ablative prepositions

The locative interrogative paio only occurs with the prepositions ri 'at, in, on (LOC)' and ila 'from (ABL)' (see interrogatives in §16.3). Examples (44)-(47) show various positions. They also illustrate that in order to ask a locative question one of these two prepositions must co-occur with paio.

| Rololo | ripaio | rialam | todeide |
| :--- | :--- | :--- | :--- |
| ro-lolo | ri=paio | ri=alam | todeide |
| IV/IR-search | LOC=where | LOC=nature | small |

ape rololo rialam togoge'.
ape ro-lolo ri=alam togoge'
or IV/IR-search LOC=nature large
'You search for the answer inside (lit. little nature) or you search for the answer outside (lit.
big nature).'
[jptext02.jdb 045]
(45) Ai ripaio joo siopu nujunjung moo?
ai ri=paio joo siopu nu=junjung moo
but LOC=where really owner $\mathrm{CN} / \mathrm{GE}=$ house this
'But where, really, is the owner of this house?'
[mdtext20.txt 010]
(46) Ai oo, nao asal ila paio?
ai 'oo nao asal ila paio
but $2 \mathrm{SG} / \mathrm{AB}$ that origin from where
'But where do you come from?'
[mdtext15.txt 073]

| (47) | Ripaio | tagu mami | doruo moo? |  |
| :--- | :--- | :--- | :--- | :--- |
| ri=paio | tagu mami | doruo moo |  |  |
| LOC=where | friend | 1PL.EXC | two | here |

'Where are our two friends?'
[fktale01.txt 007]

### 8.4 Prepositions subcategorised by speech verbs

Speech verbs subcategorise for either the comitative preposition sono 'with' or the locative preposition ri 'in, at, on, etc.' or for both. Speech verbs used in direct or indirect speech require at least one of these prepositions when the addressee is referred to, and ri and sono seem to be interchangeable with no change in the meaning. The various uses of sono and ri in direct and indirect speech are illustrated in (48)-(56).
(48) Jari neburamo a'u sono io, "iye."
jari $N$-pe-bura=mo a'u sono io iye
so RE-SF/DY-speak=COMP $1 \mathrm{SG} / \mathrm{AB}$ with $3 \mathrm{SG} / \mathrm{AB}$ yes
'So I spoke with him, "Yes".'
[cekupitu.int 006]
(49)

'The monkey told that to the flesh-eater.'
(51) Ono muagarang asumu nao, jomo upomongi
ono mu-agarang asu=mu nao jomo u-po 1 -mongi
if 2 SG.IV/IR-love $\operatorname{dog}=2 S G /$ GE that just 1 SG.IV/IR-SF/FA-request

| riSiopu | antau | asumu | nao | maala | majari | manusia. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ri=Siopu | antau | asu=mu | nao | mo-ala | ma-jari | manusia |
| LOC=Lord | in.order | dog=2SG/GE | that | ST/IR-can | COP/IR-become | man |

'If you love your dog there, I'll just ask the Lord in order that your dog there can become a person.'
[mdtext19.txt 046]
(52)

| Neburamo | io | ma'o | ritagunyo | odo | uo, "..." |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| N-pe-bura=mo | io | ma'o | ri=tagu=nyo | odo | 'uo |  |
| RE-SF-speak=COMP | $3 S G / A B ~ g o ~$ | LOC=friend=3SG/GE | monkey yonder |  |  |  |

'He spoke to his friend the monkey, "...".,
[troll.int 114]
(53)

| Jari | no'upeilua' | rijimo. |
| :--- | :--- | :--- |
| jari | no'u-peilu-a' | ri=jimo |
| so | 1SG.IV/RE-tell-TZ | LOC=3PL/AB |

'So I told (it) to them.'
[jptext04.jdb 018]

(54) | Neduta | moje | siina | nigibang | sono | unga | nu'olongian. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| N-pe-duta | moje | siina | ni=gibang | sono | unga | nu='olongian |
|  | RE-SF-propose | again | mother | PN/GE=lizard | COM | child | CN/GE=king

'The water monitor's mother proposed again to the king's daughter.'

| Odo | mai | nomongi | momangang | sono | riulasang | moo. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| odo | mai | $N$-pong-mongi | M-pong-mangang | sono | ri=ulasang | moo |
| monkey | come | RE-SF-request | IR-SF-chew.betel.nut | COM | LOC=turtle | this |

'The monkeys came and requested to chew betel nut with this turtle.'
(56) A’u moo janji sono oo.
a'u moo janji sono 'oo
$1 \mathrm{SG} / \mathrm{AB}$ this promise with $2 \mathrm{SG} / \mathrm{AB}$
'I promise you.'

### 8.5 Non-productive prepositional incorporation

Prepositional incorporation is not a productive means of word formation in Pendau (Katamba 1993:285-286), although, it occurs in several common formations. The general locative preposition ri is incorporated into at least these three verbs: mo-ri-ompong 'be pregnant (lit. in the stomach or belly)', and monga-ri-ulu 'go before, go first', and na-riatang 'is at/on the highest' (these may occur in either irrealis or realis mode). In (57)-(58) it appears that the denominal verbal prefix is applied to what should otherwise be a prepositional phrase with a nominal object, ri=ompong 'at/in the stomach'. Example (59) shows a locative predicate with the prepositional phrase ri='ompong 'pregnant (lit. in the stomach)'. It would seem natural that a very common idiom such as this could be formed into a verb as shown in examples (57)-(58).
(57) Ai rapi nulangkai uо noriompong.
ai rapi nu=langkai 'uo $N$-po $0_{1}$-ri-ompong
but spouse CN/GE-male yonder RE-SF/DE-LOC-stomach
'But that man's wife was pregnant.'
[mdtext2.txt 036]
(58) Nyaa reebiling miu rapi'u nao,
nyaa ro-ebiling miu rapi='u nao
don't IV/RE-leave $2 \mathrm{PL} / \mathrm{GE}$ spouse=1SG/GE that
saba' io nao noriompong.
saba' io nao N -po ${ }_{1}$-ri-ompong
because 3SG/AB that RE-SF/DE-LOC-stomach
'Don't you all leave my spouse there, because she is now pregnant.' [mdtext20.txt 049]
(59) A'u moo riompong.
a'u moo ri=ompong
$1 \mathrm{SG} / \mathrm{AB}$ here $\mathrm{LOC}=$ stomach
'I am pregnant.'

In (60) the temporal adverb ulu 'before, first'(§14.3.2.6) is preceded by what would normally also be a prepositional phrase, as in $r i=u l u$ 'at first'. The rare and unproductive monga-/nonga- prefix is discussed in §9.7.3. Statives can be formed from locative prepositional phrases such as na-ri-atang. This prepositional incorporation is illustrated in (61).
(60) A'u mongariulu ila emu ma'o riGalilea.
a'u monga-ri-ulu ila emu ma'o ri=Galilea
1SG/AB UD/RE-LOC-before ABL 2PL/AB go LOC=Galilee
'I will go on before you to Galilee.'
[Mark 14:28]
(61) Ndau diang rukum tonariatang ila rukum todoruo uo.
ndau diang rukum to=na-ri=atang ila rukum to=doruo 'иo
NEG EXIS law RM=ST/RE-LOC=top ABL law RM=two yonder
'There isn't any law that is higher than those two laws.'
[Mark 12:31]

### 8.6 Instrumental 'preposition' nu

This section presents the instrument noun phrase marker nu. Although nu could be interpreted as an oblique marker, the data presented below indicates it behaves more like a core argument (second object) marker than an oblique argument marker. Andrews (1985:128-130) discusses the ambiguous status of instrument and second objects in general; see also $\S 6.6 .4$ and $\S 10.1-3$. In all cases $n u$ is a proclitic ( $\S 4.2 .4 .2$, $\S 5.5$, and §7.5.1). The grounds for interpreting the instrumental marker $n u$ as a core argument marker are threefold: 1) causativisation requires a third argument to be a core argument, and there are cases in which this third argument is the instrument marked by nu (§10.2.2), 2) the semantics of some verbs such as sambale imply that there is a third argument although it does not seem to be required, and 3) the use of $n u$ as a core argument marker for inverse agents shows by analogy that it is reasonable to assume it can also be used to mark the core argument of another role. Although the latter two claims are admittedly ambiguous, the first claim based on causativisation is quite clear. Example (62) shows that the $n u$ marks a core argument since the causativisation of inang 'eat' increases the valency by one (see $\S 10.2$ for discussion on causatives).

```
(62)
\begin{tabular}{lll} 
Tagu'u & nipainana' & nirapi'u \\
tagu='u & ni-pa-inang-a' & ni=rapi='u \\
friend=1SG/GE & IV/RE-CAUS-eat-TZ & PN/GE=spouse=1SG/GE
\end{tabular}
\begin{tabular}{ll} 
nuloka & uo. \\
\(n u=l o k a\) & uo
\end{tabular}
INSTR=banana yonder
'My spouse fed my friend with/using that banana.'
```

[EN97-003.30]
The particle $n u$ is used for four grammatical functions, ${ }^{4}$ and except when functioning as a genitive linker in possessive constructions the concept 'effector' captures its use in

[^99]stative clauses (§9.4.2.2 and §17.4.4), instrument clauses (this section), and as the agent in inverse constructions (Chapter 12). Van Valin and Wilkins (1996:289) describe the function of this kind of particle as one of the manifestations of what they call an 'effector':
...the more basic role arising from verb semantics is what we call effector, roughly, the dynamic participant doing something in an event. This thematic relation underlies agent, force, and instrument, roles which are normally taken to be distinct but related in some way. Our goal is to demonstrate the basicness of the effector relation and to show how agent, force, and instrument interpretations derive from it.

Instruments are only marked by the proclitic $n u$ when they are not the pivot of the clause (that is, a non-subject; see $\S 6.6 .4$ and $\S 10.3 .3 .1-3$ ). It is also used to mark the genitive of common nouns. As indicated in Figure 8.1, nu has none of the other possible functions of the local case prepositions, and it requires an instrument in its dependent noun phrase. In example (63) note that the last word in the second clause nu=uram 'medicine' has the proclitic $n u$, and that the P argument 'them' is implied from the context.

| Ila | mai | uo | nialaponyo | uram, |
| :--- | :--- | :--- | :--- | :--- |
| ila | mai | 'uo | ni-alap=nyo | uram |
| ABL | come | yonder | IV/RE-get=3SG/GE | medicine |

paey nirembasinyo nuuram.
paey ni-rembas-i=nyo nu=uram
and.then IV/RE-hit-DIR=3SG/GE INSTR=medicine
'From there then he took the medicine, and then he applied the medicine to them.'
(lit. From there then he got the medicine, and then he hit them with the medicine.)
Example (64) is not marked with the instrument proclitic nu. Uram is clearly not the P argument, even though the previous clause (see example (63)) allows it to be the P argument. This shows that for verbs which allow instruments they require the instrument to be marked by nu. Elicitation shows that unga 'child' can be inserted as the P argument of rembas 'hit' as shown in (65). This also demonstrates one of the two preferred word orders: P V A INSTR. This follows the applicative preferred word order P V A O2, see §10.3.6.

| *....paey | nirembasinyo | uram. |
| :--- | :--- | :--- |
| paey | ni-rembas- $i=$ nyo | uram |
| and.then | IV/RE-hit-DIR=3SG/GE | medicine |

*‘...and then he applied (lit. hit) the medicine.'

| ...paey | unga | nirembasinyo | nuuram |
| :--- | :--- | :--- | :--- |
| paey | unga | ni-rembas-i=nyo | nu $=$ uram |
| and.then | child | IV/RE-hit-DIR=3SG/GE | INSTR=medicine |

' ... and then he hit the child with the medicine.'
Elicited examples demonstrate that the particle $n u$ can appear twice in the same clause with a different function for each noun phrase. In (66) one marks the A argument and the other marks the instrument (see Figure 6.3 for the paradigm of pronouns and noun phrase
markers in Pendau, see also §7.5.1 for noun markers). ${ }^{5}$ Example (67), also elicited, shows that it is possible to place the instrument noun phrase between the A argument and the verb.
(66) ...paey asu nirembasi nuunga nuuram.
paey asu ni-rembas-i nu=unga nu=uram
and.then dog IV/RE-hit-DIR CN/GE=child INSTR=medicine
'...and then the child applied (lit. hit) the medicine on the dog.'

| (67). ..paey | unga | nirembasi | nuuram | niYusup. |
| :--- | :--- | :--- | :--- | :--- |
| paey | unga | ni-rembas-i | nu=uram | ni=Yusup |
| and.then | child | IV/RE-hit-DIR | INSTR=medicine | PN/GE=Joseph |

'.. and then Joseph hit the child with the medicine.'
Example (68) shows variation of the word order of the P argument (in contrast to (66) and (67)) when the instrument noun phrase is used. However, elicited examples with this word order are not accepted by all speakers. Examples (69)-(70) show that the instrument case marker $n u$ can also appear in an active voice clause in contrast to inverse voice clauses (illustrated by (65)-(68)). ${ }^{6}$

| _..paey | nirembasinyo | unga | uo | nuuram | uo. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| paey | ni-rembas- $i=$ nyo | unga | 'uo | nu=uram | 'uo |
| and.then | IV/RE-hit-DIR=3SG/GE | child | yonder | INSTR=medicine | yonder |

' ...and then he hit the child with the medicine.'
(69) SiDesmon norembas unga uо nuuram.
si=Desmon $\quad N$-pong-rembas unga 'uo nu=uram
PN/AB=Desmon RE-SF/PT-hit child yonder INSTR=medicine
'Desmon hit the child with the medicine.'

| SiDesmon | nongkologi | ayu | иo | nusensar. |
| :--- | :--- | :---: | :--- | :--- |
| si=Desmon | N-pong-'olog-i | 'ayu | 'uo | $n u=$ sensar |
| PN/AB-Desmon | RE-SF/PT-cut-DIR | wood | yonder | INSTR=chainsaw |

'Desmon cut into the wood with the chainsaw.

| SiYusup | monyambale | japing | uo | nupiso. |
| :--- | :--- | :--- | :--- | :--- |
| si=Yusup | M-pong-sambale | japing | 'uo | nu=piso |
| PN/AB=Joseph | IR-SF/PT-butcher | cow | yonder | INSTR=machete |

'Joseph will slaughter the cow with a knife.'

[^100]The next example shows a different word order, accepted by my language helper during an elicitation session, but this word order has not been found in natural text where the preferred word order is with the instrument NP in final position.

| SiYusup | monyambale | nupiso | japing | uo. |
| :--- | :--- | :--- | :--- | :--- |
| si=Yusup | M-pong-sambale | nu=piso | japing | 'uo |
| PN/AB=Joseph | IR-SF/PT-butcher | INSTR | cow | yonder |

'Joseph will slaughter the cow with a knife.'
Most of the preceding examples were elicited, using the text in (63) as a starting point. Elicitation was collected from one speaker and then the data was judged by another Pendau speaker. There was never disagreement when the instrument NP is used in the final position, but there was frequently some disagreement on word order when instrument was not final. The instrument noun phrase was always clearly rejected in any pre-verbal position in the clause (as expected since this is the pivot/subject position). In many of the elicited examples the oblique comitative sono 'with' and the instrumental nu 'with, by means of (INSTR)' can be interchanged without a difference of meaning. However, examples (73) and (74) below clearly show a contrast between an instrumental and a comitative use. In reaction to (73) my language helper laughed and said that it was a possible sentence construction, but that it literally meant that the glass was drunk along with the water (the exclamation mark indicates that it is grammatical, but semantically strange). ${ }^{7}$ The literal explanation fits well with the comitative sense. Example (74) properly indicates the instrumental use of the glass, since it would be understood to mean that someone used the glass to drink with. Finally, example (75) shows that sono and the $n u$ can appear together in the sequence of sono nu with an instrumental function 'with the use of, by means of'.

| !Ogo | niinungo'u | sono | galas. |
| :--- | :--- | :--- | :--- |
| ogo | ni-inung='u | sono | galas |
| water | IV/RE-drink=1SG/GE | COM | glass |

'I drank the water along with the glass.'
(that is, the glass was ingested with the water)
(74) Ogo niinungo'u nugalas.
ogo ni-inung='u nu=galas
water ni-drink $=1 \mathrm{SG} / \mathrm{GE} \quad$ INSTR=glass
'I drank the water using a glass.'

[^101]| (75)Ogo <br> ogo | niinungo'u | si-inung='u | sono |
| :--- | :--- | :--- | :--- | nugalas.

'I drank the water with the use of a glass.'

### 8.7 Other functions of prepositions

Each of the local case prepositions may have other functions in addition to those already presented in this chapter. Figure 8.2 summarises and contrasts all of the functions which the prepositional particles have been found to occur in (including the non-local case 'preposition').

|  | ri | ila | sono | nu |
| :--- | :--- | :--- | :--- | :--- |
| Oblique NP (Adjunct; see $\S 8.3)$ | yes | yes | yes | unclear |
| Predicate clause (see $\S 6.5 .3)$ | yes | yes | yes | no |
| Speech verbs (see $\S 8.4$ and $\S 15.4)$ | yes | no | yes | no |
| Directional verbs (see $\S 11.2)$ | yes | yes | no | no |
| Locomotion verbs (see $\S 9.3 .4)$ | yes | yes | no | no |
| Conjunction (relators) (see $\S 15.6)$ | no | no | yes | no |
| Comparative clauses (see $\S 15.2)$ | no | yes | no | no |
| Discourse connector $(\S 15.7)$ | no | yes | no | no |
| Locative subject (see $\S 10.3 .3 .5)$ | some | no | no | no |

Figure 8.2. Various functions of prepositional particles

## 9

# Verb classes and miscellaneous verb morphology 

### 9.1 Introduction

This chapter focuses on the verb classes (see overview in Figure 9.1). The first sections cover the canonical verbs ( $\$ 9.2-5$ ). They discuss the seven verb classes as categorised by their transitivity possibilities: transitive, intransitive, and classes with mixed transitivity. Later sections deal with the non-canonical classes of verbs (§9.6), as well as with miscellaneous topics (§9.7). ${ }^{1}$ The final section of the chapter introduces a range of miscellaneous verbal morphology not treated in Chapter 12 (for example, inverse constructions), Chapter 13 (tense, aspect and mode), or Chapter 10 (valency altering mechanisms).

All canonical verbs except those from the stative class must occur with a stem-forming prefix. Some stem-forming prefixes are members of the HPS (see §3.5.7) while others are not. Verb class membership is determined by (1) the form of the obligatory prefix (or in the case of statives, the lack of a prefix), and (2) the possibility for verbs to co-occur with a range of other affixes. Each verb class identified in this way has a distinct set of semantico-syntactic characteristics associated with it. The verb classes are distinguished by the techniques used to form various derived stems, such as in the inverse construction, and various derivations using the augmented stem former (see §4.3). While most verbal roots only ever occur in one verb class, some roots have variable class membership.

A primary distinction can be made between transitive and intransitive verbs according to whether or not verbs can occur in an inverse construction. Intransitive verbs cannot occur in the inverse construction; to be affixed in the inverse construction they must first become a transitive class verb through derivation. Some verb classes are variable in transitivity, that is, some verbs in the class are transitive, and others are intransitive or behave like intransitives (see $\S 9.3 .6$ for discussion of incorporation-like behaviour of some verbs in the mixed transitivity classes). Distinctions between the factive, denominal, and locomotion classes (all marked by $\mathrm{po}_{1^{-}}$) are made on the basis of whether or not verbs from these classes can occur in the inverse construction, and whether in a non-derivational inverse construction they require the $p o_{1-}$ - or not. Factives require the $p o_{1}{ }^{-}$in the inverse construction whereas denominals do not. ${ }^{2}$ Locomotion verbs are further distinguished by the fact that $p o_{1}$ - obligatorily co-occurs with the infix -um- marking telic aspect.

[^102]| Transitivity | Verb <br> classes | Example | Stem <br> former | Pivot / subject | Irrealis / realis ${ }^{3}$ | Inverse <br> (nonderived) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TRANSITIVE | $\begin{aligned} & \hline \text { Primary } \\ & \text { §9.2.2 } \\ & \hline \end{aligned}$ | nongkomung 'to carry' | pong- <br> (рере-) | A | $\mathrm{M}-/ \mathrm{N}-$ | ni’omung |
|  | Factive §9.2.3 | nogabu 'to cook' | $\mathrm{po}_{1-}$ | A |  | nipogabu |
| MIXED <br> TRANSITIVITY | Dynamic $\S 9.3 .2$ | nelolo <br> 'to search' | pe- | $\mathrm{A} \sim \mathrm{S}_{\mathrm{A}}$ |  | nilolo |
|  | Denominal $\S 9.3 .3$ | nojala <br> 'to net' | $\mathrm{po}_{1-}$ | $\mathrm{A} \sim \mathrm{S}_{\mathrm{A}}$ |  | nijala |
|  | Locomotion $\S 9.3 .4$ | nol[um]olon 'to swim' | $\mathrm{po}_{1-}$ | $\mathrm{A} \sim \mathrm{S}_{\mathrm{A}}$ |  | -- ${ }^{4}$ |
| INTRANSITIVE | Postural §9.4.1 | nopotundo 'to sit' | popo- ${ }^{5}$ | $\mathrm{S}_{\text {A }}$ |  | -- ${ }^{6}$ |
|  | Stative §9.4.2 | notou' 'to be finished' | --7 | $\mathrm{S}_{\mathrm{P}}$ | mo-/no- | -- |

Figure 9.1. Overview of Pendau verb classes
Figure 9.1 shows examples of verbs from each class along with the stem-forming prefix used, and an indication of what the role of the pivot/subject is, an illustration of how irrealis/realis is marked, and an example of an inverse form if there is one.

Figure 9.2 illustrates some of the constructions that verbs from each class may occur in and which the stem former must appear. For the inverse construction a 'no' does not mean
12). For example, class III verbs (DY) sometimes have the pe-stem former in the inverse form, ni-petaang 'wait', but not ni-lolo 'search for'. However, imperative forms for both of these verbs begin with pe-, as in pe-taang 'wait!', and pe-lolo 'search!'. In summary, only by looking at the full paradigm of the verbs in Pendau and the use of the stem former $p V(C)$ - across a number of different grammatical constructions can the actual verb classes be shown to associate with a particular stem former.
3 Verbs are all marked for either irrealis or realis mode (see §13.2). With some verbs, including the stative verb class, modality is marked by mo-/no- or a similar prefix. With the other six canonical verb classes, modality is marked by an initial $m$ - or $n$ - which is analysed here as a floating autosegment that displaces the initial $p$ of the stem forming prefix (see $\S 4.3$ ).
4 Locomotion class VI verbs can be formed in the inverse construction after they become members in the class I transitive verb class, for example, ni-lolon-a'. This is achieved by adding the transitivising causative suffix $-a$ ' (see $\S 10.2 .4$ )
5 Another possible analysis is that the postural prefix is just po- preceded by mo-/no- as irrealis/realis prefixes rather than as floating autosegments. However, since there is no real evidence that the postural verb class shouldn't be analysed with a floating autosegment the simplest analysis that fits in with the rest of the actor oriented verb classes is that the postural prefix is popo- (with one po- frequently dropping off).
${ }^{6}$ Postural class V verbs can be formed in the inverse construction after they become members of the class I transitive verb class, for example, ni-tundo-a', as well as in the active voice as in mepedulina'. This is achieved by adding the transitivising causative suffix $-a^{\prime}$ (see $\S 10.2 .4$ ).
7 For the stative verb there is no evidence that suggests there should be an underlying stem former for this verb class. In fact counterevidence is found in the agentive nominalisation of this verb class, which retains the irrealis or realis prefix rather than a $p V(C)$ - stem former (see Figure 4.1 in §4.3).
a verb in that class cannot appear in the inverse construction, it only means it does not occur with the stem former.

Canonical verbs can be classified by their verb class prefix or, in the case of the three classes which each use the $p o_{1^{-}}$, the contrastive range and possibility for which affixes may co-occur with it. Each such class has a common semantico-syntactic denominator that is lacking within the other classes (for example, stative versus primary transitive, etc.). Each class of verbs has been named according to the most common semantic and syntactic denominator which characterises the majority of its members. In the case of verbs with stem formers the unique stem former that occurs with it is given a particular class name; in the case of the minor verb classes, it is the characteristics of all of the verbs or verb in its class. Not all verbs in a class will have the denominator, nor does it mean that a verb that has a class's denominator necessarily belongs to that class.

|  | Primary <br> pong- | Factive <br> $p o_{1^{-}}$ | Dynamic <br> $p e-$ | Denominal <br> $p o_{1-}$ | Postural <br> popo- | Locomotion <br> $p o_{1}-$ | Stative <br> $\varnothing$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inverse <br> construction | No | Yes | Some | Some | No | No | No |
| Instrumental <br> applicative | Yes | Yes | Yes | No | Yes | No | No |
| Locative <br> applicative | Yes | Yes | Yes | No | Yes | No | No |
| Imperative | Yes | Yes | Yes | Yes | Yes | Yes | No |
| Locative <br> nominalisation | Yes | Yes | Yes | Yes | Yes | No | No |
| Agentive <br> nominalisation | Yes | Yes | Yes | Yes | No | Yes | No |
| Instrumental <br> nominalisation | Yes | No | Yes | Yes | No | No | No |

Figure 9.2. Occurrence of verbs from each canonical class in different grammatical constructions

Examples (1)-(7) illustrate each of the seven canonical verb classes in simple sentences. Most of the roots used to form verbs can be identified as inherently either a noun (see $\S 5.3$ ) or a verb (see §5.6). Most verb roots in turn can be grouped together by their verbal semantics into one of the remaining six canonical verb classes. The use of class prefixes allows these six different verb classes to be imposed on one of the other five verb classes, since the prefix determines class membership (and the co-occurrence of the telic infix -umwith the $p o_{1}$ - distinguishes the locomotion verb class from the factive verb class). ${ }^{8}$

[^103](1) Primary transitive [pong-] (Class I see §9.2.2)

A'u mangalap bau.
a'u M-pong-alap bau
1SG/AB IR-SF/PT-get fish
'I get fish.'
(2) Factive $\left[\boldsymbol{p o}_{1}{ }^{-}\right.$] (Class II see §9.2.3)

Jimo nogabu bau uo.
jimo $N$-po $1_{1}$-gabu bau 'иo
3PL/AB RE-SF/FA-cook fish yonder
'They cooked that fish.'
[EN97-002.19]
(3) Dynamic [pe-] (Class III see §9.3.2)

Jimo nengkani.
jimo $\quad N$-pe-ngkani
3PL.AB RE-SF/DY-eat
'They ate.'
[horse.pin 857]
(4) Denominal [po $\mathbf{1}_{1-}$ (Class IV see §9.3.3)

A'u mobasi lading.
a'u M-po ${ }_{1}$-basi lading
1SG/AB IR-SF/DE-steel knife
'I am forging a knife.'
[EN97-003.51]
(5) Locomotion [po $\mathbf{1}_{1-}$ ] (Class VI see §9.3.4)

A'u nolumolon ridagat.
a'u $\quad N$-po ${ }_{1}$-[um]-lolon ri=dagat
1SG/AB RE-SF/LCM-TEL-swim LOC=ocean
'I swam in the ocean.'
[EN97-003.52]
(6) Postural [popo-] (Class V see §9.4.1)

Io nopoduling ri’uo
io $N$-popo-duling ri='uo
3SG/AB RE-SF/POS-lie.down LOC=yonder
'He lay down over there.'
[horse.pin 508]
(7) Stative [mo-/no-] (Class VII see §9.4.2)

A'u moo memenyong.
a'u moo mo-menyong
1SG/AB this ST/IR-cold
'I here am cold.'

### 9.2 Canonical transitive verb classes

### 9.2.1 Introduction

Transitive canonical verb classes are distinguished by the fact that verbs from these classes may all occur in the inverse voice (see Chapter 12). The following canonical transitive verb classes can be identified:

- Primary Transitive
- Factive

Each of these classes is discussed in turn below.

### 9.2.2 Primary transitive [Class I pong-, pepe-]

Verbs from the primary transitive verb class usually co-occur with the stem former pong- (and occasionally with pepe-). This stem former is subject to both vowel harmony (§3.5.7) and nasal assimilation (§3.5.4); see also further details in §5.6.2.1. Examples (8)(13) illustrate typical primary transitive active voice verb constructions.
(8) A'u monatap salana.
a'u M-pong-tatap salana
1SG/AB IR-SF/PT-wash pants
'I will wash the pants.'
[EN97-003.63]
(9) Jimo uo nongkomung asu.
jimo 'uo N-pong-'omung asu
3PL/AB yonder RE-SF/PT-carry dog
'They took dogs (with them).'
[asu2.pin 003]
(10) A'u monyapor bau.
a'u $\quad$ M-pong-sapor bau
1SG/AB IR-SF/PT-spear fish
'I will spear fish.'
[EN97-003.57]
(11) Ito menginungopo ogo moonda',
'ito $\quad$-pong-inung=po ogo mo-onda'
1PL.INC/AB IR-SF/PT-drink=CONT water ST/IR-hot
'We will drink some hot water.'
(12) A'u menginang bau.
a'u M-pong-inang bau
1SG/AB IR-SF/PT-eat fish
'I will eat fish.'
[EN97-002.44]
(13) Alea' $a$ 'u mongolimo aki bou.
alea' $a$ 'u M-pong-oli=mo aki bou
let 1 SG/AB IR-SF/PT-buy=COMP battery new
'Let me buy a new battery now.'

Another prefix that is sometimes used to form active voice verbs is pepe-. ${ }^{9}$ This prefix can be thought of as a secondary prefix, since it is used only with a few verbs. Example (14) illustrates the verb sarampung 'barbed spear', which requires the pepe- prefix and does not permit the use of nong-. This is contrasted with the generic verb sapor 'spear', as in (15), which does not permit the use of the pepe- prefix.

| A'u | nepesarampung | babi. |
| :--- | :--- | :--- |
| a'u | N-pepe-sarampung | babi |
| 1SG/AB | RE-SF/PT-barbed.spear | pig |

```
'I speared the pig.'
[EN97-003.61]
\begin{tabular}{llll} 
(15) & A'u & nonyapor & babi. \\
a'u & N-pong-sapor & babi \\
& 1SG/AB & RE-SF/PT-spear & pig
\end{tabular}
'I speared the pig.'
[EN97-003.61]
Some class I verbs can be prefixed with either pong- or the pepe-, as in (16)-(21). Other verbs are prefixed by one or the other (as in (14) and (15)). At this time there is no evidence to suggest that there are any factors which determine the choice between pong- or pepe-. I conclude that the use of one or the other is either by convention and/or stylistic preference. However one factor that demonstrates that the pepe- stem former is secondary to the pong- is in the use of derivations that require a stem former. When transitive verbs form other derivations that require the use of a stem former, only the pong- form is used. This is true even on primary transitive verbs which are known only to take the prefix pepein the active voice. All causativised roots that result in active voice transitive forms are affixed with pong- or pepe- (including those roots from classes II-VI), and the resulting words become members of this verb class (see \(\S 10.2\) for causativisation).
\begin{tabular}{lll} 
A'u & monulis & surat. \\
a'u & M-pong-tulis & surat \\
1SG/AB & IR-SF/PT-write & letter
\end{tabular}
'I will write a letter.'
[EN97-003.63]
(17) A'u nepetulis surat.
a'u \(N\)-pepe-tulis surat
1SG/AB RE-SF/PT-write letter
'I wrote a letter.'
[EN97-003.63]
(18) A'u momate manu'.
a'u M-pong-pate manu'
1SG/AB IR-SF/PT-kill chicken
'I will kill a chicken.'
[EN97-003.53]

\footnotetext{
9 The prefix pepe- looks as if it could be analysed into two formatives. There are no serious clues to indicate what the separate pe-syllables in these forms could possibly mean, and so pepe- is assumed to be one formative.
}
(19) A'и nepepate manu'.
a'u \(N\)-pepe-pate manu'

1SG/AB RE-SF/PT-kill chicken
'I killed a chicken.'
[EN97-003.53]
(20) A'u morembas tagu'u.
a'u M-pong-rembas tagu='u
1SG/AB IR-SF/PT-hit friend=1SG/GE
'I will hit my friend.'
[EN97-003.55]
(21) A'u meperembasi tagu'u.
a'u M-pepe-rembas-i tagu='u
1SG/AB IR-SF/PT-hit-DIR friend=1SG/GE
'I will hit my friend.'
[EN97-003.55]

\subsection*{9.2.2.1 Other primary transitive verb class details}

\subsection*{9.2.2.1.1 Use of the prefix song- 'one'}

An interesting variation of the active voice construction, which is normally formed with the irrealis/realis autosegments \(M-/ N\)-, is the autosegment \(S\) - which can be roughly glossed 'one'. The numeral 'one' \(S\) - as incorporated into the active voice verbal prefix restricts the time of the verb to a short duration. Irrealis/realis cannot be marked when songis used, as in (22)-(25). \({ }^{10}\) Examples (26) and (27) illustrate the use of the irrealis autosegment \(M\) - in the parallel constructions in (22) and (23).
(22)
\begin{tabular}{lll} 
A'u & sonsosop & ogo. \\
\(a^{\prime} u\) & S-pong-sonsop & ogo \\
1SG/AB & ONE-SF-inhale & water
\end{tabular}
'I take a sip of water.' [time restricted]
(23) A'u sonsosop rokok.
a'u S-pong-sonsop rokok
1SG/AB ONE-SF-inhale cigarette
'I take a puff (smoke) a cigarette.' [time restricted]
(24)

A’u sonsosop susu.
a’u S-pong-sosop susu
1SG/AB one-SF-inhale milk
'I take a sip of milk.' [time restricted]
(25)
\begin{tabular}{llllll} 
Ila & mai & uo & Sonturu & unga & uo. \\
ila & mai & 'uo & S-pong-turu & unga & 'uo \\
ABL & come & yonder & ONE-SF-sleep & child & yonder
\end{tabular}
'After that the children slept a little bit.'
[poora.pin 125-126]

\footnotetext{
10 The elicitation examples here are idealised examples based on a real text example found in horse.pin 172.
}
\begin{tabular}{lll} 
A'u & monyosop & ogo. \\
a'u & M-pong-sosop & ogo \\
1SG/AB & IR-SF/PT-inhale & water
\end{tabular}
'I sip (suck) water.'
\begin{tabular}{lll} 
A'u & monyosop & rokok. \\
a'u & M-pong-sosop & rokok \\
1SG/AB & IR-SF/PT-inhale & cigarette
\end{tabular}
'I puff (smoke) a cigarette.' [time unrestricted]

\subsection*{9.2.2.1.2 Active voice prefix on numerals}

There is one grammatical construction in which a prefix that has the same form as the active voice prefix pong- is affixed to reduplicated numerals. This construction appears in a noun phrase and modifies the head noun, as demonstrated in examples (28) and (29). What makes this modifier look like a verb is the fact that irrealis and realis can be contrasted with the prefix. However, in contrast to active voice verbs the reduplicated numeral does not take an A argument. \({ }^{11}\) The best interpretation of this construction is that it modifies the head noun. Non-reduplicated numerals such as so-mpulu 'ten' and lelima 'five' can fill this same slot (see §7.5.2.1.4 for further discussion).
\begin{tabular}{llll} 
A'u & mengitai & nonggatu-gatus & bituong. \\
a'u & M-pong-ita-i & N-pong-gatu-gatus & bituong \\
1SG/AB & IR-SF/PT-see-DIR & RE-SF-DUP-hundreds & stars
\end{tabular}
'I see hundreds and hundreds of stars.'
[EN97-002.29]
(29) Monggatu-gatus pariamamo siYesus naate.

M-pong-gatu-gatus pariama=mo si=Yesus no-ate
IR-SF-RED-hundred year=COMP PN/GE=Jesus ST/RE-die
'Jesus died hundreds of years ago.'
[EN97-002.28]

\subsection*{9.2.3 Factive verbs [Class II po \(\mathbf{1}_{1}\)-]}

Examples (30)-(32) illustrate the factive verb prefix \(p o_{1-}\) with some of the most common verbs in this class of transitive verbs. Although factive verbs are identified by their use of the \(p o_{1}\) - stem former this prefix appears on the surface in the active voice only when preceded by another prefix, as in (33) and (34). These verbs show prefix combinations with the primary transitive prefix pong-. These examples show that the sequence of prefixes includes the stem former \(p o_{1}\) - immediately preceding the root. In simple forms with factive verbs the \(p o_{1-}\) - stem former does not show up on the surface (§4.3).

\footnotetext{
\({ }^{11}\) In fact it reminds me of stative verbs that are used to modify head nouns in compound nouns such as mangibang me-meas 'reef white-tip shark (lit. shark white)', see §7.4.6. However the construction with the reduplicated numeral shows the opposite word order, and irrealis is always used in compound nouns. Another possible connection is the use of active voice prefixes on stative verbs, to add an intensifying dimension to the verb rather than change its transitivity (see §9.4.2.3).
}
(30)
\begin{tabular}{lll} 
A'u & mogutu & junjung. \\
a'u & M-po \(0_{1}\)-gutu & junjung \\
1SG/AB & IR-SF/FA-make & house
\end{tabular}
'I will make a house.'
[EN97-003.62]
(31) A'u nomongi vea.
a'u \(N\)-po.-mongi vea
1SG/AB RE-SF/FA-request raw-rice
'I requested rice.'
[EN97-003.52]
(32) Tomogurang bengkel nombayu rampa. tomogurang bengkel \(N\)-po \(0_{1}\)-mbayu rampa elder female RE-SF/FA-pound spice 'The old woman pounded the spices.'
[poora.pin 262]
(33) Jimo nompopogabu bau uо.
jimo \(N\)-pong-po \(3_{3}\)-po \(0_{1}\)-gabu bau 'uo
3PL/AB RE-SF/PT-CAUS-SF/FA-cook fish yonder
'They had someone cook that fish.'
[EN97-002.19]
(34) A'u me'ipomongi vea.
a'u \(\quad\)-pe'i-po- \({ }_{1}\)-mongi vea
1SG/AB IR-REQ-SF/FA-request raw.rice
'I requested someone to request uncooked rice.'
[EN97-003.52]

\subsection*{9.3 Canonical verb classes with mixed transitivity}

\subsection*{9.3.1 Introduction}

Three verb classes are distinguished by the fact that some of the verbs in each class may occur in the inverse voice and some of the verbs may not. The following canonical verb classes with mixed transitivity can be identified:
- Dynamic
- Denominal
- Locomotion

Each of these verb classes is discussed in turn below.

\subsection*{9.3.2 Dynamic verbs (Class III pe-)}

\subsection*{9.3.2.1 Typical dynamic verbs}

Dynamic verbs take the pe-stem former (see definition in §5.6.2.3). Examples (35)(39) illustrate the dynamic verb when they are used in intransitive constructions.
\begin{tabular}{lll} 
Sampanyo & jimo & neosa. \\
sampanyo & jimo & N-pe-osa \\
after.that & 3PL/AB & RE-SF/DY-rest
\end{tabular}
'After that they rested.'
Io neondo' rigii nudagat.
io \(\quad N\)-pe-ondo, ri=gii nu=dagat
3SG/AB RE-SF/DY-stop LOC=edge \(\mathrm{CN} / \mathrm{GE}=\) ocean
'He/she stopped at the edge of the ocean.'
[EN97-004.56]
(37)
\begin{tabular}{llllll} 
Ila & mai & uo & nelampamo & olongian & uo. \\
ila & mai & 'uo & N-pe-lampa=mo & 'olongian & 'uo \\
from come & yonder & RE-SF/DY-travel=COMP & king & yonder
\end{tabular}
'And after that the king left.'
[miracle1.pin 072]
(38)
\begin{tabular}{llllll} 
Jari & иo-иo & moo & ami & monopo & neguru. \\
jari & 'иo-'иo & moo & 'ami & mono=po & N-pe-guru \\
so & RED-yonder & this & 1PL.EXC/AB & still=CONT & RE-SF/DY-learn
\end{tabular}
'So now I (hon.) am still continuing to learn.'
[cekuphil.int 010]
(39) Bai uo io nembuat
bai 'uo io \(N\)-pe-mbuat
like yonder 3SG/AB RE-SF/DY-emerge
paey io nesalana o nebaju.
paey io \(N\)-pe-salana o \(N\)-pe-baju
and.then 3SG/AB RE-SF/DY-pants and RE-SF/DY-shirt.
'After that he emerged (from the water), and then he put on his pants and shirt.'
[mdtext15.txt 043]

The dynamic verb class can also occur in transitive clause constructions Examples (40)(42) illustrate dynamic verbs with a P argument.
(40)
\begin{tabular}{llll} 
Ami & mengkanipo & loka & lulu. \\
'ami & M-pe-ngkani=po & loka & lulu \\
1PL.EXC/AB & IR-SF/DY-eat=CONT & banana & first
\end{tabular}
'We are going to eat bananas first.'
[poora.pin 290]
(41)
\begin{tabular}{llllll} 
Ila & uo & jimo & tarus & neluat & baju \\
ila & 'uo & jimo & tarus & N-pe-luat & baju \\
from & yonder & 3PL/AB & continue & RE-SF/DY-remove & shirt
\end{tabular}
paey jimo neriing dagat.
paey jimo \(N\)-pe-riing dagat
and.then \(3 P L / A B\) RE-SF/DY-bathe ocean
'After that they removed their shirts, and then they bathed in the ocean (lit. ocean-bathed).'
[Tanjong 031]
(42)
\begin{tabular}{llll} 
A'u & moo & melolo & topomintis. \\
a'u & moo & M-pe-lolo & topomintis \\
1SG/AB & this & IR-SF/DY-search & blacksmith
\end{tabular}
'I here am looking for a blacksmith.'
[asu2.pin 077]

Examples (43) and (44) illustrate pe- affixed to nominal roots. In (43) the effect is to indicate presence of the object denoted by the noun (blood), while in (44) it is to indicate possessor of the object (house).
(43) Tagu'u meraa.
tagu='u M-pe-raa
friend=1SG/GE IR-SF/DY-blood
'My friend is bleeding.'
[EN97-003.31]
(44) Io nejunjungomo.
io \(\quad N\)-pe-junjung \(=m o\)
3SG/AB RE-SF/DY-house=COMP
'He already has a house.'
[EN97-004.62]

\subsection*{9.3.2.2 Dynamic prefixes on nominalised stative roots}

Dynamic prefixes can also be affixed to a nominalised stative root, as in (45). Example (46) by contrast shows stative affixation on the same stative verb anta' 'near, close' (the precise difference in meaning is difficult to convey in English free translations, but neanta'ong can be approximated as 'next to, beside').
(45) Gadera'u neanta'ong sono gadera niCeku.
gadera='u \(\quad\)-pe-anta'-ong sono gadera ni=Ceku
chair=1SG/GE RE-SF/DY-close-locN COM chair CN/GE=Ceku
'My chair is next to Ceku's chair.'
[EN97-004.21]
(46) Gadera'u naanta' gadera niCeku.
gadera='u no-anta' gadera ni=Ceku
chair=1SG/GE ST/RE-close chair PN/GE=Ceku
'My chair was close to Ceku's chair.'
[EN97-004.21]

\subsection*{9.3.2.3 Dynamic prefixes on reciprocal verb constructions}

One way to form a reciprocal verb is by reduplicating the first syllable and adding the locative nominalising suffix -ong. This verb construction can only be prefixed with the dynamic prefix (see \(\S 10.4\) for a discussion of different reciprocal constructions). Examples (47) and (48) provide typical examples.
(47) A'u neroropa'ong.
a'u \(\quad N\)-pe-ro-ropa'-ong
1SG/AB RE-SF/DY-RED-cut-locN
'I exchanged machete cuts (with s.o.).'
[EN97-002.38]
\begin{tabular}{llll} 
Too & nesasaporongomo, & too & neroropa'ongomo \\
too & N-pe-sa-sapor-ong=mo, & too & N-pe-ro-ropa'-ong=mo \\
person & RE-SF-RED-spear-locN=COMP & person & RE-SF-RED-cut-locN=COMP
\end{tabular}
'People speared each other, and people were cutting each other.' [horse.pin 540-541]

\subsection*{9.3.3 Denominal verbs (Class IV po \({ }_{1}\)-)}

\subsection*{9.3.3.1 Typical denominal verbs}

Examples (49)-(53) show typical nouns affixed with the denominal prefixes \(M-p o_{1}-/ N-\) \(p o_{1}\) - (see definition in §5.6.2.4). They also contrast uses of transitive ((49), (52), and (53)) and intransitive clauses ((50) and (51)) created with such verbs. Note that the oblique comitative sono 'with, together' appears to be used optionally with such verbs, compare (49) and (50).
(49) Mangge, a’u moo morapi ungato nao
mangge a’u moo M-po-rapi unga=to nao
uncle.VOC \(1 \mathrm{SG} / \mathrm{AB}\) this IR-SF/DE-spouse child=1PL.INC/GE that
'Uncle, I here will marry your (hon.) child there.'
[mdtext15.txt 024]
(50)
\begin{tabular}{llllll} 
A'u & butu & morapi & sono & ungato & nao. \\
a'u & butu & M-po.-rapi & sono & unga=to & nao \\
1SG/AB just & IR-SF/DE-spouse & COM & child=1PL.INC/GE that
\end{tabular}
'I will just marry with your (hon.) child there.'
[mdtext15.txt 031]
(51) Io mounga.
io \(\quad M\)-po \(o_{1}\)-unga
3SG/AB IR-SF/DE-child
'She will give birth.'
[EN97-003.501]
(52)
\begin{tabular}{lll} 
A'u & moasu & babi. \\
a'u & M-po - -asu & babi \\
1SG/AB & IR-SF/DE-dog & pig \\
'I will hunt pigs (with dogs).'
\end{tabular}
[EN97-003.51]
(53)
\begin{tabular}{llll} 
A'u, & uti, & ma'opo & mojala \\
\(a ' u\) & \(u t i\) & ma'o=po & M-po - -jala \\
1SG/AB & dear.boy/VOC & go=CONT & IR-SF/DE-net
\end{tabular}
\begin{tabular}{lll} 
montiang & bauto & nao. \\
M-pong-tiang & bau=to & nao \\
IR-SF/PT-add & fish=1PL.INC/GE & that
\end{tabular}
'Dear boy, I will go again and cast the net and add to our fish there.' [tambao.tst 010]

\subsection*{9.3.3.2 Denominalised possessive noun prefix combination}

Words with stems beginning with the possessive prefix 'o- 'have' are treated language internally as nominals for the purposes of deriving a stem-forming verb. So as a working hypothesis I assume that whenever the prefix ' \(o\) - is used to form a canonical verb it first derives a noun that is subsequently denominalised with the denominal verb class prefix \(p o_{1-}\), as shown in (54).
\begin{tabular}{lllll} 
(54) \begin{tabular}{llll} 
Siama'u & no'alampa & ridusunang & nutoo \\
siama='u & \(N\)-po - -o-lampa & ri=dusunang & nu=too
\end{tabular} \\
father=1SG/GE & RE-SF/DE-HAVE-travel & LOC=village & CN/GE=person
\end{tabular}
'My father travelled to a village of active people carrying a large boat that sailed off.'
[ceku02.jdb 013]

Here lampa 'walk, travel' is the base in the derived noun 'a-lampa 'have a walk, have a journey' and from which is derived the verb no-'a-lampa 'do the activity of having walks'. \({ }^{12}\) For nouns that end word formation with the affixation of ' \(o\) - 'have' and derive the possessive minor verb construction it is assumed that the 'o- 'have' prefix determines a possessive predication (see Heine 1997; Taylor 1999). \({ }^{13}\)

The possessive prefix belongs to the vowel harmony set, and so it has three allomorphs: ' \(o-\), ' \(a-\), and ' \(e\) - (cognate with \(k a\) - in the Kaili-Pamona languages, see Barr 1988b). When ' \(o\) - is affixed to a noun it creates a predication meaning 'to have \(X\) ' or 'own \(X\) ', as in ' \(e\) piso 'have a machete', 'e-siina 'have a mother', or as 'o-unga 'have a child' as in (55). \({ }^{14}\) The noun unga 'child' is the base for the denominal verb mo'ounga (M-po-'o-unga) 'give birth (lit. have a child)', as in (56). Note also that this verb can also occur in the inverse voice as is shown in the relative clause in this example.

Saba' ito ndau o-unga.
saba' 'ito ndau 'o-unga
because 1PL.INC/AB NEG HAVE-child
'Because we don't have a child.' [nalalo.pin 006]
\begin{tabular}{llllll} 
Bai uo & no'ounga, & joo & unga & bengkel & tutuu \\
bai 'uo & \(N\)-po \(0_{1-\prime}\) o-unga & joo & unga & bengkel & tutuu \\
like yonder & RE-SF/DE-HAVE-child & however & child & female & really
\end{tabular}
tonipo'oungaa'onyo.
to \(=n i-p o_{1-}\) 'o-unga-a'=nyo
RM \(=\) IV/RE-SF/DE-HAVE-child-TZ=3SG/GE
'So then she gave birth, however it really was a girl child that she had given birth to.'
[mdtext5.txt 027]

\footnotetext{
12 Note that the agentive nominalisation topo'alampa 'a walker, a traveller' verifies the example presented here as a legitimate verb.
\({ }^{13}\) When added to a verb root 'o 'have' always derives a noun (§7.4.1). Although, when ' \(o\) is added to a nominal root it creates a possessive predication (§6.6.2.2). Even the possessive predication is reminiscent of the verbless equative clause construction.
\({ }^{14}\) See \(\S 6.6 .2 .2\) and \(\S 7.4 .1\), and for stative based intensification where the 'o- precedes a reduplicated stative root see §7.4.3.5.
}

Example (57) demonstrates that the initial \(p o_{1^{-}}\)is a stem former preceding the possessive ' \(o\) - prefix and not part of the homophonous resultative prefix po' \(o_{1-}\) (see §10.6), since the stem former \(p o_{1}\) - clearly forms a noun in this part of the paradigm. \({ }^{15}\)
```

(57) Nodua' ribulang po'ounganyo.
$N$-po $o_{1}$-dua' ri=bulang po $o_{1}$ 'o-unga $=n y o$.
RE-SF/DE-arrive LOC=month SF/DE-HAVE-child=3SG/GE

```
'The month for her to give birth arrived.'
[gibang.pin 011]

\subsection*{9.3.4 Locomotion verbs (Class V po 1- \(^{-}\))}

\subsection*{9.3.4.1 Typical locomotion verbs}

The locomotion verb class is marked by the prefix \(p o_{1^{-}}\)(see \(\S 5.6 .2 .6\) for the definition). The root lolon 'swim' cannot be prefixed only with the \(p o_{1-}\) - prefix but must also have the telic aspectual infix -um- affixed in combination, as contrasted in (58) and (59) (telic aspect is discussed in §13.4.1.3). Examples (60)-(66) show other representative locomotion verbs.
(58)
\begin{tabular}{lll} 
A'u & nolumolon & ridagat. \\
a'u & N-po 1 -[um]-lolon & ri=dagat \\
1SG/AB & RE-SF/LCM-TEL-swim & LOC=ocean
\end{tabular}
'I swam in the ocean.'
[EN97-003.52]
(59) *A'u no-lolon ri=dagat.
(60) Bai uo io noluminjo' riolot.
bai 'uo io \(N\)-po \(o_{1}\)-[um]-linjo' ri=olot
like yonder 3SG/AB RE-SF/LCM-TEL-run LOC=wilderness
'After that he ran into the wilderness.' [senge1.pin 013]
(61) Ila uo io ma'o-ma'o bole-bole uo luminjo' seide'.
ila 'uo io ma'o-ma'o bole-bole 'uo [um]-linjo' so-ide'
ABL yonder 3SG/GE RED-go RED-suddenly yonder TEL-run ONE-little
'After that he suddenly went and ran a bit.'
[troll.int 295]
(62) Tambao moo nolumeapomo.
tambao moo \(N\)-po \(1_{1}\)-[um]-leap
pelican this RE-SF/LCM-TEL-fly=COMP
'The pelican flew off.'
[tambao.tst 029]

\footnotetext{
\({ }^{15}\) Note that because this stem former is of the denominal class (see §9.3.3) it could never take the form pa or \(p e\) unlike the po formative in \(p o^{\prime} o_{1}\) - which can also occur as \(p a^{\prime} a\) - and \(p e e^{\prime} e\) - as shown in \(\S 10.6\).
}
\begin{tabular}{lllll} 
(63) \begin{tabular}{l} 
Tarus \\
tarus
\end{tabular} & \begin{tabular}{l} 
rapinyo \\
rapi=nyo
\end{tabular} & 'uo & nolumeap \\
continue & spouse=3SG/GE & yonder & RE-SF/LCM-Teap \\
& & & \\
Mene' & mata nueleo. & & \\
mene' & mata \(\quad\) nu=eleo & & \\
go.up & eye & \(\mathrm{CN} / \mathrm{GE}=\) sun &
\end{tabular}
'And then his spouse flew off up to the sun (lit. eye of the sun/day).' [mdtext14.txt 046]
(64) Bai uo nembirung api uo, tarus nolumengkeromo
bai 'иo \(N\)-pe-mbirung api 'uo tarus \(N\)-po \(o_{1}\)-[um]-lengker=mo
like yonder RE-SF-flame fire yonder continue RE-SF/LCM-TEL-boil=COMP
\begin{tabular}{lllc} 
ogo & rilalong & nuurong & uo. \\
ogo & ri=lalong & nu=urong & 'uo \\
water & LOC=inside & CN/GE=earth.pot & yonder
\end{tabular}
'After the fire was flaming, then the water began to boil inside the earthen pot.'
[mdtext14.txt 024]
(65) Paey jimo nopumure'omo ogo uo,
paey jimo \(N\)-po - -[um]-pure'=mo ogo 'uo
and.then \(3 P L / A B \quad\) RE-SF/LCM-TEL-upstream=COMP water yonder
\begin{tabular}{llll} 
sampe & nodua' & rimata & nuogo. \\
sampe & \(N\)-po \({ }_{1}\)-dua, & ri=mata & \(n u=o g o\) \\
until & RE-SF/DE-arrive & LOC=eye & CN/GE=water
\end{tabular}
'And then they followed the water upstream until they arrived at the spring (lit. eye of water).'
[mdtext18.txt 038]
(66) Bia ponyu moo moluaromo molumeep.
bia ponyu moo mo-luar=mo M-po - -Lum]-leap
later sea.turtle this UD/IR-want=COMP IR-SF/LCM-TEL-dive
'Later this sea turtle wanted to dive.'
[trtlegg.pin 027]
Examples (67) and (68) use the verb root tangis 'cry' which is not semantically a locomotion verb, but in Pendau is in the locomotion class. In (67) it appears that the interaction between the irrealis mode and the telic aspect marks an inception into a new state, that is, 'crying' (see §13.4.1.3 for further discussion), whereas in (68) the inception is created by the interaction of tarus 'continue' (which in this context requires immediate action of the verb) and the telic aspect. The prefixed locomotion verbs are intransitive since an oblique preposition must be used in order for another NP to be used, as in (68).
(67) Jari ulasang moo motumangis.
jari ulasang moo \(M\)-po \({ }_{1}\)-[um]-tangis
so land.turtle this IR-SF/LCM-TEL-cry
'So land turtle began to cry.'
```

(68) Siinanyo tarus notumangis
siina=nyo tarus N-po1-[um]-tangis
mother=3SG/GE continue RE-SF/LCM-TEL-cry
sono unganyo uo.
sono unga=nyo 'uo
COM child=3SG/GE yonder
'Her mother then began to cry with her child.'

```
[ceku03.jdb 063]

\subsection*{9.3.4.2 Transitive locomotion verb constructions}

Verb roots that are inherently locomotion can further form transitive constructions with the causative suffix \(-a^{\prime}\) (TZ; §10.3.4). \({ }^{16}\) Examples (69) and (70) contrast the active voice form with the inverse voice form. Other verb classes are always used in transitive verb constructions when affixed with the locomotion prefix-infix combination (see §13.4.1.3 and for a discussion of the obligatory use of the TZ applicative \(-a\) ' in these latter cases see §10.3.4).
(69)
\begin{tabular}{llll} 
A'u & nolumolona' & unga'u & ridagat. \\
a'u & N-po \(0_{1}\) - [um]-lolon-a' & unga='u & ri=dagat \\
1SG/AB & RE-SF/LCM-TEL-swim-TZ & child=1SG/GE & LOC=ocea
\end{tabular}
'I took my child swimming in the ocean.'
[EN97-003.52]

'I took my child swimming in the ocean.'
[EN97-003.52]
Examples (71)-(74) illustrate other locomotion verbs that are suffixed with the TZ suffix \(-a^{\prime}\).
(71) Jari io jomo nosumandega'
jari io jomo \(N\)-po \(o_{1}\)-[um]-sandeg-a'
so 3 SG/AB just RE-SF/LCM-TEL-lean-TZ
ma'o ripuи nu’ayu.
ma'o ri=puи nu=’ayu
go LOC=trunk CN/GE=tree
'So he was just leaning against the trunk of the tree.' [trtlegg.pin 035]
\begin{tabular}{lll} 
(72) & \begin{tabular}{ll} 
Paey & no'uminjira'
\end{tabular} & moje \\
paey & \(N\)-po 1 - [um]-'injir-a' & moje \\
and.then & RE-SF/LCM-TEL-stand.straight-TZ & again
\end{tabular}

\footnotetext{
\({ }^{16}\) The transitivising suffix (TZ) \(-a\) ' is a causative when forming transitive verbs from intransitives (see \(\S 10.2 .4\) and apparent exceptions in \(\S 10.3 .4\) ), but is an applicative when applied to transitive verbs (see §10.3).
}
\begin{tabular}{lll} 
tonangkait & ningeno & uo. \\
to-no-ngkait & ningeno & 'uo \\
AGN-ST/RE-cripple & just.now & yonder
\end{tabular}
'And then the cripple stood up straight just then.'
\begin{tabular}{llll}
\begin{tabular}{lll} 
Odo & ningeno & uo
\end{tabular} & nolumumpata' \\
odo & ningeno & 'uo & \(N\)-po \(o_{1}\)-um-lumpat-a' \\
monkey & just.now & yonder & RE-SF/LCM-TEL-jump-TZ \\
& \\
manyau & ritano. \\
ma-nyau & ri=tano \\
UD/IR-go.down & LOC=ground \\
'The monkey just then jumped down to the ground.'
\end{tabular}
[troll.int 272]
\begin{tabular}{llll} 
Ila uo siinanyo & neteulemo & rijunjungonyo \\
ila 'uo siina=nyo & N-pe-teule=mo & ri=junjung=nyo
\end{tabular}
'After that her mother returned to her house when she began crying with regret.'
[ceku03.jdb 088]

\subsection*{9.3.4.3 Derived locomotion verbs from non-locomotion verb classes}

Derived locomotion verbs are commonly created from other verb classes. The basic test for classing verbs is primarily based on what verb class prefix is found with a verb's base in its simplest form. \({ }^{17}\) These derived locomotion verbs require the addition of the TZ \(-a\), suffix in order to derive a locomotion verb, as well as the locomotion prefix and associated telic infix. This addition signals that these derived locomotion verbs are also transitive. These differ from the transitive locomotion verb constructions described in §9.3.4.2 since basic underived locomotion verbs may also be found in a simple form without the transitiviser suffix. In summary then, derived locomotion verbs usually require the transitivising inflectional morphology in addition to the locomotion verbal affix combination, whereas underived locomotion verbs may occur with or without additional transitivising morphology.

Example (75) lists representative examples of verb roots from other verb classes, as well as a noun and an adverb that can all be affixed with the locomotion affix combination. Representative words with the locomotion affix combination infix that normally require the suffix \(-a\) ' are given in (76)-(81). One common exception is formed from the noun sombal 'sail', and does not require the TZ -a' suffix, as shown in (82).

\footnotetext{
\({ }^{17}\) Although it is stated here simply, it is not always an easy task to determine which verb class a verb root/base belongs to. For further details see \(\S 9.1, \S 4.3\), and \(\S 5.6\).
}
\begin{tabular}{lll} 
tuut & 'follow' & Class I \\
pipit & 'perimeter' & Class I \\
tungga & 'intent, reason' & Class I \\
tuar, ntuar & 'descend head down at 45' & Class I \\
turana' & 'let be' & Class I \\
ntama & 'enter' & Class III \\
ginsi & 'slide, scoot' & Class III \\
gombo & 'meet' & Class IV \\
sunsul & ''bow head' & Class V \\
siir & 'stare, gaze' & Class VIII \\
sombal & 'sail'18 & Noun \\
sabar & ''patience' & Noun \\
tarus & 'continue' & Adverb
\end{tabular}
\begin{tabular}{lllll} 
A'u & motumuuta' & meteule & ma'o & kampungoto. \\
\(a^{\prime} u\) & M-po \(1-[\) lum]-tuut-a' & M-pe-teule & ma'o & kampung=to \\
1SG/AB & IR-SF/LCM-TEL-follow-TZ & IR-SF-return & go & village=1PL.INC/GE
\end{tabular}
'I will follow him back to our village.'
[horse.pin 1135]
\begin{tabular}{llll} 
SiYesus & nepeliling & jimo, & ayama'o \\
si \(=\) Yesus & N-pepe-liling & jimo, & ayama'o \\
PN/AB=Jesus & RE-SF-watch & 3PL/AB & how
\end{tabular}
jimo montumamaa' doi' rilalong nupeti uo.
jimo \(\quad\)-po \(o_{1}\)-[um]-ntama-a' doi' ri=lalong nu=peti 'иo

3PL/AB IR-SF/LCM-TEL-enter-TZ money LOC=inside CN/GE=box yonder
'Jesus watched them, how they put the money inside of that box.' [Mark 12:41]
(78)
\begin{tabular}{llll} 
Tonangkait & moo & nosumiira' & manyau \\
to-no-ngkait & moo & \(N\)-po 1 -[um]-siir-a & ma-nyau \\
AGN-ST/RE-cripple & this & RE-SF/LCM-TEL-stare-TZ & UD/IR-go.down
\end{tabular}
\begin{tabular}{lll} 
ritagunyo & tonobuta & uo. \\
ri=tagu \(=\) nyo & to-no-buta & 'uo
\end{tabular}

LOC=friend \(=3\) SG/GE AGN-ST/RE-blind yonder
'The cripple stared down at his friend, that blind man.'
[nangkait.pin 125]
(79) Notumarusa'
\(N\)-po \(o_{1}\)-[um]-tarus-a'
\begin{tabular}{ll} 
jalang & nijimo. \\
jalang & nijimo \\
road & 3PL/GE
\end{tabular}

RE-SF/LCM-TEL-continue-TZ
road \(3 \mathrm{PL} / \mathrm{GE}\)
'They continued on their path.'
[Mark 9:30]
(80)
\begin{tabular}{llll} 
Paey & nosumunsula' & manyau & ritano \\
paey & N-po \(0_{1}\)-[um]-sunsul-a, & ma-nyau & ri=tano \\
and.then & RE-SF/LCM-TEL-bow.head-TZ & UD/IR-go.down & LOC=ground
\end{tabular}

\footnotetext{
\({ }^{18}\) Note also that sombal 'sail' can become a nominalised agent based on the locomotion verb affixing to form toposumombal 'sailor'.
}
\begin{tabular}{lll} 
nobisara & sono & Alata'ala. \\
N-po \(1_{1}\)-bisara & sono & Alata'ala \\
RE-SF/DE-speak & COM & God
\end{tabular}
'And then He bowed His head down to the ground and spoke with God.'
[Mark 14:35]
\begin{tabular}{llll} 
(81) So'-uya & saenyopo & A'u & mosumabara' \\
so'-uya & sae=nyo=po & a'u & M-po \(-[\) um]-sabar-a' \\
ONE-why & long=3SG/GE=CONT & 1SG/GE & IR-SF/LCM-TEL-patient-TZ
\end{tabular}
sijojoo eти?
si-jojoo emи?
ONE-all 2PL/AB
'How much longer will I be patient with you all?'
[Mark 9:19]
\begin{tabular}{llllllll} 
(82) Ila uo & paey & niore & moje & sombal & nupayangan & uo, \\
ila 'uo & paey & ni-ore & moje & sombal & nu=payangan 'uo \\
& ABL yonder & and.then & IV/RE-pull & again & sail & CN/GE=boat yonder
\end{tabular}
\begin{tabular}{lll} 
jimo & nelampa & nosumombalomo. \\
jimo & \(N\)-pe-lampa & \(N\)-po \({ }_{1}\)-[um]-sombal=mo \\
3PL/AB & RE-SF/DY-travel & RE-SF/LCM-TEL-sail=COMP
\end{tabular}
'After that then they pulled out the boat's sail, and they began to travel and sailed on.'
[mdtext15.txt 055]

\subsection*{9.3.4.4 Reduplicated locomotion verb constructions (iterative aspect)}

Locomotion verbs apparently require some sort of aspectual marking. If a locomotion verb does not take the telic aspect using the -um- infix in combination with the locomotion prefix \(m o-/ n o\) - (see \(\S 13.4 .1 .3\) ), then the alternative is to form a reduplication which creates an iterative or durative aspect (see §13.4.1.5), as illustrated in (83) and (84). Example (85) shows the two uses of the root linjo' 'run' in the logical sequence of noluminjo' 'begin to run', and linjo-linjo' 'run and run', neatly illustrating the contrast between the two different aspects.
(83) Ila иo ponyи moo lolo-lolon manyau.
ila 'иo ponyu moo lolo-lolon ma-nyau
ABL yonder sea.turtle this RED-swim UD/IR-go.down
'After that this sea turtle swam and swam down.'
[trtlegg.pin 026]
(84) Bai uо monopo tangi-tangis siinanyo ио
bai 'uo mono=po tangi-tangis siina=nyo 'uo
like yonder still=COMP RED-cry mother=3SG/GE yonder
o siamanyo.
o siama=nyo
and father=3SG/GE
'Like that the mother and father still continued to cry.'
[mdtext4.txt 049]
\begin{tabular}{llll} 
Paey & noluminjo' & linjo-linjo' & io. \\
paey & N-po \(0_{1}\)-[um]-linjo' & linjo-linjo' & io \\
and.then & RE-SF/LCM-TEL-run & RED-run & 3SG/AB
\end{tabular}
'And then he began to run, and he ran and ran.'
[troll.int 273]

\subsection*{9.3.5 Comparison of mixed transitivity verb classes and possessive predicates}

This section examines two verb classes, dynamic verbs prefixed with \(M-/ N-p e-\), and denominal verbs prefixed with \(M-/ N-p o_{1}\)-, and compares them to possessive predicates that take the ' \(o\) - possessive prefix.

The \(M-/ N\) - pe- prefix seems to behave similarly to the Indonesian ber- prefix, and to have a similar range of meanings (although there is not a one-to-one correlation in Pendau). The base may be certain verbs or certain nouns (see §5.6.2.3 for a representative list). Normally it is used in an intransitive clause where the single argument is an actor (contrast this with stative verbs where the single argument is an undergoer). The meanings of dynamic verbs which are often denominal-like include:
- wear s.t., for example, me-salana 'wear pants' from salana 'pants', mebaju 'wear a shirt' from baju 'shirt'
- own s.t., for example, me-junjung 'own house' from junjung 'house'
- activity X is done by the agent \([\mathrm{S}=\mathrm{A}]\), for example, me-intolu 'lay eggs' from intolu 'egg(s)', me-raa 'to bleed' from raa 'blood', me-gayo 'use a dip net' from gayo 'dip net', ne-gempang 'to walk' from gempang 'walk', me-ngkani 'eat' from ngkani 'eat'

The verbalising or denominal prefix \(M-/ N-p o_{1^{-}}\)(non-harmonic prefix) results in a verb in which the A argument does X activity (where X is the meaning of the noun root). Typical examples of the \(\mathrm{M}-/ \mathrm{N}-\mathrm{po}_{1-}\) - verbaliser prefix are: mo-sapeda 'go bicycling' and moasu 'go hunting with dogs'. Although there is marginal overlap between the denominal prefix and the dynamic prefix, the denominal prefix only occurs on nouns and the dynamic prefix occurs on nouns and verbs.

It will be useful to compare these two verbal prefixes with the possessive verbal prefix 'o- (see \(\S 7.4 .1\) and \(\S 6 \cdot 6 \cdot 2.2\) ). Typical examples of 'o- affixes on nouns are: 'o-unga 'have a child', 'a-japing, 'have a cow', 'e-piso 'have a machete', and 'e-siina 'have a mother'.

What these three prefixes have in common is that they can each be the sole prefix affixed to a noun (although the 'o- prefix can be preceded by other prefixes in which case it is a derived canonical verb). Although there is partial overlap between the functions of these affixes, they can be separated by several semantic components which are expressed in Figure 9.3. Possession is a component of both the dynamic and possessive prefixes, and indicates the agent of the clause has possession of the prefixed noun (for example, ' \(a\) japing 'have/own a cow' from japing 'cow'). The affected component means that for the dynamic and the possessive prefix the state of the agent is somehow affected by whatever the semantic content of the root means (for example, me-raa 'bleed' from raa 'blood'). The activity component is pertinent to all denominal prefixes and to some dynamic prefixes; it means that the agent of the clause is involved in some activity determined by the semantic content of the root (for example, me-riing 'bathe' from riing 'bathe'). The wear and use component indicates a special activity in which the root is worn or used by the agent of the clause (for example, me-baju 'wear a shirt', from baju 'shirt'). The last two components, external and internal agent, mean that the agent uses the meaning of the
root either in an external manner to the agent/actor, or an internal manner (that is, more 'patient-like'). \({ }^{19}\)
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Name & Prefix & Possession & Affected & Activity & Wear/Use & Agent external & Agent internal \\
\hline a) Denominal & \[
\mathrm{M}-/ \mathrm{N}-
\]
\[
\mathrm{po}_{1^{-}}
\] & ---- & -- & \(\checkmark\) & \(\checkmark\) (some) & \(\checkmark\) & ----- \\
\hline b) Dynamic & \(\mathrm{M}-\mathrm{N}-\) pe- & \(\checkmark\) (some) & \(\checkmark\) (some) & \(\checkmark\) (some) & \(\checkmark\) (some) & ---- & \(\checkmark\) \\
\hline c) Possessive & '0- & \(\checkmark\) & \(\checkmark\) & ---- & ---- & ---- & ---- \\
\hline
\end{tabular}

Figure 9.3. Matrix of semantic components of three affixes
Figure 9.4 shows that these three affixes reflect a continuum from an inert state to a dynamic activity, and shows that there is some overlap between the possessive and dynamic prefix, and between the dynamic and the verbaliser affixes. The affixes in Figure 9.3 are labelled in Figure 9.4 as (a), (b), and (c).


Figure 9.4. State and activity continuum of three affixes

\subsection*{9.3.6 Incorporation-like behaviour with dynamic verbs}

Some dynamic verbs seem to incorporate the noun which follows the verb into the verb phrase (albeit syntactically and not morphologically; see \(\S 8.5\) for prepositional incorporation and §9.7.8 for morphological incorporation). In examples (86) and (87) 'ocean-bathing' and 'fresh-water-bathing' are clearly focused on the different kinds of activities and not the different locations. Example (88) shows that the location is designated with the use of an oblique phrase (see \(\S 6.7\) and Chapter 8). Some of the corresponding functions of the dynamic prefix pe- are found with the Indonesian prefix ber-. Wolff et al. (1984:282) describes the functions of ber-:

However, this word or phrase that complements the verb with ber- is not the recipient, the thing affected by the action (as the English translation might lead you to view it), but rather it tells what type of action it is: it qualifies the action. Thus berbahasa Inggris or berbicara Inggris, 'to speak English' are phrases consisting

\footnotetext{
\({ }^{19}\) The external/internal components signify whether the activity affects or impinges on the agent personally (that is, the actor is part of the process) or impersonally (that is, the actor is involved in an activity that does not inolve a physical part of himself/herself). For the similar Indonesian prefix ber- Mintz (1994:134-135) in fact says:

The main function of ber- is to indicate that the subject of the utterance is the patient, that is, the experiencer of the action. A minor function is to indicate that the subject is the possessor of particular attributes although even in this function...it may still be seen as marking the subject as the patient.
}
of a verb with ber- meaning 'speak' and the word Inggris which tells what type of studying one is doing.
Also a few words, such as riing 'bathe' can be contrasted between active voice constructions and dynamic verb constructions. In these cases there is a clear contrast in the direction of the activity (89).
\begin{tabular}{llllll} 
Diang & moje & too & ndau & neriing & dagat. \\
diang & moje & too & ndau & N-pe-riing & dagat \\
EXIS & again & person NEG & RE-SF/DY-bathe & ocean
\end{tabular}
'There was again a person who wasn't ocean-bathing.' [tanjong.pin 031-2]
\(\begin{array}{lll}\text { (87) } & \text { Jimo } & \text { neriing } \\ \text { jimo } & N \text {-pe-riing } & \text { ogo. } \\ & \text { ogo }\end{array}\)
3PL/AB RE-SF/DY-bathe water
'They fresh-water bathed.'
[EN98-003.54]
(88) Jimo neriing ridagat.
jimo \(\quad N\)-pe-riing ri=dagat
3PL/AB RE-SF/DY-bathe LOC=ocean
'They bathed in the ocean.'
[EN98-003.54]
(89) Tagu'u noriing unganyo.
tagu='u \(\quad\)-pong-riing unga=nyo
friend=1SG/GE RE-SF/PT-bathe child=3SG/GE
'My friend bathed his/her child.'
[EN97-002.46]

\subsection*{9.4 Canonical intransitive verb classes}

Intransitive verbs may not occur in the inverse voice (see Chapter 12). The following classes of canonical intransitive verbs can be identified:
- Postural
- Stative

\subsection*{9.4.1 Postural verbs (Class VI popo-)}

\subsection*{9.4.1.1 Typical postural verbs}

Postural verbs are marked with the popo- prefix. The postural prefix popo- indicates what the posture of the person is at that moment or is becoming (§5.6.2.5). Examples (90)(98) show the use of different postural verbs in a number of different contexts. Example (90) contrasts the simple intransitive form of the verb duling 'lie down' with (91) in which the distributive plural aspectual infix -ong- occurs.
(90) Io nopoduling ri'uo.
io \(\quad N\)-popo-duling ri='uo
3SG/AB RE-SF/POS-lie.down LOC=yonder
'He lay down over there.'
[horse.pin 508]
```

(91) Jimo nongopodulingomo ribongkarang.
jimo N-[ong]-popo-duling=mo ri=bangkarang
3PL/AB RE-DIST-SF/POS-lay.down-COMP LOC=garden.hut

```
'They each lay down in the garden hut.'
Examples (92) and (93) each contain a sequence of two clauses in which the second verb contrasts a different posture of a person which has changed from that found in the first verb. In (92) the standing position must be assumed before the participant is able to begin to run so nopo'oro means 'stood up' rather than 'was standing'. Likewise in (93) the natural action of a person just waking up from sleep is to sit up (that is, people normally are lying down when they sleep, so nopotundo does not mean 'was sitting', but rather 'sat up'). Examples (94) and (95) illustrate the use of tundo 'sit'. \({ }^{20}\) In (94) the close sequence of the two clauses indicates that the children were sitting down when the magical uulo' 'horsefly' flew off. In (95) the manner of the sitting is modified with the reduplicated stative verb mbosi' 'good'.
(92) Paey io nopo'oro, paey noluminjo'
paey io \(N\)-popo-'oro paey \(N\)-po \(o_{1}\)-[um]-linjo'.
and.then \(3 \mathrm{SG} / \mathrm{AB}\) RE-SF/POS-stand and.then RE-SF/LCM-TEL-run
'And then he stood up, and then he began to run.'
[troll.int 223]
(93) Io nembaung, paey nopotundo.
io \(N\)-pe-mbaung paey \(N\)-popo-tundo
3SG/AB RE-SF/DY-wake.up and.then RE-SF/POS-sit
'He woke up, and then he sat up.'
[katira.int 018]
\begin{tabular}{llllll} 
Bai & uo & jimo & mopotundo & ribongkarang & uo, \\
bai & 'uo & jimo & M-popo-tundo & ri=bongkarang & 'uo \\
like & yonder & 3PL/AB & IR-SF/POS-sit & LOC=hut & yonder
\end{tabular}
\begin{tabular}{lll} 
tarus & uulo' uo & nolumeap. \\
tarus & uulo' 'uo & \(N_{\text {-po }}^{1}\)-[um]-leap \\
continue & horsefly yonder & LCM-TEL-fly
\end{tabular}
'After that they sat down in that hut, and then the horsefly flew off.' [mdtext17.txt 041]
\begin{tabular}{llll} 
Paey & jimo & nopotundo & mbosi-mbosi’. \\
paey & jimo & N-popo-tundo & mbosi-mbosi' \\
and.then & 3PL/AB & RE-SF/POS-sit & RED-good
\end{tabular}
'And then they sat down in a good manner.'
[fktale01.txt 034]

\footnotetext{
20 At least one postural verb is an exception to the norm. The verb ngodung 'sit' does not take a popo- stem former, but requires the stem former \(p o_{1-}\) and can only be formed as nongodung, as in example (91), and not as *nopongodung. Although the more common word for 'sit' is tundo, it is considered to be less polite, and ngodung is used with guests.
}
\begin{tabular}{lllll} 
Bai & uo & ami & nongodungomo & ri'uo. \\
bai & 'uo & 'ami & N-po-ngodung=mo & ri='uo \\
like & yonder & 1PL.EXC/AB & RE-SF-sit=COMP & LOC=yonder
\end{tabular}
'After that we sat down there.'
[Tanjong 073]

Examples (96)-(98) illustrate the uses of three additional postural verbs dengke 'squat', 'udung 'bow', and koub 'bend over'.
(96) Tarus sikai'u nopodengke ri'uo.
tarus si=kai='u N-popo-dengke ri='uo
continue \(\quad \mathrm{PN} / \mathrm{AB}=\) grandpa \(=1 \mathrm{SG} / \mathrm{GE}\) RE-SF/POS-squat \(\quad\) LOC=yonder
'And then grandfather squatted down there.'
[lindug.int 010]
(97) Jimo mopo’udung o noraintu'u ritolonyo.
jimo \(\quad\)-popo-'udung o \(\quad N\)-po \({ }_{1}\)-raintu'u ri=tolo=nyo
3PL IR-SF/POS-bow and RE-SF-kneel LOC=front=3SG/GE
'They bowed and kneeled before him.'
[Mark 3:11]
(98) Mopokoub mombuas luit nusapatunyo

M-popo-koub \(\quad\)-pong-buas luit nu=sapatu=nyo
IR-SF/POS-bend IR-SF/PT-open string CN/GE=shoe=3SG/GE
a'u ndau masipato'.
a'u ndau ma-sipato'
1SG/AB NEG ST/IR-proper
'I am not worthy to bend over and untie His shoestrings.'
[Mark 1:7]

\subsection*{9.4.1.2 Reduplication of postural roots without the postural prefix}

Postural verbs are frequently encountered without the postural stem former popo- when they are reduplicated. This reduplication usually indicates a durative or iterative aspect, as in examples (99)-(100) (see §13.4.1.5 for discussion of reduplication and aspect).
(99)
\begin{tabular}{llll} 
Sirapinyo & tundo-tundo & ringanga & nuantulang. \\
si \(=\) rapi \(=\) nyo & tundo-tundo & ri \(=\) nganga & nu \(=\) antulang \\
\(\mathrm{PN} / \mathrm{AB}=\) spouse=3SG/GE & RED-sit & LOC=mouth & \(\mathrm{CN} / \mathrm{GE}=\) giant.clam
\end{tabular}
'His spouse was sitting in the mouth of a giant clam.'
(100) Bai uo jimo mono tundo-tundo ribongkarang uо
bai 'uo jimo mono tundo-tundo ri=bongkarang 'uo
like yonder \(3 \mathrm{PL} / \mathrm{AB}\) still RED-sit LOC=hut yonder
tarus uulo' uo nolumeap.
tarus uulo' 'uo \(N\)-po \(o_{1}\)-[um]-leap
continue horsefly yonder RE-SF/LCM-TEL-fly
'After that they were still sitting in that hut, and then that horsefly flew off.'
[mdtext19.txt 040]

\subsection*{9.4.2 Stative verbs (Class VII mo-/no-)}

\subsection*{9.4.2.1 Typical stative verbs}

Morphologically, the stative verb class is exclusively marked with mo-/no- and negatively identified as a canonical verb class in that stative verbs do not take a stem
former. Syntactically they only take one argument. The S argument is always the undergoer \(\left(\mathrm{S}_{\mathrm{P}}\right)\), marked by the absolute case. Irrealis and realis mode ( \(\$ 13.2\) ) are marked by the harmonic prefixes mo-/no- respectively (§3.5.7). Typical statives (§5.6.2.7) are: mbosi 'good', pangkat 'tall', ate 'die', tubu 'live', nabu 'fall', meas 'white', and menyong 'cold'. Examples (101)-(107) show a number of typical stative verbs.
(101) Bai uo io naanta'omo.
bai 'иo io no-anta'=mo
like yonder \(3 \mathrm{SG} / \mathrm{AB}\) ST/RE-close=COMP
'After that he came closer.'
[mdtext15.txt 004]
(102)
\begin{tabular}{lll} 
Nedea & isinyo & tagu. \\
no-dea & isi=nyo & tagu \\
ST/RE-many & fill=3SG/GE & friend/VOC
\end{tabular}
'It's filled with many things, friend.'
[nangkait.pin 152]
(103)
\begin{tabular}{lllll} 
Paey & baya & nuunga & uo & neriri \\
paey & baya & nu=unga & 'uo & no-riri \\
and.then & forehead & CN/GE=child & yonder & ST/RE-yellow
\end{tabular}
\begin{tabular}{llll} 
sono & alaenyo & neriri & jojoo. \\
sono & alae \(=\) nyo & no-riri & jojoo \\
COM & body=3SG/GE & ST/RE-yellow & all
\end{tabular}
'And then the baby's forehead was yellow and its entire body was all yellow.'
[mdtext15.txt 107]
(104) Ulasang uo ndau naate, ai sura netubu.
ulasang 'uo ndau no-ate ai sura \(N\)-pe-tubu turtle yonder NEG ST/RE-die but only RE-SF/DY-live 'That turtle didn't die, but only lived.'
[ceku01.jdb 092]
(105) A'u monopo neide watunyo uo.
a'u mono=po no-ide uatu=nyo 'uo
\(1 \mathrm{SG} / \mathrm{AB}\) still=CONT ST/RE-small time \(=3 \mathrm{SG} / \mathrm{GE}\) yonder
'I was still small at that time.'
[jo'ong.int 002]
(106) Neburamo rapi bengkel uo, "kareva nombosi'."

N-pe-bura=mo rapi bengkel 'uo kareva no-mbosi'
RE-SF/DY-speak=COMP spouse female yonder news ST/RE-good
'The wife spoke, "The news is good.""
[mdtext14.txt 062]
(107) Ai ndau nagana' aniong, apa nedea too.
ai ndau no-gana' aniong apa no-dea too
but NEG ST/RE-enough cooked.rice because ST/RE-many people
'But there wasn't enough cooked rice, because there were many people.'
[terminal.int 042]

\subsection*{9.4.2.2 Stative verb constructions with adjunct agents ('middle voice')}

Stative verbs constructions with a P core argument and an A adjunct argument are rather problematic to describe. \({ }^{21}\) In §9.4.2.2.1 stative verb constructions are described in which stative clauses sometimes appear with an additional A adjunct (see also §6.6.2.5). One explanation is that these are constructed by analogy to the detransitivised transitive roots (and can be considered to be a middle voice-see §12.2), and the 'agent' is an adjunct agent which is an 'effector'. In order to emphasise that these constructions require an 'effector' they will often be translated with 'by/via'. Statives derived from transitive roots are described in \(\S 9.4 .2 .2\). . These are described below as detransitivised verbs. However, because the root is transitive the stative construction allows an agent adjunct to occur (a similar construction to inverse constructions, see Chapter 12).

\subsection*{9.4.2.2.1 Stative verb roots with adjunct agents}

Verb roots affixed with the stative prefix mo-/no- occasionally appear with an adjunct which is marked in precisely the same way as A arguments are marked for inverse clause constructions. It appears that statives can marginally increase their transitivity by adding a genitive agent as a syntactic adjunct, that is, it is an 'effector' of the stative verb which results in an affect, as in (108). Example (109) shows that the P argument of a stative verb is not required overtly, whereas the genitive agent may appear in the same clause (both the P argument and the adjunct genitive agent may be omitted as well).
\begin{tabular}{cll} 
(108) Aniong & notou', & nijimo. \\
aniong & no-tou' & nijimo \\
rice & ST/RE-finish & 3PL/GE
\end{tabular}
'The rice was finished by/via them.'
[EN97-002.28]
(109) Notou’ nijimo.
no-tou' nijimo
ST/RE-finish 3PL/GE
'It (something) was finished by/via them.'
[EN97-002.28]
Further examples of stative clause constructions that have an adjunct agent appear in (110)-(116). Statives without agents could be considered to function like passives \({ }^{22}\) and stative constructions with agents can be considered to be middle voice (see §12.2 and §17.4.4).
\(\begin{array}{clll}\text { (110) A'u } & \text { ndaupo } & \text { maate } & \text { miu. } \\ \text { a'u } & \text { ndau=po } & \text { mo-ate } & \text { miu } \\ \text { 1SG/AB } & \text { NEG=CONT } & \text { ST/IR-die } & \text { 2PL/GE }\end{array}\)
'I was not killed by/via you all.
[miracle1.pin 126]

\footnotetext{
\({ }^{21}\) I am using the concepts of 'adjunct' and 'core' arguments as prototypical concepts.
22 The usage of stative verbs in discourse is similar to passive constructions in other languages (§17.4.4).
}
(111) Junjung narava nijimo.
junjung no-rava nijimo house ST/RE-clean 3PL/GE
'The house was cleaned by/via them.' [bulagon.pin 011]
(112)
\begin{tabular}{lll} 
Toтото'uри & noponu & nulungkeer. \\
to-mo-mo'upu & no-ponu & nu=lungkeer \\
AGNM-RED-grandchild & ST/RE-full & CN/GE=slime
\end{tabular}
'The grandson was filled with slime.'
[tambao.pin 061]
(113) Ai ndau naala nutoo dea uo sipa’onyo.
ai ndau no-alap nu=too dea uo sipa'=nyo
but NEG ST/RE-get CN/GE=person many yonder
'But many people didn't get that feature/characteristic.'
feature \(=3\) SG/GE
[EN97-004.18]
(114) Odo noonda' nuapi.
odo no-onda' nu=api
monkey ST/RE-hot CN/GE=fire
'The monkey was warmed by/via the fire.'
[EN97-003.15]
(115) Piso moo mountul nutopomintis.
piso moo mo-untul nu=topomintis
machete this ST/IR-sharp CN/GE=blacksmith
'This machete is being sharpened by/via the blacksmith.'
(116) Sapatu moo mebe’as niamanyo.
sapatu moo mo-be'as ni=ama=nyo
shoe this ST/IR-open PN/GE=father=3SG/GE
'This shoe was removed by/via his/her father.'

Example (117) illustrates a stative verb with a question word used as the 'agent' (or 'effector'). In this story the stepmother is referring to her skinny young adopted baby daughter. In this statement she is lying and claims that the child is not skinny (which implies that she hasn't been feeding her) but is strong and healthy and plays every day.
(117) Nao ndau nagasa nusapa.
nao ndau no-gasa nu=sapa
that NEG ST/RE-thin CN/GE=what
'She is not skinny whatsoever.' (lit. 'That is not skinny from what.') [mdtext18.txt 024]

\subsection*{9.4.2.2.2 Detransitivisation of transitive roots with stative prefixation}

There are a few transitive roots which may take either the stative verb construction or the ni- verb construction without intermediary derivations. These roots include alap 'get, take, find', and gansing 'damage'. Firstly, in (118) and (119), note that in the Indonesian translation my language helper provided he used two words to convey the difference in meaning: dapat 'find, get' for the stative verb, and ambil 'take, carry' for the ni- verb. Secondly, the root alap can be formed with the aspectual prefix \(m e-/ n e\) - preceding the non-
volitional aspect formative \(t e-\), as in example (120). Stative verb constructions are readily translated into English as passives, and inverse voice constructions are usually translated as active voice constructions.
(118) Baи иo naalaponyo.
bau 'uo no-alap=nyo
fish yonder ST/RE-get=3SG/GE
'That fish was found by/via him.' [Indonesian: ‘Ikan itu dia dapat.' = fish that he got]
(119) Bau иo nialaponyo.
bau 'uo ni-alap=nyo
fish yonder ni-get=3SG/GE
'He took that fish.' [Indonesian: ‘Ikan itu dia ambil.' = fish that he took]
(120) Bau uo netealaponyo.
bau 'uo ne-te-alap=nyo
fish yonder AV/RE-NV-get=3SG/GE
'The fish was (able to be) taken at once when he/she got it.'
[EN97-002.24]
Examples (121) and (122) are a similar minimal pair. My language helper suggested the stative verb construction denoted an unintentional act (121) whereas the ni- verb construction referred to an intentional one (122). Although the semantic meaning of the verb in the inverse voice is semantically the same as in the active voice counterpart (and both are syntactically transitive-see Chapter 12), pragmatically the degree of topicality on the P argument is equal to or higher than the A argument of the same clause (see Chapter 12 and §17.4). \({ }^{23}\)
(121) Motoro'u nagansingonyo.
motor='u no-gansing=nyo
motorcycle=1SG/GE ST/RE-damage=3SG/GE
'My motorcycle was damaged by/via him.'
(122) Motoro'u nigansingonyo.
motor='u ni-gansing=nyo
motorcycle=1SG/GE IV/RE-damage=3SG/GE
'He damaged my motorcycle.'
In addition to the minimal pairs presented above, there are some near minimal pairs, which suggests that the stative verb really is intransitive, as in (123) and (124). The applicative directional suffix -i cannot be used on stative verbs such as in (123), however it is mandatory on some verb roots such as in (124) when affixed in the inverse voice (see §10.3.5.2).

\footnotetext{
\({ }^{23}\) As expressed by Givón (1994:8) and discussed in detail in Chapters 12 and 17, the \(\mathrm{A}>\mathrm{P}\) in active voice constructions, and the \(\mathrm{P}>\mathrm{A}\) in inverse voice constructions. Also see Quick (1997a, 1999a).
}
\begin{tabular}{lll} 
(123) Oto'u & narampung & nutoo. \\
oto \(=\) ' \(u\) & no-rampung & \(n u=\) too \\
car \(=1 \mathrm{SG} / \mathrm{GE}\) & ST/RE-burn & CN/GE=person
\end{tabular}
'My car was burned by/via a person (or: by someone).'
\begin{tabular}{lll} 
(124) Oto'u & nirampuni & nutoo. \\
oto='u & ni-rampung-i & \(n u=\) too \\
car=1SG/GE & IV/RE-burn-DIR & CN/GE=person
\end{tabular}
'Someone burned my car.'

\subsection*{9.4.2.3 Using mong-/nong- on stative verb roots}

Stative roots can occur with the primary transitive prefix pong- without changing the transitivity of the stative verb, \({ }^{24}\) but with the semantic effect of intensifying the quality of the \(\mathrm{S}_{\mathrm{P}}\) argument (compare this to the similar affixation of reduplicated numerals in §9.2.2.1.2). This affixation possibility has never been encountered in texts, but has been found in elicited utterances. Examples (125)-(127) are typical.
(125) Nongoge tagu'u.
\(N\)-pong-oge tagu='u
RE-SF-big friend=1SG/GE
'My friend was really big.'
[EN97-003.3]
(126) Tagu'u nongoge.
tagu='u \(\quad N\)-pong-oge
Friend=1SG/GE RE-SF-big
'My friend was really big.'
[EN97-003.3]
(127) Tagu'u nengide.
tagu='u \(\quad\)-pong-ide
Friend=1SG/GE RE-SF-small
'My friend was really tiny.'
[EN97-003.3]

\subsection*{9.4.2.4 Stative verb roots with inverse voice prefix}

In example (128) rasa 'feel' is clearly an intransitive stative verb. However, rasa can be transitivised as shown in (129). Here the dynamic verb ne-ongkor 'tire' is a clausal complement of no'urasa 'I felt' (and the whole construction is analysable as inverse voice, with ne-ongor as subject).

\footnotetext{
\({ }^{24}\) When a primary transitive prefix pong- occurs with verbs normally associated with other verb classes, they transfer class membership to the primary transitive class and acquire the transitivity properties. So an intransitive verb such as me-riing 'bathe' becomes mo(ng)-riing 'bathe someone' (see examples in §9.5.1).
}
(128) Narasa.
no-rasa
ST/RE-feel
'That felt good.'
\begin{tabular}{ll} 
(129) & Neongkor \\
N-pe-ongkor & no'urasa. \\
no'u-rasa \\
RE-SF/DY-tire & 1SG.IV/RE-feel \\
'I feel tired.' &
\end{tabular}
[nangkait.pin 057]

\subsection*{9.4.2.5 Stative prefix in combination with the possessive prefix}

The stative prefix may also occur in combination with the possessive prefix ' \(o\) - that means to 'possess or have the state or condition of X' (see §6.6.2.2., §7.4.1, §9.3.3.2, and \(\S 9.3 .5\), for further details and discussion of ' \(o\)-). In example (130) ' \(o\) - is prefixed to the dynamic verb lampa 'travel, walk'. Examples (131)-(133) illustrate the stative verbal prefix in combination with the possessive prefix on lampa. Example (134) illustrates the stative-possessive affix combination on the existential verbal root diang 'is, to be'.
(130) Tarus unga uo alampa-lampa.
tarus unga 'uo 'o-lampa-lampa
and.then child yonder HAVE-RED-travel
'And then the child walked and walked.' [mdtext11.txt 013]
(131) Paey jimo na’alampa-lampamo.
paey jimo no-'o-lampa-lampa=mo
and.then 3PL.AB ST/RE-HAVE-RED-travel=COMP
'And then they had already walked and walked.'
[mdtext17.txt 010]
(132) Unga uo na’alampa-lampa nelolo tagu.
unga 'uo no-'o-lampa-lampa \(N\)-pe-lolo tagu
child yonder ST/RE-HAVE-RED-travel RE-SF/DY-search friend
'The child had walked and walked searching for his friend.'
[mdtext15.txt 140]
(133) Ila uo juragang uo na’alampa-lampa
ila иo juragang 'иo no-'o-lampa-lampa
from yonder captain yonder ST/RE-HAVE-RED-travel
ma'o gii nujo'ong nutoo uo.
ma'o gii nu=jo'ong nu=too 'иo
go edge \(\mathrm{CN} / \mathrm{GE}=\) garden \(\mathrm{CN} / \mathrm{GE}=\) person yonder
'After that the captain had walked toward the edge of that person's garden.'
[mdtext20.txt 011]
(134)
\begin{tabular}{llll} 
Paey & ito & ndau & ne'ediang. \\
paey & 'ito & ndau & no-'o-diang \\
and.then & 1PL.INC/AB & NEG & ST/RE-HAVE-EXIS
\end{tabular}
'And then we didn't have anything.' [gibang.pin 071]

\subsection*{9.4.2.6 Stative prefixes on nominalised bases}

Stative prefixes can prefix locative stative roots that have been nominalised by the suffix -ong (locN). \({ }^{25}\) See §7.4.2 for a discussion of these locative nominalisations. Example (135) illustrates the affix combination on no-tou'-ong=omo 'the finishing of, place of s.t. finished'. Example (136) demonstrates the stative verb no-tou' 'finish' without the nominalising suffix -ong in contrast to (135). Example (137) further shows with the no-/-ong affix combination that a noun can be 'incorporated' into the semantics of the verb (the noun is simply further specifying what was finished off, and cannot be a syntactic object in a stative clause).
(135) Io notou'ongomo.
io no-tou'-ong=omo
3SG/AB ST/RE-finish-locN=COMP
'He finished everything up.'
[EN98-001.50]
(136) Balung notou'onyo.
balung no-tou'=nyo
lunch ST/RE-finish=3SG/GE
'The lunch was finished by him/her.'
[EN97-002.59]
\begin{tabular}{llll} 
(137) Ito & moo & notou'ongomo & balung. \\
'ito & moo & no-tou'-ong=mo & balung \\
1PL.INC/AB & this & ST/RE-finish-locN=COMP & lunch
\end{tabular}
'We have already finished our lunch.'
[poora.pin 020]
Example (138) shows an idiomatic use of the stative verb onda' 'hot' used with this affix combination to describe someone's emotion as angry (or possibly filled with 'heat'). Other typical non-idiomatic uses are given in (139)-(141) with the roots tanda 'sign, mark' and akal 'deceive, trick'. Another example of a stative clause with an agent (or middle voice-see discussion in \(\S 9.4 .2 .2\) ) is (141).
(138) Io noonda’ongomo.
io no-onda'-ong=mo
3SG/AB ST/RE-hot-locN=COMP
'He is angry (lit. hot or heated).'
[EN98-001.50]
(139) Io natandaongomo.
io no-tanda-ong=mo
3SG/AB ST/RE-sign-locN=COMP
'He already had the sign/mark.'
[EN98-001.51]

\footnotetext{
25 Another possible interpretation is to suggest the simultaneous affixation of 'o-/-ong, that is, it is a circumfix as the Indonesian affix combination ber-/-an is often described in Indonesian grammars.
}
(140) Io na’akalongomo.
io no-'akal-ong=mo
3SG/AB ST/RE-trick-locN=COMP
'He had already been tricked.
(141) Ети na’akalongo’u.

ети no-'akal-ong='u
2PL/AB ST/RE-deceive-locN=1SG/GE
'You (all) were deceived by me.'
[EN97-002.42]
In some cases, as in examples (142) and (143), it becomes difficult to distinguish in meaning between stative verb constructions which differ only in the presence or absence of the locative nominalising suffix -ong. Example (142) may be adding that the person has become known in a certain location. In both examples (142) and (143) the noun kareva 'news' becomes a stative verb.
(142) Io nakarevaongomo.
io no-kareva-ong=mo
3SG/AB ST/RE-news-locN=COMP
'He/she became known.'
[EN98-001.50; EN97-004.61]
(143) Io nakarevamo.
io \(\quad\) no-kareva \(=\) mo
3SG/AB ST/RE-news=COMP
'He/she was already known.'
Examples (144)-(145) have the additional nominal possessive prefix (see §7.4.1), which on verbs has a resultant effect on the derivation. Other verb classes can take the possessive 'have' prefix 'o- such as no-'a-lampa 'have a journey', but they do not also take the combination of affixes discussed here.
(144) Io no'odua'ongomo.
io no-'o-dua'-ong=mo
3SG/AB ST/RE-HAVE-arrive-locN=COMP
'He was already possessed.' (note: as in spirit or demon possession)
[EN98-001.51]
(145) Tagu'u na'araaong.
tagu='u no-'o-raa-ong
friend=1SG/GE ST/RE-HAVE-blood-locN
'My friend had a (her) period (lit. blood came upon her).'
[EN97-003.31]

\subsection*{9.5 Multiple class membership versus transferred class membership}

This section discusses the multiple or variable class membership of some verb roots. In principle any verb can be transferred to another verb class by using that class's stem forming prefix, and of course valency changing strategies (causative and applicative) may also change an intransitive to a transitive verb. Only a few roots are commonly found in
more than one class, and often a verb can be identified as inherently in one class (usually based on its transitivity) and its class membership is transferred to another class. This section presents data for some roots which seem to transfer class membership when a stem former associated with another class is used. The alternative is to consider that they possibly have membership in two verb classes. The former view is considered more plausible based on two criteria: 1) semantico-syntactic criteria, that is, which of two classes does the semantico-syntactic criteria match the best, and 2) on frequency, that is, which class the root is most frequently affixed as. However, with only a few words to go on, future research will be needed to clarify if one or both cases are true.

\subsection*{9.5.1 Primary transitive and dynamic prefixes on the same root}

The primary transitive prefixes pong- and pepe- can sometimes be prefixed to the same roots as the dynamic prefix pe-. When this occurs there is only a shift in meaning if the verb has an intransitive meaning when used with the pe-. Sentences (146) and (147) are synonymous. Both have transitive verbs consisting of riing 'bathe' prefixed by M-pepeand \(M\)-pong-. In (148) by contrast riing takes the dynamic prefix pe-. Examples (149) and (150) show that the primary transitive prefix pepe- doesn't necessarily differ from the meaning that may occur with the dynamic pe-. However when pe-is used it could also mean that the agent is 'fish-searching', as in (150).
(146) A'u meperiing unga'u. a'u M-pepe-riing unga='u 1SG/AB IR-SF/PT-bathe child=1SG/GE
'I will bathe my child.'
[EN97-003.23]
(147) A'u moriing unga'u.
a'u M-pong-riing unga='u
1SG/AB IR-SF/PT-bathe child=1SG/GE
'I will bathe my child.'
[EN97-003.23]
\begin{tabular}{llllll} 
(148) \begin{tabular}{ll} 
Ila & uo \\
ila & 'uo
\end{tabular} & jimo & tarus & neluat & tarus & N-pe-luat \\
from & yonder & 3PL/AB & continue & RE-SF/DY-remove & shirt
\end{tabular}
\begin{tabular}{llll} 
paey & jimo & neriing & dagat. \\
paey & jimo & N-pe-riing & dagat \\
and.then & 3PL/AB & RE-SF/DY-bathe & ocean
\end{tabular}
'After that they removed their shirts, and then they bathed in the ocean (lit. ocean-bathed).'
[Tanjong 031]
(149) A'u mepelolo bau.
a'u M-pepe-lolo bau
1SG/AB IR-SF/PT-search fish
'I will look for fish.'
[EN97-003.25]
```

(150) A'u melolo bau.
a'u M-pe-lolo bau
1SG/AB IR-SF/DY-search fish

```
'I will fish-search.' or: 'I will look for fish.'

\subsection*{9.5.2 Dynamic and factive prefix on same roots}

Some roots have also been found to have either the factive or the dynamic prefix affixed to the root. For example gutu 'make, create' is a factive transitive verb and normally takes the prefix po- as in (151). However, gutu can also take the dynamic prefix pe- as in (152). Example (153) illustrates that the stem former prefix pe-can be used on the same root that \(p o_{1-}\) more frequently occurs on. However, when a different class prefix is used, in some cases a semantic shift in meaning occurs. Although in the examples below the only possible discernable difference is the possibility that megutu api in (152) could also mean 'fire-make' (but this doesn't seem to help with the example in (153)).
\begin{tabular}{clc} 
(151) A'u & mogutu & api. \\
a'u & M-po 1 -gutu & api \\
1SG/AB & IR-SF/FA-make & fire
\end{tabular}
'I will make a fire.'
[EN97-003.21]
\begin{tabular}{clc} 
(152) \(A\) 'u & megutu & api. \\
\(a^{\prime} u\) & M-pe-gutu & \(a p i\) \\
1SG/AB & IR-SF/DY-make & fire
\end{tabular}
'I will make a fire.' (or: 'I will fire-make.')
[EN97-003.21]
(153) Api nipegutu'u.
api ni-pe-gutu='u
fire IV/RE-SF-make=1SG/GE
'I made the fire.'
[EN97-003.21]

\subsection*{9.6 Minor verb classes}

There are only four classes of minor or non-canonical verbs: 1) the copula class consists of jari 'become' (§9.6.1), 2) the existential class consists of diang 'is, to be' (§9.6.2), 3) the possessive verb is prefixed with 'o- 'have' (§9.6.3), and 4) the directional verb class (§9.6.4). These four classes will be discussed in the following sections.

\subsection*{9.6.1 Copula verb jari ‘become’}

The copula verb jari 'become \({ }^{26}\) is prefixed with \(\mathrm{ma}-/ \mathrm{na}-.^{27}\) Copula clauses are similar in structure to verbless clauses such as equative and possessive clauses, except that the copula verb jari joins the two complements and indicates that the first complement becomes the state or identity of the second complement (see §6.6.3.2). Like equative clauses, the copula clause refers to the same referent in both complements. These complements are often noun phrases, but they can also be stative verbs. Examples (154)(156) show typical uses of the Pendau copula verb linking noun phrases. Example (157) shows that a stative verb phrase can also be used as a complement. In this case the person's body becomes well after a long period of sickness.
\begin{tabular}{lllll} 
(154) Emu & nao & najari & botuang & mami. \\
emu & nao & na-jari & botuang & mami \\
2PL/AB & that & COP/RE-become & slave & 1PL.EXC/GE
\end{tabular}
'You all have become our slaves.' [mdtext15.txt 026]
(155) Maate metubu oo nao kana majari rapi'u.
mo-ate \(M\)-pe-tubu 'oo nao kana ma-jari rapi='u ST/IR-die IR-SF/DY-live \(2 \mathrm{SG} / \mathrm{AB}\) that certain COP/IR-become spouse=1SG/GE 'You will certainly become my wife, whether I live or I die.' [mdtext1.txt 086]
```

(156) Bu'unyo najari tatagang.
bu'u=nyo na-jari tatagang
bone=3SG/GE COP/RE-become lime

```
'His bones became lime.'
[turtle.pin 223]
(157) Tarus alaenyo najari nombosi'.
tarus 'alae=nyo na-jari no-mbosi'
continue body=3SG/GE COP/RE-become ST/RE-good
'Then his body became well.'
[katira.int 024]
Copula clauses pattern similarly to active voice transitive clauses. First there is a semantic 'transfer' which occurs between the two complements. In a transitive clause the transfer is normally between two different entities, but in the copula clause they are both referring to the same entity although a shift has occurred to the subject. Secondly, just as in active voice transitive clauses, the absolute case is used whenever a noun phrase is used in either complement position.

\footnotetext{
\({ }^{26}\) Note that this is cognate with the Indonesian copula jadi 'become', which can also be affixed as menjadi. The copula verb can take a stem pa- (or pa'a-) in certain derivations, as in the imperative pa'ajari 'make that result in'.
\({ }^{27}\) It is likely that \(m a-/ n a\) - were formed analogically based on the harmonic stative prefix \(m o_{1}-/ n o_{1}\)-. This is a diachronic conjecture based on the fact that there are no other Pendau prefixes that have the vowel \(a\) as an underlying vowel. Only prefixes in the harmonic prefix set (§3.5.7) can have the \(a\) vowel as one of the allomorph's vowels. For example, stative verbs have the underlying prefix \(m o_{1}-n o_{1^{-}}\), with allomorphs ma-na- and me-ne-. Since vowel harmony is conditioned by the first vowel of the root or stem, which is \(a\) in jari, the natural form would therefore become ma-/na-.
}

\subsection*{9.6.2 Existential verb diang 'is, exist'}

Existential clauses have the verb diang 'is, exist' (see §6.6.2.1). The verb does not take irrealis/realis modality prefixes (except when deriving a new verb class- see §9.6.2.1). Existential clauses have an intransitive structure in that the noun phrase is the subject and is marked with the absolute case. Existential clauses generally assert a state of affairs that exists for the subject of the clause. Typical uses of diang are given in examples (158)(165).
(158) Diang jea odo sono ulasang
diang jea odo sono ulasang

EXIS hearsay monkey with turtle
\begin{tabular}{ll} 
nosijanji & negayo. \\
N-posi-janji & N-pe-gayo \\
RE-MUT-promise & RE-SF/DY-shrimp.net
\end{tabular}
'There was it's said a monkey and a turtle that promised each other to go and catch shrimp.'
[EN98-001.2; ceku01.jdb]
(159) Bai uo tinting soung ami diang riDonggala
bai 'uo tinting soung 'ami diang ri=Donggala
like yonder o'clock one 1PL.EXC/AB EXIS LOC=Donggala
'We arrived in Donggala at one o'clock.'
[jptext07.jdb 022]
(160) Riluar ndau diang, tapi rilalong junjung diang.
ri=luar ndau diang, tapi ri=lalong junjung diang
LOC=outside NEG EXIS but LOC=inside house EXIS
'There isn't any outside, but there is inside the house.' [tangke01.doc]
(161) Ndaumo diang.
ndau \(=\) mo diang
NEG=COMP EXIS
'There isn't any left.' or: 'All gone.' or: 'There isn't any now.' (in reference to an empty matchbox picked up)
[EN98-001.7]
(162) Ndau diang ha'u.
ndau diang ha'u
NEG EXIS 1SG/AB
'I wasn't there.'
[EN97-004.52]
(163) Ai ndau diang obol, maumpo asu ndau diang.
ai ndau diang obol, maumpo asu ndau diang
but NEG EXIS smoke even dog NEG EXIS
'But there wasn't any smoke, and there weren't even any dogs.' [asu2.pin 176]
\begin{tabular}{llllll} 
(164) Ila & uo & a'u & ndaumo & diang & masanang. \\
ila & 'uo & a'u & ndau=mo & diang & mo-sanang \\
ABL yonder & 1SG/AB & NEG=COMP & EXIS & ST/IR-happy
\end{tabular}
'After that I wasn't happy any more.'
[bugmalei.int 034]
\(\begin{array}{llllll}\text { (165) ...apa } & \text { a'u } & \text { nijanjia' } & \text { nijimo } & \text { diang } & \text { pu'ot, } \\ \text { apa } & \text { a'u } & \text { ni-janji-a' } & \text { nijimo } & \text { diang } & \text { pu'ot } \\ \text { since } & \text { 1SG/AB } & \text { IV/RE-promise-TZ } & \text { 3PL/GE } & \text { EXIS } & \text { seine.net }\end{array}\)
'...since they had promised me there was a seine fishing net (for me).'
[jptext04.jdb 007]

\subsection*{9.6.2.1 Derived affixation on diang}

The existential verb diang can also occur with a combination of the stative prefix \(\mathrm{mo}_{1-}\) \(/ n o_{1-}\) and the possessive prefix ' \(o\) - which derives the verb me'ediang 'to have, possess, come into existence (IR)'. \({ }^{28}\) Diang 'to be' is never affixed with only a stative prefix. The derived affixation for diang is illustrated in examples (166) and (167).
(166) Bai uo nimpoyona' nijimo mata nijimo,
bai 'uo ni-mpoyong-a' nijimo mata nijimo
like yonder IV/RE-close.eyes 3PL/GE eye 3PL/GE
\begin{tabular}{llll} 
tarus & ne'ediang & junjung & lombung. \\
tarus & no-'o-diang & junjung & lombung \\
continue & ST/RE-HAVE-EXIS & house & lavish
\end{tabular}
'Then they closed their eyes, and then a lavish house appeared.' [gibang.pin 083]
\begin{tabular}{clll} 
(167) Paey & ito & ndau & ne'ediang. \\
paey & 'ito & ndau & no-'o-diang \\
and.then & 1PL.INC/AB & NEG & ST/RE-HAVE-EXIS
\end{tabular}
'And then we didn't have anything.'
[gibang.pin 071]

\subsection*{9.6.3 Possessive verb 'have’}

Nouns can be prefixed with 'o- 'having, possessing, with', for example, bembe 'goat' becomes ebembe 'have a goat'. This derivation is commonly used to form verbless possessive clauses (see §6.6.2.2 and compare §7.4.1) in which it is the second NP. When a possessive clause is formed the first NP determines the possessor or owner of the noun that is prefixed with ' \(o-\), as in (168).

\footnotetext{
\({ }^{28}\) When ' \(O\) - is the only prefix on roots it is glossed as HAVE (a 'have' possessive) as it forms a possessive predicate (§6.6.2.2 and §7.4.1).
}
\begin{tabular}{llllll} 
Too & ajaping & nonyambalemo & japing, too & amanu' \\
too & 'o-japing & N-pong-sambale=mo & japing too & 'o-manu' \\
person & HAVE-cow & RE-SF/PT-butcher=COMP & cow & person & HAVE-chicken
\end{tabular}
\begin{tabular}{llllll} 
nonyambalemo & manu' too & ebembe & nonyambalemo & bembe. \\
\(N\)-pong-sambale=mo & manu' too & 'o-bembe & \(N\)-pong-sambale=mo bembe \\
RE-SF-butcher=COMP & chicken & person & HAVE-goat & RE-SF-butcher=COMP goat
\end{tabular}
'People with/having cows butchered cows, people with/having chickens butchered chickens, and people with/having goats butchered goats.'
[miracle1.pin 006]

\subsection*{9.6.4 Directional motion verb class}

There are four directional motion verbs, ma'o 'go', mai 'come', nyau 'go down', and mene' go up. These can take prefixes, but as they have irregular prefixes it is difficult to class them into a single canonical verb class. Directionals are also distinguished from other verbs by a number of other characteristics, and they are thus discussed separately in Chapter 11.

\subsection*{9.7 Miscellaneous verb morphology}

This section begins by reviewing topographical verbs, which by their irregular affixation and overlapping semantic domain require some comment. Other topics cover verbs with irregular or infrequent affixation, verbs borrowed from Indonesian, and relic verb forms.

\subsection*{9.7.1 Topographical verbs}

\subsection*{9.7.1.1 Introduction}

Topographical verbs form a loose semantic domain since the affixation of these verbs is not consistent with any one particular verb class. They can be roughly categorised as verbs which either specify motion relative to land, as in (169), or water, as in (170). Topographical verbs generally take a dynamic affix or one of the transitive prefixes. The topographical deictic verbs are main verbs that indicate a specific kind of motion. The prefixes vary according to the verb they prefix. Topographical verbs often co-occur with directional verbs and only collocate with specific directional serial verbs. For example tindang 'descend' can only occur with nyau 'go down', and la'e 'ascend' can only cooccur with mene' 'go up' (see \(\S 11.3\) for the discussion of directional serial verbs).
169) Land-based topographical verbs
\begin{tabular}{ll} 
tindang & 'go down, descend' \\
la'e & 'ascend a mountain, for example, slope of a mountain' \\
ntuun & 'descend, climb down, for example, from a house' \\
mpara'e & 'climb, ascend, for example, slope of a mountain' \\
sau-sau & 'descend, climb down, for example, slope of a mountain' \\
gois & \begin{tabular}{l} 
'cross over the mountain top or summit, that is, from one side to another' \\
\\
\\
\\
\\
side (also means slope or incline)' \\
'traversing, following a mountain along midway point somewhere between \\
the foot and the peak without going down or up'
\end{tabular}
\end{tabular}

\section*{169) Land-based topographical verbs}

Cont. bubuntuan 'follow ridge, or peak of a mountain' arap 'climbing cliffs up to a mountain top' tigar 'climbing cliffs up to a mountain top'

\section*{170) Water-based topographical verbs}
salug 'go down river, downstream, stream, path'
pure' 'go up river, upstream'
gilig 'follow downstream'
pipit 'perimeter, following the edge of s.t., for example, following a oastline, or the perimeter of a garden, etc.'
songgal 'disembark, coming off an ocean vessel (going down); only in or at the ocean,' for example, after beaching a boat you 'step down' from the boat.'

\subsection*{9.7.1.2 Land-based topographical verbs}

Examples (171)-(175) illustrate tindang 'descend' with the dynamic prefix pe- (other topographical verbs may have different affixation). Examples (172)-(175) show the use of the collocational serial verb nyau and (172) and (174) show a second serial verb mai 'come' after the first one nyau 'go down' in further specifying the semantic event. See § 11.4 for discussion of multiple serial verbs.
(171) Ila иo siina nuunga uo netindangomo
ila 'uo siina nu=unga 'uo N-pe-tindang=mo

ABL yonder mother CN/GE=child yonder RE-SF/DY-descend=COMP
\begin{tabular}{llll} 
ila & buut & pelamunongonyo & uo. \\
ila & buut & pe-lamung-ong=nyo & 'uo \\
from & mountain & SF-grass-locN=3SG/GE yonder
\end{tabular}
'From there that mother came down from her grassy mountain.' [ceku03.jdb 023]
(172) Tarus netindang ipag nigibang nyau mai.
tarus \(N\)-pe-tindang ipag ni=gibang nyau mai continue RE-SF/DY-descend sibling.in.law PN/GE=lizard descend come 'After that the water monitor's sister-in-law descended and came down.'
[gibang.pin 151]
\begin{tabular}{llllll} 
(173) Notou' & uo & jimo & tarus & netindang & menyau \\
no-tou' & 'uo & jimo & tarus & N-pe-tindang & me-nyau \\
ST/RE-finish & yonder & 3PL/AB & continue & RE-SF/DY-descend & UD/IR-go.down
\end{tabular}
kampung.
kampung
village
'After finishing that then they went down to the village.'
[katira.int 011]
\begin{tabular}{lllllll} 
(174) Jimo metindang & nyau & mai junjung nijimo uo. \\
jimo & M-pe-tindang & nyau & mai junjung & nijimo 'uo \\
3PL/AB & IR-SF/DY-descend go.down & come house & 3PL/GE yonder
\end{tabular}
'They come down to their house.'
[mdtext20.txt 071]
(175) Ila uo siamanyo uo netindangomo menyau
ila 'uo siama=nyo 'uo \(N\)-pe-tindang=mo me-nyau
ABL yonder father=3SG/GE yonder RE-SF/DY-descend=COMP UD/IR-go.down
rijunjungonyo rikampung.
ri=junjung=nyo ri=kampung
LOC=house \(=3\) SG/GE \(\quad\) LOC=village
'After that his father descended down to his house in the village.' [mdtext5.txt 050]
Examples (176)-(177) illustrate the use of ntuun 'descend, lower s.t.' with the realis inverse voice prefix ni- and the causative suffix -a'. Note that mami is the possessor of the undergoer NP and not the actor NP for the verb (the actor NP is ellipsed).
(176) Paey unga doruo ио nintuuna' nualoaga ио
paey unga doruo 'иo ni-ntuun-a' nu=aloaga 'ио and.then child two yonder IV/RE-descend-TZ CN/GE=crow yonder
riрии nubulagon.
ri=pии \(\quad n u=b u l a g o n\)
LOC=tree CN/GE=rattan
'And then the crow lowered the two children into a rattan tree,
[mdtext18.txt 072]
(177) Tarus nintuuna' balung mami.
tarus ni-ntuun-a' balung mami
continue IV/RE-descend-TZ lunch 1PL.EXC/GE
'Then they handed out (lit. descend, down) our lunches.' [Tanjong 030]
Examples (178)-(181) illustrate the use of la'e 'ascend' with the prefix ma-/na-. This prefix has no known meaning (it is glossed UD for 'undetermined'). There is no class of stem-forming verbs which contain a prefix with the underlying form *pa- (although the copula jari 'become' has this homophonous prefix-see \(\S 9.6 .1\) ). Contrast this irregularity with the \(M-/ N\)-pe- prefixes above which can be assigned to the dynamic pe- verb class. Although some topographical verbs may appear with a verb class prefix, the inconsistency between the affixation of topographical verbs may suggest that some change is in progress as to their class status.
\begin{tabular}{lllll} 
(178) Ila & uo & tarus & nala'emo & siama \\
ila & 'uo & tarus & na-la'e \(=\) mo & siama \\
ABL yonder & continue & UD/RE-ascend=COMP & father
\end{tabular}
\begin{tabular}{llll}
\(o\) & siina & nuunga & uo. \\
\(o\) & siina & \(n u=\) unga & 'uo \\
and & mother & \(\mathrm{CN} / \mathrm{GE}=\) child & yonder
\end{tabular}
'Continuing from there the child's father and mother ascended.' [mdtext5.txt 069]
Examples (179)-(181) also illustrate the collocation of the directional serial verb mene' 'go up' with la'e 'ascend'.
(179) Alea' ami mala'e mene' tebuat
alea' 'ami ma-la'e mene' tebuat
let 1PL.EXC/AB UD/IR-ascend go.up inland
\begin{tabular}{llll} 
sono & siina' \(u\) & \(o\) & siama'u. \\
sono & siina=' \(u\) & \(o\) & siama=' \(u\) \\
COM & mother \(=1 \mathrm{SG} / \mathrm{GE}\) & and & father=1SGGE
\end{tabular}
'Let us ascend and go up inland with my mother and my father.' [gibang.pin 173]
(180) Ila uo juragang nala'emo mene'
ila 'иo juragang na-la'e=mo mene'
ABL yonder captain UD/RE-ascend=COMP go.up
sono sirapinyo.
sono si=rapi \(=\) nyo
COM PN/AB=spouse=3SG/GE
'From there the captain ascended to go up with his spouse.'
[mdtext15.txt 083]
\begin{tabular}{llllllll} 
(181) & \begin{tabular}{lll} 
Paey & langkai & uo
\end{tabular} & nala'e & mene' & jo'ong & nijimo. \\
paey & langkai & 'uo & na-la'e & mene' & jo'ong & nijimo \\
& and.then & male & yonder & UD/RE-ascend & go.up & garden & 3PL/GE
\end{tabular}
'And then that man ascended up to their garden.'
[mdtext21.txt 024]
Example (182) illustrates the use of gois 'cross, cross over' with the dynamic prefix pe-. Example (183) is an extended use of gois, which shows the sun, has crossed midday (that is, passed its zenith). \({ }^{29}\)
\begin{tabular}{llllll} 
Ila & Tambu ami & megoisomo & buut & siinanyo. \\
ila & T. & 'ami & M-pe-gois=mo & buut & siina=nyo \\
from & T. & 1PL.EXC/AB & IR-SF/DY-cross=COMP & mountain & mother=3SG/GE
\end{tabular}
'From Tambu then we crossed over the mother mountain.'
[jptext03.jdb 010]
(183) Sampanyo netegoisomo
sampanyo ne-te-gois=mo
after.that RE-NV-cross=COMP
eleo, nodua'omo
io.
eleo \(N\)-po \(0_{1}\)-dua'=mo io
'After midday (lit. sun crossed), he arrived.'
[troll.int 083-084]

\footnotetext{
29 The prefix ne- in (183) is only marked as realis since verbs prefixed with te- can be from different classes (see \(\S 13.4 .2 .2\) ). An alternative analysis is that it may be \(N\)-pe-, where the \(p e\) - is the dynamic prefix.
}

Example (184) illustrates the use of 'arap 'cliff' with the prefix ma-. Examples (185)(187) illustrate three different topographical verbs: mpara'e 'climb' in (185) and (186), sau-sau 'descend' in (185) and (187), and 'apit 'slope' in (187). Each of these appears to use a verbaliser prefix no-/mo-.
(184)
\begin{tabular}{lll}
...nyaa & bega', & toma'arap! \\
nyaa & bega' & to=ma-'arap \\
don't & too.much & RM=UD/IR-cliff \\
'... don't go up the cliffs!'
\end{tabular}
[nangkait.pin 077]
(185) Ila иo ami tarus nelampa ri'uo, paey
ila 'uo 'ami tarus \(N\)-pe-lampa ri='uo paey
from yonder 1PL.EXC/AB continue RE-SF/DY-walk LOC=yonder and.then
\begin{tabular}{|c|c|c|c|c|}
\hline nompara'e & ila uo & paey & ami & nosau-sau, \\
\hline \(N\)-po \(0_{1}\)-mpara'e & ila 'иo & paey & 'ami & N -po \(\mathrm{o}_{1}\)-sau-sau \\
\hline RE-SF/DE-climb & ABL yonder & and.then & 1PL.EXC/AB & RE-SF/DE-RED-descend \\
\hline paey moje & mompara'e. & & & \\
\hline paey moje & M-po \(\mathbf{1}_{- \text {-mpara }}\) & & & \\
\hline and.then again & IR-SF/DE-cli & & & \\
\hline
\end{tabular}
'From there we continued travelling over there, and then from there we climbed, and then we descended, and then again we climbed.'
[Tanjong 012]
(186) Tarus unga иo nompara'e riatang nubatu ио.
tarus unga 'иo \(N\)-po -mpara'e ri=atang nu=batu 'ио
continue child yonder RE-SF/DE-climb LOC=top CN/GE=rock yonder
'And then that child climbed up to the top of that rock.' [senge1.pin 013]
(187) Ila иo ami mosau-sau,
ila 'uo 'ami M-po \(0_{1}\)-sau-sau
from yonder 1PL.EXC/AB IR-SF/DE-RED-descend
\begin{tabular}{ll} 
joo & mo'umapit. \\
joo & M-po 1 -[um]-'apit \\
however & IR-SF/LCM-TEL-slope
\end{tabular}
'From there we descended, however we followed the mountain slope.' [Tanjong 024]

\subsection*{9.7.1.3 Water-based topographical verbs}

There are also 'water-based' topographical verbs. Most of these have to do with matching the direction of the participant with the flow of the water or the intersection of water and land. In the jungle interior the traditional paths have often been the waterways, so it is not surprising that Pendau have special verbs to indicate whether they are travelling upstream or downstream. Examples (188) and (189) show a verb derived from salug 'stream, downstream'.
(188) Jimo neteule te'e nosumalug.
jimo \(N\)-pe-teule te'e \(N\)-po \({ }_{1}\)-[um]-salug
3PL/AB RE-SF/DY-return back RE-SF/LCM-TEL-stream
'They turned back and went downstream.'
[nalalo.pin 152]
\begin{tabular}{lllllll} 
(189) Sembengi joo sembengi, & ma'o sangsalug & mai & sangsalug, \\
so-mbengi joo & so-mbengi & ma'o so-ng-salug & mai so-ng-salug \\
ONE-night however ONE-night & go & ONE-LIG-stream & come & ONE-LIG-stream
\end{tabular}
'One night after another, the seven of them went down one stream and up another, up one mountain and down another.'
[poora.pin 010-013]

Examples (190) and (191) show a verb derived from pure' 'upstream'. All of the verbal uses of these roots use a verbaliser prefix mo-/no- (except example (191) which appears to use the active voice prefix nong-, although it is possible that the root may vary between pure' and mpure'). Examples (192) and (193) show a verb derived from pipit 'perimeter' namely momipit 'to follow the coastline or perimeter'. Pipit is not restricted to the coastline but can also be used for land-based topographical perimeters, as when following the perimeter of a fence, a house, or the base of a mountain, etc. (so strictly speaking it is not just restricted to 'water-based' verbs).
\(\left.\begin{array}{lllll}\text { (190) Jimo } & \text { nopumure'omo } & \text { ogo } & \text { uo } \\
\text { jimo } & N-p o_{1}-[\text { um]-pure'=mo } & \text { ogo } & \text { 'uo }\end{array}\right]\)\begin{tabular}{llll} 
3PL/AB & RE-SF/LCM-TEL-upstream=COMP & water & yonder
\end{tabular}
'They followed the water upstream until they found a spring (lit. eye of water).'
[mdtext18.txt 038]
(191) Juragang ио потритиre'omo ogo ио.
juragang 'иo \(N\)-po \(o_{1}\) [um]-mpure'=mo ogo 'иo
captain yonder RE-SF/LCM-TEL-upstream=COMP water yonder
'That captain followed the water upstream.'
[mdtext1.txt 085]
\begin{tabular}{lllll} 
(192) Jimo & sura & momipit & nyau & mai. \\
jimo & sura & M-pong-pipit & nyau & mai \\
3PL/AB & only & RE-SF/PT-perimeter & go.down & come
\end{tabular}
'They only followed the coastline (lit. perimeter) as they came down here.'
[mdtext15.txt 002]
\(\begin{array}{lllll}\text { (193) Bai uo } & \text { jimo } & \text { uo } & \text { nosumombalomo } & \text { payangan nijimo } \\ \text { bai 'uo } & \text { jimo } & \text { 'uo } & N \text {-po }-[\text { lum]-sombal }=\text { mo } & \text { payangan nijimo }\end{array}\) like yonder 3PL/AB yonder RE-SF/LCM-TEL-sail=COMP boat 3PL/GE
\begin{tabular}{lll} 
uo & nomipit & tarus. \\
'uo & N-pong-pipit & tarus \\
yonder & RE-SF/PT-perimeter & continue
\end{tabular}
'So they sailed their boat and continued following the coastline.' [mdtext20.txt 213]

\subsection*{9.7.2 Ambient verbs}

Ambient verbs are affixed in the same way as stative verbs. However, stative verbs require a subject and ambient verbs do not. Examples (194) and (195) illustrate typical ambient clauses. Other possibilities include: memenyong 'it's cold', moruung 'it's cloudy', and mogurung 'it's thundering'.
```

(194) Ono moujang ito megege.
ono mo-ujang 'ito mo-gege
if/when ST/IR-rain 3PL.INC/AB ST/IR-wet
'If/when it rains we will be wet.'
(195) Moonda'.
mo-onda'
ST/IR-hot
'It's hot.'

```

\subsection*{9.7.3 Prefix monga-/nonga-}

The prefix monga- / nonga- is rare. It is glossed as undetermined as to verb class (UD). With few examples nothing can be said about its meaning, other than to see how it is used in specific contexts, as in (196) and (197).
(196) Asu nongatimbu
asu nonga-timbu
dog UD/RE-mate
'Dogs mated.'
[EN97-003.32]
(197)
\begin{tabular}{lllllll} 
Ila & uo & jimo & jomo & mongalilinjo' & ma'o & mai \\
ila & 'uo & jimo & jomo & monga-li-linjo' & ma'o & mai \\
ABL yonder & 3PL/AB & just & UD/IR-RED-run & go & come
\end{tabular}
ripopomoiaong ripali-palitonyo uо.
ri=po-po \(1_{1}\)-moia-ong ri=pali-palit=nyo 'uo
LOC=RED-SF-live-locN LOC=RED-surround=3SG/GE yonder
'After that they just ran to and from their living places from around the surrounding areas there.'
[Mark 6:55]

\subsection*{9.7.4 Prefixes borrowed from Indonesian}

Contact between Pendau and Indonesian (which includes a variety of Indonesian or Malay dialects such as Manado Malay \({ }^{30}\), see \(\S 1.2 .4\) ) brings in new lexemes (and some older ones as well). In the case of some words this contact affects how the borrowed form of the active voice transitive prefix is formed in Pendau. Indonesian meng- has a schwa vowel which is usually pronounced in Pendau borrowings as [a]. This results in mang- or nang- prefixes (irrealis and realis respectively) on some words with the appropriate nasal assimilation rules applying. For example, Indonesian tuntut 'demand', and its active voice form menuntut (pronounced [mənuntut] becomes manuntu' or nanuntu' in Pendau with irrealis and realis respectively. The initial nasal is adjusted to realis as context demands since that distinction is not made in Indonesian, with representative examples given in (198). Other words that use schwa in the root are also pronounced as [a] as shown in (1990).
\begin{tabular}{lll}
\begin{tabular}{l} 
manuru' \\
manonton \\
mantahang
\end{tabular} & \begin{tabular}{l} 
menurut (turut) \\
menonton (tonton) \\
menahan (tahan)
\end{tabular} & \begin{tabular}{l} 
'according to' \\
'watch, view' \\
'guard, endure'
\end{tabular} \\
na-sadia & ber-sedia & 'ready, prepared' \\
Sanin & Senin & 'Monday' \\
Salasa & Selasa & 'Tuesday'
\end{tabular}

\subsection*{9.7.5 Prefix combination po-to-}

The prefix combination ni-po-to is rare, the last formative to- being the rare element. Here to- is glossed as an undetermined affix (UD), since there is not enough data to determine its meaning synchronically.
\begin{tabular}{llclll} 
Nipototutuung & mami, & "nyaa & tutuu & raala & miu!" \\
ni-po-to-tu-tuung & mami, & nyaa & tutuu & ro-ala & miu \\
IV/RE-SF-UD-RED-order & 1PL.EXC/GE don't & really & IV/IR-get & 2PL/GE
\end{tabular}
'We repeatedly ordered, "don't you really get it!""
[EN98-003.43]

\subsection*{9.7.6 Prefix combination ne-te-om-po-}

Another rare prefix is om-, \({ }^{31}\) in the combination ne-te-om-po-. This combination has only been found in the root turu 'sleep', as in neteompoturu 'fall asleep' shown in example (201).


\footnotetext{
\({ }^{30}\) Or known locally as Malayu Manado. Merrifield and Salea (1996:125-126) claim that in North Sulawesi the term Bahasa Indonesia 'Indonesian language' is used both for Standard Indonesian and also for Malayu Manado 'Manado Malay’. Central Sulawesi was formerly part of the North Sulawesi province.
\({ }^{31}\) The prefix om- (and infix -om-) is still productive in some Philippine languages such as Eastern Bontoc (Fukuda 1997:33).
}

\subsection*{9.7.7 Relic prefix gi-}

Only one verb, ntoya 'swing', has been recorded with a relic prefix gi-. \({ }^{32}\) The sequence gintoya is found in several different verbal constructions, \({ }^{33}\) as in examples (202)-(205) (the ng only shows up in some of the examples). The gi- has no known meaning synchronically.

Pita' иo nipomagintoyai nijimo.
pita' 'uo ni-pong-pa-gi-ntoya-i nijimo
ribbon yonder IV/RE-SF-CAUS-REL-swing-DIR 3PL/GE
'They used the ribbon to swing her.'
[gibang.pin 100]
(203) A'u nogintoya ri’ayu.
a'u \(\quad N\)-po \(o_{1}\)-gi-ntoya ri='ayu
1SG/AB RE-SF-REL-swing LOC=tree
'I was swinging by the tree.'
[EN98-001.40]
(204) Bai uo io nintoyana' tarus noudut pita'.
bai 'uo io ni-ntoyang-a' tarus no-udut pita'
like yonder 3SG/AB IV/RE-swing-OC continue ST/RE-break ribbon
'As they were swinging her, then the ribbon broke.'
[gibang.pin 110]
(205) A'u netentoyang ri'ayu.
a'u ne-te-ntoyang ri='ayu
1SG/AB RE-NV-swing LOC=tree
'I was hanging by the tree.'
[EN98-001.40]

\subsection*{9.7.8 Compound nouns as verbs}

Examples (206) and (207) exhibit verb compounding in which a compound word takes a verbal prefix. The compound word is in bold font. See §9.3.2, §9.3.5-6 for discussion on dynamic verbs which appear to function sometimes as verb compounding with the syntactic 'object'.
\begin{tabular}{cllllll} 
(206) A'u & mombasa & buku & uo, & bia & mekaca & mata. \\
a'u & M-pong-basa & buku & 'uo, & bia & M-pe-kaca & mata \\
1SG/AB & IR-SF/PT-read & book & yonder, & later & IR-SF/DY-glass eye
\end{tabular}
'I will read that book, later when I will wear glasses.'
[EN97-004.26]
\begin{tabular}{cllll} 
(207) A'u & nombasa & buku & nekaca & mata. \\
a'u & N-pong-basa & buku & N-pe-kaca & mata \\
1SG/AB & RE-SF/PT-read & book & RE-SF/DY-glass eye
\end{tabular}
'I read a book wearing/using glasses.'
[EN97-004.26]

\footnotetext{
32 The form gi- does not appear in the simple inverse form of the verb as example (204) shows. Contrasting this with example (203) reveals the form gi- as a distinct formative.
33 The gi- prefix marks 'goal focus' in Philippine languages such as Cebuano.
}

Another verb that participates in compounds is sala 'wrong' (cognate with Indonesian salah 'wrong'). Some verbs are created by joining two words with nasal velar \(/ \mathrm{ng} /\) ligature (LIG). \({ }^{34}\) Examples (208) and (209) show how sala is fused to two different words with the nasal ligature joining them. In (208) two verbs are joined to create one verb. In (209) the noun jalang 'road' is incorporated into the verb. Compounds found in my data with sala 'wrong' are listed in (210). \({ }^{35}\)
(208) masalambura
mo-sala-ng-bura
ST/IR-wrong-LIG-speak
'wrong talking'
[EN97-004.34]
(209) Emu nao nasalanjalangomo
'ети nao no-sala-ng-jalang=mo
2PL/AB that ST/RE-wrong-LIG-road=COMP
'You all there have taken the wrong road.'
[tanjong 018]
(210)
\begin{tabular}{llll} 
sala-mate & 'wrongful death' & sala-m-bura & 'wrong talk' \\
sala-paha & 'wrong understanding' & \begin{tabular}{l} 
sala-n-jalang \\
'wrong road'
\end{tabular} \\
sala-n-tano & 'wrong earth' & mata sala & 'become wrong (lit. wrong eye)'
\end{tabular}

\subsection*{9.7.9 The 'whatchamacallit' verb anu}

Example (211) illustrates how anu 'whatchamacallit' can be used as a verb root that substitutes for some unidentified verb. \({ }^{36}\)
\begin{tabular}{lllll} 
(211) Kira-kira & botonyo & moo & ndau & tonianu \\
kira-kira & boto=nyo & moo & ndau & to \(=\) ni-anu \\
about & trunk=3SG/GE & this & NEG & RM=IV/RE-'whatchamacallit'
\end{tabular}
'This trunk isn't the thing that the government wanted to 'whatchamacallit' not so long ago?' [Lewonu Riddle \#1]

\footnotetext{
\({ }^{34}\) The ligature \(n g\) is used in several other parts of word formation, usually unpredictably (see §7.4.5), but always only before an obstruent (and in which nasal assimilation processes apply). For example, nosi-mbolos 'switching, exchanging s.t. with s.o.' clearly contains the root bolos and not *mbolos', and the mutual activity prefix posi- normally does not have a final velar nasal as part of its prefix. See also §7.5.2.2.2 for discussion of the inconsistent appearance of nasal ligature following the numeral one prefix so-.
\({ }^{35}\) Sala may also be used to precede persons, as in sala souni too 'one person'; salah is also used in Indonesian, for example, salah orang 'one person'.
\({ }^{36}\) Probably borrowed from Indonesian anu 'whatchamacallit'. This can appear with any verb affixation possibility including various inverse constructions such as these: ra-anu, \(r a-a n u=m o, r a-a n u=n y o=m o\), ni- anu, mu-anu, etc.
}

\section*{10 Transitivity altering operations}

\subsection*{10.1 Introduction}

Transitivity altering operations discussed in this chapter are transitivity increasing and decreasing. Most of the former transitivity increasing operations are performed via causatives and applicatives ( \(\S 10.2\) and \(\S 10.3\) ) and involve increasing the valency by one (see Figure 10.1 for an overview of affixes used for causatives and applicatives). The transitivity decreasing operations discussed in this chapter are reciprocals, equatives, and resultatives (§10.4-6; see Figure 10.2 for an overview of relevant morphology). Valency decreasing operations in Pendau are often the more difficult ones to analyse because for most verbs the decrease in transitivity is semantic rather than syntactic. All of the transitivity altering operations discussed here are congruent with features found in many other Sulawesi languages.
\begin{tabular}{|l|l|l|}
\hline Affix(es) & Intransitive to transitive & Transitive to ditransitive \\
\hline \hline po \(_{2}-\), po' \(_{2}{ }^{-}\) & Causative & -- \\
\hline \(\mathrm{po}_{3}{ }^{-}\) & Causative & Causative \\
\hline pa- & -- & Causative \\
\hline\(-a^{\prime}\) & Causative/applicative & Applicative \\
\hline pe'i- & -- & Requestive \\
\hline \(\mathrm{pV}(\mathrm{C})-/-\mathrm{a}\) ' & -- & Applicative \\
\hline \(\mathrm{pV}(\mathrm{C})-/-\mathrm{i}\) & -- & Applicative \\
\hline \hline
\end{tabular}

Figure 10.1. Transitivity increasing affixation
\begin{tabular}{|l|l|}
\hline Morphology & Detransitive \\
\hline \hline posi- & Reciprocal \\
\hline\(\sigma_{c^{-}} /\)-ong & Reciprocal \\
\hline gu- & Equative \\
\hline po'o \(_{1-}-\) & Resultative \\
\hline
\end{tabular}

Figure 10.2. Detransitivising morphology

\subsection*{10.2 Causatives}

Causatives introduce a new A argument in intransitives and monotransitives to create monotransitives and ditransitives respectively. \({ }^{1}\) Causatives have been described as one means of creating a complex predicate from a formerly simple predicate (see Payne 1997:175-177).

In predicate calculus (as overviewed by Payne 1997:174-177) the P (predicate) of a transitive clause can be represented as \(\mathrm{P}=\operatorname{PRED}(\mathrm{x}, \mathrm{y})\). With the addition of the causative then a causative construction can be similarly represented as CAUS \((x,(P))\). This formula is introduced here in order to compare causatives with some other valency increasing constructions. In intransitive to transitive causativisation, the new argument becomes actor, and the sole underived argument becomes undergoer of the derived clause, whether it was an actor or an undergoer in the underived clause, as in (1). In transitive to ditransitive the new argument becomes the actor, the old underived actor becomes the undergoer and the old underived undergoer becomes the second object, as shown in (2). The actor of the causation is the Causer, and the undergoer is the Causee, while the third argument can be termed the Causand (following van den Berg 1989, Donohue 1995).
\begin{tabular}{cl}
\(\varnothing\) & The dog sat down. \\
\(\downarrow\) & \(\downarrow\) \\
The man made & the dog sit down. \\
causer & causee
\end{tabular}
(2)
\begin{tabular}{lll}
\(\varnothing\) & We drink water. \\
\(\downarrow\) & \(\downarrow\) & \(\downarrow\) \\
They made & us drink & water. \\
causer & causee & causand
\end{tabular}

Examples (3) and (4) illustrate inung 'drink' causativised with \(\mathrm{po}_{3^{-}}\)- in an active voice clause (3) and in an inverse voice clause (4). \({ }^{2}\)
\begin{tabular}{lllll} 
Jimo & nompoinungomo & ami & ogo & moonda', \\
Jimo & N-pong-po \({ }_{3}\)-inung=mo & 'ami & ogo & mo-onda' \\
3PL/AB & RE-SF/PT-CAUS-drink=COMP & 1PL.EXC/AB & water & ST/IR-hot
\end{tabular}
'They made us drink hot water. \({ }^{\text {' }}\)
[EN97-003.28]
(4)
\begin{tabular}{lllll} 
Ami & nipoinungomo & nijimo & ogo & moonda'. \\
'ami & ni-po \({ }_{3}\)-inung=mo & nijimo & ogo & mo-onda' \\
1PL.EXC/AB & IV/RE-CAUS=drink=COMP & 3PL/GE & water & ST/IR-hot \\
'They made us drink hot water.' & & [jptext03.jdb 022; EN97-003.28]
\end{tabular}

\footnotetext{
\({ }^{1}\) This has traditionally been expressed by saying that the subject of the underived clause becomes the object of the derived causative clause.
2 The pa-causative is ungrammatical or marginally grammatical with the word inung 'drink, as in Ami ni-pa-inung=omo nijimo (but see (23) for an example with pa-/-i on inung). When used in the environment in which the morphophonemic deletion of the \(p\) phoneme is expected po- is also ungrammatical as in *Jimo mom-(p)o-inung=omo ami ogo mo-onda’ (see §3.3 for the lexical phonology account for why the \(p\) in \(p a-\) is deleted but not the \(p\) in \(p o-\) ).
\({ }^{3}\) Note that ogo moonda' 'hot water ' is an idiom for coffee or tea.
}

In terms of predicate calculus examples (3) and (4) can both be represented by the same formula: CAUS(ami,(INUNG(jimo, ogo moonda'))) or in the English equivalent (CAUS(they, (DRINK(us/we, hot water))).

There are a number of strategies available for causativisation in Pendau. The most productive are with one of the prefixes \(p o_{2^{-}}, \mathrm{po}_{3^{-}}\), and \(p a\)-. These three causative strategies are summarised in Figure 10.3 and discussed further in \(\S 10.2 .1-3\). In addition to these major strategies, the suffix \(-a\) ' has some causative uses. It is discussed in \(\S 10.2 .4\) and summarised in Figure 10.4. The requestive prefix pe'i- (REQ) will be discussed in §10.2.5. \({ }^{4}\)
\begin{tabular}{|c|c|c|c|c|}
\hline Verb class & Derived verb class & Causative prefix & \multicolumn{2}{|l|}{Underived to derived causative} \\
\hline \multirow[t]{2}{*}{Stative} & \multirow[t]{2}{*}{Primary transitive} & \(\mathrm{po}_{2}{ }^{-}\) & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\[
\begin{array}{ll}
\varnothing & \text { Undergoer } \\
\downarrow & \downarrow \\
\text { Causer } & \text { Causee }
\end{array}
\]}} \\
\hline & & \(\mathrm{po}^{\prime} \mathrm{o}_{2}{ }^{-}\) & & \\
\hline Locomotion & Locomotion & \(\mathrm{po}_{3}{ }^{-}\) & \begin{tabular}{lc}
\(\varnothing\) & Actor \\
\(\downarrow\) & \(\downarrow\) \\
Causer & Causee
\end{tabular} & \\
\hline Denominal & Denominal & \(\mathrm{po}_{3}{ }^{-}\) & \begin{tabular}{lc}
\(\varnothing\) & Actor \\
\(\downarrow\) & \(\downarrow\) \\
Causer & Causee
\end{tabular} & Undergoer \(\downarrow\) Causand \\
\hline Factive & Factive & \(\mathrm{po}_{3}{ }^{-}\) & \begin{tabular}{cc}
\(\emptyset\) & Actor \\
\(\downarrow\) & \(\downarrow\) \\
Causer & Causee
\end{tabular} & \begin{tabular}{l}
Undergoer \(\downarrow\) \\
Causand
\end{tabular} \\
\hline \multirow[t]{2}{*}{Primary transitive} & \multirow[t]{2}{*}{Primary transitive} & \(\mathrm{po}_{3}\) - & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{lll}
\(\varnothing\) & Actor & Undergoer \\
\(\downarrow\) & \(\downarrow\) & \(\downarrow\) \\
Causer & Causee & Causand
\end{tabular}}} \\
\hline & & pa- & & \\
\hline
\end{tabular}

Figure 10.3. Summary of main causation types in Pendau \({ }^{5}\)

\subsection*{10.2.1 General causative po \(_{3^{-}}\)}

The general causative formative \(\mathrm{po}_{3^{-}}\)is used with any non-stative root or stem. The general causative is usually used to create ditransitives from transitives, but intransitive verbs may also form transitives with this prefix. The prefix does not take vowel harmony in contrast to the stative causative \(p o_{2}{ }^{-}\). The \(p o_{3^{-}}\)causative prefixes do not follow the expected rule of voiceless consonant deletion when preceded by the transitive prefix pongin which the nasal assimilates to the homorganic point of articulation, whereas in the paprefix the \(p\) deletes following the standard morphophonemic rule (§10.2.2-3). This is explained in \(\S 3.3\) as motivation for putting the two types of affixes into different levels of the lexical phonology.

Example (5) shows a non-causative transitive construction with the verb inung 'drink', and the causativised construction is given in (6).

\footnotetext{
4 Requestives are sometimes known as 'locutional causatives' (van den Berg 1989:201-202).
5 The homophonous forms of the three po- prefixes are: \(p o_{1}\) - stem former for various verb classes, \(p o_{2^{-}}\) harmonic stative causative (with allomorphs \(p a\) - and \(p e\)-), and \(p o_{3}\) - general causative (non-harmonic).
}
\(\begin{array}{lll}\text { (5) Ito } & \text { menginungopo } & \text { kopi. } \\ \text { 'ito } & \text { M-pong-inung=po } & \text { kopi }\end{array}\)
1PL.INC/AB IR-SF/PT-drink=CONT coffee
'Let's drink coffee again.'
(6)
\begin{tabular}{lllll} 
Jimo & nompoinungomo & ami & ogo & moonda'. \\
Jimo \(\quad\) N-pong-po \({ }_{3}\)-inung=mo & 'ami & ogo & mo-onda' \\
3PL/AB & RE-SF/PT-CAUS-drink=COMP & 1PL.EXC/AB & water & ST/IR-hot \\
'They made us drink hot water.' & & & [EN97-003.28]
\end{tabular}

Example (7) illustrates the causativisation of a nominal root. This example can be compared with examples (8) and (9). It is particularly important not to confuse the two homophonous forms in these latter two examples. The formative \(\mathrm{po}_{1}-\) must be understood to be the stem former and not a causative (see discussion of stem formers in \(\S 4.3\) and Quick 1999b). Example (10) illustrates the use of the causativised denominal rapi 'spouse' in a more complex sentence as well as in conjunction with the applicative suffix \(-a^{\prime}\) (see discussion of applicatives in \(\S 10.3\) and combinations of the applicative \(-a\) ' with causatives in §10.3.7).
\begin{tabular}{lllll} 
Bengkel & uo & nipoporapi & nulangkai & moo. \\
bengkel & 'uo & ni-po - -po \({ }_{3}\)-rapi & nu=langkai & moo \\
female & yonder & IV/RE-SF-CAUS-spouse & CN/GE=male & this
\end{tabular}
'This man gives that woman in marriage (to someone else).'
[EN97-002.20]
(8) Langkai moo morapi bengkel uo.
langkai moo M-po_rapi bengkel 'uo
male this IR-SF/DE-spouse female yonder
'This man will marry that woman.'
[EN97-002.20]
(9)
\begin{tabular}{lllll} 
Bengkel uo & niporapi & nulangkai & moo. \\
bengkel 'uo & ni-po - -rapi & \(n u=\) langkai & moo \\
female yonder & IV/RE-SF/DE-spouse & CN/GE=male & this
\end{tabular}
'This man will marry that woman.'
[EN97-002.20]
(10) Jari unga langkai nao tonetubu ami nao kana
jari unga langkai nao to=netubu 'ami nao kana
so child male that \(\mathrm{RM}=\mathrm{DY} /\) RE-live \(2 \mathrm{PL} . \mathrm{EXC} / \mathrm{AB}\) that certain
upoporapia' unga'u otou'ong nao.

1SG.IV/IR-SF-CAUS-spouse-TZ child=1SG/GE HAVE-finish-locN that
'So the boy that we raised I will certainly have married to your youngest daughter.'
[miracle1.pin 011]
Examples (11) and (12) show a sequence of po-po-. Closest to the root is the causative \(\mathrm{po}_{3}{ }^{-}\), and furthest from the root is the stem former \(\mathrm{po}_{1^{-}}\). Example (13) contrasts this with a homophonous verb. Note that the first po- is reduplicated from the stem and gives an
iterative sense to the predicate. Example (13) cannot be a causative because there are only two core arguments and the constituent order does not allow a causative interpretation.
(11) A'u mopopobasi jimo lading.
a'u \(\quad\) M-po \(\mathbf{1}_{1}-\) po \(_{1}\)-po \(o_{3}\)-basi jimo lading
1SG/AB IR-SF-SF-CAUS-steel 3PL/AB knife
'I forged them a knife.'
[EN97-003.501]
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{2}{*}{(12)} & Jim & nipopobasi'u & la \\
\hline & jimo & ni-po \({ }_{1}-\mathrm{po}_{3}\)-basi \(=\) ' & din \\
\hline & \(3 \mathrm{PL} / \mathrm{AB}\) & IV/RE-SF-CAUS & kni \\
\hline
\end{tabular}
'I forged them a knife.'
[EN97-003.501]
(13) Lading nipopobasi'u.
lading ni-po-po \({ }_{1}\)-basi='u
knife IV/RE-RED-SF-steel=1SG/GE
'I kept forging the knife.'
[EN97-003.501]
Example (14) illustrates with the root linjo' 'run' that the causative po- also applies to the locomotion (LCM) verb class.
```

(14) A'u mopopolinjo' ajarano'u
a'u M-po_-po-po_}\mp@subsup{3}{3}{\prime-linjo' ajaran='u
1SG/AB IR-SF/LCM-RED-CAUS-run horse=1SG/GE

```
'I kept running my horse. (I had/made my horse continue to run.)' [horse.pin 221]

\subsection*{10.2.2 Causative pa-}

In \(\S 10.2 .1\) and 10.2.3 I discuss the two causative formatives \(p o_{2}{ }^{-}\)and \(p o_{3}{ }^{-}\). This section introduces the distinct causative formative \(p a\)-. The \(p a\) - formative has only been found associated with a few words, so attempts at determining whether there are differences between the semantics of this causative and the \(\mathrm{po}_{2^{-}}\)and \(\mathrm{po}_{3^{-}}\)formatives have been hindered by insufficient data. Even so, it is suggested below that pa- may be a 'direct causative', whereas the others are 'indirect causatives'.

Example (15) illustrates a non-causative transitive with the verb inang 'eat'. Examples (16) and (17) illustrate the causative derivation in the inverse voice construction. Example (16) shows all three arguments, and (17) illustrates that the causand can also be covert. Examples (18) and (19) show the causative pa affixed to the lexeme inang 'eat' in the active voice. Example (18) shows all three arguments, and (19) illustrates that the causand may also be omitted in the active voice.
(15) Loka niinang mami.
loka ni-inang mami
banana IV/RE-eat 1PL.EXC/AB
'We ate bananas.'
(16)
\begin{tabular}{lllll} 
Tagu'u & nipainang & nirapi'u & loka & uo. \\
tagu='u & ni-pa-inang & ni=rap \(=\) 'u & loka & 'uo \\
friend=1SG/GE & IV/RE-CAUS-eat & PN/GE=spouse=1SG/GE & banana & yonder
\end{tabular}
'My spouse fed my friend that banana.'
[EN97-003.30]
(17)

Jimo nipainangomo nutomogurang uо
jimo ni-pa-inang=mo nu=tomogurang 'uo
3PL/AB IV/RE-CAUS-eat=COMP CN/GE=elders yonder
'The elders fed (caused to eat) them (the children).'
[poora.pin 116]
\begin{tabular}{llll} 
Sirapi'u & nomainang & tagu'u & loka. \\
si=rapi='u & N-pong-pa-inang & tagu='u & loka \\
PN/AB=spouse=1SG/GE & RE-SF/PT-CAUS-eat & friend=1SG/GE & banana
\end{tabular}
'My spouse fed my friend a banana.'
[EN97-003.30]
\begin{tabular}{lllll} 
SiYesus & nomainang & lelima & ribu & too. \\
si=Yesus & N-pong-pa-inang & lelima & ribu & too \\
PN/AB=Jesus & RE-SF/PT-CAUS-eat & five & thousand & people
\end{tabular}
'Jesus fed five thousand people.'
[Mark 6:30]
The pa-causative prefix is the only one that follows the general morphophonemic pattern in which the \(p\) phoneme is assimilated and deleted from word roots. In the non-pacausatives nasal assimilation occurs but never deletion of the \(p\) phoneme (see \(\S 10.2 .1\), \(\S 10.2 .3\), and \(\S 3.3\) ). The word bases on which the \(p a\) - prefix has been attested are from the dynamic verb class and the primary transitive class.

Example (20) illustrates the underived form of guru in a dynamic semitransitive construction. In examples (21) and (22) guru 'learn' forms the base of causative verbs 'teach'. Example (21) illustrates the causative derivation of guru in the active voice construction (note that the \(p\) in the \(p a\) is deleted). This also shows that a third argument may or may not be covert in this construction since the dynamic verb guru 'learn' does not require an object. However it is likely that the third core argument here is implicit, since other examples with this verb can be shown to have a third argument with this causativised verb, as shown in (22). Example (22) illustrates the causative derivation of guru in an inverse voice construction (here the third argument is a complement clause).
\begin{tabular}{llll} 
(20) & Ami & monopo & neguru. \\
'ami & mono=po & \(N\)-pe-guru \\
& 1PL.EXC/AB & still=CONT & RE-SF/DY-learn
\end{tabular}
'We were still learning.'
[cekuphil.pin 010]
\(\begin{array}{llll}\text { (21) } & \text { Io } & \text { nomaguru } & \text { jimo. } \\ \text { io } & \text { N-pong-pa-guru } & \text { jimo } \\ & \text { 3SG/AB } & \text { RE-SF/PT-CAUS-learn } & \text { 3PL/AB }\end{array}\)
'He taught them.'
\begin{tabular}{|c|c|c|c|c|c|}
\hline (22) & \begin{tabular}{l}
Ami \\
'ami \\
1PL.EXC/AB
\end{tabular} & \begin{tabular}{l}
nipaguru \\
ni-pa-guru \\
IV/RE-CAUS-learn
\end{tabular} & \begin{tabular}{l}
niama
\[
n i=a m a
\] \\
\(\mathrm{CN} / \mathrm{GE}=\) father
\end{tabular} & \[
\begin{aligned}
& \text { niLori } \\
& \text { ni=Lori } \\
& \text { CN/GE=Lori }
\end{aligned}
\] & \\
\hline & [nongetik & rimesin & ketik.] & & \\
\hline & \(N\)-pong-ketik & \(r i=m e s i n\) & ketik & & \\
\hline & RE-SF/PT-type & LOC=machine & type & & \\
\hline & 'Lori's father ta & aught (cause to learn) & us to type on a typ & writer.' & [cekuphil.pin 008] \\
\hline
\end{tabular}

The pa-causative appears to have formed at least one new lexeme. One source for this view is the fossilised word pate 'kill', which is clearly historically from the word ate 'die'. Contrast the stative realis verb form na-ate 'died' with for example nomate 'killed' in the inverse voice construction formed from nong-pate; note that *nomapate is ungrammatical. \({ }^{6}\) This suggests that historically pa-fused with the root, forming a new lexeme.

The difference in the morphophonemics and the apparent fusion of at least one word with the pa-suggest that if there is a functional distinction between the various causative formatives, then the \(\mathrm{po}_{2}{ }^{-}\)and \(\mathrm{po}_{3}\) may tend to indicate indirect causation and the \(p a\) causative to indicate direct causation. See the definition and discussion in Payne (1997:181-184) for some typological support for this notion; also see Evans (1996:175) for a similar possibility discussed for Kaili (Ledo dialect). This can be illustrated with the word pate 'kill', which although no longer a derived form clearly shows direct physical involvement. Further evidence is given in examples (23) and (24) which contrast the paand the po- causatives respectively. Example (23) shows that the narrator relates a personal story of when my wife and I gave our daughter Lori some medicine to drink, clearly a direct physical involvement. This contrasted with (24) in which guests are often served a hot drink such as tea or coffee, and the guests drink it themselves. Example (23) also shows that sometimes the causand may be marked with the instrument marker nu (see 8.6 for further discussion).
(23) Ila uo moje siLori notumangis
ila 'uo moje si=L. \(N\)-po \(o_{1}\)-[um]-tangis
ABL yonder again \(\mathrm{PN} / \mathrm{AB}=\mathrm{L}\). RE-SF-TEL-cry
nipainuni nuuram.
ni-pa-inung-i nu=uram
IV/RE-CAUS-drink-DIR INSTR=medicine
'After that Lori cried again when they made her drink the medicine.' [Tanjong 040]
(24)
\begin{tabular}{lllll} 
Ami & nipoinungomo & nijimo & ogo & moonda'. \\
'ami & ni-po \({ }_{3}\)-inung=mo & nijimo & ogo & mo-onda' \\
1PL.EXC/AB & IV/RE-CAUS=drink=COMP & 3PL/GE & water & ST/IR-hot
\end{tabular}
'They made us drink hot water.'
[EN97-003.28]

\footnotetext{
\({ }^{6}\) Compare the likely history of this with the directional verb mene' 'go up' which has the related form pene' 'climb' which could be argued to have followed a similar path (or is going in that direction).
}

\subsection*{10.2.3 Stative causative \(\boldsymbol{p o}_{2^{-}}\)and \(\boldsymbol{p o}^{\prime} \boldsymbol{o}_{2^{-}}\)}

This section discusses the causativisation of the stative verb class, which derives a monotransitive verb from an intransitive verb. Stative verbs which are causativised can be in either active voice, as in (25)-(27), or inverse voice as in (28). The causative \(\mathrm{po}_{2}\) - takes vowel harmony following the same pattern as the stative prefix mo-/no-.

A'u nompalalo' lovu'u.
a'u \(\quad\)-pong-po-lalo' lovu='u
\(1 \mathrm{SG} / \mathrm{AB}\) RE-SF/PT-CAUS-deep well=1SG/GE
'I deepened my well.'
[EN97-003.3]
(26) A'u nompe'ide tagu'u.
a'u \(N\)-pong-poz-'ide tagu='u
\(1 \mathrm{SG} / \mathrm{AB}\) RE-SF/PT-CAUS-small friend=1SG/AB
'I belittle my friend.'
[EN97-003.3]
(27) Rapi'u mompoonda’ ogo uo.
rapi='u M-pong-po \({ }_{2}\)-onda' ogo 'uo
Spouse \(=1\) SG/GE IR-SF/PT-CAUS-hot water yonder
'My spouse is heating that water.'
[EN97-003.3]
(28) Aniong no'upotou'.
aniong no'u-po \({ }_{2}\)-tou'
rice 1 SG.IV/RE-CAUS-finish
'I finished off the rice.'
[EN97-002.26]
Examples (29) and (30) show the causative \(\mathrm{po}^{\prime} \mathrm{o}_{2}{ }^{-}\)- with the possessive prefix ' \(o\) - (which also takes vowel harmony, see \(\S 6.6 .2 .2, \S 7.4 .1\), and \(\S 10.6\) ). \({ }^{7}\) Some root bases seem to require this combination, and other root bases do not (it is unknown whether this is speaker preference or is lexically determined). This combination can occur in either active or inverse voice.
\begin{tabular}{lll} 
Unga'u & nipe'esiina' & nutagunyo. \\
unga='u & ni-po'o \({ }^{2}\)-siing- ' & nu=tagu=nyo \\
child=1SG/GE & IV/RE-CAUS-dirty-TZ & CN/GE=friend=3SG/GE
\end{tabular}
'His/her friend made my child dirty.'
[EN97-002.25]
(30) A'u nompo'ombosi’ motor tagu'u.
a'u N-pong-po'o \({ }_{2}\)-mbosi' motor tagu='u
1SG/AB RE-SF/PT-CAUS-good motorcycle friend=1SG/AB
'I fixed my friend's motorcycle.'
[EN97-003.5]

\footnotetext{
7 This analysis is similar to Kaili paka- and Muna feka- analyses, for example, by Barr (1988b) and van den \(\operatorname{Berg}\) (1989:281-282). Further research is necessary to determine whether the Pendau po' \(o_{2}\) - prefix is actually composed of two formatives, that is, causative and the possessive 'have' prefixes. Also note the subcripting differentiates this from the po' \(o_{1}\) - resultative prefix used only with stative prefixes ( \(\$ 10.6\) ).
}

\subsection*{10.2.4 The causative use of -a' on intransitive constructions}

Although the transitiviser suffix \(-a\) ' functions primarily as an applicative (§10.3), sometimes it is as a causative (see Figure 10.4). This section describes the causative use of \(-a\) ' in intransitive constructions found in the locomotion verb class and in the postural verb class. Not all intransitives are clearly causativised when -a' is used, since some can be interpreted as creating a new undergoer (object) rather than a new actor.

In Pendau, \(-a\) ' is also an applicative that derives ditransitive benefactive and instrument clauses from monotransitives ( \(\S 10.3\) ). The cognate Indonesian suffix -kan also functions either as an applicative or as a causative. Payne (1997) notes that Seko Padang (a South Sulawesi language) has a suffix with this double function.
\begin{tabular}{|c|c|c|c|c|c|}
\hline Verb class & Derived verb class & Causative suffix & \multicolumn{3}{|l|}{Underived to derived causative} \\
\hline \multirow[t]{2}{*}{\[
\begin{aligned}
& \text { Locomotion } \\
& (\S 9.3 .4)
\end{aligned}
\]} & locomotion & \multirow[t]{2}{*}{-a'} & & Actor & \\
\hline & primary transitive IV & & Causer & Causee & \\
\hline \[
\begin{aligned}
& \hline \text { Postural } \\
& \text { (§9.4.1) }
\end{aligned}
\] & primary transitive IV & -a' & \begin{tabular}{l}
\(\varnothing\) \\
\(\downarrow\) \\
Causer
\end{tabular} & Actor \(\downarrow\) Causee & \begin{tabular}{l}
Undergoer \(\downarrow\) \\
Causand
\end{tabular} \\
\hline
\end{tabular}

Figure 10.4. Summary of -a' causation in Pendau
Example (31) shows the root lolon 'swim' in an intransitive (locomotion verb class) construction. Example (32) shows a transitive is created when the suffix \(-a\) ' is added in the active voice. Example (33) illustrates the same causativisation of lolon 'swim' in the inverse voice. \({ }^{8}\)
\begin{tabular}{lll}
\(A^{\prime} u\) & nolumolon & ridagat. \\
\(a^{\prime} u\) & \(N\)-po \(o_{1}\) [TEL]-lolon & ri=dagat \\
1SG/AB & RE-SF/LCM-TEL-swim & LOC=ocean
\end{tabular}
'I swam in the ocean.'
[EN97-003.52]
(32)
\begin{tabular}{llll} 
A'u & nolumolona' & unga'u & ridagat. \\
a'u & \(N\)-po \(a_{1}\)-[um]-lolon- \(a\) & unga='u & ri=dagat \\
1SG/AB & RE-SF/LCM-TEL-swim-TZ & child=1SG/GE & LOC=ocean
\end{tabular}
'I took my child swimming in the ocean.'
or: 'I had my child swim in the ocean.'
[EN97-003.52]
(33) Unga'u nilolona'o'u ridagat.
unga='u ni-lolon- \(a\) '='u ri=dagat
child \(=1 \mathrm{SG} / \mathrm{GE} \quad \mathrm{IV} /\) RE-swim-TZ=1SG/GE \(\quad\) LOC=ocean
'I took my child swimming in the ocean.'
or: I had my child swim in the ocean.'
[EN97-003.52]
Example (34) illustrates the noun tagu 'friend' verbalised in an intransitive construction. In examples (35) and (36) the \(-a\) ' creates a transitive clause with the

\footnotetext{
\({ }^{8}\) See \(\S 13.4 .1 .3\) for a discussion of the telic infix -um-, and \(\S 9.3 .4\) for a discussion of the locomotion verbs.
}
denominal notagu 'became friends'. I interpret (36) as a causative (although it could conceivably be an applicative). Example (37) demonstrates the causative function of the transitiviser on the derived noun unga 'child'.
\begin{tabular}{lll} 
Ito & moo & notagumo. \\
'ito & moo & \(N\)-po \({ }_{1}\)-tagu \(=\) mo. \\
1PL.INC/AB this & RE-SF/DE-friend=COMP
\end{tabular}
'We have now become friends.'
[troll.int 046]
(35)
\begin{tabular}{llllll} 
Ndaumo & diang & too & moluar & notagua' & io. \\
ndau \(=\) mo & diang & too & mo-luar & \(N\)-po \({ }^{-}\)-tagu-a' & io. \\
NEG=COMP & EXIS & person & UD/IR-want & RE-SF/DE-friend-TZ & 3SG/AB \\
'There was no longer anyone who wanted to be friends with him.' & [troll.int 003]
\end{tabular}
\begin{tabular}{lll} 
A'u & notagua'omo & bau \\
\(a^{\prime} u\) & \(N\)-po \(0_{1}\)-tagu-a'=mo & bau \\
1SG/AB & RE-SF/DE-friend-TZ=COMP & fish
\end{tabular}
'I now school with fish./I have become a friend of fish.'
\begin{tabular}{lllll} 
No'upo'oungaa' & unga & bengkel & riagana'onyo & sagatus. \\
no'u-po \(0_{1}\)-'o-unga-a' & unga & bengkel & ri=agana'=nyo & sa-gatus \\
1SG.IV/RE-SF-HAVE-child-TZ & child & female & LOC=enough & ONE-hundred
\end{tabular} 'I gave birth to a baby girl on the one-hundredth final one.' [mdtext20.txt 077]

Example (38) illustrates the intransitive verb tundo 'sit', and (39) illustrates the causativisation of this verb.
(38) Bai uo jimo mopotundo ribongkarang uo,....
bai 'uo jimo M-popo-tundo ri=bongkarang 'uo like yonder 3PL/AB IR-SF/POS-sit LOC=hut yonder 'After that they sat down in that hut, (and then the horsefly flew off).' [mdtext17.txt 041]
(39) Nitundoa' nusiina nujuragang ио
ni-tundo- \(a\) ' nu=siina nu=juragang 'иo
IV/RE-sit-TZ CN/GE=mother CN/GE=captain yonder
\begin{tabular}{llll} 
bengkel & uo & rigadera & bulaan. \\
bengkel & 'uo & ri=gadera & bulaan \\
female & yonder & LOC=chair & gold
\end{tabular}
'The captain's mother had the woman sit in the gold chair.' [mdtext15.txt 082]
Some verbs appear to have two meanings (and therefore membership in two verb classes), for example nabu means: 1) fall (stative), and 2) drop (primary transitive), illustrated in (40)-(41).
\begin{tabular}{lll}
\begin{tabular}{ll} 
Odo & uo
\end{tabular} & nanabu. \\
odo & 'uo & no-nabu \\
monkey & yonder & SF/RE-fall
\end{tabular}
'That monkey fell down.'
\begin{tabular}{lllll} 
A'u & monabu, & batuanyo, & tangke-tangke & ri'oo. \\
a'u & M-pong-nabu & batua=nyo & tangke-tangke & ri='oo \\
1SG/AB & IR-SF/PT-drop & meaning=3SG/GE & RED-riddle & LOC=2SG/AB
\end{tabular}
'I will drop the riddle's meaning to you.'
[Sibayu Riddle \#1]
Verb roots such as nabu 'drop', which are polysemous, are not required to take any transitivising morphology. However, in the inverse construction there is no instance of nabu occurring without a suffix. The causative function of \(-a\) ' seems to be required to form the inverse construction, as in (42) and (43). In (42) the man drops two coconuts from the tree, one for himself and one for the woman below. The woman (or 'us') is ellipsed here. In (43) the flying horse bucked the man off, causing him to 'drop' to the ground. So the causand, presumably the ground where he fell to, is ellipsed here. Example (44) shows the directional applicative \(-i\) which requires three arguments (although two arguments are covert). This is an imperative in the inverse form, and the turtle spoken to is ellipsed here as is commonly done to addressees in an imperative. The second object, the banana, is ellipsed as well.
\begin{tabular}{lllll} 
Tarus & ninabua'o'u & lumbag & ruo & nta'u. \\
tarus & ni-nabu-a'='u & lumbag & ruo & nta'u \\
continue & IV/RE-drop-TZ=1SG/GE & young.coconut & two & CLSF
\end{tabular}
‘Then I made two young coconuts drop (to the ground).' [maslia.pin 045]
\begin{tabular}{lllll} 
Sapa & a'u & ninabua' & nupesabeongoto & nao? \\
sapa & a'u & ni-nabu-a, & \(n u=p e\)-sabe-ong=to & \(n a o\) \\
what & 1 SG/AB & IV/RE-drop-TZ & CN/GE=SF-ride-Nloc=1PL.INC.GE & that
\end{tabular}
‘Why did our (flying) horse (lit. the place to ride) drop me?’ [horse.pin 958]
\begin{tabular}{lllll} 
Tagu, & \(a \prime\) n & nabui & nyau & mai! \\
tagu & a'u & nabu-i & nyau & mai \\
friend/VOC & 1SG/AB & drop-DIR & go.down & come
\end{tabular}
'Friend, drop it (=banana) down here to me!' (the turtle speaking to the monkey in the banana tree)
[ceku01.jdb 031]
Examples (45) and (46) use the verb root tangis 'cry'. This is not semantically a locomotion verb, but in Pendau it is in the locomotion verb class. Example (46) verifies that the locomotion verb class is intransitive since an oblique preposition must be used in order for another argument to be used. Example (47) illustrates a clear use of a direct object doi' 'money' when the transitiviser \(-a\) ' is suffixed to the locomotion verb construction (as a causative in this case). This is a transitivised construction based on the root ntama 'enter', which is normally prefixed with the dynamic verb class pe-.
\begin{tabular}{llll} 
Jari & ulasang & moo & motumangis. \\
jari & ulasang & moo & \(M_{-}\)po \(_{1}\)-[um]-tangis \\
so & land. turtle & this & RE-SF/LCM-TEL-cr
\end{tabular}
'So land turtle began to cry.' [turtle.pin 167]
(46)
\begin{tabular}{lll} 
Siinanyo & tarus & notumangis \\
siina=nyo & tarus & \(N_{-p o}\) - \([\) um \(]-\)-tangis \\
mother=3SG/GE & continue & RE-SF/LCM-TEL-cry
\end{tabular}
\begin{tabular}{lll} 
sono & unganyo & uo. \\
sono & unga=nyo & 'uo \\
COM & child=3SG/GE & yonder
\end{tabular}
'Her mother then began to cry with her child.' [ceku03.jdb 063]
\begin{tabular}{lllll} 
SiYesus & nepeliling & jimo, & ayama'o & jimo \\
si=Yesus & N-pepe-liling & jimo & ayama'o & jimo \\
PN/AB=Jesus & RE-SF-watch & 3PL/AB & how & 3PL/AB
\end{tabular}
\begin{tabular}{llllc} 
montumamaa' & doi' & rilalong & nupeti & uo. \\
\(M-\) o \(_{1}-[u m]-\) ntama-a' & doi' & \(r i=\) lalong & \(n u=p e t i\) & 'uo \\
IR-SF/LCM-TEL-enter-TZ & money & LOC=inside & CN/GE=box & yonder
\end{tabular}
'Jesus watched them, how they put the money inside of that box.' [Mark 12:41]

\subsection*{10.2.5 Requestive pe'i-}

The formative \(p e\) ' \(i\) - (with variant \(p e-\) ) creates a requestive verb construction. The description by van den Berg of the Muna locutional causative prefix fe- (1989:201) fits perfectly with the use of \(p e\) ' \(i\) - in Pendau: \({ }^{9}\)

A fe-causative implies that the causer has interacted verbally with the causee with the purpose of having him or her perform an action for the benefit of the causer. Hence the name 'locutional causative'. The normal translation of a locutional causative is therefore 'ask, request, command to do X for the benefit of the subject'. The degree of politeness and compulsion (request versus order) is left unspecified.

Example (48) illustrates a non-causativised transitive with the word pate 'kill' (the directional is obligatory for pate in the inverse construction). Compare (48) with (49) which illustrates that there are three arguments. However it is unclear in example (49) whether the second singular pronoun io 'he/she' is the recipient because of the benefactive applicative or whether it is the causee (as described for typical causative constructions in §10.2). It may be that for a causee of a requestive to appear it must become a recipient of a benefactive (see discussion in \(\S 10.3 .7\) for the overlap between causatives and applicatives).

\footnotetext{
9 Cognate formatives in related Sulawesi languages are discussed in van den Berg (1989:201-202); Donohue (1995:213-215); Evans (1996:183-184); and Barr (1988b). Evans (1996:183) notes that for Kaili (which uses the cognate peki-): 'If one wishes to state the causee overtly, it must be done with a prepositional phrase...Thus while semantically valency is increased, syntactically it is not.' This is also true in Muna (van den Berg 1989:201-202).
}
\begin{tabular}{llllll} 
Sirapinyo & langkai & moo & nipatei & nutoo & nate. \\
si=rapi=nyo & langkai & moo & ni-pate-i & nu=too & no-ate \\
\(\mathrm{PN} / \mathrm{AB}=\) spouse=3SG/GE & male & this & IV/R-kill-DIR & CN/GE=person & ST/RE-die
\end{tabular}
'A person killed this man's wife dead.'

\section*{(49)}
\begin{tabular}{llcl} 
Io & nipe'ipatea'o'u & asu & uo. \\
io & ni-pe'i-pate-a'='u & asu 'uo \\
3SG/AB & IV/RE-REQ-kill-TZ=1SG/GE & dog & yonder
\end{tabular}
'I requested that he/she kill that dog.'
or: 'I requested that someone kill that dog for him/her.'
[EN97-003.54]
Payne (1997:177) states that in many languages there are other valency increasing operations that have the same pattern as the causative. This can be easily demonstrated with the formulas used in predicate calculus. The causative formula can be represented as CAUS( \(\mathrm{x},(\mathrm{P})\) ) (see the introduction in \(\S 10.2\) for this discussion). The requestive formula can be represented as REQ(x,(P)) (note that Payne uses 'ASK' where I have used 'REQ').

It is unclear from the little data that I have on requestives whether there is a real causee in these constructions or not. The requestive pe'i- can be used in either active or inverse voice constructions as shown in (50)-(54). All of these last examples illustrate that if there is a causee it is a covert argument.
(50)

Unga numanusia repe'ira'op
unga nu=manusia ro-pe'i-ra'op
child \(\quad \mathrm{CN} / \mathrm{GE}=\) mankind IV/IR-REQ-capture
\begin{tabular}{llll} 
nuImam-imam & \(o\) & nuguru-guru & Agama, \\
nu=imam-imam & \(o\) & nu=guru-guru & agama \\
CN/GE=RED-religious.leaders & and & CN/GE=RED-teacher & religion
\end{tabular}
\begin{tabular}{lllll} 
paey & io & repe'irukum & nijimo & maate. \\
paey & io & ro-pe'i-rukum & nijimo & mo-ate \\
and.then & 2SG/AB & IV/IR-REQ-judge & 3SG/GE & ST/IR-die
\end{tabular}
'The religious leaders and the religious teachers will order the Son of Man to be captured, and then they will ask that He be judged to die.'
[Mark 10:33]
(51) A'u me'ipogutua' piso'u.
a'u M-pe'i-po \(1_{1}\)-gutu-a' piso='u
1SG/AB IR-REQ-SF/FA-make-TZ machete=1SG/GE
'I request that you create my machete (for me).'
[asu2.pin 125]
(52) A'u me'iротbayu paee.
a'u \(\quad\)-pe'i-po \({ }_{1}\)-mbayu paee
1SG/AB IR-REQ-SF-pound seed.rice
'I will request that someone pound the rice.'
[EN97-003.49]
(53) Paee nipe'ipombayu'u.
paee ni-pe'i-po \({ }_{1}\)-mbayu='u
rice \(\quad \mathrm{IV} / \mathrm{RE}-\mathrm{REQ}-\mathrm{SF} / \mathrm{FA}-\) pound \(=1 \mathrm{SG} / \mathrm{GE}\)
'I requested someone to pound the rice.'
[EN97-003.49]
\begin{tabular}{lll} 
Nipe'i'aia'onyomo & too & totolu uo. \\
ni-pe'i-'ai-a'=nyo=mo & too & totolu 'uo \\
IV/RE-REQ-call-TZ=3SG/GE=COMP & person & three yonder
\end{tabular}
'He requested the three men there to be called (to him).'
[natal01.pin 015]
Example (55) shows that the lexeme mongi 'request, beg' can also take the requestive prefix and the requestive increases the valency (with the causee a covert argument).
\begin{tabular}{lll} 
A'u & me'ipomongi & vea. \\
\(a^{\prime} u\) & M-pe'i-po \({ }_{1}\)-mongi & vea
\end{tabular}

1SG/AB IR-REQ-SF/FA-request raw.rice
'I asked someone to request rice.'
[EN97-003.52]
There are some verbs which only take the pe-formative and it is clear that this is a variant form of pe'i-. Examples (56) and (57) show that pe-may be used in both the active and inverse voice clause constructions. Both examples illustrate that the causand can be covert (in these cases the subject of teaching).
(56) Tagu'u nipepaguru'u.
tagu='и ni-pe-pa-gurи='и
friend \(=1 \mathrm{SG} / \mathrm{GE} \quad\) IV/RE-REQ-CAUS-learn=1SG/GE
'I sent (requested) my friend to teach.'
[EN97-002.23]
\begin{tabular}{lll} 
A'u & терераguru & tagu'u. \\
a'u & М-pe-pe-pa-guru & tagu='u \\
1SG/AB & IR-SF/DY-REQ-CAUS-learn & friend=1SG/GE
\end{tabular}
'I asked for my friend to teach.'
[EN97-002.23]
Example (58) illustrates the ditransitive sambale 'butcher, slaughter'. Although there is no surface causee, there is arguably a covert argument (even if only implied semantically). It remains to be tested whether a syntactic increase in valency actually occurs, but minimally there is a semantic increase in transitivity. Example (59) illustrates a ditransitive clause without the requestive, and (60) shows that another argument can be added (although it is also covert here). Future research will need to be done to verify that all four (potential) core arguments can occur on the surface.
\begin{tabular}{lllll} 
Nyaa-nyaa & io & moo & nao & siYohanis \\
nyaa-nyaa & io & moo & nao & \(s i=\) Yohanis \\
RED-don't & 3SG/AB & this & that & \(\mathrm{PN} / \mathrm{AB}=\) John
\end{tabular}
\begin{tabular}{llc} 
tono'upe'isambale & ba'inyo & uo. \\
to=no'u-pe'i-sambale & ba'i=nyo & 'uo \\
RM=1SG.IV/RE-REQ-slaughter & head=3SG/GE & yonder \\
'Don't let that be John whom I had ordered to be beheaded.'
\end{tabular}
[Mark 6:15]
(59)
\begin{tabular}{lll} 
Sarampang & niponyapora'o'u & babi. \\
sarampang & ni-pong-sapor-a'='u & babi \\
barbed.spear & IV/RE-SF-spear-TZ=1SG/GE & pig
\end{tabular}
'I speared the pig with a barbed fish spear.'
[EN97-003.61]
(60) Sarampang nipe'iponyapora'o'u babi.
sarampang ni-pe'i-pong-sapor-a'='u babi
barbed.spear IV/RE-REQ-SF-spear-TZ=1SG/GE pig
'I requested that a barbed fish spear be used to kill the pig.'
[EN97-003.61]

\subsection*{10.3 Applicatives}

\subsection*{10.3.1 Introduction}

Causatives and applicatives both typically increase the transitivity of a verb by adding one argument to its valency creating transitive verbs from an intransitive verb root, and ditransitive verbs from a monotransitive verb root (Katamba 1993:270-272, Payne 1997:186-191). The difference between causatives and applicatives is that the causative introduces a new Actor argument and the applicative licenses or 'applies' a new nonActor argument. Figure 10.5 summarises the applicatives and their functions. Pendau has two applicative suffixes that can be added to intransitives and transitives, increasing their valency. These are the transitiviser \(-a\) (TZ) and the directional -i (DIR).

The applicative affixes can also be used with other functions. In this discussion I deal with the purely syntactic valency affecting uses first ( \(\S 10.3 .2-3\) ), then other uses (§10.3.45). Like other transitives and ditransitives in Pendau, most applicative forms occur in both active and inverse constructions ( \(\S 10.3 .2\) ). However, a few applicative forms only occur in the inverse construction (§10.3.3).
\begin{tabular}{|l|l|l|}
\cline { 3 - 3 } \multicolumn{1}{c|}{} & Suffix & \begin{tabular}{l} 
Semantic roles of \\
applied argument
\end{tabular} \\
\hline Directional (DIR) & \multirow{2}{*}{\(-i\)} & goal \\
\cline { 3 - 3 } & locative \\
\hline Transitiviser (TZ) & \multirow{2}{*}{\(-a^{\prime}\)} & benefactive \\
\cline { 3 - 3 } & & instrument \\
\hline
\end{tabular}

Figure 10.5. Applicatives and their basic functions

Ditransitives can also occur in the inverse voice construction, as shown in (61)-(64). The first thing one should notice is that the non-A arguments take the same case marking as they would take in active voice, whether absolute (for example, (61)-(63)) or instrumental, as in (64). Example (61) shows a 'give' clause (bagi 'give' always requires
one of the two applicative suffixes, as in (61) and (66)) \({ }^{10}\), (62) shows the applicative \(-a\) ' as a benefactive construction (compare to (61)), (63) shows a causative construction, and finally (64) shows an instrument clause with the NP marked with \(n u\). The annotations in examples (61)-(65), (68)-(69), (81), (83) and (84) can be interpreted in this way (from top to bottom): the first row identifies the position of etic macroroles; the second maps the semantic roles for a particular macrorole position; and the third row identifies the emic grammatical relations.
\begin{tabular}{llll} 
A'u & sura & nibagii & nuodo \\
a'u & sura & ni-bagi-i & nu=odo \\
1SG/AB & only & IV/RE-give-DIR & CN/GE=monkey \\
P=Pivot & & & A \\
Recipient & & Agent \\
SUBJECT & & OBJECT \\
'The monkey only gave me its skin (banana peeling).'
\end{tabular}
ulinyo.
uli \(=\) nyo
skin=3SG/GE
\(3^{\text {rd }}\) argument
Theme
\(2{ }^{\text {nd }}\) OBJECT
'The monkey only gave me its skin (banana peeling).'
[EN97-003.13]
(62)
\begin{tabular}{lll} 
Io & niolia'o'u & vea. \\
io & ni-oli-a'='u & vea \\
3SG/AB & IV/RE-buy-TZ=1SG/GE & rice \\
P=Pivot & & A
\end{tabular}
'I bought him/her rice.'
[EN97-003.59]
(63)
\begin{tabular}{llll} 
Tagu'u & nipainang & nirapi'u & loka uo. \\
tagu='u & ni-pa-inang & ni=rapi='u & loka 'uo \\
friend=1SG/GE & IV/RE-CAUS-eat & PN/GE=spouse=1SG/GE & banana yonder \\
P=Pivot & & A & \(\mathbf{3}^{\text {rd }}\) argument \\
Causee & & Causer & Causand \\
SUBJECT & & OBJECT & \(\mathbf{2}^{\text {nd }}\) OBJECT
\end{tabular}
'My spouse fed my friend that banana.'
[EN97-003.30]
(64)
\begin{tabular}{lllll} 
Japing & uo & nisambale & niYusup & nupiso. \\
japing & 'uo & ni-sambale & ni=Yusup & nu=piso \\
cow & yonder & IV/RE-butcher & PN/GE=Joseph & INSTR=machete \\
P=Pivot & & & A & \(\mathbf{3}^{\text {rd }}\) argument \\
Theme & & & Agent & Instrument \\
SUBJECT & & & OBJECT & \(\mathbf{2}^{\text {nd }}\) OBJECT
\end{tabular}
'Joseph butchered that cow with the machete.'
[EN97-002.35]
The second thing to note is that when the constructions in (61)-(64) are compared to the examples in §10.3.2.1.1, the second object remains the final core argument in both active and inverse voice constructions, but in contrast to those examples which are in the active voice the first object has become the pivot. Since this first object can be considered to be

\footnotetext{
10 Although there are a few exceptions, these appear to be mistakes since the word bagi always ends with the same vowel as the directional suffix. Therefore it is advisable to consider these as typographical errors, etc.
}
the P argument (or undergoer), it is no different than monotransitive inverse voice constructions in which the P argument is the pivot. So all of these types of ditransitives (including the \(-a\) ' applicative) function in the same way in either the active voice or the inverse voice constructions. \({ }^{11}\)

\subsection*{10.3.2 Applicatives that occur in both active and inverse constructions}

This section discusses applicatives that can occur in both active and inverse clause constructions. Section 10.3.2.1. presents the benefactive applicative and §10.3.2.2 the directional goal applicative.

\subsection*{10.3.2.1 The benefactive applicative - \(\boldsymbol{a}\),}

Benefactive clauses by definition require three arguments, so the applicative \(-a\) ' does not form transitive benefactive clauses from intransitive clauses (although the \(-a\) ' can function as a causative to form transitives from some intransitive verbs, see §10.2.4).

\subsection*{10.3.2.1.1 Benefactive applicative in the active voice}

Ditransitive clauses have three core arguments. The normal word order for ditransitive clauses is for the third argument to follow the linear sequence of the A and P arguments (last position of all core arguments), as in (65)-(67). The third argument is usually a theme, causand, or instrument. Exceptions to this word order will be discussed later (§10.3.6), but elicitation shows that the third argument can be in several other positions (not all are normally found in texts though) as long as the relative ordering of the A and P is not violated ( \(\S 10.3 .6\) ). (See \(\S 12.1-3\) and \(\S 6.2\) on transitive verbs and the word orders for active voice and inverse voice, also see Quick 1997a, 1999a, 1999b, 2001, and 2002.)

Examples (65)-(67) illustrate the transitiviser \(-a^{\prime}\) as a benefactive applicative, and shows that the second argument (the P argument \(=\) undergoer) and the third argument \({ }^{12}\) of all ditransitives (except for non-subject instrument noun phrases) are marked by the absolute case (zero marking for common nouns, see \(\S 6.2\) and \(\S 7.5 .1\) ). \({ }^{13}\)
\begin{tabular}{|c|c|c|c|c|}
\hline (65) & A'u & mongolia' & io & vea. \\
\hline & \(a^{\prime} u\) & M-pong-oli-a' & io & vea \\
\hline & 1SG/AB & IR-SF/PT-buy-TZ & 3SG/AB & rice \\
\hline & A=Pivot & & P & \(3^{\text {rd }}\) argument \\
\hline & A=Pivot & & Recipient & Theme \\
\hline & SUBJECT & & OBJECT & \(2^{\text {nd }}\) OBJECT \\
\hline
\end{tabular}
[EN97-003.58]

\footnotetext{
\({ }^{11}\) The fact that \(-a\) ' is a causative on inherent intransitives and an applicative on inherent monotransitives demonstrates that active voice and inverse verbal constructions are both transitive because both increase valency in the same way. Active voice with the \(-a\) ' creates a benefactive construction which is ditransitive. If the inverse voice construction was inherently intransitive then the affixation of the \(-a\), should produce a causative construction that is monotransitive, but in fact it parallels the active voice construction and produces a benefactive ditransitive construction.
12 There is no commonly agreed terminology for this. One option is to view this as a second undergoer.
\({ }^{13}\) See Andrews (1985) and Dryer (1986) for a discussion of first and second objects (or as primary and secondary objects in the latter article).
}
\begin{tabular}{lllll} 
(66) \begin{tabular}{l} 
A'u
\end{tabular} & mombagia' & oo & bulaan. \\
a'u & M-pong-bagi-a' & 'oo & bulaan \\
& 1SG/AB & IR-SF/PT-give-TZ & 2SG/AB & gold
\end{tabular}
'I will give you gold.'
\begin{tabular}{lllll} 
Jimo & meloloa' & ami & bau & nudagat. \\
jimo & M-pe-lolo-a' & 'ami & bau & nu=dagat \\
3PL/AB & IR-SF/DY-look-TZ & 1PL.EXC/AB & fish & CN/GE=ocean \\
'They are looking for ocean fish for us (exc.).'. & &
\end{tabular}

\subsection*{10.3.2.1.2 Benefactive applicative in the inverse construction}

Examples (68) and (69) demonstrate the three arguments in benefactive applicatives in the inverse construction. These examples annotate the arguments for recipient, agent, and theme.

> (68)
\begin{tabular}{llllll} 
Maala & \(a^{\prime} u\) & roolia' & miu & kaeng & salana? \\
ma-ala & \(a^{\prime} u\) & ro-oli-a, & miu & kaeng & salana \\
UD/IR-may & 1SG/AB & IV/IR-buy-TZ & 1PL.EXC/GE & cloth & pants \\
& & P=Pivot & & A & \(3^{\text {rd }}\) argument \\
& & Recipient & & Agent & Theme \\
& & SUBJECT & OBJECT & \(\mathbf{2}^{\text {nd }}\) OBJECT
\end{tabular}
'Can you (hon. pl. for sg.) buy me cloth pants?'
[king.pin 135]
(69)
\begin{tabular}{llll} 
Tarus & SiKatira & nipogutua' & nijimo \\
tarus & \(s i=K\). & ni-po \({ }_{1}\)-gutu-a' & nijimo \\
continue & PN/AB=K. & IV/RE-SF/FA-make-TZ & 3PL/GE \\
& & \begin{tabular}{l} 
P=Pivot
\end{tabular} \\
& & Recipient & \\
& & SUBJECT &
\end{tabular}
'Then they made a garden hut for Katira.'
Examples (70) and (71) illustrate that the recipient may be covert.
(70) Nibagia' nigibang pepitu karung moje.
ni-bagi-a' ni=gibang pepitu karung moje
IV/RE-give-TZ PN/GE=water.monitor seven sack more
'The water monitor gave (him) seven more sacks.'
(71) Paey nialapa' nuponungaonyo ogo.
paey ni-alap-a, nu=ponungao=nyo ogo
and.then IV/RE-get-TZ CN/GE=nephew/niece=3SG/GE water
'And then the nephew got water (for the horse).'
[horse.pin 950]

Example (72) illustrates that the agent may be covert.
```

(72) Jimo uо nisambalea'omo manu' sensiama.
jimo 'иo ni-sambale-a'=mo manu' sensiama
3PL/AB yonder IV/RE-butcher-TZ=COMP chicken male
'(They) butchered a rooster for them.' or: '(They) butchered them a rooster.'

```

Example (73) illustrates the use of the factive verb gutu 'make, create' which requires the stem former \(p o_{1}\) - in the inverse voice construction (see \(\S 4.3\) and \(\S 9.2 .3\) on verb classes and their stem formers). In (73) we see the use of the benefactive \(-a\) ' on a factive verb in inverse voice. The argument piso 'machete' can be omitted since it is clear in the context that the topic is the machete.

Examples (74) and (75) illustrate that although the word order positions of the P argument and the second object can be swapped, the pivot remains the P argument, io 'he, she'. Note also that this word formation is ambiguous with an instrumental applicative (see (155)), but the semantics of this clause disambiguates it.
\[
\begin{aligned}
& \text { (74) Io nipogabua'o'u vea. } \\
& \text { io ni-po-gabu-a'='u vea } \\
& \text { 3SG/AB IV/RE-SF/FA-cook-TZ-1SG/GE raw.rice } \\
& \text { 'I cooked rice for him/her.' }
\end{aligned}
\]
[EN97-003.59]
(75)

Vea nipogabua'o'u io
vea ni-po-gabu-'='u io
raw.rice IV/RE-SF/FA-cook-TZ-1SG/GE 3SG/AB
'I cooked rice for him/her.'
[EN97-003.59]
10.3.2.1.3 Benefactives and causatives with oblique sono 'with' as a core argument

This section shows some data in which an apparent core argument is marked by the oblique comitative sono 'with, to, together'. This is contrary to what is expected in clauses with applicatives and causatives.

Examples (76) and (77) show that the comitative sono 'with, to, together' can occur in one of two word order positions that the second object would normally occur in. Also note that the semantic role of the sono phrase here is the recipient. The recipient is normally understood to be the first object in benefactive constructions which do not use sono.
\begin{tabular}{lllllll} 
Ula & иo & nombagia' & doi' & sono & langkai & uo \\
ula & 'uo & N-pong-bagi-a' & doi' & sono & langkai & 'uo \\
snake & yonder & RE-SF/PT-give-TZ & money & COM & male & yo \\
'That snake gave the money to that man.' & & & {\([\mathrm{m}\)}
\end{tabular}
\begin{tabular}{lllll} 
(77) & \begin{tabular}{ll} 
Nibagia'onyo & sono
\end{tabular} & juragang & loka & uo. \\
ni-bagi-a' \(=n y o\) & sono & juragang & loka & 'uo \\
IV/RE-give-TZ=3SG/GE & COM & captain & banana & yonder
\end{tabular}
'He gave the captain the bananas.' or: 'He gave the bananas to the captain.'
[mdtext15.txt 018]
Examples (78) and (79) also show the causee in the expected second object position (normally the causand position) is marked with the oblique comitative sono 'with, together, to'. Example (80) shows that the same verb construction as in (79) does not require the comitative sono.
\begin{tabular}{|c|c|c|c|}
\hline Tarus & nipoitoa' & nuodo & ио \\
\hline us & ni-po \({ }_{1}\)-ito-a' & nu=odo & 'иo \\
\hline continue & IV/RE-CAUS-look-TZ & CN/GE=monkey & onder \\
\hline
\end{tabular}
\begin{tabular}{llll} 
urang & uo & sono & bakaka. \\
urang & uo & sono & bakaka \\
shrimp & yonder & COM & kingfisher
\end{tabular}
'And continuing on the monkey showed the shrimp to the kingfisher.'
[EN97-004.38; mdtext6.doc]
\begin{tabular}{lllcccc} 
Odo uo & mompoitoa' & urang & sono & bakaka & (uo). \\
odo & uo & M-pong-po \\
-ito-a' & urang & sono & bakaka & 'uo \\
monkey yonder & IR-SF/PT-CAUS-look-TZ & shrimp & with & kingfisher & yonder \\
'That monkey will show the shrimp to the kingfisher.' & & [EN97-004.38]
\end{tabular}
(80)
\begin{tabular}{lll} 
Tarus & nipoitoa' & niYusup \\
tarus & ni-po \({ }_{3}\)-ito-a, & ni=Yusup \\
continue & IV/RE-CAUS-look-TZ & PN/GE=Joseph
\end{tabular}
\begin{tabular}{llll} 
siama & niLori & gambar & uo. \\
siama & ni=Lori & gambar & 'uo \\
father & PN/GE=Lori & picture & yonder
\end{tabular}
'Continuing on Joseph showed Lori's father that picture.'
[EN97-004.39]
More data and research will be necessary in order to determine if the sono is really a core argument. It can be tentatively concluded that the sono marks a dative-like grammatical relation in certain applicative and causative constructions. In these cases it may be the semantic goal of the second object (Andrews 1985).

\subsection*{10.3.2.2 The directional goal applicative -i on inverse voice ditransitives}

When the directional suffix -i is productive it has the A move towards the P , or do something within or approaching the spatial confines of the P (also see §10.3.3.5). A verb with the suffix -i allows the agent to participate in a locative or otherwise deictic sense of the verb with the P which would not otherwise be allowable except with an oblique argument. Evans (n.d.) states about the cognate -Ci in Ledo (Kaili): 'Syntactically it increases the valency by raising an oblique object to direct object. Semantically it means
to apply that activity to a certain place.' See §10.3.5.1 for discussion and examples in which the -i increases semantic transitivity but there is no increase in valency.

Example (81) shows that the verb bagi 'give' requires three arguments. The semantic roles are annotated below each argument.
\begin{tabular}{llll} 
Ito & nibagii & nuSiopu & dale. \\
'ito & ni-bagi-i & nu=Siopu & dale \\
1PL.INC/AB & IV/RE-give-DIR & CN/GE=Lord & gift \\
P=Pivot & & A & \(3^{\text {rd }}\) argument \\
Recipient & & Agent & Theme \\
SUBJECT & & OBJECT & \(\mathbf{2}^{\text {nd }}\) OBJECT
\end{tabular}
'The Lord gave us a gift.'
[mdtext20.txt 044]
Example (82) illustrates the verb nabu 'drop' used here with only one overt argument (recipient). The addressee/agent is implied by the imperative construction (but referred to with the vocative tagu 'friend') and the banana (second object/theme) that is requested to be dropped from the tree is obvious from the story's context.
\begin{tabular}{lllll} 
Tagu, & \(a \prime u\) & nabui & nyau & mai! \\
tagu & a'u & nabu-i & nyau & mai \\
friend/VOC & 1SG/AB & drop-DIR & go.down & come
\end{tabular}
'Friend, drop it (=banana) down here to me!' (the turtle speaking to the monkey in the banana tree)
[ceku01.jdb 031]

\subsection*{10.3.3 Applicatives that occur only in inverse constructions}

\subsection*{10.3.3.1 Introduction}

This section describes a second kind of applicativisation which could be called 'second object applicativisation'. This is a promotion from the second object position to the grammatical subject position in the inverse construction. \({ }^{14}\) 'Second object applicativisation' contrasts with those applicatives which may occur in either voice ( \(\S 10.3 .2\) ), since this process only occurs in inverse voice construction. \({ }^{15}\) The other difference is that those applicatives create the second object position.

To form this second type of applicative, the same two suffix applicatives -i and -a' are used in combination with the stem former \(p V(C)\)-. Figure 10.6 illustrates how the word formation works. When the \(-a\) ' suffix is used an instrument is the pivot as in (83), and with the use of the \(-i\) suffix a locative noun phrase is the pivot as in (84).

\footnotetext{
\({ }^{14}\) Just as an undergoer (P argument) can be the grammatical subject, the third argument can be swapped with the P argument's position when this applicativisation process occurs. This results in promoting it from a lower position to the highest position, that is, to the grammatical relation subject (see also §6.4).
\({ }^{15}\) It is not necessary to show invalid counterparts, as what might be construed to be the counterparts result in different applicative constructions as described in \(\S 10.3 .2\), for example, benefactives in active voice. Non-pivot instruments of course do not require applicativisation as the instrument marker nu precedes the instrument phrase in either active or inverse voice.
}

'The grandfather butchered the cow at/by that house.'
In addition to these straightforward applicatives, there are additional inverse voice constructions, involving an applicative suffix plus an additional stem forming \(p V(C)\) prefix, which can be used to promote an instrumental or locative noun phrase to the subject position. Structurally Pendau is quite similar to Indonesian in many aspects of its grammar. However, the constructions that raise instrument and locative noun phrases to subject position are an important exception to this similarity. These constructions have more in common with the 'instrument focus' and 'locative focus' constructions found in Philippine-type languages. \({ }^{16}\)
\begin{tabular}{|l|l|l|l|l|}
\hline Subject & RE/IR & Stem former & BASE & Applicative \\
\hline Locative & \multirow{2}{*}{ ni-/ro- } & \(\mathrm{pV}(\mathrm{C})-\) & \multirow{2}{*}{} & \\
\cline { 1 - 1 } Instrumental & & & & \(-i\) \\
\cline { 5 - 5 } & & & & \\
\hline
\end{tabular}

Figure 10.6. Instrumental and locative applicative formation

\subsection*{10.3.3.2 The instrumental applicative -a,}

This section demonstrates that the instrument noun phrase can become the subject of the clause via applicativisation.

When the instrument noun phrase becomes pivot through applicativisation it is not normally indicated by any case marker. When the instrument noun phrase is not the pivot it obligatorily takes the case marker \(n u=\). The pivot status of the instrument is indicated by word order (that is, occurrence in the pre-verbal argument position), and is morphologically marked on the verb by the combination of a prefix and the benefactive \(-a\) '. The prefix can vary depending on which root is taking instrument focus. The prefix is

\footnotetext{
\({ }^{16}\) Note that there is not a corollary 'benefactive focus' in Pendau, since benefactives can appear in either active voice or inverse voice, and the recipient becomes the pivot in inverse voice just as any other monotransitive P argument would.
}
normally a stem former from one of the verb classes, abbreviated here as \(p V(C)-.^{17}\) Example (85) is from a folk tale about a man who is looking for a blacksmith. He finds the blacksmith and asks him to make a machete from his axe (that is, by forging it).

\section*{(85) Baliungo'u mupogutua'omo piso. \\ baliung=' \(u \quad\) mu-po \(o_{1}\) gutu-a' \(=m o \quad\) piso \\ axe=1SG/GE 2SG.IV/IR-SF/FA/INSTR-make-TZ=COMP machete}
'You make machetes for me by using my axe.'
Example (86) shows that the pivot instrument noun phrase can be implied from the context. The noun doi' 'money' is in parentheses because elicitation shows that this is what could fit here in the story's context.
\begin{tabular}{lll} 
(Doi') & upongongkosa' & unga'u \\
doi' & 'u-pong-ongkos-a' & unga='u \\
money & 1SG.IV/IR-SF/PT/INSTR-cost-TZ & child=1SG/GE
\end{tabular}
'I will use (the money) to pay for my child.'
Examples (87)-(89) illustrate the instrument in the pre-verbal position with the A and the P arguments in post-verbal positions with three different verbs.
\begin{tabular}{lllll}
...paey & uram & uo & nirembasa'onyo & unga. \\
paey & uram & 'uo & ni-rembas-a'=nyo & unga \\
and.then & medicine & yonder & IV/RE-hit-TZ=3SG/GE & child
\end{tabular}
'...and then he applied the medicine on the child.'
(88) Batu niporampaa'o'и io.
batu ni-pong-rampa-a'='u io
rock IV/RE-SF/PT/INSTR-throw-TZ=1SG/GE 3SG/AB
'He threw a rock at me.'
Patolo niponulisa'o'u surat.
piso ni-pong-tulis- \(a\) '='u surat
machete yonder IV/RE-SF/PT/INSTR-write-TZ=1SG/GE letter
'I used a pencil to write a letter.'
[EN97-003.63]
Example (90) shows the pivot noun phrase again in the pre-verbal position. There is a restriction to where it appears, however, as shown by the unacceptable example in (91).

\footnotetext{
\({ }^{17}\) However, note that some verbs have a stem former which already fills the prefix prerequisite, for example, 'gabu, pogabu' 'cook', and therefore it is only the benefactive suffix that is added which turns the verb construction into instrument focus in combination with the appropriate word order. Contrast this with the factive nipogutua' 'make, create (IV/RE)', in (73), which has the same affix combination but is a benefactive construction. Technically the verb form in example (73) is ambiguous between a benefactive formed verb and an instrument formed verb clause. However, even though the pivot argument is omitted, context and elicitation showed that this example is in fact a benefactive clause.
}


Note that examples (92) and (93) are identical in structure to the last ungrammatical example, except that they substitute the question word sapa 'what' in each of the nonagent core argument positions. These examples further clarify the reason why (91) is not acceptable. These will be further discussed in §10.3.3.3.
\begin{tabular}{lllll} 
(92) \begin{tabular}{ll} 
!Sapa & nipongkologa'
\end{tabular} & niDesmon & sensar & uo? \\
sapa & ni-pong-'olog-a' & ni=Desmon & sensar & 'uo \\
what & IV/RE-SF/PT/INSTR-cut-TZ & PN/GE-Desmon & chainsaw & yonder \\
& 'What did Desmon use to cut the chainsaw?' & &
\end{tabular}
\begin{tabular}{lllll} 
(93) \begin{tabular}{lll} 
!'Ayu & uo & nipongkologa'
\end{tabular} & niDesmon & sapa? \\
'ayu & 'uo & ni-pong-'olog-a' & ni=Desmon & sapa \\
wood & yonder & IV/RE-SF/PT/INSTR-cut-TZ & PN/GE-Desmon & what
\end{tabular}
'What did Desmon cut with the wood?' (that is by using the wood)
Example (94) shows that the instrument case marker nu= may appear optionally (at least in an elicitation session). However my language assistant suggested that this sentence would be better without the \(n u\) particle. \({ }^{18}\)

'Desmon used a chainsaw to cut that wood.'
Examples (95) and (96) contrast pivot and non-pivot instrument noun phrases and the use and non-use of the \(p o_{1}{ }^{-}\)prefix. Example (97) illustrates an instrument noun phrase pivot which uses the primary transitive stem former pong- prefix.

Paee rosunung nijimo nuuram.
paee ro-sunung nijimo nu=uram
rice IV/IR-burn 3PL/GE INSTR=medicine
'They burned (or smoked) the rice with medicine.'

\footnotetext{
18 This suggests that when the non-pivot instrument noun phrase marker is used it is a core argument.
}
(96) Uram roposununa' nijimo paee.
uram ro-po \({ }_{1}\)-sunung-a' nijimo paee
medicine IV/IR-SF/INSTR-burn-TZ 3PL/GE rice
'They burned (or smoked) the rice with medicine.'
\begin{tabular}{lllllll} 
Doi' & moluar & ropongolia' & nijimo & gulang o & pita & nilon. \\
doi' & mo-luar & ro-pong-oli-a' & nijimo & gulang o & pita & nilon \\
money & UD/IR-want IV/IR-SF/PT-buy-TZ & 3PL/GE & rope & and ribbon & nylon
\end{tabular}
'They wanted to buy rope and fishing line with (their) money.'
Example (98) demonstrates that reciprocal and instrumental affixes can combine in the same verb.
\begin{tabular}{llllll} 
Ogo & uo & niposiponuana' & nijimo & api & uo. \\
ogo & 'uo & ni-posi-pong-tuang-a' & nijimo & api & 'uo \\
water & yonder & IV/RE-REC-SF/PT-pour-TZ & 3PL/GE & fire & yonder
\end{tabular}
'Together they poured water on the fire.' (it is implied that water is taken from one place or container)

\subsection*{10.3.3.3 The 'what' test in applicative instrument clauses}

Previous sections have described several Pendau applicative constructions including benefactive (§10.3.2.1), directional (§10.3.2.2, §10.3.5.1), instrument (§10.3.3.1-4), and then later the locative (§10.3.3.5). The latter two applicative constructions resemble Philippine instrument focus and locative focus syntactic constructions. This section will briefly look at how using the content question sapa 'what' in elicitation highlights the word order position of instrument NPs in instrumental applicativisation (I will look only at the canonical SVO word order; see \(\S 16.3\) for discussion of interrogatives). There are two reasons for using the 'what' test:
- Using sapa 'what' in the instrument position reveals that it is a semantic rather than a grammatical prohibition on the use of atypical objects as an instrument
- It demonstrates that the NP in the pre-verbal word order position is assigned instrument status from the verb's applicative construction

In applicativised instrument clauses the instrument NP is placed in the subject position. This is illustrated in example (99).
(99) Sensar ио nipongkologa' niDesmon aуи ио.
sensar 'иo ni-pong-'olog-a' ni=Desmon 'ayu 'иo
chainsaw yonder IV/RE-SF/PT-cut-TZ PN/GE-Desmon wood yonder
'Desmon used a chainsaw to cut that wood.'
Example (100) shows that the instrument and the P argument cannot simply reverse word positions (although the instrument can be in the word final position if it is also marked with the instrument case marker \(n u=\); also note that ayu 'wood' can be the subject in a simple two argument inverse voice construction).
```

(100) *Ayu uo nipongkologa' niDesmon sensar uо.
'ауи 'иo ni-pong-'olog-a' ni=Desmon sensar 'uo
wood yonder IV/RE-SF/PT-cut-TZ PN/GE=Desmon chainsaw yonder
'*Desmon used wood to cut that chainsaw.'

```

In example (101)—a modification of example (99)—sensar 'chainsaw' is substituted by the question word sapa 'what'. This results in a well formed sentence. However if the same construction as (100) is used, substituting ayu 'wood' with sapa 'what', as in (102), then the sentence is accepted with some reticence. If (100) is again used substituting sensar 'chainsaw' with sapa 'what', as in (103), this again is accepted with some reservation. Although the use of the question word 'what' transforms these into grammatically acceptable clauses, they are semantically strange because it is not normal to cut a chainsaw, nor is it normally possible to cut something with wood. These examples further demonstrate that the NP in the pre-verbal position is both the instrument and the pivot (or 'instrument focus').
(101) Sapa nipongkologa' niDesmon ayu uo?
sapa ni-pong-'olog-a' ni=Desmon 'ayu 'ио
what IV/RE-SF/PT-cut-TZ PN/GE=Desmon wood yonder
'What did Desmon use to cut that wood with?'
[EN97-004.45]
(102) !Sapa nipongkologa’ niDesmon sensar uo?
sapa ni-pong-'olog-a' ni=Desmon sensar 'uo
what IV/RE-SF/PT-cut-TZ PN/GE-Desmon chainsaw yonder
'What did Desmon use to cut the chainsaw?'
\begin{tabular}{rllll} 
(103) !Ayu & uo & nipongkologa' & niDesmon & sapa? \\
'ayu & 'uo & ni-pong-'olog-a, & ni=Desmon & sapa \\
wood & yonder & IV/RE-SF/PT-cut-TZ & PN/GE-Desmon & what
\end{tabular}
'What did Desmon cut with the wood?' (that is by using the wood)

\subsection*{10.3.3.4 Portmanteau of the causative prefix and the instrument applicative stem former}

Examples (104) and (105) differ only in word order, specifically in which NP is in pivot position. The causative prefix serves a double function when the instrument noun phrase is the pivot. First it is used to mark the derivational lexeme 'feed' derived from 'eat', as in (104), and secondly to mark instrument in combination with the benefactive suffix -a' (105).
(104) Bau uo nipainangoto nuupang
bau 'uo ni-pa-inang=to nu=upang
fish yonder IV/RE-CAUS-eat=1PL/GE INSTR=bait
'We used the bait to feed the fish.'
\begin{tabular}{clll} 
(105) Upang & uo & nipainana'oto & bau \\
upang & 'uo & ni-pa-inang-a'=to & bau \\
'uo \\
bait & yonder & IV/RE-CAUS/SF/INSTR-eat-TZ=1PL/GE & fish
\end{tabular}
'We used the bait to feed the fish.'

\subsection*{10.3.3.5 The locative applicative -i}

An oblique locative NP can become the pivot of the clause via applicitivisation, as in (106). When this happens it would seem that there are three core arguments in the clause construction regardless of the normal oblique function.

\section*{(106)}
```

Ribongkarongo'u niponyoputi'u.
ri=bongkarong='u ni-pong-soput-i='u
LOC=hut=1SG/GE IV/RE-SF/PT-shoot-DIR=1SG/GE

```
'I shot (it) at/beside my hut.'
Examples (107) and (108) show the contrast between the applicative in (107) and the applicative's promotion of the locative noun phrase as the pivot/subject in (108). In (107) the directional -i forms a lexical derivational meaning, while in (108) the suffix combines with the stem former to promote a former prepositional phrase to subject.
\begin{tabular}{clll} 
(107) Tavala & ni'omuni & nikai & ribuut. \\
tavala & ni-'omung-i & \(n i=k a i\) & ri=buut \\
spear & IV/RE-carry-DIR & PN/GE=grandfather & LOC=mountain
\end{tabular}
'The grandfather held the spear on the mountain.'
\begin{tabular}{llll} 
(108) Buut & nipongkomuni & nikai & tavala. \\
buut & ni-pong-'omung-i & ni=kai & tavala \\
mountain & IV/RE-SF/PT-carry-DIR & PN/GE=grandfather & spear \\
& 'The grandfather carried the spear to the mountain.' &
\end{tabular}

Example (109) contrasts the verb guntung 'light' in a basic inverse construction with the applicativised locative noun phrase in (110). Example (111) contrasts the verb alap 'get, take' in a basic inverse construction with the applicativised locative noun phrase in (112).
\begin{tabular}{llll} 
Palan & niguntuni & nikai & rijunjung. \\
palan & ni-guntung-i & ni=kai & ri=junjung \\
lantern & IV/RE-light-DIR & PN/GE=grandfather & LOC=house \\
'The grandfather lit the lantern at/in the house.' &
\end{tabular}
\begin{tabular}{clll} 
(110) Junjung & nipeguntuni & nikai & palan. \\
junjung & ni-pe-guntung-i & ni=kai & palan \\
house & IV/RE-SF/DY-light-DIR & PN/GE=grandfather & lantern
\end{tabular}
'The grandfather lit the lantern at/in the house.'
(111) Bau uo nialap nikai ripayangan.
bau 'uo ni-alap ni=kai ri=payangan
fish yonder IV/RE-take PN/GE=grandfather LOC=boat
'The grandfather took the fish in the boat.'
(112) Payangan nipangalapi nikai bau uo.
payangan ni-pong-alap-i ni=kai bau 'uo
boat IV/RE-SF/PT-take-DIR PN/GE=grandfather fish yonder
'The grandfather took the fish in the boat.'
Example (113) illustrates the verb sambale 'butcher, slaughter' with the locative applicative construction. Example (114) contains a locative marked by the oblique ri that has been applicativised as subject.
```

(113) Junjung uo niponyambalei nikai japing uo
junjung 'uo ni-pong-sambael-i ni=kai japing 'uo
house yonder IV/E-SF/PT-butcher-LOC PN/GE=grandfather cow yonder
'The grandfather butchered the cow at/by that house.'
(114) Risabata oanong roong loka nipodulininyo
ri=so-bata oanong roong loka ni-po --duling-i=nyo
LOC=ONE-side right leaf banana IV/RE-SF/POS-LOC=3SG/GE
ndau diang seide nesia.
ndau diang so-ide N-pe-sia
NEG EXIS ONE-small RE-SF/DY-tear

```
'The banana leaf on the right side of where she had slept was not torn at all.'
[fktale01.txt 023]

\subsection*{10.3.4 Applicative -a' on locomotion intransitives}

Although the -a' seems quite productive as a causative affix on locomotion and postural intransitives (§10.2.4), there are at least some examples in which the -a’ appears to function as an applicative to create a locomotion transitive clause. It is difficult to find a common semantic factor in these examples, although it is possible these are lexically determined (this will require further research). In (115) it appears that the word sosol 'regret' is the direct object. Example (116) is another case of a locomotion verbal construction with two clear arguments.
\begin{tabular}{|c|c|c|c|c|}
\hline (115) Ila & ио & siinanyo & neteulemo & rijunjungonyo \\
\hline ila & 'иo & siina \(=\) nyo & \(N\)-pe-teule \(=\) mo & ri=junjung \(=\) nyo \\
\hline ABL & yonder & mother \(=3 \mathrm{SG} / \mathrm{GE}\) & RE-SF/DY-return=COMP & LOC=house \(=3\) SG/GE \\
\hline sampe & e notu & nangisa' & sosol. & \\
\hline sampe & e \(N\)-po & --[um]-tangis-a' & sosol & \\
\hline until & RE- & F/LCM-TEL-TZ & regret & \\
\hline
\end{tabular}
'After her mother returned to her house until she began crying with regret.'
[ceku03.jdb 088]
\begin{tabular}{llll} 
So'uya & saenyopo & A'u & mosumabara' \\
so-'uya & sae=nyo=po & \(a^{\prime} u\) & M-po \(_{1}\)-[um]-sabar- \(a\) \\
ONE-why & long=3SG/GE=CONT & 1SG/AB & IR-SF/LCM-TEL-patient-TZ
\end{tabular}
\begin{tabular}{ll} 
sijojoo & emu? \\
si-jojoo & emu \\
ONE-all & \(2 \mathrm{PL} / \mathrm{AB}\)
\end{tabular}
'How much longer will I be patient with you all?'
[Mark 9:19]
Examples (117) and (118) add the transitiviser suffix \(-a^{\prime}\), but in both there is no direct object, only a locative noun phrase (following a serial verb construction).
(117) Odo ningeno иo nolumumpata'
odo ningeno 'uo \(N\)-po \(o_{1}\)-[um]-lumpat-a'
monkey just.now yonder RE-SF/LCM-TEL-jump-TZ
```

manyau ritano.
ma-nyau ri=tano
UD/IR-go.down LOC=ground

```
'The monkey just then jumped down to the ground.' [troll.int 272]
(118)
\begin{tabular}{llll} 
Tonangkait & moo & nosumiira & manyau \\
to-no-ngkait & moo & \(N\)-po 1 -[um]-siir-a, & ma-nyau \\
AGNM-ST/RE-cripple & this & RE-SF/LCM-TEL-stare-TZ & UD/IR-go.down
\end{tabular}
\begin{tabular}{lll} 
ritagunyo & tonobuta & uo. \\
ri=tagu=nyo & to-no-buta & 'uo \\
LOC=friend=3SG/GE & AGNM-ST/RE-blind & yonder
\end{tabular}
'The cripple stared down at his friend, that blind man.'
[nangkait.pin 125]

\subsection*{10.3.5 Other functions of the directional applicative -i}

The suffix -i has at least four known functions in Pendau. Some of these are clearly applicative, some seem marginally applicative and others appear to be idiosyncratic occurrences. \({ }^{19}\) These functions are: 1) directional-goal applicative (creating monotransitives and ditransitives), 2) directional-locative applicative (only in inverse voice), 3) a directional that increases semantic transitivity, and 4) always associated with some verbs in the inverse voice clause construction (which may or may not be applicative). The first two were discussed in §10.3.2-3, and the latter two are discussed in §10.3.5.1-2.

\subsection*{10.3.5.1 Semantic transitivity increasing function of the directional suffix -i}

This section treats the use of \(-i\) as a means of increasing semantic transitivity (see \(\S 10.3 .2\) and \(\S 10.3 .2 .2\) for the use of \(-i\) for semantic and valency increase). Examples

\footnotetext{
19 In Indonesian grammars, the cognate suffix -i is called the locative suffix. As in Indonesian, Pendau \(-i\) has a low degree of productivity (when it does not co-occur with the stem former \(p V(C-)\). Many of the various occurrences on verbs are idiosyncratic and do not have a directional (or 'locative') applicative function at all.
}
(119)-(122) illustrate minimal pairs contrasting active voice and inverse voice. It is important to understand that the -i suffix consistently changes the lexeme from 'omung 'carry, take' to 'omun-i 'touch, hold' in either voice. \({ }^{20}\)
(119) A'u mongkomung bau rijunjung.
a'u M-pong-'omung bau ri=junjung
\(1 \mathrm{SG} / \mathrm{AB}\) IR-SF/PT-carry fish LOC=house
'I will carry the fish to my house.'
(120) A'u mongkomuni bau rijunjung.
a'u M-pong-'omung-i bau ri=junjung
1SG/AB IR-SF/PT-carry-DIR fish LOC=house
'I will hold the fish at my house.'
(121) Bau uo ni’omungo'u rijunjung.
bau 'uo ni-'omung='u ri=junjung
fish yonder IV/RE-carry=1SG/GE at=house
'I carried that fish to my house.'
(122) Bau uo ni'omuni'u rijunjung.
bau 'uo ni-'omung-i='u ri=junjung
fish yonder IV/R-carry-DIR=1SG/GE LOC=house
'I held that fish at my house.'
Example (123) shows that the use of -i with the verb 'olog 'cut' appears to actually mean 'cut into' (the -i does not require the instrument noun phrase-see \(\S 8.6\) for discussion on instrument noun phrases).
\begin{tabular}{lllll} 
SiDesmon & nongkologi & ayu & uo & nusensar. \\
si=Desmon & N-pong-'olog-i & 'ayu & 'uo & \(n u=\) sensar \\
PN/AB-Desmon & RE-SF/PT-cut-DIR & wood & yonder & INSTR=chainsaw
\end{tabular}
'Desmon cut into the wood with the chainsaw.'
The word pate 'kill' takes the directional suffix -i as shown in (124) and in (125) (although it is not inherently required as with some verbs such as rembas 'hit' in the inverse voice form). Example (125) also contrasts the first word raga 'chase' with the latter two verbs which both take the suffix \(-i\), but it is difficult to understand why the first verb does not also take this directional suffix.

\footnotetext{
\({ }^{20}\) There is some support for the notion that there is a semantic increase in transitivity in examples such as (120) and (122). Mosel and Reinig (2000) suggest a similar notion for Teop. When the applicative clitic \(n i\) is added to a verb it creates transitive verbs from intransitive verbs, but for transitive verbs it increases the semantic transitivity. For example, the Teop word ato 'touch something' ato ni becomes 'hold onto something', and the Teop word rahi 'pull (a string, fishing line, haul (a canoe)' becomes rahi ni 'catch (fish with a fishing line)'.
}
\begin{tabular}{llllll} 
(124) Sirapinyo & langkai & moo & nipatei & nutoo & naate. \\
si=rapi=nyo & langkai & moo & ni-pate-i & nu=too & no-ate \\
PN/AB=spouse=3SG/GE & male & this & IV/R-kill-DIR & CN/GE=person & ST/RE-die
\end{tabular}
'A person killed this man's wife dead.'
\begin{tabular}{llll} 
(125) Oo & uraga, & ulavai, & paey \\
'oo & 'u-raga & 'u-lava-i & upatei. \\
2SG/AB & 1SG.IV/IR-chase & 1SG.IV/IR-obstruct-DIR & and.then \\
'I will chase you, corner you, and then I will kill you.' & & \\
&
\end{tabular}

Example (126) illustrates the directional verb mene' 'go up'. \({ }^{21}\) Directional verbs are marginal transitive verbs since they may subcategorise a prepositional phrase (§11.2) or have a syntactic object. So if the directional verb pene' were considered to be derived from an intransitive verb then this example could be considered to be a real applicative derivation. This example demonstrates the thin line between semantic transitivity and syntactic transitivity with the use of -i.
(126) Nipene'inyo
ni-pene'- \(i=\) nyo
\begin{tabular}{ll} 
taipang & uo. \\
taipang & 'uo \\
mango.tree & yonder
\end{tabular}
IV/RE-go.up-DIR=3SG/GE mango.tree yonder
'He climbed up that mango tree.'

\subsection*{10.3.5.2 Appearance of -i required in inverse voice but not allowed in active voice for some words}

Some words lexically appear to require the use of the directional -i with words in the inverse voice construction, and without it in the active voice construction. This is illustrated with rembas 'hit' and guntung 'light (a fire)' in (127)-(133). The lexical meaning of the verb does not vary between the voice changes in these instances (contrast this with those instances in which lexical changes do occur with the use of -i in §10.3.5.1)
(127) *Tagu='u ni-rembas=o'u.
(128) Tagu'u nirembasi'u.
tagu='u ni-rembas- \(i=\) ' \(u\)
friend=1SG/GE IV/RE-hit-DIR=1SG/GE
'I hit my friend.'
[EN97-003.55]
(129) Palan roguntuninyo.
palan ro-guntung- \(i=n y o\)
lamp IV/IR-light-DIR=3SG/GE
'He/she will light the lamp.'
[EN98-003.12]
(130) *A'u mo-rembas-i tagu='u.

\footnotetext{
\({ }^{21}\) Here the \(p\) substitutes for the \(m\) like it would with the floating autosegments, possibly a special stem formation in which case this could be considered to be a locative applicative-see §10.3.3.5.
}
(131) *A'u mo-guntun(g)-i palan.
\begin{tabular}{cll} 
(132) A'u & morembas & tagu'u. \\
a'u & M-pong-rembas & tagu='u \\
1SG/AB & IR-SF/PT-hit & friend=1SG/GE \\
'I will hit my friend.' &
\end{tabular}
[EN97-003.55]
(133) A'u moguntung palan.
a’u M-pong-guntung palan
1SG/GE IR-SF/PT-light lamp
'I will light the lamp.'
[EN98-003.12]

\subsection*{10.3.6 Word order variations in applicative ditransitive constructions \({ }^{22}\)}

\subsection*{10.3.6.1 Post-verbal word order variations in active voice constructions}

This section demonstrates post-verbal word order possibilities in active voice constructions. Word order is free in the sense that the second object can float anywhere after the verb, but the P and A arguments must always have the sequence PA post-verbally (see \(\S 6.4\) for discussion of grammatical relations including the second object). Examples (134)-(136) show that the second object vea 'rice' can vary its position. It moves from right to left in these examples and appears in bold font. Example (137) illustrates that if the other two words change their relative position then the meaning of the clause must change.
\begin{tabular}{llll} 
(134) \begin{tabular}{ll} 
Nongolia' & io \\
N-pong-oli-a' & io \\
RE-SF/PT-buy-TZ & as \\
3SG/AB & vea. \\
'ISG/AB & vea \\
rice
\end{tabular} \\
'I bought him rice.' & & &
\end{tabular}
[EN97-002.32]
(135) Nongolia' io vea \(a^{\prime} u\).
\(N\)-pong-oli-a' io vea a'u
RE-SF/PT-buy-TZ \(3 \mathrm{SG} / \mathrm{AB}\) rice \(1 \mathrm{SG} / \mathrm{AB}\)
'I bought him rice'
[EN97-002.31]
(136) Nongolia' vea io a'u.
\(N\)-pong-oli-a' vea io a'u
RE-SF/PT-buy-TZ rice \(3 \mathrm{SG} / \mathrm{AB} \quad 1 \mathrm{SG} / \mathrm{AB}\)
'I bought him rice.'
[EN97-002.31]
(137) Nongolia’ a'u io vea.

N-pong-oli-a' \(\quad\) 'u io vea
RE-SF/PT-buy-TZ 1SG/AB 3SG/AB rice
'He bought me rice.'
[EN97-002.31]

\footnotetext{
22 Some of these word order changes are used for prominence and are further discussed as 'fronting' or as 'left-dislocation' in §17.2.
}

\subsection*{10.3.6.2 Word order possibilities in inverse voice constructions}

This section illustrates the word order possibilities for the locative noun phrase, instrument noun phrase, and second object (which may be theme or an instrument noun phrase). Since the instrument and locative noun phrases can also occur as the pivot, this gives the locative the highest number of word order possibilities of the three (see Figures 10.7-8).

Regardless of the pivot in a ditransitive clause the A and P arguments must always maintain their relative linear position ( \(\$ 12.3\) ). The annotated list of word orders in Figures 10.7-8 demonstrates that the P and the locative NP (LOC) can be in any order relative to each other, but the ordering of the A and P must never change. These examples represent the A as an enclitic to the V in the inverse voice constructions. A P argument could never occur between an A and the verb. \({ }^{23}\) Figure 10.7 sums up the word positions that occur when the subject occurs post-verbally, and Figure 10.8 sums up the word order positions that occur when the subject occurs pre-verbally. \({ }^{24}\) To sum up both of these figures, any oblique or second object can appear in virtually any word order position whether it is a pivot or not. \({ }^{25}\)
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{8}{|c|}{Post-verbal subject in inverse voice} \\
\hline Example \# & & & Verb & & Object & & Subject & \\
\hline \#145 & & & \({ }_{\text {SF }} V_{\text {DIR }}\) & & A & & LOC & \\
\hline \#146 & & & \({ }_{\text {SF }} V_{\text {DIR }}\) & & A & P & LOC & \\
\hline \#147 & & & \(\mathrm{SF} \mathrm{V}_{\text {DIR }}\) & & A & & LOC & P \\
\hline \#151 & & & \(\mathrm{V}_{\text {TZ }}\) & ! P & A & & & O2 \\
\hline \#150 & & & \(\mathrm{V}_{\text {TZ }}\) & & A & & P & 02 \\
\hline \#149 & & & \(\mathrm{V}_{\text {TZ }}\) & & A & 02 & P & \\
\hline \#152 & & 02 & \(\mathrm{V}_{\text {TZ }}\) & & A & & P & LOC \\
\hline \#153 & LOC & 02 & \(\mathrm{V}_{\text {TZ }}\) & & A & & P & \\
\hline \#154 & 02 & LOC & \(\mathrm{V}_{\text {TZ }}\) & & A & & P & \\
\hline \#94, 156 & & & \({ }_{\text {SF }} \mathrm{V}_{\text {TZ }}\) & & A & P & (nu=)INSTR & \\
\hline
\end{tabular}

Figure 10.7. Word order possibilities in inverse voice constructions with post-verbal subject

\footnotetext{
\({ }^{23}\) Note that the annotated list is not comprehensive, but it does illustrate the majority of word order possibilities.
\({ }^{24}\) Abbreviations used in Figures 10.7-8: A agent or actor, SF stem former \(p V(C)\)-, DIR directional applicative suffix -i, P patient or undergoer, THEME theme, TZ transitiviser as applicative suffix - \(a\) ', O2 Second Object (theme in these examples), (nu=) optional instrument marker occasionally allowed in elicitation (and other examples clearly prohibited), ! exclamation mark indicates an unlikely word order position found only in elicitation.
\({ }^{25}\) There are a few apparent restrictions. Also note that not all obliques have been confirmed to come between the inverse voice verb and A argument. However this is also the least natural of all possible positions when a non-A NP does occur there.
}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{7}{|c|}{Pre-verbal subject in inverse voice} \\
\hline Example \# & & Subject & Verb & & Object & Second object \(^{26}\) & \\
\hline \#139 & & LOC & \({ }_{\text {SF }} \mathrm{V}_{\text {DIR }}\) & & A & P (THEME) & \\
\hline \#140 & & LOC & P \({ }_{\text {SF }} \mathrm{V}_{\text {DIR }}\) & & A & & \\
\hline \#141 & & *P & \({ }_{\text {SF }} \mathrm{V}_{\text {DIR }}\) & & A & & \\
\hline \#142 & & *P & \({ }_{\text {SF }} \mathrm{V}_{\text {DIR }}\) & & A & & LOC \\
\hline \#143 & & P & \(\mathrm{V}_{\text {DIR }}\) & & A & & LOC \\
\hline \#144 & & LOC & \({ }_{\text {SF }} \mathrm{V}_{\text {DIR }}\) & & A & & \\
\hline \#160 & & P & \(\mathrm{V}_{\text {DIR }}\) & & A & INSTR & \\
\hline \#161 & & P & \(\mathrm{V}_{\text {DIR }}\) & & A & INSTR & LOC \\
\hline \#81 & & P & \(\mathrm{V}_{\text {DIR }}\) & & A & THEME & \\
\hline \#68 & & P & \(\mathrm{V}_{\text {TZ }}\) & & A & THEME & \\
\hline \#155 & & INSTR & \({ }_{\mathrm{SF}} \mathrm{V}_{\text {TZ }}\) & & A & P (THEME) & \\
\hline \#159 & & *INSTR & V & & A & P & \\
\hline & & & Pre-verb & l subject & n active & oice \({ }^{27}\) & \\
\hline \# & & A & V & & P & & LOC \\
\hline §8 \#71 & & A & V & & P & INSTR & \\
\hline \# & & A & \(\mathrm{V}_{\text {TZ }}\) & & P & THEME & INSTR \({ }^{28}\) \\
\hline \# & & A & \(\mathrm{V}_{\text {TZ }}\) & & P & THEME & \\
\hline §8 \#72 & & A & V & INSTR & P & & \\
\hline \#138 & LOC, & A & V & & P & & \\
\hline \#123 & & A & \(\mathrm{V}_{\text {DIR }}\) & & P & INSTR & \\
\hline
\end{tabular}

Figure 10.8. Word order possibilities in inverse voice constructions with pre-verbal subject contrasted with some active voice constructions with pre-verbal subject
(the asterisk * and shading means that grammatical construction is not possible; a comma means that entry is topicalised)

In example (138) the locative noun phrase is in the first word order position, (that is, it is topicalised) but it is clearly not the selected argument (that is, the pivot/subject) since it is in an active voice construction clause. In (139) the locative noun phrase is again in the first word order position but it is clearly the selected argument although it still has the locative proclitic \(r i\) (this will be demonstrated in the series of examples (140)-(148)).
\begin{tabular}{lllll} 
RiMalawa, & \(a\) 'u & monyoput & odo & moo. \\
ri=Malawa & \(a ’ u\) & M-pong-soput & odo & moo \\
LOC=Malawa & 1SG/AB & IR-SF/PT-shoot & monkey & this
\end{tabular}
'At Malawa, I will shoot a monkey.'
[EN98-003.33]

\footnotetext{
\({ }^{26}\) Second object is a third grammatical relation (§6.4.3). Note that this heading occurs in the majority of instances following the first object, but there are a few instances where the second object occurs in a different position.
\({ }^{27}\) The stem former does not function as part of the applicativisation process in the active voice, and so is not annotated here. The stem former functions as an underlying part of the formation of all canonical verbs to determine their verb class, except for stative verbs (see Chapters 4 and 9).
28 This might be construed to be a 'third object'.
}
\begin{tabular}{llll} 
RiMalawa & roponyoputi'u & odo & moo. \\
ri=Malawa & ro-pong-soput-i='u & odo & moo \\
LOC=Malawa & IV/IR-SF/PT-shoot-DIR=1SG/GE & monkey & this
\end{tabular}
'I will shoot a monkey at/in Malawa.'
[EN98-003.33]
The series of examples in (140)-(148) show a number of contrasts and varying word order positions in which the locative noun phrase can and cannot occur. Example (140) highlights the option of putting in the P argument directly preceding the verb. However, since the combination of the stem former \(p v(C)\) - and the directional -i require the 'oblique' NP to be the pivot, this word order position does not identify it as the pivot (although the word order given in this elicited example probably does not occur in any text).
\begin{tabular}{llll} 
Ribongkarango' \(u\) & rusa & uo & niponyoputi'u. \\
ri \(=\) bongkarang=' \(u\) & rusa & 'uo & ni-pong-soput- \(-=\) ' \(u\) \\
LOC=hut=1SG/GE & deer & yonder & IV/RE-SF-shoot-DIR=1SG/GE
\end{tabular}
'I shot the deer at/beside my hut.'
[EN98-003.33]
The ungrammatical examples in (141) and (142) conclusively show that when the combination of the \(p V(C)\) - prefix ( SF ) and the -i directional suffix raise the oblique argument to core argument status, as in (140), the P argument is not the selected argument. Example (142) illustrates that when the P argument is the only core argument preceding the \(p V(C)\) - stem former and the directional -i it cannot be the pivot. Example (143) illustrates conversely that the P argument must be the pivot when the \(p V(C)\) - stem is not used and there is a directional suffix -i. Note that in (143) the suffix -i does not appear to have any necessary function. See \(\S 10.3 .5\) for the discussion on the range of uses and idiosyncracies of \(-i\).
\begin{tabular}{llll} 
(141) *Rusa & uo & niponyoputi'u. \\
rusa \\
deer & 'uo \\
yonder
\end{tabular} ni-pong-soput-i='u \begin{tabular}{l} 
IV/RE-SF-shoot-DIR-1SG/GE
\end{tabular}
[EN98-003.34]
Examples (144) and (145) illustrate that the P argument does not need to be overt, and that the locative noun phrase can occur pre-verbally or post-verbally. Examples (146) and (147) add the P argument after the verb and show the same pre-verbal and post-verbal positions of the locative argument. Example (148) illustrates the use of the same locative phrase in the active voice construction.
(144) Ribongkarango'u niponyoputi'u.
ri=bongkarang='u ni-pong-soput- \(i=\) 'u
LOC=hut=1SG/GE IV/RE-SF-shoot-DIR=1SG/GE
'I shot (it) at/beside my hut.'
[EN98-003.34]
(145) Niponyoputi’u
ribongkarango'u.
ni-pong-soput-i='u
ri=bongkarang='u
AV/RE-SF-shoot-DIR=1SG/GE
LOC=hut=1SG/GE
'I shot (it) at/beside my hut.'
[EN98-003.34]
(146) Niponyoputi’u
ni-pong-soput=i='u rusa uo ribongkarango'u.
rusa uo ri=bongkarang='u
'I shot that deer at/beside the hut.'
[EN98-003.34]
(147) Niponyoputi'u ribongkarango'u rusa uo.
ni-pong-soput-i='u ri=bongkarang='u rusa 'uo
IV/RE-ST-shoot-DIR=1SG/GE LOC=hut=1SG/GE deer yonder
'I shot that deer at/beside the hut.'
[EN98-003.34]
(148) A'u monyoputi riMalawa.
a'u M-pong-soput-i ri=Malawa
1SG/AB IR-SF/PT-shoot-DIR LOC=Malawa
'I will shoot (it) at Malawa.'
[EN98-003.34]

Examples (149) and (150) illustrate the two common word orders for benefactive clauses with the post-verbal \(P\) (Recipient) subject. Example (151) is very unusual and has only been found infrequently during elicitation. This last example is clearly outside the normal patterns.
(149) Niatora'onyo teule ma'o junjungonyo unga uo.
ni-ator-a'=nyo teule ma'o junjung=nyo unga 'uo
IV/RE-deliver-TZ \(=3\) SG/GE return go house \(=3 \mathrm{SG} / \mathrm{GE}\) child yonder
'He took (lit. delivered) that child home to his house.'
[miracle1.pin 035]
(150) Nisambalea'omo niCeku jimo manu' niYusup.
ni-sambale- \(a\) ' \(=\) mo \(n i=C\). jimo manu' ni=Y.
IV/RE-butcher-TZ=COMP \(\mathrm{PN} / \mathrm{GE}=\mathrm{C}\). 3PL/AB chicken \(\mathrm{PN} / \mathrm{GE}=\mathrm{Y}\).
'Ceku butchered Joseph's chicken for them.'
[EN97-002.32]
(151) !Nisambalea'omo jimo niCeku manu' niYusup.
ni-sambale- \(a\) ' \(=\) jimo ni=C. manu' ni=Y.
IV/RE-butcher-TZ=COMP \(3 \mathrm{PL} / \mathrm{AB} \quad \mathrm{PN} / \mathrm{GE}=\mathrm{C}\). chicken \(\mathrm{PN} / \mathrm{GE}=\mathrm{Y}\).
'Ceku butchered Joseph's chicken for them.'

Examples (152)-(154) below show the locative noun phrase in various positions in a benefactive construction. These examples also show that rusa 'deer', the second object, may precede the verb in various combinations with the locative noun phrase.
\begin{tabular}{lllll} 
Rusa & uo & nisoputa'o'u & jimo & riMalawa. \\
rusa & 'uo & ni-soput-a'='u & jimo & ri=Malawa \\
deer & yonder & IV/RE-shoot-TZ=1SG/GE & 3PL/AB & LOC=Malawa
\end{tabular}
'I shot that deer for them at Malawa.'
[EN98-003.35]
\begin{tabular}{lllll} 
RiMalawa & rusa & uo & nisoputa'o'u & jimo. \\
ri=Malawa & rusa & 'uo & ni-soput-a'='u & jimo \\
LOC=Malawa & deer & yonder & IV/RE-shoot-TZ=1SG/GE & 3PL/AB
\end{tabular}
'I shot that deer for them at Malawa.'
[EN98-003.35]
\begin{tabular}{lllll} 
(154) \begin{tabular}{l} 
Rusa \\
rusa
\end{tabular} & 'uo & riMalawa & ri=Malawa & nisoputa'o'u \\
deer & yonder & LOC=Malawa & IV/RE-shoot-TZ=1SG/GE & jimo. \\
& 3PL/AB
\end{tabular}
'I shot that deer for them at Malawa.'
[EN98-003.35]
The applicativised instrument NPs in (155) and (156) contrast with the locative examples in Figures 10.7-8. Examples (157) and (158) illustrate that applicativised instrument noun phrases may not ordinarily be marked with the instrument marker \(n u=\). Compare (94), in which occasionally the instrument marker was allowed to mark the applicativised subject, but only in elicitation sessions. Example (159) illustrates that an instrument marked NP may not occur in a pre-verbal position without being applicativised first. Example (160) illustrates the usual position and marking for a non-applicativised instrument noun phrase.
(155)
\begin{tabular}{lll} 
Urong & nipogabua'o'u & vea. \\
urong & ni-po-gabu-a'='u & vea \\
earthen.cooking.pot & IV/RE-SF/FA-cook-TZ=1SG/GE & raw.rice
\end{tabular}
'I used the earthen cooking pot to cook the rice in.'
[EN97-003.57]
(156) Nipogabua'o'u vea urong.
ni-po-gabu-a'='u vea urong
IV/RE-SF/FA-cook-TZ=1SG/GE raw.rice earthen.cooking.pot.
'I used the earthen cooking pot to cook the rice in.'
[EN97-003.57]
(157)
\begin{tabular}{lll} 
*Nuurong & nipogabua'o'u & vea. \\
nu=urong & ni-po-gabu-a'='u & vea \\
INSTR=earthen.cooking.pot & IV/RE-SF/FA-cook-TZ=1SG/GE & raw.rice
\end{tabular}
*'I used the earthen cooking pot to cook the rice in.'
[EN97-003.57]
\begin{tabular}{lll} 
*Nipogabua'o'u & vea & nuurong. \\
ni-po-gabu-a'='u & vea & \(n u=\) urong \\
IV/RE-SF/FA-cook-TZ=1SG/GE & raw.rice & INSTR=earthen.cooking.pot
\end{tabular}
*'I used the earthen cooking pot to cook the rice in.'
[EN97-003.57]
\begin{tabular}{cllll} 
(159) * Nupiso & nisambale & niYusup & japing & uo. \\
nu=piso & ni-sambale & ni=Yusup & japing & 'uo \\
INSTR=machete & IV/RE-butcher & PN/GE & cow & yonder
\end{tabular}
*'Joseph used a machete to butcher the cow.'
[EN97-002.35]
(160) Too nirembasinyo nupombolilo.
too ni-rembas-i=nyo nu=pong-bolilo
person IV/RE-hit-DIR=3SG/GE INSTR=SF/PT=club
'He/she used a club to hit (that) person.'
[EN97-002.45]
Example (161) illustrates the usual word order positions when both an instrument and a locative phrase occur together in the same clause. Example (162) illustrates that an instrument NP may occur as a fourth argument in a benefactive construction.
\[
\begin{array}{lllll}
\text { (161) } \text { Oto'u } & \text { nirampuninyo } & \text { nuapi } & \text { ila } & \text { lilin. } \\
\text { oto='u } & \text { ni-rampung-i=nyo } & \text { nu=api } & \text { ila } & \text { lilin } \\
\text { car=1SG/GE } & \text { IV/RE-burn-DIR=3SG/GE } & \text { INSTR=fire } & \text { ABL } & \text { candle }
\end{array}
\]
'He/she used fire from a candle to burn up my car.'
[EN97-002.35]
\begin{tabular}{llllll} 
(162) A'u & monulisa' & siCeku & jarita & uo & nupatolo. \\
a'u & M-pong-tulis-a' & si=C. & jarita & 'uo & nu=patolo \\
1SG/AB & IR-SF/AV-write-TZ & PN/AB=C. & story & yonder & INSTR=pencil \\
'I will use a pencil to write a story for Ceku.' & & & \\
[EN97-002.65]
\end{tabular}

\subsection*{10.3.7 Combinations of applicatives and causatives}

This section briefly discusses the combination of the applicative \(-a\) ' in the same word with a morphological \(p o s_{3}\)-. Example (163) illustrates the transitiviser \(-a\) ' functioning in an active voice clause as a benefactive applicative. Example (164) shows that the same sentence structure minus the applicative and using the causative \(p o s_{3^{-}}\)is ungrammatical. However, in examples such as (165) and (166), a combination of both of these affixes appears in the same morphological verb. Example (167) contrasts with (164), and demonstrates that it is possible to have the causative in other contexts.
\[
\begin{array}{lllll}
\text { (163) A'u } & \text { mongkomuna' } & \text { jimo } & \text { pu'ot } & \text { uo. } \\
\text { a'u } & \text { M-pong-'omung-a' } & \text { jimo } & \text { pu'ot } & \text { 'uo } \\
\text { 1SG/AB } & \text { IR-SF/PT-carry-TZ } & \text { 3PL/AB } & \text { seine.net } & \text { yonder } \\
\text { 'I will carry that seine net to/for them.' } & &
\end{array}
\]
[EN97-003.37]
(164) *A'u mom-po-'omung jimo pu'ot uo.
\(\begin{array}{lllll}\text { (165) } & \text { Nipo'itoa' } & \text { nijimo } & \text { moje } & \text { sakarung } \\ \text { ni-po } 3_{3} \text { 'oto-a'ot. } & \text { nijimo } & \text { moje } & \text { so-karung } & \text { pu'ot } \\ \text { IV/RE-CAUS-look-TZ } & \text { 3PL/GE } & \text { again } & \text { ONE-sack } & \text { seine.net }\end{array}\)
'They again showed (someone) one bag filled with a seine net.' [jptext4.doc]
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{(166)} & Jimo & nompoinuna'omo & ami & ogo & moonda'. \\
\hline & jimo & \(N\)-pong-po \({ }_{3}\)-inung-a'= mo & 'ami & ogo & mo-onda' \\
\hline & \(3 \mathrm{PL} / \mathrm{AB}\) & RE-SF/PT-CAUS-drink-TZ=COMP & P 1PL.EXC/AB & water & ST/IR-hot \\
\hline & \multicolumn{3}{|l|}{'They gave us hot water.'} & & N97-003.29] \\
\hline \multirow[t]{4}{*}{(167)} & Jimo & nompoinungomo a & ami & ogo & moonda'. \\
\hline & jimo & N -pong-po-inung \(=\) mo & 'ami & ogo & mo-onda \\
\hline & 3PL/AB & RE-SF/PT-CAUS-drink=COMP & 1PL.EXC/AB & water & ST/IR-hot \\
\hline & \multicolumn{3}{|l|}{'They gave us hot water.'} & & EN97-003.29] \\
\hline
\end{tabular}

Examples such as (165) and (166) present a possible problem. These verb constructions have both a causative prefix and an applicative suffix, either one of which is sufficient to create a ditransitive from a monotransitive clause. This dual affixation of valency changing affixes poses several questions: Do these affixes somehow combine to create something new? Does one of the affixes become neutralised? Or do the semantics of causative and benefactive blur and become merged somehow?

Donohue (2000:17-18) provides a solution to this morphology mismatch by demonstrating that the causative arguments are higher up the semantic/thematic hierarchy than applicatives, \({ }^{29}\) and that causatives may extend into the normal morphological territory of applicatives. Compare for example \(\S 10.2 .4\) in which the \(-a\) ' functions as a causative and \(\S 10.3\) in which the -a' functions as an applicative. This hierarchy explains the double function of - \(a\) ' as occurring in part of the Pendau grammar as a causative and in another part of the grammar as an applicative. Donohue's work would also suggest that data which has both morphologically marked causative and applicative marking simultaneously may be interpreted as neutralising or overriding the function of the non-causative applicative.

\subsection*{10.4 Reciprocals}

This section describes affixes that detransitivise, or reduce the valency of a base transitive clause into a reciprocal construction.

\subsection*{10.4.1 Introduction}

There are two types of reciprocals in Pendau: mutual action and alternating reciprocals. Mutual action implies that two or more participants are associated in the same event or activity. The activity is usually either an exchange between participants or an action directed from one participant to another. Alternating reciprocals are activities that are performed by at least two participants in the same verbal type of event but the exchange takes place in an alternating sequential fashion, that is, first one then the other, etc.. Mutual action is described in \(\S 10.4 .1 .1\) and alternating reciprocals are described in §10.4.1.2. These are followed by a discussion that compares these types of reciprocals in §10.4.1.3.

\footnotetext{
\({ }^{29}\) Donohue (2000:3) quotes Bresnan and Kanerva (1989) with one version of a thematic hierarchy as: agent \(>\) beneficiary \(>\) goal/experiencer \(>\) instrument \(>\) theme/patient \(>\) locative.
}

\subsection*{10.4.1.1 Mutual action posi-}

The formative combination of posi- creates a mutual action (MUT) between two or more participants (sometimes reciprocal but not always). I have borrowed the term 'mutual action' from Himmelmann and Wolff (1998:49) who use it to describe an affix in another Sulawesi language, Toratán. A list of sample words that take the posi- affix is given in (168) (note that the surface form is used in this list, and that these can all be understood to be either M-posi- or \(N\)-posi-). Often the Indonesian translation (Manado Malay) that language helpers give is the word baku which is usually understood to be a reciprocal event. However this translation can be misleading since in Pendau not all events that posi- plus verb refer to are really reciprocal events. Both the Indonesian glosses (where I can supply them) and English glosses are given below. Since many of these verbs were given to me in elicitation without a complete sentence, I sometimes can only offer the meaning of the root.
\begin{tabular}{|c|c|c|}
\hline Penda & Indonesian & English \\
\hline mosi-patei & 'baku bunuh' & 'kill' \\
\hline mosi-uba & -- & 'piggyback' \\
\hline mosi-suung & 'baku menjunjung, atas bahu' & 'carry on shoulders' \\
\hline mosi-sumpa & 'baku sumpah' & 'swear' \\
\hline nosi-baro & 'baku bantah' & 'argue' \\
\hline nosi-tora & 'baku ingat' & 'remember' \\
\hline nosi-sala & 'baku salah' & 'wrong' \\
\hline nosi-ntuvu & 'baku setuju' & 'agree' \\
\hline nosi-ampuni & \begin{tabular}{l}
'saling memaafkan, \\
'saling mengampuni'
\end{tabular} & 'forgive' \\
\hline nosi-dame & 'berdamai' & 'peace' \\
\hline mosi-sapor & 'baku tombak' & 'spear' \\
\hline mosi-eva & 'baku lawan' & 'oppose' \\
\hline mosi-sempa' & 'baku tendang' & 'kick' \\
\hline nosi-agarang \({ }^{30}\) & 'baku sayang' & 'love, pity' \\
\hline nosi-tuut & 'baku ikut' & 'follow' \\
\hline nosi-'ono & 'baku kena, baku cocok' & 'fit, hit' \\
\hline nosi-galo' & 'baku campur' & 'mix s.t., mix with people' \\
\hline nosi-mpuru & 'baku lingkar, baku ikat' & 'tangled, tie together' \\
\hline nosi-inum & 'baku minum' & 'drink from same glass' \\
\hline nosi-lolo & 'baku cari' & 'search' \\
\hline nosi-'omun-i & 'baku pegang' & 'touch' \\
\hline nosi-'omung & 'baku bawa' & 'carry' \\
\hline nosi-ayo' & 'baku cium' & 'smell' \\
\hline nosi-ayo' boo & 'baku cium bau' & 'smell odour' \\
\hline nosi-tanduk & 'baku tanduk' & 'gore' \\
\hline nosi-rumpa' & 'baku tambrak' & 'run over' \\
\hline nosi-mpules & 'baku lipat, sambung tali' & 'fold, join, attach' \\
\hline nosi-ubung & \begin{tabular}{l}
'baku sambung' \\
'baku putar tangan di antara
\end{tabular} & 'attach, join s.t. together' \\
\hline nosi-piyor & dua orang' & 'arm wrestle, twist hands' \\
\hline nosi-mpoyona' & 'baku tutup mata' & 'wink as secret code' \\
\hline nosi-ngkirat-a' & 'baku gerak kening' & 'raise eyebrows' \\
\hline
\end{tabular}

\footnotetext{
\({ }^{30}\) A similar meaning can be derived with ne'eseseiluong,'baku cinta', 'love'. See §10.4.1.2 for discussion on alternating reciprocals.
}

Penda
nosi-mbolos
mosi-sabol
nosi-po-mongi
mosi-tagal mosi-tagal-i mosi-p-inga-i \({ }^{31}\) mosi-alap=oто

\section*{Indonesian}
'baku ganti'
'baku pinjam'
'baku minta'
'baku borak'
'baku tahan' 'baku larang'
1) 'baku tukar'
2) 'baku bantah'

\section*{English}
'switching, for example, drivers'
'borrow'
'ask, request, beg'
'collateral, pawn'
'k.o. boat paddling'
'prohibit, warn'
1) 'trade'
2) 'argue, quarrel'

Examples (169)-(176) show the various possibilities that the multiple participants can be encoded in for the verb baro 'argue'. As expected with a detransitivising function, the second of the two participants who are arguing in these clauses, ulasang 'turtle', can be marked with the comitative sono 'with, together'.

Sono can be used as a noun phrase conjunction or as an oblique marker, as in examples (169) and (170). These examples have a conjoined noun phrase in pre-verbal and post-verbal word orders respectively.
(169) Odo sono ulasang nosibaro.
odo sono ulasang \(N\)-posi-baro
monkey COM turtle RE-MUT-argue
'The monkey argued with the turtle.' [EN98-001.3; ceku01.jdb]
(170) Nosibaro odo sono ulasang.
\(N\)-posi-baro odo sono ulasang
RE-MUT-argue monkey COM turtle
'The monkey argued with the turtle.'
[EN98-001.3]
Example (171) parallels (169), but uses the conjunction o 'and'.
(171) Odo o ulasang nosibaro.
odo o ulasang \(N\)-posi-baro
monkey and turtle RE-MUT-argue
'The monkey and the turtle argued.'
[EN98-001.3]
Examples (172) and (173) illustrates sono and \(o\) as discontinuous constituents with the pre-verbal noun phrase.
(172) Odo nosibaro sono ulasang.
odo \(N\)-posi-baro sono ulasang
monkey RE-MUT-argue COM turtle
'The monkey quarrelled with the turtle.'
[EN98-001.3]

\footnotetext{
\({ }^{31}\) The \(p\) inserted here may be a special variation of a \(p V(C)\) - stem former.
}

\section*{(173) Odo nosibaro o ulasang. \\ odo \(N\)-posi-baro o ulasang \\ monkey RE-MUT-argue and turtle \\ 'The monkey and the turtle argued.'}
[EN98-001.3]
Example (174) demonstrates that the plural participants can be represented by a single plural pronoun. Example (175) shows that a singular pronoun can occur as the subject of a verb with mutual action, but it has to imply one or more other participants. This example contrasts with the plural distributive, since a plural distributive requires a plural pronoun in this position (§13.4.1.1). Compare (175) with (176).
(174) Jimo nosibaro.

Jimo \(\quad N\)-posi-baro
3PL/AB RE-MUT-argue
'They argued.'
[EN98-001.3]
(175) A'u nosibaro.
a'u \(\quad\)-posi-baro
1SG/AB RE-MUT-argue
'I argued (with someone).'
[EN98-001.3]
(176) A'u nosibaro sono rapi'u.
a'u \(\quad\)-posi-baro sono rapi='u
\(1 \mathrm{SG} / \mathrm{AB}\) RE-MUT-argue with spouse \(=1 \mathrm{SG} / \mathrm{GE}\)
'I argued with my spouse.'
[EN98-001.3]
Verbs with the mutual action posi- prefix can also express multiple participants as distinct syntactic arguments as in (177). This example illustrates a clause with multiple participants: a number of people are carrying sick people on their shoulders. The A arguments are those carrying the sick people, and the P arguments are the sick people being carried. Here each group of people is expressed as a separate syntactic argument.
\begin{tabular}{llllll} 
Jari & tonepee & niposisuungomo & nijimo & sono & ompanyo. \\
jari & to-no-pee & ni-posi-suung=mo & nijimo & sono & ompa=nyo \\
so & AGNM-ST/RE-sick & IV/RE-MUT-carry=COMP & 3PL/GE & COM & mat=3SG/GE
\end{tabular}
'So they carried (on shoulders) sick people with their mats.'
[Mark 6:55]
Examples (178)-(181) illustrate the prefix posi- on the root turu' 'agree'. Example (178) shows again (compare to (186)) that the subject can be singular, but the verb requires multiple participants (unless the sono is interpreted to be a discontinuous NP with the subject). One of the other participants may or may not be marked with an oblique, as here. Example (179) shows that the multiple participants required by posi- can also all be in the subject position. Example (180) contrasts a negated mutual activity with (179) which does not have a negated mutual activity. Example (181) shows that animacy is not a requirement of the grammatical usage of posi-, since the arguments here are inanimate.
(178) A'u nosituru' sono rapi'u.
a'u \(N\)-posi-turu' sono rapi='u
1SG/AB RE-MUT-agree with spouse=1SG/GE
'I agreed with my spouse.'
[EN98-001.13]
(179) Jimo nosituru’.
jimo \(\quad N\)-posi-turu'
3PL/AB RE-MUT-agree
'They agreed.' or: 'They had the same opinion.'
[EN98-001.13]
(180) Jimo ndau nosituru’.
jimo ndau N-posi-turu'
3PL/AB NEG RE-MUT-agree
'They did not have the same opinion.'
[EN98-001.13]
(181) Nosituru' sono isi nuAlkitab.

N-posi-turu' sono isi nu=Alkitab
RE-MUT-agree COM substance CN/GE=bible
'That agrees with the Bible.'
[EN98-001.13]
Examples (182)-(185) illustrate the use of posi- in both active voice and inverse voice constructions. Example (182) illustrates clearly that posi- is not a true reciprocal. This is clear because when one participant is chasing another, the type of action can be divided depending on whether one is the pursuer and the other is the pursued. \({ }^{32}\) Examples (183) and (184) express a reciprocal action (since arguing is in one sense a reciprocal event), and the topic of the argument is expressed as a separate syntactic argument. Note that (183) uses the directional applicative and (184) uses the benefactive applicative \(-a\) '. These applicatives indicate an increase in valency. By contrast posi- seems to indicate a degree of detransitivisation, since the plural participants can be dealt with in the same argument (although it must be noted that this is not obligatory, see discussion below).
(182)
\begin{tabular}{llll} 
Nosiragamo & moje & jimo & doruo. \\
N-posi-raga=mo & moje & jimo & doruo \\
RE-MUT-chase=COMP & again & 3PL/AB & two
\end{tabular}
'The two of them chased each other.' (note: only the flesh-eater chases the monkey in this folk tale)
[troll.pin 164]
(183)
\begin{tabular}{llll} 
Sapa & niposibaroi & miu & nao? \\
sapa & ni-posi-baro-i & miu & nao \\
what & IV/RE-MUT-argue-DIR & 2PL/GE & that
\end{tabular}
'What are you (pl.) arguing about there?'
[ceku01.jdb 042]

\footnotetext{
32 This could be identified as a type of reciprocal that Lichtenberk (1985) refers to as a 'chaining situation'. Although Lichtenberk's description of chaining situations clearly overlaps with the function that posihas, his analysis is centred on chaining situations with more than two participants, so it is not clear that it should be applied to the Pendau data.
}
\begin{tabular}{lllll} 
(184) Ila uo & siYesus & nomo'utanya & rijimo, \\
ila 'uo & si=Yesus & N-pong-po \({ }_{1}\) '’utanya & ri=jimo \\
from yonder & PN/GE=Jesus & IR-SF/PT-SF/FA-ask & LOC=3PL/AB
\end{tabular}
\begin{tabular}{lll} 
"Sapa & toniposibaroa' & miu?" \\
sapa & to=ni-posi-baro-a' & miu \\
what & RM=IV/RE-MUT-argue-TZ & 2PL/GE
\end{tabular}
'From there Jesus asked them, "What are you all quarrelling about?"' [Mark 9:16]
Examples (185)-(189) illustrate the perception verb otoi 'know' affixed with posi-. In (185) the six participants didn't know a thing in response to a question. One common use of posiotoi 'know each other' is for stating that two or more people know or recognise each other, as in (186). Examples (187) and (188) show that the capacity for knowing or recognition doesn't extend to inanimate objects. Compare (187) and (188) with (189) in which the inanimate object, in this case a folk tale, is known by multiple participants. The sense of mutual action may also include a sense of 'communal behaviour' in some of these examples.
(185) Jimo toroonong moo ndaumo nosiotoi.
jimo to=roonong moo ndau=mo \(N\)-posi-otoi
3PL/AB RM=six here NEG=COMP IR-MUT-know
'None of the six knew a thing.' [nalalo.pin 080]
(186) A'u nosiotoi sono too uo
a'u N-posi-otoi sono too 'uo
1SG/AB IR-MUT-know COM person yonder
'I know/recognise that person (and he/she knows/recognises me).' [EN98-001.11]
(187) *A’u nosiotoi loka
a'u N-posi-otoi loka
1SG/AB RE-MUT-know banana
*‘The banana and I know each other.'
(188) *A'u nosiotoi sono loka.
a'u N-posi-otoi sono loka
1SG/AB RE-MUT-know COM banana
*'I am acquainted with the banana.'
(189) Uma-umanong иo niposiotoimo mami
uma-umanong 'uo ni-posi-otoi=mo mami
RED-account yonder IV/RE-MUT-know=COMP 1PL.EXC/GE
'We each already knew that story.'
[EN98-001.11]

Examples (190) and (191) illustrate that the prefix posi- can be part of a nominalising strategy, as when it derives toposipatei 'warrior' from pate 'kill', or for topositanding 'contestants, ball players'. \({ }^{33}\)
(190) to-posi-pate-i

AGNM-MUT-kill-DIR
'warriors'
[EN98-001.20]
(191) to-posi-tanding

AGNM-MUT-contest
'contestants, players'

The formative si- can be used on adverbs to unify the adverbial sense as shown in (192). \({ }^{34}\) Van den Berg (1989:319) notes that Muna has the verbal circumfix si-/-ha which is productive and has the meaning 'at the same time, all together'.
\begin{tabular}{rlll} 
(192) jojoo all & si-jojoo all together \\
tutuu & true & si-tutuu & it's really true, indeed, actually
\end{tabular}

An alternative analysis of posi- would be as a special aspect along the same lines as the plural distributive aspectual infix -ong- (§13.4.1.1). In the plural distributive aspect there are plural participants doing multiple similar events, whereas if posi- is an aspect, there is a single unitary action performed by multiple participants.

\subsection*{10.4.1.2 Alternating reciprocal \(\sigma_{c}-/-o n g\)}

This section introduces an affix combination that produces an alternating reciprocal event. The morphology begins with a dynamic prefix \(M / N-p e\) - followed by a \(\sigma_{c}{ }^{-}\) reduplication template of the root (§3.6) which is followed either by the suffix -ong (or the less common -ang) which will be glossed as 'alternating reciprocal' (AREC), although on nouns the homophonous suffix -ong marks a locative nominalisation.

Examples (193)-(197) illustrate the affixation combination of the alternating reciprocal in individual words. Full sentences will be given in §10.4.1.3, since it is easier to describe the alternating reciprocation in contrast to the mutual action constructions.
(193) neroropa'ongomo
\(N\)-pe- \(\sigma_{c}\)-ropa'-ong \(=\) oто
RE-SF/DY-RED-cut-AREC=COMP
'cut each other with s.t.'
[horse.pin 463]

\footnotetext{
\({ }^{33}\) Note also that the suffix -i also appears in this nominalisation, which shows its peculiar idiosyncratic nature in that it is not always syntactically productive (see §10.3.5).
\({ }^{34}\) This is possibly connected semantically with the si in posi-.
}
(194) tonesasaporong
to \(=N\)-pe- \(\sigma_{c}\)-sapor-ong
RM=RE-SF/DY-RED-spear-AREC
'spear each other’
[horse.pin 467]
(195) tonejajalo'ongomo
to \(=N\)-pe- \(\sigma_{c}\)-jalo'-ong \(=\) omo
RM=RE-SF/DY-RED-stab-AREC=COMP
'stab each other with knives'
[horse.pin 537]
(196) netatamba'ong
\(N\)-pe- \(\sigma_{c}\)-tamba'-ong
RE-SF/DY-RED-engage-AREC
'be engaged to each other'
(197) negagamparong
\(N\)-pe- \(\sigma_{c}\)-gampar-ong
RE-SF/DY-RED-neck.to.neck-AREC
'neck to neck (as in racing)'
[EN 97-001.14]

\subsection*{10.4.1.3 Comparison of mutual action and alternating reciprocal action}

Affixation on the word raga 'chase' is used to contrast mutual action and alternating reciprocal action in examples (198) and (199). As explained in §10.4.1 (see (182)), raga 'chase' shows clearly that when this verb is prefixed with posi- it is not a true reciprocal action, but there is a joint activity in which the participants are involved, as (198) shows again here. Example (199) shows here that when raga is affixed with the combined affixation \(\sigma_{c}-/\) ong it must be a game of tag, which is an alternating chasing activity. Although technically posi- on the root raga 'chase' could be used in describing a game of tag, the distinction between the activities was clearly identified by my language helper. In (198) posi- indicates that one of the two is chasing the other, whereas when \(\sigma_{c} / /\) ong is used in (199) there was a turn-taking involved (that is, an alternation).
(198) Jimo nosiraga.
jimo \(\quad N\)-posi-raga
3PL/AB RE-MUT-chase
'They were in a chase together (with one pursuing the other).'
[EN98-001.4; cf horse.pin 187]
(199) Jimo neraragaong.
jimo \(\quad N\)-pe- \(\sigma_{c}\)-raga-ong
3PL/AB RE-SF/DY-RED-chase-AREC
'They played tag.' or: 'They chased each other.'
[EN98-001.4]
Affixation on the root lumba 'race' further illustrates the distinction of a mutual activity with an alternating one. In (200) the participants are simply in a race together, whereas in (201) it means that first one and then the other of the participants is in the lead (as would
occur in a close race). Examples (202) and (203) show that the structure for mutual action (see discussion in §10.4.1) is the same as for an alternating reciprocal action.
(200) Jimo mosilumba.
jimo M-posi-lumba
3PL/AB IR-MUT-race
'They are racing (one another).'
[EN98-001.4]
(201) Jimo melulumbaong.
jimo \(\quad\)-pe- \(\sigma_{c}\)-lumba-ong
3PL/AB IR-SF/DY-RED-race-AREC
'They are racing each other (first one is in the lead and then the other).'
[EN98-001.4]
\begin{tabular}{clll} 
(202) A'u & sono & tagu' \(u\) & mosilumba. \\
a'u & sono & tagu=' \(u\) & M-posi-lumba \\
1SG/AB & COM & friend=1SG/GE & IR-MUT-race
\end{tabular}
'I and my friend will race together.'
[EN98-001.4]
(203) A'u sono tagu'u melulumbaong.
a'u sono tagu='u M-pe- \(\sigma_{c}\)-lumba-ong
1SG/AB COM friend=1SG/GE IR-SF/DY-RED-race-AREC
'I and my friend will race ahead of each other.'
[EN98-001.4]
The alternating reciprocal affixation often occurs when a story is talking about violent activities such as killing, stabbing, cutting, etc. (although there are exceptions such as netatamba'ong 'be engaged to each other' in which only the basic idea of reciprocation seems to apply). Examples (204) and (205) show that it becomes hard to distinguish any semantic difference between chickens fighting and chickens killing each other. However, in elicitation it was usually clear that these were never identical activities. However, if we understand that in other examples (such as in (198)-(203)) there is a clear distinction between posi and \(\sigma_{c}-/\)-ong, then it is easy to postulate that in (204) the killing activity can be either one-sided or reciprocal, whereas in (205) the killing activity is viewed as an alternating activity.
(204) Manu' mosipatei.
manu' M-posi-pate-i
chicken IR-MUT-kill-DIR
'The chickens are killing each other.'
[EN98-001.21]
(205) Manu' nepapateang.

тапи' \(\quad N\)-pe- \(\sigma_{c}\)-pate-ang
chicken RE-SF/DY-RED-kill-AREC
'The chickens are killing/fighting each other.'
Examples (206) and (207) show the root jalo' 'stab' with posi and CV-/-ong affixation respectively. For these examples I was informed that there was no distinction in meaning.
(206) Jimo mosijalo’.
jimo M-posi-jalo'
3PL/AB IR-MIT-stab
'They are stabbing each other.'
[EN98-001.3; horse.pin 537]
(207) Jimo nejajalo’ong.
jimo \(\quad N\)-pe- \(\sigma_{c}\)-jalo'-ong
3PL/AB IR-SF/DY-RED-stab-AREC
'They stabbed each other, alternating (first one stabbed and then the other).'
[EN98-001.3]

\subsection*{10.5 The equative gu- prefix}

The verbal gu- prefix has a very specialised usage (possibly emphatic) in transitive constructions which can be viewed as establishing an equative function. This equative function is analysed here as detransitivising even though the morphosyntax used is transitive.

Examples of \(g u\) - in the active voice are much more like what is expected for reflexives typologically, as shown in (208) and (209). Here the A and the P argument refer to the same person. Another interesting feature is that a ligature nasal (LIG) appears between the active voice affix combination and the root base (§7.4.5).
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{4}{*}{(208)} & A'u & noguntope & siMesak. \\
\hline & \(a^{\prime} u\) & \(N\)-po \({ }_{1}\)-gu-n-tope & si=Mesak \\
\hline & 1SG/AB & RE-SF-EQTV-LIG-name & CN/AB=Mesak \\
\hline & \multicolumn{3}{|l|}{'I am named Mesak.' or: 'I call myself Mesak.'} \\
\hline \multirow[t]{4}{*}{(209)} & Io & noguntope & siMesak \\
\hline & io & \(N\)-po \({ }_{1}\)-gu-n-tope & si=Mesak \\
\hline & 3SG/AB & RE-SF-EQTV -LIG-name & CN/AB=Mesak \\
\hline & \multicolumn{3}{|l|}{'His name is Mesak.'} \\
\hline
\end{tabular}

Note that these reflexive-like constructions however cannot be conveyed in the inverse verb construction, as in (210).
\begin{tabular}{ll}
\(* S i=\) Mesak & ni-po \({ }_{1}\)-gu-tope \(=\) nyo. \\
CN/AB=Mesak & IV/RE-SF-EQTV -name=3SG/GE
\end{tabular}

Example (211) illustrates another example of gu- used in the active voice construction. The only known productive verb to use \(g u\) - in the active voice is tope 'name'. Examples of \(g u\) - in the active voice are quite rare in the corpus. However within the riddle genre, guin the inverse voice is common (§18.3.3).
\begin{tabular}{rlllll} 
(211) Sampe & manu' uo & noguntope & manu' & senge. \\
sampe & manu' 'uo & \(N\)-po - -gu-n-tope & manu' & senge \\
until & bird & yonder & RE-SF-EQTV -LIG-name & bird & osprey
\end{tabular}
'So that bird became known as the osprey.' [ceku03.jdb 090]
However, the main use of this affix is in riddles where it is always found in the inverse verb construction. The gu prefix is always preceded with the stem former po as in nipogu-. In over fifty narrative and folk tale texts there are only two clause constructions that have the \(g u\) - prefix in them, and one of these two uses seems to be largely idiomatic. My language helpers both agreed that \(g u\) - is most commonly used in riddles, and this is borne out in my riddle corpus. This distribution supports the notion that \(g u\) - is a prefix used to convey a special kind of poetical sense. In riddles it is used to identify whether the object being guessed is one and the same object. That is, when \(g u\) - is used in the inverse voice construction the A and the P are in an equative relationship (as contrasted with for example partitive reflexives, see Geniušienè 1987:80). The equative prefix is normally only used on inherent noun bases. The exceptions seem to be largely idiomatic.

In example (212) the riddler uses this type of construction to provide a hint or clue to the riddle's solution. Here the riddler says if humans are buried in the dirt, then what is the dirt buried with? After a few questions and answers are given then the equative construction in (212) is given as a further clue. \({ }^{35}\)
```

(212) Nao botonyo nipogubotonyo,
nao boto=nyo ni-po -qu-boto=nyo
that trunk=3SG/GE IV/RE-SF-EQTV-trunk=3SG/GE
roongonyo nipoguroongonyo.
roong=nyo ni-po -gu-roong=nyo
leaf=3SG/GE IV/R-SF-EQTV-leaf=3SG/GE
'Its trunk is its own trunk, and its leaves are its own leaves.' [tangke01.doc riddle \#3]

```

The construction is different from the active voice forms because the same root is used both in the verb and in the noun of the P argument. In addition to this the A argument must agree with the genitive possessor of the P argument. All of the examples with the guformed in this way are in the inverse construction. These clauses demonstrate that they are syntactically transitive, but semantically intransitive since both the A and the P argument refer to the same entity.

Example (213) contrasts with (212) in that in the former the gu-prefix is absent and a different semantic effect occurs. The subscript letters in the free translation indicate that although there may be some ambiguity, in this construction there is a process or change

\footnotetext{
\({ }^{35}\) In essence the riddler is stating something pertinent about the entity (that is, the solution) without saying what it is. After a few more questions and answers the riddler repeats the riddle, 'If humans are buried in the earth, then what is the earth buried with?'. This process goes on for a while, until the audience gives up, although they know it has something to do with bones. The solution is given with an example. The brain is buried with the bones, but what does the brain become? It becomes dirt. So the solution to the riddle is: the dirt is buried in the bones. Now we can see that the equative construction in (212) is camouflaging the word bu'u 'bones' in both clauses.
}
from one entity to another (or from one part to another part of the same entity). \({ }^{36}\) So what makes these constructions without the \(g u\) - distinct from those with \(g u\) - are true transitives, with two syntactic arguments.
(213) Roongonyo niporoongonyo.
roong=nyo ni-po 1 -roong=nyo
leaf=3SG/GE IV/RE-SF-leaf=3SG/GE
'Their leaves \({ }_{\mathrm{i}}\) become its leaves \({ }_{\mathrm{j}}\).'
Example (214) shows that removal of the po stem former creates an ungrammatical clause.
```

(214) *Roong=onyo ni-roong=onyo.
leaf=3SG/GE IV/RE-leaf=3SG/GE

```

The clauses in (215) and (216) show that the riddle object can also be referred to by extension in the first person. It is very common in Pendau riddles to refer to an inanimate object anthropomorphically.
```

(215) Roongo'u nipoguroongo'u.
roong='u ni-po (-gu-roong='u
leaf=1SG/GE IV/R-SF-EQTV-leaf=1SG/GE
'My leaf is my own leaf.'
(216) Baju'u upogubaju.
baju='u 'u-po-gu-baju
shirt=1SG/GE 1SG.IV/IR-SF-EQTV-shirt
'The shirt I wear is my own shirt.'

```

Examples (217) and (218) contrast two similar clauses. Example (217) is a clause without the \(g u\)-, and (218) uses the \(g u\) - prefix. Both of these clauses occur in the same riddle. In (217) the entity of the riddle (that is, something that can move) may be part of something else, such as a tree branch which can move, but the tree itself does not move, so the two parts/entities may be connected but have to be in a part-whole relationship. In contrast to this, in (218) the entities are the same. Whatever the object is, if any one part moves the whole part moves, that is, it is an inseparable whole. In this riddle the answer is the air (which of course can be used for either of these examples). \({ }^{37}\)

\footnotetext{
\({ }^{36}\) The Indonesian translation of (212) and (213) are different (and note that the syntactic construction is not at all parallel between Indonesian and Pendau). The second clause in (212) is translated into Indonesian as daunnya tetap daunnya 'its leaves remain its leaves', and the similar clause without the gu prefix in (213) is translated as daunnya jadi daunnya 'its leaves become its leaves'.
\({ }^{37}\) The clauses which are parallel in structure to the clauses that have the verbal equative prefix \(g u\) - also appear to be equative-like. However, a proper analysis of these will have to await future research and more data than is currently available.
}
(217) Kedonyo nipokedonyo.
kedo \(=\) nyo \(\quad\) ni-po \(o_{1}\)-kedo \(=\) nyo
move \(=3\) SG/GE IV/RE-SF-move=3SG/GE
'Its movement can move by itself.' [Sibayu riddle \#2;
EN98.002.8]
(218) Kedonyo nipogukedonyo.
kedo=nyo ni-po \({ }_{1}-\) gu-kedo=nyo
move \(=3 \mathrm{SG} / \mathrm{GE}\) IV/R-SF-EQTV-move=3SG/GE
'Its movements are its own movements. \({ }^{38}\)
[EN98-002.9]
Examples (219)-(221) illustrate other idiosyncratic uses. These also seem to show that verbs with the \(g u\) - prefix have emphatic properties (notably there is no use of a P argument as in the previous examples).
(219) Upogumate!
'u-po \(1_{1}\)-gu-mate
1SG.IV/IR-SF-EQTV-die
'I would rather die!'
[king.pin 127]
(220) Ndau nipogusanang.
ndau ni-po \(o_{1}\)-gu-sanang
NEG IV/RE-SF-EQTV-happy
'I myself am not happy.'
[EN97.004.31]
(221) Nipogusanang.
ni-po \({ }_{1}\)-gu-sanang
IV/RE-SF-EQTV-happy
'I myself am happy.'

\subsection*{10.6 Resultative po'o-}

This section analyses the formative sequence of po'o- (a harmonic prefix-see §3.5.7) as a resultative (RSLTV) construction. This formative only occurs following a stative prefix. The combination of stative with resultative detransitivises the word and results in an intransitive clause. Cognates of \(p o^{\prime} o_{1}\) - can be found in many Austronesian languages, although there are various meanings (also compare \(\mathrm{po}^{\prime} \mathrm{o}_{2}-\S 10.2 .3\) ). \({ }^{39}\) Resultatives, possessives, and homophonous causative combinations are compared in Figure 10.9.

\footnotetext{
\({ }^{38}\) The Indonesian translation given for this was as geraknya dia punya gerak sendiri literally 'its movements he/she has are its own movements.'
\({ }^{39}\) Both van den Berg (1989:197-198; 281-282) and Donohue (1995:204-207) identify the cognate formatives in Muna (feka-) and Tukang Besi (hoko-) as a factitive (both of these languages are found in Southeast Sulawesi). However, in Pendau it cannot be shown that a transitive clause is formed as shown in their descriptions. Himmelmann and Wolff (1998) describe the cognate form in Toratán (of Northern Sulawesi) as an 'exhaustive stative'.
}
\begin{tabular}{|c|c|c|}
\hline Affix(es) & Semantic effect & Used on \\
\hline po'o \(1_{1-}\) (pa'a-, pe'e-) & Resultative & stative root to derive stative verb \\
\hline po'o \(2^{-}\)(pa'a-, pe'e-) & Causative & stative root to derive transitive verb \\
\hline 'o- ('a-, 'e-) & Possessive & nouns, verbs \\
\hline po-'o- (pa- 'a-, pe- 'e-) & Stem former-possessive & nouns, verbs \\
\hline
\end{tabular}

Figure 10.9. A comparison of resultatives, possessives, and homophonous causative combinations

The Pendau formative po'o- shows traces of indirect causation. Many Pendau examples refer to a completed result due to some external causation.

In the discourse immediately preceding example (222) Jesus orders a storm on the lake to stop. This is immediately followed by the wind stopping and the lake becoming calm.
(222) Example with resultative affixation (this section)
\begin{tabular}{lllll} 
Angin & neondo', & rano иo & nepe'elino. \\
angin & N-pe-ondo' & rano 'uo & no-po'o \(1_{1}\)-lino \\
wind & RE-SF/DY-stop & lake & yonder & ST/RE-RSLTV-calm
\end{tabular}
'The wind stopped, and the lake had become unexpectedly calm.'
[Mark 2:39]
However since there is no syntactic change in the valency it does not seem appropriate to treat \(p o^{\prime} o_{1}\) - as a causative. The best solution is to analyse this as one formative which will be called a resultative (RSLTV). This is because the meaning of all of these verbal constructions results in a changed state or condition. This change decreases the valency of transitive verbs and results in an intransitive clause. Examples (223) and (224) illustrate clauses that have identical morphology but are actually not resultative constructions.
(223) Similar looking form—with stem former-possessive affixation (§12.4.10)
\begin{tabular}{lllllll} 
Bai & no & no'ounga, & joo & unga & bengkel & tutuu \\
bai 'uo & \(N\)-po 1 -'o-unga & joo & unga & bengkel & tutuu \\
like yonder & RE-SF/DE-HAVE-child & however & child & female & really
\end{tabular}
tonipo'oungaa'onyo.
to \(=n i-p o_{1}\)-'o-unga- \(a\) '=nyo
RM \(=\mathrm{IV} / \mathrm{RE}-\mathrm{SF} / \mathrm{DE}-\mathrm{HAVE}-\mathrm{child}-\mathrm{TZ}=3 \mathrm{SG} / \mathrm{GE}\)
'So then she gave birth, however it really was a girl child that she had given birth to.'
[mdtext5.txt 027]
(224) Similar looking form—with causative po'o \(_{2^{-}}\)(§12.4.14)

Nyaa mupo'otou'!
nyaa mu-po'o \({ }_{2}\)-tou'
don't 2SG.IV/IR-CAUS-finish
'Don't you finish it!'
[poora.pin 527]

Examples (225)-(229) demonstrate the stative resultative no-po'o- affixation. In all of these examples the undergoer is affected and somehow changed indirectly as a result of previous actions. Although further research is needed these are tentatively identified in the translation of these examples as an 'unexpected' resulting state, as further contrasted in Figure 10.10 with their stative affixed counterparts.
\begin{tabular}{|l|l|l|l|l|}
\hline Root base & \begin{tabular}{l} 
Stative prefix \\
(realis)
\end{tabular} & Gloss & \begin{tabular}{l} 
Resultative \\
(realis)
\end{tabular} & Gloss \\
\hline Stative & ne-lino & 'calm' & ne-pe'e-lino & \begin{tabular}{l} 
'become unexpectedly \\
calm'
\end{tabular} \\
\hline & na-nabu & 'fall' & na-pa'a-nabu & 'unexpectedly fall' \\
\hline & na-tarob & 'rip' & na-pa'a-tarob & 'unexpectedly rip' \\
\hline & no-udut & 'sever' & no-po'o- 'dut & 'unexpectedly sever' \\
\hline Transitive & na-la'as & 'release' & na-pa'a-la'as & 'unexpectedly release' \\
\hline & ma-ate \({ }^{40}\) & 'die' & na-pa'a-pate & 'unexpectedly kill/die' \\
\hline & na-raut & 'collapse' & na-pa'a-raut & 'unexpectedly collapse' \\
\hline
\end{tabular}

Figure 10.10. Comparison of stative and stative-resultative verbs

Example (225) is preceded in the story by reference to a pair of flesh-eaters who are standing up in the top of a coconut tree. After spotting the children escaping in a sailboat they cast a spell in order to make their hair long enough to reach it. Their hair wraps around the mast of the sailboat and they begin pulling it closer to them. The ninety-nine brothers attempt to cut the hair with their knives and axes, but it is futile and the metal just chips off. Finally a magical cat tells their sister that he can bite the hair. At this point we pick up the story and find out that the hair is completely severed by the action of the cat. As a result the flesh-eaters both fall down unexpectedly from the coconut tree and die.
(225) Tarus
tarus no-po'o \(o_{1}\)-udut luba nu=panganganta ио
and.then ST/RE-RSLTV-sever hair \(\mathrm{CN} / \mathrm{GE}=\) flesh-eater

'And then the flesh-eater's hair was unexpectedly severed. And then the flesh-eaters fell from the coconut tree trunk there with the result that the flesh-eaters unexpectedly died.'
[mdtext20.txt 211]
Examples (226)-(228) are also from stories about the flesh-eaters. In (226) the monkey tricks the flesh-eater into thinking that a bumble bee hive is a magic drum. Consequently

\footnotetext{
40 The form pate 'kill' is not found in the stative construction as in *na-pate.
}
the flesh-eater beats on the drum, but instead he unexpectedly rips open the beehive with serious consequences. Later in the story the monkey again tricks the flesh-eater, but shows him a python coiled up and convinces the flesh-eater that the python is a magic belt. So when the flesh-eater grabs the python, the python attacks the flesh-eater and they become embroiled in a bitter battle. Finally the flesh-eater gouges out the eyes of the python, and the python unexpectedly releases its hold on him, as given in (227). In (228) seven children are pursued by a pair of flesh-eaters, but a giant cat saves them by unexpectedly killing the flesh-eaters. Their death is the result of the giant cat attacking them.
\begin{tabular}{rllllc} 
(226) Paey & napa'atarob & mai & bonuo & \(n u=t a t a m b u a n g\) & uo. \\
paey & no-po'o \({ }_{1}\)-tarob & mai & bonuo & \(n u=\) tatambuang & 'uo \\
and.then & ST/RE-RSLTV-rip & come & nest & CNM//GE=bumble.bee & yonder
\end{tabular}
'And then the bumble bees' nest was unexpectedly ripped open.' [troll.pin 213]
\begin{tabular}{lllll} 
(227) Ila & uo & saa & moo & napa'ala'as \\
ila 'uo & saa & moo & no-po'o 1 -la'as \\
from yonder & python & this & ST/RE-RSLTV-release
\end{tabular}
'After that this python unexpectedly released itself from the body of the flesh-eater.'
[troll.int 289]
\begin{tabular}{llll} 
(228) Napa'apate & jimo & ntoirapi & uo. \\
no-po'o 1 -pate, & jimo & ntoirapi & 'uo \\
ST/RE-RSLTV-kill & them & husband\&wife & yonder
\end{tabular}
'The husband and wife (flesh-eaters) were unexpectedly killed (by the giant cat).'
[poora.pin 399]
In example (229) the floor unexpectedly collapses underneath the man as he merely walks around his bedroom. The floor's collapse is a result of the man repeatedly walking on it.
(229) Bai uo siamanyo ma’o lampa-lampa,
bai 'иo siama=nyo ma'o lampa-lampa
like yonder father=3SG/GE go RED-travel
\begin{tabular}{llll} 
tarus & napa'araut & salo & nupo'oturuong \\
tarus & no-po'o \({ }_{1}\)-raut & salo & \(n u=p o_{1-}{ }^{\prime}\) o-turu-ong \\
and.then & ST/RE-RSLTV-collapse & floor & CN/GE=SF-HAVE-sleep-Nloc
\end{tabular}
\begin{tabular}{lllllll} 
niamanyo & uo, & tarus & nanabu & siama & nuunga & uo, \\
ni=ama \(=\) nyo & 'uo & tarus & no-nabu & siama & nu=unga & 'uo \\
PN/GE=father=3SG/GE & yonder & and.then & ST/RE-fall & father & CN/GE=child & yonder
\end{tabular}
\begin{tabular}{llllll} 
paey & niumpag & nubengga & uo & sampe & naate. \\
paey & ni-umpag & nu=bengga & 'uo & sampe & no-ate \\
and.then & IV/RE-step.on & CN/GE=buffalo & yonder & until & ST/RE-dead
\end{tabular}
'After that his father went walking and walking, and then the floor of his father's bed collapsed, and then the child's father fell down and the water buffalo stepped on him until he was dead.'

Although some of the roots presented in the examples above, such as lino 'calm, quiet' are statives as in (222), others such as pate 'kill', udut 'sever, cut', tarob 'rip, tear', and la'as 'release' are basically transitive, as in (225)-(228). These transitive roots can best be interpreted as detransitivised when the resultative stative affix combination affixes them.

\section*{11 Directional verbs and serialisation}

\subsection*{11.1 Introduction}

There is one very productive set of serial verbs in Pendau that can serve as either directional or purposive serial verbs, depending on whether they respectively precede or follow the main verb. These are the set of verbs glossed as 'come', 'go', 'descend', and 'ascend'. The main discussion begins with the form and functions of directional verbs in §11.2. Section 11.3 will discuss the directional verbs functioning as serial verbs. Serial verbs in Pendau seem to have their locus in motion, as the fifth verb that often patterns like the four directional verbs is teule 'return'. The more difficult task of examining multiple sequentially conjoined verbs and discussing whether these are serial verbs or simply concatenation of verbs is presented in \(\S 11.4\).

\subsection*{11.2 Directional verbs}

\subsection*{11.2.1 Introduction}

There are four directional verbs which can be thought of as two sets of antonyms, as listed in (1).
(1) ma’o 'go'
mai 'come'
nyau 'go down, descend, climb down'
mene' 'go up, ascend, climb up'
Directional verbs have three striking peculiarities. First, they have irregular morphological affixation. Secondly, they can also function as serial verbs when they precede or follow the matrix verb (§11.3). Example (2) lists the different affixations and forms that ma'o and mai can occur as, and (3) lists the various affixations for mene' and nyau. A comparison of these two lists suggests that the items in (2) have become more grammaticised than the items in (3).
\begin{tabular}{|c|c|c|c|c|}
\hline (2) & ma'o & 'go (RE or IR )' & mai & 'come (RE or IR)' \\
\hline & na'o & 'go (RE)' & -- & -- \\
\hline & 'u-ma'o & 'go (SF/RE or SF/IR)' & 'и-mai & 'come (SF/RE or SF/IR)' \\
\hline & no-'u-ma'o & 'go (UD/RE-SF)' & no-'u-mai & 'come (UD/RE-SF)' \\
\hline & mo-'и-ma'o & 'go (UD/IR-SF)' & mo-'u-mai & 'come (UD/IR-SF)' \\
\hline & la'o & 'go (IMP)' & -- & -- \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline mene' & 'go up (IR or RE)' & nyau & 'go down' \\
\hline me-mene' & 'go up (IR-SF/DY)' & me-nyau & 'go down (IR-SF/DY)' \\
\hline пе-тепе' & 'go up (RE-SF/DY)' & ne-nуau & 'go down (RE-SF/DY) \\
\hline no-'u-mene' & 'go up (UD/RE-SF)' & -- & -- \\
\hline то-'и-тепе' & 'go up (UD/IR-SF)' & -- & -- \\
\hline -- & -- & ma-nyau & 'go down (UD/IR?)' \\
\hline
\end{tabular}

The first thing that can be observed about these two lists is the variability of affixation possibilities which occur. \({ }^{1}\) This is a striking contrast to most verbs in Pendau which can usually be sorted into a verb class according to which stem former (or lack of stem former for stative verbs) a verb is associated with. However the use of pe-with mene' 'go up' and nyau 'go down' indicates that the set of four verbs formerly belonged to the dynamic verb class (see \(\S 5.6 .2 .3\) and \(\S 9.3 .2\) ). Any of these four directional verbs can appear without a verbal prefix, and the bare verbs do not indicate irrealis or realis (although the context will usually imply one or the other). The variability of the affixation probably reflects a certain amount of synchronic instability in the grammar of this set of verbs, as well as the multiple syntactic possibilities that this verb class can function in. Serial verbs are often cited as an unstable class of verbs, for example Crowley (1987:77) states for Oceanic languages:
...the forms that are suggested for proto-Oceanic by Pawley (1973) have been diachronically highly unstable, and have evolved into prepositions in all of the Central Vanuatu languages (and also many other languages outside this subgroup).
There is not one prefix that can occur on all four directional verbs. Figure 11.1 presents the lists in (2) and (3).

The four syntactic uses of directional verbs are illustrated in examples (4)-(8), using mene' 'go up' and mai 'come'. First, directional verbs may occur as independent verbs as in (4).

\footnotetext{
\({ }^{1}\) A transitive form of mene' 'go up' may be derived in inverse voice as nipene' or repene' with applicative suffixes \(-a\) ' or \(-i\), and means 'climb'. An example can be seen in (75). Compare the formation of transitive verb pate 'kill' from ate 'die' which is formed in a similar manner as pene' 'climb' is from mene' 'go up'. The initial \(m\) of mene' is substituted with \(p\) either as a causative or as a stem former variation. Ma'o 'go' may also be derived in inverse voice as nipo'uma'o, nipoma'o, ropo'uma', or ropoma'o and occurs with either the applicative suffix \(-a\) ' or \(-i\). In an elicitation session my main language helper said the form with po'u- was preferable to po- when used with ma'o (EN98-003.44).
}
\begin{tabular}{|l|l|l|l|l|l|l|l|}
\hline \begin{tabular}{l} 
Directional \\
verb
\end{tabular} & \begin{tabular}{l} 
Irregular \\
realis \\
form
\end{tabular} & \begin{tabular}{l} 
Irregular \\
imperative \\
form
\end{tabular} & \begin{tabular}{l} 
Dynamic \\
prefix pe-
\end{tabular} & \begin{tabular}{l} 
Occurs \\
w/o \\
affixing
\end{tabular} & \begin{tabular}{l} 
'u- \\
stem \\
former
\end{tabular} & \begin{tabular}{l} 
mo'u / \\
no'u- \\
prefix
\end{tabular} & \begin{tabular}{l} 
ma- \\
prefix
\end{tabular} \\
\hline \begin{tabular}{l} 
mene' \\
'go up'
\end{tabular} & -- & -- & \begin{tabular}{l} 
M/N- \\
pe-mene'
\end{tabular} & mene' & -- & \begin{tabular}{l} 
mo'umene' \\
no'umene'
\end{tabular} & \begin{tabular}{l}
-- \\
\hline \begin{tabular}{l} 
nyau \\
'go down'
\end{tabular} \\
--
\end{tabular} \\
\hline \begin{tabular}{l} 
ma'o \\
'go'
\end{tabular} & na'o & la'o & \begin{tabular}{l} 
M/N-pe- \\
nyau
\end{tabular} & nyau & -- & -- & manyau \\
\hline \begin{tabular}{l} 
mai \\
'come'
\end{tabular} & -- & -- & ma'o & 'u-ma'o & \begin{tabular}{l} 
mo'uma'o/ \\
no'uma'o
\end{tabular} & -- \\
\hline
\end{tabular}

Figure 11.1. Summary of variation with the directional verb set \({ }^{2}\)
(4) Directional verb as main verb (§11.2)

A'u nemene' niu.
1SG/AB RE-SF/DY-go.up coconut
'I climbed the coconut tree.'
[maslia.pin 044]
Examples (5) and (6) show the same verb as a directional serial verb (see §11.3.2) and a purposive serial verb respectively ( \(\$ 11.3 .3\) ). The two types are distinguished according to whether they occur after the main verb (directional serial verb) or before it (purposive serial verb).
(5) Directional serial verb (\$11.3.2)
\begin{tabular}{lllllll} 
Bai uo & nisiira' & mene' & nijimo bituong & uo. \\
bai & 'uo & ni-siir-a' & mene' & nijimo bituong & 'uo \\
like yonder & IV/RE-stare-TZ & go.up & 3PL/GE star & yonder
\end{tabular}
'After that they stared up at that star.'
[natal01.pin 021]
(6) Purposive serial verb (\$11.3.3)

Tarus unga иo mene' nangabut palupun nutomogurang ио.
tarus unga 'uo mene' \(N\)-pong-abut palupun nu=tomogurang 'uo
continue child yonder go.up RE-SF-clear overgrowth \(\mathrm{CN} / \mathrm{GE}=\) elder yonder
'After that that child went up to clear the overgrown weeds of that elder.'
[mdtext20.txt 123]

\footnotetext{
\({ }^{2}\) The prefix sequence no-' \(u\)-/mo-' \(u\) - can occur on all of the directional verbs except nyau. Also note that the dynamic prefix me-/ne- (underlyingly \(M-/ N-p e-\) ) can only occur with mene' and nyau. It is also interesting to see the irrealis/realis contrast affects the nasal verb root of ma'o and forms na'o for a realis form, since irrealis/realis is normally part of the affixes and not part of the root. Finally ma- only occurs on the nyau directional verb, and this too may be a result of paradigmatic pressure in which an underlying mo- follows vowel harmony converting this into ma. However there is no real evidence to determine what any of the mo-/no- and ma-surface prefix forms operate as other than the fact that mo-no- contrast irrealis and realis mode (thus marked as UD, 'undetermined'). The ' \(u\) - prefix has no counterpart in verbal prefixation, and so I simply designate it as a prefix stem former.
}

Directional verbs often subcategorise a prepositional phrase, as in (7), but in some contexts this appears to be optional (more examples appear in §11.2.2-3). Example (8) shows the use of serial verbs as dependents of a prepositional phrase, a use that is usually reserved for nouns (see the discussion of these as gerunds in §7.4.9).
(7) Directional verb as main verb subcategorising prepositional phrase (see §8.3.7 and §11.2.2-3)
\begin{tabular}{llllll} 
A'u & ma'o & ritopogunting, & paey & a'u & nigunting. \\
a'u & ma'o & ri=to-po 1 \(_{1}\) gunting & paey & a'u & ni-gunting \\
1SG/AB & go & LOC=AGNM-SF-scissors & and.then & 1SG/AB & IV/RE-scissors
\end{tabular}
'I went to the barber, and then he cut me (my hair).' [terminal.int 016]
(8) Directional verb as dependent of locative preposition ri (§7.4.9)
\begin{tabular}{llll} 
Ami & nelampa & rimai & moo. \\
'ami & N-pe-lampa & ri=mai & moo
\end{tabular}

1PL.EXC/AB RE-SF/DY-walk LOC=come here
'We walked up to come here.'
[poora.pin 371]

\subsection*{11.2.2 Go and come verbs}

Of all the directional verbs mai 'come' and ma'o 'go' are the most irregular. They often do not take a prefix, but occasionally they take irrealis or realis prefixes (see the list of possibilities in (2)).
(9) Oo nyaapo mai o bia uala.
'oo nyaa=po mai o bia 'u-ala
2 SG/AB don't=CONT come and later 1SG.IV/IR-get
'Don't you come yet, and I will get you later.'
[mdtext3.txt 022]
(10)
\begin{tabular}{lll} 
Ami & ma'o & Kulawi. \\
'ami & ma'o & Kulawi \\
1PL.EXC/AB & go & Kulawi
\end{tabular}
'We (excl.) went to Kulawi.'
[cekuphil.int 006]
This section gives examples of ma'o and mai as the main verb. For a discussion of directional verbs functioning as serial verbs see §11.3. Examples (11) and (12) show the use of ma'o 'go' as the main verb with three different tense interpretations, depending on the context, since there is no irrealis/realis prefix used. Example (12) shows the use of the prefix ' \(u\) - which is often found attached to ma'o 'go' and other directional verbs. However this prefix is only found with directional verbs and any difference it makes to the meaning of the derived form is indeterminate, so I will refer to it as a stem former. \({ }^{3}\) Examples (13) and (14) contrast the irrealis and realis affixed forms of ma’o. Examples (11)-(14) also illustrate that directionals sometimes subcategorise a locative prepositional phrase (i.e. directionality implies a location); but compare example (10) which shows that the usage of a locative preposition with directionals is optional.

\footnotetext{
\({ }^{3}\) The 'u- prefix doesn't appear on any other verb class, and it is clearly not the productive pronimal prefix 'u-1SG.IV/IR.
}
\begin{tabular}{llll} 
(11) & Io & ma’o & riTambu. \\
io & ma'o & ri=Tambu \\
& 3SG/AB & go & LOC=T.
\end{tabular}
'He/she goes to Tambu.'
(12) Io uma’o riTambu.
io 'u-ma'o ri=T.
3SG/AB SF-go LOC=T.
'He/she goes to Tambu.'
(13) Io no'uma’o riTambu nimporongomo
io no-'u-ma'o ri=T. nimporongomo

3SG/AB UD/RE-SF-go LOC=T. yesterday
'He went to Tambu yesterday.'
(14) Io mo'uma'o riTambu seinsangana.
io mo-'u-ma'o ri=T. seinsanga
3SG/AB UN/IR-SF-go LOC=T. tomorrow
'He is going to Tambu tomorrow.'
Examples (15) and (16) illustrate the irregular imperative form of ma'o 'go', which is la'o.
(15) Oo la’o pombayu!
'oo la'o po \(1_{1}\)-mbayu
2SG/AB go/IMP SF-pound
'You go and pound it!' [poora.pin 101]
(16) Emu la'omo, saba' neteumbamo jalang
'emи la'o=mo saba' ne-te-umba=mo jalang
2PL/AB go/IMP=COMP because AV/RE-NV-open=COMP road
'You go now, because the road is already open.'
[mdtext19.txt 057]
Another irregular form (see la'o above) of ma'o 'go' is na'o, which appears only six times in my database corpus, always appears preceding paio 'where', as in example (17). The substitution of \(n\) for \(m\) in this word reflects the power of the irrealis/realis paradigm in which the nasals \(m-/ n\) - provide a binary contrast. Apparently na'o is formed by analogy with the realis \(N\) - on this very common word ma'o 'go'. Although na'o 'went' creates an irregular realis form of ' go ' based on \(m a\) 'o, ma'o ' go ' is not restricted to the irrealis mode.
\begin{tabular}{lll} 
(17) \begin{tabular}{ll} 
Siinamu & na'o
\end{tabular} & paio? \\
siina \(=m u\) & na'o & paio \\
mother \(=2 \mathrm{SG} / \mathrm{GE}\) & \(\mathrm{go} / \mathrm{RE}\) & where
\end{tabular}
'Where did your mother go?'
[poora.pin 561]
Examples (18) and (19) are examples of mai prefixed with irrealis and realis prefixes respectively.
\begin{tabular}{lll} 
Io & kana & mo'umai. \\
io & kana & mo-'u-mai \\
3SG/AB & certainly & UD/IR-SF-come
\end{tabular}
'He can certainly come (in).'
[horse.pin 251]
(19)
\begin{tabular}{lllll} 
Paey & no'uditi & tarus & io & no'umai. \\
paey & no'u-diit-i & tarus & io & no-'u-mai \\
and.then & 1SG.IV/RE-pull-DIR & continue & 3SG/AB & UD/RE-SF-come
\end{tabular}
'And then I pulled him up, and then he came to me.'
[lindug.int 020]
Ma'o 'go' and mai 'come' are also used in paired clauses to show a directional alternation of coming and going (or hither and thither).
\begin{tabular}{llllll} 
(20) & Jimo & ma'o & sangsalu, & mai & sangsalu. \\
jimo & ma'o & so-ng-salu & mai & so-ng-salu \\
& 3PL/AB & go & ONE-LIG-path & come & ONE-LIG-path
\end{tabular}
'They went down one path and up another path.'

\subsection*{11.2.3 Up and down verbs}

This section exemplifies the use of mene' and nyau as main verbs (see \(\S 11.3\) for a discussion of directional verbs functioning as serial verbs). Examples (21) and (22) show the use of the realis prefix \(N\) - and the dynamic verb class stem former pe- on mene' 'go up'. These two examples also show that the location of the action can either be marked with a prepositional phrase or just as often be a core argument.
\begin{tabular}{lll} 
(21) \begin{tabular}{ll} 
Io & nemene'omo
\end{tabular} & ribumbungan. \\
io & \(N\)-pe-mene'= \(\%\) & ri=bumbungan \\
& 3SG/AB & RE-SF/DY-go.up=COMP
\end{tabular}
'He already climbed up the ridgepole.'
[asu2.pin 202]
\begin{tabular}{llllll} 
(22) \begin{tabular}{ll} 
Ila & uo \\
ila & odo \\
'uo & odo
\end{tabular} & nemene'omo & N-pe-mene'=mo & loka & uo. \\
& loka & 'uo \\
from yonder & monkey & RE-SF/DY-go.up=COMP & banana & yonder
\end{tabular}
'From there the monkey already went up the banana tree.
[ceku01.jdb 022]
Examples (23) and (24) show the use of the no-' \(u\) - prefix combination (realis) on mene'. Example (25) shows the use of the mo-'u- prefix combination (irrealis). See Figure 11.1 which shows that mo'u-/no'u- appears on all of the directional verbs except for nyau. The ' \(u\) - stem former prefix is only found on directional verbs (see more discussion in §11.2.2). As mentioned in \(\S 11.2 .2\) the appearance of this prefix combination is unpredictable in its occurrence, but it is certainly less frequent than the unaffixed form mene' or even the use of the \(M / N\)-pe- prefix combination.
\begin{tabular}{llll} 
(23) \begin{tabular}{ll} 
Jimo & no'umene'
\end{tabular} & siina & nigibang. \\
jimo & no-'u-mene, & siina & ni=gibang \\
3PL/AB & UD/RE-SF-go.up & mother & PN/GE=lizard
\end{tabular}
'Then they went up to the mother of the water monitor lizard.'
[gibang.pin 121]
(24) Bai uo nolumeap nakaasimo, jimo no'umene'.
bai 'иo \(N\)-po \({ }_{1}\)-[um]-leap no-kaasi=mo jimo no-'u-mene'
like yonder RE-SF-TEL-fly ST/RE-shrink=COMP 3PL/AB UD/RE-SF-go.up
'So as they flew up they shrunk (in apparent size), and they went up.' [horse.pin 671]
(25) A'u mo'umene' raerava.
a'u mo-'u-mene' raerava
1SG/AB UD/IR-SF-go.up sky
'I will go up into the sky.' [mdtext13.txt 005]

Examples (26)-(28) show the use of the unaffixed form of mene' as the main verb of a clause (i.e. without prefixes).
\begin{tabular}{lll} 
Masaepo & ito & mene'? \\
mo-sae=po & 'ito & mene' \\
ST/RE-long=CONT & 1PL.INC/AB & go.up
\end{tabular}
'When will we go up?'
[horse.pin 848]
(27)
\begin{tabular}{lllllll} 
Ila \(\quad\) uo & tarus & mene' & unga & uo & sono & sikainyo \\
ila 'uo & tarus & mene' & unga 'uo & sono & si=kai=nyo \\
ABL yonder & continue & go.up & child & yonder & COM & \(\mathrm{PN} / \mathrm{AB}=\) grandpa=3SG/GE \\
& & & & \\
nengita & sobalo nuunga & uo. & \\
N-pong-ita & sobalo nu-unga & 'uo & \\
RE-SF/PT-see & snare \(\mathrm{CN} / \mathrm{GE}=\) child & yonder
\end{tabular} 'From there that child continued and went up with his grandpa to see that child's snare.'
[mdtext15.txt 133]
\begin{tabular}{llll} 
(28) & Ito & mene'opo & nao. \\
'ito & mene'=po & nao \\
& 1PL.INC/AB & go.up=CONT & there
\end{tabular}
'We will go up there.'
[odo1.pin 011]

Example (29) demonstrates an extended use of mene' in which anger increases (lit. 'goes up').
```

(29)

| Nemene'omo | biliis | nutonobuta | moo. |
| :--- | :--- | :--- | :--- |
| N-pe-mene'=mo | biliis | nu=to-no-buta | moo |
| RE-SF/DY-go.up=COMP | anger | CN/GE=AGNM-ST/RE-blind | this |

'The blind man's anger increased (lit. went up).'
[nangkait.pin 197]

```

Examples (30)-(34) demonstrate the use of nyau 'go down' affixed with the dynamic prefix pe-. These examples also contrast the location in a prepositional phrase with noun phrases that are not marked as prepositional phrases. The latter noun phrases become the locative goal of the directional verb.

'And then that child's stepmother went down to the water and washed clothes.'
[mdtext18.txt 025]
\begin{tabular}{lllll} 
Ila uo & jimo & uo & menyaumo \\
ila & 'uo & jimo & 'uo & M-pe-nyau=mo \\
from & yonder & 3PL/AB & yonder & IR-SF/DY-go.down=COMP
\end{tabular}
kampung,
kampung
village
'After that they now went down to the village.'
(33)
\begin{tabular}{llll} 
Ededea & menyau & riaravaong & nao. \\
'e-de-dea & M-pe-nyau & ri-aravaong & nao \\
HAVE-RED-many & IR-SF/DY-go.down & LOC=ocean & that
\end{tabular}
'Many people are going down to the ocean.'
[poora.pin 237]
(24)
\begin{tabular}{llllll} 
Jari & ito & nao & kai & menyau & sembengi. \\
jari & 'ito & nao & kai & M-pe-nyau & so-mbengi \\
so & 1PL.INC/AB & that & grandpa/VOC & IR-SF/DY-go.down & ONE-night
\end{tabular}
'So we there, grandpa, will go down for one night.'
[poora.pin 329]
Example (35) illustrates the use of the ma- prefix on nyau. Figure 11.1 shows that this prefix is only used on this directional verb. Once again the influence of other language features seems to penetrate this small class of verbs since vowel harmony that occurs in the stative prefix and elsewhere could be seen as the cause for this development. Compare the irregular form na'o 'go' which possibly developed from analogy of realis and irrealis in §11.2.2. This could simply be because ma'o 'go' begins with \(m\) which is also the irrealis formative for actor oriented verbs.

'He descended again, and he went down to the ocean.'
[troll.int 125]

\subsection*{11.3 Directional verbs as serial verbs}

\subsection*{11.3.1 Introduction to serial verbs}

The literature on serial verbs generally defines serial verbs as at least two verbs with one semantic event (see Crowley 1987, Durie 1988, 1997, Foley and Olson 1985, Foley and Van Valin 1984, Lefebvre 1991, Pawley and Lane 1998, Payne 1997; but see Sebba 1987 for a different viewpoint). For example Payne (1997:307) defines serialisation as: \({ }^{4}\)

A serial-verb construction contains two or more verb roots that are neither compounded...nor members of separate clauses.
However, the literature suggests that this is one of several identifying features. Other features often cited in the literature include: \({ }^{5}\)
- verb inflection between the serial verbs agreeing in categories such as tense, aspect, mode, person/number agreement, as well as transitivity and negation
- clause boundaries not indicated by overt morphemes or by intonation breaks
- restrictions on core arguments, often where the verbs must take the same actor
- negation and adverbs governing the whole predicate, not individual verbs
- each verb can function independently in a main clause.

Taking all of these features together does not provide one with absolute criteria in identifying serial verbs, but rather the clustering of several features often signals that a serial verb construction is in use.

\subsection*{11.3.2 Directional verbs as directional serial verbs}

A directional serial verb has the following major characteristics:
- It must occur after the main verb.
- It normally does not take verbal affixation, but if it does it can only be in irrealis mode.
- Only the main verb may take imperative morphology; thus the irregular form la'o 'go (IMP)' can never be used, nor any of the stem formers.
- The actor of the main verb must be the same actor as the one for the directional serial verb.

The four motion verbs mai 'come', ma'o 'go', mene' 'go up', and nyau 'go down' have another common syntactic function in which they can operate as a serial verb (see §11.2 for a general overview of the use of these verbs). \({ }^{6}\) A fifth verb teule 'return' co-occurs

\footnotetext{
4 Sebba (1987:117) has a slightly different view. He sees the serial verb as a 'directional complement' to the first verb: 'In fact a VP following a motion verb, provided it contains a directional verb, will be a directional complement irrespective of whether a PP is present or not...' Sebba (1987:134) also summarises these serial verbs as acting semantically as prepositions but syntactically as a subtype of a verbal phrase (what Givón (1991) calls deictic-directional).
Sebba (1987:117) states: 'The verbs of the set of which kon is a member all cause a directional interpretation to be put on the following PP...The work which in English is done by a preposition is done in Sranan by verbs. We call this closed set of verbs directional verbs.'
5 This list was largely adapted from Pawley and Lane (1998).
\({ }^{6}\) Postural and locomotion verbs each form their own verb classes based on their own stem former and affix combination ( \(\S 9.4 .1\) and \(\S 9.3 .4\) ) which is distinct from those that occur with the directional verb (note
}
with this set as well. Structurally the main verb precedes the directional motion verb, which in this syntactic function will be called a 'directional serial verb'. The main verb will be annotated as V1, and the directional serial verb as V2 as in (36).
\begin{tabular}{lllll} 
(36) & Panganganta & netesiir & ma'o & riodo \\
panganganta & ne-te-siir & ma'o & ri \(=\) odo & uo \\
flesh.eater & AV/RE-NV-look & go & LOC=monkey & yonder \\
& & V1 & V2 &
\end{tabular}
'The flesh-eater looked at that monkey.'
Many languages use the verbs 'come' and 'go' as serial verbs as well as several other directional verbs (see Sebba 1987 for examples). Hale (1987:8) describes one type of serial verb construction found in a Central American language, Misumalpan, which parallels what is found in Pendau, where:
...direction verbs combine with verbs of 'manner of motion' to render the composite notions of 'flying thither' and 'flying hither'. Neither verb in the series corresponds to a distinct event, and the verbs of direction serve merely to express just that, direction.
A further diagnostic useful in verifying that the directional motion verbs as V 2 verbs are true serial verbs is the fact that the V2 verbs do not usually take irrealis/realis marking nor any of the other verb morphology that they can take as main verbs (but see further discussion below and example (94)). In addition to this the V2 verb always agrees with the argument structure of the V1 verb (i.e. it takes the same core arguments subcategorised by the V1 verb). However, at times V2 allow for oblique arguments when the motion is directed away from a non-core argument (see \(\S 8.3 .7\) and \(\S 8.4\) for contexts in which subcategorisation of obliques occurs when a directional verb is the main verb). This is of course always the case in intransitive clauses, but it is clearly contrasted in transitive constructions. This subcategorisation possibility also distinguishes the directional serial verbs from purposive serial verbs, since the purposive serial verbs never change the subcategorisation possibilities of the matrix verb.

For nuclear serialisation the V1 and V2 verbs are one semantic event which share all of the morphosyntactic properties of \(\mathrm{V} 1,{ }^{7}\) and the V 2 contributes directionality to the semantic event of V1. For core serialisation the V2 is functioning like a preposition in which path or direction the V1 takes place.
though that the dynamic verb class prefix pe-does occur sometimes with mene' 'go up' and with nyau 'go down').
7 Serial verbs in some languages can be divided into 'same subject', 'same object', or 'switch subject' (see for example Bradshaw 1983, 1993, Hyslop 1998, Early 1993, 1994, and Donohue 1995). However, this turns out not to be very useful in describing the directional serial verbs in Pendau. It is simpler to say that in Pendau the directional serial verbs always agree with the arguments that the V1 verb subcategorises. Although in many cases the V2 could be described as having the 'same subject', this is not true in the case of inverse voice clauses, when it is actually the 'same agent' (a grammatical object). Likewise, I cannot simply replace 'same agent' with 'same subject', because in stative verbs it is not the agent (since the \(S=P\) ). This suggests then that Pendau could be described as the V1 and V2 having the 'same pivot' which would capture all of the possibilities, but this does not really add anything new or useful to the description.

Directional serial verbs can be used in either intransitive or transitive verb constructions, as in (37)-(39). Intransitive clauses always point the V1 from the single argument (A or P argument) in a direction towards the oblique argument. Examples (38) and (39) show transitive clauses which use serial verbs to denote an event that is oblique oriented (core serialisation) as in (38) or undergoer oriented (nuclear serialisation) as in (39).
(37) Intransitive core serial verb construction (§11.3.2.1)
\begin{tabular}{llll} 
Io & mendoang & ma'o ribangkalang & togoge', \\
io & M-pe-ndoang & ma'o ri=bangkalang togoge, \\
3SG/AB & RE-SF/DY-exit & go \(\quad\) LOC=river & large
\end{tabular}
'He exited from the large river.'
(38) Transitive core serial verb clause (see §11.3.2.2)
\begin{tabular}{llllll} 
Oo & moo & ro'omung & mami & ma'o & riapar. \\
'oo & moo & ro-'omung & mami & ma'o & ri=apar \\
2SG/AB & this & IV/IR-carry & 1PL.EXC/GE & go & LOC=swamp
\end{tabular}
'We will carry you to the swamp.'
(39) Nuclear serial verb clause (see §11.3.2.3)
\begin{tabular}{llllll} 
Nisiira' & ma'o & nuodo & rupa & nupanganganta & uo. \\
ni-siir-a, & ma'o & nu=odo & rupa & nu=panganganta & 'uo \\
IV/RE-stare-TZ & go & CN/GE=monkey & face & CN/GE=flesh.eater & yonder
\end{tabular}
'The monkey stared into the flesh-eater's face there.'

Inverse transitive verb constructions show two different word orders depending on whether the genitive marked NP is an enclitic, a free pronoun, or NP. The serial verb always occurs after enclitics, as in (40) (and so is ambiguous as whether it is nuclear or core serialisation). However, the V2 can occur in two word order positions when a free pronoun/NP is used: 1) immediately after the verb preceding the A argument, as in (41), or 2) immediately following the A argument, as in (42), just like it does when it follows the enclitics. The two orders do not normally differ in meaning.
(40) Serial verb following genitive actor enclitic (see §11.3.2.3)
\begin{tabular}{lll} 
Nitajia'onyomo & ma'o & jalanyo. \\
ni-taji-a' \(=\) nyo \(=\) mo & ma'o & jala=nyo \\
IV/RE-cast-TZ=3SG/GE=COMP & go & net \(=3\) SG/GE
\end{tabular}
'He cast the net out.'
(41) Nuclear serial verb preceding genitive actor NP (see §11.3.2.3)
\begin{tabular}{llllll} 
Nisiira' & ma'o & nuodo & rupa & nupanganganta & uo. \\
ni-siir-a' & ma'o & nu=odo & rupa & nu=panganganta 'uo \\
IV/RE-stare-TZ & go & CN/GE=monkey & face & CN/GE=flesh.eater yonder \\
'The monkey stared into the flesh-eater's face there.'
\end{tabular}
(42) Core serial verb following genitive actor free pronoun (see §11.3.2.1-2)
\begin{tabular}{llllll} 
Nisiira' & nijimo & ma'o & loka & jomo & neriri. \\
ni-siir-a, & nijimo & ma'o & loka & jomo & no-riri \\
IV/RE-stare-TZ & 3PL/GE & go & banana & really & ST/RE-yellow
\end{tabular}
'They stared at the really yellow bananas.'
Although normally the V2 verb is unaffixed, in the few cases in which the V2 verb is affixed it is always in the irrealis mode, as in (43). However, this does not need to clash with the statement that V2 must be in the same mode as the V1; the V2 verb can still be understood to take the same mode as the V1 verb even if it is realis (see §11.3.2.1). The principle seems to be the same as found in compounds such as mangibang memeas 'reef white-tip shark or great blue shark, Prionace glauca, Triaenodon obesus (lit. white shark)' (see §7.4.6 and §13.2.4) in which the modifier is a stative verb always in the irrealis form. When stative verbs are used to derive agentive nominalisation with the to- prefix, a generic meaning is given to the resulting noun when the irrealis prefix is used (see §7.4.2 and \(\S 13.2 .5)\). So in conclusion, when the V1 verb is marked with realis it dominates the irrealis marked V2 and gives the whole predication a realis mode.
(43) Different modes in serial construction: realis on V1 and irrealis on V2
\begin{tabular}{lllll} 
Paey & unga & uo & neteule & menyau \\
paey \\
and.then & unga & child & no & yonder \\
re-teule & RE-SF/DY-return & MR-pe-nyau
\end{tabular}
'And then that child returned down to his grandfather's house.' [mdtext20.txt 170]
Complement clauses with directional verbs, such as in (44), have a similar structure in some respects to serial verb constructions such as (40) and (42). In all of these examples the directional verb follows the genitive actor in inverse constructions. However, directional serial verb constructions are distinguished from directional complement clause constructions by the semantics of the matrix verb. That is, it is clear that the directional verb is a separate predication from the matrix verb by the semantic requirements of the speech act verb. Directional complements require a speech act verb as the matrix verb. The matrix verb has its own P argument distinct from the P argument of the directional verb.
(44) Complement clause with directional verb (see §15.3.1.1)
\begin{tabular}{|c|c|c|c|c|}
\hline \begin{tabular}{l}
Unga \\
unga \\
child
\end{tabular} & \begin{tabular}{l}
иo \\
'ио \\
yonder
\end{tabular} & \begin{tabular}{l}
niubamo \\
ni-uba \(=m o\) \\
IV/RE-invite=COMP
\end{tabular} & \[
\begin{aligned}
& \text { niamanyo } \\
& \text { ni=ama }=\text { nyo } \\
& \mathrm{PN} / \mathrm{GE}=\text { father }=3 \mathrm{SG} / \mathrm{GE}
\end{aligned}
\] & \begin{tabular}{l}
[mene' \\
mene’ \\
go.up
\end{tabular} \\
\hline \multicolumn{5}{|l|}{\[
\begin{array}{ll}
\text { bumbu } & n u=\text { pangale.] } \\
\text { bumbu } & n u=\text { pangale } \\
\text { jungle } & \text { CN/GE=virgin.jungle' }
\end{array}
\]} \\
\hline \multicolumn{4}{|l|}{'His/her father invited that child to go up into the virgin jungle.'} & [mdte \\
\hline
\end{tabular}

In example (45) the directional verb ma'o 'go' does not use the irregular imperative form la'o 'go!' in a serial verb construction. Examples (46) and (47) illustrate similar serial verb constructions with mene' 'go up' and mai 'come'. The other directional verbs do not have irregular imperative forms. The other directional verbs use a stem former when used as an independent verb in an imperative clause. The lack of stem formers when they are in an imperative serial construction is a similar test as the irregular verb la'o in demonstrating they are in a unitary predication.
\begin{tabular}{llll} 
Pentama & ma'o & lalong & nao! \\
pe-ntama & ma'o & lalong & nao \\
SF/DY-enter & go & inside & that
\end{tabular}
‘Go on inside there!'
[poora.pin 495]
(46) Emu peteulemo mene' junjung!
'ети pe-teule=mo mene' junjung
2PL/AB SF/DY-return=COMP go.up house
'You all return home!'
[dugong.int Quick:1991]
(47)
\begin{tabular}{lllll} 
Nisimbati & nutomogurang & uo, & "pentama & mai!" \\
ni-simbat- \(i\) & \(n u=\) tomogurang & 'uo, & "pe-ntama & mai! \\
IV/RE-answer-LOC & CN/GE=elder & yonder & SF/DY-enter & come \\
'The elder answered, "come in!"" & & & [fktale01.txt 014]
\end{tabular}

Commonly teule 'return' occurs in the V2 position, as illustrated in (48)-(51). Example (48) illustrates a common construction when someone begins a personal narrative of an earlier event in their life. Example (49) has the bride return to sit down with the groom. The sequence of teule following the verb tubu 'live' is often used to describe a miraculous event, as in (50) in which an animal or person comes back to life from the dead. Example (51) shows that the floating adverb moje 'again' can come between V1 and V2.
\begin{tabular}{lllll} 
Jari & rimoo & ututura' & teule & riwatunyo \\
jari & ri=moo & 'u-tutur-a' & \begin{tabular}{l} 
teule
\end{tabular} & \begin{tabular}{l} 
ri=watu \(=\) nyo
\end{tabular} \\
so & LOC=here & 1SG.IV/IR-recount-TZ \\
return & LOC=time=3SG/GE \\
a'u & mono & unga & logas & uo. \\
a'u & mono & unga & logas & 'uo \\
SG/AB & still & child & young.unmarried.man & yonder
\end{tabular}
'So here I want to recount and return to the time that I was still a young man.'
[jptext02.jdb 027]
(49) Paey nitundoa' teule sono langkai uo.
paey ni-tundo-a' teule sono langkai 'uo
and.then IV/RE-sit-TZ return COM male yonder
'And then they had her sit back down with the man.'
[mdtext21.txt 053]
(50)
\begin{tabular}{llllll} 
Tarus & netubu & teule & unga & tonaate & uo. \\
tarus & \(N\)-pe-tubu & teule & unga & to=no-ate & 'uo \\
then & RE-SF/DY-live & return & child & RM=ST/RE-die & yonder
\end{tabular}
'Then the child that had died became alive again.'
[mdtext5.txt 055]
(51)
\begin{tabular}{llll} 
Paey & rataana, & moje & teule. \\
paey & ro-taan-a, & moje & teule \\
and.then & IV/IR-restrain-TZ & again & return
\end{tabular}
'And then it will restrain it once again.'
[videotr.txt 211]

\subsection*{11.3.2.1 Core serial verbs in intransitive clauses}

This section gives examples of serial verb constructions with various intransitive verb classes. In all cases the directional verb points the main verb in one of the four spatial directions aimed at the oblique prepositional phrase. Examples (52)-(55) all use teule 'return' as V1, but contrast ma'o 'go', mai 'come', mene' 'go up', and nyau 'go down' as V2.
(52) Jimo neteule ma’o riulasang uо.
jimo \(\quad N\)-pe-teule ma'o ri=ulasang 'uo
3PL/AB RE-SF/DY-return go LOC=turtle yonder
'They returned to that turtle.'
(53) Io meteule mai rijunjung.
io M-pe-teule mai ri=junjung
3SG/AB IR-SF/DY-return come LOC=house
'He returned home to his house.'
(54) A'u moo meteule mene' riatang.
a'u moo \(M\)-pe-teule mene' ri=atang
\(1 \mathrm{SG} / \mathrm{AB}\) this IR-SF/DY-return go.up LOC=above
'I will return to the top above.'
\begin{tabular}{lllll} 
Paey & unga & uo & neteule & menyau \\
paey & unga & 'uo & N-pe-teule & M-pe-nyau
\end{tabular}
and.then child yonder RE-SF/DY-return IR-SF/DY-go.down
\begin{tabular}{lll} 
junjung & nikai & nijimo \\
junjung & ni=kai & nijimo. \\
house & PN/GE=grandpa & 3PL/GE
\end{tabular}
'And then that child returned down to his grandfather's house.' [mdtext20.txt 170]
Examples (56)-(59) demonstrate the use of the serial verb ma'o 'go' in intransitive verb constructions. Note that although the verb in (59) uses the causative suffix -a' (TZ) it is functioning as an intransitive (§10.2.4).
\begin{tabular}{lllll} 
(56) & Panganganta & moo & nopoipisomo & ma'o
\end{tabular} riombir..
(57)
\begin{tabular}{lllll} 
Panganganta & netesiir & ma'o & riodo & uo. \\
panganganta & ne-te-siir & ma'o & ri=odo & 'uo \\
flesh.eater & RE-NV-look & go & LOC=monkey yonder
\end{tabular}
'The flesh-eater looked at that monkey.'
(58) Io neansilip ma'o ribumbu.
io \(N\)-pe-ansilip ma'o ri=bumbu
3SG/AB RE-SF/DY-force go \(\mathrm{LOC}=\) jungle
'He forced his way through the jungle.'
(59) Odo moo nolumumpata' ma'o risandaang.
odo moo \(N\)-po - \(_{1}\) [um]-lumpat-a' ma'o ri=so-ndaang
monkey this RE-SF/LCM-TEL-jump-TZ go LOC=ONE-branch
'The monkey jumped towards the branch.'

Example (60) illustrates the intransitive verb gempang reduplicated (but in the dynamic pe- verb class) and shows that an oblique argument is not necessary when the direction is unspecified or already known from the context.
(60) Bai uo gempang-gempang ma'o siinanyo.
bai 'uo gempang-gempang ma'o siina=nyo
like yonder RED-walk go mother=3SG/GE
'So his mother walked and walked in that direction.'

Example (61) illustrates mai 'come' and (62) and (63) illustrate mene' 'go up' as V2.
(61) Paey jimo nodua'omo mai rikampung mami.
paey jimo \(N-\) po \(_{1}\)-dua'=mo mai ri=kampung mami
and.then 3PL/AB RE-SF/DE-arrive=COMP come LOC=village 1PL.EXC/GE
'And then they arrived (coming) at our village.'
[horse.pin 594]
(62) Odo moo nolumpataa' mene' rindaang nu'ayu.
odo moo \(N\)-po \(1_{1}\)-lumpat-a' mene' ri=ndaang nu='ayu
monkey this RE-SF-jump-TZ go.up LOC=branch \(\mathrm{CN} / \mathrm{GE}=\) tree 'This monkey jumped up to the tree branch.'
(63) Emu peteulemo mene' ripomoiaong miu.
'ети pe-teule=mo mene' ri=po \({ }_{1}\)-moia-ong miu \(2 \mathrm{PL} / \mathrm{AB} \mathrm{SF} / \mathrm{DY}-\) return=COMP go.up \(\mathrm{LOC}=\mathrm{SF}=\) live-locN \(2 \mathrm{PL} / \mathrm{GE}\)
'You all return now and go up to your homes.'

As a V2 serial verb nyau 'go down' has one interesting property that the other three directional verbs do not show. Examples (64)-(66) show what looks like an irrealis prefix \(m a-\). Since the directional motion verbs are synchronically unstable, it appears that this prefix has been formed by analogy from other verb classes (see Figure 11.1 and \(\S 11.2\) for the general discussion). \({ }^{8}\) Example (66) (also see (56) and (63)) also shows the completive aspectual enclitic affixes to the V1 verb (in the same way as do the pronominal enclitics), and not the V2 verb.
\begin{tabular}{lllll} 
Io mentama & manyau & rilalong & nutano. \\
io & M-pe-ntama & ma-nyau & ri=lalong & nu=tano \\
3SG/AB & IR-SF/DY-enter & UD/IR-go.down & LOC=inside & CN/GE=earth
\end{tabular}
'He went down into the earth.'
\begin{tabular}{llll} 
Ito & metindangomo & manyau & ridusunang. \\
'ito & M-pe-tindang=mo & ma-nyau & ri=dusunang \\
1PL.INC/AB & IR-SF/DY-descend=COMP & UD/IR-go.down & LOC=village \\
'We will go down now to that village.'
\end{tabular}
(66) Odo moo nanabumo manyau rilalong nuapi.
\begin{tabular}{llllll} 
odo & moo & no-nabu=mo & ma-nyau & ri=lalong & \(n u=a p i\) \\
monkey & this & ST/RE-fall=COMP & UD/IR-go.down & LOC=inside & CN/GE=fire
\end{tabular}
'This monkey fell down into the fire.'
Examples (67)-(69) show constructions in which the completive aspectual enclitic \(=m o\) occurs on the serial verb ma'o. However all of these cases are ambiguous in that they can be interpreted as consisting of two clauses or as one clause (those with a third verb preceding the V1 and V2 are a separate clause from the clause with the V1 and V2 verbs). If ma'o is a serial verb in these instances, then it is the only serial verb which can take an aspectual enclitic. The use of nyau, mene', and mai with enclitics in the V2 position is unattested in my corpus. In (67) neteulemo 'returned now' is probably not a V2 since it is marked with realis (the V2 appears to be rarely prefixed, and when it is marked it is with irrealis-see the discussion in §11.3.1). However in (68) it is not clear whether the meteule 'return' is a V2 of nopootomo 'ask to already leave' since it could fit the pattern of V2 verb with irrealis (and the ma'o could also then be interpreted to be a V3 serial verb as well). \({ }^{9}\)

\footnotetext{
8 Compare with example (55) which uses the irrealis prefix me-to form menyau 'go down'. It appears that if the V2 verb is affixed it must be in irrealis mode, but that the V2 verb still takes the same mode as the V1 verb even if it is realis. However, since there is no opposite counterpart *na-, it is not likely that this is a functioning verbal prefix. The putative \(m a\) - prefix cannot be a stative prefix \(m o_{1}\) - since the A argument is the subject for all directional verbs, and it can't be the ma-/na- prefix used on jari 'become' (which is in its own verb class), since these have the irrealis/realis binary contrast. There are not any other possibilities, and the rest of the verbs in the directional verb class do not take this putative prefix.
9 Intonation would be a good test here, and my sense is that a pause could occur before meteule 'return'. However I have not yet conducted studies of intonation which could clarify this.
}
```

(67) Ila uo tomogurang uo nelampa neteulemo ma'omo
ila 'uo tomogurang 'uo N-pe-lampa N-pe-teule=mo ma'o=mo
from yonder elder yonder DY/RE-walk DY/RE-return=COMP go=COMP
junjungonyo.
junjung=nyo
house=3SG/GE
'After that the elder walked and returned to his house.'
or: 'After that the elder walked, he returned, and went to his house.'
(68) Tomogurang иo nopootomo meteule ma'omo
tomogurang 'иo $N$-po $1_{1}$-pooto=mo $\quad$-pe-teule $\quad$ 'o'o=mo
elder yonder RE-SF-ask.leave=COMP IR-SF/DY-return go=COMP
junjungonyo.
junjung=nyo
house=3SG/GE
'The elder excused himself and returned to his house.'
or: 'The elder excused himself, and he returned, and went to his house.'
(69) Jari ila uo too dea uo nengeteulemo ma'omo
jari ila 'иo too dea 'иo $N$-[ong]-pe-teule=mo ma'o=mo
so ABL yonder person many yonder RE-DISTR-SF-return=COMP go=COMP

| junjung | nijimo | mboto. |
| :--- | :--- | :--- |
| junjung | nijimo | mboto |
| house | 3PL/GE | self |

'So after that many people each returned to their own homes.'
or: 'So after that many people each returned, and went to their own homes.'

```

\subsection*{11.3.2.2 Core serial verbs in transitive clauses}

This section provides examples of directional core serial verbs in transitive clauses. Examples (70) and ( 71 contrast an active voice clause and an inverse voice clause in which both use the directional verb nyau 'go down'.
(70) Io nongkomung tuainyo uo manyau
io \(N\)-pong-'omung tuai=nyo 'uo ma-nyau
3SG/AB RE-SF/PT-carry y.sibling=3SG/GE yonder UD/IR-go.down
rigii nudagat.
ri=gii nu=dagat
LOC=edge CN/GE=ocean
'She carried her baby sister down to the edge of the ocean.'
\begin{tabular}{llll} 
Nitoto'a'onyo & manyau & riba'i & nirapinyo. \\
ni-toto'-a'=nyo & ma-nyau & ri=ba'i & ni=rapi=nyo \\
IV/RE-slash-TZ=3SG/GE & UD/IR-go.down & LOC=head & PN/GE=spouse=3SG/GE
\end{tabular}
'He slashed it down into his wife's head.'
Examples (72) and (73) illustrate transitive clauses with the serial verb ma'o 'go'.
(72)
\begin{tabular}{llll} 
Oo & uatoraa' & ma'o & risiinamu. \\
'oo & 'u-atora-a' & ma'o & ri=siina \(=m u\) \\
2SG/AB & 1SG.IV/RR-deliver-TZ & go & LOC= \(=\) mother=2SG/GE
\end{tabular}
'I will take you to your mother.'
(73) Payangan nianta'a' ma'o rilugus.
payangan ni-anta'-a' ma'o ri=lugus
boat IV/RE-near-TZ go LOC=betel.nut.tree
'(They) made the boat approach the betel nut tree.'
Examples (74) and (75) illustrate transitive clauses with the serial verb mene' 'go up'. Example (75) also illustrates the V2 verb mene' after the A argument and preceding the preposition \(r i\) 'in, at, on, by, etc.'.

Ro'omungonyo mene' ripomoiaongonyo uo.
ro-'omung=nyo mene' ri=po \({ }_{1}\)-moia-ong=nyo 'uo
IV/IR-carry \(=3\) SG/GE go.up LOC=SF-live-locN=3SG/GE yonder
'They took it up to their dwelling there.'
\begin{tabular}{lllllll} 
Ulasang & moo & kaliuliu & ni'omung & nipene'a' & nijimo & mene, \\
ulasang & moo & kaliuliu & ni-'omung & ni-pene'-a' & nijimo & mene \\
turtle & this & at.once & IV/RE-carry & IV/RE-climb-TZ 3PL/GE & go.up
\end{tabular}
ritubu ayu nuagut.
ri=tubu 'ayu nu=agat
LOC=trunk tree CN/GE=k.o.tree
'They (=monkeys) at once carried this turtle and climbed up the trunk of an agut tree.'

\subsection*{11.3.2.2 Directional nuclear serial verbs in transitive clauses}

The examples in this section illustrate transitive clauses in which the serial verb is oriented towards the P argument, i.e. directional nuclear serial verbs in which V1 and V2 form a unitary predication. Examples (76)-(78) illustrate the verb sequence siir ma'o 'look towards, stare at' in three similar transitive clauses.
\begin{tabular}{lllll} 
Bole-bole & nisiira'onyo & ma'o & joo & panganganta \\
bole-bole & ni-siira-a'=nyo & ma'o & joo & panganganta \\
RED-sudden & IV/RE-stare-TZ=3SG/GE & go & still/really flesh.eater
\end{tabular}
```

toporaga io.
to $=$ po $_{1}$-raga io
RM=SF-chase $3 \mathrm{SG} / \mathrm{AB}$

```
'Suddenly he spotted the flesh-eater that was still chasing him.'
\begin{tabular}{lllll} 
Nisiira' & ma'o & nijimo & diang & peti. \\
ni-siir-a' & ma'o & nijimo & diang & peti \\
IV/RE-stare-TZ & go & 3PL/GE & EXIS & coffin
\end{tabular}
'They stared at the coffin there.'
\begin{tabular}{llll} 
Nisiira' & ma'o & nikainyo & mo'upunyo. \\
ni-siir-a' & ma'o & \(n i=k a i=n y o\) & mo'upu=nyo \\
IV/RE-stare-TZ & go & PN/GE=grandpa=3SG/GE & grandson=3SG/GE
\end{tabular}
'The grandfather stared at his grandson.'
Example (76) differs in that the A argument is a clitic, and so the serial verb ma'o 'go' must follow V1 immediately, although it follows the A argument. In examples (77) and (78) the serial verb precedes the A argument. Elicitation shows that ma'o can follow the A argument in contrast to (78) and precede the P argument without changing the meaning, although this reordering would seem to change it from a nuclear to a core serial construction. Likewise mo'upunyo 'his grandson' can be in the pre-verbal position and still maintain the same meaning (and ma'o can appear either between the verb and the A argument, or follow the A argument).

Examples (79) and (80) illustrate the serial verb following the A argument (for those specified) and preceding the P argument of the transitive clause. The V2 serial verb can appear in two positions when the genitive A argument is not an enclitic-it can precede the genitive A argument, as in (77) and (78), or follow it, as in (80) (although this seems more likely to be a core serial construction). Elicitation shows that the P argument saa uo 'that python' in (79) can be in pre-verbal position and have the same meaning.
\begin{tabular}{lllc} 
Nilumpatinyomo & ma'o & saa uo. \\
ni-lumpat- \(i=\) nyo \(=\) mo & ma'o & saa 'uo \\
IV/RE-jump-DIR=3SG/GE=COMP & go & python yonder \\
'He jumped towards that python.' & &
\end{tabular}
(80) Nisiira' nijimo ma’o loka jomo neriri.
ni-siir-a' nijimo ma'o loka jomo no-riri
IV/RE-stare-TZ 3PL/GE go banana really ST/RE-yellow
'They stared at the really yellow bananas.'
Examples (81)-(84) illustrate mai 'come' as a serial verb in transitive clauses. \({ }^{10}\)

\footnotetext{
10 Example (81) transitivises the stative verb anta' 'near' with the causative suffix \(-a\) ' (§10.2.4).
}
\begin{tabular}{lllll} 
Anta'a'opo & mai & ususui & silei & nao \\
anta'-a'=po & mai & 'u-susu- \(i\) & \(s i=l e i\) & nao \\
near-TZ=CONT & come & 1SG.IV/IR-milk-DIR & PN/PN=vagina & that
\end{tabular}
'Come closer and I will nurse my baby girl (lit. vagina) there.'
(82) Alapa’ mai!
alap-a' mai
get-TZ come
'Bring it here!'
(83)
\begin{tabular}{llllll} 
Jimo & nentamamo & nigua'omo & mai & nijimo uo. \\
jimo & N-pe-ntama=mo & ni-gua'=mo & mai & nijimo 'uo \\
3PL/AB & RE-SF/DY-enter=COMP & IV/RE-scoop=COMP & come & 3PL/GE yonder
\end{tabular}
'They entered and they scooped out (the food for themselves).'
(84)
\begin{tabular}{llll} 
Ni'aia'onyo & mai & sirapinyo & langkai. \\
ni-'ai-a'=nyo & mai & si=rapi \(=\) nyo & langkai \\
IV/RE-call-TZ=3SG/GE come & PN/AB=spouse=3SG/GE & male
\end{tabular}
'She called her husband to come.' or: 'She called her husband to her.'
Example (85) illustrates the serial verb nyau 'go down' preceding a conjoined P argument.
\begin{tabular}{llllll} 
Nililingonyo & manyau & panganganta & o saa uo. \\
ni-liling=nyo & ma-nyau & panganganta & o saa 'uo \\
IV/RE-stare=3SG/GE & UD/IR-go.down flesh.eater & and python yonder
\end{tabular}
'He stared down at the flesh-eater and the python there.'

\subsection*{11.3.2.4 Multiple directional serial verbs}

This section discusses the use of multiple serial verbs. No more than two serial verbs can follow the V1, resulting in: V1 V2 V3. This is because one of the three serial verbs would always contradict at least one of the others semantically. Elevation changing directional verbs (mene' and nyau) always fill the V2 position and the horizontal directional verbs (ma'o and mai) always fill the V3 position, see Figure 11.2.
\begin{tabular}{|l|l|}
\hline \begin{tabular}{l} 
V2 \\
elevation changing
\end{tabular} & \begin{tabular}{l} 
V3 \\
horizontal
\end{tabular} \\
\hline mene' 'go up' & ma'o 'go' \\
\hline nyau 'go down' & mai 'come' \\
\hline
\end{tabular}

Figure 11.2. Fixed order of multiple directional serial verbs
Examples (86) and (87) illustrate the serial verb sequence of mene' mai 'come up here'. \({ }^{11}\)

\footnotetext{
\({ }^{11}\) Compare example (87) to the following example. Both seem to be cast in the same mode, except that the example below does not have a V1 verb preceding mene'. It suggests that the double serial verb structure
}
(86)
\begin{tabular}{llllll} 
Sapa & saba' & emu & nombali' & mene' & mai? \\
sapa & saba' & 'emu & \(N\)-pong-bali' & mene' & mai \\
what & because & \(2 P L / A B\) & RE-SF-move & go.up & come
\end{tabular}
'What was the reason you all moved up here?'
\begin{tabular}{lllll} 
Ila & uo & nodua'omo & mene' & mai \\
ila & 'uo & \(N-p o_{1}\)-dua'= mo & mene' & mai \\
ABL & yonder & RE-SF/DE-arrive=COMP & go.up & come
\end{tabular}
mompanusu unganyo.

M-pong-pang-susu unga=nyo
RE-SF/PT-CAUS-milk child=3SG/GE
'After that she came up to nurse her daughter.'
\begin{tabular}{llllll} 
Jari & bulu & niinanyo & nagaaromo & mene' mai \\
jari & bulu & ni=ina=nyo & no-gaar=mo & mene' mai \\
so & fur & \(\mathrm{PN} / \mathrm{GE}=\) mother=3SG/GE & ST/RE-far=COMP & go.up & come
\end{tabular}
'So her mother's fur had already progressed up to, 'whatchamacallit', her navel.'

Examples (89) and (90) illustrate the sequence nyau mai 'come down here'. Elicitation shows that the serial verb sequence can follow the \(A\) argument and still have the same meaning.
\begin{tabular}{llllll} 
Bagii & nyau & mai & a'u & loka & nao! \\
bagi-i & nyau & mai & a'u & loka & nao \\
give-DIR & go.down & come & 1SG/AB banana & that
\end{tabular}
'Bring down to me that banana!'
(90) Sura ulinyo moje nitabola' nyau mai nuodo uo.
sura uli=nyo moje ni-tabol-a' nyau mai nu=odo 'uo
only skin=3SG/AB again IV/RE-toss-TZ go.down come \(\mathrm{CN} / \mathrm{GE}=\) monkey yonder 'That monkey again only tossed the (banana) skins down (to him).'

Example (91) shows that the serial verb may be repeated within the clause. Such a repetition doesn't add any new information, but may provide some prominence to the location thus specified.
can either omit a V1 verb and/or use the first directional verb as the V1 verb. Compare this example to the purposive serial verbs in §11.3.3.
\begin{tabular}{lllll} 
Siinanyo & mene' & mai & nompanusu & unganyo. \\
siina=nyo & mene' & mai & N-pong-pang-susu & unga=nyo \\
mother=3SG/GE & go.up & come & RE-SF/PT-CAUS-milk child=3SG/GE \\
'Her mother went and came up to nurse her child.'
\end{tabular}


The following example illustrates a common idiomatic means to express 'back and forth' with both ma'o and mai used in the same sentence. The first verb preceding the serial verb is repeated. Thus the formula is: ...X ma'o \(X\) mai..., where X is any motion verb and the directional verbs ma'o 'go' and mai 'come' must be in the order presented.
(92) Io gempang ma’o, gempang mai riatang nubatang.
io gempang ma'o gempang mai ri=atang nu=batang
3SG/AB walk go walk come LOC=above \(\mathrm{CN} / \mathrm{GE}=\log\)
'He walked back and forth on top of the logs.'

\subsection*{11.3.3 Directional verbs as purposive serial verbs}

A purposive serial verb in Pendau generally has the following major characteristics:
- It must occur before the main verb (but following negatives).
- It does not take verbal affixation.
- Adverbs cannot occur between the purposive serial verb and the main verb.
- The irregular imperative la'o 'go' is never used as a purposive, instead the form ma'o is used. Only the main verb takes imperative morphology in a serial verb construction.
- The actor of the main verb must be the same actor as the one for the purposive serial verb.
- When the undergoer or other non-actor argument occurs preceding the matrix inverse verb as the subject, it must appear immediately before the serial verb and not between V1 and V2. This is the strongest argument for a unitary predication.
The four purposive serial verbs are the four directional verbs: ma'o 'go', mai 'come' mene' 'go up', and nyau 'go down'. The purposive serial verbs appear to be becoming grammaticised as auxiliaries. Unlike the directional serial verbs, purposive serial verbs never subcategorise. This indicates that directionality is secondary to the primary meaning of intent or purpose.

One major piece of evidence that the purposive serial verb is a single predication with the main verb comes from the inverse voice clausal constructions. Example (93) illustrates a sequence of two predications in which the first is mene' 'go up', and the second verb is lolo 'search'. This cannot be one predication because each verb has its own syntactic agent (although they refer to the same participant). The agent io 'he/she (3SG/AB)' is the grammatical subject of mene' and cannot simultaneously be the grammatical subject of the second verb lolo since this would require a reflexive construction. The grammatical subject of lolo 'search' is ellipsed and could overtly occur either immediately before or after lolo. If it were to precede lolo it would have to occur between mene' and lolo.

Io nemene' nilolonyo.
io \(N\)-pe-mene, ni-lolo=nyo
3SG/AB RE-SF/DY-go.up IV/RE-search=3SG/GE
'He went and searched (for people).'
[asu2.pin 185]
Examples (94)-(97) illustrate the use of ma'o preceding inverse voice verbal constructions. Examples (94) and (95) offer the strongest evidence for unitary predications with non-actor noun phrases preceding V1 V2. This is exactly what is expected in inverse voice clause constructions. It is a syntactic violation to place an actor argument between the non-actor argument and the V1. If the directional verbs in this pre-verbal position were independent predications they would need their own syntactic actor apart from that which appears in the inverse verb. However, the only actor available is the inverse verb's agent (and it is never the undergoer-if the directional verb uses the undergoer of the inverse construction as its actor, then it must be a different predication). The inverse voice agent follows the verb as a free pronoun in example (96), and in (97) it is a verbal prefix.
(94) Unitary predication-instrument clause construction
\begin{tabular}{llllll} 
[Rampa & o & lana & tonombongi] & ma'o ropolanaa'. \\
rampa & o & lana & to \(=N\)-po-mbongi & ma'o & ro-po-lana-a' \\
spice & and coconut.oil & RM=RE-SF-fragrant & go & IV/IR-SF/DE-coconut.oil-TZ
\end{tabular}
nijimo batang niYesus rikubur.
nijimo batang ni=Y. ri=kubur
3PL/GE corpse PN/GE=Y. LOC=grave
'They used spices and coconut oil that was fragrant to anoint the corpse of Jesus in the grave.
[Mark 16:1]
(95) Unitary predication-benefactive clause construction

Batangonyo ma’o rokubura'.
batang=nyo ma'o ro-kubur-a'
corpse=3SG/GE go IV/IR-grave-TZ
'(They) buried his corpse.'
[Matthew 12:12]
(96) Unitary predication
Tarus ma’o niparesa mami cingke’ uo.
tarus ma'o ni-paresa mami cingke' 'uo
continue go IV/RE-check 1PL.INV/GE cloves yonder
'And then we went to check the cloves over there.' [jo'ong.int 011]
(97) Unitary predication

Bia ma’o uitai kuburonyo.
bia ma'o 'u-ita-i kubur=nyo
later go 1SG.IV/IR-see-DIR grave=3SG/GE
'Later I will go see his grave.'
[miracle1.pin 120]

In (98) the son requests his parents to go and ask the king for another daughter (since there were previous rejections). The purposive serial verb ma'o 'go' precedes the main verb duta 'propose'. Since ma'o is not in its irregular imperative form la'o 'go/IMP', then the predication must be a single predication.
\begin{tabular}{lllllll} 
Emu & ene & o & papa & ma'opo & peduta & moje. \\
'emu & ene & o & papa & ma'o=po & pe-duta & moje \\
2PL/AB & mom/VOC & and & dad/VOC & go=CONT & SF/DY-propose & also
\end{tabular}
'You, mom and dad, go propose again!'
[gibang.pin 033]
As has been observed with the directional serial verbs (see §11.3.2), imperative verbs can adjoin non-imperative verb forms. One common imperative that I have often heard when climbing up the steps of houses built up off the ground is 'Be careful you don't fall!' as in example (99) (the stem former po- without other preceding affixation indicates it is in the imperative).

\section*{(99)}
\begin{tabular}{lll} 
Ai & pombosi & manabu! \\
Ai & po-mbosi & mo-nabu \\
but & SF-good & ST/IR-fall
\end{tabular}
'But be careful you don't fall!'
[videotr.txt 044]

\subsection*{11.3.3.1 The purposive serial verb ma'o 'go'}

The purposive serial verb ma'o 'go' plus main verb X is most frequently translated as 'go to do X '. Examples (100)-(102) demonstrate the use of ma'o in transitive and intransitive clauses. In (100) the father and mother of the water monitor lizard 'went to propose' to the king's daughter.
\[
\begin{array}{llllll}
\text { Siinanyo } & o & \text { siamanyo } & \text { ma'o } & \text { meduta } & \text { unga }  \tag{100}\\
\text { nu'olongian. } \\
\text { siina=nyo } & o & \text { siama=nyo } & \text { ma'o } & \text { M-pe-duta } & \text { unga } \\
n u=\text { 'olongian } \\
\text { mother=3SG/GE } & \text { and father=3SG/GE } & \text { go } & \text { IR-SF-propose child } & \text { CN/GE=king }
\end{array}
\]
'His mother and his father went to propose to the king's daughter.' [gibang.pin 016]
Example (101) provides two examples in a wider context. The first clause identifies that the author first went to bathe. This activity is identified with a closure in the next clause where it says he finished his bathing (this supports the fact that this is one predication and not two predications in the first clause). In the next sentence, the author changes his shirt (since bathing is usually performed with clothes on in this type of context), and then goes to school. Clauses which have denominal verbs demonstrate clearly that this is not a sequence of events since 'he went and (he) did the activity of schooling' does not really make sense with these constructions.
\begin{tabular}{cllllll} 
(101) A'u & tarus & ma'o & neriing. & Notou' & neriing, & tarus \\
a'u & tarus & ma'o & N-pe-riing. & no-tou' & N-pe-riing, tarus \\
1SG/AB continue & go & RE-SF-bathe & ST/RE-finish & RE-SF-bathe continue
\end{tabular}
```

a'u nombolos baju'u, paey a'u ma'o nosikola.
a'u N-pong-bolos baju='u, paey a'u ma'o N-po --sikola
1SG/AB RE-SF-change shirt=1SG/GE and.then 1SG/AB go RE-SF-school
'I then went to bathe. After I finished bathing, then I changed my shirt, and I went to
school.'
[bugmalei.int 023]

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In example (102) ma'o precedes the denominal verb no-kumpulan 'meeting'. A sequence of directional plus denominal forms a single predicate. The removal of ma'o in this case would make this clause ungrammatical or at best change the intended meaning.
(102) Jimo ma'o nokumpulan, bia...
jimo ma'o \(N\)-po \({ }_{1}\)-kumpulan, bia 3PL/AB go RE-SF/DE-gathering later
'They went to the meeting, later ...'
[jptext03.jdb 032]
Example (103) is similar to (102) in having a denominal verb, in this case a stative prefix combined with the possessive 'o- 'have' prefix on the stative verb root.
(103) Iye, a’u ma’omo mo’oturu.
iye, \(a\) 'u ma'o=mo mo-'o-turu
yes \(1 \mathrm{SG} / \mathrm{AB}\) go=COMP ST/IR-HAVE-sleep
'Yes, I'll go sleep now.'
[mdtext5.txt 076]
Examples (104)-(106) demonstrate the use of ma'o with active voice clauses. The first was written about an occasion when my language helper was with me in the provincial capital on a supply trip, and I went and bought bread, \({ }^{12}\) but this use is not two predications or events, but one. In (105) the flesh-eaters went to sharpen their teeth in preparation for eating children. Example (106) further demonstrates the unitary predication that the purposive serial verb creates. This sentence is complicated by the fact that manu' 'bird, chicken' serves as the grammatical object of the main verb 'omung 'carry, bring', and simultaneously as the subject of the inverse voice verb roposavua' 'be cock-fighting'. The free translation is a bit awkward, and could be translated more idiomatically as 'the boy took his chicken that would be used in the cock fight.'
(104) Paey ma'o nongoli roti.
paey ma'o \(N\)-pong-oli roti
and.then go RE-SF/PT-buy bread
'And then he went to buy bread.'
[jptext07.jdb 051]

\footnotetext{
12 Buying bread was only one specific activity done while in Palu, so in this personal narrative it is quite natural to say 'He went to buy bread' while in Palu. I did not go to Palu to buy bread, but I did go to Palu and buy bread.
}
(105) Panganganta uo ma’o nomangasa ngisi nijimo
panganganta 'uo ma'o N-pong-pang-asa ngisi nijimo
flesh-eater yonder go RE-SF/PT-CAUS-whet teeth 3PL/GE
\begin{tabular}{lll} 
rigii & nuogo & uo. \\
ri=gii & \(n u=o g o\) & 'uo \\
LOC=edge & \(\mathrm{CN} / \mathrm{GE}=\) water & yonder \\
'The flesh-eaters went to whet their teeth by the edge of the water over there.'
\end{tabular}
[mdtext18.txt 058]
(106) Unga иo ma'omo nongkomung manu'onyo roposavuna'.
unga 'иo ma'o=mo \(N\)-pong-'omung manu'=onyo ro-po \({ }_{1}\)-savung-a' child yonder go=COMP RE-SF-carry bird=3SG/GE IV/IR-SF-cock.fight-TZ
'The boy went to take his chicken that would be used in the cock fighting.'
[mdtext15.txt 142]

\subsection*{11.3.3.2 The purposive serial verb mene' 'go up'}

Examples (107) and (108) illustrate the purposive serial verb mene' 'go up' in active voice clause constructions. In both cases the participants go up either to clear the weedy overgrowth or to fell trees. Removal of mene' would remove the purposive idea, and just state that those were the activities that were done with the implication that they were already in the location in which the activity was done.
(107) Tarus unga uo mene' nangabut palupun
tarus unga 'uo mene' N-pong-abut palupun
continue child yonder go.up RE-SF/PT-clear overgrowth
nutomogurang uo.
nu=tomogurang 'uo
\(\mathrm{CN} / \mathrm{GE}=\) elders yonder
'And then the child went up to clear the overgrowth of the elders there.'
[mdtext20.txt 123]
(108) Jimo mene'omo nonobong ayu togoge
jimo mene'=mo N-pong-tobong 'ayu togoge
3PL/AB go.up=COMP RE-SF/PT-fell wood large
'They went up to fell large trees.'
[mdtext20.txt 131]
Examples (109)-(111) illustrate mene' in one transitive and two intransitive clauses. In example (109) the participants went up to make a jungle lean-to (temporary shelter), and in (110) the father went up to work in his garden. In (111) the participants went up to sleep.
(109) Ila uo jimo asi mene' negutu sanu binaung.
ila 'uo jimo asi mene' \(N\)-pe-gutu sanu binaung ABL yonder 3PL/AB pity go.up RE-SF-make whatchamacallit lean.to
'After that they, too bad, went up to make, whatchamacallit, a lean-to.'
[fktale01.txt 002]
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline (110) & Siama & nu & иo & mene' & nokarajaa & rijo'ongonyo. \\
\hline & siama & \(n u=u n g a\) & 'ио & mene' & \(N\)-po \({ }_{1}\)-karajaa & ri=jo'ong =onyo \\
\hline & father & CNGE= child & yonder & go.up & RE-SF/DE-work & LOC= garden=3SG/GE \\
\hline & 'That & d's father we & p to w & in hi & garden.' & [mdtext18.txt 0 \\
\hline
\end{tabular}
\begin{tabular}{clll} 
(111) Ami & tarus & mene'omo & no'oturu. \\
'ami & tarus & mene'=mo & no-'o-turu \\
1PL.EXC/AB & continue & go.up=COMP & ST/RE-HAVE-sleep
\end{tabular}
'We then went up to sleep.'
[cekupitu.int 014]

\subsection*{11.3.3.3 The purposive serial verb nyau 'go down'}

The purposive serial verb nyau uses the prefix \(m e-\) when it is in V1 syntactic position. Examples (112)-(114) illustrate menyau 'go down' in an active voice clause construction ((112)-(113)) and in a denominal verb construction ((114)). Example (113) shows the purposive clause as a complement clause of the verb tuju. This latter example is further evidence for the unitary predication of purposive clauses.
\begin{tabular}{lllll} 
Jimo & menyau & mongoli & vea & riLabean. \\
jimo & M-pe-nyau & M-pong-oli & vea & ri=Labean \\
3PL/AB & IR-SF-go.down & IR-SF/PT-buy & rice & LOC=L.
\end{tabular}
'They went down to buy rice at Labean.' [maslia.pin 050]
(113) Nitujumo nigibang siamanyo o siinanyo
ni-tuju \(=\) mo ni \(=\) gibang \(\quad\) siama \(=\) nyo o siina \(=\) nyo

IV/RE-send=COMP PN/GE=lizard father=3SG/GE and mother=3SG/GE
\begin{tabular}{llll} 
moje menyau & mangalap & botuang & apampulu. \\
moje \(M\)-pe-nyau & mang-alap & botuang & apa-mpulu \\
also & IR-SF/DY-go.down & IR-SF/PT-get & slave
\end{tabular} four-tens
'The monitor lizard sent his father and his mother again down to get forty slaves.'
[gibang.pin 075]
```

(114) A'u menyau mobanta ridagat.
a'u M-pe-nyau M-por-banta ri=dagat
1SG/AB IR-SF/DE-go.down IR-SF/DE-fish LOC=ocean
'I will go down to fish in the ocean.'
[mdtext14.txt 005]

```

In examples (115) and (116) menyau is used in inverse voice constructions. However example (115) is not a purposive use, since it is two predications. This can be proven by the insertion of the noun for 'marriage partner' between the two verbs which would make it the subject of nika' 'marry'. Example (116) provides the contrast with a unitary predication made up of nyau 'go down' and lolon 'swim'. The context makes it clear that the narrator was the one who went down to swim.
(115) Sigibang menyau ninika’.
si=gibang M-pe-nyau ni-nika'
PN/AB=lizard IR-SF/DE-go.down IV/RE-marry
'The monitor lizard went down to get married.' [gibang.pin 076]
(116) Paey menyau no’uloloni.
paey M-pe-nyau no'u-lolon-i
and.then IR-SF/DY-go.down 1SG.IV/RE-swim-DIR
'And then I went down to swim.'
[maslia.pin 039]

\subsection*{11.3.3.4 The purposive serial verb mai 'come'}

The purposive serial verb mai 'come' is illustrated in active voice verbal constructions in (117) and (118).
(117) Jimo mai nepetomиа’ ami.
jimo mai \(N\)-pepe-tomи- \(a\) ' 'ami
3PL/AB come RE-SF-meet-TZ 1PL.EXC/AB
'They came here to meet us.'
[jptext03.jdb 018]
(118)

Saba' a'u moo mai nengita mo'uри'и.
saba' a'u moo mai N-pong-ita mo'uри='и
because \(1 \mathrm{SG} / \mathrm{AB}\) this come RE-SF/PT-see grandchild=1SG/GE
'Because I have come here to see my grandchild.'
[mdtext11.txt 053]
Example (119) shows a purposive serial verb clause as the complement of the matrix verb 'ai 'call'. Example (120) illustrates mai in an inverse voice verbal clause construction.
\begin{tabular}{lllll} 
Paey & ni'aia'onyo & rapinyo & langkai uo \\
paey & ni-'ai-a'=nyo & rapi=nyo & langkai 'uo \\
and.then & IV/RE-call-TZ=3SG/GE & spouse=3SG/GE & male & yonder
\end{tabular}
mai nengkani.
mai \(N\)-pe-ngkani
come RE-SF-eat
'And then she called her husband there to come and eat.'
[mdtext14.txt 026]
\(\begin{array}{lllll}\text { (120) A'u } & \text { mai } & \text { nitabola', } & \text { miu } & \text { ripomoiaongo'u. } \\ \text { a'u } & \text { mai } & \text { ni-tabol-a' } & \text { miu } & \text { ri=po }{ }_{1} \text {-moia-ong='u } \\ \text { 1SG/AB } & \text { come } & \text { IV/RE-discard-TZ } & \text { 2PL/GE } & \text { LOC=SF=live=locN=1SG/GE }\end{array}\)
'You came and threw me into my own place.'
[turtle.pin 207]
In (121) and (122) two purposive serial verbs precede the main verb (see §11.3.2.4 for the same semantic rules that dictate the order sequence). Example (121) has the sequence mene' mai 'go up here, come up here', and (122) has nyau mai 'come down here'. Since this last example is in the inverse voice it also demonstrates nicely that it is the first person
agent that is going down, and not the second person P argument, therefore allowing this to be interpreted as a single predication.
\begin{tabular}{llll} 
(121) Mene' mai & nengita & unga & uo. \\
mene' mai & N-pong-ita & unga & 'uo \\
go.up come & RE-SF/PT-see & child & yonder \\
'They came up to see that child.' &
\end{tabular}
[mdtext11.txt 050]
\begin{tabular}{lllll} 
Paey & oo & nyau & mai & uala. \\
paey & 'oo & nyau & mai & 'u-alap \\
and.then & 2SG/AB & go.down & come & 1SG.IV/IR-ge
\end{tabular}
'And then I will come down here to get you.'
[mdtext14.txt 064]

\subsection*{11.4 Sequences of two, three, four, and five verbs}

This section discusses sequences of two to five verbs which do not contain a directional verb. There is at this stage not enough evidence to warrant calling such verb sequences serial verbs, since it appears that each of the non-directional verbs is an independent predication. Example (123) illustrates a sequence in which two inverse verbs have the same undergoer and actor. Although examples such as these could conceivably be interpreted as a serial verb construction, it appears that the verbs are better analysed as compressed clauses which are juxtaposed and which have ellipsed shared arguments. Future testing for intonation contours will be helpful in determining whether there are any boundaries that may occur between juxtaposed verbs like these.
\(\begin{array}{cllllll}\text { (123) Ulasang } & \text { moo } & \text { kaliuliu } & \text { ni'omung } & \text { nipene'a' } & \text { nijimo } & \text { mene' } \\ \text { ulasang } & \text { moo } & \text { kaliuliu } & \text { ni-'omung } & \text { ni-pene'-a' } & \text { nijimo } & \text { mene } \\ \text { turtle } & \text { this } & \text { at.once } & \text { IV/RE-carry } & \text { IV/RE-climb-TZ } & \text { 3PL/GE go.up }\end{array}\)
ritubu ayu nuagut.
ri=tubu ’ayu nu=agat
LOC=trunk tree CN/GE=k.o.tree
‘They (=monkeys) at once carried this turtle and climbed up the trunk of an agut tree.'
A different case is presented by triple verbal sequences which have one of the four directional verbs in between the other two verbs . The directional verb may be a directional serial verb which forms a single predicate with the first verb, or a purposive serial verb which forms a predicate with the third verb. In example (124) mai 'come' is a directional serial verb paired with dua' 'arrive' and notumangis 'began to cry' is a separate clause (the referent 'she' is recoverable from the context).
(124) Nodua' mai notumangis.

N -po \(1_{1}\)-dua' mai N -po \(1_{1}\)-[um]-tangis
RE-SF-arrive come RE-SF/LCM-TEL-cry
'She came down and began to cry.'

In (125) ma'o 'go' is a purposive serial verb for lolo 'search' and these form a separate predicate from santaba 'cross'. Each of the predicates has the same first person subject \(a^{\prime} u\). The river crossed is the ellipsed object of santaba, and the payangan 'boat' is the object of the last verb (or last predication).
\begin{tabular}{lllll} 
(125) A'u & moo & mesantaba & ma'o & melolo \\
a'u & moo & M-pe-santaba & ma'o & M-pe-lolo \\
1SG/AB & this & IR-SF/DY-cross & go & IR-SF/DY-search \\
& & & & \\
pesabeong & mami & payangan. & \\
pe-sabe-ong & mami & payangan & \\
SF-ride-locN & 1PL.EXC/GE & boat \\
'I will cross and go look for our canoe vessels.'
\end{tabular}

In (126) the completive aspectual enclitic suggests that the directional verb ma'o ' go ' is a purposive serial verb with the following verb angka 'steal' (see §11.3.3 for discussion of purposive serial verbs).
\begin{tabular}{llll} 
Ito & melampamo, & ma'o & mangangka. \\
'ito & M-pe-lampa=mo & ma'o & M-pong-angka \\
1PL.INC/AB & IR-SF/DY-travel=COMP & go & IR-SF/PT-steal \\
'Let's leave now, and we will go steal.' & &
\end{tabular}

Example (127) contains a sequence of five verbs that intervene between an initial subject and a final object. The first three verbs are all in realis, and either make up one predicate or three individual predicates with the ellipsis of the same subject. The last two verbs are both in irrealis mode and can be considered to be one distinct predicate from the previous three verbs. What is of interest here is that all of the verbs have the same subject and object, and that the subject and object are each represented only once in the sentence (which follows the canonical SVO word order).

'He (the turtle) had begun to test going up, he wanted to get the banana tree's fruit.'
[turtle.pin 033]
Example (128) illustrates a sequence of four verbs, arguably one predication, in which 'omung can be considered to be the core verb (all of which are preceded by the negative ndau 'no, not'). First is the abilitative verb maala 'able', followed by the inverse voice construction ro'omung 'carry'. Maala is from a small class of semi-auxiliary verbs which often form a complex verb construction which modifies the main verb which follows it (§14.4). Meteule 'return' can be considered to be a serial verb that follows the inverse voice verb, which is itself followed by the serial verb mai 'come'.
\begin{tabular}{rlllll} 
(128) Ndau & maala & ro'omung & meteule & mai & rijunjung, \\
ndau & ma-ala & ro-'omung & M-pe-teule & mai & ri=junjung \\
NEG & ST/IR-able & IV/IR-carry & IR-SF/DY-return & come & LOC=house
\end{tabular}
'We were not able to bring back any of it to our house.'
[jptext02.jdb 020]

\section*{12 Voice and the inverse construction}

\subsection*{12.1 Introduction}

This chapter discusses voice and the inverse construction. The grammatical relations of subject, object, and second object are all defined and claimed to be identifiable in Pendau (see §6.4). The voice system is reviewed and the opposition between inverse voice and the non-inverse voice is clarified ( \(\$ 12.3\) ). All of these topics are most relevant as they have figured in a long history of controversy over the best way to analyse transitive sentences in Western Malayo-Polynesian languages (especially the 'Philippine languages'). Adding to this controversy has been the confusing use of the term 'focus' for various voice constructions in the Philippine languages such as actor focus, patient or goal focus, instrument focus, and locative focus. \({ }^{1}\) This chapter is the first grammatical description of a Western Malayo-Polynesian language that methodically uses the term 'inverse voice'. \({ }^{2}\) Compare examples (1) and (2) with Figure 12.1 which clearly shows inverse voice results from the realignment of the macroroles (capital letters in the English translation indicate the grammatical subject in Pendau).
(1) Siama'и nonuju siina'u.
si=ama='u
PN/AB=father=1SG/GE
N-pong-tuju
si=ina= 'u
RE-SF/PT-send
\(\mathrm{PN} / \mathrm{AB}=\) mother \(=1 \mathrm{SG} / \mathrm{GE}\)
Pivot=A
non-pivot=P
'MY FATHER sent my mother.'
\begin{tabular}{lll} 
Siama'u & nituju & niina'u. \\
si=ama='u & ni-tuju & ni=ina='u \\
PN/AB=father=1SG/GE & IV/RE-send & PN/GE=mother=1SG/GE \\
Pivot=P & & non-pivot=A \\
'My mother sent MY FATHER.' &
\end{tabular}

\footnotetext{
1 See for example Barlaan (1999) for a study of 'focus' in Isnag.
2 Some other Western Malayo-Polynesian languages (for example, Karao, Brainard 1994, Cebuano, Payne 1994, Seko Padang, Payne and Laskowske 1997) have been cited as having inverse voice, but those works do not use it as a main alternative transitive voice (that is, part of a symmetrical voice system) in the manner that I am claiming.
}
\begin{tabular}{|l|l|l|l|}
\hline Active voice & \begin{tabular}{l} 
Subject \\
actor role
\end{tabular} & V & \begin{tabular}{l} 
Object \\
undergoer role
\end{tabular} \\
\hline Inverse voice & \begin{tabular}{l} 
Subject \\
undergoer role
\end{tabular} & V & \begin{tabular}{l} 
Object \\
actor role
\end{tabular} \\
\hline
\end{tabular}

Figure 12.1 Macrorole realignment

The discussion will show that the 'focus system' in Pendau is actually a contrast of active and inverse voice, where 'inverse' refers to pragmatic inverse following Givón's 1994 model of voice contrasts, that is, a symmetrical voice system (see Himmelmann 2002a, and Ross 2002a, 2002b). This chapter points out that the identification of some of the verb classes presented in Chapter 9 is intertwined with the inverse construction (only some verb classes can be identified without looking at the inverse construction; also see the \(p V(C)\)-stem former paradigm in §4.3).

The two main points are: 1) that most verbs may be formed in either the inverse construction or the non-inverse construction, and 2) some verbs are derived in either construction and some verbs are never derived in either construction. The discussion of grammatical relations as an emic pattern \({ }^{3}\) demonstrates further that the re-alignment of the subject and object roles between non-inverse and inverse constructions melds together as an elegant and concise pattern (see Figure 12.1 and §12.3). \({ }^{4}\)

\footnotetext{
3 Longacre (1996:240) comments, 'The above relations and \(S, A\), and \(O\) are simply etic starting points which are worked up into the grammar of a given language.'
4 The analysis of the inverse voice system in Pendau represented in Figure 12.1 (originally presented in Quick 1997a) is controversial in that some linguists clearly do not agree that an actor or semantic agent can ever be a grammatical object. Disagreements on this issue reflect some of the same differences among grammarians over alternative ways to analyse Philippine-type languages, which in turn reflect differences in theoretical assumptions. Even in the Algonquian languages linguists differ on how to analyse grammatical relations. Rhodes (1976, as referred to by Dryer 1997:129 and Givón 2001b:161) analyses Plains Cree and Ojibwa in the same way that I have analysed Pendau in allowing the inverse voice agent to be the grammatical object. Givón (2001b:154-168) discusses the objections of certain linguists to a typology of voice inversion and answers these objections. One must be extremely careful to differentiate an etic and an emic analysis. What I am presenting here in this introductory section is an emic analysis based on a careful study of the data in recognition of recent theoretical work including that on inverse voice (compare Figure 12.1 with Figure 12.5). It will be difficult to grasp how a grammatical object can be an actor/agent if thinking strictly in cross-linguistic terms. It is best to understand that grammatical relations in Pendau are 'language particular' (Dryer 1997, Ross 2002a:24-26) with some cross-linguistic similarities that motivate the use of grammatical subject and grammatical object as substantive labels for Pendau. It is logical to conclude that the non-pivot core argument which is not a grammatical subject must be a grammatical object (or in the case of ditransitives a first and second object). The macroroles (or their equivalent semantic roles) do not need to map one-to-one onto grammatical subject and object because in Pendau the mapping varies according to the voice, that is, it allows what can be called macrorole realignment. Lexical Functional Grammar for example is one theoretical model that allows the possibility for an actor (or agent) to be the grammatical object (Avery Andrews pers. comm., Kroeger 1993:40, Manning 1996:39, 41). As I explain in §12.4.1-3, in a pragmatically based inverse voice system a grammatical object which is an actor should be marked as unusual or different, and this is the case in Pendau. This analysis then indirectly places Pendau and other similar Western Malayo-Polynesian languages into a broad typology that includes some North American languages, which exhibit the 'norm reversal' discussed by Givón (1994). (For my discussion of this see §12.2 and §12.4.)
}

\subsection*{12.2 Predicates and voice}

Syntactic clause types are determined by their predicates. Predicates can be either nominal or verbal (§6.5-6). Verbal predicates fall into several verb classes in Pendau based on a distinct set of semantico-syntactic characteristics associated with particular stem formers in most cases (this is discussed in detail in §4.3, §5.6, §6.6, and Chapter 9). Figure 12.2 shows the pivots and functions for each predicate type in Pendau. \({ }^{5}\) The first column lists the predicate type. The next two columns list the prefixes used to mark verb classes (contrasting irrealis and realis modes in their surface forms). The next two columns identify whether the actor (that is, the A argument) or the undergoer (that is, the P argument) is the pivot. \({ }^{6}\) A 'yes' indicates that the actor or the undergoer argument is a second core argument required in the verb's clause. 'Sometimes' indicates that an undergoer argument may occur. In all but two instances the absolute noun phrase is used for both the actor and the undergoer. The two exceptions use the genitive noun phrase set (see Figure 12.2 and discussion above), and are indicated here with an asterisk (and highlighted with a grey box). The column on the right describes the kinds of functions that the type of verb class (or predicate) is most associated with in other languages.
\begin{tabular}{|c|c|c|c|c|c|}
\hline Predicate & Irrealis & Realis & Actor
\[
\left(\mathrm{A} \text { or } \mathrm{S}_{\mathrm{A}}\right)
\] & Undergoer ( P or \(\mathrm{S}_{\mathrm{P}}\) ) & Functions like \\
\hline Verbless & not applicable & not applicable & pivot & yes & equative \\
\hline Existential & not applicable & not applicable & pivot & no & existential \\
\hline Possessive \({ }^{7}\) & not applicable & not applicable & pivot & yes & possessive \\
\hline Copula & ma- & na- & pivot & yes & become \\
\hline Stative \(_{1}\) & \(\mathrm{mo}_{1^{-}}\) & no- & no & pivot & passive voice \\
\hline Stative \(_{2}\) & \(\mathrm{mo}_{1^{-}}\) & no- & yes * & pivot & middle voice \\
\hline Dynamic & M-pe- & \(N\)-pe- & pivot & sometimes & antipassive voice \\
\hline Denominal & M-po \({ }_{1-}\) & \(N-\mathrm{po}_{1}{ }^{-}\) & pivot & sometimes & antipassive voice \\
\hline \multirow[t]{2}{*}{Transitive} & M-pong- & \(N\)-pong- & pivot & yes & active voice \\
\hline & ro- & ni- & yes * & pivot & inverse voice \\
\hline
\end{tabular}

Figure 12.2. Pivots and functions of verb clause constructions in Pendau
(* indicates that the genitive case is used here; elsewhere it is the absolute case)

Givón's (1994) typology will be used as a benchmark in diagnosing the use of voice in Pendau. This typology is given in Figure 12.3.

\footnotetext{
5 Figure 12.2 does not list all of the verb class possibilities, but it does represent all of the major possibilities. For a full listing and description of the verb classes and verbal morphology see Chapter 9.
\({ }^{6}\) For the verbless, existential, possessive, and copular clauses the A and P notionally are irrelevant, however syntactically the noun phrases are marked similarly to active transitive and intransitive clauses.
\({ }^{7}\) The possessed noun phrase is marked with the prefix ' \(o\) - (with allomorphs ' \(e\) - and 'a based on vowel harmony).
}
\begin{tabular}{lccc} 
Voice & \multicolumn{3}{c}{ Relative topicality } \\
Active & A & \(>\) & P \\
Inverse & P & \(>\) & A \\
Passive & P & \(\gg\) & A \\
Antipassive & A & \(\gg\) & P
\end{tabular}

Figure 12.3. Givón's voice typology (adapted from Givón 1994)
Double wedge arrows indicate that the argument pointed to is suppressed or omitted syntactically, indicating that the difference in topicality is so huge that the suppressed or omitted argument is essentially non-topical. \({ }^{8}\) Since the pivot in Pendau is the selected argument this means by default that this noun phrase has the highest topical ranking for any given clause. \({ }^{9}\)

The most insightful application of Givón's typology in Pendau is in distinguishing the two transitive clause constructions as active and inverse voice (see §4.3, §5.6 §6.2, §6.6.3.1, and Chapter 9 for further elaboration of the verbal morphology and Chapter 17 for further diagnostics using Givón's quantification methodology). In order to properly understand what Givón is saying here, it is necessary to look at this typology in context. Inherent topic-worthiness \({ }^{10}\) (Payne 1997:150-151) is a basic concept in determining which NP acts on another NP (see Figure 12.4 below) in any given transitive clause construction.


Figure 12.4. Topic-worthiness hierarchy (adapted from Payne 1997:150)
Normally when there are two arguments, the highest of the two arguments on the topicworthiness hierarchy acts on the lower argument. So this simply means that normally the higher of the two arguments must be the A argument and the lower must be the P argument. This is one reason that active voice is often the main or only basic transitive clause in many languages, since it aligns itself with this hierarchy. This is also sufficient to explain clauses which have the A as pivot. However, when P becomes the pivot this is counter to this hierarchy, and is what Givón (1994:23) calls 'norm reversal'. So specific clauses can invert the topic-worthiness hierarchy or allow a clause to encode the P argument as higher ranked in topicality than the A argument for a particular clause. Although the inherent topic-worthiness hierarchy is really concerned with the direction of transitivity (at least prototypically), when a language selects a non-A core argument as the pivot, the direction of transitivity is unchanged (transitivity is still from A to P ), and the A argument is not demoted or suppressed in Pendau as it would be in a language like English

\footnotetext{
8 This is different from covert arguments of a transitive construction that are omitted because they are easily recoverable from the context.
9 Givón does not use the term 'pivot', so this is my interpretation of his voice typology as applied to Pendau. I assume that the pivot is a clause's topic in Givón's model, and this assumption is borne out in a consistent analysis of the Pendau voice system as presented in this chapter.
\({ }^{10}\) Givón calls this the 'generic topic hierarchies' (1994:22); also see Dixon (1994:84-85) for a similar hierarchy he calls the 'nominal hierarchy'.
}
(in which case the active voice becomes a passive voice), but the A argument swaps topicality status with the non-A argument (see the statistical evidence presented in Chapter 17). \({ }^{11}\)

It is worth examining briefly some data from an 'inverse language'. The terminology direct/inverse was originally coined for Algonquian languages of North America. In these examples, I will only look at the contrast between the two nouns coded as obviative (OBV) and proximate (PROX), since the choice between these is based on pragmatic discourse information and demonstrates the use of functional inverse. The two Plains Cree examples below are quoted and (adapted slightly) from Foley and Van Valin (1985:298).
\begin{tabular}{lll} 
Asam-e-w & napew- \(\varnothing\) & atim-wa \\
feed-DCT-3 & man-PROX & dog-OBV
\end{tabular}
\begin{tabular}{llll} 
Asam-ik (asam-ekw-w) & napew-(w)a & atim- \(\varnothing\) & (INVERSE) \\
feed-INV-3 & man-OBV & dog-PROX
\end{tabular}

The translation is the same for both sentences (compare these to the Pendau Active and Inverse constructions in examples (1) and (2) ). The difference between them is that the nouns marked as proximate are more topical than the nouns marked as obviative. \({ }^{12}\)

Pendau has a pragmatic or functional inverse in contrast to the often cited grammatical inverse of Algonquian languages. \({ }^{13}\) Algonquian languages really have a 'split inverse system' (my term) where grammatical (or semantic) inverse \({ }^{14}\) applies everywhere except when there are two third person core arguments, which are then chosen on pragmatic grounds to be assigned the proximate and obviate case (that is, pragmatic inverse). Kutenai (language isolate in British Columbia, Montana, and Idaho) has an inverse voice system that only applies when two third persons are in the same clause:

The first thing to observe is that unlike a number of other languages with constructions that have been described as inverse constructions, the inverse construction in Kutenai is restricted to clauses with two third person participants. The contrast of direct to inverse does not apply to clauses with first or second person participants... (Dryer 1994:66)
Although there is no animacy hierarchy at work, Kutenai has been described as an inverse voice language.

\footnotetext{
\({ }^{11}\) The A is still inherently topical, but for the specific clause it is outranked (or conceivably equally ranked) by virtue of the fact that it is not the pivot. The possibility that they are equally ranked is mentioned in Thompson (1994).
12 Also see Dahlstrom (1986) for further discussion and examples of Plains Cree. As examples (3) and (4) illustrate, the proximate and obviate distinction is not just made on third person pronouns.
\({ }^{13}\) The animacy hierarchy (or agentivity hierarchy) is usually cited as the key to the choice between direct and inverse voice. Payne (1997: 150-151) observes that: 'These are not really very accurate terms, as many of the elements have nothing to do with animacy or agentivity in the usual sense.'
\({ }^{14}\) Payne (1997:211, 215, 216) uses the term 'grammatical inverse' for Givón's equivalent term 'semantic inverse'.
}

Givón (1994:23) contrasts these two inverse voice clause types with these definitions: \({ }^{15}\)

\section*{Pragmatic inverse:}

If the agent is more topical than the patient (cf. norm (24c)), the direct-active clause is used. If norm (24c) is reversed and the patient is more topical, the inverse clause is used.

\section*{Semantic inverse:}

If the agent outranks the patient on the relevant generic topic hierarchy (cf. norms \(22 \mathrm{a}, \mathrm{b}, \mathrm{d}-\mathrm{i})\), the direct-active clause is used. If the relevant norm is reversed and the patient outranks the agent on the relevant hierarchy, the inverse clause is used.
'Passive' and 'antipassive' as descriptive labels are perhaps more questionable for Pendau. There is no derived passive construction in Pendau. However, the stative construction has two main similarities to the passive. First both have an undergoer subject, and secondly the frequency of the adjunct effector (or 'agent') in texts correlates closely to Givón's percentages for passives (see §17.4.4 for more details). The label antipassive voice will not be used for the dynamic and denominal verbs since the P argument does not receive any kind of different marking and does not perform any morphological or syntactic operations according to typological criteria (see Katamba 1993, Dixon and Aikhenvald 1997). \({ }^{16}\)

\subsection*{12.3 Primary transitive clauses \({ }^{17}\)}

\subsection*{12.3.1 Introduction}

This section presents data for identifying the existence of two primary transitive clause types: those with a nong- verb construction (all active voice transitive constructions in either irrealis or realis), and those with a ni- verb construction (all inverse voice transitive constructions in either irrealis or realis).

Figure 12.5 compares the etic word orders for basic transitive clauses and their associated transitive verb affixes in Pendau. Each verb type has a rigid argument position that is post-verbal, \({ }^{18}\) and each verb type has a flex argument position that is in either 1) a pre-verbal position or 2 ) in a post-verbal position which must follow the rigid argument position. The flex positions are marked in Figure 12.5 by circles around the arguments which have more than one word order position. However, what is relevant is that this pattern suggests that both the nong- verb clause and the ni- verb clause have one single underlying word order (the emic word order). The flex position is identified as that of the pivot since pre-verbally this is the same position the pivot occurs in relative clauses, and

\footnotetext{
\({ }^{15}\) Here (24c) is the agentivity hierarchy (in Givón 1994:22): agent>dative>patient, or a subset of the inherent topic worthiness hierarchy.
\({ }^{16}\) The reason they function like antipassives is that the P argument is often optional or ungrammatical. When a P argument appears in dynamic and verbalised clause constructions it is sometimes an incorporated noun. This is discussed in Chapter 9.
\({ }^{17}\) Most of this section was presented in an earlier version in Quick 2002; also compare Quick 1997a.
\({ }^{18}\) Floating adverbs ( \(\$ 14.5 .2\) ) and serial verbs ( \(\$ 11.3 .2\) ) may occur between the verb and the rigid argument in either voice. Serial verbs are by definition part of the verb event and therefore do not invalidate this analysis. Although floating adverbs may occur between the verb and the rigid argument they are an exception and do not invalidate this analysis.
}
the rigid position as that of the non-pivot. The emic word order variation is a pragmatic discourse function that is discussed in §17.4.3.2 (also see Quick forthcoming).


Figure 12.5. \(A\) and \(P\) argument positions in Pendau transitive clauses

Pendau transitive clause types can be summarised as:
Pendau has two transitive verb forms distinguished by nong- and ni- prefixes. These verb constructions both have A and P arguments.
```

nong- AVP or VPA word order
Absolute is used in A and P positions
Genitive may occur in the P position, but it is rare
ni- PVA or VAP word order
PA-V and A-VP described in §12.4.2 (pronominal prefixes)
Absolute is used in the P position
Genitive is used in the A position

```

The ni- verb construction indicates that A is in the non-pivot position, and the P is in the pivot position. The nong- verb construction indicates that A is in the pivot position, and the P is in the non-pivot position. The choice between ni- and nong- verb constructions seems to be dependent on the degree of topic continuity. The ni- verb construction seems to be the favoured verb construction when the A argument has a low referential distance (nearly a \(3: 1\) ratio; for discussion and evidence see Chapter 17).

\subsection*{12.3.2 Verbs with nong- \({ }^{19}\)}

Clauses with nong- verbs have two word orders: AVP and VPA. In this section I will look at the AVP order (see (26) in \(\S 12.3 .4\) and \(\S 10.3 .6 .1\) for examples in the VPA order). The A may be a pronoun ( 05 or an NP (6). When the P argument does not have a demonstrative, as in (5), it is either referentially definite or indefinite, but when it takes a demonstrative, as in (6), it must be definite (see §7.6.3). These examples demonstrate that there are no restrictions on definite or indefinite noun phrases in the P argument position. \({ }^{20}\)

\footnotetext{
19 It should be noted that there are other active voice prefixes. The other two main prefixes are mo- \(n \mathrm{no}\) - and тере-/nepe-. The prefix mepe-/ nepe- which selects the A argument as the pivot can on some words be substituted for mong- / nong- without changing the meaning. While some roots can take either prefix many roots occur with only one of the two prefixes. For simplicity and clarity I have not used these as examples in this chapter. See Chapter 9 for further details on all of the transitive voice prefixes.
\({ }^{20}\) See Foley and Van Valin (1985:287) and Givón \((1984,1990)\).
}
(5) A'u nongoli vea.
a'u \(\quad\)-pong-oli vea
\(1 \mathrm{SG} / \mathrm{AB}\) RE-SF/PT-buy raw.rice
'I bought rice.'
(6)
\begin{tabular}{llll} 
Sipapa & nongkomung & vea & uo. \\
si=papa & N-pong-'omung & vea & 'uo \\
PN/AB=grandpa & RE-SF/PT-take & raw-rice & yonder \\
'Grandpa took that rice.' & &
\end{tabular}

The argument order PVA is not possible when a nong- verb construction is used.
\begin{tabular}{lll} 
*Vea & nongoli & \(a\) 'u. \\
vea & N-pong-oli & \(a\) 'u \\
raw.rice & RE-SF/PT-buy & 1SG/AB \\
'I bought rice.'
\end{tabular}
(8)
\begin{tabular}{llll} 
*Vea & uo & nongkomung & sipapa. \\
vea & 'uo & N-pong-'omung & si=papa \\
raw.rice & yonder & RE-SF/PT-take & PN/AB=grandpa
\end{tabular}
'Grandpa took that rice.'
Absolute pronouns can function as both A and P as can be seen by comparing examples (5) and (9). In (5) \(a^{\prime} u\) ' \(I\) ' is the agent, while in (9) it is the patient.
(9) Io nengebiling a'u.
io \(\quad N\)-pong-ebiling \(a^{\prime} u\)
\(3 \mathrm{SG} / \mathrm{AB}\) RE-SF/PT-leave \(1 \mathrm{SG} / \mathrm{AB}\)
'He left me.' (Not: *I left him.)
The positions of the two absolute pronouns in example (9) could be reversed and the sentence would still be grammatical (although the meaning changes). Thus, in this construction the grammatical role of the arguments is indicated by word order, not by the form of the pronoun. The same line of reasoning applies to the variant word order VPA since the order *VAP in the active voice is also ungrammatical (note that it is the relative 'flex' position of A in relation to the 'rigid' position of the P argument which is important here, as shown in Figure 12.5). \({ }^{21}\)

Both A and P proper nouns are preceded by the proper noun phrase marker si regardless of the argument position ((10) and (11)). As with pronouns, who sees whom is dictated by the argument position together with the nong- verbal prefix.

\footnotetext{
\({ }^{21}\) Of course either A or P arguments (or both) may appear as 'covert' arguments, but the context in conjunction with the verb's voice prefix will usually disambiguate which one is which. See \(\S 17.4 .4\) for the distribution and frequency of covert arguments.
}
```

(10)

| Sikai | nengitai | sibe'e. |
| :--- | :--- | :--- |
| si $=$ kai | N-pong-ita-i | si $=b e$ 'e |

$\mathrm{PN} / \mathrm{AB}=$ grandfather $\mathrm{RE}-\mathrm{SF} / \mathrm{PT}$-see-DIR $\mathrm{PN} / \mathrm{AB}=$ grandmother
'The grandfather saw the grandmother.'

```
(11)
\begin{tabular}{lll} 
Sibe'e & nengitai & sikai. \\
si \(=\) be'e & N-pong-ita-i & si=kai \\
PN/AB=grandmother & RE-SF/PT-see-DIR & PN/AB=grandfather
\end{tabular}
```

'The grandmother saw the grandfather.'

```

Common nouns are typically not preceded by a noun phrase marker. They are marked here as zero proclitic only for illustration; they will not usually be marked. Argument structure is indicated by word order as shown by (12) and (13). Only the noun phrase preceding the verb can be the A argument. The post-verbal argument position has to be occupied by the P argument.
\begin{tabular}{lll} 
Tagu'u & nonuju & unga'u. \\
\(\varnothing=\) tagu \(=\) 'u & N-pong-tuju & \(\varnothing=\) unga=' \(u\) \\
CN/AB=friend=1SG/GE & RE-SF/PT-send & CN/AB=child=1SG/GE
\end{tabular}
'My friend sent my child.'

\section*{(13)}
\begin{tabular}{lll} 
Unga'u & nonuju & tagu'u. \\
\(\varnothing=\) unga=' \(u\) & N-pong-tuju & \(\varnothing=\) tagu \(=\) ' \(u\) \\
CN/AB=child=1SG/GE & RE-SF/PT-send & CN/AB=friend=1SG/GE
\end{tabular}
'My child sent my friend'
There is an optional, but very rare, common noun phrase marker \(u=\). In one of the few texts that it appears, it is only used three times in 238 clauses. Elicitation shows that it may precede both A and P nouns, in the position indicated as zero above ( \(\varnothing=\) ). \({ }^{22}\) Himmelmann (pers. comm.) suggests that it may have some kind of highlighting effect.

While genitive noun phrases are never used as the A argument of the nong- verb, the genitive singular pronouns are occasionally found in the P argument position, as in examples (14) and (15). \({ }^{23}\) The claim that these are P arguments is supported by their occurrence as recipients of benefactive applicative constructions, as in (16) (§10.3.2.1). Vea 'rice' is the second object ( \(\$ 10.3 .2 .1\) ).
(14) Jimo mongkomungonyo.
jimo M-pong-'omung=nyo
3PL/AB IR-SF/PT-carry=3SG/GE
'They will carry him/her.'

\footnotetext{
\({ }^{22}\) The \(\varnothing\) does not imply a zero morpheme or a zero formative. This is only used occasionally in this book for heuristic purposes. Normally the common noun in the absolute case is not glossed since there is no morphological marking for it.
\({ }^{23}\) There seems to be no pattern other than that they must be a transitive verb.
}
```

(15) Jimo mongkomung io.
jimo M-pong-'omung io
3PL/AB IR-SF/PT-carry 3SG/AB
`They will carry him/her.'
(16) A'u nongolia'onyo vea.
a'u N-pong-oli-a'=nyo vea
1SG/AB RE-SF/PT-buy-TZ=3SG/GE raw.rice
'I bought rice for him.'

```

\subsection*{12.3.3 Verbs with ni-}

In contrast to the nong- verb constructions, the ni- verb constructions use both absolute and genitive cases to mark the P and the A arguments respectively. Note that in (17) and (18) the \(n i=\) proclitic marks proper nouns instead of the \(s i=\) proclitic, and that the common nouns (17) and pronouns (18) representing the P argument are from the absolute case set (see §7.5.1 on the difference between common nouns and proper nouns). The examples in this section give only the PVA word order. VAP word order also occurs and will be discussed in §12.3.4 (also see §10.3.6.2). Example (17) uses the verb base 'omung 'carry, take' with the ni- verb prefix. Compare (17) with (15) above where 'omung occurs with M-pong-. The A argument cannot precede a ni- verb form. Thus (19) is ungrammatical.
\begin{tabular}{llll} 
Vea & uo & ni'omung & nipapa'u. \\
vea & 'uo & ni-'omung & ni=papa='u \\
raw.rice & yonder & IV/RE-take & PN/GE=grandpa=1SG/GE
\end{tabular}
'My grandpa took that rice.'
A’u moo nituju nipapa.
a'u moo ni-tuju ni=papa
1SG/AB here IV/RE-send CN/GE=grandpa
'Grandpa sent me.'
\begin{tabular}{llll} 
*Nipapa'u & ni'omung & vea & uo. \\
ni=papa='u & ni-'omung & vea & 'uo \\
PN/GE=grandpa=1SG/GE & IV/RE-take & raw.rice & yonder \\
*'My grandpa took that rice.' & &
\end{tabular}

Example (20) looks similar to (13). However, the noun phrase preceding the ni- verb form must be the P argument. \({ }^{24}\) This contrasts with the nong-V clause in example (13) above where unga'u 'my child' must be an A argument in the pre-verbal position. Another way that the ni- verb differs from the nong- verb is that common nouns functioning as an agent of a ni- verb are marked with \(n u=.{ }^{25}\)

\footnotetext{
\({ }^{24}\) Note that elicitation has demonstrated that this position can optionally take the \(u=\) clitic for common nouns.
\({ }^{25}\) The genitive case constituents are also used to possess the noun directly preceding the pronoun or noun phrase marker (for example see (20)).
}
\begin{tabular}{lll} 
Unga'u & nituju & nutagu'u. \\
\(\varnothing=\) unga='u & ni-tuju & nu=tagu='u \\
CN/AB=child=1SG/GE & IV/RE-send & CN/GE=friend=1SG/GE
\end{tabular}
'My friend sent my child.'
The following is an example of the first person genitive enclitic as the A argument of the ni- verb.
\begin{tabular}{ll} 
Sipapa & nituju'u \\
si=papa & ni-tuju='u \\
PN/AB=grandpa & IV/RE-send=1SG/GE
\end{tabular}
'I sent Grandpa.'
In summary I have shown that the A argument in the ni- verb has a unique marking, \({ }^{26}\) and that all other core argument positions of the ni- and the nong- verb constructions are from the absolute case.

\subsection*{12.3.4 Comparison of the ni- and the nong- verb clause}

Not only are the ni- and the nong- verb forms semantically transitive, but they are syntactically transitive as well. \({ }^{27}\) Both constructions fit into the prototypical primary transitive verb, where neither the A or the P are marked obliquely. \({ }^{28}\) Each verb prefix requires two different noun phrase entities for its clausal predication, and when a core argument is overtly realised it is obligatorily either in absolute or genitive case.

In examples (1) and (2) above the nouns 'father' and 'mother' have the same 'emic' word order, but the A and P arguments assigned to these nouns are in an opposite 'etic' word order in relation to the verb (see Figure 12.1). Morphologically there are two differences between these two clause constructions. The first morphological difference resides in the two verb prefixes. The second difference is in the proper noun phrase marker for the noun phrase that follows the verb. A proper noun agent in a ni- verb clause is marked with ni, not with si. \({ }^{29}\) Common nouns are zero marked in the nong-verb clause, but marked with nu preceding the A argument in a ni- verb clause as in example (20).

Examples (22) and (23) show how pronouns are used from the two noun phrase sets. There are only two morphological differences between these examples (not counting the stem former in (22)). First, the verbal prefix indicates they are different, and secondly the pronoun nijimo 'they' is from a different pronoun set than jimo 'them'.

\footnotetext{
\({ }^{26}\) The A argument may be a covert argument (see 17.4.6 for the statistics). Also there are instances of passive-like behaviour when the A is a non-specified entity or a generic agent; however, these in and of themselves are very minor occurrences compared to the whole of the data.
27 Although any core argument may be covert.
\({ }^{28}\) See \(\S 5.5\) and \(\S 7.5 .1\) for a discussion about the noun phrase markers and why they aren’t considered to be oblique markers. If the genitive proper noun marker \(n i=\) is considered oblique then the absolute proper noun marker \(s i=\) would also have to be considered oblique. One must keep in mind the whole paradigm and also remember that the common nouns are unmarked in absolute case. Unmarked nouns do not imply that marked nouns are oblique. A comparison of the parallel pronoun set is required.
\({ }^{29}\) However, both ni and si are used to mark the noun to which it is attached to as a proper noun and not as a common noun.
}
\begin{tabular}{llll} 
(22) & \begin{tabular}{l} 
Ami \\
'ami
\end{tabular} & \begin{tabular}{l} 
nonuju \\
N-pong-tuju
\end{tabular} & \begin{tabular}{l} 
jimo. \\
jimo
\end{tabular} \\
& \begin{tabular}{l} 
1PL.EXC/AB \\
'We sent them.'
\end{tabular} & RE-SF/PT-send & 3PL/AB
\end{tabular}

Word order is important in Pendau. The discussion until now has been restricted to one word order possibility for each verb form's clause construction. The examples below demonstrate that there is variation in the word order for both the ni- verb and the nongverb constructions (see \(\S 17.4\) for the statistics).

In the alternative word order for the ni- verb form the P argument moves to word final position as shown in examples (24) and (25) below. It is important to note that the A argument's position remains the same (is rigid) when contrasting the two word order possibilities for the ni- verb clause construction. In contrast, the P argument's position is flexible, and so I call this the flex position (see Figure 12.5).
\begin{tabular}{lll} 
Nira'oponyo & odo & moo \\
ni-ra'op=nyo & odo & moo \\
IV/RE-catch=3SG/GE & monkey & this
\end{tabular}
'He caught this monkey.'
\begin{tabular}{llll} 
Paey & ni'ito & nutoo & a'u. \\
paey & ni-'ito & nu=too & \(a^{\prime} u\) \\
and.then & IV/RE-see & CN/GE=person & 1SG/AB
\end{tabular}
'And then people saw me.'
Example (26) shows that in the nong- verb clause construction the P argument has the rigid word order position, and the A argument has the flex position.
\begin{tabular}{lllllll} 
(26) & Nongkomung & asu & jimo & ono & mbengimo & ri'uo. \\
N-pong-'omung & asu & jimo & ono & mbengi=mo & ri='uo \\
RE-SF/PT-take & dog & 3PL/AB & if & night=COMP & LOC=yonder
\end{tabular}
'They took dogs over there when it was already night.'
An A argument may be omitted or irrelevant, as shown in (27). In §17.4.4 these are discussed briefly and four texts quantified there discuss these as 'covert' arguments (also see Figures \(17.14-17\) ). The evidence from these texts shows that the A argument is rarely omitted in inverse voice clause constructions, and that the A argument in the active voice is 'covert' more often in some of these texts than those in the inverse voice clauses.
(27)
\begin{tabular}{llll} 
Dampenyo & jomo & rooli & riPalu. \\
dampe \(=\) nyo & jomo & ro-oli & ri=Palu \\
seed=3SG/GE & just & IV/IR-buy & LOC=Palu
\end{tabular}
'The seeds will just be bought in Palu.'

\subsection*{12.4 The inverse construction}

This section will discuss different sorts of evidence that shows that the inverse voice is a transitive construction, and therefore can be contrasted as an alternative transitive construction to the active voice, but is not to be analysed as a passive or as an ergative construction. The arguments are summarised below. \({ }^{30}\)
1. The 'flex position' is filled by the pivot as demonstrated in §12.3.1-4 for both active and inverse voice constructions. The complementary etic word orders formed by these two voice constructions can be unified into the emic SVO/VOS word orders. The pivot has a privileged status, shown by the fact that it must always be the head of a relative clause (§6.4.1.3). Section 6.4 provides arguments for designating the pivot as the grammatical subject relation.
2. The A argument in imperative constructions in inverse voice must be a core argument (§12.4.1), as it is in the active voice. This means that when the A argument is preceded by a noun phrase marker it cannot be interpreted to be an oblique marker. Furthermore, when the A argument is omitted it is still obligatorily understood to be the addressee (that is, it is a 'covert' core argument).
3. A arguments that are pronominal inverse voice prefixes must be a core argument (§12.4.2).
4. Discourse evidence demonstrates that the A and P arguments in both active voice and inverse voice constructions are highly topical (see §17.4).
5. Stative verbs have a similar profile as the prototypical passive construction based on discourse evidence of low frequency of A arguments and low topicality when they do occur (see §17.4.4).
6. Ditransitive constructions require three core arguments. Instrument and locative applicative constructions occur only in inverse voice constructions (see §10.3.3).
7. Causative constructions (see \(\S 10.2\) ) are formed in the same way in either active or inverse voice constructions (for example, stative verbs can be causativised which add one argument and formed in either active or inverse voice, see §10.2.3).

Figure 12.6 demonstrates that all primary major verb classes can serve as the base for forming a verb marked for inverse voice (also compare Figure 9.1).

\footnotetext{
\({ }^{30}\) See Cook (1997) for some similar argumentation for analysing Samoan with an inverse construction.
}
\begin{tabular}{|c|c|c|c|c|}
\hline & Predicate & Irrealis/realis & \begin{tabular}{l}
Stem \\
former
\end{tabular} & Form inverse voice \\
\hline \multirow{3}{*}{Major} & Transitives & mong-/nong-тере-/nepe-mo-/no- & \begin{tabular}{l}
pong- \\
pepe- \\
\(\mathrm{po}_{1-}\)
\end{tabular} & yes \\
\hline & Dynamic & me-/ne- & pe- & yes \\
\hline & Denominal & mo-/ no- & \(\mathrm{po}_{1}{ }^{-}\) & yes \\
\hline \multirow[t]{3}{*}{Classes} & Postural & mopo-/nopo- & роро- & \begin{tabular}{l}
yes \\
(derived)
\end{tabular} \\
\hline & Locomotion & mo-/no- (-um-) & \(\mathrm{po}_{1-}{ }^{-}\) & \begin{tabular}{l}
yes \\
(derived)
\end{tabular} \\
\hline & Stative & mo-/ no- & (none) & \begin{tabular}{l}
yes \\
(derived)
\end{tabular} \\
\hline
\end{tabular}

Figure 12.6. Surface morphology of verb class prefixes and contrastive features

\subsection*{12.4.1 Imperatives in inverse voice}

Just as transitive verbs can appear in either active voice or inverse voice, so too can transitive imperatives. Imperatives are formed either with the bare root/stem or with the \(p V(C)\) - stem former (§16.2). Either transitive voice can appear with or without the pongprefix. In these instances the voice can only be distinguished by which case and word order position the A takes. \({ }^{31}\) When the imperative appears in the inverse construction, the addressee must be the A argument (just as it is in the active voice, and of course as implied by the universal notion of imperative). The fact that the A argument of an inverse imperative clause must be the addressee is the single most important fact which demonstrates that the A argument of inverse voice constructions is irrefutably a core argument (compare the argument of Yoshimura (1983) that the traditional Indonesian 'passive' is really a separate transitive construction). Examples (28) and (29) illustrate inverse voice imperative clauses with the A argument in the genitive case (compare these with declarative constructions of the inverse in (24) and (25)). Example (29) is particularly clear. The first half of the sentence uses two imperative verbs marked with the stem former \(p V(C)\) - and the sentence begins with the A argument in the absolute case (AB). However, the final imperative clause with the verb talau 'leave' has both the A and the P arguments expressed with the A argument in the genitive case (GE) and the P argument in the absolute case ( AB ).
\begin{tabular}{lllll} 
paey & 'omung & miu & mai & ria'u! \\
paey & 'omung & miu & mai & ri=a'u \\
and.then & carry & 2PL/GE & come.here & LOC=1SG/AB
\end{tabular}
' \(\ldots\) and then you all bring (him) to me!' [natal01.pin]

\footnotetext{
\({ }^{31}\) This is basically the same thing that occurs in Indonesian, except that there is no stem formative, and it is only the base or root of the verb that appears. See for example Yoshimura (1983.)
}
```

(29)
Emu pelampamo posumombalomo
'ети pe-lampa=mo po -[um]-sombal=mo
2PL/AB SF/DY-travel=COMP SF/LCM-TEL-sail=COMP

| motumarusa' | jalangoto, |
| :--- | :--- |
| M-po $_{1}$-[um]-tarus- $a$, | jalang=to |
| IR-SF/LCM-TEL-continue-TZ | path=1PL.INC/GE |


| talaumo | miu | $a^{\prime} u!$ |
| :--- | :--- | :--- |
| talau $=m o$ | miu | $a^{\prime} u$ |
| leave=COMP | 2PL/GE | 1SG/AB |

'You all travel on, sail on continuing on our path, you all leave me!' [jptext8.doc]

```

\subsection*{12.4.2 Portmanteau pronominally prefixed inverse voice constructions}

This section examines the portmanteau prefixes which express both agent person and number, and voice. In order to understand the portmanteau prefixes it is necessary first to look at the entire paradigm of agent marking possibilities in the inverse constructions. Figure 12.7 displays the paradigm for the inverse voice affixation and different pronominal possibilities with the root oli 'buy', including the portmanteau prefixes. Pronouns may appear post-verbally either as enclitics or free pronouns depending on the pronoun used (also compare figure 7.3 in \(\S 7.3 .1\) ). A second means of indicating first and second person is as a portmanteau prefix: 'u- (1SG.IV/IR), no'u-(1SG.IV/RE), and \(m u\) - ( \(2 \mathrm{SG} . \mathrm{IV} / \mathrm{IR}\) ). \({ }^{32}\) The latter set is a defective set, but regardless of its incompleteness it is highly functional and very common. When a portmanteau prefix is used it has three functions: 1) it marks first or second person, 2) it marks realis or irrealis (contrasted only in the first person), and 3) it marks the clause as an inverse voice transitive clause construction. \({ }^{33}\) Ni- marked verbs require a second formative to indicate the pronoun, but portmanteau prefixed verbs simplify that by collapsing the pronoun and the voice into one affix.

One of the marks of an Indonesian-type language as opposed to a Philippine-type language (Himmelmann 1996b, 2002a, Wolff 1996) is that it may mark the agent with pronominal affixing in addition to or instead of free pronouns (see Figure 12.7). Pendau fills this criteria with the portmanteau prefixes, since one function of the prefix is pronominal (and it is transparent that they are the same formatives used as enclitics).

\footnotetext{
\({ }^{32}\) Compare this to Da'a which only has two of these three pronominal prefixes (Barr 1988b). Also compare to Indonesian's \(k u\) - ' 1 SG ', and mu- ' 2 SG '.
\({ }^{33}\) It should be obvious that the same formatives used as first and second person clitics are 'reused' as the portmanteau prefixes. It can be speculated that the portmanteau prefixes were a later development and acquired the voice marking once they began to fill the prefix position.
}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow{8}{*}{Inverse voice} & Person & Irrealis & Realis & Irrealis & Realis \\
\hline & 1SG & ro-oli= 'u & ni-oli= 'u & 'u-oli & no'u-oli \\
\hline & 2SG & ro-oli=mu & ni-oli \(=\) mu & mu-oli & \\
\hline & 3SG & ro-oli \(=\) nyo & ni-oli=nyo & & \\
\hline & 1PL.INC & ro-oli \(=\) to & ni-oli=to & & \\
\hline & 1PL.EXC & ro-oli mami & ni-oli mami & & \\
\hline & 2PL & ro-oli miu & ni-oli miu & & \\
\hline & 3PL & ro-oli nijimo & ni-oli nijimo & & \\
\hline
\end{tabular}

Figure 12.7. Inverse voice with agent marking possibilities (oli ‘buy’)
Examples (30)-(35) illustrate each of the portmanteau prefixes. For each of these examples one could substitute the pronominal prefix with either ro- (IV/IR) or ni- (IV/RE) and use the pronoun post-verbally and have the same meaning. Although a difference in meaning has yet to be detected, one can speculate that if there is a difference, it is likely a pragmatic one. If so, the difference could be either making the agent more prominent (as opposed to a post-verbal position), or reflect informal usage, etc.
(30) Apa sura butu baliung moo no'u'omung-'omung
apa sura butu baliung moo no'u-'omung-'omung
since only just axe this 1SG.IV/RE-carry-RED
apa ndau episo.
apa ndau 'o-piso
since NEG HAVE-machete
'Since I am only just carrying this axe, (and) since I don't have a machete.'
[asu2.pin 067]
Baliungo'u mupogutua'omo piso
baliung='u mu-po \(1_{-}\)-gutu-a'=mo piso
axe \(=1 \mathrm{SG} / \mathrm{GE} \quad 2 \mathrm{SG} . \mathrm{IV} / \mathrm{IR}-\mathrm{SF} / \mathrm{FA}\)-make-TZ=COMP machete
'You make machetes for me by using my axe (that is, a blacksmith makes them from the axe by forging).'
[asu2.pin 050]
(32) Ndau nasae ila uo tarus no'uinang.
ndau no-sae ila 'uo tarus no'u-inang
NEG ST/RE-long ABL yonder continue 1SG.IV/RE-eat
'Not long after that, then I ate.'
[cekupitu.int 008]
(33)
\begin{tabular}{llllll} 
Ono & ubuka & peti & moo, emu & nyaa & manosol. \\
ono & 'u-buka & peti & moo, 'emu & nyaa & man-sosol \\
if/when & 1SG.IV/IV-open & box & this & 2PL/AB & don't
\end{tabular} AV/IR-regret
'When I open this coffin, don't you all be sorry.'
(34) A'u nyaa mutuuta'!
a'u nyaa mu-tuut-a'
1SG/AB don't 2SG.IV/IR-follow-TZ
'Don’t (you) follow me!' [horse.pin 031]
(35)
\begin{tabular}{lllllll} 
Ai & ono & oo & usaur & sapa & mubagia' & a'u? \\
Ai & ono & 'oo & 'u-saur & sapa & mu-bagi-a' & a'u \\
but if/when & 2SG/AB & 1SG.IV/IR-defeat & what & 2SG.IV/IR-give-TZ & 1SG/AB \\
'But if I defeat you, what will you give to me?' & & [horse.pin 128-128b]
\end{tabular}

Example (36) shows a sequence of three verbs all prefixed with 'u 'first person irrealis'. Example (37) by contrast shows the lexeme pate 'kill' with a first person realis prefix.
(36) Oo uraga, ulavai,
'oo 'u-raga 'u-lava-i
2SG/AB 1SG.IV/IR-chase 1SG.IV/IR-obstruct-DIR
paey upatei.
paey 'u-pate-i
and.then 1SG.IV/IR-kill-DIR
‘I will chase you, I will corner you, and then I will kill you.' [tambao.pin 044-046]
\begin{tabular}{lll} 
(37) & No'upatei & jimo \\
no'u-pate-i & jimo \\
& 1SG.IV/RE-kill-DIR & 3PL/AB \\
& 'I killed them.' &
\end{tabular}
[mdtext20.txt 297]
Examples (38) and (39) illustrate the portmanteau prefix functioning as second person irrealis in imperative and declarative clauses respectively.
(38) Nyaa muinang jojoo!
nyaa mu-inang jojoo
don't 2SG.IV/IR-eat all
'Don't eat all of it!' [troll.int 096]
(39) A'u muinang.
a'u mu-inang
1SG/AB 2SG.IV/IR-eat
'You will eat me.'
[troll.int 304]
(Monkey speaking to flesh-eater.)

\subsection*{12.4.3 Alternatives to the inverse voice analysis}

There are two alternatives to the inverse voice analysis which analyse one of the two clause types as transitive and the other clause type as intransitive. These appear in the literature on Indonesian and Philippine languages.

One alternative proposes that the clause types that I have analysed as inverse voice versus active voice be analysed as ergative versus antipassive. \({ }^{34}\) The main arguments against the ergative-antipassive analysis are: 1) the nong-clause construction in Pendau shows no difference in the marking of the A and the P argument, \({ }^{35}\) and 2) there is another candidate for antipassive (or the functional equivalent of antipassive voice) in Pendau, namely the dynamic verb class marked with pe-. As mentioned earlier, an ergative analysis depends crucially on grouping the \(\mathrm{S} / \mathrm{P}\) arguments in opposition to the A argument (which appears to be what one can do when only contrasting inverse voice in opposition to intransitive constructions). However, since there is also the argument grouping of S/A there is no basis for deciding which of the two transitive clause constructions should be basic (this is because \(\mathrm{S}, \mathrm{A}\), and P all occur in the absolute case when comparing active voice clauses with intransitive constructions). Frequency of active voice and inverse voice clauses is not significantly different (see §17.4), so frequency cannot be used to determine whether one transitive is more basic than the other. \({ }^{36}\)

Another alternative is to analyse the ni- clause construction as a passive clause. \({ }^{37}\) This alternative is better than the ergative-antipassive, but it is unsustainable for several reasons. Section 17.4 shows that the A argument of ni- clauses is highly topical, which is counter to the norm for A arguments of passives in languages that have unambiguous passive constructions such as English. Morphological evidence is mixed. None of the genitive pronouns following the ni- verb are marked as oblique, whereas the common nouns and proper nouns have proclitics ( \(n u=\) and \(n i=\) respectively) which might be interpreted as indicating that the nouns they occur with are non-core. It is not clear that the

\footnotetext{
34 For Tagalog and other Philippine languages see de Guzman (1988), and also see Payne (1999) on Cebuano (and Philippine languages in general), for Balinese see Artawa (1994), for Indonesian see Verhaar (1983). For arguments against ergativity and for two basic transitive clauses in Indonesian see Kaswanti Purwo (1988); and for Balinese see Arka (2003), (Clynes (1995), Pastika (1999), for a comparison of Balinese and Pendau as inverse languages see Pastika and Quick (2007), for Kimaragang see Kroeger (1988), and for Tagalog see Kroeger (1993) and see Shibatani (1988a, 1988b) for Philippine languages in general. Indonesian is treated by traditional and pedagogical sources as having a contrast between active and passive (Moeliono 1988, Sneddon 1996, and Wolff, Oetomo, and Fietkiewicz 1984), although it is widely acknowledged that the Indonesian passive is not the same as passives found in languages like English.
\({ }^{35}\) Antipassives prototypically mark the P argument with an oblique, and in Pendau the A and the P are marked identically, that is, both are in the absolute case and neither has any trace of non-core status.
\({ }^{36}\) Shibatani (1988b:114) points this out for Philippine languages: 'As for the functional load of the actortopic and the goal-topic constructions, both bear considerable amounts, nearly equalling in their weights. The unique aspect of Philippine languages lies precisely in this aspect; namely both the actor-topic construction and the goal-topic construction are basic clause types both morphologically and functionally.'
\({ }^{37}\) Tagalog was analysed as having a passive by Bloomfield (1917), and Indonesian is traditionally analysed as having a passive construction. The Philippine literature today generally recognises that the so-called passive construction is something like 1) 'goal focus', objective voice, or 2) less widely acknowledged as an ergative construction. In the former case, the term 'focus' is used to contrast different transitive voice alternations such as 'instrument focus', 'beneficiary focus', 'goal focus', or 'actor focus' in which one core argument is 'topicalised' or is the grammatical subject (\$12.1). The analysis of inverse voice coincides with the 'focus system' school of thought, and does not in principle clash with this view. I see the concept of voice inversion as a broader typological analysis which captures similarities in many languages (§12.2). It is interesting that there is a parallel in the Algonquian and other Amerindian inverse voice languages where some authors regularly state that the inverse construction resembles a passive (see Dryer 1994:68 for example). Some authors analyse it as a passive.
}
entire genitive set should be analysed as oblique since they don't all have prepositions like the NP markers. One argument against there being any ambiguity in the status of the genitive nouns is the fact that even the absolute set of proper nouns has a proclitic, or 'preposition', the \(s i=\), in incontestable core argument positions. \({ }^{38}\) Even if the post-verbal genitive noun set were to be considered at best to be ambiguous, the incomplete pronominal portmanteau set used as inverse voice agents is not ambiguous and cannot be analysed as oblique (§12.4.2). This set has the same inverse voice meaning as the combination of an inverse marking prefix with a pronominal clitic (although there may be a pragmatic reason for using one strategy over the other).

Another piece of evidence for the inverse voice analysis is the occasional use of the genitive set (but only the singular pronouns) to mark the P argument of the mong- verb construction. These P arguments are clearly core arguments. As stated in \(\S 12.3 .2\), it is clear in benefactive clauses that the recipient is a core argument and pronominal recipients are genitives, compare with example (16) above. So if genitive pronouns are used as core arguments in one type of construction they are likely to be core arguments in another construction. So by analogy the same genitive set used for ni- verb constructions is a core argument and not an oblique. The preponderance of evidence leads to the conclusion that the inverse construction is syntactically transitive.

Finally, stative verbs in Pendau serve as the functional equivalents of passive verbs (cf. a similar analysis for Chamorro in Cooreman 1983:459-460) and provide a striking contrast to ni- clauses (that is, if there is already a functionally equivalent passive elsewhere in the grammar, then it is not necessary to look for it somewhere else, this is addressed in §17.4.4). \({ }^{39}\) Thus a viable alternative is to analyse ni- clauses as not only semantically transitive, but also syntactically transitive and therefore not passive.

In Pendau there are two reasons for the A of an inverse construction to be uniquely marked. Firstly it shows that the A is outranked or equally ranked in topicality to the pivot (§12.2). This contrasts with the marking used for the \(A\) and \(P\) in the active voice where it is irrelevant to mark this distinction with a different case. Since the A of a ni-clause is in an unusual or unexpected position it is not surprising that it should be uniquely marked (see Quick 1997a). Secondly, it shows that the A is still topical, albeit obviated, even though it is not the pivot. \({ }^{40}\)

Inverse languages of North America often mark the genitive case in the same way as the obviative pronouns and nouns. It is also interesting to note that ergative languages often mark genitive pronouns and nouns in the same way as ergative nouns and pronouns. The parallels between ergative-absolutive marked clauses and active-inverse voice argument markings possibly have similar typological motivations. Since the ergative clause is

\footnotetext{
38 This gets rather complicated. It is justifiably ambiguous because it is argued elsewhere that when the genitive proclitics are used with stative verbs they are non-core adjuncts (§9.4.2.2).
\({ }^{39}\) The functional equivalence I am referring to here is essentially how stative clauses in Pendau profile topic continuity of the agent in relationship to other clause constructions and patterns in the same way as passives do in other languages. Additionally, statives are functionally equivalent to passives because: 1) statives are intransitives and the core argument has the same \(\mathrm{S}_{\mathrm{P}}, 2\) ) they can have a passive-like adjunct agent or 'effector' which creates something like 'middle voice' (§9.4.2.2), and 3) in some cases stative prefixes are used to derive intransitives from transitives in which case they have an adjunct agent and can also be called 'middle voice' (§9.4.2.2.2). However, statives are different from passives because they encompass their own word class.
\({ }^{40}\) Also see Payne's discussion (1997:152-153) on ergative marked A's which appears just as applicable in the case of the Genitive A in Pendau.
}
usually cited as the only transitive clause, the P is marked in the same way as the S leaving the A to be marked uniquely as ergative. \({ }^{41}\) In the case of Pendau, since there are two transitive constructions there are more theoretically possible ways to mark each argument, one of which does not follow the Algonquian way of contrasting one proximate and one obviative argument in both direct and inverse clauses. Both the ergative agent in an ergative marked clause and the genitive marked agent in Pendau are functionally 'obviated' in relative topicality, thus converging in motivation to mark them contrastively to their other cases respectively. If one chooses to ignore the active voice argument markings, then it appears as if Pendau groups \(\mathrm{P} / \mathrm{S}\) together in opposition to the A . However, since Pendau also marks both arguments in the active voice with the same case for both the A and the P arguments, here called 'absolute case', it seems rather obvious that if both arguments in the inverse construction were marked the same it would increase possible confusion to the listener. So what ends up being marked is the functionally 'obviated' argument, labelled as 'genitive case', in opposition to all arguments elsewhere in Pendau that I have labelled as 'absolute case’ (§6.2).

\subsection*{12.4.4 Inverse voice constructions with post-verbal agents}

Examples (40)-(43) show inverse voice constructions with enclitic agents and with postverbal free form pronominal agents (all of the genitive case). Examples (42) and (43) further demonstrate the use of the same person pronouns in the genitive and absolute case in the A and the P positions. For other examples of inverse voice constructions see the sections on each verb class (\$12.4.5-14).

\begin{tabular}{lllll} 
paey & ni'omungonyo & mene' & sono & siinanyo. \\
paey & ni-'omung=nyo & mene' & sono & siina=nyo \\
and.then & IV/RE-carry=3SG/GE & go.up & COM & mother=3SG/GE
\end{tabular}
'Then he took the eye of the anchovy fish, and then he took it up to his mother.'
[mdtext15.txt 121]
\begin{tabular}{llll} 
Sapa & niposibaroi & miu & nao? \\
sapa & ni-posi-baro-i & miu & nao \\
what & IV/RE-MUT-quarrel-DIR & 2PL/GE & that
\end{tabular}
'What are you quarrelling about there?'
[ceku01.jdb 042]
\begin{tabular}{llll} 
Paey & rasaur & miu & ami. \\
paey & ro-saur & miu & 'ami \\
and.then & IV/IR-defeat & 2PL/GE & 1PL.EXC/AB
\end{tabular}
'And then you all will defeat us.'
[horse.pin 586]

\footnotetext{
\({ }^{41}\) There are cases where ergative languages have been alternatively interpreted as having inverse voice, or as in the case of Nocte (Tibeto-Burman) as having ergative marking in an inverse voice clause (see Payne 1997:210). In fact the criteria for distinguishing the ergative agent in Nocte can be credibly applied to Pendau. Ergativity is not a voice, so the fact that a language could have an ergative-absolutive system coinciding with inverse voice would be of course feasible.
}
(43)
\begin{tabular}{llll} 
Kana & rasaur & mami & emu. \\
kana & ro-saur & mami & 'emu \\
certain & IV/IR-defeat & 1PL.EXC/GE & 2PL/AB
\end{tabular}
'We will certainly defeat you all.'

\subsection*{12.4.5 Primary transitive class with inverse voice prefix}

This section shows typical transitive roots prefixed with the ni-/ro- prefix (IV). Many transitive roots, as in (44)-(49), do not change their form when adding the prefix, except for the initial voice prefix-in contrasting active voice and inverse voice.
(44) Asu uo nipate'u.
asu 'uo ni-pate='u
dog yonder IV/RE-kill=1SG/GE
'I killed that dog.'
[EN97-003.53]
(45) Bau pedoruonyo nialapo'u.
bau pe-doruo=nyo ni-alap='u
fish SF-two=3SG/GE IV/RE-get=1SG/GE
'I got the second fish.'
[PLL \#32]
(46) Bau nisapor'o'u.
bau ni-sapor='u
fish IV/RE-spear=1SGGE
'I speared the fish.'
[EN97-003.57]
(47)
\begin{tabular}{lllll} 
Tarapasa & nengkanimo & niinangonyo & songgomol & aniong \\
tarapasa & N-pe-ngkani=mo & ni-inang=nyo & so-ng-gomol & aniong \\
force & RE-SF/DY-eat=COMP & IV/RE-eat=3SG/GE & ONE-LIG-handful & rice
\end{tabular}
'He had no choice but to eat now, so he ate a handful of rice.'
[asu2.pin 084]
(48) Jarita ио nituliso'u.
jarita 'uo ni-tulis='u
story yonder IV/RE-write=1SG/GE
'I wrote that story.'
[EN97-002.64]
(49) Ila uo paey nioli mami ruo basung
ila 'uo paey ni-oli mami ruo basung
ABL yonder and.then IV/RE-buy 1PL.EXC/GE two sago.container
'After that, then we bought two containers of sago.'
[jo'ong.int 009]
However, some verbs require the directional suffix -i (DIR), as examples (50) and (51) show. See \(\S 10.3 .2 .2, \S 10.3 .3 .5\), and \(\S 10.3 .5\) for a discussion of the directional suffix.
(50) *Tagu='u ni-rembas \(=o\) 'u.
\[
\begin{array}{ll}
\text { (51) } \begin{array}{ll}
\text { Tagu'u } & \text { nirembasi'u. } \\
\text { tagu='u } & \text { ni-rembas- } i=\text { 'u } \\
\text { friend=1SG/GE } & \text { IV/RE-hit-DIR=1SG/GE } \\
& \text { 'I hit my friend.' }
\end{array}
\end{array}
\]
[EN97-003.55]

\subsection*{12.4.6 Factive verbs with stem former \(\mathrm{po}_{1^{-}}\)}

Factive verbs affixed with inverse voice prefixes ni-/ro- always require the stem former \(p o_{1-}\) to appear, as demonstrated in (52)-(54). Thus mongi 'request, beg' occurs as nipomongi (55), but cannot occur as *nimongi (56).
(52) Vea nipogabu'u.
vea ni-po \(1_{1}\)-gabu='u
rice IV/RE-SF/FA-cook=1SG/GE
'I cooked rice.'
[EN97-003.57]
(53) Junjung nipogutu'u.
junjung ni-po \(o_{1}\)-gutu='u
house IV/RE-SF/FA-make=1SG/GE
'I made a house.'
[EN97-003.62]
(54) Bau иo nipogabu nijimo.
bau 'иo ni-po \({ }_{1}\)-gabu nijimo
fish yonder IV/RE-SF/FA-cook 3PL/GE
'They cooked that fish.'
[EN97-002.19]
(55) Vea nipomongi'u.
vea ni-po \({ }_{1}\)-mongi='u
rice IV/RE-SF/FA-request \(=1\) SG/GE
'I requested rice.'
[EN97-003.52]
(56) *Vea ni-mongi=’u.

\subsection*{12.4.7 Dynamic verbs with stem former pe-}

Some dynamic verbs also require a pe-stem former in the inverse forms. \(P e\) - is an idiosyncratic stem former (see discussion of the factive verb class in section §9.2.3 and the stem former used to determine its verb class). Examples (57) and (58) show pe- in two actor oriented verb forms, ne-taang 'waited' and ne-tubu 'lived, grew'.
\begin{tabular}{llllll} 
Paey & unga bengkel sia'a & uo & netaang & tuainyo. \\
Paey & unga bengkel & sia'a & 'uo & \(N\)-pe-taang & tuai \(=\) nyo \\
and.then & child female & o.sibling yonder & RE-SF/DY-wait & y.sib. \(=3\) SG/GE
\end{tabular}
'And then the older daughter there waited for her younger sister.' [mdtext17.txt 063]

\section*{(58)}
\begin{tabular}{ll} 
Netubumo & tetela uo. \\
N-pe-tubu & tetela 'uo \\
RE-SF/DY-live=COMP & corn
\end{tabular} yonder
'That corn began to grow.'
Examples (59)-(61) show that the inverse prefixed verb form requires the stem former \(p e\)-. Compare (60) with examples in \(\S 12.4 .9\) for a discussion of the difference between nipetubu 'raised, make live' and nipotubu 'cared for'. In example (61) the dynamic transitive verb ngkani 'eat' occurs in a locative applicative construction (which requires the pe-prefix), that is, the locative construction is in the grammatical subject relation (see §10.3.3.5).
(59)
\begin{tabular}{llllll} 
Bai & uo & nipetaang & nusia'anyo & tuainyo & uo, \\
bai & 'uo & ni-pe-taang & \(n u=\) sia'a=nyo & tuai \(=\) nyo & 'uo \\
like & yonder & IV/RE-SF-wait & CN/GE=o.sibling=3SG/GE & y.sibling & yonder
\end{tabular}
\begin{tabular}{llllll} 
tuainyo & uo & ndaupo & diang & nodua' & mai. \\
tuai=nyo & 'uo & ndau=po & diang & \(N\)-po - \(_{1}\)-dua' & mai \\
y.sibling=3SG/GE & yonder & NEG=CONT & EXIS & RE-SF/DE-arrive & come
\end{tabular}
'After that her older sister waited for her younger sister over there, but her younger sister did not come here again.'
[mdtext17.txt 064]
(60) Jari nipetubu lampu nuoto.
jari ni-pe-tubu lampu nu=oto
so IV/RE-SF-live light \(\mathrm{CN} / \mathrm{GE}=\) car
'So he turned (lit. live) the car lights on.'
[terminal.int 039]
(61) Rijunjung uо nipengkani mami babi.
ri=junjung 'uo ni-pe-ngkani mami babi
LOC=house yonder IV/RE-SF-eat 1PL.EXC/GE pig
'We ate pigs in that house.'
[EN98-003.39]

\subsection*{12.4.8 Dynamic verbs without stem former}

Examples (62)-(64) contain dynamic verbs affixed with inverse voice prefixes alone without a stem former. No additional morphology is required to form inverse voice verbs (compare to §12.4.7).
\begin{tabular}{lllll} 
Tarus & nilolo & niinanyo & unga & uo. \\
tarus & ni-lolo & ni=ina=nyo & unga & 'uo \\
continue & IV/RE-search & PN/GE=\(=\) mother=3SG/GE child & yonder
\end{tabular}
'Her mother continued looking for her daughter (lit. child).'
[senge1.pin 016]
(63) Nilampa nijimo tolumbengi tolu eleo.
ni-lampa nijimo tolu-mbengi tolu eleo
IV/RE-walk 3PL/GE three-night three day
'They travelled three days and three nights.'
[katira.int 009]

'After that he undressed that child, and then his older brother bathed that child. After he finished bathing that child, then his older brother dressed that child (lit. put shirt on).'
[mdtext17.txt 046]
Dynamic verbs marked in inverse voice may also be contrastively marked with the actor oriented form of the verb prefix as \(M-p e-/ N-p e-\) as shown in (65), compare §9.3.2. Dynamic verbs marked with the non-inverse voice vary whether they are transitive or intransitive. Some verbs such as riing 'bathe' are syntactically transitive when an object is added, but form verbs such as 'river-bathing' where the noun is functioning as an incorporated noun (see §9.3.6).
\begin{tabular}{lllll} 
(65) & Notou' & neriing & io, & paey \\
no-tou' & N-pe-riing & io, & paey \\
ST/RE-finish & RE-SF/DY-bathe & 3SG/AB & and.then
\end{tabular}
'After he finished bathing, then he bathed Silver Necklace (the flying horse).'
[horse.pin 502]

\subsection*{12.4.9 Dynamic and denominal stem prefixes on same roots}

Verb roots of one class can sometimes take stem formers normally associated with a different verb class, as was noted in Chapter 9 . For example, there is the root tubu 'live, grow, raise' which is a dynamic root and so normally is associated with the dynamic prefix \(M-p e-/ M-p e-\). However a subtle semantic shift can take place when tubu takes the prefix \(M-p o-/ M-p o-\), in which case motubu means 'raise, care for'. The semantic difference is maintained for each stem former when they are prefixed with inverse voice ni-/ro-. Example (66) contrasts nipetubu 'raised' and nipotubu 'cared for' within the same text by the same Pendau author in adjacent sentences.
\begin{tabular}{llllll} 
(66) & Apa & a'u & moo & nipetubu & nu'olongian \\
apa & \(a^{\prime} u\) & moo & ni-pe-tubu & nu='olongian & moo \\
since & 1SG/AB & this & IV/RE-SF/DY-live & CN/GE=king & this
\end{tabular}
\begin{tabular}{llllll} 
Ila & mono & meide', & mono & nododa & tojungo'u, \\
ila & mono & me-ide', & mono & no-doda & tojung='u \\
ABL & still \(\quad\) ST/IR-small & still & ST/RE-red & heel=1SG/GE
\end{tabular}
'Because I was raised by this king. From the time when I was little and my heels were still red, the king cared for me.'
[troll.int 310-312]

\subsection*{12.4.10 Denominal verbs that require the stem former \(\mathrm{po}_{1^{-}}\)}

Some denominal verbs require a stem former \(p o_{1-}{ }^{-}\)in the inverse voice construction. This fact suggests that \(\mathrm{po}_{1^{-}}\)actually underlies the formation used for mo-/no-. Example (67) shows \(p o_{1}\) - on the root basi 'steel'. The \(p o_{1}{ }^{-}\)is required in the inverse verb form, as shown with nipobasi 'forged s.t.'. To omit \(p o_{1}\) - after ni- yields an ungrammatical construction, as in (68).
(67) Lading nipobasi'u.
lading ni-po \({ }_{1}\)-basi='u
knife IV/RE-SF/DE-steel=1SG/GE
'I am forging a knife.'
[EN97-003.501]
(68) *Lading ni-basi \(=’ u\).

Another common denominal verb morapi 'marry' (from rapi 'spouse') is illustrated in (69). It is contrasted in inverse forms in (70) and (71). See also the discussion of causatives in §10.2 and Quick (1999b).
(69) Langkai moo morapi bengkel uo.
langkai moo M -po \(1_{1}\)-rapi bengkel 'uo
male this RE-SF/DE-spouse female yonder
'This man will marry that woman.'
[EN97-002.20]
(70) Bengkel uo niporapi nulangkai moo.
bengkel 'иo ni-po \({ }_{1}\)-rapi nu=langkai moo
female yonder IV/RE-SF/DE-spouse CN/GE=male this
'This man will marry that woman.'
[EN97-002.20]
(71) Oo uporapi.
oo 'u-po \({ }_{1}\)-rapi
2SG/AB 1SG.IV/IR-SF/DE-spouse
'I will marry you.'
\begin{tabular}{llllll} 
(72) & Bengkel & uo & nipoporapi & nulangkai & moo. \\
bengkel & 'uo & ni-po 1 -po \({ }_{3}\)-rapi & \(n u=\) langkai & moo \\
& female & yonder & IV/RE-SF/DE-CAUS-spouse & CN/GE=male & this
\end{tabular}
'This man gives that woman in marriage (to someone else).'
[EN97-002.20]

\subsection*{12.4.11 Denominal verbs without a stem former}

Example (73) is representative of many denominal verbs that do not require a stem former in the inverse voice.
\begin{tabular}{lll} 
Ni'itonyomo & bau & torajalanyo. \\
ni-'ito=nyo=mo & bau & to=ro-jala=nyo \\
IV/RE-see=3SG/GE=COMP & fish & RM=IV/IR-casting.net=3SG/GE
\end{tabular}
'He saw the fish that he would cast the net at.'
[tambao.tst 012]

\subsection*{12.4.12 Postural verbs}

Transitive clauses based on positional verbs, such as duling 'lie' and tundo 'sit' can be formed in the inverse voice by using the prefix ni- and the applicative suffix \(-a\) '. The popo- formative does not appear as part of the stem (see §4.3) in this combination. Examples (74)-(76) illustrate typical postural verbs prefixed with ni- (§9.4.1). \({ }^{42}\)
\begin{tabular}{llllll} 
Bai & uo & notou' & bongkarang & uo & nipogutu, \\
bai & 'uo & no-tou' & bongkarang & 'uo & ni-po 1 -gutu \\
like & yonder & ST/RE-finish & hut & yonder & IV/RE-SF-make
\end{tabular}
\begin{tabular}{lllll} 
paey & unga & uo & nidulina' & ri'uo. \\
paey & unga & 'uo & ni-duling-a' & ri='uo \\
and.then & child & yonder & IV/RE-lie.down-TZ & LOC=yonder
\end{tabular}
'So he finished making the hut, and then he laid the child down there.'
[mdtext1.txt 038]
(75)
\begin{tabular}{llll} 
Nitundoa' & nusiina & nujuragang & uo \\
ni-tundo-a' & \(n u=\) siina & \(n u=\) juragang & 'uo \\
IV/RE-sit-TZ & CN/GE=mother & CN/GE=captain & yonder
\end{tabular}
\begin{tabular}{llll} 
bengkel & uo & rigadera & bulaan. \\
bengkel & 'uo & ri=gadera & bulaan \\
female & yonder & LOC=chair & gold
\end{tabular}
'The captain's mother had the woman sit in the gold chair.'
[mdtext15.txt 082]

\footnotetext{
\({ }^{42}\) However, the popo- formative does form stems for other parts of its verb class paradigm. Examples such as (74) illustrate that the popo- formative cannot simply be a transitivity marker since it does not appear on a transitive construction (and by extension the other stem formers as well), as is claimed for Kaili languages (see Barr (1988b) and Evans (1996, n.d.) for various \(p V\) - prefixes).
}
\begin{tabular}{lllll} 
Nitundoa'onyo & ritolo & nutoo & dea & siKuse'. \\
Ni-tundo-a'=nyo & ri=tolo & \(n u=\) too & dea & si=Kuse \\
IV/RE-sit-TZ=3SG/GE & LOC=front & CN/GE=person & many & PN/AB=K.
\end{tabular}
'She had Mr Kuse' sit down in front of all of those people.' [mdtext4.txt 078]

\subsection*{12.4.13 Inverse prefix in combination with iterative aspectual circumfix}

Another minor, but productive, affix combination with the inverse voice is an aspectual circumfix ra-/-an. This marks an iterative or multiple action of the verb (more complete discussion is given in §13.4.1.4). Example (77) is typical.
\begin{tabular}{lllll} 
(77) \begin{tabular}{llll} 
Jojoo & too & uo & niratinjunan
\end{tabular} & nutatambuang. \\
jojoo & too & 'uo & ni-ra-tinjung-an & nu=tatambuang \\
all & person & yonder & IV/RE-ITV-sting-ITV & CN/GE=bumble.bee
\end{tabular}
'The bumble bees repeatedly stung all of those people over there.' [fktale.doc by siDidi]

\subsection*{12.4.14 Inverse prefix in combination with causative po' \(_{2^{-}}\)or the possessive prefix}

The causative prefix po' \(_{2^{-}}\)and the possessive prefix ' \(o\) - 'have' can occur in combination with the inverse prefix ni-. In such cases ni- or ro- can occur alone with ' \(o\) or in combination with 'o- and certain other affixes.

Example (78) demonstrates that the possessive 'o- 'have' prefix can occur in other transitive constructions with and without a po formative preceding it.

[asu2.pin 077]

Example (79) illustrates the causative prefix po \(^{\prime} \mathrm{o}_{2^{-}}\)on the same inverse voice verb. This formative is homophonous with the resultative po' \(o_{1}\)-. In both cases vowel harmony applies producing the surface form pa'a-; see also \(\S 10.2 .3\) and \(\S 10.6\) for more examples.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline (79) & \begin{tabular}{l}
Bai \\
bai \\
like
\end{tabular} & \begin{tabular}{l}
ио \\
'иo \\
yonder
\end{tabular} & \begin{tabular}{l}
nialap \\
ni=alap \\
IV/RE-get
\end{tabular} & nuulasang nu=ulasang CN/GE=turtle & \begin{tabular}{l}
bu'u \\
bu'u \\
bones
\end{tabular} & \begin{tabular}{l}
nuodo, \\
nu=odo \\
CN/GE=monkey
\end{tabular} \\
\hline & paey & & asiromu & nuulasang & & \\
\hline & paey & & a-siromu & nu=ulas & & \\
\hline & and.t & en IV/ & E-CAUS-g & ther \(\mathrm{CN} / \mathrm{GE}=\) & urtle & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline nipa'ajarinyo & tatagang & bu'u & nuodo & ио. \\
\hline ni-po'o \({ }_{2}\)-jari \(=\) nyo & tatagang & bu'u & nu \(=\) odo & 'иo \\
\hline IV/RE-CAUS-become=3SG/GE & lime & bones & CN/GE=monkey & yonder \\
\hline
\end{tabular}
'After that the turtle took the monkey's bones, and then the turtle gathered them up and created lime from the monkey's bones.'
[ceku01.jdb 061]
Examples (80) and (81) illustrate the causative po' \(_{2^{-}}\)and the possessive prefix on the stative root tou' 'finish, end' with various affix combinations. All of the non-possessive affixes in these examples can also occur with inverse voice prefixes when the possessive is not used (with corresponding changes in meaning).
(80) Nyaa mupo'otou'!
nyaa mu-po'o \(\mathbf{o}_{2}\)-tou'
don't 2SG.IV/IR-CAUS-finish
'Don't you finish it!'
[poora.pin 527]
(81) Ni’otou'inyo.
ni-'o-tou'-i=nyo
IV/RE-HAVE-finish-DIR=3SG/GE
'That finished them off.' (Context: After all the monkeys had drunk their fill of the water in an attempt to drain the pond so that they could kill the turtle, they died from consuming too much water.)
[turtle.pin 230]

Example (82) illustrates an odd meaning output from the base of pate 'kill' when 'ooccurs in combination with inverse affixation.
```

(82) Jarita'u watunyo a’u ni’apatei
jarita='u watu=nyo a'u ni-'o-pate-i
story=1SG/GE time=3SG/GE 1SG/AB IV/RE-HAVE-kill-DIR
niina'u.
ni $=$ ina $=$ ' $u$
PN/GE=mother=1SG/GE

```
'The time of my story was when my mother orphaned (lit. having killed herself) me.'

\section*{13 Tense, aspect, and mode}

\subsection*{13.1 Introduction}

Payne (1997:233-234) distinguishes tense, aspect, and mode (TAM) as follows:
Tense, aspect and mode (TAM for short) are operations that anchor or ground the information expressed in a clause according to its sequential, temporal or epistemological orientation. Tense is associated with the sequence of events in real time, aspect with the internal temporal 'structure' of a situation, while mode relates the speaker's attitude toward the situation or the speaker's commitment to the probability that the situation is true.
In Pendau aspect and modality \({ }^{1}\) are marked morphologically. At least one aspect or modal formative is nearly always present, others are optional. However tense cannot be identified morphologically. The use of modal and aspectual markers reflect various times of an event in a way that often appears 'tense-like'. Although tense is not a grammatical category in Pendau, specific tense types may be realised when aspectual clitics appear with words marked for realis or irrealis (see §13.3.2). These correlations are also noted by Chung and Timberlake (1985:206): \({ }^{2}\)

The different temporal locations of an event - past, present, and future - are inherently correlated with differences in mood and aspect. An event that will occur after the speech moment is non-actual and potential. Hence there is a correlation between future tense and non-actual potential mood and, by implication, between non-future tense and actual mood. An event that is ongoing at the speech moment has not been completed. Hence, there is a correlation between present tense and incompletive (imperfective or progressive) aspect and, by implication, between past tense and completive (perfective or nonprogressive) aspect. A consequence of these correlations is that temporal distinctions may be expressed by morphosyntactic categories that have wider modal or aspectual functions.

\footnotetext{
1 On the terms 'mood' and 'modality' Palmer (1994:2536) states:
There is one important terminological problem. The term 'modality' is proposed for the grammatical category under consideration, but traditional studies talk of 'mood.' In its traditional sense mood is a purely morphological category of the verb, and the term will here be restricted to that sense. Mood is, therefore, one way in which modality may be expressed; modal verbs are another.
...There is justification, then, for the recognition of a cross-linguistic grammatical category, comparable with the categories of tense and aspect; the most appropriate name for this category is 'modality.'
\({ }^{2}\) Also see Payne (1997:233-248) and Donohue (1995:167) for a similar discussion of the interrelatedness of tense, aspect and mode.
}

Figure 13.1 displays the major formatives that mark irrealis and realis modes (see \(\S 4.3\) and Chapter 9), the slot for aspectual affixes (normally following the modal prefix), followed by aspectual enclitics marking completive and continuative aspects. The irrealis and realis modes are discussed in \(\S 13.2\), and the two aspectual enclitics are discussed in §13.3. Other verbal prefixes mark several other aspects (including reduplicative prefixing and suffixing), and include deliberateness/pretense (DEL), distributive (DIST), nonvolitional/abilitative (NV), iterative (ITV), durative (DUR), telic (TEL), and atelic (ATEL). These aspectual affixes are discussed in §13.4.
\begin{tabular}{|l|l|l|}
\hline Mode & \begin{tabular}{l} 
Other mode/aspectual \\
affixes and infix
\end{tabular} & \begin{tabular}{l} 
Aspectual \\
enclitics
\end{tabular} \\
\hline \begin{tabular}{l} 
M-, mo-, me-, ma- (irrealis) \\
\(N\)-, no-, \(n e-\), \(n a-\quad\) (realis) \\
ro-, 'u-, mu- (irrealis) \\
\(n i-, n o ' u-\quad\) (realis)
\end{tabular} & \begin{tabular}{l} 
All other non-tense \\
combining aspects
\end{tabular} & \(=m o\) (COMP) \\
\hline
\end{tabular}

Figure 13.1. Basic morphological positions and order of aspect and mode formatives

\subsection*{13.2 Realis-irrealis mode distinctions}

\subsection*{13.2.1 Introduction}

Payne (1997:244) provides a good cross-linguistic definition of irrealis and realis modes (also see Barr 1983, 1988c:78 for definitions for Da’a, a Kaili language):

The highest-level distinction in modal operations is between realis and irrealis, though like most conceptual distinctions these terms describe a continuum. A prototypical realis mode strongly asserts that a specific event or state of affairs has actually happened, or actually holds true. A prototypical irrealis mode makes no such assertion whatsoever. Irrealis mode does not necessarily assert that an event did not take place or will not take place. It simply makes no claims with respect to the actuality of the event or situation described. Negative clauses do assert that events or situations do not hold, but these are subject to the same realis-irrealis continuum as are affirmative clauses.
It is tempting to interpret the irrealis \(M\) - and the realis \(N\) - markers just as non-past and past tense markers, as identified in (1) and (2), respectively; but in fact they function primarily to identify factuality versus non-factuality. The irrealis/realis distinction is relative in actual usage in regard to the temporal point of reference. In narratives the setting becomes the locus of time and what conceptually would be past and non-past tense in other languages is only relative to any particular setting's locus as long as past is equated with realis and non-past with irrealis. Example (3) illustrates the use of \(=m o\) (COMP) and \(=p o\) (CONT) in the same sentence on two verbs marked for realis, demonstrating death as past and life as present or ongoing.
(1) A'u mogabu vea.
a'u \(\quad\) - -po \(_{1}\)-gabu vea
1SG/AB IR-SF/FA-cook raw.rice
'I will cook rice.' or: 'I am cooking rice.' 'Non-past' = Non-factual
(2) A'u nogabu aniong.
a'u \(N\)-po \({ }_{1}\)-gabu aniong
1SG/AB RE-SF/FA-cook cooked.rice
'I cooked rice.
'Past' = Factual
(3)
\begin{tabular}{llll} 
Siina'u & naatemo & siama'u & netubupo. \\
siina='u & no-ate=mo & siama='u & N-pe-tubu=po \\
mother=1SG/GE & ST/RE-die=COMP & father=1SG/GE & RE-SF-live=CONT
\end{tabular}
'My mother is already dead, and my father is still alive.'
[ceku02.jdb 008]
Although the distinction between realis and irrealis mode cannot be interpreted to be dentical to tense, when tense is a by-product of a verbal event it usually appears as past for realis and non-past for irrealis as shown in Figure 13.2 (the X marks the present) and as introduced in examples (1) and (2). The correlation of present tense in the irrealis mode is not what is expected according to theoreticians. \({ }^{3}\) Givón (1984:285), for example, states: \({ }^{4}\)

Of the four major tenses, past, present, future and habitual, the past and present are clearly realis ('fact') tenses, dealing with events/states that either have occurred or are in the process of occurring. The future is a clear irrealis tense, dealing with hypothetical, possible, uncertain states or events that have not yet occurred.


Figure 13.2. Correlation of irrealis and realis modes with time in Pendau
The following sections give examples of irrealis and realis modal contrasts that demonstrate correlations with temporal and factual/afactual. Negation is shown to have no influence on irrealis/realis. The nature of the realis and irrealis distinction is further clarified when stative verbs, such as colours and other adjective-like verbs, are contrasted since most stative verbs have no temporal meaning. Examples (4) and (5) contrast irrealis in negative (prohibitive) and positive (declarative) statements. Example (6) contrasts realis with the irrealis in the preceding positive statement.

\footnotetext{
3 Not all languages express present events in the realis mode (see Early 1994:134-145 for a discussion of Lewo in which realis is used for non-future tenses). Ledo, a closely related language to Pendau, has the same basic irrealis/realis coding system, but expresses present events in the realis (see Evans n.d). Da'a, a very close language to Ledo (both Kaili languages), marks present tense the same way as Pendau (see Barr 1983, 1988c; compare also Crowley 1982:132 for a definition of realis that includes 'prior to the present').
4 Also see Givón (1984:309-310) for examples of the Philippine language Bikol where the prefix nag- is used for realis/past, realis/progressive and the prefix mag- is used for irrealis/future and other 'futureprojecting modal categories'. Compare Katamba 1993:220-221.
}
(4) Nyaa momoia rimoo!
nyaa \(\quad \mathrm{M}\)-po -moia ri=moo
don't IR-SF-live LOC=here
'Don’t live/stay here!' Present/non-factual
(5)
\begin{tabular}{lll} 
Ito & momoia & rimoo. \\
'ito & M-po - \(_{1}\) moia & \(r i=\) mo \\
1PL.INC/AB & IR-SF-live & LOC=here
\end{tabular}
'We will live/stay here.' Future/non-factual
(6) A'u nomoia rimoo.
\(a^{\prime} u \quad N\)-po-moia ri=moo
1SG/AB RE-SF-live LOC=here
‘I lived here.' Past/Factual

In Pendau the negative does not constrain the choice between realis or irrealis. The removal of the negative does not necessarily change the mode. Both realis and irrealis occur with negative clauses/propositions, as illustrated in (7)-(9).
(7) A'u ndau nomoia rimoo.
a'u ndau \(\quad\) N-po \({ }_{1}\)-moia ri=moo
\(1 \mathrm{SG} / \mathrm{AB}\) NEG RE-SF-live LOC=here
'I don't live here.'
Factual
(8) A’u ndau momoia rimoo.
a'u ndau \(\quad\) M-po \(1_{1}\)-moia ri=moo
\(1 \mathrm{SG} / \mathrm{AB}\) NEG IR-SF-live LOC=here
'I'm not going to live here.'
Future/non-factual
(9) Moo balungomu antau ndau mo'orop.
moo balung=mu antau ndau mo-'orop
this lunch=2SG/GE so.that NEG ST/IR-hunger
'Here is your lunch so that you won't be hungry.'
Examples (10) and (11) express events that occurred/did not occur the day before, and require the use of realis. Example (12) uses irrealis since the predicted event is not guaranteed to occur. It is ungrammatical to impose realis on an unrealised event, however strong the possibility might be that the event will occur.
(10) Noujang nimporongomo.
no-ujang nimporongomo
ST/RE-rain yesterday
'It rained yesterday.'
(11) Ndau noujang nimporongomo.
ndau no-ujang nimporongomo
NEG ST/RE-rain yesterday
'It didn't rain yesterday.'
(12) Seinsangana moujang.
seinsangana mo-ujang
tomorrow ST/IR-rain
'Tomorrow it will rain.'

\subsection*{13.2.2 Realis}

\subsection*{13.2.2.1 Past as realis}

Past actual events are usually encoded as realis, which naturally means that these constructions are translated as past tense in languages which mark tense, as illustrated in (13)-(16). Example (16) specifies the past with the adverb nimporongomo 'yesterday' in the last relative clause of the sentence.
\begin{tabular}{lllllll} 
(13) & Jari & ami & neingka & sono & tomogurang & ribuut
\end{tabular} nao.
(14)
\begin{tabular}{llll} 
Ami & nesoo & ribuut & nao. \\
'ami & \(N\)-pe-soo & ri=buut & nao
\end{tabular}

1PL.EXC/AB RE-SF/DY-stop.by LOC=mountain that
'We stopped by (for a visit) at that mountain.'
(15) Netedua' sono seseng togoge.
ne-te-dua' sono seseng togoge
AV/RE-NV-arrive COM cat large
'They came upon a giant cat.'
(16) Alap mai bau tonitapaimu
alap mai bau to=ni-tapa-i=mu
get come fish RM=IV/RE-smoke.meat-DIR=2SG/GE
\begin{tabular}{llll} 
tono'utuju & rioo & nimporongomo & uo. \\
to=no'u-tuju & ri='oo & nimporongomo & 'uo \\
RM=1SG.IV/RE-ask.to.do & LOC=2SG/AB & yesterday & yonder
\end{tabular}
'Bring to me the fish that I asked you to smoke for me yesterday.'

\subsection*{13.2.2.2 Past procedural events as realis}

Procedural events of the past require the realis prefix, as in (17). This contrasts with generic procedural events which require irrealis marking (§13.2.3.5).
(17) Notou' nitimbang paey nipobalu'.
no-tou' ni-timbang paey ni-po \({ }_{1}\)-balu'
ST/RE-finish IV/RE-weigh and.then IV/RE-SF-sell
'After it was weighed then it was sold.'

\subsection*{13.2.3 Irrealis}

\subsection*{13.2.3.1 Present events as irrealis}

Example (18) illustrates the use of irrealis when events of the present time are expressed. The younger sister in this story speaks with her older brother about their present living situation where they have been living in the home of a flesh-eater.
```

(18) A'u moje ndaumo moluar momoia rimoo,
a'u moje ndau=mo mo-luar M-po_-moia ri=moo
1SG/AB also NEG=COMP UD/IR-want IR-SF-live LOC=here
saba' a'u meingkamo.
saba' a'u mo-ingka=mo
because 1SG/AB ST/IR-fear=COMP

```
'I also no longer want to live here, because I am afraid now.' [mdtext13.txt 052]
Although irrealis may be correlated with or interpretable as referring to present time in many clauses, there are exceptions in which realis is used at times for present time events (as is expected by theory-see §13.2.1). Furthermore when the combination of irrealis and completive aspect would normally be interpreted as present tense, it can actually indicate the future (as in example (19); also see §13.3.7 for further discussion and examples).

\subsection*{13.2.3.2 Future events as irrealis}

Examples (19)-(21) show the use of irrealis for future events.
(19) Seinsangana ito melampamo.
seinsangana 'ito \(\quad\)-pe-lampa \(=\) mo
tomorrow 1PL.INC/AB IR-SF/DY-travel=COMP
'Tomorrow we will leave (lit. travel, go).'
[mdtext19.txt 053]
(20) Bia reinangoto seinsangana.
bia ro-inang=to seinsangana
later IV/IR-eat=1PL.INC/GE tomorrow
'Later tomorrow we will eat it.'
(21) Dampenyo jomo rooli riPalu.
dampe=nyo jomo ro-oli ri=Palu
seed=3SG/GE just IV/IR-buy LOC=Palu
'The seeds will just be bought in Palu.'

\subsection*{13.2.3.3 Prohibitives as irrealis}

The prohibitive nyaa always imposes irrealis on the verb, \({ }^{5}\) in contrast to the negative ndau 'no' ( \(\S 14.2 .2\) ) which can have either realis or irrealis on the following verb. The imperative formation of verbs is never marked with irrealis or realis (§16.2.2). The prohibitive nyaa is shown with verbs in irrealis mood in (220) and (23).
(22) Nyaa moboyong!
nyaa mo-boyong
don't ST/IR-naughty
'Don't be naughty!'
(23) Nyaa mupesooi!
nyaa mu-pe-soo-i
don't 2SG.IV/IR-SF/DY-stop.by-DIR
'Don't stop and visit (them)!'

\subsection*{13.2.3.4 Hypothetical events as irrealis}

Hypothetical or proposed situations are expressed using irrealis mode, as shown in (24) and (25). \({ }^{6}\) If-then conditional constructions require both verbs to be in the irrealis mode, as in (24). \({ }^{7}\)
(24) Ono a'u monuut sapa u'omung?
ono a'u M-pong-tuut sapa 'u-'omung
if/when 1SG/AB IR-SF/PT-follow what 1SG.IV/IR-carry
'If/when I come along (then) what should I bring?'
\begin{tabular}{lllll} 
Paey & nigegesinyo & ai & ono & jomo \\
paey & ni-geges- \(i=\) nyo & ai & ono & jomo \\
and.then & IV/RE-scrub-DIR=3SG/GE & but & if/when & just
\end{tabular}
\begin{tabular}{lllll} 
regegesi & nupale & masae & paey & meigi. \\
ro-geges- \(i\) & nu=pale & mo-sae & paey & mo-igi \\
IV/IR-scrub-DIR & CN/GE=hand & ST/IR-long & and.then & ST/IR-remove
\end{tabular}
'Then he washed (lit. scrub, rub) him, but if he just washed him with his hands it would be a long time before it (the slime) was removed.'

\subsection*{13.2.3.5 Generic procedural and generic statements as irrealis}

Procedural explanations (see §18.2.2) are given as generic information, and since this indicates an unrealised potential activity the irrealis is used, as in (26). \({ }^{8}\) When a generic

\footnotetext{
5 Imperatives never use irrealis or realis modal markings.
\({ }^{6}\) The conditional conjunction ono 'if, when' is inherently ambiguous in a future or non-factual situation.
7 However realis can be used when a future locus point has first been established with an irrealis verb, as shown in (37) in §13.2.4.
\({ }^{8}\) A generic procedural statement marks verbs with irrealis and contrasts distinctly with a narrative procedural statement which marks verbs with realis mode, as in §13.2.2.2.
}
statement is made about what will happen if an event should occur, the clause is always preceded with the conditional ono 'if/when' and the following verbs must be irrealis (see §13.2.3.4 and compare examples (24) and (25)). Example (27) shows a conditional generic statement.
(26)
\begin{tabular}{lllll} 
Ono & motou' & reiliti & paey & rasampali. \\
ono & mo-tou' & ro-ilit-i & paey & ro-sampal- \(i\) \\
if/when & ST/IR-finish & IV/IR-skin-DIR & and.then & IV/IR-cut-DIR
\end{tabular}
'When you finish skinning it, then you cut it up.'
(27) Ono moujang ito megege.
ono mo-ujang 'ito mo-gege
if/when ST/IR-rain 3PL.INC/AB ST/IR-wet
'If/when it rains we will get wet.'

\subsection*{13.2.3.6 Adhortative as irrealis}

Adhortative occurs as irrealis, as in (28)-(30), when it is proposing an afactual or future event (see §13.2.3.2).
(28) Alea’ rakarajaa' mami!
alea' ro-karaja-a' mami
allow IV/IR-work-TZ 1PL.EXC/GE
'Let us do some work!'
\begin{tabular}{lll} 
Alea' & rotudaitomo & tetela. \\
alea' & ro-tuda \(-\mathrm{i}=\) to \(=\) mo & tetela \\
allow & IV/IR-plant-DIR=1PL.INC/GE=COMP & corn
\end{tabular}
'Let's plant corn.'
[jptext05.jdb 029]
(30) Alea' ito melampa.
alea' 'ito M-pe-lampa
allow 1PL.INC/AB IR-SF/DY-travel
'Let's go.'
[mdtext19.txt 009]

\subsection*{13.2.4 Stative verbs as irrealis and realis}

Stative verbs demonstrate clearly that the irrealis and realis modal markers are not tense markers. Although stative verbs marked with realis/irrealis can be seen at times to demarcate factual and non-factual, at other times the demarcation is better analysed as specific, i.e. realised (realis), versus generic, i.e. conventionalised (irrealis). \({ }^{9}\) The list in (31) illustrates the stative verbs riri 'yellow', meas 'white', doda 'red', and onda' 'hot' affixed with the irrealis prefix mo- in compound nouns, i.e. lexical generic items. Example (32) illustrates the compound noun ogo moonda 'hot water' from a text in which the clause's main verb is in realis mode, but the stative verb in the compound noun is in

\footnotetext{
9 See \(\S 7.4 .3 .5\) and \(\S 13.2 .5\) for how agentive nominalisation of stative verbs maintains the distinction of specific/generic.
}
irrealis mode. \({ }^{10}\) The term kareva mombosi' 'good news' is frequently heard in answer to sapa kareva 'what's the news? (or: how are you?)'. However it is used in the translated portions of the new testament with the realis form as kareva nombosi' 'good news (specific)' in contrast to 'good news' that is 'general' or 'generic' in some way. The term too naate 'dead person/people' describes someone or those who have already died, i.e. a specific person or group of persons, as in (33). Example (34) illustrates the generic use of too maate 'dead person/people'.

[miracle1.pin 076]
\begin{tabular}{lllll} 
(34) \begin{tabular}{llll} 
Too & maate & mepekubura, too & tonaatemo. \\
too & mo-ate & M-pepe-kubur-a, & too
\end{tabular} to=no-ate \(=\) mo \\
& person & ST/IR-die & IR-SF-bury-TZ & person
\end{tabular} RM-ST/RE-die=COMP
'Dead people will bury people who have already died.'
[Matthew 8:22b]
Examples (35) and (36) compare sentences with stative formed predications. Example (35) illustrates a magical newborn baby that is yellow or golden coloured, and demonstrates the use of realis for a specific entity. Compare this to (36) which uses irrealis and appears to contradict the rule that specific entities require realis. However this can be interpreted as referring to the generic category of 'black-skinned bodies' since Pendau people refer to themselves as having a 'black body'.

\footnotetext{
\({ }^{10}\) Alternatively these phrases (noun plus stative verb) could be considered to contain stative verbs functioning attributively with its head noun (John Bowden pers. comm.). In §7.4.6 I analyse these as compound nouns since many of these occur as lexical items, but it could be that there is a continuum between compound nouns and the attributive function of the stative verb in a stative verb phrase. Compare these to \(\S 7.6 .2\) where stative verbs do modify the head noun.
}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline (35) & \begin{tabular}{l}
Baya \\
baya \\
forehead
\end{tabular} & \begin{tabular}{l}
nuunga
nu=unga \\
CN/GE=child
\end{tabular} & \begin{tabular}{l}
ио \\
'иo \\
yonder
\end{tabular} & \begin{tabular}{l}
neriri \\
no-riri \\
ST/RE-yellow
\end{tabular} & \begin{tabular}{l}
sono \\
sono \\
COM
\end{tabular} & \[
\begin{aligned}
& \text { alaenyo } \\
& \text { alae }=\text { nyo } \\
& \text { body=3SG/GE }
\end{aligned}
\] \\
\hline & neriri & jojoo. & & & & \\
\hline & no-riri & jojoo & & & & \\
\hline & ST/RE-ye & low all & & & & \\
\hline & 'The chil & forehead was & yellow & his whole bod & was ye & as well.' \\
\hline
\end{tabular}
[mdtext15.txt 107]

\section*{(36)}
\begin{tabular}{lllll} 
Kaeng & meitongomo, & nasituru' & alae'u & meitong. \\
kaeng & mo-itong=mo & nasituru' & alae='u & mo-itong \\
cloth & ST/IR-black=COMP & coincidentally & body=1SG/GE & ST/IR-black
\end{tabular}
'The cloth is black, and coincidentally my body is black.'
[king.pin 147-148]
Example (37) demonstrates that a future possibility can be encoded as realis. This is done by putting the locus of the situation into the future. This then permits a speaker to talk about a future event as if it has already happened. The speaker speaks as if the forecasted locus is in the present. This has to be done with an irrealis marked verb first followed by a realis marked verb second. This demonstrates that Pendau has relative 'realis' which operates in a similar manner as relative tense does in other languages. Conversely a stative verb may use irrealis in the past to talk about a present state relative to that time, as in (38).
(37)
\begin{tabular}{lllll} 
Ono motumangis & tuaimu & alapa' & aniong & tonoonda', \\
ono \(M\)-po \(1_{1}\)-um-tangis & tuai \(=\) mu & alap-a & aniong & to \(=\) no-onda' \\
if IR-SF/LCM-TEL-cry & y.sibling=2SG/GE & get-TZ & cooked.rice & RM=ST/RE-hot
\end{tabular}
\begin{tabular}{llll} 
nyaa & mubagi & aniong & tonemenyong. \\
nyaa & mu-bagi & aniong & to \(=\) no-menyong \\
don't & 2SG.IV/IR-give & cooked.rice & RM=ST/RE-cold
\end{tabular}
'If your younger sister begins to cry give her rice that is hot, don't you give her rice that is cold.'
[senge1.pin 004]
(38) Unga uo nipainango'u aniong moonda'.
unga 'uo ni-pa-inang='u aniong mo-onda'
child yonder IV/RE-CAUS-eat=1SG/GE cooked.rice ST/IR-hot.
'I fed that child with hot rice.'
[senge1.pin 010]
In a narrative context the realis depicts factual events in the past, as in (39). Conversely, the irrealis may depict afactual, future events in a narrative, as in (40).
\(\begin{array}{llllll}\text { (39) } & \text { Bai uo } & \text { noonda'omo } & \text { eleo nipuaimo } & \text { nijimo } & \text { rampa } \\ \text { bai 'uo } & \text { no-onda'=mo } & \text { eleo ni-puai=mo } & \text { nijimo } & \text { rampa } & \text { 'uo } \\ & \text { like yonder } & \text { ST/RE-hot=COMP } & \text { sun IV/RE-dry=COMP } & \text { 3SG/GE spice } & \text { yonder }\end{array}\)
like yonder ST/RE-hot=COMP sun IV/RE-dry=COMP 3SG/GE spice yonder
'After the sun became hot they dried the spices (in the sun).' [mdtext18.txt 059]
\begin{tabular}{llllll} 
(40) Ono ito & melampa & meeleo & moonda' & eleo. \\
ono 'ito & M-pe-lampa & mo-eleo & mo-onda' & eleo \\
if & 1PL.INCL/AB & IR-SF/DY-travel & ST/IR-sun & ST/IR-hot & sun
\end{tabular}
'If we travel during the day the sun will be hot.' [mdtext17.txt059]

\subsection*{13.2.5 Agentive nominalisation of stative verbs}

Another important use of irrealis and realis modes is in the derivation of agentive nominalisations (AGNM). On non-stative verbs an agentive nominalisation has the prefix combination to-pV(C)-, but for stative verbs the prefix is to-mo-/to-no- (see §7.4.2 and §7.4.3.5 for a discussion of these nominalisation types). \({ }^{11}\) Agentive nominalisation of a stative verbs yields the meaning 'person who has the condition or state of X ', where X is the stative verb root. Example (41) with realis specifies individuals and, by contrast, (42) uses irrealis for generic categories.
\begin{tabular}{llllll} 
Diang & jea & too & riulu & tonangkait & \(o\) \\
diang & jea & too & ri=ulu & to-no-ngkait & \(o\) \\
EXIS & HSY & person & LOC-before & AGNM-ST/RE-cripple & and
\end{tabular}
tonobuta netepotagu.
to-no-buta ne-te-po \(1_{1}\)-tagu
AGNM-ST/RE-blind AV/RE-NV-SF-friend
'There was, it is said, in past times a cripple and a blind man who happened to become friends.' [nangkait.pin 002]
\begin{tabular}{lll}
...tomeongkor & meigi & ongkoronyo, \\
to-M-pe-ongkor & M-pe-igi & ongkor=nyo \\
AGNM-IR-DY/SF-tired & IR-DY/SF-lose & tired=3SG/GE
\end{tabular}
\begin{tabular}{lll} 
tomo'orop & meigi & oroponyo... \\
to-mo-'orop & M-pe-igi & 'orop=nyo
\end{tabular}

AGNM-ST/IR-hungry IR-SF/DY-lose hungry-3SG/GE
'...tired people will lose their tiredness, and hungry people will lose their hunger...'

\subsection*{13.3 Aspectual enclitics}

\subsection*{13.3.1 Completive and continuative aspects}

The completive and continuative aspectual enclitics in Pendau come in a mutually exclusive pair, mo for completive, and po for the continuative. \({ }^{12}\) Both verbal and non-

\footnotetext{
\({ }^{11}\) Also note that there is a homophonous relative marker to= which usually can be disambiguated with syntactic tests. For example, with the negative ndau the proclitic precedes the negative and other words, whereas with the homophonous to- agentive nominalisation prefix, it cannot be removed in these kinds of tests. See \(\S 15.5\) for the use of relative clauses and the discussion there, and see \(\S 7.4 .2 .3\) for the discussion on differentiating these homophonous formatives.
\({ }^{12}\) These two aspect markers have cognate forms throughout many Sulawesi languages. Martens (1988) states that 'many languages in Sulawesi have a perfective suffix or enclitic with the shape -mi or -mo. In Uma (a Kaili-Pamona language) the base form of the completive clitic is -mi, but the forms -mo and -ma also occur', also see Gregerson and Martens 1986. Martens (1988:206) identifies the enclitic -pi (which
}
verbal words can be marked for aspect, as \(=m o\) and \(=p o\) can cliticise to non-verbal as well as verbal roots. Completive \(=m o\) roughly correlates with non-future events, while \(=p o\) correlates with future events. However, the primary function of these enclitics is aspectual. Because it usually denotes a completed action, =mo is called completive (COMP), but it can also indicate an immediate action will take place, and on some nonverbs it may add an emphatic force. Because it usually indicates an ongoing action \(=p o\) is called continuative. It may also indicate an additional action, a point in the future, or a sequential action that can be translated as 'next' or 'again'. Both aspectual enclitics may be used as softeners in imperative constructions (see §16.2.3).

The different temporal values of the two clitics can be clearly seen in the following pairs of adverbs and pronouns: ndau=po 'not yet', ndau=mo 'not now, no longer, no more', oo=po 'your turn (lit. you again)', oo=mo 'your turn is over (lit. you already)', ruombengi=po 'the day after tomorrow (lit. continuing for two nights)', and ruo-mbengi=mo 'the day before yesterday (lit. after two nights)'. Two question words are formed from one root, sae 'long time', by combining the stative realis/irrealis prefixes mo-/no- with the completive and continuative aspectual enclitics \(=m o /=p o\) respectively: na-sae \(=m o\) 'when, how long has it been?', and ma-sae=po 'when, how much longer?'. In the last pair, mode interacts with aspect to achieve the meaning; the first member of the pair being realis and the second irrealis, as shown respectively in examples (43) and (44).
(43) Nasaemo ni'ito miu bituong uo?
\begin{tabular}{llll} 
no-sae=mo & ni-'ito & miu & bituong 'uo \\
ST/RE-long=COMP & IV/RE-see & 2PL/GE & star
\end{tabular}
'When did you (first) see the star?'
[natal01.pin 016]
\begin{tabular}{lllll} 
Jari & masaepo & ito & monika' & ungato? \\
jari & mo-sae \(=\) po & 'ito & M-pong-nika' & unga=to \\
so & ST/IR-long=CONT & 1PL.INC/AB & IR-SF/PT-marry & child=1PL.INC/GE
\end{tabular}
'So when will we marry off our children?'
[mdtext11.txt 061]
Realis and irrealis modes are indicated, as described in \(\S 13.2\), by the form of the verbal prefix. The alternation between the two modes has temporal implications; alternation between realis and irrealis modes usually distinguishes past and non-past tense for transitive verbs, although it is better to view the distinction in non-tense terms as contrasting actual and non-actual events.

\subsection*{13.3.2 Interactions of mode and aspect: The tense output model}

Figure 13.3 shows how tense correlates with the aspectual markers \(=p o\) and \(=m o\), and how tense correlates with realis and irrealis modes (the ' X ' on the time line in Figure 13.3
also has the variant -po) as basically a continuative or additive aspect marker. However, he notes that it is used in comparative constructions as well (1988:208), as it is in Pendau (see §13.3.6). The Mori language (Bungku-Mori sub-group of Sulawesi) also has -mo and -po suffixes which Barsel (1994:5) refers to as 'non-future' and 'future' emphatic suffixes, respectively. In Ledo (a Kaili-Pamona language) Evans (n.d.) calls -mo a completive aspectual enclitic, and -pa a sequential or incomplete aspectual enclitic.
indicates the present). \({ }^{13}\) Notice that there is a mismatch where the ' X ' (present tense) occurs above and below the line. This temporal mismatch allows four different combinations of mode and aspect to intersect (see also Figure 13.4).


Figure 13.3. Correlation of Tense with Aspect and Mode in Pendau
\begin{tabular}{|l|c|c|l|}
\cline { 2 - 3 } \multicolumn{1}{c|}{} & \(=m o\) & \(=p o\) & \multicolumn{1}{c}{} \\
\hline\(N-\) & 1 & 2 & Realis \\
\hline\(M-\) & 3 & 4 & Irrealis \\
\hline & Completive & Continuative & \multicolumn{2}{c}{} \\
\cline { 2 - 3 } \multicolumn{1}{c|}{} & &
\end{tabular}

Figure 13.4. Intersection of tense, aspect, and mode: The tense output model

Figure 13.4 shows the four possible TAM combinations that often result from the interaction of the verbal prefixes and aspectual clitics in declarative constructions. \({ }^{14}\) The values of the four cells in Figure 13.4 are given in the list below (matrix numbers match the list numbers):
1. Past Completive (excludes present)
2. Past Sequential or Past Continuative
3. Present (excludes past and often, but not always, the future)
4. Future Sequential or Future Continuative (excludes past and present)

Either clitic can occur with a verb in either mode, allowing for four different shades of meaning. Examples and discussion of these are in §13.3.2.1-4.

\subsection*{13.3.2.1 Irrealis with =mo}

When the completive enclitic \(=m o\) is combined with a verb in irrealis mode, the event described is understood as an immediate present act, as in (45)-(47).

\footnotetext{
\({ }^{13}\) The correlation of tense is only one component of the aspectual markers, and also only one component of the modality marking. The \(M\) - and \(N\) - affixes represent all irrealis and realis affixes in Figures 13.2-3, so include for example the ro-/ni- affixes respectively.
\({ }^{14}\) Kroeger (1993:15-17) shows a similar matrix for Tagalog with similar parameters, although the cells are interpreted differently.
}
```

(45) Oo moo rapateimo mami.
'oo moo ro-pate-i=mo mami
2SG/AB this IV/IR-kill-DIR=COMP 1PL.EXC/GE
'We (monkeys) are going to kill you (turtle) now!'
(46)
Osia' ratabola'otomo molongkang
osi-a' ro-tabol-a'=to=mo mo-longkang
strong-TZ IV/IR-throw-TZ=1PL.INC/GE=COMP ST/IR-quick

| antau io | nao | maatemo. |  |
| :--- | :--- | :--- | :--- |
| antau io | nao | mo-ate $=$ mo |  |
| in.order | 3SG/AB | that | ST/IR-die $=$ COMP |

'Quick (lit. strong), let's throw him in quickly, so that he will die now.'
[ceku01.jdb 083]
(47) Ito moo mo’oropomo,
'ito moo mo-'orop=mo
1PL.INC/AB this ST/IR-hunger=COMP
$\begin{array}{lll}\text { saba' } & \text { notou'omo } & \text { balungoto. } \\ \text { saba' } & \text { no-tou'=mo } & \text { balung=to } \\ \text { because } & \text { ST/RE-finish=COMP } & \text { lunch=1PL.INC/GE }\end{array}$
'We here are already hungry, because our lunches are all gone.' [poora.pin 023]

```

\subsection*{13.3.2.2 Realis with =mo}

When =mo is combined with a realis mode verbal affix, the action is generally interpreted as a punctual past event, as in (48) and (49). This and other discourse uses are discussed further in §18.2.1.1.
(48) Jimo ио nisambalea'omo manu' sensiama.
jimo 'иo ni-sambale-a'=mo manu' sensiama 3PL/AB yonder IV/RE-butcher-TZ=COMP chicken male
'(They) butchered a rooster for them./ (They) butchered them a rooster.'
(49) Ila иo nerema mai nongkomungomo asu jimo.
ila 'иo nerema mai N-pong-'omung=mo asu jimo
from yonder daylight come RE-SF/PT-carry=COMP dog 3PL/GE
'When daylight came they took the dogs (to go hunting).'
However, sometimes the same combination can be used for a hypothetical situation in the future. In (50) it serves to emphasise the inevitability of the consequence should the antecedent come to pass. That is, it makes the 'present' tense located in the future. Compare this example with (37), (24) and (25) in this chapter). See §15.6.1 for complex sentences that use propositional relators such as saba' 'because'.
(50)
\begin{tabular}{lllllll} 
Nyaa & robolilo & asi & a'u & moo & saba' & nibolilomo \\
nyaa & ro-bolilo & 'asi & a'u & moo & saba' & ni-bolilo=mo \\
don't & IV/IR-club & too.bad & 1SG/AB & here & because & IV/RE-club=COMP
\end{tabular}
paey te'e'u nengengkekee' moo.
paey te'e='u N-pong-[ong]-ke-kee' moo
and.then back=1SG/GE RE-SF/PT-DIST-RED-bumps here
'Please don't club me, because after I am clubbed then my back will be all bumpy!' (turtle responding to the monkeys)

\subsection*{13.3.2.3 rrealis with =po}

When = po occurs with an irrealis mode verb, as in (51)-(54), it indicates a future event which may require some time to reach its endpoint. Present tense is specifically excluded.
\begin{tabular}{lllll} 
Ila & mai & moo & repelampaipo & limambengi. \\
ila & mai & moo & ro-pe-lampa-i=po & lima-mbengi \\
ABL come & this & IV/IR-SF/DY-go-DIR=CONT & five-night
\end{tabular}
'From here it takes five days to get there.'
(52)
\begin{tabular}{llllll} 
Alea' & be'e, & ami & mengkanipo & loka & lulu. \\
alea' & be'e & 'ami & M-pe-ngkani=po & loka & lulu \\
allow & grandma/VOC & 1PL.EXC/AB & IR-SF/DY-eat=CONT & banana & first
\end{tabular}
'Grandma, let us still eat bananas first.'
(53) Pasti a'u moo maatepo.
pasti a'u moo mo-ate=po
certain \(1 \mathrm{SG} / \mathrm{AB}\) this \(\mathrm{ST} / \mathrm{IR}-\mathrm{die}=\mathrm{CONT}\)
'Certainly I will be the next to die.'
[nalalo.pin 146]
(54)
\begin{tabular}{lll} 
Ami & mogutupo & balung \\
'ami & M-po \({ }_{1}\)-gutu=po & balung \\
1PL.EXC/AB & IR-SF/FA-make=CONT & lunch
\end{tabular}
\begin{tabular}{llll} 
apa & ami & moje & mo'uma'o. \\
apa & 'ami & moje & mo-'u-ma'o \\
since & 1PL.EXC/AB & again & UD/IR-SF-go
\end{tabular}
'We will make a lunch since we also are going.'
[horse.pin 1162]

\subsection*{13.3.2.4 Realis with =po}

It is also possible for =po to combine with a realis mode verb, as in (55)-(57). In such cases it is difficult to capture in the English translation the aspectual distinctions made in Pendau. The events cited in example (55) below have already happened in the narrative, and are now reported in a way that emphasises their sequentiality. Examples (56) and (57) show =po with the meaning 'again'. Examples (58) and (59) show \(=p o\) in its sequential use, best translated here as 'next'.
\begin{tabular}{|c|c|c|c|c|}
\hline (55) & \begin{tabular}{ll} 
Panganganta & moo \\
panganganta & moo \\
flesh.eater & this
\end{tabular} & \begin{tabular}{l}
nandasamo no-ndas \(a=\) mo \\
ST/RE-critical=COMP
\end{tabular} & \begin{tabular}{l}
nirasainyo \\
ni-rasa-i=nyo \\
IV/RE-feel=DIR=3SG/GE
\end{tabular} & \begin{tabular}{l}
apa \\
apa \\
because
\end{tabular} \\
\hline & no'oropomo, & nitinjungopo & nutatambuang, & \\
\hline & no-'orop=mo & ni-tinjung \(=\) po & nu=tatambuang & \\
\hline & ST/RE-hungry=COMP & P IV/RE-sting=CONT & CN/GE=bumble.bee & \\
\hline & niti'apopo & nusaa. & & \\
\hline & ni-ti'ap=po & \(n u=s a a\) & & \\
\hline & IV/RE-bite=CONT & CN/GE=python & & \\
\hline
\end{tabular}
'The flesh-eater was already feeling critically injured (or: mortally wounded), because he was hungry, and then/next bumble bees had stung him, and then/next a python had bitten him.'
\begin{tabular}{llll} 
Neburapo & siopu & nuaniong & uo, \\
N-pe-bura=po & siopu & \(n u=a n i o n g\) & 'uo \\
RE-SF/DY-speak=CONT & owner & CN/GE=rice & yonder
\end{tabular}
\begin{tabular}{llll} 
"Sapa & nengkani & aniongo'u & moo?" \\
sapa & \(N\)-pe-gnkani & aniong='u & moo \\
what & RE-SF/DY-eat & raw.rice=1SG/GE & this
\end{tabular}
'The rice owner spoke again, "What ate my rice here?""
\begin{tabular}{lllll} 
Tarapasa & uli & nu'ayu & uo & niubungonyopo \\
tarapasa & ulit & nu='ayu & 'uo & ni-ubung=nyo=po \\
force & skin & CN/GE=tree & yonder & IV/RE-join=3SG/GE=CONT
\end{tabular}
sampe nodua' ritano.
sampe \(N\)-po \({ }_{1}\)-dua' ri=tano
until RE-SF/DE-arrive LOC=ground
'Finally he had to join together more (lit. again) bark until it reached the ground.'
[mdtext4.txt 028]
(58)
\begin{tabular}{lllll} 
Ami & nesoopo & moje & riBuana & Sari \\
'ami & \(N\)-pe-soo=po & moje & \(r i=B\). & \(S\). \\
1PL.EXC/AB & RE-SF/DY-stop.by=CONT & also & LOC=B. & S.
\end{tabular}
rijunjung niPandeta Abdi \(B\).
ri=junjung ni=Pandeta \(A\). B.
LOC=house PN/GE=pastor
A. B
'We stopped next also at Buana Sari at the house of Pastor Abdi B.' [jptext03.jdb 027]
(59) Ila uo ami nelampamo ila Donggala ai
ila 'uo 'ami \(N\)-pe-lampa=mo ila D. ai
ABL yonder 1PL.EXC/AB RE-SF/DY-travel=COMP ABL D. but
\begin{tabular}{lllll} 
nesoopo & riTerminal & Donggala paey ami & nengkani. \\
\(N\)-pe-soo=po & \(r i=T\). & \(D\). & paey 'ami & \(N\)-pe-ngkani \\
RE-SF/DY-stop.by=CONT \(\mathrm{LOC=T}\) & D. & then 1PL.EXC/AB RE-SF/DY-eat
\end{tabular}
'After that we left Donggala, but first/next we stopped at the Donggala Terminal, and then we ate.'
[jptext07.jdb 035]

\subsection*{13.3.3 Imperatives with enclitic aspects}

\subsection*{13.3.3.1 Introduction}

Imperative verbs are identified by the fact that there is no modal prefix used leaving only the verb root or stem form (with a \(p V(C)\) - stem former), as in example (60). A unique feature of imperatives (see \(\S 16.2\) ) is that they can only be issued during a speech act, and thus the performative act is a present event (although the command may refer to a future task). As has been discussed in \(\S 13.3 .2\) for verbs marked with realis/irrealis, an imperative verb may also affix continuative and completive aspect markers.
(60) Seinsangana nyau mai omung tuaimu
seinsangana nyau mai 'omung tuai=mu
tomorrow go.down come bring/IMP y.sibling=2SG/GE
ususuipo!
'u-susu-i=po
1SG.IV/IR-milk-DIR=CONT
'Tomorrow come down here, bring your younger sister for me to nurse again!'
[dugong.int, Quick 1991]

\subsection*{13.3.3.2 Imperative with =mo}

Example (61) illustrates the use of the bare verb root with the completive enclitic, and (62) and (63) show stem forms with the completive enclitic. Just like verbs marked with irrealis and the completive aspectual marker, the imperative with \(=m o\) imposes a strict sense of present tense, or an imminent event which will have a turning point determined by the verb and the agent.
(61) Sambalea'omo manu' jimo nao!
sambale-a'=mo manu' jimo nao
butcher-TZ=COMP chicken 3PL/AB that
'Slaughter/butcher the chicken for them!'
(62) Jari emu peteulemo mene' junjung!
jari 'emu pe-teule=mo mene' junjung
so \(2 \mathrm{PL} / \mathrm{AB}\) SF/DY-return=COMP go.up house
'So you all go home up to the house!'
(63) Emu pensoyo'omo ridodop nupetubuongo'u nao!
'emи pe-nsoyo'=mo ri=dodop nu=pe-tubu-ong='u nao
2PL/AB SF/DY-hide=COMP LOC=chest CN/GE=SF/DY-live-locN=1SG/GE that
'You (all) hide now in my pet's chest!'

\subsection*{13.3.3.3 Imperative with =po}

Imperatives with =po are an order or request for something to be done again, as in (64) and (65) or something continuing into the future, as in (66).
(64) Seinsangana emu po'odua'opo!
seinsangana 'emu po-'o-dua'=po
tomorrow \(2 \mathrm{PL} / \mathrm{AB}\) SF/DE-HAVE-arrive=CONT
‘Tomorrow you all come again!’
(65) Kuruk oo pentontoro'opo
kuruk 'oo pe-n-tontoro'o=po
call.chicken/VOC 2SG/AB SF/DY-LIG-crow=CONT
'Kuruk \({ }^{15}\) you crow again!'
[mdtext1.txt 061]
(66) Petaangopo!
pe-taang=po
SF/DY-wait=CONT
‘(You) just wait!'
[ceku01.jdb 028]

\subsection*{13.3.3.4 Prohibitive imperatives with =mo}

The prohibitive imperative uses the word nyaa 'don't'. It always requires irrealis modality when verbs are used (which is different from 'positive' imperatives which use bare roots or bare stem formations, compare §16.2.2). Examples (67)-(69) show nyaa with the completive enclitic \(=m o\). Verbs in prohibitive clauses must be marked as irrealis whenever a verb can take a modal affix (see §14.2.2).
(67) Nyaamo!

пуаа \(=\) то
don't=COMP
‘Don't now!' or: ‘Not now!’
(68)
\begin{tabular}{lllll} 
Oo & nyaamo & monuut & sono & ami! \\
'oo & nyaa= \(=\) mo & M-pong-tuut & sono & 'ami \\
2SG/AB & don't=COMP & IR-SF/PT-follow & COM & 1PL.EXC/AB
\end{tabular}
'Don't (you) follow us!'
[asu2.pin 052]
(69) Nyaamo repetaang miu!
nyaa \(=\) mo ro-pe-taang miu
don't=COMP IV/IR-SF/DY-wait 2PL/GE
'Don’t you all wait (for me)!'
[horse.pin 1204]

\footnotetext{
\({ }^{15}\) Kuruk is the onomatopoeic word for calling chickens, e.g. to feed them, but in this story it is used as a vocative for a magical rooster.
}

\subsection*{13.3.3.5 Prohibitive imperatives with \(=\boldsymbol{p o}\)}

Examples (70) and (71) show nyaa with the continuative enclitic =po, making a request to postpone an activity.
(70) Nyaapo asara-sara uti,
nyaa=po 'o-sara-sara uti
don't=CONT HAVE-RED-hurry dear.boy/VOC
\begin{tabular}{lll} 
apa & ito & mengkanipo. \\
apa & 'ito & M-pe-ngkani=po \\
because & 1PL.INC/AB & IR-SF/DY-eat=CONT
\end{tabular}
'Don't be in such a hurry dear boy, because we will eat first.' [mdtext12.txt 013]
(71) Nyaapo lulu rapatei unga nao, bia magana’omo
nyaa \(=\) po lulu ro-pate-i unga nao bia mo-gana' \(=\) mo
don't=COMP before IV/IR-kill-DIR child that later ST/IR-enough=COMP
umuronyo totolumbulang paey rapatei.
umur=nyo totolu-ng-bulang paey ro-pate-i
age \(=3\) SG/GE three-LIG-month and.then IV/IR-kill-DIR
'Don't yet kill that child, later after she is three months old, then kill her.'
[mdtext5.txt 033]
Examples (72) and (73) illustrate two common idioms which have two aspectual enclitics in the same construction. The formative ini has an undetermined meaning.
(72) nyaapoinimo
nyaa=po-ini=mo
don't=CONT-UD=COMP
‘just a minute now’
[EN97-002.68]
(73) nyaapoinipo
nyaa \(=p o-\) ini \(=p o\)
don't=CONT-UD=CONT
'in a little bit'
[EN97-002.68]

\subsection*{13.3.4 Enclitics on words that don't carry modal affixes}

One of the interesting facts about \(=m o\) and \(=p o\) is that they can occur on non-verbs. This section illustrates the use of non-verbs with these clitics as well as the minor verb diang 'is, be, exist' which does not take modal prefixes (except derivationally). Example (74) shows diang with \(=\) po indicating the meaning 'again' or 'more'. Examples (74) and (75) illustrate the negative adverb ndau 'no' with the enclitic =po, a combination translated as 'not yet', and example (76) ndau with the enclitic =mo 'not now, no longer, no more'.
(74) Ndaupo, diangopo.
ndau \(=\) po \(\quad\) diang=po
NEG=CONT EXIS=CONT
'Not yet, there are still more.'
[EN98-002.12]
(75) Io ndaupo norapi.
\begin{tabular}{lll} 
io & ndau \(=p o\) & \(N\)-po \(1_{1}\)-rapi \\
3SG/GE & NEG=CONT & RE-SF/DE-spouse
\end{tabular}
'He was not yet married.'
[bugmalei.int 005]
(76) Ndaumo diang.
ndau=mo diang
NEG=COMP EXIS
'There isn't any left.' or: ‘All gone.' or: 'There isn't any now.' (in reference to an empty match box picked up)
[EN98-001.7]

Conjunctions, or relators/connectors, can take enclitics, as in (77). Sadang 'since' when cliticised with = po makes the whole clause mean 'again', or related as 'furthermore'.
\begin{tabular}{llllll} 
(77) & \begin{tabular}{l} 
No'uya \\
no-'uya
\end{tabular} & \begin{tabular}{l} 
paey \\
paey
\end{tabular} & \begin{tabular}{l} 
a'u \\
a'u
\end{tabular} & \begin{tabular}{l} 
muinang, \\
mu-inang
\end{tabular} & \begin{tabular}{l} 
sadangopo \\
sadang=po
\end{tabular} \\
ST/RE-why & and.then & 1SG/AB & 2SG.IV/IR-eat & \\
since=CONT
\end{tabular}
'Why then will you eat me, since again I haven't done anything wrong?'
[troll.int 304-304a]
Pronouns can also take aspectual enclitics as in (78) and (79). Example (78) also shows that a single clause may have more than one enclitic. The clitics must be the same within a clause, but a complex sentence can have contrasting aspectual enclitics. Whenever an aspectual clitic is added to a pronoun it probably highlights it as well as adding aspectual value (§13.3.5). When \(=p o\) is cliticised to pronouns it can also mean 'next, again'. For example in a domino game when a speaker says oopo, it means 'your turn', or 'you're next'.
(78) Bia a'upo.
bia \(a^{\prime} u=p o\)
later \(1 \mathrm{SG} / \mathrm{AB}=\mathrm{CONT}\)
'I'll do it later.'
[EN98-001.66]
(79) Neongkoromo tutuu a'umo.
\(N\)-pe-ongkor=mo tutuu \(a^{\prime} u=m o\)
RE-SF/DY-tired=COMP truly \(1 \mathrm{SG} / \mathrm{AB}=\mathrm{COMP}\)
'I am now truly tired.'

Examples (80)-(82) show that demonstratives can take aspectual enclitics. Example (81) demonstrates that enclitics increase the verb-like quality of the locative predicate (§6.5.3.1). \({ }^{16}\)
(80) Moomo.
moo \(=\mathbf{m o}\)
this=COMP
'This is it now.'
[EN98-002.68]
\begin{tabular}{lllll} 
(81) & Oo, & lei, & \begin{tabular}{l} 
rimoopo
\end{tabular} & lulu
\end{tabular} \begin{tabular}{l} 
apa \\
'oo
\end{tabular} lei \(\quad\)\begin{tabular}{lll} 
ri=moo=po & lulu & apa
\end{tabular}
'You, dear girl, come here first, because I have to go defecate.'
[mdtext11.txt 007]
(82)
\begin{tabular}{lllll} 
Guru, & jojoo & uo & no'uturu'imo, & ilapo \\
guru & jojoo & 'uo & no'u-turu'-i=mo & ila=po \\
teacher/VOC & all & yonder & 1SG.IV/RE-obey-DIR=COMP & ABL=CONT
\end{tabular}
a'u mono nolumbi'.
a'u mono no-lumbi'
1SG/AB still ST/RE-young
'Teacher, I have obeyed it all, from when I was still young.'
[Mark 10:20]
The quantifier jojoo 'all' can also take \(=m o\), as in (83). The clitic emphasises that the \(S_{P}\) argument 'now' is angry. In this instance the whole crowd of people are rhetorically underlined. This pragmatic prominence is in addition to its aspectual meaning that still intersects with the realis modal prefix of the verb.
\begin{tabular}{llllllll} 
Jari & too & dea & jojoomo & nanasu & sono & emu & nao. \\
jari & too & dea & jojoo=mo & no-nasu & sono & 'emu & nao
\end{tabular}
so people many all=COMP ST/RE-anger COM \(2 \mathrm{PL} / \mathrm{AB}\) that
'So all of the crowd are now angry with you all.'
[mdtext7.txt 008]
Examples (84) and (5) show =po with the adverb mono 'still'. In example (84) the combination of aspects means 'still going', i.e. the narrator was still going to second grade at that time, and similarly in (85), the narrator was 'still being raised' at the point of the story. Although in example (86) =po follows the stative verb dea 'many', a modally affixed verb, this aspect marker occurs within a coordinated noun phrase which creates an 'additional' sense which means 'many more' or 'many other'.

\footnotetext{
\({ }^{16}\) Clitics occur far more frequently on verbs, and so a verbless clause which takes a clitic on the predicate makes it seem even more like a verb.
}
\(\begin{array}{lllllll}\text { (84) } & \text { Watunyo } & \text { uo } & \text { a'u } & \text { monopo } & \text { kalas } & \text { doruo. } \\ \text { uatu=nyo } & \text { 'uo } & \text { a'u } & \text { mono=po } & \text { kalas } & \text { doruo } \\ \text { time=3SG/GE } & \text { yonder } & \text { 1SG/AB } & \text { still=CONT } & \text { class } & \text { two }\end{array}\)
'At that time I was still in grade two.'
[bugmalei.int 003]
(85) Jari a'u monopo nipiara nikai'u
jari a'u mono=po ni-piara ni=kai='u
so \(1 \mathrm{SG} / \mathrm{AB}\) still \(=\mathrm{CONT}\) IV/RE-raise \(\mathrm{PN} / \mathrm{GE}=\) grandpa \(=1 \mathrm{SG} / \mathrm{GE}\)
o nibe'e.
o ni=be'e
and \(\mathrm{PN} / \mathrm{GE}=\) grandma
‘So my grandfather and grandmother were still raising me.' [ceku02.jdb 014]
(86) Niito nuunga uo tinibo, kasubi, tomboloku, paey taedo, papaya, ni-ito nu=unga 'uo tinibo kasubi tomboloku paey taedo papaya IV/RE-look CN/GE=child yon.sugarcane cassava sweet.potato then pumpkin papaya
\begin{tabular}{lllllll} 
antimun, & o & nedeapo & utang-utang & ntaninyo & ila & uo. \\
antimun & \(o\) & no-dea=po & utang-utang & ntani=nyo & ila & 'uo \\
cucumber & and & ST/RE-many=CONT & RED-vegetables & different=3SG/GE & ABL & yon.
\end{tabular}
'The children saw that there were sugarcane, cassava, sweet potatoes, and then pumpkins, papaya, cucumbers, and many more vegetables different from those.' [mdtext11.txt 018]

Directional verbs often take the aspectual enclitics. In example (87) ma'o 'go' is used as a purposive serial verb with \(=p o\) meaning 'to go again', in this case 'to go fishing again (with a casting net)'.
\begin{tabular}{lllllll} 
(87) & A'u, uti, & ma'opo & mojala & montiang & bauto & nao. \\
a'u & uti & ma'o=po & \(M\)-po 1 -jala & \(M\)-pong-tiang & bau=to & nao
\end{tabular} 1SG/ABdear.boy/VOC go=CONT IR-SF-net IR-SF-add fish=1PL.INC/GE that 'I, dear boy, will go again to fish and add to our fish there.'
[tambao.tst 010]
Question words such as so'uya 'how many', as in (88), and sapa 'what' can take \(=\) po, as in (89). In example (88) the question so'uyapo 'how many more', is answered with totolupo 'three more'. This question and answer, filmed in a video documentary, was followed up by the widow of the house listing her children's names one by one. \({ }^{17}\) Sapapo in (89) can be translated into English as 'whatever'.

\footnotetext{
\({ }^{17}\) This refers to some raw video footage of various snippets of Pendau life made during my field work in 1998. The cameraman was Abdi Bangkalang. My main language helper, Josep Piri, was the key man involved in many of the situations, including this one in which he was in a conversation with a widow living in a traditional Pendau house. In this particular footage we focused on the names of the different parts of the house.
}
\begin{tabular}{llll} 
"Jari & so'uyapo & tonosikola?" & "Totolupo." \\
jari & so-'uya=po & to=N-po \({ }_{1}\)-sikola & totolu=po \\
so & ONE-why=CONT & RM=RE-SF/DE-school & three=CONT
\end{tabular}
'So how many more that are going to school?" "Three more.", [videotr.txt 053-054]
(89) Sapapo jomo toreinang miu, nao jojoo uinang.
sapa \(=\) po jomo to=ro-inang miu nao jojoo 'u-inang
what \(=\) CONT just \(\mathrm{RM}=\mathrm{IV} /\) IR-eat \(2 \mathrm{SG} / \mathrm{GE}\) that all \(1 \mathrm{SG} . \mathrm{IV} / \mathrm{IR}=\) eat
'Whatever it is that you just eat, that is all I will eat.' [mdtext15.txt 071]
Numerals are often used with \(=\) po to mean ' X (number) more', as in (90) and (91). When numerals precede nouns that they modify, the enclitic follows the final noun, as in (90). Example (91) shows the numeral doruo 'two' with \(=p o\), which is used with stative verbs that are prefixed with the numeral one so- prefix (where vowel harmony applies). In example (92) se-ide=po means 'almost, a little bit more'.
(90) Ruo kampungopo nidua' mami.
ruo kampung=po ni-dua' mami
two village=CONT IV/RE-arrive 1PL.EXC/GE
'We arrived after (we passed) two more villages.'
[Tanjong 027]
(91) Nipeilu sopir moo, "metaangopo panumpang,
ni-peilu sopir moo M-pe-taang=po panumpang
IV/RE-tell driver this IR-SF/DY-wait=CONT passenger
doruopo torololo."
doruo=po to=ro-lolo
two \(=\) CONT \(\quad\) RM \(=\) IV/IR-search
'The driver said, "I am still waiting for passengers, two more that I am looking for.",
[terminal.int 006]
\begin{tabular}{llllll} 
(92) Jimo & seidepo & nolodong & saba' & no’oge & barumbang. \\
jimo & so-ide=po & no-lodong & saba' & no-'oge & barumbang \\
3PL/AB & ONE-small=CONT & ST/RE-drown & because & ST/RE-big & wave
\end{tabular}
'They nearly (lit. one little more) drowned because the waves were big.'
[jo'ong.int 029]

\subsection*{13.3.5 Multiple aspectual enclitics in one clause}

Clauses can have more than one aspectual enclitic, but a word can have only one. Within one predication the enclitics must be the same, e.g. if the verb has the continuative enclitic \(=p o\) then only \(=p o\) can occur on other words in the same clause. Although each clitic may add emphasis to a component of the clause, the overall aspectual meaning is in agreement (an exception is when the prohibitive nyaa and the verb each take \(=p o\), see §14.2.2). Examples (93)-(95) demonstrate that a single clause can have two or three continuative enclitics. Example (95) has three continuative aspectual enclitics spread over two clauses in one sentence. The third =po used on se-minggu=po 'one more week' functions to derive a new sense restricted to this one word. Example (96) shows the
completive enclitic on the verb, but on the preposed temporal noun phrase there is a continuative enclitic which is strictly used within the noun phrase (and could also be considered to be a derivational use).
\begin{tabular}{lllll} 
Paey & a'u & monopo & nosabangopo & jimo. \\
paey & a'u & mono=po & N-po \({ }^{\text {-sabang }}=\) po & jimo \\
and.then & 1SG/AB & still=CONT & RE-SF/DE-help=CONT & 3PL/AB
\end{tabular}
'And then I still was helping them.'
(94) Monopo nipo’oturua'onyopo.

топо \(=\) po ni-po \(\mathbf{o}^{-}\)'o-turu-a'=nyo=po
still=CONT IV/RE-SF-HAVE-sleep-TZ=3SG/GE=CONT
'He is still sleeping (lit. having to use sleep for s.t.) on it (i.e. making a decision via a good dream or a bad dream).'
[horse.pin 249]
Puang, ami moo monopo molabupo
puang ’ami moo mono=po M-po \({ }_{1}\)-labu=po
king/VOC 1PL.EXC/AB this still=CONT IR-SF/DE-anchor=CONT
rinyau nao seminggupo.
ri=nyau nao so-minggu=po
LOC=go.down that ONE-week=CONT
'Lord, we here are still anchoring down there for one more week.' [mdtext20.txt 232]
\begin{tabular}{lllll} 
(96) & Pepitu & mbengipo, & ito & monika'omo \\
pepitu & mbengi=po & 'ito & M-po \(0_{1}\)-nika'= & ungato. \\
& seven & night=CONT & 1PL.INC/AB & IR-SF/DE-marry=COMP \\
& child=1PL.INC/GE \\
& 'In seven more nights, we will marry (off) our children.' & [mdtext11.txt 063]
\end{tabular}

Examples (97) and (98) show the completive \(=m o\) twice within the same clause (see also example (79) in §13.3.4). The use of two completive enclitics in example (97) does not create two distinct completive events, although there is more emphasis placed on the morning. Example (98) is more difficult to determine whether there is one or two completed events because there is a sequence of three verbs. However the final verb is probably a directional serial verb that goes with the verb teule 'return', and so the two completive markers can be interpreted to be in agreement.

tarus nodua' rapinyo langkai ila pobantaong.
tarus \(N\)-po \({ }_{1}\)-dua' rapi=nyo langkai ila po \({ }_{1}\)-banta-ong
continue RE-SF/DE-arrive spouse \(=3 \mathrm{SG} / \mathrm{GE}\) male ABL SF/DE-fishing-locN
'After the morning became clear (lit. daylight), then her husband came back from his fishing trip.'
[mdtext14.txt 014]
```

(98) Ila uo tomogurang uo nelampa neteulemo
ila 'uo tomogurang 'uo N-pe-lampa N-pe-teule=mo
ABL yonder elder yonder RE-SF/DY-travel RE-SF/DY-return=COMP
ma'omo junjungonyo.
ma'o=mo junjung=nyo
go=COMP house=3SG/GE

```
'After that the elders travelled and returned to their house.'
[mdtext1.txt 026]

\subsection*{13.3.6 Comparatives with \(=\) po}

One other productive use of the continuative enclitic \(=p o\) is in forming comparative sentences, which are discussed in more detail in §15.2. Example (99) is a typical comparative sentence.
\begin{tabular}{llllll} 
Buku & moo & noogepo & paey & buku & uo. \\
buku & moo & no-oge=po & paey & buku & 'uo \\
book & this & ST/RE-big=CONT & and.then & book & yonder
\end{tabular}
'This book is much bigger than that book.'
[EN97-004.65]

\subsection*{13.3.7 Some problems with using the tense output model}

As has been observed in §13.3.2.1, when irrealis and completive intersect the tense output model predicts that this should result in present tense. Example (100) serves to highlight the fact that the tense output model must be used with care. The word maate \(=m o\) 'die (ST/IR/COMP)' refers to a future hypothetical situation, albeit imminent unless certain action is taken. Also, simultaneous to the crow's speech, the flesh-eaters (not mentioned specifically in this sentence, jimo 'they' refers to them) are sharpening their teeth, a sign that they will commence eating flesh shortly. Although this is clearly a present activity, it is used in the realis mode (in conjunction with the adverb pepees 'in process'). \({ }^{18}\)
(100) Neburamo aloaga uo sono unga doruo иo "опо emи

N-pe-bura=mo aloaga 'uo sono unga doruo 'иo ono 'eти
RE-SF-speak=COMP crow yonder COM child two yonder if \(2 \mathrm{PL} / \mathrm{AB}\)
nao ndau melampa nyapoini emu nao maatemo,
nao ndau M-pe-lampa nyapoini 'emu nao mo-ate=mo
that NEG IR-SF/DY-travel shortly 2PL.AB that ST/IR-die=COMP
\begin{tabular}{llllllll} 
saba' & jimo & sa'o-sa'o & moo & pepees & nomangasa & ngisi & nijimo \\
saba' & jimo & sa'o-sa'o & moo & pepees & N-pong-pang-asa & ngisi & nijimo \\
because & 3PL/AB & RED-now & this & in.process & RE-SF-CAUS-whet & teeth & 3PL/GE
\end{tabular}

\footnotetext{
18 Present tense is in fact predicted by the general theory of realis and irrealis, as mentioned in \(\S\) 13.2.1.
}
\begin{tabular}{lll} 
rigii & nuogo & uo." \\
ri=gii & \(n u=o g o\) & 'uo \\
LOC=edge & CN/GE=water & yonder
\end{tabular}
'The crow spoke to the two children there, "If you don't go, in a few minutes you will die, because they (the flesh-eaters) are right now in the process of sharpening their teeth at the edge of the water over there."
[mdtext18.txt 063]
Although the combination of mode (irrealis/realis) and primary aspect (completive/ continuative) is often translatable in English by specific tenses, there are many situations where a strict interpretation of output tense is often not possible. The reasons for this might be: 1) irrealis/realis is relative, and thus may at times mismatch with an 'absolute tense' model, 2) there may be other universal grammatical principals at work that occasionally realign the synchronic boundary between realis and irrealis to a higher order (see discussion in \(\S 13.2 .1\) ), and 3) although tense may be an inherent by-product of mode and aspect which would identify a particular tense to each respectively, the combination of mode and aspect does not necessarily imply a similar one-to-one correlation for all outputs, and it certainly does not guarantee that the tense output model will predict a flawless output.

\subsection*{13.3.8 Verbal aspect on prepositions}

Example (101) shows the prepositional phrase receiving a verb-like quality with the addition of continuative po followed by an adverb lulu 'first'. Since prepositional phrases may be the locative predicate of a verbless clause it makes sense that a clitic which appears most frequently on verbs may be adding a verbal quality to the predication. Examples (102) and (103) show that the ablative preposition can be cliticised with the po, which gives the prepositional phrase more of a verb-like quality.
(101) Neburamo
\(N\)-pe-bura=mo
RE-SF/DY-speak=COMP
siama nuunga uo, "oo, lei,
siama nu=unga 'иo 'oo lei
father \(\mathrm{CN} / \mathrm{GE}=\) child yonder \(2 \mathrm{SG} / \mathrm{AB}\) dear.girl/VOC
\begin{tabular}{llllll} 
rimoopo & lulu & apa & \(a \prime \prime\) & ma'opo & metatai." \\
\(r i=m o o=p o\) & lulu & apa & \(a \prime u\) & ma'o=po & M-pe-ta-tai \\
LOC=here=CONT & first & because & 1SG/AB go=CONT IR-SF/DY-RED-faeces
\end{tabular}
'The child's father spoke, "You, dear girl, come over here first, because I have to go defecate."
[mdtext11.txt 007]
\begin{tabular}{llll} 
(102) Ilapo & ningeno & ndau diang & ni'ito'u. \\
ila=po & ningeno & ndau diang & ni-'ito='u \\
ABL=CONT just.now & NEG EXIS & IV/RE-look=1SG/GE
\end{tabular}
'From then until now I didn't see you.'
[terminal.int 023]
(103) Ai ono ndau masadar, ilapo moo ito metepo'ito. ai ono ndau mo-sadar moo 'ito mo me-te-po \({ }_{1}\)-'ito but if NEG ST/IR-conscious ABL=CONT this 1PL.INC/AB AV/IR-NV-SF-look 'But if you're not conscious, then from here on we will see each other.'

\subsection*{13.4 Other modal and aspectual affixes}

Other aspects and modes are marked with verbal prefixes (including reduplication), or with infixes which follow a modal prefix. All may co-occur with one of the two aspectual enclitics. Figure 13.5 shows these affixes and their functions. Some aspectual affixes can occur with several verb classes, and one (the iterative circumfix ra- / -an) only occurs in the inverse voice verb formation (see Figure 13.5). However, most of these prefixes are preceded by a specific irregular irrealis/realis prefix (see Figure 13.6). The sections below provide examples and discussion for these affixes.
\begin{tabular}{|c|c|c|}
\hline Aspect/mode & Function & Affix(es) \\
\hline \multirow{6}{*}{Aspectual} & Telic & -um- \\
\hline & \multirow[t]{2}{*}{Distributive} & le- \\
\hline & & -ong- \\
\hline & Iterative & ra- /-an \\
\hline & Iterative (atelic) / durative (reduplication) & \[
\begin{aligned}
& \sigma_{\mathrm{c}}- \\
& \sigma \sigma_{\mathrm{c}}- \\
& -\sigma_{\mathrm{c}} \sigma \\
& \hline
\end{aligned}
\] \\
\hline & Opposition & li- \\
\hline \multirow{2}{*}{Modal} & Deliberate & ti-, titi-,tingka-, naning- \\
\hline & Non-volitional & te- \\
\hline
\end{tabular}

Figure 13.5. Other aspectual and modal affixation \({ }^{19}\)
\begin{tabular}{|l|l|l|l|}
\cline { 2 - 4 } \multicolumn{1}{c|}{} & Aspect/mode & Irrealis/realis & Prefix(es) \\
\hline \hline \multirow{2}{*}{ Mode } & \begin{tabular}{l} 
Non-volitional/ \\
abilitative
\end{tabular} & \(m e-/ n e-\) & te- \\
\cline { 2 - 4 } & Deliberate & mo-/no- & ti-, titi-, tingka, naningka \\
\hline \multirow{2}{*}{ Aspect } & Distributive & \(m e-/ n e-\) & \(l e-\) \\
\cline { 2 - 4 } & Opposition & \(m o-/ n o-\) & \(l i-\) \\
\hline
\end{tabular}

Figure 13.6. Surface morphology of the irregular prefixes which precede aspectual and modal affixes \({ }^{20}\)

\subsection*{13.4.1 Other aspectual affixes}

\subsection*{13.4.1.1 Distributive plural}

Pendau has two distributive affixes: the infix -ong- (with vowel harmony allomorphs), and the prefix \(l e\)-. Distributive means that each individual of the subject does the verbal activity, since the plural subjects individually perform the same type of verbal activity. To

\footnotetext{
19 Reduplication patterns are discussed as affix templates in \(\S 3.5\). The \(\sigma_{c}\) represents the core syllable CV.
\({ }^{20}\) Further research should show whether verbs with these prefixes can be analysable similarly to the canonical verbs which have underlying \(p V(C)\) - prefixes and would then feasibly take the irrealis/realis floating autosegments \(M-/ N-\).
}
date there has been no difference found in meaning between the two affixes, although the -ong- may be more productive.

The distributive affixes require a plural subject (and never occur in inverse voice formations). The distributive infix -ong- is important theoretically because the A or S arguments require agreement with this infix, and this is additional evidence that the A or S is the grammatical subject (compare §6.4.1.5). The infix -ong- does not simply make plural agreement because plural pronouns may be used without a distributive affix (§13.4.1.1.1). \({ }^{21}\)

\subsection*{13.4.1.1.1 Distributive infix -ong-}

Example (104) shows the verb stem duling 'lie down' and its postural and stem prefixes in contrast to (105) and (106) which also have the distributive infix -ong-. Conventionally, in the interlinearisation the DIST gloss for -ong- follows in linear sequence as if it were a prefix following the prefix it is actually inserted into. The infix -ong- occurs after the first consonant of the verbal prefix and is considered to be in the HPS (§3.5.7).
(104) Io nopoduling ri'uo
io \(N\)-popo-duling ri='uo
3SG/AB RE-SF/POS-lie.down LOC=yonder
'He lay down over there.' [horse.pin 508]
(105) Jimo nongopodulingomo ribongkarang.
jimo \(\quad N\)-[ong]-popo-duling=mo ri=bongkarang
3PL/AB RE-DIST-SF/POS-lie.down=COMP LOC=garden.hut
'They each lay down in the garden hut.'
[EN97-004.19]
(106) Jimo nongopoduling rijunjung nijimo mboto.
jimo \(\quad\) N-[ong]-popo-duling \(\quad\) ri=junjung nijimo mboto
3PL/AB RE-DIST-SF/POS-lie.down LOC=house 3PL/GE self
'They each lay down in their own house.'
[EN97-004.19]
The vowel of the distributive prefix harmonises with the vowel of the verb's prefix. So after the infix is inserted into the verb's prefix these forms are attested: mongo-, mongong-/nongo-, nongong- and menge-, mengeng- /nenge-, nengeng. In my corpus manga-, mangang- /nanga-, nangang- are unattested, but probably occur as well. Examples (107) and (108) contrast the use of distributive and non-distributive with the same verb root and with the same plural subjects. The distributive in (107) specifies that each individual in the crowd returned home, whereas the same verb without the distributive affix in (108) does not specify the individuality of the plural subjects.
(107) Too dea uo nengeteulemo ma'omo junjung nijimo mboto.
too dea 'uo \(N\)-[ong]-pe-teule=mo ma'o=mo junjung nijimo mboto
person many yon. RE-DIST-SF-return=COMP go=COMP house 3PL/GE self
'The people in the crowd each returned to their own homes.' [mdtext4.doc]

\footnotetext{
\({ }^{21}\) See van den Berg (1989) for a plurality suffix marker -hi in Muna for the object, subject, or both.
}


Example (109) shows that a singular pronoun, in this case \(a\) 'u ' \(I\) ( \(1 \mathrm{SG} / \mathrm{AB}\) )', is ungrammatical with a distributive infix. Examples (110) and (111) show the plural pronoun jimo 'they (3PL.AB)' in clauses with and without the distributive prefix.
(109) *A'u m[eng]e-lolo bau.
[EN97-004.19]
\begin{tabular}{lll} 
Jimo & melolo & bau. \\
jimo & M-pe-lolo & bau \\
3PL/AB & IR-SF/DY-search & fish
\end{tabular}
'They will look for fish.'
[EN97-004.19]
\begin{tabular}{cll} 
(111) Jimo & mengelolo & bau. \\
jimo & M-[ong]-pe-lolo & bau \\
3PL/AB & IR-DIST-SF/DY-search & fish
\end{tabular}
'They each were looking for fish.'
[EN97-004.19]
Examples (112) and (113) show that the distributive prefix is not simply a plural agreement prefix. Since it is a cultural norm for a husband and wife to live in the same house, this sentence is unacceptable because it would have to mean that the married couple returned to separate homes (although it is grammatical as indicated by the exclamation mark). If nenge- was replaced with ne- then it would be an acceptable sentence. Example (113) shows the same verb construction and a similar noun phrase, but this time it is the man and his friend (who are unmarried) who each returned to their own individual homes.
\begin{tabular}{lll} 
!SiCeku & sono rapinyo & nengeteulemo \\
si \(=\) Ceku & sono rapi=nyo & N-[ong]-pe-teule \(=\) mo \\
PN/AB=Ceku & COM spouse=3SG/GE & RE-DIST-SF/DY-return=COMP
\end{tabular}
\begin{tabular}{llll} 
ma'omo & junjung & nijimo & mboto \\
ma'o=mo & junjung & nijimo & mboto \\
go=COMP & house & 3PL/GE & self
\end{tabular}
'!Ceku and his wife each returned to their own homes.'
[EN97-004.18]
\begin{tabular}{llll} 
SiCeku & sono & tagunyo & nengeteulemo \\
si=Ceku & sono & tagu=nyo & N-[ong]-pe-teule=mo \\
PN/AB & COM & friend=3SG/GE & RE-DIST-SF/DY-return=COMP
\end{tabular}
\begin{tabular}{llll} 
ma'omo & junjung & nijimo & mboto \\
ma'o=mo & junjung & nijimo & mboto \\
go=COMP & house & 3PL/GE & self
\end{tabular}
'Ceku and his friend each returned to their own homes (i.e. two different houses).'
[EN97-004.18]

Examples (114) and (115) show how the use of the distributive can further specify the situation in contrast to a more generic situation. Example (114) could mean the fishermen were all in the same boat searching for fish, or scattered through two or more boats, whereas (115) specifies that the fishermen were each in their own boats. Examples (116) and (117) show this generic versus specific situation with the verb lampa 'travel, journey'.
(114) Jimo melolo bau sono payangan.
jimo M-pe-lolo bau sono payangan
3PL/AB IR-SF/DY-search fish COM boat
'They will search for fish with a boat.'
[EN97-004.19]
\begin{tabular}{cllllll} 
(115) Jimo & mengelolo & bau & sono & payangan & nijimo & mboto. \\
jimo & M-[ong]-pe-lolo & bau & sono & payangan & nijimo & mboto \\
3PL/AB & IR-DIST-SF-search & fish & COM & boat & 3PL/GE & self
\end{tabular}
'They each searched for fish with their own boats.'
[EN97-004.19]
(116) Tarus nengelampa too dea uo.
tarus \(N\)-[ong]-pe-lampa too dea 'uo
continue RE-DIST-SF/DY-travel person many yonder
'Each person continued walking.'
[mdtext4.doc]
\begin{tabular}{llllll} 
(117) Too & dea & nengelampa & rijunjung & nijimo & mboto. \\
too & dea & N-[ong]-pe-lampa & ri=junjung & nijimo & mboto \\
person & many & RE-DIST-SF-travel & LOC=house & 3PL/GE & self
\end{tabular}
'Many people went to each of their own homes.'
[EN97-004.21; mdtext4.doc]
The distributive specifies that the subject individually performs the action, but does not specify a one-to-one correlation with the object. Examples (118) and (119) contrast transitive clauses with and without the use of the -ong- infix, and (120) and (121) give additional examples of transitive constructions with uses of -ong-. Examples (118) and (120) do not specify whether the persons each have one dog or one chair, or whether each has more than one dog or chair, or whether some individuals have one item and others have more than one item. Example (119) shows that without the distributive -ong- the subject is less specific, or less individuated than a similar clause with -ong-, as in (120). Example (121) contrasts with (118) and (120) in that inum begins with a vowel, but 'omung begins with the glottal consonant \(/ / /\) and assimilates to the same oral point of articulation (i.e. dorsal) and the same feature of constricted glottis resulting in a velar stop \(/ \mathrm{k} /\) following the velar nasal (§3.5.5).
(118) Jimo mongongkomung asu.
jimo \(\quad\)-[ong]-pong-'omung asu
3PL/AB IR-DIST-SF/PT-carry dog
'They each took dogs (to go hunting).'
[EN97-004.19]
(119) Jimo mongkomung gadera uо.
jimo M-pong-'omung gadera 'uo
3PL/AB IR-SF/PT-carry chair yonder
'They will carry those chairs.'
[EN97-004.20]
(120) Jimo mongongkomung gadera uo.
jimo M-[ong]-pong-'omung gadera 'uo
3PL/AB IR-DIST-SF/DY-carry chair yonder
'They each carried a chair(s) there.'
[EN97-004.20]
(121) Jimo mengenginum juи nuniu.
jimo \(\quad\)-[ong]-pong-inum juи nu=niu
3PL/AB IR-DIST-SF/PT-drink juice CN/GE=coconut
'They each drank coconut juice.'
[EN97-004.19]
Stative verbs can also take the distributive infix, as in (122) and (123). These examples provide morphological evidence that the \(\mathrm{S}_{\mathrm{P}}\) of a stative verb is a subject (see discussion of grammatical relations in §6.4).
(122) Saba' too ri'uo mongoboyong.
saba' too ri='uo mo-[ong]-boyong
because person LOC=yonder ST/IR-DIST-naughty
'Because each of those persons there is naughty.'
[miracle1.pin 144]
(123) Notou' nipainang jimo uo nongobosumo sou-soung.
no-tou' ni-pa-inang jimo 'uo no-[ong]-bosu=mo sou-soung
ST/RE-finish IV/RE-CAUS-eat 3PL/AB yon. ST/RE-DIST-full=COMP RED-one
'After (the elders) fed them, each one of them was full.'
[poora.pin 117]

\subsection*{13.4.1.1.2 Distributive prefix le-}

The prefix \(l e\) - appears to have the same function as -ong-. Although the data is limited, one distributional difference is that \(l e\) - can follow the numeral one prefix so- (which because of vowel harmony will always appear as se- when preceding le-), whereas -ongcannot. In addition le-must be preceded in verb formations by its own unique verb prefix \(m e-\). The realis form \(n e\) - has been rejected in elicitation. Examples of \(l e\) - are given in (124)-(127).
(124) Jojoo melepantol, tavala selepantol.
jojoo me-le-pantol tavala so-le-pantol
all AV/IR-DIST-embed spear ONE-DIST-embed
'All (of the krises) embedded, each of the spears embedded (into a different victim).'
[horse.pin 603-604]
\begin{tabular}{lllll} 
(125) Diang soso'uya & tomogurang toporaa & meletundo & ri'uo. \\
diang so-so-'uya & tomogurang to-po - raa & me-le-tundo & ri='uo. \\
EXIS RED-ONE-why elder & AGNM-SF-blood & AV/IR-DIST-sit & LOC=yon. \\
'There were several sacrificial elders each standing around over there.'
\end{tabular}
\begin{tabular}{llllll} 
Bai & soso'uya & too & todiang & mele'oro & ri'uo. \\
bai & so-so-'uya & too & to=diang & me-le-'oro & ri='uo \\
like & RED-ONE-why & person & RM=EXIS & AV/IR-DIST-stand & LOC=yonder
\end{tabular}
'Like several persons who were each standing there.'
[Mark15:35]
(127) Sagaat junjung jomo seletili'.
so-gaat junjung jomo so-le-tili'
one-section house just one-DIST-leaning
'One section of each of the houses still just leaned.'

When postural verbs, such as tundo 'sit in' (128) are prefixed with le-the stem forming prefix popo- does not occur. Compare meletundo in (128) with nopotundo in (129). \({ }^{22}\) Examples (130) and (131) demonstrate that le- requires a plural subject.
(128) Riwatu uo nedea too meletundo ripali-palit niYesus. ri=uatu 'uo no-dea too me-le-tundo ri=pali-palit ni=Yesus LOC=time yon. ST/RE-many person AV/IR-DIST-sit LOC=RED-around PN/GE=J.
'At that time many people were sitting around Jesus.'
[Mark 3:32]
(129) Bai uo nopotundo sagaat nopodulingomo.
bai 'uo \(N\)-popo-tundo so-gaat \(N\)-popo-duling=mo
like yonder RE-SF/POS-sit ONE-section RE-SF/POS-lie=COMP
'After that they sat down, and some of them laid down.'
[poora.pin 508]
(130) Jimo mele’omung tavala uo.
jimo me-le-'omung tavala 'uo
3PL/AB AV/IR-DIST-carry spear yonder
'They all each carried those spears.'
[EN98-003.59]
(131) *Io mele’omung tavala ио.
io me-le-'omung tavala 'uo
3SG/AB AV/IR-DIST-carry spear yonder
*'He/she each carried those spears.'
[EN98-003.59]

\subsection*{13.4.1.2 The 'opposing' prefix li-}

A prefix li- 'opposing' must follow a mo-/no- prefix when it is used. This combination appears to mean opposing directions, or to do something or be something opposite (OPPO). \({ }^{23}\)

\footnotetext{
\({ }^{22}\) This indicates that the po- in the popo- stem former may be indicative of another aspect (see \(\S 4.3\) and Chapter 9 for discussion of stem formers).
}
\begin{tabular}{lll} 
(132) & Rimoo \(\quad\) ito & molimpogaat. \\
ri=moo 'ito & mo-li-ng-po - \(_{1}\) gaat
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline (133) Ai & ito & molinte'e. \\
\hline ai & 'ito & mo-li-ng-te'e \\
\hline but & 1PL.INC/AB & AV/IR-OPPO-LIG-back \\
\hline
\end{tabular}
'But we will go in opposite directions.' [mdtext20.txt 166]
\begin{tabular}{lllll} 
Sobuung & puse & ai & nolintani & siamanyo. \\
so-buung & puse & ai & no-li-ntani & siama=nyo \\
ONE-attach & navel & but & AV/RE-OPPO-different & father=3SG/GE
\end{tabular}
'Siblings (lit. same navel attachment) but different fathers.'
[EN97-004.65]

\subsection*{13.4.1.3 Telic aspect infix -um-}

The infix -um- marks telic aspect and only occurs on class VI locomotion verbs, or derived locomotion verbs. See \(\S 9.3 .4\) for an extensive discussion of the locomotion verb class. Verbs with -um- are considered to be telic because the action has either just begun, i.e. the action may be inceptive, and/or is a clearly bounded activity that cannot go on indefinitely. This view is expressed clearly by Chung and Timberlake (1985:217):

At the predicate level, the meaning of closure differs for processes and for states.
A process may either have the potential of continuing indefinitely, or it may have associated with it a natural boundary or limit on the degree of change, such that when the limit is reached, the event cannot continue. Traditionally a process without an inherent limit is called atelic, one with a limit is called telic (from Greek telos 'limit, end, goal'). Using the terminology proposed here, a process without limit is open at the predicate level; one with a limit is closed.
...Applied to states, closure implies a complete change of state, specifically inception rather than cessation.
For a fuller discussion of this point see Comrie (1976:44-48).
Locomotion verbs are ideal candidates for expressing telic aspect, and could be the reason that the infix -um- rarely occurs without its co-occurring prefix \(p o_{1}\)-. Often the translation for a locomotion verb will be translated as 'begin to' to demonstrate that there is an inception into a new state, i.e. the start of the locomotion state or activity. \({ }^{24}\) Sometimes this is achieved by the interaction of irrealis and the telic aspect, as in (135), but in other occurrences it may be other elements within the proposition which require an inception of the locomotion verb, or even other contextual constraints.

\footnotetext{
23 This prefix li- is possibly the same formative used in the quantifier ntoli, such as in ntoli siina 'mother and child', and this is described in §7.5.2.3 as a human dual opposition.
\({ }^{24}\) This state should not be confused with stative verbs in Pendau. In the context of locomotion verbs, a previous 'state' changes into the 'state' of the locomotion that begins (and ends).
}
```

(135) Jari ulasang moo motumangis.
jari ulasang moo M-pon-[um]-tangis
so turtle this IR-SF/LCM-TEL-cry

```
'So Turtle began to cry.'
[turtle.pin 167]
It is obvious that locomotion verbs require a closure to the locomotional activity when they are affixed with the telic infix -um-. However, the aspect of a locomotion verb can be switched to an indefinite continuation via reduplication, which then marks the atelic aspect. In example (136) the first use of linjo' 'run' indicates the running began at a certain point, and then the same word linjo' is then reduplicated showing atelic aspect (or equivalently called 'iterative aspect' as discussed in §13.4.1.5 for reduplication). Example (137) illustrates that either the locomotion prefix \(p o_{1^{-}}\)is not always required or it may appear optionally in certain contexts.
```

(136) Paey noluminjo' linjo-linjo' io.
paey $\quad N$-po ${ }_{1}$-[um]-linjo' linjo-linjo' io
and.then RE-SF/LCM-TEL-run RED-run 3SG/AB

```
'And then he began to run, and he ran and ran.'
[troll.int 273]
\begin{tabular}{llllllll} 
Ila uo & io & ma'o-ma'o & bole-bole & uo & luminjo' & seide'. \\
ila 'uo & io & ma'o-ma'o bole-bole & 'uo & [um]-linjo' & so-ide' \\
ABL yonder & 3SG/GE RED-go & RED-suddenly & yonder & TEL-run & ONE-little
\end{tabular}
'After that he suddenly went and ran a bit.'
[troll.int 295]

\subsection*{13.4.1.4 Iterative circumfix ra-/-an}

The circumfix ra-/-an marking repetition is not very common in the corpus (appearing in only one oral text several times, and once in a draft translation of Genesis), but was found to be quite productive in elicitation. The iterative circumfix can only be formed in the inverse voice verbal construction. Typical examples are in (138)-(140).
(138) Jojoo too uo niratinjunan nutatambuang.
jojoo too 'uo ni-ra-tinjung-an nu=tatambuang
all person yonder IV/RE-ITV-sting-ITV CN/GE=bumble.bee
'The bumble bees repeatedly stung all of those people over there.'
[EN98-002.22/fktale.doc by siDidi]
(139) A'u niratinjunan nutatambuang.
a'u ni-ra-tinjung-an nu=tatambuang
1SG/AB IV/RE-ITV-sting-ITV CN/GE=bumble.bee
'The bumble bees repeatedly stung me.'
[EN98-002.22]
(140) Ami nirasinggaanonyo,
'ami ni-ra-singga-an=nyo
1PL.EXC/AB IV/RE-ITV-rebuke-ITV=3SG/GE
\begin{tabular}{llll} 
paey & nipeilunyo & ami & mata-mata. \\
paey & ni-peilu=nyo & 'ami & mata-mata \\
and.then & IV/RE-tell=3SG/GE & 1PL.EXC/AB & RED-eye
\end{tabular}
'They repeatedly rebuked us, and they said we were spies.'
[Genesis 42:30]

\subsection*{13.4.1.5 Iterative/durative aspect via reduplication}

Reduplication is a common means of forming a verbal aspect referred to here as iterative or durative. Reduplication is a special kind of affixation based on three templates (see §3.6.1 for a discussion of the phonology of reduplication and the reduplication templates). The three basic Pendau reduplication templates are repeated here for convenience in example (141). Each marks aspect. \({ }^{25}\) The choice of template for a particular verb appears to be unpredictable, although pragmatics and convention may play a part in which particular template is chosen.

\section*{(141) Pendau reduplication templates}

Template type 1: \(\sigma_{c^{-}}\left(E \sigma_{c}-\right)\)
Template type 2: \(\sigma \sigma_{c^{-}}\left(E \sigma \sigma_{c^{-}}\right)\)
Template type 3: \(-\sigma_{c} \sigma\left(-E \sigma_{c} \sigma\right)\)
One view of iterative aspect is to consider that the root being reduplicated creates diffuse action. Barr (1988a:38) says for Da'a (a Kaili-Pamona language):

We here call verbal aspect signalled by reduplication diffuse in the sense that the actions thus marked are not just single, specific actions occurring at only one point in time. Rather they are actions that are diffused along the time spectrum, occurring either at more than one point on the spectrum (repeated action), or extending over a segment of that spectrum (continuous action or state).
Donohue (1995:294) offers a succinct definition of the function of verbal reduplication for Tukang Besi (a Southeast Sulawesi language):

Reduplication of verbs in Tukang Besi is used to show the extension of an action over time, or the lack of reality about the action, both concepts commonly associated with reduplication.
It is clear that reduplication in Pendau operates similarly to Da'a and Tukang Besi. \({ }^{26}\)
Examples (142)-(145) present a sample of verbs constructed following reduplication template types 1-3. Reduplicated verbs can appear with or without verb class prefixes, as shown in examples (143) and (144).

\footnotetext{
\({ }^{25}\) These templates are also used for nominalisation processes, see §7.4.8.
\({ }^{26}\) Another way to approach this is to follow Chung and Timberlake (1985). They suggest a classification of predicates into open versus closed state types that is valid for Pendau. Following this view Pendau verbal reduplication marks an atelic aspect for non-stative verbs and an open state for stative verbs. These could be considered to be in a kind of complementary distribution, which then results in a single concept that can be identifed as iterative aspect. Section 13.4.1.3 shows that Pendau contrasts the atelic aspect (via verbal reduplication) and telic aspect (via the infix -um-) (see example (136)).
}
(142) Reduplication template type \(\mathbf{1} \boldsymbol{\sigma}_{\mathbf{c}^{-}}\)
\begin{tabular}{llll} 
ro-bu-bura-i & 'continuously speak' & bura & 'speak' \\
ni-po-po-gabu & 'repeatedly cook' & pogabu & 'cook' \\
mom-po-po-mbosi' & 'repeatedly make good' & pombosi' & 'cause to be good' \\
ni-pa-pa-guru-a' & 'repeatedly use to teach' & paguru & 'teach' \\
mepe-ba-baas-i & 'continuously tease' & baas & 'tease'
\end{tabular}
(143) Reduplication template type \(\mathbf{2} \sigma \sigma_{\mathbf{c}^{-}}\)with other verbal prefixation
\begin{tabular}{llll} 
ne-lampa-lampa & 'went for a walk' & lampa & 'go, walk' \\
mo-mongi-mongi & 'beg and beg' & mongi & 'beg' \\
me-pe-aka-akal-i & 'keep deceiving', & akal & 'deceive' \\
'e-ingka-ingka & 'always afraid' & ingka & 'afraid' \\
'a-lampa-lampa & 'walk and walk' & lampa & 'go/walk' \\
re-ingki-ingkit & 'nibbling' & ingkit & 'nibble' \\
ro-tuju-tuju & 'sending on errands' & tuju & 'send on errand' \\
ni-uli-ulit & 'repeatedly' & ulit & 'repeat'
\end{tabular}
(144) Reduplication template type \(2 \sigma \sigma_{\mathrm{c}}-/ \mathrm{E} \sigma \sigma_{\mathrm{c}}\) - without other verbal prefixation
gempa-gempang
linjo-linjo’
tundo-tundo
lingko-lingko
taru-tarus
mbiru-mbirung
bebe-beber
sampa-sampal
'go walking' 'run and run' 'sitting' 'coiled' 'continuing 'flaming' 'encircling' 'cutting'
\begin{tabular}{ll} 
gempang & 'walk' \\
linjo' & 'run' \\
tundo & 'sit' \\
lingko & 'coil'
\end{tabular}
tarus 'continue'
mbirung 'large flames'
beber 'encircle'
sampal 'cut, hack'
(145) Reduplication template type \(3-\sigma_{c} \sigma /-E \sigma_{c} \sigma\)
\begin{tabular}{llll} 
mang-abut-ngabut & 'keep clearing away' & abut & 'clear away' \\
non-(t)ari-nari & 'dance and dance' & tari & 'dance' \\
mong-komung-komung & 'carry and carry' & 'omung & 'carry' \\
re-gila-gila=mo & 'fearful, crazed' & gila & 'crazy' \\
'a-nggalang-nggalang & 'continuously itchy' & nggalang & 'itch' \\
nom-(p)ikir-mikir & 'think and think' & pikir & 'think'
\end{tabular}

Examples (146)-(149) illustrate reduplication template type \(1 \sigma_{c}-\). In (146) the first syllable of the root bura 'speak' is reduplicated. In (147)-(149) the first syllable of the stem is reduplicated.
(146)
\begin{tabular}{ll} 
Robuburai & nutoo. \\
ro-bu-bura-i & \(n u=\) too \\
IV/IR-RED-speak-DIR & CN/GE=person
\end{tabular}
'One person kept talking about him/her.'
[EN97-004.2]
(147) Baи иo nipopogabu nijimo.
bau 'иo ni-po-po \(1_{1}\)-gabu nijimo
fish yonder IV/RE-RED-SF-cook 3PL/GE
'They cooked that fish over and over.'
[EN97-002.19]
(148) Komputer nipapagurua'o'u io.

Komputer ni-pa-pa-guru-a'='u io
computer IV/RE-RED-CAUS/SF-learn-TZ=1SG/GE 3SG/AB
'I kept using the computer to teach him.'
[EN97-003.66]
(149) A'u nompopombosi' tagu'u.
a'u \(N\)-pong-po-po \({ }_{2}\)-mbosi' tagu='u
1SG/AB RE-SF/PT-RED-CAUS-good friend=1SG/GE
'I repeatedly straightened out my friend.'
[EN97-003.5]

Examples (150)-(154) provide reduplicated verbs with other verbal prefixes which precede template type 2 .
\begin{tabular}{llll} 
Toluinsang & niuli-ulit & nukai-kai & nongkai \\
tolu-insang & ni-uli-ulit & \(n u=k a i-k a i\) & \(N\)-pong-’ai \\
three-time & IV/RE-RED-repeat & CN/GE=RED-grandpa & RE-SF/PT-call
\end{tabular}
tambao sono niolu'inyo.
tambao sono ni-olu'- \(i=n y o\)
pelican with IV/RE-chant-DIR=3SG/GE
'As the grandfather called to the pelican he repeated the chant three times.'
(151) Io sura mengkani-ngkani lamunong.
io sura M-pe-ngkani-ngkani lamunong
3SG/AB only IR-SF/DY-eat-RED grass
'He only eats grass.'
[horse.pin 145]
(152)
\begin{tabular}{llll} 
Emu & nao & mongoorop-oropomo & no'uita-itai. \\
'emu & nao & mo-[ong]-orop-orop=mo & no'u-ita-ita-i \\
2PL/AB & that & ST/IR-DIST-hunger-RED=COMP & 1SG.IV/RE-RED-see-DIR
\end{tabular}
'You all are each already hungry I see.'
[poora.pin 033]
(153) Baliung moo no'u'omung-'omung.
baliung moo no'u-'omung-'omung
axe this 1SG.IV/RE-RED-carry
'I kept on carrying this axe.'
[asu2.pin 067]
(154) Naomo joo oo tomepeaka-akali a'u.
nao=mo joo 'oo to=mepe-aka-akal-i a'u
that=COMP however \(2 \mathrm{SG} / \mathrm{AB} \quad \mathrm{RM}=\mathrm{AV} / \mathrm{IR}-\) RED-deceive-DIR \(1 \mathrm{SG} / \mathrm{AB}\)
'However there you are who keeps tricking me.'
[troll.int 301]

Examples (155)-(160) show template reduplication type 2 without any other verbal prefixation.
\begin{tabular}{llllll} 
(155) Ila mai & uo & io & lampa-lampa, & nelampa \\
ila mai & 'uo & io & lampa-lampa, & N-pe-lampa \\
ABL come & yonder & 3SG/AB & RED-travel & RE-SF/DY-travel \\
& & & \\
tolumbengimo & tolueleo. & & \\
tolu-mbengi \(=\) mo & tolu-eleo & & \\
three-night=COMP & three-day & &
\end{tabular}
'After that he walked and walked, and he had already walked three nights and three days.'
[asu2.pin 060]
(156) Saa uo bebe-beber jomo bebe-beber
saa 'uo bebe-beber jomo bebe-beber
python yonder RED-encircled just RED-encircled
'The python encircled (him) and just kept encircling (him).'
[troll.int 267]
(157) Paey jimo nopotundo mbosi-mbosi'.
paey jimo N-popo-tundo mbosi-mbosi'
and.then 3PL/AB RE-SF/POS-sit RED-good
'And then they sat down in a good manner.'
[fktale01.txt 034]
\begin{tabular}{lllllll} 
(158) & Bai & uo & jimo & mono & tundo-tundo & ribongkarang \\
bai & 'uo & jimo & mono & tundo-tundo & ri=bongkarang & 'uo \\
like & yonder & 3PL/AB & still & RED-sit & LOC=hut & yonder
\end{tabular}
\begin{tabular}{llll} 
tarus & uulo', & иo & nolumeap. \\
tarus & uulo' & 'uo & \(N_{\text {-po }}\)--[um]-leap \\
continue & horsefly & yonder & RE-SF/LCM-TEL-fly
\end{tabular}
'After that they were still sitting in that hut, and then that horsefly flew off.'
[mdtext19.txt 040]
(159) Bengkel uo tundo-tundomo riogo, najarimo sa’ulong.
bengkel 'uo tundo-tundo=mo ri=ogo, na-jari=mo sa'ulong
female yonder RED-sit=COMP LOC=water COP/RE-become=COMP sago
'The woman kept sitting in the water, and she became a sago tree.' [mdtext2.txt 061]
(160) Ila uo ponyu moo lolo-lolon manyau.
ila uo ponyu moo lolo-lolon ma-nyau
ABL yonder sea.turtle this RED-swim UD/IR-go.down
'After that this sea turtle swam and swam down.' [trtlegg.pin 026]
The identification of template 3 reduplication as a suffix can be determined by the fact that morphophonemic modification of a prefixed root is copied, e.g. mongkomung-komung from the root 'omung 'carry' and nonari-nari from the root tari 'dance' as in example (161) (see also (145)). Examples (162) and (163) show the final nasal of the prefix reduplicated with the root. When there are no distinct affixes on the base other than the
reduplicant, type 3 reduplication becomes difficult to distinguish from rhetorical usage. In rhetorical usage, repetition of a whole word is used for dramatic effect and often occurs two, three, or more times (see \(\S 17.3\) for a discussion of repetition).
(161) Unga bengkel niHerodias nonari-nari ritolo nijimo.
unga bengkel ni=Herodias \(N\)-pong-tari-nari ri=tolo nijimo child female PN/GE=H. RE-SF/PT-dance-RED LOC=front 3PL/GE
'Herodias's daughter danced and danced in front of them.'
[Mark 6:22]
(162) Ono jomo mangabut-ngabut bumbu-bumbu
ono jomo \(\quad\)-pong-abut-ngabut bumbu-bumbu
if just IR-SF/PT-clear-RED RED-weed
nupetombolokuongoto nao...
nu=pe-tomboloku-ong=oto nao
CN/GE=SF-sweet.potato-locN=1PL.INC/GE that
'If we just clear away the weedy growth from those sweet potatoes...' [poora.pin 217]
```

(163) Ito monsale-nsale roi numata.
'ito M-pong-sale-nsale roi nu=mata
1PL.INC/AB IR-SF/PT-coax.lose-RED sleepy CN/GE=eye
`We are persuading our eyes to lose their sleepiness.' [tangke02.doc riddle \#3]

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\subsection*{13.4.2 Other modal prefixes}

\subsection*{13.4.2.1 Deliberate prefix ti-, titi, tingka, and naningka-}

Deliberate mode is marked by several prefixed forms: ti-, titi-, tingka-, and naningka-. All but the latter always follow either the deliberate modal verbal prefix mo-/no-, or occasionally the prefix me-/ne- (no difference in meaning has been detected as yet). Verbs with this affixation denote an action done deliberately by the subject (which may result in a reflexive activity as well), as in (164) and (165). This prefix contrasts with the nonvolitional prefix \(t e-\), described in 13.4.2.2. Constructions with the deliberate prefix are sometimes used to express a pretended action. Example (166) shows that either interpretation is possible for some words, whereas (167) and (168) are likely to be understood solely as pretended activities. Example (168) shows the me- preceding titi-.
(164) Io notitinabu.
io no-titi-nabu
3SG/AB AV/RE-DEL-fall
'He/she deliberately fell down.'
[EN98-001.67]
(165) Io motitipate.
io mo-titi-pate
3SG/AB AV/IR-DEL-kill
'He/she wants to kill himself/herself.'
[EN98-001.68]
(166) Io notitiosi.
io no-titi-osi
3SG/AB AV/RE-DEL-strong
'He/she strengthened himself/herself.' or: 'He/she pretended to be strong.'
[EN98-001.67]
(167) Io notitituru.
io no-titi-turu.
3SG/AB AV/RE-DEL-sleep
'He/she pretended to be asleep.'
[EN98-001.66]
(168) A'u netitipee.
a'u ne-titi-pee
1SG/AB AV/RE-DEL-sick
'I pretended to be sick.'
[EN98-001.66]

Examples (169)-(173) provide contextual uses of the deliberate mode with the prefix titi-. Examples (172) and (173) show the variant ti- with the verb keni 'noise', whereas the same verb in (171) uses titi- with no identifiable difference in meaning.
(169) Io notitibarani ma'o risiPilatus, nomongi batang niYesus. io no-titi-barani ma'o ri=si=Pilatus, \(N\)-po \(o_{1}\)-mongi batang ni=Yesus \(3 \mathrm{SG} / \mathrm{AB} \mathrm{AV} / \mathrm{RE}-\mathrm{DEL}-\) brave go \(\mathrm{LOC}=\mathrm{AB}=\mathrm{P}\). RE-SF-request corpse \(\mathrm{PN} / \mathrm{GE}=\mathrm{J}\).
'He took courage (lit. made himself brave) and went to Pilate, and requested the body of Jesus.'
[Mark 15:43]
(170) Ila uo io nebura notitiasi risiYesus...
ila 'иo io \(N\)-pe-bura no-titi-asi ri=si=Yesus
ABL yonder 3SG/AB RE-SF/DY-speak AV/RE-DEL-pity LOC \(=\mathrm{PN} / \mathrm{AB}=\mathrm{Jesus}\)
'After that he spoke pleading (lit. pity himself) to Jesus...'
[Mark 5:23]
(171) Ai siYesus ndau notitikeni, ndau diang nisimbatinyo.
ai si=Yesus ndau no-titi-keni, ndau diang ni-simbat-i=nyo
but PN/AB=J. NEG AV/RE-DEL-noise NEG EXIS IV/RE-answer-DIR=3SG/GE
'But Jesus didn't make a sound, he didn't answer.'
[Mark 14:61]
(172) Jimo jomo notikeni,
jimo jomo no-ti-keni,
3PL/AB just AV/RE-DEL-noise
diang topotumangis no’ongguangguang.
diang to-po-[um]-tangis no-'o-nggua-ngguang
EXIS AGNM-SF-TEL-cry ST/RE-HAVE-RED-wail
'They just (intentionally) made noise, there were weepers who kept wailing.'
[Mark 5:38]
(173) Ee nyaa motikeni!
ee nyaa mo-ti-keni
hey don't AV/IR-DEL-noise
'Hey don't make so much noise!'
[troll.int 239]
Examples (174) and (175) illustrate the prefix tingka-. \({ }^{27}\)
\begin{tabular}{llll}
\begin{tabular}{l} 
Notingkanabumo \\
no-tingka-nabu=mo
\end{tabular} & \begin{tabular}{l} 
riogo \\
ri=ogo
\end{tabular} & \begin{tabular}{l} 
to'otorotoro \\
to='o-toro-toro
\end{tabular} & uo, \\
AV/RE-DEL-fall=COMP & LOC=water & RM=HAVE-RED-whirl & yonder \\
panganganta & ningeno & moo. & \\
\begin{tabular}{l} 
panganganta
\end{tabular} & \begin{tabular}{l} 
ningeno
\end{tabular} & moo. &
\end{tabular}
'He deliberately fell into water that was a whirlpool, this flesh-eater just now (mentioned).'
[troll.int 336]
(175) Unga uo nebentang ritano, paey notingkaduling
unga 'uo no-bentang ri=tano, paey no-tingka-duling
child yonder ST/RE-fall LOC=ground and.then AV/RE-DEL-lie.down
ma'o mai ilunyo nembuyo.
ma'o mai ilu=nyo N-pe-mbuyo
go come saliva=3SG/GE RE-SF/DY-mucous
'The child fell over onto the ground, and then he deliberately lay down with saliva and mucous coming out.'
[Mark 9:20]
Examples (176), (178), and (179) illustrate the last prefix used for deliberate mode, i.e. naning-. \({ }^{28}\) Example (177) contrasts the non-deliberate use of 'omung 'carry' with deliberate use in (176).
\begin{tabular}{lll} 
(176) A'u & naningkomuni & bau. \\
a'u & naning-'omung-i & bau \\
1SG/AB & AV.DEL/RE-carry-DIR & fish \\
'I intentionally held the fish.' & \\
(177) A'u & nongkomuni & bau. \\
a'u & N-pong-'omung-i & bau \\
1SG/AB & RE-SF/PT-carry-DIR & fish \\
'I held the fish.'
\end{tabular}

\footnotetext{
\({ }^{27}\) This is probably derived from fusing the ting- with a resultative prefix *ka-found in other Sulawesi languages such as in the Kaili languages Ledo and Da'a.
\({ }^{28}\) This prefix is not analysable synchronically, but diachronically the obvious link may be a prefix *nangthat preceded the ting- prefix.
}
(178) Io naningkologi jalan.
io naning-'olog-i jalan
3SG/AB AV.DEL/RE-cut-DIR road
'He/she intentionally took a short cut (lit. he intentionally cut a trail/road).'
[EN98-001.65]
\begin{tabular}{clll} 
(179) Io & naningkologa' & jimo & jalan. \\
io & naning-’olog-a' & jimo & jalan \\
3SG/AB AV.DEL/RE-cut-TZ & 3PL/AB & road
\end{tabular}
'He/she took them on a shortcut.'
Additional words elicited with this prefix are listed here, with the root in parentheses: naningku'ut 'reject' (ku'ut), notingkaujang 'bathe in the rain' (ujang), notingkalulus 'deliberately escaping by sliding down a coconut tree' (lulus), notingkalipo 'deliberately disappearing' (lipo), notitiempur 'intentionally being late or slow' (empur), notingkarade 'climbing up a wall with fingers and fingernails (e.g. a steep bank or cliff)' (rade), notiti'aug 'intentionally paddle' ('aug), naningkologi 'intentionally take shortcut' ('olog), naningkoto 'intentionally tie s.t.' ('oto), and notitibarani 'be brave, take courage' (barani). \({ }^{29}\)

\subsection*{13.4.2.2 Non-volitional prefix te-}

The prefix te- has either non-volitional or an abilitative sense. The prefix me-/ne-, which always precedes \(t e\) - can be seen to be a distinct formative from \(t e\) - because \(t e-\) also occurs following the inverse voice prefix ro-/ni-, as can be seen by comparing examples (180) and (181). Me-/ne- does not ascribe the subcategorisation of the verb (as the basic class verb prefixes do), but the root of the verb itself identifies the subcategorisation of the verb as can be attested in comparing the transitive 'omung 'carry' in examples (180) and (181) with the stative gaar 'far, distant' in examples (182) and (183). \({ }^{30}\)
(180) Tomogurang jojoo mete’omungomo sanjata nijimo.
tomogurang jojoo me-te-'omung=mo sanjata nijimo
elders all AV/IR-NV-carry-COMP weapon 3PL/GE
'All the elders carried their weapons.'
[horse.pin 291-292]
(181) Sanjata'u nite'omungo'u.
sanjata='u ni-te-'omung='u
weapon=1SG/GE IV/RE-NV-carry=1SG/GE
'I carried my weapon.'
[EN97-001.17]

\footnotetext{
29 The root barani 'brave' is either cognate or a loan from Indonesian berani, and the affixed form notitibarani is translated into Indonesian as beranikan diri 'cause yourself to be brave'.
30 Technically all verbs which take a verb class prefix subcategorise their matrix verb by the verb root, and the verb class prefix agrees with the subcategorisation. However, whenever a verb class prefix conflicts with the verb root class then the verb class prefix overrides the verb root's subcategorisation.
}
```

(182) A'u netegaar ila tagu'u.
a'u ne-te-gaar ila tagu='u
1SG/AB AV/RE-NV-far from friend=1SG/GE

```
'I am separated a little distance from my friend.' (context: e.g. in fishing boats on the sea)
[EN98-002.1]
\begin{tabular}{llll} 
(183) A'u & nagaar & ila & tagu'u. \\
a'u & no-gaar & ila & tagu='u \\
1SG/AB & ST/RE-far & from & friend=1SG/GE
\end{tabular}
'I am far from my friend.'
[EN98-002.1]

Often it is not possible to distinguish between these meanings. \({ }^{31}\) The te- prefix will be discussed first with transitive roots in §13.4.2.2.1, and then with stative roots in \(\S 13.4 .2 .2 .2\). Representative examples of verbs from all of the major verb classes that can take the non-volitional prefix te- are listed in (184). Also included are some classes that are unverified (because the full verb paradigm was not available in the corpus), as well as a few words that apparently only occur in verb class VII.
(184)
\begin{tabular}{ll} 
Verb class prefix & te-prefix class \\
mon-diit & me-te-diit \\
mon-tui & me-te-tui \\
meng-inang & me-te-inang \\
mon-(t)oto' & me-te-toto', \\
mong-komung & me-te-'omung \\
mang-ayo', & me-te-(in)-ayo' \\
mon-taub & me-te-taub \\
mom-buka' & me-te-buka', \\
mepe-tanduk & me-te-tanduk \\
mom-bira & me-te-bira \\
mo-'ono' & me-te-'ono' \\
me-ntama & me-te-ntama \\
me-gois & me-te-gois \\
me-beber & me-te-beber \\
mo-'o-turu & me-te-om-po-turu \\
& \\
mo-dua', & me-te-dua', \\
mo-po-duling & me-teduling \\
mo-po-lupit & me-te-lupit \\
mol[um]ambot-a' & me-te-lambot \\
mo-ontong & me-te-ontong \\
me-meas & me-te-meas \\
ma-gaar & me-te-gaar \\
mo-umba & me-te-umba \\
mo-luar & me-te-luar
\end{tabular}
\begin{tabular}{ll} 
English gloss of root & Root verb class \\
'pull' & Class I (PT) \\
'touch, hold' & Class I (PT) \\
'eat' & Class I (PT) \\
'slash' & Class I (PT) \\
'carry' & Class I (PT) \\
'smell', & Class I (PT) \\
'close, cover' & Class I (PT) \\
'open' & Class I (PT) \\
'horn(s)' & Class I (PT)/noun \\
'spread open, unroll'' & Class I (PT) \\
'hit, strike' & Class II (PT) \\
'enter' & Class III (DY) \\
'descend', & Class III (DY) \\
'tangle, ensnared', & Class III (DY) \\
'sleep'; 'fall asleep' & Class III \\
& (DY)/noun \\
'arrive, find' & Class IV (DE) \\
'lay down' & Class V (POS) \\
'sideways, on its side' & Class V (POS) \\
'yearn, homesick' & Class VI (LCM) \\
'straight, straighten' & Class VII (ST) \\
'white, whiten' & Class VII (ST) \\
'far, distant' & Class VII (ST) \\
'open' & Class VII (ST) \\
'want'; 'delighted' & Desiderative verb
\end{tabular}

\footnotetext{
\({ }^{31}\) The Indonesian cognate ter- is often described in grammars as 'accidental' or as something that just is or just happens.
}
\begin{tabular}{lllll} 
(184) & Verb class prefix & \(\boldsymbol{t e}\) - prefix class & English gloss of root & Root verb class \\
Cont. & -- & me-te-ariulu' & 'lead, out in front' & \begin{tabular}{l} 
class unverified
\end{tabular} \\
& -- & me-te-kening & 'noise, noisy' & class unverified \\
& -- & me-te-engkirat \({ }^{33}\) & 'raise eyebrows' & class unverified \\
-- & me-te-durus & 'lay even with s.t.' & class unverified \\
-- & me-te-jila' & 'rise of water' & class unverified \\
-- & me-te-ompos & 'strike exactly' & class unverified \\
-- & me-te-ogot & 'tie up' & class unverified
\end{tabular}

The valency of the verbal root and its basic verb class do not change. Stative verbs which take the te- prefix still form stative clause constructions (with a \(\mathrm{S}_{\mathrm{P}}\) argument, see §13.4.2.2.2), and transitive verbs still have two arguments (A and P , see §13.4.2.2.1).

\subsection*{13.4.2.2.1 Non-stative verbs with te-}

Examples (185)-(188) illustrate uses of accidental or coincidental events that are marked with the te-prefix. Example (185) relates an event that happened to me. Many entrances in Indonesia are low and too often I unintentionally strike my head against the upper part of the doorway. Example (186) comes from a folk tale and describes the man finding a house at the edge of a village (i.e. he was not looking for the house, so he 'happened upon it').
\begin{tabular}{lllll} 
(185) \begin{tabular}{ll} 
Ba'i & niama \\
ba'i & ni=ama
\end{tabular} & niLori & netetandu, & ridopi \\
head & \(\mathrm{PN} / \mathrm{GE}=\) father & \(\mathrm{PN} / \mathrm{GE}=\mathrm{L}\). & ne-te-tandu' & AV/RE-NV-butted \\
ri=dopi \\
LOC=board
\end{tabular}
'The head of Lori's father hit (lit. butted) the board that juts above the doorway.'
[jptext07.jdb 037]
\begin{tabular}{rlllll} 
(186) Aa & io & netedua' & junjung & ritampa' & nukampung. \\
\(a a\) & io & ne-te-dua, & junjung & ri=tampa' & nu=kampung \\
INTJ & 3SG/AB & AV/RE-NV-arrive & house & LOC=edge & CN/GE=village
\end{tabular}
'Ah, he found (or: happened upon) a house at the edge of the village.' [asu2.pin 148]
Example (187) is from a video of how snares are used. When a bird enters the snare it pulls the snare (unintentionally) and then because the snare trip is triggered the sapling pulls the snare taut and catches the feet of the bird (or 'happens to tie its feet up').

\footnotetext{
\({ }^{32}\) Various word forms similar to meteariulu 'lead, out in front' all are transparently formed from the prepositional phrase \(r i=u l u\) ' \(\mathrm{ABL}=\) before, first'.
\({ }^{33}\) The lexical noun engkirap 'eyebrow', is similar, contrasting only in the final consonant.
}
```

(187) Jari ono rataang ba'anyo rotoja' io metediit
jari ono ro-taang ba'a=nyo ro-toja' io me-te-diit
so if IV/IR-fasten loop=3SG/GE IV/IR-step.in 3SG/AB AV/IR-NV-pull
bai moo, meteogotomo paa numanu'.
bai moo me-te-ogot-mo paa nu=manu'
like this AV/IR-NV-tie=COMP foot CN/GE=bird

```
'If its snare loop is fastened, and then stepped in, it is pulled like this, and the bird's foot is tied up.'
[videotr.txt 246]
Example (188) is a bit different since the appearance of the children inside the middle of a house occurs after they have followed magical instructions of closing and then opening their eyes. Their arrival inside the house is not of their own volition or power, since it is an external power which has brought them into this house. Unspecified external power is similarly assumed in the particular resulting state of inanimate objects in examples (189)-(193).
```

(188) Paey ami netentama riunte' nujunjungoto.
paey 'ami ne-te-ntama ri=unte' nu=junjung=to
and.then 1PL.EXC/AB AV/RE-NV-enter LOC=middle CN/GE=house=1PL.INC/GE

```
'And then we (exc.) appeared (lit. happened to enter) in the middle of your (hon/inc.) house.'
[poora.pin 586]
Examples (189)-(193) demonstrate the use of te- to mark the changed state of an inanimate object resulting from the effects or cause of an external force. Example (189) describes the relative position of the sun as just passing its zenith and beginning to 'go down' or 'descend' in contrast to its previous path of ascent. Examples (190) and (191) show that inanimate objects (which do not have their own volition) appear in a certain manner or state (how they arrived or came that way is irrelevant to the predication). Examples (192) and (193) show the previous contexts that brought the inanimate objects into their present state.
(189) Sampanyo netegoisomo eleo.
sampanyo ne-te-gois=mo eleo
after.that AV/RE-NV-descend=COMP sun
'After that the sun began going down (i.e. immediately after noon).' [troll.int 083]
(190) Diang luba' netebeber ritandang nuti'or uо.
diang luba' ne-te-beber ri=tandang nu=ti'or 'ио

EXIS hair AV/RE-NV-tangle LOC=branch CN/GE=bamboo yonder
'There was hair tangled around the branch of the bamboo (sp.) there.' [mdtext1.txt 083]
(191) Nisiira' ma’o babaang o sava-savang jojoo netetaub.
ni-siir-a' ma’o babaang o sava-savang jojoo ne-te-taub
IV/RE-look-TZ go door and RED-window all AV/RE-NV-close
'(When we) looked at the door and windows they were all closed up.' [jptext03.jdb 028]
```

(192) Jimo tarus nombira sombal. Bai uo netebiramo
jimo tarus $N$-pong-bira sombal bai 'uo ne-te-bira=mo
3PL/AB continue RE-SF-unroll sail like yonder AV/RE-NV-unroll=COMP

| sombal | uo, | payangan | uo | noluminjo'omo. |
| :--- | :--- | :--- | :--- | :--- |
| sombal | 'uo | payangan | 'uo | $N_{\text {-po }}^{1}$-[um]-linjo'=mo |
| sail | yonder | boat | yonder | RE-SF/LCM-TEL-run=COMP |

```
'They then unfurled the sail. After they had unfurled the sail, the boat began to sail (lit. run).' [mdtext20.txt 177-178]
\begin{tabular}{llll} 
(193) Tarus & nitatalinyo & bamba & uo. \\
tarus & ni-tatal-i=nyo & bamba & 'uo \\
continue & IV/RE-stomp-DIR=3SG/GE & door & yonder
\end{tabular}
\begin{tabular}{llll} 
Tarus & netebuka' & bamba & ио. \\
tarus & ne-te-buka' & bamba & 'иo \\
continue & AV/RE-NV-open & door & yonder
\end{tabular}
'And then he kicked the door. And then the door opened.' [mdtext13.txt 019-020]
Unlike the previous examples, (194)-(197) demonstrate the uses of te- to mark an ability to do something or an intentional act which may lack some degree of control from the agent. Example (194) is a true story narrative of a python attack. The victim attempts to defend himself by slashing at the python with his machete, but at first only succeeds in cutting his own foot (or leg).
```

(194) Peruoinsangonyo nitoto'onyo ndau nete'ono' saa
pe-ruo-insang=nyo ni-toto'=nyo ndau ne-te-'ono' saa
SF-two-time=3SG/GE IV/RE-slash=3SG/GE NEG AV/RE-NV-strike python
butu nete'ono' paanyo.
butu ne-te-'ono' paa=nyo
only AV/RE-NV-strike foot=3SG/GE
'The second time he slashed, he wasn't able to strike the python, but he only happened to strike his own foot.'
[bulagon 013]

```

Example (195) is a folk tale about a blind man and a cripple. At the end of the story the two are hitting each other, and the blind man happens to strike the cripple on his leg, and then suddenly his leg is healed and he is able to straighten it.
\begin{tabular}{lllll} 
Neteompos & ma'o & rialingkot & tonangkait & uo, \\
ne-te-ompos & ma'o & ri=alingkot & to-no-ngkait & 'uo \\
AV/RE-NV-strike & go & LOC=popliteal.space & AGNM-ST/RE-cripple & yonder
\end{tabular}
\begin{tabular}{lllll} 
kaliu-liu & neteontong & paa & tonangkait & uo. \\
kaliu-liu & ne-te-ontong & paa & to-no-ngkait & 'uo \\
turn-RED & AV/RE-NV-straight & foot & AGNM-ST/RE-cripple & yonder
\end{tabular}
'He struck behind the knee of the cripple, and suddenly the cripple's leg straightened out.'
[nangkait.pin 200]

Example (196) is a folk tale about a fisherman and a pelican. As he is out fishing with his circular casting net he sees ('able to see' or 'happens to see') the fish he is after. Example (197) is from another folk tale in which the king's daughter chooses the man with golden skin (which he is hiding from public attention) by eating his leftovers.
\begin{tabular}{lllr} 
Tokaikai & moo & nete'itomo & bau. \\
to-kai-kai & moo & ne-te-'ito=mo & bau \\
AGNM-RED-grandpa & this & AV/RE-look=COMP & fish
\end{tabular}
'The grandfather already could see fish.' [tambao.tst 003]
(197) Ila uo tarus bengkel uo neteinang labi niKuse'.
ila 'uo tarus bengkel 'uo ne-te-inang labi ni=Kuse'.
ABL yonder continue female yonder AV/RE-NV-eat leftover \(\mathrm{PN} / \mathrm{GE}=\mathrm{K}\).
'After that then the girl ate Kuse's leftovers.' [mdtext4.txt 075]
Examples (198) and (199) contrast the transitive verb 'omung 'carry' with the actororiented mete- prefix combination with the inverse voice prefix combination nite- (both of which appear to have the abilitative sense).
(198)
\begin{tabular}{lllll} 
Tomogurang & jojoo mete'omungomo & sanjata & nijimo \\
tomogurang & jojoo me-te-'omung=mo & sanjata & nijimo \\
elders & all & AV/IR-NV-carry-COMP & weapon & 3PL/GE
\end{tabular}
'All the elders carried their weapons.'
[horse.pin 291-292]
(199) Sanjata'u nite'omoungo'u.
sanjata= 'u ni-te-'omoung='u
weapon=1SG/GE IV/RE-NV-carry=1SG/GE
'I carried my weapon.'
[EN97-001.17]
Examples (200)-(204) contrast ayo' 'smell' with and without the prefix te- in active voice and inverse voice verb constructions. Example (202) shows a variation of the teverb construction with the relic infix -in- which some speakers may use in combination with this particular verb. \({ }^{34}\)
(200) A'u mangayo' obol.
a'u M-pong-ayo' obol
1SG/AB IR-SF/PT-smell smoke
'I smell smoke.'
[EN97-002.44]
(201) A'u meteayo' obol.
a'u me-te-ayo' obol
1SG/AB AV/IR-NV-smell smoke
'I can smell smoke.'
[EN97-002.44]

\footnotetext{
\({ }^{34}\) A few verbs are regularly used with -in-. The transitive verb inang 'eat' has lexicalised the infix, whereas other verbs such as ayo' 'smell' and epe 'hear' are often formed in the active voice as me-inayo' and me-in-epe respectively.
}
(202) A'u meteinayo' obol.
a'u me-te-in-ayo' obol
1SG/AB AV/IR-NV-REL-smell smoke
'I can smell smoke.'
[EN97-002.44]
(203) Obol niayo'o'u.
obol ni-ayo'='u.
smoke IV/RE-smell=1SG/GE
'I smelled smoke.'
[EN97-002.44]
(204) Obol niteayo'o’u.

Obol ni-te-ayo'='u.
smoke IV/RE-NV-smell=1SG/GE
'I was able to smell smoke.'
[EN97-002.44]

Example (205) shows that the Class VII prefix me-/ne- is not obligatory in some verb constructions, and that the te- forms a stem with the root kening 'noisy', as evidenced by the reduplication of the first syllable.
```

(205) Io ndau tetekening.
Io ndau te-te-kening.
3SG/AB NEG RED-NV-noisy

```
    'She didn't make a peep (or: sound).'
[mdtext4.txt 059]

\subsection*{13.4.2.2.2 Stative verb roots with te-}

Stative verb roots can also take te-, but they cannot form a non-volitional verb from an already non-volitional stative verb. The te- prefix added to statives results in the meaning 'the most of X ' or 'a little of X '. Examples (206)-(208) provide typical uses of stative verbs with the te-prefix. Example (206) maximises the colour memeas 'white'. Examples (207) and (208) both show the verb gaar 'far' in its derivative netegaar meaning 'a bit far away' is a common reply used in riddle genres to a riddle guesser's answer. When the riddler describes the guesser's answer as netegaar as in (207), then the answer is not very close, but not far away either. In example (208) the distance between two friends in boats is a 'little distance'. Example (209) gives the stative verb without the te-.
(206)
\begin{tabular}{llllll}
...ndau & diang & toponatap & pakean & ridunia & moo \\
ndau & diang & to-pong-tatap & pakean & ri=dunia & moo \\
NEG & EXIS & AGNM-SF-wash & clothes & LOC=world & this \\
& & & & & \\
majari & pakean & metemeas & bai & uo. & \\
ma-jari & pakean & me-te-meas & bai & 'uo & \\
COP/IR-become clothes & ST/IR-NV-white & like yonder &
\end{tabular}
'...there aren't any clothes washers in the world that can make clothes as white as that.'
[Mark 9:3]
(207) Netegaar seide.
ne-te-gaar se-ide
ST/RE-NV-far ONE-small
'A little far.' (context: riddler's response to a guess.)
[tangke02.doc]
(208) A'u netegaar ila tagu'u.
a'u ne-te-gaar ila tagu='u
1SG/AB ST/RE-NV-far from friend=1SG/GE
'I'm a bit far from my friend.'
[EN98-002.1]
(209) A'u nagaar ila tagu'u.
a'u no-gaar ila tagu='u
1SG/AB ST/RE-far from friend=1SG/GE
'I am far from my friend'
[EN98-002.1]

The te- prefix sometimes occurs in combination with a following po- prefix. The \(\mathrm{po}_{1}\) prefix is assumed to be a stem former for class IV verbs (see \(\S 4.3\) and Chapter 9). Since the verbs in this class are normally denominals, this suggests that a different effect is achieved when it affixes a verb root, resulting in some skewing. The verb sometimes has an apparent reciprocal meaning, but this interpretation turns out to be a by-product of the fact that there are multiple participants.

The non-volitional mode contributes an abilitative or coincidental (or accidental) sense to the clausal predication. Examples (210)-(213) each show a subject accomplishing a task with the oblique argument.
(210) Paey netepodua' siRante Salaka sono siRante Mbulava.
paey ne-te-po \({ }_{1}\)-dua' si=Rante Salaka sono si=Rante Mbulava and.then RE-NV-SF-arrive \(\mathrm{PN} / \mathrm{AB}=\) chain silver \(\mathrm{COM} \mathrm{PN} / \mathrm{AB}=\) chain gold
'And then Silver Chain found (came upon) Gold Chain.'
[horse.pin 546]
\begin{tabular}{lllll} 
Ami & netepodua' & sono & siKapas & rijalang \\
'ami & ne-te-po \(1_{1}\)-dua' & sono & si=Kapas & ri=jalang. \\
1PL.EXC/AB & RE-NV-SF-arrive & with & PN/AB=Kapas & LOC=road
\end{tabular}
'We were able to meet (or: happened to meet) Kapas along the way.' [maslia.pin 049]
(212) A'u meteporapi sono siBecky
a'u me-te-po \({ }_{1}\)-rapi sono si=Becky.
1SG/AB IR-NV-SF-spouse with PN/AB=Becky
'I already was able to marry Becky.'
[EN98-001.26; cf. PLL \#23]
(213) A'u metepojarita sono siama niLori.
a'u me-te-po \(0_{1}\)-jarita sono siama ni=Lori.
1SG/AB IR-NV-SF-story with father PN/GE=Lori
'I speak/tell stories with Lori's father.'
[EN98-001.24; cf. PLL \#23]
Examples (214) and (215) show the te- prefix does not alter the subcategorisation of the derived denominal verb (in these clauses the verbs are intransitive).
(214) Tonangkait o tonobuta netepotagu.
to- \(N\)-po \(o_{1}\)-ngkait \(o\) to- \(N\)-po \(o_{1}\)-buta ne-te-po \({ }_{1}\)-tagu.
AGNM-RE-SF-cripple and AGNM-RE-SF-blind
RE-NV-SF-friend
'The cripple and the blind man had become friends.'
[nangkait 002]
(215) Barumbang netepotaramo.
barumbang ne-te-po \({ }_{1}\)-tara \(=\) mo
wave RE-NV-SF-clash=COMP
'The waves crashed into each other.'
[jptext05.jdb]
In examples (216) and (217) the base is inang 'eat' which here has the sense 'adjoin, abut' Examples (217) and (218) show that verbs can be formed with te- without also requiring the \(m e-/ n e-\) prefix.
(216) Junjung mami netepoinang suriab mami. junjung mami ne-te-po \(o_{1}\)-inang suriab mami.
house 1PL.EXC/GE AV/RE-NV-SF-eat eave 1PL.EXC/GE
'Our houses touch each other with their eaves.'
[EN98-001.26]
\begin{tabular}{lllll} 
(217) Tepoinang & jo'ong & mami & jomo & reitai \\
te-po \\
NV-SF-eat & jo'ong & mami & jomo & ro-ita-i. \\
Narden & 1PL.EXC/GE & just & IV/IR-see-DIR
\end{tabular}
'Our gardens adjoin each other, it only remains to be seen (where the boundary lies).'
[EN98-001.26]
(218) Durusa’ ritu paey tepouyur.
durus-a' ritu paey te-po \(1_{1}\)-uyur
lay-TZ beside and.then NV-SF-together
'Lay it beside the wood and then they will be even.'
[EN98-001.25]

\section*{14 Other clausal modifiers}

\subsection*{14.1 Introduction}

Semi-auxiliary verbs, adverbs, and negation can all be considered to be adjuncts that modify a single predication. These adjuncts are not grammatically required by the predication, since their removal would still leave a correct grammatical construction (although the semantics of the clause of course changes). The most common position for adjuncts is in the pre-verbal position (or before the predicate in the case of verbless clauses), as shown in examples (1)-(4).
(1) Negative adjunct (\$14.2)
\begin{tabular}{llll} 
A'u & ndau & mengkani & bau. \\
a'u & ndau & M-pe-ngkani & bau \\
1SG/AB & NEG & IR-SF/DY-eat & fish
\end{tabular}
'I don't eat fish.'
(2) Adverbial adjunct (veridical adverb; §14.3.4)

A'u kana mengkani bau.
a'u kana M-pe-ngkani bau
1SG/AB certain IR-SF/DY-eat fish
'I will certainly eat fish.'
[EN98-003.11]
(3) Adverbial adjunct (time adverb; §14.3.2)

A'u mono mengkani bau.
A'u mono M-pe-ngkani bau
\(1 \mathrm{SG} / \mathrm{AB}\) still IR-SF/DY-eat fish
'I am still eating fish.'
[EN98-003.11]
(4) Semi-auxiliary verb modifier ( \(\$ 14.4\) )
\begin{tabular}{lllll} 
Jimo & matua & nijimo & mengkani & bau. \\
jimo & matua & nijimo & M-pe-ngkani & bau \\
3PL/AB & capable/IR & 3PL/GE & IR-SF/DY-eat & fish
\end{tabular}
'They are capable of eating fish.'
[EN98-003.11]

\subsection*{14.2 Negation}

Negation is applied to declarative or imperative clause constructions. One of the interesting characteristics of many Central Sulawesi languages is that the names of many of them are ascribed by the basic negative declarative word for 'no' (or some variation of
the word 'no'). The word Pendau or ToPendau (Pendau people, Pendau language) is typical in this respect, i.e. ndau means 'no'. All (or at least most) Kaili languages use the word 'no' for their language or dialect, e.g. ledo, da'a, uma (see Evans n.d., Barr 1988a, 1988b). The language described nowadays as Pamona was first described as the Bare'e language (in Adriani and Kruyt 1914), which also means 'no'. The Tomini-Tolitoli language Tajio for example also means 'no' (or ajio 'no', see McKenzie 1991).

\subsection*{14.2.1 The negative ndau 'no, not'}

The negative ndau 'no, not' is used to negate declarative verbal constructions and other verbless clauses (both of these are clausal negation, see Payne 1997:282) as well as a simple answer to a yes-no question (see discussion of interjections in §5.9). Many languages distinguish constituent negation (e.g. Indonesian bukan 'not') with a different negative, but Pendau uses the negative ndau for both clausal negation and constituent negation (see Payne 1997:282).

Examples (5)-(7) are all negative responses to questions. Example (5) is a denial of some information, and example (6) shows the use of constituent negation. Example (7) is a simple negative reply (with a vocative) with the continuative aspectual enclitic \(=p o\) (see \(\S 13.3\) for discussion of aspectual enclitics).
(5) Ndau tutuu.

Ndau tutuu
NEG true
'It's not true.'
[horse.pin 175]
(6) Neburamo olongian, "ndau a’u."
\(\begin{array}{llll}\text { N-pe-bura=mo } & \text { 'olongian } & \text { ndau } & a^{\prime} u \\ \text { RE-SF/DY-speak=COMP } & \text { king } & \text { NEG } & \text { 1SG/AB }\end{array}\)
'The king spoke, "Not I".'
\begin{tabular}{llll} 
Neburamo & too & nukampung & uo, \\
N-pe-bura=mo & too & nu=kampung & 'uo \\
RE-SF/DY-speak=COMP & person & CN/GE=village & yonder
\end{tabular}
\begin{tabular}{ll} 
"ndaupo & kai." \\
ndau \(=\) po & kai \\
NEG=CONT & grandpa/VOC
\end{tabular}
'That village person spoke, "Not yet grandfather." [mdtext12.txt 012]
Examples (8)-(10) show that the negative precedes the predicate. Example (8) shows that the speaker doesn't possess a machete. Example (9) illustrates a negated existential clause. Example (10) is a verbless negated comparative clause (similar in structure to equative clauses).
\begin{tabular}{lll} 
A'u & ndau & episo \\
a'u & ndau & 'e-piso \\
1SG/AB & NEG & HAVE-machete
\end{tabular}
'I don't have a machete.'
[asu2.pin 066]
(9) Ai ndau diang obol.
ai ndau diang obol
but NEG EXIS smoke
'But there wasn't any smoke.'
[asu2.pin 174]
(10)
\begin{tabular}{lllll} 
Apa & petubuongoto & nao & ndau & bai \\
apa & pe-tubu-ong=to & nao & ndau & bai \\
because & SF/DY-live-locN=1PL.INC/GE & that & NEG & like
\end{tabular}
petubuongoto biasa.
pe-tubu-ong=to biasa
SF/DY-live-locN=1PL.INC/GE usual
'Because my pet (hon. 1PL.INC) there is not like your everyday pet.' [horse.pin 1019]
Examples (11)-(13) show the negation of the desiderative verb luar 'want'. Example (13) also shows the use of the completive aspectual enclitic \(=m o\) on the negative, which generally means 'not now, no longer, no more'.
(11) Tapi \(a^{\prime} u\) ndau moluar.
tapi \(a^{\prime} u\) ndau mo-luar
but 1SG/AB NEG UD/IR-want
'But I didn't want to.'
[bugmalei.int 015]
(12)
\begin{tabular}{llllll} 
Paey & siRante & Salaka & ndau & moluar & rasaur. \\
paey & si=Rante & Salaka & ndau & mo-luar & ro-saur \\
and.then & PN/AB-chain & silver & NEG & UD/IR-want & IV/IR-defeat
\end{tabular}
'And then Silver Chain did not want to be defeated.'
[horse.pin 226]
\(\begin{array}{llllllll}\text { (13) } & \text { Tapi } & \text { a'u } & \text { ndaumo } & \text { moluar } & \text { nomoia } & \text { sono } & \text { jimo } \\ \text { Tapi } & \text { uo. } & \text { ndau }=\text { mo } & \text { mo-luar } & N \text {-po } & \text {-moia } & \text { sono } & \text { jimo } \\ \text { but } \\ \text { but } & \text { 1SG/AB } & \text { NEG=COMP } & \text { UD/IR-want } & \text { RE-SF-live } & \text { COM } & \text { 3PL/AB yonder } \\ \text { 'But I didn't want to live with them any longer.' } & & & \text { [bugmalei.int 036] }\end{array}\)
Examples (14)-(19) show the use of the negative in stative clauses. Example (15) validates that the turtle didn't die by contrasting it with the following clause to state that he actually lived (in what was perceived to have been a life-threatening situation to him by his would-be assailants). Example (16) contrasts the prohibitive negative nyaa 'don't' in the first clause (see \(\S 14.2 .2\) for discussion of nyaa) with the use of the negative ndau 'no' second clause (this is in the context of a story with a flying horse). Example (17) illustrates a common adverbial clause used to transition from one event to another with at least the phrase ndau masae 'not long'; however, this same phrase can be used as a regular stative clause as shown in example (18) (which also has a negative possessive verbless clause preceding the stative clause). Example (19) shows the use of maala 'able, can' negated, and in this clause with the addition of the completive aspectual enclitic means 'no longer able'.
(14) A'u ndau masae.
a'u ndau mo-sae
1SG/AB NEG ST/IR-long
'I won't be long.' [horse.pin 648]
(15) Ulasang uo ndau naate, ai sura netubu. ulasang 'uo ndau no-ate ai sura \(N\)-pe-tubu turtle yonder NEG ST/RE-die but only RE-SF/DY-live 'The turtle didn't die, but he just lived.'
[ceku01.jdb 092]
(16) Nyaa bega' mapangkat, antau ami ndau meingka.
nyaa bega' mo-pangkat, antau 'ami ndau mo-ingka
don't too ST/IR-tall in.order 1PL.EXC/AB NEG ST/IR-fear
'Don't go too high, so that we won't be afraid.' [horse.pin 1165]
(17) Ndau nasae ila uo tarus no'uinang.
ndau no-sae ila 'иo tarus no'u-inang
NEG ST/RE-long ABL yonder continue 1SG.IV/RE-eat
'Not long after that, then I ate.'
[cekupitu.int 008]
(18) Jimo ndau ounga, saba' porapi nijimo ndau nasae.
jimo ndau 'o-unga, saba' po \(1_{1}\)-rapi nijimo ndau no-sae \(3 \mathrm{PL} / \mathrm{AB}\) NEG HAVE-child because SF/DE-spouse 3PL/GE NEG ST/RE-long 'They didn't have a child because their marriage hadn't been long.' [ceku02.jdb 010]
(19) Nene ndaumo maala a'u mentuung.
nene ndau=mo mo-ala a'u M-pe-ntuung
\(\mathrm{mom} / \mathrm{VOC}\) NEG=COMP ST/IR-able 1SG/AB IR-SF/DY-descend
'Mother, I can no longer come down.'
[ceku03.jdb 061]
Examples (20)-(24) show inverse voice constructions with the negative ndau. Examples (20)-(22) demonstrate the pre-verbal position of the P argument, whereas examples (23) and (24) demonstrate the negation of inverse voice constructions with the post-verbal position of the P argument. In both word order variations ndau is always in the pre-verbal position.
\begin{tabular}{lll} 
Ito & ndau & nitarima. \\
'ito & ndau & ni-tarima \\
1PL.INC/AB & NEG & IV/RE-receive
\end{tabular}
'They didn't receive us.'
[gibang.pin 032]
(21) Oo nao ndau niakali'u.
'oo nao ndau ni-akal-i='u
\(2 \mathrm{SG} / \mathrm{AB}\) that NEG IV/RE-deceive-DIR=1SG/GE
'I did not deceive you.'
[mdtext10.txt 017]
(22)
\begin{tabular}{llll} 
Jimo & nao & ndau & niotoi'u. \\
jimo & nao & ndau & ni-otoi \(=\) 'u \\
3PL/AB & that & NEG & IV/RE-know=1SG/GE
\end{tabular}
'I don't know them.'
[miracle1.pin 051]
(23)
\begin{tabular}{llllll} 
Ai & rapinyo & langkai & uo & ndau & nibibiina'onyo \\
ai & rapi \(=\) nyo & langkai & 'uo & ndau & ni-bi-biing-a'=nyo \\
but & spouse=3SG/GE & male & yonder & NEG & IV/RE-RED-hear-TZ=3SG/GE
\end{tabular}
\begin{tabular}{llll} 
bisara & nirapinyo & bengkel & uo. \\
bisara & ni=rapi=nyo & bengkel & 'uo \\
conversation & PN/GE=3SG/GE & female & yonder
\end{tabular}
'But that husband, he did not listen to his wife's conversation there.' [mdtext14.txt 044]
(24) Ndau roolimu loka nao,
ndau ro-oli=mu loka nao
NEG IV/IR-buy=2SG/GE banana that
\begin{tabular}{lllll} 
nao & sura & pombagi'u & sono & oo. \\
nao & sura & pong-bagi='u & sono & 'oo \\
that & only & SF/PT-give=1SG/GE & COM & \(2 \mathrm{SG} / \mathrm{AB}\)
\end{tabular}
'Don't buy those bananas, those are just my gift to you.'
[mdtext15.txt 020]
Example (25) shows an example of a negated relative clause, with the proclitic relative marker to=.
(25)
\begin{tabular}{llll} 
Nielinganinyomo & ambinang & nuajaran & uo \\
ni-elingang- \(\mathbf{i}=\) nyo \(=\) mo & ambinang & nu=ajaran & 'uo \\
IV/RE-forget-DIR=3SG/GE=COMP & armpit & CN/GE=horse & yonder
\end{tabular}
\begin{tabular}{lll} 
tondau & maala & rotui'. \\
to \(=\) ndau & mo-ala & ro-tui \\
RM=NEG & ST/IR-able & IV/IR-grip
\end{tabular}
'He forgot that he shouldn't grip the horse's armpit.'
[horse.pin 916]

\subsection*{14.2.1.1 Use of the negative ndaa dia 'not' minor variation}

In riddles we find a second negative form, ndaa dia, which has the same meaning as ndau, as in (26). \({ }^{1}\) The form ndaa appears to be a minor, but productive variation of ndau restricted to constituent negation, as confirmed later in an elicitation session.
(26) Ndaa dia.
ndaa dia
NEG NEG
'Not.'
[EN97-004.52]

\footnotetext{
1 This variation of the negative ndau was discovered in the collection of riddles recorded in Lewonu village (or technically dusun of the Walandano village).
}

Example (27) shows the negation of the first person singular pronoun with the ndaa dia periphrastic construction and has the same meaning as (28) which uses the simple ndau form. \({ }^{2}\)
\begin{tabular}{llll} 
(27) & Ndaa & dia & ha'u. \\
ndaa & dia & ha'u \\
NEG & NEG & 1SG/AB
\end{tabular}
'Not I.'
[EN97-004.52]
(28) Ndau ha'u.
ndau ha'u
NEG 1SG/AB
'Not I.'
[EN97-004.52]

\subsection*{14.2.2 The prohibitive nyaa 'don't'}

Negative imperatives, or prohibitives, are formed with the word nyaa 'don't'. As with the declarative negative ndau 'no', the negative nyaa always precedes the predicate. The use of the prohibitive nyaa always requires an irrealis modality on verbs (see §13.3.3.4-5 for discussion of prohibitives with aspectual enclitics).

Example (29) is a common prohibitive clause heard when adults are speaking to children. Example (30) contrasts a prohibitive clause with a subsequent 'positive' imperative commanding someone to move on as they are not wanted there. Example (31) shows the aspectual completive enclitic \(=m o\) which creates an ultimatum (compare with the enclitic =mo on ndau which means 'no longer, no more') for the man who is excommunicated from his friends (see \(\S 16.2 .3\) for discussion of enclitics used for degrees of politeness).
(29) Nyaa metekening.
naa me-te-kening
don't AV/IR-NV-noise
'Don't be noisy!'
[gibang.pin 137]

\footnotetext{
2 The origin of dia is uncertain. It is not a synchronic variant of the existential verb diang, as demonstrated in example (27) which can be compared to this example:
\begin{tabular}{lll} 
Ndau & diang & ha'u. \\
ndau & diang & ha'u \\
NEG & EXIS & 1SG/AB \\
'I wasn't there.'
\end{tabular}

If the form dia was a variant of the existential verb diang then phrases such as *dia asu=' \(u\) would be grammatical, but they are not (asu 'dog'; and =' \(u\) ' \(1 \mathrm{SG} / \mathrm{GE}\) ). Although that is the synchronic situation, it is likely that dia and diang are historically connected. In the neighbouring Balaesang language on the Balaesang Peninsula in which this data was collected, the Balaesang language does use diang as its negative (Himmelman 2001). In Pamona (Bare'e), the negator bare'e 'not' originates from iba re'e (lit. 'not there is'), and that the Pamona re'e (coming from ria) and the Pendau dia(ng) are likely cognates (anonymous reviewer:pers. comm.). Other neighbouring Kaili languages also use ria 'no' as their current negative.
}
(30)

Oo nyaa momoia rimoo, pelampamo oo.
'oo nyaa M-po \(_{1}\)-moia ri=moo, pe-lampa=mo 'oo
2SG/AB don't IR-SF-live LOC=here SF/DY-travel=COMP 2SG/AB
'Don't you live here, you go now!'
[asu2.pin 051]
(31)
\begin{tabular}{lllll} 
Oo & nyaamo & monuut & sono & ami. \\
'oo & nyaa=mo & M-pong-tuut & sono & 'ami \\
2SG/AB & don't=COMP & IR-SF/PT-follow & COM & 1PL.EXC/AB
\end{tabular}
'Don't follow us anymore!'
[asu2.pin 052]
Examples (32)-(38) are all instances of nyaa used in inverse voice clausal constructions. Examples (32)-(34) all have the P argument in the pre-verbal position, whereas examples (35)-(38) have the P argument in the post-verbal position. These all illustrate with different verbs that the P argument cannot occur between the negative and the verb.
(32)
\begin{tabular}{llll} 
A'u & nyaa & rapasa & miu. \\
a'u & nyaa & ro-pasa & miu \\
1SG/AB & don't & IV/IR-force & 2PL/GE
\end{tabular}
'Don't you force me.'
[king.pin 124]
(33)

A'u, asi, nyaa mu'inang!
a'u, 'asi, nyaa mu-'inang
1SG/AB pity don't 2SG.IV/IR-eat
'Please don't eat me!'
[troll.int 028]
(34) I
\begin{tabular}{llll} 
Io & nyaa & mubagi & bolug! \\
io & nyaa & mu-bagi & bolug \\
3SG/AB & don't & 2SG.IV/IR-give & leftover
\end{tabular}
'Don't give him leftovers!'
[ceku03.jdb 007]
(35) Nyaa raala miu ayu ape ranggas nuaog.
nyaa ro-ala miu 'ayu ape ranggas nu=aog
don't IV/IR-get 2PL/GE wood or twig CN/GE=bamboo
'Don't take any wood or bamboo (sp.) twigs.' [mdtext15.txt 080]
(36) Nyaa mubabaasi unga nao!
nyaa mu-ba-baas-i unga nao
don't 2SG.IV/IR-RED-tease-DIR child yonder
'Don't you keep teasing that child!'
[mdtext20.txt 119]
(37) Ai nyaa rapatei miu a'u!
ai nyaa ro-pate-i miu a'u
but don't IV/IR-kill-DIR 2PL/GE 1SG/AB
'But don't kill me!'
[miracle1.pin 116]
```

(38) Nyaa mu'omung mai ayu tonialapomu nao!
Nyaa mu-'omung mai 'ayu to=ni-alap=mu nao
don't 2SG.IV/IR-carry come wood RM=IV/RE-get=2SG/GE that
'Don't bring the wood here that you got there!' [mdtext14.txt 038]

```

Example (39) illustrates a verbless clause and the use of the comparative bai 'like' in conjunction with the negative nyaa (see §14.3.4.3 for discussion of bai). Example (40) illustrates the use of a directional verb negated with nyaa. Both of these words also have the continuative \(=p o\), and contribute separate meanings which merge into the single predication. Nyaa=po means 'not yet', and mene'=opo means 'again, also'.
(39) Jari emu nyaa bai nao asi!
jari 'emи nyaa bai nao 'asi
so \(2 \mathrm{PL} / \mathrm{AB}\) don't like that pity
'So, please, don't be like that!'
[miracle1.pin 148]
(40) Nyaapo mene'opo uo!
nyaa=po mene'=po 'иo
don't=CONT go.up=CONT yonder
'Don't (yet) go up there anymore!'
[odo1.pin 008]
Examples (41)-(43) illustrate the use of nyaa with stative verbs. In (41) negative behaviour is discouraged. In (42) the rider of the horse is asked not to go too far. In example (43) the nyaa is used to ask someone to refrain from eating like a pig. This illustrates the negation of only the first clause in a complex sentence.
\begin{tabular}{ccl} 
Ai & nyaa & moboyong! \\
ai & nyaa & mo-boyong \\
but don't & ST/IR-naughty
\end{tabular}
'But don't be naughty!'
[asu2.pin 079]
(42) \begin{tabular}{llll} 
Ai & nyaapo & lulu & magaar! \\
ai & nyaa=po & lulu & mo-gaar
\end{tabular}
but don't=CONT first ST/IR-far
'But don't go too far at first.' [horse.pin 160]
\begin{tabular}{llllllll} 
(43) & Nyaa & mo'osi & mengkani & loka & apa & mepee & ompong \\
Nyaa & mo-'osi & nao! \\
don't & ST/IR-strong & IR-SF-eat & banana & because & ST/IR-hurt & stomach & that \\
'Don't eat lots of bananas, because your stomachs will hurt.' & [poora.pin 284]
\end{tabular}

Example (44) illustrates the use of nyaa with the preposition sampe 'until'. This folk tale is about a small human being discovered inside a fruit. One person is commanded to split it open slowly and carefully in order not to strike the person inside.
```

(4) Tilangomo pala-palaa, nyaa sampe mo'ono manusia
tilang=mo pala-palaa, nyaa sampe M-po-'ono manusia
split=COMP RED=slow don't until IR-SF-hit human
rilalongonyo nao.
ri=lalong=nyo nao
LOC=inside=3SG/GE that
'Split it in half very slowly so that you don't hit the human that is inside there.'

```
[mdtext15.txt 102]

\subsection*{14.2.2.1 The reduplication of nyaa}

The reduplication of nyaa provides a means of stating a potential fact or realised fact that the speaker (or thinker of inaudible thoughts) hopes will not be true, or a way of stating incredulity that something may have happened without their knowledge. I will translate examples with nyaa-nyaa idiomatically as 'heaven forbid'. Example (45) shows the thoughts of a husband concerning his wife who had been pregnant, but finds out by her actions that she is no longer pregnant. In (46) the flesh-eater reminds his friend the monkey that some of the fish should be saved for the next day just in case his hunting expedition on this day is unsuccessful.
\begin{tabular}{llll} 
Nyaa-nyaa & rapi'u & nao & no'oungamo! \\
nyaa-nyaa & rapi='u & nao & no-'o-unga=mo \\
RED-don't & spouse=1SG/GE & that & ST/RE-HAVE-child=COMP
\end{tabular}
'Heaven forbid that my wife has already had our baby!' [mdtext14.txt 022]
(46) Bia reinangoto seinsangana, apa nyaa-nyaa a'u
bia ro-inang=to seinsangana, apa nyaa-nyaa a'u
later IV/IR-eat=1PL.INC/GE tomorrow because RED-don't 1SG/AB
\begin{tabular}{lllll} 
ma'o & melolo & ndau & mo'odua' & asi. \\
ma'o & M-pe-lolo & ndau & M-po \({ }^{1}\) 'o-dua' & 'asi \\
go & IR-SF/DY-search & NEG & IR-SF/DE-HAVE-arrive & pity \\
'Later tomorrow we'll eat it, because heaven forbid that when I search for food I don't find \\
any, what a pity.' \\
[troll.int 118]
\end{tabular}

\subsection*{14.3 Adverbs}

Adverbs are adjuncts that modify clausal predications. Adverbs are difficult to classify cross-linguistically, since the categories in specific languages vary widely. Payne (1997:69) states:

Semantically, forms that have been called adverbs cover an extremely wide range of concepts. For this reason they cannot be identified in terms of time stability or any other well-defined semantic parameter.
However, it is possible to partially distinguish adverbs as a word class based on language specific criteria of word order possibilities in relationship to other word classes.

In Pendau I have classified adverbs into four sub-classes: degree, time, comparative, and veridical. Many adverbs are difficult to translate into English. Usually there is only one gloss given for any one adverb in the interlinearised parsing, but the free translation may often appear different from the parsed gloss to better fit the context. These adverbial sub-classes will each be discussed below with examples from a range of various clausal constructions.

\subsection*{14.3.1 Adverbs of degree}

Some adverbs of degree further specify or qualify the nature of a predicate by intensifying or focusing on the constituent it is modifying. Other adverbs of degree are mensural in nature, and modify the verb or predication. The adverbs of degree discussed are: jomo 'just, remain, quite' (§14.3.1.1), butu 'only, just' (§14.3.1.2), sura 'only' (§14.3.1.3), pada 'same, together' (§14.3.1.4), masaro 'often, repeatedly' (§14.3.1.5), joo 'truly, however, remain’ (§14.3.1.6), bega 'too’ (§14.3.1.7), paas 'exactly, precisely’ (§14.3.1.8) and tarapasa 'force' (§14.3.1.9).

\subsection*{14.3.1.1 The adverb jomo 'just, remain, quite’}

The adverb jomo has a range of meanings including 'just', 'quite', 'really', 'remain', and 'only'. When jomo is used with stative verbs it often means an intensive quality of the state involved (see (56)). Jomo is one adverb which seems to be restricted to a prepredicate position (always pre-verbal, but sometimes used to modify nouns or nominalised clauses which can appear post-verbally). Example (47) shows the meaning of jomo which is translated as 'just' and with the sense 'remain'. In this sentence it means that the narrator had no other choice but to live with his grandfather as a result of his particular family situation. Earlier in this narrative, in (48), the narrator describes the situation leading up to this family situation in which he and another sibling lived in a number of different homes before he ended up living with his grandfather. Example (49) shows the use of jomo in which a monkey is suddenly captured by a flesh-eater and is 'quite' or 'really' surprised. Example (50) shows jomo in an inverse voice clause construction.
\begin{tabular}{llllll} 
Tarapasa & a'u & jomo nomoia & sono & sikai'u. \\
tarapasa & a'u & jomo & N-po \(1_{1}\)-moia & sono & si=kai='u \\
force & 1SG/AB & just & RE-SF-live & COM & PN/AB=grandpa=1SG/GE
\end{tabular}
'Finally I just had to live with my grandfather.'
[cekumom.int 019]
\begin{tabular}{llllll} 
Ami & jomo & ma'o & sojunjung, & mai & sojunjung. \\
'ami & jomo & ma'o & so-junjung, & mai & so-junjung \\
1PL.EXC/AB & just & go & ONE-house & come & ONE-house
\end{tabular}
'We just went from one house to another house.'
[cekumom.int 010]
(49)
\begin{tabular}{llllll} 
Odo & moo & jomo & neteijiji, & apa & nidurau'omo \\
odo & moo & jomo & ne-te-jiji, & apa & ni-durau' \(=\) mo \\
monkey & this & just & AV/RE-NV-surprise & because & IV/RE-grab=COMP
\end{tabular}
\begin{tabular}{lll} 
nupanganganta & uo & ritundung. \\
nu=panganganta & 'uo & ri=tundung \\
CN/GE=flesh-eater & yonder & LOC=scruff.of.neck
\end{tabular}
'The monkey was quite surprised, because the flesh-eater had him by the scruff of his neck.'
[troll.int 026-026a]
(50) Ai jomo suara'u mиере.
ai jomo suara='u mи-ере
but just voice=1SG/GE 2SG.IV/IR-hear
'But you just hear my voice.'
[nagarang.pin 180]
Other uses of jomo occur in verbless clauses as in examples (51)-(53). Example (51) is a typical expression in response to situations in which the choice is left up to the other person. In examples (52) and (53) the verbless clauses with jomo are in locative predicate clauses. Examples (51)-(53) all demonstrate the meaning of jomo in the sense of 'remain' or 'only' (although it is translated more idiomatically here).
(51) "Nao jomo emu," maa’onyo.

пао јото 'ети maa'=onyo
that just \(2 \mathrm{PL} / \mathrm{AB}\) said=3SG/GE
'"That is up to you," he said.'
[king.pin 159]
(52) Alea' oo nao lei upiaramo,
alea' 'oo nao lei 'u-piara=mo
allow \(2 \mathrm{SG} / \mathrm{AB}\) that dear.girl/VOC 1SG.IV/IR-raise=COMP
jomo ito doruo rimoo.
jomo 'ito doruo ri=moo
just 1PL.INC/AB two LOC=here
'Allow me to raise you dear girl, it will be just the two of us here.' [mdtext11.txt 048]
(53) Jari jomo rapinyo bengkel sumoungonyo rijunjung uо.
jari jomo rapi=nyo bengkel sumoung=nyo ri=junjung 'uo
so just spouse=3SG/GE female alone=3SG/GE LOC=house yonder
'So it was just his wife by herself at that house.'
[mdtext14.txt 010]
Examples (54) and (55) show the use of jomo in nominalised clauses. Example (54) shows that there were lots of bananas. Similarly example (55) shows a series of three noun phrases which include descriptions of three different kinds of food that the participants looked at.
(54) Tarus ni'ito nijimo loka jomo nedea.
tarus ni-'ito nijimo loka jomo no-dea
continue IV/RE-see 3PL/AB banana just ST/RE-many
'And then they looked at the bananas which was quite a lot.' [mdtext18.txt 040]
\begin{tabular}{lllllll} 
(55) & Nisiira' & nijimo & ma'o & loka & jomo & neriri, \\
Ni-siir-a & nijimo & ma’o & loka & jomo & no-riri \\
IV/RE-gaze-TZ & 3PL/GE & go & banana & just & ST/RE-yellow
\end{tabular}
'They gazed at the bananas that were quite yellow, and the sugarcane was quite long, and the cucumbers just laying there.'
[poora.pin 041-043]
Example (56) is another interesting example of jomo in a stative verbal clause which also uses the stative verb ide 'small' with the enclitic =po to modify the noun aniong 'rice'.
\begin{tabular}{llllll} 
Bai & uo & nitainyo & isi & nuurong & uo, \\
bai & 'uo & ni-ita- \(i=n y o\) & isi & \(n u=\) urong & 'uo \\
like & yonder & IV/RE-see-DIR=3SG/GE & fill & CN/GE=pot & yonder
\end{tabular}
\begin{tabular}{llll} 
jomo & seidepo & aniong & naboli. \\
jomo & so-ide \(=\) po & aniong & na-boli \\
just & ONE-little=CONT & rice & ST/RE-left
\end{tabular}
'After that he saw the cooking pot's fillings and there was just a little bit of rice left.'
[mdtext11.txt 022]

\subsection*{14.3.1.2 The adverb butu 'only, just'}

The adverb butu has a range of meanings including most frequently 'only, just'. Examples (57)-(59) show butu in dynamic verb clause constructions.
(57) Ai odo uo butu mengkani ritubunyo.
ai odo 'uo butu M-pe-ngkani ri=tubu=nyo
but monkey yonder only IR-SF/DY-eat LOC=trunk=3SG/GE
'But that monkey only ate up on the tree trunk.'
[ceku01.jdb 029]
(58) Unga uo butu nengkani aniong nutoo uo.
unga 'uo butu \(N\)-pe-ngkani aniong nu=too 'uo
child yonder only RE-SF/DY-eat rice \(\mathrm{CN} / \mathrm{GE}=\) person yonder
'That child only ate that person's rice.'
[mdtext11.txt 024]
\(\begin{array}{lllll}\text { (59) } & \text { A'u } & \text { kana } & \text { meriing } & \text { butu. } \\ \text { a'u } & \text { kana } & \text { M-pe-riing } & \text { butu } \\ \text { 1SG/AB } & \text { certain } & \text { IR-SF/DY-bathe } & \text { only }\end{array}\)
'I will certainly just bathe.'
[troll.int 330]
Example (60) illustrates the use of butu with the locomotion verb tangis 'cry', and example (61) shows butu in an active voice verbal clause construction (in addition to the combination with moluar 'want').
(60)
\begin{tabular}{lll} 
Io & butu & motumangis. \\
io & butu & M-po \(_{1}\)-[um]-tangis \\
3SG/AB & only & IR-SF/LCM-TEL-cry
\end{tabular}
'She just keeps crying.'
[ceku03.jdb 019]
(61) Io butu moluar monggagap randaa.
io butu mo-luar M-pong-gagap randaa
3SG/AB only UD/IR-want IR-SF/PT-grope virgin
'He just wanted to grope the virgin.'
[fktale01.txt 019]
Examples (62) and (63) illustrate the meaning of butu as 'only' (although sometimes it is translated more idiomatically as 'just'). Both of these examples also illustrate butu in verbless clauses. Example (63) illustrates the contrastive use of butu. The two participants are preparing to race each other, one with a car, and the hero with his flying horse.
(62) Apa a'u ndau butu rimoo.
apa \(a\) 'u ndau butu ri=moo
because \(1 \mathrm{SG} / \mathrm{AB}\) NEG only LOC=this
'Because I am not just only here.' or: ‘Because I am not alone here.' [nagarang.pin 183]
Ri'emu oto, a'u butu ajaran.
ri='emu oto, a'u butu ajaran
LOC \(=2 \mathrm{PL} / \mathrm{AB}\) car \(1 \mathrm{SG} / \mathrm{AB}\) only horse
'You have a car, and I only have a horse.'
[horse.pin 061-062]
Examples (64) and (65) illustrate the use of butu in clauses with a reduplicated verb. In these cases the adverb emphasises the nature of the specific type of reduplication.
(64) Odo moo linjo-linjo' butu linjo-linjo'.
odo moo linjo-linjo' butu linjo-linjo'
monkey this RED-run only RED-run
'The monkey ran and ran, and he just ran and ran.'
[troll.int 175]
(65) Io teteburis butu ribau todiang ripalenyo uo.
io te-teburis butu ri=bau to=diang ri=pale=nyo 'uo

3SG/AB RED-nibble only LOC=fish RM=EXIS RM=hand=3SG/GE yonder
'He just nibbled on the fish that was in his hand there.' [troll.int 160a]
Examples (66) and (67) demonstrate the use of butu in inverse voice clause constructions in post-verbal and pre-verbal positions respectively.
(66) Upatei butu oo nao.
'u-pate-i butu 'oo nao
1SG.IV/IR-kill-DIR only 2SG/AB that
'I will just kill you there.'
[mdtext6.txt 024]
```

(67) Io butu raalapa' ogo rigalas niinanyo uo.
io butu ro-alap-a' ogo ri=galas ni-ina=nyo 'uo
3SG/AB only IV/IR-get-TZ water LOC-glass PN/GE-mother=3SG/GE yonder
'She just wanted to give him water in his mother's glass there.' [mdtext4.txt 040]

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\subsection*{14.3.1.3 The adverb sura 'just, only'}

The adverb sura overlaps in meaning to butu if it is not synonymous. However, sura is another adverb which seems to be restricted to a pre-predicate position (always pre-verbal, but sometimes used to modify nouns or nominalised clauses where it can appear postverbally). Examples (68) and (69) illustrate the delimiting nature of sura to a specific nominal amount in two verbless clauses.
(68) Sura lelima bulang a'u ri'uo.
sura lelima bulang a'u ri='uo
just five month \(1 \mathrm{SG} / \mathrm{AB}\) LOC=yonder
'I was just there for five months.'
[bugmalei.int 008]
\(\begin{array}{lllll}\text { (69) } & \text { Gajimu } & \text { sombulang } & \text { sura } & \text { onoribu }\end{array} \quad\) rupia.
'Your wages for one month will just be six thousand rupiahs.'
[bugmalei.int 029]
Examples (70) and (71) illustrate again the delimiting use of sura. Example (70) contrasts what a horse consumes compared to the opponent's vehicle which consumes petrol (identifiable in the previous context). Example (63) also delimits the predication in contrast to what the turtle had expected (i.e. the turtle expected to be given bananas instead of just banana peelings).
\begin{tabular}{lllll} 
(70) & Io & sura & mengkani-ngkani & lamunong. \\
io & sura & M-pe-ngkani-ngkani & lamung-ong \\
& 3SG/AB & just & IR-SF/DY-eat-RED & grass-locN \\
& 'He just eats grass.'
\end{tabular}
[horse.pin 145]
\begin{tabular}{llll} 
A'u & sura & nibagii & ulinyo. \\
a'u & sura & ni-bagi-i & uli \(=\) nyo \\
1SG/AB & just & IV/RE-give-DIR & skin=3SG/GE
\end{tabular}

Examples (72) and (73) demonstrate uses of sura in inverse voice constructions (also see (63) above). These show a more general usage of the meaning of sura 'just' (although 'only' would be a possible translation as well here).
\begin{tabular}{llll} 
Sura & nisoobinyo & kaeng & memeas. \\
sura & ni-soob-i=nyo & kaeng & mo-meas \\
just & IV/RE-cover-DIR=3SG/GE & cloth & ST/IR-white
\end{tabular}
'He just covered her with a white cloth.'
[nalalo.pin 136]
\begin{tabular}{lllllll} 
(73) & Jari & suranyo & nimpoyona' & nijimo & mata & nijimo \\
jari & sura=nyo & ni-mpoyong-a' & nijimo & mata & nijimo & 'uo \\
so & just=3SG/GE & IV/RE-close.eyes-TZ & 3PL/GE & eye & 3PL/GE & yonder
\end{tabular}
'So they just shut their eyes.'
[poora.pin 447]
Examples (74) and (75) show further examples of sura used in the delimiting sense of 'just, only', in sentences with relative clauses. In example (74) it is clear that the second singular addressee oo was searched for by the speaker. Example (75) identifies a group of volley ball players, but the pastor of the church was not there (identifiable in the preceding context).
\begin{tabular}{lllll} 
Apa & sura & oo & nao & tono'ulolo. \\
apa & sura & 'oo & nao & to =no'u-lolo \\
because & just & 2SG/AB & that & RM=1SG.IV/RE-search
\end{tabular}
'Because its just you there that I was searching for.'
[horse.pin 1140]
(75) Sura diang too tonotamba' voli baal ritolo nugareja.

Sura diang too to \(=N\) - po \(_{1}\)-tamba' voli baal ri=tolo nu=gareja
just EXIS person \(\mathrm{RM}=\mathrm{RE}-\mathrm{SF} / \mathrm{DE}\)-play volley ball \(\mathrm{LOC}=\) front \(\mathrm{CN} / \mathrm{GE}=\) church
'There were just people that were playing volley ball in front of the church.'
[jptext03.jdb 029]
Examples (76) and (77) contrast the uses of the non-delimiting use of sura, in (76), with example (77) which delimits a magical grain of rice that was the only thing that was eaten but couldn't be finished even after several days. This distinction seems to involve the scope of sura over the verb or over the noun. When sura modifies the scope of the noun it delimits or focuses the limitation of the noun or nominalised clause.
\begin{tabular}{llllll} 
(76) & Jimo & sura & momipit & nyau & mai. \\
jimo & sura & M-pong-pipit & nyau & mai \\
3PL/AB & just & IR-SF/PT-perimeter & go.down & come \\
& 'They just followed the coast down to here.'
\end{tabular}
[mdtext15.txt 002]
(77)
\begin{tabular}{llllll} 
Suranyo & uo & neinang, & ai ndau & notou'onyo. \\
sura=nyo & 'uo & N-pe-inang, & ai ndau & no-tou'=nyo \\
just=3SG/GE & yonder & RE-SF/DY-eat & but & NEG & ST/RE-finish=3SG/GE
\end{tabular}

Examples (78) and (79) demonstrate a contrastive use of sura with the preceding clause, which is in line with its meaning of 'just, only' or 'distinct from some other situation'.
(78)
\begin{tabular}{lllllllll} 
Jari & siDelmos moo ndau diang & ila & suku ntaninyo, & sura & Pendau. \\
Jari & si \(=\) Delmos & moo & ndau diang & ila & suku & ntani \(=\) nyo, & sura & Pendau \\
so & PN/AB=D. this & NEG EXIS & ABL tribe different \(=3\) SG/GE & just & P.
\end{tabular}
'So Delmos here isn't from any other tribe, just Pendau.'
[videotr.txt 061
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline (79) & \begin{tabular}{l}
Ndau \\
ndau \\
NEG
\end{tabular} & \begin{tabular}{l}
diang \\
diang \\
EXIS
\end{tabular} & \begin{tabular}{l}
niepe \\
ni-epe \\
IV/RE-hear
\end{tabular} & \begin{tabular}{l}
mami \\
mami \\
1PL.EXC/GE
\end{tabular} &  & \begin{tabular}{l}
nugoong \\
nu=goong \\
CN/GE=gong
\end{tabular} & miu, miu 2PL/GE \\
\hline & sura & suara & nutombolo & попи & & ayu bu & \\
\hline & ra & suara & nu=tombolo & \(N\)-pon & -tutu' & 'ayu buntu & \\
\hline & just & voice & CN/GE=woo & dpecker RE-SF & PT-pec & wood dead & \\
\hline
\end{tabular}
'We didn't hear the sound of your gong, we just heard the sound of a woodpecker pecking a dead tree.'
[mdtext15.txt 067]
Example (80) shows the use of both sura and butu in the same clause. Here it seems that their respective meanings must be different, but it is difficult to tell whether it is just adding emphasis to the adverbs' scope.
(80) Apa sura butu baliung moo no'u'omung-'omung.
apa sura butu baliung moo no'u-'omung-'omung
because only just axe this 1SG.IV/RE-carry-RED
'Because I only just carried this axe.'
[asu2.pin 067]

\subsection*{14.3.1.4 The adverb pada 'same, together'}

The adverb pada (and its variations pada-pada and limpada) means 'same' or 'together'. Examples (81 and (82) illustrate variations of pada. In example (81) two participants are involved in a race, so it is clear that they were running together. In example (82) the reciprocal formation used with liling 'stare' reinforces the 'sameness' or 'togetherness' of the verbal predication. Example (83) illustrates the post-verbal position of pada-pada.

Paey limpada ropopolinjo'.
paey li-ng-pada ro-po \({ }_{2}\)-po \({ }_{1}\)-linjo'
and.then OPPO-LIG-same IV/IR-CAUS-SF-run
'And together they would begin to run.'
[horse.pin 181]
(82) Ila uo jimo pada-pada netejiji’ nelililinong
ila 'uo jimo pada-pada ne-te-jiji' N-pe-li-liling-ong
ABL yonder 3PL/AB RED-same AV/RE-NV-surprise RE-SF-RED-stare-AREC
'After that they both were surprised together and stared at each other.' [nangkait.pin 208]
(83) Jimo nonuda pada-pada pesompuunong.
jimo \(\quad N\)-pong-tuda pada-pada pe-so-mpuung-ong
3PL/AB RE-SF/PT-plant RED-same SF-ONE-group-locN
'Together they planted one group (of seedlings).' [turtle.pin 014]

\subsection*{14.3.1.5 The adverb masaro 'often, repeatedly'}

The adverb masaro 'often, repeatedly' indicates that action has occurred a number of times, as in (84) (this is the only example of this adverb in my data).
\begin{tabular}{llllll} 
(84) & Bai & uo & io & masaro & nipasa. \\
bai & 'uo & io & masaro & ni-pasa \\
& like & yonder & 3SG/AB & often & IV/RE-pressure
\end{tabular}
'After that he was often pressured.'
[nalalo.pin 115]

\subsection*{14.3.1.6 The adverb joo 'truly, however, remain'}

The adverb joo is barely indistinguishable from its use as a propositional relator between propositions where it means 'however' (technically identified as a contrafactual propositional relation in 15.5), and may occur as an interjection which means 'truly'. When used as an adverb the meaning 'remain' may occur as a result of its basic contrafactual meaning which gives information that is contrary to expectation (which 'leaves' therefore only one possibility that 'remains'). That is, joo is only used when what it co-occurs with is counter to the perceived expectation. This is shown in example (85).

\section*{(85) Joomo jalanonyo.}

Joo=mo jalan=nyo
remain=COMP road=3SG/GE
'Just this road remains.' or: 'Only the road remains.'
[EN97-004.35]

\subsection*{14.3.1.7 The adverb bega' 'too, very'}

The adverb bega qualifies the verb augmentatively. It can be translated as 'too' or 'very', or in the case of negative clauses 'too much', as in examples (86) and (87). Example (86) illustrates the use of bega' with the perception verb otoi 'know'. In this personal narrative the writer relates that his mother died when he was very young, so he didn't really know her very well at all. Example (87) shows that when bega' is negated it decreases the augmentation. Example (88) shows the stative verb ide 'small' augmented with bega' which in this case actually creates a diminutive effect. This text is in reference to a cock fight where one participant tells his opponent that his chicken is really too small to fight his chicken.
(86) Tapi siina'u ndaupo bega' niotoi'u.
tapi siina='u ndau=po bega' ni-otoi='u
but mother=1SG/GE NEG=CONT too.much IV/RE-know=1SG/GE
'But I didn't know my mother very well.'
[cekumom.int 003]
(87) Nyaa bega' mapangkat!
nyaa bega' mo-pangkat
don't too.much ST/IR-tall
'Don't go too high!'
[horse.pin 1164]
(88)
\begin{tabular}{llll}
\begin{tabular}{ll} 
Manu'omu & nao
\end{tabular} & neide & bega'. \\
manu' \(=m u\) & nao & no-ide & bega' \\
chicken=2SG/GE & that & ST/RE-small & very
\end{tabular}
'Your chicken there is very small.'
[mdtext15.txt 139]

\subsection*{14.3.1.8 The adverb paas 'exactly, precisely'}

Paas is an adverb of precision that can be translated as 'precisely', 'exactly', 'just then', etc. \({ }^{3}\) One of the frequent uses of paas is to delimit the specific duration of the action, as in examples (89)-(91). Example (89) illustrates that the participants were in a particular location for exactly one night. Example (90) states that it took two years for the participant of the folk tale to be completely healed. In the case of example (91), it is on Friday evening that the participant arrived (rather than delimiting a length of time).
(89) Paas sembengi jimo ri'uo,
paas so-mbengi jimo ri='uo
precise ONE-night 3PL/AB LOC=yonder
'They were there exactly one night.'
[horse.pin 885]
(90)
\begin{tabular}{lllllll} 
Paas & ruo & pariama & io & ri'uo & tarus & nombosi', \\
paas & ruo & pariama & io & ri='uo & tarus & no-mbosi' \\
precise & two & year & 3SG/AB & LOC=yonder & continue & ST/RE-good
\end{tabular}
alaenyo uo.
alae \(=\) nyo 'ио
body \(=3\) SG/GE yonder
'He was there exactly for two years and then his body became well.' [katira.int 015]

'He again arrived exactly on Friday night.'
[nagarang.pin 125]
Examples (92) and (93) show that a particular instant in time is specified. In example (92) there is a particular (although unspecified time) when a giant cat meows. In example (93), it is exactly after the rooster crows the third time that the participant leaves his location.
\begin{tabular}{llll} 
Paas & nengao & moje & seseng. \\
paas & \(N\)-pe-ngao & moje & seseng \\
precisely & RE-SF/DY-meow & also & cat
\end{tabular}
'Just then a cat meowed.'
[poora.pin 356]
(93) Ila uo paas netontoro'o manu' petotolu unsuronyo
ila 'uo paas \(N\)-pe-tontoro'o manu' pe-totolu unsur=nyo
ABL yonder exact RE-SF-crow chicken SF-three time \(=3 \mathrm{SG} / \mathrm{GE}\)
io negempangomo.
io \(\quad N\)-pe-gempang \(=m o\)
3SG/AB RE-SF/DY-walk=COMP
'Exactly when the rooster crowed the third time he left (lit. walk).'
[asu2.pin 117]

\footnotetext{
\({ }^{3}\) Compare this to the Indonesian word which it may be borrowed from, pas 'exact, precise'.
}

Paas can be used as a stative verb as illustrated in example (94). The first clause indicates that the anchovy's eyes are measured, and then the eyes are found to be an exact fit for the blind mother (who is subsequently healed of her blindness).


\subsection*{14.3.1.9 The adverb tarapasa 'forced'}

The adverb tarapasa means 'force' in the sense there is no other alternative left due to what is usually an impersonal outside force at work. This might be illustrated with a situation in which someone is starving and said, 'I was forced to eat toothpaste in order to survive.' Examples (95)-(99) illustrate the use of tarapasa. \({ }^{4}\)
(95) Tarapasa no’oropomo ompong nijimo uo.
tarapasa no-'orop=mo ompong nijimo 'uo
forced ST/RE-hunger=COMP stomach 3PL/GE yonder
'Their stomachs were forced to go hungry.'
[poora.pin 061]
(96)
\begin{tabular}{llll} 
Tarapasa & nibagia'onyo & siamanyo & labinyo \\
tarapasa & ni-bagi-a'=nyo & \(s i=a m a=n y o\) & labi=nyo \\
forced & IV/RE-give-TZ=3SG/GE & \(\mathrm{PN} / \mathrm{AB}=\) father=3SG/GE & leftover=3SG/GE
\end{tabular}
\begin{tabular}{llll} 
uo & paey & niinang & niamanyo. \\
'uo & paey & ni-inang & \(n i=a m a=n y o\) \\
yonder & and.then & IV/RE-eat & PN/GE=father=3SG/GE
\end{tabular}
'He was forced to give his father his leftovers, and then his father ate it.'
[mdtext5.txt 007]
\begin{tabular}{|c|c|c|c|c|c|}
\hline (97) & Tarapasa tarapasa forced & \begin{tabular}{l}
kai \\
kai \\
grandfather
\end{tabular} & \begin{tabular}{l}
nuunga \\
nu=unga \\
CN/GE=child
\end{tabular} & \begin{tabular}{l}
ио \\
'ио \\
yonder
\end{tabular} & nogutua'omo
\[
\begin{aligned}
& N-p o_{1}-\text { gutu-a' }=\text { mo } \\
& \text { RE-SF-make-TZ=COMP }
\end{aligned}
\] \\
\hline & sobalo & nuunga & ио & sabamba & \\
\hline & so-balo & nu=unga & 'ио & so-bamb & \\
\hline & ONE-snare & CN/GE= & hild yonder & ONE-door & \\
\hline
\end{tabular}
'So the grandfather was forced to make one door for the child's snare.'
[mdtext15.txt 127]

\footnotetext{
4 Note that tarapasa is borrowed from Indonesian terpaksa 'force' (this verb is formed with the accidental, non-volitional prefix ter- with the root paksa which can also be inflected as a transitive verb).
}
(98) Ila uo tarapasa nigansingomo baliung.
ila 'uo tarapasa ni-gansing=mo baliung
from yonder forced IV/RE-damage=COMP axe
'And then the axe was forced to break (under the strain).' [asu2.pin 127]
(99) Bai uo jimo moluaromo mogabu ndau diang
bai 'uo jimo mo-luar=mo M-po - gabu ndau diang
like yonder 3PL/AB UD/IR-want=COMP IR-SF-cook NEG EXIS
\begin{tabular}{llllll} 
ayu torodudul, & tarapasa rapinyo & langkai uo & nangala \\
'ayu to=ro-dudul & tarapasa & rapi=nyo & langkai 'uo & N-pong-alap \\
wood \(\mathrm{RM}=\mathrm{IV} / \mathrm{IR}-\)-kindle & forced & spouse=3SG/GE & male & yonder & RE-SF-get
\end{tabular}
\begin{tabular}{llll} 
ayu & api & torapake & mogabu. \\
'ayu & api & to=ro-pake & M-po - -gabu \\
wood & fire & \(\mathrm{RM}=\mathrm{IV} / \mathrm{IR}-\mathrm{use}\) & \(\mathrm{IR}-\mathrm{SF}-\mathrm{cook}\)
\end{tabular}
'And then they now wanted to cook but there wasn't any wood that could be kindled, so the husband had to get firewood that they would use to cook with.' [mdtext14.txt 036]

\subsection*{14.3.2 Time adverbs}

The time adverbs discussed here are pa’ali, sa'ali 'just now' (§14.3.2.1); bia 'later' (§14.3.3.2); kaliu-liu, takaliu 'at once, immediately’ (§14.3.2.3); nimporongomo 'yesterday’ and seinsangana 'tomorrow’ (§14.3.2.4); ningeno 'just then, earlier' (§14.3.2.5); lulu, ulu 'first, before' (§14.3.2.6); pabia-bia 'at first, in the beginning' (§14.3.3.7); sa'o-sa'o, ио-'иo 'now' (§14.3.2.8), mono 'still' (§14.3.2.9); and pepees 'during, in process' (§14.3.2.10).

\subsection*{14.3.2.1 The adverbs pa'ali 'just then' and sa'ali ‘just then'}

The adverbs pa'ali and sa'ali appear to be variations of the same lexeme that means 'just then'. They refer to a particular point in time just referred to. An example of pa'ali is given in (100).
\begin{tabular}{llllllll} 
(100) Riwatu & siYesus & nisalib, & eleo & pa'ali & jaang & tinting & sesio. \\
ri=watu & si \(=\) Yesus & ni-salib & eleo & pa'ali & jaang & tinting & sesio \\
LOC=time & PN/AB=Yesus & IV/RE=crucify & day & exactly & o'clock & time & nine
\end{tabular}
'At the time Jesus was crucified, the time of day was exactly nine o'clock.' [Mark 15:25]
Examples (101)-(103) illustrate sentences with sa'ali. All of these examples are used when a length of time is specified. Example (101) specifies that exactly after one month passed since the mother had left, then the father also left. Example (102) illustrates sa'ali used in a verbless clause and specifies the age of the narrator at the time of a major earthquake that happened in Central Sulawesi. Example (103) specifies that the point in time when their food ran out was right after seven days of travelling.
(101) Sa’ali
sa'ali so-ng-bulang siina='u N-pe-lampa
just.then ONE-LIG-month mother=1SG/GE RE-SF/DY-travel
siama'u moje nelampa.
siama='u moje N-pe-lampa
father \(=1 \mathrm{SG} / \mathrm{GE}\) also RE-SF/DY-travel
'After my mother had been gone for exactly one month then my father also left.'
[poora.pin 565]
(102) Watunyo lindug uo umuro'u sa'ali oalu pariama.
uatu=nyo lindug 'uo umur='u sa'ali oalu pariama time \(=3 \mathrm{SG} / \mathrm{GE}\) earthquake yonder age=1SG/GE just.then eight year
'At the time of that earthquake my age was just eight years old.' [lindug.int 002]
(1) Sa’ali pepitumbengi rijalang notou'omo balung mami.
sa'ali pepitu-mbengi ri=jalang no-tou'=mo balung mami
just.now seven-night LOC=road ST/RE-finish=COMP lunch 1PL.EXC/GE
'After just seven nights on the road we finished all of our food.' [poora.pin 097]

\subsection*{14.3.2.2 The adverb bia 'later'}

The adverb bia means 'later'. Example (104) illustrates bia in a dynamic verbal clause construction and points to the fact that the participants will eat at a later point in time after they arrive at a destination. Example (105) illustrates bia in a stative clause construction. This example also shows that occasionally adverbs are suffixed with the third person singular genitive pronoun. The pronoun never varies as it does on the abilitative auxiliaries which can take subject agreement (see §14.4.1.1).
(104)
\begin{tabular}{llll} 
Ito & bia & mengkani & riDonggala. \\
'ito & bia & M-pe-ngkani & ri=Donggala \\
1PL.INC/AB & later & IR-SF/DY-eat & LOC=D.
\end{tabular}
'We will eat later in Donggala.'
[jptext07.jdb 021]
(105) Bianyo nagana' panumpang, paey ami nelampa.
bia=nyo no-gana' panumpang, paey 'ami N-pe-lampa
later-3SG/GE ST/RE-enough passenger and.then 1PL.EXC/AB RE-SF/DY-travel
'After he (=the driver) had enough passengers, then we left (lit. travel).'
[terminal.int 025]
Example (106) illustrates the use of bia in an existential clause that is juxtaposed with the following clause. Example (107) shows bia in a verbless clause in which the first person singular \(a\) ' \(u\) takes the continuative aspectual enclitic to complete the short clause.
\begin{tabular}{lllllll} 
(106) Bia & diang & soung & warung & riolot & ami & nesoomo. \\
bia & diang & soung & uarung & ri=olot & 'ami & \(N\)-pe-soo=mo \\
later & EXIS & one & food.stall & LOC=country & 1PL.EXC/AB & RE-SF-stop.in=COMP
\end{tabular}
'Later there was a warung in the countryside that we stopped in at.' [jptext03.jdb 039]
```

(107) Bia a'upo.
Bia a'u=po
later 1SG/AB=CONT

```
'Later I'll also come.'
[ceku01.jdb 054]
Examples (108) and (109) illustrate uses of bia in inverse voice clause constructions. Example (109) is also an example of the purposive serial verb ma'o 'go' used in the same clause with the adverb bia (see §11.3.3).
(108) Bia ubuka'a' jalangomu.
bia 'u-buka'-a' jalang=mu
later 1SG.IV/IR-open-TZ road=2SG/GE
'Later I will open the way for you.'
[horse.pin 799]
(109) Bia ma’o uitai kuburonyo.
bia ma'o 'u-ita-i kubur=nyo
later go 1SG.IV/IR-see-DIR grave=3SG/GE
'Later I will go see his/her grave.' [miracle1.pin 120]

\subsection*{14.3.2.3 The adverb kaliu-liu, takaliu 'at once, immediately'}

The adverb kaliu-liu means 'at once', and has a variation that appears as takaliu. Examples (110) and (111) illustrate the use of kaliu-liu in inverse voice constructions.
(110) Oo kaliu-liu uinang.
'oo kaliu-liu 'u-inang
2SG/AB at.once-RED 1SG.IV/IR-EAT
'I will eat you at once!'
[troll.int 050]
(111) Kaliu-liu nidangka nijimo peti uo.
kaliu-liu ni-dangka nijimo peti 'uo
at.once-RED IV/RE-lift 3PL/GE box yonder
'At once they lifted the chest.'
[nangkait.pin 115]
Example (112) illustrates the use of kaliu-liu with a stative verb (along with the adverb jomo 'just'). In this story the flesh-eater is told that if he performs a certain act then he will immediately become happy. Example (113) illustrates the use of kaliu-liu in which the earthen rice pot is opened as soon as it is discovered by a pair of thieves.
\(\begin{array}{cll}\text { (112) } \begin{array}{ll}\text { Jomo } & \text { kaliu-liu }\end{array} & \text { masanang. } \\ \text { jomo } & \text { kaliu-liu } & \text { mo-sanang } \\ \text { just } & \text { at.once-RED } & \text { ST/IR-happy }\end{array}\)
'He/she will at once just be happy.'
[troll.int 248]
(113) Jimo kaliu-liu nongumba urong nuaniong.
jimo kaliu-liu N-pong-umba urong nu=aniong
3PL/AB at.once-RED RE-SF/PT-open earth.pot CN/GE=rice
'At once they opened the earthen rice pot.'
[nangkait.pin 102]

Example (114) illustrates the use of takaliu 'at once' in each of the sentences' two clauses. The owner of a magical rooster asks it to crow and at once he crows. As soon as the magical rooster crows a large house magically appears.
(114) Ila ио takaliu netontoro'o тапи' ио,
ila 'иo takaliu \(N\)-pe-tontoro'o manu' 'ио
ABL yonder at.once RE-SF/DY-crow chicken yonder
\begin{tabular}{llll} 
takaliu & najari & junjung & togoge. \\
takaliu & na-jari & junjung & togoge \\
at.once & COP/RE-become & house & large
\end{tabular}
'After that the rooster crowed at once, and at once a large house appeared.'
[mdtext1.txt 072]

\subsection*{14.3.2.4 The adverbs nimporongomo 'yesterday' and seinsangana 'tomorrow'}

This section illustrates the two adverbs nimporongomo 'yesterday' and seinsangana 'tomorrow', that are prototypical of a number of other possibilities that cannot possibly be exhaustively listed here (e.g. numerals with temporal nouns such as ruo-mbengi=po 'the day after tomorrow, lit. two-nights=CONT'). Examples (115) and (116) illustrate typical uses of seinsangana in intransitive clauses.
(115) Seinsangana ito mosavung.
seinsangana 'ito \(\quad\)-po \(_{1}\)-savung
tomorrow 1PL.INC/AB IR-SF/DE-cock.fight
'Tomorrow we will have a cock fight.'
[mdtext15.txt 151]
(116) Saba' ito seinsangana melampa.
saba' 'ito seinsangana M-pe-lampa
because 1PL.INC/AB tomorrow IR-SF/DY-travel
'Because tomorrow we will leave (lit. travel).' [nalalo.pin 059]
Example (117) shows the use of seinsangana in an active voice construction, and shows the pronominal enclitic used on it.
(117) Bai seinsangananyo mai jimo totolu uo nongoyota'
bai seinsangana=nyo mai jimo totolu 'uo \(N\)-pong-oyot-a'
like tomorrow=3SG/GE come \(3 \mathrm{PL} / \mathrm{AB}\) three yonder RE-SF/PT-pack-TZ
\begin{tabular}{ll} 
junjung & nijimo. \\
junjung & nijimo \\
house & 3PL/GE
\end{tabular}
'When tomorrow came, the three of them packed up their house.' [mdtext21.txt 043]
Example (118) illustrates the use of nimporongomo 'yesterday' in a relative clause. One other usage of nimporongomo and seinsangana is in a noun phrase with a demonstrative.
\begin{tabular}{lllll} 
(118) Mono & diang & bau & tonitapaimu & nimporongomo \\
mono & diang & bau & to \(=\) ni-tapa- \(i=m u\) & nimporongomo \\
'uo
\end{tabular}
'Do you still have that fish you smoked yesterday?' [mdtext15.txt 092]

\subsection*{14.3.2.5 The adverb ningeno 'just then, earlier’}

The adverb ningeno means 'just then' or 'earlier'. Ningeno can relate time relatively from the point of the predication to some earlier point in time which may or may not be specified. In addition to the syntactic function as an adjunct, when ningeno appears with the demonstrative uo 'yonder' there is a discourse function that indicates the reference of a nominal phrase in contrast to other possible nominal references.

Examples (119) and (120) illustrate the use of ningeno in inverse voice clause constructions. In example (119) the poor seven children finally had found their parents (implied sometime earlier in the same day). Example (120) is about the group of monkeys talking about how they had just thrown the turtle into the lake, and thought he would drown. But since the turtle tricked them, the monkeys discuss a further plan about how they might finally kill him (which they fail to do, however).
\begin{tabular}{lll} 
Nidua'otomo & ningeno & togogeto. \\
ni-dua'=to \(=\) mo & ningeno & togoge=to \\
IV/RE-arrive=1PL.INC/GE=COMP & just.then & large=1PL.INC/GE
\end{tabular}
'We found our parents (lit. large, elders) just then.'
[poora.pin 631]
(120)
\begin{tabular}{lllllll}
...saba' ulasang & nitabola' & mami & ningeno & riapar & moo... \\
saba' & ulasang & ni-tabol-a, & mami & ningeno & ri=apar & moo \\
because & turtle & IV/RE-throw-TZ & 1PL.EXC/GE & just.then & LOC=lake & this
\end{tabular}
'...because we just then threw the turtle into this lake...'
[turtle.pin 221]
Examples (121)-(123) illustrate one usage of ningeno and with the demonstrative uo 'yonder'.
(121) Ai nengkani sapa emu uti ningeno uo?
ai \(N\)-pe-ngkani sapa 'emu uti ningeno 'uo but RE-SF/DY-eat what 2PL/AB dear.boy/VOC just.then yonder 'But what did you all, dear boy, just then eat there?'
[poora.pin 279]
(122) Sapa batua nuundurongomи ningeno uо?
sapa batua nu=undurong=mu ningeno 'uo
what mean \(\mathrm{CN} / \mathrm{GE}=\) song \(=2 \mathrm{SG} / \mathrm{GE}\) just.then yonder 'What is the meaning of the song (you sang) just then?'
[turtle.pin 141]
(123) Diang niepe miu suara nugoong mami ningeno uo?
diang ni-epe miu suara nu=goong mami ningeno 'ио EXIS IV/RE-hear 2PL/GE voice CN/GE=gong 1PL.EXC/GE just.then yonder 'Did you all hear the sound of our gong just then?' [mdtext15.txt 028]

Examples (124)-(126) illustrate the anaphoric tracking discourse function of ningeno uo in which it appears to mean 'just mentioned'. In these cases it may be modifying the nominal phrase in a temporal manner within the discourse (§7.6.3.3), and it appears to become part of the noun phrase. Examples (124) and (125) are declarative sentences with the use of ningeno uo. Example (124) has this modifying phrase appear twice specifying both the time of a cause and result sequence. Example (125) shows that when ningeno appears with the demonstrative uo it does not always have to apply to a previous referent. Example (126) illustrates the use of ningeno uo used in the repetition of a tail-head transition (see \(\S 17.3\) for a discussion of tail-head transitions and other uses of repetition).
```

(124) Neterampa' odo ningeno uо,
Ne-te-rampa' odo ningeno 'uo
AV/RE-NV-fall monkey just.then yonder

```
\begin{tabular}{lllll} 
apa & loka & ningeno & uo & nebentangomo. \\
apa & loka & ningeno & uo & no-bentang=mo \\
because & banana & just.then & yonder & ST/RE-fall
\end{tabular}
'The monkey just mentioned fell down because the banana tree just mentioned had fallen over.'
[troll.int 169-170]
\begin{tabular}{llll} 
Paey & no'uminjira' & moje & tonangkait \\
Paey & \(N\)-po 1 -[um]- 'injir-a' & moje & to-no-ngkait \\
and.then & RE-SF/LCM-TEL-sit.straight-TZ & also & AGNM-ST/RE-cripple
\end{tabular}
\begin{tabular}{ll} 
ningeno & uo. \\
ningeno & 'uo \\
just.now & yonder
\end{tabular}
'And the cripple just mentioned also sat up straight.'
[nangkait.pin 203]
(126) Paey niluaa'onyo mo'upunyo.
paey ni-lua-a'=nyo mo'upu=nyo
and.then \(\mathrm{IV} / \mathrm{RE}-\) vomit-TZ=3SG/GE grandchild=3SG/GE
\begin{tabular}{lllllll} 
Jari & tambao & ningeno & uo & notou', & niluaa'onyo & uo, \\
jari & tambao & ningeno & 'uo & no-tou', & ni-lua-a'=onyo & 'uo \\
so & pelican & just.then & yonder & ST/RE-finish & IV/RE-vomit-TZ=3SG/GE & yonder
\end{tabular}
\begin{tabular}{llll} 
io & nolumeapomo & ma'o & ripomoiaongonyo. \\
io & \(N\)-po 1 -[um]-leap=mo & ma'o & ri=po \({ }_{1}\)-moia-ong=nyo \\
3SG/AB & RE-SF/LCM-TEL-fly=COMP & go & LOC-SF/DE-live-locN=3SG/GE
\end{tabular}
'And then he vomited up the grandchild. So after the pelican just mentioned had finished vomiting him up he flew off to his dwelling place.'
[tambao.tst 052-055]

\subsection*{14.3.2.6 The adverb lulu, ulu 'first, before'}

The adverb lulu (and its variation ulu) means 'first' or 'before'. Examples (127) and (128) show the use of lulu in dynamic verbal clause constructions. Example (127) demonstrates that the pronominal participant will descend first before any other participant
in the context. Example (128) indicates that the verbal predication indicated precedes some other activity in the context.
\[
\begin{array}{llll}
\text { (127) Io } & \text { kana } & \text { mentuung } & \text { lulu. } \\
\text { io } & \text { kana } & \text { M-pe-ntuung } & \text { lulu } \\
\text { 3SG/AB } & \text { certain } & \text { IR-SF/DY-descend } & \text { first }
\end{array}
\]
'He will certainly descend first.'
[horse.pin 373]
\(\begin{array}{lll}\text { (128) Ito } & \text { mesonggal } & \text { lulu. } \\ \text { 'ito } & \text { M-pe-songgal } & \text { lulu } \\ \text { 1PL.INC/AB } & \text { IR-SF/DY-disembark } & \text { first }\end{array}\)
'We will disembark first.'
[mdtext15.txt 008]
Example (129) emphasises that the first person pronominal will once again arrive first. The aspectual continuative enclitic on the pronoun emphasises that it is the speaker who anticipates his arrival at a destination in contrast to his opponent. Examples (130) and (131) are similar (excepting the absence of the continuative enclitic), and have the participant participate in the predication before other participants.
\begin{tabular}{lll} 
A'upo & lulu & modua'. \\
a'u \(u\) po & lulu & M-po 1 -dua' \\
1SG/AB=CONT & first & IR-SF/DE-arrive \\
'I will again arrive first. &
\end{tabular}
[horse.pin 048]
\(\begin{array}{cllll}\text { (130) A'u } & \text { moluar } & \text { mengita } & \text { togoge'u } & \text { lulu. } \\ \text { a'u } & \text { mo-luar } & \text { M-pong-ita } & \text { togoge='u } & \text { lulu } \\ \text { 1SG/AB } & \text { UD/IR-want } & \text { IR-SF/PT-see } & \text { large=1SG/GE } & \text { first }\end{array}\)
'I want to see my parents first.'
[mdtext15.txt 044]
(131) Tapi
taigibang
tapi
si \(=\) gibang
but
lulu
PN \(/ \mathrm{AB}=\) lizard
first
go.up, ,

Example (312) illustrates the use of ulu which is used as part of a prepositional phrase, but still has the same adverbial effect in proposing to do something prior to continuing the present activity.
\begin{tabular}{|c|c|c|c|c|c|}
\hline (132) & Neosapo & ito & asi & tagu & riulu. \\
\hline & \(N\)-pe-osa \(=\) po & 'ito & 'asi & tagu & ri=ulu \\
\hline & RE-SF/DY-rest=CONT & 1PL.INC/AB & & friend/VOC & LOC=first \\
\hline
\end{tabular}
'Friend, too bad, let's rest again first.' [nangkait.pin 056]

\subsection*{14.3.2.7 The adverb pabia-bia 'at first, in the beginning'}

Pabia-bia is the adverb which means 'at first' or 'in the beginning'. This adverb always appears as a reduplication (compare the adverb bia 'later' in §14.3.2.2). Example (133) shows pabia-bia in a purposive clause. This example is a personal narrative describing
part of a shopping trip I was on, and the narrator relates how I drove to the Impres market before other activities.
\begin{tabular}{llllll} 
(133) Pabia-bia & ma’o & ripotomu & Impres & nongoli & utang. \\
pabia-bia & ma'o & ri=potomu & Impres & N-pong-oli & utang \\
first-RED & go & LOC=market & I. & RE-SF/PT-buy & vegetables
\end{tabular}
'At first (he) went to the Impres market to buy vegetables.' [jptext07.jdb 050]
The adverb pabia-bia frequently has the third singular enclitic =nyo as part of the formation as in examples (134) and (135). Example (134) relates the first place that the narrator says he went to with his fiancée in a non-volitional verbal construction. Example (135) demonstrates the use of this adverb in a complement clause. In the complement clause the adverb is the adjunct/modifier for the matrix verb undang 'invite', even though it follows the subordinate clause verb tubu 'live'.
\begin{tabular}{|c|c|c|c|}
\hline (134) & Pabia-bianyo pabia-bia=nyo & \[
\begin{aligned}
& \text { ami } \\
& \text { ’ami }
\end{aligned}
\] & \begin{tabular}{l}
netepodua' \\
ne-te-po \({ }_{1}\)-dua'
\end{tabular} \\
\hline & first-RED=3SG/GE & 1PL.EXC/AB & AV/RE-NV-SF/FA-arrive \\
\hline & rijunjung niam & yo. & \\
\hline & ri=junjung ni-am & = y o & \\
\hline & LOC=house PN/G & -father \(=3 \mathrm{SG} / \mathrm{GE}\) & \\
\hline & 'Firstly we came upo & her father's house.' & \\
\hline
\end{tabular}
[maslia.pin 004]
\begin{tabular}{llllll} 
(135) Io & moje & nepeundang & too & nipetubunyo \\
io & moje & N-pepe-undang & too & \begin{tabular}{l} 
ni-pe-tubu \(=\) nyo
\end{tabular} \\
3SG/AB & again & RE-SF-invite & person & IV/RE-SF/DY-live=3SG/GE \\
& & & & \\
\begin{tabular}{l} 
pabia-bianyo \\
pabia-bia=nyo
\end{tabular} & uo. & 'uo & & \\
first-RED=3SG/GE & yonder & & \\
'He also invited people that he first resurrected over there.' & [miracle1.pin 078]
\end{tabular}

Example (136) uses the adverb pabia-bia in a verbless clause, and example (137) demonstrates the adverb's usage in stative verb clausal construction.
(136) Tutuunong pabia-bianyo ndaupo.

Tutuunong pabia-bia=nyo ndau=po
swimming.hole first-RED=3SG/GE NEG=CONT
'The swimming hole was not yet there in the beginning.'
[nalalo.pin 154]
(137) Pabia-bianyo jimo monopo mombosi' sono a'u

Pabia-bia=nyo jimo mono=po mo-mbosi' sono a'u
first-RED \(=3\) SG/GE 3PL/AB still=CONT \(\quad\) ST/IR-good COM 1 SG/AB
'In the beginning they were still kind to me.'
[bugmalei.int 009]

\subsection*{14.3.2.8 The adverbs sa'o-sa'o 'now, time' and uo-'uo 'now, time'}

The two adverbs sa'o-sa'o and uo-'иo appear to have the same meaning, i.e. 'now, time'. These adverbs can only appear as reduplicated words (but note that uo 'yonder' is a demonstrative). Both adverbs frequently appear with either one of two demonstratives, uo 'yonder' or moo 'this, here' (the demonstrative nao 'that, there' does not appear to be used in this kind of construction, probably because \(u o\) and moo are the ones that are usually used for discourse purposes-see §7.6.3.3).

Examples (138)-(141) demonstrate the use of sa'o-sa'o. Example (138) emphasises an event occurring in another location simultaneous to the speaker's statement (and in fact is a warning of imminent danger). Examples (139) and (140) show the use of this adverb in locative predications which describe present situations. Example (141) illustrates that sa'o-sa'o is the time of the occurrence, and the present point of a state of fact that began many years ago (i.e. wages owed to the author were never given to him even until the point of time of this statement).
\(\begin{array}{lllllll}\text { (138) ...saba' } & \text { jimo } & \text { sa'o-sa'o } & \text { moo } & \text { pepees } & \text { nomangasa } & \text { ngisi } \\ \text { saba' } & \text { jimo } & \text { sa'o-sa'o } & \text { moo } & \text { pepees } & \text { N-pong-pang-asa } & \text { ngisi } \\ \text { because } & \text { 3PL/AB } & \text { RED-now } & \text { this } & \text { in.process } & \text { RE-SF/PT-CAUS-whet } & \text { teeth }\end{array}\)
\begin{tabular}{llll} 
nijimo & rigii & nuogo & uo. \\
nijimo & ri \(=\) gii & nu=ogo & 'uo \\
3PL/GE & LOC=edge & CN/GE=water & yonder
\end{tabular}
' ...because they (the flesh-eaters) are right now in the process of sharpening their teeth at the edge of the water over there.' [mdtext18.txt 063]
(139) Apa sa'o-sa'o moo ito riunte' nu'aparisong. apa sa'o-sa'o moo 'ito ri=unte' nu='o-paris-ong because RED-now this 1PL.INC/AB LOC=middle CN/GE-HAVE-difficult-locN 'Because at this time we are in the middle of a difficulty.'
[poora.pin 145]
(140) Jari a'u sa'o-sa'o moo, ritano nuPendau.
jari a'u sa'o-sa'o moo, ri=tano nu=Pendau
so \(1 \mathrm{SG} / \mathrm{AB}\) RED-now this LOC=ground \(\mathrm{CN} / \mathrm{GE}=\mathrm{P}\).
'So I am at this time now on Pendau ground.' [mdtext15.txt 104]
(141) Sampe gaji'u ndaumo nendoang sa'o-sa'o ио. sampe gaji='u ndau=mo \(N\)-pe-ndoang sa'o-sa'o 'uo until wage-1SG/GE NEG=COMP RE-SF/DY-exit RED-now yonder 'Since that time I haven't received any wages.'
[bugmalei.int 037]
Examples (142) and (143) illustrate the use of uo-'иo in a post-verbal position in (142), and in the pre-verbal position in (143).

```

(143) Jari uо-ио moo ami monopo negurи.
jari 'иo-'ио moo 'ami mono=po N-pe-gurи
so now here 1PL.EXC/AB still=CONT RE-SF/DY-learn

```
    'So at this time I am still continuing to learn.'
[cekuphil.int 010]

\subsection*{14.3.2.9 The adverb mono 'still'}

Examples (144)-(150) provide typical uses of mono in different sentence types. Examples (144) and (145) illustrate the use of mono in stative verb clauses. In (144), it is clear that the participants were asleep at that point in time, as also evidenced in subsequent clauses in which they say they had a dream. In (145) a state of hunger still exists, which explains why the child was crying.
(144) Rindoung uo jimo mono no’oturu' ri'uo.

Ri=ndoung 'uo jimo mono no-'o-turu' ri='uo
LOC=night yonder 3PL/AB still ST/RE-HAVE-sleep LOC=yonder
'That night they were still sleeping over there.'
[nata101.pin 029]
(145) Unga иo notumangis moje,
unga 'uo N -po \(\mathrm{I}_{1}\)-[um]-tangis moje
child yonder RE-SF/LCM-TEL-cry also
saba' mono moorop ompongonyo uo.
saba' mono mo-orop ompong=nyo 'uo
because still ST/IR-hunger stomach=3SG/GE yonder
'The child began to cry again, because her stomach was still hungry.' [mdtext18.txt 017]
Examples (146 and (147) illustrate the use of mono in conjunction with atelic aspectual reduplicated verbs. In both of these cases the first clause sets up a situation in which the action in the following clause occurs simultaneously.
) Saba' jimo mono bura-bura nodua'omo siRante Salaka.
saba' jimo mono bura-bura \(N\)-po \(o_{1}\)-dua'=mo si=Rante Salaka
because 3PL/AB still RED-speak RE-SF/FA-arrive=COMP PN/AB=R. S.
'Because they were still speaking when Rante Salaka arrived.'
\begin{tabular}{lllllll} 
(147) Bai & uo & jimo & mono & tundo-tundo & ribongkarang & uo \\
bai & 'uo & jimo & mono & tundo-tundo & ri=bongkarang & 'uo \\
like & yonder & 3PL/AB & still & RED-sit & LOC=hut & yonder
\end{tabular}
\begin{tabular}{llll} 
tarus & uulo' & uo & nolumeap. \\
tarus & uulo' & 'uo & N -po \(0_{1}\)-[um]-leap \\
continue & horsefly & yonder & RE-SF/LCM-TEL-fly
\end{tabular}
'After that they were still sitting in that hut, and then that horsefly flew off.'
[mdtext19.txt 040]
Example (148) illustrates the use of mono in an existential clause.
\begin{tabular}{llllll} 
(148) Mono diang & bau & tonitapaimu & nimporongomo & uo? \\
mono & diang & bau & to=ni-tapa-i=mu & nimporongomo & 'uo \\
still & EXIS & fish & \(\mathrm{RM}=\mathrm{IV} / \mathrm{RE}-\) smoke-DIR=2SG/GE yesterday & yonder
\end{tabular}
'Do you still have that fish you smoked yesterday?'
[mdtext15.txt 092]

Examples (149) and (150) illustrate the use of mono in verbless clauses. In (149) it relates to a prior time and an equative clause is used to express his social position and relative age. In (150) possessive noun phrases are used to emphasise that both his mother and father are still alive at the present time of his speech act.
```

(149) Jari rimoo ututura'` teule riwatunyo
jari ri=moo 'u-tutur-a' teule ri=watu=nyo
so LOC=this 1SG.IV/IR-recount-TZ return LOC=time=3SG/GE

| a'u | mono | unga | logas | uo. |
| :--- | :--- | :--- | :--- | :--- |
| a'u | mono | unga | logas | 'uo |
| 1SG/AB | still | child | bachelor | yonder |

```
'So here I am going to recount back to the time when I was still a young man.'
[jptext02.jdb 027]
\(\begin{array}{lllllll}\text { (150) Saba' } & \text { a'u } & \text { moo mono esiama } & \text { mono } & \text { esiina. } \\ \text { saba' } & \text { a'u } & \text { moo mono } & \text { 'o-siama } & \text { mono } & \text { 'o-siina } \\ \text { because } & 1 \mathrm{SG} / \mathrm{AB} & \text { this } & \text { still } & \text { HAVE-father } & \text { still } & \text { HAVE-mother }\end{array}\)
'Because I here still have a father and still have a mother.' [horse.pin 766]

\subsection*{14.3.2.10 The adverb pepees 'during, in process'}

Examples (151)-(156) show the adverb pepees 'during, in process' in typical sentences which can have either irrealis or realis modal verbs. In (151) the verb is in irrealis mode, while in examples (152) and (153) the verbs are in realis mode (all of these examples also illustrate the use of pepees in active voice clauses). Examples (152) and (153) also illustrate the use of pepees in one of two clauses in a sentence in order to signify the simultaneity or temporal overlap of a situation.
\begin{tabular}{lll} 
(151) Io & pepees & mongugas. \\
io & pepees & M-pong-ugas \\
3SG/AB & in.process & IR-SF/PT-wash
\end{tabular}
'She is washing the dishes.'
\begin{tabular}{llllll} 
(152) Bai & uo & niito & nujuragang & bengkel & uo, \\
bai & 'uo & ni-ito & nu=juragang & bengkel & 'uo \\
like & yonder & IV/RE-see & CN/GE=captain & female & yonder
\end{tabular}
\begin{tabular}{lllll} 
bengkel & uo & pepees & nomuai & luba'onyo. \\
bengkel & 'uo & pepees & \(N\)-pong-puai & luba'=nyo \\
female & yonder & in.process & RE-SF/PT-dry & hair=3SG/GE
\end{tabular}
'Then the captain looked at the woman, and the woman was drying her hair.'
[mdtext15.txt 050]
\begin{tabular}{lllllll} 
(153) ...saba' jimo sa'o-sa'o & moo & pepees & nomangasa & ngisi \\
saba' & jimo & sa'o-sa'o & moo & pepees & N-pong-pang-asa & ngisi \\
because & 3PL/AB RED-now & this & in.process & RE-SF/PT-CAUS-whet & teeth
\end{tabular}
\begin{tabular}{lllc} 
nijimo & rigii & nuogo & uo. \\
nijimo & ri=gii & nu=ogo & 'uo \\
3PL/GE & LOC=edge & CN/GE=water & yonder
\end{tabular}
'...because they (the flesh-eaters) are right now in the process of sharpening their teeth at the edge of the water over there.'
[mdtext18.txt 063]
Examples (154) and (155) illustrate the use of pepees with dynamic verbal clause constructions. In (154) the grammatical object is itself a clause with the turtle the subject of the complement clause. In (155) the participants are walking (lit. travel) along, as they are walking along they come upon a river. This simultaneous or temporal overlap is expressed in this linear sequence, where in one of the two clauses of the sentence pepees will be used.
\begin{tabular}{llll} 
(154) Jimo & netedua' & ponyu pepees & neintolu. \\
jimo & ne-te-dua, & ponyu pepees & N-pe-intolu \\
3PL/AB & AV/RE-NV-arrive & turtle in.process & RE-SF/DY-egg
\end{tabular}
'They came upon a turtle that was in the process of laying eggs.' [trtlegg.pin 009]
(155) Bai uo pepees nelampa, jimo netedua' ogo bangkalang. bai 'иo pepees N-pe-lampa, jimo ne-te-dua' ogo bangkalang like yon. in.process RE-SF-travel 3PL/AB AV/RE-NV-arrive water river 'As they were walking, they came upon the river water.' [mdtext19.txt 024]

Example (156) illustrates that two quarrelling participants were still at it, when in the subsequent clause the tarsier arrived.
\begin{tabular}{llllll} 
(156) \begin{tabular}{lll} 
Bai \\
bo & odo & sono ulasang
\end{tabular} & pepees & nosibaro, \\
bai 'uo & odo & sono ulasang & pepees & N-posi-baro \\
like yonder & monkey COM & turtle & in.process & RE-MUT-argue
\end{tabular}
'As the monkey and turtle were in process of arguing, the tarsier arrived.'
[ceku01.jdb 040]

\subsection*{14.3.3 Comparative adverbs}

The comparative adverbs that will be discussed here are selio, siboto 'like' (§14.3.3.1), and moje 'again, also' (§14.3.3.2).

\subsection*{14.3.3.1 The adverbs selio 'like' and siboto 'like'}

The adverbs selio and siboto both have the same comparative meaning as 'like' (both of which are synonymous with bai for which see §14.3.4.3). Selio may also occur in the
reduplicated form as selio-lio. Examples (157)-(159) illustrate the use of selio. In (157) the pants that were made are compared to a tree climber's pants. In (158) the condition of a well is compared to the condition of a newly created well. Example (159) illustrates the reduplicated form selio-lio and is used in a negative construction that does not match the expected voice of a sibling with the sibling's known voice.
(157) Nipogutua'oтo
ni-po \(o_{1}\)-gutu- \(a^{\prime}=m o\)
salana selio salana topemene’.
IV/RE-SF/FA-make-TZ pants like pants AGNM-SF-go.up
'He/she had pants made for him that was like tree climber's pants.' [king.pin 165]
(158) Lovu uo jomo selio nigali-galisi.
lovu 'uo jomo selio ni-gali-galisi
well yonder just like IV/RE-RED-clean.dig
'The well was like one that had just been made clean.' [asu2.pin 110]
(159) Suara tonongkai no ndau selio-lio suara nia'anyo
suara to \(=N\)-pong-'ai 'uo ndau selio-lio suara ni-a'a=nyo
voice \(\mathrm{RM}=\mathrm{RE}-\mathrm{SF} / \mathrm{PT}\)-call yonder NEG like-RED voice PN/GE-o.sib. \(=3 \mathrm{SG} / \mathrm{GE}\) 'The voice of the one calling wasn't like the voice of her older brother.'
[mdtext13.txt 018]
Examples (160) and (161) illustrate the use of siboto 'like'. In (160) a magical grain of rice is compared to the size of an index finger. In (161) a previous period of time is compared to a future period of time before the sibling will be able to reappear in a visible form.
(160) Kira-kira oogenyo siboto tonuju
kira-kira 'o-oge=nyo siboto tonuju
approximately \(\mathrm{HAVE}-\mathrm{big}=3 \mathrm{SG} / \mathrm{GE}\) like index.finger
'It (the rice) was approximately as big as an index finger.' [nagarang.pin 151]
(161) Sibotomo moo asasaenyo a'u kana muito.
siboto=mo moo 'o-sa-sae=nyo a'u kana mu=ito
like \(=\) COMP this HAVE-RED-long=3SG/GE \(1 \mathrm{SG} / \mathrm{AB}\) certain 2SG.IV/IR-see
'It will be just like this long period of time before you will certainly see me.'
[nagarang.pin 118]

\subsection*{14.3.3.2 The adverb moje 'again, also'}

The adverb moje 'again, also' is one of the most common adverbs used. Examples (162)-(165) illustrate the use of moje with dynamic verbal clause constructions. Examples (162) and (163) illustrate moje in the post-verbal position, and the A argument in preverbal and post-verbal positions respectively. Example (164) illustrates the use of the aspectual continuative enclitic = po which means 'next' or 'again' in this context, while moje means 'also' here (as in this story it is comparative to earlier stops made on this journey). Example (165) demonstrates the common use of moje in speech margins that precede direct speech.

\section*{(162)}

Jimo nelampamo moje.
jimo \(N\)-pe-lampa \(=\) mo moje
3PL/AB RE-SF/DY-travel=COMP also
'They left again.'
[asu2.pin 030]
(163) Nelampa moje jimo pepitu.
\(N\)-pe-lampa тоје jimo pepitu
RE-SF/DY-travel also 3PL/AB seven
'The seven of them travelled again.'
[asu2.pin 014]
```

(164) Ila uo ami nesoopo moje nenginung kopi
Ila 'uo 'ami N-pe-soo=po moje N-pong-inung kopi
ABL yonder 1PL.EXC/AB RE-SF-stop.in=CONT also RE-SF-drink coffee
riwarung.
ri=uarung
LOC=food.stall

```
'After that we stopped next and also drank coffee at the food stall.' [jptext04.jdb 023]
(165) Neburamo moje siama nubengkel uo, "iye."
    \(N\)-pe-bura=mo moje siama nu=bengkel uо iye
    RE-SF/DY-speak=COMP also father CN/GE=female yonder yes
    'The girl's father also said, "Yes".'
    [mdtext15.txt 037]

Example (166) illustrates the use of the continuative aspect in the first clause, and the use of the adverb moje in the subsequent clause. Example (167) illustrates the use of moje in an inverse voice clausal construction. The seven burlap bags are given as part of a bride price, and are additional items as indicated by moje.
```

(166) Ami mogutupo balung apa ami
'ami M-po=gutu=po balung apa 'ami
1PL.EXC/AB IR-SF/FA=make=CONT sack.lunch since 1PL.EXC/AB
moje mo'uma'o.
moje mo-'u-ma'o
again IR-SF-go
'We will next make a sack lunch since we are going again.'

```
```

(167) Nibagia` nigibang pepitu karung moje.
ni-bagi-a' ni=gibang pepitu karung moje
IV/RE-give-TZ PN/GE=lizard seven bag also
'Monitor Lizard also gave him seven burlap bags.' [gibang.pin 062]

```

Example (168) shows the use of moje in an existential clause. Corn is in addition to some other available food. Example (169) is a verbless clause which states that the second child in a family is also a girl.
(168) Diang moje tetelato.
diang moje tetela=to
EXIS also corn=1PL.INC/GE
'There was also our own corn.'
[jptext05.jdb 031]
(169) Unga pedoruonyo bengkel moje.
unga pe-doruo=nyo bengkel moje
child SF -two \(=3 \mathrm{SG} / \mathrm{GE}\) female also
'The second child was also a girl.'
[ceku03.jdb 004]

\subsection*{14.3.4 Miscellaneous adverbs}

In this section I discuss three adverbs with a variety of different functions. The first two can be labelled evidential and veridical respectively. There is one veridical adverb, kana 'certain(ly), must' (§14.3.4.1), and one evidential adverb jea 'hearsay' (§14.3.4.2) in Pendau. Veridical adverbs provide a speaker with the means to establish his/her belief or attitude about possible or potential truth. Payne (1997:252) comments on the difference between evidential and veridical (or validational) adverbs:

Some linguists (e.g., Weber 1986) make a distinction between evidential force and validational or veridical force. In this view evidential marking is strictly limited to indicating the source of the information expressed in the clause, whereas validational or veridical marking indicates the degree of commitment the speaker makes as to the truth of the assertion.
Finally, the adverb bai is discussed in \(\S 14.3 .4 .3\). This adverb has a range of different functions including what seems to be a kind of focus marking and others which are more elusive to pin down.

\subsection*{14.3.4.1 The adverb kana 'certainly, must'}

The adverb kana 'certainly, must' nearly always occurs with irrealis modal verb (when irrealis can be marked). The adverb kana has not been found in a post-verbal position, but it has been found to precede the negative ndau and pre-verbal A arguments, which is enough evidence to warrant classing it as an adverb instead of an auxiliary. Examples (170) and (171) show the adverb kana 'certainly, must' preceding stative verbs.
\[
\begin{array}{lll}
\text { (170) A'u } & \text { kana } & \text { masae. } \\
\text { a'u } & \text { kana } & \text { mo-sae } \\
\text { 1SG/AB } & \text { certain } & \text { ST/IR-long } \\
\text { 'I will certainly be a long time.' }
\end{array}
\]
[horse.pin 646]
(171) Babi nao kana maate moje.
babi nao kana mo-ate moje
pig that must ST/IR-die again
'That pig must also die.'
[tangke01, riddle\#3]

Examples (172)-(174) show kana in several inverse voice clausal constructions, but in the pre-verbal position. Example (173) shows the P argument in the pre-verbal position, and example (174) shows the P argument in the post-verbal position.
```

(172) Emu kana renika'.
'emu kana ro-nika'
2PL/AB certain IV/IR-marry

```
'She will certainly marry you (sg. hon.).' [mdtext15.txt 033]
(173) Apa oo moo kana uinangomo"

ара 'oo moo kana 'u-inang=mo
because \(2 \mathrm{SG} / \mathrm{AB}\) this certain 1SG.IV/IR-eat=COMP
'Because I will certainly eat you now.'
[troll.int 035]
(174) Kana rasaur mami emu.
kana ro-saur mami 'eти
certain IV/IR-defeat 1PL.EXC/GE 2PL/AB
'We will certainly defeat you.'
[horse.pin 588]
Example (175) shows kana used preceding the copula verb jari 'become'. Example (176) shows the use of kana in a locative predicate preceding the prepositional phrase (i.e. the predicate).
\[
\begin{array}{llll}
\text { (175) } & \text { Oo } & \text { nao } & \text { kana }
\end{array} \quad \begin{aligned}
& \text { majari } \\
& \text { 'oo }
\end{aligned} \text { nao } \begin{array}{lll}
\text { kana } & \text { ma-jari } \\
\text { 2SG/AB } & \text { that } & \text { certain } \\
\text { COP/IR-bed } \\
\text { 'You will definitely become my wife.' } \\
\text { (176) A'u } & \text { kana } & \text { riitu. } \\
\text { a'u } & \text { kana } & \text { ri=itu } \\
\text { 1SG/AB } & \text { certain } & \text { LOC=there }
\end{array}
\]
majari rapi'u.
    'oo nao kana ma-jari rapi='u
    \(2 \mathrm{SG} / \mathrm{AB}\) that certain COP/IR-become spouse \(=1 \mathrm{SG} / \mathrm{AB}\)
[mdtext1.txt 086]
'I will certainly go there.'
[horse.pin 240]
Examples (177) and (178) show the possibility of using realis with kana. In (177) kana precedes both the A argument and the negative ndau. Although kana has not been observed in a post-verbal position, the mobility it has pre-verbally is enough to identify it as an adverb.
\begin{tabular}{clll} 
(177) Tarapasa & kana & niangga'i & tomogurang. \\
tarapasa & kana & ni-angga'-i & tomogurang \\
force & certain & IV/RE-respect-DIR & elders
\end{tabular}
'They were certainly forced to respect their elders.' [asalusul.doc]
(178) Ono mono vea kana io ndaupo nebangkar.
ono mono vea kana io ndau=po \(N\)-pe-bangkar
if still rice certain \(3 \mathrm{SG} / \mathrm{AB}\) NEG=CONT RE-SF/DY-swell
'If it is still uncooked rice it definitely is not yet swollen.' [tangke01, riddle \#5]

\subsection*{14.3.4.2 The hearsay adverb jea 'said'}

The hearsay adverb jea 'said' is often used to indicate that the information is secondhand. One prototypical use that jea is often found in is in the first sentence of a folk tale as
in example (179), which would be equivalent to English folk tales that start off with the formulaic 'once upon a time' or as 'it's been said'. In other examples, as in (180)-(182), the speaker appears to disclaim responsibility for whether in fact something is true or not. Example (181) shows that although the son was thought to have been killed, it actually turns out not to be true at this point in the story. So it appears that irrealis is used because the event was known not to be true.
\begin{tabular}{lllll} 
(179) \begin{tabular}{lll} 
Diang & jea & odo
\end{tabular} & sono & ulasang \\
diang & jea & odo & sono & ulasang \\
EXIS & HSY & monkey & with & turtle
\end{tabular}
'There was, it's said, a monkey and a turtle that promised each other to go and catch shrimp.'
[ceku01.jdb]
(180) Bee, medea jea.

Bee, mo-dea jea
true ST/IR-many HSY
'True, they say there are lots.'
[lexicon.db]
(181)
\begin{tabular}{llll} 
Sura & mupatei & jea & ungamu. \\
sura & mu-pate-i & jea & unga \(=m u\) \\
only & 2SG.IV/IR-kill-DIR & HSY & child=2SG/GE
\end{tabular}
'Only it was said that you killed your son.'
[king.pin 086]
(182) Io uo jea ndau maala modua' mai.
io 'uo jea ndau mo-ala \(M_{\text {-po }}^{1}\)-dua' mai
3 SG/AB yonder HSY NEG ST/IR-able IR-SF/FA-arrive come
'He/she (the dog) there, it's said, cannot come here.' [mdtext17.txt 071]

\subsection*{14.3.4.3 The adverb bai 'like, probably’}

The adverb bai functions much like the particle 'like' in some varieties of American English, as in examples such as 'he was like a great guy'. Although bai (and the complex form bai uo 'like that') occurs frequently in Pendau discourse, its functions are not well understood and further research is required. The adverb bai 'like' is not like most other adverbs because it can often modify the noun phrase and looks a bit like a preposition. Givón (1984:80) states:

In many languages, adverbs of various types are made around nouns, by constructing a prepositional or post-positional phrase. These may be manner adverbs, time adverbs, or location adverbs, most commonly.
Givón (1984:80) gives this English example which is sometimes similar to how bai works in Pendau: 'He eats like a pig.' Example (183) illustrates the use of bai 'like' preceding the noun phrase which is the pivot or subject of a transitive clause. If bai were removed from this clause it would be completely grammatical, and would mean 'Allow me to kill
this child here.'. The fact that bai precedes what must be the core argument in this clause demonstrates that it is not a preposition of the sort which makes this an oblique noun phrase (see Chapter 8).
\begin{tabular}{lllll} 
(183) Alea' & upateimo & bai & unga & moo. \\
alea' & 'u-pate- - =mo & bai & unga & moo \\
allow & 1SG/IV-kill-DIR=COMP & like & child & this
\end{tabular}
'Allow me to kill like this child here.'
[mdtext5.txt 032]
Examples (184)-(187) show the use of bai in non-verbal clauses. Example (184) shows that there is a preceding situation (or extra-textual) that evokes the matching of a sound with that of a blacksmith at work. Example (185) shows two sentences so that the previous context to the sentence that uses bai makes sense. The pet is the flying horse which is compared to a vehicle that is considered to be powerful by its owner (by implication that it is called a machine). Example (186) is a typical example of correcting someone's behaviour or technique. Example (187) is a locative predicate, and illustrates that in conjunction with the question word paio it is best translated as 'whatever'.
(184) Ho' nao bai suara nutopomintis.
ho' nao bai suara nu=topomintis
whew that like sound CN/GE=blacksmith
'Whew, that is like the sound of a blacksmith.' or: 'Whew, that is probably the sound of a blacksmith.' [asu2.pin 087]
(185) Sura petubuongomu nao, mu'omung-'omung mai nao.
sura pe-tubu-ong=mu nao, mu-'omung-'omung mai nao
only SF/DY-live-locN=2SG/GE that 2SG.IV/IR-carry-RED come that
Ndau osi nusapa, ndau bai masiin.
ndau 'osi nu=sapa, ndau bai masiin
NEG strong CN/GE=what NEG like machine
'You just are bringing your pet there. He is not strong whatsoever, not like a machine.'
[horse.pin 696-699]
(186) Ndau bai nao, unga'u.
ndau bai nao, unga='u
NEG like that child \(=1 \mathrm{SG} / \mathrm{GE}(=\mathrm{VOC})\)
'Not like that, my child.'
[mdtext4.txt 041]
\begin{tabular}{rllll} 
(187) Sembengi & io & bai & rikampung & paio. \\
So-mbengi & io & bai & ri=kampung & paio \\
ONE-night & 3SG/AB & like & LOC=village & where
\end{tabular}
'He spent one night in whatever village he was at.'
[horse.pin 990]
Example (188) illustrates a verbless clause that expands the generic noun of a copula noun phrase by specifying what kinds of animals the resurrected bones turned into. Example (189) is another example of bai used in a noun phrase used in a copula question.
(188) Jojoo majari binatang, bai bengga, japing, ajaran. jojoo ma-jari binatang, bai bengga, japing, ajaran all COP/IR-become animal like water.buffalo cow horse 'All become animals, like water buffaloes, cows, and horses.' [asu2.pin 230-234]

'Like which man will become your husband?'
[mdtext4.txt 069]

In contrast to ila uo which links sequences between clauses (and often between sentences), bai uo links up with the first clause of a phrase and connects the temporal situation with the subsequent clause, as in (190).
\begin{tabular}{lllll} 
(190) Bai uo & no'uinang & tarus & no'uluaa'. \\
bai & 'uo & no'u-inang & tarus & no'u-lua-a' \\
like yonder & 1SG.IV/RE-eat & continue & 1SG.IV/RE-vomit-TZ
\end{tabular}
'When I ate that, then I threw up.'
[cekupitu.int 009]
Example (191) is a complement clause with the perception verb 'know'. Bai is used to modify the subordinate clause's verb umput 'fasten', and not the matrix verb.
\begin{tabular}{llllll} 
(191) A'u & ndau & niotoi'u & mongumput & bai & nao. \\
a'u & ndau & ni-otoi='u & M-pong-umput & bai & nao \\
1SG/AB & NEG & IV/RE-know=1SG/GE & IR-SF/PT-fasten & like that
\end{tabular}
'I myself don't know how to attach it like that.'
[king.pin 186]
The adverb bai is frequently something like a comparative which means 'like' or 'probably'. At times it may have other meanings such as 'just'. The adverb bai is often used in conjunction with uo as a sequential interclausal relator, as in bai uo which is often translated as 'after that' (but does literally mean 'like yonder'). This usage is discussed in Chapter 18.

\subsection*{14.4 Semi-auxiliary verbs}

Semi-auxiliary verbs are a small group of verbs that appear as the first constituent of two in a complex verb construction (although they may also function less frequently as independent verbs). These verbs add either an abilitative (§14.4.1) or desiderative (§14.4.2) scope to the matrix verb. The semi-auxiliary verbs are grammaticised complement verbs and they are discussed in that context in §15.3.2.2.

\subsection*{14.4.1 Abilitative verbs ma’ule 'able’, matua 'capable’, otoi 'know’, and ala 'able, can'}

\subsection*{14.4.1.1 Abilitative verbs that take subject agreement}

Most of the abilitative verbs in Pendau are unique in that they require subject agreement and can also be contrasted with irrealis or realis modes. The agreement
marking uses the genitive pronominal set (see \(\S 6.2\) and \(\S 7.3 .1\) ). The forms ma'ule 'able' and matua 'capable' are more grammaticised than the word otoi 'know', since the first two contrast irrealis and realis only with the \(m-/ n\) - nasals. The word otoi 'know' follows the inverse voice pattern (and seems always to be in realis mode). The two grammaticised abilitative auxiliaries are shown in (192).
\begin{tabular}{lll} 
Irrealis & Realis & \\
matua & natua & 'able' \\
ma'ule & na'ule & 'capable'
\end{tabular}

Examples (193)-(195) illustrate the use of matua with first person subject agreement. Irrealis mode is indicated both on the abilitative verb and on the main verb ngkani 'eat'. Example (194) illustrates that when the subject agreement is missing, then an ungrammatical clause is created. Example (195) illustrates that subject agreement occurs even when the genitive pronoun is a free form. \({ }^{5}\)
\begin{tabular}{llll} 
A'u & matua'u & mengkani & bau. \\
a'u & matua='u & M-pe-ngkani & bau \\
1SG/AB & capable/IR=1SG/GE & IR-SF/DY-eat & fish
\end{tabular}
'I am capable of eating fish.'
[EN98-003.11]
(194) *A'u matua me-ngkani bau.
\begin{tabular}{lllll} 
(195) Jimo & matua & nijimo & mengkani & bau. \\
jimo & matua & nijimo & M-pe-ngkani & bau \\
3PL/AB & capable/IR & 3PL/GE & IR-SF/DY-eat & fish
\end{tabular}
'They are capable of eating fish.'
[EN98-003.11]
Examples (196)-(199) illustrate the use of ma'ule 'able'. All of these have subject agreement, although the subject pronoun (of the main verb) does not appear overtly in the same clause as the abilitative verb in examples (196) and (197). In (198) the abilitative verb occurs with the negative ndau 'no, not'. Example (199) illustrates that the semiauxiliary verb can occasionally be used as the only predicate of a clause.
\begin{tabular}{lllll} 
Monopo & ma'ule'u & mangatu & ungato & nao. \\
mono=po & ma'ule='u & M-pong-atu & unga=to & nao \\
still=CONT & able=1SG/GE & IR-SF/PT-guard & child=1PL.INC/GE & that
\end{tabular}
'I still am able to guard our children there.' [mdtext14.txt 055]
(197) Ono mono ma'uleto, ito melampapo
ono mono ma'ule=to, 'ito M-pe-lampa=po
if still able=1PL.INC/GE 1PL.INC/AB IR-SF/DY-travel=CONT

\footnotetext{
5 The genitive pronoun set is made up of enclitics and free forms, see \(\S 6.2\) and \(\S 7.3 .1\).
}
\begin{tabular}{lll} 
momari-maris & buut & nao. \\
M-po \(_{1}\)-mari-maris & buut & nao \\
IR-SF/DE-RED-hurry & mountain & that
\end{tabular}
'If we are still able to let's continue travelling and hurry up that mountain.'
[poora.pin 029]
\begin{tabular}{lllll} 
Ami & ndau & matua & mami & megempang. \\
'ami & ndau & matua & mami & M-pe-gempang \\
1PL.EXC/AB & NEG & capable & 1PL.EXC/GE & IR-SF/DY-walk
\end{tabular}
'We are not capable of walking (further).'
[poora.pin 105]
(199) Paey a'u moje moluar mepeuji petubuongo'u
paey a'u moje mo-luar M-pepe-uji pe-tubu-ong='u
and.then \(1 \mathrm{SG} / \mathrm{AB}\) also UD/IR-want IR-SF-test \(\mathrm{SF} / \mathrm{DY}\)-live-locN=1SG/GE
\begin{tabular}{lll} 
matuanyo & ape & ndau. \\
matua=nyo & ape & ndau \\
capable/IR=3SG/GE & or & NEG
\end{tabular}
'And then I also want to test my pet (to see if) he is capable or not.' [horse.pin 649]
Example (200) illustrates the use of irrealis and realis in the same complex sentence, clearly contrasting the modal uses of the auxiliary ma'ule/na'ule 'able'.
(200) Bai uo na’ulenyomo uo nonangkuang bobo
bai 'иo na'ule=nyo=mo 'uo N-pong-tangkuang bobo like yonder able/RE=3SG/GE=COMP yonder RE-SF-pole.carry water.container
\begin{tabular}{llllll} 
ruonta'u, & neburamo & moje & rapinyo & bengkel, "ono \\
ruo-nta'u, & N-pe-bura=mo & moje & rapi=nyo & bengkel & ono \\
two-CLSF & RE-SF-speak=COMP & also & spouse=3SG/GE & female & if
\end{tabular}
\begin{tabular}{llll} 
ma'ulenyomo & monangkuang bobo & apanta'u uo..." \\
ma'ule \(=\) nyo \(=\) mo & M-pong-tangkuang & bobo & apa-nta'u 'uo \\
able/IR=3SG/GE=COMP & IR-SF-pole.carry & water.container & four-CLSF yonder
\end{tabular}
'After he was already able to carry two coconut water containers on a pole over his shoulder, then the wife spoke again, "When he is able to carry four coconut water containers on a pole over his shoulder..."" \({ }^{6}\)

The verb otoi 'know' which can function as a main verb also has a second productive use as an abilitative verb, as in (201). Since this abilitative verb always indicates the ability or 'know-how' of the speaker it is always in the realis mode. Since otoi functions like an inverse verb construction when it appears as an abilitative auxiliary it has more affixation possibilities such as the option to use the first person prefix or the first person enclitic.

\footnotetext{
\({ }^{6}\) The meaning of tangkuang is 'to carry s.t. on a pole over the shoulders'. This means there is usually something attached to both ends of the pole. The word bobo means a hollowed out coconut shell that is used to store water, or to carry water in.
}
```

(201) A'u no'uotoi nobanta.
a'u no'u-otoi N-po -banta
1SG/AB 1SG.IV/RE-know RE-SF/VBZR-fish

```
'I know how to fish.'
[EN98-003.3]
Example (202) illustrates a negated construction, shows that the subject agreement can occur as an enclitic, and that the main verb can also be in a different mode, in this case in irrealis.
\begin{tabular}{ccllll} 
(202) A'u & ndau & niotoi'u & mongumput & bai & nao. \\
a'u & ndau & ni-otoi='u & M-pong-umput & bai & nao \\
1SG/AB NEG & IV/RE-know=1SG/GE & IR-SF-scatter & like & that
\end{tabular}
'I myself don't know how to scatter like that.'
[king.pin 186/EN98-003.3]

\subsection*{14.4.1.2 The abilitative verb that does not take subject agreement}

The verb ala means 'able, can, may, allow'. It has a near homophone alap 'get, take' (and is actually sometimes homophonous since the \(p\) is often dropped off this very common word, in contrast to other final \(p\) s which are never omitted). Although the verb ala has an abilitative meaning, it is not consistent in the strict word order and other characteristics of the abilitative verbs (§14.4.1.1). The verb ala has similar occurrences and problems for analysis as luar (§14.4.2). Example (203) illustrated that the A argument can occur between maala and the second verb. This is one thing that makes ala inconsistent with the other abilitative verbs.
(203) Nene ndaumo maala a'u mentuung.

Nene ndau=mo mo-ala a'u M-pe-ntuung
grandma/VOC NEG=COMP ST/able 1SG/AB IR-SF/DY-descend
'Grandma, I can no longer descend.'
[ceku03.jdb 061]
Examples (204) and (205) illustrate the use of ala in dynamic verb constructions. Example (204) illustrates the sequence of maala before the verb meteule 'return'. Both of these verbs have the same first person subject. Example (205) is similar except that the verb sequence is interrupted with their shared subject pronoun.

\begin{tabular}{lllll} 
Jari & a'u & ndaumo & maala & meteule. \\
jari & a'u & ndau=mo & mo-ala & M-pe-teule \\
so & 1SG/AB & NEG=COMP & ST/IR-able & IR-SF/DY-return
\end{tabular}
'So I no longer can return home.'
[horse.pin 1240]
(205)
...saba' ndaupo maala a'u metindang.
saba' ndau=po mo-ala a'u M-pe-tindang
because NEG=CONT ST/IR-able 1SG/AB IR-SF/DY-go.down
'...because I can't yet go down.'
[mdtext7.txt 045]
Example (206) illustrates ala in a stative clause. Examples (207) and (208) illustrate ala in clauses with various directional verb clause constructions. Example (207) does not mean that the husband cannot do the task, but he is stating that he 'should' not leave
because his wife is about to give birth. In contrast (208) does use the verb ala as an abilitative possibility, as it was impossible for the turtle to climb the tree in this story.
(206) Ai diang tonepebagia' tanda maala matarus.
ai diang to \(=\) - -pepe-bagi-a' tanda mo-ala mo-tarus
but EXIS RM=RE-SF-give-TZ sign ST/IR-able ST/IR-continue
'But there was one who give us a sign that we could continue.' [jptext07.jdb 042]
```

(207) A'u ndaupo maala mo'uma'o
a'u ndau=po mo-ala mo-'u-ma'o
$1 \mathrm{SG} / \mathrm{AB}$ NEG=CONT ST/IR-get UD/IR-SF-go
saba' rapi'u ndaumo masae mo'ounga.
saba' rapi='u ndau=mo mo-sae mo-'o-unga
because spouse=1SG/GE NEG=COMP ST/IR-long ST/IR-HAVE-child
'I can't go yet, because my wife won't be long before she gives birth.'

```
[mdtext15.txt 101]
(208) Ndau naala io nemene'.
ndau no-ala io \(N\)-pe-mene,

NEG ST/RE-able 3SG/AB RE-SF/DY-go.up
'He could not climb (up the tree).'
[turtle.pin 038]
Example (209) illustrates the use of ala in a copula clause construction. Once again this shows the abilitative quality of the verb, since the dog is empowered to become a human being.
\begin{tabular}{lll} 
Jomo & upomongi & risiopu, \\
jomo & 'u-po 1 -mongi & ri=siopu \\
just & 1SG.IV/IR-SF-beg & LOC=lord
\end{tabular}
\begin{tabular}{llllll} 
antau & asumu & nao & maala & majari & manusia. \\
antau & asu \(=m u\) & nao & mo-ala & ma-jari & manusia \\
in.order.to & dog \(=2\) SG/GE & that & ST/IR-able & COP/IR-become & human
\end{tabular}
'I will just ask the master, in order that your dog can become a human.'
[mdtext19.txt 046]
Examples (210)-(214) illustrate the use of maala in inverse voice verbal constructions. Examples (210)-(212) always require the ability (or inability in negative constructions) of the A argument of the verbal activity. Since the P argument in all of these examples is inanimate, it is clear that the A argument is the one with the abilitative or sense of possibility towards the verbal activity. In (213) and (214) the context helps to clarify that the A argument is the one denying, or not allowing, or not able to provide for the verbal activity.
\begin{tabular}{llll} 
Ndaupo & maala & reitai & sobalomu \\
ndau \(=\) po & mo-ala & ro-ita-i & sobalo=mu \\
NEG=CONT & ST/IR-able & IV/IR-see-DIR & snare=2SG/GE
\end{tabular}
'I can't go see your snare yet.'
[mdtext15.txt 131]
(211) Ndau maala tutuu rotui’ ambinangonyo.
ndau mo-ala tutuu ro-tui' ambinang=nyo
NEG ST/IR-able true IV/IR-grab armpit=3SG/GE
'You really must not grab his armpit.'
[horse.pin 968]
(212) Ndaumo maala nindoana’onyo abato uo
ndau=mo mo-ala ni-ndoang-a'=nyo abato 'uo
NEG=COMP ST/IR-able IV/RE-exit-TZ=3SG/GE grub yonder
ila engenyo.
ila enge=nyo
ABL nose=3SG/GE
'He couldn't remove that sago grub from his nose.'
[mdtext6.txt 068]
Emu, uti asi, ndaupo maala
'emu, uti 'asi, ndau=po mo-ala
2PL/AB dear.boy/VOC pity NEG=CONT ST/IR-able
upopomoia rimoo.
'и- po \(_{3}\)-po \({ }_{1}\)-moia ri=moo
1SG.IV/IR-CAUS-SF/FA-live LOC=here
'Dear boys, what a pity, I can't yet let you all live here.'
[poora.pin 614]
(214) Neburamo moje togoge nubengkel uo sono juragang uo, N-pe-bura=mo moje togoge nu=bengkel 'uo sono juragang 'uo RE-SF-speak=COMP also parent \(\mathrm{CN} / \mathrm{GE}=\) female yonder COM captain yonder
\begin{tabular}{lllll} 
"ami moo, uti, & ndau maala & roporapi & miu,..." \\
'ami & moo uti & ndau mo-ala & ro-po - -rapi & miu
\end{tabular}

1PL.EXC/AB here dear.boy/VOC NEG ST/IR-able IV/IR-SF/DE-spouse 2PL/GE
'The girl's father (lit. parent) spoke again to that captain, "Dear boy, you may not marry her (lit. us)...""
[mdtext15.txt 028]
Examples (215) and (216) illustrate the use of ala 'able' in relative clause constructions which are inverse voice clauses. The appearance of maala preceding these inverse voice verb constructions within a relative clause indicates that syntactically there is one predication within the relative clause.
(215) Ambinangonyo tondau maala rotui'.
ambinang=nyo to=ndau mo-ala ro-tui'
armpit=3SG/GE RM=NEG ST/IR-able IV/IR-grab
'It's his armpit that shouldn't be grabbed.'
[horse.pin 906]
\begin{tabular}{llllll} 
(216) Ripaio & diang & bangkalang & ape & lovu rimoo & tomaala \\
Ri=paio & diang bangkalang & ape & lovu & ri=moo & to=mo-ala \\
LOC=where & EXIS river & or & well & LOC=here & RM=ST/IR=able \\
& & & & & \\
reinung & ogonyo? & & & & \\
ro-inung & ogo=nyo & & & & \\
IV/IR-drink & water=3SG/GE & & & &
\end{tabular}
'Where is there a river or well here that I could drink water?' [mdtext20.txt 220]
Examples (217) and (218) illustrate the use of ala as a question word used to make a polite request (another meaning here is 'allow'). Maala always occurs in irrealis and at the beginning of the clause that forms the question. In (217) the speaker is politely asking if he will be allowed to participate in the cock fight. In (218) the man is asking if the young lady he wants to marry will be allowed to have her come down from the house to see him. The elder (not necessarily the parent) says that she may.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{(217)} & Maala & \(a^{\prime} u\) & moje & mosavu & & & manu'o' \\
\hline & Mo-ala & \(a^{\prime} u\) & moje & M-po & savung & & anu'= \\
\hline & ST/IR-get & 1SG/AB & also & IR-SF/D & DE-cock & & icken \\
\hline & \multicolumn{7}{|l|}{'May I also fight my chicken (in the cock fight)?'} \\
\hline \multirow[t]{6}{*}{(218)} & \multirow[t]{3}{*}{\begin{tabular}{l}
Maala \\
mo-ala \\
ST/IR-able
\end{tabular}} & io & mendo & & nyau & ma & lulu? \\
\hline & & io & M-pe-nd & loang & nyau & mai & Iulu \\
\hline & & 3SG/AB & IR-SF/D & Y-exit & go.down & come & first \\
\hline & \multicolumn{2}{|l|}{Neburamo} & & ogurang & & "maal & ala." \\
\hline & \multicolumn{2}{|l|}{\(N\)-pe-bura \(=\) mo} & & ogurang & & "mo-a & la \\
\hline & RE-SF/DY- & -speak=CO & OMP eld & & yonder & ST/IR & R-able \\
\hline
\end{tabular}
"'Can she exit and come on down here first?" The elder spoke, "Yes she can.'"
[mdtext15.txt 061-062]

\subsection*{14.4.2 The desiderative verb luar 'want, would like'}

Examples (219)-(221) illustrate the use of the desiderative verb luar 'want' in active voice verbal constructions. Example (219) contrasts the realis form noluar with (220) and (221) which have the irrealis form moluar. These examples also seem to give purposive nature to the clause in a similar manner as the purposive serial verbs do (see §11.3.3).
\begin{tabular}{llllllll} 
Tapi & bengkel & uo & ndau & noluar & nombali & ila & jimo. \\
tapi & bengkel & 'uo & ndau & no-luar & N-pong-bali & ila & jimo \\
but & female & yonder & NEG & UD/RE-want & RE-SF-move & from & 3PL/AB
\end{tabular}
'But that girl/woman did not want to move away from them.' [maslia.pin 016]
(220) A'u moluar mongoli songko ri'uo.
a'u mo-luar M-pong-oli songko ri='uo
1SG/AB UD/IR-want IR-SF/PT-buy hat LOC=yonder
'I would like to buy a hat over there.'
[mdtext6.txt 049]
```

(221) A'u moluar mengita togoge'u lulu,
A'u mo-luar M-pong-ita togoge='u lulu
1SG/AB UD/IR-want IR-SF/PT-see parents=1SG/GE first
saba' a'u nasaemo rimoo.
saba' a'u no-sae=mo ri=moo
because 1SG/AB ST/RE-long=COMP LOC=COMP
'I want to see my parents first, because I've already been here a long time.'

```
[mdtext15.txt 044]
Examples (222)-(226) illustrate the use of luar with denominal and dynamic verbs, which include intransitive and transitive clauses. All of these examples also convey a desiderative meaning, and could possibly have the meaning of 'intend'. Usually the modality of luar agrees with the modality of the verb. However in example (224) luar takes the mo- irrealis prefix while the main verb takes realis modality. This can be compared to example (225) which has the same verb sequence and both have realis modal prefixes. It does not seem likely that example (224) is two predications. This disharmony may be indicative that the modality in luar is becoming lost (or at least is in some kind of flux). Example (226) shows a similar clause as (224) but has realis marking on both verbs (this shows that the negation with ndau 'no' is not having any influence on this).
\begin{tabular}{llllll} 
Ami & moluar & meduta & mo'upu & miu & nao. \\
'ami & mo-luar & M-pe-duta & mo'upu & miu & nao \\
1PL.EXC/ABB & UD/IR-want & IR-SF/DY-propose & grandchild & 2PL/GE & that
\end{tabular} 'We want to propose to your (hon.) granddaughter there.'
[mdtext11.txt 057]
(223) \(\begin{array}{llllll}\text {...saba' tuai } & \text { nuunga } & \text { uo } & \text { moluar } & \text { mengkani } & \text { aniongonyo. } \\ \text { saba' tuai } & \text { nu=unga } & \text { 'uo } & \text { mo-luar } & \text { M-pe-ngkani } & \text { aniong=nyo } \\ \text { because } & \text { y.sib. } & \mathrm{CN} / \mathrm{GE}=\text { child } & \text { yonder } & \text { UD/IR-want } & \text { IR-SF-eat } \\ \text { rice }=3 \mathrm{SG} / \mathrm{GE}\end{array}\)
(224) A'u ndau moluar norapi sosono ipago'u. a'u ndau mo-luar \(N\)-po \(1_{1}\)-rapi so-sono ipag='u 1SG/AB NEG UD/IR-want RE-SF-spouse RED-COM sibling.in.law=1SG/GE 'I don't want to be married to my sister-in-law.'
[mdtext20.txt 104]
(225) Tarus langkai uo noluar norapi ipagonyo.
tarus langkai 'uo no-luar \(N\)-po \({ }_{1}\)-rapi ipag=nyo
continue male yonder UD/RE-want RE-SF-spouse sibling.in.law=1SG/GE
'And then the man wanted to marry his sister-in-law.'
[mdtext20.txt 110]
(226) Tosi'a'a ndaupo noluar norapi.
to=si'a'a ndau=po no-luar \(N\)-po \(o_{1}\)-rapi
AGNM=o.sibling NEG=CONG UD/RE-want RE-SF/DE-spouse
'The older sibling still did not want to get married.' [miracle1.pin 167]

Examples (227) and (228) illustrate the use of luar in an inverse voice verbal clause construction. These examples are parallel to the purposive serial verbs and the abilitative verbs, all of which make up complex verb constructions.
(227) Langkai uo butu moluar reinang nutoo dea ri'uo. langkai 'иo butu mo-luar ro-inang nu=too dea ri='иo male yonder only UD/IR-want IV/IR-eat CN/GE=person many LOC=yonder 'Many people only wanted to eat that man up there.'
[mdtext14.txt 070]
\begin{tabular}{|c|c|c|c|c|c|}
\hline (228) Nodua' & ri'uo & olongian & ио & tarus & moluar \\
\hline \(N-p o_{1}\)-dua' & ri= 'иo & 'olongian & 'иo & tarus & mo-luar \\
\hline RE-SF-arrive & LOC=yonder & er king & yonder & continue & UD/IR-want \\
\hline rara'op & nijimo sa & sakampung & ио. & & \\
\hline ro-ra'op & nijimo so & so-kampung & 'иo & & \\
\hline IV/IR-capture & 3PL/GE O & ONE-village & yonder & & \\
\hline
\end{tabular}
'After the king had arrived there then they, the entire village there, wanted to capture him.'
[miracle1.pin 090]
Examples (229)-(231) illustrate the use of luar as a main verb. Examples (229) and (230) illustrate that the first clause with luar has its own subject, and the following clause has its own subject and verb. However example (231) is not as clear. The wife is the subject of luar, while at the same time this clause forms the grammatical subject of the inverse voice verbal construction.
(229)
\begin{tabular}{llllll} 
Kai, & ono & emu & moluar & a'u & momoiamo \\
kai, & ono & 'emu & mo-luar & \(a^{\prime} u\) & M-po-moia=mo \\
grandpa/VOC & if & 2PL.AB & UD/IR-want & 1SG/AB & IR-SF-live=COMP
\end{tabular}
sono oo.
sono 'oo
COM 2SG/AB
‘Grandfather, if you (hon.) want, I will live now with you.’ [mdtext13.txt 034]
(230) Ono emu moluar, ito mobataro.
Ono 'emи mo-luar, 'ito M-po \({ }_{1}\)-bataro
if \(2 \mathrm{PL} / \mathrm{AB}\) UD/IR-want 1 PL.INC/AB IR-SF/DE-bet
'If you (hon.) want, we can make a bet.' [mdtext9.txt 002]
\begin{tabular}{|c|c|c|c|c|}
\hline (231) Tarus tarus continue & \begin{tabular}{l}
noluar \\
no-luar \\
UD/RE-want
\end{tabular} & \begin{tabular}{l}
rapinyo \\
rapi=nyo \\
spouse \(=3\) SG/GE
\end{tabular} & \begin{tabular}{l}
bengkel uo \\
bengkel 'uo \\
female yonder
\end{tabular} & \begin{tabular}{l}
ni'utei \\
ni-’ute-i \\
IV/RE-louse-DIR
\end{tabular} \\
\hline nirapinyo & & langkai. & & \\
\hline ni= rapi \(=\) & & langkai & & \\
\hline PN/GE=s & pouse=3SG/GE & male & & \\
\hline \multicolumn{4}{|l|}{'And then the wife wanted her husband to delouse her.'} & [mdtext20.tx \\
\hline
\end{tabular}

Examples (232)-(233) show the adverb moje appearing between luar and the main verb.
(232) Iye, a'u moluar moje mosavung.
iye, \(a\) 'u mo-luar moje \(M\)-po a \(_{1}\)-savung
yes 1SG/AB UD/IR-want also IR-SF/DE-cock.fight
'Yes, I want to also be in the cock fight.' [mdtext15.txt 146]
(233) Jari a'u moluar moje mombalas.
jari a'u mo-luar moje \(M\)-pong-balas
so \(1 \mathrm{SG} / \mathrm{AB}\) UD/IR-want also IR-SF/PT-revenge
'So I also want to take revenge (on her).'
[mdtext20.txt 284]
(234) Ai \(a\) 'u moluar moje molumba.
ai a’u mo-luar moje M-po-lumba
but 1SG/AB UD/IR-want also IR-SF/DE-race
'But I want also to race.'
[horse.pin 121]
Examples (235) and (236) illustrate luar functioning as an intransitive verb that shares its subject with another verb. The subject occurs between the two verbs. This kind of discontinuity does not occur with the abilitative verbs, and this is evidence that the desiderative cannot yet be classed as an auxiliary (if they are moving in that direction).
\begin{tabular}{lllll} 
Bai & uo & noluaromo & siinanyo & momoia \\
bai & 'uo & no-luar=mo & siina \(=\) nyo & M-po 1 -moia \\
like & yonder & UD/RE-want=COMP & mother=3SG/GE & IR-SF/FA-live
\end{tabular}
ribumbu nupangale.
ri=bumbu nu=pangale
LOC=jungle CN/GE=virgin.jungle
'After that the mother already wanted to live in the virgin jungle.'
[mdtext21.txt 006]
\begin{tabular}{lllll} 
Paey & noluar & unga & uo & nengkani. \\
paey & no-luar & unga & 'uo & \(N\)-pe-ngkani \\
and.then & UD/RE-want & child & yonder & RE-SF/DY-eat
\end{tabular}
'And then that child wanted to eat.'
[mdtext4.txt 025]
Example (237) illustrates an applicativised instrument subject clause. In this clause it is impossible for an inanimate object such as doi' 'money' to want something, so the semantics of this clause requires that it is the agents (people at the fisheries co-op) who want to use the money (as a means to help a poor fisherman). Example (238) illustrates with a relative clause that the verb luar 'want' must be interpreted as a unitary predication.
\begin{tabular}{lllllll} 
(237) Doi' & moluar & ropongolia' & gulang & o & pita' & nilon... \\
doi' & mo-luar & ro-pong-oli-a, & gulang & o & pita' & nilon \\
money & UD/IR-want & IV/IR-SF/PT-buy-TZ & rope & and & ribbon nylon
\end{tabular} 'They wanted to use the money to buy rope, fishing line (etc.)...' [jptext07.jdb 012]
```

(238) ...ayu tomoluar repejo'onito uo.
'ayu to=mo-luar ro-pe-jo'ong-i=to 'uo
wood RM=UD/IR-want IV/IR-SF/DY-garden-DIR=1PL.INC/GE yonder
'...(in the middle of the jungle/woods) that we want to plant in over there.'
[jptext01.jdb 006]

```

Examples (239) and (240) illustrate the use of luar in the same apparent syntactic form as in examples (227) and (228) (also for similar but ditransitive inverse voice constructions see (237) and (238)). However in these examples, the luar verb must be interpreted as a separate predication from the second verb in the sequence. In (239) the king's daughter is asked whether she wants to marry the water monitor lizard, and then she answers that she doesn't want to. Her answer confirms that the question with luar is a different predication from the main verb rapi 'spouse (to marry)'. Her answer also demonstrates the use of moluar functioning as a main verb (see also (229)-(231)). Example (240) is clearly using moluar as a different predication which is confirmed in the surrounding context of the story. The magical golden boy that was kidnapped comes back and only will drink out of his golden cup (his mother has not yet recognised him at this point). The context demonstrates that the boy was offered at least one other cup of water that he refused.
(239) Paey nipo'utanyai nu'olongian,
paey ni-po \(1_{1}\) '’utanya- \(\mathrm{i} \quad \mathrm{nu}=\) 'olongian
and.then IV/RE-SF-ask-DIR CN/GE=king
\begin{tabular}{llll} 
"oo & moluar & roporapi & nigibang?" \\
'oo & mo-luar & ro-po 1 -rapi & ni=gibang \\
2SG/AB & UD/want & IV/IR-SF/DE-spouse & PN/GE=lizard
\end{tabular}
\begin{tabular}{lllllll} 
Neburamo & unga & bengkel & uo, & "a'u & ndau & moluar." \\
N-pe-bura=mo & unga & bengkel & 'uo, & a'u & ndau & mo-luar \\
RE-SF-speak=COMP & child & female & yonder & 1SG/AB & NEG & UD/IR-want
\end{tabular}
'And then the king asked (his daughter), "Do you want the water monitor lizard to marry you?" The daughter spoke, "I don't want to."" [gibang.pin 027-028]
(240) Ai unga uo ndau moluar raalapa' ogo
ai unga 'uo ndau mo-luar ro-alap-a' ogo
but child yonder NEG UD/IR-want IV/IR-get-TZ water
rigalaas ntaninyo.
ri=galaas ntani \(=\) nyo
LOC=glass different=3SG/GE
'But that child did not want (his mother) to bring him water in any other glass.'
[mdtext4.txt 039]

\subsection*{14.5 Word order of verbal adjuncts (adverbs, semi-auxiliary verbs, and negation)}

\subsection*{14.5.1 A comparison of adjuncts in pre-verbal position}

Adverbs and semi-auxiliary verbs often provide the means of giving a predication a finer nuance, while negation of course negates a clause's meaning. Examples (241)-(252) illustrate negation, adverbs, and semi-auxiliary verbs in similar dynamic verbal clause constructions (only the specific adjunct is changed). This provides a way of summarising the previous sections and contrasting what semantic differences goes on. These examples are presented in what can be considered the most common position of adjuncts (for those that may float).

\section*{Negation}
\begin{tabular}{lllll} 
(241) & A'u & ndau & mengkani & bau. \\
a'u & ndau & M-pe-ngkani & bau \\
& 1SG/AB & NEG & IR-SF/DY-eat & fish
\end{tabular}
'I will not eat fish.'
[EN98-003.12]

\section*{Adverbs}
(242) A'u jomo mengkani bau.
a'u jomo M-pe-ngkani bau
1SG/AB just IR-SF/DY-eat fish
'I just eat fish.'
[EN98-003.11]
(243) A'u. butu mengkani bau.
a'u butu M-pe-ngkani bau
1SG/AB only IR-SF/DY- fish
'I will only eat fish.'
[EN98-003.12]
(244) A'u sura mengkani bau.
a'u sura M-pe-ngkani bau
\(1 \mathrm{SG} / \mathrm{AB}\) only IR-SF/DY-eat fish
'I will only eat fish.'
[EN98-003.11]
(245) A’u samata mengkani bau
a'u samata M-pe-ngkani bau
\(1 \mathrm{SG} / \mathrm{AB}\) always IR-SF/DY-eat fish
I will always eat fish.'
[EN98-003.11]
(246) A'u masaro mengkani bau.
a'u masaro M-pe-ngkani bau
\(1 \mathrm{SG} / \mathrm{AB}\) often IR-SF/DY-eat fish
'I often eat fish.'


\subsection*{14.5.2 Floating adverbs}

Adverbs such as moje 'again, also' are floating adverbs. The term 'floating' is not used in a technical sense, but in the looser sense of word order variability. \({ }^{7}\) Examples (253)(262) illustrate the possible positions that floating adverbs may occur in (in these examples the adverb moje 'again, also' is used). A floating adverb must normally occur in a postsubject constituent position (however, when it precedes the subject it is distinctively topicalisation, which is discussed further below). When the floating adverb occurs in these positions there is no semantic change, and the scope is over the predication itself and not the entire proposition. The adverb moje is in bold font and floats in or moves position in

\footnotetext{
7 See Donohue (1995:173-175) for an example of floating adverbs in Tukang Besi and 'launching' that occurs according to criteria 'that is relevant to a non-nominative-argument'. At this point in time there has been no observable reason that distinguishes the 'floating' in Pendau, but like Tukang Besi it is possible to nominate a canonical position which in Pendau is pre-verbal (but post-verbal in Tukang Besi).
}
what are otherwise the same clauses. Examples (253)-(255) illustrate the three positions that an adverb may occur in with an inverse voice transitive clause.

\section*{Inverse voice transitive clauses}

'ami ri=moo moje ni-dua' nu=bali
1PL.EXC/AB LOC=this also IV/RE-arrive CN/GE=enemy
'The enemy again arrived here beside us.'
(354) Ami rimoo nidua' moje nubali.
'ami ri=moo ni-dua' moje nu=bali
1PL.EXC/AB LOC=this IV/RE-arrive also CN/GE=enemy
'The enemy again arrived here beside us.'
\begin{tabular}{lllll} 
(255) Ami & rimoo & nidua', & nubali & moje. \\
'ami & ri=moo & ni-dua' & nu=bali & moje \\
1PL.EXC/AB & LOC=this & IV/RE-arrive & CN/GE=enemy & also
\end{tabular}
'The enemy again arrived here beside us.'
Examples (256)-(258) demonstrate the mobility of moje in a stative clause that has an agent (i.e. it is a middle voice). The adverb could also occur post-verbally in a stative clause which has no agent.

\section*{Stative verb clauses (with agent=middle voice)}
\begin{tabular}{lllll} 
Odo & moo & moje & naatemo & nuapi. \\
odo & moo & moje & no-ate \(=\) mo & nu \(=\) api \\
monkey & this & also & ST/RE-die=COMP & CN/GE=fire
\end{tabular}
'The monkey also died by/via the fire.'
(257) Odo moo naatemo moje nuapi.
odo moo no-ate=mo moje nu=api
monkey this ST/RE-die=COMP also CN/GE=fire
'The monkey also died by/via the fire.'
(258) Odo moo naatemo muapi moje.
odo moo no-ate=mo nu=api moje
monkey this ST/RE-die=COMP CN/GE=fire also
'The monkey also died by/via the fire.'
Examples (259)-(262 illustrate the four positions that adverbs in ditransitive active voice instrument clauses may occur in.

\section*{Active voice ditransitive clause (instrument clause)}
(259)

SiYusup
moje monyambale japing uo
si=Yusup
moje M-pong-sambale
PN/AB=Joseph
'Joseph also butchered the cow with the machete.'
(260)
\begin{tabular}{llllll} 
SiYusup & monyambale & moje & japing & uo & nupiso. \\
si=Yusup & M-pong-sambale & moje & japing & 'uo & nu=piso \\
PN/AB=Joseph & IR-SF/PT-butcher & also & cow & yonder & INSTR=machete
\end{tabular}
'Joseph also butchered the cow with the machete.'
(261)
\begin{tabular}{llllll} 
SiYusup & monyambale & japing & uo & moje & nupiso. \\
si=Yusup & M-pong-sambale & japing & 'uo & moje & nu=piso \\
PN/AB=Joseph & IR-SF/PT-butcher & cow & yonder & also & INSTR=machete
\end{tabular}
'Joseph also butchered the cow with the machete.' 'Joseph also butchered the cow with the machete.'

Some adverbs such as sura 'only' seem to be restricted to where they can float to as examples (263)-(267) illustrate. In these examples sura 'only' can occur in two positions, either before the verb or before the instrument phrase (examples (264) and (265) contrast the instrument phrase with the prepositional phrase with the instrument).
\begin{tabular}{llllll} 
SiYusup & sura & monyambale & japing & uo & nupiso. \\
si=Yusup & sura & M-pong-sambale & japing & 'uo & nu=piso \\
PN/AB=Joseph & only & IR-SF/PT-butcher & cow & yonder & INSTR=machete
\end{tabular}

PN/AB=Joseph only IR-SF/PT-butcher cow yonder INSTR=machete
sura M-pong-sambale
\begin{tabular}{ll} 
nupiso & moje \\
nu=piso & moje \\
INSTR=machete & also
\end{tabular} also
'Joseph will only butcher the cow with a machete.'
(264) *Si=Yusup mony-(s)ambale sura japing ио nu=piso.
(265) SiYusup monyambale japing иo sura nupiso.
si=Yusup M-pong-sambale japing 'uo sura nu=piso \(\mathrm{PN} / \mathrm{AB}=\) Joseph IR-SF/PT-butcher cow yonder only INSTR=machete
'Joseph will only butcher the cow with a machete.'
SiYusup monyambale japing uo sura sono piso.
si=Yusup M-pong-sambale japing 'uo sura sono piso PN/AB=Joseph IR-SF/PT-butcher cow yonder only with machete 'Joseph will only butcher the cow with a machete.'
(267) *Si=Yusup mony-(s)ambale japing uo nu=piso sura.

Examples (268) and (269) illustrate the fronting or topicalisation of moje 'also, again'. When moje is fronted it has a different intonation than those in examples (253)-(262), i.e.
there is a pause that follows the moje in topicalisation that does not occur in the other varied positions. These examples have a scope over the entire clausal proposition that usually comes after a question or a statement that is followed up with this topicalisation.
(268)

Moje, ami rimoo nidua' nubali.
moje, 'ami ri=moo ni-dua' nu=bali
also 1PL.EXC/AB LOC=this IV/RE-arrive CN/GE=enemy
'Also (in addition to that), the enemy arrived here beside us.'
(269)
\begin{tabular}{llll}
\begin{tabular}{ll} 
Moje, & a'u \\
moje, & a'u
\end{tabular} & mongkomung bau. \\
alsong-'omung bau & ISG/AB & IR-SF/PT-carry fish
\end{tabular}
'Also (in addition to that), I will carry fish.'

\subsection*{14.6 Adjunct combination possibilities}

The most common constituent structure of the optional verbal modifiers (i.e. adjuncts) are sketched in example (270) (parentheses indicate optional constituents; note that not all of these constituents can co-occur-specifically the PUR cannot co-occur with DIR (or at least the purposive (PUR) serial verbs can't), and there may be constraints on multiple adverbs (ADV)).

\section*{(270) \((\mathrm{RM}=)(\mathrm{NEG})(\mathrm{ADV})(\mathrm{MOD} / \mathrm{PUR})\) VERB (DIR) (ADV/DIR)}

Examples of some of the adjunct combinations that may occur in the verbal predicate are given in examples (271)-(279) (the predicate phrase is in bold font). These modifiers include negation (NEG) with ndau 'no', as in (271), and nyaa 'don't, other adverbs (ADV) such as kana 'certainly', as in (272) and moje, as in (272)-(275), and purposive serial verbs (PUR) such as ma'o 'go' (creating a purpose clause as in (275)) and moluar 'want', as in (271) and (273). Directional serial verbs (DIR, as in (274)) point the verb in a specific direction (see §11.3.2).
\[
\begin{array}{lcll}
\text { (271) Io } & \text { ndau } & \text { moluar } & \text { meondo'. } \\
\text { io } & \text { ndau } & \text { mo-luar } & \text { M-pe-ondo' } \\
\text { 3SG/AB } & \text { NEG } & \text { UD/IR-want } & \text { IR-SF/DY-stop } \\
& \text { 'He/she didn't want to stop.' } &
\end{array}
\]
[EN97-004.57]
\begin{tabular}{cllll} 
(272) \begin{tabular}{clll} 
Babi & nao & kana & maate
\end{tabular} \begin{tabular}{c} 
moje. \\
babi \\
pig
\end{tabular} & nao & kana & mo-ate & moje \\
that & certainly & ST/IR-die & again
\end{tabular}
'That pig will certainly die later.'
[EN98-003.10]
\begin{tabular}{lllll} 
Ai & a'u & moluar & moje & molumba. \\
ai & a'u & mo-luar & moje & M-po \({ }_{1}\)-lumba \\
but & \(1 \mathrm{SG} / \mathrm{AB}\) & \(\mathrm{UD} / \mathrm{IR}\)-want & again & IR-SF/DE-race
\end{tabular}
'But I want to race again.'
[horse.pin 121]
\begin{tabular}{rllll} 
(274) Antau & ami & mendoang & ma'o & moje. \\
antau & 'ami & M-pe-ndoang & ma'o & moje \\
so.that & 1PL.EXC & IR-SF/DY-exit & go & again
\end{tabular}
'So that we go and exit again.'
```

(275) Tarus ma'o neduta moje siina nigibang
tarus ma'o N-pe-duta moje siina ni=gibang
continue go RE-SF/DY-propose again mother PN/GE=lizard

| sono | unga | nu'olongian. |
| :--- | :--- | :--- |
| sono | unga | $n u=$ 'olongian |
| with | child | $\mathrm{CN} / \mathrm{GE}=$ king |

'Continuing on the water monitor lizard's mother went again to propose to the king's daughter.'
[gibang.pin 034]

```

Adverbs from the same sub-class sometimes appear together as in (276) where sura 'only' and butu 'just, only' co-occur. Adverbs of degree such as paas 'exactly' may cooccur with adverbs such as moje 'again', as in (277). Adverbs of time may co-occur with a purposive serial verb such as in (278). Many other combinations are possible, but the full range of possibilities has not yet been explored. Example (279) illustrates a negative relative clause that also has the semi-auxiliary verb maala 'able, can' in the predication. Relative clauses marked by the proclitic to \(=(\mathrm{RM})\) are discussed in \(\S 15.5\).
\begin{tabular}{ccllll} 
(276) Apa & sura & butu & baliung & moo & no'u'omung-'omung. \\
apa & sura & butu & baliung & moo & no'u-'omung-'omung \\
because & only & just & axe & this & 1SG.IV/RE-carry-RED
\end{tabular}
‘Because I only just carried this axe.' [asu2.pin 067]
(277) Paas moje nodua' io bengi nuJumaa'.
paas moje N -po \({ }_{1}\)-dua' io bengi nu=Jumaa'
precise also RE-SF/DE-arrive 3SG/AB night CN/GE=Friday
'He again arrived exactly on Friday night.'
[nagarang.pin 125]
(278) Bia ma’o uitai kuburonyo.
bia ma'o 'u-ita-i kubur=nyo
later go 1SG.IV/IR-see-DIR grave=3SG/GE
'Later I will go see his/her grave.'
[miracle1.pin 120]
(279)
\begin{tabular}{llll} 
Nielinganinyomo & ambinang & nuajaran & uo \\
ni-elingang- \(i=n y o=m o\) & ambinang & \(n u=\) ajaran & 'uo \\
IV/RE-forget-DIR=3SG/GE=COMP & armpit & CN/GE=horse & yonder
\end{tabular}
\begin{tabular}{lll} 
tondau & maala & rotui'. \\
to \(=\) ndau & mo-ala & ro-tui \\
RM=NEG & ST/IR-able & IV/IR-grip
\end{tabular}
'He forgot that he shouldn't grip the horse's armpit.'

\section*{15 Clause combinations and other complex sentences}

\subsection*{15.1 Introduction}

This chapter describes a number of clause combinations and other complex sentences that are formed by a continuum of various strategies. Some of these clause combinations are also complex sentences, but not all of the complex sentences discussed here are combinations of clauses. A simple sentence may of course be synonymous with a basic clause. Although the term 'sentence' is a traditional term, it is difficult to define. I have chosen to use 'sentence' because it captures a variety of non-simple clauses, various coordinating combinations of clauses, and phrases that are in some way subordinate to a clause. These clause combinations and complex sentences can be viewed on a binding continuum as very loose to very tight. \({ }^{1}\) Among the tighter bound are comparative and complement clauses. Comparative clauses compare two objects, and thus one can't appear without the other (§15.2). Complement clauses by their nature cannot appear independently and function as an integral constituent of another clause ( \(\$ 15.3\) ). Quotation margins are discussed separately as they always introduce direct speech and can be thought of as loosely dependent on the speech clause (§15.4).

The clauses which are less loosely bound are relative clauses and those that have two or more clauses co-ordinated by a clausal connector or 'relator'. Relative clauses appear as a constituent of a simple clause and since they modify the constituent of another clause, they are themselves not syntactically required by that clause ( \(\S 15.5\) ). Clauses combined with relators will be referred to by Longacre's (1985) typological term 'co-ranking' and the clause relators will be identified by the kind(s) of propositional relations that they create (§15.6). Finally, discourse connectors are the loosest bound phrases. They are typically a marginal phrase that can adjoin a clause, thus forming a complex sentence that relates the clause to spans of discourse. Discourse connectors are dependent on the clause they join, but the clause itself does not syntactically require them (§15.7).

\subsection*{15.2 Comparatives in Pendau}

Pendau has two different comparative constructions: \({ }^{2}\) a general comparative (§15.2.1), and an incremental comparative ( \(\S 15.2 .2\) ). These will be discussed in the general framework used by Andersen (1983), Comrie (1989:91), and Crookston (1994).

\footnotetext{
1 Payne (1997:307) notes a similar continuum for clause combinations (comparative constructions and quotation margins are excluded) and includes serial verbs. I discuss serial verbs in §11.3.
\({ }^{2}\) See Andrews (1975) for a technical discussion of comparatives. He suggests that there is a structural similarity between comparatives and relative clauses.
}

In comparative constructions one entity is compared with another, and it is asserted that one of these entities has a greater degree of some quality than the other entity has of some quality. While the general comparative can be used for any kind of comparison, the incremental can only be used when the difference between the two compared entitities is small.

\subsection*{15.2.1 General comparative}

The general comparative construction has two parts to the construction. The first part requires a stative verb with the continuative enclitic \(=p o\). The subject or complement of the stative verb constitutes the object \({ }^{3}\) which is 'more of X ' (i.e. the comparee NP) than the element it is compared to (i.e. the standard of comparison; in this construction it is not uncommon for the stative verb's argument to be ellipsed). The second half of the comparison begins with the conjunction paey 'than'. The basic structure of the general comparative can be schematised as in (1).
\[
\begin{equation*}
\text { ST.VERB=po } \quad \text { (X) } \quad \text { (paey } \mathrm{Y}) \tag{1}
\end{equation*}
\]

A stative verb is marked by the continuative enclitic \(=p o\). The verb is followed by an argument which is asserted to have more of the quality referred to by the verb than some other referent (and may be ellipsed). The other referent can then be referred to overtly after insertion of the conjunction paey. \({ }^{4}\) This basic structure is illustrated in examples (2) and (3).
(2)
\begin{tabular}{llll} 
[Nooge'opo & siLori] & [paey & tuainyo.] \\
no-oge'= & si=Lo & paey & tuai=nyo \\
ST/RE-big=CONT & PN/AB=Lori & than & younger.sibling=3SG/GE \\
'Lori is bigger than her sister.' & &
\end{tabular}
(3) [Mododapo baju'u] [paey bajumu.]
mo-doda=po baju='и paey baju=mи

ST/IR-red=CONT shirt=SG/GE than shirt=2SG/GE
'My shirt is redder than your shirt.'
In most general comparative examples, the arguments referred to are subjects of the verb involved, as in (2) and (3). However, sometimes the objects of comparison may be complement clauses rather than subjects. This is illustrated in (4).
\begin{tabular}{lllll} 
[Nasanangopo & nongore & bau] & [paey & mengkani.] \\
na-sanang=po & N-pong-ore & bau & paey & M-pe-ngkani \\
ST/RE-happy=CONT & RE-SF-pull & fish & than & IR-SF/DY-eat
\end{tabular}
'One is happier pulling up fish than (when one) is eating.'

\footnotetext{
\({ }^{3}\) This is yet another use of 'object'. The object here is not a grammatical relation or secondary object, but rather it is referring to one of a pair of items always found in comparative constructions, i.e. the comparee (= the object) and the item compared which is the standard of comparison.
\({ }^{4}\) As a propositional relator paey indicates temporal sequentiality, see examples in §15.6.3.
}

If the object of comparison has already been established in the preceding discourse, overt reference to it in a paey phrase is unnecessary. This is illustrated in (5) where the comparative construction comes in the second of two conjoined clauses, and where the object of comparison has already been introduced in the first clause.

'Even though gold is good, it is even better when a child obeys his/her parent's wishes.'

\subsection*{15.2.2. Incremental comparative}

This section provides examples of the incremental comparative structure. The incremental comparative differs from the general comparative in that the difference between the two items is asserted to be small. In the generic comparative the difference is left unspecified. This can be schematised as in (6). The pattern starts with the object being compared to, where the comparee NP is marked here as X ). This is followed by a stative verb that refers to the size or quality of something. This is then followed by either seide' (so-ide' 'ONE-small') or sooge (so-oge 'ONE-big). The ablative ila 'from' is used to target the thing compared. These are illustrated in examples (7)-(10). \({ }^{5}\)
\[
\mathrm{X} \quad \text { ST.VERB } \quad \text { so- }\left\{\begin{array}{l}
\text { 'small' }  \tag{6}\\
\text { 'big' }
\end{array}\right\} \text { ila } \mathrm{Y}
\]
(7) [Payangano'u moo mooge seide'] [ila moo.]
payangan='u moo mo-oge so-ide' ila moo
boat=1SG/GE this ST/IR-big ONE-small ABL this
'My boat is a little bigger than this one."
[EN97-003.47]
(8) [Buku moo neide seide'] [ila moo.]
buku moo ne-ide so-ide, ila moo
book this ST/RE-small one-small ABL this
'This book is a little smaller than this one.'
(9) [Buku moo mooge sooge] [ila moo.]
buku moo mo-oge so-oge ila moo
book this ST/IR-big one-big ABL this
'This book is a little bigger than this one.'

\footnotetext{
5 Although these examples only illustrate stative verbs for small, large, and the colour red, it is likely that other stative verbs can fill this position. Note however that only the stative verbs for small and large are used in the second stative verb of the formula (the ones affixed with the numeral one prefix so-). The possibility that there is a further contrast of degree indicated by one or the other of these such as 'much, greater' or 'a teeny bit different' is not yet known. Future research will be needed to clarify this issue.
}
(10) [Buku moo mododa seide’] [ila moo.]
buku moo mo-doda so-ide' ila moo
book this ST/IR-red ONE-small ABL this
'This book is a little redder than this one.'

A special construction for asking comparative alternation questions is discussed in §16.3.4.

\subsection*{15.3 Complementation}

A complement clause can be identified according to the definition given by Payne (1997:313) \({ }^{6}\) :

A prototypical complement clause is a clause that functions as an argument (subject or object) of some other clause (Noonan 1985). A main (or matrix) clause is one that has another clause as one of its core arguments.

Complement clauses are not marked by a complementising particle. Some of the verbs which take complement clauses are listed in Figure 15.1. These reflect what is typically found typologically (e.g. Givón 1990, Noonan 1985).
\begin{tabular}{|l|l|l|l|}
\hline \multicolumn{2}{|c|}{ Regular complement verbs } & \multicolumn{2}{|c|}{\begin{tabular}{c} 
Grammaticised complement verbs \\
(semi-auxiliary verbs)
\end{tabular}} \\
\hline \hline tuju & 'send' & luar & 'want, would like' \\
\hline jai & 'send' & ala & 'able, can' \\
\hline undang & 'invite' & ma'ule & 'able' \\
\hline 'utanya & 'ask' & matua & 'capable' \\
\hline ubu & 'coax, invite' & otoi & 'know (how to)' \\
\hline inga & 'prohibit, forbid' & & \\
\hline su'at & 'test' & \\
\hline tuung & 'order' & \\
\hline rait & 'accuse' & \\
\hline peilu & 'say, tell' & \\
\hline ito & 'see' & \\
\hline epe & 'hear, listen' & & \\
\hline ingka & 'fear' & \\
\hline tora & 'remember & & \\
\hline rasa & 'feel' & \\
\hline
\end{tabular}

Figure 15.1. Regular and grammaticised complement verbs
All complements are undergoers of the matrix clause. This means that complements may be classed either as 'object' or 'subject' complements since undergoers may be grammatical subjects or objects depending on the voice orientation. There is a subset of complement verbs that are described as semi-auxiliary verbs. The semi-auxiliary verbs

\footnotetext{
\({ }^{6}\) The term 'complement' is sometimes used for other syntactic phrases. Here it is largely used for syntactic complementation structures; however, it is also used as a convenient label for a few minor clause structures such as may be found in copula clauses (§6.6.3.2 and §9.6.1)
}
function as complement verbs that are more grammaticised than other complement verbs (see \(\S 14.4\) for discussion on semi-auxiliary verbs).

Subject complements will be discussed in §15.3.1 and object complements in §15.3.2. A special complement form, the discourse complement, will be discussed in §15.4.1. The use of complements in testing subject-hood is given in §6.4.1.4.

\subsection*{15.3.1 Subject complementation}

In subject complementation the subject of the matrix and the complement clause have the same reference. The pivot (or subject) of the matrix normally is subject to equi deletion when the pivot of the complement is coreferential (see §6.4.1.4). This section will examine the structural difference between pre-verbal and post-verbal word order of the matrix subject in complementation sentence constructions. Both of these patterns appear frequently in texts. They reflect the general difference in pragmatic word order of SVO/VOS (§17.4).

\subsection*{15.3.1.1 Pre-verbal matrix subject}

There are various means to express a subject complement. In example (11), rasa is an intransitive stative verb, but it can be transitivised as shown in (12) and (13) in which the dynamic verb ongkor 'tire' and stative verb orop 'hungry' occur in the complement clause (the first person is deleted via equi deletion). Both of these verbs are in the subject position.
(11) Narasa.
no-rasa
ST/RE-feel
'That felt good.
(12) [Neongkor] no’urasa.

M-pe-ongkor no’u-rasa
IR-SF/DY-tire 1SG.IV/RE-feel
'I feel tired.'
[nangkait.pin 057]
(13) [Nooropomo tutuu] no'urasai.
no-orop=mo tutuu no'u-rasa-i
ST/RE-hunger=COMP truly 1SG.IV/RE-feel-DIR
'I feel that I am truly hungry.'
[troll.int 131]
Examples (14) and (15) illustrate the use of jai 'send' and ubu 'coax, invite' in which the subject occurs in the canonical order (i.e. SVO), and the coreferential subject of the complement is deleted. An important point to understand here is that these complements are 'discontinuous' (the subject and its complement clause are underlined). This discontinuity introduces some ambiguity since the last phrase could be analysed as a third core argument. \({ }^{7}\) I analyse this as a discontinuous complement clause since the subject

\footnotetext{
7 Although it may be possible to interpret this as an 'adverbial purpose' clause there are several reasons for not doing so. Firstly, means-purpose clauses are normally semantically related with an overt relator such
}
could be in the order VOS in which case the undergoer would directly precede the complement phrase (discussed in 15.3.1.2). \({ }^{8}\) Complement clauses can also be formed with the use of directional verbs (§11.3) as shown in (15).
\begin{tabular}{lllll} 
Unga & nupayangan & uo & nipejaimo & nujuragang \\
\hline unga & nu=payangan & 'uo & ni-pe-jai=mo & nu=juragang \\
child & CN/GE=boat & yonder & IV/RE-SF/DY-send=COMP & CN/GE=captain
\end{tabular}
\begin{tabular}{ll} 
[nongore & babalango. \(]\) \\
\hline\(N\)-pong-ore & ba-balango \\
RE-SF/PT-pull & RED=ancho
\end{tabular}
'The captain sent the boat's child to pull up the anchor.'
[mdtext15.txt 054]
(15)
\begin{tabular}{llll} 
Unga & uo & niubumo & niamanyo \\
\hline unga & 'uo & \(n i-u b u=m o\) & \(n i=a m a=n y o\) \\
child & yonder & IV/RE-invite=COMP & PN/GE=father=3SG/GE
\end{tabular}
\begin{tabular}{lll}
{\([\) mene' } & bumbu & nupangale. \(]\) \\
\hline mene' & bumbu & \(n u=\) pangale \\
go.up & jungle & \(\mathrm{CN} / \mathrm{GE}=\) virgin.jungle
\end{tabular}
'His/her father invited that child to go up into the virgin jungle.' mdtext11.txt 004]
Another interesting kind of complementation in Pendau is an equative type of complement construction, as in (16) and (17). The complement clause in these instances is a simple noun phrase (a verbless equative clause). The subject of the matrix verb is equated with the final simple NP. Although this NP looks similar to the predicate of an equative clause (which as the NP of an equative clause may have a slight pause preceding it), there are two reasons why it can't be considered to be an equative clause. First the verb subcategorises for a complement clause, and second the applicative transitiviser occurs on all the verbs indicating that syntactically there must be a third argument. In example (16) the pronoun is equated with and identified as the panganganta 'flesh-eater'. In (17) the pronoun is equated with the personal name of the man Ceku. Also note that identifying the third argument as the same participant as the pivot of the matrix verb fits in with the use of same subject complement clauses.
(16) Io nipeilua'omo nutoo [panganganta.]
io ni-peilu-a'=mo nu=too panganganta

3SG/AB IV/RE-said-TZ=COMP CN/GE=person flesh-eater
'People said that he was a flesh-eater.'
[EN97-002.67; troll.int 007]
\begin{tabular}{llll} 
Io & nipeilua'omo & nutoo & [siCeku.] \\
io & ni-peilu-a'=mo & nu=too & si=Ceku \\
3PL/AB & IV/RE-said-TZ=COMP & CN/GE=person & PN/AB=Ceku
\end{tabular}
'People said that he is Ceku.'
[EN97-002.67]

\footnotetext{
as antau 'in order to' (see \(\S 15.6\) for others). Secondly, peja 'send' is a typical complement verb typologically (see Givón 1990), and thus it seems better to analyse this as a complement clause.
8 Further research is needed to determine if the \(\mathrm{S}+\) complement +V order also occurs.
}

\subsection*{15.3.1.2 Post-verbal matrix subject}

Examples (18)-(21) illustrate the post-verbal position of the argument which doubles as the subject of both matrix and complement clauses. In these examples the complement clause would be a grammatically independent clause if the material preceding the complement's subject were to be removed. Example (21) illustrates a relative clause that is the subject of the matrix clause, and is also the subject of the complement clause (indicated by underlining).
(18) Jari niepe nigibang manu' [netontoro'o.]
jari ni-epe ni-gibang manu' \(N\)-pe-tontoro'o
so IV/RE-hear PN/GE-lizard chicken RE-SF/DY-crow
'So the water monitor heard the rooster crow.'
[gibang.pin 136]
(19)
\begin{tabular}{llllll} 
Ndaumo & niepenyo & [unga & uo & nongkai & siamanyo.] \\
ndau=mo & ni-epe \(=\) nyo & unga & uo & N-pong-‘ai & siama=nyo \\
NEG=COMP & IV/RE-hear=3SG/AB child & yonder & RE-SF/PT-call & father=3SG/GE \\
'He no longer could hear the child calling him (lit. her father).' & [mdtext11.txt 010]
\end{tabular}
(20)
\begin{tabular}{llll} 
Nitujua'onyo & botuangonyo & [nangala & taasonyo.] \\
ni-tuju-a'=nyo & botuang=nyo & N-pong-alap & taas=nyo \\
IV/RE-send-TZ=3SG/GE & slave=3SG/GE & RE-SF/PT-get & bag=3SG/GE
\end{tabular}
'He sent his servant to get his bag.' [miracle1.pin 133]
(21) Nitoramo nubengkel uo bua nuluit
ni-tora=mo nu=bengkel 'иo bua nu=luit
IV/RE-remember=COMP \(\mathrm{CN} / \mathrm{GE}=\) female yonder fruit \(\mathrm{CN} / \mathrm{GE}=\) vine
\begin{tabular}{llll} 
toniroru & nirapinyo & uo & [reinangonyo.] \\
to \(=\) ni-roru & ni=rapi=nyo & 'uo & ro-inang=nyo \\
RM=IV/RE-pick & PN/GE=spouse=3SG/GE & yonder & IV/IR-eat=3SG/GE
\end{tabular}
'The woman remembered the vine's fruit that her spouse had picked was what she would
eat.'
[mdtext16.txt 069]
Example (22) illustrates a left-dislocated matrix clause with a complement clause (see also §17.2.2). The first noun phrase odo moo 'this monkey' is a left-dislocated NP which precedes the basic matrix clause. This example illustrates that in the right discourse context, the coreferential subject can be ellipsed entirely from both clauses. In the context of the story that this example comes from it is clear that the panganganta 'flesh-eater' is the missing argument.
\begin{tabular}{lll} 
Odo & moo, & nipeingainyo \\
odo & moo & ni-pe-inga-i=nyo \\
monkey & this & IV/RE-SF/DY-prohibit-DIR=3SG/GE
\end{tabular}

\footnotetext{
[meriing.]
M-pe-riing
IR-SF/DY-bathe
[cf. troll.int 326/EN98-003.41]
}

\subsection*{15.3.2 Object complements}

This section contrasts object complements that are subcategorised with regular complement verbs with those that are grammaticised as semi-auxiliary verbs. In both categories the complement clause is the object of the complement verb.

\subsection*{15.3.2.1 Object complements with regular complement verbs}

Examples (12) and (24) contrast the dynamic verb lolo with and without an object in the complement clause respectively. These both show that each of the core arguments are non-coreferential. Directional verbs may also be used in object complement clauses, as in (25).
(23)
\begin{tabular}{llll} 
A'u & monuju & io & [melolo.] \\
a'u & M-pong-tuju & io & M-pe-lolo \\
1SG/AB & IR-SF/PT-send & 3SG/AB & IR-SF/DY-search
\end{tabular}
'I will send him to go looking.'
[EN98-003.9]
(24)
\begin{tabular}{lllll} 
A'u \(\quad\) monuju & io & [melolo & bau.] \\
a'u \(\quad\) M-pong-tuju & io & M-pe-lolo & bau \\
1SG/AB IR-SF/PT-send & 3SG/AB & IR-SF/DY-search & fish \\
'I will send him to look for fish.' & & &
\end{tabular}
[EN98-003.9]
(25) Jimo mongubu tuai nijimo
jimo M-pong-ubu tuai nijimo
3PL/AB IR-SF/PT-invite y.sibling 3PL/GE
\begin{tabular}{lll} 
[menyau & rigii & nudagat.] \\
me-nyau & ri=gii & nu=dagat \\
UD/IR-go.down & LOC=edge & CN/GE=ocean
\end{tabular}
'They invited their little sister to go down with them to the ocean's edge.'
[gibang.pin 097]
The matrix clauses in (26)-(28) are intransitive constructions with a complement clause. The complement clauses in these examples have subject equi deletion (i.e. the complement subject and matrix subject are coreferential). Example (28) illustrates that the complement clause can be a transitive construction.

Ami meingka [mebentang.]
'ami \(\quad\) M-pe-ingka mo-bentang
1PL.EXC/AB IR-SF/DY-fear ST/IR-fall.down
'We fear we will fall down.'
[lindug.int 007/EN98-003.9]
(27)
\begin{tabular}{lll} 
Ami & meingka & [manabu.] \\
’ami & M-pe-ingka & mo-nabu \\
1PL.EXC/AB & IR-SF/DY-fear & ST/IR-fall
\end{tabular}
'We fear we will fall.'
[EN98-003.9]
\begin{tabular}{llll} 
Ami & meingka & [mangalap & mangiban.] \\
'ami & M-pe-ingka & M-pong-alap & mangiban \\
1PL.EXC/AB & IR-SF/DY-fear & IR-SF/PT-take & shark
\end{tabular}
'We are afraid we will get a shark.'
[EN98-003.9]
In some object complement constructions, the object of the matrix clause is coreferential with the subject of the complement clause. These constructions are illustrated in (29) and (30). In (29) the complement clause is an inverse voice clause. This example illustrates that the inverse voice is syntactically required since the controller is not the same as the controllee (i.e. an active voice construction in the complement clause would be ungrammatical). Example (30) illustrates an active voice clause serving as the complement clause.
```

(29) Io moje nepeundang too [nipetubunyo
io moje N-pepe-undang too ni-pe-tubu=nyo
3SG/AB again RE-SF/PT-invite person IV/RE-SF/DY-live=3SG/GE
pabia-bianyo uo.]
pabia-bia=nyo 'uo
first-RED=3SG/GE yonder

```
'He also invited people that he first resurrected over there.' [miracle1.pin 078]
\begin{tabular}{lllll} 
Sirapi'u & nepeubua' & unganyo & [mepetuuta' & io.] \\
si=rapi='u & N-pepe-ubu-a' & unga=nyo & M-pepe-tuut-a' & io \\
PN/AB=spouse=1SG/GE & RE-SF-coax-TZ & child=3SG/GE & IR-SF-follow & 3SG/AB
\end{tabular}
'My wife coaxed my child to follow her.'
[EN98-003.7]
Equative verbless clauses can also be the object complement clause. In example (31) the pronoun is equated with and identified as the panganganta 'flesh-eater'.


\subsection*{15.3.2.2 Object complements with grammaticised complement verbs}

There are several complement verbs which are grammaticised to some extent and which will be referred to as semi-auxiliary verbs. These are extensively discussed in §14.4. The semi-auxiliary verbs fall into two groups: abilitative and desiderative.

Representative abilitative verbs with subject agreement and their complement clause are shown in (32)-(34). Examples (32) and (33) show the use of matua 'able'. Example (34) illustrates that the word otoi 'know' may function as an abilitative 'know how to' in the same way as matua. The abilitative verb ala 'able, can', in (35) and (36), contrasts with the previous examples as it does not take subject agreement.
\begin{tabular}{llllll} 
(32) & Jimo & matua & nijimo & [mengkani & bau.] \\
jimo & matua & nijimo & M-pe-ngkani & bau \\
& 3PL/AB & capable/IR & 3PL/GE & IR-SF/DY-eat & fish \\
& 'They are capable of eating fish.' & &
\end{tabular}
[EN98-003.11]
(33)
\begin{tabular}{lllll} 
Ami & ndau & matua & mami & [megempang.] \\
’ami & ndau & matua & mami & M-pe-gempang \\
1PL.EXC/AB & NEG & capable & 1PL.EXC/GE & IR-SF/DY-walk
\end{tabular}
'We are not capable of walking (further).'
[poora.pin 105]
(34) A’u no’uotoi [nobanta.]
a'u no'u-otoi \(\quad N\)-po \({ }_{1}\)-banta
1SG/AB 1SG.IV/RE-know RE-SF/DE-fish
'I know how to fish.'
[EN98-003.3]
(35) Jari \(a\) 'u ndaumo maala [meteule.]
jari a'u ndau=mo mo-ala M-pe-teule
so \(1 \mathrm{SG} / \mathrm{AB}\) NEG=COMP ST/IR-able IR-SF/DY-return
'So I no longer can return home.'
[horse.pin 1240]
(36) Ndaupo maala [reitai sobalomu.]
ndau=po mo-ala ro-ita-i sobalo \(=m u\)
NEG \(=\) CONT ST/IR-able IV/IR-see-DIR snare=2SG/GE
'I can't go see your snare yet.'
[mdtext15.txt 131]

The desiderative verb luar 'want, would like' shown in (37)-(40). The complement clauses always occur as an object complement since luar cannot be put into the inverse voice construction.
\begin{tabular}{lllll} 
A'u & moluar & [mongoli & songko & ri'uo.] \\
a'u & mo-luar & M-pong-oli & songko & ri='uo \\
1SG/AB & UD/IR-want & IR-SF-buy & hat & LOC=yonder
\end{tabular}
'I would like to buy a hat over there.'
[mdtext6.txt 049]
(38) Langkai uo butu moluar [reinang nutoo dea ri’uo.]
langkai 'uo butu mo-luar ro-inang nu=too dea ri='uo male yonder only UD/IR-want IV/IR-eat \(\mathrm{CN} / \mathrm{GE}=\) person many LOC=yonder 'Many people only wanted to eat that man up there.'
[mdtext14.txt 070]
(39) Ai a'u moluar moje [molumba.]
ai a'u mo-luar moje M-po1-lumba
but 1SG/AB UD/IR-want also IR-SF/DE-race
'But I want also to race.'
[horse.pin 121]

\section*{(40) \\ \begin{tabular}{llll} 
A'u & moluar & [mengkani & bau. \(]\) \\
a'u & mo-luar & M-pe-ngkani & bau \\
1SG/AB & UD/IR-want & IR-SF/DY-eat & fish
\end{tabular}}
'I want to eat fish.'
[EN98-003.11]

\subsection*{15.4 Quotation margin formulas}

Quotation margin formulas are special clauses which introduce direct speech. These quotation margins are made up of speech and perception verbs and so can be considered to be the matrix clause for an embedded complement clause, in which the complement itself is the direct speech. \({ }^{9}\) Longacre (1985:252), for example, states: 'In spite of the superficial similarity of such structures to clauses with object complements, the quote part of a quotation sentence does not plausibly construe as the object.' Complement clauses are discussed in §15.3. Typical verbs used for the quotation margin of 'discourse complements' are listed in (41).
```

(41) peilu 'said, recount, inform' tuju 'send on errand'
maa'10 'said' tuung 'order'
bura 'speak' boto' 'speak'
pikir 'think' mongi 'request, beg'
bisara 'speak' 'ai 'call'
simbat 'answer'

```

\subsection*{15.4.1 Standard discourse complements}

Most of the quotation formula verbs which are used to introduce direct speech use the verb class prefix with irrealis/realis modality (the exception is maa' 'said' which is discussed in §15.4.2). Typical examples are provided in (42)-(44).
```

(42) Neburamo unga uo, "Iye."
N-pe-bura=mo unga 'uo, "iye."
RE-SF/DY-speak=COMP child yonder yes
'The child spoke, "Yes."'

```
\begin{tabular}{llllll} 
Nomeilumo & odo & uo, & "Nyaa, & nyaa, & asi!" \\
N-pong-peilu=mo & odo & 'uo, & "nyaa, & nyaa, 'asi \\
IR-SF/PT-speak=COMP & monkey & yonder & don't & don't & too.bad
\end{tabular}
‘The monkey spoke, "Don't, don’t, please!""

\footnotetext{
\({ }^{9}\) See for example Tukang Besi in Donohue (1995:386, 402-404), where I take the term 'discourse complement' from.
10 Although maa' could be interpreted as a noun, it is not known to occur in any other construction except to introduce speech. Indonesian uses the noun kata 'word' in a similar way as maa' to introduce speech, e.g. katanya 'he/she said'; however it is also clearly used as a noun in many other clause constructions. Kata can also be used as a verb in Indonesian, e.g. dikatakan or mengatakan.
}
(44) No'utanyamo sirapinyo,
\(N\)-po \(1_{1}\) ' utanya \(=\) mo \(\quad s i=r a p i=n y o\)
RE-SF/FA-ask=COMP PN/GE=spouse=3SG/GE
\begin{tabular}{lll} 
"Masaepo & eти & melampa?" \\
mo-sae-po & 'emu & M-pe-lampa \\
ST/IR-long=CONT & 2PL/AB & IR-SF/DY-travel
\end{tabular}
'His spouse asked (him), "How long will you all travel?""
[gibang.pin 091-092]

Examples (45) and (46) illustrate that the speaker can also be in the pre-verbal word order position (at least in non-inverse voice constructions).
(45) Manu' nebura, "Sirapi nigibang ringanga nuantulang." Мапи' N-pe-bura, si=rapi ni=gibang ri=nganga nu=antulang chicken RE-SF-speak \(\mathrm{PN} / \mathrm{AB}=\) spouse \(\mathrm{PN} / \mathrm{GE} \quad \mathrm{LOC}=\) mouth \(\mathrm{CN} / \mathrm{GE}=\) giant.clam 'The chicken spoke, "The water monitor lizard's spouse is in the mouth of the giant clam.""
[gibang.pin 132]
(46) Odo moo nonyimbat, "Loka'u naatemo...."
odo moo \(N\)-pong-simbat, loka='u no-ate=mo monkey this RE-SF/PT-answer banana=1SG/GE ST/RE-die=COMP 'The monkey answered, "My banana tree has died...""
[turtle.pin 024-025]

All verbs which introduce direct speech can also be formed in the inverse voice construction as demonstrated in (47)-(50).
\begin{tabular}{lrllll} 
Niburamo moje langkai uo & sono & rapinyo & bengkel, "..." \\
Ni-bura=mo & moje langkai 'uo & sono & rapi=nyo & bengkel \\
IV/RE-speak=COMP also male & yonder COM & spouse=3SG/GE female \\
'The man spoke again to his wife, "..."" & & [mdtext5.txt 011]
\end{tabular}
(48) Nipeilu nuulasang, "Ndau diang."
ni-peilu nu=ulasang, ndau diang
IV/RE-speak CN/GE=turtle NEG EXIS
'The turtle spoke, "There isn't any."
(49) Nipo’utanyainyo, "Oo nao ila paio?"

Ni-po \(1_{1}\) 'utanya- \(\mathbf{i = n y o , ~}\) 'oo nao ila paio
IV/RE-SF-ask-DIR=3SG/GE \(2 \mathrm{SG} / \mathrm{AB}\) that ABL where
'He asked him, "Where did you come from?",
\begin{tabular}{lllll} 
Nisimbati & nutomogurang & uo, & "Pentama & mai!" \\
ni-simbat-i & nu=tomogurang & 'uo, & pe-ntama & mai \\
IV/RE-answer-DIR & CN/GE=elder & yonder & SF/DY-enter & come
\end{tabular}
'The elder answered, "Come in!""
[fktale01.txt 014]

Although the direct speech often infers from the context who is spoken to, the one spoken to can optionally be identified in the quotation margin preceding the direct speech. This may be done by using one of the two obliques sono (COM) as in (51) or \(r i=(\mathrm{LOC})\) as in (52), or by referring to the addressee as a core argument as in (53 and (54) (depending somewhat on the valency of the verb).
\begin{tabular}{llllll} 
Jari & neburamo & a'u & sono & io, & "Iye." \\
jari & N-pe-bura=mo & a'u & sono & io, & iye \\
so & RE-SF/DY-speak=COMP & \(1 S G / A B\) & COM & \(3 S G / A B\) & yes
\end{tabular}
'So I spoke to him, "Yes".'
[cekupitu.int 006]
(52)
\begin{tabular}{llll} 
Nipeilu & nuodo & riulasang & uo, \\
ni-peilu & nu=odo & ri=ulasang & 'uo \\
IV/RE-speak & CN/GE=monkey & LOC=turtle & yonder
\end{tabular}
\begin{tabular}{llll} 
"Oo & moo & rapateimo & mami!" \\
'oo & moo & ro-pate-i=mo & mami \\
2SG/AB & this & IV/IR-kill-DIR=COMP & 1PL.EXC/GE
\end{tabular}
'The monkeys said to the turtle, "We will kill you now!""
(53)
\begin{tabular}{lll} 
Ni'aia'omo & niinanyo & unga \\
ni-'ai-a' \(=\) mo \\
IV/RE-call-TZ=COMP & ni=ina=nyo & PN/GE=mother=3SG/GE \\
child & yonder
\end{tabular}
"Alimo lei."
ali=mo lei
let=COMP dear.girl/VOC
'Her mother called to her child, "Come on now, dear girl."" [senge1.pin 019]
(54) Ila ио nituju nuunga uо moje tomogurang uо,
ila 'uo ni-tuju nu=unga 'uo moje tomogurang 'uo
ABL yonder IV/RE-send \(\mathrm{CN} / \mathrm{GE}=\) child yonder also elder yonder
"Kai, be'e,..."
kai be'e
grandpa/VOC grandma/VOC
'After that the children sent the elder ones again, "Grandfather, grandmother...""
Other verbs such as ' \(a i\) 'call' and tuung 'order' do not always introduce direct speech, but they may frequently be used to do so as shown in (55) and (56).
\begin{tabular}{lllll} 
(55) Ila uo tonangkait & moo nongkaimo & tagunyo \\
ila 'uo to-no-ngkait & moo & N-pong-'ai=mo & tagu \(=\) nyo \\
& ABL yonder & AGNM-ST/RE-cripple this & RE-SF/PT-call=COMP & friend=3SG/GE
\end{tabular}
\begin{tabular}{lcclllll} 
tonobuta & uo, "Ali & moo suung & a'u & moo tagu..." \\
to-no-buta & 'uo, Ali & moo suung & a'u & moo tagu \\
AGNM-ST/RE-blind yonder let & this & carry & 1SG/AB this & friend/VOC
\end{tabular}
'After that the cripple called to his friend the blindman, "Let me be carried (on the
shoulders) here, friend.",
[nangkait.pin 026-028]
\begin{tabular}{lllll} 
Nipototutuung & mami, & "Nya tutuu raala miu!" \\
ni-po \({ }_{1}\)-to-tu-tuung & mami, & nyaa tutuu ro-alap & miu \\
IV/RE-SF-UD-RED-order & 1PL.EXC/GE & don't & really & IV/IR-get
\end{tabular} 2PL/GE
'We repeatedly ordered (you), "Don't you actually get (it/that)!", [EN98-003.43]

Thoughts which are expressed in many languages as indirect speech are syntactically expressed in the same way as direct speech, as shown with the verb pikir 'think' in (57).
```

(57) Nipikira' nuodo moo, "Ro'uyaimu a'u...?"
ni-pikir-a' nu=odo moo, "ro-`иуа-i=mu a'u
IV/RE-think-TZ CN/GE=monkey this IV/IR-why-DIR=2SG/GE 1SG/AB

```
'The monkey thought, "Why is it that you (have chased) me...?"" [troll.int 161a]

Indirect questions are not formed in Pendau. When a participant is thinking a thought, the thought is expressed in the same manner as direct speech except that thoughts are expressed with the word ambo' 'breath' in conjunction with a speech verb as shown in (58).
\begin{tabular}{llllll} 
Ai & siama & nuunga & uo & butu o'uta-'utanya & riambo'onyo. \\
ai siama & nu=unga & 'uo & butu & 'o-'uta-'utanya & ri=ambo'=nyo \\
but father & CN/GE=child & yonder & just & HAVE-RED-ask & LOC=breath=3SG/GE
\end{tabular}
\begin{tabular}{lllll} 
Neburamo & ambo' & nusiamanyo & uo, & "Nyaa-nyaa \\
N-pe-bura=mo & ambo' & nu=siama=nyo & 'uo, & "nyaa-nyaa \\
RE-SF-speak=COMP & breath & CN/GE=father=3SG/GE & yonder & RED-don't
\end{tabular}
\begin{tabular}{llllll} 
unga'u & moo & ndau nipainang & nusiina & wato' & nijimo." \\
unga='u & moo & ndau ni-pa-inang & nu=siina & uato' & nijimo \\
child=1SG/GE this & NEG & IV/RE-CAUS-eat & CN/GE=mother & step & 3PL/GE
\end{tabular}
'But the child's father just kept asking himself (lit. his breath). His father's breath spoke,
"Could it be that their stepmother is not feeding my child?"" [mdtext18.txt 019-02-]

Another way that a speaker can frame a question that he or she is asking the addressee is illustrated in (59) (technically an embedded quotation). This also follows the format that is typical of discourse complements. Complements can also be a question when the matrix verb is a speech act verb such as 'utanya 'ask', as illustrated in example (59).
\begin{tabular}{lllll} 
A'u mo’utanya, "Paio togu luba' & tonibebera' \\
A'u & M-po - -'utanya, & "paio togu luba' & to=ni-beber-a' \\
1SG/AB & IR-SF/FA.SF-ask & where owner hair & RM=IV/RE-encircle-TZ
\end{tabular}
\begin{tabular}{lll} 
ritandang & nuaog & moo?" \\
\(r i=\) tandang & \(n u=a o g\) & moo?" \\
LOC=forked.branch & \(\mathrm{CN} / \mathrm{GE}=\) bamboo & this
\end{tabular}
'I am asking you, "Where is the owner of this hair that is encircled around the fork of this bamboo?""
[mdtext15.txt 059]

\subsection*{15.4.2 Use of maa' 'say, said'}

The quotation word maa' 'say, said' is different from the verbs used to introduce direct speech. \({ }^{11}\) First of all it does not take any verbal morphology, which makes it possible to interpret this as a possessee noun in a genitive phrase as shown in the list in (60). This is similar to the Indonesian kata 'said, word', as in katanya 'he/she said'.

\section*{(60)}
```

maa' nu=
maa'ni=
maa'=o'u
maa'=oto
maa'=oти
maa'=onyo
maa' miu
maa'mami

```

Secondly the position of maa' can appear in virtually any word order position in introducing or identifying the speaker of the direct speech. This means it can precede the whole direct speech event (as do the other quotation introducing verbs) as in (61), or after the whole direct speech event as in (62), or anywhere in the middle of the syntactic constituent which is the direct speech (which creates a discontinuous clausal constituent as in (63)-(65), or even within constituents of the clause, as in (66), or in conjunction with one of the regular forming speech act verbs, as in (67).

\footnotetext{
\({ }^{11}\) The maa' word has been one word that has been difficult to determine its phonological status. As an irregular verb which introduces direct speech it sometimes sounds nearly homophonous with combinations such as ma'o=nyo 'he/she went/goes' and maa'=onyo 'he/she said/says'. However there is one clear test that shows the vowel is a lengthened vowel phonemically, and this test is to add the relative marker proclitic to \(=\). If the vowel were a single \(a\) then the penultimate stress would begin with the proclitic. Since the stress falls on the \(m a\) syllable it is clear that there are two \(a\) vowels phonemically. In the elicited example (i) it was clear that the stress was placed on the ma syllable. Example (ii) demonstrated that the stress shifted to the epenthetic \(o\) vowel of the enclitic \(=o\) ' \(u\).
(i) Ila uo tomaa' nijimo uo, "Ito ma'o ripotomu."
ila 'uo to=maa' nijimo 'иo 'ito ma'o ri=potomu
from yonder \(\mathrm{RM}=\) said \(3 \mathrm{PL} / \mathrm{GE}\) yonder \(1 \mathrm{PL} . I N C / A B\) go \(L O C=\) market 'From there that which they said there, "Let's go to the market."' [EN97-004.61]
\(\begin{array}{lllllll}\text { (ii) Ila uo tomaa'o'u } & \text { ningeno, "Ito } & \text { melolo } & \text { wani." } \\ \text { ila 'uo to=maa'='u } & \text { ningeno 'ito } & \text { M-pe-lolo } & \text { uani } \\ & \text { from yonder } & \text { RM=said=1SG/GE } & \text { just.then } & \text { 1PL.INC/AB } & \text { IR-SF-search } & \text { honey bee } \\ & \text { 'From there that which I just said, "Let's go look for honey bees."" } & \text { [EN97-004.61] }\end{array}\)
}

""Let's," he/she was said to say, "go down now.""
[EN97-004.42]
(65) "Ito," jea maa’ nutogoge, "metindangomo."
'ito jea maa' nu=togoge, M-pe-tindang=mo
1PL.INC/AB HSY say CN/GE=parent IR-SF/DY-go.down=COMP
"'Let's," the parent/elder was said to say, "go down now.""
(66) "Sisee," maa'onyo, "иo?"
si=see," maa'=nyo, 'иo
\(\mathrm{PN} / \mathrm{AB}=\) who \(\quad\) said \(=3 \mathrm{SG} / \mathrm{GE}\) yonder
""Who's there?" he/she said.'


Example (68) demonstrates a conversation between two participants. The first man to speak is introduced with the verb bura 'speak', and the second man is introduced with the word maa' 'said'.
\begin{tabular}{llll} 
Ila & mai & uo & neburamo \\
ila & mai & 'uo & N-pe-bura=mo \\
ABL & come & yonder & RE-SF/DY-speak=COMP
\end{tabular}
\begin{tabular}{lll} 
langkai & uo, "Ripaio \\
langkai & 'uo, ri=paio \\
male & yonder & LOC=where
\end{tabular}
\begin{tabular}{lllll} 
siinamu & nao?" & Maa'onyo, "Siina'u & nao, siama'u...." \\
siina=mu & nao & maa'=nyo, & siina='u & nao, siama='u \\
mother=1SG/GE & that & said=3SG/GE & mother=1SG/GE that & father=1SG/GE \\
'After that the man spoke, "Where is your mother?" He said, "My mother is there, my \\
father (is there)..." & [asu2.pin 225-227]
\end{tabular}

\subsection*{15.5 Relative clauses}

A relative clause (RC) is a clause which occurs as a constituent of a NP which is itself a constituent of a higher clause. The NP containing the RC may or may not have a head noun which it modifies. Such a head noun can usefully be referred to as the common argument (CA). \({ }^{12}\) RCs occur immediately following any CA and are preceded by the relative proclitic marker to \(=\). The relative clause in Pendau can be summarised under two main points :
- The common argument (CA) must be the subject (or pivot) of the RC. The CA is never an object, indirect object, oblique, etc. of the RC. \({ }^{13}\)
- The CA can occur in any syntactic position of the main clause including subject, object, indirect object, indirect object, prepositional phrases, one noun in a conjoined noun phrase, and possessive noun phrases.

The kinds of relative clauses can be further distinguished as:
- simple headed RC (intransitive, transitive, and verbless clauses)
- embedded and combinations of relative clauses
- headless RC

Example (69) is typical of a Pendau clause with a relative clause.
(69) Jari jimo nongkomung loka toreinang nijimo.
jari jimo \(N\)-pong-’omung loka to=ro-inang nijimo
so \(3 \mathrm{PL} / \mathrm{AB}\) RE-SF/PT-carry banana \(\mathrm{RM}=\mathrm{IV} / \mathrm{IR}\)-eat \(3 \mathrm{PL} / \mathrm{GE}\)
'So they took bananas that they would eat (later).'
Note that the relative clause in this example occurs in the inverse voice. The inverse voice is obligatory here because loka 'banana' must be the undergoer-subject. This can be demonstrated as in (70) which shows that an objectionable semantic clause is formed.

\footnotetext{
12 The 'common argument' (CA) was suggested as a useful term by Dixon (at a workshop on Relative Clauses in 1996 at the Australian National University) to help in discussing the NP that functions as one argument of the matrix clause while also functioning as an argument of the relative clause.
\({ }^{13}\) The main test for identifying the pivot in transitive constructions is the fact that relativised NPs always form the head of a relative clauses according to the voice used (for the test procedure as applied to Cebuano see Shibatani 1991:120-123). Also see Kroeger (1993:23-24) for using relativisation as a test for subjecthood in Tagalog and other Western Malayo-Polynesian languages.
}
\begin{tabular}{llllll} 
(70) & !Jari & jimo & nongkomung & loka & tomenginang
\end{tabular} jimo.
!'So they took bananas that would eat them.'
Relative clauses provide supportive evidence for basic SVO word order in Pendau. Pendau is clearly a VO language, but S can occur either before or after the VO sequence. In relative clauses, S always occurs before VO providing additional evidence for basic SVO order. The VOS pattern can be seen as a pragmatic variation of the same order (see §6.2, §12.3 and §17.4.3.2).

Noun phrases with RCs may be further qualified by a following demonstrative, just as normally found in a noun phrase (see §7.6.3). Examples (71) and (72) show the NPs containing the RCs for this modified by the demonstrative uo 'yonder'. Example (72) also shows that an RC can modify any noun as an attribute, in this case a NP within a prepositional phrase. These examples also show that a possessor in a genitive phrase may be relativised.
\begin{tabular}{lllll} 
Ai & alaenyo & [toneriri & uo \(]\) & nipoyoginyo. \\
ai & 'alae \(=\) nyo & to=no-riri & 'uo & ni-poyog- \(i=\) nyo \\
but body=3PL/GE & RM=ST/RE-yellow & yonder & IV/RE-charcoal-DIR=3SG/GE
\end{tabular}
'He charcoaled his body that was yellow (to make it look black).'
(72) Io ma'o nonggagap bau ribamba nuogo
io ma'o \(N\)-pong-gagap bau ri=bamba nu=ogo
\(3 \mathrm{PL} / \mathrm{AB}\) go RE-SF/PT-catch fish LOC=door \(\mathrm{CN} / \mathrm{GE}=\) water
\begin{tabular}{lllllll} 
[tondau & bega' & nagaar & ila & pomoiaong & nijimo & uo.] \\
to \(=\) ndau & bega' & no-gaar & ila & po 1 -moia-ong & nijimo & 'uo \\
RM=NEG & too.much & ST/RE-far & ABL & SF-live-locN & 3PL/AB & yonder
\end{tabular}
'He went and caught fish in the freshwater inlet that wasn't too far from their living quarters over yonder.'

Example (73) illustrates that instrument NPs that are pivots can also be relativised.
(73) Niu [tonetubu ri'uo] ropombayara' nijimo indato.
niu to=N-pe-tubu ri='uo ro-pong-bayar-a' nijimo inda=to coconut RM=RE-SF-live LOC=yonder IV/IR-SF-pay-TZ 3PL/GE debt=1PL.INC/GE 'The coconut tree that lives there is used to pay their debt.'
[EN97-004.4]
Example (74) illustrates that one of two nouns in a conjoined noun phrase can also take an RC.
\begin{tabular}{lllllll} 
Ito & ongkomung & balung & loka & o aniong & [tonongongo.] \\
'ito & M-pong-'omung & balung & loka & o aniong & to \(=N\)-po 1 -
\end{tabular}
'We will take a banana lunch and rice that was cooked.'

Examples (75) and (76) show that the to particle is a clitic since it can precede other words such as the adverb mono 'still' in (75) and the negative ndau 'no' in (76).
```

(75) Sala souni [tomono no'uito.]
sala soung-i to=mono no'u-ito
one.of one-DIR RM=still 1SG.IV/RE-look
'That was one that I still looked at.' [EN97-003.16; cf. jptext2.doc]
(76)

| Nielinganinyomo | ambinang | nuajaran uo |  |
| :--- | :--- | :--- | :---: |
| ni-elingang- $\mathrm{i}=$ nyo $=$ mo | ambinang | nu=ajaran | 'uo |
| IV/RE-forget-DIR=3SG/GE=COMP | armpit | CN/GE=horse yonder |  |

[tondau maala rotui'.]
to=ndau ma-ala ro-tui'
RM=NEG ST/IR-able IV/IR-grip
'He forgot that he shouldn't grip the horse's armpit.'

Sections §15.5.1-3 are organised according to which syntactic structure is found within the relative clause (e.g. inverse voice, active voice, intransitive, existential, etc.). Section §15.5.4 discusses embedded and combinations of relative clauses; §15.5.5 discusses headless relative clauses; and $\S 15.5 .6$ finishes the discussion on RCs by looking at possessors, locatives, and demonstratives that may be relativised.

### 15.5.1 Intransitive verbal relative clauses

Examples (77)-(79) illustrate stative constructions in the RC.

| (77) | Ndau | nasae | nidua'omo | nijimo |
| :--- | :--- | :--- | :--- | :--- |
| ndau | no-sae | ni-dua'=mo | nijimo | bubuntuan |
| bubuan |  |  |  |  |

'It wasn't long before they arrived at the valley ridge that wasn't too high.'

| (78) | Nodua' | tagu | nuod | [tonaatemo.] |
| :---: | :---: | :---: | :---: | :---: |
|  | $N-p o_{1}$-dua' | tagu | nu=odo | to $=$ no-ate $=$ mo |
|  | RE-SF-arrive | friend |  |  |

'The friends of the monkey who died arrived.'

| (79) | A'u | nopake | salana | [tonobou $]$ | sono | naus | [tonobou.] |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a'u | N-po ${ }_{1}$-pake | salana | to $=$ no-bou | sono | naus | to=no-bou |  |
|  | 1SG/AB | RE-SF-use | pants | RM=ST/RE-new | COM | sarong | RM=ST/RE-new |

'I wore new pants along with a new sarong.'
Example (80) shows the RC with an existential verb and also ending the NP with a demonstrative. Example (81) illustrates a relativised reduplicated verb mbirung 'flame'.

```
(80) ..ribau [todiang ripalenyo uo.]
    ri=bau to=diang ri=pale=nyo 'uo
    LOC=fish RM=EXIS LOC=hand=3SG/GE yonder
    ' ...at the fish that was in his hand there.'
```

(81) Odo moo nanabumo rilalong nuapi [tombiru-mbirung.]
odo moo no-nabu=mo ri=lalong nu=api to=mbiru-mbirung
monkey this ST/RE-fall=COMP LOC=inside $\mathrm{CN} / \mathrm{GE}=$ fire $\mathrm{RM}=$ RED-flame
'The monkey fell into the fire that was flaming.'

### 15.5.2 Verbless relative clauses

Relative clause markers provide an additional strategy in Pendau to modify a head noun without a verbally syntactic clause. Examples (82) and (83) show the productive use of modifying the head noun in a spatial location by using the prepositional phrase structure.

| Unga | [torijunjung | moo | nongoyotomo | sou-soung. |
| :--- | :--- | :--- | :--- | :--- |
| unga | to $=$ ri $=$ junjung | moo | N-pong-oyot=mo | sou-soung |
| child | RM=LOC=house | this | RE-SF/PT-pack.up=COMP | RED-one |

'The children at this house each packed up (their things).'
(83) Sapa-sapa [torilalong nujunjung moo] raagarotomo.
sapa-sapa to=ri=lalong nu=junjung moo ro-agar=to=mo
RED-what $\mathrm{RM}=\mathrm{LOC}=$ inside $\mathrm{CN} / \mathrm{GE}=$ house this IV/IR-split=1PL.INC/GE=COMP
'Whatever is inside the house we will split between us now.'
Examples (84) and (85) illustrate that a pronoun or noun can be modified with a relativised numeral.
(84) Jimo [toroonong] ndau ma'o ri'uo.
jimo to=roonong ndau ma'o ri='uo
3PL/AB RM=six NEG go.up LOC=yonder
'The six of them didn't go there.'
(85) Ndau nasae nodua'omo unganyo [todoruo]
ndau no-sae $\quad N$-po ${ }_{1}$-dua'=mo unga=nyo to=doruo

NEG ST/RE-long RE-SF-arrive=COMP child=3SG/GE RM=two

| nelibur | siina | nijimo. |
| :--- | :--- | :--- |
| N-pe-libur | siina | nijimo. |
| RE-SF/DY-follow | mother | 3PL/GE |

'Not long after she arrived, her two children came straggling behind their mother.'

### 15.5.3 Transitive relative clauses

### 15.5.3.1 Active voice clause in relative clauses

Examples (86)-(88) illustrate the relativised clause in the active voice construction. Note that in order to satisfy the criterion that the CA must be the subject of the relative clause, the CA is always an agent/actor in the active voice construction.

| Sisee | [tonongkomung | emu,] |
| :--- | :--- | :--- |
| si=see | to $=N$-pong-'omung | 'emu |
| PN/AB=who | RM=RE-SF/PT-carry | 2PL/AB |

раеу ети nodua’ rimoo?
paey 'ети $\mathrm{N}^{2} \mathrm{po}_{1}$-dua' ri=moo?
then 2PL/AB RE-SF-arrive ABL=this
'Who was it that brought you, so that you came here?'
(87) Ulasang [tonorampung taguto.]
ulasang to $=N$-pong-rampung tagu $=$ to
turtle RM=RE-SF/PT-burn friend=3PL/AB
'The turtle that burned our friend.'
(88)

| Oo | [tomepeaka-akali | $a^{\prime}$ u. $]$ |
| :--- | :--- | :--- |
| 'oo | to=M-pepe-aka-akal-i | $a^{\prime} u$ |
| 2SG/AB | RM=IR-SF/PT-RED-trick-DIR | 1SG/AB |
| 'You (are the one) who is trying to trick me.' |  |  |

### 15.5.3.2 Inverse voice clause in relative clauses

This section provides examples of relative clauses which occur in the inverse voice. In examples (89)-(92) the CA is undergoer-subject in each RC.

| Jimo | nonuda | unga | nuloka |
| :--- | :--- | :--- | :--- |
| jimo | N-pong-tuda | unga | nu loka |
| 3PL/AB | RE-SF/PT-plant | child | CN/GE=banana |


| [tonialap | nijimo | ningeno | uo.] |
| :--- | :--- | :--- | :--- |
| to=ni-alap | nijimo | ningeno | 'uo |
| RM=IV/RE-get | 3PL/AB | just.then | yonder |

'They planted banana seedlings that they had recently taken from there.'
(90) Unga [toroduta mami moo] unga pedoruonyo.
unga to=ro-duta mami moo unga pe-doruo=nyo
child $\mathrm{RM}=\mathrm{IV} / \mathrm{IR}$-propose 1 PL.EXC/GE this child $\mathrm{SF}-\mathrm{two}=3 \mathrm{SG} / \mathrm{GE}$
'The child that we propose to is your second child.'
(91) A'u moomo mata nuogo [to'utuut.]
a'u moo=mo mata nu=ogo to='u-tuut
$1 \mathrm{SG} / \mathrm{AB}$ this=COMP eye $\mathrm{CN} / \mathrm{GE}=$ water $\quad \mathrm{RM}=1 \mathrm{SG} . \mathrm{IV}$-follow
'This is the eye of water (spring) that I will follow.'

| (92) | Naate | manu' | [toniagarang |
| :--- | :--- | :--- | :--- |
| no-ate | manu' | to=ni-agarang | 'uo |
|  | ST/RE-die | chicken | RM=IV/RE-love |

'The chicken that he loved died.'

Example (93) illustrates the question word sapa 'what' substituting for a noun in the head noun slot for the RC.
(93) Ndau diang sapa [tonidua'onyo.]
ndau diang sapa to=ni-dua'=nyo
NEG EXIS what RM=IV/RE-arrive=3SG/GE
'There was nothing (no game) that he could find.'
Examples (94)-(96) illustrate RCs which are headed by arguments having the semantic roles of beneficiary, location, and instrument respectively. In these examples both the applicative suffixes ( $-a$ ' and $-i$ ) as well as the inverse voice are needed in order to satisfy the argument that the CA be subject of the relative clause. Since (95) and (96) are locative and instrument applicative constructions they also require $p V(C)$ - stem formers to co-occur with the suffixes.

| (94) | A'u $\quad$ moo | ila | mono meide' | nipotubumo |
| :--- | :--- | :--- | :--- | :--- |
| a'u $\quad$ moo | ila | mono mo-ide, | ni-po $1_{1}$-tubu $=$ mo |  |

'From the time I was small the king raised me, the owner of the belt that I have guarded it for.' (The monkey speaking to the flesh-eater.)
(95)

| Watunyo <br> uatu=nyo <br> time=3SG/GE <br> 'uo | yonder | tope | nupangale |
| :--- | :--- | :--- | :--- |
| name | nu=pangale |  |  |
| CN/GE=jungle |  |  |  |

'At that time, the name of the jungle that we lived in was the Eye of Rawang (or Rawang Spring).'
[lindug.int 005]
(96) ...langkai uo ma'o nangala doi'
langkai 'иo ma'o N-pong-alap doi'
male yonder go RE-SF/PT-get money

| toropombayara' | nulangkai | uo | indanyo. |
| :--- | :--- | :--- | :--- |
| to=ro-pong-bayar-a' | $n u=$ langkai | 'uo | inda=nyo |
| RM=IR/IV-SF-pay-TZ | CN/GE=male | yonder | debt $=3$ SG/GE |

'...the man went to get the money that the man would use to pay off his debt.'
[mdtext21.txt 020]

### 15.5.4 Combinations of relative clauses

The following examples illustrate two relative clauses in various combinations, some of which include embedded relative clauses. Combinations of RCs consist of almost any combination that can also be found in a sentence. Note that for some combined relative clauses the head noun is the subject for each RC, but for some RCs a preceding RC contains the head noun.

Examples (97) and (98) are typical combinations of RCs. The first, (97), shows the agent (the flesh-eater) switches from the speaker (flesh-eater) to the addressee (the monkey) in the first RC and back to the speaker (flesh-eater) again in the final RC. An embedded RC is given in (98).

| Alap mai | bau | [tonitapaimu] | [tono'utuju.] |
| :---: | :---: | :---: | :---: |
| alap mai | bau | to =ni-tapa-i=mu | to =no'u-tuju |
| et come | fish | RM=IV/RE-smoke | RM=1SG.IV/RE-send |


| Ito | metindangomo | manyau | ridusunang |
| :--- | :--- | :--- | :--- |
| 'ito | M-pe-tindang=mo | ma-nyau | ri=dusunang |
| 1PL.INC/AB | IR-SF/DY-descend=COMP | UD/IR-go.down | LOC=village |


| [todiang | nabo' | nujunjung | [tono'u'itomo.]] |
| :--- | :--- | :--- | :--- |
| to $=$ diang | nabo' | nu=junjung | to=no'u-'ito=mo |
| RM=EXIS | roof | CN/GE=house | RM=1SG.IV/RE-look=COMP |

'We will descend down to the village that has the house's roof that I already saw.'

### 15.5.5 Headless relative clauses

Headless relative clauses are relative clauses with the head noun ellipsed. Examples (99) and (100) illustrate the use of the headless relative clause. In (99) the ellipsed head might be X 'food'. Example (100) has two relative clauses, and the first one is a headless relative clause in which the ellipsed head might be X 'place'. This headless relative clause is the head for the second relative clause in this sentence.

(99) | Io | ma'o | melolo | [toreinang | nijimo.] |
| :--- | :--- | :--- | :--- | :--- |
| io | ma'o | M-pe-lolo | to=ro-inang | nijimo |
|  | 3PL/AB | go | IR-SF/DY-search | RM=IV/IR-eat | 3PL/GE

'He went to search for their food. (lit. He went to search for stuff that they could eat.).'

```
(100) Jari ami na`alampa-lampamo nelolo paio
    jari 'ami no-'o-lampa-lampa=mo N-pe-lolo paio
    so 1PL.EXC/AB ST/RE-HAVE-RED-travel=COMP RE-SF/DY-search where
pomoiaong paio diang, asi, [tonombosi]
po_-moia-ong paio diang 'asi to=no-mbosi
SF-live-locN where EXIS too.bad RM=ST/RE-good
[toropomoiai mami.]
to=ro-po -moia-i mami
RM=IV/IR-SF-live-DIR 1PL.EXC/GE
```

'So we walked and we walked and we walked, and we looked for a place to live where it would be, too bad, a good place that we could live. (lit. ...a place that is good, a place that we could live).'

In (101) the following sequence of RC shows that the second RC ellipses salana 'pants' and creates a headless RC.

| (101) Diang naus, | salana | [tonadantang,] | [tonampudu'.] |  |
| ---: | :--- | :--- | :--- | :--- |
| diang | naus | salana | to=no-dantang | to $=$ no-mpudu |
| EXIS | sarong | pants | RM=ST/RE-long | RM=ST/RE-short |

'There is a sarong, long pants, and short pants.'

### 15.5.6 Relativising possessors, locatives, and demonstratives

In principle any noun phrase or constituent of a noun phrase may be relativised. This freedom can be seen in the way that locatives, demonstratives, genitive noun phrases, and the possessor of a genitive noun phrase may be relativised. Examples (102)-(1-4) illustrate the relativisation of various genitive noun phrases.

| Nira'oponyo | rapinyo | [tonibutai | uo.] |
| :--- | :--- | :--- | :--- |
| ni-ra'op=nyo | rapi=nyo | to=ni-buta-i | 'uo |
| IV/RE-catch=3SG/GE | spouse=3SG/GE | RM=IV/RE-blind-DIR | yonder |

'He caught his spouse there who had been blinded.'
[mdtext16.txt 166]
(103) Unga'u [tonilinjo'a' nu'uayang uo]
unga='u to=ni-linjo'-a' nu='uayang 'ио
child=1SG/GE RM-IV/RE-run-TZ CN/GE-osprey yonder
bulaan jojoo alaenyo.
bulaan jojoo 'alae=nyo
gold all body=3SG/GE
'My child who had been taken away (lit. cause to run away) by the osprey is golden (coloured) all over his body.'
[mdtext4.txt 042]
(104) Siina nuunga [tonoluminjo' uo] noriing
siina nu=unga to=N-po-[um]-linjo' 'uo $N$-pong-riing
mother $\mathrm{CN} / \mathrm{GE}=$ child $\mathrm{RM}=\mathrm{RE}-\mathrm{SF} / \mathrm{LCM}-\mathrm{TEL}-$ run yonder RE-SF/PT-bathe

| unganyo | $[$ tonetompu | poyog | uo. $]$ |
| :--- | :--- | :--- | :--- |
| unga=nyo | to=N-pe-tompu | poyog | 'uo |
| child=3SG/GE | RM=RE-SF/DY-spread | charcoal | yonder |

'The mother of the child who had run over there bathed her child who had the charcoal spread (all over his body).'
[mdtext16.txt 164]

Examples (105) and (106) show that just the possessor in a genitive noun phrase can occur as the head of the relative noun clause.
(105) Nidua' nupanganganta uo valea nupayangan
ni-dua' nu=panganganta 'uo valea nu=payangan
IV/RE-arrive CN/GE=flesh.eater yonder track CN/GE=boat

| [tonibusul | nuunga | uo.] |
| :--- | :--- | :--- |
| to=ni-busul | $n u=$ unga | 'uo |
| RM=IV/RE-push.boat.into.water | CN/GE=child | yonder |

'The flesh-eater found the tracks of the boat that had been pushed into the water.'
[mdtext20.txt 183]
(106) Ai luba nubengkel [tonibutai uo] ndau nentama
ai luba nu=bengkel to=ni-buta-i 'uo ndau $N$-pe-ntama
but hair $\mathrm{CN} / \mathrm{GE}=$ female $\mathrm{RM}=\mathrm{IV} / \mathrm{RE}-\mathrm{blind}-\mathrm{DIR}$ yonder NEG RE-SF/DY-enter
rilalong nubua nuluit uo.
ri=lalong nu=bua nu=luit 'иo
LOC=inside $\mathrm{CN} / \mathrm{GE}=$ fruit $\mathrm{CN} / \mathrm{GE}=$ vine yonder
'But the hair of the woman that was blinded there didn't enter inside of the vine's fruit
there.' [mdtext16.txt 076]
Lone demonstratives that represent the noun phrase may also be relativised as in (107). Demonstratives may also be the sole modifier of the relative clause as in (108).

| (107) Tabulu | emu | moo | nao | [tonilolo | mami.] |
| :--- | :--- | :--- | :--- | :--- | :--- |
| tabulu | 'emu | moo | nao | to=ni-lolo | mami |
| while | 2PL/AB | this | that | RM=IV/RE-search | 1PL.EXC/GE |

'While you all were here we were looking for you there.'

| (108) A'u | moo | morapi | unga | [tonao.] |
| :---: | :---: | :--- | :--- | :--- |
| a'u | moo | M-po-rapi | unga | to=nao |
| 1SG/AB | here | IR-SF/DE-spouse child | RM=there |  |

'I (am the one who) will marry that child there.'
[mdtext20.txt 024]
Nouns in prepositional phrases can also be relativised, as in (109).


Locative oriented relative clauses can also be created, as in (110) and (111) (see also §15.5.2 for more examples).
(110) Nipasiromunyo jojoo sampe-suvunyo, togogenyo, ni-pasiromu=nyo jojoo sampe-suvu=nyo togoge=nyo $\mathrm{IV} /$ RE-gather $=3 \mathrm{SG} / \mathrm{GE}$ all sibling=3SG/GE parent=3SG/GE

| unganyo, | rapinyo | rigaar | $[$ torianta'.] |
| :--- | :--- | :--- | :--- |
| unganyo | rapinyo | ri=gaar | to $=r i=a n t a$ |
| child=3SG/GE | spouse=3SG/GE | $\mathrm{LOC=far}$ | $\mathrm{RM}=\mathrm{LOC}=$ near |

'He gathered all of his siblings, his parents, his children, his spouse from near and far.'
[flktale01.doc]

(111) Sapa-sapa [torilalong] $\quad$| nujunjung | moo | raagarotomo. |
| :--- | :--- | :--- |
| sapa-sapa to $=$ ri=lalong | nu=junjung | moo |
| ro-agar=to=mo |  |  |

RED-what $\mathrm{RM}=\mathrm{LOC}=$ inside $\mathrm{CN} / \mathrm{GE}=$ house this
IV/IR-split=2PL.INC/GE=COMP
'We will split whatever is inside this house.'
[nalalo.pin 057]

### 15.6 Interclausal relators and propositional relations

In this section I discuss the conjoining of independent clauses with interclausal relators or conjunctions. According to the theory of Semantic Structural Analysis (see Beekman et al. 1981, Larson 1984, Beekman and Callow 1974, Headland 1993, Roberts 1997, Levinsohn 1999) interclausal relators can be categorised according to the meaningful relationships they express between the clauses they link. Figure 15.2 provides a listing of interclausal relators in Pendau categorised according to semantics. Following Longacre (1985:238), independent clauses linked by relators are classed as co-ranking clauses.

| Relator | Gloss | Propositional Relation |
| :--- | :--- | :--- |
| antau | 'in order that, so that' | cause-effect |
| jari | 'so' | cause-effect |
| lantaran | 'because' (Ind.) | cause-effect |
| iringonyo | 'because' | cause-effect |
| karna | 'because' (Ind.) | cause-effect |
| saba' | 'since, because' | cause-effect |
| apa | 'because' | cause-effect |
| maumpo | 'although, however, even though' | concession-contraexpectation |
| poporo | 'although' | concession-contraexpectation |
| ai | 'but' | concession-contraexpectation |
| kandati | 'although' (Ind.) | concession-contraexpectation |
| tapi | 'but' (Ind.) | concession-contraexpectation |


| Relator | Gloss | Propositional Relation |
| :--- | :--- | :--- |
| joo | 'however, whereas, really' | concession-contraexpectation |
| ono | 'if' | condition-consequence |
| talomonyo | 'if not' | condition-consequence |
| tabulu | 'while, whereas' | simultaneous |
| o | 'and' | simultaneous |
| sono | 'with, together, while' | simultaneous |
| bai uo | 'like that (yonder), after that' | simultaneous/overlap |
| ila uo | 'from that (yonder), after that' | simultaneous/overlap |
| ape | 'or' | alternation |
| paey | '(and) then' | sequential |
| sampe | 'until' | sequential |
| sampanyo | 'after that, then', | sequential |
| bia | 'later' | sequential |
| tarus | 'continue' (Ind.) | sequential |
| dungku | 'after that, then' | sequential |

Figure 15.2 Propositional Relations in Pendau ${ }^{14}$
These relator conjunctions can be divided into major categories according to the environment found: intraclausal and interclausal. The intraclausal conjunctions conjoin noun phrases of the same noun phrase argument (see §7.7). The interclausal conjunctions can be further subdivided into either intrasentential or intersentential. Some of the interclausal conjunctions can function as either type, while others are limited to connecting intrasentential conjoining clauses. Following van den Berg (1989) these can be termed independent and dependent conjunctions. In addition, some of the intersentential conjunctions function as new paragraph boundary markers as well, such as jari 'so, therefore' (see §18.2.1.1 for discussion of this and other paragraph boundary markers). However, most of the following relator conjunctions must be used within the paragraph. The primary concern in this chapter will be on the interclausal conjunctions, although a few intraclausal conjunctions will be discussed in the same sections where the conjunction is used to connect clauses for contrastive purposes. A number of the borrowed conjunctions are interchanged with Pendau conjunctions synonymously. Those borrowed from Indonesian are marked (Ind.).

### 15.6.1 Cause-effect relations

There are a number of relators which signify a cause-effect relation between two clauses. ${ }^{15}$ Most require the clause expressing cause to come first, with the clause expressing effect to follow. Example (112) illustrates the use of saba' 'because' linking two clauses in one sentence. Example (113) illustrates the use of jari 'because, so' linking two sentences.

[^104]```
(112) Ito moo mooropomo,
    'ito moo mo-orop=mo
    1PL.INC/AB this ST/IR-hungry=COMP
```

```
saba' notou'omo balungoto.
```

saba' notou'omo balungoto.
saba' no-tou'=mo balung=to
saba' no-tou'=mo balung=to
because ST/RE-finish lunch=1PL.INC/GE
because ST/RE-finish lunch=1PL.INC/GE
'We are already hungry, because our packed lunch is already all gone.'

| (113) Io | nanabu | riogo | to'otoro-toro | uo. |
| :--- | :--- | :--- | :--- | :--- |
| io | no-nabu | ri=ogo | to='o-toro-toro | 'uo |
| 3SG/AB | ST/RE-fall | LOC=water | RM=HAVE-RED-spin | yonder |

Jari io naatemo.
jari io no-ate=mo
so 3SG/AB ST/RE-die=COMP

```
'He fell into the water that was spinning and spinning. So he died.'
Example (114) illustrates the relator iringonyo 'because' at the beginning of the sentence, but relates the two independent clauses of the same sentence with a cause-effect relation. Pendau adds the third person enclitic =nyo to the Indonesian word iring 'because', literally then iringonyo could mean 'its cause, its basis'. Most cause-effect relators appear between the two clauses they link, but this example demonstrates the relator in the first clause which is also the causal clause.


The relators jari 'so, because', lantaran 'because', and karna 'because' are all borrowed from Indonesian (from jadi 'so, because', lantaran 'because', and karena 'because' respectively). Some speakers seem to make a use of some of these more than other speakers (which is either idiolectical or regional). Examples (115) and (116) illustrate the use of lantaran 'because' connecting two clauses in one sentence,. This relator is different from many of the others because the relator precedes the causal clause, and thus illustrates sentences with the effect clause preceding the causal clause. Examples (117) and (118) illustrate the use of jari 'so, because' connecting a clause in a single sentence, and connecting two sentences. These all have the causal clause preceding the effect clause. In example (119) jari is used to begin a new sentence, with a meaning of 'so, therefore'.
\begin{tabular}{clllll} 
(115) Jimo & nao & ndau & niotoi'u, & lantaran & gau-gau'ong \\
jimo & nao & ndau & ni-otoi='u & lantaran & gau-gau'-ong \\
3PL/AB & that & NEG & IV/RE-know=1SG/GE because & RED-action-locN
\end{tabular}
\begin{tabular}{lll} 
numanggenyo & tuai'u & moo. \\
nu=mangge \(=\) nyo & tuai='u & moo \\
CN/GE= uncle=3SG/GE & y.sibling=1SG/GE & this
\end{tabular}
'I didn't know them because of the actions of their uncle, my younger sibling here.'
[miracle1.pin 051-052]
\begin{tabular}{llllll} 
Ami & nelampa & rimai & moo & lantara & nomoia \\
'ami & \(N\)-pe-lampa & ri=mai & moo & lantaran & \(N\)-po \(1_{1}\)-moia \\
1PL.EXC/AB & RE-SF/DY-travel & LOC=come & this & because & RE-SF-live
\end{tabular}
rijunjung nutoo mene' ribuut nao.
ri=junjung nu=too mene' ri=buut nao
LOC=house \(\mathrm{CN} / \mathrm{GE}=\) people go.up \(\mathrm{LOC}=\) mountain that
'We travelled and came here because we were living in the house of people up in that mountain.'
(117) Ito moo notagumo,
'ito moo \(N\)-po 1 -tagu=mo
1PL.INC/AB this RE-SF/DE-friend=COMP
\begin{tabular}{llllll} 
jari & a'u & moo & ma'o & melolo & bau. \\
jari & a'u & moo & ma'o & M-pe-lolo & bau \\
so & 1 SG/AB & this & go & IR-SF/DY-search & fish
\end{tabular}
'We are now friends, so I will go to look for fish.'
(118) Ami moo ndau moo esiina, ndau moo esiama.
'ami moo ndau moo 'e-siina ndau moo 'e-siama
1PL.EXC/AB this NEG this HAVE-father NEG this HAVE-father
\begin{tabular}{llllllll} 
Jari & ami & moo & melolo & siina & \(o\) & siama & mami. \\
jari & 'ami & moo & M-pe-lolo & siina & \(o\) & siama & mami \\
so & 1PL.EXC/AB & this & IR-SF/DY-search & mother & and & father & 1PL.EXC/GE
\end{tabular}
'We don't have our mother nor our father. So we are searching for our mother and our father.'
[poora.pin 418]
(119) Jari tambao ningeno uo notou' nilua'onyo uo,
jari tambao ningeno 'uo no-tou' ni-lua'=nyo 'uo so pelican just.then yonder ST/RE-finish IV/RE-vomit=3SG/GE yonder
\begin{tabular}{llll} 
io & nolumeapomo & ma'o & ripomoiaongonyo. \\
io & \(N\)-po \(0_{1}\)-um-leap=mo & ma'o & \(r i=p o_{1}\)-moia-ong=nyo \\
3SG/AB & RE-SF/LCM-TEL-fly=COMP & go & LOC=SF-live-locN=3SG/GE
\end{tabular}
'So just as the pelican finished vomiting (up the grandson), then he flew off to his nest (or dwelling place).'

Examples (120) and (121) illustrate the use of antau 'in order to' as a connector between two clauses. The first clause preceding the relator antau in both examples presents a clear intention followed by the effect.


Examples (122) and (123) illustrate the use of apa 'because, since' that links two clauses with the propositional relation of cause-effect.
\begin{tabular}{lllll} 
Odo & moo & netejiji, & apa & nidurau'omo \\
odo & moo & ne-te-jiji & apa & ni-durau'=mo \\
monkey this & AV/RE-NV-surprise & because & IV/RE-grab.back.of.neck=COMP
\end{tabular}
nupanganganta uo.
nu=panganganta 'иo
\(\mathrm{CN} / \mathrm{GE}=\) flesh-eater yonder
'The monkey was surprised, because the flesh-eater had grabbed him by the back of the neck.'
\(\left.\begin{array}{lllll}\text { (123) Notou' } & \text { uo } & \text { odo moo ndaumo } & \text { eingka-ingka, } \\
\text { no-tou' } & \text { 'uo } & \text { odo } \quad \text { moo } & \text { ndau=mo } & \text { 'e-ingka-ingka }\end{array}\right]\)\begin{tabular}{lll} 
ST/RE-finish yonder & monkey this NEG=COMP & HAVE-RED-fear
\end{tabular}
'After that this monkey was no longer afraid because the flesh-eater had died.'

Example (124) shows saba' 'because' with a similar cause-effect propositional relation as apa in the preceding examples. However in (125) and (126) saba' 'because, since, reason' expresses a different type of cause-effect, which can be further classified as a reason-exhortation relation. This distinction is necessary since it only occurs in the imperative mode in combination with the relator saba'.
```

(124) A'u najari bai moo, saba' a'u
a'u na-jari bai moo saba' a'u
1SG/AB COP/RE-become like this because 1SG/AB
nitoto'onyo nubalida.
ni-toto'=nyo nu=balida
IV/RE-slash=3SG/GE CN/GE=weaving.sword
'I have become like this, because he slashed me with the weaving sword.'
(125) Emu peteulemo saba' togogemu bai nodua'omo!
'eти pe-teule=mo saba' togoge=mu bai $N$-po ${ }_{1}$-dua'=mo
2PL/AB SF-return=COMP because parent=2SG/GE like RE-SF-arrive=COMP
'You (pl.) go home now, because your father has probably already come home!'

```
```

(126) Ali susui tuai'u, saba' nooropomo!

```
(126) Ali susui tuai'u, saba' nooropomo!
ali susu-i tuai='u saba' no-orop=mo
ali susu-i tuai='u saba' no-orop=mo
come milk-DIR y.sibling=1SG/GE because ST/RE-hunger=COMP
come milk-DIR y.sibling=1SG/GE because ST/RE-hunger=COMP
'Come nurse my baby sister, because she is already hungry!'
```


### 15.6.2 Concession-contraexpectation relations

The propositional relation concession-contraexpectation is really another type of causeeffect. However it seems useful to distinguish these from the other types of cause effect presented in §15.6.1, as the effect is contrary to the expected effect, i.e. the contraexpectation. The clause with the effect is a statement of concession, or an acknowledgement of a situation or event. The concession normally precedes the contraexpectation, as is normal for cause-effect relations, however the clause order may be reversed by placing the relator with its following contraexpectation clause before the concession clause.

Example (127) illustrates the use of joo 'however, truly, whereas' as a relator for the propositional relation of concession-contraexpectation (or contrafactual).

Nisangkanyo
ni-sangka=nyo
IV/RE-think=3SG/GE
aуи mepepatei joo
'ayи M-pepe-pate-i joo
wood IR-SF/PT-kill-DIR however
ayu toraalap uram.
'ayu to=ro-alap uram
wood $\mathrm{RM}=\mathrm{IV} /$ IR-get medicine
'He thought that wood would kill you, however that wood that (he) got turned out to be medicine.'
[EN97-002.56; Katira.pin 023]

Examples (128)-(130) illustrate the same propositional relation with maumpo 'although, however, even though'. Example (128) illustrates maumpo at the beginning of the sentence, but links the two clauses of the same sentence. Examples (129) and (130) illustrate maumpo preceding the second clause of which the first is linked.

| (128) Maumpo | manasu | olongian, | a'u | kana | meriing | butu |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| maumpo | mo-nasu | 'olongian | a'u | kana | M-pe-riing | butu |
| although | ST/IR-anger | king | 1SG/AB | certain | IR-SF/DY-bathe | just |

'Even though the king will be angry, I will certainly just bathe.'
$\left.\begin{array}{llllll}\text { (129) Ono oo } & \text { melampa } & \text { maumpo } & \text { ripaio } & \text { jalangomu } \\ \text { ono 'oo } & \text { M-pe-lampa } & \text { maumpo } & \text { ri=paio } & \text { jalang=mu } \\ \text { if } & \text { 2SG/AB } & \text { IR-SF/DY-travel } & \text { although } & \text { LOC=where } & \text { path=2SG/GE } \\ & & & & & \end{array}\right]$ uinang.
'Wherever you travel, even if your path is hidden, I will certainly search for you and I will eat you.'

| Ujamin | maumpo | a'u | ndau | mu'ito. |
| :--- | :--- | :--- | :--- | :--- |
| 'u-jamin | maumpo | a'u | ndau | $m u=$ 'ito |
| 1SG.IV/IR-guarantee | although | 1SG/AB | NEG | 2SG.IV/IR=see |

'I guarantee it, even though you cannot see me.'

The relators ai and tapi, both mean 'but', are used synonymously by Pendau speakers (the latter is clearly a borrowing, and the former is conceivably an older borrowing). Ai and tapi are illustrated in examples (131) and (132) connecting two clauses. Example (133) illustrates ai connecting sentences.
(131) A'и ио nengkanimo mpuи, ai ndau motou'.
a'и 'иo $N$-pe-ngkani=mo mpиu ai ndau mo-tou'
$1 \mathrm{SG} / \mathrm{AB}$ yonder RE-SF/DY-eat=COMP really but NEG ST/IR-finish
'I really did eat, but I didn't finish it off.'
(132) Nagana’omo jimo roonong uo niduta,
no-gana'=mo jimo roonong 'uo ni-duta
ST/RE-enough=COMP 3PL/AB six yonder IV/RE-propose

| tapi | ndau | diang | tonoluar. |
| :--- | :--- | :--- | :--- |
| tapi | ndau | diang | to=no-luar |
| but | NEG | EXIS | RM=UD/RE-want |

'She finished proposing to the six of them, but none of them wanted to (marry her son).'

| (133) Ami | netedua' | junjung | ribuut | nao. |
| :---: | :--- | :--- | :--- | :--- |
| 'ami | ne-te-dua' | junjung | ri=buut | nao |
| 1PL.EXC/AB | AV/RE-NV-arrive | house | LOC=mountain that |  |


| Ai | ndau | niotoi | mami | tope nutogu | junjung uo. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ai | ndau | ni-otoi | mami | tope $n u=$ togu | junjung 'uo |
| but NEG | IV/RE-know | 1PL.EXC/GE | name $\mathrm{CN} / \mathrm{GE}=$ master | house yonder |  |

'We arrived at the house in those mountains, but we didn't know the house owner's name.'

### 15.6.3 Sequential relations

Sequential relations are usually temporal and include simultaneous time, temporal overlap, and chronological sequence. Those that are used chronologically are always iconic, that is the clause preceded by the relator follows the preceding clause or sentence in time. Paey is often used for 'and then' relations connecting clauses or sentences as in (134) and (135). Another sequential relator is sampanyo 'after that, then' as in (136)(138). Examples (136) and (137) illustrate sampanyo in sentence initial position, but note that both relations that are connected are in the subsequent two clauses. Example (136) also shows the sequential relator sampe 'until'. Examples (136) and (138) illustrate the use of sampanyo with the repetition feature tail-head transition ${ }^{16}$ (see $\S 17.3$ for discussion of repetition in Pendau). Dungku is another word that is used for 'after that, then', as illustrated in (139).
(134) Omung mai, paey uinang!
'omung mai paey 'u-inang
carry come and.then 1 SG.IV/IR-eat
'Bring it here, and then I will eat it!'
(135) Niengkatonyo jalanyo, paey ma'o nirantana'onyo. ni-engkat=nyo jala=nyo paey ma'o ni-rantan-a'=nyo IV/RE-lift=3SG/GE net=3SG/GE and.then go IV/RE-shake-TZ=3SG/GE 'He lifted his net, and then he went to shake out (the fish).'

| Io | nompanusu | unganyo | sampe | nobosu. |
| :--- | :--- | :--- | :--- | :--- |
| io | N-pong-pang-susu | unga=nyo | sampe | no-bosu |
| 3SG/AB | RE-SF/PT-CAUS-milk | child=3SG/GE | until | ST/RE-full |


| Sampanyo | nobosu | io | nete'ompoturu | ripalanga. |
| :--- | :--- | :--- | :--- | :--- |
| sampanyo | no-bosu | io | ne-te-'om-po-turu | ri=palanga |
| after | ST/RE-full | 3SG/AB | AV/RE-NV-REL-SF-sleep | LOC=lap |

'She nursed her daughter until she was full. After she was full she fell asleep in her lap.'
(137) Sampanyo odo moo nanabumo rilalong nuapi
sampanyo odo moo no-nabu=mo ri=lalong nu=api
after monkey this ST/RE-fall=COMP LOC=inside CN/GE=fire

| tombiru-mbirung | uo | odo | moo | naatemo. |
| :--- | :--- | :--- | :--- | :--- |
| to=mbiru-mbirung | 'uo | odo | moo | no-ate $=$ mo |
| RM=RED-flame | yonder | monkey | this | ST/RE-die=COMP |

'After the monkey fell into the fire that had large flames, then the monkey died.'

| (138) Ila | uo | odo | moo | nopootomo | neteule |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ila | 'uo | odo | moo | no-poot=mo | N-pe-teule |
| from yonder | monkey | this | ST/RE-ask.leave=COMP | RE-SF/DY-return |  |

[^105]| ma'omo | rijunjung | nijimo. | Sampanyo | odo | moo | neteulemo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ma'o=mo | ri=junjung | nijimo | sampanyo | odo | moo | N-pe-teule=mo |
| go=COMP | LOC=house | 3PL/GE | after | monkey this | RE-SF/DY-return=COMP |  |
|  |  |  |  |  |  |  |
| ndaupo | nagaar | jimo, | ulasang | moo | nongundur. |  |
| ndau=po | no-gaar | jimo | ulasang | moo | N-pong-undur |  |
| NEG=CONT | ST/RE-far | 3PL/AB turtle | this | RE-SF/PT-sing |  |  |

'After the monkeys said goodbye they returned toward their home. After the monkeys were returning home, they hadn't gone far when the turtle began to sing.'
(139) Dungku niepenyo suara numanu' nintuuna'onyo sombal.
dungku ni-epe=nyo suara nu=manu' ni-ntuung-a'=nyo sombal
after IV/RE-hear voice CN/GE=chicken IV/RE-down-TZ-3SG/GE sail
'After he heard the chicken's voice he lowered the sail.'

Examples (140) and (141) illustrate the use of bia 'later'. Tarus (from Indonesian terus 'continue, then') is illustrated in (142) and (143). It can be used also to mean 'after' or 'straight away, right then', and usually means that the following event occurred immediately after the previous clause or event.
(140) Rependolong bia reinangonyo seinsangana. ro-pendolong bia ro-inang=nyo seinsangana
IV/IR-store later IV/IR-eat=3SG/GE tomorrow
'You store it, and we (lit. he/she/it) will eat it later tomorrow.'
(141) Paey noluminjo' linjo-linjo' io,
paey $\quad \mathrm{N}^{- \text {po }_{1} \text {-um-linjo' linjo-linjo' io }}$
and.then RE-SF/LCM-TEL-run RED-run 3SG/AB

| bia | nidua'onyo | ogo. |
| :--- | :--- | :--- |
| bia | ni-dua'=nyo | ogo |
| later | IV/RE-arrive=3SG/GE | water |

'And then he began to run, and he ran and ran. Later he arrived at the water.'
(142) Notou' nombayu tarus nogabu.
no-tou' $N$-po $1_{1}$-mbayu tarus $N$-po $1_{1}$-gabu
ST/RE-finish RE-SF/FA-pound continue RE-SF/FA-cook
'After finishing the pounding, then she did the cooking.'

| (143) Nodua' | rinyau | uo | tarus | nipanika. |
| :--- | :--- | :--- | :--- | :--- |
| no-dua' | ri=nyau | 'uo | tarus | ni-pa-nika. |
| ST/RE-arrive | LOC=go.down | yonder | continue | IV/RE-CAUS-wed |

'After they arrived down there, then they were married.'

### 15.6.4 Simultaneous and overlapping temporal relations

Example (144) illustrates the use of sono as a relation of simultaneous time 'with, while'. Examples (145)-(148) illustrate the use of $o$ 'and, while, then'. The linker $o$ 'and,
while, then' when conjoining coordinate clauses may be simultaneous or temporal overlap as in examples (145)-(147). Example (148) illustrates a sequential usage of o. The temporal sequence implied in these examples is pragmatically derived from the order of the clauses expressed and is not part of the meaning of $o$ or sono.
(144)

| Toluinsang | niuli-ulit | nukai-kai | nongkai |
| :--- | :--- | :--- | :--- |
| tolu-insang | ni-uli-ulit | nu=kai-kai | N-pong-'ai |
| three-time | IV/RE-RED-repeat | CN/GE-RED-grandfather | RE-SF/PT-call |
| tambao | sono | niolu'inyo. |  |
| tambao | sono | ni-olu'- $i=n y o$. |  |
| pelican | COM | IV/RE-chant-DIR=3SG/GE |  |

'The grandfather repeated three times calling to the pelican while chanting.'
(145)

| Odo | nodua'omo | mai | $o$ | nebura, | "..." |
| :--- | :--- | :--- | :--- | :--- | :--- |
| odo | $N$-po ${ }^{1}$-dua'=mo | mai | $o$ | $N$-pe-bura | "..." |
| monkey | RE-SF-arrive=COMP | come | and | RE-SF/DY-speak | (quote) |

'The monkey arrived here and spoke, "...".'
(146) Jari ulasang moo nongunduromo o notitiasi.
jari ulasang moo $N$-pong-undur=mo o no-ti-tias-i
so turtle this RE-SF/PT-sing=COMP and UD/RE-RED-sorrow-DIR
'So the turtle sang and mourned.'
(147) Ulasang sura netataa o nebura bai uo
ulasang sura $N$-pe-tataa o $N$-pe-bura bai 'uo turtle only RE-SF/DY-laugh and RE-SF/DY-speak like yonder 'The turtle just laughed and spoke like that.'
(148) Io nomupuk bua иo o niinangonyo.
io $\quad N$-pong-pupuk bua 'uo o ni-inang=nyo
3SG/AB RE-SF/PT-pick fruit yonder and IV/RE-eat=3SG/GE
'He picked the fruit and ate it.'

Tabulu means 'while' and can be used preceding the two relations, as in (149) or as a relator between the two clauses, as in (150).
(149) Tabulu emu moo nao tonilolo mami.
tabulu 'emu moo nao to=ni-lolo mami
while $2 \mathrm{PL} / \mathrm{AB}$ this that $\mathrm{RM}=\mathrm{IV} / \mathrm{RE}$-search $1 \mathrm{PL} . E X C / G E$
'While you all were here we were looking for you there.'
(150) A'u bai moo, tabulu oo nao mono uli biasa
a'u bai moo tabulu 'oo nao mono uli biasa
$1 \mathrm{SG} / \mathrm{AB}$ like this while $2 \mathrm{SG} / \mathrm{AB}$ that still skin normal
'I am like this (invisible), while you still have a normal body (lit. skin).'

The connectors o 'and' and sono 'with, together (COM)' are also conjunctions for noun phrases, as shown in (151) and (152) (see §8.3.4 where sono is also used as the comitative preposition).
(151) Io nongkomung tavala o sarampang.
io $N$-pong-'omung tavala o sarampang
3SG/AB RE-SF/PT-carry spear and 2.pronged.fishing.spear
'He carried his hunting spear and his fishing spear.'
(152) Io nongkomung atupe pepitu dampe sono intolu mamanta
io $N$-pong-’omung atupe pepitu dampe sono intolu mo-manta

3SG/AB RE-SF/PT-carry rice.cake seven CLSF COM egg ST/IR-raw

| sadampe | sono | lugus | sadampe |
| :--- | :--- | :--- | :--- |
| so-dampe | sono | lugus | so-dampe |
| ONE-CLSF | COM | betel.nut | ONE-CLSF |

'She carried seven rice cakes with one raw egg and with one betel nut.'

### 15.6.5 Condition-consequence relations

Positive condition-consequence clauses are preceded by the relator ono ${ }^{17}$ 'if' and negative condition-consequences are preceded by the relator talomonyo 'if not for'. In both types the first clause with the relator contains the condition, and the subsequent clause contains the consequence. The relator ono is shown in (153) and (154).

| (153) Ono | ndau | mubagia', | oo | nao | uinangomo! |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ono | ndau | mu-bagi-a, | 'oo | nao | 'u-inang=mo |
| if | NEG | 2SG.IV-give-TZ | 2SG/AB | that | 1SG.IV/IR-eat=COMP |

'If you don't give it to me, then I am going to eat you!'

| (154) Ono | ndau | muparasaya, | nao | kuburonyo! |
| :--- | :--- | :--- | :--- | :--- |
| ono | ndau | mu-parasaya | nao | kubur $=$ nyo |
| if | NEG | 2SG.IV/IR-believe | that | grave $=3$ SG/GE |

'If you don't believe me, there's her grave!'
Ono frequently appears in tandem with one of the other conjunctions, as in (155)-(157). These combinations include: bia ono 'later if', jari ono 'so if', apa ono 'because if', ono bai 'probably if', saba' ono 'because if', ono...paey 'if...and then', ai ono 'but if', and ono bai uo 'if like that'. Example (155) illustrates the use of ono bai uo 'if that's how it is'. ${ }^{18}$

[^106](155)

| Ono | bai | no | ito | meteulemo. |
| :--- | :--- | :--- | :--- | :--- |
| ono | bai | 'uo | 'ito | M-pe-teule=mo. |
| if | like | yonder | 1PL.INC/AB IR-SF/DY-return=COMP |  |
| 'If that's how it is then let's go home.' |  |  |  |  |

(156) Jari ono nodua’ tempo nukonda
jari ono $N$-po ${ }_{1}$-dua' tempo nu=konda
so if RE-SF-arrive time CN/GE=tide

| io | ma'o | melolo | bau. |
| :--- | :--- | :--- | :--- |
| io | ma'o | M-pe-lolo | bau |
| 3SG/AB | go | IR-SF/DY-search | fish |

'So when the time in between tides would come he went searching for fish.'
Example (157) illustrates the use of talomonyo 'if not for, if it wasn't for' as a negative condition-consequence relation.
(157) Ono ndau nituluni nupetubuongoto nao
ono ndau ni-tulung-i nu=pe-tubu-ong=to nao
if NEG IV/RE-help-DIR CN/GE=SF/DY-live-locN=1PL.INC/GE that

| ami | moo | naatemo. | Talomonyo | petubuongoto |
| :--- | :--- | :--- | :--- | :--- |
| 'ami | moo | no-ate=mo | talom=nyo | pe-tubu-ong=to |
| 1PL.EXC/AB | this | ST/RE-die=COMP | if.not=3SG/GE | SF-live-locN=1PL.INC/GE |
| ami | moo | paey | ndau | no'uya. |

'If our (hon.=your) pet (giant cat) didn't help there, we here would already be dead. If it wasn't for our (hon.=your) pet here than we wouldn't be here (lit. doesn't matter (why)).'
[EN97-002.62; poora.pin 539]

### 15.6.6 Alternation relation with ape

Alternation relations provide an alternative possibility that follows the first clause. The relator ape 'or' precedes the alternative clause, as shown in (158)-(160).
(158) Bai marate' ape mombosi' ami rimoomo.
bai mo-rate' ape mo-mbosi' 'ami ri=moo=mo
like ST/IR-bad or ST/IR-good 1PL.EXC/AB LOC=this=COMP
'Whether it's good or bad here we are now.'
(159) Unga miu tonialap nutoo ape nipiara nutoo.
unga miu to=ni-alap nu=too ape ni-piara nu=too
child 2PL/GE RM=IV/RE-get $\mathrm{CN} / \mathrm{GE}=$ people or $\mathrm{IV} /$ RE-care $\mathrm{CN} / \mathrm{GE}=$ people
'Someone got your child or someone took care of your child.'

| (160) Ito | ma'o | oigi | ape | ma'o | oanong. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 'ito | ma'o | oigi | ape | ma'o | oanong |
| 1PL.INC/AB | go | left | or | go | right |

'We will go left or we will go right.'
(161) shows that ape is also used to conjoin noun phrases.
(161) Bai bau nudagat, ape bau nuatang.
bai bau nu=dagat ape bau nu=atang
like fish $\mathrm{CN} / \mathrm{GE}=$ ocean or fish $\mathrm{CN} / \mathrm{GE}=$ above
'Like saltwater fish or freshwater fish.'

### 15.7 Discourse connectors

Discourse connectors appear in the margin of a clause. Longacre (1985:235-237) demonstrates that the sentence can be analysed as having a margin, a base, and a nucleus. In Pendau the margins of a clause can be identified as a phrasal unit by the fact that their removal does not create an ungrammatical sentence nor affect the basic syntax. Discourse connectors all relate or orient the sentence to the discourse context. These connectors sometimes overlap with some of the temporal propositional relations discussed in §15.6, since they may introduce an orientation to the chronology of the sentence with the previous context and/or with the rest of the sentence or following sentences.

Many discourse connectors end their NP with the demonstrative uo 'yonder', and seldom with moo 'this' (see discussion on demonstratives in §7.6.3).

| ila uo | 'after that, then' |
| :--- | :--- |
| no-tou' иo, no-tou' | 'after finishing that' |
| no-tou' ila иo | 'after finishing that' |
| bai uo | 'when, as, while' |
| jari | 'so, because' |
| jari bai uo | 'so after that, so while' |
| bai moo | 'like this' |
| no-tou'X | 'after finishing X' |
| ri=ulu | 'at first, before' |
| ndau na-sae ila uo | 'not long after that' |
| watu=nyo, watu uo | 'at that time, when' |

Examples (163) and (164) illustrate the use of ila uo 'after that, then (lit. from yonder)'. This discourse connector always begins a clause referring to a new event that follows what was referred to in the previous span of discourse. The temporal span can be qualified with a specific time such as ndau nasae 'not long', as in (165). This example shows that when the basic discourse connector is qualified an independent clause is created. It is the whole clause which now functions as the discourse connector. Examples (166) and (167) illustrate similar constructions. Example (168) illustrates the complex discourse connector jari ila uo 'so after that'. Example (169) illustrates that the discourse connector can occasionally occur in the sentence final position (although sentence or clause initial position occurs much more frequently).
(163)

| Ila uo | ponyu | moo | nengkalabaromo | manyau | ridagat. |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ila | иo | ponyu | moo | N-pe-ngkalabar=mo | ma-nyau | ri=dagat |
| from yonder | turtle | this | RE-SF/DY-crawl=COMP | UD/IR-go.down | LOC=ocean |  |

'After that the sea turtle crawled down to the ocean.'
[trtlegg.pin 023]

| (164) Ila | uo | tarapasa | nigansingomo | baliung. |
| :--- | :--- | :--- | :--- | :--- |
| ila | 'uo | tarapasa | ni-gansing=mo | baliung |
| from yonder | force | IV/RE-ruin=COMP | axe |  |

'After that he was forced to ruin the axe.'
[asu2.pin 127]
(165) Ndau nasae ila uo tarus no’uinang.
ndau no-sae ila 'uo tarus no'u-inang
NEG ST/RE-long from yonder continue 1SG.IV/RE-eat
'Not long after that I ate right away.'
[cekupitu.int 008]
(166) Santanga jaang ila uo, ami diangomo riSuli....
so-ng-tanga jaang ila 'uo 'ami diang=mo ri=Suli ONE-LIG-half hour from yonder 1PL.EXC/AB EXIS=COMP LOC=S. 'Half an hour after that, then we arrived at Suli...' [jptext03.jdb 013-014]
(167) Sura sembengi ila uo tarus a'u noluminjo'
sura so-mbengi ila 'uo tarus a'u $N$-po $o_{1}$-um-linjo'
just ONE-night from yonder continue $1 \mathrm{SG} / \mathrm{AB}$ RE-SF/LCM-TEL-run
mene’ Lewonu.
тепе’ Levonu
go.up L.
'Just one night after that then I ran up to Lewonu.'
[bugmalei.int 035]
(168) Jari ila uo a'u tarus ri'uo.
jari ila 'иo a'u tarus ri='иo
so from yonder $1 \mathrm{SG} / \mathrm{AB}$ continue $\mathrm{LOC}=$ yonder
'So after that I stayed there.'
[maslia.pin 019]

| (169) Paey | unga | petotolunyo | nogintoya | ila | uo. |
| :---: | :--- | :--- | :--- | :--- | :--- |
| paey | unga | pe-totolu=nyo | $N$-po $o_{1}$-gi-ntoya | ila | 'uo |
| and.then | child | SF-three=3SG/GE | RE-SF-REL-swing | from | yonder |

'And then after that the third child took a swing.'
[gibang.pin 103]
The discourse connector notou' uo 'after finishing that' is also a very common way to demarcate a new event in a sequence of events, as in (170). Example (171) illustrates that a complex combination of the propositional relator jari followed by the discourse connector notou' uo which is itself combined with the discourse connector ila uo may occur. Notou' is also often used in tail-head linkages, as in (172) (see discussion on tailhead linkage in §17.3.1.2). The standard formula is that the preceding verb is repeated after notou' as "X, notou' $X$..." where X is the verb.
$\begin{array}{rllll}\text { (170) Notou' } & \text { uo } & \text { jimo } & \text { neteule } & \text { jojoo. }\end{array}$
no-tou' 'иo jimo $N$-pe-teule jojoo
ST/RE-finish yonder 3PL/AB RE-SF/DY-return all
'After that they all returned home.' [libur.pin 010]

| (171) Jari | notou' | ila | uo | ami | sono | too | nuKoprasi |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| jari | no-tou' | ila 'uo 'ami | sono | too | nu=Koprasi |  |  |
| so | ST/RE-finish | from yonder | 1PL.EXC/AB | COM | person | CN/GE=Co-op |  |


| manyau | riMapagar. |
| :--- | :--- |
| ma-nyau | $r i=M$. |
| UD/IR-go.down | $\mathrm{LOC}=\mathrm{M}$. |

'So after finishing that we and the Co-op people went down to Mapagar.'
$\left.\begin{array}{lllll}\text { (172) Jimo } & \text { nengkani. } & \text { Notou' } & \text { nengkani, } \\ \text { jimo } & \text { N-pe-ngkani } & \text { no-tou' } & \text { N-pe-ngkani } \\ \text { 3PL/AB } & \text { RE-SF/DY-eat } & \text { ST/RE-finish } & \text { RE-SF/DY-eat }\end{array}\right]$

Another discourse connector uses the word watu, which often occurs as watunyo (with the third person enclitic). This means 'at that time'. Note that in (173) the first use of watunyo is really a clausal relator or connector which indicates the temporal background for the following clause. The second use of watunyo indicates a discourse connection which refers back to the time of the person's narrative. This is a good case which shows that there is a continuum between some of the clausal relators and higher level discourse connectors.

| (173) Watunyo | a'u | nomoia | riMalei, | a'u | monopo | nosikola. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| uatu=nyo | $a \prime \prime$ | $N$-po 1 -moia | ri $=$ Malei | a'u | mono=po | $N$-po ${ }_{1}$-sikola |
| time=3SG/GE | 1SG/AB RE-SF-live | LOC=M. | 1SG/AB | still=CONT | RE-SF-school |  |


| Watunyo | uo | a'u | monopo | kalas | doruo. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| uatu=nyo | 'uo | a'u | mono=po | kalas | doruo |
| time=3SG/GE | yonder | 1SG/AB | still-CONT | class | two |

'When I lived in Malei, I was still going to school. At that time I was still in class two.'

## 16 Asking questions and making requests

### 16.1 Introduction

This chapter discusses the strategies available to Pendau speakers for making requests and for asking questions. In §16.2 I discuss a variety of strategies for making requests. These include true imperative constructions, but also a number of other strategies which can be used, for example, to express greater politeness. In $\S 16.3$ I discuss ways of asking questions.

### 16.2 Commands and requests

### 16.2.1 Introduction

There are a variety of means available to Pendau speakers for giving commands and making requests. Imperatives are discussed in $\S 16.2 .2$ and other polite strategies for making requests are discussed in §16.2.3.

### 16.2.2 Imperatives

Imperative verbs are distinguished from other verbs by the fact that they do not take irrealis/realis marking. They may occur either with or without a $p V(C)$ - stem former (see $\S 4.3$ and Chapter 9). ${ }^{1}$ A few verbs have special suppletive imperative forms. These are discussed in the last part of this section.

Examples (1)-(5) illustrate imperative constructions in which the verbs occur with stem formers. Examples (1)-(3) show omission of the A argument. Overt reference to the A argument is also possible, as illustrated in (4) and (5). It is important to note that these examples use the A argument in the absolute case, since in later examples the same imperative constructions will appear with the A argument in the genitive case. The difference between stem and bare-root verb constructions between the inverse voice verb construction and non-inverse verb constructions will be discussed shortly.
(1) Pogutumo api!
po $1_{1}$-gutu $=$ mo api
SF/FA-make=COMP fire
'(You) make a fire!'
[asu2.pin 200]

[^107](2) Pemene' mai uti.
pe-mene' mai uti
SF-go.up come dear.boy/VOC
'Come up here dear boy!’ [asu2.pin 069]
(3)

| Neburamo | siinanyo | "pogabua'omo!" |
| :--- | :--- | :--- |
| $N$-pe-bura=mo | siina=nyo | po $_{1}$-gabu-a'=omo |
| RE-SF/DY-speak=COMP | mother=3SG/GE | SF/FA-cook-TZ=COMP |

'Her mother spoke, "(You) cook it (for her)!'
[ceku03.jdb 015]
(4) Oo pongkomung intolu mamanta sadampe!"
'oo pong-'omung intolu mo-manta so-dampe
2SG/AB SF/PT-carry egg ST/IR-raw ONE-CLSF
'You carry one raw egg!
[mdtext5.jdb 038]'
(5) Emu lulu po'oturu ila uo paey a'u!
'ети lulu po ${ }_{1}$ 'o-turи ila 'иo paey a'u
2PL/AB first SF-HAVE-sleep ABL yonder and.then $1 \mathrm{SG} / \mathrm{AB}$
'You all go to sleep first, and then after that I will!'
[poora.pin 186]

In examples (6)-(12) the imperative verbs occur without stem formers as bare stems. Note the contrast between examples (9)-(10) where the verb 'omung 'carry' occurs as a bare stem and example (4) above where it occurred with a stem former. Note also the occurrence of two imperative verbs in (10), the first of which, peteule 'return', occurs with a stem former, and the second of which, 'omung 'carry', occurs as a bare stem.
(6) Talaui $a$ 'u!
talau-i a'u
leave-DIR 1SG/AB
'(You) leave me (some of the fish)!'
[troll.int 080]
(7) Ono bai uo tuluni a'u!

Ono bai 'uo tulung-i a'u
if like yonder help-DIR 1SG/AB
'If that's how it is then help me!'
[troll.int 193]
(8) Bagii nyau mai a'u bela!
bagi-i nyau mai a'u bela
give-DIR go.down come $1 \mathrm{SG} / \mathrm{AB}$ friend
'You give (it) to me, friend!' [turtle.pin 066]
(9) Seinsangana nyau mai 'omung tuaimu ususuipo!

Seinsangana nyau mai 'omung tuai=mu 'u-susu-i=po
tomorrow go.down come bring y.sib. $=2$ SG/GE 1SG.IV/IR-milk-DIR=CONT
'Tomorrow come down here and bring your baby sister, and I will nurse her again!'

| Peteule | oo | uti | 'omung | bua | nutaipang |
| :--- | :--- | :--- | :--- | :--- | :--- |
| pe-teule | 'oo | uti | 'omung | bua | nu=taipang |
| SF/DY-return | 2SG/AB | dear.boy/VOC | carry | fruit | CN/GE=manggo |

moo sadampe!
moo so-dampe
this ONE-CLSF
'Dear boy, you return and bring one mango fruit here!"
[nalalo.pin 024]
(11) Alapa' mai!
alap-a' mai
get-TZ come
'Bring it here!'
(12)

| Anta'a'opo | mai | ususui | silei | nao. |
| :--- | :--- | :--- | :--- | :--- |
| anta'-a'=po | mai | 'u-susu-i | si=lei | nao |
| near-TZ =CONT | come | 1SG.IV/IR-milk-DIR | PN/GE=vagina | that |

'Come closer and I will nurse my baby girl (lit. vagina) there.'

Since transitive verbs can occur in either active or inverse voice, it is not surprising that imperatives can also be formed in both voices. Example (13) illustrates the imperative inverse voice construction. This construction is also discussed in §11.5.1. Since imperative verbs do not allow active voice or inverse voice morphology, the only unequivocal way to identify the voice is checking to see which case the A argument in in. Examples (14)-(16) illustrate the imperative verb petaang 'wait' in inverse constructions. Example (17) illustrates the use of pe-taang 'wait', which has no overt A argument. The pronoun $a^{\prime} u$ ' $I(1 S G / A B)$ ' could be the $P$ argument in either active or inverse voice constructions, and so it cannot be verified which voice it may be in.

| (13) | ...paey <br> paey and.then | 'omung 'omung carry | miu <br> miu <br> 2PL/AB | mai <br> mai <br> come.here |  | 1SG/AB |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | '... and then (you all) bring him to me!' |  |  |  |  |  | [natal01.pin] |
| (14) | Petaang miu! <br> pe-taang miu <br> SF/DY-wait 2PL/GE |  |  |  |  |  |  |
|  | 'You all wait!' |  |  |  |  |  | [natal01.pin 008] |
| (15) | Petaang baremu, ami <br> pe-taang bare $=m u$, 'ami <br> SF-wait split=2SG/GE 1PL.EXC/AB <br> 'You just wait until we get you, we are goin |  |  |  | ma'o <br> ma'o <br> go | mongkai <br> M-pong-kai <br> IR-SF/PT-call | tagu. tagu friend |
|  |  |  |  |  | to ca | our friends.' | [turtle.pin 214] |

```
(16) Petaang bare miu!
    Pe-taang bare miu
    SF/DY-wait split 2SG/GE
    'You all just wait until I get my hands on you (lit. wait split in two you all).'
```

                                    [poora.pin 388]
    | (17)Neburamo | panganganta uo | $"$ "petaang | $a \prime$ 'u, petaang!" |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| N-pe-bura=mo | panganganta 'uo | "pe-taang | a'u, pe-taang |  |
| RE-SF-speak=COMP | flesh-eater | yonder | SF/DY-wait | 1SG/AB SF/DY-wait |

‘The flesh-eater spoke, "(You) wait for me, wait!'
[poora.pin 392]
Pendau also has two irregular suppletive imperative forms. These are the directional verbs la'o 'go' (compare to the declarative ma'o 'go') and ali 'come' (compare to the declarative mai 'come'). The imperative forms of these are illustrated in (18) and (19). The suppletive directionals la'o 'go' and ali 'come' are often used in serial verb sequences, just as their declarative counterparts are. In such constructions, the second verb in the sequence can occur like any other imperative verb, either with a bare stem former or just as a bare root. Each possibility is shown in (20)-(24). Examples (20) and (21) show the second verb with the stem former $p V(C)$-, and example (22) with the second verb as a bare form.
(18)

| Ети | la'ото, |
| :--- | :--- |
| 'ети |  |
| la'o=то, |  |


| saba' | neteumbamo | jalang |
| :--- | :--- | :--- |
| saba, | ne-te-umba=mo | jalang |
| because | AV/RE-NV-open=COMP | road |

2PL/AB go.IMP=COMP because AV/RE-NV-open=COMP road
'You go now, because the road is already open.'
[mdtext19.txt 057]

| Iye uti, | ali | rimoo, | bia | ubukaa' | jalangomu. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| iye uti, | ali | ri=moo, | bia | 'u-buka-a, | jalang=mu |
| yes dear.boy/VOC | come | LOC=here | later | 1SG.IV/IR-open-TZ | road=2SG/GE |

'Yes dear boy, come over here, later I will open the road for you.' [horse.pin 797-799]
(20) Oo la’o pombayu!
'oo la'o po ${ }_{1}$-mbayu
2SG/AB go/IMP SF/FA-pound
'You go pound!'
[poora.pin 101]
(21) Oo la'o pobalu'a' tutudaongo'u rima'o uo!
'oo la'o po-balu'-a' tu-tuda-ong='u ri=ma'o 'ио
2SG/AB go/IMP SF-TZ-pound RED-plant-locN=1SG/GE LOC=go yonder
'You go sell my garden up there!'
[king.pin 094-095]
(22) Bai moo la'o lolo miu mbosi-mbosi' unga uo riBetlehem!
bai moo la'o lolo miu mbosi-mbosi' unga 'uo ri=Betlehem like this go/IMP search 2PL/GE RED-good child yonder LOC=Bethlehem
'Like this you all go search well for that child in Bethlehem!'
[natal01.pin 017]

Ali is used to politely call or request someone to come towards the speaker and can mean 'let's', 'come', 'please come'. Example (23) is from a folk tale about a woman who becomes a dugong. Each time that her children come down to the ocean and call for her to come nurse the baby sister, the mother's body has fur growing on a new part of her body. This sentence illustrates the word ali 'come' preceding the verb mbuat 'emerge' with the stem formation pembuat, and preceding the denominal verb susu 'milk, nurse' without a stem former. Example (24 illustrates another clause with ali preceding the verb ita 'see' without the stem former.

| Ene, ene ali | pembuat | mai, | ali | susui | tuai'u. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Ene, ene ali | pe-mbuat | mai, | ali | susu- $i$ | tuai $=$ 'u |
| mom mom come | SF/DY-emerge | come | come | milk-DIR | y.sib. $=1 S G / G E$ |

'Mommy, mommy, please come out (lit. emerge), please nurse my baby sister!'
[dugong.int Quick 1991]

| Kai, | ali | itai | jo'ong | mami! |
| :--- | :--- | :--- | :--- | :--- |
| kai, | ali | ita-i | jo'ong | mami |
| grandpa/VOC | come | see-DIR | garden | 1PL.EXC/GE |
| 'Grandpa, come see our garden!' |  |  |  |  |

[mdtext20.txt 151]

### 16.2.3 Politeness strategies for making requests

In some circumstances, a variety of strategies are available to Pendau speakers for softening the impact of commands and making them more polite (or in some cases to strengthen them and make them less polite). In situations where issuing a command can be seen to be of benefit to the addressee, softening a command is unnecessary, and a bare imperative will almost invariably be used. (This is similar to the situation in English and other languages, where a command such as 'take a seat' would be normally polite whereas 'get out of my seat' would be seen as rude if it were not softened by some politeness strategy.)

The politeness strategies for making requests are:

- use of the adhortative marker alea 'allow, let us'
- use of the abilitative verb maala 'could, able'
- use of the aspectual enclitics $=m o$ or $=p o$
- use of the requestive formative pe'i-.

The first three strategies are discussed here. The requestive is treated separately in §10.2.5.

The use of the adhortative marker alea' 'allow, let us' is illustrated in (25) and (26).

| Alea' | rotudaitomo | tetala. |
| :--- | :--- | :--- |
| alea' | ro-tuda- $i=$ to $=$ mo | tetela |
| allow | IV/IR-plant-DIR-1PL.INC/GE=COMP | corn |

'(Will you) allow us to plant corn now.'
[jptext05.jdb 029]

| (26) | Alea' | a'u | mongolimo | aki |
| :--- | :--- | :--- | :--- | :--- |
| alea' | a'u | M-pong-oli=mo | aki | bou. |
| allow | 1SG/AB | IR-SF/PT-buy=COMP | battery | new |

'Allow me to buy a new battery now.'
[jptext07.jdb 031]
Another common strategy of politeness uses the word maala 'can, able'. Syntactically it forms a question, but the illocutionary force is a polar request. Examples (27) and (28) illustrate the use of ala as a question word used to make a polite request (another meaning here is 'allow'). Maala always occurs in irrealis and at the beginning of the clause that forms the question. In (27) the speaker is politely asking if he will be allowed to participate in the cock fight. In (28) the man is asking if the young lady he wants to marry will be allowed to come down from the house to see him. The elder (not necessarily the parent) says that she may. Example (29) is a request to the addressee to buy him a pair of pants.

'May I also fight my chicken (in the cock fight)?'
[mdtext20.txt 236]
(28)

| Maala | io | mendoang | nyau | mai | lulu? |
| :--- | :--- | :--- | :--- | :--- | :--- |
| mo-ala | io | M-pe-ndoang | nyau | mai | lulu |
| ST/IR-able | 3SG/AB | IR-SF/DY-exit | go.down | come | first |


| Neburamo | tomogurang | uo, "Maala." |
| :--- | :--- | :--- | :---: |
| N-pe-bura=mo | tomogurang | 'uo, mo-ala. |
| RE-SF/DY=speak=COMP | elders | yonder ST/IR-able |

"'Can she exit and come on down here first?" The elder spoke, "Yes she can.""
[mdtext15.txt 061-062]

| (29) | Maala | a'u | roolia' | miu | kaeng | salana? |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| mo-ala | a'u | ro-oli-a' | miu | kaeng | salana |  |
|  | ST/IR-may | 1SG/GE | IV/I-buy-TZ | 2PL/GE | cloth | pants |

'Could you (hon. sg.) buy me a pair of pants?'
[EN97-002.58]
The next strategy to form polite imperatives is by using the normal imperative verb strategies discussed in $\S 13.3 .3$ in conjunction with one of the aspectual enclitics $=m o$ or =po. Even though the primary purpose of these clitics is to provide aspectual information, they can also provide a further degree of politeness, or in some cases rudeness. Their use does not obligatorily carry politeness, as this is determined by the sociolinguistic context.

The aspectual enclitics $=m o$ 'completive' and $=p o$ 'continuative' produce a variety of different effects when used in imperatives. The continuative marker $=p o$ can be used to soften the impact of a command by suggesting that there is no urgency for the task to be completed, as in examples (30) and (31). In example (30) the child is speaking to a magical rooster which has provided her with special help. Each time that the rooster would crow for her, something special would be provided such as food or a house. The
rooster provides things for the girl, so she asks him politely to help her once again. Example (31) is used in an exchange between two friends.
(30) Kuruk oo pentontoro'opo
kuruk 'oo pe-n-tontoro'o=po
call.chicken/VOC 2SG/AB SF/DY-LIG-crow=CONT
'Kuruk you crow again!'
[mdtext1.txt 061]
Petaangopo!
Pe-taang=opo
SF/DY-wait=CONT
'Wait (a bit longer)!'
[ceku01.jdb 028]
This can be contrasted with the use of the verb pe-taang 'wait' in example (32) in which the children's lives are being threatened.

Petaang bare miu!
Pe-taang bare miu
SF/DY-wait split 2SG/GE
'You all just wait until I get my hands on you (lit. wait split in two you all).'
[poora.pin 388]
The completive marker adds to the urgency of any command that has been issued by suggesting that the order should be carried out immediately. When used in the context of an invitation to do something for the addressee's benefit, its use can be seen as conveying politeness. If used in circumstances where carrying out the request would not be of benefit to the addressee, then the use of =mo could sometimes be seen as particularly rude.

Examples (33) and (34) illustrate the completive enclitic $=m o$. Example (33) is in a folk tale in which the speaker is conveying an urgent message that will protect seven children from being killed by two flesh-eaters. Example (34) is relating a true story that happened to me and my language helper (and written by Josep Piri). After an incident on the road I had asked my language helper if I should stop and he said to me that I should just keep driving.

```
Emu pensoyo'omo ridodop
    'emи pe-nsoyo'=mo ri=dodop
    2PL/AB SF/DY-hide=COMP LOC=chest
    nupetubuongo'u nao!
    nu=pe-tubu-ong='u nao
    CN/GE=SF/DY-grow-locN=1SG/GE that
```

    'You (pl.) hide now in my pet's chest there.' \({ }^{2}\)
    [poora.pin 396]
    [^108](34) No’upeilua', "Nyaamo. Tarusa'omo!"
no'и-peilu- $a$ ', "nyaa=mo. tarus- $a$ '= $=$ о
1SG.IV/RE-said-TZ don't=COMP continue-TZ=COMP
'I said to him, "Don’t now. Continue on!’
[jptext04.jdb 033]
The requestive stem formative pe'i (REQ) can also be used to request someone to do something, as shown in (35). A full discussion of the requestives is found in $\S 10.2 .5$.

| Pe'ilolo | ritano | nuPendau. |
| :--- | :--- | :--- |
| pe'i-lolo | ri=tano | nu=Pendau |
| SF/REQ-search | LOC=ground | $\mathrm{CN} / \mathrm{GE}=\mathrm{P}$. |
| 'You can ask them to search for me in the Pendau homeland.' |  |  |

[mdtext15.txt 105]

### 16.2.4 Negative commands

Negative imperatives (prohibitives) can be formed using the negative nyaa but do not follow the 'positive' imperative mood syntax (they use declarative constructions). ${ }^{3}$ See §14.2.2 for the discussion on prohibitives.

### 16.3 Asking questions

### 16.3.1 Introduction

Questions are indistinguishable from statements syntactically, except for possible differences of intonation (Quick 2006) and the use of interrogative words in non-polar questions. Polar questions and alternative questions are discussed in §16.3.2. Content questions are then discussed in $\S 16.3 .3$. This is followed by a description of comparative alternation question constructions in §16.3.4. Finally, §16.3.5 discusses a special declarative construction which forms an illocutionary question.

### 16.3.2 Polar questions and alternative questions

Polar questions are formed syntactically in the same way as declaratives (§16.3.2.1), but they occur with higher ascending intonation than that used for declaratives (see §2.7 for discussion of interrogative intonation and Quick 2006). Polar questions also have the option of adding the question particle apa 'can, is, are, will'. Two other words that are often used in polar questions are moluar 'want, desire' and mono 'still' (see §16.3.2.2 below). Alternation questions differ from the previously mentioned polar questions in that one or more alternatives are offered to the listener (see $\S 16.3 .2 .3$ ).

### 16.3.2.1 Basic polar questions

Any basic declarative clause can be used as a polar question, but it will have an ascending intonation rather than a descending one. Example (36) illustrates a non-verbal clause, and example (37) illustrates a typical transitive clause in conjunction with the existential verb diang.

[^109]$\begin{array}{llllll}\text { (36) } & \text { Nipeilu } & \text { nijimo, "Oo } & \text { moo } & \text { musu?" } \\ \text { ni-peilu } & \text { nijimo, } & \text { 'oo } & \text { moo } & \text { musu? } \\ & \text { IV/RE-say } & \text { 3PL/GE } & \text { 2SG/GE } & \text { here } & \text { enemy }\end{array}$
'They said, "Are you an enemy? (lit. You are enemy?)", [jptext8.doc]
(37) Diang niepe miu suara nugoong mami ningeno uo? Diang ni-epe miu suara nu=goong mami ningeno 'uo EXIS IV/RE-hear 2PL/GE voice $\mathrm{CN} / \mathrm{GE}=$ gong 1PL.EXC/GE just.now yonder 'Did you all hear the sound of our gong just now? (lit. There was the sound of a gong that you all heard just now?)'
[mdtext15.txt 028]

The polar question particle $a p a$ 'is, are, can, will' is optionally used on polar questions as in (38) and (39). This is polysemous with the more frequently occurring apa 'because' (§15.6), and homophonous with apa 'four'.
(38) Apa jimo jojoo norapi bengkel uo?
apa jimo jojoo $N$-po-rapi bengkel 'uo
PQ 3PL/AB all RE-SF/DE-spouse female yonder
'Would all of them marry that woman?'
[Matthew 22:28]
(39) Apa maala montiang umuronyo maumpo sura seide'?
apa mo-ala M-pong-tiang umur=nyo maumpo sura so-ide'
PQ ST/IR-able IR-SF/PT-add age=3SG/GE even just ONE-small
'Are you able to add/increase your age even just a little?'
[Matthew 6:27]

Questions can also be formed by using tags with declarative utterances. Examples (40) and (41) illustrate two different types of tag questions. Example (40) illustrates the common use of tooh 'right, OK'. Example (41) illustrates a contraction of uo 'yonder' and eeh 'huh' that results in ue 'yonder huh, over there huh?'. This particular tag question directs the attention to a referential location while expecting an affirmative reply.
(40) Ono ito moo manusia maate, tantu nitanong ritano, tooh?
ono 'ito moo manusia mo-ate, tantu ni-tanong ri=tano, tooh
if 1PL.INC/AB this man ST/IR-die certain IV/RE-bury LOC=ground TAG
'If/when we, mankind die, we will certainly be buried in the ground, right?'
(41) Reinang, ue (uo eeh)?

Ro-inang, ue (uo eeh)
IV/IR-eat yonder.huh
'Is it something we can eat, yes?'
[Lewonu Riddle \#1]
Nuooh is an infrequent tag question used at the end of a statement which expects an affirmative response.

| (42) | A'u | monuut | oo, | nuooh. |
| :--- | :--- | :--- | :--- | :--- |
| a,u | M-pong-tuut | 'oo, | nuooh |  |
|  | 1SG/AB | IR-SF/PT-follow | 2SG/AB | TAG |

'I will come with you, OK?'
[EN98-002.12]

### 16.3.2.2 Polar questions with moluar 'want' and mono 'still'

Although other verbal modifiers can appear in a polar question, moluar 'want' and mono 'still' seem to appear more frequently in this role. Typical examples with mono 'still' are illustrated in examples (43) and (44). Typical examples with the use of moluar 'want' are given in examples (45) and (46).

| Mono | diang | bau | tonitapaimu | nimporongomo |
| :--- | :--- | :--- | :--- | :--- |
| mono | diang | bau | to $=$ ni-tapa- $i=m u$ | nimporongomo |
| still | EXIS | fish | RM=IV/RE-smoke-DIR=2SG/GE | yesterday | yonder

'Do you still have that fish you smoked yesterday?'
[mdtext15.txt 092]
(44)

| Mono | niotoimu | siinamu? |
| :--- | :--- | :--- |
| mono | ni-otoi $=m u$ | si-ina $=m u$ |
| still | IV/RE-know=2SG/GE | PN/AB-mother=2SG/GE |

'Do you still know your mother?'
[EN97-002.41]
(45) Emu moluar sosono ami moo?
'ети mo-luar so-sono 'ami moo

2PL/AB ST/IR-want RED-with 1PL.EXC/AB here
'Do you all want to be together with us here?'
(46) Paey nipo'utanyai nu'olongian,

Paey ni-po $1_{1}$ ''utanya-i nu='olongian
and.then IV/RE-SF-ask-DIR CN/GE=king

| "oo | moluar | roporapi | nigibang?" |
| :--- | :--- | :--- | :--- |
| 'oo | mo-luar | ro-po 1 -rapi | ni=gibang |
| 2SG/AB | UD/IR-want | IV/IR-SF/DE-spouse | PN/GE=lizard |


| Neburamo | unga | bengkel | uo, | "a'u | ndau | moluar." |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $N$-pe-bura=mo | unga | bengkel | 'uo, | a'u | ndau | mo-luar |
| RE-SF-speak=COMP | child | female | yonder | 1SG/AB | NEG | UD/IR-want |

'And then the king asked (his daughter), "Do you want the water monitor lizard to marry you?" The daughter spoke, "I don't want to."'

### 16.3.2.3 Alternative questions

Alternative questions present at least two possibilities from which the expected reply is affirmation of one or the other (see (47) and (48)). It is possible that none of the alternatives as presented is correct, or all are correct as in (48).

| Rotope | rialam | togoge | atau | rialam | todeide? |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Ro-tope | ri=alam | togoge | atau | ri=alam | todeide |
| IV/IR-name | LOC=nature | big | or | LOC=nature | small |

'Is the name of it outside (lit. big nature) or inside the house (lit. small nature)?'
[Sibayu Riddle \#1]

| Tomeseilua' uo | batuanyo | khusus | sura bengkel atau langkai? |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| To=mo-seilu-a' | 'uo | batua=nyo | khusus | sura bengkel atau | langkai? |
| RM=ST/IR-like-TZ yonder | mean=3SG/GE | special | only female or | male |  |

'For those who like it, is the meaning of it especially for women or men? (Answer: Men like it, women like it.)'
[Sibayu Riddle \#1]

### 16.3.3 Content questions

Most of the content question words in Pendau are nouns. However two of the content question words (why and when) are verbs and can therefore contrast realis/irrealis modality and contrast completive or continuative aspect. The root for 'why' can occur with either transitive or intransitive marking. Transitives appear in either active or inverse voice (the pong- verb class), and the intransitive form takes the stative verb class prefix.

Any content question that can substitute for a noun, such as sapa 'what', can be relativised as shown in (49). Example (50) illustrates the question word si=see 'who' relativised.

| Sapa toniporembasa'o'u | tagu'u...? |
| :--- | :--- |
| sapa to=ni-pong-rembas-a'= 'u | tagu='u |
| what $\mathrm{RM}=\mathrm{IV} / \mathrm{RE}-\mathrm{SF} / \mathrm{PT}-\mathrm{hit-TZ}=1 \mathrm{SG} / \mathrm{GE}$ | friend=1SG/GE |
| 'What was it that I hit my friend with (since he was naughty)?' |  |

[EN97-003.56]

| Jari | sisee | tomongkomung | tambobo? |
| :--- | :--- | :--- | :--- |
| Jari | si=see | to=M-pong-'omung | tambobo? |
| so | $\mathrm{PN} / \mathrm{AB}=$ who | $\mathrm{RM}=\mathrm{RE}-\mathrm{SF} / \mathrm{PT}$-carry | collecting.container |

'So who will carry the collecting container?' [odo1.pin 005]
There are no question words used to mark relative clauses. Relative clauses are normally marked with the relative marker to $=$ which is homophonous with the agentive nominaliser prefix to- which means 'the one that does X activity'.

Two of the content question words may appear in contrasting core case positions (contrasting 'who' and 'what' in either absolute or genitive case). The case marking reveals also that the 'who' word is classed as a proper noun, and the 'what' word is classed as a common noun. These two question words may appear following an oblique, in which the locative $r i$ precedes the absolute case si as in $r i=s i=s e e ~ a n d ~ r i=\varnothing=s a p a . ~ H o w e v e r, ~$ more typically the oblique ri will precede the locative question word 'where', or sometimes preceded by the ablative locative 'from' as the instance requires.

### 16.3.3.1 Interrogative forms

Pendau has seven basic question words (see §16.3.2.1 for discussion of the optional polar question particle apa 'is, are, will'). Example (51) lists those which are nouns, and
example (52) lists those question words which take a verbal affix showing the range of verbal prefixation (and required aspect for each of the uses of 'when'). Both lists compare the equivalent Indonesian gloss. Examples (53)-(57) illustrate each of the non-verbal content questions (these will each be discussed in §16.3.3.2).
(51) Pendau
sapa/nusapa
sisee/nisee
so'uya
ayama'o
paio
(52)

Pendau
no'uya
mongkuya/nongkuya ro'uya/ni'uya masaepo/nasaemo

Indonesian
apa (-kah)
siapa
berapa
bagaimana
di=mana

Indonesian
kenapa, betapa
meng-apa
diapa (-kan)
kapan

## English gloss

'what'
'who'
'how many'
'how'
'where' (can mean 'who' in
c omparative constructions)

## English gloss

'why (realis-stative)'
'why, what do (irrealis/realis-active voice)'
'why, what do (irrealis/realis-inverse voice)' 'when (irrealis/realis-stative)'
(53) Moo sapa?
moo sapa
this what
'What's this?'
[video transcript, etc.]
(54) Sisee tagumu?

Si=see tagu=mu
PN/AB=who friend=2SG/GE
'Who are your friends?'
[asu2.pin 191]
(55) Kira-kira so'uya mbengipo?

Kira-kira so-’uya mbengi=po
RED-about ONE-why night=CONT
'About how many more nights (to get there)?
[asu2.pin 161]'
(56) Jari ayama'o pombarasaimu?
jari ayama'o pong-barasa-i=mu
so how SF-feel-DIR=2SG/GE
'So how do you feel?'
[nagarang.pin 166]
(57) Ma'o paio oo?
ma'o paio 'oo
go where $2 \mathrm{SG} / \mathrm{AB}$
'Where are you going?'

### 16.3.3.2 Non-verbal question words

### 16.3.3.2.1 Sapa 'what'

Examples (58)-(66) illustrate the uses of sapa 'what' in a typical range of syntactic constructions. Examples (58) and (59) illustrate the question word sapa 'what' is focused on identifying a referent prior to the immediate time specified by ningeno uo.
(58)

Ai nengkani sapa emu uti ningeno uo?
ai $N$-pe-ngkani sapa emu uti ningeno 'uo
but RE-SF/DY-eat what 2PL/AB dear.boy/VOC just.now yonder
'But what did you all, dear boy, just now eat there?'
[poora.pin 279]
(59) Sapa batua nuundurongomu ningeno uo?
sapa batua nu=undurong $=m u$ ningeno 'uo
what mean $\mathrm{CN} / \mathrm{GE}=$ song $=2 \mathrm{SG} / \mathrm{GE}$ just.now yonder
'What is the meaning of your song (you sang) just now?'
[turtle.pin 141]
(60) Sapa niposibaroi miu nao?
sapa ni-posi-baro-i miu nao
what IV/RE-MUT-argue-LOC 2PL/GE that
'What are you (pl.) arguing about there?' [ceku01.jdb 042]
(61) Sapa kareva ila mata nueleo?
sapa kareva ila mata nu=eleo
what news from eye $\mathrm{CN} / \mathrm{GE}=$ sun
'What's the news from the eye of the sun?' [mdtext14.txt 061]
(62) Sapa saba' emu nombali' mene' mai?
sapa saba' emu N-pong-bali' mene' mai
what because 2PL/AB RE-SF/PT-move go.up come
'What was the reason you all moved up here?'
(63) Ono a'u monuut sapa u'omung?

Ono a'u M-pong-tuut sapa 'u-'omung
if/when 1SG/AB IR-SF/PT-follow what 1SG.IV/IR-carry
'If/when I come along what should I bring?'
(64) Bai sura sapa nipo’ounga nutuai'u moo?
bai sura sapa ni-po ${ }_{1}$ 'o-unga nu=tuai='u moo
like only what IV/RE-HAVE-child CN/GE=y.sibling=1SG/GE this
'Like just what has my younger sister given birth to?'
[mdtext20.txt 075]
(65) Ono bai sisee rasaur sapa toroposibataroa'oto?.

Ono bai sisee ro-saur sapa to=ro-posi-bataro-a'=to
if like who IV/IR-defeat what RM=IV/IR-MUT-bet-TZ=1PL.INC/GE
'So what will we bet each other for the one who defeats the other?' [mdtext20.txt 244]
(66) Sapa niponyambalea' niYusup japing uo?
sapa ni-pong-sambale-a' ni=Yusup japing 'uo
what IV/RE-SF/PT-butcher-TZ PN/GE=Joseph cow yonder
'What did Joseph use to butcher that cow with?'
[EN97-004.44]

### 16.3.3.2.2 $\mathbf{S i}=$ see, ni=see 'who'

Examples (67) and (68) illustrate the use of see 'who' in two different argument positions of a ditransitive benefactive clause. These illustrate the different case marking that can appear preceding see as a proper noun.

| Japing | uo | nisambalea', | niYusup | sisee? |
| :--- | :--- | :--- | :--- | :--- |
| japing | 'uo | ni-sambale-a' | ni=Yusup | si $=$ see |
| cow | yonder | IV/RE-butcher-TZ | PN/GE=Joseph | PN/AB=who |

'Who did Joseph butcher that cow for?'
[EN97-004.44]
(68) Japing uo nisambalea' nisee siCeku?
japing 'uo ni-sambale-a' ni=see si=Ceku
cow yonder IV/RE-butcher-TZ PN/GE=who PN/AB=Ceku
'Who butchered that cow for Ceku?'
[EN97-004.44]

### 16.3.3.2.3 So'uya 'how many'

The word so'uya is formed from the prefix so- 'one' attached to the verb root 'uya 'why'. This combination creates 'how many, how much' as illustrated in examples (69)(71).
(69) Pasura uo so'uyamo tubuangonyo?
pasura 'uo so-'uya=mo tubu-ang=nyo
seedling yonder ONE-why=COMP trunk-locN=3SG/GE
'That seedling, how old is it now?'
[EN97-004.64]
(70) Emu so'uya santagu?
'emu so-'uya so-ng-tagu
2PL/AB ONE-why ONE-LIG-friend
'How many friends are in your group?'
[poora.pin 090]
(71) So'uya olinyo loka nao mangge?
so-’uya oli=nyo loka nao mangge
ONE-why buy=3SG/GE banana that uncle/VOC
'Uncle, how much does that banana cost?'
[mdtext15.txt 019]
Question words such as so'uya 'how many', as in (72), and sapa 'what' can take the continuative aspectual enclitic =po, as in (98) . In example (72) so'uyapo means 'how many more', and is answered with the numeral plus the enclitic as totolupo meaning 'three more'.

| (72) | $\begin{aligned} & \text { "Jari } \\ & \text { jari } \end{aligned}$ | so'uyapo <br> so-'uya=po | tonosikola?" to $=N$-po ${ }_{1}$-sikola | "Totolupo." totolu $=p o$ |
| :---: | :---: | :---: | :---: | :---: |
|  | so | ONE-why=CONT | RM=RE-SF/DE-school | three=CONT |

"'So how many more that are going to school?""Three more."
[videotr.txt 053-054]

### 16.3.3.2.4 Ayama'o 'how, how about, what about'

The word ayama'o 'how, how about, what about' seems to have a little different meaning than the English gloss 'how', so I have provided some textual replies to these questions to help in understanding its possible meanings. In example (73) the captain frames his question to the passengers of his boat, and they reply 'That's just up to (you) the captain'. This implies that the question word is asking something like 'Are you ready to leave?'. Their answer implies that they are all set to leave.
Neburamo
N-pe-bura=mo
RE-SF-speak=COMP

| juragang | "Ayama'o | riitu | nao?" Neburamo |
| :--- | :--- | :--- | :--- |
| juragang | ayama'o | ri=itu | nao $\quad$ N-pe-bura=mo |
| captain | how | LOC=there | that $\quad$ RE-SF-speak=COMP |


| unga | nupayangan | o | panumpang | nao, "Jomo juragang." |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| unga | nu=payangan | o | panumpang | nao, "jomo | juragang |  |
| child | $\mathrm{CN} / \mathrm{GE}=$ boat | and | passenger | that | just | captain |

'The captain spoke, "How are things here?" The boat child and passengers said, "It's just up to (you) the captain."
[jo'ong.int 026]
Example (74) is a story about a young man and a young woman who want to get married but the man is a Christian and the woman is a Muslim. The girl's parents want the man to convert to Islam before they get married. The question here is framed by the young woman's mother, and probably means something like, 'Well, how about it?' with the implication that she expects the man to have made a decision in regards to the matter. The man responds that he does not want to become a Muslim.

| (74) | Nipeilu | siina nubengkel | uo | sono | a'u, "Ayama'o oo | nao?" |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ni-peilu | siina | nu=bengkel | 'uo sono | a'u, | ayama'o 'oo | nao |
| IV/RE-tell | mother | CN/GE=female | yonder | COM | 1SG/AB how | 2SG/AB that |


| Nomeilumo | $a \prime \prime$ | "A'u | ndau | moluar | ono | mentama | Islam." |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| N-pong-eilu=mo | a'u, | $a$ 'u | ndau | moluar | ono | M-pe-ntama | Islam |
| RE-SF-tell=COMP | 1SG.AB | 1SG.AB NEG | want | if | IR-SF-enter | Islam |  |

'The girl's mother said to me, "What do you think (lit. how are you about that)?" I said, "I don't want to if I have to enter Islam.""
[maslia.pin 024]
In example (75) the dog in this folk tale is accompanied by two sisters (one of which is temporarily in the magical dog's stomach for safe keeping). However when they come to a river the dog is unable to cross and asks the sister not in his stomach, 'What now?' or 'How about this?'. The girl goes on to answer in the story that she will carry the dog across. In example (76) the monkey and the turtle are discussing how their respective banana trees are growing. Previously they had found banana seedlings together and each taken one home to grow. The turtle's tree has been growing well and has begun to bear fruit, and so he asks the monkey 'And how is yours growing?'. The monkey replies that
his banana tree has died even though he has ripped its leaves apart and abused it trying to make it grow.
$\begin{array}{lllllll}\text { (75) } & \text { Jimo } & \text { netedua' } & \text { ogo } & \text { bangkalang, } & \text { tarus } & \text { nebura }\end{array}$ asu

| uo | sono | unga | bengkel | uo, | "Ayama'o | moo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 'uo | sono | unga | bengkel | 'uo, | ayama'o | moo |
| yonder | COM | child | female | yonder | how | this |
| a'u | moo | ndau | maala | mesantaba?" |  |  |
| a'u | moo | ndau | mo-ala | M-pe-santaba |  |  |
| 1SG/AB | this | NEG | ST/IR-able | IR-SF/DY-cross |  |  |

'They came upon a river, and then the dog spoke to the girl, "What now? I won't be able to cross this."
[mdtext17.txt 026]

| "Loka'u | nebuamo | bela, lokamu | ayama'o | bela?" |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| loka='u | N-pe-bua=mo | bela, | loka=mu | ayama'o | bela |
| banana=1SG/GE | RE-SF-fruit=COMP | friend | banana=2SG/GE | how | friend |

```
Odo moo monyimbat, "Loka'u naatemo...."
odo moo M-pong-simbat, loka='u no-ate=mo
monkey this IR-SF/PT-answer banana=1SG/GE ST/RE-die=COMP
```

""My banana tree already has fruit, friend. How about your banana tree friend?" The monkey answered, "My banana tree died..."" [turtle.pin 021-025]

### 16.3.3.2.5 Paio 'where'

Paio 'where' is a locative question word, and therefore frequently is preceded by one of the two oblique locatives $r i=(\mathrm{LOC})$ or ila (ABL). Example (77) illustrates paio without the use of an oblique. Examples (78)-(80) illustrate the very common use of $r i=p a i o$ in various syntactic constructions, and example (81) illustrates the use of the ablative ila preceding paio.

| Bai | langkai | paio | tomajari | rapinyo? |
| :--- | :--- | :--- | :--- | :--- |
| Bai | langkai | paio | to $=$ ma-jari | rapi $=$ nyo |
| like | male | where | $\mathrm{RM}=$ COP/IR-become | spouse $=3$ SG/GE |

'Like where is the man that will become your husband?'
[mdtext4.txt 069]
(78)

| Ripaio | diang | bangkalang | ape | lovu rimoo | tomaala |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ri=paio | diang | bangkalang | ape | lovu | ri $=$ moo | to $=$ mo-ala |
| LOC=where | EXIS | river | or | well | LOC=here | RM=ST/IR=able |

reinung ogonyo?
ro-inung ogo=nyo
IV/IR-drink water=3SG/GE
'Where is there a river or well here that I could drink water?'
[mdtext20.txt 220]
(79) Ai ripaio joo siopu nujunjung moo?
ai ri=paio joo siopu nu=junjung moo
but LOC=where really owner $\mathrm{CN} / \mathrm{GE}=$ house this
'But where, really, is the owner of this house?' [mdtext20.txt 010]
(80) Ripaio tagu mami doruo moo?
ri=paio tagu mami doruo moo
LOC=where friend 1PL.EXC two here
'Where are our two friends?'
[fktale01.txt 007]
(81) Ai oo, nao asal ila paio?
ai 'oo, nao asal ila paio
but $2 \mathrm{SG} / \mathrm{AB}$ that origin from where
'But where do you come from?'
[mdtext15.txt 073]

### 16.3.3.2.6 Two question words in one clause

Although I haven't found two question words in any text (within the same clause), elicitation shows that it would be possible to have 'who' and 'what' in the same ditransitive instrument clause.
(82) Paee rosunung nisee nusapa?
paee ro-sunung ni=see nu=sapa
rice $\mathrm{IV} / \mathrm{IR}$-burn $\mathrm{PN} / \mathrm{GE}=$ who $\mathrm{INSTR}=$ what
'Who smoked (that is, medicated) the rice with what?'
[EN97-004.45]

### 16.3.3.3 Question verbs

### 16.3.3.3.1 Stative no-'uya 'why, what's the matter'

The stative verb form no-'uya queries an intransitive state, and therefore must always be in the realis mode, and can mean either 'why' (83)-(85) or 'what's the matter' (86). ${ }^{4}$ No'uya usually appears as the first verb in the clause except when a conjunction such as $a i$ 'but' or apa 'because' co-occurs with the question, as in (85).
(83) No’uya paey a'u muinang, sadangopo
no-'uya paey a'u mu-inang, sadang=po

ST/RE-why and.then 1SG/AB 2SG.IV/IR-eat since=CONT

```
a'u moo ndau diang sala'u.
a'u moo ndau diang sala='u.
1SG/AB this NEG EXIS wrong=1SG/GE
```

'Why then will you eat me, since again I haven't done anything wrong?'
[troll.int 304-304a]

[^110]| No'uya | odo | moo | nebura | bai | moo? |
| :--- | :--- | :--- | :--- | :--- | :--- |
| no-'uya | odo | moo | N-pe-bura | bai | moo |
| ST/RE-why | monkey | this | RE-SF/DY-speak | like | this |

'Why is this monkey speaking like this?'
[troll.int 031]

| Ai | no'uya | emu | neteule? |
| :--- | :--- | :--- | :--- |
| ai | no-'uya | 'emu | N-pe-teule |
| but | ST/RE | 2PL/AB | RE-SF/DY-return |

'But why have you all come back home?
[miracle1.pin 040]'
(86)

| No'uya | oo | nao | tagu? |
| :--- | :--- | :--- | :--- |
| no-'uya | 'oo | nao | tagu |
| ST/RE-why | 2SG/AB | that | friend/VOC |

'What's the matter there, friend?' (One kingfisher species asks this to another kingfisher species who is crying because the monkey pulled his feathers out.) [mdtext6.txt 029]

### 16.3.3.3.2 Transitive forms of 'uya 'why?'

The transitive verb forms nongkuya/mongkuya, ni'uya/ro'uya 'why?' appear to be triggered by puzzling events or situations. It often appears to entail the question 'why do/did?, what do/did?' in order to seek the cause of some problem or situation.

In (87) the younger sibling responds to a suggestion the older sibling has made. The older sibling then answers the question and explains the motives and plan for escaping from the house of the flesh-eaters where they have been held captive. In (88) the flesheater has been chasing the monkey in this folk tale in order to eat him, when previously they had been friends. The monkey asks the flesh-eater literally 'Why you me in the trunk of this banana tree?', where 'you' is the A argument and the 'me' is the P argument. The translation presents the possibility that this can be translated as 'bothering', however this may not be the best translation. It may be that the 'why' verb somehow captures the whole pursuit event along with the problem, since a less literal translation could be given as something like 'What is your problem that would make me end up like this so that I am now in this tree trying to stay alive?'.

Ro'uya, kaka?
ro-’uya, kaka
IV/IR-why older.sibling/VOC
'Why is that, brother?'
or: 'How do I do that, brother?' [poora.pin 312]

| Ro'uyaimu | a'u | ritubu | nuloka | moo? |
| :--- | :--- | :--- | :--- | :--- |
| ro-'uya-i=mu | a'u | ri=tubu | $n u=$ loka | moo |
| IV/IR-why-DIR=2SG/GE | 1SG/AB | LOC=trunk | CN/GE=banana | this |

'Why do you bother me in this banana tree?' or: 'Why are you doing this to me in this banana tree?'
[troll.int 161a]
When 'uya is used in negated declarative statements it is clear that its meaning is 'no matter, nothing is the matter, it doesn't matter' (see examples (110)-(112 in §16.3.3.4). In fact one common answer to the 'why' question is 'no', as in (89).

```
(89) Oo nao nongkuyamo? Ndau asi.
'oo nao N-pong-'uya=mo? ndau asi
2SG/AB that RE-SF/PT-why=COMP NEG too.bad
'Why is it with you?...Nothing.'
or: 'What did you do?...Nothing.'
```

[mdtext14.txt 015]
In example (90) a nephew asks his uncle why he is still in the place he is. The uncle's reply is that he has married. In (91) the younger sibling asks his older sibling why they have to put up with the rude behaviour of their cousin towards them.
(90)

| Oo | nao | mongkuya | rimoo? |
| :--- | :--- | :--- | :--- |
| 'oo | nao | M-pong-'uya | ri=moo |
| 2SG/AB | that | IR-SF/PT-why | LOC=this |

'Why/how is it that are you here?' or: 'What did you do to get here?' [horse.pin 1121]
(91)

| Mongkuyamo | ito | moo kaka? | Sadang | sampesuvuto |
| :--- | :--- | :--- | :--- | :--- |
| M-pong-'uya=mo 'ito | moo kaka? | Sadang | sampesuvu=to |  |
| IR-SF-why=COMP | 1PL.INC/AB this | o.sibling/VOC | because | cousin=1PL.INC/GE |


| si'a'a | langkai | nao | ndau | mombosi' | sono | ito | doruo. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| si'a'a | langkai | nao | ndau | mo-mbosi' | sono | 'ito | doruo |
| o.sibling/VOC | male | that | NEG | ST/IR-good | COM | 1PL.INC/AB two |  |
| 'What did we do (lit. why has it happened to us), brother (vocative)? | Because our male |  |  |  |  |  |  |
| cousin isn't nice to the two of us.' | [mdtext17.txt 007] |  |  |  |  |  |  |

### 16.3.3.3.3 The temporal interrogative sae 'when'

This question word is based on the stative root sae which in non-question contexts means 'length of time'. Since the word 'when' in Pendau can question past/actual or future/potential events, in Pendau it is mandatory that the stative verb be formed in one of two contrastive formations. This is done by pairing one modal prefix with one aspectual enclitic. When the realis prefix is combined with the completive aspectual enclitic, as in nasaemo, then the meaning of 'when, how long has it been?' is produced. When the irrealis prefix is combined with the continuative aspectual enclitic, as in masaepo, then the meaning of 'when, how much longer?' is produced. Examples of each of these is shown respectively in (92) and (93). The question word in these formations clearly illustrates the tense output model described in §13.3.2.

| Nasaemo | ni'ito | miu | bituong | uo? |
| :--- | :--- | :--- | :--- | :--- |
| no-sae $=$ mo | ni-'ito | miu | bituong | 'uo |
| ST/RE-long=COMP | IV/RE-see | 2PL/GE | star | yonder |

'When did you (first) see the star?'
[nata101.pin 016]
(93)

| Jari | masaepo | ito | monika' | ungato? |
| :--- | :--- | :--- | :--- | :--- |
| jari | mo-sae $=$ po | 'ito | M-po 1 -nika' unga=to |  |
| so | ST/IR-long=CONT | 1PL.INC/AB | IR-SF/DE-marry child=1PL.INC/GE |  |

'So when will we marry off our children?'
[mdtext11.txt 061]

| (94) | Masaepo ito | mene'? |
| :--- | :--- | :--- |
| mo-sae=po | 'ito | mene' |
| ST/RE-long=CONT | 1PL.INC/AB | go.up |
| 'When will we go up?' |  |  |

[horse.pin 848]

### 16.3.3.4 Indefinite use of interrogative forms

The question words can also be used as indefinites. Reduplication of indefinites may also occur. In this case a 'diffuse' meaning is added to the indefinite (§7.4.3.2). Reduplicated indefinites can never be interpreted as questions, but must take an indefinite and diffuse meaning. A comparison of the indefinites with the reduplicated diffuse counterparts is given in (95).
(95)

| Indefinite |  |
| :--- | :--- |
| sapa | 'what, whatever' |
| sisee/nisee | 'who, whoever' |
| so'uya | 'how many, some' |
| no'uya | 'why, matter' |
| paio | 'where, wherever' |
| ayama'o | 'how, however' |

Diffuse (including plural)

| sapa-sapa | 'whatever', |
| :--- | :--- |
| nisee-nisee, sisesee | 'whomever' |
| so-so'uya | 'several' |
| ni-'uya-'uya | 'matter' |
| pai-paio | 'wherever' |

The rest of this section provides examples of indefinites and their diffuse counterparts according to the content word they are based on.

## Sapa 'whatever'

| Ila | uo | ndau | diang | sapa | nibatia' | nijimo. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ila | 'uo | ndau | diang | sapa | ni-bati-a' | nijimo |
| from | yonder | NEG | EXIS | what | IV/RE-make-TZ | 3PL/GE |

'After that there wasn't anything they could make.'
(97) Sapa-sapa torilalong nujunjung moo raagarotomo.
sapa-sapa to=ri=lalong nu=junjung moo ro-agar=to=mo
RED-what $\mathrm{RM}=\mathrm{LOC}=$ inside $\mathrm{CN} / \mathrm{GE}=$ house this $\mathrm{IV} / \mathrm{IR}$-split=2PL.INC/GE=COMP
'We will split whatever is inside this house.'
[nalalo.pin 057]
Sapapo jomo toreinang miu, nao jojoo uinang.
sapa=po jomo to=ro-inang miu, nao jojoo ’u=inang
what $=$ CONT just $\mathrm{RM}=\mathrm{IV} / \mathrm{IR}$-eat $2 \mathrm{SG} / \mathrm{GE}$ that all $1 \mathrm{SG} . \mathrm{IV} / \mathrm{IR}=$ eat
'Whatever it is that you just eat, that is all I will eat.'
[mdtext15.txt 071]
In example (99) the pet is the flying horse which is compared to a vehicle which is considered to be powerful by its owner (by implication that it is called a machine). The indefinite sapa 'what, whatever' is used in a genitive construction as the possessor of the genitive NP.
Sura petubuongomu nao, mu'omung-'omung mai nao.
sura pe-tubu-ong=mu nao, mu-'omung-'omung mai nao
only SF-live-locN=2SG/GE that 2 SG.IV/IR-carry-RED come that
Ndau osi nusapa, ndau bai masiin.
ndau 'osi nu=sapa, ndau bai masiin
NEG strong $\mathrm{CN} / \mathrm{GE}=$ what NEG like machine
'You just are bringing your pet there. He is not strong whatsoever, not like a machine.'
[horse.pin 696-699]

## Paio 'wherever'

(100)

| A'u | moo | be'e | ripaio | ro'ondoung |
| :--- | :--- | :--- | :--- | :--- |
| a'u | moo | be'e | ri=paio | ro-'o-ndoung |
| 1SG/AB | this | grandmother/VOC | LOC=where | IV/IR-HAVE-evening |
| ri'uo |  | ropo'oturui. |  |  |
| ri='uo | ro-po |  |  |  |
| LOC=y-o-turu-i |  |  |  |  |

'Grandmother, I here, wherever I am when it gets dark, that's where I sleep at.'
[asu2.pin 077]
(101) Rololo ripaio, rialam todeide
ro-lolo ri=paio ri=alam todeide
IV/IR-search LOC=where LOC=nature small
ape rololo rialam togoge.
ape ro-lolo ri=alam togoge
or IV/IR-search LOC=nature large
'You search (for the answer) wherever, (either) inside (lit. little nature), or you search for the answer outside (lit. big nature).' [jptext02.jdb 045]
(102) Ai too sura nodua' ri'io ila pai-paio.
ai too sura $N$-po-dua' ri='io ila pai-paio
but people only RE-SF-arrive $\mathrm{LOC}=3 \mathrm{SG} / \mathrm{GE}$ ABL wherever
'But people only came to him from everywhere (lit. wherever).'
[Mark 1:45]

## Ayama'o 'however'

(103) Neburamo olongian uo, "Nao jomo oo, bai ayama'o
$N$-pe-bura=mo 'olongian 'uo, nao jomo 'oo, bai ayama'o

RE-SF-speak=COMP king yonder that just 2SG/AB like how
gugutuongoти nao jomo usarakana' sono oo."
gu-gutu-ong=mu nao jomo 'u-sarakan-a' sono 'oo
RED-make-locN=2SG/GE that just 1SG.IV/IR-surrender-TZ COM 2SG/AB

| Neburamo | bengkel | uo, | "Ayama'o | carato |
| :--- | :--- | :--- | :--- | :--- |
| N-pe-bura=mo | bengkel | 'uo, | ayama'o | cara=to |
| RE-SF/DY-speak=COMP | female | yonder | how | method=1PL.INC/GE |


| paey | jimo | roonong | nao | maate'u | jojoo." |
| :--- | :--- | :--- | :--- | :--- | :--- |
| paey | jimo | roonong | nao | mo-ate='u | jojoo |
| and.then | $3 P L / A B$ | six | that | ST/IR-die=1SG/GE | all |

'The king spoke, "That is up to you, like however you do that, I surrender that to you." The girl spoke, "What would be our method so that those six (girls) are all killed by me?""
[mdtext20.txt 285-286]
(104) ...apa maumpo ayama'o sorongomи, apa maumpo ayama'o sorong=mu since although how fast=2SG/GE

| oo | nao | kana | butu | udua'! |
| :--- | :--- | :--- | :--- | :--- |
| 'oo | nao | kana | butu | 'u-dua' |
| 2SG/AB | that | certain | only | 1SG.IV/IR-arrive |

'...since however fast you may go, I will catch up with you!'
[troll.int 174a]

## Sisee/nisee 'whoever, anyone'

(105) Ndau diang sisee rilalong nao.
ndau diang si=see ri=lalong nao
NEG EXIS $\mathrm{PN} / \mathrm{AB}=$ who $\mathrm{LOC}=$ inside that
'There isn't anyone inside that.'
[mdtext20.txt 278]
(106) Ono unga nisee-niseepo jomo monyempa’ baal nao
ono unga ni=see-nisee=po jomo M-pong-sempa’ baal nao
if child $\mathrm{PN} / \mathrm{GE}=$ who-RED=CONT just IR-SF/PT-kick ball that

| paey | mo'ono | dodop | nuunga'u, | uo |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| paey | mo-'ono | dodop | nu=unga='u, | 'uo |  |
| and.then | ST/IR-hit | chest | CN/GE=child=1SG/GE | yonder |  |
| tomajari | rapi | nuunga'u | bengkel | nao. |  |
| to=ma-jari | rapi | $n u=u n g a=' u$ | bengkel | nao |  |
| RM=COP/IR-become | spouse | CN/GE=child=1SG/GE | female | that |  |

'Whichever child next just kicks the ball and strikes my daughter's chest, that (boy) will become my daughter's husband, that girl.'
[mdtext9.txt 005]
(107) Apa sisesee too maumpo sura pe'omuni tampa
apa si=se-see too maumpo sura pe-'omung-i tampa
because $\mathrm{PN} / \mathrm{AB}=$ whoever people even only SF-touch-DIR edge

| nubajunyo | majari | mongondo' | io. |
| :--- | :--- | :--- | :--- |
| nu=baju=nyo | ma-jari | M-pong-ngondo' | io |
| CN/GE=shirt=3SG/G | COP/IR-become | IR-SF/PT-heal | 3SG/AB |

```
ila peenyo.
ila pee=nyo
ABL sick=3SG/GE
```

'Because whoever the person (is) even (they) only touch the edge of his shirt (they) will become healed from his/her sickness.'
[Mark 6:56]

So'uya 'why, some, several (ST)'
(108) Diang nolumumpata' bau sombalan bai so'uya insang Diang $N$-po $\boldsymbol{o}_{1}$-[um]-lumpat-a' bau sombalan bai so-'uya insang. EXIS RE-SF/LCM-TEL-jump-TZ fish sailfish like ONE-why time
'There were sailfish that jumped like several times.' [jptext04.jdb 041]
No'uya 'why, matter (ST)'
(109) Ono ndau nituluni nupetubuongoto nao
ono ndau ni-tulung-i nu=pe-tubu-ong=to nao
if NEG IV/RE-help-LOC CN/GE=SF/DY-live-locN=1PL.INC/GE that
ami moo naatemo. Talomonyo
'ami moo no-ate=mo. talom=nyo
1PL.INC/AB this ST/RE-die=COMP if.not=3SG/GE

| petubuongoto | ami | moo paey | ndau no'uya. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| pe-tubu-ong=to | 'ami | moo | paey | ndau | no-'uya |
| SF/DY-live-locN=1PL.INC/GE | 1PL.INC/AB this | and.then | NEG | ST/RE-why |  |

'If our (hon.=your) pet didn't help there, we here would already be dead. If it wasn't for our (hon.=your) pet here than we wouldn't be here (lit. doesn't matter (why)).' [poora.pin 539]

Ni'uya/ro'uya 'why, matter (IV)'
(110) Ndau ro’uyai ono ndaupo diang doi’. ndau ro-'uya-i ono ndau=po diang doi' NEG IV/IR-why-DIR if NEG=CONT EXIS money
'It doesn't matter if you don't have any money.'
[horse.pin 1130]
(111) Ndau ro’uyai asi kene,
ndau ro-'uya-i 'asi kene
NEG IV/IR-why-DIR too.bad mother/VOC

| ono | ami | no'oropomo. |
| :--- | :--- | :--- |
| ono | 'ami | no-'orop=mo |
| if | 1PL.EXC/AB | ST/RE-hunger=COMP |

'It doesn't matter, too bad, mother if we are already hungry.'
[poora.pin 526]
(112) Maumpo a’u meingka ono ndau diang tagu,
maumpo a'u M-pe-ingka ono ndau diang tagu
although $1 \mathrm{SG} / \mathrm{AB}$ IR-SF-fear if NEG EXIS friend

```
ndau ro'uyai be'e.
ndau ro-'uya-i be'e
NEG IV/IR-why-DIR grandma/VOC
```

'Although I am afraid if there is no friend (here), it doesn't matter grandma.'
[mdtext11.txt 047]

## Ni’uya-'uya 'matter (IV)'

| Bai | sura | ni'uya-uyanyo | naate | bali | nijimo | uo. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| bai | sura | ni-'uya-uya=nyo | na-ate | bali | nijimo | 'uo |
| like | only | IV/RE-RED-why=3SG/GE | ST/RE-die | enemy | 3SG/GE | yonder |

'Like only why he had their enemy die.'
[horse.pin 482]

### 16.3.3.5 Word order of content questions

A content question word appears in the same position as the element it questions would occur in a declarative sentence.

Sapa 'what' has three possibilities because it can occur in any one of three core argument positions, as well as the oblique or non-core positions. The core positions it can occur in are the $A$ argument, $P$ argument, or as the instrument (see (66) and (49)), that is, the secondary object position. The proper noun see 'who' has been found in three core argument positions as the A argument, the P argument, and the beneficiary in ditransitives (also the secondary object position). It may also occur in some non-core argument positions.

The content word so-'uya 'how many' occurs in the position in which a numeral would otherwise occur. Compare So'uya too? 'How many people?' and Sompulu too 'Ten people' with time expressions Tinting so'uya? 'What time is it?' and Tinting sompulu 'Ten o'clock.'

The one major exception is the locative question word paio 'where', although it is usually preceded by the general locative proclitic $r i=$ or the ablative preposition ila 'from' and can occur in the normal final position of the clause (either as a question or as an indefinite), it is often fronted to the beginning of the clause (for a general discussion of fronting see §17.2).

Verbal question words have various word order positions that are typical of verbs, that is, $\mathrm{SVO} / \mathrm{SV}$ and VOS/VS (see $\S 12.3$ and $\S 17.4 .3 .2$ ).

### 16.3.4 Comparative alternation questions

Another special construction that two question words appear in is a comparative construction with a following alternation noun phrase, as in (115)-(117). The basic construction uses paio 'where' which can mean in these contexts 'who' or 'which'. This construction is similar to the incremental comparative discussed in $\S 15.2 .2$; a stative root prefixed with the numeral one prefix so- is a key component in the predication.
(114) Paio semeas, moo ape moo?
paio so-meas moo ape moo
where ONE-white this or this
'Which is whiter, this or this?'
(115) Paio soolom, songi moo ape songi uo?
paio so-olom, songi moo ape songi uo
where ONE-dark room this or room yonder
'Which is darker, this room or that room over there?'
(116) Paio sountol piso moo ape uo?
paio so-untol piso moo ape uo
where ONE-sharp machete this or yonder
'Which one is sharper, this machete or that one over there?'
[EN97-004.64]
(117) Paio solongkang, io ape a'u?
paio so-longkang, io ape a'u
where ONE-fast $3 \mathrm{SG} / \mathrm{AB}$ or $1 \mathrm{SG} / \mathrm{AB}$
'Who is faster, him/her or me?'
[EN97-004.64]
(118) Paio sombosi, $a$ 'u nomoia riPalu ape riMalawa?

where ONE-good $1 \mathrm{SG} / \mathrm{AB}$ RE-SF-live LOC=P. or $\mathrm{LOC}=\mathrm{M}$.
'Is it better if I live in Palu or in Malawa? (lit. Where is it good for me to live, in Palu or in Malawa?)'

When people are involved in the comparative alternation question the word paio may be substituted with sisee 'who' as in example (119).

Sisee sogurang, rapi'u ape a'u?
sisee so-gurang, rapi='u ape a'u
who ONE-old spouse $=1 \mathrm{SG} / \mathrm{GE}$ or $1 \mathrm{SG} / \mathrm{AB}$
'Who is older, my spouse or me?'
[EN97-004.63]

### 16.3.5 Forming questions with declarative constructions

There are several other pragmatic ways of forming a question without using question words. Questions can be formed in declarative constructions with the prohibitive reduplicated as nyaa-nyaa 'don't-don't' as a result of the illocutionary force.

To form a question with a declarative statement a special reduplicative use of the prohibitive nyaa 'don't' is formed, as in (120) and (121).
(120) Nyaa, nyaa bai sanu taas nuunga pongkaleong
nyaa, nyaa bai sanu taas nu=unga pong-'ale-ong
don't don't like umm bag CN/GE-child SF-store-locN

| hanananyo | bukunyo | uo. |
| :--- | :--- | :--- |
| hanana $=$ nyo | buku | 'uo |

whatchamacallit=3SG/GE book=3SG/GE yonder
'It couldn't be like that children's bag, the container for, whatchamacallit that book there (could it)?' or: 'Is that really the children's bag, the container for, whatchamacallit that book there?'
[Sibayu riddle \#2]
 'But the child's father just kept asking himself (lit. his breath). His father's breath spoke, "Could it be that their stepmother is not feeding my child?""
[mdtext18.txt 019-02]

## 17 Some discourse features of cohesion and prominence

### 17.1 Introduction

Discourse as viewed in Chapters 17 and 18 consists of the language specific conventions used to communicate any domain or stretch of speech that may be considered to have a beginning and an end.

This chapter covers some of the discourse features of cohesion and prominence that occur in Pendau. It is divided into three parts. The first part deals with the pragmatic fronting of oblique phrases for effects of prominence and the left-dislocation structure which is used for topic continuity. The second deals with various types of repetition (following the classification set forth in Quick 1994). The third part of this chapter takes a quantitative approach to discourse following Givón's approach to topic continuity (1983, 1994). The final section (§17.4) addresses the following topics: word order variation (SV/SVO versus VS/VOS), voice selection criteria, and identifying the inverse voice as transitive.

### 17.2 Fronting and left-dislocation

The main formal distinction between fronting (§17.2.1) and left-dislocation (§17.2.2) is that the fronted NP or PP is part of the clause, whereas the left-dislocated NP is not part of the clause. The major functional correlate of this distinction is that left-dislocation is done for purposes of topic continuity (that is, cohesion), whereas fronting creates prominence or emphasis of the NP or PP.

### 17.2.1 Fronting

Fronting is a pragmatic function which moves a clause internal phrase forward from its normal canonical position in order to give it some prominence. Fronted phrases include second objects (discussed in §17.2.1.1) and prepositional phrases (discussed in §17.2.1.2).

### 17.2.1.1 Fronting of second objects

The second objects of ditransitive clauses normally occur in various post-verbal positions whether in active or inverse voice. This is covered in §10.3.6 (see also Figures 10.7-8). However, the second object can only appear pre-verbally in the initial clause
position when a pause precedes the remaining part of the clause. This contrasts with leftdislocation in that the topicalised second object is a constituent of the clause. ${ }^{1}$

### 17.2.1.2 Fronting of prepositional phrases

Prepositional phrases normally occur in clause-final position, but can be fronted to highlight or put some prominence on the prepositional phrase, as shown in (1). There are two fronting positions: 1) post-verbal, and 2) pre-verbal.

| V | NP | PP | normal |
| :--- | :--- | :--- | :--- |
| V | PP | NP | post-verbal |
| PP | V | NP | pre-verbal |

Example (2) illustrates that the normal constituent order for prepositional phrases is in the final clause position. See $\S 10.3 .6$ for discussion of locative pivot/subject in various word order positions.
$\begin{array}{lllll}\text { (2) } \begin{array}{ll}\text { Paey } & \text { ratabola'oto } \\ \text { paey } & \text { ro-tabol- } a \text { '=to }\end{array} & \text { io } & \text { uo } & \text { rirano. } \\ \text { and.then } & \text { IV/IR-throw-TZ=1PL.INC/GE } & \text { io } & \text { 'uo } & \text { ri=rano } \\ & & \text { SB } & \text { yonder } & \text { LOC=lake }\end{array}$
'And then we'll throw him into the lake.' (monkeys talking about the turtle)
[ceku01.jdb 075]
Examples (3)-(7) illustrate fronting of the prepositional phrase to the immediately postverbal position.
(3) Bai uo nodua' ritubu nuloka odo uo..
bai 'uo $N$-po ${ }_{1}$-dua' ri=tubu nu=loka odo 'uo
like yonder RE-SF-arrive LOC=trunk CN/GE=banana monkey yonder
'After that the monkey came to the trunk of the banana tree...' [ceku01.jdb 023]
(4) Ila uo nitalaunyo rijunjung unga ио.
ila 'uo ni-talau=nyo ri=junjung unga 'uo
from yonder IV/RE-leave=3SG/GE LOC=house child yonder
'From there he left that child at the house.' [ceku03.jdb 043]
(5) Nodua' ri'uo io.

N - $\mathrm{po}_{1}$-dua' ri='uo io
RE-SF-arrive LOC=yonder $3 \mathrm{SG} / \mathrm{AB}$
'He arrived over there.'
[horse.pin 525]

[^111](6) Tarus nitabola'onyo ridagat
tarus ni-tabol-a'=nyo ri=dagat
continue IV/RE-throw-TZ=3SG/GE LOC=ocean
bengkel rapi nujuragang ио.
bengkel rapi nu=juragang 'иo
female spouse $\mathrm{CN} / \mathrm{GE}=$ captain yonder
'Continuing on he threw the woman, the captain's wife into the ocean.'
[mdtext15.txt 077]
(7) Paey nipasiromu rijunjung nijimo unga uo.
paey ni-pa-siromu ri=junjung nijimo unga 'uo
and.then IV/RE-CAUS-gather LOC=house 3PL/GE child yonder
'And then they (the flesh-eaters) gathered the children at their house.' [mdtext20.txt 113]

Example (8) shows a complex sentence with three clauses. Each of the clauses is transitive and has abato 'grub' as its subject. In the third and final clause of the sentence the prepositional phrase is fronted before the P argument to highlight the location in which the grub is deliberately put, that is, engenyo 'his nose'.
(8) Bai uo ni’itonyo abato uo, tarus nialaponyo
bai 'uo ni-'ito=nyo abato 'uo tarus ni-alap=nyo
like yonder IV/RE-see=3SG/GE grub yonder continue IV/RE-get=3SG/GE

```
abato uo, paey nintamaa'onyo riengenyo
abato 'uo paey ni-ntama-a'=nyo ri=enge=nyo
grub yonder and.then IV/RE-enter-TZ=3SG/GE LOC=nose=3SG/GE
    abato uo.
    abato 'uo
    grub yonder
```

'After that he saw that grub, and then he took the grub, and then he put into his nose the grub.'
[mdtext6.txt 067]

Example (9) shows a temporal prepositional phrase fronted to a post-verbal position.
(9) Mengkani riulu ito tagu.

M-pe-ngkani ri=ulu 'ito tagu
IR-SF/DY-eat LOC=first 1PL.INC/AB friend/VOC
'Friend, let's eat first.'
[nangkait.pin 132]

Examples (10)-(12) illustrate fronting of prepositional phrases to the pre-verbal position.
(10) Paey ri'ototou'onyo
paey ri='o-to-tou'=nyo
and.then $\quad$ LOC $=$ HAVE-RED-finish $=3 S G / G E$

| nogintoya | rapi | nigibang. |
| :--- | :--- | :--- |
| N -po $\mathrm{o}_{1}$-gi-ntoya | rapi | $n i=$ gibang |
| RE-SF-REL-swing | spouse | $\mathrm{CN} / \mathrm{GE}=$ lizard |

'And then at the very end of (their turns), the monitor lizard's wife went swinging.'
[gibang.pin 107]
(11) Bia ri’otou' nukampung
bia ri='o-tou' nu=kampung
later LOC=HAVE-finish CN/GE village
paey nidua'onyo manggenyo.
paey ni-dua'=nyo mangge=nyo
and.then IV/RE-arrive $=3 \mathrm{SG} / \mathrm{GE}$ uncle $=3 \mathrm{SG} / \mathrm{GE}$
'Later at the end of the village, then he found his uncle.'
[horse.pin 1110]
(12) Jari rimoo ututura' teule
jari ri=moo 'u-tutur-a' teule
so LOC=this 1SG.IV/IR-story-TZ return

| riwatunyo | a'u | mono | unga | logas | uo. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ri=watu=nyo | a'u | mono | unga | logas | 'uo |
| LOC=time=3SG/GE | 1SG/AB | still | child | unmarried.man | yonder |

'So here, I want to recount a story and return to the time when I was still a young unmarried man.'
[jptext02.jdb 027]

Example (13) illustrates that a locative predicate can be fronted in a verbless clause for prominence (in this example the car is contrasted with his flying horse).

'You (hon.) have a car, I only have a horse, but we can still have a contest with each other.'
[horse.pin 063]

Examples (14)-(16) show the ablative preposition ila 'from' in the pre-verbal position where it highlights the starting location from which the event referred to begins.

| (14)Ila Tambu ami | megoisomo | buut | siinanyo. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ila | T. | 'ami | M-pe-gois=mo | buut | siina=nyo |
| ABL | T. | 1PL.EXC/AB | DY/IR-cross=COMP | mountain | mother=3SG/GE |
|  | 'From Tambu we crossed the mother mountain.' |  |  |  |  |
| [jptext03.jdb 010] |  |  |  |  |  |


| (15) | Ila | gii | nuposoleong | jimo | nomipitomo |
| :--- | :--- | :--- | :--- | :--- | :--- | mai.

ABL edge $\mathrm{CN} / \mathrm{GE}=$ SF-beach.walking-locN 3PL/AB RE-SF-perimeter=COMP come
'From the edge of the shoreline they came following the coastline.' [mdtext15.txt 005]
(16)

| Ila | Donggala | ami | tarus | nentama | riLabuana. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ila | D. | ami | tarus | N-pe-ntama | ri=L. |
| ABL | Donggala | 1PL.EXC/AB | continue | RE-SF/DY-enter | LOC=Labuana |
| 'From | Donggala we continued and entered Labuana.' | [cekupitu.int 019] |  |  |  |

Example (17) illustrates a fronted pre-verbal prepositional phrase. In this case it precedes the setting for the remainder of the clause.

```
(17) Riwatunyo riulu io nobanta sono tagunyo
ri=uatu=nyo ri=ulu io N-po_-banta sono tagu=nyo
LOC=time=3SG/GE LOC=first 3SG/AB RE-SF/DE-fish with friend=3SG/GE
riulu riuju nuDampelas.
ri=ulu ri=uju nu=D.
LOC=first LOC=point CN/GE=D.
'At that time, he at first fished with his friend first at the Dampelas point of land.'
```

[jptext06.jdb 003]

### 17.2.2. Left-dislocation

Left-dislocation is the extraposition of a noun phrase to a position in front of a clause in which the dislocated NP is also referred to (see Payne 1997:271-276, Andrews 1985:7780, Foley and Van Valin 1985:355-358, and Givón 1990:740-741, 757-760). Leftdislocation is a discourse strategy for re-introducing a topic after a gap (Givón 1990:740741, 757-758, Foley and Van Valin 1985:355-356). Left-dislocation would appear to be related to 'resumptive repetition' (see §17.3.1.3).

Example (18) illustrates left-dislocation with an active voice clause construction, and examples (19)-(21) illustrate this with inverse voice clause constructions. Examples (20) and (21) illustrate that the dislocated NP may itself be preceded by an adverbial adjunct or discourse connector (see §15.7).

| Ulasang | moo, io | nompamula | nepesu'ata' | nemene' |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ulasang | moo | io | N-pong-pa-mula | $N$-pepe-su'at-a' | $N$-pe-mene' |
| turtle | this | 3SG/AB | RE-SF/AF-CAUS-begin | RE-SF-test-TZ | RE-SF/DY-go.up |


| moluar | mangalap | bua | nulokanyo | uo. |
| :--- | :--- | :--- | :--- | :--- |
| mo-luar | M-pong-alap | bua | $n u=$ loka=nyo | 'uo |
| UD/IR-want | IR-SF/PT-get | fruit | CN/GE=banana=3SG/GE | yonder |

'This turtle, he had begun to test going up, he wanted to get the banana tree's fruit.'

| (19)Odo moo, sura ulinyo nitabola'onyo <br> odo moo sura uli=nyo | ni-tabol-a'=nyo | nyau | mai |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| monkey this | only | skin=3SG/GE | IV/RE-discard-TZ=3SG/GE | go.down | come |
|  | 'This monkey, he only discarded its skin down to him (the turtle).' | [turtle.pin 067] |  |  |  |


| Jari | ila | uo, | ulasang | moo, nisu'ata'onyo | nemene'... |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| jari | ila | 'uo | ulasang | moo | ni-su'at-a'=nyo | N-pe-mene' |
| so | ABL | yonder | turtle | this | IV/RE-test-TZ=3SG/GE | RE-SF/DY-go.up |

'So after that, this turtle, he attempted to climb (up the tree)...'
[turtle.pin 034-035]

| Ila | uo, | ulasang | moo, nisu'ata'onyopo |  |
| :--- | :--- | :--- | :--- | :--- |
| ila | 'uo | ulasang | moo | ni-su'at- $a$ '=nyo=po |
| ABL | yonder | turtle | this | IV/RE-test-TZ=3SG/GE=CONT |


| nomongi | mene' | riodo | uo. |
| :--- | :--- | :--- | :--- |
| $N$-po ${ }_{1}$-mongi | mene' | ri=odo | 'uo |
| RE-SF/FA-request | go.up | LOC=monkey | yonder |

'After that, this turtle, he again attempted to ask up to the monkey there.'
[turtle.pin 075]

### 17.3 Repetition

Various types of repetition are used for discourse pragmatic effects in Pendau. Repetition can be classified typologically according to whether its basic function is for cohesion or for prominence (see Quick 1985, 1986, 1994). The following sections describe two types of cohesive repetition (tail-head linkage and resumptive repetition) and one type of prominence repetition (iconic repetition). Reduplication is a morphosyntactic phenomenon that is not considered to be a discourse level type of repetition (see §3.6, §7.4.3 and §13.4.1.5).

### 17.3.1 Cohesive repetition

### 17.3.1.1 Introduction

Cohesive repetition functions to provide a link between something that is thematic in one section of a text with the same theme in a following stretch of discourse.

### 17.3.1.2 Tail-head linkage

Tail-head linkage occurs when a verb from one clause ('the tail') is repeated as 'the head' of the following clause. Folk tales and narratives have occasional tail-head linkage, but tail-head linkage is a predominant feature in procedural genres.

Example (22) shows a number of tail-head linkages. The first line 'after the meat has been quartered, then it gets cut up' ends with nitai-tai 'be cut up' which functions as the tail of the tail-head linkage. In the following clause 'when we finish cutting it up then we weigh it', nitai-tai 'be cut up' is then repeated as the following head. Each subsequent clause in the example is joined by another tail-head linkage. The next two are linked with nitimbang 'get weighed' and the final two are linked with nipobalu 'get sold'. Note that in each case the head of the second clause is preceded by notou' 'having finished (X)'.

| (22)Notou' <br> no-tou' | nisampali, <br> ni-sampal-i | paey <br> paey | nitai-tai. <br> ni-tai-tai |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ST/RE-finish | IV/RE-quarter-DIR | and.then | IV/RE-cut-RED |  |

'After the meat has been quartered, then we cut it up. After we cut it up, then we weighed it. After we weighed it, then we sold it. After we finished selling it, then people bought it.'

The following repetition in (23) provides an example of tail-head linkage in the folk tale composed by Josep Piri called Uma-umanong ulasang sono odo notagu 'The story about the turtle and the monkey who were friends' [turtle.pin 094-096]. In this example the linked elements are much more complex, consisting of a whole series of verbs. ${ }^{2}$

| Odo | moo | nanabumo | manyau | rilalong | nuapi |
| :--- | :--- | :--- | :--- | :--- | :--- |
| odo | moo | no-nabu=mo | ma-nyau | ri=lalong | $n u=a p i$ |
| monkey | this | ST/RE-fall=COMP | UD/IR-down | LOC=inside | CN/GE=fire |


| tojomo | mbiru-mbirung | uo. |
| :--- | :--- | :--- |
| to=jomo | mbiru-mbirung | 'uo |
| RM=just | RED-flame | yonder |


| Sampanyo | odo | moo | nanabumo | rilalong | nuapi |
| :--- | :--- | :--- | :--- | :--- | :--- |
| sampanyo | odo | moo | no-nabu $=$ mo | ri=lalong | nu=api |
| after.that | monkey | this | ST/RE-fall=COMP | LOC=inside | CN/GE=fire |


| tombiru-mbirung | uo | odo | moo | naatemo |
| :--- | :--- | :--- | :--- | :--- |
| to $=$ mbiru-mbirung | 'uo | odo | moo | no-ate $=$ mo |
| RM=RED=flames | yonder | monkey | this | ST/RE-die=COMP |

[^112]| niturana' | nuulasang | io | no'onto'. |
| :--- | :--- | :--- | :--- |
| ni-turun-a' | nu=ulasang | io | no-'onto' |
| IV/RE-let.be-TZ | CN/GE=turtle | 3SG/AB | ST/RE-burnt |

'This monkey fell down into the fire that was really burning (lit. flaming) there. After the monkey had fallen into the fire that was burning there, the monkey died. The turtle (had) let him burn to a crisp.'

### 17.3.1.3 Resumptive repetition

Resumptive repetition occurs when something is stated in one or more clauses, and then, after a series of intervening clauses it is restated later in a discourse to resume the earlier topic or storyline. Example (24) illustrates resumptive repetition in the Katira folk tale. In (24) it is stated that Katira was in the jungle for two years, and was healed there. This is followed by eight clauses of explanatory background. After this digression, then the previous topic is resumed by repeating the fact that Katira was in the jungle for two years and that his body was healed.
(24) Paas ruo pariama io ri’uo,

| paas | ruo | pariama | io | $r i=$ 'uo |
| :--- | :--- | :--- | :--- | :--- |
| precisely | two | years | $3 S G / \mathrm{AB}$ | LOC=yonder |


| tarus | nombosi' | alaenyo | uo. |
| :--- | :--- | :--- | :--- |
| tarus | no-mbosi' | 'alae=nyo | 'uo |
| continue | ST/RE-good | body=3SG/GE | yonder |

'He was there exactly two years, and then his body was healed there.'
...(8 clauses of explanatory background intervene here)

| Paas | ruo | pariama | io | ripangale | ио |
| :---: | :---: | :---: | :---: | :---: | :---: |
| paas | ruo | pariama | io | ri=pangale | 'иo |
| precisely | two | year | 3SG/AB | LOC=jungle | yonder |
| tarus | alae |  | najari | nom | si |
| tarus |  | nyo | na-jari | no-m | bosi’ |
| continue | body | 3SG/GE | COP/RE- | come ST/R | -good |

'He was in that jungle for exactly two years, and then his body became healed.'
[Katira.pin 15-24]
Resumptive repetition also occurs in the oral narrative text (fktale01.txt and abbreviated as M1text) found in Appendix 12. The details of this text, including the resumptive repetition, are provided in the semantic structural analysis of this text in Figure 18.7 and in Appendix 10.

Left-dislocation (as discussed in $\S 17.2 .2$ above) is similar to resumptive repetition in that it is often used to return to a previously interrupted topic. Left-dislocation may be in fact a grammaticised form of resumptive repetition (§17.2.2). In example (25) the resumption to the monkey occurs after a brief interlude in which the turtle is attempting to reach the turtle without success and shouts to the monkey to give him a banana.

| Ndau nibagii | nyau | mai | ulasang | siopu | nuloka | moo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ndau | ni-bagi- | nyau | mai | ulasang | siopu | nu=loka | moo '(And the monkey) didn't give any down to the monkey, the owner of the banana tree.'

...(several clauses intervene here with the turtle shouting to the monkey)

| Odo | moo, | sura | ulinyo | nitabola'onyo | nyau |
| :--- | :--- | :--- | :--- | :--- | :--- |
| odo | moo | sura | uli=nyo | ni-tabol-a'=nyo | nyau |
| monkey | this | only | skin=3SG/GE | IV/RE-discard-TZ=3SG/GE | go.down come |
| 'This monkey, he only discarded its skin down to him (the turtle).' | [turtle.pin 063-067] |  |  |  |  |

### 17.3.2 Prominence repetition: suspense and/or iconic simulation of time duration or abundance

Prominence repetition differs from cohesive repetition in that it serves to highlight something from a text in some way rather than to provide cohesion. One of the most common forms of highlighting marked by this kind of repetition is that of duration. Sometimes special sound effects such as slowing down the repetition and altering the narrator's voice may also be used to emphasise the duration. In (26) the duration of the hero walking is highlighted by the repetition of the word gempang 'walk' several times.

| (26) | Ila | ио | paas | netontoro'o | manu' | petotolu | unsuronyo | io |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ila | 'иo | paas | $N$-pe-tontoro'o | manu' | pe-totolu | unsur=nyo | io |
|  | ABL | yonder | exactly | RE-SF-crow | chicken | SF-three | time $=3$ SG/GE | 3SG/AB |
|  | negempangomo |  |  | gempang-gempang | io | gemp | ang. |  |
|  | $N-$ pe $=$ gempang $=$ mo |  |  | gempang-gempang | io | gemp |  |  |
|  | DY/RE-walk=COMP |  |  | RED-walk | 3SG/ | AB walk |  |  |

'From there exactly as the chicken crowed three times he was already walking. And he kept walking and walking and walking.' [asu2.pin 117-118]

Example (27) demonstrates even more clearly that this kind of repetition is correlated iconically to time elapsing. Example (28) provides a description of a long journey to a village. First, there is a repetition of gempang 'walk' which gives the listener a feeling of time and distance passing. Then a sequence of menyau 'go down' is repeated a number of times to give the impression of going downhill quite a distance. Finally, another sequence of manyau 'go down', this time limited to the act of seeing, shows that the man is still a long way from the village. Eventually after all of this, the man reaches the village of his destination.

| (27) | ..ai | kampung | togoge | tarus | nelampa, | nelampa | nelampa |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ai | kampung | togoge | tarus | N-pe-lampa | N-pe-lampa | $N$-pe-lampa |  |
| but | village | large | continue | RE-SF/DY-walk | RE-SF/DY-walk | RE-SF/DY-walk |  |


| ruombengimo | rijalang | ma'onyo. | Ruombengipo | rijalang |
| :--- | :--- | :--- | :--- | :--- |
| ruo-mbengi $=$ mo | ri $=$ jalang | ma'o $=$ nyo | ruo-mbengi $=$ po | ri $=$ jalang |
| two-nights=COMP | LOC=road | go $=3$ SG/GE | two-night=CONT | LOC $=$ road |


| ma'onyo | uo | lampa | lampa, | lampa, uo | moje | mondoung |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ma'o=nyo | 'uo | lampa | lampa | lampa | 'uo | moje | M-po $0_{1}$-ndoung |
| go=3SG/GE | yonder | walk | walk | walk | yonder | also | IR-SF-evening |

'...but in the large village they continued walking, and walking, and walking, for two nights they had already been on the road. After two more nights going on the road, they were walking, and walking, and walking, and it was also evening when they would sleep (but) also they walked, and walked, and walked. Ah he found a house on the edge of a village.'
[asu2.pin 138-148]
(28)

| Ila | mai | uo | nerema | mai | uo | io | menyau |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ila | mai | 'uo | N-pe-rema | mai | 'uo | io | M-pe-nyau |
| ABL come | yonder | RE-SF/DY-daylight | come | yonder | 3SG/AB | IR-SF-go.down |  |


| negempang. | Gempang, | gempang, | gempang, | menyau, | menyau, |
| :--- | :--- | :--- | :--- | :--- | :--- |
| N-pe-gempang | gempang | gempang | gempang | M-pe-nyau | M-pe-nyau |
| RE-SF-walk | walk | walk | walk | IR-SF-go.down | IR-SF-go.down |

menyau uo joo ritampa' nukampung, ai mono magaar ndau
M-pe-nyau 'uo joo ri=tampa' nu=kampung ai mono ma-gaar ndau IR-SF-go.down yonder really LOC=edge CN/GE=village but still ST/I-far NEG

| butu | teruompulu | kilo. | Re'ita | menyau, | menyau-menyau, |
| :--- | :--- | :--- | :--- | :--- | :--- |
| butu | te-ruo-mpulu | kilo | ro-'ita | M-pe-nyau | M-pe-nyau-menyau |
| just | SF-two-tens | kilometer | IV/IR-see | IR-SF-go.down | IR-SF-go.down-RED |


| hama' ededea | nujunjung | moo, ai | ndau | diang | obol. |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| hama' 'o-de-dea | $n u=j u n j u n g$ | moo | ai | ndau | diang | 'obol |
| wow | HAVE-RED-many | CN/GE=house | this | but | NEG | EXIS |
| smoke |  |  |  |  |  |  |

'After coming there (and) after daylight came he went down walking. He walked, and he walked, and he walked, going down, going down, and going down really to the edge of the village, but he was still far away not quite twenty kilometres. He looked down, and down, and down, wow (he saw) a lot of houses here, but there wasn't any smoke.'
[asu2.pin 163-174]
Although expressing duration of time is probably the most common function of prominence repetition, other effects are also provided by the device. Example (29) does not show time elapsing, but rather a large quantity of food has been devoured by the blind man and the cripple.


Bai uo jimo notou' nengkani.
bai 'uo jimo no-tou' $N$-pe-ngkani
like yonder they ST/RE-finish RE-SF/DY-eat
'The two of them ate. And they really ate and they ate. They ate until they were full and they couldn't finish the rice and fish that they had just gotten there. That's how it was until they finished eating.'
[nangkait.pin 142]

### 17.4 Topic (referential) continuity

### 17.4.1 Introduction to topic continuity in Pendau

When people talk, they usually talk about particular things or topics. Some referents are talked about more often than others and for longer stretches at a time. Topic continuity, then, refers not only to whether or not a particular referent remains central to a discourse over a long period of time, but also to how a particular referent which is mentioned more than once is tracked or referred to later within a discourse. Linguists have often noticed that more continuous referents are often realised linguistically in different ways than less topical elements. Sometimes highly topical elements need not even be realised overtly at all.

Topic continuity manifests itself in a variety of ways in Pendau, as listed in (30). ${ }^{3}$ This ranks the manifestations of continuity from those associated with the most continuous referents to the least continuous (from top to bottom respectively). This ranking fits well with Givón's observations (1990:917) that 'referents that are already active require minimal coding.'
(30) zero anaphora (§17.4.4)
agreement in abilitative verbs (§14.4.1.1)
conjugational pronouns (defective paradigm in inverse voice, §12.4.2)
clitic pronouns (genitive pronouns, including mixed clitics and free pronouns, §7.6.4)
independent pronouns (absolute case pronouns, §7.3.1)
full noun phrase (chapter 7)
left-dislocation (§17.2.2)

[^113]
### 17.4.2 Methodology and background of the four Pendau texts quantified

In order to examine how topic continuity manifests itself in Pendau narrative genres, four texts have been taken and analysed in some detail. The following sections (§17.4.3-4) give the results of the analysis of four Pendau narrative texts with a total of 746 clauses following specific quantitative methodologies proposed by Givón and others. These four texts are abbreviated in this section as Mtexts 1-4 (or sometimes simply as M1-M4). Figure 17.1 shows the total number of clauses for each text, the title, the author, and whether the text was recorded or composed. ${ }^{4}$ The texts were coded following a tagging convention that has been developed for this kind of analysis, and that can be quantified quickly by a computer program (the Multilinear Discourse Analysis software developed primarily by Quick, see Quick 1996). Each participant in every clause was identified and then marked according to its realisation, such as zero anaphora or a particular noun phrase type as well as macroroles/semantic roles and grammatical relations, etc. Other database fields mark categories such as event/non-event, quotation or speech margin, word order type, etc.

|  | text name in English | style | author | \# of clauses |
| :--- | :--- | :--- | :--- | :--- |
| Mtext1 <br> (M1) | The story of the seven men in search of rattan <br> and the two who got lost (fktale01.txt) | oral <br> (recorded) | SiDidi | 94 |
| Mtext2 <br> (M2) | The story of the monkey and the turtle who <br> were friends (turtle.pin) | composed | Josep Piri | 221 |
| Mtext3 <br> (M3) | The story of the flesh-eater who found a <br> monkey to be his friend (troll.int) | composed | Josep Piri | 354 |
| Mtext4 <br> (M4) | The story of the pelican who swallowed the <br> grandfather's grandson (tambao.tst) | composed | Josep Piri | 77 |

Figure 17.1. Texts analysed and quantified

### 17.4.3 Text profiles according to NP types and participants

This section provides a preliminary look at the raw profile of the four texts before going on to examining specific measures of topic continuity in each text. Figures 17.2-5 show raw numbers of referent realisations in different linguistic guises for each text. The abbreviations are defined as follows: DEM is a NP coded simply with a demonstrative, N1 is a full noun phrase in the absolute case, N 2 is a full noun phrase in the genitive case (as agent), P 1 is an absolute case pronoun, P 2 is a genitive case pronoun (as agent), P 3 is the pronominally affixed set (associated with the genitive case pronouns since it functions as agent), $\mathrm{QN} / \mathrm{QF}$ are quantifiers or quantifier floating adverb functioning as a simple $\mathrm{NP}, \mathrm{RC}$ are relative clauses, and ZR marks zero anaphora. ${ }^{5}$ The different colours (represented by each distinct 'bar') indicate different participants or characters in a story for a particular NP type. Each position of a bar represents the same participant for different NP types.

[^114]High total scores are consistent between these texts for the absolute noun phrases (N1), the absolute pronoun case (P1), and zero anaphora. From this raw data one can already note that the high scores for N 1 and P 1 , and those for N 1 and ZR are roughly equivalent. This is significantly different from what the literature generally says about argument realisation. This will be discussed further in the light of topic continuity in later sections.


Figure 17.2. Participants 1-37 NP profile of Mtext1


Figure 17.3. Participants 1-39 NP profile of Mtext2


Figure 17.4. Participants 1-30 NP profile of Mtext3


Figure 17.5. Participants 1-11 NP profile of Mtext4

### 17.4.3.1 Selection criteria and transitivity evidence from discourse-based quantification

Two major questions are dealt with in this section. First, does the inverse construction behave like a typical passive in languages which have them? ${ }^{6}$ Secondly, can the choice

[^115]between a ni- verb and a nong- verb be predicted based on discourse level information, and if so what are the parameters? These two problems will initially be explored following Givón's topic continuity methodology in §17.4.3.1.1 (Givón 1994; see Quick 1997a, 2002, for previous work on this topic in Pendau). The first question is answered by using Givón's basic methodology. The second question is partially answered by applying Givón's methodology, but it is more fully answered in §17.4.3.1.2 by applying Dryer's supplementary method (1994). Dryer's method is a modification of the basic Givón method.

### 17.4.3.1.1 Applying the Givón method

Topic continuity analysis measures the frequency of occurrence of nominal arguments that are tracked in core argument positions. ${ }^{7}$ Givón (1994:10) states:

These methods are based on the assumption that more topical, (thematically important) referents tend to be both more anaphorically accessible ('continuous') and more cataphorically persistent ('recurrent'). Neither measure assesses topicality directly. Rather, they measure the referential continuity properties of referents, in two-opposite-textual directions. It is assumed then that the two measures should correlate with the two respective cognitive dimensions of topicality.

The quantification is carried out by examining each core argument of each transitive clause in a text and counting 'back' to find a match (thus measuring referential distance) and counting 'forward' to find a match (measuring topic persistence).

In this study, measurement of referential distance (RD) is made according to the conventions developed by Givón (1994). Once a core argument has been identified (whether it is expressed overtly or not), the analyst then looks backwards in the text until a previous reference to the same entity is found. One of two different values for RD is then ascribed: 1) distance of 1-3 (the most recent reference was made in any of the three immediately preceding clauses); and 2) distance $>3$ (no reference was made in any of the three preceding clauses. ${ }^{8}$

In this section the designation ni- is used as a shorthand to refer to all inverse voice constructions, and the designation nong- is used as a shorthand to refer to all active voice constructions.
these two constructions show far more significant differences. Past analyses that view the Philippine non-actor topic construction passive miss important overall characteristics of this construction that are not shared by the prototypical passives: namely, (i) it is not an agent defocusing mechanism in that it syntactically encodes both agent and patient, just as in active transitive clauses in other languages, and (ii) its functional load of coding a transitive event is as great as that of the actor-topic construction.
${ }^{7}$ All core arguments required as actor or undergoer (coded here as A and P respectively) in a clause are counted whether or not they appear overtly or covertly.
8 Giving a detailed rationale for why these particular measurements are used is beyond the scope of this study. Givón (1994) provides extensive discussion of why these particular measures (and those used for topic persistence) are appropriate. Givón actually uses three measurements, with the first category $(R D=1-3)$ split into two sub-categories $(R D=1$, and $R D=2-3)$. The less precise measurement is deemed sufficient for current purposes. Due to computer programming constraints the referential distance begins tabulating at the fourth clause from the beginning, and the topic persistence stops tabulating when it senses it is on the tenth clause from the end.

Tables 1a-d show the raw values for the referential distance for the four texts (Mtexts 14) quantified. These four tables show that each text generally patterns in the same way.

Starting with the first column in Tables 1a-d, the P argument has $66 \%-74 \%$ for a RD of 1-3 which indicates that it has high topicality. In contrast to this, the P argument for a RD $>3$ has low topicality as shown by the figures $25 \%-33 \%$. The A argument for the niconstruction has $89 \%-96 \%$ frequency for a RD of $1-3$ which is an even higher topicality than that for the P argument in the same ni- construction. The A argument in this construction with a $\mathrm{RD}>3$ has a low topicality as indicated by the range of $3 \%-17 \%$.

In the third column, which has the P argument for the nong- construction, the P argument ranges from $27 \%-57 \%$. The P argument occurs $27 \%-57 \%$ of the time when the RD is $1-3$, and it occurs $42 \%-72 \%$ of the time when the RD $>3$. The statistics for the P argument for the nong- construction vary widely between these four texts, and it can only be concluded that its topicality varies from text to text. However when we look at the A argument in the nong- construction we see that the A is highly topical when it has a RD of $1-380 \%-89 \%$ of the time as contrasted to only $10 \%-20 \%$ when the RD $>3$.

Table 1a. Referential distance values-Mtext1

|  | ni- | ni- | nong- | nong- |
| :---: | :---: | :---: | :---: | :---: |
| RD | P | A | P | A |
| $1-3$ | $32(74.42 \%)$ | $26(89.66 \%)$ | $5(27.78 \%)$ | $53(85.48 \%)$ |
| $>3$ | $11(25.58 \%)$ | $3(10.34 \%)$ | $13(72.22 \%)$ | $9(14.52 \%)$ |
| Total | $43(100 \%)$ | $29(100 \%)$ | $18(100 \%)$ | $62(100 \%)$ |

Table 1b. Referential distance values-Mtext2

|  | ni- | ni- | nong- | nong- |
| :---: | :---: | :---: | :---: | :---: |
| RD | P | A | P | A |
| $1-3$ | $36(66.66 \%)$ | $54(93.10 \%)$ | $9(33.33 \%)$ | $33(80.49 \%)$ |
| $>3$ | $18(33.33 \%)$ | $4(6.90 \%)$ | $18(66.67 \%)$ | $8(19.51 \%)$ |
| Total | $54(100 \%)$ | $58(100 \%)$ | $27(100 \%)$ | $41(100 \%)$ |

Table 1c. Referential distance values-Mtext3

|  | ni- | ni- | nong- | nong- |
| :---: | :---: | :---: | :---: | :---: |
| RD | P | A | P | A |
| $1-3$ | $70(70.71 \%)$ | $65(82.28 \%)$ | $24(53.34 \%)$ | $79(89.77 \%)$ |
| $>3$ | $29(29.29 \%)$ | $14(17.72 \%)$ | $21(46.76 \%)$ | $9(10.23 \%)$ |
| Total | $99(100 \%)$ | $79(100 \%)$ | $45(100 \%)$ | $88(100 \%)$ |

Table 1d. Referential distance values-Mtext4

|  | $n i-$ | $n i-$ | nong- | nong- |
| :---: | :---: | :---: | :---: | :---: |
| RD | P | A | P | A |
| $1-3$ | $19(70.37 \%)$ | $26(96.30 \%)$ | $8(57.14 \%)$ | $15(88.24 \%)$ |
| $>3$ | $8(29.63 \%)$ | $1(3.70 \%)$ | $6(42.86 \%)$ | $2(11.76 \%)$ |
| Total | $27(100 \%)$ | $27(100 \%)$ | $14(100 \%)$ | $17(100 \%)$ |

Figure 17.6 shows a scatter-plot display for the RD for ni- and nong- verb constructions when the RD is equal to between one and three for either A or P in each of the four texts. The relative topicality of A, then, seems to have little or no bearing on whether on not a nior a nong- form of the verb is used. Topicality of P, though, seems to be a much better predictor of voice. If the A in the ni- clause was actually an oblique of a passive, then the A should be expected to be much lower than this. I would also expect it to be lower in topicality than the A in the nong- verb constructions (see §17.4.4). What appears dramatically here is that the A in the ni- verb is actually higher in topicality than the A in the nong-verb in three out of four of these texts, although this difference would not appear to be statistically significant. Figure 17.6 illustrates that topicality of P as measured by RD in the ni- verb construction is much higher than the topicality of $P$ in the nong- verb construction measured by the same criterion. This is what I would expect from a transitive construction that 'focuses' or makes the P the pivot (or subject).


Figure 17.6. Percentages of ni- and nong- verb constructions with RD = 1-3 for $P$ and $A$ (Mtexts 1-4)

Figure 17.7 shows that for gaps greater than three clauses (that is, discontinuous topics as contrasted to uninterrupted topics in Figure 17.6) non-topical A arguments are hardly ever encountered in either voice, but that if the P argument is not topical, then the nongvoice tends to be used more frequently than ni-. One of the reasons for high topicality of A in both voices is that A arguments generally occur in 'runs', that is, the same participant is frequently a topical A for several continuous clauses. On the other hand, P arguments may or may not be continuous.


Figure 17.7. Percentages of ni- and nong- verb constructions with RD > $\mathbf{3}$ for $\mathbf{P}$ and $\mathbf{A}$ (Mtexts 1-4)

### 17.4.3.1.2 Applying the Dryer method

Dryer (1994) has proposed a supplementary method to Givón's basic method for quantifying topic continuity which has two variations. I have also applied Dryer's methodology to the Pendau data since it gives even clearer reasons for voice selection than Givón's does on its own to determining voice selection criteria (see §7.4.3.1). The Dryer method uses roughly the same counting procedures outlined above, except that the topicality measures for A and P are compared so that the results obtained are measures of relative topicality between A and P rather than absolute topicality of A or P alone. There are three possible scores for each comparison':

1) A was mentioned in a more recent clause than $P$.
2) A and $P$ were both mentioned most recently in the same clause.
3) $P$ was mentioned in a more recent clause than $A$.

The statistics obtained from the application of the Dryer method can be viewed in two ways. ${ }^{10}$ In what Dryer calls the 'vertical' analysis, the relative topicality measures of A versus $P$ are computed as percentages within each clause type. In Dryer's 'horizontal' analysis, the starting point is relative topicality, and selection of clause type is computed as a percentage for each relative topicality measure. Tables 2a-d show the Dryer vertical analysis of referential distance for each text. These tables also show a similarity in the statistics for all the texts. They underscore and provide background information in understanding Tables 3a-e which give the Dryer horizontal analysis values. The statistics show a clustering effect that allows us to make a provisional statement regarding when a

[^116]speaker tends to choose a ni- verb construction over the nong- verb construction. When the RD of $\mathrm{A}<\mathrm{P}$ for a given clause, than the nong- verb construction is more frequently chosen (this is discussed further below).

Table 2a. Relative referential distance of As and Ps (vertical analysis) Mtext1

|  | ni- | nong- |
| :--- | :--- | :--- |
| RD of A lower | $12(40.00 \%)$ | $28(75.68 \%)$ |
| RD of A and P same | $7(23.33 \%)$ | $3(8.11 \%)$ |
| RD of P lower | $11(36.67 \%)$ | $6(16.22)$ |
| Total | $30(100 \%)$ | $37(100 \%)$ |

Table 2b. Relative referential distance of As and Ps (vertical analysis) Mtext2

|  | ni- | nong- |
| :--- | :--- | :--- |
| RD of A lower | $15(22.39 \%)$ | $17(40.48 \%)$ |
| RD of A and P same | $25(37.31 \%)$ | $5(11.90 \%)$ |
| RD of P lower | $27(40.30 \%)$ | $20(47.62)$ |
| Total | $67(100 \%)$ | $42(100 \%)$ |

Table 2c. Relative referential distance of As and Ps (vertical analysis) Mtext3

|  | ni- | nong- |
| :--- | :--- | :--- |
| RD of A lower | $30(26.32 \%)$ | $51(50.00 \%)$ |
| RD of A and P same | $36(31.58 \%)$ | $19(18.63 \%)$ |
| RD of P lower | $48(42.11 \%)$ | $32(31.37 \%)$ |
| Total | $114(100 \%)$ | $102(100 \%)$ |

Table 2d. Relative referential distance of As and Ps (vertical analysis) Mtext4

|  | ni- | nong- |
| :--- | :--- | :--- |
| RD of A lower | $3(9.38 \%)$ | $4(21.05 \%)$ |
| RD of A and P same | $15(46.88 \%)$ | $6(31.58 \%)$ |
| RD of P lower | $14(43.75 \%)$ | $9(47.37)$ |
| Total | $32(100 \%)$ | $19(100 \%)$ |

Tables 3a-d show the Dryer horizontal analysis for each text and Table 3e gives combined totals for all the texts. Table 3 e shows quite clearly that when A is more topical than P , speakers tend to choose a nong- construction, but when P is equal in topicality, or greater in topicality than A , speakers tend to choose a ni- construction.

Table 3a. Relative referential distance of As and Ps (horizontal analysis) Mtext1

|  | ni- | nong- | Total |
| :--- | :--- | :--- | :--- |
| RD of A lower | $12(30.00 \%)$ | $28(70.00 \%)$ | $40(100 \%)$ |
| RD of A and P same | $7(70.00 \%)$ | $3(30.00 \%)$ | $10(100 \%)$ |
| RD of P lower | $11(64.71 \%)$ | $6(35.29 \%)$ | $17(100 \%)$ |

Table 3b. Relative referential distance of As and Ps (horizontal analysis) Mtext2

|  | ni- | nong- | Total |
| :--- | :--- | :--- | :--- |
| RD of A lower | $15(46.88 \%)$ | $17(53.13 \%)$ | $32(100 \%)$ |
| RD of A and P same | $25(83.33 \%)$ | $5(16.67 \%)$ | $30(100 \%)$ |
| RD of P lower | $27(57.45 \%)$ | $20(42.55 \%)$ | $47(100 \%)$ |

Table 3c. Relative referential distance of As and Ps (horizontal analysis) Mtext3

|  | ni- | nong- | Total |
| :--- | :--- | :--- | :--- |
| RD of A lower | $30(37.04 \%)$ | $51(62.96 \%)$ | $81(100 \%)$ |
| RD of A and P same | $36(65.45 \%)$ | $19(18.63 \%)$ | $55(100 \%)$ |
| RD of P lower | $48(60.00 \%)$ | $32(40.00 \%)$ | $80(100 \%)$ |

Table 3d. Relative referential distance of As and Ps (horizontal analysis) Mtext4

|  | ni- | nong- | Total |
| :--- | :--- | :--- | :--- |
| RD of A lower | $3(42.86 \%)$ | $4(57.14 \%)$ | $7(100 \%)$ |
| RD of A and P same | $15(71.43 \%)$ | $6(28.57 \%)$ | $21(100 \%)$ |
| RD of P lower | $14(60.87 \%)$ | $9(39.13 \%)$ | $23(100 \%)$ |

Table 3e. Relative referential distance of As and Ps (horizontal analysis) All texts combined

|  | ni- | nong- | Total |
| :--- | :--- | :--- | :--- |
| RD of A lower | $60(38 \%)$ | $100(62 \%)$ | $160(100 \%)$ |
| RD of A and P same | $83(72 \%)$ | $33(28 \%)$ | $116(100 \%)$ |
| RD of P lower | $100(60 \%)$ | $67(40 \%)$ | $167(100 \%)$ |

Figure 17.8 summarises the statistics from Tables 3a-d. This data shows that there are clear tendencies between when a nong- clause is used and when a ni- clause is used. A choice between a nong- and a ni-clause is based more often than not on the degree of topic
continuity. The rule of thumb in choosing between a ni- and a nong- verb construction can be stated as follows:

- If the P argument is more continuous ( RD of $\mathrm{P}<\mathrm{A}$ ) or just as continuous as the A argument ( RD of $\mathrm{P}=\mathrm{A}$ ), than the ni- verb construction will more often be chosen.
- If the A argument is more continuous than the P argument ( RD of $\mathrm{A}<\mathrm{P}$ ) than the nong- verb construction will more often be chosen.


Figure 17.8. Frequency of ni- and nong- clauses according to whether the $A$ is equal to $P$ in referential distance ( $R D A=P$ ), the $A$ is less than $P$ in referential distance ( $R D A<P$ ), or the $P$ is less than $A$ in referential distance ( $\mathbf{R D} \mathbf{P}<A$ ) in Mtexts 1-4

### 17.4.3.2 Word order variation in Pendau

This section presents the findings of statistics on word order variation and attempts to find a motivation for selecting between SV/SVO and VS/VOS word order which were discussed in Chapter 12. The subject can either appear before or after the verb in both intransitive and transitive clauses. The majority of clauses in narrative texts appear with the subject preceding the verb. However there are a significant number of clauses with verbs from all verb classes in which $S$ follows the verb.

Figure 17.9 displays raw basic word order scores for Mtext3 which has a total of 354 clauses. Only clauses that had an overt subject were counted, the seventy-five clauses with no overt subject are not included in this tabulation. (These figures do include clauses that had covert objects but overt subjects.) The figures show that both word orders are quite frequent, but that SV/SVO is more frequent than VS/VSO.

| SV/SVO | VS/VOS | Total clause population |
| :--- | :--- | :--- |
| $178(64 \%)$ | $101(36 \%)$ | 279 |

Figure 17.9. Frequency of word order types SV/SVO and VS/VOS

Figure 17.10 shows the values for referential distance of the subject (S) in each of the word orders. These figures show that the subject has about the same degree of topic continuity in either word order, that is, it has occurred within the previous three clauses $83 \%$ of the time whatever the word order.

| RD | SV/SVO | VS/VOS |
| :---: | :---: | :---: |
| $1-3$ | $148(83 \%)$ | $84(83 \%)$ |
| $>3$ | $30(17 \%)$ | $17(17 \%)$ |
| Total | $178(100 \%)$ | $101(100 \%)$ |

Figure 17.10. Comparison of the referential distance between SV/SVO and VS/VOS word orders: Mtext3

Since it is often mentioned in the literature on topic continuity that pronouns are more topical than full NPs, I then specified a further distinction by quantifying the subjects that occurred as full noun phrases (N1) and those occurring as pronouns (P1). This was done for both word orders and is tabulated in Figure 17.11 for VS/VOS and Figure 17.12 for SV/SVO.

| RD VS/VOS | N1 | P1 |
| :--- | :--- | :--- |
| $1-3$ | $57(77 \%)$ | $27(100 \%)$ |
| $>3$ | $17(23 \%)$ | $0(0 \%)$ |
| Total | $74(100 \%)$ | $27(100 \%)$ |

Figure 17.11. Comparison of the $S$ as $N 1$ and $P 1$ in VS/VOS word order

| RD SV/SVO | N1 | P1 |
| :--- | :--- | :--- |
| $1-3$ | $72(72 \%)$ | $76(97.5 \%)$ |
| $>3$ | $28(28 \%)$ | $2(2.5 \%)$ |
| Total | $100(100 \%)$ | $78(100 \%)$ |

Figure 17.12. Comparison of the S as N1 and P1 in SV/SVO word order

Rau (1997:382) in her discussion of word order variation in Atayal (Austronesian, Taiwan) states that:

The results of VARBRUL runs indicate that topicworthiness is the only factor that has any significant effect on word order variation. Proper nouns strongly favor the SV order, followed by common nouns, while personal pronouns strongly disfavor the SV order. Topicworthiness corresponds well with Givón's topic continuity. In other words, VS order is associated with topic continuity while SV order is associated with topic discontinuity.

However, in Pendau, both word orders reflect similar statistics. This is contrary to the assumed expectation that the post-verbal subject would reflect a more discontinuous nature. Not surprisingly nearly all of the absolute case pronouns (P1) were referential
within the last three clauses. However, what is surprising is that $77 \%$ of 74 tokens for the full noun subjects in VS/VOS orders (N1) had a RD $<4$.

Figure 17.13 shows that full noun phrase subjects occur more commonly than pronominal subjects in the VS/VOS word order, while in the SV/SVO word order there are roughly equal numbers of full noun phrase and pronominal subjects.

|  | SV/SVO | VS/VOS |
| :--- | :--- | :--- |
| N1 (etc.) | $89(52 \%)$ | $74(73 \%)$ |
| P1 | $81(48 \%)$ | $27(27 \%)$ |
| Total | $170(100 \%)$ | $101(100 \%)$ |

Figure 17.13. Comparison of total occurrences of N 1 and P 1 in SV/SVO and VS/VOS word orders

When the grammatical subject is in the post-verbal position it is more likely to occur as a full noun phrase than as a pronoun. This distinction demonstrates that the full noun phrase is favoured in about a $3: 1$ ratio when the subject is in the post-verbal position. Since the referential distance of a subject is approximately the same when comparing preverbal and post-verbal subject clause constructions, it must be (provisionally) concluded that the difference between the use of VS/VOS and SV/SVO word orders has nothing to do with topic continuity. This indicates that there must be an independent factor apart from topic continuity which results in the difference between word orders. Further research is needed to determine what might cause word order variations. Obvious possibilities include the placement of NPs in different positions for the purposes of emphasis, or the positioning of heavy NPs in places where their use is less awkward, etc.

### 17.4.4 Does Pendau have a 'passive'?

Givón (1994) sets out a number of criteria for determining which structures in a language might be labelled as passive, and how to distinguish passives from inverse constructions. The first criteria are related to topicality and are measured by RD and TP of A. According to Givón, passives are used when A arguments are not topical by either measure. We have already seen in $\S 17.4 .3 .1$ that the ni- construction in Pendau fits neither of these criteria, and is thus not a good candidate for a passive. Givón (1983:23) also states that:
...the text frequency of passives is much much lower than that of actives, somewhere between 5-20 percent of all main, affirmative, declarative clauses...This by itself tags the passive as a discontinuous device in discourse, by virtue of its rarity.
In the texts analysed in §17.4.3.1, the ni- construction was used over $20 \%$ more often than the nong- construction. Table 3e showed a total of 243 ni-clauses in all texts versus a grand total of 200 nong- clauses. By Givón's frequency criterion then, the Pendau niconstruction makes a better inverse than it does a passive.

Givón gives yet another quantitative diagnostic for distinguishing passive from inverse voice. This diagnostic is the difference in frequency of omission of A arguments in each kind of structure (1994:12).

Figures 17.14-17 display the total occurrences for the four possible occurrences or nonoccurrences (labelled as overt and covert respectively) for nong- and ni- clause constructions. In Figures 17.14-17 it can be seen that the A argument is rarely omitted (or covert) in the ni- clause construction, and in fact the A argument is more often omitted in a nong- construction in some of the texts. ${ }^{11}$

| Mtext1 | AV | IV |
| :--- | :--- | :--- |
| 1 Both A/P Overt | 11 | 13 |
| 2 A Overt, (P Covert) | 1 | 9 |
| 3 P Overt, (A Covert) | 2 | 5 |
| 4 Both A/P Covert | 0 | 1 |

Figure 17.14. Frequency of overt/covert $A / P$ arguments in Mtext1

| Mtext2 | AV | IV |
| :--- | :--- | :--- |
| 1 Both A/P Overt | 25 | 35 |
| 2 A Overt, (P Covert) | 11 | 20 |
| 3 P Overt, (A Covert) | 3 | 9 |
| 4 Both A/P Covert | 0 | 3 |

Figure 17.15. Frequency of overt/covert $\mathbf{A} / \mathbf{P}$ arguments in Mtext2

| Mtext3 | AV | IV |
| :--- | :--- | :--- |
| 1 Both A/P Overt | 28 | 69 |
| 2 A Overt, (P Covert) | 16 | 31 |
| 3 P Overt, (A Covert) | 15 | 3 |
| 4 Both A/P Covert | 5 | 0 |

Figure 17.16. Frequency of overt/covert $\mathbf{A} / \mathbf{P}$ arguments in Mtext3

| Mtext4 | AV | IV |
| :--- | :--- | :--- |
| 1 Both A/P Overt | 6 | 15 |
| 2 A Overt, (P Covert) | 1 | 17 |
| 3 P Overt, (A Covert) | 8 | 0 |
| 4 Both A/P Covert | 2 | 1 |

Figure 17.17. Frequency of overt/covert $\mathrm{A} / \mathrm{P}$ arguments in Mtext 4

[^117]It is clear then, that the Pendau ni- construction is better treated as an inverse than as a passive by all of the criteria discussed by Givón.

The stative construction is a more likely candidate for passive (since it clearly fits all Givón's criteria for a passive outlined above). Figures 17.18-21 demonstrate that the 'agent' or 'effector' (E) that brought about the states described in stative constructions ${ }^{12}$ is a more likely oblique candidate that fits the profile for frequency of occurrence of the agent of a passive voice construction than the A from the inverse voice constructions. Su refers to the stative verb subject which is an undergoer subject. The E argument only occurs 5 times in a main clause while the Su occurs 62 times in all of these texts.

| Mtext 1 | Su | E |
| :--- | :--- | :--- |
| $1-3$ | 14 | 0 |
| $>3$ | 0 | 0 |

Figure 17.18. RD of stative clause arguments in Mtext1

| Mtext 2 | Su | E |
| :--- | :--- | :--- |
| $1-3$ | 14 | 2 |
| $>3$ | 4 | 0 |

Figure 17.19. RD of stative clause arguments in Mtext2

| Mtext 3 | Su | E |
| :--- | :--- | :--- |
| $1-3$ | 24 | 3 |
| $>3$ | 4 | 0 |

Figure 17.20. RD of stative clause arguments in Mtext3

| Mtext 4 | Su | E |
| :--- | :--- | :--- |
| $1-3$ | 2 | 0 |
| $>3$ | 0 | 0 |

Figure 17.21. RD of stative clause arguments in Mtext4

[^118]|  | \# of stative clauses | \# of total clause types |
| :--- | :--- | :--- |
| Mtext1 | $6(6.4 \%)$ | 94 |
| Mtext2 | $24(10.9 \%)$ | 221 |
| Mtext3 | $30(8.5 \%)$ | 354 |
| Mtext4 | $2(2.6 \%)$ | 77 |
| Total Clauses | $62(8.3 \%)$ | 746 |

Figure 17.22. Total number of stative clauses in Mtexts 1-4
Figure 17.22 shows that the relative frequency of stative clauses compared with clauses of other types also fits Givón's criteria for a passive very well. Out of 746 clauses in these four texts only 62 clauses (or $8.3 \%$ ) were stative clauses.

To summarise this section then, it is clear that by all of Givón's criteria, the niconstruction in Pendau is much better treated as an inverse construction than as a passive. If we were to look for a discourse functional equivalent for a passive in Pendau, a much better candidate for such a structure would be the stative construction.

## 18 Discourse features and structures of Pendau genres

### 18.1 Introduction

This chapter describes the structure and characteristics of various genres primarily following the discourse or text linguistics practised by Longacre (for example 1983). Various genres are examined and compared, although most of the detailed discussion concerns itself with the narrative genre. A highlight of the narrative genre discussion is identifying the verb rank scheme for narrative genres following Longacre's methodology (1989a, 1989b).

I follow Longacre (1983, and see Larson 1984:365-388 for a similar viewpoint) and make a broad categorisation distinguishing between monologue and repartee (dialogue or conversation). The section on monologues (§18.2) further categorises monologue genres following Longacre's typology. The section on non-monologue genres (§18.3) briefly mentions live conversation and dialogues (reported speech), discusses riddles as a ritualised repartee, and also briefly mentions kayori singing (which co-occurs with dancing).

### 18.2 Monologue genres

Monologue is by definition the speech activity of an individual. Longacre (1983) provides a useful typology of monologue genres which I follow here (see Figure 18.1).

| $\begin{array}{r} + \text { contingent } \\ \text { succession } \end{array}$ | + Agent orientation | - Agent orientation | + projected time |
| :---: | :---: | :---: | :---: |
|  | NARRATIVE | PROCEDURAL |  |
|  | Prophecy | How-to-do-it |  |
|  | Story | How-it-was-done | - projected time |
| - contingent succession | BEHAVIORAL | EXPOSITORY | + projected time |
|  | Hortatory | Budget proposal |  |
|  | Promissory | Futuristic essay |  |
|  | Eulogy | Scientific paper | - projected time |

Figure 18.1. Longacre's genre typology for monologue (adapted from Longacre (1983:5) and Edmondson and Burquest 1998:84)

A basic feature of Longacre's genre typology is the use of four parameters. The two most basic are: contingent temporal succession and agent orientation. Contingent (temporal) succession refers to whether or not a discourse must normally be chronological or not. Agent orientation refers to whether a discourse type depends for the most part on the continuity and referential identity of agents throughout a discourse or not. These two parameters then create four broad discourse types (see Figure 18.1): narrative, procedural, behavioural, and expository. The third parameter, projected time, then subdivides the genres, which are either plus or minus projected time. Projection roughly correlates with future versus non-future events. Longacre (1983:4) defines projection:

Projection has to do with a situation or action which is contemplated, enjoined, or anticipated but not realized.
The fourth parameter, tension (not shown here), has to do with the notional plot struggle or other polarisation employed providing further refinements (Longacre 1983:4-6). ${ }^{1}$

### 18.2.1 Narrative genres

The narrative genres examined in this section are all different kinds of stories. Narrative stories can be sub-typed as folk stories, mythology, and personal experience (following Payne 1997). All of these sub-types have a similar linguistic surface structure (with the exception that personal experience stories may be told in the first person), and are largely distinguished by the kinds of participants involved (for example whether supernatural beings are involved, or whether animals are personified, etc.).

Folk tales clearly have a plot structure (with tension, climax, etc.). Although personal experience stories may also have a plot, they typically are a chronological series of events that happened to an individual(s) within a specific time frame.

### 18.2.1.1 Paragraph structure

Longacre (1968, 1979, 1983, 1985, 1989a, 1989b) recognises the paragraph as a linguistic structure distinct from the orthographic paragraph. Generally a paragraph has a thematic coherence which is set apart from surrounding text by cohesive linguistic signals which mark it as a separate linguistic unit. Defining a paragraph in Pendau is rather elusive, since there is no single defining surface marker which absolutely marks the beginning or end of a paragraph. However, a case can often be made for paragraph divisions based on the convergence of multiple linguistic signals. The discussion in this section applies generally to narrative discourse, but probably applies to many other genres as well. ${ }^{2}$

A paragraph is typically a unified span of two or more clauses. ${ }^{3}$ The demarcation of a new paragraph consists of at least one or more of the following linguistic signals within the

[^119]first clause or sentence: ${ }^{4}$ change in participant(s), change in location, change in time, change in setting, use of certain sequential relators (for example ila uo 'after that'), use of the completive enclitic $=m o$ (in conjunction with the use of a sequential relator), a direct speech margin which indicates a new speaker is speaking (§15.4), resumptive repetition (§17.3.1.3), and re-introduction of an NP (including left-dislocation, §17.2.2). Typically the first clause of a new paragraph has $\mathrm{SV}(\mathrm{O})$ word order (although $\mathrm{V}(\mathrm{O}) \mathrm{S}$ is possible).

Paragraph boundaries can also be negatively inferred. That is, there are certain linguistic devices that must occur paragraph internally. The use of third person pronouns and zero anaphora usually mark a tight topical continuity. Many of the propositional relations' connectors (or relators) such as ai 'but' can never occur as a transition between paragraphs (see $\S 15.6$ for a list of propositional relations and their relators). Tail-head repetition is another linguistic device that only occurs paragraph medially. In addition to the surface structure signals, paragraphs have a semantic or thematic unity that provides some cohesion within its scope. Internal paragraph structure is marked with the high continuity of a theme (see discussion on topic continuity in §17.4). This is often reflected by the use of zero anaphora and third person pronouns.

The completive aspectual enclitic $=m o$ frequently co-occurs in the same sentence with ila uo or sampanyo (or other temporal sequential relators). Another striking characteristic of this clitic is that once a clause uses the completive $=m o$, it often 'chains' in subsequent clauses or sentences providing a clustering effect of completed events. ${ }^{5}$ Figures 18.2-5 illustrate the frequency of the aspectual completive $=m o$ when it co-occurs in a sentence with a temporal relator. The label VP indicates that the clitic is bound to a verb, and the label Neg indicates the clitic is bound to a negative that precedes the verb. ${ }^{6}$

| MText1 | ila uo | jari | sampanyo | apa | dungku | karna | without relator | Total = mo |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gloss | 'after that' | 'so' | 'after that' | 'because' | 'then' | 'because' | -- | -- |
| VP | 2 | 3 | 0 | 2 | 2 | 1 | 2 | 12 |
| Neg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Figure 18.2. Frequency of completive in Mtext1

[^120]| MText2 | ila uo | jari | sampanyo | apa | dungku | saba' | bai uo | paey | without <br> relator | Total <br> =mo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Gloss | 'after <br> that' | 'so' | 'after that'' | 'because <br> , | 'then' | 'because' | 'after <br> that' | 'then' | $-{ }^{--}$ | -- |
| VP | 15 | 7 | 9 | 1 | 0 | 3 | 5 | 1 | 16 | 57 |
| Neg | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |

Figure 18.3. Frequency of completive in Mtext2

| MText3 | ila uo | jari | sampanyo | apa | dungku | saba' | bai <br> uo | paey | without <br> relator | Total <br> =mo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Gloss | 'after <br> that' | 'so' | 'after that' | 'because' | 'then' | 'because' | 'after <br> that' | 'then' | -- <br> -- <br> VP 11 | 5 |
| Neg | 0 | 5 | 10 | 0 | 2 | 6 | 2 | 60 | 101 |  |

Figure 18.4. Frequency of completive in Mtext3

| MText4 | ila uo | jari | sampanyo | apa | dungku | saba' | bai <br> uo | paey | without <br> relator | Total <br> =mo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Gloss | 'after <br> that' | 'so' | 'after that' 'because' | 'then' | 'because' | 'after <br> that' | 'then' | - | -- <br> VP 00 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 12 | 12 |  |  |  |
| Neg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |

Figure 18.5. Frequency of completive in Mtext4

### 18.2.1.2 Introduction and settings

The beginnings of folk tales are marked by the usage of formulaic introductions to the story. Many folk tales are introduced by the phrase 'I am bringing a story about X', as in (1). Another common way to begin a folk tale is by starting the first clause with the existential verb diang, as in example (2). If the first clause contains an explicit mention of uma-umanong 'story', then the next sentence usually presents the initial setting of the story with diang (see §6.6.2.1 and §9.6.2 for some discussion on diang and the use of existential words as presentational).

| Ha'u | mongkomung | uma-umanong | tonakasi-'asi. |
| :--- | :--- | :--- | :--- |
| a'u | M-pong-'omung | uma-umanong | to-no-kasi-'asi |
| 1SG/AB | IR-SF/PT-carry | RED-story | AGNM-ST/RE-RED-poor |

'I am bringing a story about the poor ones.'
(2)

| Diang | unga | nu'olongian | nelampa | nosumombal. |
| :--- | :--- | :--- | :--- | :--- |
| diang | unga | nu='olongian | $N$-pe-lampa | $N$-po ${ }_{1}$-um-sombal |
| EXIS | child | CN/GE=king | RE-SF/DY-travel | RE-SF/LCM-TEL-sail |

'There was once a child of the king who went travelling and sailed off.'
[mdtext16.pin 002]

Personal narratives generally begin with some orientation about the time and situation of the story, as in (3), and do not always use the existential diang. However, some stories, may use it to begin a narrative as in (4).
(3) Jarita'u watunyo $a^{\prime} u$ nomoia sono siama niLori.
jarita='u uatu=nyo $\quad a^{\prime} u \quad N$-po ${ }_{1}$-moia sono siama ni=Lori
story $=1 \mathrm{SG} / \mathrm{AB}$ time $=3 \mathrm{SG} / \mathrm{GE} 1 \mathrm{SG} / \mathrm{AB}$ RE-SF-live COM father $\mathrm{PN} / \mathrm{GE}=\mathrm{L}$.
'This is my story about the time when I lived with Papa Lori.' [cekuphil.int 001]
(4) Diang seeleo siama niEl o niArmin mene' nombulagon.
diang so-eleo siama ni=El o ni=Armin mene' N-pong-bulagon
EXIS ONE-day father $\mathrm{PN} / \mathrm{GE}=\mathrm{E}$. and $\mathrm{PN} / \mathrm{GE}=\mathrm{A}$. go.up $\mathrm{RE}-\mathrm{SF} / \mathrm{PT}-\mathrm{rattan}$
‘There was one day that El's father and Armin's father went up to get rattan.'
[bulagon 001]
Sometimes the introduction to a story serves as the setting and the narrative immediately plunges into the first episode, while in other stories there may be more background information that follows the introductory sentence and which provides a setting for one or more episodes. Settings may provide important background information. For example, in (5), the reason the flesh-eater is called panganganta is because he eats raw anta meat. ${ }^{7}$

| Toreinangonyo | mokurang | tomongongo, | sura |
| :--- | :--- | :--- | ---: |
| to $=$ ro-inang $=$ nyo | mo-kurang | to $=M$-po $o_{1}$-ngongo | sura |
| RM=IV/IR-eat $=3$ SG/GE | ST/IR-less | $\mathrm{RM}=\mathrm{IR}$-SF/FA-cook | only |


| raantanyo | bai | bau | nudagat | ape | bau | nuatang. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ro-anta=nyo | bai | bau | nu=dagat | ape | bau | nu=atang |
| IV/IR-raw=3SG/GE | like | fish | $\mathrm{CN} / \mathrm{GE}=$ ocean or | fish | $\mathrm{CN} / \mathrm{GE}=$ above |  |

panganganta.
panganganta
flesh-eater
'That which he/she/it eats is less than cooked, he/she/it eats food raw like ocean fish or freshwater fish. That is why people call him/her/it the panganganta ('flesh-eater').'
[troll.int 005-007]

### 18.2.1.3 Peak and climax

Longacre (1968, 1983; see also Larson 1984, Edmondson and Burquest 1992, Payne 1997) has long noted that narratives frequently mark the notional climax of a plot by

[^121]specific kinds of linguistic devices (many of these devices have been remarked on and are well known in literary circles as well). He states that the peak is the surface structure representation of the notional climax; here is his elaboration of peak (1983:24):

> I use the term PEAK to refer to any episode-like unit set apart by special surface structure features and corresponding to the Climax or Denouement in the notional structure. Where the surface structure distinguishes two such surface units which encode both of these notional structure units, I posit Peak (Climax) versus Peak (Denouement). Climax and/or Denouement may, however, be marked in no special way in the surface structure, but may on the contrary simply encode as further surface structure episodes. When both are unmarked, the surface structure of the narrative is EPISODIC even though there are climax and denouement in the notional (plot) structure.

Longacre further describes a linguistic 'bag of tricks' (1983:25) that can be generalised as a 'zone of turbulence'. Some of these are described here for peak (1983:25-26):

Peak (and Peak') essentially is a zone of turbulence in regard to the flow of the discourse in the preceding and following parts of the discourse. Routine features of the event-line may be distorted or phased out at Peak. Thus, the characteristic event-line tense/aspect may be substituted for by another tense/aspect. Alternatively, the characteristic tense/aspect of the main line of a discourse may be extended to unexpected uses at Peak. Particles which elsewhere mark rather faithfully the event-line of a story may suddenly be absent. Routine participant reference may be disturbed. In brief, Peak has features peculiar to itself and the marking of such features takes precedence over the marking of the main line-so that the absence of certain features or even analytical difficulties can be a clue that we are at the Peak of a discourse.

Longacre (1983:26-38) identifies other 'tricks' as: rhetorical underlining (repetition, slowing down action, etc.), concentration of participants, heightened vividness, change of pace, change of vantage point and/or orientation, and the incidence of particles and onomatopoeia.

In the folk tale by siDidi (a story about seven men who went to gather rattan-an untitled folk tale), the peak of the narrative has an unusual grammatical construction which has not been documented anywhere else in my corpus, but when checked in elicitation it was not considered to be at all unusual. This sentence is illustrated in (6) where ni-ra-tinjun(g)-an 'stung' has an unusual affix combination ra-/-an which creates a multiple or iterative aspectual affect (see §13.4.1.4). In addition to this the root verb tinjung 'sting' is repeated twice after the first instance.

| Nedea | nokurang | sampesuvu | unganyo | togogenyo |
| :--- | :--- | :--- | :--- | :--- |
| no-dea | no-kurang | sampesuvu | unga=nyo | togoge=nyo |
| ST/RE-many | ST/RE-less | sibling | child=3SG/GE parent=3SG/GE |  |


| rapinyo | jojoo | niratinjunan, | nitinjung, | nitinjung |
| :--- | :--- | :--- | :--- | :--- |
| rapi=nyo | jojoo | ni-ra-tinjung-an | ni-tinjung | ni-tinjung |
| spouse=3SG/GE | all | IV/RE-ITV-sting-ITV | IV/RE-sting | IV/RE-sting |


| jojoo | nutatambuang | uo | asi. |
| :--- | :--- | :--- | :--- |
| jojoo | nu=ta-tambuang | 'uo | 'asi |
| all | CN/GE=RED-bumble bee | yonder | too.bad |

'Every one (lit. many less) of his sibling's children, his parents, and his spouse all were stung, and stung and stung, all (of them) by the bumble bees, too bad.'
[fktale.doc]
Another well-known literary device that occurs in this story is the gathering of a lot of participants in the peak. Figure 18.6 illustrates a screen capture (from the MDA computer program) of a view of the tracking of participants 1-30 (from left to right) and clauses 1090 (top to bottom). Participants are the various geometrical shapes (dots, squares, circles, etc.). The two main participants are easily identified by tracking lines number 2 and 3 . Other participants appear fairly randomly until we get near the bottom of this screen view (which is also near the end of the folk tale). Clause 85 is the unusual grammatical construction presented in (6) above, and here we see a gathering of the participant's family. The zone of turbulence can be seen here in the preceding clauses as the number of participants increases for a number of clauses between 65 and 85 .


Figure 18.6. Abstract profile of the peak of the Mtext1 (clauses 10-90)

### 18.2.1.4 Finis

Finis is the surface structure realisation of the notional closure of a narrative story. Not all stories have this, but when it occurs it either conveys a cultural value, ideal or evaluation by the storyteller. Example (7) ends the folk tale which summarises one cultural ideal, and in fact suggests that the origin of this particular saying comes from this cultural ideal.

| (7) | Jari uomo | sanu | ono | "kedo |
| :--- | :--- | :--- | :--- | :--- |
| jari | 'uo=mo | sanu | ono | kedo |
| so | yonder=COMP | umm | if | move |


| ito | ndau | mombosi' | sono | ribengkel." |
| :--- | :--- | :--- | :--- | :--- |
| 'ito | ndau | mo-mbosi' | sono | ri=bengkel |
| 1PL.INC/AB | NEG | ST/IR-good | COM | LOC=female |

'So that is, umm, if/when "(This shows) our behaviour/intent (lit. movement) is not good towards a woman."
[fktale01.txt 037]

### 18.2.1.5 Semantic structural analysis of a folk tale

Following the theory of Semantic Structural Analysis (see Beekman et al. 1981, Larson 1984, Beekman and Callow 1974, Headland 1993, Roberts 1997, Levinsohn 1999), clauses and groups of clauses can be seen to form propositional relations that form coherent units (see Figure 15.2 for a listing of interclausal relators). Using this theory I have made a preliminary analysis of a short folk tale (Mtext1- a story about seven men who went to gather rattan, by siDidi) as shown in Figure 18.7 (the text and English translation are provided in Appendix 10). The kind of relations found in a narrative genre are strikingly different from those found in the hortatory genre. A semantic structural analysis of a typical adat prayer is given in Figure 18.11. A comparison of these two analyses highlights the kinds of distinctions that are made in these two genres.


Figure 18.7. Semantic structural analysis of Mtext1 folk tale (the left side precedes the right side; see Appendix 10 for further details)

### 18.2.1.6 Verb rank scheme in narrative discourse

Longacre has proposed 'a hierarchy of events definable in terms of the degree that they are essential to the text' (Edmondson and Burquest 1992:90). This hierarchy suggests that there is a continuum from dynamic to static that a narrative genre uses to encode the main events of the story (see Figure 18.8). The less action that is involved in the clause or sentences means that the morphosyntax of a clause or sentence that is used will be less dynamic in its coding. For Longacre 'event' means that a clause will contribute to moving the storyline forward.

```
1 Storyline
    2 ~ B a c k g r o u n d e d ~ a c t i o n s / e v e n t s ~
            3 Setting (exposition)
                4 Irrealis (negatives and modals)
                    5 Cohesion
                            6 \text { Setting (exposition)}
                                    Irrealis (negatives and modals)
                                    8 \text { Evaluations (author intrusions)}
                                    Cohesive and thematic
```

Figure 18.8. Etic bands of salience in narrative (adapted from Longacre 1989a)

1 Storyline
2 Backgrounded actions/events
3 Setting (exposition)
4 Irrealis (negatives and modals)
5 Cohesion
Figure 18.9. Verb rank scheme for Pendau narrative genres
In Figure 18.9 I propose a verb rank scheme for Pendau following Longacre's proposal with five bands for the narrative genre. The underlying analysis for this scheme is presented in some detail in Figure 18.10 and shows the application of Longacre's model to the Pendau language. The first thing that should be noted is that the first three bands are constituted of those verbs and morphosyntactic features that contribute to a more dynamic construction. This is marked with the vertical arrow. This also fits well with the structure of the verbs as presented in $\S 12.2$ in Figure 12.2. It is clear that nearly all verbs in Pendau can be marked morphosyntactically with either irrealis or realis, the verb rank scheme accurately models the way a narrative text moves forward in the event line versus the nonevent line.

### 18.2.2 Procedural genre

Procedural genre could be labelled a 'how-to-do-it' genre. A prominent feature of the procedural genre is the use of tail-head linkage through most of a text. See §17.3.1.2 for a discussion of tail-head linkage, and example for a sequence of four sentences which are
from a procedural text (a text which describes the steps in butchering a cow, selling the meat, etc.). Procedural texts can be given either as a procedural narrative of an actual event (as in examples in $\S 17.3 .1 .2$ ) or as a generic method to do some activity. Both of these procedural types are presented with tail-head linkage, but are marked by a difference in the use of realis and irrealis (this agrees with Longacre's genre typology with its use of the parameters of minus and plus projected time respectively in Figure 18.1). A procedural narrative is given in realis, and a generic procedural activity is marked in irrealis (§13.2.3.5; also see Quick 1989a.

| Realis: <br> transitives <br> dynamic <br> denominal <br> directional | Band 1 <br> Storyline-action <br> oriented | Completive aspect <br> (verb classes 1-6) |
| :--- | :--- | :--- |
| Stative | Band 2 <br> Background | Stative verb class <br> Transitives w/ continuative aspect |
| Verbless <br> Existential | Band 3 <br> Setting | Existential diang <br> Copula jari ‘become' <br> Verbless clauses |
| Irrealis: <br> transitives <br> dynamic <br> denominal | Band 4 <br> Irrealis <br> (sense of participant <br> involvement) | Irrealis, negation, direct speech <br> exchanges, semi-auxiliary moluar <br> 'want' |
|  | Band 5 <br> Cohesion | Adverbial adjuncts <br> Resumptive repetition <br> Tail-head linkage |

Figure 18.10. Details of the verb rank scheme in Pendau according to their bands

### 18.2.3 Adat prayer - hortatory genre

Adat prayers can be classified typologically as an hortatory genre (behavioural). I have only a small sampling of nine adat ${ }^{8}$ prayers, called gane, that were given at the Pendau inoculation rite of passage in 1989 (see Quick 1989a). This adat ceremony began early in the evening of one day and finished mid-day of the next. The adat specialist (iso-isong, in Indonesian 'dewan hadat') went to each child and prayed to the ancestors of each child while performing a ceremonial washing (called langgir). These prayers involved warnings

[^122]and requests and formally opened up the public part of the inoculation rite of passage. ${ }^{9}$ This adat ceremony is called pali, however, Pendau often refer to this ceremony simply as mopopoadat or nipopoadat which is simply a denominalisation of the noun adat 'traditions, cultural laws' and means to undergo the expected Pendau adat rituals. ${ }^{10}$ Figure 18.11 shows a semantic structural analysis of one adat prayer (the semantic structure of the hortatory genre is clearly distinct from that of the narrative genre, compare with Figure 18.7). Example (8) illustrates that each adat prayer usually has an introduction, a body, and a closure.

## (8) Outline of adat prayers:

Opening: The initiate is identified by name and/or by name of deceased relative(s). Optionally: background, purpose and details of the pali; ancestry of mixed Pendau (with Tajio, Kaili, or Dampelas bloodlines) is briefly delineated.
Body: Protection against evil is requested, so that a long life may be granted. Usually a key phrase 'forty-four kinds of evil' is mentioned. Deceased relatives are often requested not to harm the initiates.
Closure: A warning not to break adat laws is sometimes given to the initiate. Optionally: long life is requested; background, purpose, and details of the pali; the specialist's speech specifically states that if he doesn't say enough or says too much that it is to be ignored and what he says elsewhere will also cover all the initiates. (Sometimes the body serves as the closure.)

Each prayer usually begins by identifying the initiate by name and/or by identifying the living parents, as in (9). This is usually followed by addressing one or more deceased family relatives (which in some of the prayers are identified as a malaeka' 'supernatural being, angel, spirit', also in (9)).

| Ee moo siJuus. | Ee malaeka' | Janainta, ee | malaeka' | niSalangku |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ee moo | si $=$ Juus | ee malaeka' | J. | ee | malaeka' | ni=Salangku |
| hey this | $\mathrm{PN} / \mathrm{AB}=\mathrm{J}$. hey spirit | J. | hey | spirit | $\mathrm{PN} / \mathrm{GE}=\mathrm{S}$. |  |


| urampe | jojoo | siinanyo | sibe'enyo | ee |
| :--- | :--- | :--- | :--- | :--- |
| 'u-rampe | jojoo | siina=nyo | si=be'e=nyo | ee |
| 1SG.IV/IR-mention | all | mother=3SG/GE PN/GE=g.mother=3SG/GE hey |  |  |


| malaeka' | niMalansabu, | emu | ndau | diang | bai | sembengi-sembengi |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| malaeka' | ni $=$ Malansabu | 'emu | ndau | diang | bai | so-mbengi-sembengi |
| spirit | PN/GE $=$ M. | 2PL/AB | NEG | EXIS | like | ONE-evening-RED |


| rarampe | mami | ami | manusia | moo | to'umai |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ro-rampe | mami | 'ami | manusia | moo | to $=$ 'u-mai |
| IV/IR-mention | 1PL.EXC/GE | 1PL.EXC/AB | human | here | $\mathrm{RM}=$ SF-come |

[^123]| ridunia | karna | emu | ri'uma'omo | riombo | siongomo |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ri=dunia | karna | emu | ri='u-ma'o=mo | ri=ombo | siong=mo |
| LOC=world | because | 2PL/AB | LOC=SF-go=COMP | LOC=happy | place=COMP |

'Hey, this (child) is Juus. Hey spirit of Janainta, hey spirit of Salangku, I mention all the mothers and grandmothers, hey spirit of Malansabu, you all are not like the evenings we mention, we are humans here that have come to the world, because you all have gone on to the happy place.'
[monggane 066-067]


1) Hey, hey, this child of Ambo Dola I wash-ceremonially here. 2) There isn't like what I see that is from my stock all my grandsons and granddaughters hey this is what we take together with the adat. 3) That is not only like the Pendau adat (and) there is not only the Tajio adat that we take together. 4) So don't interfere with the adat! 5) Don't interfere! 6) Because you do not take those who are stepchildren. 7) You don't umm all of us are united as one whatchamacallit, the two adats are taken as only one. 8/9) There isn't, children this isn't wrong for us to do this. 10) Don't bother them! 11) Don't wound! 12) Don't cripple! 13) Don't be blind! 14) Don't seek harm of any kind of thing! 15) Don't bring evil intent of any kind upon these children! 16) Bring life to my grandchild. 17) Don't bring anything different. 18) Not one different thing on them here. 19) The Dampelas grandchildren are not more canari trees but are the nephews and nieces inside this house. 20) Hey all of them are my children my grandchildren that you see. 21) Don't come like a person. 22) Because all of my stock will be given their age to live tomorrow.

Figure 18.11. Semantic Structural Analysis of adat prayer

Most of the prayers request that none of the forty-four evil or wicked things ${ }^{11}$ in life should ever occur to the initiate (phrased usually with the negative prohibitive nyaa 'don't'), as in (10). This is usually expanded to include any possible disaster or disease, etc. Often the spirits are requested not to bother the life of the children, as in (11). Each prayer is generally closed with a positive request that each child should be given a long life and not to bring to them sickness or pain, as in (12). Some of the prayers include background for the existence and purpose of the adat ritual, and specific features such as kayori will be performed.
(10)

| Sinina | ja-jaat | bisa | ila | apampulu | rapat. | Ndau | diang | mo'ono |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| sinina | ja-jaat | bisa | ila | apa-mpulu | rapat | ndau | diang | mo-'ono |
| all | RED-wicked | poison | ABL | four-tens | four | NEG | EXIS | ST/IR-hit |


| rimo'upu'u | jojoo. | Nanabu | risantanonyo |  |
| :--- | :--- | :--- | :--- | :--- |
| ri=mo'upu='u | jojoo | no-nabu | ri=so-ng-tano=nyo |  |
| LOC=g.child | all | ST/RE-fall | LOC=ONE-LIG-ground=3SG/GE |  |
| soogonyo |  | sambaliang |  | nualam |


| rirairava | ralampanyo | sinina | jaat. | Bisa-bisa | sagala | rupa |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ri $=$ rairava | ro-lampa=nyo | sinina | jaat | bisa-bisa | sagala | rupa |
| LOC=weather | IV/IR-travel=3SG/GE | all | wicked | RED-poison | all | kinds |


| ndau | diang | mo'ono | rimo'upu'u. |
| :--- | :--- | :--- | :--- |
| ndau | diang | M-po $o_{1}$-'ono | ri=mo'upu $=$ ' $u$ |
| NEG | EXIS | IR-SF-hit | LOC $=$ g.child $=1 \mathrm{SG} / \mathrm{GE}$ |

'All kinds of evil and poisons from the fourty-four, will not strike any of my grandchildren. Fall onto the ground and the water, the movement of big nature in the weather will carry all of the evil. All kinds of poisons will not strike my grandchildren.' [monggane 011-014]
(11) Nyaamo roboyoni ambo’ nuunga!
nyaa=mo ro-boyong-i ambo' nu=unga
don't=COMP IV/RE-bother-DIR breath CN/GE=child
'Don't (you) bother the child's breath!'
[monggane 023]
(12)

| Nibagii | miu | umur, unga | nibagii | dale, |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ni-bagi-i | miu | umur | unga | ni-bagi-i | dale |
| IV/RE-give-DIR | 1PL/GE age | child | IV/RE-give-DIR | gift |  |

[^124]| nyaamo | raatora' | miu | mai | pee! |
| :--- | :--- | :--- | :--- | :--- |
| nyaa $=$ mo | ro-ator-a' | miu | mai | pee |
| don't=COMP | IV/IR-deliver-TZ | $1 \mathrm{PL} / \mathrm{GE}$ | come | sick |
| 'You (pl.) give to the child, give a gift to the child, don't bring sickness to the child.' |  |  |  |  |

[monggane 054]
The adat specialist speaks with a louder voice than in a private conversation (so the 100 plus people present can no doubt hear him) or when a folk tale is told. Some clauses are strung together without normal intonation pauses, and some words or short clauses are spoken in a somewhat staccato pace so that each of these units is clearly emphasised.

### 18.3 Non-monologue genres

This section describes three types of non-monologue genres. These include: kayori, a kind of ritual singing ( $\S 18.3 .1$ ); conversation or dialogue ( $\S 18.3 .2$ ); and riddle exchanges (§18.3.3).

### 18.3.1 Ritual singing-kayori

Kayori is a kind of responsive ritual singing and dancing that is usually performed in association with Pendau cultural rituals or ceremonies (see Quick 1989a). Kayori appears to be a means of passing down new and old stories and cultural values in an entertaining fashion. Although I have several hours of kayori singing recorded I have not yet begun a serious analysis of the material. One problem that will occur in a future analysis is the fact that kayori involves the use of more than one language, and in fact involves switching from one language to another (my impression is that this switching could occur as frequently as every clause, and that there are usually at least three to four languages involved). Himmelmann (pers. comm.) has made similar observations about kayori in other Tomini-Tolitoli languages as well.

Kayori singing is performed with one expert leading the singing and dancing. The dancing is performed in a circle which at times involves following the leader with one's hands on the back of the person in front, or with everyone facing the centre as they rotate stepping in a slow anti-clockwise circle (see Quick 1989a for a diagram and description of the dancing). There seem to be two main types of singing. One is where the leader's words are echoed after he sings. The other type is where an exchange or 'dialogue' occurs between two groups of participants, often between the women and men. When kayori is performed at the Pendau inoculation rite of passage, it lasts most of the night in order to keep the initiates awake throughout the night preceding the culmination of the ceremony at daybreak (see Quick 1989a). ${ }^{12}$

Atkinson (1979:25) refers to kiyori (cognate to kayori) as used by the Wana people (the Taa language in eastern Central Sulawesi) as a kind of 'pithy verse'. In the Pamona language (sometimes called Bare'e) of the Poso area of Central Sulawesi, kayori is mentioned in a folk tale called Asul Usul Datu Pamona (in Proyek Penerbitan dan Pencatatan Kebudayaan Daerah 1981). A footnote in this folk tale (p. 29) states that

[^125]kayori is a quatrain (pantun) sung at a traditional celebration and is performed responsively between men and women. A drawing is given of the kayori dance which looks very similar to what I observed in the Pendau ritual in 1989. In the Kaili languages of western Central Sulawesi a similar kind of 'riddle' singing with dancing is called rano (Evans pers. comm.). Suwondo (1978) describes the rano as a performance in which the history of their ancestors and hope for salvation in the future is sung responsively.

### 18.3.2 Dialogue and conversation (repartee)

Live conversation is a special kind of interaction between two or more participants. Conversations may include some of the monologue genres mentioned earlier in this chapter. Actual clause structure is in principle not different than found elsewhere in the grammar description. So-called fragments that appear in live conversation (and are sometimes represented in direct speech dialogues) usually turn out to be the continuation or beginning of a dialogue between multiple speakers (see Longacre 1983:43-44).

The techniques for analysis of conversation have become quite sophisticated and are outside the scope of this work. The structure of Pendau is not significantly different from what has already been recorded in narratives (and the dialogues within them). The only data that I have specifically collected and analysed on the topic of conversations are on the riddle games. The unique contribution of the riddle genre is discussed in $\S 18.3 .3$ as a specialised conversation genre.

Dialogues are a common feature which occur in many narrative stories. They are representations of direct speech (or conversation) that are usually introduced by a speech act verb or phrase such as ne-bura '(he/she) said'. These are referred to as 'quotation margin formulas' (see §15.4), while the direct speech itself is referred to as 'discourse complements' (see §15.4.1). Any type of clause or utterance can appear as the direct speech of a dialogue.

### 18.3.3 Riddles

Riddles in Pendau are a specialised form of repartee (dialogue or conversation). In fact riddles could be thought of as a highly specialised language game (see Quick 2007). Longacre (1983:73-74) discusses and analyses normal repartee as a game, so to consider riddles as a kind of elaborate game with its own rules and moves fits rather well with his model of 'repartee as a game'.

Riddles have been an intimate part of Pendau culture as they have always been associated with funerals and memorial services (these are held the first day of a person's death, ${ }^{13}$ the third night, and the fortieth night after a person's death). Riddles have a very ordered structure that is unique when compared to other genres in Pendau. At some time during the service (which may last all night) there is often an organised time to tell riddles. The objective of telling riddles seems to be to provide the bereaving family with encouragement.

Josep Piri (jptext2.jdb) has described some of the events surrounding funerals. (I have witnessed and participated in probably a dozen or more of these myself. My corpus only includes about ten riddle tellings that were recorded in two different villages at only two

[^126]funerals.) Two of the activities that follow the burial are tangke-tangke 'riddles' and lelesan 'string games'. ${ }^{14}$

Any person who has a riddle can tell a riddle, and is referred to as the toponabu 'the one who drops, the dropper'. The riddle is given and then a chance for guesses can be made by anyone participating (called topelolo 'searcher(s)'), and sometimes several people may be talking at once. As with other genres, the structure of the riddle exchange is composed of a beginning (opening), a middle (body), and the end (closure), as elaborated in (13).

## (13) Outline of riddle genre:

Opening: The riddle as a puzzle to be solved is stated.
Body: Guesses and clues are exchanged between the riddler and the guessers.
Closure: The answer to the riddle is given (either by a 'searcher' (guesser) or by the 'dropper' (riddler) in the event it is unsolved).

Sometimes the object of the riddle's puzzle is referred to metaphorically as nabi 'the prophet' or in at least one riddle siina 'mother' (Lewonu Riddle \#4 in the riddle corpus). In (14), Josep Piri gives a formulaic opening to his riddle, in which nabi is used as the parent of the object.

| (14)Diang jea unga nunabi. Ono <br> diang jea unga nu=nabi ono mebura, | M-pe-bura |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| EXIS | HSY | child | CN/GE=prophet | if | 3SG/AB | IR-SF/DY-speak |
|  |  |  |  |  |  |  |
| Sombura | majari | dusunang, |  |  |  |  |
| so-ng-bura | ma-jari | dusunang |  |  |  |  |
| ONE-LIG-word | COP/IR-become | village |  |  |  |  |


| ono | ruombura | majari | pakakas | torapake. |
| :--- | :--- | :--- | :--- | :--- |
| ono | ruo-ng-bura | ma-jari | pakakas | to=ro-pake |
| if | TWO-LIG-word | COP/IR-become | tool | RM=IV/IR-use |


| Uo | toroboto | sapa | uo? |
| :--- | :--- | :--- | :--- |
| 'uo | to=ro-boto | sapa | 'uo |
| yonder | RM=IV/IR-guess | what | yonder |

'There was it's said a child of the prophet. If he/she spoke, one word would become a village, if there were two words then there would be a tool that could be used. That is what should be guessed, what is it?' (Answer: The capital of Central Sulawesi is Palu, the reduplicated form is palu-palu 'hammer'. This answer is complicated by the fact that palu is the Indonesian word for 'hammer', but in order to distinguish these two the reduplicated form is commonly used (although the capital Palu is probably an indigenous Kaili word for a tree species).)
[jptext2.jdb 037-040]

[^127]As often as not, the question or statement that outlines the puzzle is simply stated or asked without the formulaic preface. Example (15) is a typical riddle told as one sentence. Some riddles may need more than one sentence to explain them. Difficult riddles may be repeated on request by the guessers (usually early in the body after one or two guesses have been made).

| Noribu-ribu | botonyo | sura | soung | roongonyo. |
| :--- | :--- | :--- | :--- | :--- |
| $N$-po 1 -ribu-ribu | boto=nyo | sura | soung | roong=nyo |
| RE-SF/DE-RED-thousand | trunk=3SG/GE | only | one | leaf=3SG/GE |

'It has thousands of trunks, but yet it only has one leaf.' (Answer: the ocean (lit. dagat 'ocean') is the leaf, and the trunks are rivers (lit. ogo 'fresh water'). [Lewonu Riddle \#1]

Although the body of the riddle game is conversation-like in nature, the give and take of the riddler and the guessers have a basic structure to how the questions can lead to the answers, and how the riddler responds to make it easier or more difficult to guess the answer. The body of the riddle game usually begins with a binary question that helps the guessers delimit the domain to search or (see $\S 16.3 .2$ for discussion of polar questions). This is done by asking if the object is typically found in alam togoge 'big nature (outside a house)' or if it is in alam todeide 'little nature (inside a house)', as in (16).

| Lingidimo, | rialam | togoge | ape | rialam | todeide? |
| :--- | :--- | :--- | :--- | :--- | :--- |
| lingid- $i=$ mo | ri=alam | togoge | ape | ri=alam | todeide |
| hint-DIR=COMP | LOC=nature | large | or | LOC=nature little |  |

'Give us another hint, is it in big nature or in little nature?'
[Sibayu Riddle \#2]
In past times in the event that someone fell asleep they would be marked with charcoal. If someone knew the answer right away they were not supposed to give it. The riddler often camouflages the answer to his/her clues to the riddle by using metaphorical language. When an answer is close, the riddler may say ponopeong, which means the guesser's guess is closest to the riddle's object. Note that ponopeong is built from the word tope 'name' with the combination of a stem former prefix and the locative nominalising suffix (pong-tope-ong).

Another interesting morphosyntactic feature that is used to provide hints is the special equative $g u$ - prefix (for more about its morphosyntactic nature see §10.5). The $g u$ construction seems to be preserved and maintained almost solely within the riddle genre. Example (17) illustrates the use of gu-. The riddle's answer is nyava 'air', and the riddler virtually gives away the answer within the response, even using nyava 'air, breathe' four times. Even after this helpful hint the guessers were still stumped for quite a while.

| (17) | Ha'u | batuanyo | pakenyo |
| :--- | :--- | :--- | :--- | nipogupakenyo,


| kedonyo | nipogukedonyo, | nyavanyo |
| :--- | :--- | :--- |
| kedo=nyo | ni-po 1 -gu-kedo=nyo | nyava=nyo |
| move=3SG/GE | IV/RE-SF-EQTV-move=3SG/GE | air=3SG/GE |


| nipogunyavanyo. | Ndau | diang | batuanyo |
| :--- | :--- | :--- | :--- |
| ni-po 1 -gu-nyava=nyo | ndau | diang | batua=nyo |
| IV/RE-SF-EQTV-air=3SG/GE | NEG | EXIS | meaning=3SG/GE |


| toninyavai | nu'ito | manusia. | Io | batuanyo |
| :--- | :--- | :--- | :--- | :--- |
| to=ni-nyava-i | nu='ito | manusia | io | batua=nyo |
| RM=IV/RE-air-DIR | $\mathrm{CN} / \mathrm{GE}=1 \mathrm{PL.INC} / \mathrm{AB}$ | human | 3SG/AB | meaning=3SG/GE |


| nipogutu | nuSiopu | Alata'ala, | paey | nenyava. |
| :--- | :--- | :--- | :--- | :--- |
| ni-po $1_{1}$-gutu | $n u=$ Siopu | Alata'ala | paey | N-pe-nyava |
| IV/RE-SF/FA-make | CN/GE=Lord | God | and.then | RE-SF/DY-air |


| Alea' | batuanyo | unimpisa' | sono | ito. |
| :--- | :--- | :--- | :--- | :--- |
| alea' | batua=nyo | 'u-nimpis-a' | sono | 'ito |
| let | meaning=3SG/GE | 1SG.IV/IR-thin-TZ | COM | 1PL.INC/AB |

'I mean, its use is its own use, its moves are its own moves, its breath is its own breath. There is no meaning without us humans breathing it. The Lord God made it its meaning, and then it breathed. There, I have made that meaning thin enough for you.'
[Riddle \#2 Sibayu]
If the riddler deems the riddle to be easy, or the additional clues given have made it very easy to guess, then the riddler will usually say it is menimpis 'thin', and less frequently refer to it as manggaang 'light'. Riddles that are deemed difficult may be referred to as moboat 'heavy', ma'apal 'thick', or malalo' 'deep'. If the guess is clearly not close, then the riddler may say nagaar 'far', or netegaar 'not far', as in (18), or tanasi 'wrong answer' (the latter seems to only be used in the riddle genre).

| Netegaar | seide. |
| :--- | :--- |
| ne-te-gaar | so-ide |
| AV/RE-NV-far | ONE-small |

'A little far.' or: ‘A bit cold.' (context: riddler’s response to a guess.) [tangke02.doc]

## Appendix 1 Primary Pendau text corpus inventory and abbreviations

| Authors (Village): | Lewonu Riddle Tellers: |  |  |
| :--- | :--- | :--- | :--- |
| DA | Dainali (Simontomu/Sioyong) | \#3 | SiDondong |
| JP | Josep Piri (Malawa) | \#6 | SiDaud |
| KA | Kamun (Pinayor/Sibayu) | \#7 | Yulianus |
| MD | Mesak Doge (Lewonu/Sibayu) |  |  |
| SD | SiDidi (Malawa) | Linguists: |  |
| SH | SiHayo (Navuong) | BQ | Becky Quick |
| SL | SiLayang (Sibayu) | PQ | Phil Quick |
| SS | SiSahulin (Sibayu) |  |  |
| TO | To'o Aprianto (Pinayor/Sibayu) | Sibayu Riddle Tellers and |  |
|  |  | Participants: |  |
| Genre: |  | SiLiter | SiDokia |
| BS | Bible Story (composed not | SiYusup Piri | SiKupi |
|  | translated) |  | SiHajem |
| CONV | conversation |  |  |
| DE | descriptive |  |  |
| FT | folktale |  |  |
| HI | history |  |  |
| HO | hortatory |  |  |
| NA | narrative |  |  |
| PN | personal narrative |  |  |


| Title or Topic | File name | Author | Genre | Composed or Oral | No. of Words | No. of Clauses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Three men on a trip | 3tolampa.pin | MD | PN | composed | -- | 55 |
| Boyhood work | bugmalei.pin | MD | PN | composed | -- | 40 |
| Ceku orphaned | cekumom.pin | MD | PN | composed | -- | 23 |
| Python attack | bulagnel.pin | TO | PN | composed | -- | 17 |
| A trip with Phil | cekuphil.pin | MD | PN | composed | -- | 19 |
| An experience when Ceku was seven | cekupitu.pin | MD | PN | composed | -- | 27 |
| At a cloves plantation | jo'ong.pin | MD | PN | composed | -- | 36 |
| A school holiday adventure | libur.pin | KA/TO | PN | composed | -- | 18 |
| Ceku in an earthquake | lindug.pin | MD | PN | composed | -- | 35 |
| Ceku's first wife | maslia.pin | MD | PN | composed | -- | 62 |
| Fishing with dip net | megayo.pin | -- | PN | composed | -- | 06 |
| Story about Nerlin | nerlin.pin | -- | PN | composed | -- | 15 |
| Fishing with Eko | nomeang.pin | KA/TO | PN | composed | 91 | -- |
| Working a wet rice field | paruja.pin | MD | PN | composed | -- | 35 |
| Trip to Donggala | tanjong.pin | MD | PN | composed | -- | 80 |
| Trip home from Palu | terminal.pin | MD | PN | composed | -- | 43 |
| A sea captain | katira.pin | MD | FT | composed | -- | 28 |
| The cripple and the blind man | nangkait.pin | JP | FT | composed | -- | 211 |
| The three wise men | natal01.pin | JP | BS | composed | -- | 32 |
| Coconut story | niu1.pin | TO | FT | composed | -- | 27 |
| The pelican that swallowed the grandson | tambao1.mdb | JP | FT | composed | 325 | 77 |
| The turtle and the monkey | turtle.pin | JP | FT | composed | 1117 | 231 |
| The turtle egg incident | trtlegg.pin | JP | FT | composed | -- | 43 |
| The flesh-eater and the monkey | troll.mdb | JP | FT | composed | 1876 | 360 |
| A king and his seven virgin daughters | 7unga1.pin | -- | FT | oral | -- | 9 |
| The legend of the Pleides | asu2.pin | SH | FT | oral | -- | 238 |
| The woman who became a dugong | dugong1.db | SL | FT | oral | -- | 180 |
| The water monitor and his human bride | gibang1.db | MD | FT | oral | -- | 177 |
| The flying horse | horse.pin | SH | FT | oral | -- | 1250+ |
| The son of a king | king.pin | SS | FT | oral | -- | 189 |
| The miracle of the snake medicine | miracle1.pin | SS | FT | oral | -- | 205 |
| The two children and the one who was invisible | nagarang.pin | SH | FT | oral | -- | 250 |
| The golden child raised by the flesh-eater | nalalo.pin | SS | FT | oral | -- | 98 |
| The time the monkey and the turtle went fishing | odo1.pin | -- | FT | oral | -- | 20 |
| The seven poor children who were caught by flesheaters and escaped | poora.pin | SS | FT | oral | -- | 636 |


| Title or Topic | File name | Author | Genre | Composed or Oral | No. of Words | No. of Clauses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| The sandal and the proposal | short1.pin | SL | FT | oral | -- | 16 |
| The senge bird | senge1.pin | -- | FT | oral | -- | 24 |
| The woman who became a stone | stone1.pin | MD | FT | oral | -- | 34 |
| The abandoned girl and the magic rooster | mdtext1.doc | MD | FT | composed | 1047 | -- |
| The person who became a sago tree | mdtext2.doc | MD | FT | composed | 761 | -- |
| The frog and the rat | mdtext3.doc | MD | FT | composed | 395 | -- |
| The golden child | mdtext4.doc | MD | FT | composed | 995 | -- |
| The father who killed his daughter | mdtext5.doc | MD | FT | composed | 976 | -- |
| The monkey and the kingfisher | mdtext6.doc | MD | FT | composed | 621 | -- |
| The person with leprosy | mdtext7.doc | MD | FT | composed | 626 | -- |
| The tutudiaí' bird and the hermit crab | mdtext8.doc | MD | FT | composed | 162 | -- |
| How an only son won the only daughter by kicking a ball at her | mdtext9.doc | MD | FT | composed | 195 | -- |
| The myna bird and the dove | mdtext10.doc | MD | FT | composed | 196 | -- |
| The abandoned daughter and the giant | mdtext11.doc | MD | FT | composed | 829 | -- |
| The flesh-eater | mdtext12.doc | MD | FT | composed | 306 | -- |
| The flesh-eater that ate SiToena-ena | mdtext13.doc | MD | FT | composed | 761 | -- |
| The woman who became a puteana' spirit | mdtext14.doc | MD | FT | composed | 927 | -- |
| The account of the Mandar king that married a Pendau virgin | mdtext15.doc | MD | FT | composed | 1395 | -- |
| The sailor who married the saltmaker's daughter | mdtext16.doc | MD | FT | composed | 2625 | -- |
| The mother who orphaned her seven children | mdtext17.doc | MD | FT | composed | 1021 | -- |
| The two children who ran away from their stepmother | mdtext18.doc | MD | FT | composed | 1199 | -- |
| Mother who orphaned her seven children | mdtext19.doc | MD | FT | composed | 658 | -- |
| The woman who had 100 spider-children | mdtext20.doc | MD | FT | composed | 3986 | -- |
| The poor people | mdtext21.doc | MD | FT | composed | 852 | -- |
| The monkey and the turtle | ceku01.doc a | MD | FT | composed | 482 | -- |
| Ceku's biography | ceku01.doc b | MD | PN | composed | 297 | -- |
| The child that became a senge' bird | ceku01.doc c | MD | FT | composed | 669 | -- |


| Title or Topic | File name | Author | Genre | Composed <br> or Oral | No. of <br> Words | No. of <br> Clauses |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Traditional way to make a <br> garden | jptext1.doc | JP | DE | composed | 276 | -- |
| Activities done at a funeral | jptext2.doc | JP | DE | composed | 288 | -- |
| Delivering a turtle to a <br> wedding | jptext3.doc | JP | PN | composed | 296 | -- |
| Getting a fishing net from <br> the co-op | jptext4.doc | JP | PN | composed | 294 | -- |
| Fighting the waves | jptext5.doc | JP | FT | composed | 260 | -- |
| A talking rock in the sea | jptext6.doc | JP | PN | composed | 151 | -- |
| Trip to Donggala with Phil | jptext7.doc | JP | PN | composed | 469 | -- |
| History of Pendau | jptext8.doc | JP | HI/NA | composed | 1019 | -- |
| Seven friends and the two <br> that got lost | fktale01.doc | SD | FT | oral | 554 | -- |
| Eight Lewonu riddles | tangke01.doc | various | riddle | oral | 2681 | -- |
| Three Sibayu riddles | tangke02.doc | various | riddle | oral | 1800 | -- |
| Nine adat prayers | -- | -- | HO | oral | -- | -- |
| Three video segments <br> (fishing, house, snare) | video.tr | various | CONV | oral | 1058 | -- |
| Origin story of Pendau | asulusul.doc | -- | NA/ <br> CONV | oral | 1448 | -- |
| Various texts in PLL <br> (Quick 1989a) | Lessons 1-34 | various | various | oral and <br> semi- <br> composed | -- | -- |

## Appendix 2 Syllable statistics

The syllable statistics in Figures A2.1-6 produced here are from the DOS utility program called sylstat.exe from the PTOOLS (Phonology Tools) program developed by Bill Brown (1989) available from SIL. Note that compounds, phrases, and hyphenated reduplicated words were removed from the lexicon database in order to use the sylstat.exe program efficiently.

Note also that a statistical check of texts should yield higher number of syllables per word since affixation of words occurs more frequently than in the lexicon database (largely a root based lexicon) and would provide a more representative spread (up to ten syllable words are known in texts). ( N denotes a syllabic nasal in word initial position.)

| Syllable <br> Shape | S1 | S2 | Total <br> Occurrence | Per cent |
| :--- | ---: | :--- | :--- | ---: |
| V | 264 | 133 | 397 | $8.8 \%$ |
| CV | 1535 | 851 | 2396 | $53 \%$ |
| CVC | 369 | 1090 | 1459 | $32.4 \%$ |
| VC | 83 | 178 | 261 | $5.8 \%$ |
|  | Total |  |  |  |
|  |  |  |  |  |

Figure A2.1. Two syllable words ( 2251 words $=54.7 \%$ )

| Syllable <br> Shape | S1 | S2 | S3 | Total <br> Occurrence | Per cent |  |  |  |
| :--- | ---: | ---: | :--- | :--- | ---: | :---: | :---: | :---: |
| V | 125 | 130 | 131 | 386 | $9.9 \%$ |  |  |  |
| CV | 854 | 1042 | 558 | 2454 | $63.1 \%$ |  |  |  |
| CVC | 198 | 11 | 460 | 771 | $19.8 \%$ |  |  |  |
| VC | 39 | 12 | 148 | 199 | $5.1 \%$ |  |  |  |
| N | 81 | 0 | 0 | 81 | $2.1 \%$ |  |  |  |
| Total |  |  |  |  |  |  | 3891 |  |

Figure A2.2. Three syllable words (1297 words = 31.5\%)

| Syllable <br> Shape | S1 | S2 | S3 | S4 | Total <br> Occurrence | Per cent |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| V | 40 | 45 | 72 | 213 | 213 | $11.4 \%$ |
| CV | 337 | 356 | 345 | 1226 | 1226 | $65.4 \%$ |
| CVC | 66 | 59 | 48 | 335 | 335 | $17.9 \%$ |
| VC | 14 | 9 | 4 | 162 | 90 | $4.8 \%$ |
| N | 12 | 0 | 0 | 63 | 12 | $0.6 \%$ |

Figure A2.3. Four syllable words (469 words = 11.4\%)

| Syllable <br> Shape | S1 | S2 | S3 | S4 | S5 | Total <br> Occurrence | Per cent |
| :--- | ---: | ---: | ---: | ---: | ---: | :--- | ---: |
| V | 6 | 12 | 11 | 15 | 14 | 58 | $14.1 \%$ |
| CV | 67 | 59 | 58 | 64 | 32 | 280 | $68.3 \%$ |
| CVC | 9 | 8 | 11 | 3 | 25 | 56 | $13.7 \%$ |
| VC | 0 | 3 | 2 | 0 | 11 | 16 | $3.9 \%$ |
| N | 0 | 0 | 0 | 0 | 0 | 0 | $0.0 \%$ |

Figure A2.4. Five syllable words ( 82 words $=\mathbf{2 . 0 \%}$ )

| Syllable <br> Shape | S1 | S2 | S3 | S4 | S5 | S6 | Total <br> Occurrence | Per cent |
| :--- | ---: | ---: | ---: | ---: | ---: | :--- | :--- | ---: |
| V | 0 | 0 | 0 | 3 | 2 | 2 | 7 | $8.3 \%$ |
| CV | 12 | 13 | 12 | 10 | 11 | 5 | 63 | $75 \%$ |
| CVC | 2 | 1 | 2 | 0 | 1 | 3 | 9 | $10.7 \%$ |
| VC | 0 | 0 | 0 | 1 | 0 | 4 | 5 | $6 \%$ |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.0 \%$ |

Figure A2.5. Six syllable words ( 14 words $=0.3 \%$ )

| Syllable <br> Shape | Total Occurrence | Per cent |
| :---: | :---: | :---: |
| V | 1061 | 9.8\% |
| CV | 6417 | 59.5\% |
| CVC | 571 | 24.5\% |
| VC | 94 | 0.9\% |
|  | Total 10779 |  |

Figure A2.6. All words combined
Statistics in Figures A2.1-6 are based on the basic data from the lexion as follows:
Total Number of Words $=4114$
Average Number of Syllables/Word $=2.6$

## Appendix 3 Spectrograms and spectra of Pendau vowels

The five Pendau vowels examined in Chapter 2 and in this appendix are from the recorded frame So'uya toPendau ri'uo? 'How many Pendau people are over there?' (see §2.5.3 for a list of similar sentence frames). Figure A3.1 shows the sound waves, the spectra, and the spectrogram of the five Pendau vowels, and the sound waves with the annotation of phones shown above its segment. These are illustrated from the two words toPendau ri 'Pendau person at'. These five vowels will be examined individually comparing the spectrogram and the spectra of each.


Figure A3.1. Spectrogram and spectra of Pendau [i]
Figures A3.1-5 show the sound waves (top window), spectrogram (left lower window), and spectra (right lower window) for each of the five Pendau vowels. In the top window with the sound waves the vowel segment is displayed between two vertical lines. The portion of the sound waves between these two lines is analysed in the spectrogram and the spectra windows. Each of the spectrogram windows has black horizontal (roughly) lines which are the program's indications of where the possible centres of a formant lies. The spectra window for each of the vowels has a single vertical line showing where I believe the second formant (F2) is.

Figure A3.1 shows the sound waves for [i] and its spectrogram and spectra. The horizontal lines in the spectrogram indicate the approximate centre of possible formants for the vowel. The formant bands for the first (F1) and second (F2) formants can be seen to occur at the bottom and top areas of the spectrogram. Verification for these areas were checked with the spectra of the [i] vowel. The horizontal line marks the approximate peak of the second formant.

Figure A3.2 shows the sound waves of [e] between the two vertical lines. The spectrogram shows formant bands for F1 and F2. Horizontal lines show the programs' best guess for the centre of where the formant bands are. However, these program interpretations are misleading at times. The first and third horizontal lines (counting from the bottom to the top) however do show where the F1 and F2 formant bands are. This can be checked in the spectra. The spectra window has a vertical line placed where F2 is, and the Hertz frequency matches with that of the third horizontal line in the spectrogram.


Figure A3.2. Spectrogram and spectra of Pendau [e]

Figure A3.3 shows the sound waves, spectrogram, and spectra of the vowel [a]. The first two continous horizontal lines from the bottom of the spectrogram show the centre for formants one (F1) and two (F2). The vertical line in the spectra display again indicates the centre of formant two.


Figure A3.3. Spectrogram and spectra of Pendau [a]


Figure A3.4. Spectrogram and spectra of Pendau [o]

Figure A3.4 shows the sound waves, spectrogram and spectra of the [o] vowel. The first two continuous lines from the bottom of the spectrogram indicate the centre for formants one and two. The vertical line in the spectra display shows the centre of the second formant.

In Figure A3.5 the sound waves, spectrogram, and spectra are given for the [u] vowel. The first two horizontal lines across the bottom of the spectrogram indicate the centre of the first two formants. A close inspection of the spectra shows a second cluster of waves where the vertical line marks the centre of formant two (F2).


Figure A3.5. Spectrogram and spectra of Pendau [u]

Figure A3.6 shows a sampling of 10-12 tokens for each vowel. These are primarily from S1, although a couple of examples were taken from S2 to spot-check the conclusions here. Although this is not a rigorous series of test with cross-checks from the environments of different consonants, etc., it does provide an initial benchmark and agrees generally with the expected relationship of the five vowels to each other (see for example English vowels in Ladefoged 1982:174-196).


Figure A3.6. Sample of vowel format frequencies from three Pendau men (S1, S2, and S3)

# Appendix 4 Supporting data for stress and pitch correlations 

This appendix provides additional supporting segmentation and segment duration data that was examined in determining the analysis for stress and pitch in Pendau (see §2.6.2). The longest duration in all of the tokens examined was about 300 ms . for the tokens mpaa 'cluster’. Since the vowel is phonetically long it is not possible to distinguish when the vowel changes phonologically to the second vowel. Thus the longer duration is probably merely the coincidence of the long vowel. The other tokens ngkaat 'small flame' which also has a long vowel has durations just under and just over 100 ms . (the trajectory target's peak ranges from 14 to 21 Hz respectively) Other Pendau words can be tested in the future with the addition of possesive enclitics, for example, which would move the penultimate stress to the second half of the long vowel as in paa 'foot' and paanyo 'its foot'.

Figure A4.1 shows the duration for each segment on the left-hand side for each token, and then the total duration in milliseconds for each syllable on the right-hand side.


Figure A4.1. Rising pitch for Pendau tokens: bankalang 'river'
Figure A4.2 and figure A4.3 shows the rising pitch for four tokens of bangkalang 'river', and four tokens of mangge 'uncle’ respectively. Since mangge has a CVC syllable for the penultimate syllable, the end of the nasal [m] segmental duration is indicated midway for tokens 1, 2, and 3 in Figure A4.2 (token 4 appears to be an aberration, and it does not have this midway mark since it is so short in duration).

Figure A4.3 contrasts the pitch indication of one token each for bangkalang 'river' (token 1) and mangge 'uncle' (token 1). Notice the downward slope preceding the penultimate syllable
and the rise of the contour line by the end of the penultimate syllable. The break in the line for bangkalang is due to the voiceless stop. Notice that there is a similar contour in Figure A4.3. Figure A4.4 shows the actual segment and syllable durations for all bangkalang and mangge tokens. In this figure (and similar ones below), the statistics are displayed with the segmentation of additional tokens used in the sound waves produced by WINCECIL. Each line represents a different token from a sentence frame. Durations are in milliseconds. The highlighted grey area in the rectangle indicates the penultimate syllable.


Figure A4.2. Rising pitch in Pendau tokens: mangge 'uncle'


Figure A4.3. Rising pitch for bangkalang 'river' and mangge 'uncle’

| $\mathbf{b}$ | $\mathbf{a}$ | $\mathbf{y}$ | $\mathbf{k}$ | $\mathbf{a}$ | $\mathbf{l}$ | $\mathbf{a}$ | $\mathbf{y}$ | CVC |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 68 | 65 | 100 | 38 | 100 | 53 | 99 | 151 | 234 | 138 | 303 |
| 69 | 56 | 83 | 79 | 83 | 56 | 103 | 221 | 208 | 161 | 380 |
| 71 | 54 | 99 | 49 | 99 | 62 | 90 | 179 | 224 | 148 | 329 |
| 71 | 51 | 95 | 61 | 92 | 55 | 136 | 150 | 216 | 153 | 341 |
|  |  |  |  |  |  |  |  |  |  |  |
| $\mathbf{m}$ | $\mathbf{a}$ | $\mathbf{y}$ | $\mathbf{g}$ | $\mathbf{e}$ |  |  |  | $\mathbf{C V C}$ | $\mathbf{C V}$ |  |
| 76 | 85 | 45 | 64 | 208 |  |  | 206 | 272 |  |  |
| 122 | 72 | 62 | 74 | 198 |  |  | 255 | 272 |  |  |
| 89 | 124 | 72 | 36 | 204 |  |  | 285 | 240 |  |  |
| 77 | 74 | 47 | 47 | 251 |  |  | 198 | 298 |  |  |

Figure A4.4. Duration of penultimate syllables for Pendau tokens: bangkalang 'river' and mangge 'uncle'

Figure A4.5 shows the rising pitch for two tokens each for ndueng 'anoa (dwarf buffalo)', ngkeang 'k.o. parrot', and mbengi 'night'. The similar pattern is by now quite apparent. These tokens illustrate penultimate syllables with the CV syllable followed by either a VC or a CV syllable.


Figure A4.5. Rising pitch in Pendau tokens: ndueng 'anoa', ngkeang 'k.o. parrot', mbengi 'night’

Figure A4.6 shows the line contour of the pitch pattern for mbengi (token 1), ndueng (token 1), and ngkeang (tokens 1 and 2 with token 2 in the upper right window). The vertical lines (left and right cursors in the program) indicate the low and high points for the pitch (in Hz ) for the penultimate syllables. Figure A4.7 shows the duration of these tokens, and again highlights the duration of the penultimate syllable (additional examples follow below).


Figure A4.6. Rising pitch in four Pendau tokens: mbengi 'night', ndueng 'anoa', and ngkeang 'k.o. parrot' (2 tokens)

| $\mathbf{n}$ | $\mathbf{d}$ | $\mathbf{u}$ | $\mathbf{e}$ | $\mathbf{y}$ | $\mathbf{C}$ | $\mathbf{C V}$ | $\mathbf{V C}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 66 | 22 | 96 | 219 | 157 | 66 | 118 | 376 |
| 66 | 22 | 96 | 218 | 176 | 66 | 117 | 395 |
|  |  |  |  |  |  |  |  |
| $\mathbf{m}$ | $\mathbf{b}$ | $\mathbf{e}$ | $\mathbf{y}$ | $\mathbf{i}$ | $\mathbf{C}$ | $\mathbf{C V}$ | $\mathbf{C V}$ |
| 118 | 46 | 103 | 114 | 234 | 118 | 148 | 347 |
| 105 | 31 | 125 | 71 | 302 | 105 | 157 | 373 |
| $\mathbf{y}$ | $\mathbf{k}$ | $\mathbf{e}$ | $\mathbf{a}$ | $\mathbf{y}$ | $\mathbf{C}$ | $\mathbf{C V}$ | $\mathbf{V C}$ |
| $\mathbf{9 1}$ | 66 | 120 | 195 | 203 | 91 | 186 | 398 |
| 101 | 48 | 104 | 197 | 246 | 101 | 152 | 442 |

Figure A4.7. Contrast of penultimate syllable duration for six tokens of three words: ndueng 'anoa', mbengi ‘night', and ngkeang 'k.o. parrot’

| $[\boldsymbol{y}$ | $\mathbf{i}$ | $\mathbf{s}$ | $\mathbf{i}$ |  |
| :--- | :--- | :--- | :--- | :--- |
| 96 | 140 | 138 | 275 |  |
| 94 | 111 | 155 | 177 |  |
| 105 | 78 | 136 | 173 |  |
| 96 | 106 | 131 | 199 |  |
| $\mathbf{n}$ | $\mathbf{a}$ | $\mathbf{b}$ | $\mathbf{o}$ | $\mathbf{?}$ |
| 83 | 125 | 86 | 103 | 27 |
| 98 | 104 | 77 | 119 | 15 |
| 95 | 111 | 102 | 145 | 47 |
| 83 | 110 | 76 | 103 | 60 |


| CV | CV | 'teeth' |
| :--- | :--- | :--- |
| 236 | 413 |  |
| 205 | 332 |  |
| 184 | 309 |  |
| 202 | 330 |  |
|  |  |  |
| $\mathbf{C V}$ | $\mathbf{C V C}$ | 'roof' |
| 216 | 216 |  |
| 202 | 210 |  |
| 206 | 294 |  |
| 193 | 240 |  |


| $\mathbf{s} \mathbf{o}$ | $\mathbf{y}$ | $\mathbf{k}$ | $\mathbf{o}$ | $\mathbf{l}$ | $\mathbf{u}$ | $\mathbf{y}$ | $\mathbf{C V C}$ | $\mathbf{C V}$ | CVC | 'k.o. tooth' |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 105 | 52 | 105 | 73 | 76 | 77 | 57 | 289 | 261 | 149423 |  |
| 105 | 37 | 101 | 85 | 76 | 47 | 65 | 184 | 242 | 160296 |  |
|  |  |  |  |  |  |  |  |  |  |  |
| $\mathbf{y}$ | $\mathbf{k}$ | $\mathbf{a :}$ | $\mathbf{t}$ |  |  |  | $\mathbf{C}$ | $\mathbf{C V}$ | $\mathbf{V C}$ | 'flame' |
| 125 | 90 | 221 | 282 |  |  |  | 125 | 200 | 383 |  |
| 127 | 59 | 211 | 248 |  |  | 127 | 165 | 353 |  |  |

(Note: The long vowels are arbitrarily divided into half for the syllable values.)

| $\mathbf{m}$ | $\mathbf{p}$ | $\mathbf{a :}$ | $\mathbf{C}$ | $\mathbf{C V}$ | $\mathbf{V}$ | 'cluster' |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 79 | 98 | 399 | 79 | 297 | 200 |  |
| 135 | 107 | 381 | 135 | 297 | 191 |  |

(Note:The long vowels are arbitrarily divided into half for the syllable values.)

| $\mathbf{s}$ | $\mathbf{a}$ | $\mathbf{m}$ | $\mathbf{p}$ | $\mathbf{a :}$ | $\mathbf{C V C}$ | $\mathbf{C V}$ | $\mathbf{V}$ | 'one cluster' |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 104 | 86 | 60 | 73 | 264 | 249 | 205 | 132 |  |
| 102 | 74 | 61 | 75 | 277 | 238 | 214 | 135 |  |

(Note: he long vowels are arbitrarily divided into half for the syllable values.)

| $\mathbf{t}$ | $\mathbf{o}$ | $\mathbf{p}$ | $\mathbf{e}$ | $\mathbf{n}$ | $\mathbf{d}$ | $\mathbf{a}$ | $\mathbf{u}$ | $\mathbf{C V}$ | $\mathbf{C V C}$ | $\mathbf{C V}$ | $\mathbf{V}$ | 'Pendau' |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 94 | 110 | 85 | 68 | 67 | 40 | 139 | 180 | 204 | 220 | 179 | 180 |  |
| 106 | 49 | 91 | 66 | 45 | 40 | 142 | 199 | 150 | 202 | 182 | 199 |  |
| 114 | 86 | 114 | 49 | 81 | 53 | 152 | 254 | 200 | 244 | 206 | 254 |  |
| 89 | 67 | 109 | 61 | 73 | 53 | 186 | 265 | 156 | 244 | 239 | 265 |  |

## Appendix 5 Supporting data for acoustic analyses of glottal stop as creaky voice

Figure A5.1 shows the voiced variation [ h ] in ' $a$ ' $u$. The first person pronoun ' $a$ 'u is the only clear word in Pendau that appears with the pharyngeal [ h$]$. The particular context of this token is from a conversation from PLL \#6 (Quick 1989c:15, the second reading by S2): Maala ha'u monuut? 'May I come (lit. follow).' Note that at this stage of the development of the orthography <h> was used on the first person pronoun.


Figure A5.1. Glottal stops in 'a'u '1SG' as [6] and creaky voice (S2)
Another word that may be similarily pronounced in Pendau is the word 'ada ' 'adat, tradition', which is pronounced often as [hadat]; but many other language groups in Central Sulawesi also pronounce this common word in Indonesia this way.

In Figure A5.2 the glottal stop appears phonetically as a voiceless [h] in 'a 'u '1SG'. The sound waves of the [h] are similar to the sound waves of the [s] in figure 2.21 in §2.6.3 (this utterance is by S 1 in the series of frames mentioned in Set C in §2.5.3).


Figure A5.2 Glottal stops in 'a'u '1SG' as [h] and creaky voice (S)
Figure A5.3 is in a narrative context and shows that there is creak phonation on the vowels which transition from [a] to [o]. Note also that the glottal stop has to be phonologically realised here because vowel epenthesis has occurred between the glottal stop and the third person enclitc $=n y o$. Note that this is a borrowed word from Indonesian buka and the actual phonological details probably include the addition of the benefactive -a' suffix (thus the sequence of same vowels is difficult to separate here) would actually form the word ni-buka-a'=onyo 'he opened it for them'.


Figure A5.3. Glottal stop in nibuka'onyo 'he opened it' as creaky voice (S3)
Figures A5.4 and A5.5 contrast the final glottal stop in mene' 'go up' a word repeated for dramatic emphasis (from folktale (S3)). The repetition in Figure A5.4 shows a glottal stop ends the word as the vowel transitions into creaky voice (following the second vertical line). The first
mention of mene’ in Figure A5.5 shows no glottal stop but creaky voice occurs in the entire duration of the vowel. The spectra of the /e/ vowel in both tokens has a similar pattern (see the bottom right-hand window in both figures).


Figure A5.4. First glottal stop in mene' (mene') 'go up and up' as creaky voice


Figure A5.5. Second glottal stop in (mene') mene' 'go up and up'
Since there are words in Pendau that are known to have phonemic glottal stops word initially, as can be compared in affixation paradigms (e.g. 'omung, ni'omung, and mongkomung see §3.5.5 for further discussion) it is necessary to determine whether there are vowel initial words which contrast a phonetic glottal stop and a phonological glottal stop which is part of the lexical word. The display in Figure A5.6 shows there is no glottal stop between words that end and begin in the same vowel [i] (from PLL \#9 last sentence of conversation (S2), Quick 1989c:21). Notice that there is no pause between these two words. The top window with the wave sounds shows the
initial vowel [i] in isinyo 'its flesh' between the two vertical lines. The bottom window with the spectrogram shows the entirety of both [i] vowels, and there is no sign of discontinuity between these two vowels (as appears in clear instances of glottal stop in the previous figures).


Figure A5.6. No glottal stop word initially between nongoli isinyo 'bought its flesh'
Figure A5.7 shows a transition between vowels of the two words nongoli anes 'bought meat'. This may be an instance of a glottal stop, but it is more likely just a transition between the quality of vowels. If this is a glottal stop, this indicates that glottal stop may sometimes be inserted phonetically and is not part of the lexical word anes (PLL \#9 conversation, Quick 1989c:21).


Figure A5.7. No glottal stop word initially between nongoli anes 'bought its meat'

In Figure A5.8 the first token of the frame mogabu aniongo'u 'cook my rice' there is a clear pause between the two words (from the substitution drill first time, PLL 5, voice by Albert Ottay (S2)). This is signified with the two brackets [] annotated above the sound waves and the spectrogram (sound waves in this stretch are background noise from this poorer quality recording).


Figure A5.8. No glottal stop word initially between nogabu aniongo'u 'cook my rice'

The repetition of the same phrase in a more rapid speech in Figure A5.9 shows the vowels transitioning without any pause between the words. (substitution drill second time, PLL 5, voice by Albert Ottay (S2)). There does seem to be some difference in the sound waves, but this may just be a simple case of lower magnitude increasing to a higher magnitude. In any case, in a comparison of different tokens of the same words from Figures A5.8 and A5.9 a possible glottal stop is not consistent, and is quite likely to appear occassionally on vowel initial words as a nonphonemic glottal stop.


Figure A5.9. Possible glottal stop word initially between nogabu aniongo'u 'cook my rice'

## Appendix 6 Onomatopoeic expressions

This section presents some of the more common onomatopeic words that are used. Sample words are represented in the list in (1).
(1) kuruk 'cluck, call chicken(s)’
ne-tontoro’o 'crow, cock-a-doodle-doo’
tutu 'call a dog (with a high pitch voice)'
bak, bak 'call a pig(s) (note the vowel is phonetically [0]'
kuiik 'sound a pig makes, call pigs'
mbaoo 'call the tambao 'pelican, egret'’
Examples (2) and (3) illustrate the use of tontoro'o 'crow, cock-a-doodle-doo' as a verb. Example (2) also illustrates the use of kuruk as a vocative, although kuruk is often used to simply call chickens to come and eat. Example (4) illustrates the tambao 'pelican' is called by abbreviating it to mbao (note that the author extends the vowels and adds an $h$ for dramatic effect).
(1) Kuruk oo pentontoro'opo
kuruk 'oo pe-n-tontoro'o=po
call.chicken/VOC 2SG/AB SF/DY-LIG-crow=CONT
‘Kuruk you crow again!’
(child speaking to magical rooster)
[mdtext1.txt 061]
(2) Tarus niepenyo suara numanu' netontoro'o.
tarus ni-epe $=$ nyo suara nu=manu' N-pe-tontoro'o
continue IV/RE-hear=3SG/GE sound CN/GE=chicken RE-SF/DY-crow
'Then he heard the sound of a rooster crowing.'
[mdtext20.txt 006]
(3) Maa'onyo, "Mbaoo, mbaoooooh, mbaoo, mbaooooh. Ali luaa' mo’upu...!"
maa'=nyo tambao tambao tambao tambao ali lua-a' mo'ири
say=3SG/GE pelican pelican pelican pelican come vomit-TZ grandson
'He said, "Mbaoo, mbaooooh, mbaoo, mbaooooh. Please come and vomit up my grandson...!"’
[tambao.tst 035-040]

## Appendix $7 \quad$ Nominal phrase elements

Figure A7.1 shows the criteria that distinguishes the nominal phrase elements.

|  | Derive <br> New <br> Noun | Function <br> as Head | Pre-Head | Post-Head | Relativise | Open/ <br> Closed |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Noun | Yes | Yes | compounds | compounds | Yes | Open |
| Pronoun | No | Yes | No | GEN <br> Phrase | Yes | Closed |
| Numerals | New <br> Numeral | Yes | Yes | No | Yes | Closed |
| Sortal <br> Classifiers | No | Yes | Yes | No | No | Closed |
| Mensural <br> Classifiers | No | Yes | Yes | No | No | Open |
| Noun Markers | No | No | Yes | GEN <br> Phrase | No | Closed |
| Quantifiers | No | Yes | Yes | No | Yes | Closed |
| Demonstratives | No | Yes | No | Yes | No | Closed |

Figure A7.1. Nominal Phrase Criteria

## Appendix $8 \quad$ Verbal affixation possibilities

Figure A8.1 shows the sequence possibilities of many of the verbal affixes. Note that not all combinations are possible or are known. Figure A8.2 shows the important ordering of enclitics when both classes appear, and this does show all of the possible combinations.

| Prefixes |  |  |  |  | ROOT | Suffixes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M-/N- |  | $\begin{aligned} & \mathrm{po}_{1-}^{-}, \mathrm{po}_{3}{ }^{-}, \\ & \text {pa- } \\ & \text { (CAUS) } \end{aligned}$ | $\mathrm{pV}(\mathrm{C})-$ <br> Verb Class <br> Stem Formers |  |  | $-\sigma_{c} \sigma$ <br> (ATEL, <br> DUR, <br> INTENS) |
| Verb Class <br> Prefixes <br> pV(C)- | $\sigma_{\mathrm{c}}{ }^{-}$ <br> (REC) | te- (NV) |  | $\begin{aligned} & \text { gu- } \\ & \text { (EQTV) } \end{aligned}$ | -um- <br> (TEL) | $\begin{aligned} & \text {-ong } \\ & \text { (REC) } \end{aligned}$ |
| -ong- infix <br> (DIST) | $\begin{aligned} & \sigma_{c^{-}} \\ & (\mathrm{ITV}) \end{aligned}$ | pe‘i-, pe(REQ) | le(DIST) | '0- (HAVE) | $\begin{aligned} & \text {-in- } \\ & \text { (relic) } \end{aligned}$ | $\begin{array}{\|l} \hline-a^{\prime} \\ \text { (TZ) } \end{array}$ |
| ro-/ni- <br> (IV) | $\sigma \sigma_{\mathrm{c}}$ - (ATEL, DUR, INTENS) |  | ti-, titi-, ting(DEL, PTNS) posi(MUT) |  |  | $\begin{array}{\|l} \hline-\mathrm{i} \\ \text { (DIR) } \end{array}$ |

Figure A8.1. The main verbal morphological formatives

| Pronominal <br> Enclitics | Aspectual <br> Enclitics |
| :--- | :--- |
| ='u |  |
| (1SG/GE) |  |
| $=$ mu | $=$ mo |
| (2SG/GE) | (COMP) |
| $=$ nyo | =po |
| (3SG/GE) | (CONT) |
| =to |  |
| (1PL.INC/GE) |  |

## Figure A8.2. Verbal enclitics

## Appendix $9 \quad$ Verb stem template charts 1-5

This appendix supplements the discussion of the stem formers in §4.3. The key for derivation types 1-6 are: 1 or 2-instrumental or locative applicativisation (§10.3), 3-imperative (§16.2.2), 4-locative nominalisation (§7.4.2.2), 5-agentive nominalisation (§7.4.2.3), and 6-instrumental nominalisation (§7.4.2.1). Classes I-IV and VI are shown in charts 1-5 (class V is not represented here).

Chart 1—Template verb class I: pong-
$\left.\begin{array}{|l||l|l|l|l|}\hline \text { I } & \text { 'buy' } & \text { 'carry' } & \text { 'draw water' } & \text { 'get, take' } \\ \hline \hline \text { root } & \text { oli } & \text { 'omung } & \text { sau' } & \text { alap } \\ \hline \text { AV/PT } & \text { nongoli } & \text { nongkomung } & \text { nonsau' } & \text { nangalap } \\ \hline \text { IV } & \text { nioli } & \text { ni’omung } & \text { nisau' } & \begin{array}{l}\text { nialap } \\ \sim \text { nipangalap }\end{array} \\ \hline 1 / 2 & \text { nipongolia' } & \text { nipongkomuni } & & \text { nipangalapi } \\ \hline 3 & \text { pongoli } & \begin{array}{l}\text { pongkomung } \\ \sim\end{array} & & \begin{array}{l}\text { pangalap } \\ \sim\end{array} \\ \hline 4 & & \text { alap }\end{array}\right\}$

| I | 'club' | 'hit, strike' | 'drink' | 'butcher, <br> slaughter' |
| :--- | :--- | :--- | :--- | :--- |
| root | bolilo | rembas | inung | sambale |
| AV/PT |  | norembas | nenginung | nonyambale |
| IV | nibolilo | nirembasi | niinung | nisambale |
| $1 / 2$ |  | niporembasa' | nipenginuni | niponyambalea' |
| 3 |  |  |  | sambalea' |
| 4 |  |  | penginunong |  |
| 5 |  |  | topenginung |  |
| 6 | pombolilo | porerembas |  | ponyambale |

Chart 2—Template verb class II: po $\boldsymbol{1}_{\mathbf{1}}$ -

| II | 'make' | 'sell' | 'cook' | 'live, dwell' | 'request, beg' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| root | gutu | balu | gabu | moia | mongi |
| FA | nogutu | nobalu' | nogabu | nomoia | nomongi |
| IV | nipogutu | nipobalu' | nipogabu | nipomoia | nipomongi |
| $1 / 2$ | nipogutua' |  | nipogabua' | nipomoiai |  |
| 3 | pogutu | pobalu' | pogabu | pomoia |  |
| 4 | pogutuong |  | pogabuong | pomoiaong | pomoiaong |
| 5 | topogutu | topobalu'' |  |  | topomongi |
| 6 |  |  |  |  |  |

Chart 3-Template verb class III: pe-
$\left.\begin{array}{|l|l|l|l|l|l|l|}\hline \text { III } & \text { 'bathe' } & \text { 'wait' } & \text { 'hide' } & \text { 'search' } & \text { 'eat' } & \text { 'learn' } \\ \hline \text { root } & \text { riing } & \text { taang } & \text { nsoyo' } & \text { lolo } & \text { ngkani } & \text { guru } \\ \hline \text { DY } & \text { neriing } & \text { netaang } & \text { nensoyo' } & \text { nelolo } & \text { nengkani } & \text { neguru } \\ \hline \text { IV } & & \text { nipetaang } & & \text { nilolo } & \text {-- } & \\ \hline 1 / 2 & & & & \text { nipeloloi } & & \\ \hline 3 & \text { periing } & \text { petaang } & \text { pensoyo' } & \begin{array}{l}\text { pelolo } \\ \sim\end{array} & & \text { lolo }\end{array}\right)$

| III | 'live, grow' | 'ride’ | 'enter' | 'walk, travel' | 'walk' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| root | tubu | sabe | ntama | lampa | gempang |
| DY | netubu | nesabe <br> ~ nensabe | nentama | nelampa | negempang |
| IV | nipetubu | nisabe | nintama | nilampa |  |
| 1/2 |  | nipesabei | nipentamai | nipelampai |  |
| 3 | petubu | pesabe | pentama | pelampa | pegempang |
| 4 | petubuong | pesabeong | pentamaong | pelampaong |  |
| 5 |  | topesabe |  |  | topegempang |
| 6 | petutubu | pesabe |  | pelampa <br> (telampa) |  |

Chart 4-Template verb class IV: po $\boldsymbol{o}_{\mathbf{1}}$ -

| IV | 'spouse' | 'fish' | 'work' | 'govern, rule' | 'fishing <br> net' | 'meeting' |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| root | rapi | banta | karajaa | parenta | jala | gombo' |
| DE | norapi | nobanta | nokarajaa | noparenta | nojala | nogombo' |
| IV | niporapi |  | nikarajaa | niparenta | nijala |  |
| $1 / 2$ |  |  |  |  |  |  |
| 3 | porapi | pobanta |  |  |  |  |
| 4 |  | pobantaong | pokarajaaong | poparentaong |  | pogombo'ong |
| 5 |  | topobanta |  | topoparenta | topojala |  |
| 6 |  |  |  |  |  |  |

Chart 5-Template verb class VI: popo-

| VI | 'lie down' | 'sit' | 'stand' |
| :--- | :--- | :--- | :--- |
| root | duling | tundo | 'oro |
| Postural | nopoduling | nopotundo | nopo'oro |
| IV | nidulina' | nitundoa' | ni'oroa' |
| $1 / 2$ | nipodulini |  |  |
| 3 | poduling | nopotundo | nopo'oro |
| 4 | podulinong | potundoong |  |
| 5 |  |  | (topongkoro) |
| 6 |  |  |  |

## Appendix 10 Semantic structural analysis of a folktale and free translation



1 Nidua' - correct form by Josep Piri.





[^128]

96) Tarima kasih.

## Free Translation of: The Story of the Seven Men Who Gathered Rattan and the Two Who Got Lost (see Figure 18.7). The story was narrated by SiDidi.

1) I am going to recount a story of seven people that climbed up to gather rattan,
2) and two of these persons got lost (lit. wrong road).
3) It was like this when the seven of them first climbed to gather rattan up at the spring (lit. eye of water).
4) After that they just went up to make umm a lean-to shelter.
5) After working for a while in the jungle
6) they entered the jungle
7) after they had gone into the jungle they spread out looking just for rattan.
8) Now, after that two of them got lost (lit. wrong road).
9) After they returned to their hut, they didn't find them in the hut
10) because, since they had gotten lost.
11) After that the five of them returned to their hut
12) and they waited for their friend
13) who didn't come.
14) So they were half-dead from searching for them,
15) 'Where are our two friends?'
16) But those two travelled
17) and continued to go up, and go up
18) (until) they came upon a person's house that had a jungle of many banana trees.
19) After that the two of them asked each other,
20) 'How about if we continue on up to that person's house or not?'
21) One of them spoke,
22) 'Ah, we must go there
23) because we are already so hungry.'
24) So (with no other choice) they went there
25) and they found a female parent with one virgin in that house inside the virgin jungle.
26) They looked around the house that had many bananas.
27) After they had been inside for a while
28) they said,
29) ‘Good evening!’
30) The parent answered,
31) 'Come in!’
32) They entered
33) just the two of them entered.
34) They were hungry.
35) Finally they asked for some food.
36) After that they went to sleep.
37) After they went to sleep here
38) they got umm a one branch of a banana leaf for the two of them
39) to have something for them to use to sleep on.
40) So in between them umm the virgin was on the right side where one branch of a banana leaf was
41) and on the left side of her there was also a branch of a banana leaf and so in between them was the virgin.
42) After one-half of the night the one man couldn't sleep
43) because of the virgin on his side
44) he just wanted to grab the virgin.
45) The other one didn't move and he slept
46) until daytime and didn't move at all.
47) The one did not sleep
48) until daytime
49) because he only wanted to grab umm that virgin.
50) Later when daytime had come, the female parent checked umm their beds, the one on the left, his banana leaf was all torn up.
51) The banana leaf on the right side of where she had slept
52) was not torn at all.
53) Later after that they wanted to go home (lit. return)
54) the parent just gave them umm gifts
55) for them to take
56) and for them to take back home to their spouses.
57) Umm, each one was given a wrapped package umm, a package,
58) so they did not know what was inside it
59) the female parent only ordered them,
60) 'When you arrive at your houses
61) call all of your siblings from near or far, all of your children and all of your parents,
62) and then you can open umm your packages here.'
63) So the two of them each had just one package,
64) in Pendau this is called umm bukeng, bungkeng (a wrapped package).
65) So after that they just returned,
66) they returned and arrived at their houses.
67) All of their siblings, their parents, their spouses, their children were happy.
68) All of them were happy
69) because they had just arrived.
70) So after they arrived in the house they called all of their siblings and parents that were near and far,
71) and then they opened umm their wrapped packages.
$72 / 73$ ) So the one who had torn the banana leaf that he had slept on was last
72) and then he opened his bag with its wrapped package.
73) The one who had slept until daytime and didn't tear his banana leaf was the first to open umm his wrapped package.
74) Not knowing what was inside it he gathered all of his siblings, his parents, his children, and his spouse from near and far they all came
75) and he opened it.
76) He opened it and the contents inside of it was money, there was gold, there were umm shirts, all kinds of things were just inside of it.
77) Finally they were just all so happy.
78) The other one later heard that news.
79) This one also gathered also umm his siblings, his parents,
80) and then also he opened also umm his wrapped package.
81) He opened it inside of his house
82) and then they were all sitting comfortably there
83) and then he opened umm his wrapped package.
84) He opened it and out came however only a lot of bumblebees that were inside of it.
85) Nearly all of the siblings, his children, his parents, and his spouse all were stung repeatedly
86) and were stung
87) they were all just stung by those bumblebees.
88) Finally they were in pain and some were harmed
89) because the bumble bees hurt when they bit them.
90) So that explains, umm about the movement (of a man)
91) 'We are not good to a woman.'
92) That goes with all of the laws that are finished in this world.
93) That's just my story.
94) Thank you.

## Appendix 11 Topic persistence values for topic continuity of Mtexts \#1-4

This section presents data for the topic persistence values for the topic continuity found in the Mtexts \#1-4. This data supplements the discussion in §17.4.


Figure A11.1. Frequency of ni- and nong- clauses according to whether the $A$ is equal to $P$ in topic persistence (TP $A=P$ ), the $A$ is less than $P$ in topic persistence ( $T P A<P$ ), or the $P$ is less than $A$ in topic persistence (TP $\mathbf{P}<A$ ) Mtexts \#1-4

Table 1-M1. Topic persistence values (Mtext1)

|  | ni- | ni- | nong- | nong- |
| :---: | :---: | :---: | :---: | :---: |
| TP | P | A | P | A |
| 1 : | 5 | 2 | 3 | 2 |
| 2: | 1 | 3 | 4 | 0 |
| 3: | 3 | 0 | 0 | 3 |
| 4: | 2 | 2 | 0 | 11 |
| 5: | 1 | 2 | 2 | 6 |
| 6: | 0 | 1 | 2 | 10 |
| 7: | 4 | 4 | 0 | 7 |
| 8: | 0 | 6 | 0 | 10 |
| 9: | 3 | 2 | 1 | 15 |
| 10: | 1 | 0 | 1 | 1 |
| 1-2: | 6 (30.00\%) | 5 (22.73\%) | 7 (53.85\% ) | 2 (3.08\%) |
| 3-10: | 14 (70.00\%) | 17 (77.27\%) | 6 (46.15\% ) | $\begin{array}{ll} \hline 63 \\ \text { ( } \end{array} \text { (96.92\% }$ |
| TOTAL: | 20 | 22 | 13 | 65 |

Table 2-M1. Relative Topic Persistence of As and Ps (vertical analysis) Mtext1

|  | Type 1: ni- | Type 2: nong- |
| :--- | :--- | :--- |
| TP of A lower | $14(56 \%)$ | $33(91.67 \%)$ |
| TP of A and P same | $0(0.00 \%)$ | $0(0.00 \%)$ |
| TP of P lower | $11(44.00 \%)$ | $3(8.33 \%)$ |
| Total | $25(100 \%)$ | $36(100 \%)$ |

Table 3-M1. Relative Topic Persistence of As and Ps (horizontal analysis) Mtext1

|  | Type 1: ni- | Type 2: nong- | Total |
| :--- | :--- | :--- | :--- |
| TP of A lower | $14(29.79 \%)$ | $33(70.21)$ | $47(100 \%)$ |
| TP of A and P same | $0(0.00 \%)$ | $0(0.00 \%)$ | $0(100 \%)$ |
| TP of P lower | $11(78.57 \%)$ | $3(21.43 \%)$ | $14(100 \%)$ |

Table 4-M2. Topic persistence values (Mtext2)

|  | ni- | ni- | nong- | nong- |
| :--- | :--- | :--- | :--- | :--- |
| TP | P | A | P | A |
| $1:$ | 9 | 4 | 4 | 3 |
| $2:$ | 5 | 8 | 1 | 7 |
| $3:$ | 6 | 6 | 2 | 7 |
| $4:$ | 0 | 6 | 0 | 4 |
| $5:$ | 1 | 10 | 2 | 0 |
| $6:$ | 0 | 9 | 1 | 6 |
| $7:$ | 5 | 5 | 1 | 5 |
| $8:$ | 0 | 5 | 0 | 7 |
| $9:$ | $14(35.00 \%)$ | $12(19.05 \%)$ | $5(29.41 \%)$ | 10 <br> $(22.73 \%)$ |
| $10:$ | $26(65.00 \%)$ | $51(80.95 \%)$ | $12(70.59 \%)$ | 34 <br> $(77.27 \%)$ |
| $1-2:$ |  |  |  | 5 |
| $3-10:$ | 40 | 63 | 17 | 44 |
| TOTAL: |  |  |  |  |

Table 5-M2. Relative Topic Persistence of As and Ps (vertical analysis) Mtext2

|  | Type 1: ni- | Type 2: nong- |
| :--- | :--- | :--- |
| TP of A lower | $42(65.63 \%)$ | $33(82.50 \%)$ |
| TP of A and P same | $2(3.131 \%)$ | $0(0.00 \%)$ |
| TP of P lower | $20(31.25 \%)$ | $7(17.50 \%)$ |
| Total | $64(100 \%)$ | $40(100 \%)$ |

Table 6-M2. Relative Topic Persistence of As and Ps (horizontal analysis) Mtext2

|  | Type 1: ni- | Type 2: nong- | Total |
| :--- | :--- | :--- | :--- |
| TP of A lower | $42(56.00 \%)$ | $33(44.00 \%)$ | $75(100 \%)$ |
| TP of A and P same | $2(100.00 \%)$ | $0(00.00 \%)$ | $2(100 \%)$ |
| TP of P lower | $20(74.07 \%)$ | $7(25.93 \%)$ | $27(100 \%)$ |

Table 7-M3. Topic persistence values (Mtext3)

|  | ni- | ni- | nong- | nong- |
| :--- | :--- | :--- | :--- | :--- |
| TP | P | A | P | A |
| $1:$ | 6 | 4 | 6 | 2 |
| $2:$ | 6 | 5 | 4 | 5 |
| $3:$ | 7 | 9 | 6 | 10 |
| $4:$ | 16 | 13 | 4 | 14 |
| $5:$ | 20 | 6 | 0 | 9 |
| $6:$ | 5 | 7 | 2 | 13 |
| $7:$ | 13 | 16 | 2 | 18 |
| $8:$ | 11 | 13 | 3 | 12 |
| $9:$ | $12(12.90 \%)$ | $9(10.47 \%)$ | $10(25.64 \%)$ | $7(7.22 \%)$ |
| $10:$ | $81(87.10 \%)$ | $77(89.53 \%)$ | $29(74.36 \%)$ | $92(92.78 \%)$ |
| $1-2:$ | 93 | 89 | 39 | 97 |
| $3-10:$ |  |  |  | 9 |
| TOTAL: | 93 |  |  |  |

Table 8-M3. Relative topic persistence of As and Ps (vertical analysis) Mtext3

|  | Type 1: ni- | Type 2: nong- |
| :--- | :--- | :--- |
| TP of A lower | $46(41.82 \%)$ | $82(82.00 \%)$ |
| TP of A and P same | $10(9.09 \%)$ | $5(5.00 \%)$ |
| TP of P lower | $54(49.09 \%)$ | $13(13.00 \%)$ |
| Total | $110(100 \%)$ | $100(100 \%)$ |

Table 9-M3. Relative topic persistence of As and Ps (horizontal analysis) Mtext3

|  | Type 1: ni- | Type 2: nong- | Total |
| :--- | :--- | :--- | :--- |
| TP of A lower | $46(35.94 \%)$ | $82(64.06 \%)$ | $128(100 \%)$ |
| TP of A and P same | $10(66.67 \%)$ | $5(33.33 \%)$ | $15(100 \%)$ |
| TP of P lower | $54(80.60 \%)$ | $13(19.40 \%)$ | $67(100 \%)$ |

Table 10-M4. Topic persistence values (Mtext4)

|  | ni- | ni- | nong- | nong- |
| :--- | :--- | :--- | :--- | :--- |
| TP | P | A | P | A |
| $1:$ | 4 | 1 | 3 | 0 |
| $2:$ | 1 | 1 | 2 | 1 |
| $3:$ | 4 | 3 | 3 | 2 |
| $4:$ | 2 | 1 | 2 | 1 |
| $5:$ | 0 | 1 | 1 | 2 |
| $6:$ | 6 | 1 | 2 | 2 |
| $7:$ | 1 | 5 | 0 | 0 |
| $8:$ | 2 | 3 | 1 | 4 |
| $9:$ | 5 | 1 | 1 | 3 |
| $10:$ | $19(79.17 \%)$ | $23(92.00 \%)$ | $10(66.67 \%)$ | $14(93.33 \%)$ |
| $1-2:$ | 24 | 25 | 15 | 15 |
| $3-10:$ |  |  |  | 15 |
| TOTAL: |  |  |  |  |

Table 11-M4. Relative topic persistence of As and Ps (vertical analysis) Mtext4

|  | Type 1: ni- | Type 2: nong- |
| :--- | :--- | :--- |
| TP of A lower | $17(58.62 \%)$ | $12(66.67 \%)$ |
| TP of A and P same | $1(3.45 \%)$ | $0(0.00 \%)$ |
| TP of P lower | $11(37.93 \%)$ | $6(33.33 \%)$ |
| Total | $29(100 \%)$ | $18(100 \%)$ |

Table 12-M4. Relative topic persistence of As and Ps (horizontal analysis) Mtext4

|  | Type 1: ni- | Type 2: nong- | Total |
| :--- | :--- | :--- | :--- |
| TP of A lower | $17(58.62 \%)$ | $12(41.38 \%)$ | $29(100 \%)$ |
| TP of A and P same | $1(100.00 \%)$ | $0(0.00 \%)$ | $1(100 \%)$ |
| TP of P lower | $11(64.71 \%)$ | $6(35.20 \%)$ | $17(100 \%)$ |

## Appendix 12 Interlinearised texts

## Hortatory genre—Ritual adat prayer (see also §18.2.3)

This is one of nine prayers that were given at a traditional Pendau innoculation ceremony (Quick 1989a) called pali. See Figure 18.11 for the semantic structural analysis of this prayer, and see §18.2.3 for further details. (Note that glosses with (Ind.) indicate that the word is a clear borrowing from Indonesian.)
adat 001
Ee, ee, moo unga niAmbo Dola ulanggiromo moo. ee ee moo unga ni- Ambo Dola ' $u$ - langgir $=m o \quad$ moo hey hey this child PN/GE= Ambo Dola 1SG.IV/IR-ceremonial_washing =COMP this Hey, hey, this child of Ambo Dola I now wash ceremonially here.
adat 002-007
Ndau diang bai ni'ito'u toila batangano'u, jojoo ndau diang bai ni- 'ito $=$ ' $u$ to $=$ ila batangan ='u jojoo NEG EXIS like IV/RE- see =1SG/GE RM= ABL body =1SG/GE all

```
mo'upu'и bengkelonyo langkainyo, ee, moo niposialai
mo'uри ='u bengkel =nyo langkai =nyo ee mooni- posi- ala -i
grandchild=1SG/GE female =3SG/GE man =3SG/GE hey this IV/RE- SF/MUT- get -DIR
sono ada' ndau diang bai butu ada' Pendau ndau diang butu riada'
sono adat ndau diang bai butu adat Pendau ndau diang butu ri= adat
COM traditions NEG EXIS like only traditions Pendau NEG EXIS only LOC=traditions
```

Tajio, niposialai mami. Jari emu ada’ nyaa
Tajio ni- posi- ala -i mami jari emu adat nyaa
Tajio IV/RE- SF/MUT- get -DIR 1PL.EXC/GE so 2SG/AB traditions don't
melaloi! Nyaa melaloi! Karna emu posialai
M- pe- lalo -i nyaa $M$ - pe- lalo -i karna emu posi- ala-i
IR- SF/DY- interfere -DIR don't IR- SF/DY- interfere-DIR because 2PL/AB SF- get-DIR
ndau diang nitaimpina. Emu ndau niposi(sala) jojoo mami
ndau diang ni= taimpina emu ndau ni= posi- sala jojoo mami
NEG EXIS PN/GE= stepchild 2PL/AB NEG IV/RE=SF/MUT- wrong all 1PL.EXC/GE


Everyone (lit. there isn't like) that I see here is from my blood line (lit. my body), all my grandsons and granddaughters, hey, will be given the adat (ceremony). That is not only like the Pendau adat (and) there is not only the Tajio adat, we will do the adat (ceremony) together. So don't interfere with the adat! Don't interfere! Because you do not take those who are stepchildren. All of us together do not wrong you, (but) we unite as one whatchamacallit, the two adat ceremonies are united and taken as only one.
adat 008-014
ndau diang, ndau diang niposisala ami totogoge unga. Nyaa
ndau diang ndau diang ni- posi- sala 'ami RED- togoge unga nyaa
NEG EXIS NEG EXIS IV/RE- SF/MUT-wrong 1PL.EXC/AB RED- parents child don’t

| roboyoni |  | miu! | Nyaa papa'iyong! |  | Nyaa manakait! |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ro- boyong | $-i$ | miu | nyaa | RED-pa'i | -ong | nyaa ma- na- | kait


| Nyaa mobuta! | Nyaa mebisi'ong |  | sagala rupa, |
| :--- | :--- | :--- | :--- |
| nyaa $M$-po- | buta nyaa $M-$ pe bisi | -ong sagala |  |

don't IR- SF/DE- blind don't IR- SF/DY- seek.to.harm-locN every all_kinds
There isn't, children this isn't wrong for us adults to do this. Don't bother them! Don't wound! Don't cripple! Don't blind! Don't seek harm of any kind of thing.
adat 015-018
Nyaa membuat ri'alae nuunga. nipoumur mai moo
nyaa membuat $r i=$ 'alae $n u=$ unga ni- po- umur mai moo
don't make (Ind.) LOC= body CN/GE= child IV/RE-SF/DE- age come this

| mo'upu'u | ndau mai | tetani | ndau | soung | tetani | jimo | moo. |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| mo'upu $=$ | ndau mai tetani | ndau | soung | tetani | jimo | moo |  |
| grandchild= $=$ | 1SG/GE | NEG come other | NEG one | other | 3PL/AB this |  |  |

Don't bring evil intent of any kind upon these children. Bring life to my grandchild don't bring anything different not one different thing on them here.
adat 019-020
Ndau poleongopo Dampelasmo'upu hanga poana'ong lalong junjung moo. Ee
ndau poleong =po Dampelasmo'upu hanga poana'ong lalong junjung moo ee
NEG canari_tree=CONT Dampelasgrandchild and ${ }^{3}$ nephew/niece inside house this Hey

[^129]```
jojoopo ana'u sembiti mo'uри'и ita-itai miu.
jojoo =po unga ='u so- ng- biti mo'upu ='u RED- ita -i miu
all =CONT child =1SG/GE ONE-LIG-time grandchild=1SG/GE RED- see -DIR 2PL/GE
    The Dampelas grandchildren are not more canari trees but are the nephews and nieces inside this
    house. Hey all of them are my children my grandchildren that you see at one time.
```

adat 021-022
ndau mai bai selio nutoo kana jojoo ribatangano'u
ndau mai bai selio nu= too kana jojoo ri= batangan ='u
NEG come like like CN/GE=person because all LOC= body= $1 \mathrm{SG} / \mathrm{GE}$
nipo'oumur miu seinsangana.
ni- po- 'o- umur miu seinsangana
IV/RE- SF- HAVE-age 2PL/GE tomorrow

Don't come like a person because you will give my descendants (lit. my body) their age to live tomorrow.

## Narrative Genre-Oral Folktale

This is the story of seven brothers who went into the jungle to gather rattan, and about the adventure of two who got lost as told by SiDidi. This is the same folktale analysed with the Semantic Structural Analysis in Chapter 18 (see Figure 18.7), and displayed in Appendix 10 (note that the numbers used there do not necessarily match the numbering used here, since the interlinearised text used here is from the original database). (Note that glosses with (Ind.) indicate that the word is a clear borrowing from Indonesian.)
fktale01.txt 001a-001b
$\left.\begin{array}{llllll}\text { A'u } & \text { mepeuma-umana' } & \text { uma-umanong } & \text { topepitu } & \text { nala'e } \\ \text { a'u } & \text { M- } & \text { pepe- uma-umang }-a & & \text { uma-umang -ong } & \text { to }=\text { pepitu }\end{array}\right)$ na- la'e
mene' nombulagon, doruo too nasalanjalang.
mene' $N$ - pong- bulagon doruo too no- sala- ng- jalang
go_up RE- SF/PT- rattan two person ST/RE- wrong- LIG- road
I am going to recount a story of seven people who climbed up to gather rattan, and two of these persons got lost (lit. wrong road).
fktale01.txt 002a-002b

| Bai moo pertama jimo pepitu nala'e |  | nombulagon | rimene' |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| bai moo | pertama | jimo | pepitu | na- | la'e | $N-$ | pong- bulagon | ri | mene'


| rimata |  | nuogo. |  | Ila | uo | jimo | asi | mene |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ri= | mata | $n u=$ | ogo | ila | 'uo | jimo | 'asi | mene |

negutu sanu binaung.
pe- gutu sanu binaung
RE- SF/DY- make whatchamacallit lean-to
It was like this when the seven of them first climbed to gather rattan up at the spring (lit. eye of water).
After that they just went up to make umm a lean-to shelter.
fktale01.txt 002c-002e

| Nasae-sae |  | mai | jimo | mokarajamo | ribumbu |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| no- sae | -RED | mai | jimo | M- po- karajaa $=$ mo | ri= | bumbu |
| ST/RE-long.time | -RED | come | 3PL/AB | IR- SF- work | $=$ COMP | LOC= |
| jungle |  |  |  |  |  |  |


| mentama |  | ribumbu. | Dungku | rilalong | nubumbu | jimo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| M- pe- | ntama | ri= bumbu dungku | ri= lalong | nu $=$ bumbu | jimo |  |
| IR- | SF/DY- | enter | LOC= $=$ jungle | after_that | LOC= inside | CN/GE= jungle |


| nesamburemo |  |  | nelolo |  | bulagon | asi. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $N-\quad$ pe- | sambure | $=$ mo | N- pe- | lolo | bulagon | ’asi |
| RE- SF/DY- spread | $=$ COMP | RE- SF/DY- | search_for | rattan | just |  |

After working for a while by the jungle they entered the jungle. After they had gone into the jungle they spread out looking just for rattan.
fktale01.txt 003-005

| Naa', ila uo doruo nasalanjalang | neteule | nyau mai |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| naa' ila 'uo doruo no- sala | ng- jalang | N- pe- teule nyau mai |  |
| Now | ABL yonder two | ST/RE- wrong -LIG-road | RE-SF/DY-returngo_down come |


| bongkarang nijimo | ndaumo | nidua'i | nijimo | bongkarang, |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| bongkarang nijimo | ndau $=$ mo | ni- dua' | - | nijimo | bongkarang |
| garden_hut | 3PL/GE | NEG | $=$ COMP | IV/RE- arrive - DIR | 3PL/GE |
| garden_hut |  |  |  |  |  |


| kana | apa | jimo | nasalanjalangomo. |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| kana | apa | jimo | no- | sala- | ng- | jalang | = mo

Now, after that two of them got lost (lit. wrong road). After they returned to their hut, they didn't find them in the hut because, since they had gotten lost.
fktale01.txt 006a-006b
Ila uo jimo tolelima neteule ribongkarang nijimo
ila 'uo jimo to= lelima N - pe- teule ri= bongkarang nijimo
ABL yonder 3PL/AB RM= five RE- SF/DY- return LOC= garden_hut 3PL/GE
nipepetaang nijimo, tagu nijimo ndau diang nodua'.
ni $=$ RED-pe- taang nijimo tagu nijimo ndau diang $N$ - po- dua’
IV/RE- RED- SF/DY-wait 3PL/GE friend 3PL/GE NEG EXIS RE- SF/DE- arrive
After that the five of them returned to their hut and they waited, (but) their friend didn't come.

fktale01.txt 008a-008c
Ai todoruo moo nelampa taruus mene’ mene'
ai to $=$ doruo moo $N$ - pe- lampa tarus mene' mene'
but RM= two this RE- SF/DY- walk continue go_up go_up

| metedua, |  | junjung | nutoo | bumbu | nuloka | dea. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $M-$ | pe- | te- dua, | junjung | nu= | too | bumbu | nu= | loka |
| dea |  |  |  |  |  |  |  |  |
| IR- | SF/DY- | NV- arrive | house | CN/GE= person | jungle | CN/GE= banana | many, |  |

But those two travelled and (they) continued to go up, and go up (until) they came upon a person's house that had a jungle of many banana trees.
fktale01.txt 009a

| Ila | uo | jimo | mosipo'utanyamo | jimo | doruo, |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ila | 'uo | jimo | M- posi- | po- 'utanya $=$ mo | jimo | doruo |

ABL yonder 3PL/AB IR- SF/MUT- SF- ask =COMP 3PL/AB two
After that the two of them asked each other,
fktale01.txt 009b

| 'ayama'o | ito | moo | matarus | ma'o rijunjung |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ayama'o | ito | moo | mo- tarus | ma'o | ri $=$ |
| junjung |  |  |  |  |  |
| how | 1PL.INC/AB | this | UD/IR-continue go | LOC $=$ house |  |


| ritoo |  | uo | atau | ndau?' |
| :--- | :--- | :--- | :--- | :--- |
| ri= | too | 'uo | atau | ndau |
| LOC $=$ | person | yonder | or | NEG |

'How about if we continue on up to that person's house or not?'
fktale01.txt 010a-010c
Neburamo soung, 'aa' ito kana matarus,
$N$ - pe- bura =mo soung aa' ito kana mo- tarus
RE-SF/DY- speak =COMP one ah 1PL.INC/AB certain UD/IR- continue

| karna | ito | moo | nooropomo |  | asi.' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| karna ito | moo | no- orop | $=$ mo | 'asi |  |
| because | 1PL.INC/AB | this | ST/RE- | hunger | $=$ COMP just |

One of them spoke, 'Ah, we must go there, because we are already just so hungry.'
fktale01.txt 011a-011b

tomogurang bengkel sono soung randaa rijunjung uo
tomogurang bengkel sono soung randaa ri= junjung 'uo
parent/elder female COM one maiden LOC= house yonder
rilalong nubumbu ripangale.
ri= lalong $n u=$ bumbu $r i=$ pangale
LOC $=$ inside CN/GE= field LOC= virgin_jungle
So (with no other choice) they went there and they found a female parent with one virgin in that house inside a field in the virgin jungle.
fktale01.txt 012-013

| Kukuliling | junjung | jimo | uo, | sonu, | loka | dea. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| RED- kuliling | junjung | jimo | 'uo | sonu | loka | dea |
| RED- go.around.something | house | 3PL/AB | yonder | whatchamacallit | banana many, |  |

Nasae jimo nentama, maa'o peilu nijimo,
no- sae jimo $N$ - pe- ntama maa' peilu nijimo

ST/RE-long.time 3PL/AB RE-SF/DY-enter said tell 3PL/GE

```
'salama' mondoung!'
salama' M- po- ndoung
save IR- SF/DE- night
```

They looked around the house that had, whatchamacallit, many bananas. After a while they entered, they said, 'Good evening!’
fktale01.txt 014-016

| Nisimbati |  | nutomogurang | uo, | 'pentama |  | mai!' |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ni- simbat | $-i$ | $n u=$ | tomogurang | 'uo | pe- | ntama | mai |
| IV/RE- respond | -DIR | CN/GE= parent | yonder | SF/DY- enter | come |  |  |


| Jimo | nentama |  | ma'o, | nentama |  | ma'o jimo | asi | doruo. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| jimo | $N$ - pe- | ntama | ma'o | $N$ - pe- | ntama | ma'o jimo | 'asi | doruo |
| 3PL/AB | RE- SF/DY- enter | go | RE- SF/DY- enter | go | 3PL/AB just | two |  |  |

Nooropomo.
no- orop =mo
ST/RE- hunger =COMP
The parent answered, 'Come in!’ They entered, just the two of them entered. They were hungry.
fktale01.txt 017a-17e

| Tarapasa | jimo | nomongi | toreinang. |  | Ila | uo | jimo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| tarapasa | jimo | $N$ - po- mongi | to $=$ | ro- | inang | ila | 'uo |
| force | 3PL/AB | RE- SF- request | RM= | IV/IR- | eat | ABL | yonder | 3PL/AB


jimo doruo nialapa' sanu roong loka
jimo doruo ni- alap -a’ sanu roong loka
3PL/AB two IV/RE-get -TZ whatchamacallit, leaf banana

| pesandaanong | ropo'oturui |  |  |  |  |  | nijimo. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| pe- | so- | ndaang | -ong | ro- | po- | 'o- | turu |
| -i | nijimo |  |  |  |  |  |  |
| SF/DY- | ONE- branch | -locN | IV/IR- | SF- HAVE- | sleep | -DIR | 3PL/GE |

Finally they asked for some food. After that they went to sleep. After they went to sleep here they got umm one branch of a banana leaf for the two of them to have something for them to use to sleep on.
fktale01.txt 018a-018b

| Jari ritanga-tanga | nijimo sanu | randaa | tosabata |  |
| :--- | :--- | :--- | :--- | :--- |
| jari ri $=$ RED- tanga | nijimo sanu | randaa | to $=$ so- | bata |
| so | LOC= RED- mid | 3PL/GE whatchamacallit, | maiden | RM= ONE- |
| side |  |  |  |  |



So in between them umm the virgin was on the right side where one branch of a banana leaf was and on the left side of her there was also a branch of a banana leaf and so in betweeen them was the virgin.
fktale01.txt 019a-019c

| Dungku | santanga |  | bengi | tosoung | ndau neteompoturu |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| dungku | so- ng- | tanga | mbengi | to $=$ soung | ndau ne- te- om- | po- turu |
| after_that | ONE- LIG- mid | night | RM= one | NEG AV/RE- NV- UD- SF- sleep |  |  |


| karna | randaa | risebinyo | io | butu | moluar |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| karna | randaa | ri $=$ sebi | $=$ nyo | io | butu | mo- | luar |
| because | maiden | LOC $=$ side | $=3 S G / G E$ | 3SG/AB | only | UD/IR- | want |

monggagap randaa.
M- pong- gagap randaa
IR- SF/PT- grope maiden
After one-half of the night the one man couldn't sleep because of the virgin on his side he just wanted to grab the virgin.
fktale01.txt 020-021c
Tosoung moondau diang neibu-ibu' noturu sampe neeleo ndau to $=$ soung moondau diang $N$ - pe- RED-ibu' $N$ - po- turu sampe no- eleo ndau RM $=$ one this NEG EXIS RE- SF- RED- move RE- SF- sleep until ST/RE-day NEG
diang neibu-ibu’. Tosoung moo ndau neteompoturu sampe
diang $N$ - pe- RED - ibu' to $=$ soung moo ndau ne- te- om- po- turu sampe
EXIS RE- SF- RED- move RM= one this NEG AV/RE- NV-REL- SF- sleep until

| neeleo |  | asi, | kana | io | butu | moluar |  | pegagap |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| no- | eleo | 'asi | kana | io | butu | mo- | luar | pe- | gagap |
| ST/RE- day | oh_dear | must | 3SG/AB | just | UD/IR- | want | SF/DY- | grope |  |

sanu randaa uo.
sanu randaa 'иo
whatchamacallit maiden yonder
The other one didn't move and he slept until daytime and didn’t move at all. The one did not sleep until daytime, oh dear, he certainly just wanted to grab umm that virgin.
fktale01.txt 022-023b
Ila uo dungku neeleo mai niparesa nutomogurang bengkel ila 'uo dungku no-eleo mai ni- paresa nu= tomogurang bengkel ABL yonder after_that ST/RE- day come IV/RE- check CN/GE= parent/elder female


loka nipodulininyo ndau diang seide' nesia.
loka ni- po-duling -i =nyo ndau diang so- ide' $N$ - pe-sia
banana IV/RE- SF- lay.down -DIR =3SG/GE NEG EXIS ONE-small RE- SF/DY- torn
Later when daytime had come, the female parent checked umm their beds, the one on the left, his banana leaf was all torn up. The banana leaf on the right side of where she had slept was not torn at all.
fktale01.txt 024a-d
Dungku ila uo jimo moluar meteule jimo asi nibagi dungku ila 'uo jimo mo- luar $\mathrm{M}^{-}$pe- teule jimo ’asi ni- bagi after_that ABL yonder 3PL/AB UD/IR- want IR- SF/DY-return 3PL/AB just IV/RE- give

| nutomogurang | ио | anu | ole-ole | untuk | ro' | ng nijim |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| tomogurang | 'иo | sanu | ole-ole | untuk | ro- | 'omung | nijimo |
| N/GE= parent | yonder | whatchamacallit | gift (Ind.) | for (Ind.) | V/IR | carry | 3PL/G |

meteule ro'omung nijimo ma'o sono rirapi nijimo.
M- pe- teule ro- 'omung nijimo ma'o sono ri= rapi nijimo
IR- SF/DY-return IV/IR- carry 3PL/GE go COM LOC= spouse 3PL/GE
Later after that they wanted to go home (lit. return) the parent just gave them umm gifts for them to take and for them to take back home to their spouses.
fktale01.txt 025a-025f

| Sonuu, | nibagi |  | sou-soung pesangkaluong |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| sanu | ni- | bagi | RED- soung | pe- so- ng- ,alu | -ong |
| whatchamacallit | IV/RE- give | RED- one | SF- ONE- LIG- wrapped.package | -locN |  |


| sanu, | bungkusan, | jari | ndau niotoi | sapa | rilalong, | sura |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| sanu | bungkusan | jari | ndau ni- | otoi | sapa | ri= lalong | sura |
| whatchamacallit wrapped.package (Ind.) | so | NEG | IV/RE- know what | LOC= inside | only |  |  |

nituuna' nutomogurang bengkel uo, 'ono modua'
ni- tuung -a' nu= tomogurang bengkel 'uo ono $M$ - po- dua'
IV/RE- order -TZ CN/GE= parent/elder female yonder if IR- SF- arrive

| rijunjung | miu | aia' |  | jojoo sampesuvu | miu | rigaar | atau |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ri $=$ junjung | miu | 'ai | $-a$, | jojoo sampesuvu | miu | ri= | gaar | atau |
| LOC $=$ house | 2PL/GE call | -TZ | all | siblings | 2PL/GE | LOC $=$ far | or (Ind.) |  |

rianta' unga miu jojoo togoge miu, paey robuka' miu
ri= anta' unga miu jojoo togoge miu paey ro- buka' miu
LOC= close child 2PL/GE all parents 2PL/GE then IV/IR- open (Ind.) 2PL/GE

| sanu | bungkusan | miu | moo.' |
| :--- | :--- | :--- | :--- |
| sanu | bungkus | miu | moo |
| whatchamacallit | wrapped_package (Ind.) | $2 P L / G E$ | this |

Umm, each one was given a wrapped-package umm, a package, so they did not know what was inside it, the female parent only ordered them 'When you arrive at your houses call all of your siblings from near or far, all of your children and all of your parents, and then you can open umm your packages here.'
fktale01.txt 026a-026b

| Jari | jimo | doruo | asi | pesounong |  | bungkusan |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| jari | jimo | doruo | 'asi | pe- | soung | -ong | bungkusan |
| so | 3PL/AB two | just | SF/DY- one | -locN | wrapped.package (Ind.) |  |  |

ono pomeilu nutopendau sanu bukeng, bungkeng.
ono pong- peilu nu= to- pe- ndau sanu bukeng bungkeng
if SF/PT- said CN/GE= AGNM SF/DY- NEG whatchamacallit rattan.bag rattan.bag
So the two of them each had just one package, in Pendau this is called umm bukeng, bungkeng (a bag made from rattan). ${ }^{4}$
fktale01.txt 027a-027e
Jari ila uo jimo asi neteulemo neteule mai moo
jari ila 'uo jimo 'asi $N$ - pe- teule =mo $N$ - pe- teule mai moo so ABL yonder 3PL/AB just RE- SF/DY-return =COMP RE-SF/DY-return come this


| sampesuvu | togoge | nijimo | rapi-rapi | nijimo | unga | nijimo. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| sampesuvu | togoge | nijimo | RED- rapi | nijimo | unga | nijimo |
| siblings | parents | 3PL/GE | RED- spouse | 3PL/GE | child | 3PL/GE |

Jojoo neteluar, apa jimo asi nodua'omo.
jojoo ne- te- luar apa jimo 'asi $N$ - po-dua' =mo
all AV/RE- NV- happy because 3PL/AB just RE- SF- arrive =COMP
So after that they just returned, they returned and arrived at their houses. All of their siblings, their parents, their spouses, their children were just happy. All of them were happy, because they had just arrived.

[^130]fktale01.txt 028a-028b
Jari dungku jimo nodua' rijunjung ni’aia'omo jojoo
jari dungku jimo $N$ - po- dua' ri= junjung ni- 'ai -a' =mo jojoo
so after_that 3PL/AB RE- SF- arrive LOC= house IV/RE- call -TZ =COMP all

| nijimo | sampe-sampesuvu | nijimo | togoge | rigaar | rianta', |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| nijimo | RED- sampesuvu | nijimo | togoge | ri $=$ | gaar | ri= anta |
| 3PL/GE RED- siblings | 3PL/GE parents | LOC $=$ distance | LOC= close |  |  |  |


| paey | jimo | mombuka' | sanu | bukeng | nijimo uo. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| paey | jimo | M- pong- buka' | sanu | bungkeng | nijimo 'uo |

and.then 3PL/AB IR- SF/PT- open (Ind.) whatchamacallit, rattan.bag 3PL/GE yonder
So after they arrived in the house they called all of their siblings and parents that were near and far, and then they opened umm their wrapped packages.
fktale01.txt 029a-029b

| Jari to | soung | moo | asi | tonesia |  |  | roong | loka | moo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| jari to $=$ | soung | moo | 'asi | to $=$ | $N$ - | pe- | sia | roong | loka | moo


paey nibuka’onyo taasonyo sono bukengonyo.
paey ni- buka' =nyo taas =nyo sono bungkeng =nyo
and.then IV/RE- open (Ind.) =3SG/GE plastic_bag =3SG/GE COM rattan.bag =3SG/GE
So the one who had just torn the banana leaf that he had slept on was last and then he opened his rattan bag with its wrapped package.
fktale01.txt 030

| Tosoung | moo | tono' |  |  | sam | neeleo | dau diang |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| soung | oo | to $=\mathrm{N}$ - | po- 'o- | turu | sampe | no- eleo | ndau diang |
| $\mathrm{M}=$ one | this | RM=RE- | SF- HAVE- |  | until | ST/RE-day | NEG EXIS |


| esi | roong lokanyo | nongailulu | bu |
| :---: | :---: | :---: | :---: |
| $N$ - pe- sia | roong loka =nyo | $N$ - pong- ailulu | $N$ - pong- buka' |
| RE- SF/DY- torn | leaf banana =3SG/GE | RE- SF/PT- in_front | RE- SF/PT- open (Ind.) |

sanu bungkengonyo.
sanu bungkeng =nyo
whatchamacallit rattan.bag =3SG/GE
The one who had slept until daytime and didn't tear his banana leaf was the first to open umm his wrapped package.
fktale01.txt 031a-031b
Ndau niotoi sapa rilalong nipasiromonyo jojoo
ndau ni- otoi sapa ri= lalong ni- pa- siromo =nyo jojoo
NEG IV/RE- know what LOC= inside IV/RE- CAUS- gather =3SG/GE all


Not knowing what was inside it he gathered all of his siblings, his parents, his children, and his spouse from near and far they all came, and he opened it.
fktale01.txt 032
Nibuka' mai isinyo rilalong diangomo doi'
ni- buka' mai isi =nyo ri= lalong diang $=m o \quad$ doi'
IV/RE- open (Ind.) come filling =3SG/GE LOC= inside EXIS =COMP money

fktale01.txt 033-034c
Tarapasa neteluaromo asi. Tosoung moo dungku
tarapasa ne- te- luar =mo 'asi to= soung moo dungku force AV/RE- NV-happy =COMP just RM= one this after_that
neteinepe kareva uo. Tosoung moo moje
ne- te- -in- epe kareva 'uo to $=$ soung moo moje
AV/RE- NV- -REL-listen news yonder RM= one this also

| nomasiromo |  | moje | sanu | sampesuvunyo, <br> $N$ - pong- pa- |
| :--- | :--- | :--- | :--- | :--- |
| siromo | moje | sanu | sampesuvu | $=$ nyo |
| RE- SF/PT- CAUS- | gather | also | whatchamacallit | siblings |

togogenyo, paey moje nibuka'onyo moje sanu
togoge =nyo paey moje ni- buka' =nyo moje sanu
parents/elders =3SG/GE and.then more IV/RE- open (Ind.) =3SG/GE also whatchamacallit
bukengonyo uо.
bungkeng =nyo 'uo
rattan.bag =3SG/GE yonder
Finally they were just all so happy. The other one later heard that news. This one here also gathered also umm his siblings, his parents, and then also he opened also umm his rattan bag package.
fktale01.txt 034d-034f
Nibuka'onyo rilalong nujunjung paey jimo
ni- buka' =nyo ri= lalong nu= junjung paey jimo
IV/RE- open (Ind.) $=3 \mathrm{SG} / \mathrm{GE}$ LOC= inside $\mathrm{CN} / \mathrm{GE}=$ house and.then 3PL/AB

| nopotundo | mbosi-mbosi', | paey | nibuka'onyo |  | sanu |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $N$ - popo- tundo $R E D-$ mbosi' | paey | ni- | buka | =nyo | sanu |
| RE- SF/POS- sit | RED- good | and.then | IV/RE- | open (Ind.) | =3SG/GE |

bukengonyo uo.
bungkeng =nyo 'uo
rattan.bag =3SG/GE yonder
He opened it inside of his house and then they were all comfortably sitting there and then he opened umm his wrapped rattan bag.
fktale01.txt 034g
Nibuka' mai joo sura tatambuang dea rilalongonyo.
ni- buka’ mai joo sura RED-tambuang dea ri= lalong =nyo
IV/RE- open (Ind.) come however only RED- bumblebee many LOC= inside =3SG/GE
He opened it and out came however only a lot of bumblebees that were inside of it.
fktale01.txt 035a-035c

| Nedea | nokurang | sampesuvu | unganyo | togogenyo |
| :--- | :--- | :--- | :--- | :--- |
| $N-\quad$ pe- dea no- kurang | sampesuvu | unga =nyo | togoge =nyo |  |
| RE- SF/DY-many | ST/RE- less | siblings | child =3SG/GE parents =3SG/GE |  |


| rapinyo | jojoo | niratinjunan, |  | nitinjung |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| rapi | $=n y o$ | jojoo | ni- $\quad$ ra- | tinjung | -an | ni- tinjung |
| spouse | $=3 S G / G E$ | all | IV/RE- ITV- | sting | ITV | IV/RE- sting |

nitinjung jojoo nutatambuang uo asi.
ni- tinjung jojoo nu= RED-tambuang 'uo 'asi
IV/RE- sting all CN/GE= RED-bumblebee yonder just
Nearly all of the siblings, his children, his parents, and his spouse all were stung repeatedly, and were stung they were all just stung by those bumblebees.
fktale01.txt 036a-036b

| Tarapasa | переето |  | sagaat | neijaromo |
| :---: | :---: | :---: | :---: | :---: |
| tarapasa | no- | pee =mo | so- gaat | $N$ - pe- ijar =mo |
| force | ST/RE- | hurt =COMP | ONE- separated | RE- SF/DY- hurt =COMP |
| karna | перее | $n i ' i ' i$ | nutatambuang. |  |
| karna | no- pee | ni- 'i'i | $n u=\quad R E D-$ | tambuang |
| because S | ST/RE- hurt | IV/RE- bite | CN/GE= RED- | bumblebee |

Finally they were in pain and some were harmed because the bumblebees hurt when they bit them.
fktale01.txt 037-038

| Jari uomo | sanu | ono kedo | 'Ito | ndau mombosi' |
| :--- | :--- | :--- | :--- | :--- |
| jari 'uo $=$ mo | sanu | ono kedo | ito | ndau mo- mbosi' |
| so yonder $=$ COMP whatchamacallit if | movement | 3PL.INC/AB | NEG ST/IR- good |  |

sono ribengkel.’ Uo jojoo sono hukuman notou' asi ridunia moo.
sono ri= bengkel 'uo jojoo sono hukuman no- tou' 'asi ri= dunia moo
COM LOC= female yonder all COM law ST/RE-finish just LOC= earth this

Uo jojoo sono hukuman notou' asi ridunia moo.
'иo jojoo sono hukuman no- tou' 'asi ri= dunia moo
yonder all COM law ST/RE- finish just LOC= earth this
So that explains, umm about the behaviour (lit. movements) (of a man). 'We do not behave well with a woman.' That goes with all of the laws that are finished just in this world.
fktale01.txt 039-040
Sura ila uo uma-umanongoto. Tarima kasih.
sura ila 'uo uma-umang-ong =to tarima kasih
only ABL yonder story -locN =1PL.INC/GE receive (Ind.) love/thanks (Ind.)
That's just my (hon. pl. incl.) story. Thank you.

## Narrative Genre-Composed Folktale

This is 'the story of the turtle and the monkey who were friends', as written by Josep Piri. This is one of several versions and will be familiar to those who work in Sulawesi and the Philippines.
turtle.pin 001
Uma-umanong ulasang sono odo notagu.
Uma-umanong ulasang sono odo $N$ - po- tagu
story turtle COM monkey RE- SF/DE- friend
The story of the turtle and the monkey who were friends.
turtle.pin 002-003b
Riulu diang ulasang o odo notagu. jampanyo jimo
ri= ulu diang ulasang o odo $N$ - po- tagu sampanyo jimo LOC = before EXIS turtle and monkey RE- SF/DE- friend after 3PL/AB

bau ribangkalang.
bau ri= bangkalang
fish LOC= river
Long ago there was a turtle and a monkey who were friends. After they had been friends for a long time, they went to search for fish in the river.
turtle.pin 004-006

uo, bole-bole jimo nete'ito sangka nuloka.
'иo bole-bole jimo ne- te- 'ito sangka nu= loka yonder suddenly 3 PL/AB AV/RE- NV- see seedling CN/GE= banana

While they were dip net fishing for fish and shrimp in that river, suddenly they happened to see some banana seedlings.
turtle.pin 007-009


| paey | ni’omung | nijimo, | neteule |  | rijunjung. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| paey | ni- | 'omung | nijimo | $N-$ pe- | teule |
| ri | junjung |  |  |  |  |
| and.then | IV/RE- carry | 3PL/GE | RE- SF/DY- return | LOC= house |  |

And then they dug up the banana seedlings there, and then they carried (the seedlings), and returned home.
turtle.pin 010-012b

| Sampanyo nodua' |  | rijunjung, | jimo | nogabu. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| sampanyo $N-$ po- dua' | ri $=$ | junjung | jimo | $N-$ po- | gabu |  |

after RE- SF/FA- arrive LOC= house 3PL/AB RE- SF/FA- cook
bai uo nongongo, jimo nengkani.
bai 'uo $N$ - pong- ngongo jimo $N$ - pe- ngkani
like yonder RE- SF/PT- already_cooked 3PL/AB RE- SF/DY- eat
After they arrived home, they cooked. After they cooked, they ate.
turtle.pin 013-015

| Notou' | nengkani |  | jimo | nonuda |  | unga nuloka |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| no- | tou, $N$ - pe- | ngkani | jimo | $N-\quad$ pong- | tuda | unga nu= | loka |
| ST/RE- | finish RE- SF/DY- eat | 3PL/AB | RE- SF/PT- | plant | child | CN/GE= banana |  |


| tonialap |  | nijimo | ningeno | uo. | Jimo | nonuda | pada-pada |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| to $=$ ni- | alap | nijimo | ningeno | 'uo | jimo | $N$ - pong- tuda | RED- pada |  |
| RM= IV/RE- get | 3PL/GE just_now | yonder | 3PL/AB | RE- SF/PT- plant RED- together |  |  |  |  |



| unga | nuloka |  | uo | nituda |  | nijimo, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| unga | nu= | loka | 'uo | ni- | tuda | nijimo |
| child | CN/GE= banana | yonder | IV/RE- | plant | 3PL/GE |  |

After they finished eating they planted the banana seedlings that they had just gotten then. They planted the seeds together in one group. After several months had passed since they had planted the banana seedlings,
turtle.pin 016-018

| loka | nuulasang | neumbu'omo |  |  | nombos |  | ai | loka |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| loka | nu= ulasang | $N$ - pe- | umbu' | $=\mathrm{mo}$ | no- | mbosi' | ai | loka |
| banana | CN/GE= turtle | RE-SF/DY- | sprout | =COMP | ST/RE- | good | but | banana |

nuodo, netubu-tubu umbu'onyo sura resensekanyo.
nu $\quad$ odo $N$ - pe- RED-tubu umbu' =nyo sura ro- senseka =nyo
CN/GE= monkey RE-SF/DY- RED- live sprout =3SG/GE only IV/IR- tear =3SG/GE The turtle's banana tree sprouted nicely, but as the monkey's banana tree was growing he ripped its shoots.
turtle.pin 019
Sampanyo soso'uya mbulangopo ila uo
sampanyo RED- so- 'uya ng- bulang =po ila 'uo
after RED- ONE- why LIG- month =CONT ABL yonder

```
loka nuulasang moo nebuamo.
loka nu= ulasang moo N- pe- bua =mo
banana CN/GE= turtle this RE- SF/DY- fruit =COMP
```

After several more months passed then the turtle's banana tree began to bear fruit.
turtle.pin 020-023
Jari ila uo ulasang nomeilumo riodo, 'loka'u jari ila 'uo ulasang $N$ - pong- peilu =mo ri= odo loka ='u so ABL yonder turtle RE-SF/PT- said =COMP LOC= monkey banana =1SG/GE
nebuamo bua bela, lokamu, ayama'omo bela?'
$N$ - pe- bua =mo bela loka =mu ayama'o =mo bela
RE- SF/DY- fruit =COMP friend/VOC banana =2SG/GE how =COMP friend/VOC
So after that the turtle said to the monkey, 'Friend, my banana tree is bearing fruit now, friend, how is your banana tree going?'
turtle.pin 024-029

| Odo | moo | nonyimbat, | 'loka'u | naatemo, | apa |
| :--- | :--- | :--- | :--- | :--- | :--- |
| odo | moo | $N$ - pong- simbat | loka $=$ ' $u$ | no- ate | $=$ mo | apa

dia-diang umbu'onyo mendoang, sura ubeu-beut,
dia- diang umbu' =nyo $\quad M$ - pe- ndoang sura 'u- $\quad$ RED- beut
RED- EXIS sprout =3SG/GE IR- SF/DY- exit only 1SG.IV/IR- RED- pull
usenseka.' Ndau nasae ila uo, nalamemo
'u- senseka ndau no- sae ila 'uo no- lame =mo
1SG.IV/IR- tear NEG ST/RE- long ABL yonder ST/RE- ripe.fruit =COMP

| bua | nuloka |  | nuulasang | moo |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| bua | nu= | loka | nu= | ulasang | moo |
| fruit | $\mathrm{CN} / \mathrm{GE}=$ | banana | $\mathrm{CN} / \mathrm{GE}=$ | turtle | this |

The monkey answered, 'My banana tree has died, because whenever its shoots came out I just pull and pull on it, I tear it.' Not long after that, the fruit of the turtle’s banana tree ripened.
turtle.pin 030-033

| Jari | ila uo, sampanyo | ulasang | moo | nete'ito |  | lokanyo |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Jari | ila 'uo sampanyo | ulasang | moo | ne- | te- | 'ito | loka $=$ nyo |
| so | ABL yonder after | turtle | this | AV/RE- NV- | see | banana $=3 S G / G E$ |  |


| nalamemo |  |  |
| :--- | :--- | :--- | :--- | :--- |
| no- lame $=$ mo | ritubunyo <br> ri $=\quad$ tubu $=$ nyo | uo, ulasang moo, io |
| ulasang moo io |  |  |

ST/RE- overripe =COMP LOC= trunk =3SG/GE yonder turtle this 3SG/AB

| nompamula |
| :---: |
|  |  |

RE- SF/PT- CAUS- begin RE- SF/PT test -TZ RE- SF/DY- go_up UD/IR- happy
mangalap $\quad$ bua nulokanyo $\quad$ loka $=$ nyo 'uo
M- pong- alap bua nu=
IR- SF/PT- get fruit $\mathrm{CN} / \mathrm{GE}=$ banana $=3 \mathrm{SG} / \mathrm{GE}$ yonder
So after that, when the turtle happened to see his bananas had ripened on its trunk, the turtle, he began
trying to climb up wanting to get his banana's fruit there.
turtle.pin 034-036

nipene'inyo tumbu-tumbu' bola-bolaag
ni- pe- mene' -i =nyo RED-tumbu' RED- bolaag

IV/RE- SF- go_up -DIR =3SG/GE RED- go.up.head.first RED- sideways

```
tili-tili` tua-tuar.
RED- tili' RED- tuar
RED- leaning RED- descend
```

So after that, the turtle, he tried to climb up and he tried climbing up it head first, sideways, leaning, and head downwards.
turtle.pin 037-042


He tried all kinds of actions. He was not able to climb up. Not long after that the monkey arrived here by the side of this turtle, and he spoke, 'Just what is your difficulty there, dear friend?’
turtle.pin 043-045

| Nonyimbat |  | ng | oo | 'no'usu'ata' |  |  |  | mene |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| pong- | simbat | ulasang | тoo | no'u- | su'at | -a | N- |  |  |  |  |
| E- SF/PT- | respond | turtle | this | 1SG.IV/RE | test | -TZ |  |  |  |  |  |

```
loka'u moo ai ndau naalapo'u rlap ='u memene'.' 
banana =1SG/GE this but NEG ST/RE- get =1SG/GE RE- SF/DY- go_up
```

The turtle replied, 'I have tried to climb up my banana tree here, but I have not been able to climb up.'
turtle.pin 046-048b

| Jari | ila | uo | odo | moo | nomongi |  | bia |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| jari | ila | 'uo | odo | moo | N- po- | mongi | bia |
| so | ABL | yonder monkey | this | RE- SF/FA- | request | later |  |

rotuluninyo repene'a'onyo.
ro- tulung -i =nyo ro- pe- mene' -a' =nyo
IV/IR- request.help -DIR =3SG/GE IV/IR- SF/DY- go_up -TZ =3SG/GE

maa' =nyo mai 'u- tulung -i oo
said $=3 S G / G E$ come 1SG.IV/IR- request.help -DIR 2SG/AB

| bia | upene'a' |  | lokamu |  |  | nao.' |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| bia | 'u- | pe- | mene' | $-a$, | loka | $=m u$ |
| later | nao |  |  |  |  |  |
| later | 1SG.IV/IR- | SF/DY- go_up | -TZ | banana $=2$ SG/GE that |  |  |

So after that the monkey requested later that he help him to climb up the banana tree. He said, 'Come I will help you and later I will climb up your banana tree there.'
turtle.pin 049-052
Ila uo, ulasangomo nonyimbat, 'uo paey nombosi' asi
ila 'uo ulasang =mo $N$ - pong- simbat 'uo paey no- mbosi' 'asi
ABL yonder turtle =COMP RE- SF/PT- respond yonder and.then ST/RE- good just

loka'u.'
loka ='u
banana $=1$ SG/GE
After that the turtle replied, 'There that is just good, friend, you help me, (and) climb up my banana tree.'
turtle.pin 053-058

| Bai | uo | notou' |  | nebura | ulasang | moo, | odo | moo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| bai | 'uo | no- | tou' | $N$ - | pe- | bura | ulasang | moo |
| lodo | moo |  |  |  |  |  |  |  |
| like | yonder | ST/RE- | finish | RE- | SF/DY- speak | turtle | this | monkey |
| this |  |  |  |  |  |  |  |  |


|  | ma'o |  |  |  | sur |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| po- lumpat -a' =mo | ma'o | N - | $p e$ - | mene' | sura | o |  |
| RE- SF- jump -TZ =COMP | go | RE- | SF/DY- | go_up | only | two |  |

```
nolumumpata' odo moo, diangomo ritubu
N- po- -[um]- lumpat -a' odo moo diang =mo ri= tubu
RE- SF/LCM- -TEL- jump -TZ monkey this EXIS =COMP LOC= end
nuloka uo, paey nopotundo mbosi-mbosi' ripuu
nu= loka 'uo paey N- popo- tundo RED- mbosi' ri= puu
CN/GE= banana yonder and.then RE- SF/POS- sit RED- good LOC= tree
```



```
CN/GE= branch CN/GE= banana yonder
So when the turtle had finished speaking, (then) the monkey jumped up and went to climb up, just two times the monkey jumped and then he was on the banana tree trunk there, and then he sat down comfortably in a branch of the banana tree there.
```

turtle.pin 059-064
Ndau nasae ila uo, io nompamulamo nomupuk
ndau no- sae ila 'uo io $N$ - pong- pa- mula $=m o \quad N$ - pong- pupuk
NEG ST/RE- long ABL yonder 3SG/AB RE- SF/PT- CAUS- begin =COMP RE- SF/PT- pick

| bua | nuloka |  | uo, oru-taruus | niinangonyo. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| bua | nu= | loka | 'uo | o | RED- tarus | ni- inang $=$ nyo |
| fruit | CN/GE= banana | yonder and | RED- continue | IV/RE- eat | $=3 S G / G E$ |  |

Bai uo io nengkani, ina-inang sura ina-inang,
bai 'uo io $N$ - pe- ngkani RED-inang sura RED-inang
like yonder 3SG/AB RE- SF/DY- eat RED-eat only RED-eat
ndau nibagii, nyau mai ulasang, siopu nuloka moo.
ndau ni- bagi -i nyau mai ulasang siopu nu= loka moo
NEG IV/RE- give -DIR go_down come turtle owner CN/GE= banana this
Not long after that he began to pick the banana fruit there, and he immediately began to eat. Like that he ate, (and) he ate and ate, he just ate and ate, and he didn’t give any down to the monkey, the owner of the banana tree.
turtle.pin 065-066
Bole-bole ulasang moo neroroa' nomongi maa'onyo,
bole-bole ulasang moo $N$ - pe- RED- roa' $N$ - po- mongi maa' $=n y o$ suddenly turtle this RE- SF/DY- RED- shout RE- SF/DE- beg said =3SG/GE

| 'bagii | nyau | mai | a'u | bela!' |
| :--- | :--- | :--- | :--- | :--- |
| bagi | -i | nyau | mai | a'u |
| give | -DIR | go_down | come_here | 1SG/AB |
| friend/VOC |  |  |  |  |

Suddenly the turtle shouted begging, and he said, 'You give me (some) down here friend!’
turtle.pin 067-070
Odo moo sura ulinyo nitabola'onyo nyau mai.
odo moo sura uli =nyo ni- tabol -a' =nyo nyau mai
monkey this only skin =3SG/GE IV/RE- toss -TZ =3SG/GE go_down come_here

Nebura moje ulasang moo, 'eeeh, sura uli-ulinyo asi bela!'
$N$ - pe- bura moje ulasang moo eeeh sura RED-uli =nyo 'asi bela
RE- SF/DY- speak more turtle this INTJ only RED-skin =3SG/GE just friend/VOC
This monkey, he just tossed down its skin to him. The turtle spoke again, 'Hey its just the skins friend!'
turtle.pin 071-074

| Notou' | ila | uo, | sampanyo nipetaang |  | nuulasang | moo, |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| no- | tou' | ila | 'uo | sampanyo | ni- | pe- | taang | $n u=$ |
| ST/RE- finish | ABL yonder after | IV/RE- SF/DY- wait | CN/GE= turtle | moo |  |  |  |  |
| SNis |  |  |  |  |  |  |  |  |

ndau diang nibagii nuodo moo. Ulasang nanasumo.
ndau diang ni= bagi-i nu= odo moo ulasang no- nasu =mo
NEG EXIS IV/RE- give -DIR CN/GE= monkey this turtle ST/RE- angry =COMP
After that was finished, then the turtle waited, and the monkey didn't give him any. The turtle became angry.
turtle.pin 075-078
Ila uo ulasang moo nisu'ata'onyopo nomongi mene'
ila 'uo ulasang moo ni- su'at $-a$ ' =nyo $=p o \quad N$ - po- mongi mene'
ABL yonder turtle this IV/RE- test -TZ $=3 \mathrm{SG} / \mathrm{GE}=\mathrm{CONT}$ RE-SF- beg go_up

| riodo |  | ио. | Maa'onyo, | 'bag |  | nyau | mai | a'u |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $r i=$ | odo | 'ио | maa' = nyo | bagi | -i | nyau | mai | $a ' u$ |
| LOC= | monkey | yonder | said =3SG/GE | give | -DIR | go_down | come_here | 1SG/AB |

loka nao, apa nooropomo tutuu, no’urasai moo.'
loka nao apa no- orop =mo tutuu no’u- rasa -i moo
banana that because ST/RE- hungry =COMP true 1SG.IV/RE- felt -DIR this
After that the turtle, he again tried begging up to the monkey there. He said, 'Give me some bananas down here, because I am really hungry already, I feel/taste it here.'
turtle.pin 079-080
Eeh sura ulinyo moje nitabola' nyau mai nuodo
eeh sura uli =nyo moje ni- tabol -a’ nyau mai nu= odo
hey only skin =3SG/GE more IV/RE- toss -TZ go_down come_here CN/GE= monkey
uo. Bai no niduru’ nuulasang loka uo tutuu,
'иo bai 'иo ni- duru' nu= ulasang loka 'uo tutuи
yonder like yonder IV/RE- pick_up CN/GE= turtle banana yonder true
sura ulinyo.
sura uli =nyo
only skin =3SG/GE
Hey it was just the skins that the monkey again tossed down to him. After that the turtle picked up the banana, and truly it was just its skin.
turtle.pin 082-086
Jari ulasang moo nongunduromo o notitiasi. Maa'onyo, jari ulasang moo N - pong- undur =mo o N - po- titiasi maa' =nyo so turtle this RE-SF/PT sing =COMP and $R E-S F$ - plead said =3SG/GE
'Sura uli-ulinyo asi bela nibagia'omu a'u asi.'
sura RED- uli =nyo 'asi bela ni= bagi -a' =mu a'u 'asi
only RED- skin = 3SG/GE just friend/VOC IV/RE- give -TZ = 2SG/GE 1SG/AB just

| Notou' |  | ila | uo, | io | nomasiromo |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| no- | tou' | ila $\quad$ 'uo | io | $N$ - | pong- | pa- | siromo |  |
| ST/IR- | finish | ABL yonder | 3SG/AB | RE- | SF/PT- | CAUS- | gather |  |

ayu-'ayu tonotuu tonaalap nidangkanyo.

RED- 'ayu to= no- tuu to= no- alap ni- dangka =nyo
RED- wood $\mathrm{RM}=\mathrm{ST} / \mathrm{IR}$ - dry $\mathrm{RM}=\mathrm{ST} / \mathrm{IR}$ - get IV/RE- lift $=3 \mathrm{SG} / \mathrm{GE}$
So this turtle sang a song and he pleaded, 'Dear friend these are just the skins that you are just giving me. After finishing that, he gathered wood that was dry that he got, and he lifted it up.
turtle.pin 087-089
Bai uo netepasiromomo ayu ripuu nuloka
bai 'иo ne- te- pa- siromo =mo 'ayu ri= puи nu= loka like yonder AV/RE- NV- CAUS- gather =COMP wood LOC= tree CN/GE= banana

| uo, nialaponyo |  | moje | uyo-uyo | tonotuu, |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 'uo | ni- | alap | = nyo | moje | RED- | uyo | to $=$ |
| no- | tuu |  |  |  |  |  |  |
| yonder | IV/RE- | get | S3SG/GE | more | RED- | dried.banana.leaf | RM= |

nivunjua'onyomo $=$ mo ripuи nuloka uo,
ni- vunju -a' =nyo =mo ri= puи nu= loka 'ио
IV/RE- mound $-\mathrm{TZ}=3 \mathrm{SG} / \mathrm{GE}=\mathrm{COMP}$ LOC= tree $\mathrm{CN} / \mathrm{GE}=$ banana yonder
When he had gathered the wood by the trunk of the banana tree there, (then) he also got dry banana leaves that were dry, (then) he piled them up at the trunk of the banana tree there,
turtle.pin 090-092
paey nirampuninyo. Sampanyo api nengkaatomo,
paey ni- rampung -i =nyo sampanyo api $N$ - pe- ngkaat =mo
and.then IV/RE-burn -DIR =3SG/GE after fire RE- SF- small_flames =COMP

```
odo moo nolumumpata' ma'o risandaangonyo
odo moo N- po- [-um]- lumpat -a' ma'o ri= so- ndaang =nyo
monkey this RE- SF- -TEL- jump -TZ go LOC= ONE- branch =3SG/GE
```

nagape'.
no- gape'
ST/RE- break
and then he burned them. After the fire began to flame, this monkey began to jump to one of its
branches and that broke.
turtle.pin 093a-093b

nagape' moje. Api moo najarimo tutuu otou'onyo,
no- gape' moje api moo na- jari =mo tutuи 'o- tou' =nyo
ST/RE-break more fire this COP/RE- become =COMP true HAVE- finish =3SG/GE

After that he jumped again to one of its branches and it just broke too. This fire truly finished him.
turtle.pin 094

| Odo | moo | nanabumo |  | manyau | rilalong | nuapi |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| odo | moo | no- | nabu | $=$ mo | mo- | nyau | ri= lalong |
| mu | nu | api |  |  |  |  |  |
| monkey | this | ST/RE- fall | $=$ COMP | UD/IR- | go_down | LOC= inside | CN/GE= fire |


| tojomo |  | mbiru-mbirung | uo. |
| :--- | :--- | :--- | :--- |
| to $=$ | jomo | RED- | mbirung |
| RM $=$ | just | RED- | large.flames |

The monkey fell down into the fire that was just burning with large flames.
turtle.pin 095a-095b

| Sampanyo | odo | moo nanabumo |  | rilalong | nuapi |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| sampanyo | odo | moo | no- | nabu | $=$ mo | ri $=$ lalong | nu |
| after | monkey | this | ST/RE- fall | api |  |  |  |
| COMP | LOC= | inside | CN/GE $=$ | fire |  |  |  |

tombiru-mbirung uo odo moo naatemo,
to $=$ RED- mbirung 'uo odo moo no- ate =mo

RM= RED- large_flames yonder monkey this ST/RE- die =COMP
After that the monkey fell into the fire that was flaming and flaming, (and then) the monkey died.
turtle.pin 096-099
Niturana' nuulasang io no'onto'. Ila uo bia api moo
ni- turana' nu= ulasang io no- 'onto' ila 'uo bia api moo
IV/RE- let_be CN/GE= turtle 3SG/AB ST/RE- singed ABL yonder later fire this


The turtle let him singe. And then later the fire went out, and then this turtle went to get the monkey's bones that had become lime.
turtle.pin 100-102

| Jari | tatagang | uo, | nialuinyo |  | mbosi-mbosi', |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| jari | tatagang | 'uo | ni- | alui | $=n y o$ | RED- mbosi' |
| so | lime | yonder IV/RE- | wrap_up | $=3 S G / G E$ | RED- good |  |


| paey nipendolongonyo. | Jari | bai | so'uya | eleo | ila | uo, |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| paey | ni- pendolong | $=$ nyo | jari | bai | so- 'uya | eleo | ila 'uo |
| and.then IV/RE-store | $=3 S G / G E$ | so | like | ONE- why | day | ABL yonder |  |


| nodua' | tagu | nuodo | tonaatemo |  |
| :---: | :---: | :---: | :---: | :---: |
| $N$ - po- dua' | tag | nu= | to= no- | ate $=$ mo |

RE- SF- arrive friend CN/GE= monkey RM= ST/RE- die =COMP yonder

So he wrapped the lime with very great care, and then he stored it. So after several days from that the friends of the monkey who had died arrived.
turtle.pin 103-106

| nodua' | tagunyo |  | tonipotagu |  |  | nuulasang uo. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $N$ - po- dua' | tagu | = nyo | to $=$ | ni- | po- tagu | nu= | ulasang | 'иo |  |
| RE- SF- arrive | friend | =3SG/GE | E RM= | IV/RE- | SF- friend | CN/GE= | turtle | yonder |  |
| Maa'onyo | no | riulasang |  | ио, | 'Ami | nodua' |  | ma | mo |
| maa' $=$ nyo | sono | $r i=\quad u l a s$ | ulasang | 'ио | 'ami | $N$ - po- | dua' | mai | mo |
| said =3SG/GE | COM | LOC= tur | turtle | yonder | 1PL.EXC/A | RE-SF/DE | - arrive | come | e this |

mo'utanya tagu mami, apa bai so'uya eleomo ndaumo

M- po- 'utanya tagu mami apa bai so- 'uya eleo $=m o$ ndau $=m o$
IR- SF- ask friend 1PL.EXC/GE because like ONE- why day =COMP NEG =COMP
ni'ito mami.'
ni-'ito mami
IV/RE- see 1PL.EXC/GE
The friends of the one who had been the friend of the turtle arrived there. He said to the turtle there, 'We (excl.) have come here, to ask about our friend (excl.), because it's been several days since we have seen him.'
turtle.pin 107-111
Nonyimbat ulasang moo, maa'onyo, 'ndau moje no’uotoi, apa
$N$ - pong- simbat ulasang moo maa' =nyo ndau moje no'u- otoi apa RE- SF/PT- respond turtle this said =3SG/GE NEG more 1SG.IV/RE-know because
bai, so'uya eleo moo ndaumo nomoia sono a'u rimoo.
bai so- 'uya eleo moo ndau =mo $N$ - po- moia sono a'u ri= moo
like ONE- why day this NEG =COMP RE- SF- live COM 1SG/AB LOC= this
The turtle replied, and he said, 'I also don't know, because it's been several days since he hasn't lived with me here.'
turtle.pin 112-114
$\begin{array}{lllllll}\text { Ila uo, neburamo } \\ \text { ila 'uo bura =mo } & \mathrm{N}-\mathrm{pe-} & \begin{array}{l}\text { odo } \\ \text { odo }\end{array} & \begin{array}{l}\text { tonelolo } \\ \text { to }= \\ N-\end{array} & \text { pe- } & \text { lolo }\end{array}$
ABL yonder RE- SF/DY- speak =COMP monkey RM= RE-SF/DY- search_for

| tagunyo | ningeno | uo, | 'jari | ono bai uo | ami |
| :--- | :--- | :--- | :--- | :--- | :--- |
| tagu $=$ nyo | ningeno | 'uo | jari | ono bai 'uo | 'ami |
| friend $=3 S G / G E$ | just_now | yonder so | if like yonder | 1PL.EXC/AB |  |

meteulemo.'
M- pe- teule =mo
IR- SF/DY- return =COMP
After that the monkey that was looking for his friend just then spoke, 'So if that is how it is then we (excl.) will go home now (lit. return).’
turtle.pin 115-121
'Ai ono diang torapamangang, ami mamangang
ai ono diang to $=$ ro- pa- mangang 'ami mo- mangang
but if EXIS RM= IV/IR-CAUS- chew_betelnut 1PL.INC/AB ST/IR- chew_betelnut


| 'diang bela.' | Sampanyo odo moo mamangangomo., |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| diang bela | sampanyo | odo | moo | mo- mangang | $=$ mo |  |
| EXIS | friend/VOC | after | monkey | this | ST/IR- chew_betelnut | $=$ COMP |

Neburamo odo uo,
$N$ - pe- bura =mo odo 'uo
RE- SF/DY- speak =COMP monkey yonder
'But if there is some (betelnut for us) to chew, then we will chew (betelnut) first, and then we will go home (lit. return) friend.' The turtle replied, 'There is some friend.' Then the monkeys chewed (betelnut) now. The monkeys spoke,
turtle.pin 122-122b

| 'nombosi' | tutuu | rasa | nutatagangomu |  | moo |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| no- | mbosi' | tutuu | rasa | nu $=$ | tatagang | $=m u$ | moo |
| ST/RE- good | true | felt | $\mathrm{CN} / \mathrm{GE}=$ | lime | $=2 \mathrm{SG} / \mathrm{GE}$ | this |  |


| bela, | nipegutumu |  | ila | sapa | moo | bela?’ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| bela | ni- | pe- | gutu $=$ mu | ila | sapa | moo | bela |
| friend/VOC | IV/RE- | SF/DY- | make $=2$ SG/GE | ABL | what | this | friend/VOC |

'The taste of your lime here is really good friend, what did you make this from friend?'
turtle.pin 123-124

turtle only RE- SF/DY- laugh RE- SF- -REL- listen monkey RE- SF/DY- speak
bai uo.
bai 'иo
like yonder
The turtle just laughed when he heard the monkeys speak like that.
turtle.pin 125
Ila uo odo moo nopootomo
ila 'uo odo moo no- pooto =mo
ABL yonder monkey this ST/RE- ask_permission_to_leave =COMP

| neteule |  | ma’omo | rijunjung | nijimo |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $N$ - | pe- | teule | ma'o $=$ mo | ri $=\quad$ junjung | nijimo |
| RE- | SF/DY- | return | go $=$ COMP | LOC= house | 3PL/GE |

After that the monkeys asked to leave and returned towards their houses.
turtle.pin 126a-128

| Sampanyo odo | moo | neteulemo. |  | Ndaupo | nagaar |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| sampanyo odo | moo | $\mathrm{N}-\mathrm{pe-}$ | teule $=$ mo | ndau $=$ po | no- | gaar |

after monkey this RE-SF/DY- return $=$ COMP NEG $=$ CONT ST/RE- distance
jimo, ulasang moo nongundur, maa'onyo sono
jimo ulasang moo $N$ - pong- undur maa' =nyo sono
3PL/AB turtle this RE- SF/PT- sing said =3SG/GE COM
niolu'inyo bai moo:
ni- olu' -i =nyo bai moo
IV/RE- chant -DIR = 3SG/GE like this
Then the monkeys went home (lit. return). They hadn't gone far, and the turtle sang (a song), he said while chanting like this:
turtle.pin 129-137
'Bu'u, bu'u miu bela nipamangang-mangangomo miu.
bu'u bu'u miu bela ni- pa- RED-mangang =mo miu
bone bone 2PL/GE friend/VOC IV/RE-CAUS- RED- chew_betelnut =COMP 2PL/GE

Bu'u, bu'u miu bela nipamangang-mangangomo miu.
bu'u bu'u miu bela ni- pa- RED-mangang =mo miu
bone bone 2PL/GE friend/VOC IV/RE-CAUS- RED- chew_betelnut =COMP 2PL/GE

Bu'u, bu'и miu bela nipamangang-mangangomo miu.'
bu'u bu'u miu bela ni- pa- RED-mangang =mo miu
bone bone 2PL/GE friend/VOC IV/RE-CAUS- RED- chew_betelnut =COMP 2PL/GE
'Bones, your (pl.) bones friend, you all chewed and chewed (the betelnut).
Bones, your (pl.) bones friend, you all chewed and chewed (the betelnut).
Bones, your (pl.) bones friend, you all chewed and chewed (the betelnut).'
turtle.pin 138a-139b
Bai uo odo moo neinepe ulasang nongunduromo, bai 'uo odo moo $N$ - pe- -in- epe ulasang $N$ - pong- undur =mo like yonder monkey this RE-SF--REL- listen turtle RE-SF/PT- sing =COMP

| jimo | neondo', | paey | nanguler | ma'o, | ni po'utanya |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| jimo | $N-$ | pe- | ondo' | paey | nanguler | ma'o | ni- | po- 'utanya

nijimo batua nuundurong ulasang ningeno uo.
nijimo batua nu= undurong ulasang ningeno 'uo
3PL/GE meaning CN/GE= song turtle just_now yonder
When the monkeys heard the turtle sing (that song), they stopped, and then they went back, and they asked what the meaning of the song the turtle just then (sang).
turtle.pin 140-143

| Sampanyo odo | no'utanya | riulasang, | 'sapa batua |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| sampanyo | odo | N - po- 'utanya | ri $=$ ulasang | sapa | batua |
| after | monkey | RE- SF- ask | LOC= turtle | what meaning |  |

nuundurongomи ningeno uo?’ Nipeilu nuulasang,
nu= undurong $=m u$ ningeno 'uo ni- peilu nu= ulasang
CN/GE= song =2SG/GE just_now yonder IV/RE- said CN/GE= turtle

| 'ndau diang sapa batua nuundurongo'u |  | uо.' |
| :--- | :--- | :--- | :--- | :--- |
| ndau diang sapa batua | nu= undurong $=$ 'и |  |

NEG EXIS what meaning CN/GE= song =1SG/GE yonder
Then the monkeys asked the turtle, 'What is the meaning of your song (that you sang) just now?' The turtle said, 'There isn't any meaning to my song there.'
turtle.pin 144-146

| Notou' | ila | ио | m |  | odo | ningeno |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| no- | tou' ila | 'ио | $N$ - pe- | teule $=$ mo | odo | ningeno |
| ST/RE- | finish AB | yonder | RE- SF/DY- | return $=$ COMP | monkey | just_now |

Bai so’uya eleo ila uo, nodua' moje odo mai
bai so- 'uya eleo ila 'uo $N$ - po- dua' moje odo mai like ONE- why day ABL yonder RE- SF- arrive more monkey come_here
nomongi mamangang sono riulasang moo.
$N$ - po- mongi mo- mangang sono ri= ulasang moo
RE-SF- request ST/IR- chew_betelnut COM LOC= turtle this
After finishing that the monkeys just then went home (lit. return). After several days from that the monkeys again came and asked to chew (betelnut) with this turtle.
turtle.pin 147
Sampanyo notou'omo namangang
sampanyo no- tou' =mo no- mangang
after ST/RE- finish =COMP ST/RE- chew_betelnut
nopootomo meteule moje odo moo.
no- pooto $=m o \quad M$ - pe- teule moje odo moo

ST/RE- ask_permission_to_leave =COMP IR- SF/DY- return more monkey this
Then after finishing chewing the monkeys asked to leave to go home (lit. return) again.
turtle.pin 148-149
Bai uo jimo neteule ndaupo moje jimo nagaar, bai 'uo jimo $N$ - pe- teule ndau =po moje jimo no- gaar like yonder 3PL/AB RE- SF/DY- return NEG =CONT more 3PL/AB ST/RE- distance
ni'ulit moje nuulasang undurongonyo toseeleonyo uo.
ni- 'ulit moje nu= ulasang undurong =nyo to= so- eleo =nyo 'иo
IV/RE- repeat more CN/GE= turtle song =3SG/GE RM= ONE-day =3SG/GE yonder
While they were returning they weren't too far again, and the turtle repeated his song from that one day.
turtle.pin 150-152


| nuundurong | uo. |
| :--- | :--- |
| nu $=\quad$ undurong | 'uo |
| CN/GE= song | yonder |

So the turtles heard the song of the turtle there, they stopped, and then they thought about the meaning of that song.
turtle.pin 153-158

after IV/RE- understand =COMP 3PL/GE meaning CN/GE= song CN/GE= turtle

| ио, |  |  | tosoung, | o, |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | bura $=$ mo | g | maa -nyo |  |  |
| yonder | SF/DY | speak | M | said | oh |  |


| nuundurong | nuulasang | uo, | tatagang |
| :--- | :--- | :--- | :--- |
| nu= undurong | $n u=$ ulasang 'uo | tatagang |  |
| CN/GE= song | CN/GE= turtle | yonder | lime |


| tonipamangangoto | uo | tatagang | jarinyo |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| to $=$ ni- pa- | mangang=to | 'uo | tatagang | jari | $=n y o$ |
| RM= IV/RE- CAUS- | chew_betelnut=1PL.INC/GE yonder | lime | become | $=3 S G / G E$ |  |

ila bu'u nutaguto.'
ila bu'u nu= tagu =to
ABL bone CN/GE= friend =1PL.INC/GE
Then they understood the meaning of the song of the turtle there. One of them spoke, and he said, 'Oh, the meaning of the song of the turtle is that the lime that we chewed there was lime made from the bones of our (incl.) friend.'
turtle.pin 159-162
Jari ila uo, jimo neteule ma’o riulasang uо,
jari ila 'uo jimo $N$ - pe- teule ma'o ri= ulasang 'uo
so ABL yonder 3PL/AB RE-SF/DY- returngo LOC= turtle yonder

| nanasumo | sono ni'itomo |  | nijimo | laab, | nuloka |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| nasu $=$ mo | sono ni- 'ito | = mo | nijimo | laab | $n u=$ | loka |
| ST/RE- angry=COMP | COM IV/RE- see | =COMP | 3PL/GE | ck | E= | banan |

tonarampung,
to $=$ no- rampung
RM= ST/RE-burn
So after that they returned to the turtle there. They were angry when they saw the signs of the banana tree that had been burned up,
turtle.pin 163-166
mono diang tatagang sumambure ri'uo. Ila uo nira'op nijimo
mono diang tatagang -[um]-sambure ri= 'uo ila 'uo ni- ra'op nijimo still EXIS lime -TEL- scattered LOC= yonder ABL yonder IV/RE- capture 3PL/GE
ulasang uo paey nipeilu nuodo riulasang uо, 'oo moo
ulasang 'uo paey ni- peilu nu= odo ri= ulasang 'uo oo moo
turtle yonder then IV/RE- said CN/GE= monkey LOC= turtle yonder 2SG/AB this

| rapateimo |  | mami, | jari | alea'omo |  | oo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ro- pate | $-i$ | $=$ mo | mami | jari | alea' | $=$ mo |
| IV/IR- | oo |  |  |  |  |  |
| kill | -DIR | $=$ COMP | 1PL.EXC/GE | so | let_it_be | $=$ COMP |

rarampunimo.'
ro- rampung -i =mo
IV/IR- burn -DIR =COMP
There was still lime scattered there. After that they caught the turtle, and then the monkeys said to the turtle there, 'We (excl.) are going to kill you now, so let us burn you now.'
turtle.pin 167-170c
Jari ulasang moo motumangis paey nebura, maa'onyo,
jari ulasang moo $M$ - po- -[um]- tangis paey $N$ - pe- bura maa' =nyo
so turtle this IR- SF- -TEL- crying and.then RE- SF/DY- speak said =3SG/GE
'a’u asi nyaa rarampuni saba' narampungomo a'u
a'u 'asi nyaa ro- rampung-i saba' no- rampung =mo a'u
1SG/AB please don't IV/IR- burn -DIR because ST/RE- burn =COMP 1SG/AB
moo paey diang neitong alae'u moo.'
moo paey diang no- itong 'alae ='u moo
this and.then EXIS ST/RE- pupil body =1SG/GE this
So the turtle began to cry, and then he spoke, and he said, 'Please don't burn me because (after) I am burned then my body will be black.'
turtle.pin 171-172
$\begin{array}{lllllll}\text { Ila uo } & \text { nebura } & & \text { moje } & \text { odo, } & \text { 'jari } \\ \text { ila } & \text { 'uo } & N \text { - pe- } & \text { bura } & \text { moje } & \text { odo } & \text { jari } \\ \text { ABL yonder } & \text { RE- } & \text { SF/DY- } & \text { speak } & \text { again } & \text { monkey } & \text { so }\end{array}$
ro'uyaimo oo moo joo robolilomo nu'ayu.'
ro- 'иуа -i =mo оо moo joo ro- bolilo =mo nu= 'ayu
IV/IR- why -DIR =COMP 2SG/AB this however IV/IR- club =COMP INSTR= wood
After that the monkeys spoke again, 'So if that's what would happen to you, then we would rather club you with wood.'
turtle.pin 173-176
Nonyimbat moje ulasang moo, 'nyaa robolilo asi a'u moo
$N$ - pong- simbat moje ulasang moo nyaa ro- bolilo 'asi a'u moo RE-SF/PT- respond also turtle this don't IV/IR- club please 1SG/AB this


The turtle again replied, 'Please don't club me here, because (after you) club (me) then my back will be all bumpy here.' The monkeys spoke again, 'So with what can you be killed so that you will die?'
turtle.pin 177-178b
'Ono bai uo, alea'omo oo moo ro'omung mami ma
ono bai 'иo alea' =mo oo moo ro- 'omung mami ma'o
if like yonder let_it_be =COMP 2SG/AB this IV/IR- carry 1PL.EXC/GE go

'If that's how it us let us carry you to the lake and then we will toss you here into its water there.'
turtle.pin 179-183

| Neinepe |  | bisara nuodo | bai | uo, ulasang moo, |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $N$ - pe- | -in- epe | bisara | $n u=$ | odo | bai | 'uo uo ulasang moo |
| RE-SF/DY- | -REL- listen speak | CN/GE= monkey like yonder turtle this |  |  |  |  |

nebura moje, maa'onyo, 'ono bai uo maatemo tutuu
$N$ - pe- bura moje maa' =nyo ono bai 'uo mo- ate =mo tutuu
RE-SF/DY- speak also said =3SG/GE if like yonder ST/IR-die =COMP true
a'u moo asi.'
a'u moo 'asi
1SG/AB this please
Hearing the monkeys talk like that, the turtle, (he) spoke again, and he said, 'If that's how it is I am really going to die, please (have pity on me).'
turtle.pin 184-188
Ila uo odo moo nanasumo tutuu. Jari odo moo
ila 'uo odo moo no- nasu =mo tutuu jari odo moo
ABL yonder monkey this ST/RE- angry =COMP true so monkey this


After that the monkeys were really angry. So the monkeys spoke, 'What is that pleading, catch and lift him now, and then we will go throw him into the lake.'
turtle.pin 189-192

| Bai uo | ni'omung | nijimo. | Sampanyo | nodua' | riapar, |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| bai 'uo | ni- | 'omung | nijimo | sampanyo | N - po- | dua' | ri= apar |
| like yonder | IV/RE- carry | 3PL/GE after | RE- SF- | arrive | LOC= lake |  |  |

ulasang moo kaliu-liu ni’omung nipene'a' nijimo mene
ulasang moo kaliu-liu ni- 'omung ni- pe- mene' -a' nijimo mene'
turtle this immediately IV/RE- carry IV/RE-SF/DY- go_up -TZ 3PL/GE go_up

| 'ritubu |  | ayu | nuagut. | Bia | ila | uo, | paey | nitabola' |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ri= | tubu | 'ayu | nu= | agut | bia | ila | 'uo | paey | ni- tabol |
| LOC= |  |  |  |  |  |  |  |  |  |
| LOA |  |  |  |  |  |  |  |  |  |
| trunk | wood | CN/GE= k.o.tree | later | ABL yonder | then | IV/RE- toss | -TZ |  |  |

nijimo manyau riogo nuapar uo.
nijimo mo- nyau ri= ogo nu= apar 'uo
3PL/GE UD/IR- go_down LOC= water CN/GE= lake yonder
So they carried him. After they arrived at the lake, the turtles immediately carried (him), and they climbed up the trunk of an agut tree. Later after that then they threw him down into the water of that lake.
turtle.pin 193-196
$\begin{array}{lllllll}\text { Jari bai } & \text { uo } & \text { nitabola' } & \text { manyau } & & \text { ulasang } & \text { moo, } \\ \text { jari } & \text { bai } & \text { 'uo } & \text { ni- tabol } & \text { a' } & \text { mo- } & \text { nyau } \\ \text { so } & \text { liksang } & \text { moo } \\ \text { so } & \text { likender } & \text { IV/RE- toss } & \text {-TZ } & \text { UD/IR- } & \text { go_down } & \text { turtle }\end{array}$ this
odo kaliu-liu neroroa', maa'onyo, 'maate oo!'
odo kaliu-liu $N$ - pe- RED- roa' maa' =nyo mo- ate oo
monkey immediately RE- SF RED- shout said =3SG/GE ST/IR- die 2SG/AB
So that's how they threw the turtle down, and the monkeys at once shouted, and said 'You die!'
turtle.pin 197
Notou’ uo sapa tonajari ulasang ningeno
no- tou' 'uo sapa to $=$ na- jari ulasang ningeno
ST/RE- finish yonder what RM= COP/RE- become turtle just_now
moo odua'onyo manyau riogo uo,
moo 'o- dua' =nyo mo- nyau ri= ogo 'uo
this HAVE- arrive $=3$ SG/GE UD/IR- go_down LOC= water yonder
After finishing that what happened to the turtle just then was that his arrival was down into that water.
turtle.pin 198-201


| io | uo. | Io | netataa |  | paey | nebura |  | bai | moo, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| io | 'uo | io | $N$ - pe- | tataa | paey | N- pe- | bura | bai | moo |
| 3SG/AB yonder | 3SG/AB | RE- | SF/DY- laugh | and.then | RE- | SF/DY- | speak | like | this |

maa'onyo,
maa' =nyo
said =3SG/GE
He shouted up to the monkeys who had thrown him there. He laughed, and then he spoke like this, and he said,
turtle.pin 202-208
'He, he, he, heee, ио paey na'akalongo'u emu bela.
he he he heee 'иo paey no- 'akal -ong ='и eти bela
ha ha ha hee-hee yonder and.then ST/RE- lie -locN =1SG/GE 2SG/AB friend/VOC
A'u mai nitabola' miu ripomoiaongo'u. He heee.'
a'u mai ni= tabol -a' miu ri= po- moia-ong ='u he heee 1SG/AB come IV/RE= toss -TZ 2PL/GE LOC= SF- live -locN =1SG/GE ha hee-hee
'Ha, ha, ha, hee-hee, so there I have tricked all of you friends. You all have thrown me into my dwelling. Ha, hee-hee.'
turtle.pin 209/210

| Sampanyo | niepe |  | nuodo |  |
| :--- | :--- | :--- | :--- | :--- |
| sampanyo | ni- | epe | nu $=$ | odo |
| after | IV/RE- | listen | CN/GE= monkey |  |

ulasang sura netataa o nebura bai uo.
ulasang sura $N$ - pe- tataa o $N$ - pe- bura bai 'uo
turtle only RE- SF/DY- laugh and RE- SF/DY- speak like yonder
After that the monkeys heard the turtle just laughing and talking like that.
turtle.pin 211-214
Odo nontiang nasu nijimo. Jari ila uo odo moo,
odo $N$ - pong- tiang nasu nijimo jari ila 'uo odo moo
monkey RE- SF/PT- add angry 3PL/GE so ABL yonder monkey this

| nebura |  | moje | manyau | riulasang | uo. | Maa'onyo, |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $N$ - pe- | bura | moje | mo- | nyau | ri= ulasang | 'uo | maa' =nyo |
| RE- SF/DY- speak | more | UD/IR- go_down | LOC= turtle | yonder said $=3 S G / G E$ |  |  |  |


| 'Petaang | baremu |  | ami | ma'o | mongkai | tagu, |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| pe- taang | bare | $=m u$ | 'ami | ma'o | M- pong- | 'ai tagu |
| SF/DY- wait | split | =2SG/GE | 1PL.EXC/AB | go | IR- | SF/PT- call friend |

The monkeys increased in their anger. So after that this monkey spoke again down to that turtle. and he said, 'You just wait until we get our hands on you (lit. split you), we are going to call our friends,
turtle.pin 215-216

| paey | reinung | mami | ogo | nuapar |  | moo | sampe | nooti, |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| paey | ro- inung | mami | ogo | nu= | apar | moo | sampe | no- | oti |
| and.then | IV/IR- drink | 1PL.EXC/GE | water | CN/GE= lake | this | until | ST/RE- | dry_out |  |


| paey | oo | nao rara'op | mami | paey | rapatei!’ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| paey | oo | nao ro- ra'op | mami | paey | ro- | pate | -i |
| and.then | 2SG/AB that | IV/IR- capture | 1PL.EXC/GE | and.then | IV/IR- kill | -DIR |  |

and then we (pl. excl.) will drink the water of this lake until it is dried out, and then we (pl. excl.) will catch you and kill you!’
turtle.pin 217
Ndau nasae ila uo netepasiromo odo uo
ndau no- sae ila 'иo ne- te- pa- siromo odo 'uo
NEG ST/RE- long ABL yonder AV/RE- NV-CAUS- gather monkey yonder
nonggatus.
N - pong- gatus
RE- SF/PT- hundred
Not long after that hundreds of monkeys gathered there.
turtle.pin 218a-219

| Jari | sampanyo jimo | netepasiromo |  | uo |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :--- |
| jari | sampanyo | jimo | ne- | te- | pa- | siromo 'uo |  |
| so | after $3 P L / A B$ | AV/RE- | NV- | CAUS- | gather | yonder |  |


| neburamo |  | odo | tonongkai | jimo | jojoo | uo |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $N-\quad$ pe- | bura $=$ mo | odo | to $=\quad N-\quad$ pong- | ai | jimo | jojoo | 'uo |
| RE- SF/DY- | speak $=$ COMP monkey | RM= RE- SF/PT- call | 3PL/AB all | yonder |  |  |  |


| paey maa'onyo, 'tono'upengkaia' |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| paey maa' = nyo | to $=$ no'u- | pong- 'ai $-a$ | emu emu | moo, |

and.then said $=3 S G / G E$ RM $=1$ SG.IV/RE- SF/PT- call -TZ 2SG/AB this
So after that they gathered there and the monkeys that had called all of them spoke, and then he said, 'All of you that I have called here,
turtle.pin 220-223

| ito | menginung | ogo nuapar |  | moo, saba' ulasang |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ito | M- pong- inung | ogo nu= | apar | moo saba, ulasang |


| tonorampung | taguto, | bu'unyo | najari | tatagang, |
| :--- | :--- | :--- | :--- | :--- |
| to $=N$ - pong-rampung | tagu = to | bu'u =nyo | na- | jari |
| RM= RE-SF- burn | friend=1PL.INC/GE | bone =3SG/GE COP/RE- become lime |  |  |

turtle.pin 224a-226
paey nibagia'onyo nipamangang mami.'
paey ni- bagi -a' =nyo ni- pa- mangang mami
and.then IV/RE- give -TZ =3SG/GE IV/RE-CAUS- chew_betelnut 1PL.EXC/GE

Ila uo, otou'onyo io nebura.
ila 'иo 'o- tou' =nyo io $N$ - pe- bura
ABL yonder HAVE-finish =3SG/GE 3SG/AB RE- SF/DY-speak and then he gave it to us and we chewed it (with betelnut).' After that, he stopped talking.
turtle.pin 227-229

| Nompamulamo | odo-odo | nenginung | ogo nuapar |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $N-$ pong- pa- mula $=$ mo | $R E D-$ odo | $N$ - pong- inung ogo nu= apar |  |  |
| RE- SF/PT- CAUS- begin $=$ COMP | RED- monkey | RE- SF/PT- drink | water | CN/GE= lake |

uo. Jari jimo inung-inung, joo inung ndau nasae diangomo
'uo jari jimo RED- inung joo inung ndau no- sae diang =mo
yonder so 3PL/AB RED- drink however drink NEG ST/RE- long EXIS =COMP
tonaate, saba’ nalabatomo bosu nenginung ogo uo.
to $=$ no- ate saba' no- labat $=m o$ bosu $N$ - pong- inung ogo 'uo RM= ST/RE- die because ST/RE- pass =COMP full RE-SF/PT- drink water yonder The monkeys began to drink the water of that lake. So they drank and drank, however (as they) drank it wasn't long before there were some that died, because they were so full from drinking that water.
turtle.pin 230a-230b

IV/RE- HAVE- finish -DIR =3SG/GE however 3PL/AB RM= RE- SF/PT- drink water

ио seide' noropu,
'иo so- ide' no- ropи
yonder ONE- small ST/RE- wiped_out
He ended it, however those who were drinking the water were nearly all wiped out,
turtle.pin 230c-231

| ai | ogo | nuapar |  | toniinung |  | nijimo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ai | ogo | nu $=$ apar | to $=$ | ni- | inung | nijimo |
| but | water | CN/GE= lake | RM= | IV/RE- | drink | 3PL/GE |

uo sura bate-batenyo. Ila SiJosep Piri.
'uo sura RED- bate =nyo ila si= Josep Piri
yonder only RED- remain_unchanged =3SG/GE ABL PN/AB= Josep Piri
But the (level of the) water of the lake that they had drunk remained unchanged. (This story is) from Joseph Piri.

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[^0]:    1 The perahu (sometimes spelled in English as prahu) is a generic term for Sulawesi developed oceangoing sea vessels (one highly developed vessel developed in South Sulawesi is called the pinisi (sometimes spelled in English as 'phinisi').

[^1]:    2 Sneddon (1993) and Noorduyn (1991a, 1991b) refer to this group as Tomini.
    ${ }^{3}$ Note that there is an important difference in the terms 'microgroup' and 'group' as defined by Sneddon and Himmelmann respectively. Sneddon uses the term 'microgroup' to imply a number of important historical relationships, the most significant involving the claim that all the languages in a microgroup come from a proto-language (see for example Sneddon 1989). The use of the term 'group' used by Himmelmann and others is used merely to indicate that the data so far available make a group of languages appear to have a greater number of similar features and facts than other languages.

[^2]:    4 Himmelmann (2001:23) also mentions the Malei village as a location for Pendau (but notes that Malei is composed of Bugis, Ledo and five families of Balaesang). However Lewonu is across a river from Malei and is mostly made up of Pendau speakers. It is likely there are Pendau speakers also in Malei, but the main concentration is clearly in Lewonu. In the past the Lewonu hamlet was part of the Walandano village which is several kilometres further east (a reflection of the Christian make-up of Walandano and Lewonu as opposed to a majority of Muslims in Malei).
    5 Since close to half of all Pendau speakers live in the Balaesang subdistrict I have made no attempt to list the population in each village and/or hamlets in which they live.

[^3]:    ${ }^{6}$ This is recorded in survey field notes and a map sketch from the SIL 1981 survey (Barr, Busenitz and Martens 1981), and accords with other information I have observed while doing my field work in 19971998. This is also noted in Himmelmann (2001:41).

    7 Estimates for Pasir Putih in Kecamatan Sirenja are based also on statistical information received from Pdt. Bangkalang (1988:pers. comm.) on the Pendau church membership and my own impression from visiting there and meeting some Pendau. An estimate of the small Pendau community near Sibado is based on my recollection of the short visit I had there in 1988 when I was part of the SIL survey team for Tajio (see McKenzie 1991), as well as being based on McKenzie's report. Figures for the Tada-Silutong areas are educated estimates based on what I know about the size of similar communities. Note though that I don't have statistical information to base this on and that there could be more or less than I have indicated. The total figures however do reflect a close approximation to other census data and can be taken to give a relative overall picture of the population of Pendau speakers. Figures for Sidoan in Kecamatan Tinombo, for all other locations listed for Kecamatan Dampal Utara, Kecamatan Dampal Selatan, Kecamatan Dampelas, and Kecamatan Sojol are round figures based on Himmelmann (2001). Note that there were some areas he also did not have figures for, and that most of these are based on head of household units (KK—kepala keluarga). Himmelmann notes that a KK averages four persons. I also added the Pani'i and Simontomu locations to the areas mentioned by Himmelmann for Kecamatan Dampelas, however I am unsure whether his figures include Simontomu with those from Parisan or whether Sioyong also includes Pani'i.

[^4]:    8 Posona is listed in McKenzie's (1991:26) summary of Pendau locations encountered on the SIL survey of Tajio in 1988.
    9 This figure support's that of 4200 Pendau speakers given in Wumbu et al. (1986). It is possible there are more speakers than indicated in the 1986 Census, however I expect the total figure would still be less than 5000 speakers.

[^5]:    ${ }^{10}$ According to a footnote in Noorduyn (1991b:139) Adriani is the sole author of volume III, and so any of the discussion here that I reference as Adriani and Kruyt (1914) can be attributed to Adriani.
    ${ }_{11}$ Note also that Umalasa and Ndau are sometimes spelled in earlier Dutch literature as Oemalasa and Ndaoe (and sometimes repeated in later English language lists, etc.).

[^6]:    12 Of course *ra-is probably the earlier proto form. Pendau has reanalysed it so that synchronically it is underlyingly ro-, with the alternations $r a-$, and $r e$ - predictably produced through vowel harmony.

[^7]:    ${ }^{13}$ Kaseng et al. (1979:88) erroneously give a figure of 16,780 Balaesang speakers. Even if that included all of the Pendau speakers it would still be only about 10,000 at best.
    ${ }^{14}$ I accompanied McKenzie on this survey trip (along with two other SIL men) and was the one to actually take this word list.
    ${ }^{15}$ There is now a road between Tambu and Kasimbar which connects the two coasts here at the narrowest part of the Central Sulawesi isthmus.

[^8]:    ${ }^{16}$ The word Indonesian is used here to cover Manado Malay, Standard Indonesian, and any other variety of Indonesian that immigrants might be considered to control, that is, Balinese-Indonesian and JavaneseIndonesian. Of course many Javanese and Balinese have now been in the area for close to twenty years and may have absorbed many of the lexical and syntactic features of Manado Malay, or are at least aware of their use by now.

[^9]:    ${ }^{17}$ It remains to be investigated whether the scattered Pendau speakers further north have any significant dialectical differences.

[^10]:    ${ }^{1}$ It should therefore be noted that I am not marking penultimate stress in any of the phonetic transcriptions, unless it is relevant to a particular point being discussed.
    ${ }^{2}$ The glide is inserted post-lexically therefore it does not need to be written orthographically. Currently orthographic practice however appears to prefer to write it as <piyor>.

[^11]:    ${ }^{3}$ Ladefoged and Maddieson (1996:90) state that '...dental or alveolar sibilant affricates are also quite common...'
    4 This phone appears to occur only in recently borrowed words. See $\S 2.4 .2$ for further discussion of its phonotactic distribution.
    5 In borrowed words from Indonesian word final $/ \mathrm{k} /$ tends to become a glottal stop or to disappear altogether.
    ${ }^{6}$ See Steinhauer (1991) for a discussion of glottal stop problems in the Gorontalo language (North Sulawesi) which parallels those in Pendau. The glottal stop is not written in the word initial position in the orthography. This is reflected in the first line of interlinear examples, but it is written in the underlying forms of subsequent lines in the interlinearised examples, as elsewhere when it is necessary or helpful in particular examples or discussions.

[^12]:    7 Himmelmann (1991:21) notes that in East Lauje [h] is 'a variant onset for word-initial vowels', and is only found otherwise in loan words. It should be noted however that a glottal stop in word initial position is difficult for English speakers to hear. Also see Himmelmann and Wolff (1998:9) for a description of a similar sound in Toratán. There are a few high frequency words in which it is still unclear whether there is an underlying phonemic glottal stop or whether the sounds produced are phonetically induced from their environment. The two most noticeable words are $/ \mathrm{a}^{\prime} \mathrm{u} /$ ' $1 \mathrm{SG} / \mathrm{AB}$ ' and /adat/ 'traditions'. These are often pronounced as [haiu] and [hada?] respectively. However, the initial phone may also be manifested as a phonetic glottal stop, a pharyngeal [ f$]$, a voicless glottal fricative [ h ], or as a laryngealised onset of the vowel (that is, creaky voice).
    8 Himmelmann (1991:20) shows the bilabial fricative [ $\beta$ ] in Lauje to be an allophone of $/ \mathrm{b} /$ when it is 'before $/ \mathrm{u}$ /, unless it is preceded by a nasal (in a NC-sequence).' This is clearly not the case for Pendau as $[\beta]$ also appears contiguous to front and low vowels as in: [ $\beta$ ea] 'rice', [taßala] 'barbless spear'.

[^13]:    9 The glide in vaya 'spirit' can be contrasted with what appears to be a similar sequence in ni'aia' 'called'. However the important distintion to understand here is that the root is 'ai 'call' and has the transitiviser suffix $-a$ '. When this suffix is added a non-phonemic glide is inserted to produce [ni?ai ${ }^{j}$ a?]. See §3.5.6.2 for more discussion.

[^14]:    ${ }^{10}$ Whatley (1991:pers. comm.) first recognised this minimal pair in Lauje.
    11 It is important to understand for this pair that the penultimate stress is what determines the difference in identifying the distinction between the glide and vowel.

[^15]:    12 A ' + ' indicates the marginal status of $/ \mathrm{h} /$. See $\S 2.3$. The $/ \mathrm{h} /$ may be a new phoneme incorporated into Pendau phonology via borrowed Indonesian words.

[^16]:    ${ }^{13}$ These statistics are based on a database of almost 4000 lexemes which included 24,890 phonemes. This chart does not include the 2354 phonemes (so 24,890-2354 $=22,536$ phonemes that are reflected in this figure) which are part of word initial and word medial nasal-obstruent sequences (see Figure 2.8). Any further analysis must reflect that when there are coda final consonants word medial they only occur as part of a nasal-obstruent sequence.

[^17]:    14 There are two phonemes, $/ \mathrm{h} /$ and $/ \mathrm{v} /$, however which are predicted by this rule but are unknown to occur following a nasal.

[^18]:    15 Sneddon (1993) has observed (on limited data from Himmelmann) that the epenthesis in Pendau was an 'echo vowel' and has implied that the epenthesis in Tomini languages may be connected to the paragogic vowels that occur in languages such as Lauje. However it is my opinion that Pendau is a strong counterexample to the open syllable drift that occurs in other Sulawesi languages, and there is clearly no paragogic vowels or echo vowels in the Pendau area in which my study is based. See further discussion in $\S 1.2 .3, \S 2.4 .2$. Also see $\S 3.2 .3$ for a discussion for positing ' $o$ ' as the underspecified vowel in Pendau that is chosen via the post-lexical complement rules.

[^19]:    ${ }^{16}$ The syllabic nasal publication (Quick 1991a) is the first published work of any detail on the Pendau language. Also see Quick (1991b) for a revision of this article presented to the Indonesian Linguistic Society (Masyarakat Linguistik Indonesia 1991).
    ${ }^{17}$ There is one word with the Nc sequence, kanci 'diaper pin', but this word is probably borrowed from Indonesian (or Manado Malay), and there are no word initial or root initial Nc sequences in the lexicon database. The Nj sequence is similar to the Nc but is possibly from an earlier stage of borrowing. For the Nj sequence there are some word initial possibilities, but I have not established these clearly enough yet to see if they can exist without a prefix.

[^20]:    18 Nasal-obstruent sequences such as n.j and n.c always have an alveolar or dental nasal respectively because the $/ \mathrm{n} /$ is homorganic with the first phone in the complex affricate.
    19 The recordings were on a Marantz ('Superscope') cassette recorder, with manual settings available. In 1991 I recorded systematic frames from a Pendau man, Mesak Doge (S1) in my home in Palu, the provincial capital of Central Sulawesi.
    20 There are more recorded frames than given in (A) to (C), but some of the recorded data was rejected during the analysis as poor quality; other data was just simply not used or not relevant.

[^21]:    ${ }^{21}$ In the developmental stages of the Pendau orthography the $/ \mathrm{h} /$ was considered to be the phoneme in ' $a$ ' $u$ ' 1 SG ', and so it was spelled ha'u and read accordingly. Later reactions by native speakers show that the glottal stop occurs word initially, although the [h] is often pronounced-it is still not clear whether the variation between glottal stop and [h] is epiphonomena which occur with certain high frequency words or are phonemic variations.

[^22]:    22 The anoa is endemic to Sulawesi and is also known as the dwarf buffalo.
    ${ }^{23}$ There is no phonological violation in Pendau as there is in the so-called open syllable languages.

[^23]:    ${ }^{24}$ The brackets indicate that there is an underlying distributive infix -ong-. The prefix in which the infix occurs is a pong- prefix preceded by the $M$ - irrealis floating autosegment. It is not clear whether the root is ngkee or kee 'bump'.
    ${ }^{25}$ The ' $o$ - is a possessive prefix which for 'ombosi' means 'to have (what is) good'. The reduplication of the first syllable of the stem results in intensifying it and thus results in the meaning of 'the best'.

[^24]:    ${ }^{26}$ This analysis is relatively novel for Sulawesi languages. Fox (2000:126) states that '...'pitch-accent'...is apparently rare, and the majority of languages use stress as a realization of accent...'. This study should also stand as a corrective to those who think of stress in these languages as mainly realised as 'loudness', and further shows that the study of intonation in pitch-accent languages must be understood in the context of the pitch-accent (\$2.7).
    ${ }^{27}$ This use of 'pitch-accent' should not be confused with languages such as Japanese in which 'pitchaccent' is a term used to indicate a lexical contrast similar to tone languages (for example, Katamba 1989:208-210 and more clearly in Selkirk 1995:550-553). McCawley (1978) for example uses the term 'pitch-accent system' to contrast with true tonal systems, contrasting Japanese and Chinese as prototypical examples respectively. So technically then there are two types of pitch-accent languages, those such as Japanese where pitch-accent is phonemic, and those such as Pendau where pitch-accent is non-phonemic. The use of pitch-accent is originally from Bolinger (Bolinger 1958, Laver 1994:493) and is attributed to 'pitch obtrusion' which provides the perception of syllable prominence.

[^25]:    28 The systematic analysis of this section was completed in 1996 using WINCECIL and originally presented as a paper in Phil Rose's Advanced Phonetics class as 'The correlation of fundamental frequency and stress in Pendau' (Quick 1996). These results have been spot-checked and verified in all of the data examined with the Speech Analyzer in the sections on the glottal stop and vowel formants.

[^26]:    ${ }^{29}$ Other Sulawesi languages have been documented as having secondary stress. Multiple degrees of stress is a controversial topic (see Fox 2000) and it appears that most or all of these studies in Sulawesi in which there are claimed to be secondary stress can be contested if most or all Sulawesi languages have a pitch contour which indicates a primary stress. Himmelmann (pers. comm.) has verified that some recent acoustic research on Sulawesi languages supports my early conclusions on pitch-accent as a marker of primary stress (Quick 1996). It is likely that since a 'foot' can be determined by structural and rhythmic criteria-as I show in Row 1 of examples (17)-(19) with the use of the Perfect Grid-that the identification of secondary stress can be assigned or 'felt' to be the location of a putative secondary stress, but not be based on any phonetic criteria (what I refer to above as a 'potential position' for secondary stress). Although I do not have conclusive evidence (doing further systematic acoustic investigation on this problem would have been beyond the original scope of my research), there is no evidence that I am aware of in Pendau that would suggest there is another phonetic correlate or that there are multiple occurences of L-H pitch contours within the boundary of the word. The likelihood for these multiple occurrences in a single word is I believe extremely remote as well as counter intuitive to my understanding of Pendau.

[^27]:    1 The phoneme $/ \mathrm{s} /$ does not delete in all lexical words, and in some words it appears to be optionally deleted. When the $/ \mathrm{s} /$ is not deleted the preceding nasal becomes the dental $\mathrm{n} /$. Nasals preceding $/ \mathrm{s} /$ behave irregularly in many other Western Malayo-Polynesian languages, such as Indonesian.

[^28]:    2 In interlinearised examples, the glottal stop is not indicated in the orthography (that is, the first line) when it occurs in word initial position, but it is indicated on the subsequent lines which indicate all underlying forms of the words and their formatives.

[^29]:    3 This phonological process is not isolated to Pendau. A similar process to the one that assimilates the glottal stop to the $k$ in Pendau occurs in the neighbouring Kaili-Pamona group. In Da'a and Ledo (Kaili languages) voiceless obstruents assimilate the voicing of an affixed nasal. It is also clear that the two sets of data reflect two different historical stages of Pendau. Those with $k$ probably reflect borrowing at a later stage.
    4 Glottal stops appear to have a different range in the Kaili languages. Many cognates between Da'a and Pendau for example contrast $k s$ and glottal stops, as in kayu and 'ayu 'wood, tree' respectively. The Da'a data is from Barr's lexicon database, pers. comm., and Barr (1990); also compare Ledo data in Ghani Hali (1990).
    5 The significance of this should not be confused with surface phenomenon (such as creaky voice) which occurs in the post-lexical module.
    ${ }^{6}$ Note that the 'lexical' phoneme inventory is not the same as the traditional categories provided with an 'underlying' phoneme inventory, nor is it at all identical with the 'surface' phonology.

[^30]:    7 These alternations occur in the Pendau community. Although I have given my recommendations for what I understand to be the preferred spelling, I defer to the Pendau community to make the final decision should there ever be one.

[^31]:    8 Kenstowicz (1994:347) provides a definition for vowel harmony (carefully distinguishing it from umlaut and other similar processes):

    Vowel harmony is a phonological state in which the vowels in a given domain share or harmonize for a particular feature. It differs from other processes affecting adjacent vowels (e.g. umlaut) in that typically all of the vowels of the language participate in the harmonic constraint. In addition, the harmony applies in an essentially unbounded fashion, affecting all the relevant vowels within the domain (typically the word). Virtually any of the common features used to distinguish among vowels have been discovered to seat a harmonic system, including vowel height, backness, rounding, nasality, and pharyngeal opening or [ATR]. Vowel harmony exhibits many of the 'action-at-a-distance' properties displayed by tone.
    9 See Topping (1968) and Latta (1972) for discussion of vowel fronting harmony in Chamorro which is the reverse of this, that is the first vowel of the root or stem fronts to the vowel of the preceding prefix.

[^32]:    10 The active voice formative combinations mong- and nong- are not listed here because they are a result of $M$ - pong- and $N$ - pong-formatives, with irrealis and realis contrasting the nasal formations respectively.
    ${ }^{11}$ For purposes of exposition I ignore the effect of the floating autosegment. The underlying form of the active voice verb constructions with the irrealis floating autosegment is: M-pong-. See Chapter 9 for discussion of verb classes and stem formers. See $\S 4.3$ for discussion of stem formers.

[^33]:    12 See Hulst (1985) for further discussion of the advantages of a nonlinear analysis over a linear analysis.
    ${ }^{13}$ The rules discussed in this section will only allow vowels shown in this chart to be selected, as is practised in generative phonology. Also note that the classical analysis requires the round distinctive feature which is not necessary in the redundancy analysis used elsewhere in this chapter (Figure 3.5).
    ${ }^{14}$ See $\S 3.4 .7 .4$ for further discussion on this particular meaning of 'fronting'.
    ${ }^{15}$ See §3.4.7.4 for further discussion on this particular meaning of 'fronting'.

[^34]:    ${ }^{16}$ Hulst and van de Weijer (1995) give an excellent overview of vowel harmony. Unfortunately it is not a complete nor a comprehensive examination-as they qualify it-so it is not unexpected that the particular type of vowel harmony as occurs in Pendau is not covered in their work. Examples from Austronesian are only scantily covered.

[^35]:    ${ }^{17}$ Odden (1991) describes back-round as a formal part of vowel geometry.

[^36]:    ${ }^{18}$ I do not use a capital V to represent the underspecified $o$ vowel, as in $m V n g$ - or $M$ - $p V n g-$, as the vowel can only be one of three possibilities, that is, $a, e$, or $o$. A $V$ would imply it could occur as any of the five vowels when in fact it does not. Vowel harmony blocking also restricts the choice of vowels to $o$. I will only use a capital $O$ in examples (30)-(36) to facilitate the description of vowel harmony in this portion of the chapter. I will not use a capital $O$ elsewhere as I feel it is adequate and less confusing to represent it by a lower case $o$ when referring to a formative such as pong-. When necessary I will indicate it is a harmonic prefix so that the reader is aware there are allomorphs.

[^37]:    19 The prefix po' $o_{1}$ - is analysed as one formative prefix, a resultative, in $\S 10.6$. However it is possible that future research may show that it is a sequence of two prefixes rather than one. In either case the vowel harmony principle applies.

[^38]:    20 This extends to the stative causative harmonic $\mathrm{po}_{2}$-. Normally the causative of words such as lalo' 'deep' is nompalalo' (see examples in $\S 10.2 .3$ ), but the variation nom-po-lalo' was also accepted in elicitation. Some words appear to allow for the underlying vowel in harmonic prefixes to remain as the underlying o vowel, however most words are clearly unacceptable when the vowel harmony rules are violated. Although this could simply be a quirk of elicitation in that the speaker/listener allows for what is technically a violation of vowel harmony to occur at times, it is equally likely that exceptions and variations occur in normal speech. In either case this is additional evidence that the o vowel is the underlying vowel (see $\S 3.2 .3$ and $\S 3.5 .7$ ).

[^39]:    1 Morphemic theories sometimes refer to formatives when they discuss phonological forms pretheoretically, that is, is when proponents of the morpheme are discussing word components that they will likely call a morpheme.
    2 Pike's expanded usage of the term 'formative' does not contradict general usage, it only further specifies its usage. Pike has used the term 'formative' since at least the early 1960s. Compare also DuBois, Upton and Pike (1980), Pike (1996), and Pike and Simons (1996).

[^40]:    3 Some roots of Pendau could be viewed as precategorial (see Grimes 1991:85, 86). However most can often be determined to belong to a word class according to specific parameters (see Chapter 5). Many apparently ambiguous words can be assigned a word class by identifying the typical affixation they take. Apparent ambiguity is nearly always concerned with placing a root in the noun or the verb class.

[^41]:    4 The transitive verbs in Pendau are discussed in Chapters 6, 9, 12, and 17, and in Quick 1997a and 1999a.
    5 The stem former $p o_{1}$ - is subscripted so as to distinguish it from the other similar formatives which are the causatives $\mathrm{po}_{2}{ }^{-}$and $\mathrm{po}_{3}$ - (the latter two are distinguished via vowel harmony).
    ${ }^{6}$ In a morphemic theory these would be called 'zero morphs'.

[^42]:    7 Note that all transitive verbs can also be prefixed with the inverse voice ni-/ro- prefixes. Intransitive verbs must first become a transitive verb before being affixed with the inverse voice affix.
    8 See Rubino 1998 for a similar template paradigm in Tagalog for nominalisations patterned from 'actor focus' prefixes.
    9 The postural root 'oro stand has been found as topongkoro, but the pong- in this case is formed from the active voice verb class.

[^43]:    ${ }^{10}$ By the time this analysis was completed I was no longer in the field to carry out elicitation that might have filled in these blanks. This will require further elicitation in the field.

[^44]:    11 Himmelmann (2001, 2002a, 2002b) follows this same basic analytical approach for other Tomini-Tolitoli languages. See his $M$ - and $N$ - prefix/formative which are used to represent irrealis and realis respectively (for active voice constructions).

[^45]:    12 Historically the $M$ - reflects an infix such as -um- or -om- (see Mead 1998:186, Ross 2002a), and in some languages these still appear synchronically as allomorphs.
    ${ }^{13}$ I need to emphasise that since $M$ - and $N$ - are autosegments they have no morphophonemic interaction. It is precisely the fact that there is a contrast between $M$ - and $N$ - that a simple morphophonemic solution cannot be adopted that would work for both. Although it is tempting to want to find a common morphophonemic solution such as positing that by adding the feature [ + nasal] the correct form is realised for the irrealis mode, it does not result in the appropriate form in the realis mode. In fact Pendau also has a third autosegment $S$ - not described in this chapter. This can be glossed as 'ONE' but is used to indicate that the verb does something in small increments and is used instead of $N$ - or $M$-. See $\S 9.2 .2 .1 .1$ for discussion and examples.

[^46]:    ${ }^{14}$ I want to thank Avery Andrews for suggesting the notion of autosegment as a possible solution to this problem and discussion on how to address this specifically in the Pendau case. Although floating autosegments were originally identified in tone languages, the research shows that floating autosegments can apply to other non-tonal grammatical features as well. I should also point out that this is a synchronic analysis and does not imply that this analysis reflects the diachronic process.
    ${ }^{15}$ Morphological rules follow the approach of Word and Paradigm Theory (see §4.3.3).
    ${ }^{16}$ Tryon (1986) describes stem-initial consonant alternations in Oceanic languages which may be related to nasal substitution in Western Malayo-Polynesian languages.

[^47]:    ${ }^{1}$ Some of these tests cannot be used as independent tests for all words, but may need to be used in conjunction with one or more tests.

[^48]:    2 Another possible analysis is that the postural prefix is just po- preceded by mo-/no- as irrealis/realis prefixes rather than as floating autosegments. However there is no real evidence that the postural verb class shouldn't be analysed with a floating autosegment. The simplest analysis that fits in with the rest of the actor oriented verb classes is that the postural prefix should be popo-, with one po- frequently dropping off.
    ${ }^{3}$ For the stative verb there is no evidence that suggests there should be an underlying stem former for this verb class. In fact counterevidence is found in the agentive nominalisation of this verb class which retains the irrealis or realis prefix rather than a $p V(C)$ - stem former (see Figure 4.1).

[^49]:    4 A second affix тере-/nepe- (actually $M-/ N$-pepe-) is another variant of the active voice transitive prefix (see §9.2.2 for more details).
    5 In addition to these there is a lexically conditioned allomorph pepe- prefix.

[^50]:    ${ }^{6}$ This affix and the verbaliser affix have similar functions as the Indonesian ber- prefix.
    7 Ngkani 'eat' is a distinct lexical word from inang 'eat'. Although they are no doubt diachronically from the same word in Pendau they are distinguished synchronically in the syntax: ngkani only appears as a dynamic verb, while inang appears as a transitive verb in active voice and inverse voice clause constructions.

[^51]:    8 The term and identification of a class of verbs as positional (=postural) was first used in the TominiTolitoli languages for Lauje by Whatley (1984:13).
    9 A synonym that is considered to be more polite is ngodung 'sit', but this does not take the popo- prefix (see discussion with examples in §9.4.1).
    ${ }^{10}$ Note also that tangis 'cry' can become a nominalised agent based on the locomotion verb affixing to form topotumangis 'cryer, weeper'.

[^52]:    11 This prefix also derives nouns from verbs, see $\S 7.4 .1$ for discussion.

[^53]:    ${ }^{12}$ This is used in other non-Pendau areas of Sulawesi as well. This is not how Pendau would normally describe a 'white buffalo', it would probably be referred to as bengga memeas, in which the stative verb meas 'white' would be used.
    ${ }^{13}$ This is used in other non-Pendau areas of Sulawesi as well. It is possibly a shortened form of Mohammad.
    ${ }^{14}$ The Pendau tag question tooh 'right, isn't it?' is either borrowed from the Indonesian tag question toh which Echols and Shadily (1989) gloss as 'nevertheless' or directly from the Dutch toch 'yet, still, nevertheless', where the Indonesian borrowed it from. The Dutch use is similar in meaning.

[^54]:    ${ }^{15}$ A closer equivalent is the Indonesian word kasihan 'love, pity, mercy' which is a nominalisation of the verb kasih 'love', and is likely a cognate to the Pendau word 'asi (although a different Pendau word agarang means 'love, mercy').

[^55]:    1 The terms 'pivot' and 'subject' belong to etic and emic levels of analysis, respectively. Thus although in the emic analysis of Pendau 'pivot' and 'subject' turn out to be synonymous, they reflect different stages in the analysis in a similar manner as the terms 'phone' and 'phoneme' are used. For further discussion see §6.2, §6.3, §6.4.1.1, and §12.3.1.
    ${ }^{2}$ Foley and Van Valin (1985:305) define pivot as 'A pivot is any NP type to which a particular grammatical process is sensitive, either as controller or as target.' In Pendau the same arguments for identifying the grammatical subject relation are used to identify the pivot in clauses such as relative clauses (see §6.4.1.3). I assume in this section for sake of simplicity that once the pivot has been identified in clauses such as relative clauses, I can therefore use the notion pivot for all other verbal clauses which pattern in the same way as, for example, the relative clause (except that the relative marker is not there, etc.). Additional word order evidence for citing these as the pivots is presented in (§12.3).

[^56]:    ${ }^{3}$ Following Dixon (1979, 1994) and Andrews (1985), agent and patient can be represented as prototypical arguments that have been symbolised as A and O respectively. Others, such as Comrie (1989), have used the same idea with the partially different labels of A and P respectively. In this thesis I will follow Comrie's labels A and P to refer to the basic argument positions of transitive clauses. This means that whenever I use P it may be one of several possible semantic roles (for example, causee, patient, recipient, etc.), that is, the P indicates it is the undergoer macrorole, and its semantic roles may vary in both monotransitive and ditransitives clauses.
    4 This only demonstrates SVO and SV word orders. VOS and VS word orders also occur, see § 12.3 for more details.
    5 Also see Barr 1988b, 1988c, 1995 for a description of Da’a (Kaili subgroup) as a two-focus language of Central Sulawesi.
    ${ }^{6}$ Dixon (1994:179) states in a footnote that 'Tagalog and other languages of the Philippines subgroup of Austronesian are not easily characterisable in terms of the accusative/ergative parameter.' In fact later Dixon and Aikhenvald (1997) call Philippine-type languages 'argument focusing,' and clearly cite them as languages with two basic transitive clauses (which cannot therefore be analysable as accusative or ergative types).
    7 For reviews see Boutin (1988a, 1988b, 1994), Kroeger (1993), Matsuda (1988) and Shibatani (1988a, 1988b). See Barlaan (1999) for a solid study of the 'focus' system in Isnag for example.
    8 For example see Tagmemics (Pike and Pike 1982), Lexical Functional Grammar (Manning 1996:4), Role and Reference Grammar (Van Valin and LaPolla 1997, Foley and Van Valin 1984), and the core versus non-core layers are presented as a general principle in Andrews (1985:80 ff.).

[^57]:    9 Core arguments may be 'covert' or omitted when they are recoverable from the context.
    ${ }^{10}$ Directional verbs sometimes subcategorise a prepositional phrase as if it were a core argument. In these exceptions then there is functionally no difference between core and non-core arguments. However the difference between core and non-core is based on prototypical patterns not the exceptions.
    ${ }^{11}$ See the discussion in $\S 12.4 .3$ for some remarks on the common occurrence of marking genitives and the A of inverse with the same set.
    12 The genitive pronoun set also includes the fronted pronouns ' $u$ - and $m u$ - for 1 st and 2 nd person respectively, effectively becoming verbal prefixes. The genitive pronoun set is a mixed set, some are enclitics, and some are free words (distinguishable by phonological criteria).

[^58]:    13 Garvin (1958) describes the two pronoun sets in Kutenai as absolute and obviative; in later literature on Kutenai (for example, Dryer 1994) the terms 'proximate' and 'obviative' are used respectively.

[^59]:    ${ }^{14}$ Conjunction reduction cannot be used as a test as the example below illustrates that the null pronoun cross references the previous object (either the object or subject can be coreferenced):

    | [Io | nomupuk | bua | uo] | o | [Ø | niinangonyo.] |
    | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
    | io | N-pong-pupuk | bua | 'uo | $o$ | $\varnothing$ | ni-inang=nyo |
    | 3SG/AB | RE-SF/PT-pick | fruit | yonder | and | $\varnothing$ | IV/RE-eat=3SG/GE |

    'He/she picked the fruit and he/she ate (it).'
    15 Jojoo 'all' is the only known quantifier that floats. For a discussion of all of the quantifiers see §7.5.2.3.

[^60]:    16 Although Manning's analysis is an ergative one, it does not invalidate my application of his analysis.
    ${ }^{17}$ See also Andrews (1985:122-123) and Katamba (1993:263).

[^61]:    18 There is a pragmatic difference in word orders. See $\S 17.4$ for more details.

[^62]:    19 Diang may be affixed with ne'e-diang 'have or possess something', in which case it is no longer functioning as an existential verb. See $\S 9.6 .2 .1$ for further discussion.

[^63]:    ${ }^{20}$ The resultative prefix $p o{ }^{\prime} o_{1}$ - is analysed as distinct from the sequence of $p o-{ }^{\prime} o$-, see $\S 10.6$.
    ${ }^{21}$ Alternatively the sentences in example (50) could be translated as if the predication were a relative clause, 'One person who had a water buffalo butchered a water buffalo. A person who had a cow butchered a cow. A person who had a chicken butchered a chicken. A person who had a goat butchered a goat.'

[^64]:    ${ }^{22}$ A complement clause is considered to be one that functions as an argument of the clause and so it is not considered to be a ditransitive clause. See $\S 15.3$.
    ${ }^{23}$ Although some have proposed a possible etic category on a par with $\mathrm{S}, \mathrm{A}$, and P , there does not seem to be general agreement yet on the nature of this category. So I will just refer to this generically as a 'third argument' unless otherwise specified for a specific clause.
    ${ }^{24}$ This chapter assumes instruments are second objects. There are two basic reasons for interpreting the instrument NP as a core argument. First, the semantics of the verb require a third entity, and secondly the nu common noun marker is considered to be part of a genitive paradigm for the inverse voice agent which is understood to be core. So by analogy with the genitive paradigm the instrument NP marker is understood to be a core argument, although arguably marginally so. Inherent instrument verbs do not seem to require the third instrument argument, so this contributes ambiguity to the status of the instrument NP as well. In $\S 8.6$ I will discuss the ambiguous status of instrument phrases and the reason they are interpreted as core rather than as oblique.
    25 Although it might be inferred that the applicative disallows 'theme' from becoming the pivot, it appears that the more general situation is that whenever 'theme' and 'instrument' are mapped to the second object grammaticalisation, they can never be the pivot, since the pivot is the grammatical subject in Pendau. This is more general since a non-pivot instrument is a second object grammatical relation and there is no applicative marker necessary to denote this. It is important to point out though that 'theme' is never a pivot in a ditransitive construction. This is parallel to the case in Indonesian (from an anonymous reviewer: pers. comm.).

[^65]:    ${ }^{26}$ Pivot and subject are defined and discussed in $\S 6.2-4$ and Chapter 12.

[^66]:    ${ }^{27}$ See $\S 10.2$. 3 for a discussion of causativised stative verbs.

[^67]:    1 This does not include complement clauses functioning as a noun phrase-see $\S 15.3$ for a discussion on complementation.

[^68]:    ${ }^{2}$ One other possible synonym for the second plural free pronoun emu is ongo. Although my main language helper described this as a synonym, it always occurs preceding a noun, and may be better identified as a plural human marker for small groups of people, such as ongo unga 'you (pl.) children', ongo lei 'you (pl.) girls', ongo uti 'you (pl.) boys', and ongo tagu 'you (pl.) friends'. Also notice that emu can co-occur with ongo emu ongo unga 'you (pl.) children (group)'. See §7.5.2.3 where I propose that this compound is one of several possible quantifiers.

[^69]:    ${ }^{3}$ The first person inclusive plural pronouns ito and =to (absolute and genitive case respectively) may also be used as honorific singular pronominal arguments of a predication (\$7.3.1).

[^70]:    4 In the Kaili-Pamona group the cognate is kali. The cognate kali occurs in Lauje as well.

[^71]:    5 Blust (2001:5t) states 'If we make allowance for semantic contagion, a fairly strong case can be made that many of the lexical categories marked by *qali/kali- share an important common property, although it is neither a linguistic property, nor a semantic property which can be perceived in the natural world. Rather, what defines many *qali/kali- words, and distinguishes them from unmarked lexical categories of similar semantic content, is a dangerous connection with the world of spirits.' See also Blust (1983) and Osmond (2000) for additional information.
    ${ }^{6}$ This is probably built historically from the stative verb root meas 'white'. The ghost shrimp is not white but has a transclucent outer body, where the internal organs are visible.

[^72]:    7 The relative clause marker to=, the agentive nominalising prefix to-, and too 'person' are obviously all historically connected, but it is not clear if the synchronic form reflects one of these as its frozen form or an early stage in which they were not entirely distinguished. Mead (1998:356ff.) gives more details that connects relative markers and the various forms for 'person' in other Sulawesi languages.
    8 One reviewer has suggested the feasibility that togoge might reflect historically from a previous reduplication of oge 'big', as in <to-oge-oge.
    9 If the coastline goes north and south, then the two directional nouns are rough equivalents of east and west (depending whether the mountains are west or east of the particular coastline). If the coastline goes east and west then the two directional nouns are rough equivalents of north and south (again depending whether the mountains are south or north of the coastline). If the speaker was on the peak of a mountain ridge that goes north and south then he/she would use teriong 'seaward' in any direction that took him/her down towards the east or west coastlines.

[^73]:    ${ }^{10}$ The cognate form $k a$ - in the Kaili languages behaves similarly. For example Evans (n.d.) states for Ledo: 'Adjectives can be nominalised with the addition of the $\boldsymbol{k a}-(-\boldsymbol{n})$ affixes. It indicates a state of affairs or a quality.' Elsewhere she states the ka- prefix is also used to nominalise various other types of

[^74]:    ${ }^{11}$ Sundanese has been noted to have a similar locative nominalisation (Comrie and Thompson 1985:355).

[^75]:    ${ }^{12}$ Note also that some reduplicated words are ambiguous, such as tokai-kai 'the grandfather, the grandfathers', and tobengkel-bengkel 'the women, the woman'. See §7.4.2.3 and §7.4.3.5 for the use of the agentive prefix to- and how participants can be highlighted.

[^76]:    ${ }^{13}$ There are two kinds of sago trees, one is the sa'ulong 'sago palm' and the other is bagis 'sugar palm'. Both are used to produce a traditional Pendau staple food called rabia 'sago'.

[^77]:    ${ }^{14}$ I apply the term 'agentive' because the prefix to- is the same prefix used to form agentive nominalisation in which a noun or verb becomes a person who is able to do X (see §7.4.2.3)

[^78]:    ${ }^{15}$ Although the literal translation of santagu is 'one friend' it means 'one group (of friends)'.

[^79]:    ${ }^{16}$ According to van den Berg (1989:110) this word order difference 'stresses' the first element. So in the case of a numeral preceding a noun, it is the numeral which is more marked. When the numeral follows the head noun, it is the head noun which is marked pragmatically. This may be the case for Pendau as well.

[^80]:    ${ }^{17}$ Place names are not categorised with personal names in Pendau, but are classed as common noun.

[^81]:    18 The anoa is also referred to as the 'dwarf buffalo' (endemic to Sulawesi), however the former term is the normal English term for this (borrowed from Indonesian).
    19 The word for 'monkey' is usually formed with a word initial glottal stop, as in 'odo. The proper name Kodo is an exception or is borrowed from another regional language such as Kaili which uses a $k$ where Pendau uses a glottal stop (see $\S 2.6 .3$ for more details about the different phonetic manifestations of the glottal stop phoneme).
    ${ }^{20}$ The si/ni is a clitic. Compare to sisesee in which this reduplication means 'whoever' (this is similar to the Indonesian siapa-siapa). If si was part of the word it would have been reduplicated. See §16.3.3.4 for discussion of indefinite interrogative forms.

[^82]:    ${ }^{21}$ Numerals can become verbs with the prefix mong-/nong- (for example, mong-gatus 'hundreds'), see §7.5.2.1.4 for examples and discussion.

[^83]:    ${ }^{22}$ See §7.5.2.4 on the meaning of pesounong when it is used as a derived classifier, in which case it means 'one each' of the head noun.
    ${ }^{23}$ A common alternation of the $7^{\text {th }}$ place is pe-pepituong, but this is not considered to be proper Pendau by many speakers.

[^84]:    ${ }^{24}$ The first six ordinal numerals may also be expressed as soung, pedoruonyo, petotolunyo, peraapatonyo, pelelimanyo, and peroonongonyo, respectively.
    ${ }^{25}$ Too soung 'first person' is synonymous and interchangeable with too pabia-bianyo 'first person'.
    ${ }^{26}$ My fieldnotes do not have a po- prefixed as the others do. Its absence may reflect optionality.

[^85]:    ${ }^{27}$ Ordinals can be expressed two ways, another way that the 'third child' could be expressed is as unga po'ototolunyo.
    ${ }_{28}$ This looks like the active voice prefix $M$-pong-/N-pong- although the stem former cannot be shown to appear in this particular context. This prefix also takes vowel harmony just like the active voice stem former. Nothing definitive can be said about whether these are the same prefix or not.

[^86]:    ${ }^{29}$ The general format follows van den Berg (1989). Two other possible classifiers were identified in the field, but, I was unable to get actual examples of head nouns in Pendau which could be used in these cases: se-ngke'ap 'flat thin piece of something' (for example, puzzle pieces, plywood pieces, etc.), and so-m-boto 'trunk, log, bridge of nose'.
    ${ }^{30}$ This classifier would only apply on a multi-headed griffin, since the multiple heads appear as 'branches'.

[^87]:    ${ }^{31}$ The word for measuring or numbering in Pendau is gangka.

[^88]:    ${ }^{32}$ Sometimes ntoli is formed as ntoi. The li formative may be borrowed or a relic form from one of the other Tomini-Tolitoli languages since $l i$ in Lauje for example is cognate with Pendau ri 'at, in, on, etc.'. The $l s$ and $r$ are systematically found in cognates between Tomini-Tolitoli languages (Himmelmann 2001).

[^89]:    33 In some derivations ampa- is a productive alternative of apa- 'four' (influenced by Indonesian empat 'four').

[^90]:    ${ }^{34}$ This ambiguity does not occur when aspectual enclitics or other verbal morphology appears on the stative verb in addition to the modality.

[^91]:    35 This is a different use from ana used as a lexical quantifier (§7.5.2.3) as in ana guru 'students, disciples'.

[^92]:    ${ }^{36}$ See §7.4.6 on compound nouns for a similar structure without the genitive linkers.

[^93]:    ${ }^{37}$ See §7.4.6 on compounds for discussion of alternations of lexical items usage with and without possessive linkers.

[^94]:    ${ }^{38}$ I suspect that through some historical development sumoung 'alone, self' was formed from the numeral soung 'one' by inserting the infix -um-. It would make sense that the derived meaning 'alone' would have developed from the numeral 'one'. Compare this process with Tukang Besi, where Donohue (1999:419) states that pe'esa- 'own, alone' is 'probably related to proto Austronesian *isa 'one'.'

[^95]:    (190) Nipogabu'umo mboto.
    ni-po $1_{1}$-gabu='u=mo mboto
    IV/RE-SF/FA-cook=1SG/GE=COMP self
    'I myself did the cooking.'

[^96]:    ${ }^{39}$ Givón (1990:490) states that conjoined nouns will share the same case, but may or may not all be marked for case:

    As noted above, a strong condition on NP conjunction is that the conjoined NP must share the same case role. Such a restriction serves well to prevent case-conflicts in NP conjunction. An open issue still remains, namely whether all the conjoined nouns are (repeatedly) case-marked, or only the entire NP. This option often yields a useful semantic distinction.

[^97]:    ${ }^{1}$ The general locative $r i$ is a proclitic because it is only one syllable (a minimal word consists of two syllables-see $\S 2.4$ and §4.2.4).
    ${ }^{2}$ The instrumental noun phrase marker $n u$ is a proclitic because it is only one syllable (a minimal word consists of two syllables-see §2.4 and §4.2.4).

[^98]:    3 Verbs such as ingka 'fear' and nasu 'anger' can be analysed as subcategorising for sono 'with', similar to colloquial Indonesian takut/marah sama dia 'afraid/angy of/with him/her' (anonymous reviewer: pers. comm).

[^99]:    4 Actually five, if the simultaneous function for marking common nouns is noted for the genitive and agentive use in inverse constructions.

[^100]:    5 This is not the only possibility for having multiple occurrences of nu in the same clause, but it is the only possibility when the $n u$ is marking two NPs that are each core arguments with different roles.
    ${ }^{6}$ The directional applicative has a semantic effect here (see 14.3.3) rather than a syntactic effect since an instrument NP marked with $n u$ does not require an applicative.

[^101]:    7 It is important not to misunderstand the importance of this nonsensical but grammatical construction, as it clearly demonstrates that the functions of sono and $n u$ are not ambiguous but really are comitative and instrumental respectively. It is nonsensical because a 'glass' or a 'cup' is a solid and not a liquid that can be ingested. It of course is possible to imagine that it could take place in a cartoon or other 'world' which is what makes this construction grammatical. It is precisely this kind of example which demonstrates conclusively that any overlap the two formatives have is merely an ambiguity. These two formatives are seldom substitutable.

[^102]:    ${ }^{1}$ See also $\S 5.6$ for a discussion of the distinction between canonical and non-canonical verbs. Earlier analyses of Pendau verb classes can be found in Quick (1999a, 1999b).
    ${ }^{2}$ In the 'inverse voice', stem formers are sometimes replaced with the inverse prefix while at other times stem formers are retained, with the inverse voice prefix preceding the retained stem former (see Chapter

[^103]:    ${ }^{8}$ The denominalised verb class is not relevant because the root is inherently a noun, so there is no need to distinguish between the three verb classes which all use the $p o_{1}{ }^{-}$stem former. However this does not preclude the possibility for a noun to be affixed by another verbal classes' prefix.

[^104]:    14 Note that some of the interclausal relators listed in Figure 15.2 may also conjoin NPs, and may also occur as discourse connectors (§15.7).
    15 A more refined method used by Semantic Structural Analysis theory divides these according to meanspurpose, reason-result, and means-result.

[^105]:    ${ }^{16}$ Also known in the literature as tail-head linkage or recapitulation. See Quick $(1985,1986,1994)$ for features of repetition classified according to their functions.

[^106]:    ${ }^{17}$ The alternate meaning is 'when'. When ono is used to mean 'when' the verbs can be realis or irrealis, however when it means the conditional 'if' the verbs must be irrealis. See §13.2.3.4 on the use of irrealis for hypothetical uses.
    ${ }^{18}$ Headland (1993) states that 'Conditional (IF-THEN) clauses have underlying logical relations.'

[^107]:    1 When the $p V(C)$ - stem former is not used, it is likely to shorten the entire imperative command, that is, for efficiency, rapid speech, or common usage, etc.

[^108]:    2 The pet is a giant cat.

[^109]:    3 See Indonesian for parallel morphosyntactic strategies in forming imperatives and prohibitives (see for example Yoshimura 1983).

[^110]:    4 The irrealis form mo-'uya is usually used with the negative ndau 'no' as in ndau mo'uya 'it won't matter' (and also appears in the realis form, see (1)).

[^111]:    ${ }^{1}$ Probably any core argument can be fronted to the left-most position given that there must be a pause and the proper pragmatic context arises.

[^112]:    ${ }^{2}$ Although the 'tail' that is repeated here is nearly the whole sentence, it still characterises the functions normally associated with 'tail-head' linkage. Longacre (1983) also discusses 'head-head' and 'tail-tail' linkages which all have the same basic function as 'tail-head' linkage.

[^113]:    3 Compare this with the typological listing in Payne (1997:345).

[^114]:    4 'Composed' means that a story has been authored by a native Pendau speaker who has had some training in writing/authoring skills as well as considerable natural talent to perform what I judge to be some of the best narrative material in Pendau.
    5 In the later quantification methods it was found to be adequate to collapse the lower frequency NPs annotated here as QN/QF, RC, DEM into the appropriate N 1 or N 2 (usually the former). In my counting of RCs I am quantifying only the head noun as a token that is modified by a RC.

[^115]:    6 This has been addressed many times in the literature on the Philippine languages. Shibatani (1988b:96) gives a representative opinion (where his use of 'goal-topic' is the equivalent 'inverse' construction in Pendau):

    In conclusion then, it is clear that while the patient nominals in the goal-topic construction and the passive in English and other languages are similar in regards to subject/topic role,

[^116]:    9 Again, as for the application of Givón's methodology, measures of referential distance alone rather than for RD and topic persistence will give fairly clear results, so no measures for topic persistence will be recorded here.
    ${ }^{10}$ Dryer (1994) presents an additional means of analysing topic continuity data which he calls the 'vertical analysis' and the 'horizontal analysis'.

[^117]:    ${ }^{11}$ This data also argues against the antipassive interpretation. This is because the antipassive would tend to omit the P argument rather than the A argument.

[^118]:    12 Stative verbs with an 'effector' adjunct may be a 'middle voice' which differs from stative constructions in which no 'effector' appears. However the statistics here refer to all main clauses which have a stative verb in them.

[^119]:    1 Longacre (1983:3) uses the term 'notional' to indicate the purpose or intent of a discourse type that is behind or underlying it. A 'plot' is the notional purpose of a narrative. Different parts of a discourse, such as 'finis', are also notional concepts. The term 'notional' contrasts with 'surface structure'. Generally the surface structure of a discourse uses linguistic devices to signal the notional concepts.
    2 Paragraphs may also have embedded paragraphs, that is, they can be recursive (see Longacre 1989a, Hwang 1989).
    3 The term 'sentence' could be substituted for 'clause' in this section, since complex sentences may be established as a basic unit for the purpose of the discussion on paragraph structure. Also see $\S 15.1$ for more discussion on 'complex sentences'.

[^120]:    4 If every paragraph begins with a linguistic signal then there is no need for a signal to mark the end of the paragraph since obviously the next paragraph signal simultaneously signals that the preceding clause marked the end of that paragraph.
    5 Usually it 'chains' sequentially, that is, if one clause has it, one or more of the following clauses are also likely to have it although it is by no means a requirement.
    6 The enclitic = mo does appear in one or two additional instances of most of these texts bound to a noun or pronoun. In these cases it seems to mark the NP for a highlighting effect and possibly sometimes as contrastive focus. Gregerson and Martens (1986) discuss the discourse use of the cognate form in the Sulawesi Uma language which was often found to have a special role in discourse in highlighting or contrasting a participant or action.

[^121]:    7 This implies that there is an etymological connection of the last part of panganganta which is semantically connected, which is feasible if the first part of the word is a stem former.

[^122]:    8 Adat is an Indonesian or Malay word that is in widespread usage throughout much of Indonesia for the traditional laws or customs of specific ethnic groups. Altogether there were ten prayers and only the last nine were transcribed and analysed since the first one was deemed technically unclear. Although the prayer for each initiate can be viewed as an individual unit, the context of the situation forms a cohesive whole between each prayer. Since each prayer patterns basically the same, whenever something is not mentioned in one of the following prayers, the adat specialist may invoke retroactively his requests over all of the previous prayers (and sometimes all of the initiates including the ones he has not yet prayed over). So, for example, in the very first prayer the fact that the traditional laws, adat, is being taught throughout the Pendau ritual is overtly specified.

[^123]:    ${ }^{9}$ There is a seclusion period involving some adat teaching preceding the public part of the ritual. The public part of the ritual begins in the evening and ends midday of the next day.
    ${ }^{10}$ Sometimes the Kaili word vati is used as the name for this adat ceremony.

[^124]:    ${ }^{11}$ The numeral forty-four is a special number that is often used to refer to something bad, and only representative examples of wickedness, disease, or disasters are mentioned in the prayers. Some examples are mentioned in Figure 18.11.

[^125]:    ${ }^{12}$ The dero (or mo-dero) dance, often referred to as badero, is another kind of dancing that is said to be borrowed from the Poso area was also performed several times during the night. This dance is even more entertainment-oriented as attributed by young people's enthusiasm for this particular dance form.

[^126]:    ${ }^{13}$ The 'first day' or actually 'first evening' after a person's death is contingent on what time of day the person died. The main point is that the funeral is held within twenty-four hours of the person's death, so if a person died in the evening, the funeral would probably be held the next day.

[^127]:    ${ }^{14}$ The string is obtained by removing it from the edge of the white burial cloth and forming a loop. These are not random string designs. This is a sequence of twelve different 'string pictures', which apparently represent each month of the year. Each picture has its own name. After each picture, one partner is supposed to make the next month in the sequence by removing the string from the partner's hands and immediately making the next picture.

[^128]:    2 This clause is an evaluation comment by the narrator.

[^129]:    ${ }^{3}$ Hanga 'and' is the Dampelas conjunction, as might be expected in this setting which occurred in Simontomu, a boundary area between Pendau and Dampelas speakers; o 'and' is the Pendau conjunction.

[^130]:    ${ }^{4}$ The first utterance bukeng was probably an error in mispronunciation, corrected as bungkeng 'rattan bag'.

