## A grammar of Papuan Malay

Angela Kluge

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Angela Kluge

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\text { buat } \text { Kori }^{\dagger}, \text { Sarlota }^{\dagger}, \text { Nela }^{\dagger} \text { dorang }
$$

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## Preface

This book is the revised version of my PhD dissertation, published by LOT by the same title, which I successfully defended in June 2014 at Leiden University. The original dissertation has undergone a number of revisions; overall, however, its contents have remained the same.

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## Abbreviations

| 1,2, 3 | 1st, 2nd, 3rd person | Do | direct object |
| :---: | :---: | :---: | :---: |
| ACL | accidental | DY | dynamic |
| ADJCT | adjunct | EDC | education |
| ADNOM | adnominal | +EDC | better educated |
| AdPoss. | adnominal possessive | -EDC | less educated |
| ADV | adverb | ELS | elision |
| ADV.T | adverb, temporal | EMPH | emphasis, emphatic |
| ADVs | adversative | FRIC | fricative |
| AFFR | affricate | Glot | glottal |
| AFFX | affixation | Hum | human |
| AG | agent | ILCT | interlocutor |
| AGT | agentive | INAL | inalienable |
| AL | alienable | InAN | inanimate |
| Alt. | alternative | Ins | instrument |
| Alv | alveolar | InT | interrogative |
| AN | animate | intens | intensity |
| APR | approximant | INTR | intransitive |
| A-p-UlT | antepenultimate | Is | Isirawa |
| ARGT | argument | k.o. | kind of |
| ASSCT | association | L.DIST | locative, distal |
| ATTR | attributive | L.MED | locative, medial |
| AUG | augmentation | L.PROX | locative, proximal |
| ben | beneficiary | LAB | labial |
| BW | base word | LAT-APRX | lateral-approximant |
| C | consonant | LIG | ligature |
| caus | causative | lim. | limited |
| CIRC | circumstance | LiQ | liquid |
| CL | clause | Loc | locative |
| CMPR | comparative | LOCT | location |
| CNJ | conjunction | marg. | marginal |
| CST | contrastive | med. | medium |
| D.DIST | demonstrative, distal | MOD | modifier |
| D.prox | demonstrative, proximal | N | noun |
| DEM | demonstrative | N.COM | noun, common |
| DIM | diminution | N.Loc | noun, location |
| DIPH | diphthong | n.time | noun, time-denoting |


| NAS | nasal | RECP | reciprocal |
| :---: | :---: | :---: | :---: |
| NEG | negation, negative | REL | religion |
| NEG.IMP | negative imperative | REL | relativizer |
| nMLZ | nominalizer | RES | result |
| NOM | nominal | RET | retention |
| NP | noun phrase | RHOT | rhotic |
| NUM | numeral | S | subject |
| o | object | s.o. | someone |
| Obl. | oblique | s.th. | something |
| ObStr | obstruent | SG | singular |
| omv | object of mental verb | SI | Standard Indonesian |
| ORTH | orthography | Sim. | similarity |
| Orthogr. | orthography | SPK | speaker |
| oSb | older sibling | SPM | speech mistake |
| outsd | outsider | ST | stative |
| PAL | palatal | Stat | status |
| PAL-ALV | palato-alveolar | + Stat | higher social status |
| PAT | patient | -stat | lower social status |
| PFX | prefix | STD | standard of comparison |
| PHON | phoneme | SUPL | superlative |
| PL | plural | sylb | syllable |
| PL-HOLD | placeholder | TOP | topic |
| PLOS | plosive | TRU | truncated |
| PN | proper noun | ULT | ultimate |
| POL | politics | UP | unclear pronunciation |
| poss | possessive | UV | undergoer voice |
| POSSM | possessum | v | vowel |
| POSSR | possessor | v | verb |
| PP | prepositional phrase | v.bi | verb, bivalent |
| prec. | precedes | v.mo | verb, monovalent |
| Pred | predicate, predicative | v.tri | verb, trivalent |
| PRO | personal pronoun | vblz | verbalizer |
| Prod | productivity | vDI | verb, ditransitive |
| Pronom | pronominal | VEL | velar |
| P-Ult | penultimate | voc | vocative |
| QT | quantifier | vp | verb phrase |
| QUANT | quantity | vsi | verb, intransitive stative |
| RC | relative clause | VTR | verb, transitive |
| RDP | reduplicant | ySb | younger sibling |
| REC | recipient |  |  |

## Conventions for examples

The examples in this book are taken from the recorded corpus. For each example the record number of the original WAV sound file (see §1.11.4.1) is given. This record number also includes a reference number, as each interlinear text is broken into referenced units. Hence, the example number 080919-007-CvNP. 0015 refers to line or unit 15 in the record 080919-007-CvNP. Elicited examples, including constructed sentences for grammaticality judgments, are labeled as "elicited". For each of these examples the respective Toolbox record/reference number is given. All examples are numbered consecutively throughout each chapter (the same applies to tables and figures).

The conventions for presenting the Papuan Malay examples, interlinear glosses, and the translations of the examples into English are presented in Table 1 and Table 2.

In the examples, commas mark intonation breaks, question marks signal question intonation, and exclamation marks indicate directive speech acts and exclamations. Where

Table 1: Papuan Malay example and translation conventions

| Convention | Meaning |
| :--- | :--- |
| Papuan Malay example |  |
| bold | highlights parts of the example pertinent for the discussion |
| $\sim$ | separates reduplicant and base |
| - | morpheme boundary |
| $=$ | clitic boundary |
| $\varnothing$ | omitted constituent |
| $\ldots$ | ellipsis |
| \| | intonation breaks |
| [] | surrounds utterances in a language other than Papuan Malay, or |
| $(())$ | instances of unclear pronunciation |
| * | surrounds nonverbal vocalizations, such as laughter or pauses |
| ?? | precedes ungrammatical examples |
| á | precedes only marginally grammatical examples |
| VVV | acute accent signals a slight increase in pitch of the stressed syllable |
| Is | vowel lengthening |
| UP | utterance in the Isirawa language |
| i, ${ }_{j}$ | unclear pronunciation |

Table 2: Papuan Malay example and translation conventions continued.

| Convention | Meaning |
| :---: | :---: |
| Interlinear gloss |  |
|  | separates words glossing single Papuan Malay words for which English is lacking single-word equivalents, as with papeda 'sagu.porridge' <br> separates formally segmentable morphemes without marking the morpheme boundaries in the corresponding Papuan Malay words, either to keep the text intact and/or because it is not relevant, as in tujuangnya 'purpose:3possR' |
| [] TRU | surrounds truncated utterances, or speech mistakes truncated utterance which results from a false start, or an interruption, as in ora 'TRU-person'; the untruncated lexeme is orang 'person' |
| SPM | speech mistake, as in ar 'sPM-fetch'; the correct form is ambil 'fetch' |
| Translation |  |
| bold <br> () | highlights the part of the translation relevant for the discussion surrounds parts of the translation which do not have a parallel in the example, such as explanations or omitted arguments |
| [] | surrounds the record/reference number |
| [] | surrounds utterances in the Isirawa language, instances of unclear pronunciation, or speech mistakes |
| (()) | surrounds nonverbal vocalizations, such as laughter or pauses |
| Is | utterance in the Isirawa language |
| SPM | speech mistake |
| TRU | truncated utterance |
| UP | unclear pronunciation |
| i, ${ }^{\text {j }}$ | subscript letters keep track of what different terms refer to |

considered relevant for the discussion, intonation breaks are indicated with "|" rather than with a comma. Morpheme breaks are shown in Chapter 3, which discusses "Wordformation". In subsequent chapters, though, they are usually not shown, given the low functional load of affixation in Papuan Malay; the exception is that hyphens are still used in compounds. Names are substituted with aliases to guard anonymity.

In the translations, gender, tense, and aspect are often not deducible; they are given as in the original context.

When parts of an example are quoted in the body text, they are marked in italic.

## Maps



Figure 1: The location of the Sarmi regency within Southeast Asia and West Papua

## 1 Introduction

Papuan Malay is spoken in West Papua, ${ }^{1}$ which covers the western part of the island of New Guinea. The language is a nonstandard variety of Malay, belonging to the Malayic branch within the Austronesian language family. ${ }^{2}$

Within the larger Malay continuum, Papuan Malay forms a distinct, structurally coherent unit.

In West Papua, Papuan Malay is the language of wider communication and the first or second language for an ever-increasing number of people of the area (ca. 1,100,000 or $1,200,000$ speakers). While Papuan Malay is not officially recognized, and therefore not used in formal government or educational settings or for religious preaching, it is used in all other domains, including unofficial use in formal settings, and, to some extent, in the public media.

This grammar describes Papuan Malay as spoken in the Sarmi area, which is located about 300 km west of Jayapura. Both towns are situated on the northeast coast of West Papua (see Figure 1(a) on p. xxvii and Figure 1(b) on p. xxvii). After a general introduction to the language, presented in this chapter, the grammar discusses the following topics, building up from smaller grammatical constituents to larger ones: phonology, word formation, word classes, noun phrases, adnominal possessive relations, prepositional phrases, verbal and nonverbal clauses, non-declarative clauses, and conjunctions and constituent combining.

This chapter provides an introduction to Papuan Malay. The first section gives a brief introduction to the larger geographical setting of Papuan Malay (§1.1). The genetic affiliations and the dialect situation of the language are discussed in $\S 1.2$ and $\S 1.3$, respectively. The linguistic setting of Papuan Malay is examined in $\S 1.4$, followed in $\S 1.5$ by a description of its sociolinguistic profile and in $\S 1.6$ of its typological profile. Pertinent demographic information is given in §1.7, and an overview of the history of Papuan Malay is presented in $\S 1.8$. Previous research on the language is summarized in $\S 1.9$, followed in $\S 1.10$ by a brief overview of available materials in Papuan Malay. Finally, in §1.11, methodological aspects of the present study are described.

### 1.1 Geographical setting

Papuan Malay is mostly spoken in the coastal areas of West Papua. As there is a profusion of terms related to this geographical area, some terms need to be defined before providing more information on the geographical setting of Papuan Malay.

[^0]"West Papua", the term adopted in this book, denotes the western part of the island of New Guinea. More precisely, the term describes the entire area west of the Papua New Guinea border up to the western coast of the Bird's Head, as shown in Figure 1(a) (p. xxvii; see also §1.11.2 regarding the larger setting of the research location). ${ }^{3}$

In addition to the name "West Papua", two related terms are used in subsequent sections, namely "Papua province" and "Papua Barat province". Both refer to administrative entities within West Papua. As illustrated in Figure 1(b) (p. xxvii), Papua province covers the area west of the Papua New Guinea border up to the Bird's Neck; the provincial capital is Jayapura. Papua Barat province, with its capital Manokwari, covers the Bird's Head.

West Papua occupies the western part of New Guinea which belongs to the eastern Malay Archipelago. With its 317,062 square km, it covers about $40 \%$ of New Guinea's landmass. Its length from the border with Papua New Guinea in the east to the western tip of the Bird's Head is about $1,200 \mathrm{~km}$. Its north-south extension along the border with Papua New Guinea is about 700 km . The central part of West Papua is dominated by the Maoke Mountains. They are an extension of the mountain ranges of Papua New Guinea and, for the most part, covered with tropical rainforest. The northern and southern lowlands are covered with lowland rainforests and freshwater swamp forests which are drained by major river systems, such as the Mamberamo in the north and the Digul in the south. (See Encyclopædia Britannica Inc. 2001-a; 2001-b.)

Major areas with substantial concentrations of Papuan Malay speakers are the coastal urban areas of Jayapura and Sarmi on the north coast, Merauke and Timika on the south coast, Fakfak and Sorong in the western part and Manokwari in the northeastern part of the Bird's Head, and Serui on Yapen Island in Cenderawasih Bay. Other areas with substantial speaker numbers most likely include Nabire in the Bird's Neck, Biak Island in Cenderawasih Bay, and possibly Wamena in the highlands in central West Papua. (See Scott et al. 2008: 10; see also Figure 1(b) on p. xxvii.).

### 1.2 Genetic affiliations

As a Malay language, Papuan Malay belongs to the Malayic sub-branch within the Mala-yo-Polynesian branch of the Austronesian language family. A review of the literature suggests, however, that the exact classification of Papuan Malay is difficult for three reasons. First, as discussed in §1.2.1, the internal classification of the Malayo-Polynesian subgroup is problematic. Moreover, there is a debate in the literature over the classification of the Malayic languages within Western-Malayo-Polynesian. Secondly, as discussed in §1.2.2, there is disagreement among scholars regarding the status of the eastern Malay varieties, including Papuan Malay, as to whether they are non-creole descendants of Low Malay or Malay-based creoles. Thirdly, there is an ongoing debate over the legitimacy of Papuan Malay as a distinct language, as discussed in §1.2.3.

[^1]
### 1.2.1 Papuan Malay, a Malayic language within Malayo-Polynesian

As a Malayic language, Papuan Malay belongs to the Malayo-Polynesian branch. Its classification within this branch is problematic, however.

In the literature the Malay languages are frequently classified as "Western MalayoPolynesian" or "West-Malayo-Polynesian (see for instance Adelaar 2001: 227; Nothofer 2009: 677; Tadmor 2009a: 791).

The existence of the Western Malayo-Polynesian subgroup, however, is not well established. Blust (1999: 68), for instance, points out that "Western Malayo-Polynesian does not meet the minimal criteria for an established subgroup". Hence, Blust concludes that Western Malayo-Polynesian instead constitutes a "residue" of languages which do not belong to the Central- and Eastern-Malayo-Polynesian sub-branch (Blust 1999: 68). Along similar lines, Adelaar (2005b: 14) notes that Western Malayo-Polynesian "does not have a clear linguistic foundation [...] and the genetic affiliations of its putative members remain to be investigated". Donohue \& Grimes (2008) also discuss the problematic status of the Western Malayo-Polynesian subgroup. Based on phonological, morphological, and semantic innovations, the authors conclude that there is no basis for the Western Malayo-Polynesian and Central/Eastern-Malayo-Polynesian subgroups. In 2013, the status of the Western-Malayo-Polynesian (WMP) subgroup remains problematic, with Blust (2013: 31) maintaining that it "is possible that WMP is not a valid subgroup, but rather consists of those MP [Malayo-Polynesian] languages that do not belong to CEMP [Central-Eastern Malayo-Polynesian]" (see also Blust 2013: 741-742.

Moreover, there is disagreement among scholars with respect to the classification of the Malayic languages within Western Malayo-Polynesian. Based on phonological and morphological innovations, Blust (1994: 31ff) groups them within Malayo-Chamic which is one of five subgroups within Western-Malayo-Polynesian. The two branches of this grouping refer to the Malayic languages of insular Southeast Asia, and the Chamic languages of mainland Southeast Asia (see also Blust 2013: 32). Adelaar (2005a), by contrast, suggests that Malayic is part of a larger collection of languages, namely MalayoSumbawan. This group has three branches. One includes the sub-branches Malayic, Chamic, and Balinese-Sasak-Sumbawa, while the other two include Sundanese and Madurese. Blust (2010), however, rejects this larger Malayo-Sumbawan grouping. Based on lexical innovations, he argues that Malayic and Chamic form "an exclusive genetic unit" and should not be grouped together with Balinese, Sasak, and Sumbawanese (Blust 2010: 80-81; see also Blust 2013: 736). Hence, (Blust 2013: xxxii) classifies Papuan Malay as a Malayic language within Malayo-Chamic. This classification for the Malay languages within Malayo-Chamic is also adopted by the Ethnologue (Lewis, Simons \& Fennig 2016b).

### 1.2.2 Papuan Malay, a non-creole descendant of low Malay

Papuan Malay is a non-creole descendant of low Malay. ${ }^{4}$
There is an ongoing discussion in the literature, however, regarding the status of the eastern Malay varieties, including Papuan Malay; that is, whether they are indeed noncreole descendants of low Malay or rather Malay-based creoles.

Three factors contribute to this discussion: (1) the "simple structure" of Papuan Malay and the other eastern Malay varieties, with their lack of inflectional morphology and limited derivational processes (see §1.6.1.2), (2) the influence from non-Austronesian languages which these languages, including Papuan Malay, show (see §1.6.2), and (3) the history of Malay as a trade language (see $\S 1.8$ ). These pertinent characteristics of the eastern Malay varieties receive different interpretations.

Scholars such as Adelaar \& Prentice (1996: 675), Donohue (2007b; 2011), and McWhorter (2001) conclude that these languages best be characterized as Malay-based pidgins or creoles.

By contrast, other scholars, such as Collins (1980), Gil (2001), Bisang (2009), and Paauw (2013), and also earlier contributions by Donohue (2003) and Donohue \& Smith (1998), challenge the alleged creole origins of the eastern Malay varieties, given that structural simplicity is also found in inherited Malay varieties and also given that linguistic borrowing is not limited to pidgins or creoles.

This latter view is also the one adopted in the present description of Papuan Malay. The fact that Papuan Malay has a comparatively simple surface structure and some features typically found in Papuan but not in Austronesian languages is not sufficient evidence to classify Papuan Malay as a creole.

Throughout the remainder of this section, the different positions regarding the creole versus non-creole status of the eastern Malay varieties are presented in more detail. The view that the eastern Malay varieties are creolized languages is discussed first.

Adelaar \& Prentice (1996: 675) propose a list of eight structural features which illustrate the reduced morphology of the eastern Malay varieties and some of the linguistic features they borrowed from local languages. According to the authors, these features, which distinguish the eastern Malay varieties from the western Malay varieties and literary Malay, point to the pidgin origins of the eastern Malay varieties, including those of West Papua. Hence, Adelaar \& Prentice (1996) propose the term Pidgin Malay Derived dialects for these varieties. In a later study, Adelaar (2005a: 202) refers to the same varieties as Pidgin-Derived Malay varieties. Another researcher who supports the view that the (eastern) Malay varieties are creolized languages is McWhorter (2001; 2005; 2007: 197251). Considering the structural simplicity of Malay and its history as a trade language, he comes to the conclusion that Malay is an "anomalously decomplexified" language which shows "the hallmark of a grammar whose transmission has been interrupted to a considerable degree (2007: 197, 216). The Ethnologue (Lewis, Simons \& Fennig 2016b) also adopts the view that the eastern Malay varieties are creolized languages and classifies

[^2]them as Malay-based creoles; these varieties include Ambon, Banda, Kupang, Larantuka, Manado, North Moluccan, and Papuan Malay. (See also Roosman 1982; Burung \& Sawaki 2007.)

This view that the regional Malay varieties are creolized languages is further found in descriptions of individual eastern Malay varieties such as Ambon Malay, Kupang Malay, and Manado Malay.

For Ambon Malay, Grimes (1991: 115) argues that the language is a creole or nativized pidgin. This conclusion is based on linguistic, sociolinguistic, and historical data, which the author interprets in light of Thomason \& Kaufman's (1988: 35) framework of "contactinduced language change". Following this framework, nativized pidgins are the longterm "result of mutual linguistic accommodation" and "simplification" in multilingual contact situations (1988: 174, 205, 227). Along similar lines, Jacob \& Grimes (2011: 337) consider Kupang Malay to be a Malay-based creole that displays a substantial amount of influence from local substrate languages (see also Jacob \& Grimes 2006). Manado Malay is also taken to be a creole that developed from a local variety of Bazaar Malay which is a Malay-lexified pidgin (Prentice 1994: 411; Stoel 2005: 8).

Van Minde (1997), in his description of Ambon Malay, and Litamahuputty (1994), in her grammar of Ternate Malay, by contrast, make no clear statements as to whether they consider the respective eastern Malay varieties to be creolized languages or not.

In fact, the alleged creole status and pidgin origins of the regional (eastern) Malay varieties have been contested by a number of scholars. Collins (1980), Wolff (1988), Gil (2001), Bisang (2009), and Paauw (2013), for instance, argue that structural simplicity per se is not evidence for the pidgin origins of a language. Nor is the borrowing of linguistic features. Blust (2013) seems to have a similar viewpoint, although he does not overtly state this. Less clear is Donohue's (2003; 2007a; 2007b; 2011) and Donohue \& Smith's (1998) position concerning the creole/non-creole status of the eastern Malay varieties.

Bisang (2009: 35) challenges the view that low degrees of complexity should be taken as an indication to the pidgin/creole origins of a given language. In doing so, he specifically addresses the viewpoints put forward by McWhorter (2001; 2005). Paying particular attention to the languages of East and Southeast Mainland Asia, Bisang (2009) makes a distinction between overt and hidden complexity. The author shows that languages with a long-standing history may also have "simple surface structures [...] which allow a number of different inferences and thus stand for hidden complexity" (2009: 35). That is, such languages do not oblige their speakers to employ particular structures if those are understood from the linguistic or extralinguistic context.

As far as particular regional Malay varieties are concerned, Collins (1980), for example, comes to the conclusion that Ambon Malay is not a creole. Examining sociocultural and linguistic evidence, the author compares Ambon Malay to Standard Malay and to the nonstandard Malay variety Trengganu. Ambon Malay is spoken in a language-contact zone and held to be a creole. Trengganu Malay, by contrast, is spoken on the Malay Peninsula and considered an inherited Malay variety. This Malay variety, however, is also characterized by structural simplifications typically held to be characteristics of creole languages. In consequence, Trengganu Malay could well be classified as a creole

Malay just like Ambon Malay (Collins 1980: 42-53, 57-58). As a result of his study, Collins questions the basis on which Malay varieties such as Ambon Malay are classified as creole languages, while other varieties such as Trengganu are not. Arguing that the overly simplified categorization offered by creole theory does not do justice to the Austronesian languages, he comes to the following conclusion (1980:58-59):

The term creole has no predictive strength. It is a convenient label for linguistic phenomena of a certain time and place but it does not encompass the linguistic processes which are taking place in eastern Indonesia.

In the context of his study on Banjarese Malay, a variety spoken in southwestern Borneo, Wolff (1988) expresses a similar viewpoint. The author examines the question of whether Banjarese Malay represents a direct continuation of old Malay or is the result of rapid language change, such as creolization. Wolff concludes that there is "absolutely no proof that any of the living dialects of Indonesian/Malay are indeed creoles" (1988: 86).

Another critique concerning the use of the term creoles with respect to regional Malay varieties is put forward by Steinhauer (1991) in his study on Larantuka Malay. Given that too little is known about the origins and historical developments of the eastern Malay varieties, the author argues that the label creole is not very useful. Moreover, it becomes "meaningless" if it is too "broadly defined" in terms of the type of borrowing it takes for a language to be labeled a creole (1991: 178).

Gil (2001) also refutes the classification of the regional Malay varieties as creolized languages and Adelaar \& Prentice's (1996) notion of Pidgin Malay Derived dialects. More specifically, he argues that Adelaar \& Prentice (1996) do not give sufficient evidence that the original trade language was indeed a pidgin. Based on his research on Riau Indonesian, Gil (2001) maintains that structural simplicity in itself is not sufficient evidence to conclude that a language is a creole.

Paauw (2005; 2007; 2009; 2013) also takes issue with the classification of the eastern Malay varieties as creolized languages. In his 2005 paper, Paauw points out that the features found in Pidgin Malay Derived varieties (Adelaar \& Prentice 1996) are also found in most of the inherited Malay varieties. Therefore, these features are better considered "markers of 'low' Malay, rather than contact Malay" (Paauw 2005: 17). In another paper addressing the influence of local languages on the regional Malay varieties, Paauw (2007) discusses some of the features which have been taken as evidence that these Malay varieties are creolized languages. He comes to the conclusion that borrowing in itself does not prove creolization. Otherwise, "it would be hard to find any language which couldn't be considered a creole" (2007: 3). In discussing the alleged pidgin origins and creolization of the eastern Malay varieties, Paauw (2009: 26) maintains that there is not enough linguistic evidence for the claim that these are creoles. Likewise, Paauw (2013: 11) points out that there is no linguistic evidence for the pidgin origins of the eastern Malay varieties, even though they developed under sociocultural and historical conditions which are typical for creolization. Instead, these varieties show many similarities with the inherited Malay varieties with respect to their lexicon, isolating morphology, and syntax.

It seems that Blust (2013) also questions the classification of the eastern Malay varieties as creoles. First, he lists the eastern Malay varieties as Malayo-Chamic languages rather than as creoles (2013: xxvii). Second, in discussing pidginization and creolization among Austronesian languages, Blust (2013: 65--66) refers in detail to Collins's (1980) study on Ambon Malay. Blust does not overtly state that he agrees with Collins. He does, however, quote Collins's (1980: 58-5) above-mentioned conclusion that the label "creole has no predictive strength", without critiquing it. This, in turn, suggests that Blust has a similar viewpoint on this issue.

Donohue's position about the creole/non-creole status of regional Malay varieties, including Papuan Malay, is less clear. Donohue \& Smith (1998: 68) argue that the different Malay varieties cannot be explained in terms of a single parameter such as "pure" versus "mixed or creolize". With regard to Papuan Malay, Donohue (2003: 1) remarks that the fact that Papuan Malay displays six of the eight features found in Adelaar \& Prentice's (1996) Pidgin Malay Derived varieties does not prove the pidgin origins of this Malay variety. Due to areal influence these features may also have developed independently in nonpidgin or non-creole Malay varieties. In a later study on voice in Malay, Donohue (2007a) takes a slightly different position in evaluating the contact which the Malay languages of eastern Indonesia had with non-Austronesian languages. He concludes this contact caused "some level of language assimilation" and "language adaptation", but he does not assert that this contact had to result in creolization (2007a: 1496). In another 2007 publication on voice variation in Malay, Donohue (2007b: 72) notes that those Malay varieties spoken in areas far away from their traditional homeland show characteristics not found in the inherited Malay varieties. Moreover, in some areas these "transplanted" Malay varieties have undergone "extensive creolization". Finally, in his 2011 study on the Melanesian influence on Papuan Malay verb and clause structure, Donohue refers to Papuan Malay as one of the "ill-defined 'eastern' creoles" spoken between New Guinea and Kupang. As such, it does not represent "an Austronesian speech tradition", with the exception of its lexicon (2011: 433).

In concluding this discussion about the creole versus non-creole status of Papuan Malay, the author agrees with those scholars who challenge the view that the eastern Malay varieties are creolized languages. Moreover, the author agrees with Bisang (2009: 35,43 ), who argues that complexity is not limited to the morphology or syntax of a language. Instead, complexity may instead be found in the pragmatic inferential system as applied to utterances in their discourse setting. Such "hidden complexity" is certainly a pertinent trait of Papuan Malay, as shown throughout this book. Two examples of hidden complexity are presented in (1) and (2). Due to the lack of morphosyntactic marking in Papuan Malay, a given construction can receive different readings, as illustrated in (1). Depending on the context, the kalo ... suda 'when/if ... already' construction can receive a temporal or a counterfactual reading. ${ }^{5}$ Example (2) illustrates the pervasive use of eli-

[^3]sion in Papuan Malay. Verbs allow but do not require core arguments. Therefore, core arguments are readily elided when they are understood from the context ( " $\varnothing$ " represents the omitted arguments).

Examples of hidden complexity
(1) kalo de suda kasi ana prempuang, suda tida ada prang suku if 3SG already give child woman already neg exist war ethnic.group lagi
again
[About giving children to one's enemy:]
Temporal reading: 'once she has given (her) daughter (to the other group), there will be no more ethnic war'
Counterfactual reading: 'if she had given (her) daughter (to the other group), there would have been no more ethnic war' [081006-027-CvEx.0012]
(2) ... karna de tida bisa bicarabahasa, maka Ø pake bahasa orang because 3sG NEG be.able speak language therefore use language person bisu, ... baru Ø Øfoto, foto, a, Ø snang, be.mute and.then photograph photograph ah! feel.happy (.about) prempuang bawa babi, Ø kasi Ø Ø woman bring pig give
[First outside contact between a Papuan group living in the jungle and a group of pastors:] '[but they can't speak Indonesian,] because she can't speak Indonesian, therefore (she) uses sign language ... (the pastor is taking) pictures, pictures, ah, (the women are) happy, the women bring a pig, (they) give (it to the pastors)' [081006-023-CvEx.0073]

### 1.2.3 Papuan Malay, a distinct language within the Malay continuum

Papuan Malay is part of the larger Malay language continuum. The Malay varieties are situated geographically in a contiguous arrangement from the Malay Peninsula (Malaysia and Singapore) in the west across Malaysia, the Sultanate of Brunei Darussalam, and the Indonesian archipelago all the way to West Papua in the east (see Figure 1(a) on p. xxvii).

This arrangement suggests a chaining pattern for the Malay continuum in which the individual Malay speech groups have contact relationships with the other Malay groups surrounding them which results in the linguistic similarity of adjoining groups. In consequence, adjacent varieties are likely to have higher degrees of inherent intelligibility than varieties that are situated at some distance to each other. That is, intelligibility decreases as the distance between the varieties along the chain increases, due to the increasing dissimilarities between the respective language systems (see Karam 2000: 126).

The chaining pattern of the Malay cluster raises the question whether Papuan Malay is a distinct language or a dialect of a larger Malay language, such as Standard Indone-
sian which is expected to serve as a transvarietal standard for other regional Malay varieties. To answer this question, three factors need to be taken into account: structural similarity, inherent intelligibility, and shared ethnolinguistic identity with other Malay varieties. These are also the three criteria applied by the ISO 639-3 standard "for defining a language in relation to varieties which may be considered dialects" (Lewis, Simons \& Fennig 2016a; see also Hymes 1974: 123).

First, structural similarity with other Malay varieties: As a Malay variety, Papuan Malay shares many structural and lexical features with other Malay varieties. At the same time, however, Papuan Malay also exhibits a considerable amount of unique phonological, morphological, syntactic, lexical, and discourse features. These structural characteristics distinguish the language from other eastern Malay varieties, such as Ambon, Manado, or North Moluccan Malay, as well as from the standard varieties of Malay, such as Standard Indonesian. (See Anderbeck 2007: 3; Donohue 2003: 1; 2007b: 73; Paauw 2009: 20; Scott et al. 2008: 110-111.)

Second, inherent intelligibility with other Malay varieties: For Papuan Malay speakers with no prior contact, the mentioned structural uniqueness has direct implications for their comprehension of other Malay varieties, in that they have difficulties understanding these varieties. That is, there is only limited or no inherent intelligibility between Papuan Malay and other Malay varieties. This applies especially to Standard Indonesian and the western Malay varieties in general. (See Anderbeck 2007: 3; Donohue 2007b: 72-73; Paauw 2009: 20; Suharno 1979: 27-28; Yembise 2011: 213-214.)

Third, shared ethnolinguistic identity with other Malay varieties: ethnolinguistically, Papuans typically identify with their respective indigenous vernacular languages, regardless as to whether or not they are still active speakers of that language. Beyond this local identity, they have a well-established, distinct identity as Papuans, especially vis-à-vis Indonesians from the western parts of Indonesia. This has largely to do with the ongoing Indonesian occupation (since 1963) and the negative attitudes that the Indonesian government and Indonesian institutions express toward Papuans and "Papuaness" and also toward Papuan Malay (for more details on language attitudes see §1.5.2). Vice versa, Papuan attitudes towards Indonesia and "Indonesianess" are also rather negative. (See for instance Chauvel 2002; King 2004.) Papuans summarize their distinct identity as follows: suku beda, bahasa beda, agama beda, adat beda '(our) ethnicity is different, (our) language(s) is/are different, (our) religion is different, (and our) customs are different'. This statement was made to the author on numerous occasions during her stays in West Papua. This distinct ethnolinguistic identity vis-à-vis Papuan Malay is also evidenced by the names which Papuans use to refer to their language, names such as logat Papua 'Papuan speech variety' or bahasa tanah 'home language'. Indonesian, by contrast, is always bahasa Indonesia 'Indonesian language'. These names for Papuan Malay not only indicate a strong, indigenous identification with their language. They also imply that Papuans are able to distinguish between their language and Indonesian (Scott et al. 2008: 19). (See also the discussion on language awareness in §1.5.2 'Language attitudes'.)

Given its structural uniqueness, limited or nonexistent inherent intelligibility, and the lack of shared ethnolinguistic identity with other Malay varieties, it is concluded here
that Papuan Malay is a distinct language within the larger Malay continuum. The ISO 639-3 code for Papuan Malay is [pmy] (Lewis, Simons \& Fennig 2016a).

### 1.3 Dialect situation

Papuan Malay is a structurally coherent unit with slight dialectal variations across the various regions where the language is spoken.

The identification of regional varieties of Papuan Malay is complicated, however, due to its linguistic and sociolinguistic setting, as Paauw (2009) points out. In West Papua both Papuan and Austronesian languages are spoken. "Each of these languages has its own grammatical and phonological system which can influence the Malay spoken by individuals and communities" (2009: 75). Besides, "a large number of speakers of Papuan Malay are second-language speakers, and this too influences the linguistic systems of individuals and communities" (2009: 76).

To explore how many distinct varieties of Papuan Malay exist, a linguistic and sociolinguistic survey of the language was conducted in 2007 across West Papua (Scott et al. 2008). The survey was carried out in and around seven coastal urban areas, namely Fakfak, Jayapura, Manokwari, Merauke, Timika, Serui, and Sorong (for details see §1.9.2 and §1.9.3; see also Figure 1(b) on p. xxvii). In these locations different Papuan and Austronesian languages are spoken and second-language Papuan Malay speakers come from different linguistic backgrounds (see also §1.4).

The survey results suggest that regional differences of Papuan Malay are minor and limited to "differences in accent, pronunciation, and perhaps some differences in vocabulary" (Scott et al. 2008: 18).

With respect to the phonology, Scott et al. (2008: 24-44) mention the following regional features: (1) word-final voiceless plosives seem to be present in the eastern but not in the western parts West Papua; (2) the word-final lateral seems to fluctuate freely with the flap in the eastern part of West Papua, while the word-final lateral seems to be missing in the western part; (3) nasal assimilation seems to occur in the western but not in the eastern parts of West Papua; (4) vowel harmony of [ $\partial$ ] to a vowel in another segment possibly occurs in the western but not in the eastern parts; and (5) the glottal fricative may be missing in the urban areas of Merauke. Overall, however, these differences are minor. At most, they possibly support an Eastern and Western Papuan Malay divide with Timika "sometimes following the Western regions of Fakfak and Sorong and sometimes following the Eastern regions of Jayapura and Merauke" (Scott et al. 2008: 43). This "possible East-West divide", however, requires further research (2008: 44). Some of Scott et al.'s (2008) findings are modified by the current study (see Chapter 2): As for the word-final lateral, the corpus data does not show any fluctuation with the flap; ${ }^{6}$ nasal assimilation does occur (§2.2.1). As far as the lexicon is concerned, regional differences also appear to be minor (Scott et al. 2008: 46, 96, 99). Regional differences with respect to the grammar were not observed.

[^4]Overall, the data indicates that Papuan Malay as spoken across West Papua forms a structurally coherent unit despite its larger linguistic and sociolinguistic setting.

Moreover, while speakers are able "to identify others from different regions" according to their usage of Papuan Malay, these regional variations do not impede comprehension: "Papuan Malay spoken in different regions of Papua is readily intelligible by Papuans from different regions of the province"; even children would understand Papuan Malay speakers from different regions "upon first exposure" (Scott et al. 2008: 18).

Taken together, these findings suggest that regional varieties of Papuan Malay are dialects of the same language rather than distinct, albeit closely related, languages. (See also Anderbeck 2007: 3, and the ISO 639-3 criteria for language identification in Lewis, Simons \& Fennig 2016a. ${ }^{7}$ )

The proposition that Papuan Malay is a structurally coherent unit modifies Donohue's (2003: 1) conclusion that "[it] is in a very real sense misleading to write about 'Papuan Malay' [...] as if there was one unified variety of Malay spoken in the west of New Guinea". Donohue suggests that there are at least four distinct Papuan Malay varieties, without, however, addressing the question "whether these different varieties of Malay constitute an entity that can be called Papuan Malay in any linguistic sense" (2003: 1). Instead, Donohue leaves this question "for a later date" (2003: 2). The most salient Papuan Malay varieties are listed below (2003: 1-2; see also Figure 1(b) on p. xxvii):

1. North Papua Malay, spoken along West Papua's north coast between Sarmi and the Papua New Guinea border; it shows a clear influence from Manado Malay / North Moluccan Malay.
2. Serui Malay, spoken in Cenderawasih Bay (except for the Numfor and Biak islands); it is rather similar to North Papua Malay.
3. Bird's Head Malay, spoken on the west of the Bird's Head (in and around Sorong, Fakfak, Koiwai), is closely related to Ambon Malay; the varieties spoken on the east of the Birds' Head (in and around Manokwari and other towns) are similar to Serui Malay.
4. South Coast Malay, spoken in and around Merauke.

Donohue (2003: 2) maintains, as mentioned, that the northern Papuan Malay varieties show "a clear influence" from Manado Malay and/or North Moluccan Malay. As one example of this influence, he presents the lexical item kelemarin 'yesterday', which is found in North-Moluccan Malay (Voorhoeve 1983: 3), but not in South Coast Malay. The present corpus, by contrast, does not include any kelemarin tokens. Instead, all attested 153 Papuan Malay tokens for 'yesterday' are realized with an alveolar rhotic. Neither

[^5]
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do Scott et al. (2008) make reference to the alternative realization of the word-internal rhotic as a lateral.

In summary, the findings of a linguistic and sociolinguistic language survey of different coastal regions of West Papua suggest that Papuan Malay forms a structurally coherent unit. Regional variations do occur, but they are minor and the observed differences support at most dialectal divisions, such as a possible East-West divide.

### 1.4 Linguistic setting

West Papua is the home of 274 languages, according to Lewis, Simons \& Fennig (2016b). Of these, 216 are non-Austronesian, or Papuan, languages ( $79 \%$ ). ${ }^{8}$ The remaining 58 languages are Austronesian ( $21 \%$ ). ${ }^{9}$

In the Sarmi regency, where most of the research for this description of Papuan Malay was conducted, both Papuan and Austronesian languages are found, as shown in Figure 1(c) (p. xxvii). Between Bonggo in the east and the Mamberamo River in the west, 23 Papuan languages are spoken. Most of these languages belong to the Tor-Kwerba language family (21 languages). One of them is Isirawa, the language of the author's host family. The other twenty Papuan languages are Airoran, Bagusa, Beneraf, Berik, Betaf, Dabe, Dineor, Itik, Jofotek-Bromnya, Kauwera, Keijar, Kwerba, Kwerba Mamberamo, Kwesten, Kwinsu, Mander, Mawes, Samarokena, Trimuris, and Wares. The remaining two languages are Yoke which is a Lower Mamberamo language, and the isolate Massep. In addition, eleven Austronesian languages are spoken in the Sarmi regency. All eleven languages belong to the Sarmi branch of the Sarmi-Jayapura Bay subgroup, namely Anus, Bonggo, Fedan, Kaptiau, Liki, Masimasi, Mo, Sobei, Sunum, Tarpia, and Yarsun. While all of these languages are listed in the Ethnologue (Lewis, Simons \& Fennig 2016b), three of them are not included in Figure 1(c) (p. xxvii), namely Jofotek-Bromnya and Kaptiau, both of which are spoken in the area around Bonggo, and Kwinsu which is spoken in the area east of Sarmi.

Table 1.1: Status values and their numeric equivalents

| Status | Numeric Value |
| :--- | :--- |
| Developing | 5 |
| Vigorous | 6 a |
| Threatened | 6 b |
| Shifting | 7 |
| Moribund | 8 a |
| Nearly extinct | 8 b |

[^6]Of the 23 Papuan languages, one is "developing" (Kwerba) and five are "vigorous" (see Table 1.1 and Table 1.2). The remaining languages are "threatened" (7 languages), "shifting" to Papuan Malay (7 languages), "moribund" (1 language), or "nearly extinct" (2 languages). One of the threatened languages is Isirawa, the language of the author's host family. ${ }^{10}$

Most of the 23 Papuan languages are spoken by populations of 500 or less (16 languages), and another three have between 600 and 1,000 speakers. Only three have larger populations of between 1,800 and 2,500 speakers. One of them is the "developing" language Kwerba.

Three of the 23 Papuan languages have been researched to some extent, namely "shifting" Berik, "threatened" Isirawa, and "developing" Kwerba. The resources on these languages include word lists, descriptions of selected grammatical topics, issues related to literacy in these languages, anthropological studies, and materials written in these languages. Isirawa especially has a quite substantial corpus of resources, including the New Testament of the Bible. Moreover, the language has seen a five-year literacy program. In spite of these language development efforts, the language is losing its users. In four languages, a sociolinguistic study was carried out in 1998 (Clouse, Donohue \& Ma 2002), namely in Aironan, Massep, Samarokena, and Yoke. Limited lexical resources are also available in Samarokena and Yoke, as well as in another eight languages (Beneraf, Dabe, Dineor, Itik, Kauwera, Kwesten, Mander, and Mawes). For the remaining eight languages no resources are available except for their listing in the Ethnologue (Lewis, Simons \& Fennig 2016a) and Glottolog (Nordhoff et al. 2013): Bagusa, Betaf, Jofotek-Bromnya, Keijar, Kwerba Mamberamo, Kwinsu, Trimuris, and Wares. (For more details see Appendix C.) ${ }^{11}$

Of the eleven Austronesian languages, one is threatened, four are "shifting" to Papuan Malay, five are "moribund", and one is "nearly extinct" (see Table 1.3). Most of these languages have less than 650 speakers. The exception is Sobei with a population of 1,850 speakers. Sobei is also the only Austronesian language that has been researched to some extent. The resources on Sobei include word lists, descriptions of some of its grammatical features, anthropological studies, and one lexical resource. In another four languages limited lexical resources are available. For the remaining six languages no resources are
${ }^{10}$ The Ethnologue (Lewis, Simons \& Fennig 2016a) gives the following definitions for the status of these languages: 5 (Developing) - The language is in vigorous use, with literature in a standardized form being used by some though this is not yet widespread or sustainable; 6a (Vigorous) - The language is used for face-to-face communication by all generations and the situation is sustainable; 6b (Threatened) - The language is used for face-to-face communication within all generations, but it is losing users; 7 (Shifting) - The child-bearing generation can use the language among themselves, but it is not being transmitted to children; 8 a (Moribund) - The only remaining active users of the language are members of the grandparent generation and older; 8b (Nearly Extinct) - The only remaining users of the language are members of the grandparent generation or older who have little opportunity to use the language. For details see http: //www.ethnologue.com/about/language-status (accessed 8 January 2016). See also Table 1.1.
${ }^{11}$ The Ethnologue (Lewis, Simons \& Fennig 2016a) provides basic information about these languages including their linguistic classification, alternate names, dialects, their status in terms of their overall development, population totals, and location. The Ethnologue is available at http://www.ethnologue.com (accessed 8 January 2016). Glottolog (Nordhoff et al. 2013) is an online resource that provides a comprehensive catalogue of the world's languages, language families and dialects. Glottolog is available at http://glottolog.org/ (accessed 8 January 2016).

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available, except for their listing in the Ethnologue (Lewis, Simons \& Fennig 2016a) and Glottolog (Nordhoff et al. 2013): Fedan, Kaptiau, Liki, Masimasi, Sunum, and Yarsun. (For more details see Appendix C.)

### 1.5 Sociolinguistic profile

This section discusses the sociolinguistic profile of Papuan Malay. In summary, this profile presents itself as follows:

- Strong and increasing language vitality of Papuan Malay;
- Substantial language contact between Papuan Malay and Indonesian;

Table 1.2: Papuan languages in the Sarmi regency: Status and populations. Numeric status values are shown Table $1.1^{a}$

| Name | ISO 639-3 code | Status | Population |
| :---: | :---: | :---: | :---: |
| Aironan | [air] | (Vigorous) | 1,000 |
| Bagusa | [bqb] | (Vigorous) | 600 |
| Beneraf | [bnv] | (Shifting) | 200 |
| Berik | [bkl] | (Shifting) | 200 |
| Betaf | [bfe] | (Threatened) | 600 |
| Dabe | [dbe] | (Shifting) | 440 |
| Dineor | [mrx] | (Moribund) | 55 |
| Isirawa | [srl] | (Threatened) | 1,800 |
| Itik | [itx] | (Threatened) | 80 |
| Jofotek-Bromnya | [jbr] | (Threatened) | 200 |
| Kauwera | [xau] | (Vigorous) | 400 |
| Keijar | [kdy] | (Shifting) | 370 |
| Kwerba | [kwe] | (Developing) | 2,500 |
| Kwerba Mamberamo | [xwr] | (Vigorous) | 300 |
| Kwesten | [kwt] | (Shifting) | 2,000 |
| Kwinsu | [kuc] | (Shifting) | 500 |
| Mander | [mqr] | (Nearly extinct) | 20 |
| Massep | [mvs] | (Nearly extinct) | 25 |
| Mawes | [mgk] | (Threatened) | 850 |
| Samarokena | [tmj] | (Threatened) | 400 |
| Trimuris | [tip] | (Vigorous) | 300 |
| Wares | [wai] | (Shifting) | 200 |
| Yoke | [yki] | (Threatened) | 200 |

[^7]- Functional distribution of Papuan Malay as the low variety, and Indonesian as the high variety, in terms of Ferguson's (1972) notion of diglossia;
- Positive to somewhat ambivalent language attitudes toward Papuan Malay; and
- Lack of language awareness of many Papuan Malay speakers about the status of Papuan Malay as a language distinct from Indonesian.

Papuan Malay is spoken in a rich linguistic and sociolinguistic environment, which includes indigenous Papuan and Austronesian languages, as well as Indonesian and other languages spoken by migrants who have come to live and work in West Papua (see §1.4 and §1.7.1). As in other areas of New Guinea, many Papuans living in the coastal areas of West Papua speak two or more languages (Foley 1986: 15-47; see also Mühlhäusler 1996). The linguistic repertoire of individual speakers may include one or more local Pa puan and/or Austronesian vernaculars, Papuan Malay, and - depending on the speaker's education levels - Indonesian, and also English, all of which are being used as deemed necessary and appropriate.

Many of the indigenous Papuan and Austronesian languages are threatened by extinction. By contrast, the vitality of Papuan Malay is strong and increasing. This applies especially to urban coastal communities where Papuan Malay serves as a language of wider communication between members of different ethnic groups (Scott et al. 2008: 1018). In the Sarmi regency, for instance, many vernacular languages are shifting, or have shifted, to Papuan Malay (see §1.4).
There is also substantial language contact between Papuan Malay and Indonesian.
The coexistence and interaction of indigenous vernacular languages, Papuan Malay, and Indonesian with their varying and overlapping roles creates a triglossic situation.

Table 1.3: Austronesian languages in the Sarmi regency: Status and populations.
Numeric status values are shown in Table 1.1

| Name | ISO 639-3 code | Status | Population |
| :--- | :--- | :--- | ---: |
| Anus | $[\mathrm{auq}]$ | (Shifting) | 320 |
| Bonggo | $[\mathrm{bpg}]$ | (Moribund) | 320 |
| Fedan | $[\mathrm{pdn}]$ | (Moribund) | 280 |
| Kaptiau | $[\mathrm{kbi}]$ | (Shifting) | 230 |
| Liki | $[\mathrm{lio}]$ | (Moribund) | 11 |
| Masimasi | $[\mathrm{ism}]$ | (Nearly extinct) | 10 |
| Mo | $[\mathrm{wkd}]$ | (Shifting) | 550 |
| Sobei | $[\mathrm{sob}]$ | (Shifting) | 1,850 |
| Sunum | $[\mathrm{ynm}]$ | (Threatened) | 560 |
| Tarpia | $[\mathrm{tpf}]$ | (Moribund) | 630 |
| Yarsun | $[\mathrm{yrs}]$ | (Moribund) | 200 |

More investigation is needed, however, to determine whether the interplay between all three best be explained in terms of Fasold's (1984: 44-50) notion of "double overlapping diglossia" or whether their functional distribution represents an instance of "linear polyglossia". For the present discussion, however, the status of the indigenous vernaculars vis-à-vis Papuan Malay and Indonesian is not further taken into consideration. Instead, the remainder of this section focuses on the interplay of Papuan Malay and Indonesian.

Both languages are in a diglossic distribution. In this situation, according to Ferguson's (1972) notion of diglossia, Indonesian serves as H, the HIGH variety, which is acquired through formal education, and Papuan Malay as L, the Low variety, which is acquired in informal domains, including the home domain.

Papuan Malay speakers display the typical language behavior of Low speakers in their language use patterns as well as with respect to their language attitudes. Language use and the diglossic distribution of Papuan Malay and Indonesian are discussed in §1.5.1, and language attitudes, together with language awareness, in §1.5.2.

### 1.5.1 Language use

The diglossic, or functional, distribution of Indonesian as the high variety and Papuan Malay as the low variety implies that in certain situations Indonesian is more appropriate while in other situations Papuan Malay is more appropriate.
In terms of Fishman's (1965: 86) "domains of language choice", three factors influence such language choices: the topics discussed, the relationships between the interlocutors, and the locations where the communication takes place. Another factor to be taken into account is speaker education levels, given that Indonesian is acquired through formal education. Below the four factors are discussed in more detail. ${ }^{12}$

1. Speaker education levels

In diglossic situations, the Low variety is known by everyone while the high variety is acquired through formal education (Ferguson 1972). This also applies to the diglossic distribution of Papuan Malay and Indonesian. While Papuan Malay is known by almost everyone in West Papua's coastal areas, knowledge of Indonesian depends on speakers' education levels.
The results of the mentioned 2007 survey (Scott et al. 2008: 14-17) show that bilingualism/multilingualism is "a common feature of the Papuan linguistic landscape". The report does not, however, give details about the degree to which Papuans are bilingual in Indonesian, but notes that bilingualism levels remain uncertain.
During her 3-month fieldwork in Sarmi (see §1.11.3), the author did not investigate bilingualism in Indonesian. She did, however, note changes in speakers' language behavior depending on their education levels. Papuan Malay speakers with higher

[^8]education levels displayed a general and marked tendency to "dress up" their Papuan Malay with Indonesian features. This tendency was even more pronounced when discussing high topics (see Factor 2 "Topical regulation"), or when interacting with group outsiders (see Factor 3 "Relationships between interlocutors"). The observed features include lexical choices. Such choices are made between lexical items that are distinct in both languages, for example Indonesian desa 'village' or mereka '3pl' instead of Papuan Malay kampung 'village' and dorang/dong '3PL', respectively. Lexical choices are also made between lexical items that are rather similar in both languages, such as Indonesian adik ['a.dik] 'younger sibling' or tidak ['ti.dek] 'NEG', instead of Papuan Malay ade ['a.d ] 'younger sibling' and tida ['ti.da] 'NEG', respectively. Other features are syntactic ones, such as Indonesian causatives formed with suffix kan 'caus', passives formed with prefix di 'uv', or possessives formed with suffix -nya '3possr'. ${ }^{13}$

Less-educated speakers, by contrast, did not display this general tendency of mixing and switching to Indonesian given their more limited exposure to the HIGH variety Indonesian. They only showed this tendency to "dress-up" their Papuan Malay with Indonesian features or lexical items when discussing high topics (see Factor 2 "Topical regulation"), or when interacting with fellow-Papuans of higher social standing or with group outsiders (see Factor 3 "Relationships between interlocutors").
2. Topical regulation

As Fishman (1965: 71) points out, "certain topics are somehow handled better in one language than in another". The results of the 2007 survey provide only limited information about this issue, however. The findings only state that Papuan Malay is the preferred language for humor and that politics are typically discussed in the indigenous vernaculars (Scott et al. (2008): 17). The author's own observations during her 3 -month fieldwork in late 2008 modify these findings (see §1.11.3). The observed Papuan Malay speakers displayed a notable tendency to change their language behavior when discussing HIGH topics. That is, when talking about topics associated with the formal domains of government, politics, education, or religion they tended to "dress up" their Papuan Malay and make it more Indonesian-like.
3. Relationships between interlocutors

Language behavior is not only influenced by the topics of communication and speaker education levels, but also by role relations. That is, individual speakers display certain language behaviors depending on the role relations between them (Fishman 1965: 76).

As for Papuan Malay, the 2007 survey results (Scott et al. 2008: 13, 14) indicate that family members and friends typically communicate in Papuan Malay or in the vernacular, but not in Indonesian. The same applies to informal interactions between

[^9]customers and vendors, or between patients and local health workers. Teachers may also address their students in Papuan Malay in informal interactions (in informal interactions in primary school, students may even address their teachers in Papuan Malay). The report does not discuss which language(s) Papuans use when they interact with fellow-Papuans of higher social standing or with outsiders.

During her 3-month fieldwork in Sarmi (see §1.11.3), however, the author did note changes in speakers' language behavior depending on the role relations between interlocutors in terms of their status and community membership.
In interactions with fellow-Papuans of equally low status, less-educated Papuans typically used the Low variety Papuan Malay. (At times, they also switched to Isirawa, the vernacular language for most of them.) By contrast, when interacting with fellow-Papuans of higher social standing, such as teachers, mayors and other government officials, and pastors, or when conversing with group outsiders, that is non-Papuans, the observed speakers showed a marked tendency to change their language behavior. That is, in such interactions, their speech showed influences from the HIGH variety Indonesian, similar to the general language behavior of better-educated speakers, described under Factor 1 "Speaker education levels". As for the language behavior of better-educated speakers, their general tendency to "dress-up" their Papuan Malay with Indonesian features was even more marked when they interacted with group outsiders, such as the author. This tendency to "dress-up" one's Papuan Malay with Indonesian features reflects role relations, in that the use of Papuan Malay indicates intimacy, informality, and equality, while the use of Indonesian features signals social inequality and distance, as well as formality (see also Fishman 1965: 70). ${ }^{14}$

## 4. Locations

Language behaviors are also influenced by the locations where communication takes place, in that speakers consider certain languages to be more appropriate in certain settings (Fishman 1965: 71, 75). This also applies to Papuan Malay. In certain domains, Papuan Malay speakers consider Indonesian to be more appropriate than Papuan Malay due to the diglossic distribution of both languages (Scott et al. 2008: 11-18). That is, Indonesian is the preferred language for formal interactions in the education and religious domains (such as formal instruction, leadership, or preaching) or other public domains such as government offices. Papuan Malay strongly dominates all other domains. In addition, it is also the preferred language for informal interactions in public domains such as schools, churches, and government offices.

[^10]
### 1.5.2 Language attitudes

Fishman's (1965: 70) considerations of intimacy and distance, informality and formality also apply to Papuan Malay.

The findings of the 2007 survey indicate that Papuans associate Papuan Malay with intimacy and informality, while they associate Indonesian with social distance and formality (Scott et al. 2008). The names which the interviewees used to refer to Papuan Malay reflect these positive feelings toward their language: bahasa tanah 'home language', $b a$ hasa santay 'language to relax', bahasa sehari-hari 'everyday language', or bahasa pasar 'market/trade language'. Especially the name bahasa tanah 'home language' suggests "a strong, indigenous identification with this speech form" (2008: 18). Most interviewees also stated that they are interested in the development of Papuan Malay. Moreover, the majority of interviewees stated that Papuan Malay and Indonesian are of equal value and that Indonesian speakers do not deserve more respect than Papuan Malay speakers. Given these findings, the researchers come to the conclusion that among the interviewed Papuans attitudes toward Papuan Malay are "remarkably positive" (2008: 18-22).

The expressed attitude that Papuan Malay and Indonesian are of equal value is remarkable, given that in diglossic communities speakers usually consider the HIGH variety to be superior. The Low variety, by contrast, is usually held "to be inferior, even to the point that its existence is denied" (Fasold 1984: 36).

The author's own observations agree with the survey findings that Papuans find Papuan Malay suitable for intimate communication, while they feel at a distance with Indonesian. Many Papuan Malay speakers she met referred to their speech variety as logat Papua 'Papuan speech variety', a name that like bahasa tanah 'home language' indicates a strong, indigenous identification with their language.

At the same time, though, it is questioned here to what extent Papuans feel at ease with Papuan Malay and how positive their attitudes really are. While most of the 2007 interviewees said that Papuan Malay and Indonesian are of equal value, the same interviewees also stated that Indonesian was more appropriate in certain domains. Besides, the author's own observations suggest that Papuans also consider Indonesian to be more appropriate for certain topics and with certain interlocutors. These language behaviors suggest that language attitudes toward Papuan Malay are somewhat ambivalent as far as formal domains are concerned.

A "low level of correlation between attitudes and actual behavior" is not unusual, though, as scholars such as Agheyisi \& Fishman (1970:140) point out (see also Cooper \& Fishman 1974: 10; Baker 1992: 16). As for Papuan Malay, the observed mismatch can perhaps be accounted for in terms of Kelman's (1971) distinction of sentimental and instrumental attachments. Applying this distinction, one can say that Papuans are "sentimentally attached" to Papuan Malay but "instrumentally attached" to Indonesian. Papuan Malay is associated with sentimental attachments, in that it makes Papuans feel good about being Papuan. Indonesian, by contrast, is associated with instrumental attachments in that it allows them to achieve social status and their education and to get things done (Kelman 1971: 25).

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In this context, the attitudes which Indonesians and Indonesian institutions express toward Papuan Malay are also important. Overall, it seems that Indonesians who live in West Papua but do not speak Papuan Malay consider the language to be poor or bad Indonesian (Scott et al. 2008: 19). In West Papua, this view is implicitly communicated by Indonesian government institutions, for instance by hanging banners across major roads which demand mari kita berbicara bahasa Indonesia yang baik dan benar 'let us speak good and correct Indonesian'. Such negative language attitudes are widespread and at times rather demeaning. Moreover, they are not only directed towards the language but also towards its speakers. King (2002: 94), for instance, reports that Indonesians in Papua consider Papuans to be stupid and backwards: "'Papua bodoh' - stupid Papuans; backward Papuans". Moreover, negative attitudes towards Papuan Malay, and the eastern Malay varieties in general, are also found among Indonesian academics. Masinambow \& Haenen (2002: 106), for example, report that scholars in Indonesia continue to regard the eastern Malay varieties as second-class, mixed languages which are opposed by the pure High Malay language. ${ }^{15}$
(For a discussion of Indonesian language planning see Sneddon 2003: 114-143; for a discussion of the role of Papuan Malay in the context of Indonesian language politics see Besier 2012: 13-17.)

Hence, the need for Papuans to distinguish between sentimental and instrumental attitudes is confounded by the negative attitudes which Indonesian institutions and individuals have toward Papuan Malay.

Notably, Papuan Malay is not recognized by the Papuan independence movement OPM (Organisasi Papua Merdeka - 'Free Papua Movement') either.

The First Papuan People's Congress, held on 16-19 October 1961, issued a manifesto which declared that Papua Barat 'West Papua' would be the name of their nation, Papua the name of the people, Hai Tanahku Papua 'My land Papua' the national anthem, the Bintang Kejora 'Morning Star' the national flag, the burung Mambruk 'Mambruk bird' the national symbol, and Satu Rakyat dan Satu fiwa 'One People One Soul' the national motto. Moreover, the Congress decided that the national language should not be Malay, as it was the colonizer's language (Alua 2006: 40-43). The Second Papuan People's Congress, held from 29 May until 4 June 2000 at Cenderawasih University in Jayapura, reconfirmed the national anthem, flag, and symbol, and again rejected Papuan Malay as the national language. Instead the Congress decided that English should be the official language. In addition, Papuan Malay and Tok Pisin should serve as "common" languages (King 2004: 50). ${ }^{16}$

Likewise, the Third Papuan People's Congress, held from 17-19 October 2011 in Abepura, rejected Papuan Malay as the national language (Besier 2012: 19).

This desire of Papuan nationals "of a clean linguistic break" is an utopian dream, however, as Rutherford (2005: 407) points out. Moreover, it presents a dilemma since only few people in West Papua speak these other languages, whereas Papuan Malay is the de facto language of wider communication. (See also Besier 2012: 17-22.)

[^11]The fact that Papuan Malay has not been officially recognized in spite of its large numbers of speakers reflects the lack of esteem held by the main stakeholders vis-à-vis this language, by the Indonesian or OPM stakeholders. (See also Besier 2012: -32.)

Another factor to be considered in the context of language attitudes is the issue of language awareness.

The findings of the 2007 sociolinguistic survey indicate a potential lack of language awareness. Papuan interviewees stated that "lesser educated [... Papuan Malay] speakers would likely be unaware of the differences" between their language and Indonesian; that is, "they would consider the speech form they use to be coincident with standard Indonesian" (Scott et al. 2008: 11). Along similar lines, Paauw (2009: 76) reports that many Papuan Malay speakers are not aware of the fact that their speech variety is distinct from Indonesian. (See also Burung 2008b: 5-7.)

The author made similar observations during her 2008 fieldwork in Sarmi. Many Papuan Malay speakers she met thought that they were speaking Indonesian with a local Papuan flavor when conversing with other Papuans.

This lack of language awareness is not surprising, however, given the negative language attitudes that Papuans experience from the Indonesian government and Indonesian institutions which sanction Indonesian as the only acceptable variety of Malay. Through this "ideological erasure" of Papuan Malay from official quarters, the language has become "invisible", using Gal \& Irvine's (1995: 974) terminology. This erasure has led to the perception among many Papuans that Papuan Malay does not exist as a distinct language. (See also Errington 2001: 30).

In summarizing this discussion on language attitudes, it is concluded that overall Papuans' attitudes toward Papuan Malay are positive to somewhat ambivalent, rather than wholly positive.

### 1.6 Typological profile of Papuan Malay

This section presents an overview of the typological profile of Papuan Malay as described in this book. General typological features of the language are discussed in $\S 1.6$.1, followed in $\S 1.6 .2$ by a comparison of some of its features with those found in Austronesian and in Papuan languages. In §1.6.3, some features of Papuan Malay are compared to those found in other eastern Malay varieties.

### 1.6.1 General typological profile

In presenting the pertinent typological features of Papuan Malay, an overview of its phonology is given in §1.6.1.1, its morphology in §1.6.1.2, its word classes in $\S 1.6 .1 .3$, and its basic word order in §1.6.1.4.

### 1.6.1.1 Phonology

Papuan Malay has 18 consonant and five vowel phonemes. The consonant system consists of the following phonemes: /p, b, t, d, g, k, tf, d3, s, h, m, n, n, $\mathrm{y}, \mathrm{r}, \mathrm{l}, \mathrm{j}, \mathrm{w} /$. All

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consonants occur as onsets, ${ }^{17}$ while the range of consonants occurring in the coda position is much smaller. The five vowels are $/ \mathrm{i}, \varepsilon, \mathrm{u}, \rho, \mathrm{a} /$. All five occur in stressed and unstressed, open and closed syllables. A restricted sample of like segments can occur in sequences. Papuan Malay shows a clear preference for disyllabic roots and for CV and CVC syllables; the maximal syllable is CCVC. Stress typically falls on the penultimate syllable. Adding to its 18 native consonant system, Papuan Malay has adopted one loan segment, the voiceless labio-dental fricative /f/. (Chapter 2)

### 1.6.1.2 Morphology

Papuan Malay is a language near the isolating end of the analytic-synthetic continuum. That is, the language has very little productive morphology and words are typically single root morphemes. Inflectional morphology is lacking, as nouns and verbs are not marked for any grammatical category such as gender, number, or case. Word formation is limited to the two derivational processes of reduplication and affixation.

Reduplication is a very productive process. Three types of lexeme formation are attested, namely full reduplication, which is the most common one, partial and imitative reduplication. Usually, content words undergo reduplication; reduplication of function words is rare. The overall meaning of reduplication is "a higher/LOWER DEGREE of ...", employing Kiyomi's (2009: 1151) terminology. (Chapter 4)

Affixation has very limited productivity. Papuan Malay has two affixes which are somewhat productive. Verbal prefix TER- 'ACL' derives monovalent verbs from mono- or bivalent bases. The derived verbs denote accidental or unintentional actions or events. Nominal suffix -ang 'рат' typically derives nominals from verbal bases. The derived nouns denote the patient or result of the event or state specified by the verbal base. In addition, Papuan Malay has one nominal prefix, $P E(N)$ - 'AG', which is, at best, marginally productive. The derived nouns denote the agent or instrument of the event or state specified by the verbal base. ${ }^{18}$ (§3.1, in Chapter 3)

Compounding is a third word-formation process. Its degree of productivity remains uncertain, though, as the demarcation between compounds and phrasal expressions is unclear. (§3.2, in Chapter 3)

Papuan Malay has no morphologically marked passive voice. Instead, speakers prefer to encode actions and events in active constructions. An initial survey of the corpus shows that speakers can use an analytical construction to signal that the undergoer is adversely affected. This construction is formed with bivalent dapat 'get' or kena 'hit', as in dapat pukul 'get hit' or kena hujang 'hit (by) rain'. ${ }^{19}$

[^12]
### 1.6.1.3 Word classes

The open word classes in Papuan Malay are nouns, verbs, and adverbs. The major closed word classes are personal pronouns, interrogatives, demonstratives, locatives, numerals, quantifiers, prepositions, and conjunctions. The distinguishing criteria for these classes are their syntactic properties, given the lack of inflectional morphology and the limited productivity of derivational patterns. A number of categories display membership overlap, most of which involves verbs. This includes overlap between verbs and nouns as is typical of Malay languages and other Austronesian languages of the larger region.

One major distinction between nouns and verbs is that nouns cannot be negated with tida/tra 'NEG' ( $\$ 5.2$ and $\S 5.3$, in Chapter 5). In his discussion of pertinent typological characteristics of "western Austronesian" languages, ${ }^{20}$ Himmelmann (2005: 128) points out that "in languages where negators provide a diagnostic context for distinguishing nouns and verbs, putative adjectives always behave like verbs". This also applies to Papuan Malay, in that the semantic types usually associated with adjectives are encoded by monovalent stative verbs. Verbs are divided into monovalent stative, monovalent dynamic, bivalent, and trivalent verbs. A number of adverbs are derived from monovalent stative verbs (\$5.14, in Chapter 5). Personal pronouns, demonstratives, and locatives are distinct from nouns in that all four of them can modify nouns, while nouns do not modify the former (Chapter 5).

### 1.6.1.4 Basic word order

Papuan Malay has a basic SVO word order, as is typical of western Austronesian languages (Himmelmann 2005: 141-144; see also Donohue 2007c: 355-359). This VO order is shown in (3). Very commonly, however, arguments are omitted if the identity of their referent was established earlier. This is the case with the omitted subject tong '1pl' in the second clause and the direct object bua 'fruit' in the third clause. An initial survey of the corpus also shows that topicalized constituents are always fronted to the clause initial position, such as the direct object bapa desa pu motor itu that motorbike of the mayor' in (4). ${ }^{21}$

Word order: Basic SVO order, elision of core arguments, and fronting of topicalized arguments
(3) tong liat bua, Ø liat bua dang tong mulay tendang tendang $\varnothing$

1PL see fruit see fruit and 1PL start RDP~kick
'we saw a fruit, (we) saw a fruit and we started kicking (it)' [081006-014-Cv.0001]

[^13](4) bapa desa pu motor itu Hurki de ada taru ØdiNiwerawar father village poss motorbike d.DIST Hurki 3sg exist put at Niwerawar '(as for) that motorbike of the mayor, Hurki is storing (it) at Niwerawar' [081014-003-Cv.0024]

A Papuan Malay verb takes maximally three arguments, that is, the subject and two objects, namely a recipient-like R argument and a theme-like T argument. In double object constructions with trivalent verbs, the typical word order is 'subject - verb - R - T'. However, trivalent verbs do not require, but allow three syntactic arguments. Most often, speakers use alternative strategies to reduce the number of arguments. (§11.1.3, in Chapter 11)

As is typical cross-linguistically, the SVO word order correlates with a number of other word order characteristics, as discussed in Dryer (2007a).

Papuan Malay word order agrees with the predicted word order with respect to the order of verb and adposition, verb and adpositional phrase, main verb and auxiliary verb, mark and standard, parameter and standard, clause and complementizer, and head nominal and relative clause. In two aspects, the word order differs from the predicted order. In adnominal possessive constructions, the possessor precedes rather than follows the possessum, and in interrogative clauses, the question marker is clause-final rather than clause-initial. Six word order correlations do not apply to Papuan Malay. The word order of verb and manner adverb, of copula and predicate, and of article or plural word and noun are nonapplicable, as Papuan Malay does not have manner adverbs, a copula, an article, and a plural word. Nor does the order of main and subordinate clause and the position of adverbial subordinators apply, as in combining clauses Papuan Malay does not make a morphosyntactic distinction between main and subordinate clause (see Table 1.4).

Papuan Malay has prepositions, with the prepositional phrase following the verb, as illustrated in (5) and (6); auxiliary verbs precede the main verb as shown in (5) (§13.3, in Chapter $13^{23}$ ) (see also Donohue 2007a: 373-379). The example in (6) shows that aspectmarking adverbs also precede the verb (§5.4.1, in Chapter 5); cross-linguistically, however, the order of aspect marker and verb does not correlate with the order of verb and object (Dryer 2007c: 130).

Word order: Auxiliary verb - main verb - prepositional phrase

## (5) ko harus pulang ke tempat

2sG have.to go.home to place
'you have to go home to (your own) place' [080922-010a-CvNF.0143]

[^14]Table 1.4: Predicted word order for VO languages (Dryer 2007c: 130) versus Papuan Malay word order

| Predicted word order | Papuan Malay word order | Examples |
| :--- | :--- | :--- |
| prepositions | as predicted | $(5),(6)$ |
| verb - prepositional phrase | as predicted | $(5),(6)$ |
| auxiliary verb - main verb | as predicted | $(5)$, |
| mark - standard ${ }^{22}$ | as predicted | $(7),(8)$ |
| parameter - standard | as predicted | $(7),(8)$ |
| initial complementizer | as predicted | $(9)$ |
| noun - relative clause | as predicted | $(10)$ |
| noun - genitive | possessor LiG PossEssum | $(11)$ |
| initial question particle | clause final question | $(12)$ |
| verb - manner adverb | nonapplicable |  |
| copula - predicate | nonapplicable |  |
| article - noun | nonapplicable |  |
| plural word - noun | nonapplicable |  |
| main clause - subordinate clause | nonapplicable |  |
| initial adverbial subordinator | nonapplicable |  |

(6) de suda naik di kapal

3sG already ascend at ship
'he already went on board' [080923-015-CvEx.0025]
In Papuan Malay comparison clauses, the parameter precedes the mark, both of which precede the standard, as in (7) and (8). The position of the index differs depending on the type of comparison clause. In degree-marking clauses the parameter follows the index, as in the superlative clause in (7). In identity-marking clauses, by contrast, the parameter precedes the index as in the similarity clause in (8), or it is omitted. The word-order of index and parameter, however, does not correlate with that of verb and object (Dryer 2007c: 130). (§11.5, in Chapter 11)

Word order: PARAMETER - MARK - STANDARD
(7) COMPAREE INDEX PARAMETER MARK STANDARD

| dia | lebi | tinggi | dari saya |
| :--- | :--- | :--- | :--- |
| 3sG | more | be.high | from |

'he/she is taller than me' (Lit. 'be more tall from me') [Elicited BR111011.002]
(8) COMPAREE PARAMETER INDEX MARK STANDARD
de sombong sama deng ko
3sG be.arrogant be.same with 2sG
'she'll be as arrogant as you (are)' (Lit. 'be arrogant same with you')
[081006-005-Cv.0002]
The complementizer bahwa 'that' occurs in clause-initial position, with the complement clause following the verb, as in (9). (§14.3.1, in Chapter 14)

Word order: Initial complementize
(9) sa tida taw bahwa jam tiga itu de su meninggal 1sg neg know that hour three d.dist 3sG already die
'I didn't know that by three o'clock (in the afternoon) she had already died' [080917-001-CvNP.0005]

Within the noun phrase, the relative clause follows its head nominal, as shown in (10) (§8.2.8, in Chapter 8). Other modifiers, such as demonstratives, or monovalent stative verbs, also occur to the right of the head nominal. This order of head nominal and modifier is typical for western Austronesian languages (Himmelmann 2005: 142; see also Donohue 2007c: 359-373). Cross-linguistically, however, the order of head nominal and demonstrative, numeral, or stative verb does not correlate with the order of verb and object (Dryer 2007c: 130). Numerals and quantifiers precede or follow the head nominal, depending on the semantics of the phrasal structure (§8.3, in Chapter 8).

Word order: Head nominal - relative clause
(10) ... karna liat ada makangang dalam kantong yang saya bawa because see exist food inside bag REL 1sG bring
'[she was already glad] because (she) saw there was food in the bag that I brought' [080919-004-NP.0032]

Likewise in noun phrases with adnominally used nouns, the modifier noun follows the head nominal, as in tulang bahu 'shoulder bone' (§8.2.2, in Chapter 8). By contrast, adnominal possession in Papuan Malay is typically expressed with a construction in which the pOSSESSOR precedes the pOSSESSUM; both are linked with the possessive marker pu(nya) 'poss', as illustrated in (11) (Chapter 9). This word order does not correlate with the general VO order, but it is typical for the eastern Malay varieties in general and other Austronesian languages of the larger region, as discussed in more detail in §1.6.2.

Word order: POSSESSOR - pOSSESSUM
(11) ... sa pegang sa pu parang sa punyajubi ...

1sg hold 1sG poss short.machete 1sg poss bow.and.arrow
'[so, in the morning I got up, I fed the dogs,] I took my short machete, my bow and arrows ...' [080919-003-NP.0003]

In alternative interrogative clauses, the question marker occurs in clause-final position. Such questions are formed with the alternative-marking conjunction ka 'or' which is also used to mark interrogative clauses, as demonstrated in (12) (§13.2.3, in Chapter 13; see also §14.2.2.2, Chapter 14). Again, this word order does not correlate with the general VO order.

Word order: Clause-final question marker $k a$ 'or'
(12) ko sendiri ka?

2sg be.alone or
'are you alone or (not)?' [080921-010-Cv.0003]
As mentioned, in a number of aspects the predicted word order does not apply to Papuan Malay. Papuan Malay has no manner adverbs. Instead monovalent stative verbs express manner; they take a postpredicate position (§5.4.8, in Chapter 5). The language has no copula either. Hence, in nonverbal predicate clauses, the nonverbal predicate is juxtaposed to the subject (Chapter 12). Neither does Papuan Malay have an article or plural word. Instead, free personal pronouns signal the person, number, and definiteness of their referents (Chapter 6). In combining clauses, Papuan Malay makes no morphosyntactic distinction between main and subordinate clauses; dependency relations are purely semantic ( $\S 14.2$, in Chapter 14).

In negative clauses, the negators occur in prepredicate position: tida/tra ' NEG ' negates verbal, existential, and nonverbal prepositional clauses, while bukang 'NEG' negates nonverbal clauses, other than prepositional ones; besides, bukang 'NEG' also marks contrastive negation (§13.1, in Chapter 13). This negator-predicate order is typical for western Austronesian languages (Himmelmann 2005: 141). Cross-linguistically, however, it does not correlate with the order of verb and object (Dryer 2007a: 130).

### 1.6.2 Papuan Malay as a language of the Papuan contact zone

In this section, some of the typological features of Papuan Malay are compared to pertinent features found in Austronesian languages in general, as well as to features typical for Austronesian languages spoken in the larger region, and to some features of Papuan languages. ${ }^{24}$

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The reason for this investigation is the observation that Papuan Malay is lacking some of the features typical for Austronesian languages, while it has a number of features which are found in Papuan languages. This investigation is not based on a comparative study, which would explore whether and to what extent Papuan Malay, as spoken in Sarmi on West Papua's northeast coast, has adopted features found in the languages of the larger region, such as Isirawa, a Tor-Kwerba language and the language of the author's hosts, or the Tor-Kwerba languages Kwesten and Samarokena, or the Austronesian languages Mo and Sobei. Such a study is left for future research. (See also Table 1.2 in §1.4.)

Instead this investigation is based on studies on areal diffusion. For a long time, scholars have noted that in the area east of Sulawesi, Sumba, and Flores, all the way to the Bird's Head of New Guinea, a number of linguistic features have diffused from Papuan into Austronesian languages and vice versa.

Klamer, Reesink \& van Staden (2008) and Klamer \& Ewing (2010) propose the term "East Nusantara" for this area. More specifically, Klamer \& Ewing (2010: 1) define ${ }^{25}$

East Nusantara as a geographical area that extends from Sumbawa to the west, across the islands of East Nusa Tenggara, Maluku [...] including Halmahera, and to the Bird's Head of New Guinea in the east [...]. In the northwest, the area is bounded by Sulawesi.

According to the above definition, only parts of West Papua belong to East Nusantara, namely the Bird's Head but not West Papua's north coast. Yet, it seems useful to examine the typological profile of Papuan Malay in light of the observed diffusion of linguistic features, discussed in Klamer, Reesink \& van Staden (2008) and Klamer \& Ewing (2010).

This comparison shows that Papuan Malay is lacking some of the features which are typical for Austronesian languages. At the same time, it has a number of features which are untypical for Austronesian languages, but which are found in Austronesian languages of East Nusantara. Moreover, Papuan Malay has some features not typically found in Austronesian languages of East Nusantara but found in Papuan languages. These features are summarized in Table 1.5 to Table 1.7; the listed features are taken from Klamer, Reesink \& van Staden (2008) and Klamer \& Ewing (2010), unless mentioned otherwise.

Table 1.5 presents seven features found in Austronesian languages in general, six of which are listed in Klamer, Reesink \& van Staden (2008: 113). ${ }^{26}$ Papuan Malay shares five of these features. It does not, however, share the typical noun-genitive order which is used to express adnominal possession. Papuan Malay noun phrases with posthead nominal modifiers are used to denote important features for subclassification of the head nominal rather than for adnominal possession (§8.2.2, in Chapter 8). Also, Papuan Malay does not distinguish between inclusive and exclusive first person plural in its pronominal paradigm.

[^16]Table 1.5: Pertinent features of Austronesian languages in general vis-à-vis Papuan Malay features

| Austronesian languages | Papuan Malay |  |
| :--- | :---: | :--- |
| Phonemic 1/r distinction | yes | (Chap. 2) |
| Preference for CVCV roots | yes | (Chap. 2) |
| Reduplication | yes | (Chap. 4) |
| Head-initial | yes | (Chap. 8) |
| Negator precedes the predicate | yes | (Chap. 13) |
| Noun-genitive order | no | (Chap. 8\& 9) |
| Inclusive-exclusive distinction in personal pronouns | no | (Chap. 5\&6) |

Table 1.6 lists 17 linguistic features "found in many of the Austronesian languages of East Nusantara" (Klamer \& Ewing 2010: 10); ${ }^{27}$ some of these features are also listed in Table 1.5. Papuan Malay shares eight of them, such as the preference for CVCV roots or the lack of a productive voice system on verbs. Another eight features, however, are unattested in the corpus, such as metathesis or clause-final negators.

Two of the nonshared morphological and two of the shared syntactic features require additional commenting, that is, indexing on the verb, the distinction between alienable and inalienable nouns, the noun-numeral order, and the absence of a passive construction.

Papuan Malay does not have indexing on the verb. Instead, Papuan Malay uses free personal pronouns. (Chapter 6)

Overall, Papuan Malay does not distinguish between alienable and inalienable possessed items, with one exception: adnominal possessive constructions with omitted possessive marker signal inalienable possession of body parts or kinship relations. Just as commonly, however, inalienable possession of these entities is encoded in the same way as possession of alienable items, that is, in a possessor ligature possessum construction. Examples are sa maytua 'my wife', dia pu maytua 'his wife', or sa pu motor 'my motorbike' (literally '1sG wife', '3sg poss wife', '1sG poss motorbike'). (Chapter 9)

In Papuan Malay noun phrases, numerals and quantifiers follow the head nominal. As mentioned in §1.6.1, however, they can also precede the head nominal, depending on the semantics of the phrasal structure. (§8.3, in Chapter 8)

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Table 1.6: Pertinent features of Austronesian languages of East Nusantara vis-à-vis Papuan Malay features

| Austronesian languages of East Nusantara | Papuan Malay |  |
| :--- | :--- | :--- |
| Phonology |  |  |
| Preference for CVCV roots | yes | (Chap. 2) |
| Prenasalized consonants | no | (Chap. 2) |
| Metathesis | no | (Chap. 2) |
| Morphology |  |  |
| No productive voice system on verbs | yes | (Chap. 3 \& 5) |
| Left-headed compounds ${ }^{a}$ | yes | (Chap. 3) |
| Agent/subject indexed on verb as prefix/proclitic | no | (Chap. 3 \& 5) |
| Inclusive-exclusive distinction in personal pronouns | no | (Chap. 5 6) |
| Morphological distinction between alienable and inalienable | no | (Chap. 3 \& 5) |
| nouns |  |  |
| Syntax |  |  |
| Verb-object order | yes | (Chap. 11) |
| Prepositions | yes | (Chap. 10) |
| Genitive-noun order ( "preposed possessor") | yes | (Chap. 8 \& 9) |
| Noun-Numeral order | yes | (Chap. 8) |
| Absence of a passive construction | yes | (Chap. 11) |
| Clause-final negators | no | (Chap. 13) |
| Clause-initial indigenous complementizers ${ }^{b}$ | no | (Chap. 14) |
| Formally marked adverbial/complement clauses | no | (Chap. 14) |
| Other |  |  |
| Parallelisms without stylistic optionality | not yet researched |  |

${ }^{a}$ In Papuan Malay the demarcation between compounds and phrasal expressions is unclear, however. Hence, it remains uncertain to what degree compounding is a productive process. (For more details see §3.2.)
${ }^{b}$ The Papuan Malay complementizer is bahwa 'that'. According to Jones (2007) it originates from Sanskrit.

Like other East Nusantara Austronesian languages, Papuan Malay does not have a dedicated passive construction. Instead, speakers encode actions and events in active constructions (see also §1.6.1.2). ${ }^{28}$

East Nusantara Austronesian languages also often make use of parallelisms without stylistic optionality. ${ }^{29}$ Whether, and to what extent, Papuan Malay employs this feature has not been researched for the present study; instead this topic is left for future research.

Papuan Malay also has a number of features which are not usually found in the East Nusantara Austronesian languages. Instead, these features are typical characteristics of Papuan languages.

Table 1.7 presents 15 linguistic features typically found in Papuan languages (Klamer \& Ewing 2010: 10). ${ }^{30}$ Papuan Malay shares six of them, such as the subject-verb order, or the genitive-noun order. There is also limited overlap between Papuan Malay and Papuan languages with respect to the position of conjunctions. All Papuan Malay conjunctions are clause-initial, but two of them can also take a clause-final position (Chapter 14). Eight of the 15 features are not found in Papuan Malay, such as gender marking or postpositions.

Among the syntactic features, there are three that need to be commented on, namely clause-chaining, switch reference, and tail-head linkage.

Clause chaining is not discussed in the present study. An initial survey of the corpus indicates, however, that it is very common in Papuan Malay. One example is given in (13).

Clause-chaining in Papuan Malay
(13) langsung sa pegang sa putar sa cari
immediately 1sG hold 1SG turn.around 1SG search
'immediately I held (the plate), I turned around, I looked around'
[081011-005-Cv.0034]
Following Klamer \& Ewing (2010: 11), clause-chaining in Papuan languages is often characterized by "some concomitant switch reference system". This, however, does not seem to apply to Papuan Malay. That is, so far dedicated switch-reference devices have not been identified, a finding which contrasts with Donohue's (2011) observations. Donohue (2011: 431-432) suggests that the sequential-marking conjunction trus 'next' "is a

[^18]Table 1.7: Pertinent features of Papuan languages vis-à-vis Papuan Malay features

| Papuan languages | Papuan Malay |  |
| :--- | :--- | :--- |
| Phonology |  |  |
| No phonemic l/r distinction | no | (Chap. 2) |
| Morphology |  |  |
| No inclusive-exclusive distinction in personal pronouns | yes | (Chap. 5\& 6) |
| Marking of gender | no | (Chap. 3 \& 5) |
| Subject marked as suffix on verb | no | (Chap. 3 \& 5) |
| Morphological distinction between alienable and inalienable | no | (Chap. 3 \& 5) |
| nouns |  |  |
| Syntax |  |  |
| Subject-verb order | yes | (Chap. 11) |
| Genitive-noun order ("preposed possessor") | yes | (Chap. 8 \& 9) |
| Serial verb constructions ${ }^{a}$ | yes | (Chap. 11) |
| Clause-chaining | yes | (example (13)) |
| Tail-head linkage | yes | (example (13)) |
| Clause-final conjunctions | few | (Chap. 14) |
| Object-verb order | no | (Chap. 11) |
| Postpositions | no | (Chap. 10) |
| Clause-final negator | no | (Chap. 13) |
| Switch reference | no | (Chap. 14) |

${ }^{a}$ Serial verb constructions are briefly mentioned in §11.2, in Chapter 11; a detailed description of this topic is left for future research.
commonly used connective when there is a same-subject coreference condition between clauses", while the sequential-marking conjunction baru 'and then' tends "to indicate switch reference". An initial investigation of the attested trus 'next, and then' and baru 'and then' tokens in the corpus shows, however, that both conjunction more often link clauses with a switch in reference, than those with same-subject coreference (§14.2.3.1 and $\S 14.2 .3 .2$, in Chapter 14). Neither do any of the other conjunctions function as dedicated switch-reference devices.

Tail-head linkage is not treated in the present study. This feature denotes a "structure in which the final clause of the previous sentence initiates the next sentence, often in a reduced form" (Foley 2000: 390; see also de Vries 2005). An initial survey of the corpus shows, however, that tail-head linkage is very common in Papuan Malay. In the example in (14), for instance, the speaker repeats part of the first clause at the beginning of the second clause: kasi senter 'give a flashlight'.

Tail-head linkage in Papuan Malay
(14) skarang dong kasi dia senter, kasi senter dong mo kasi pisow now 3pl give 3sG flashlight give flashlight 3pl want give knife 'now they give him a flashlight, (having) given (him) a flashlight, they want to give (him) a knife' [081108-003-JR.0002]

### 1.6.3 Papuan Malay as an eastern Malay variety

This section compares some of the features found in Papuan Malay to those found in other eastern Malay varieties, namely in Ambon Malay (AM) (van Minde 1997), Banda Malay (BM) (Paauw 2009), Kupang Malay (KM) (Steinhauer 1983), Larantuka Malay (LM) (Paauw 2009), Manado Malay (MM) (Stoel 2005), North Moluccan or Ternate Malay (NMM/TM) (Taylor 1983; Voorhoeve 1983; Litamahuputty 2012). ${ }^{31}$

These comparisons are far from systematic and exhaustive. Instead, they pertain to a limited number of topics as they came up during the analysis and description of the phonology, morphology, and syntax of Papuan Malay. (A detailed typological study of the eastern Malay varieties is Paauw 2009.) The comparisons discussed here touch upon the following phenomena:

- Affixation (§3.1, in Chapter 3)
- Reduplication (Chapter 4)
- Adnominal uses of the personal pronouns (§6.2, in Chapter 6)
- Existence of diphthongs (§2.1.2, in Chapter 2)
- Noncanonical functions of the possessive ligature in adnominal possessive constructions (§9.3, in Chapter 9)
- Argument elision in verbal clauses (§11.1, in Chapter 11)
- Morphosyntactic status of the reciprocity marker baku 'RECP’ (§11.3, in Chapter 11)
- Contrastive uses of negator bukang 'NEG’ (§13.1.2, in Chapter 13))

The remainder of this section gives an overview how Papuan Malay compares to the other eastern Malay varieties with respect to these phenomena. (In Table 1.8 to Table 1.11 empty cells signal that a given feature is not mentioned in the available literature. One reason could be that the respective feature is nonexistent. It is, however, just as likely that such empty cells result from gaps in the available literature.)

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Affixation is one area in which Papuan Malay has a number of features which are distinct from those found in other eastern Malay varieties. Table 1.8 presents three prefixes and one suffix and shows that the Papuan Malay affixes are different both in terms of their form and their degree of productivity. In most of the eastern Malay varieties, the three prefixes are realized as $t a-$, $p a(N)$-, and $b a$-. By contrast, the Papuan Malay affixes TER- 'ACL', PE (N)- 'AG', and BER- 'vBlz' are most commonly realized as ter-, pe( $N$ )-, and ber-, respectively; hence, they have more resemblance with the corresponding Standard Indonesian affixes.

Papuan Malay prefix $T E R$ - has only limited productivity, while prefix $B E R$ - is unproductive. In the other eastern Malay varieties, by contrast, the corresponding prefixes taand $b a$ - are very productive. Papuan Malay prefix $P E(N)$ - is, at best, marginally productive. In Manado Malay pay- is productive (in addition an unproductive form pa- exists). Likewise, in North Moluccan / Ternate Malay prefixation with pang- is productive (Litamahuputty 2012: 30)..$^{32}$ In Ambon Malay the prefix occurs but it is unproductive. The Papuan Malay prefix -ang has only limited productivity. In Ambon Malay, the suffix also occurs but according to van Minde (1997: 106) it is difficult to determine whether and to what degree it is productive.

Table 1.8: Affixation: Form and productivity

| PM | AM | BM | KM | LM | MM | NMM / | TM |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prefix TER- |  |  |  |  |  |  |  |
| Form TERPROD lim. | tayes | tayes | $\begin{aligned} & t a- \\ & \text { yes } \end{aligned}$ | $\begin{aligned} & t \partial(r)- \\ & \text { yes } \end{aligned}$ | $\begin{aligned} & t a- \\ & \text { yes } \end{aligned}$ | $\begin{aligned} & t a- \\ & \text { yes } \end{aligned}$ | $\begin{aligned} & t a- \\ & \text { yes } \end{aligned}$ |
| Prefix PE(N)- |  |  |  |  |  |  |  |
| Form $P E(N)$ PROD marg. | $\begin{aligned} & p a(N)- \\ & \text { no } \end{aligned}$ |  |  |  | $\begin{aligned} & \text { pay- } \\ & \text { yes } \end{aligned}$ | $\begin{aligned} & p a- \\ & \text { no } \end{aligned}$ | $\begin{aligned} & \text { pang- } \\ & \text { yes } \end{aligned}$ |
| Prefix BER- |  |  |  |  |  |  |  |
| $\begin{array}{ll} \hline \text { Form } & \text { BER- } \\ \text { PROD } & \text { no } \end{array}$ | $b a-$ yes | $b a-$ yes | $\begin{aligned} & b a- \\ & \text { yes } \end{aligned}$ | $\begin{aligned} & b \partial(r)- \\ & \text { yes } \end{aligned}$ | $b a-$ yes | $b a-$ yes | $b a-$ yes |
| Prefix -ang |  |  |  |  |  |  |  |
| PROD lim. | ? |  |  |  |  |  |  |

Reduplication is another phenomenon in which Papuan Malay displays a number of features which differ from those described for other eastern Malay varieties (Chapter 4). As shown in Table 1.9, Papuan Malay and the other eastern Malay varieties employ full reduplication. Partial and imitative reduplication, however, is only reported for Papuan Malay, Ambon Malay, and Larantuka Malay. Besides, Papuan Malay shares especially

[^20]many features with Ambon Malay regarding the morpheme types which can undergo full reduplication (§4.3.1, in Chapter 4).

In general, reduplication conveys a wide range of different meaning aspects. These meaning aspects differ with respect to the range of word classes they attract for reduplication. Among the eastern Malay varieties, the attested meaning aspects in Papuan Malay attract the largest range of different word classes, followed by a medium range of attracted word classes in Ambon Malay. In the other eastern Malay varieties, by contrast, this range of attracted word classes seems to be much smaller. (§4.3.2, in Chapter 4)

In Papuan Malay, the reduplicated items can also undergo "interpretational shift" or "type coercion". This feature is also attested in Ambon, Larantuka, Manado, and Ternate Malay. Again, Papuan Malay and Ambon Malay share pertinent features, in that in both varieties nouns and verbs can undergo interpretational shift, while in Manado Malay only nouns and in Larantuka and Ternate Malay only verbs are affected. (§4.3.3, in Chapter 4)

These findings suggest that reduplication in Papuan Malay has more in common with Ambon Malay than with the other eastern Malay varieties.

Table 1.9: Reduplication

| PM |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of reduplication | BM | KM | LM | NMM / | TM |  |  |
| Full | yes | yes | yes | yes | yes | yes | yes |
| Partial | yes | yes |  |  | yes |  |  |
| Imitative | yes | yes |  |  | yes |  |  |
| Meaning aspects and range of attracted word classes |  |  |  |  |  |  |  |
| Range | large | med. | small | small | small | small | small |
| Interpretational shift of reduplicated lexemes |  |  |  |  |  |  |  |
| Shift | yes | yes |  |  | yes |  | yes |

Papuan Malay is also distinct from other eastern Malay varieties with respect to the adnominal uses of its personal pronouns (Table 1.10; see also §6.2, in Chapter 6). In Papuan Malay, the second and third singular person pronouns have adnominal uses. They signal definiteness and person-number values, whereby they allow the unambiguous identification of their referents. In other eastern Malay varieties, by contrast, ' N Pro-SG' expressions are analyzed as topic-comment constructions. Besides, the first, second, and third person plural pronouns in Papuan Malay also have adnominal uses; they express associative plurality. In the other eastern Malay varieties, by contrast, associative plural expressions are only formed with the third person plural pronoun.

Table 1.10: Personal pronouns: Adnominal uses of singular and plural pronouns

|  | PM | AM | BM | KM | LM | MM | NMM / | TM |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2/3sG | yes | no | no |  |  |  | no |  |
| 1/2PL | yes | no |  | no |  | no |  | no |
| 3PL $^{33}$ | yes | yes |  | yes |  | yes |  | no |

In addition, Papuan Malay is compared to the other eastern Malay varieties in terms of one phonological and four syntactic features, summarized in Table 1.11.

Papuan Malay has no diphthongs; instead the vowel combinations /ai/ and /au/ are analyzed as V.V or VC sequences ( $\$ 2.1 .2$, in Chapter 2). The same analysis applies to Larantuka and Manado Malay. For Ambon and North Moluccan / Ternate Malay, by contrast, the same vowel sequences are analyzed as diphthongs. Most likely, though, the different analyses result from differences between the analysts rather than from distinctions between the respective Malay varieties.

In adnominal possessive constructions, the ligature pu(nya) 'poss' not only marks possessive relations, but also has a number of noncanonical functions, such as that of an emphatic marker. Such noncanonical functions of the ligature are also reported for two other eastern Malay varieties, namely Ambon and Ternate Malay.

In Papuan Malay verbal clauses, core arguments are very often elided (see §1.6.1.4 and §11.1, in Chapter 11). The same observation applies to Ambon and Manado Malay.

In Papuan Malay verbal clauses, the reciprocity marker baku 'RECP' is analyzed as a separate word ( $\S 11.3$, in Chapter 11). For Ambon, Banda, Kupang, Manado, and North Moluccan / Ternate Malay, by contrast, the same marker is analyzed as a prefix. Most likely, this different analysis is again due to differences between the analysts rather than due to linguistic differences between the respective Malay varieties.
In Papuan Malay negative clauses, the negator bukang ' ${ }^{\prime} E G$ ' not only negates nouns and nominal predicate clauses, but also signals contrast (§13.1.2, in Chapter 13). The same observation applies to Ambon, Manado, and Ternate Malay.

The overview presented in this section shows several differences and commonalities between Papuan Malay and the other eastern Malay varieties.

The differences pertain to affixation (form and degree of productivity of the affixes), and the adnominal uses of the personal pronouns. The discussed commonalities involve reduplication, the noncanonical uses of the possessive ligature, elision of core arguments in verbal clauses, and the contrastive uses of negator bukang 'nEG'. The observed commonalities suggest that Papuan Malay has more in common with Ambon Malay than with the other eastern Malay varieties. It is important to note, however, that these differences and commonalities could also result from gaps in the descriptions of the other eastern Malay varieties. The noted differences concerning the morphosyntactic status of

[^21]Table 1.11: Some phonological and syntactic features in Papuan Malay and other eastern Malay varieties

| Phonology: Diphthongs |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DIPH | $\begin{aligned} & \text { PM } \\ & \text { no } \end{aligned}$ | $\begin{aligned} & \text { AM } \\ & \text { yes } \end{aligned}$ | BM | KM | LM <br> no | MM <br> no | NMM / TM yes yes |
| Adnominal possessive constructions: Noncanonical uses of the ligature (LIG) |  |  |  |  |  |  |  |
| LIG use | $\begin{aligned} & \text { PM } \\ & \text { yes } \end{aligned}$ | AM <br> yes | BM | KM | LM | MM | NMM / TM yes |
| Verbal clauses: Argument elision |  |  |  |  |  |  |  |
| Elision | PM <br> yes | AM <br> yes | BM | KM | LM | MM <br> yes | NMM / TM |
| Verbal clauses: Morphosyntactic status of reciprocity marker baku 'RECP' |  |  |  |  |  |  |  |
| RECP | PM word | AM prefix | BM prefix | KM prefix | LM | MM prefix | NMM / TM prefix prefix |
| Negative clauses: Contrastive function of bukang 'NEG' |  |  |  |  |  |  |  |
| CST | PM <br> yes | AM <br> yes | BM | KM | LM | MM yes | NMM / TM yes |

the reciprocity marker and the phonological status of VV sequences most likely result from differences between the analysts rather than from linguistic differences between the compared Malay varieties.

Overall, the noted distinctions and similarities support the conclusion put forward in §1.8 that the history of Papuan Malay is different from that of the other eastern Malay varieties, and that Ambon Malay was influential in its genesis. (See §1.8 'History of Papuan Malay' for more details.)

### 1.7 Demographic information

This section presents demographic information about the Papuan Malay speakers. Numbers of speakers are discussed in §1.7.1, occupation details in §1.7.2, education and literacy rates in §1.7.3, and religious affiliations in §1.7.4.

### 1.7.1 Speaker numbers

The conservative assessment presented in this section estimates the number of Papuan Malay speakers in West Papua to be about $1,100,000$ or $1,200,000$.

Previous work provides different estimates for the number of people who speak Pa puan Malay. With respect to first language speakers, Clouse (2000: 1) estimates their number at 500,000 . As for its uses as a language of wider communication, Burung \& Sawaki (2007), for instance, give an estimate of one million speakers, while Paauw (2009: 71) approximates their number at 2.2 million speakers. None of the authors provides information, however, on how they arrived at these numbers.

The attempt here to approximate the number of Papuan Malay speakers is based on the 2010 census, conducted by the Non-Departmental Government Institution Badan Pusat Statistik (BPS-Statistics Indonesia). More specifically, the speaker estimate is based on the statistics published by the BPS-Statistics branches for Papua province and Papua Barat province. ${ }^{34}$

According to the BPS-Statistics for Papua province and Papua Barat province, the total population of West Papua is $3,593,803$; this includes $2,833,381$ inhabitants of Papua province and 760,422 inhabitants of Papua Barat province ${ }^{35}$ (Bidang Neraca Wilayah dan Analisis Statistik 2011b: 11-14; Bidang Neraca Wilayah dan Analisis Statistik 2012b: 92). The census data does not discuss the number of Papuan Malay speakers. The (online) data does, however, give information about ethnicity (Papuan versus non-Papuan ${ }^{36}$ ) by regency (for detailed population totals see Appendix E).

The present attempt at approximating the number of Papuan Malay speakers is based on the following assumptions: (1) Papuans who live in the coastal regencies of West Papua are most likely to speak Papuan Malay, (2) Papuans living in the interior regencies are less likely to speak Papuan Malay, and (3) non-Papuans living in West Papua are less likely to speak Papuan Malay. It is acknowledged, of course, that there might be older Papuans living in remote coastal areas who do not speak Papuan Malay, that there might be Papuans living in the interior who speak Papuan Malay, and that there might be nonPapuans who speak Papuan Malay.

For Papua province, the census data by regency and ethnicity gives a total of 2,810,008 inhabitants, including 2,150,376 Papuans ( $76.53 \%$ ) and 659,632 non-Papuans ( $23.47 \%$ ), who live in its 29 regencies. ${ }^{37}$ (This total of $2,810,008$ more or less matches the total given for the entire province which lists the entire population of Papua province with $2,833,381$ ). Of the 29 regencies, 14 are essentially coastal; the remaining 15 are located in the in-

[^22]terior. ${ }^{38}$ The total population for the 14 coastal regencies is $1,364,505$, which includes 756,335 Papuans and 608,170 non-Papuans. Based on the above assumptions that Papuans living in coastal areas can speak Papuan Malay, and that non-Papuans are less likely to speak it, the number of Papuan Malay speakers living in Papua province is estimated at 760,000 speakers.

For Papua Barat province, the census data by regency and ethnicity gives a total of 760,422 inhabitants, including 405,074 Papuans ( $53.27 \%$ ) and 355,348 non-Papuans $(46.73 \%)$ living in its 11 regencies. ${ }^{39}$ Ten of its regencies are essentially coastal; the exception is Maybrat, which is located in the interior. The total population for the ten regencies is 727,341 , including 373,302 Papuans and 354,039 non-Papuans. Based on the above assumptions, the number of Papuan Malay speakers living in Papua Barat province is estimated with 380,000 speakers. (Bidang Neraca Wilayah dan Analisis Statistik 2011a: 11-14)

These findings give a total of between $1,100,000$ to $1,200,000$ potential speakers of Papuan Malay. This estimate is conservative, as people living in the interior are excluded. Moreover, non-Papuans are excluded from this total. However, the results of a sociolinguistic survey carried out in 2007 by the Papuan branch of SIL Indonesia in several costal regencies indicate "substantive use" of Papuan Malay by "non-Papuan residents of the region" (Scott et al. 2008: 11).

The population estimate presented here does not make any statements about the potential number of first language Papuan Malay speakers. The results of the 2007 survey indicate, however, that large numbers of children learn Papuan Malay at home: all of the 14 interviewed focus groups stated that Papuan Malay is spoken in their region; moreover, $70 \%$ of the focus groups indicated that Papuan Malay is "the first language children learn in the home as well as the language most commonly used in their region" (Scott et al. 2008: 11).

### 1.7.2 Occupation details

Most of West Papua's population works in the agricultural sector: $70 \%$ in Papua province, and $54 \%$ in Papua Barat province. As subsistence farmers, they typically grow bananas, sago, taro, and yams in the lowlands, and sweet potatoes in the highlands; pig husbandry, fishing, and forestry are also widespread. The second most important domain is the public service sector. In Papua province, $10 \%$ of the population works in this sector, and $17 \%$ in Papua Barat province. Furthermore, $9 \%$ in Papua province and $12 \%$ in Papua Barat province work in the commerce sector. Other minor sectors are transport, construction, industry, and communications. (Bidang Neraca Wilayah dan Analisis Statistik 2011a: 21; 2012b: 12; Encyclopædia Britannica Inc. 2001-a; 2001-b; see also Bidang Neraca Wilayah dan Analisis Statistik 2012a: 83).

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The census data does not provide information about occupation by ethnicity. However, the author made the following observations for the areas of Sarmi and Jayapura (see Figure 1(b) on p. xxvii and Figure 1(c) on p. xxvii). Papuans typically work in the agricultural sector; those living in coastal areas are also involved in small-scale fishing. Those with a secondary education degree usually (try to find) work in the public sector. The income generating commerce and transportation sectors, by contrast, are in the hands of non-Papuans. This assessment is also shared by Chauvel (2002: 124) who maintains that "Indonesian settlers dominate the economy of [West] Papua". The author does not provide details about the origins of these settlers. Given Indonesia's "transmigration" program, however, it can be assumed that most, or at least substantial numbers, of these settlers originate from the overcrowded islands of Java, Madura, Bali, and/or Lombok. Moreover, substantial numbers of active and retired military personnel have settled in West Papua. ${ }^{40}$ (See Fearnside 1997; Embassy of the Republic of Indonesia in London 2009.)

### 1.7.3 Education and literacy rates

The 2010 census data provides information about school enrollment and literacy rates in Standard Indonesian. In West Papua, most children attend school. For older teenagers and young adults, however, the rates of those who are still enrolled in a formal education program are much lower. Literacy rates for the adult population aged 45 years or older are lower than the rates for the younger population. Overall, education and literacy rates are (much) lower for Papua province than for Papua Barat province. Details are given in Table 1.12 to Table 1.14.

Most children under the age of 15 go to school, as shown in Table 1.12. However, the data also indicates that this rate is much lower for Papua province than for Papua Barat province. The number of teenagers aged between 16 and 18 who are still enrolled in school is much lower for both provinces, again with Papua province having the lower rate. As for young adults who are still enrolled in a formal education program, the rate is even lower, at less than $15 \%$. The data in Table 1.12 gives no information about the school types involved. That is, these figures also include children and teenagers who are enrolled in a school type that is not typical for their age group. ${ }^{41}$ (For enrollment figures by school types see Table 1.13.)

The 2010 census data also shows that most children get a primary school education ( $76.22 \%$ in Papua province, and $92.29 \%$ in Papua Barat province). Enrollment figures

[^24]Table 1.12: Formal education participation rates by age groups

|  | $7-12$ | $13-15$ | $16-18$ | $19-24$ |
| :--- | :---: | :---: | :---: | :---: |
| Papua | $76.22 \%$ | $74.35 \%$ | $48.28 \%$ | $13.18 \%$ |
| Papua Barat | $94.43 \%$ | $90.25 \%$ | $60.12 \%$ | $14.66 \%$ |

for junior high school are considerably lower with only about half of the children and teenagers being enrolled. Figures for senior high school enrollment are even lower, at less than $50 \%$. The data in Table 1.13 also shows that overall Papua Barat province has higher enrollment rates than Papua province, especially for primary schools. ${ }^{42}$

Table 1.13: School enrollment rates by school type

|  | Primary | Junior high | Senior high |
| :--- | ---: | ---: | ---: |
| Papua | $76.22 \%$ | $49.62 \%$ | $36.06 \%$ |
| Papua Barat | $92.29 \%$ | $50.10 \%$ | $44.75 \%$ |

Literacy rates in 2010 differ considerably between the populations of both provinces. In Papua province only about three quarters of the population is literate, while this rate is above $90 \%$ for Papua Barat province, as shown in Table 1.14. In Papua province, the literacy rates are especially low in the Mamberamo area, in the highlands, and along the south coast (Bidang Neraca Wilayah dan Analisis Statistik 2011b: 27-30). ${ }^{43}$

Table 1.14: Illiteracy rates by age groups

|  | $<15$ | $15-44$ | $45+$ |
| :--- | ---: | ---: | ---: |
| Papua | $31.73 \%$ | $30.73 \%$ | $36.14 \%$ |
| Papua Barat | $4.88 \%$ | $3.34 \%$ | $9.91 \%$ |

The census data provides no information about education and literacy rates according to rural versus urban regions. The author assumes, however, that education and literacy rates are lower in rural than in urban areas. The census data also does not include information about education and literacy rates by ethnicity. As mentioned in §1.7.2, the author has the impression that Papuans typically work in the agriculture sector while non-Papuans are more often found in the income generating commerce and transporta-

[^25]tion sectors. This, in turn, gives non-Papuans better access to formal education, as they are in a better position to pay tuition fees.

### 1.7.4 Religious affiliations

West Papua is predominantly Christian. For most Papuans their Christian faith is a significant part of their Papuan identity. It distinguishes them from the Muslim Indonesians who have come from Java, Madura, and Lombok and settled in West Papua, as a result of Indonesia's transmigration program (see Footnote 40 in §1.7.2, p. 40).
Papua province has $2,810,008$ inhabitants, including 2,150,376 Papuans and 659,632 non-Papuans. Almost all Papuans are Christians $(2,139,208=99.48 \%)$, while only 10,759 are Muslims ( $0.05 \%$ ); the remaining $0.02 \%$ has other religious affiliations. Of the 659,632 non-Papuans, two thirds are Muslims $(439,337=66.60 \%)$, while one third are Christians $(216,582=32.83 \%)$; the remaining $0.57 \%$ has other religious affiliations. ${ }^{44}$

Papua Barat province has 760,422 inhabitants, including 405,074 Papuans and 355,348 non Papuans. For Papua Barat province, no census data is published by ethnicity and religion. Based on the data given in Bidang Neraca Wilayah dan Analisis Statistik (2011b: 11-14), however, the following picture emerges: most Papuans are Christians (352,171 = $86.94 \%$ ), while 52,903 are Muslims ( $13.06 \%$ ), most of whom live in the Fakfak regency. Of the 355,348 non-Papuans, about two thirds are Muslims $(239,099=67.29 \%)$ and one third are Christians $(110,166=31.00 \%)$; the remaining $1.71 \%$ have other religious affiliations.

### 1.8 History of Papuan Malay

Papuan Malay is a rather young language. It only developed over approximately the last 130 years, unlike other Malay languages in the larger region. As discussed in this section, though, the precise origins of Papuan Malay remain unclear. That is, it is not known exactly which Malay varieties had which amount of influence in which regions of West Papua in the formation of Papuan Malay.

Malay has a long history as a trade language across the Malay Peninsula and the Indonesian archipelago. The language spread to the Moluccas through extensive trading networks. It was already firmly established there before the arrival of the first Europeans in the sixteenth century. (See Adelaar \& Prentice 1996; Collins 1998; Paauw 2009: 42-79.) From the Moluccas, Malay spread to West Papua where it developed into today's Papuan Malay.

The southwestern part of West Papua was under the influence of the island of Seram in the central Moluccas, with trade relationships firmly established from about the fourteenth century, long before the first Europeans arrived. A special lingua franca, called Onin, was used in the context of these trade relations. Onin was "a mixture of Malay and local languages spoken along the coasts of the Bomberai Peninsula" (Goodman 2002: 1). Unfortunately, Goodman (2002) does not discuss the relationship between Onin and

[^26]Malay in more detail. It is noted, though, that today Malay is spoken in Fakfak, the main urban center on the Bomberai Peninsula, as well as in the areas around Sorong and Kaimana. According to Donohue (2003: 2), the Malay spoken in these areas "is essentially a variety of Ambon Malay" (see also Walker 1982).

The Bird's Head and Geelvink Bay, now Cenderawasih Bay, were under the authority of the Sultanate of Tidore. The first mention of Tidore's authority over this part of West Papua dates back to 15 January 1710 and can be found in the Memorie van Overgave 'Memorandum of Transfer' by the outgoing Governor of Ternate Jacob Claaszoon. In summarizing this memorandum, ${ }^{45}$ Haga (1884: 192-195) lists the locations on New Guinea's coast which belonged to Tidore's territory. Included in this list is the west coast of Geelvink Bay, with Haga pointing out that Tidore also claimed authority over Geelvink Bay's south coast. In the second half of the nineteenth century, however, Tidore's authority over Geelvink Bay declined after the Dutch banned Tidore's raiding expeditions to New Guinea on 22 February 1861 (Bosch 1995: 28-29). Roughly 35 years later, in 1895, the outgoing Resident of Ternate, J. van Oldenborgh noted that, due to this ban, Tidore's authority on New Guinea had been reduced to zero as the sultans no longer had the means to enforce their authority in this area (van Oldenborgh 1995: 81). In 1905, the last sultan of Tidore, Johar Mulki (1894-1905), relinquished all rights to western New Guinea to the Dutch (van der Eng 2004; see also Overweel 1995: 138).

Due to Tidorese influence in the eighteenth and nineteenth centuries, the Bird's Head and Geelvink Bay were firmly connected with the wider Moluccan trade network (Seiler 1982: 72; Timmer 2002: 2-3; van Velzen 1995: 314-315; see also Huizinga 1998 on the relations between Tidore and New Guinea's north coast in the nineteenth century). However, scholars disagree on how firmly Malay was established in this area, especially in Geelvink Bay, during these early trading relations.

Rowley (1972: 53), for instance, suggests that the Malay presence along West Papua's western coast may date back to the fourteenth century. Malay influence began with Javanese trading settlements and then continued with trading settlements which were under the control of Seram and Tidore. At that time, the Dutch did not yet show any direct interest in this region. It was the British who, in 1793, established the first European post at Dorey, now Manokwari, which they maintained for two years. During this period Dorey was already under the influence of Tidore and its inhabitants had to pay an annual tribute to the Tidore sultan. Van Velzen (1995: 314-315) also claims that Malay was a regional language of wider communication long before the arrival of the first Europeans is. He refers to Haga's (1885) account of one of the first European visits to the Yapen Waropen area, which took place in 1705. On Yapen Island the crew was able to communicate in Malay with some of the local inhabitants. Given that these inhabitants were ethnically Biak, van Velzen (1995) concludes that it may have been the Biak who first introduced Malay to Geelvink Bay. ${ }^{46}$

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This claim of the long-standing presence of Malay in the Geelvink Bay is not, however, supported by the reports of explorers who visited the Geelvink area in the nineteenth century. These early visits occurred after the Dutch had first shown interest in this region. This was only in 1820, after the British had established their post at Dorey in 1793; this first Dutch interest "was due in part to the fear that other attempts would be made" (Rowley 1972: 53).

For instance, when the French explorer and rear admiral Dumont d'Urville (1833: 606) stayed in Dorey (Manokwari) in September 1827, he noted that the Papuans, who formed the majority of inhabitants in Dorey, hardly knew any Malay; only the upper-class of Dorey spoke Malay more or less fluently. A similar statement about the Papuans' abilities to speak Malay comes from van Hasselt (1936). He reports how the first missionaries to West Papua, the Germans Ottow and Geissler, together with his father van Hasselt and the Dutch researcher Croockewit attempted to learn and study the local language after they had arrived in Geelvink Bay in 1858. The author notes that it was very difficult for them to learn the local language, as the Papuans knew little or no Malay (van Hasselt 1936: 116). Along similar lines, the British naturalist Wallace (1890: 380) relates that, when he came to Dorey in 1858, the local Papuans could not speak any Malay.

Based on these reports, it can be concluded that in the early eighteen hundreds Malay was not yet well established in Geelvink Bay, including the area in and around today's Manokwari. Hence, the author agrees with Seiler (1982: 73), who comes to the conclusion that, in light of accounts such as the one by Dumont d'Urville (1833),
[ $t$ ]here is no reason to assume that Malay was better known at other places along New Guinea's north coast; Manokwari was one of the most visited places in the area and if anything, Malay should have been known to a larger extent there than anywhere else.

The history of Malay along West Papua's north and northeast coast is also disputed among scholars.

Rowley (1972: 56-57) states that "Malay adventurers" went eastwards to the Sepik area "in expeditions for birds of paradise". Even long before the nineteenth century, Malay traders made sporadic visits to the northeastern coasts of New Guinea and the Bismarck Archipelago. Hence, Rowley concludes that Malay influence along West Papua's north and northeast coast began long before the Dutch started taking an interest this area.

The Danish anthropologist Parkinson (1900) came to a similar conclusion after having visited the north coast of today's Papua New Guinea. Based on his acquaintanceship with some Malay-speaking inhabitants, Malay artifacts, and some inherited Malay words, the explorer concludes that Malay seafarers from the East India islands have undertaken trips along the coast of New Guinea "for a long time" (1900: 20-21).

This conclusion is not supported, however, by the observations of other European explorers who visited West Papua's northeast coast in the nineteenth century after the Dutch had annexed the western part of New Guinea in 1828. ${ }^{47}$

[^28]Twenty years after this annexation, in 1848, the Dutch laid formal claim on West Papua's north coast, including Humboldt Bay in the east, now Yos Sudarso Bay with the provincial capital Jayapura (Rowley 1972: 56). In 1850, the Dutch sent a first expedition fleet eastwards to mark their claim; this expedition included Sultanese boats and a number of pirate boats. The fleet did not, however, reach Humboldt Bay, although the Cyclops Mountains were in sight. Two years later, though, the Dutch were able to establish a garrison in Humboldt Bay; the troops were from Ternate. However, it seems that this garrison did not include any Europeans, because, according to Seiler (1982: 74), it was only in the course of the "Etna expedition" in 1858 that the Dutch first reached Humboldt Bay. The report of this expedition states that the Papuans living in Humboldt Bay did not know any Malay and had had no contact with the outside world (Commissie voor Nieuw Guinea et al. 1862: 182-183).

Twenty years later it was still not possible to communicate in Malay with the Papuans of Humboldt Bay. Robidé van der Aa (1879: 127-129), for instance, reported that when the Government commissioner van der Crab visited Humboldt Bay in 1871, his interpreter could not communicate with the local population because of their very poor Malay. The commissioner also noted that outside trading in this area was very limited due to tense relations between the Papuan population and outside traders and due to the wild sea.

Around this time, however, outside trading between the Moluccas and West Papua's northeast coast, including Humboldt Bay and the areas to its east, started to take off. As a result of this increase in outside contacts, knowledge of Malay, especially of the North Moluccan varieties, also started to spread rapidly in this region. Seiler (1982; 1985) gives an overview of these developments, citing government officials, merchants, and missionaries who visited West Papua's northeast coast in the late nineteenth century.

One of them was the Protestant missionary Bink (1894). In 1893, about twenty years after van der Crab's 1871 visit to this area, Bink travelled to Humboldt Bay. In his report he noted the presence of Malay traders from Ternate who were shooting birds of paradise in the area (1894: 325). Another observer is the German geologist Wichmann (1917). In 1903, he travelled to Humboldt Bay and Jautefa Bay, where today's Abepura is located. Wichmann reported the presence of Malay traders who were living on Metu Debi Island in Jautefa Bay (1917: 150). A third observer is van Hasselt (1926). When he visited Jamna Island (located off the northeast coast between Sarmi and Jayapura) in 1911, he noted that several Papuans could already speak Malay, because they had been in regular contact with traders (1926: 134).

Based on the reports of these observers, Seiler (1982: 147) comes to the following conclusion:

It would appear that Malays started regular trading visits to areas east of Geelvink Bay sometime after the middle of the 19th century, at the same time as the Dutch began to explore their long-forgotten colony. This was just prior to the beginning of the German activities in the area. Twenty years or so of contact between the local people and Malays could easily account for the knowledge of Malay on the part of the coastal people.

## 1 Introduction

In the early twentieth century, the use of Malay throughout West Papua increased when the Dutch decided to increase their influence in this area and to enforce the use of Malay in the domains of education, administration, and proselytization. A major resource for these efforts was the Malay-language school system already established in the Moluccas. It provided the Dutch with the personnel necessary for bringing the population and the resources of West Papua under their control (Collins 1998: 64). Therefore West Papua saw a constant influx of Ambon Malay speaking teachers, clerks, police, and preachers during this period (Donohue \& Sawaki 2007: 254-255). This link between West Papua and Ambon was especially close, as until 1947 West Papua was part of the Moluccan administration, which had its capital in Ambon. So Ambon Malay played an important role in the genesis of Papuan Malay, as well as North Moluccan Malay.

After World War II, the Dutch government recruited additional personnel for West Papua from other areas, such as North Sulawesi, Flores, Timor, and the Kei Islands. In addition, fishermen and traders from Sulawesi and, to some extent, from East Nusa Tenggara came to West Papua. (Roosman 1982: 96; Adelaar \& Prentice 1996: 682; Donohue \& Sawaki 2007: 254-255.) At the same time, increasing numbers of Papuans received a primary school education. Furthermore, the Dutch established schools to train Papuans for public services. As a result, more and more Papuans became government officials, teachers, and police officers. During this period, Standard Malay was the official language in public domains, including trade and the religious domain. (Chauvel 2002: 120; Donohue \& Sawaki 2007: 255; see also Adelaar 2001: 234.) Outside the coastal urban centers, however, Malay played only a very limited role. This is evidenced by that fact that along West Papua's north coast Papuan Malay is still "restricted to a coastal fringe, and does not extend inland to any great extent except where agricultural projects were in force" (Donohue \& Sawaki 2007: 255).

After Indonesia annexed West Papua in 1963, Standard Indonesian became the official language of West Papua. It is used in all public domains, including primary school education, the mass media, and the religious domain.

West Papua's Malay, by contrast, is not recognized as a language in its own right vis-à-vis Indonesian (for details on the sociolinguistic profile of Papuan Malay, see §1.5). Only recently has Papuan Malay received attention from linguistics as an independent language (for details see §1.9). Materials in Papuan Malay are equally recent (for details see §1.10).

In speaking about Papuan Malay and its history and genesis one aspect needs to be highlighted, however. As Paauw (2009: 73) points out, there is linguistic evidence that both North Moluccan Malay (on the north and east coasts of the Bird's Head and in parts of Cendrawasih Bay, including the islands of Biak and Numfoor) and Ambon Malay (in the western and southern Bird's Head, the Bomberai peninsula, and in other parts of Cendrawasih Bay, including the island of Yapen) have been influential.

It is still unknown, though, exactly how much influence each variety had in the various regions of West Papua. Overall, however, regional differences in the usage of Papuan Malay across the language area seem to be minor, as discussed in $\S 1.3$.

The developments described in this section show that the history of Papuan Malay is quite distinct from that of other eastern Malay varieties. Other eastern Malay varieties were already well established before the first Europeans arrived in these areas in the sixteenth century. This applies to Ambon and North Moluccan Malay, both of which contributed to Papuan Malay. It also applies to Manado Malay, which apparently developed out of North Moluccan Malay. Likewise, it applies to Kupang Malay. (Paauw 2009: 42-79; see also Adelaar \& Prentice 1996; Collins 1998.) Papuan Malay, by contrast, only developed over the last 130 years or so.

### 1.9 Previous research on Papuan Malay

Until the second half of the twentieth century, the Malay varieties spoken in New Guinea had received almost no attention. Linguists only started taking more notice of the language in the second half of the twentieth century. An overview of these early studies is given in §1.9.1. More recent studies, starting from the early years of the twenty first century, are discussed in §1.9.2. In addition, Papuan Malay has received attention in the context of sociolinguistic and sociohistorical studies (§1.9.3).

### 1.9.1 Early linguistic studies on the Malay varieties of West Papua

Zöller (1891) mentions Malay in his description of the Papua Sprachen 'languages of Papua' (1891: 351-426), as well as in his 300 -item word list of 48 languages of Papua (1891: 443-529); the 48 languages include 29 languages of German New Guinea, and 17 languages of British New Guinea, as well as Malay and Numfor of Netherlands New Guinea (for comparative reasons, the word list also includes Maori and Samoan, besides the 48 languages of Papua).

Likewise, Teutscher (1954) mentions Malay in his article on the languages spoken in New Guinea. As a lingua franca it is used in formal and informal domains. Moreover, for Papuans this Malay has become a tweede moedertaal 'second mother tongue' (1954: 123).

Also available is a Beknopte leergang Maleis voor Nieuw-Guinea 'A concise language course in the Malay variety spoken in New Guinea’ (Bureau Cursussen en Vertalingen 1950).

The Malay of New Guinea is also mentioned by Anceaux \& Veldkamp in their Malay-Dutch-Dani word list (1960) as well as in their penciled New Guinea Malay-Dutch word list (no date).

In addition, Teeuw (1961: 49) states that after 1950 a variety of publications were produced specifically for western New Guinea; they were written in Malay with a "distinctly local colour". At the same time, however, the author notes that there were no publications which discussed the Malay of Netherlands New Guinea or the language policies regarding this Malay variety.

Around the same time, Moeliono (1963) mentions Indonesian in his study of the languages spoken in West Papua. The author refers to the language as a logat bahasa In-
donesia 'speech variety of the Indonesian language' without, however, discussing its features. The author does state, though, that this "dialect" is spoken in the coastal and urban areas of West Papua and used by the Dutch colonial government for letters and announcements. Moreover, it is used as a lingua franca, both in formal and informal domains.

Early linguistic studies on the Malay varieties spoken in West Papua date back to the second half of the twentieth century.

Samaun (1979) highlights some morphological, syntactical, and lexical features where the dialek Indonesia Irian 'Irian Indonesian dialect' of Jayapura differs from Standard Indonesian. While explaining these differences as mere simplifications, the author also notes that due to some of these modifications, this dialek of Indonesian sounds nonIndonesian.

Along similar lines, Suharno (1979; 1981) describes some aspects of Papuan Malay phonology, morphology, lexicon, and grammar in comparison to Standard Indonesian. While referring to Papuan Malay as an Indonesian dialect, the author suggests that this variety of Indonesian is autonomous and deserves more research. The author also maintains that this dialect is a suitable language for development programs. In formal situations, however, the language variety is unacceptable.

Unlike Samaun (1979) and Suharno (1979; 1981), Roosman (1982) does not refer to Papuan Malay as a dialect of Indonesian. Instead, he considers Papuan Malay as a form of Ambon Malay which has "pidgin Malay as its basic stratum" (1982: 1). In his paper, the author presents phonetic inventories of Ambon Malay (Irian Malay), Pidgin Malay, and Indonesian and comments on some of the differences he found.

Another scholar who mentions various features of the Malay spoken in West Papua is Walker (1982). In the context of his study on language use at Namatota, a village located on West Papua's southwest coast, the author discusses some of the similarities which Malay shares with Indonesian and some of the distinctions between both languages.

Ajamiseba (1984) mentions the Malay variety spoken in West Papua in the context of his study on the linguistic diversity found in this part of New Guinea. Referring to this speech variety as "Irian Indonesian", the author compares some of its features to those of other languages spoken in West Papua. This comparison, however, seems to be based on Standard Indonesian rather than on Papuan Malay.

In 1995, van Velzen published his "Some notes on the variety of Malay used in Serui and vicinity" (1995). Similar to previous studies, the author highlights some aspects of Serui Malay in comparison to Standard Indonesian. Based on phonological, morphological, and lexical features, van Velzen (1995: 315) concludes that Serui Malay and the other Malay varieties of West Papua's north coast "are probably more closely related to Tidorese or Ternatan Malay" than to Ambon Malay, as suggested by Roosman (1982). ${ }^{48}$

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### 1.9.2 Recent linguistic descriptions of Papuan Malay

More recently, Papuan Malay has received attention from linguistics as a language in its own right vis-à-vis the other eastern Malay varieties as well as vis-à-vis Indonesian. Three studies give an overview of the most pertinent features of Papuan Malay: Donohue (2003), Paauw (2009), and Scott et al. (2008).

Donohue (2003) discusses various linguistic features of Papuan Malay as spoken in the area around Geelvink Bay. The described features include, among others, phonology, noun phrases, verbal morphosyntax, and clause linkages.

In the context of his typological study of seven eastern Malay varieties, Paauw (2009) compares Papuan Malay with Ambon, Banda, Kupang, Larantuka, Manado, and North Moluccan Malay. ${ }^{49}$ The described features include phonology, lexical categories, word order, clause structure, noun phrases, prepositional phrases, and verb phrases.

Scott et al.'s (2008) study is part of a larger sociolinguistics language survey of the Papuan Malay varieties of West Papua (see §1.9.3). The authors describe different aspects of the lexicon, phonology, morphology, syntax, and discourse of Papuan Malay as spoken in (and around) the urban areas of Fakfak, Jayapura, Manokwari, Merauke, Timika, Serui, and Sorong (see also Figure 1(b) on p. xxvii).

In addition, there are a number of studies which explore specific aspects of Papuan Malay.

One of the investigated features is the personal pronoun system. Donohue \& Sawaki (2007) examine the innovative forms and functions of the pronoun system in Papuan Malay as spoken along West Papua's north coast. In their study on the development of Austronesian first-person pronouns, Donohue \& Smith (1998) explore the loss of the inclusive-exclusive distinction in non-singular personal pronouns in Papuan Malay as spoken in Serui and Merauke, as well as in other nonstandard Malay varieties. Saragih (2012) investigates the use of person reference in everyday language on the social networking service Facebook.

Besides the personal pronoun system, the voice system - that is to say, the lack thereof - has also received attention. Donohue (2007a) investigates the variation in the voice systems of six different Indonesian/Malay varieties, including Papuan Malay as spoken in the areas around Jayapura and Serui (see also Donohue 2005b; 2007b). ${ }^{50}$

In a more recent study on the Melanesian influence on Papuan Malay, Donohue (2011) investigates pronominal agreement, aspect marking, serial verb constructions, and various aspects of clause linkage in Papuan Malay.

In addition to these more in-depth studies on Papuan Malay, initial research has been conducted on a variety of different topics. Burung (2004) examines comparative constructions in Papuan Malay. Burung (2005) discusses three types of textual continuity, namely topic, action, and thematic continuity. Burung \& Sawaki (2007) describe different types of causative constructions. Burung (2008b) presents a brief typological profile

[^30]of Papuan Malay. Burung (2008a) investigates how Papuan Malay expresses the semantic prime FEEL, applying the Natural Semantic Metalanguage (NSM) framework. Lumi (2007) investigates similarities and differences of the plural personal pronouns in Ambon, Manado, and Papuan Malay. Sawaki (2004) discusses serial verb constructions and word order in different clause types, and gives an overview of the pronominal system. Sawaki (2007) investigates how Papuan Malay expresses passive voice. Warami (2005) examines the uses of a number of different lexical items, including selected interjections and conjunctions.

Other materials on Papuan Malay mentioned in the literature but not consulted by the author are the following (listed in alphabetical order): Donohue's (1997) study on contact and change in Papuan Malay as spoken in Merauke, ${ }^{51}$ Hartanti's (2008) analysis of SMS texts in Papuan Malay, Mundhenk's (2002) description of final particles in Papuan Malay, Podungge’s (2000) description of slang in Papuan Malay, Sawaki's (2005) paper on nominal agreement in Papuan Malay, Sawaki's (2005) paper Melayu Papua: Tong Pu Bahasa, and Silzer's $(1978 ; 1979)$ Notes on Irianese Indonesian.

### 1.9.3 Sociolinguistic and sociohistorical studies

To date, sociolinguistic studies on Papuan Malay are scarce.
The earliest one is Walker's (1982) study on language use at Namatota, mentioned in §1.9.2. Examining the different functions Malay and other languages have in this multilingual community, the author highlights the pervasive role of Malay in the community.

A more recent study is the sociolinguistic survey mentioned in $\S 1.3, \S 1.5$, and $\S 1.9 .2$, which the Papuan branch of SIL International carried out in (and around) the coastal urban areas of Fakfak, Jayapura, Manokwari, Merauke, Timika, Serui, and Sorong (Scott et al. 2008). In the context of this study, sociolinguistic and linguistic data was collected to explore how many distinct varieties of Papuan Malay exist and which one(s) of those varieties might be best suited for language development and standardization efforts. (See also Figure 1(b) on p. xxvii.)

Another study on Papuan Malay, mentioned in §1.5, is Besier's (2012) thesis. The author explores the role of Papuan Malay in society in terms of the language policies of the Indonesian government, as well as its role in the independence movement, in formal education, and in the church and mission organizations.

Burung (2008b) discusses the issue of Papuan Malay language awareness and vitality. Unlike Scott et al. (2008: 10-17) (see §1.5), Burung (2008b) suggests that Papuan Malay is increasingly losing domains of use to Standard Indonesian due to the increasing influence of Indonesian throughout West Papua and the lack of language awareness among Papuans. (See also Burung 2009.)

In addition to these sociolinguistic studies, there are also three sociohistorical studies, which need to be mentioned: Adelaar \& Prentice (1996), Gil \& Tadmor (1997), and Paauw

[^31](2005; 2007). These studies propose classifications of Malay in general and of the eastern Malay varieties in particular, including Papuan Malay, from a sociohistorical perspective.

Focusing on the period of European colonialism, Adelaar \& Prentice (1996) identify three distinct sociolects of Malay: (1) "literary Malay", (2) "lingua franca Malay", and (3) "inherited Malay". Within this framework, Papuan Malay is classified as a ("Pidgin Malay Derived") lingua franca or trade language (1996: 675), as already discussed in §1.2.2.

Another, "tentative typology of Malay/Indonesian dialects" is proposed by Gil \& Tadmor (1997). As their primary parameter, the authors propose the "lectal cline", and thus distinguish between acrolectal (that is, Standard Malay/Indonesian) and basilectal (that is, nonstandard) Malay varieties (1997: 1). The basilectal varieties are further divided into varieties with and without native speakers. For the former, a classification according two parameters is proposed: (1) ethnically homogeneous versus ethnically heterogeneous and (2) ethnically Malay versus ethnically non-Malay. According to this typology, Papuan Malay is classified as an "ethnically heterogeneous / non-Malay" variety (1997: 1).

A different approach is taken by Paauw (2005; 2007). Taking into account the diglossic nature of Malay, Paauw distinguishes between "national languages", "inherited varieties", and "contact varieties". Among the latter, Paauw (2007: 2) further differentiates four subtypes, one of them being the eastern Malay "nativized" varieties. Within this framework, Papuan Malay is classified as a "nativized" eastern Malay "contact variety" (2007: 2; see also Paauw 2005: 14).

### 1.10 Available materials in Papuan Malay

At this point, materials in Papuan Malay are still scarce. Most of them seem to come in the form of jokes, or mop 'humor'. These jokes are published in newspapers or posted on dedicated websites, such as MopPapua. Some of them are also published in book form, such as Warami's (2003; 2004) jokes collections. Humor in Papuan Malay also comes in the form of comedy, such as the sketch series Epen ka, cupen toh 'Is it important? It's important enough, indeed!' from Merauke, which is accessible via YouTube. ${ }^{52}$

In 2006, the movie Denias came out, a film in Papuan Malay about a boy from the highlands who wants to go to school. ${ }^{53}$

Other materials in Papuan Malay are only available on the internet, such as:

1. Kamus Bahasa Papua 'Dictionary of the Papuan Language'

- A Papuan Malay - Indonesian dictionary with currently 164 items (last updated on 24 March 2011)
- Online URL: http://kamusiana.com/index.php/index/20.xhtml (accessed 8 January 2016)

[^32]2. Kitong pu bahasa 'Our Language'

- A Christian website in Papuan Malay, Indonesian, and English which includes information about the Papuan Malay language and its history, the books of Jonah and Ruth from the Old Testament and the Easter story from the New Testament of the Bible in PDF format, and Christian texts and songs in audio format.
- Online URL: http://kitongpubahasa.com/en/_5699 (accessed 8 January 2016)

Also, mention needs to be made of a language development program launched by Yayasan Betania Indonesia, a Papuan nongovernmental organization located in Abepura, West Papua. The program's goal is to develop written and audio resources with a focus on Bible translation, seeking to promote and develop the use of the language in the religious domain (L. Harms p.c. 2015).

An online resource providing materials on issues relevant to West Papua is 'West Papua Web' ${ }^{54}$ This resource is hosted by The University of Papua, Cenderawasih University, and the Australian National University. To date, however, the website does not provide materials in Papuan Malay.

### 1.11 Present study

This study primarily deals with the Papuan Malay language as it is spoken in the Sarmi area, which is located about 300 km west of Jayapura. Both towns are located on West Papua's northeast coast. The description of the language is based on 16 hours of recordings of spontaneous conversations between Papuan Malay speakers.

The following sections provide pertinent background information for the study. After discussing some theoretical considerations in §1.11.1, the general setting of the research location Sarmi is presented in $\S 1.11 .2$. The methodological approach and the field work are described in $\S 1.11 .3$. Details on the recorded corpus and the sample of speakers contributing to this corpus are presented in §1.11.4. The procedures for the data transcription and analysis are discussed in $\S 1.11 .5$. Finally, $\S 1.11 .6$ describes the procedures involved in eliciting the word list.

### 1.11.1 Theoretical considerations

Papuan Malay is spoken in a rich linguistic and sociolinguistic environment in the coastal areas of West Papua (see $\S 1.4$ and $\S 1.5$ ). Many Papuans speak two or more languages which they use as deemed appropriate and necessary. That is, depending on the setting of the communicative event, speakers may use one or the other code or switch between them.

[^33]The conversations, recorded in Sarmi in late 2008, reveal some of this linguistic richness. They include conversations in which the interlocutors freely switch between different codes, such as Papuan Malay, Isirawa, and Indonesian. These recordings illustrate how intertwined and close to the speakers' minds the languages that are part of their linguistic repertoire are.

With a few exceptions, however, this description of Papuan Malay does not take into account language contact issues and therefore does not reflect the rich linguistic environment which Papuan Malay is part of. Instead, the description creates an abstraction of Papuan Malay as if it were a linguistic entity spoken in isolation, rather than spoken in the context of a larger, complex linguistic and sociolinguistic reality.
That is, in terms of de Saussure's (1959) distinction between langue and parole, this description of Papuan Malay focuses on the language system as "a collection of necessary conventions" (1959: 9). The rationale for this abstraction is twofold. First, it is needed in order to identify, analyze, illustrate, and discuss pertinent linguistic features which are characteristics of Papuan Malay and which distinguish this speech variety from others, such as other eastern Malay varieties. Second, the abstraction is necessary in order to appreciate the complexity of Papuan Malay as parole; as discussed below, however, the investigation of this complexity is beyond the scope of the present research.

It is pointed out, however, that this abstraction of Papuan Malay as langue is based on natural speech or parole, which represents "the executive side of speaking" (de Saussure 1959: 13, 14). Moreover, Papuan Malay as langue is accessible and recognized by its speakers, although not without some difficulty. Furthermore, in being extracted from a "heterogeneous mass of speech facts", employing de Saussure's (1959: 14) terminology, the examples and texts presented in this book reflect at least part of the larger linguistic reality of the recorded speakers.

Given this focus on langue, the present isolated analysis of Papuan Malay remains incomplete. After having extracted Papuan Malay from its complex (socio)linguistic reality, the next step in presenting an adequate linguistic description of the language needs to focus on Papuan Malay as parole, with its "heterogeneous mass of speech facts" (de Saussure 1959: 14). More specifically, this next step needs to consider the larger linguistic environment and the interactions between the different codes which are at the disposal of the coastal Papuan communities. This step, however, is beyond the scope of this book and is left for future research.

### 1.11.2 Setting of the research location

The research for the present description of Papuan Malay was conducted in Sarmi, the capital of the Sarmi regency (see Figure 1(c) on p. xxvii). In the planning stages of this research, it was suggested to the author that Sarmi would be a good site for collecting Papuan Malay language data, due to its location, which was still remote in late 2008 when the first period of this research was conducted (see also §1.11.3). It was anticipated that Papuan Malay as spoken in Sarmi would show less Indonesian influence than in other coastal urban areas such as Jayapura, Manokwari, or Sorong.

## 1 Introduction

The coastal stretch of West Papua's north coast, where Sarmi is located, is dominated by sandy beaches. The flat hinterland is covered with thick forest and gardens grown by local subsidiary farmers. The town of Sarmi is situated on a peninsula, about 300 km west of Jayapura on West Papua's northeast coast; in 2010, the town had a population of 4,001 inhabitants; the regency's population was 32,971 . ${ }^{55}$

During the first period of this research, in late 2008, it was still difficult to get to Sarmi, as there were no bridges yet across the Biri and Tor rivers, located between Bonggo and Sarmi. Both rivers had to be crossed with small ferries with the result that public transport between Jayapura and Sarmi was limited, time-consuming, and expensive. A cheaper alternative was travel by ship, since the Sarmi harbor allows larger ships to anchor. This was also time-consuming, as the traffic between both cities was limited to about one to two ships per week. There is also a small airport but in 2008 there were no regular flight connections and tickets were too expensive for the local population. Today, there are bridges across the Biri and Tor rivers and public transport between Sarmi and Jayapura is both regular and less time-consuming and expensive than in 2008.

In late 2008, the most western part of the Sarmi regency was not yet accessible by road; the sand/gravel road ended in Martewar, 20 km west of Sarmi town. The villages between Martewar and Webro, that is, Wari, Aruswar, Niwerawar, and Arbais, were accessible by motorbike via the beach during low tide; the villages further west, that is, Waim, Karfasia, Masep, and Subu, were only accessible by boat. Today, the coastal road extends to Webro. The villages further west are still not accessible via road. Travel to the inland villages (Apawer Hulu, Burgena, Kamenawari, Kapeso, Nisro, Siantoa, and Samorkena) is also difficult as there are no proper roads to these remote areas. Some villages located along rivers are accessible by boat. Other villages are at times accessible via dirt road, constructed by logging enterprises. After heavy rains, however, these roads are impassable for most cars and trucks.

Most of the Sarmi regency's Papuan population work as subsistence farmers. Employment in the public sector is highly valued, and those who have adequate education levels try to find work as civil servants in the local government offices, in the health sector, or in the educational domain. However, secondary school education is not widely available. While the larger villages west of Sarmi have primary and junior high schools, there are no senior high schools in these villages. Hence, teenagers from families who have the financial means to pay tuition fees have to come to Sarmi. Here, they usually live with their extended families. This also applies to the author's host family, most of whom are from Webro (see §1.11.3).

Public health services are basic in the regency. There is a small hospital in Sarmi, but its medical services are rather limited. For surgery and the treatment of serious illnesses, the local population has to travel to Jayapura. Financial and postal services are available in Sarmi but not elsewhere in the regency. Communication via cell-phone is also possible in Sarmi and the surrounding villages, but it is limited in the more rural areas. Many villages are still not connected to telecommunication networks, as there are not enough cell sites to cover the entire regency.

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### 1.11.3 Methodological approach and fieldwork

The description of Papuan Malay is based on 16 hours of recordings of spontaneous conversations between Papuan Malay speakers. The corpus includes only a few texts obtained via focused elicitation. The rationale for this methodological approach is discussed below.

The fieldwork was conducted in West Papua in four periods between September 2008 and December 2011. The first period took place in Sarmi from the beginning of September until mid-December 2008. During this time the texts which form the basis for the present study were recorded. The remaining three fieldwork periods took place in Sentani, located about 40 km west of Jayapura, from early October until mid-December 2009, from mid-October until mid-December 2010, and from early September until the end of November 2011. During these periods, the recordings were transcribed, about one third of the texts was translated into English, additional examples were elicited, and grammaticality judgment tests were conducted (see §1.11.5). During the fourth fieldwork in late 2011, the word list was recorded (see $\S 1.11 .6$ ), and a 150 -minute extract of the corpus was transcribed more thoroughly.

During the first fieldwork I lived with a pastor, Kornelius ${ }^{\dagger}$ Merne, his wife Sarlota ${ }^{\dagger}$, and three of their five children. Also living in the house were one of Sarlota's sisters and eight teenagers (three males and five females). The teenagers were part of the extended family and came from the Mernes' home village Webro, located about 30 km west of Sarmi, or nearby villages, which, like Webro, belong to the Pante-Barat district. At that time, the eight teenagers were junior or senior high school students. Furthermore, there was a constant coming and going of guests from villages of the Sarmi regency: relatives, pastoral workers, and/or local officials passing through or staying for several days up to several weeks. Hence, the household included between 14 and about 30 persons. The Mernes, their household members and many guests belonged to the Isirawa language group (Tor-Kwerba language family), to which Webro and the neighboring villages belong. Some guests originated from other language areas, such as the Papuan languages Samarokena, Sentani, and Tor, or the Austronesian languages Biak and Ambon Malay.

At the beginning of my stay with his family, pastor Merne had given me permission to do recordings in his house. Besides recording spontaneous conversations, I had planned to elicit different text genre such as narratives, procedurals, and expositories. This, however, soon proved to be impossible for two reasons, namely the diglossic distribution of Papuan Malay and Indonesian, and the lack of language awareness, discussed in §1.5. As a result of these two factors, it proved de facto impossible for the household members and guests to talk with me in Papuan Malay. They always switched to Indonesian. This made both focused elicitation and language learning difficult. Therefore, after a few unsuccessful attempts to elicit texts, I decided to refrain from further elicitation and to record spontaneous conversations instead. From then on, I always carried a small recording device with internal microphone which I turned on when two or more people were conversing. After a few days the household members were used to my constant recording. I never had the impression that they were trying to avoid being recorded (there were only two situations in which speakers distanced themselves from me in order not to be
recorded). Most of the sixteen hours of text were recorded in this manner, as discussed in more detail in §1.11.4.1. There are a few exceptions, though, which are also discussed in §1.11.4.1.

Given that my hosts and their guests typically switched to Indonesian when talking with me, most of my language learning was by listening to Papuans talking to each other in Papuan Malay, by applying what I observed during these conservations and in the recorded data, and by discussing these observations with those speakers who were interested in talking about language related issues. The procedures involved in transcribing and analyzing the recorded texts are described in §1.11.5.

During the fourth period of fieldwork, from the beginning of September until the end of November 2011, I recorded a 2,458 -item word list (Kluge, Rumaropen \& Aweta 2014). The items were extracted from the transcribed corpus and recorded in isolation to investigate the Papuan Malay phonology at the word level. The consultants from whom the list was recorded were two Papuan Malay speakers, Ben Rumaropen and Lodowik Aweta. The procedures involved in recording this list are described in §1.11.6.

### 1.11.4 Papuan Malay corpus and speaker sample

During the first fieldwork period in late 2008, 220 texts totaling almost 16 hours were recorded. Almost all of them were recorded in Sarmi (217/220 texts); the remaining three were recorded in Webro. The texts were recorded from a sample of about 60 different Papuan Malay speakers. The corpus is described in §1.11.4.1, and the sample of recorded speakers in §1.11.4.2.

### 1.11.4.1 Recorded texts

The basis for the current study is a 16-hour corpus. In all, 220 texts were recorded (see Appendix C). The texts were recorded in the form of WAV files with a Marantz PMD620 using the recorder's internal microphone. Each WAV file was labeled with a record number which includes the date of its recording, a running number for all texts recorded during one day, and a code for the type of text recorded. This is illustrated with the record number 080919-007-CvNP: 080919 stands for "2008, September 19"; 007 stands for "recorded text \#7 of that day"; and CvNP stands for "Personal Narrative (NP) which occurred during a Conversation (Cv)". The same record numbers are used in Toolbox for the transcribed texts (see $\S 1.11 .5 .1$ ) and the examples given in this book (see 'Conventions for examples', p. xxiii).

Most texts are spontaneous conversations which occurred between two or more Papuan speakers ( $157 / 220$ texts $-71.4 \%$ ), as shown in Table 1.15. Details concerning the contents of these conversations are given in Table 1.16. The remaining 63 texts (28.6\%) fall into two groups: conversations with the author (see Table 1.17) and elicited texts (see Table 1.18). (See also Appendix C for a detailed listing of the 220 recorded texts.)

Most of the texts in the corpus are spontaneous conversations between two or more Papuans. While being present during these conversations, I usually did not participate in the talks unless being addressed by one of the interlocutors. The recorded conversations

Table 1.15: Overview of 16 -hour corpus

| Text types |  | Texts |  |  | Hours |  |
| :--- | ---: | ---: | :--- | :--- | :--- | :--- |
|  | Count | $\%$ |  | Count | $\%$ |  |
| Spontaneous conversations | 157 | 71.4 |  | $10: 08: 02$ | 63.4 |  |
| Conversations with the author | 40 | 18.2 |  | $04: 27: 15$ | 27.9 |  |
| Elicited texts | 23 | 10.4 |  | $01: 23: 17$ | 8.7 |  |
| Total | 220 | 100 | $15: 58: 34$ | 100 |  |  |

Table 1.16: Spontaneous conversations ${ }^{a}$

| Contents |  | Texts |  |  | Hours |  |
| :--- | ---: | ---: | :--- | :--- | ---: | :---: |
|  | Count | $\%$ |  | Count | $\%$ |  |
| Casual conversations | 105 | 66.9 |  | $05: 59: 55$ | 59.2 |  |
| Expositories | 14 | 8.9 |  | $00: 59: 48$ | 9.8 |  |
| Hortatories | 5 | 3.2 | $00: 03: 48$ | 0.6 |  |  |
| Narratives (folk stories) | 2 | 1.3 | $00: 39: 45$ | 6.5 |  |  |
| Narratives (personal experiences) | 25 | 15.9 | $01: 05: 17$ | 10.7 |  |  |
| Phone conversations | 5 | 3.2 | $01: 13: 19$ | 12.1 |  |  |
| Procedurals | 1 | 0.6 | $00: 06: 10$ | 1.0 |  |  |
| Total | 157 | 100 | $10: 08: 02$ | 100 |  |  |

${ }^{a}$ As percentages are rounded to one decimal place, they do not always add up to $100 \%$.

Table 1.17: Conversations with the author

| Contents | Texts |  | Hours |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Count | \% | Count | \% |
| Casual conversations | 13 | 32.5 | 01:17:05 | 28.8 |
| Expositories | 17 | 42.5 | 02:10:15 | 48.7 |
| Narratives (personal experiences) | 8 | 20.0 | 00:50:36 | 18.9 |
| Procedurals | 2 | 5.0 | 00:09:19 | 3.5 |
| Total | 40 | 100 | 04:27:15 | 100 |

Table 1.18: Elicited texts

| Contents |  | Texts |  |  | Hours |  |
| :--- | ---: | ---: | :--- | :--- | :--- | :---: |
|  | Count | $\%$ |  | Count | $\%$ |  |
| Jokes | 14 | 60.9 |  | $00: 13: 12$ | 15.8 |  |
| Narratives (personal experiences) | 7 | 30.4 |  | $01: 06: 47$ | 80.2 |  |
| Procedurals | 2 | 8.7 |  | $00: 03: 18$ | 4.0 |  |
| Total | 23 | 100 |  | $01: 23: 17$ | 100 |  |

cover a wide range of text genre and topics. The majority of conversations are casual and about everyday topics related to family life, relations with others, work, education, politics, and religion. Five conversations were conducted over the phone. A substantial number of the recorded conversations are narratives about personal experiences such as journeys or childhood experiences. Included are also 14 expositories, five hortatories, two folk stories, and one brief procedural. ${ }^{56}$ In all, the corpus contains 157 such conversations ( $157 / 220-71.4 \%$ ), accounting for about ten hours of the 16 -hour corpus ( $63.4 \%$ ).

The corpus also includes 40 texts which I recorded when visiting two relatives of the Merne family. Unlike the other family members and guests of the Merne household, two of Sarlota Merne's relatives, a young female pastor and her husband who also lived in Sarmi, had no difficulties talking to me in Papuan Malay. I visited them regularly to chat, elicit personal narratives, and discuss local customs and beliefs. In all, the corpus contains 40 such texts ( $40 / 220-18.2 \%$ ) (see Table 1.17). These texts account for about four and a half hours of the 16 -hour corpus ( $27.9 \%$ ).

The corpus also contains 23 elicited texts ( $23 / 220-10 \%$ ) (see Table 1.18). These texts account for about one and a half hours of the 16 -hour corpus ( $8.7 \%$ ). During the first two weeks of my first fieldwork, I elicited a few texts, as mentioned in §1.11.3. Two were short procedurals which I recorded on a one-to-one basis. Besides, I elicited three personal narratives with the help of Sarlota Merne, who was one of the few who were aware of the language variety I wanted to study and record. She was present during these elicitations and explained that I wanted to record texts in logat Papua 'Papuan speech variety'. She also monitored the speech of the narrators; that is, when they switched to Indonesian, she made them aware of the switch and asked them to continue in logat Рариа. Toward the end of my stay in Sarmi, when I was already well-integrated into the family and somewhat proficient in Papuan Malay, I recorded one narrative in a group situation from one of Sarlota Merne's sisters and another three personal narratives on a one-to-one basis from one of the teenagers living with the Mernes. Also toward the end of this first fieldwork, I recorded 14 jokes which two of the teenagers also living in the house told each other. A sample of texts is presented in Appendix B.

[^35]
### 1.11.4.2 Sample of recorded Papuan Malay speakers

The corpus was recorded from about 60 different speakers. This sample includes 44 speakers personally known to the author. Table 1.19 to Table 1.21 provide more information with respect to their language backgrounds, gender, age groups, and occupations.

The sample also includes a fair number of speakers who visited the Merne household briefly and who took part in the recorded conversations. In transcribing their contributions to the ongoing conversations, their gender and approximate age were noted; additional information on their language backgrounds or occupations is unknown, however.

Table 1.19 presents details with respect to the vernacular languages spoken by the 44 recorded Papuan Malay speakers. Most of them are speakers of Isirawa, a Tor-Kwerba language (38/44-86). The vernacular languages of the remaining six speakers are the Austronesian languages Biak and Ambon Malay, and the Papuan languages Samarokena, Sentani, and Tor.

Table 1.19: The recorded Papuan Malay speakers by vernacular languages

| Vernacular language | Total |
| :--- | ---: |
| Isirawa | 38 |
| Ambon Malay | 1 |
| Biak | 1 |
| Samarokena | 2 |
| Sentani | 1 |
| Tor | 1 |
| Total | 44 |

Table 1.20 gives an overview of the recorded 44 speakers in terms of their gender and age groups. The sample includes 20 males ( $45 \%$ ) and 24 females ( $55 \%$ ). Age wise, the sample is divided into three groups: 19 adults in their thirties or older (19/44-43\%), 20 young adults in their teens or twenties (20/44-45\%), and five children of between about five to 13 years of age.

Table 1.20: The recorded Papuan Malay speakers by gender and age groups

| Age groups | Males | Females | Total |
| :--- | ---: | ---: | ---: |
| Adult (thirties and older) | 10 | 9 | 19 |
| Young adult (teens and twenties) | 6 | 14 | 20 |
| Child (5-13 years) | 4 | 1 | 5 |
| Total | 20 | 24 | 44 |

## 1 Introduction

Table 1.21 provides an overview of the speakers and their occupations. The largest subgroups are pupils ( $13 / 44-30 \%$ ), farmers ( $10 / 44-23 \%$ ), and government or business employees ( $5 / 44-11 \%$ ). Eight of the 13 students were the teenagers living in the Merne household. The two BA students were the Merne's oldest children who were studying in Jayapura and only once in a while came home to Sarmi. In addition to the ten full-time farmers, three of the government employees worked as part-time farmers. Of the total of five children, three were not yet in school; the remaining two were in primary school.

Table 1.21: The recorded Papuan Malay speakers by occupation

| Occupation | Males | Females | Total |
| :--- | :---: | ---: | :---: |
| Farmer | $2(+3)$ | 8 | $10(+3)$ |
| Pupil (high school) | 1 | 4 | 5 |
| Pupil (middle school) | 1 | 5 | 6 |
| Pupil (primary school) | 2 | 0 | 2 |
| Employee (government/business) | 5 | 0 | 5 |
| Pastor | 2 | 1 | 3 |
| Child | 2 | 1 | 3 |
| Housewife | 0 | 2 | 2 |
| (ex-)Mayor | 2 | 0 | 2 |
| Student (BA studies) | 1 | 1 | 2 |
| BA graduate | 0 | 1 | 1 |
| Church verger | 1 | 0 | 1 |
| Nurse | 1 | 0 | 1 |
| Teacher | 0 | 1 | 1 |
| Total | 24 | 20 | 44 |

### 1.11.5 Data transcription, analysis, and examples

This section discusses the transcription and analysis of the recorded Papuan Malay texts. In §1.11.5.1, the procedures for transcribing and translating the recorded data are discussed. In §1.11.5.2, the procedures related to the data analysis are described, including grammaticality judgments and focused elicitation.

### 1.11.5.1 Data transcription and translation into English

Two Papuan Malay consultants transcribed the recorded texts during the second fieldwork in late 2009 and the third fieldwork in late 2010. The two consultants were Ben Rumaropen, who was one of my main consultants throughout the entire research project, and Emma Onim.
B. Rumaropen grew up in Abepura, located about 20 km west of Jayapura; his parents are from Biak. In 2004, B. Rumaropen graduated with a BA in English from Cenderawasih University in Jayapura. From 2002 until 2008, he worked with the SIL Papua survey team. During this time he was one of the researchers involved in the mentioned 2007 sociolinguistics survey of Papuan Malay (Scott et al. 2008). E. Onim grew up in Jayapura; her parents are from Wamena. In 2010, E. Onim graduated with a BA in finance from Cenderawasih University in Jayapura. Since then, she has been the finance manager of a local NGO.

The two consultants transcribed the texts in Microsoft Word, listening to the recordings with Speech Analyzer, a computer program for acoustic analysis of speech sound, developed by SIL International. ${ }^{57}$ B. Rumaropen transcribed 121 texts, and E. Onim 99 texts; each text was transcribed in a separate Word file. Using Indonesian orthography, both consultants transcribed the data as literally as possible, including hesitation markers, false starts, truncation, speech mistakes, and nonverbal vocalizations, such as laughter or coughing. Once a recording had been transcribed, I checked the transcription by listening to the recording. Transcribed passages which did not match with the recordings were double-checked with the consultants. After having checked the transcribed texts is this manner, I imported the Word files into Toolbox, a data management and analysis tool developed by SIL International. ${ }^{58}$ In Toolbox, I interlinearized the 220 texts into English and Indonesian and compiled a basic dictionary. Each text was imported into a separate Toolbox record, receiving the same record number as its respective WAV file (for details see §1.11.4.1).

During the second fieldwork in late 2009, B. Rumaropen and I translated 83 of the 220 texts into English, which accounts for a good five hours of the 16-hour corpus. The translated texts also contain explanations and additional comments which B. Rumaropen provided during the translation process. Appendix B presents 12 of these texts.

During the fourth fieldwork period in late 2011, B. Rumaropen transcribed a $150-\mathrm{min}-$ ute extract of the corpus more thoroughly, that is, close to phonetically. In addition to the wordlist (§1.11.6), this extract also aided in the analysis of the Papuan Malay phonology.

The entire text material, including the recordings and the Toolbox files are archived with SIL International. Due to privacy considerations, however, they are not publically available. The examples in this book are taken from the entire corpus; that is, examples taken from the 137 texts which have not yet been translated were translated as needed. In the examples, proper names are substituted with aliases to guard anonymity.

### 1.11.5.2 Data analysis, grammaticality judgments, and focused elicitation

In early 2010, after B. Rumaropen had transcribed a substantial number of texts and we had translated the mentioned 83 texts, I started with the analysis of the Papuan Malay corpus. This analysis was greatly facilitated by the Toolbox concordance tool, in which all occurrences of a word, phrase, or construction can be retrieved. The retrieved data

[^36]was imported into Word for further sorting and analysis. Another helpful feature was the Toolbox export command, which allows different fields to be chosen for export into Word, such as the text, morpheme, or speech part fields.

During the analysis, I compiled a list of questions about analytical issues and comprehension problems encountered in the corpus. During the third and fourth fieldwork periods in late 2010 and late 2011, I worked through these questions with Papuan Malay consultants. Most of this work was done with B. Rumaropen. I also consulted informally with other Papuan Malay speakers on various occasions.

During both fieldwork periods in 2010 and 2011, I also worked with B. Rumaropen on grammaticality judgments. That is, based on the analysis of the corpus data, I constructed sentences which I submitted to B. Rumaropen to comment upon. When I found gaps in the data, I discussed them with B. Rumaropen to establish whether a given expression or construction exists in Papuan Malay, and I asked him to provide some example sentences. Beyond these fieldwork periods, B. Rumaropen and I stayed in contact via email and Skype and continued working on grammaticality judgments and the elicitation of example sentences, as needed.

The elicited examples and the constructed sentences for grammaticality judgments were entered into a separate Toolbox database file. Where used in this grammar, these examples are explicitly labeled as "elicited". All other examples are taken from the Papuan Malay corpus. Throughout this book all generic statements, both positive and negative, are based on the occurrences in the corpus, unless stated otherwise.

### 1.11.6 Word list

During the fourth fieldwork period in late 2011, I recorded a 2,458-item word list with two Papuan Malay consultants, namely B. Rumaropen and Lodowik Aweta. Originally from Webro, L. Aweta was one of the young people living in the Mernes' household during my first fieldwork in 2008. In 2011, L. Aweta was a student at Cenderawasih University.

The word list was extracted from the compiled Toolbox dictionary. During the elicitation, B. Rumaropen provided the stimulus, while L. Aweta repeated the stimulus within one of two different frame sentences.

The frame sentences, which are given in (15) and (16), were used alternatively and served two purposes. First, I anticipated that by repeating the target word within a larger sentence, L. Aweta would potentially be less influenced by B. Rumaropen's pronunciation. This precaution was taken in case that the pronunciations of the two consultants differed, with one being from Sentani and the other one from Sarmi. Second, eliciting the target word as part of a larger sentence allowed me to analyze how some of the word-final segments were pronounced when they occurred in sentence final position and when they were followed by another word. This proved especially helpful in analyzing the realizations of the plosives and the rhotic when occurring in the word-final coda position (see §2.1.1.1, §2.3.1.2, and §2.3.1.3 in Chapter 2).

Frame sentences for word list elicitation
(15) sa blum taw ko pu kata itu, kata $\qquad$
1sG not.yet know 2sG poss word D.DIST word $\qquad$
'I don't yet know that word of yours, the word $\qquad$
(16) ko pu kata ___ itu, sa blum taw 2sG poss word ___ D.DIST 1sG not.yet know
'that word ___ of yours, I don't yet know (it)'
B. Rumaropen recorded each elicited word in a separate WAV file, using Speech Analyzer. Subsequently, I transcribed the recorded target words as separate records in Toolbox. Each record includes the orthographic representation of the target word, its phonetic transcription, English gloss, and the word class it belongs to. The word list is found in Appendix A. The sound files and the Toolbox database file are found in Kluge, Rumaropen \& Aweta (2014).

After having entered the target words in Toolbox, I analyzed the lexical data with Phonology Assistant. This analysis tool, developed by SIL International, creates consonant and vowel inventory charts and assists in the phonological analysis. ${ }^{59}$

The description of the Papuan Malay phonology in Chapter 2 is based on a word list of 1,117 lexical roots, extracted from the 2,458-item list. In addition, 380 items, historically derived by (unproductive) affixation of Malay roots, are investigated. The corpus also includes a large number of loanwords, originating from different donor languages, such as Arabic, Chinese, Dutch, English, Persian, Portuguese, or Sanskrit. Hence, a sizeable percentage of the attested lexical items are loanwords. So far, 719 items of the 2,458-item word list ( $29 \%$ ) have been identified as loanwords, using the following sources: Jones (2007) and Tadmor (2009b) (on borrowing in Malay in general see also Blast 2013: 151156). Upon further investigation, some of the 1,117 lexical roots listed as inherited Papuan Malay words may also turn out to be loanwords. In addition, the corpus includes a number of lexical items which are typically used in Standard Indonesian but not in Papuan Malay; examples are Indonesian lesa 'village' and mereka '3pl' (the corresponding Papan Malay words are kampung 'village' and dorang/dong '3PL', respectively). Given that these words are inherited Malay lexical items, they are not treated as loanwords in this book. However, neither are these items included in the word list in Appendix A.

[^37]
## 2 Phonology

Papuan Malay has 18 consonant phonemes and a basic five-vowel system. The consonant system consists of six stops, two affricates, two fricatives, four nasals, two liquids, and two approximants. The vowel system includes two front and two back vowels, and one open central vowel. Papuan Malay shows a clear preference for disyllabic roots and for CV and CVC syllables; the maximal syllable is CCVC. Stress typically falls on the penultimate syllable, although lexical roots with ultimate stress are also attested in the corpus.

The description of Papuan Malay phonology is based on a word list of 1,117 lexical roots plus 380 items, historically derived by (unproductive) affixation of Malay roots. The 1,497 lexemes are extracted from the 2,458-item word list, mentioned in §1.11.6. The native consonant and vowel phoneme inventories are presented in §2.1. The phonological changes that the consonant and vowel segments can undergo are discussed in §2.2. A number of surface phenomena are described in §2.3. The phonotactics of Papuan Malay are investigated in $\S 2.4$, including a discussion of the segment distribution and possible sequences, syllable structures, and stress patterns. As already mentioned in §1.11.6, the corpus also includes a large number of loanwords; so far 719 items of the 2,458-item word list ( $29 \%$ ) have been identified. Papuan Malay has also adopted one loan segment, the voiceless labio-dental fricative /f/, and developed three substitution strategies to realize another non-native segment, the voiceless postalveolar fricative $/ \mathrm{f} /$. The non-native segments and loanwords are discussed in §2.5. Given the rather large percentage of loanwords, this discussion is rather detailed, including a description of the phonological and phonetic processes and the phonotactics attested in loanwords.

This chapter closes with an account of the orthographic conventions used in this grammar in $\S 2.6$ and a summary in $\S 2.7 .^{1}$

### 2.1 Segment inventory

The Papuan Malay consonant system is presented in §2.1.1, and the vowel system in §2.1.2.

[^38]
### 2.1.1 Consonant system

### 2.1.1.1 Consonant inventory

Papuan Malay has 18 consonant phonemes, shown in Table 2.1. The system consists of three pairs of stops, one pair of affricates, four nasals, two fricatives, two liquids, and two approximants.

Table 2.1: Papuan Malay consonant inventory

|  | LAB | ALV | PAL-ALV | PAL | VEL | GLOT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| STOP | p b | t d |  |  | k g |  |
| AFFR |  |  | t $\int$ d3 |  |  |  |
| NAS | m | n |  | n | $\eta$ |  |
| FRIC |  | s |  |  |  | h |
| RHOT |  | r |  |  |  |  |
| LAT-APRX |  | 1 |  |  |  |  |
| APRX |  |  |  | j | w |  |

The 18 phonemes and their realizations are presented in Table 2.2. The rhotic has three allophones; the phonological and phonetic processes involved in their variation are discussed in $\S 2.2 .2$ and $\S 2.3 .1 .3$, respectively. The voiceless stops are typically unreleased in the coda position. However, when occurring in the word-final coda position before a pause, they can be slightly released.

### 2.1.1.2 Contrast between similar consonants

Contrast between similar consonants is presented in minimal or near-minimal pairs in the following tables: in word-initial position in Table 2.3, in root-internal position in Table 2.4 and Table 2.5, and in word-final position in Table 2.6. When (near-)minimal pairs could not be found, another word containing a contrasting consonant is given. Some segments have a restricted distribution; the palatal nasal, for instance, does not occur in the coda position (§2.4.1).

Table 2.2: Papuan Malay stops

| Phoneme |  | Realization |  |
| :---: | :---: | :---: | :---: |
| Stop | /p/ | [p], | a voiceless bilabial stop |
|  |  | [p], | an unreleased voiceless bilabial stop |
|  | /b/ | [b], | a voiced bilabial stop |
|  | /t/ | [t], | a voiceless alveolar stop |
|  |  | [ t ], | an unreleased voiceless alveolar stop |
|  | /d/ | [d], | a voiced alveolar stop |
|  | /k/ | [k], | a voiceless velar stop |
|  |  | [k], | an unreleased voiceless velar stop |
|  | /g/ | [g], | a voiced velar stop |
| Affricate | / $\mathrm{t} / \mathrm{d}$ | [ t ], | a voiceless palato-alveolar affricate |
|  | /d3/ | [d3], | a voiced palato-alveolar affricate |
| Nasal | /m/ | [m], | a voiced bilabial nasal |
|  | /n/ | [ n ], | a voiced alveolar nasal |
|  | /n/ | [n], | a voiced palatal nasal |
|  | /n/ | [ n ], | a voiced velar nasal |
| Fricative | /s/ | [s], | a voiceless alveolar fricative |
|  | /h/ | [h], | a voiceless glottal fricative |
| Liquid | /r/ | [r], | a voiced alveolar trill |
|  |  | [r], | a voiceless alveolar trill |
|  |  | [r], | a voiced alveolar tap |
|  | /1/ | [1], | a voiced alveolar lateral |
| Approximant | /j/ | [j], | a voiced palatal approximant |
|  | /w/ | [w], | a voiced labio-velar approximant |

Table 2.3: Consonant contrast in word-initial position

| Contrast |  | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{p} \sim \mathrm{b} \sim \mathrm{m}$ |  | ['pu.lu] | pulu | 'tens' |
|  |  | ['bu.lu] | bulu | 'body hair' |
|  |  | ['mu.lot'] | mulut | 'mouth' |
| $\mathrm{t} \sim \mathrm{d} \sim \mathrm{n}$ | $t \sim d$ | ['top $]$ | tong | '1PL' |
|  |  | ['don ] | dong | '3PL' |
|  | $\mathrm{t} \sim \mathrm{n}$ | ['ti.ker] | tikar | 'plaited mat' |
|  |  | ['ni.ka] | nika | 'marry officially' |
|  | $\mathrm{d} \sim \mathrm{n}$ | ['de.ket] | dekat | 'near' |
|  |  | ['nc.ket'] | nekat | 'be determined' |
| $\mathrm{k} \sim \mathrm{g}$ |  | ['ka.ja] | kaya | 'like' |
|  |  | ['ga.ja] | gaya | 'manner' |
| tf $\sim 3 \sim t / d$ | tf d3 | ['fu.cey] | curang | 'be dishonest' |
|  |  | ['dзu.rey] | jurang | 'steep decline' |
|  | t $\sim$ t | ['fem.por] | campur | 'mix' |
|  |  | ['tem.per] | tampar | 'beat' |
|  | d $\sim^{\sim}$ d | ['dya.ri] | jari | 'digit' |
|  |  | ['da.ri] | dari | 'from' |
| $\mathrm{s} \sim \mathrm{h}$ |  | ['sen.tey] | santang | 'coconut milk' |
|  |  | ['hen.tem] | hantam | 'strike' |
| $\mathrm{m} \sim \mathrm{n} \sim \mathfrak{n}$ | $\mathrm{m} \sim \mathrm{n}$ | ['ma.si] | masi | 'still' |
|  |  | ['na.si] | nasi | 'cooked rice' |
|  | $\mathrm{m} \sim \wedge$ | ['me.mey] | memang | 'indeed' |
|  |  | ['na.mey] | nyamang | 'be comfortable' |
|  | $\mathrm{n} \sim \mathrm{n}$ | ['na.kel] | nakal | 'be mischievous' |
|  |  | ['na.wa] | nyawa | 'soul' |
| 1~r |  | ['ra.wey] | rawang | 'be haunted' |
|  |  | ['la.wey] | lawang | 'oppose' |
| $\mathrm{j} \sim \mathrm{n}$ |  | ['jey] | yang | 'rel' |
|  |  | ['na.wa] | nyawa | 'soul' |
| j~w |  | ['jey] | yang | 'rel' |
|  |  | ['wa.rvy] | warung | 'food stall' |

Table 2.4: Consonant contrast in root-internal position

| Contrast |  | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{p} \sim \mathrm{b} \sim \mathrm{m}$ | $\mathrm{p} \sim \mathrm{b}$ | ['ke.prn] | kepung | 'surround' |
|  |  | ['ke.bry] | kebung | 'garden' |
|  | $\mathrm{p} \sim \mathrm{m}$ | ['ra.pi] | rapi | 'be neat' |
|  |  | ['ra.me] | rame | 'be bustling' |
|  | $\mathrm{b} \sim \mathrm{m}$ | ['su.bor] | subur | 'be fertile' |
|  |  | ['su.mor] | sumur | '(a) well' |
| $\mathrm{t} \sim \mathrm{d} \sim \mathrm{n}$ | $t \sim \sim$ | ['hi.tor] | hitung | 'count' |
|  |  | ['hi.drı] | hidung | 'nose' |
|  | $t \sim n$ | ['bu.tu] | butu | 'need' |
|  |  | ['bu.nu] | bunu | 'kill' |
|  | $\mathrm{d} \sim \mathrm{n}$ | ['a.d ] | ade | 'younger sibling' |
|  |  | ['a.n¢] | ane | 'be strange' |
| $\mathrm{k} \sim \mathrm{g} \sim \mathrm{y}$ |  | ['la.ki] | laki | 'husband' |
|  |  | ['la.gi] | lagi | 'again' |
|  |  | ['la.ytt] | langit | 'sky' |
| tf $\sim 3 \sim t / d$ | f $\sim \mathrm{d}_{3}$ | ['ben.fi] | banci | 'homosexual male' |
|  |  | ['ben.d3ir] | banjir | 'flood' |
|  | t $\sim$ t | ['fa.tfet] | cacat | 'be disabled' |
|  |  | ['ta.tet] | catat | 'make a note' |
|  | d $3 \sim d$ | ['ton.d3vk] | tunjuk | 'show' |
|  |  | ['tən.dvk] | tunduk | 'bow' |
| $s \sim h$ |  | ['pa.ssr] | pasir | 'sand' |
|  |  | ['pa.hrt] | pahit | 'be bitter' |
| $\mathrm{m} \sim \mathrm{n} \sim \mathrm{n} \sim \mathrm{y}$ | $\mathrm{m} \sim \mathrm{n}$ | ['me.mey] | memang | 'indeed' |
|  |  | [me.'ney] | menang | 'win' |
|  | $\mathrm{m} \sim \mathrm{n}$ | ['ta.mu] | tamu | 'guest' |
|  |  | ['ta.na] | tanya | 'ask' |
|  | $\mathrm{m} \sim \mathrm{\eta}$ | ['la.mer] | lamar | 'apply for' |
|  |  | ['la.per] | langar | 'collide with' |
|  | $\mathrm{n} \sim \mathrm{n} \sim \mathfrak{y}$ | ['ta.nem] | tanam | 'plant' |
|  |  | ['ta.na] | tanya | 'ask' |
|  |  | ['ta.yey] | tangang | 'hand' |

Table 2.5: Consonant contrast in root-internal position continued

| Contrast | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: |
| $1 \sim \mathrm{r}$ | ['bu.lu] | bulu | 'body hair' |
|  | ['bu.ru] | buru | 'hunt' |
| $\mathrm{j} \sim \mathrm{n}$ | ['a.jem] | ayam | 'chicken' |
|  | ['a.nem] | anyam | 'plait' |
| j~w | ['la.jey] | layang | 'serve' |
|  | ['la.wey] | lawang | 'oppose' |
| w~y | ['ba.wer] | bawang | 'onion' |
|  | ['ba.ysy] | bangung | 'wake up' |

Table 2.6: Consonant contrast in word-final position

| Contrast |  | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| STOP~NASAL | $\mathrm{p} \sim \mathrm{m}$ | ['a.sep'] | asap | 'smoke' |
|  |  | ['a.sem] | asam | 'sour' |
|  | $t \sim \eta$ | ['bu.et] | buat | 'make' |
|  |  | ['bu.ey] | buang | 'discard' |
|  | $\mathrm{k} \sim \mathrm{y}$ | ['dza.rek] | jarak | 'distance between' |
|  |  | ['dza.rey] | jarang | 'rarely' |
| $1 \sim r$ |  | ['men.dvl] | mandul | 'be sterile' |
|  |  | ['mən.dør] | mundur | 'smoke' |
| j~W |  | ['trj] | tay | 'excrement' |
|  |  | ['tew] | taw | 'know' |

### 2.1.2 Vowel system

### 2.1.2.1 Vowel inventory

The Papuan Malay vowel inventory, presented in Table 2.7, consists of two front and two back vowels, and one open central vowel.

Three of the five vowels have three allophones each: /i/ can be realized as [i], [r], or $[\mathrm{e}], / \mathrm{u} /$ as $[\mathrm{u}],[\tau]$, or $[\mathrm{o}]$, and $/ \varepsilon /$ as $[\varepsilon]$, $[\varepsilon]$, or [ $\overline{\mathrm{c}}$ ]. The remaining two vowels have two allophones each: / $\mathrm{o} / \mathrm{can}$ be realized as [ $\mathrm{\rho}$ ] or [จ], and /a/ as [a] or [e]. ${ }^{2}$ While the centralized allophones for the two close vowels $/ \mathbf{i} /$ and $/ \mathrm{u} /$ and for the open vowel $/ \mathrm{a} /$ are represented with distinct entries in the IPA chart, this is not the case for the open-mid vowels $/ \varepsilon /$ and $/ \rho /$. In terms of their degree of openness, their centralized allophones

[^39]Table 2.7: Papuan Malay vowel inventory

|  | FRONT | CENTRAL | BACK |
| :--- | :--- | :--- | :--- |
| CLOSE | i |  | u |
| OPEN-MID | $\varepsilon$ |  | $\jmath$ |
| OPEN |  | a |  |

$[\varepsilon]$ and [ p ] are distinctly lower than their non-centralized allophones [ $\varepsilon$ ] and [ 9 ]. They are higher, however, than the respective open-near vowels $/ æ /$ and $/ \mathrm{p} /$ found in other languages, as described in the "IPA chart" (The International Phonetic Association 2005; see also SIL International 1996-2008). Hence, as they lie in-between the open-mid and open-near vowels, these two allophones are represented as [ $\overline{\%}$ ] and [ $\rightleftharpoons$ ]. Figure 2.1 presents the vowel space for the five vowels and their allophones. ${ }^{3}$


Figure 2.1: Vowel space for the Papuan Malay vowels
The phonological processes involved in the allophonic variation of the Papuan Malay vowels are discussed in §2.2.3.

### 2.1.2.2 Contrast between the vowel segments

Contrast between the five vowel segments in disyllabic lexical items is presented in minimal or near-minimal pairs in the following tables: in open stressed penultimate syllables in Table 2.8, in closed stressed penultimate syllables in Table 2.9, and in open unstressed ultimate syllables in Table 2.10. When minimal or near-minimal pairs could not be found, another word containing a contrasting vowel segment is given.

[^40]Table 2.8: Vowel contrast in open stressed penultimate syllables

| Contrast | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: |
| $\mathrm{i} \sim \varepsilon$ | ['i.kvt'] | ikut | 'follow' |
|  | ['c.kor] | ekor | 'tail' |
| i~a | ['i.jın] | inging | 'wish' |
|  | ['a.jı] | anging | 'wind' |
| $\mathrm{i} \sim \mathrm{u}$ | ['I.fis] | iris | 'cut' |
|  | ['ช.fus] | urus | 'arrange' |
| $\mathrm{i} \sim 3$ | ['i.tu] | itu | 'D.DIST' |
|  | ['o.tot'] | otot | 'muscle' |
| $\varepsilon \sim \mathrm{a}$ | ['ع.d3¢̦k] | ejek | 'mock' |
|  | ['a.d3ek] | ajak | 'invite' |
| $\varepsilon \sim u$ | ['c.kor] | ekor | 'tail' |
|  | ['u.kชr] | ukur | 'measure' |
| $\varepsilon \sim 3$ | ['ع.d3¢ָk'] | ejek | 'mock' |
|  | ['o.d3¢̦k'] | ojek | 'motorbike taxi' |
| $\mathrm{a} \sim \mathrm{u}$ | ['a.ra] | ara | 'direction' |
|  | ['u.cet'] | urat | ‘vein' |
| $\mathrm{u} \sim \mathrm{J}$ | ['u.dzon] | ujung | 'end' |
|  | ['0.d3çk'] | ojek | 'motorbike taxi' |

Table 2.9: Vowel contrast in closed stressed penultimate syllables

| Contrast | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: |
| i~u | ['mın.ta] | minta | 'request' |
|  | ['mon.ta] | munta | 'vomit' |
| i $\sim \varepsilon$ | ['trm.ber] | timbang | 'weigh' |
|  | ['ț̇m.bek] | tembak | 'shoot' |
| i~a | ['trm.ba] | timba | 'fetch' |
|  | ['tem.ba] | tamba | 'add' |
| i~0 | ['tm.ket] | tingkat | 'level' |
|  | ['tor. ket '] | tongkat | 'cane' |
| $\varepsilon \sim \mathrm{a}$ | ['se̦n.tu] | sentu | 'touch' |
|  | ['sen.te] | sante | 'relax' |
| $\varepsilon \sim u$ | ['ţ̇m.bek] | tembak | 'shoot' |
|  | ['tom.bsk] | tumbuk | 'pound' |
| $\varepsilon \sim 0$ | ['bẹp.kọk] | bengkok | 'be crooked' |
|  | ['bọn.kopk] | bongkok | 'be bent over' |
| $\mathrm{a} \sim \mathrm{u}$ | ['ben.tu] | bantu | 'help' |
|  | ['bsn.tu] | buntu | 'be blocked' |
| a~ | ['sem.bwn] | sambung | 'continue' |
|  | ['somm.bo̦y] | sombong | 'be arrogant' |
| u~ | ['sum.bey] | sumbang | 'donate' |
|  | ['som.bory] | sombong | 'be arrogant' |

Table 2.10: Vowel contrast in open unstressed syllables

| Contrast | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: |
| i $\sim \varepsilon$ | ['pi.li] | pili | 'choose' |
|  | ['pe.lc] | pele | 'cover' |
| i~a | ['ka.li] | kali | 'river' |
|  | ['ka.la] | kala | 'be defeated' |
| i~u | ['la.gi] | lagi | 'again' |
|  | ['la.gu] | lagu | 'song' |
| i~ | ['ba.bi] | babi | 'pig' |
|  | ['bo.bo] | bobo | 'palm liquor' |
| $\varepsilon \sim u$ | ['pa.ke] | pake | 'use' |
|  | ['pa.ku] | paku | 'nail' |
| \&~ | ['ga.lı̧] | gale | 'dig up' |
|  | ['ga.rs] | garo | 'scratch' |
| $\mathrm{a} \sim \mathrm{u}$ | ['bi.sa] | bisa | 'be able' |
|  | ['bi.su] | bisu | 'mute' |
| u~ | ['tu.bu] | tubu | 'body' |
|  | ['to.bo] | tobo | 'dive' |

### 2.2 Phonological processes

In Papuan Malay, two phonological processes are attested for the consonants and one for the vowels: nasal place assimilation (§2.2.1), tap/trill alternation of the alveolar rhotic (§2.2.2), and centralization of vowels (§2.2.3).

### 2.2.1 Nasal place assimilation

Nasal place assimilation applies to nasals as coda in the domain of the prosodic word. While all four nasals occur in the onset position (although velar $/ \mathrm{y} /$ only occurs in the word-internal onset position), only two nasals occur as coda, namely bilabial $/ \mathrm{m} /$ and velar $/ \mathrm{y} /$, as shown in Table 2.11. The velar nasal as a coda assimilates in place of articulation to a following stop or affricate. When preceding the alveolar fricative, the nasal is always realized as velar [ g ], as in bongso 'youngest offspring' or langsung 'immediately'. These patterns agree with Padgett's (1994: 489) cross-linguistic findings that nasals either do "not assimilate in place to fricatives" or that such assimilation is, at least, "highly disfavored, while assimilation to stops and affricates is pervasive". (See also de Lacy 2006: 146-147; Zsiga 2006: 554; Blust 2012.) An exception to these patterns of nasal assimilation is the prefix $P E(N)$ - ' $\mathrm{AG}^{\prime}$ ' (§3.1.4). When preceding the alveolar fricative $/ \mathrm{s} /$, the nasal is not realized as alveolar [ n ] but as palatal [ n ], as in penyakit [ p n n -sakıt] 'disease', with $/ \mathrm{s} /$ being deleted (see also Blust 2012; for the allomorphy of $\operatorname{PE}(\mathrm{N})$ - see §3.1.4.1).

Cross-linguistically, the preservation of the bilabial nasal is not unusual, as de Lacy (2006: 78-207) points out. It is due to the fact, that on the "Place of Articulation" hierarchy, the labial nasal is more marked than the dental or velar ones (de Lacy 2006: 129). Such marked elements "can be specifically targeted for preservation. Consequently, highly marked elements can survive a process that less-marked elements undergo" (de Lacy 2006: 146). ${ }^{4}$

Table 2.11: Nasal place assimilation in the word-internal coda position

| Phoneme | Realization | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| /m/ | [m] | ['sim.pen] | simpang | 'store' |
|  |  | [kęm.'ba.li] | kembali | 'return' |
| /n/ | [n] | ['min.ta] | minta | 'ask' |
|  |  | ['men.di] | mandi | 'bathe' |
|  |  | ['hen.tfor] | hancur | 'be shattered' |
|  |  | ['m.dyek] | injak | 'step on' |
|  | [y] | ['ey.ket] | angkat | 'lift' |
|  |  | ['tıj.gi] | tinggi | 'be tall' |
|  |  | ['bopy. $\mathrm{son}^{\text {O}}$ ] | bongso | 'youngest offspring' |
|  |  | ['ley.svy] | langsung | 'immediately' |

Nasal place assimilation also occurs across word boundaries, when the nasal is in the word-final coda position, as shown in Table 2.12. While bilabial $/ \mathrm{m} /$ is preserved, velar $/ \mathrm{y} /$ assimilates in place of articulation to a following stop or affricate, similar to the processes illustrated in Table 2.11. When preceding a fricative-initial or vowel-initial word, or when occurring before a pause or at the end of an utterance, by contrast, the velar nasal is most commonly realized as velar [ y ]. In Table 2.12, this is illustrated with minum 'drink', biking 'make' and bilang 'say'. Overall, however, assimilation across word boundaries is applied less often than within the prosodic word.

In summary, the data presented in Table 2.11 and Table 2.12 shows that Papuan Malay has only two underlying nasals in the coda position, namely bilabial $/ \mathrm{m} /$ and velar $/ \mathrm{y} /$, with the latter assimilating to a following stop or affricate.

[^41]Table 2.12: Nasal place assimilation in the word-final coda position

| Phoneme | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: |
| /m/ | ['mi.nชm 'bo.bo] | minum bobo | 'drink schnapps' |
|  | ['mi.nvm 'du.lu] | minum dulu | 'drink first' |
|  | [... 'mi.nชm 'ki.'tọy] | ... minum kitong | '(give) us to drink' |
|  | ['mi.nvm 'i.tu] | minum itu | 'drink that' |
|  | ['mi.nऽm, 'ta.pi] | minum, tapi | 'drink, but' |
| /n/ | ['bi.kım 'ba.gvs] | biking bagus | 'make good' |
|  | ['bi.kin 'dr.a] | biking dia | 'make him/her' |
|  | ['bi.kıı 'ko.tor] | biking kotor | 'make dirty' |
|  | ['bi.kı 'sa] | biking sa | 'make me' |
|  | ['bi.kıy 'a.pa] | biking apa | 'make what' |
|  | ['bi.kıy, 'me.mey] | biking, memang | 'make, indeed' |
| /n/ | ['bi.lem 'ba.pa] | bilang bapa | 'tell father' |
|  | ['bi.len 'dr.a] | bilang dia | 'tell him/her' |
|  | ['bi.ley 'ka.ka] | bilang kaka | 'tell older sibling' |
|  | ['bi.len 'sa.ma] | bilang sama | 'say to' |
|  | ['bi.ley 'i.ni] | bilang ini | 'say this' |
|  | ['bi.ley, 'blom] | bilang, blum | 'say, not yet' |

### 2.2.2 Tap/trill alternation of the alveolar rhotic

The rhotic /r/ is most commonly realized as the voiced alveolar trill [r]. In inter-vocalic position, however, the rhotic is realized as the voiced tap [r] as illustrated in (1) and Table 2.13. ${ }^{5}$ In the $\mathrm{C}_{2}$ position in CC clusters, the rhotic is also most commonly realized as the voiced trill [r]. The voiced tap, however, is also quite common in this position.
(1) ta pake ... gareevm srej riffaaa ... dagıt ini saja asar dia 1pl take salt lemongrass red.pepper meat D.prox 1sG smoke 3sG kasi kring di parapara give be.dry at platform
'we used ... salt, lemongrass, red pepper, ... this (pig) meat, I smoked it (and) dried (it) on a platform' [080919-004-NP.0037-0038]

[^42]Table 2.13: Tap/trill alternation of rhotic /r/

| Realization | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: |
| [r] | ['ra.kzs] | rakus | 'be greedy' |
|  | ['kri.jet] | kringat | 'sweat' |
|  | ['mor.ni] | murni | 'be pure' |
|  | ['dzey.krik] | jangkrik | 'cricket' |
| [r] | ['ba.ren] | barang | 'stuff' |
|  | ['g..sç] | goreng | 'fry' |
|  | ['v.rus] | urus | 'arrange' |

### 2.2.3 Centralization of vowels

In closed syllables the five vowels are centralized. Close /i/ is centralized to [r] and /u/
 as illustrated in Table 2.14. In unstressed closed syllables with a coda nasal, open-mid $/ \varepsilon /$ can alternatively be centralized to [ $\partial$ ] rather than to $[\varepsilon]$.

Table 2.14: Vowel centralization in closed syllables

| Phoneme | Realization | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| /i/ | [ I ] | ['tıj.gi] | tinggi | 'be high' |
|  |  | ['a.dıl] | adil | 'be fair' |
| /u/ | [ช] | ['bsu.kzs] | bungkus | 'pack' |
|  |  | ['i.krt] | ikut | 'follow' |
| /ع/ | [¢] | ['ge̦n.dọ $]$ | gendong | 'hold' |
|  |  | ['do.yẹn] | dongeng | 'legend' |
|  | [ə] | [ mm .'pet'] | empat | 'four' |
|  |  | [sam.'bi.len] | sembilang | 'nine' |
| 10/ | [จ] | ['lom.ba] | lomba | 'contest' |
|  |  | ['be.lọk] | belok | 'turn' |
| /a/ | [e] | ['en.d3ry] | anjing | 'dog' |
|  |  | ['bin.ter] | bintang | 'star' |

### 2.3 Phonetic processes

In Papuan Malay, a number of phonetic processes occur in addition to the predictable phonological processes described in §2.2. These surface phenomena involve unpredictable variation. For the consonants, the following phenomena are attested: lenition of the

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stops and the voiced affricates as well as fortition of the voiceless affricate and the palatal approximant (§2.3.1.1), elision of the voiceless stops, the alveolar fricative, the velar nasal, and the liquids (§2.3.1.2), and devoicing of the alveolar rhotic (§2.3.1.3). The vowels can undergo the following phonetic processes: centralization and lowering (§2.3.2.1), nasalization (§2.3.2.2), and lengthening (§2.3.2.3). In addition, this section includes a discussion on alternative realizations of the VC sequences /aj/ and /aw/ (§2.3.3)

### 2.3.1 Phonetic processes for consonants

### 2.3.1.1 Lenition and fortition

Lenition, or weakening, is attested for the stops and affricates and can occur in wordinternal inter-vocalic position, and word-initial position. Fortition, or strengthening, occurs very rarely and is only attested for the voiceless affricate and the palatal approximant as word-initial onset.

Most of the stops and the voiced affricate can also be lenited in word-initial position when following a word with final vowel. In this environment, however, lenition of the voiced affricate occurs less often than lenition of the stops. Inter-vocalically across word-boundaries, the word-initial obstruents are lenited to the same fricatives as wordinternally, as shown in Table 2.16. Also, /p/ can be lenited to [f], and $/ \mathrm{d} /$ and $/ \mathrm{d}_{3} /$ can be lenited to [j]. Word-initial lenition to a fricative is also attested for $/ \mathrm{b} /, \mathrm{d} /$, and $/ \mathrm{k} /$ when following a nasal. In this environment, /d/can also be lenited to [n]. Again, lenition to a fricative is unattested for the voiceless alveolar and palato-alveolar segments. Likewise, lenition in word-initial position is unattested for $/ \mathrm{g} / .^{6}$

Table 2.15: Lenition of stops and affricates in word-internal inter-vocalic position

| Phoneme | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: |
| /p/ | ['ba.фa] | bapa | 'father' |
| /b/ | ['sa. $\beta$ er] | sabar | 'be patient' |
| /d/ | ['su.ða] | suda | 'already' |
| /k/ | ['ma.xey] | makang | 'eat' |
| /g/ | ['ba.yi] | bagi | 'divide' |
| /d3/ | ['sa.ja] | saja | 'just' |
| /t f / | ['pa.je] | pace | 'man' |

Inter-vocalically, the stops and the voiced affricate can be lenited by means of spirantization to fricatives, as illustrated in Table 2.15: /p/ is lenited to $[\phi]$, /b/ to $[\beta]$, /d/ to [ $\gamma]$, $/ \mathrm{k} /$ to $[\mathrm{x}], / \mathrm{g} /$ to $[\mathrm{x}]$, and /d3/ to [j]. This process is unattested, however, for the voiceless

[^43]Table 2.16: Lenition of stops and affricates in word-initial position

| Phoneme | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: |
| /p/ | ['d $\varepsilon$ ¢ ${ }^{\text {u }}$ ] | de pu | 'his (grandson)' |
|  | ['di.a 'fluy.ku] | 3sG Poss dia palungku 3sG punch | 'he punched' |
| /b/ | ['jı 'ßi.ley] | de bilang | 'he/she said' |
|  | ['d3a.rım 'ßo.lq] | 3sG say <br> jaring bole net may | (the) net (is) permitted |
| /d/ | [m'la, $\varepsilon^{\text {' }}$ ¢ $\mathrm{p}^{\text {p }}$ '] | mulay, eh dep <br> start uh 3sG:Poss | '(he) started, uh his' |
|  | ['sa.dza ję.'yey] | saja dengang just with | 'just with' |
|  | ['sprl 'ba.ðen 'ði] | spul badang di wash body at | 'wash (your) body in' |
|  | ['ki.ton 'nu.a] | kitong dua 1pl two | 'we two' |
| /k/ | ['a.dę.'xa.xa] | ade-kaka <br> ySb oSb | 'siblings' |
|  | [dẹ.'ı¢¢ 'xa.xa] | dengang kaka with oSb | 'with (the) older sibling' |
| /d3/ | ['sa pu 'je̦.kett'] | sa pu jeket <br> 1sG poss jacket | 'my jacket' |
|  | [... 'i.tu, 'ja.yen] | ... itu, jangang <br> D.DIST NEG.IMP | 'those (big ones), don't' |

alveolar and palato-alveolar segments. The voiceless affricate / $\mathrm{t} /$ / can be lenited to the palatal approximant [ j ], while lenition of alveolar / $\mathrm{t} / \mathrm{is}$ unattested.

Fortition occurs very rarely and is attested only for the voiceless affricate and the palatal approximant in word-initial position. In the more thoroughly transcribed 150minute extract of the corpus, fortition of $/ \mathrm{t} /$ / is attested once and strengthening of $/ \mathrm{j}$ / twice, as shown in Table 2.17.

### 2.3.1.2 Elision

Elision of a word-final segment is attested for the voiceless stops, the alveolar fricative, the velar nasal, and both liquids, as shown in Table 2.18. Concerning the voiceless stops, elision applies most frequently to $/ \mathrm{k} /$. Elision of $/ \mathrm{t} /$ occurs less frequently and is unattested for $/ \mathrm{p} /$. Word-final $/ \mathrm{s} /$ is much less prone to elision than word-final stops, with the corpus containing only two lexical items with deleted /s/. When the word-final velar
nasal is omitted, it is always realized as nasalization on the preceding vowel. ${ }^{7}$ Elision of the liquids occurs only very rarely. The exception is ambil 'fetch'. Of its 221 tokens, 49 tokens are realized without word-final /l/: ['em.bi] ( 48 tokens) and ['em.be.a] ( 1 token).

### 2.3.1.3 Devoicing

Devoicing applies only to the rhotic trill as word-final coda. In this position, it is most commonly realized as [r]. Before a pause or in utterance-final position, however, the trill can also be devoiced to [r] , as illustrated in (2).
(2) skaren dọn kasi dıa sęntęrr, kasi sçntęr dọn kasi ...
now 3pl give 3sg flashlight give flashlight 3pl give
'now they give him a flashlight, (having) given (him) a flashlight they give (him) ...' [081108-003-JR.0002]

### 2.3.1.4 Palatalization

Palatalization of /s/ is rare. It occurs only in lexical roots with a /si.V/ sequence, if this root has three or more syllables and if the syllable containing /s/ is unstressed. The palatalization of /s/ co-occurs with the elision of the close front vowel $/ \mathrm{i} /$, which reduces the number of syllables by one, as illustrated in Table 2.19. Hence, /si.V/ is realized as $\left[s^{j} \mathrm{~V}\right]$. Attested is one polysyllabic lexical root with a /si.V/ sequence, the high frequency item siapa 'who'. In lexical roots with a /si.V/ sequence in which the syllable containing $/ \mathrm{s} /$ is stressed, palatalization of the fricative is unattested. Attested are the three lexical roots listed in Table 2.19, all of which are disyllabic: sial 'be unfortunate', siang 'midday', and siap 'be ready'.

This lack of assimilation in stressed syllables does, however, also apply to lexical items with more than two syllables, as evidenced by three polysyllabic loanwords, presented in §2.5.2.3. The occurrence of /s/ in a/si.V/ sequence together with the stress pattern of the respective lexical item does not, however, condition the palatalization of the fricative. This is evidenced by the fact that siapa 'who' is realized quite commonly without palatalization: ['sa.pa].

The frequency counts in Table 2.19 are based on the broad transcription of the entire 16 -hour corpus ( $16-\mathrm{H}-\mathrm{C}$ ) and the more thoroughly transcribed 150 -minute extract ( $150-\mathrm{m}-$ c). ${ }^{8}$

[^44]Table 2.17: Fortition of the voiceless affricate and the voiced palatal approximant

| Phoneme | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: |
| / $\mathrm{t} /$ | ['de̦p ' 'tu.fu] | de pu сиси | 'his grandchild' |
| /j / | ['ej 'dzey be.,srr~be.'ser] | 3sG poss grandchild ey yang besar~besar hey REL RDP $\sim$ be.big | 'hey those big ones' |
|  | ['ja] | $\begin{aligned} & \text { yo } \\ & \text { yes } \end{aligned}$ | 'yes ${ }^{\prime}{ }^{\text {a }}$ |

${ }^{a}$ Affirmative yo 'yes' is frequently realized as $y a$ (see §5.4.3).

Table 2.18: Elision of the voiceless stops, the alveolar fricative, the velar nasal, and the liquids in word-final position

| Phoneme | Item | Orthogr. | Gloss |
| :---: | :--- | :--- | :--- |
| $/ \mathrm{t} / \mathrm{l}$ | ['sa.ki] | sakit | 'be sick' |
| /k/ | ['ma.sa] | masak | 'cook' |
| /s/ | ['tru] | trus | 'be continuous' |
| /y/ | ['en.d3ĩ] | anjing | 'dog' |
| /r/ | ['la.pa] | lapar | 'be hungry' |
| /l/ | ['em.bi / 'em.be.a] | ambil | 'fetch' |

Table 2.19: Palatalization of the alveolar fricative in loanwords

| Stress | Orthogr. | Gloss | Realization | Freq. <br> $16-\mathrm{H}-\mathrm{C}$ | Freq. $150-\mathrm{m}-\mathrm{C}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| /si/ unstressed | siapa | 'who' | [si.'a.pa] | 196 | - |
|  |  |  | ['s'a.pa] | --- | 40 |
|  |  |  | ['sa.pa] | 115 | 10 |
| /'si/ stressed | sial | 'be unfortunate' | ['si.el] | 1 | 1 |
|  | siang | 'midday' | ['si.ey] | 55 | 6 |
|  | siap | 'be ready' | ['si.ep'] | 54 | 2 |

### 2.3.2 Phonetic processes for vowels

### 2.3.2.1 Centralization and lowering

In addition to the regular decentralization of the vowels in closed syllables, the data indicates two environments where centralization of vowels occurs on an irregular basis in open syllables: (1) under the influence of central vowel /a/, and (2) under the influence of the corresponding centralized allophone occurring in closed syllables. In addition, the close vowels are very commonly lowered in fast speech.

In open syllables, the close and open-mid vowels are frequently centralized under the influence of the central vowel /a/, similar to the process of centralization in closed syllables (§2.2.3) In unstressed open syllables, open-mid $/ \varepsilon /$ can alternatively be centralized to [ə] rather than to $[\varepsilon]$.

Table 2.20: Vowel centralization under the influence of central vowel/a/

| Phoneme | Realization | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| /i/ | [1] | ['di.a] | dia | '3sG' |
|  |  | ['hr.ley] | hilang | 'be lost' |
| /u/ | [ $\checkmark$ ] | ['lv.es] | luas | 'be vast' |
|  |  | ['br.key] | bukang | 'nEG' |
| /ع/ | [¢] | ['bȩ.ra] | bera | 'defecate' |
|  |  | ['he̦.la] | hela | 'haul' |
|  | [ə] | [ba.'kes] | bekas | 'trace' |
|  |  | [la.'pes] | lepas | 'free' |
| /0/ | [?] | ['ho.sa] | hosa | 'pant' |
|  |  | ['kọ.lem] | kolam | 'big hole' |

In open syllables, the close and open-mid vowels can also be centralized under the influence of the corresponding centralized allophone occurring in a closed syllable, as illustrated in Table 2.21 (see also §2.2.3).

In fast speech, the close vowels $/ \mathrm{i} /$ and $/ \mathrm{u} /$ are very commonly lowered and realized as the close-mid vowels [e] and [o] respectively, as demonstrated in (3) to (6). In (3) the verb kasi 'give' is realized as ['ka.se], and in (4) the verb balik 'turn around' is realized as ['ba.le]. ${ }^{9}$ In (5) the numeral dua 'two' is realized as ['do.a] and in (6) the common noun lubang 'hole' is realized as ['lo.bey]
(3) ... mo bikin papeda mo kase anana maken want 3pl sagu.porridge want give RDP~child eat
'[they said (they) wanted to catch chickens and then] (they) wanted to make sagu porridge to give the children to eat' [081010-001-Cv.0191]

[^45]Table 2.21: Vowel centralization harmony ${ }^{a}$

| Phoneme | Environment | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| /i/ | [r] in open sylb | [pro.'pin.si] | propinsi | 'province' |
|  | preceded by [ IC ] | ['skrıp.si] | skripsi | 'minithesis' |
|  | [ r ] in open sylb | ['mı.cry] | miring | 'be sideways' |
|  | followed by [ IC ] | ['gı.ling] | giling | 'grind' |
| /u/ | [ $\%$ ] in open SYLb | ['bsm.br] | bumbu | 'bamboo' |
|  | preceded by [ $\mathrm{vC}^{\text {c }}$ | ['bun.tr] | buntu | 'be blocked' |
|  | [ $\checkmark$ ] in open SYLB | ['lı.ros] | lurus | 'be straight' |
|  | followed by [ $\checkmark^{\text {C] }}$ | ['tช.r\%ท] | turung | 'descend' |
| / $/$ | $[\varepsilon]$ in open Sylb | [be̦r.'tẹ.mu] | bertemu | 'be friends' |
|  | preceded by [¢¢C] | [.bç.kę.'bən] | berkebung | 'do farming' |
|  | $[\varepsilon ¢]$ in open Sylb | ['غ.pęn] | epeng | 'important' |
|  | followed by [¢¢C] | [me.'lę.sçt ${ }^{\text {che }}$ | meleset | 'miss a target' |
| 10/ | [T] in open sylb | ['borj.sos] | bongso | 'youngest child' |
|  | preceded by [จㄷ. | ['topn.top] | conto | 'example' |
|  | [ T ] in open sylb | ['row.kọk] | rokok | 'cigarette' |
|  | followed by [จ C$]$ | ['kọ.dopk] | kodok | 'frog' |

${ }^{a}$ The following lexemes are loanwords: propinsi 'province' and skripsi 'minithesis'. The following lexemes are historically derived by (unproductive) affixation: bertemu 'be friends', berkebung 'farm', and meleset 'miss a target'.
(4) itu Bор Вор itu, de biasa bale D.DIST Bop Bop d.DIST 3sG be.usual turn.around
'that was Bob, that Bob, he usually (flies) a circle' (Lit. 'turns around')
[081011-010-Cv.0019]
(5) skaren dop doa men.tfin
now 3pl two fish
'now the two of them are fishing' [081109-010-JR.0002]
(6) $d \varepsilon$ massk' lobey tu

3sg enter hole D.DIST
'it (the chicken) went into that hole (in the floor)' [080921-004a-CvNP.0096]

### 2.3.2.2 Nasalization

The five vowels $i, u, \varepsilon$, $\supset$, a can be nasalized and realized as [ĩ, ũ, $\tilde{\varepsilon}, \tilde{\jmath}, \tilde{a}]$, as shown in Table 2.22. This nasalization is a result of the elision of the word-final velar nasal $/ \mathrm{y} /$, discussed in §2.3.1.2.

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Table 2.22: Nasalization of the vowels

| Phoneme | Item | Orthogr. | Gloss |
| :---: | :--- | :--- | :--- |
| $/ \mathrm{i} /$ | ['mn.drĩ] | anjing | 'dog' |
| $/ \mathrm{u} /$ | ['lay.sũ] | langsung | 'immediately' |
| $/ \varepsilon /$ | ['dẽ] | dengang | 'with'a |
| $/ \mathrm{s} /$ | ['dõ] | dong | '3PL' |
| /a/ | ['bilã] | bilang | 'say' |

${ }^{a}$ Comitative dengang 'with' is frequently realized as monosyllabic deng 'with' (see §14.2.1.1).

### 2.3.2.3 Lengthening

Vowel length is not phonemic in Papuan Malay. Very commonly, however, vowel lengthening occurs as a manifestation of emphasis, as in (7) and (8). In (7) the speaker relates how, after a long journey, they finally got to their destination sampeee di pohong 'all the way up to the tree'. In (8), an irritated mother explains to her son for the nth time that their date of departure has beluuum 'not yet' come.
(7) kitong dua turung sampeee di pohong
kitoŋ doa toron sempe:: di poho̦n
1PL two descend reach at tree
'we two came down All the way to the tree' [080917-008-NP.0024]
(8) itu bluuum, tong blum jalang
itu belæ::m tọ blom dzalen
D.DIST not.yet 1PL not.yet walk
'that's NOT YET, we're not going yet' [080921-001-CvNP.0007]

### 2.3.3 Alternative realizations of the VC sequences /aj/ and/aw/

The VC sequences /aj/ and /aw/ have alternative realizations on an irregular basis. They tend to be centralized to [ $\overline{+}]$ ] and [ JW w ], respectively, as shown in Table 2.23, or they can be reduced to the open-mid vowels [ $\varepsilon$ ] and [ D ], respectively, as illustrated in Table 2.24 and Table 2.25.

When /aj/ and /aw/ occur in disyllabic roots, they tend to be centralized to [çj] and [गָw], respectively, in the following environments (see Table 2.23). The VC sequence $/ \mathrm{aj} /$ is centralized to [ $\bar{j} \mathrm{j}]$ when following a liquid, as in serey [sع.'rẹj] 'lemongrass' or laley ['la.le̦j] 'be careless'. ${ }^{10}$ With other onset consonants /aj/ remains unaffected. As for the centralization of /aw/ to [ow w ], the data is less clear. Attested are only three lexical

[^46]Table 2.23: Realization of /aj/ as [غָj] and of /aw/ as [गָw]

| Phoneme | Realization | Item |  | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| /aj/ | [ej] vs. [¢̧] | [tf. 'rcj] | cerey | 'divorce' |
|  |  | ['la.lęj] | laley | 'be careless' |
|  |  | [s¢.'refj] | serey | 'lemongrass' |
|  |  | ['da.mej] | damay | 'peace' |
|  |  | ['tu.pej] | tupay | 'squirrel' |
| /aw/ | [ew] vs. [さָw] | ['hi.dyoww] | hijow | 'green' |
|  |  | ['pi.sow ] | pisow | 'knife' |
|  |  | ['pu.low] | pulow | 'island' |
|  |  | ['hi.rew] | hiraw | 'heed' |
|  |  | ['ki.ffew] | kicaw | 'be naughty' |

items: /aw/ is centralized to [गָw] following the lateral /l/ in pulow ['pu.low] 'island', the affricate /d3/ in hijow ['hi.d3əw] 'green', and the fricative /s/ in pisow ['pi.sow] 'knife'. With other onset consonants/aw/ is not centralized. More data is needed to explore whether centralization in these contexts is indeed unpredictable or whether it constitutes a predictable phonological process. ${ }^{11}$

When /aj/ and /aw/ occur in unstressed CVC syllables of non-monosyllabic roots, they tend to be reduced to open-mid vowels under the influence of the central vowel $/ \mathrm{a} /$; that is, $/ \mathrm{aj} /$ is realized as front $/ \varepsilon /$, and $/ \mathrm{aw} /$ as back $/ \mathrm{o} /$.

The tendency to realize /aj/ as [ $\varepsilon$ ] applies especially to unstressed CVC syllables with an onset stop, as shown in Table 2.24. In this environment, the realization of $/ \mathrm{aj} / \mathrm{as}$ [rj] occurs much less often or not at all. Examples are cape 'be tired' or pake 'use'. The VC sequence typically remains unaffected in the following environments: in unstressed CVC syllables with an initial consonant other than a stop, as in damay 'peace', when preceded by a syllable containing a vowel other than central /a/, as in sungay 'river', or in stressed syllables as in selesay 'finish'.

The tendency to realize /aw/ as [ 0 ] also applies to unstressed syllables with an onset consonant. This consonant, however, does not need to be a stop, as shown in Table 2.25. Examples are dano 'lake' and kaco 'be confused'. ${ }^{12}$ When preceded by a syllable containing a vowel other than central $/ \mathrm{a} /$, the VC sequence typically remains unaffected, and its realization as [ 0 ] is rare. The corpus includes only one lexeme with an alternative [ o ] realization, namely pulow 'island'.
${ }^{11}$ The corpus includes only eight lexical roots containing /aj/ and ten roots with /aw/.
${ }^{12}$ In addition, the corpus also contains three loanwords in which /aw/ is realized as $/ \mathrm{o} /$ :
(1) ato 'or': /'a.to/ (113 tokens) vs. /'a.taw/ (85 tokens)
(2) kalo 'if': /'ka.lo/ (1,028 tokens) vs. /'ka.law/ (230 tokens).
(3) sodara 'sibling': /so.da.ra/ ( 138 tokens) vs. /saw.'da.ra/ ( 14 tokens).

Table 2.24: Realization of /aj/ as [ej] or [ $\mathrm{\varepsilon}$ ]

| [ej] |  | [ $\varepsilon$ ] |  | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Item | Freq. | Item | Freq. |  |  |
| ['fa.pej] | 1 | ['fa.pe] | 23 | cape | 'be tired' |
| --- ${ }^{\text {a }}$ | --- | ['pa.ke] | 213 | pake | 'use' |
| ['sen.tej] | 1 | ['sen.te] | 7 | sante | 'relax' |
| ['da.mej] | 9 | --- | --- | damay | 'peace' |
| [pe.'ga.wej] | 110 | [pe.'ga.we] | 3 | pegaway | 'employee' |
| [.sc.le.'sej] | 154 | -- | --- | selesay | 'finish' |
| ['su.yej] | 6 | --- | --- | sungay | 'river' |
| ['tu.pej] | 1 | --- | --- | tupay | 'squirrel' |

${ }^{a}$ Standard Malay realizes this lexical item orthographically as <pakai> 'use, wear' (Mintz 2002).
Table 2.25: Realization of /aw/ as [ew] or [د]

| [aw] |  | [ $]$ |  | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Item | Freq. | Item | Freq. |  |  |
| ['da.new] | 1 | ['da.nı] | 3 | dano | 'lake' |
| ['ka.ffew] | 2 | ['ka.t5o] | 12 | kaco | 'be confused' |
| ['hi.d3ew] | 1 | --- | --- | hijow | 'be green' |
| ['hi.rew] | 2 | --- | --- | hiraw | 'heed' |
| ['ki.ffew] | 1 | --- | --- | kicaw | 'be naughty' |
| ['pu.lew] | 7 | ['pu.lo] | 5 | pulow | 'island' |
| ['pis.ew] | 5 | --- | --- | pisow | 'knife' |

In monosyllabic words, /aj/ and /aw/ are never realized as $/ \varepsilon /$ and $/ \rho /$, respectively. Examples are tay/taj/ 'excrement' and taw/taw/ 'know'. There is one exception, though, monosyllabic mo 'want'. In the corpus this item is typically realized as / mo/ ( 750 tokens), rather than as /maw/ (212). In the historically affixed lexical items kemawang 'will' and mawnya 'the wanting', however, the root is realized as /maw/, as the syllable containing the root is stressed.

### 2.4 Phonotactics

This section describes how in Papuan Malay segments combine to form syllables, how syllables combine into words, and what the stress patterns of these words are. The distribution and sequences of the consonant phonemes are presented in §2.4.1 and those of the vowel phonemes in section §2.4.2. The syllable structures are described in $\S 2.4 .3$ and the stress patterns in §2.4.4.

For all of the identified segment sequences, as well as for most of the syllable types and stress patterns, the attested lexical items were investigated as to whether they are inherited Malay roots or loanwords, by using the following sources: Jones (2007) and Tadmor (2009b). ${ }^{13}$ For high frequency syllable types and stress patterns, however, not all of the attested entries were checked. Hence, upon further investigation some of these lexical items may turn out to be loanwords.

### 2.4.1 Consonant phoneme distribution and sequences

Table 2.26 provides an overview of the distribution of the consonant phonemes. All consonants occur in the onset position, both word-initially and word-internally, except for the velar nasal $/ \mathrm{y} /$. While it occurs rather commonly in the word-internal onset position, it is unattested as word-initial onset. ${ }^{14}$

The range of consonants occurring as a coda is considerably smaller. The voiceless stops, fricative $/ \mathrm{s} /$, and the four sonorants (liquids and approximants) occur as coda, both word-internally and word-finally. By contrast, the following segments are unattested as coda, both word-internally and word-finally: the voiced stops, the affricates, and the glottal fricative. ${ }^{15}$ As for the nasals, only bilabial $/ \mathrm{m} /$ and velar $/ \mathrm{y} /$ occur as word-internal or word-final codas, with the velar nasal assimilating to a following stop or affricate (§2.2.1).

Table 2.26: Distribution of the consonant phonemes


A restricted sample of consonants can occur in onset CC clusters, as illustrated in Table 2.27. The range of consonants occurring in word-initial clusters is considerably larger than the range of consonants occurring in word-internal clusters.

Cross-linguistically, the creation of consonant clusters tends to be constrained and guided by the "Sonority Sequencing Principle that requires onsets to rise in sonority toward the nucleus" (Kenstowicz 1994: 254): vowels are the most sonorous, followed by glides, liquids, nasals, and obstruents. Following the Sonority Sequencing Principle, $\mathrm{C}_{1}$ "may be added to the onset only if it is less sonorous" than $\mathrm{C}_{2}$ (1994: 255). Hence, CC

[^47]Table 2.27: CC clusters - Examples

clusters are most commonly formed with an obstruent in $\mathrm{C}_{1}$ position and a glide in $\mathrm{C}_{2}$ position. The second most common are liquids or nasals occurring in $\mathrm{C}_{2}$ position, while CC clusters with an obstruent in $\mathrm{C}_{2}$ position are the least common. For the most part, the attested Papuan Malay CC clusters agree with the Sonority Sequencing Principle, as illustrated in Table 2.28: all CC clusters to the right of the double line obey the Sonority Sequencing Principle. Only two clusters are attested that do not agree with this principle. They are found to the left of the double line. Both clusters have alveolar /s/ in $\mathrm{C}_{1}$ position and $/ \mathrm{p} /$ or $/ \mathrm{k} /$ in $\mathrm{C}_{2}$ position.

All CC clusters listed in Table 2.28 occur as word-initial onsets, while some of them are also found as word-internal onsets. In Table 2.28 the latter clusters are underlined. Consonant sequences in the coda position are unattested. The data shows a clear preference for CC clusters with the lateral /l/ in $\mathrm{C}_{2}$ position (29 entries), followed by clusters with rhotic $/ \mathrm{r} /$ in $\mathrm{C}_{2}$ position (18 entries). CC clusters with the velar approximant/w/ (4
entries) or a nasal (3 entries) in $\mathrm{C}_{2}$ position are much less common. Clusters with a stop in $\mathrm{C}_{2}$ position are even less common (2 entries).

Table 2.28: CC clusters - Overview


### 2.4.2 Vowel phoneme distribution and sequences

All five vowels occur in stressed and unstressed, open and closed syllables, as illustrated in Table 2.29.

A restricted set of vowel segments can occur in V.V vowel sequences, as shown in Table 2.30. As far as attested, two examples are given for each V.V sequence. The first has a / (C)V.V/ stress pattern in which the syllable containing $\mathrm{V}_{1}$ is stressed. The second example has a /CV.'V/ stress pattern in which $V_{2}$ is stressed. Of the 51 lexical roots containing V.V sequences, 43 items ( $84 \%$ ) have a /'(C)V.V/ stress pattern, while only eight items ( $16 \%$ ) show a /CV.'V/ stress pattern. The V.V sequences are realized without an inserted glottal stop. ${ }^{16}$

[^48]Table 2.29: Distribution of vowels in stressed and unstressed syllables

| Phoneme | Stressed | pen syıb | Stressed closed sylb |  |
| :---: | :---: | :---: | :---: | :---: |
| /i/ | /'bi.su/ | 'be mute' | /'tim.ba/ | 'fetch' |
| /u/ | /'pu.ti/ | 'be white' | /'mun.ta/ | 'vomit' |
| $\mid \varepsilon /$ | /'me.ra/ | 'be red' | /'sen.tu/ | 'touch' |
| /0/ | /'go.de/ | 'be fat' | /'lom.ba/ | 'contest' |
| /a/ | /'ra.d3u/ | 'pout' | /'gay.gu/ | 'disturb' |
| Phoneme | Unstressed open sylb |  | Unstressed closed sylb |  |
| /i/ | /'ba.bi/ | 'pig' | /'ma.nis/ | 'be sweet' |
| /u/ | /'ka.ju/ | 'wood' | /'ta.kut/ | 'fear' |
| / $/ 1$ | /'ta.pe/ | 'be tired' | /'so.bek/ | 'tear' |
| /0/ | /'ga.ro/ | 'scratch' | /'be.sok/ | 'tomorrow' |
| /a/ | /'bu.ta/ | 'be blind' | /'li.pat/ | 'fold' |

Table 2.30: V.V sequences - Examples

| ${ }_{\mathrm{V} 1} \cdot \mathrm{~V}_{2}$ | Stress | Item | Gloss | Freq. |
| :---: | :---: | :---: | :---: | :---: |
| /i.u/ | /'Ci.u/ | /'ffi.um/ | 'kiss' | 2 |
| /i.a/ | /'Ci.a/ | /'di.am/ | 'be quiet' | 12 |
|  | /Ci.'a/ | /gi.'a.was/ | 'guava' | 4 |
| /u.a/ | /'u.a/ | /'u.ay/ | 'money' | 1 |
|  | /'Cu.a/ | /'bu.at/ | 'make' | 15 |
|  | /Cu.'a/ | /bu.'a.ja/ | 'crocodile' | 4 |
| /a.i/ | /'a.i/ | /'a.ir/ | 'water' | 1 |
|  | /'Ca.i/ | /'ba.ik/ | 'be good' | 7 |
| /a.u/ | /'Ca.u/ | /'da.un/ | 'leaf' | 5 |

The attested V.V sequences with their frequencies are summarized in Table 2.31. This overview, together with the data presented in Table 2.30, shows that the $V_{1}$ position is typically taken by a close vowel ( $38 / 51$ lexical roots $-74 \%$ ), while the open central vowel (36/51 lexical roots - 71\%) typically takes the $\mathrm{V}_{2}$ position.

Following Parker's (2008: 60) "hierarchy of relative sonority", most of the Papuan Malay V.V sequences are sequences of rising sonority with the open vowel/a/ in $V_{2}$ position having higher sonority than the close vowels /i/ and /u/ in $\mathrm{V}_{1}$ position (36/51 $71 \%$ ). There are two exceptions: first, the two lexical entries with an /i.u/ vowel sequence, with both vowels having the same relative sonority, and second, the 13 lexical roots with an /a.i/ or /a.u/ vowel sequence.

Table 2.31: V.V sequences and frequencies - Overview

| $\mathrm{V}_{1} . \mathrm{V}_{2}$ | i |  | u |  | a |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- | ---: | ---: |
| i | --- | 0 | i.u | 2 | i.a | 16 | 18 |
| u | --- | 0 | --- | 0 | u.a | 20 | 20 |
| a | a.i | 8 | a.u | 5 | --- | 0 | 13 |
| Total |  | 8 |  | 7 |  | 36 | 51 |

The remainder of this section discusses the analysis of the vowel combinations /ai/ and /au/ as the V.V sequences /a.i/ and /a.u/, or rather as the VC sequences /aj/ and /aw/, respectively. When /ai/ and /au/ occur in closed syllables, they are analyzed as the V.V sequences /a.i/ and /a.u/. The actual pronunciations of/ai/ and /au/ do not indicate, however, that they are V.V sequences. Examples are baik /'ba.ik/ 'be good' or laut /'la.ut/ 'sea'. When /ai/ and /au/ occur at syllable boundaries, they are analyzed as the VC sequences /aj/ and /aw/, respectively. Examples are damay /'da.maj/ 'peace' and baw /'baw/ 'smell'. This analysis is based on phonological and prosodic evidence, that is, the distribution of the vowel and consonant phonemes, as well as the syllable structures and stress patterns.

The first piece of evidence to be discussed is the vowel phoneme distribution. The five vowels occur in stressed and unstressed, open and closed syllables, as shown in Table 2.29. If the vowel combinations /ai/ and /au/ were diphthongs, they should occur in the same contexts where the five vowels occur. This, however, is not the case, as demonstrated in Table 2.32. The putative diphthong /ai/ (or centralized [ $\varepsilon$ I]) occurs in stressed and unstressed open syllables. As for closed syllables, however, /ai/ occurs only once in a stressed syllable while it is unattested in unstressed syllables. The distribution of the putative diphthong /au/ is even more restricted. In disyllabic roots, /au/ only occurs in unstressed open syllables. In addition, the corpus contains eight monosyllabic items with /au/: three open monosyllabic items such as ['tar] 'know' and five closed items such as ['dary] 'leaf'. The same distributional patterns apply to loanwords.

Table 2.32: Distribution of the putative diphthongs /ai/ and/au/ in stressed and unstressed syllables

|  | Stressed open sylb |  | Stressed closed sylb |  |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { /ai/ } \\ & / \mathrm{au} / \end{aligned}$ | [ $\mathrm{f} \varepsilon$.' 'гєI] (['tar] | 'divorce' <br> 'know') | [mu.'dzarr] <br> (['dary] | 'tilapiine fish' 'leaf') |
|  | Unstressed open sylb |  | Unstressed closed sylb |  |
| /ai/ | ['tu.par] | 'squirrel' | --- | --- |
| /au/ | ['ki.ffar] | 'be naughty' | --- | --- |

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This constraint against diphthongs in unstressed (and stressed) closed syllables supports the analysis of /ai/ and /au/ as VC combinations or vowel sequences, rather than as diphthongs. Hence, when /ai/ and /au/ occur at syllable boundaries, they are analyzed as VC combinations. Examples are cerey/ffe.'rej/ 'divorce', taw/'taw/ 'know', tupay/'tu.paj/ 'squirrel', and kicaw /'ki.ffaw / 'be naughty'. By contrast, when the second vowel, that is /i/ or / $\mathrm{u} /$, occurs in a closed syllable, /ai/ and /au/ are analyzed as vowel sequences. Examples are mujair /mu.'dza.ir/ 'tilapiine fish', and daung /'da.uy/ 'leaf'.

The second piece of evidence is the distribution of the consonant phonemes (see also §2.4.1). As already mentioned, /ai/ and /au/ are analyzed as the VC sequences /aj/ and /aw/, respectively, when they occur at syllable boundaries. If instead /ai/ and /au/ were analyzed as diphthongs, this would affect the consonant phoneme distribution, since in that case the two approximants $/ \mathrm{j} /$ and $/ \mathrm{w} /$ would only occur in the onset position of a syllable but not in the coda position. This distribution, however, does not agree with that of the other sonorants, given that the liquids and also the nasals, although not all of them, occur in both positions. The analysis of /ai/ and /au/ as $/ \mathrm{aj} / \mathrm{and} / \mathrm{aw} /$ at syllable boundaries fills this gap. Given, however, that coda $/ \mathrm{j} /$ and $/ \mathrm{w} /$ do not freely follow all vowels but only /a/, this could also be taken as evidence that /ai/ and /au/ are better analyzed as diphthongs.

The third piece of evidence has to do with syllable structures and stress patterns. Papuan Malay has a clear preference for disyllabic roots and $\mathrm{CV}(\mathrm{C})$ syllables (see §2.4.3), and stress typically falls on the penultimate syllable (see §2.4.4). The corpus contains 26 lexical roots with an /ai/ or /au/ vowel combination. Of these, 13 are analyzed as VC combinations (eight/aj/ and five/aw/ combinations). The remaining 13 vowel combination are analyzed as vowel sequences (eight/a.i/ and five /a.u/ sequences). These 13 vowel sequences occur in lexical roots with penultimate stress; that is, /a/ belongs to the stressed penultimate syllable, while the close vowel belongs to the unstressed ultimate syllable. If these 13 sequences are analyzed as diphthongs instead, the syllable structure of the respective roots changes and 12 of them become monosyllabic. This increases the number of monosyllabic roots from 44 to 56 , an increase of $27 \%$. Such an increase, however, seems to be disproportionally high given the strong preference for disyllabic roots. With respect to the stress patterns, evidence comes from one lexical root and four (historically) affixed items. In the lexical root mujair /mu.'dza.ir/ 'tilapiine fish' stress falls on the preferred penultimate syllable. If /ai/ is analyzed as a diphthong, stress instead falls on the dispreferred ultimate syllable, [mu.'dzair]. Further, as mentioned above, the actual pronunciation of the /ai/ or /au/ vowel combinations does not suggest that they are V.V sequences. This, however, does not apply to four (historically) affixed items with penultimate stress, presented in Table 2.33. In these items, the penultimate stress audibly breaks up the /ai/ and /au/ vowel combinations with the close vowel receiving stress. This is taken as evidence that in the four respective roots /ai/ and/au/ are V.V sequences rather than diphthongs.

Based on the evidence presented here, it is concluded that the analysis of the /ai/ and /au/ vowel combinations as VC combinations at syllable boundaries and as V.V sequences in closed syllables is the most efficient one. At the same time it is acknowledged, however, that there is evidence supporting the analysis of /ai/ and /au/ as diphthongs.

Table 2．33：Vowel combinations／ai／and／au／in（historically）affixed items

| （Historically） | affixed items | Gloss | Roots |  | Gloss |
| :---: | :---: | :---: | :---: | :---: | :---: |
| kebaikang | ［．ke．ba．＇． l ．key］ | ＇goodness＇ | baik | ／＇ba．ik／ | ＇be good＇ |
| maingang | ［ma．＇i．ney］ | ＇toy＇ | maing | ／＇ma．in／ | ＇play＇ |
| lautang | ［la．＇v．tey］ | ＇ocean＇ | laut | ／＇la．ut／ | ＇sea＇ |
| permaingang | ［．perr．ma．＇ı．⿹勹巳］ | ＇game＇ | maing | ／＇ma．in／ | ＇play＇ |

In the literature on eastern Malay varieties there is also some discussion concerning the question of whether these varieties have diphthongs at all，or whether vowel combi－ nations such as／ai／and／au／are better analyzed as sequences of distinct vowels．For a number of eastern Malay varieties，diphthongs have been posited．For North Moluccan／ Ternate Malay，Litamahuputty（2012：15）posits five diphthongs，／ai／，／ae／，／ao／，／oi／，and ／ei／．In earlier studies on North Moluccan Malay，Voorhoeve（1983：2）suggests five diph－ thongs，／ai／，／ae／，／au／，／ao／，and／oi／，while Taylor（1983：17）adds a sixth diphthong，／ei／． For three other eastern Malay varieties，such vowel combinations have been analyzed as sequences of distinct vowels rather than as diphthongs，that is Ambon Malay（van Minde 1997：24），Larantuka Malay（Paauw 2009：105），and Manado Malay（Stoel 2005： 12）．

## 2．4．3 Syllable structures

In Papuan Malay the minimal syllable and prosodic word consists of a single consonant and a single vowel．The maximal syllable is CCVC．Papuan Malay shows a clear prefer－ ence for disyllabic roots and for $\mathrm{CV}(\mathrm{C})$ syllables．In Table 2.34 to Table 2.37 the possible arrangements of C and V for mono－and polysyllabic roots are presented in more detail． For each type the number of occurrences is given plus one example．The investigation of the syllable structure is based on the 1，117－root word list，extracted from the above－ mentioned 2，458－item list．

Monosyllabic roots，with their different arrangements of C and V ，are presented in Table 2．34．All roots have an onset $\mathrm{C}(\mathrm{C}$ ），while monosyllabic roots with（onset） V are unattested．In addition，the data shows a clear preference for closed syllables：（C）CVC （33／44 entries－ $75 \%$ ）．

Roots with two syllables are the most common ones．The data shows a clear preference for syllables with onset C ，as shown in Table 2．35．The most common roots are CV．CV（C） （615／1，004 entries－ $61 \%$ ）and CVC．CV（C）（222／1，004 entries－ $22 \%$ ），while roots with onset V are rare（86／1，004 entries $-9 \%$ ）．Roots with onset CC clusters are also rare（42／1，004－ $4 \%$ ．

Trisyllabic roots with their possible arrangements of C and V are presented in $\mathrm{Ta}-$ ble 2．36．Again，the data shows a clear preference for syllables with onset C ．The most common roots are CV．CV．CV（C）（40／67 entries $-60 \%$ ）and CVC．CV．CV（C）（ $15 / 67$ entries $-22 \%)$ ．Roots with an onset CC cluster are，with one entry，very rare．

Table 2.34: Monosyllabic roots (44 entries)

| Syllable types | Count | Item | Gloss |
| :--- | ---: | :--- | :--- |
| CV $^{a}$ | 8 | /'ks/ | '2sG' |
| CVC | 13 | /'lur/ | 'spy on' |
| CCV | 3 | /'bli/ | 'buy' |
| CCVC | 20 | /'glap/ | 'dark' |

[^49]Table 2.35: Disyllabic roots (1,004 items)

| Syllable types | Count | Item | Gloss |
| :--- | ---: | :--- | :--- |
| V.VC | 2 | /'a.ir/ | 'water' ${ }^{\prime}$ |
| V.CV | 15 | /'a.pi/ | 'fire' |
| V.CVC | 52 | /'i.kay/ | 'fish' |
| VC.CVC | 17 | /'am.pas/ | 'waste' |
| CV.V | 4 | /'dua/ | 'two' |
| CV.VC | 35 | /'bu.at/ | 'make' |
| CV.CV | 223 | /'ba.bi/ | 'pig' |
| CV.CVC | 392 | /'go.ren/ | 'fry' |
| CV.CCVC | 3 | /'ta.brak/ | 'hit against' |
| CVC.CV | 60 | /'pan.te/ | 'coast' |
| CVC.CVC | 162 | /'tum.buk/ | 'pound' |
| CVC.CCVC | 2 | /'dzan.krik/ | 'cricket' ${ }^{\text {b }}$ |
| CCV.VC | 1 | /'klo.er/ | 'go out'c |
| CCV.CV | 11 | /'bra.ni/ | 'be courageous' |
| CCV.CVC | 14 | /'bla.kay/ | 'backside' |
| CCVC.CV | 5 | /'klam.bu/ | 'mosquito net' |
| CCVC.CVC | 6 | /'glom.bay/ | 'wave' |

[^50]Table 2.36: Trisyllabic roots (67 items) ${ }^{a}$

| Syllable types | Count | Item | Gloss |
| :--- | ---: | :--- | :--- |
| CV.V.CV | 5 | /bu.'a.ja/ | 'crocodile' |
| CV.V.CVC | 2 | /ti.'a.rap/ | 'lie face downward'b |
| CV.CV.VC | 1 | /mu.'dza.ir/ | 'tilapiine fish' |
| CV.CV.CV | 14 | /te.'li.ya/ | 'ear' |
| CV.CV.CVC | 26 | /be.'la.lan/ | 'grasshopper' |
| CV.CVC.CV | 1 | /pa.'luy.ku/ | 'punch' |
| CV.CVC.CVC | 1 | /.ge.men.'tar/ | 'tremble' |
| CV.CCV.CV | 1 | /ka.'swa.ri/ | 'cassowary' |
| CVC.CV.CV | 9 | /sen.'di.ri/ | 'be alone' |
| CVC.CV.CVC | 6 | /tam.'pe.len/ | 'slap on face/ears' |
| CCVC.CV.VC | 1 | /prem.pu.an/ | 'woman' |

${ }^{a}$ Five of the syllable types presented in Table 2.36 are attested only once. However, none of these items are listed as loanwords in Jones (2007). Nor could other literature sources be found that would identify them as loans.
${ }^{b}$ The second item displaying a CV.V.CVC syllable structure is giawas 'guava'.

Quadrisyllabic roots are presented in Table 2.37. With only two entries, they are extremely rare. ${ }^{17}$

Table 2.37: Quadrisyllabic roots (2 items)

| Syllable types | Count | Item | Gloss |
| :--- | ---: | :--- | :--- | :--- |
| V.CV.CV.CV | 1 | /,..la.'ra.ga/ | 'do sports' |
| CV.CV.V.CV | 1 | /.ke.fu.a.li/ | 'except' |

The data presented in Table 2.34 to Table 2.37 shows that Papuan Malay has a clear preference for disyllabic roots. Roots with one or three syllables are considerably less common, while quadrisyllabic roots are rare. Table 2.38 presents a frequency count for the mono- and polysyllabic roots.

The data presented in Table 2.34 to Table 2.37 also indicates that Papuan Malay has a preference for $\mathrm{CV}(\mathrm{C})$ syllables, with the maximal syllable being (C)CVC. With these "modest expansions of the simple CV syllable type", Papuan Malay displays a "moderately complex syllable structure" which is "by far the most common type" cross-linguistically, following Maddieson's (2013: 4) typology of syllable structure.

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Table 2.38: Frequencies of mono- and polysyllabic roots

| Syllable types | Count | $\%$ |
| :--- | ---: | ---: |
| Monosyllabic | 44 | $3.9 \%$ |
| Disyllabic | 1,004 | $89.9 \%$ |
| Trisyllabic | 67 | $6.0 \%$ |
| Quadrisyllabic | 2 | $0.2 \%$ |
| Total | 1,117 | $100.0 \%$ |

In his analysis, Maddieson (2013: 5) also observes an areal overlap and a significant, albeit not strong, correlation between consonant inventories and syllable structure:
...languages with simple canonical syllable structure have an average of 19.1 consonants in their inventory, languages with moderately complex syllable structure have an average of 22.0 consonants, and those with complex syllable structures have an average of 25.8 consonants.

Hence, given its consonant inventory with 18 segments, one would expect Papuan Malay to have a simple rather than a moderately complex canonical structure.

### 2.4.4 Stress patterns

In Papuan Malay, primary stress typically falls on the penultimate syllable of the lexical root, while secondary stress is assigned to the alternating syllable preceding the one carrying the primary stress. These stress patterns apply to lexical roots (§2.4.4.1) as well as to lexical items that are historically derived by (unproductive) affixation (§2.4.4.2).

### 2.4.4.1 Stress patterns for lexical roots

The basic stress patterns for di-, tri-, and quadrisyllabic lexical roots are illustrated in Table 2.39 to Table 2.41. The basis for this investigation forms the above-mentioned word list with 1,117 lexical roots.

Most disyllabic roots have penultimate stress (900/1,004 items - $90 \%$ ), as illustrated in Table 2.39. The remaining 104 items ( $10 \%$ ) have ultimate stress and display the following pattern. In 101 of the 104 roots ( $97 \%$ ), the unstressed penultimate syllable contains the front open-near vowel $/ \varepsilon /$. In the remaining three lexical roots, the unstressed penultimate syllable contains a close vowel (one item with front/i/ and two items with back $/ \mathrm{u} /$ ). ${ }^{18}$ Front open-near $/ \varepsilon /$, however, does not condition ultimate stress, as in 61 of the 900 lexical roots with penultimate stress ( $7 \%$ ) the stressed syllable also contains front $/ \varepsilon / .^{19}$

[^52]Table 2.39: Stress patterns for disyllabic lexical roots (1,004 items)

| Stress | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: |
| P-ULT | /'u.ay/ | uang | 'money' |
|  | /'a.pi/ | api | 'fire' |
|  | /'i.kan/ | ikang | 'fish' |
|  | /'bu.at/ | buat | 'make' |
|  | /'be.bas/ | bebas | 'be free' |
|  | /'go.rey/ | goreng | 'fry' |
|  | /'tum.buk/ | tumbuk | 'pound' |
|  | /'bla.kay/ | blakang | 'backside' |
| ULT | /ع.'nam/ | enam | 'six' |
|  | /عm.'pat/ | empat | 'four' |
|  | /pe.'nu/ | репи | 'be full' |
|  | /ku.'mur/ | kumur | 'rinse mouth' |
|  | /ren.'da/ | renda | 'be low' |
|  | /dz¢m.'pol/ | jempol | 'thumb' |

Table 2.40: Stress patterns for trisyllabic lexical roots (66 items)

| Stress | Item | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: |
| P-ULT | /bu.'a.ja/ | buaya | 'crocodile' |
|  | /ti.'a.rap/ | tiarap | 'lie face downward' |
|  | /mu.'dza.ir/ | mujair | 'tilapiine fish' |
|  | /tz.'li.ja/ | telinga | 'ear' |
|  | /be.la.lay/ | belalang | 'grasshopper' |
|  | /tam.'pe.lıy/ | tampeleng | 'slap on face/ears' |
|  | /prem.'pu.aŋ/ | prempuang | 'woman' |
| ULT | /.pe.le.'pa/ | pelepa | 'palm stem/midrib' |
|  | /,sc.le.'saj/ | selesay | 'finish' |
|  | /.ge.men.tar/ | gementar | 'tremble' |
|  | /.tعŋ.ge.'lam/ | tenggelam | 'sink' |

Table 2.41: Stress patterns for quadrisyllabic lexical roots (2 items)

| Stress | Item | Orthogr. | Gloss |
| :--- | :--- | :--- | :--- |
| P-ult | /, o.la.'ra.ga/ | olaraga | 'do sports' |
|  | 1.ke.ffu.a.li/ | kecuali | 'except' |

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Examples of trisyllabic words with penultimate and ultimate stress are presented in Table 2.40. Most trisyllabic roots have penultimate stress ( $63 / 67$ items $-94 \%$ ) while only four lexical roots ( $6 \%$ ) have ultimate stress. Again, a pattern similar to that for disyllabic roots emerges. In all four roots, the unstressed penultimate syllable contains the front open-near vowel $/ \varepsilon /$. As in disyllabic roots, however, front open-near $/ \varepsilon /$ does not condition ultimate stress, as in four of the 63 lexical roots with penultimate stress ( $6 \%$ ) the stressed syllable contains front $\varepsilon / .^{20}$

In the two attested lexical roots of four syllables, primary stress also falls on the penultimate syllable, as shown in Table 2.41 .

The data presented in Table 2.39 to Table 2.41 demonstrates that Papuan Malay has a clear preference for penultimate stress. Of the 1,073 lexical roots with more than one syllable, 965 roots ( $90 \%$ ) have penultimate stress, as shown in Table 2.42. There are, however, also many lexical roots that deviate from this basic pattern and that have ultimate stress (108/1,073-10\%). As already mentioned, in 105 of the 108 lexical roots with ultimate stress ( $97 \%$ ), the penultimate syllable contains the front open-near vowel $/ \varepsilon /$. Ultimate stress, however, is not conditioned by the front open-near vowel. These findings suggest that while stress in Papuan Malay is not phonemic, it has lexicalized for these items. Minimal pairs are unattested, however.

Table 2.42: Stress patterns for lexical roots - Frequencies

| Syllable types | p-ULT stress | ULT stress | Total |
| :--- | ---: | ---: | ---: |
| Disyllabic | 900 | 104 | 1,004 |
| Trisyllabic | 63 | 4 | 67 |
| Quadrisyllabic | 2 | 0 | 2 |
| Total | 965 | 108 | 1,073 |

### 2.4.4.2 Stress patterns for historically derived lexical items

Lexical items that are historically derived by (unproductive) affixation show the same stress patterns as lexical roots (for details on derivation processes in Papuan Malay see §3.1). These findings are based on a word list with 380 items, extracted from the abovementioned 2,458 -item word list. The basic stress patterns of these items are exemplified in Table 2.43 to Table 2.45; the "Affix" column presents the historical affix.

Stress patterns for disyllabic items are presented in Table 2.43. Most disyllabic items have penultimate stress ( $16 / 21$ items $-76 \%$ ). The remaining five items ( $24 \%$ ) have ultimate stress. In prefixed items in which the prefix is reduced to a consonant and forms a CC cluster with the onset consonant of the lexical root, stress is assigned to the penultimate syllable of the derived lexical item, as in brangkat /'braŋ.kat/ 'leave' or spulu /'spu.lu/

[^53]'ten'. In items with an unreduced prefix, stress remains on the lexical root and thereby on the ultimate syllable, as in bergrak /ber.'grak/ 'move'.

Stress patterns for trisyllabic lexical items are presented in Table 2.44. Almost all of them have penultimate stress (259/272 items - $95 \%$ ). That is, when a disyllabic lexical root is suffixed, the stress moves from the penultimate syllable of the root to its ultimate syllable, as in ikat /'i.kat/ 'tie up' versus ikatang/i.'ka.tay/ 'tie'. The remaining 13 items $(5 \%)$ have ultimate stress, with the antepenultimate syllable carrying secondary stress. The respective roots of the 13 items also carry ultimate stress, as in kebung /ke.'buy/ 'garden' versus berkebung /, ber.ke.'buy/ 'do farming'.

Examples of derived lexical items with four syllables are presented in Table 2.45. All 88 items have penultimate stress, while secondary stress falls on the alternating syllable preceding the one carrying the primary stress. Again, when suffixed, the stress moves to the ultimate syllable of the root, as in dalam /'da.lam/ 'inside' versus pedalamang /.pe.da.'la.may/ 'interior'.

The data presented in Table 2.43 to Table 2.45 shows that the Papuan Malay preference for penultimate stress also applies to lexical items that are historically derived by (unproductive) affixation. The vast majority of the 380 items ( $362-95 \%$ ) have penultimate stress, as shown in Table 2.46. For suffixed items, this stress pattern implies a stress-shift from the penultimate syllable of the root to its ultimate syllable. Only a small number of items deviates from this basic stress pattern and displays ultimate stress (18/380 $5 \%$ ). For 13 of the 18 items, their respective lexical roots also have ultimate stress, while another four have monosyllabic roots; the remaining item has non-compositional semantics (tagait 'be hooked'). ${ }^{21}$

### 2.5 Non-native segments and loanwords

This section describes non-native segments and loanwords attested in the Papuan Malay corpus. So far, 719 items of the 2,458 -item word list ( $29 \%$ ) have been identified as loanwords, originating from different donor languages, such as Arabic, Chinese, Dutch, English, Persian, Portuguese, or Sanskrit. Not included here are inherited Malay words which are typically used in Standard Indonesian but not in Papuan Malay, such as Indonesian desa 'village' or mereka '3pl' (the corresponding Papuan Malay words are kampung 'village' and dorang/dong '3pl', respectively). (See also §1.11.6.)

The non-native segments are presented in §2.5.1, followed in §2.5.2 by a description of the phonological and phonetic processes that native and non-native segments can undergo in loanwords. The phonotactics found in loanwords are investigated in §2.5.3.

### 2.5.1 Non-native segments

In the investigated loanwords, two consonantal segments occur that are not part of the Papuan Malay consonant inventory: the voiceless labio-dental fricative /f/ and the voiceless postalveolar fricative $/ \mathrm{S} /$.

[^54]Table 2.43: Stress patterns for disyllabic affixed lexical items ${ }^{a}$

| Stress | Item | Affix | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| P-ULT | /'bray.kat/ | /br-__/ | brangkat | 'leave' |
|  | /'pla.dzar/ | /pel-__/ | plajar | 'teacher' |
|  | /'spu.lu/ | /se-__/ | spulu | 'ten' |
|  |  | /__-ay/ | grakang | 'movement' |
| ULT | /ber.'grak/ | /ber-_-/ | bergrak | 'move' |
|  | /sc.'blas/ | /se-__/ | seblas | 'eleven' |
|  | /ta.'bla/ | /ta-__/ | tabla | 'be cracked open' |

[^55]Table 2.44: Stress patterns for trisyllabic affixed lexical items

| Stress | Item | Affix | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| P-ULT | /ba.'i.si/ | /ba- | baisi | 'be muscular' |
|  | /pe.'mu.da/ | /pe-__/ | pemuda | 'young person' |
|  | /ke.'du.a/ | $/ \mathrm{k} \varepsilon$ - | kedua | 'second' |
|  | /ta.'go.jay/ | /ta-__/ | tagoyang | 'be shaken' |
|  | /sc.'ti.ap/ | /se-__/ | setiap | 'every' |
|  | /i.'ka.tay/ | /__-ay/ | ikatang | 'tie' |
|  | /mi.'sal.na/ | / __-na/ | misalnya | 'for example' |
| ULT | /.ber.ke.'buy/ | /ber--_/ | berkebung | 'do farming' |
|  | /.ke.sm.pat/ | /ke-__/ | keempat | 'fourth' |
|  | /.me.nc.'bray/ | /me-__/ | menyebrang | 'cross' |
|  | /,ter.le.'pas/ | /t¢r-__/ | terlepas | 'be loose' |

Table 2.45: Stress patterns for quadrisyllabic affixed lexical items

| Stress | Item | Affix | Orthogr. | Gloss |
| :---: | :---: | :---: | :---: | :---: |
| P-ULT | /.pe.da.'la.man/ | /pe-__-ap/ | pedalamang | 'interior' |
|  | /.ke.gi.'a.tan/ | /ke-__-ay/ | kegiatang | 'activity' |
|  | /,ken.da.'ra.ay/ | /__-ay/ | kendaraang | 'vehicle' |
|  | /,se.be.'nar.na/ | /s $\varepsilon$-__-na/ | sebenarnya | 'actually' |

Table 2.46: Stress patterns for historically derived lexical items - Frequencies

| Syllable types | P-ULT stress | ULT stress | Total |
| :--- | ---: | ---: | ---: |
| Disyllabic | 16 | 5 | 21 |
| Trisyllabic | 259 | 13 | 272 |
| Quadrisyllabic | 87 | --- | 87 |
| Total | 362 | 18 | 380 |

The voiceless labio-dental fricative /f/ is attested in 49 loanwords. It occurs as wordinitial and word-internal onset and as word-final coda, as illustrated in Table 2.47.

Table 2.47: Labio-dental fricative /f/

| Position | Item | Orthogr. | Gloss | Donor language |
| :---: | :---: | :---: | :---: | :---: |
| Word-initial onset | ['fa.d3er] | fajar | 'dawn' | Arabic |
|  | ['fo.to] | foto | 'photo' | Dutch |
| Word-internal onset | ['si.fet] | sifat | 'characteristic' | Arabic |
|  | ['trens.fer ${ }^{\text {r }}$ ] | transfer | 'transfer' | English |
| Word-final coda | [ma.'ef] | maaf | 'pardon' | Arabic |
|  | [in.'sçn.tıf] | insentif | 'incentive' | English |

The second non-native segment occurs in loanwords of Arabic origins containing the voiceless postalveolar fricative $/ \mathrm{f} /$. Standard Malay and Standard Indonesian have adopted the fricative into their consonant inventory, realizing it as $/ \delta /<s y>$ as in syurga 'heaven' (Mintz 2002: 13). ${ }^{22}$ Papuan Malay, by contrast, has not adopted the postalveolar fricative. Instead, Papuan Malay speakers employ three different substitution strategies to realize the fricative in loanwords of Arabic origins, some of which may have been borrowed into Papuan Malay via Standard Indonesian. The most common strategy is to

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replace $/ \int /$ with the alveolar fricative [s]. Alternative strategies are to substitute $/ \mathrm{S} /$ with the palatalized alveolar fricative [ $s^{j}$ ], or with the consonant sequence [s.j]. In the same utterance or conversation, speakers may employ more than one strategy.

The three substitution strategies are illustrated in Table 2.48. The item masarakat 'community', for example, is most commonly realized with the alveolar fricative [s]. The items syarat 'condition' and syukur 'thanks to God' are, instead, realized with the palatalized alveolar fricative $\left[s^{j}\right]$. Alternatively, speakers sometimes replace $/ \mathrm{J} /$ with the consonant sequence [s.j], thereby changing the syllable pattern of the target item as in dasyat ['des.jet'] 'terrifying'.

Table 2.48: Strategies to realize the Standard Indonesian postalveolar fricative

| Orthogr. | Gloss | Realization | Freq. | Item in SI |
| :---: | :---: | :---: | :---: | :---: |
| masarakat | 'community' | [,ma.sa.'ra.ket] | 27 | masyarakat |
|  |  | [,ma.s ${ }^{\text {ja.'ra.ket] }}$ | 11 |  |
| asik | 'be passionate' | ['a.sık] | 1 | asyik |
| dasyat | 'terrifying' | ['da. ${ }^{\mathbf{j}}$ ¢tt] | 2 | dasyat |
|  |  | ['des.jet] | 4 |  |
| syarat | 'condition' | ['s ${ }^{\text {j }}$. $\mathrm{cet}{ }^{\text {d }}$ ] | 2 | syarat |
| syukur | 'thanks to God' | [ $s^{\text {j }}$. k kr] | 3 | syukur |

### 2.5.2 Phonological and phonetic processes in loanwords

Overall, the same phonological and phonetic processes apply for loanwords as for inherited Malay roots (see $\S 2.2$ and $\S 2.3$ ). Three processes, however, need to be discussed in more detail: the lack of nasal place assimilation (§2.5.2.1), lenition (§2.5.2.2), and palatalization of the alveolar fricative (§2.5.2.3).

### 2.5.2.1 Lack of nasal place assimilation

In loanwords, a nasal in the word-internal coda position typically obtains its place features from the following segment in the same way as it does in inherited Malay roots (§2.2.1). When preceding the alveolar fricative, the nasal is typically realized as $/ \mathrm{y} /$. Examples are jambu 'rose apple', cinta 'love', or bengkel 'repair shop', and bangsa 'people group' or fungsi 'function'.

In some loanwords, however, the nasal does not undergo assimilation, as illustrated in Table 2.49. Instead, the bilabial or the alveolar nasal is followed by a consonant with different place features as in jumla 'sum' or tanpa 'without'.

### 2.5.2.2 Lenition

Lenition is attested only for the bilabial voiceless stop in two lexical items, namely kopi 'coffee' and pikir 'think'. Inter-vocalically, the bilabial stop in kopi ['ko.pi] 'coffee' can be lenited by means of spirantization to fricative [f] giving ['ko.fi] 'coffee'. When following a lexeme with word-final vowel, the word-initial stop in pikir ['pi.krr] 'think' can be lenited to [f], as in ['sa 'fi.krr] sa pikir 'I think' or ['su.da 'fi.krr] suda pikir 'already thought'. ${ }^{23}$

### 2.5.2.3 Palatalization of the alveolar fricative

Palatalization of the alveolar fricative /s/ occurs in loanwords in an environment identical to that found in inherited Malay roots (§2.3.1.4). That is, palatalization of alveolar /s/ occurs in loanwords with a /si.V/ sequence, if the lexical item consists of three of more syllables and if the syllable containing /s/ is unstressed. Attested are three loanwords with /si.o/ or /si.a/ sequences, presented in Table 2.50. Again, the palatalization of /s/ cooccurs with the elision of close front /i/, which reduces the number of syllables by one. Hence, /si.. / is realized as [ $s^{j}{ }^{\mathrm{j}}$ ] and /si.a/ as [ $\mathrm{s}^{\mathrm{j}} \mathrm{a}$ ]. In loanwords with a /si.a/ sequence in which the syllable containing /s/ is stressed, /s/ is not palatalized, as in manusia 'human being'. ${ }^{24}$

### 2.5.3 Phonotactics in loanwords

This section describes the phonotactics found in loanwords: the consonant distribution and sequences are described in §2.5.3.1, the vowel distribution and sequences in §2.5.3.2, and the syllable structures and stress patterns in §2.5.3.3.

[^57]Table 2.49: Lack of nasal place assimilation in the word-internal coda in loanwords

| Realization | Item | Orthogr. | Gloss | Donor language |
| :---: | :---: | :---: | :---: | :---: |
| [m] | [a'lsm.ni] | alumni | 'alumnus' | Latin |
|  | ['dzrw.la] | jumla | 'sum' | Arabic |
|  | [kon'svm.si] | konsumsi | 'consumption' | Dutch |
| [ n ] | ['tan.pa] | tanpa | 'without' | (uncertain ${ }^{\text {a }}$ ) |
|  | [men.'fa.et'] | manfaat | 'benefit' | Arabic |
|  | [.m.for.'ma.si] | informasi | 'information' | Dutch |

[^58]Table 2.50: Palatalization of the alveolar fricative in loanwords

| Stress | Orthogr. | Gloss | Realization | Freq. |
| :---: | :---: | :---: | :---: | :---: |
| /si/ unstressed | misionaris | 'missionary' | [,mi.si.o.'na.rıs] | 1 |
|  |  |  | [.mi.s ${ }^{\text {j }}$.'na.rıs] | 10 |
|  | nasional | 'national' | [,na.si.o.'nel] | 1 |
|  |  |  | [.na.s ${ }^{\text {j}}$, 'nel] | 2 |
|  | sosial | 'social' | [,so.sı.'el] | 2 |
|  |  |  | [so.'s'el] | 3 |
| /'si/ stressed | manusia <br> rahasia usia | 'human being' | [.ma.nu.'si.a] | 49 |
|  |  | 'secret' | [ra.ha.'sı.a] | 4 |
|  |  | 'age' | [u.'si.a] | 5 |

### 2.5.3.1 Consonant distribution and sequences

The distribution of consonants in loanwords corresponds to their distribution in inherited Malay roots (see §2.4.1). This also applies to the loan fricative /f/, which has the same distribution as the alveolar fricative $/ \mathrm{s} /$ and occurs in all positions.

In loanwords a restricted sample of consonants can occur in consonant clusters, as illustrated in Table 2.51 to Table 2.53. The range of consonants occurring in word-initial consonant clusters is considerably larger than the range of consonants occurring in wordinternal clusters, similar to their distribution in inherited Malay roots.

Table 2.51: Onset CC clusters - Stops in $\mathrm{C}_{1}$ position

| Word-initial position |  |  | Word-internal position |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $/ \mathrm{pC} 2 /$ | /'prak.ttk/ | 'practicum' | /pC2/ | /o.'pra.si/ | 'operation' |
|  | /'plas.tik/ | 'plastic' |  | /'am.plop/ | 'envelop' |
| /bC2/ | /'bri.ta/ | 'news' | $/ \mathrm{bC}_{2} /$ | /'do.brak/ | 'smash' |
|  |  |  |  | /'i.blis/ | 'devil' |
| $\begin{aligned} & / \mathrm{tC}_{2} / \\ & / \mathrm{dC}_{2} / \\ & / \mathrm{kC}_{2} / \end{aligned}$ | /tra.'di.si/ | 'tradition' | $/ \mathrm{tC}_{2} /$ | /ba.'trej/ | 'battery |
|  | /'dram.ben/ | 'marching band' |  |  |  |
|  | /'knal.pot/ | 'muffler' | $/ \mathrm{kC}_{2}$ / | /,re.kre.'a.si/ | 'recreation' |
|  | /kre.'ma.si/ | 'cremation' |  | /bis.'kwit/ | 'cracker' |
|  | /'klas/ | 'class' |  |  |  |
| $/ \mathrm{gC}_{2} /$ | /'kwa/ | 'broth' |  |  |  |
|  | /'gro.bak/ | 'wheelbarrow' | $/ \mathrm{gC}_{2} /$ | /nع.'gri/ | 'state' |
|  | /'glo.d3o/ | 'be greedy' |  |  |  |

The data presented in Table 2.51 to Table 2.53 shows considerable similarities between loanwords and inherited Malay roots in terms of the distribution of consonants in CC
clusters (see Table 2.27). There are, however, also some differences. A number of CC clusters that are found in inherited Malay roots are unattested in loanwords: /tl/, /dl/, /fr/, $/ \mathrm{gn} /$, and /sr/. By contrast, the following onset CC attested in loanwords are unattested in inherited Malay roots: /gr/, /fr/, /st/. In addition, two word-final CC clusters are found in loanwords, /rt/ and /ks/. ${ }^{25}$ Finally, three onset CCC clusters are attested: /spr/, /str/, and /skr/.

[^59]Table 2.52: Onset CC and CCC clusters - Fricatives in $\mathrm{C}_{1}$ position

| Word-initial position |  |  | Word-internal position |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| /fC ${ }_{2}$ / | /'frej/ | 'be blank' |  |  |  |
| $/ \mathrm{sC}_{2}$ / | /'spa.tu/ | 'shoe' | $/ \mathrm{sC}_{2}$ / | /in.'stan.si/ | 'level' |
|  | /'sta.tus/ | 'status' |  |  |  |
|  | /'sko.la/ | 'school' |  |  |  |
|  | /'smen/ | 'cement' |  |  |  |
|  | /'snek/ | 'snack' |  |  |  |
|  | /'sla.mat/ | 'be safe' |  |  |  |
|  | /'swa.mi/ | 'husband' |  |  |  |
|  | /'sprej/ | 'bedsheet' |  |  |  |
|  | /'strap/ | 'punish' |  |  |  |
|  | /'skrip.si/ | 'minithesis' |  |  |  |

Table 2.53: Coda CC clusters

| Word-final position |  |  |
| :--- | :--- | :--- |
| $/ \mathrm{rt} /$ | /'er.port/ | 'airport' |
| /ks/ | /'kom.pleks/ | 'complex' |

Table 2.54 presents an overview of the attested consonant clusters. For the most part, the consonant clusters attested in loanwords agree with Kenstowicz's (1994: 254) Sonority Sequencing Principle (see §2.4.1).

Almost all clusters listed in Table 2.54 occur in word-initial position. The exception is /bl/ which occurs only as word-internal onset. Those clusters that are attested as word-initial and word-internal onset are underlined; /bl/ is also underlined. The two CC clusters in word-final coda position are double-underlined.

Table 2.54: CC and CCC clusters - Overview ${ }^{a}$


[^60]
### 2.5.3.2 Vowel distribution and sequences

The distribution of vowels in loanwords corresponds to that in inherited Malay roots (see §2.4.2). A restricted sample of vowels occurs in V.V vowel sequences, as shown in Table 2.55. Again, for each V.V sequence two examples are given, as far as attested. The first example displays a /'(C)V.V/ stress pattern with the syllable containing $\mathrm{V}_{1}$ being stressed. The second example has a /CV.'V/ stress pattern in which $V_{2}$ is stressed. Of the 56 loanwords with V.V sequences, 36 items ( $56 \%$ ) have a /'CV.V/ stress pattern, while 20 items (44\%) show a /CV.'V/ stress pattern. Again, the V.V sequences are realized without an inserted glottal stop.

Table 2.55: V.V sequences - Examples

| $\mathrm{V}_{1} \cdot \mathrm{~V}_{2}$ | Stress | Item | Gloss | Freq. |
| :---: | :---: | :---: | :---: | :---: |
| /i.u/ | /Ci.'u/ | /,se.ri.'us/ | 'be serious' | 1 |
| /i.s/ | /'Ci.o/ | /'ki.os/ | 'kiosk' | 6 |
|  | /Ci.'د/ | /pri.'o.d / $^{\text {d }}$ | 'period' | 2 |
| /i.a/ | /'Ci.a/ | /tfe.'ri.a/ | 'be cheerful' | 15 |
|  | /Ci.'a/ | /pi.a.ra/ | 'raise' | 8 |
| /u.a/ | /'Cu.a/ | /'smu.a/ | 'all' | 1 |
|  | /Cu.'a/ | /pu.'a.sa/ | 'fast' | 4 |
| /ع.ว/ | /'Сع.o/ | /fi.'d ${ }^{\text {c. }}$ / | 'video' | 2 |
| /ع.a/ | /Cع.'a/ | /re.'ak.si/ | 'reaction' | 2 |
| /o.i/ | /'Co.i/ | /ع.'go.is/ | 'be egoistic' | 1 |
| /o.a/ | /'Co.a/ | /'so.ak/ | 'be weak' | 5 |
|  | /Сл.'a/ | 1,on.do.'a.fi/ | 'traditional chief' | 1 |
| /a.i/ | /'Ca.i/ | /a.d3a.ip/ | 'be miraculous' | 2 |
| /a.u/ | /'Ca.u/ | /'ma.ut/ | 'death' | 1 |
| /a.e/ | /Ca.' ${ }^{\text {/ }}$ | /da.'e.ra/ | 'area' | 1 |
| /a.a/ | /'Сa.a/ | /dze.'ma.at/ | 'congregation' | 3 |
|  | /Ca.'a/ | /ma.af/ | 'pardon' | 1 |

The attested V.V sequences and their frequencies are summarized in Table 2.56. V.V sequences that are attested only once are underlined. Similar to inherited Malay roots, the $V_{1}$ position is most often occupied by a close vowel ( $37 / 56$ items $-66 \%$ ). Open-mid and open vowels, however, are also quite common in this position (19/56 items - $34 \%$ ). The $V_{2}$ position is again most often taken by the open central vowel (40/56 lexical roots - 71\%), although close and open-mid vowels are also permitted in this position (16/56 lexical roots $-29 \%$ ).

Table 2.56: V.V sequences and frequencies - Overview

| $\mathrm{V}_{1} \mathrm{~V}_{2}$ | i |  | u |  |  |  | $\bigcirc$ |  | a |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| i | --- | 0 | i.u | 1 | --- | 0 | i. 0 | 8 | i.a | 23 | 32 |
| u | --- | 0 | --- | 0 | --- | 0 | --- | 0 | u.a | 5 | 5 |
| $\varepsilon$ | --- | 0 | --- | 0 | --- | 0 | ع. 0 | 2 | ع.a | 2 | 4 |
| $\bigcirc$ | n.i | 1 | --- | 0 | --- | 0 | --- | 0 | л.a | 6 | 7 |
| a | a.i | 2 | a.u | 1 | a. $\varepsilon$ | 1 | --- | 0 | a.a | 4 | 8 |
| Total |  | 3 |  | 2 |  | 1 |  | 10 |  | 40 | 56 |

Most of the V.V sequences found in loanwords (44/56-79\%) are sequences of rising sonority, similar to the V.V sequences in inherited Malay roots (see §2.4.2). The remaining twelve vowel sequences include seven V.V sequences of equal sonority (/i.u/, /ع.o/ and /a.a/), and five V.V sequences of falling sonority (/כ.i/, /a.i/, /a.u/, and /a.e/).

### 2.5.3.3 Syllable structure and stress patterns

The syllable types and stress patterns for mono- and polysyllabic loanwords are illustrated in Table 2.57 to Table 2.64. The basis for this investigation is the above-mentioned word list with 719 loanwords.

Monosyllabic loanwords with their different arrangements of C and V are presented in Table 2.57. The data indicates a clear preference for closed syllables with an onset consonant ( $85 / 86-99 \%$ ); only one item contains an onset vowel. The data also shows that monosyllabic loanwords with onset consonant clusters are very common: 32 items ( $37 \%$ ) have a CC cluster and another four items ( $5 \%$ ) have a CCC cluster.

Table 2.57: Monosyllabic loanwords (86 items)

| Syllable types | Count | Item | Gloss |
| :--- | ---: | :--- | :--- |
| VC | 1 | /'om/ | 'uncle' |
| CV | 4 | '/t $/$ | 'tea' |
| CVC | 45 | /'dzin/ | 'genie' |
| CCV | 2 | /'kwa/ | 'broth' |
| CCVC | 30 | /'trek/ | 'truck' |
| CCCVC | 4 | /'strom/ | 'electricity' |

Disyllabic loanwords, with their attested syllable types and stress patterns, are presented in Table 2.58 and Table 2.59. They are, with 422 items, the most common, a preference corresponding to that found for inherited Malay roots. While CV(C) syllables are preferred, the data also shows that consonant clusters are quite common: the corpus includes 59 items ( $14 \%$ ) with an onset CC cluster, three items ( $0.7 \%$ ) with an onset CCC cluster, and four items ( $1 \%$ ) with a coda CC cluster. By contrast, only 42 of the attested 1,004 inherited disyllabic Malay roots ( $4 \%$ ) have an onset CC cluster (§2.4.3).
Most of the disyllabic loanwords have penultimate stress (376/422-89\%), while 46 items have ultimate stress (11\%). This corresponds to the stress patterns observed for inherited disyllabic Malay roots: 104 of the 1,004 roots ( $10 \%$ ) have ultimate stress (§2.4.4.1).

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Table 2.58: Disyllabic loanwords - Ultimate Stress (46 items)

| Syllable types | Count | Item | Gloss |
| :--- | ---: | :--- | :--- |
| V.CV | 1 | /a.'to/ | 'or' |
| V.CVC | 1 | /i.'man/ | 'faith' |
| CV.VC | 1 | /ma.'af/ | 'pardon' |
| CV.CV | 2 | /pe.'ta/ | 'map' |
| CV.CVC | 18 | /mi.'nit/ | 'minute' |
| CV.CCV | 1 | /nc.'gri/ | 'state' |
| CV.CCVC | 2 | /re.'trit/ | 'retreat' |
| CVC.CV | 4 | /pcr.'lu/ | 'need' |
| CVC.CVC | 12 | /kom.'bın/ | 'be inflated' |
| CVC.CCV | 1 | /men.'tri/ | 'cabinet minister' |
| CVC.CCVC | 1 | /bis.'kwit/ | 'cracker' |
| CCV.CVC | 2 | /ple.'ton/ | 'platoon' |

Trisyllabic loanwords, with their attested syllable types and stress patterns, are presented in Table 2.60 to Table 2.62. With 160 items, they are considerably less common than disyllabic loanwords. Again the preferred syllable structure is CV(C). In addition, however, the corpus includes a considerable number of loanwords with consonant clusters, that is, 17 items ( $11 \%$ ) with an onset CC cluster, one item with an onset CCC cluster, and one item with a word-final CC cluster. By contrast, only one of the attested 66 inherited trisyllabic Malay roots has an onset CC cluster (§2.4.3).

Most of the trisyllabic loanwords have penultimate stress (136/160-85\%), while 23 items have ultimate stress ( $14 \%$ ) and one has antepenultimate stress. By comparison, only four of the 66 inherited trisyllabic Malay roots ( $6 \%$ ) have ultimate stress (§2.4.4.1).

The corpus also contains 42 loanwords of four syllables. Their syllable types and stress patterns are presented in Table 2.63. While they are quite rare among loanwords (42/718 $-6 \%$ ), their proportion is higher than that attested for inherited Malay roots (two out of 1,117 items) (§2.4.3). The preferred syllable structure is again CV(C). In addition, the corpus includes five loanwords ( $12 \%$ ) with an onset CC cluster. By contrast, neither of the two attested inherited quadrisyllabic Malay roots has a consonant cluster. Most of the quadrisyllabic loanwords have penultimate stress ( $36 / 42-86 \%$ ), while five items have ultimate stress ( $12 \%$ ) and one has antepenultimate stress. By comparison, both inherited quadrisyllabic Malay roots have penultimate stress (§2.4.4.1).

Table 2.59: Disyllabic loanwords - Penultimate Stress (375 items)

| Syllable types | Count | Item | Gloss |
| :---: | :---: | :---: | :---: |
| V.CV | 4 | /'i.d $\varepsilon$ / | 'idea' |
| V.CVC | 18 | /'i.d3in/ | 'permission' |
| V.CCVC | 1 | /'i.blis/ | 'devil' |
| VC.CV | 6 | /'il.mu/ | 'knowledge' |
| VC.CVC | 9 | /'zm.ber/ | 'bucket' |
| VC.CVCC | 1 | /'Er.port/ | 'airport' |
| VC.CCV | 2 | /'in.tro/ | 'introduction' |
| VC.CCCV | 1 | /'ek.stra/ | 'extra' |
| VC.CCVC | 1 | /'am.plop/ | 'envelope' |
| CV.V | 2 | /'do.a/ | 'prayer' |
| CV.VC | 5 | /'ta.at/ | 'be obedient' |
| CV.CV | 72 | /'ka.ja/ | 'be rich' |
| CV.CVC | 103 | /'ho.nor/ | 'honorarium' |
| CV.CVCC | 1 | /'ra.port/ | 'school report book' |
| CV.CCVC | 2 | /'do.brak/ | 'smash' |
| CVC.CV | 48 | /'wak.tu/ | 'time' |
| CVC.CVC | 51 | /'kır.bay/ | 'sacrifice' |
| CVC.CCV | 2 | /'man.tri/ | 'male nurse' |
| CVC.CCVC | 5 | /'dis.trik/ | 'district' |
| CVC.CCVCC | 1 | /'kom.pleks/ | 'complex' |
| CCV.V | 1 | /'smu.a/ | 'all' |
| CCV.CV | 13 | /'kwa.sa/ | 'power' |
| CCV.CVC | 11 | /'sla.mat/ | 'be safe' |
| CCV.CCVC | 1 | /'pro.gram/ | 'program' |
| CCVC.CV | 2 | /'prik.sa/ | 'check' |
| CCVC.CVC | 9 | /'knal.pot/ | 'muffler' |
| CCVCC.CVC | 1 | /'trans.f£r/ | 'transfer' |
| CCCV.CV | 1 | /'stri.ka/ | 'iron' |
| CCCVC.CV | 1 | /'skrip.si/ | 'minithesis' |

Table 2.60: Trisyllabic loanwords - Ultimate stress (23 items)

| Syllable types | Count | Item | Gloss |
| :--- | ---: | :--- | :--- |
| V.CV.CVC | 1 | /, o.to.'nэm/ | 'autonomous' |
| VC.CV.CVC | 1 | /in.si.'nur/ | 'engineer' |
| CV.CV.VC | 2 | /,se.ri.'us/ | 'be serious' |
| CV.CV.CV | 1 | /,re.dye.'ki/ | 'livelihood' |
| CV.CV.CVC | 6 | /,do.mi.'nan/ | 'dominate' |
| CV.CV.CCVC | 2 | /,re.pu.'blik/ | 'republic' |
| CV.CCV.CVCC | 1 | /.pe.tro.'maks// | 'kerosene lantern' |
| CV.CVC.CV | 1 | /,su.per.'mi/ | 'instant noodles' |
| CV.CVC.CVC | 4 | /,ko.man.'dan/ | 'commandant' |
| CCV.CV.CVC | 3 | /,pre.si.'den/ | 'president' |
| CVC.CV.CVC | 1 | /.kar.ta.pel/ | 'slingshot' |

In addition, the corpus also contains ten pentasyllabic roots which are presented in Table 2.64. Most of them have penultimate stress ( $6 / 9-67 \%$ ), while two have ultimate stress and one has antepenultimate stress.

The data presented in Table 2.57 to Table 2.64 shows that for loanwords in Papuan Malay the preferred syllable types and stress patterns correspond to those attested in inherited Malay roots: most of the 719 loanwords are disyllabic ( $422 / 719-59 \%$ ) and most of the items with two or more syllables have penultimate stress ( $554 / 633-88 \%$ ). Table 2.65 presents a frequency count for the attested syllable types and stress patterns. Also corresponding to inherited Malay roots, the preferred syllable structure is $\mathrm{CV}(\mathrm{C})$. Unlike native roots, however, a considerable number of loanwords have consonant clusters, most of which are onset CC clusters.

Quite often, but not always, the adaption of loanwords into Papuan Malay involves stress shift from a syllable other than the penultimate one in the original item to the preferred penultimate syllable in the Papuan Malay word. This is illustrated in Table 2.66 with three loanwords: astronomi 'astronomy' and strategi 'strategy' are loanwords from Dutch which have ultimate stress, while transfer 'transfer' is an English loanword which has ultimate stress. In Papuan Malay, by contrast, the three items are realized with stress on the penultimate syllable.

Table 2.61: Trisyllabic loanwords - Penultimate stress (136 items)

| Syllable types | Count | Item | Gloss |
| :---: | :---: | :---: | :---: |
| V.CV.V | 2 | /a.'ro.a/ | 'departed spirit' |
| V.CV.VC | 2 | /ع.'go.is/ | 'be egoistic' |
| V.CV.CV | 8 | /a.'ca.ra/ | 'ceremony' |
| V.CV.CVC | 3 | /a.'la.mat/ | 'address' |
| V.CCV.CV | 1 | /0.'pra.si/ | 'surgery' |
| V.CVC.CV | 4 | /a.'gen.da/ | 'agenda' |
| VC.CV.CV | 4 | /as.'ra.ma/ | 'dormitory' |
| VC.CV.CVC | 2 | /ok.to.ber/ | 'October' |
| VC.CVC.CVC | 1 | /in.'sen.tif/ | 'incentive' |
| VC.CCVC.CV | 1 | /in.'stan.si/ | 'level' |
| CV.V.CV | 5 | /pi.a.ra/ | 'raise' |
| CV.V.CVC | 1 | /di.'a.lek/ | 'dialect' |
| CV.VC.CV | 1 | /re.'ak.si/ | 'reaction' |
| CV.CV.V | 9 | /ffe.'ri.a/ | 'be cheerful' |
| CV.CV.VC | 2 | /d3s.'ma.at/ | 'congregation' |
| CV.CV.CV | 35 | /pe.'pa.ja/ | 'papaya' |
| CV.CV.CCV | 1 | /ffe'ri.tra/ | 'talk' |
| CV.CV.CVC | 4 | /na.'si.hat/ | 'advice' |
| CV.CVC.CV | 4 | /ta.'lın.ta/ | 'gift' |
| CV.CVC.CVC | 8 | /ke.tum.bar/ | 'coriander' |
| CCV.V.CV | 1 | /pri.'.dع/ | 'period' |
| CCV.VC.CV | 1 | /klu.ar.ga/ | 'family' |
| CCV.CV.CV | 3 | /pri.'ba.di/ | 'be private' |
| CCV.CVC.CV | 1 | /pro.'pin.si/ | 'province' |
| CCCV.CV.CV | 1 | /stra.'tc.gi/ | 'strategy' |
| CVC.CV.VC | 1 | /man.'fa.at/ | 'benefit' |
| CVC.CV.CV | 20 | /per.'ta.ja/ | 'trust' |
| CVC.CV.CVC | 5 | /kom.'pu.ter/ | 'computer' |
| CVC.CVC.CV | 3 | /sem.'pur.na/ | 'be perfect' |
| CVC.CCV.CVC | 2 | /kom.'plo.tan/ | '(half)circle' |

Table 2.62: Trisyllabic loanwords - Antepenultimate stress (1 item)

| Syllable types | Count | Item | Gloss |
| :--- | ---: | :--- | :---: |
| CV.CV.CVC | 1 | /'d3e.ri.,ken/ | 'jerry can' |

Table 2.63: Quadrisyllabic loanwords (42 items)

| Syllable types | Count | Item | Gloss |
| :---: | :---: | :---: | :---: |
| Ultimate stress |  |  |  |
| VC.CV.CV.CVC | 1 | /is.,ti.ra.'hat/ | 'rest' |
| CV.CV.V.CVC | 1 | /,na.si.o.nal/ | 'national' |
| CV.CV.CV.CVC | 2 | /ma.jo.ri.'tas/ | 'majority' |
| CCV.V.CV.CVC | 1 | /pri., o.ri.'tas/ | 'priority' |
| Penultimate stress |  |  |  |
| V.CV.CV.CV | 1 | /.o.to.'no.mi/ | 'autonomy' |
| V.CV.CV.CVC | 1 | /,o.to.'ma.tis/ | 'be automatic' |
| VC.CV.V.CV | 1 | /,on.do.'a.fi/ | 'traditional chief' |
| VC.CV.CV.CV | 1 | /,is.ti.'me.wa/ | 'be special' |
| VC.CV.CV.CVC | 1 | /,an.ti.'fi.rus/ | 'antivirus' |
| VC.CCV.CV.CV | 1 | /,as.tro.'no.mi/ | 'astronomy' |
| VC.CVC.CV.CV | 1 | /,in.for.'ma.si/ | 'information' |
| CV.V.CV.CV | 2 | / bi.o.'lo.gi/ | 'biology' |
| CV.CV.CV.V | 5 | /,ma.nu.'si.a/ | 'human being' |
| CV.CV.V.CV | 1 | /,dza.nu.a.ri/ | 'January' |
| CV.CV.V.CVC | 1 | /.ka.ri.'a.way/ | 'employee' |
| CV.CV.CV.CV | 6 | /.te.lc.ffi.si/ | 'television' |
| CV.CV.CV.CVC | 3 | /,ma.sa.'ra.kat/ | 'community' |
| CV.CV.CVC.CVC | 2 | /,re.fe.'ren.dum/ | 'referendum' |
| CV.CVC.CV.CV | 4 | /,wa.wan.'tfa.ra/ | 'interview' |
| CV.CVC.CV.CVC | 1 | /,se.ker.ta.ris/ | 'secretary' |
| CV.CCV.V.CV | 2 | /,fe.bru.'a.ri/ | 'February' |
| CVC.CV.CV.CV | 1 | /,kər.di.'na.si/ | 'coordinate' |
| CVC.CV.CV.CVC | 1 | /.kor.di.'na.tor/ | 'coordinator' |
| Antepenultimate stress |  |  |  |
| V.CCV.CV.V | 1 | /a.'gra.ri., a/ | 'agrarian affairs' |

Table 2.64: Pentasyllabic roots (9 items)

| Syllable types | Count | Item | Gloss |
| :---: | :---: | :---: | :---: |
| Ultimate stress |  |  |  |
| V.CV.CVC.CV.CVC | 1 | /,u.ni. fer.si.'tas/ | 'university' |
| CV.CV.CV.CV.CV | 1 | /.pi.si.ko.lo.'gi/ | 'psychology' |
| Penultimate stress |  |  |  |
| V.CVC.CV.V.CV | 1 | /0.lim.pi.'a.d $/$ / | 'Olympiad' |
| V.CVC.CV.CV.CV | 1 | /ع.,man.si.'pa.si/ | 'emancipation' |
| CV.CV.V.CV.CVC | 1 | /mi.,si.o.na.ris/ | 'missionary' |
| CV.CV.CV.CV.CV | 2 | /ma.ts.ma.ti.ka/ | 'mathematics' |
| CV.CVC.CV.CV.V | 1 | /se.,ker.ta.'ri.a/ | 'secretariat' |
| Antepenultimate stress |  |  |  |
| CV.V.CV.CV.V | 1 | /,te.o.'lo.gi., a/ | 'theology' |

Table 2.65: Syllable types and stress patterns for loanwords - Frequencies

| Syllable types | Stress patterns |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Monosyllabic | (n/a) |  |  |  |
| Polysyllabic | ULT: | P-ULT: | A-P-ULT: |  |
| Disyllabic | 46 | 376 | --- | 422 |
| Trisyllabic | 23 | 136 | 1 | 160 |
| Quadrisyllabic | 5 | 36 | 1 | 42 |
| Pentasyllabic | 2 | 6 | 1 | 9 |
| Total | 76 | 554 | 3 | 633 |

Table 2.66: Stress shift in loanwords ${ }^{a}$

|  | Papuan Malay |  | Dutch | English |
| :--- | :--- | :--- | :--- | :--- |
| astronomi | 'es.tro.'no.mi | 'astronomy' | as.tro.no.'mi | ə.'stra.nə.mi |
| strategi | stra.'te.gi | 'strategy' | stra.ta.'xi | 'stræ.tI.d3I |
| transfer | 'trens.fẹr | 'transfer' | trans.'fy:r | tra:ns.'f3:(r) |

[^61]
### 2.6 Orthographic conventions

The orthographic conventions for the Papuan Malay consonant and vowel phonemes used in this grammar are presented in Table 2.67.

Table 2.67: Orthographic conventions

| Consonants |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHON p | b | t | d | t | d3 | k | g | s |  |  | m | n | n | $y$ |  |  | w |
| ORTH p | b | t | d | c | j | k | g | s |  | h | m | n | ny | ng |  | y | w |
| Vowels |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PHON i | $\varepsilon$ | u | $\bigcirc$ | a |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ORTH i | e | u | o | a |  |  |  |  |  |  |  |  |  |  |  |  |  |

The orthographic representation of the affricates, the palatal and velar nasals, and the palatal approximant follows the conventions for Standard Indonesian, as these are also used by Papuan Malay speakers when writing Papuan Malay. Stress is not marked in the examples and texts in this book. In the word lists in Appendix A, however, stress is marked; and those lexemes which do not carry penultimate stress but ultimate or antepenultimate stress are marked with " $x$ " for the interested reader.

For the representation of the velar nasal in the word-internal coda position, the surface realization is used rather than the underlying phonemic form, as in bantu 'help' and janji 'promise'. In representing the palatalized alveolar fricative, the surface realization is used instead of the underlying phonemic form. That is, [ $s^{j}$ ] is represented as <sy> as in syukur 'thanks to God'. For vocalic allophones, their surface realization instead of their underlying phonemic form is used if that allophone is also an independent phoneme. Examples are the alternative realizations of the vowel combinations /ai/ and /au/ (see §2.3.3), such as capay or cape 'be tired', and pulaw or pulow 'island'. These conventions also apply to the orthographic representation of the (historical) affixes, if one element of the affix is also an independent segment; hence, bakalay /ba-'kalaj/ 'to fight' versus bertriak /ber-'triak/ 'to scream' or talipat /talipat/ 'be folded' versus terpaksa /ter-'paksa/ 'be forced' (see $\S 3.1$ for a detailed discussion on derivation processes in Papuan Malay and the realizations of the (historical) affixes).

In fast speech, Papuan Malay speakers very often shorten disyllabic lexical items to monosyllabic ones. This affects most often the personal pronouns (see $\S 5.5$ and Chapter 6), the possessive marker (see §9.1), and the following lexical items: dengang 'with' is shortened to deng, bilang 'say' to blang, ini 'd.prox' to ni, itu 'D.DIST' to tu, kasi 'give' to kas, pergi/pigi 'go' to pi, and suda 'already' to su. Whenever speakers use these short forms, they are also given in the examples and texts in this grammar.

Vowel length is not phonemic in Papuan Malay. It does, however, have the pragmatic function of adding emphasis to a speaker's utterance, as discussed in §2.3.2.3. To in-
dicate this emphasis in the context of this grammar, vowel lengthening is represented orthographically and realized with triple vowels.

### 2.7 Summary

The Papuan Malay phoneme inventory consists of 18 consonants (six stops, two affricates, two fricatives, four nasals, two liquids, and two approximants) and five vowels. In terms of Lass' (1984: 134-159) system typology of consonants and vowels, the Papuan Malay consonant and vowel systems show, overall, no typologically unexpected constellations, with the exception of the fricatives.

Consonant system: The obstruent system with its "'cardinal' set/p t k/" and its palatoalveolar affricate set as "one 'intermediate' place" of articulation, using Lass' (1984: 147) terminology, shows no typologically unexpected constellations. The fricative system with alveolar /s/ and glottal /h/ is cross-linguistically less typical. Following Lass' (1984: 154) obstruent frequency hierarchy, systems with only two fricatives typically consist of alveolar /s/, to which labial /f/ rather than glottal /h/ is added. While the stop system is symmetric in terms of voice, the fricative system lacks a voiced series, while the nasal system lacks a voiceless series. The lack of these two series, however, is crosslinguistically quite common. They correspond to Maddieson's (2013: 4) findings that "fricatives are more commonly voiceless". They also agree with Lass' (1984: 155-157) findings that nasals show a clear "preference for voice". All consonants occur as onsets, while the range of consonants occurring in the coda position is considerably smaller.

Vowel system: The cross-linguistically very common " 5 -vowel" system with its "two heights in front and back with a low central vowel", applying Lass’ (1984: 143) terminology, shows no typologically unexpected constellations. As is typical of such systems cross-linguistically, the front vowels are unrounded while the back vowels are rounded. All five vowels occur in stressed and unstressed, open and closed syllables.

A restricted sample of like segments can occur in sequences. The constraints on their linear sequencing correspond to the Sonority Sequencing Principle if this is taken as a functional principle by which to explain the linear ordering of like segments. In CC clusters, the less sonorous segment precedes the more sonorous segment. The first consonant is typically a stop while the second consonant is a liquid. For V.V sequences the rise in sonority is less marked. The first vowel is most often a close vowel, while the second one is usually the open central vowel.

Papuan Malay shows a clear preference for disyllabic roots and for CV(C) syllables, which is typologically the most common structure. Thereby, the language displays a "moderately complex syllable structure", in terms of Maddieson's (2013: 4) typology of the syllable structure. Cross-linguistically, however, Papuan Malay would be more likely to have a simple rather than a moderately complex canonical structure, as it consists of only 18 consonants. Primary stress typically falls on the penultimate syllable, although this stress pattern is not rigid. Secondary stress usually falls on the alternating syllable preceding the one carrying the primary stress. This stress pattern applies to lexical roots as well as to lexical items that are historically derived by (unproductive) affixation.

## 2 Phonology

Adding to its 18 native consonant system, Papuan Malay has adopted one loan segment, the voiceless labio-dental fricative /f/. Also, Papuan Malay has developed three substitution strategies to realize the voiceless postalveolar fricative $/ \mathrm{S} /$ found in loanwords of Arabic origins. For the most part, the phonological and phonetic processes found in loanwords correspond to those found in inherited Malay roots. The exception is the process of nasal assimilation, which is applied less rigorously. Consonants and vowels in loanwords show the same distribution as in inherited Malay roots. In sequences of like segments, the range of attested consonants and vowels is wider in comparison to that found in inherited Malay roots. Further, for V.V sequences the rise in sonority is less marked. The preferred syllable types and stress patterns attested in loanwords correspond to those found in inherited Malay roots. Compared to Malay roots, however, a larger number of loanwords employ consonant clusters.

## 3 Word-formation

Papuan Malay has very little productive morphology. Words are typically single root morphemes and word formation is limited to the two derivational processes of reduplication and affixation. Compounding is a third word-formation process; it remains uncertain, however, to what degree it is a productive process. Inflectional morphology is lacking, as nouns and verbs are not marked for any grammatical category such as gender, number, or case. There is also no voice system on verbs.

In discussing word-formation in Papuan Malay, a major issue is to what degree these processes are productive. Following Plag (2006a: 127), the "productivity of a wordformation process can be defined as its general potential to be used to create new words and as the degree to which this potential is exploited by the speakers". Given this definition, the data in the corpus indicates that reduplication in Papuan Malay is a very productive process, whereas affixation has only very limited productivity. The productivity of compounding as a word-formation process remains debatable.

This chapter discusses two word-formation processes in detail: affixation in §3.1 and compounding in §3.2. Reduplication is described in Chapter 4. The main points of this chapter are summarized in §3.3.

### 3.1 Affixation

### 3.1.1 Introduction

In Papuan Malay, affixation is a morphological process whereby an affix is attached to a lexical root to derive new lexemes. This process typically applies to nouns and verbs.

The corpus contains a considerable number of morphologically complex lexical items with the 2,458 -item word list mentioned in $\S 1.11 .6$ including 523 affixed lexemes ( $21 \%$ ). The most commonly employed (historical) affixes are the prefixes TER- 'ACL', PE (N)- 'AG', and BER- 'vBlz', the suffixes -ang 'pat' and -nya '3possr', and the circumfix ke-/-ang ' NMLZ '. ${ }^{1}$

Before examining these affixes in detail, the remainder of this introduction discusses methodological issues related to examining the productivity of affixation in Papuan Malay.

[^62]Morphological patterns are considered to be productive if language users apply them "to create new well-formed complex words" by systematically extending the pattern "to new cases" (Booij 2007: 67, 68). By contrast, a morphological pattern is said to be unproductive when the morphological rule involved "is not used for coining new words" but "has become obsolete" (2007: 68). The productivity of a given pattern is a matter of degree, however, as pointed out by scholars such as Aikhenvald (2007: 49-58), Bauer (1983: 62100), Booij (2007: 67-71), or Pike (1967: 169-172). This degree depends on the amount "to which the structural possibilities of a word-formation pattern are actually used" (Booij 2007: 68). That is, depending on their functional load, some patterns are "fully active" or productive, while others are "inactive" or unproductive, with "semi-active" or semiproductive patterns found in-between (Pike 1967: 169-171). ${ }^{2}$ Therefore, productivity is best viewed as a "cline" (Bauer 1983: 97) or a "scalar phenomenon" (2001: 126). ${ }^{3}$ On such a cline of productivity, fully productive patterns are viewed as one endpoint, and completely unproductive patterns as the other endpoint of the continuum, with semiproductive patterns found in-between.

To investigate whether and to what degree Papuan Malay speakers employ a given affix to create new words, one technique would be to devise a test along the lines of Aronoff \& Schvaneveldt's (1978) "Productivity experiment". This psycholinguistic experiment involved a lexical-decision task which required testees to make judgments about possible but non-occurring affixed words. That is, the testees had to judge whether or not these words were instances of English.

For the present study no productivity tests were conducted to determine whether and to what extent a given affix can be attached to Papuan Malay roots to derive new lexical items. Tests such as the mentioned lexical-decision tasks were considered unworkable due to the sociolinguistic profile of the Papuan Malay speech variety and speech communities, discussed in $\S 1.5$ :

- Functional distribution of Papuan Malay as the low variety, and Indonesian as the high variety, in terms of Ferguson's (1972) notion of diglossia;
- Positive to somewhat ambivalent language attitudes toward Papuan Malay; and
- Lack of language awareness of many Papuan Malay speakers about the status of Papuan Malay as a language distinct from Indonesian.

Given this sociolinguistic profile and the formal setting of a test situation as well as the fairly high degree of linguistic relatedness between Papuan Malay and Indonesian, an undesirable amount of interference from Indonesian was expected. This assumption is based on Weinreich's (1953:1) definition of "interference" as "instances of deviation from the norms of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language, i.e. as a result of language contact". Even in a monolingual test situation, such interference would most likely have had a skewing

[^63]impact on testees' naïve judgments, given that, when in the "monolingual speech mode [...] bilinguals rarely deactivate the other language totally", as Grosjean (1992: 59) points out.

Given these problems, the attested affixes and derived words are instead examined in terms of six language internal and three language external factors. These factors were deemed relevant in examining the productivity of these affixes.

## 1. Language internal factors

The affixes are examined with respect to the following six language internal factors: (a) syntactic properties, (b) type frequencies, token frequencies, and hapaxes, (c) form-function relationship between the derivation and its base word, (d) alternative strategies, (e) formally complex words with non-compositional semantics, and (f) status of the affixed lexemes as part of the Papuan Malay lexicon or as code-switches with Indonesian.
a) Syntactic properties

If an affix is "polyfunctional", that is, if it can take bases from more than one lexical category, this is taken as evidence that the process is more productive (Booij \& van Marle 2002: 90-91; see also Zwanenburg 2000). Hence, the syntactic properties for each affix are examined as to whether it can be attached to verbal, nominal, adverbial, and/or other bases. Likewise, the syntactic properties of the affixed lexemes are described, as to which word class they belong to.
b) Type frequencies, token frequencies and hapaxes ${ }^{4}$

If an affix is represented by a large number of words (high type frequency) which, in turn, have low token frequencies, this is taken as an indication that the affixation process is more likely to be productive. (For the purposes of this study, type frequencies of ten or more are considered as "(relatively) high" while token frequencies of less than 20 are considered as "(relatively) low".)
Hay (2001: 1044-1047) points out that "the frequency of the base form is involved in facilitating decomposability. When the base is more frequent than the whole, the word is easily and readily decomposable. However, when the derived form is more frequent than the base it contains, it is more difficult to decompose and appears to be less complex". In terms of processing, morphologically complex words with a low relative frequency are accessed via their parts, that is, via a "decomposed access" or "parsing route". Morphologically complex words with a high relative frequency, by contrast, are accessed as whole words via a "whole-word access" or "direct route" (2001: 1055).

[^64]Building on Hay (2001), Hay \& Baayen (2002: 203-204) argue that "for an affix to remain productive, words containing that affix must be parsed sufficiently often that the resting activation level of that affix remains high". The findings of their study confirm this link between productivity and parsing. Hay \& Baayen (2002) show that affixes which derive words with low relative frequencies and high rates of decomposition are more likely to be productive. By contrast, affixes which derive words with high relative frequencies and low rates of decomposition are less likely to be productive.

Along similar lines Plag (2006b: 542) discusses the decomposability of derived words with low token frequencies which "tend to be words that are unlikely to be familiar to the hearer". They can, however, be understood if "an available word-formation rule allows the decomposition of the newly encountered word into its constituent morphemes and thus the computation of the meaning on the basis of the meaning of the parts" (2006b: 542). Hence, productive morphological patterns tend to be characterized by "large numbers of low frequency words and small numbers of high frequency words, with the former keeping the rule alive. In contrast, unproductive morphological categories will be characterized by a preponderance of words with rather high frequencies and by a small number of words with low frequencies" (2006b: 542).

Among the derived words with low token frequency, hapaxes are especially useful in determining the productivity of a morphological pattern, as "the highest proportion of neologisms" is found here (Plag 2006b: 542); or in other words, "[the] higher the number of hapaxes, the greater the productivity" (2006b: 544). Therefore, as Booij (2007: 69-70) points out, "one might define the degree of productivity $\mathbf{P}$ of a particular morphological process as the proportion between the number of hapaxes of that type $\left(n_{1}\right)$ to the total number of tokens N " for that particular affix; a definition which is based on Baayen's (1992: 115) formula $\mathrm{P}=\mathrm{n}_{1} / \mathrm{N}$.
For the present study, however, it remains unclear to what extent the attested hapaxes are useful in determining productivity. That is, the limited size of the corpus makes it difficult to verify which hapaxes are neologisms in Papuan Malay and which ones merely reflect the limited size of the corpus. Moreover, the literature does not mention thresholds which would allow interpreting a calculated P value in terms of the degree of productivity of a given morphological pattern. For the interested reader, however, the number of hapaxes and their respective P values for each affix are given in footnotes throughout this chapter.
c) Form-function relationship between the derivation and its base

Typical derivational processes include nominalization, verbalization, or classpreserving valency-changing operations, among others. In each case, the
derivational process "results in the creation of a new word with a new meaning", as Aikhenvald (2007: 35) points out.
Following Booij (2007: 240, 323), one "necessary" albeit not "sufficient" condition for the productivity of such derivational processes is their transparency, which is defined as "the presence of a systematic form-meaning correspondence in a morphologically complex form". Therefore, if the form-function relationship between the affixed lexemes and their base is transparent, this is taken as evidence that a given affixation process is more productive. If, by contrast, this relationship is opaque, this is considered evidence that the process is less productive.
For the present study, pairs of words in which the affixed words and their respective bases have the same semantics are not taken as parts of a larger derivational paradigm. Instead these sets are taken as pairs of words belonging to different speech varieties, namely Papuan Malay and Indonesian. This conclusion is based on the fact that, in general, nonstandard varieties of Malay "have lost most or all of this system of affixation", whereas "Standard Malay exhibits a rich system of affixation" (Paauw 2009: 20). Hence, for pairs of words with the same semantics, the unaffixed base words are taken to be the native Papuan Malay lexemes, whereas the affixed words are taken to be code-switches with the corresponding Indonesian lexemes.

## d) Alternative strategies

If speakers employ alternative strategies that do not involve affixation and that express the same meanings as the affixed forms, these alternative strategies are taken as evidence that the affixation process is less productive.
e) Formally complex words with non-compositional semantics

Affixed lexemes for which there is no corresponding base have lost their status as complex words. They are so-called "formally complex words" (Booij 2007: 17). Such a word "behaves as a complex word although there is no corresponding semantic complexity" (2007: 13). A high number of formally complex words are taken as evidence that the affixation process is less productive. Their non-compositional semantics suggest that these lexemes are either lexicalized forms or code-switches with Indonesian. (For each affix, the number of formally complex words is given with a few examples. Given, however, that they have lost their status as complex words, these items are not further discussed.)
f) Status of the affixed lexemes as part of the Papuan Malay lexicon or as codeswitches with Indonesian

If a large number of affixed lexemes are not part of the Papuan Malay lexicon but code-switches with Indonesian, this is taken as evidence that the derivation process for a given affix is less productive.

Sources such as Jones (2007), or Tadmor (2009b) allow the identification of foreign, non-Malay loanwords in the corpus. They do not, however, allow identifying code-switches with Indonesian. Hence, an alternative approach was deemed necessary to explore whether the affixed lexemes are part of the Papuan Malay lexicon or constitute code-switches with Indonesian.

All 533 attested affixed lexemes were discussed with a Papuan Malay consultant who has a high level of language awareness, both with respect to Papuan Malay and to Indonesian. Based on his knowledge of both languages, the consultant classified the affixed lexemes as "Papuan Malay" or "borrowings from Indonesian". The statement that a lexeme is considered to be Papuan Malay does not imply, however, that the respective lexeme does not exist in other Malay varieties as well. Across Southeast Asia, all Malay varieties have large sets of shared lexical items; this also applies to Papuan Malay, the other eastern Malay varieties and also to Indonesian.

While the consultant's tentative classification is subjective and not necessarily representative, it provides one more piece of evidence as to the potential productivity of the attested affixes. In Table 3.1 to Table 3.28, these alleged borrowings or code-switches with (Standard) Indonesian are underlined.
2. Language external factors: Variables of the communicative event

The affixes were examined as to whether they are employed without sociolinguistic restrictions or whether their use is conditioned by variables of the speech situation in terms of Fishman's (1965: 86) "domains of language choice". The main factors which influence language choices are (1) the topics discussed, (2) the relationships between the interlocutors, and (3) the locations where the communication takes place (1965: 67, 75). Speaker education levels are a fourth pertinent factor.

If the use of the affixes seems to be conditioned by language external factors, this is taken as evidence that the affixation process is less productive. For the present study, the pertinent "domains of language choice" are (a) the topics, (b) speaker education levels, and (c) the relationships between the interlocutors, all of which are discussed in the following. The locations of communication were not considered pertinent domains since all recorded conversations took place in the same informal setting of the home. (For details on the sociolinguistic profile of Papuan Malay, see §1.5.)
a) Speaker education levels

In West Papua, as is typical of diglossic situations, the high variety Indonesian is acquired in school. Given their amount of access to the HIGH variety, better-educated speakers are more likely to display language behaviors influenced by the high variety Indonesian than less-educated speakers. Therefore, if better-educated speakers employ a particular affix considerably more often than less-educated ones, this is taken as evidence that the affixed lexemes are
not the result of a productive process but that they constitute code-switches with Indonesian. (See also Factor 1 "Speaker education levels" in §1.5.1.)
b) Topics

Following Fishman (1965: 71), the topics under discussion may also bring "another language to the fore" as "certain topics are somehow handled better in one language than in another". This notion of topical regulation suggests that Papuan Malay speakers consider Indonesian, and not Papuan Malay, the appropriate language to use when discussing High topics associated with formal domains such as politics, education, or religion. Therefore, if Papuan Malay speakers use a particular affix much more often when discussing HIGH topics than when discussing casual daily-life issues (Low topics), this is taken as evidence that the affixed lexemes are code-switches with Indonesian. This applies especially to less-educated Papuans, as better-educated Papuans already display a general tendency to include Indonesian features when speaking Papuan Malay, although this tendency is more pronounced when the latter discuss high topics. (See also Factor 2 "Topical regulation" in §1.5.1.)
c) Relationships between interlocutors

Given the diglossic distribution of Papuan Malay and Indonesian, it is expected that the language behavior of Papuans shows influences from the HIGH variety Indonesian when they interact with fellow-Papuans of higher status or with group outsiders. As discussed under Factor 3 "Relationships between interlocutors" in $\S 1.5 .1$, the use of features from the High variety serves to signal social inequality, distance, and formality. Therefore, if speakers use a given affix much more often when conversing with interlocutors of higher status or with group outsiders than when interacting with peers, this is taken as evidence that the affixed lexemes are code-switches with Indonesian. Again, this applies especially to less-educated Papuans, given that better-educated Papuans already show a general tendency to "dress-up" their Papuan Malay with Indonesian features, although this tendency is more marked when the latter interact with group outsiders, such as the author. (See also Factor 3 "Relationships between interlocutors" in §1.5.1.)

In examining the attested affixes and affixed lexemes as outlined above, none of the factors was taken in isolation. Instead, the findings pertaining to all nine factors were taken together as an indication of the degree of productivity for the affix in question. The results of this multifaceted investigation indicate that in Papuan Malay:

- Prefix TER- 'ACL' and suffix -ang 'PAT' are somewhat productive;
- Prefix $\operatorname{PE}(N)-$ ' $A G$ ' is, at best, marginally productive; and
- Prefix ber- 'vblz', suffix -nya '3possr', and circumfix ke-/-ang 'nmlz' are unproductive.

The unproductive derivations are considered to be lexicalized forms borrowed into the language or code-switches with Indonesian; in the examples, however, no attempt is made to distinguish the two.

In the following, the six affixes are discussed in detail in terms of the factors outlined above: TER- in §3.1.2, -ang in §3.1.3, PE(N)- in §3.1.4, BER- in §3.1.5, -nya in §3.1.6, and ke-/-ang in §3.1.7. For the three somewhat productive affixes (TER-, -ang, and $\operatorname{PE}(\mathrm{N})-$ ) the mentioned variables of the communicative event are investigated in detail within the respective sections. For the remaining three affixes (BER-, -nya, and ke-/-ang) the variables of the communicative event are summarily discussed in §3.1.8. The main points on affixation are summarized in $\S 3.3$.

### 3.1.2 Prefix TER- 'ACL'

Affixation with TER- 'ACL' derives monovalent verbs from verbal bases. The derived verbs denote accidental or unintentional actions or events, as shown in (1). This derivation process appears to be somewhat productive in Papuan Malay, as discussed below.
(1) bos pagi su br-angkat ke Sarmi begini adu sial-ang boss morning already vblz-leave to Sarmi like.this oh.no! be.unfortunate-pat
ter-paksa tong dua jalang kaki
ACL-force 1PL two walk foot
'as the boss had already left for Sarmi in the morning, oh no, damn it!, the two of us were forced to walk on foot' [080921-002-Cv.0001]
Prefix TER- is a reflex of Proto-Malayic *tAr-, which, following Adelaar (1992: 155), "contributed the notion of unintentionality or feasibility to the VTR or VDI to which it was affixed". In Standard Malay, "tar-denotes an 'accidental' state, process or action" when affixed to bivalent bases and "a superlative degree" when affixed to monovalent bases (1992: 150-151). In eastern Malay varieties, the prefix also denotes accidental or unintentional actions, or events that happened unexpectedly or unintentionally. These productive uses of the prefix are attested for Ambon Malay (van Minde 1997: 98), Banda Malay (Paauw 2009: 250), Kupang Malay (Steinhauer 1983: 46), Larantuka Malay (Paauw 2009: 256), Manado Malay (Stoel 2005: 22), and North Moluccan / Ternate Malay (Taylor 1983: 18; ${ }^{5}$ Litamahuputty 2012: 133).

The corpus includes 43 monovalent verbs ( 167 tokens) prefixed with TER-: ${ }^{6}$

1. Verbs with bivalent bases ( 38 items with 153 tokens)
2. Verbs with monovalent bases (five items with 14 tokens)

The corpus also contains ten formally complex words with non-compositional semantics, such as tertawa 'laugh', tergrak 'be moved', or trapung 'be drifting'. ${ }^{7}$

[^65]Before discussing TER-affixation of bivalent bases in §3.1.2.2 and of monovalent bases in $\S 3.1 .2 .3$, the allomorphy of $T E R$ - is examined in §3.1.2.1. Variables of the communicative event that may impact the use of $T E R$ - are explored in §3.1.2.4. The main points on prefix TER- are summarized and evaluated in §3.1.2.5.

### 3.1.2.1 Allomorphy of TER-

Prefix $T E R$ - has two allomorphs, ter-and $t a$-. The allomorphs are not governed by phonological processes.

The form ter-, in turn, has three allomorphs that are the effect of, what Booij (2007: 75) calls "morphologically conditioned phonological rules". More specifically, the three allomorphs are conditioned by the word-initial segment of the base word, as shown in Table 3.1: /t $\varepsilon \mathrm{r}-/$, /t $\varepsilon-/$, and /tr-/. Most commonly, ter- is realized as /t tr -/. With onset rhotic $/ \mathrm{r} /$, however, it is realized as $/ \mathrm{t} \varepsilon-/$. With onset vowels, the prefix is usually realized as /tr-/.

Table 3.1: Realizations of allomorph ter-

| ter-base | Orthogr. | Gloss |
| :--- | :--- | :--- |
| /ter-pukul/ | terpukul | 'be beaten' |
| /tr-rendam/ | terendam | 'be soaked' |
| /tr-aŋkat/ | trangkat | 'be lifted' |

Allomorph $t a$ - is used in about one third of the affixed items; that is, 17 items with a total of 41 ta- tokens, listed in Table 3.2. Some of the derived items are alternatively realized with allomorph ter-. Hence, for each item the frequencies for $t a$ - and for terare given. ${ }^{8}$ If in a greater number of tokens the prefix is realized with /ta-/ than with $/ t \varepsilon \mathrm{r}-/$, then its orthographic representation is ta- as in tagoyang 'be shaken'. If both realizations occur with the same frequency, then the orthographic representation follows its realization in the recorded texts, as in terlepas 'be loose'.

In realizing the prefix most commonly as ter- rather than as $t a$-, Papuan Malay differs from other eastern Malay varieties such as Ambon Malay (van Minde 1997: 98), Banda Malay (Paauw 2009: 250), Kupang Malay (Steinhauer 1983: 46), Manado Malay (Stoel 2005: 22), and North Moluccan / Ternate Malay (Taylor 1983: 18; Voorhoeve 1983: 4; Litamahuputty 2012: 133). In these varieties the prefix is always realized as $t a$ - Instead, the TER-prefixed items have more resemblance with the corresponding items in Indonesian, where the prefix is realized as ter-. In addition, in Larantuka Malay the prefix is also realized as $t z(r)$ - (Paauw 2009: 253). The different behavior of Papuan Malay TER- supports

[^66]Table 3.2: Realizations of allomorph $t a$ -

| ta-base | Orthogr. | Gloss | ta- \# | ter- \# |
| :--- | :--- | :--- | ---: | ---: |
| /ta-gojay/ | tagoyang | 'be shaken' | 9 | 0 |
| /ta-putar/ | taputar | 'be turned around' | 7 | 2 |
| /ta-lipat/ | talipat | 'be folded' | 6 | 1 |
| /ta-lqmpar/ | talempar | 'be thrown' | 4 | 1 |
| /ta-gulin/ | taguling | 'be rolled over' | 3 | 0 |
| /ta-ganton/ | tergantong | 'be dependent' | 1 | 6 |
| /ta-lepas/ | terlepas | 'be loose' | 1 | 1 |
| /ta-balik/ | tabalik | 'be turned upside down' | 1 | 0 |
| /ta-bantiy/ | tabanting | 'be tossed around' | 1 | 0 |
| /ta-tfukur/ | tacukur | 'be scalped' | 1 | 0 |
| /ta-gait/ | tagait | 'be hooked | 1 | 0 |
| /ta-hambur/ | tahambur | 'be scattered about' | 1 | 0 |
| /ta-kantfin/ | takancing | 'be locked' | 1 | 0 |
| /ta-lqm/ | talem | 'be glued' | 1 | 0 |
| /ta-sala/ | tasala | 'be mistaken' | 1 | 0 |
| /ta-tikam/ | tatikam | 'be stabbed' | 1 | 0 |
| /ta-tojkat/ | tatongkat | 'be beaten' | 1 | 0 |

the conclusion put forward in $\S 1.8$ that the history of Papuan Malay is different from that of the other eastern Malay varieties.

### 3.1.2.2 Prefixed items derived from bivalent verbal bases

The corpus contains 38 TER-prefixed lexemes (with 153 tokens) with bivalent verbal base words (BW), as listed in Table 3.3 and Table 3.4. The affixation derives monovalent verbs with non-agent arguments through a valency-changing operation, in which TERremoves agent arguments. All but one of the derived lexemes are low frequency words (37 lexemes, attested with less than 20 tokens). Besides, the token frequencies for the respective bases are (much) higher for most of the derived words ( 29 lexemes).

The derived verbs denote accidental or unintentional states, processes, or actions. The term "accidental" covers "such concepts as involuntary, unmotivated, agentless, sudden, and unexpected action (or state resulting therefrom)", employing Adelaar's (1992: 150) terminology. Hence, TER- is glossed as 'ACL' ('accidental'). Two TER-prefixed items are given in context: tagoyang 'be shaken' in (2) and tertutup 'be closed' in (4). Both examples, together with the one in (3), illustrate how TER- decreases valency by "removing agent-like participants".

Table 3.3: Affixation with TER- of bivalent verbal bases ${ }^{a}$

| BW | Gloss | Item | Gloss | TER- \# | BW \# |
| :--- | :--- | :--- | :--- | ---: | ---: |
| jadi | 'become' | terjadi | 'happen' | 39 | 120 |
| paksa | 'force' | terpaksa | 'be forced' | 10 | 10 |
| masuk | 'enter' | termasuk | 'be included' | 9 | 261 |
| putar | 'turn around' | taputar | 'be turned around' | 9 | 33 |
| goyang | 'shake' | tagoyang | 'be shaken' | 9 | 10 |
| gantong | 'suspend' | tergantong | 'be dependent' | 7 | 14 |
| lipat | 'fold' | talipat | 'be folded' | 7 | 1 |
| buka | 'open' | terbuka | 'be opened' | 6 | 1 |
| angkat | 'lift' | trangkat | 'be lifted' | 5 | 81 |
| lempar | 'throw' | talempar | 'be thrown' | 5 | 5 |
| rendam | 'soak' | terendam | 'be soaked' | 12 |  |
| pukul | 'beat' | terpukul | 'be beaten' | 5 | 1 |
| bakar | 'burn' | terbakar | 'be burnt' | 4 | 59 |
| guling | 'roll over' | taguling | 'be rolled over' | 3 | 55 |
| tutup | 'close' | tertutup | 'be closed' | 3 | 2 |
| bagi | 'divide' | terbagi | 'be split up' | 3 | 53 |
| tarik | 'pull' | tertarik | 'be pulled' | 2 | 66 |
| lepas | 'free' | talepas | 'be loose' | 2 | 32 |
| kumpul | 'gather' | terkumpul | 'be collected' | 2 | 23 |
| tolak | 'push away' | tertolak | 'be rejected' | 2 | 16 |
| kupas | 'peel' | terkupas | 'be peeled' | 2 | 11 |
| buat | 'make' | terbuat | 'be made' | 2 | 1 |
| kenal | 'know' | terkenal | 'be well-known' | 1 | 135 |
| balik | 'turn over' | tabalik | 'be turned over' | 1 | 57 |
| ganggu | 'disturb' | terganggu | 'be disturbed' | 1 | 37 |
| bla | 'split' | terbla | 'be split' | 1 | 18 |
| pengaru | 'influence' | terpengaru | 'be affected' | 1 | 13 |
| banting | 'throw' | tabanting | 'be tossed around' | 1 | 7 |
|  |  |  |  | 6 | 6 |

${ }^{a}$ As mentioned in language internal factor (1f) in §3.1.1 (p. 123), alleged borrowings or code-switches with (Standard) Indonesian are underlined.

Table 3.4: Affixation with $T E R$ - of bivalent verbal bases continued ${ }^{a}$

| BW | Gloss |  | Item | Gloss | TER- \# |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BW \# |  |  |  |  |  |
| tukar | 'exchange' | tertukar | 'get changed' | 1 | 6 |
| tongkat | 'cane' | tatongkat | 'be beaten up' | 1 | 5 |
| singgung | 'offend' | tersinggung | 'be offended' | 1 | 3 |
| cinta | 'love' | tercinta | 'be beloved' | 1 | 3 |
| cukur | 'flatten' | tacukur | 'be scalped' | 1 | 2 |
| hambur | 'scatter' | tahambur | 'be scattered about' | 1 | 1 |
| wesel | 'transfer' | terwesel | 'be transferred' | 1 | 2 |
| tikam | 'stab' | tatikam | 'be stabbed' | 1 | 2 |
| kancing | 'lock' | takancing | 'be locked' | 1 | 0 |
| lem | 'glue' | talem | 'be glued' | 1 | 0 |

${ }^{a}$ As mentioned in language internal factor (1f) in §3.1.1 (p. 123), alleged borrowings or code-switches with (Standard) Indonesian are underlined.

Prefix TER-: Semantics of bivalent verbal bases and derived lexemes
(2) de bilang, mama sa liat pohong ini de ta-goyang 3sG say mother 1sG see tree D.Prox 3sG AcL-shake 'she said, "mama, I saw this tree, it was shaking"' [080917-008-NP.0031]
(3) ... bapa Markus S. doseng satu de goyang kepala father Markus S. lecturer one 3sg shake head
'... Mr. Markus S., a certain lecturer, he shook (his) head' [080917-010-CvEx.0194]
(4) kalo ko tutup pintu berkat juga ter-tutup ...
if 2sG close door blessing also ACL-close
'if you close the door (of your house), the blessing is also closed off [(because)
guests cannot come into (your) house]' [081110-008-CvNP.0096]
Of the 38 TER-prefixed bivalent verbs, one Papuan Malay consultant classified four as borrowings from Standard Indonesian (SI-borrowings) (see language internal factor (1f) in §3.1.1, p. 123), namely terbuat 'be made', terpengaru 'be influenced', tercinta 'be beloved', and terwesel 'be transferred' (in Table 3.3 these items are underlined). The same consultant also stated that Papuan Malay speakers usually employ the respective bases rather than the prefixed forms. One such contrastive set of examples is given in (5) and (6). Instead of using the prefixed form terpengaru 'be influenced', as in (5), speakers more often employ the base pengaru 'influence' in the sense of 'be influenced', as in (6).

Prefix TER-: Use patterns of base words versus derived lexemes
... tapi de ana juga cepat ikut ter-pengaru but 3sG child also be.fast follow AcL-influence
'... but he/she, a kid, also quickly follows (others) to be influenced'
[080917-010-CvEx.0001]
(6) de su pengaru dengang orang~orang yang minum

3sG already influence with RDP~person REL drink
'he has already been influenced by people who drink' [080919-007-CvNP.0018]

### 3.1.2.3 Prefixed items derived from monovalent verbal bases

The corpus contains five TER-prefixed lexemes (with 14 tokens) with monovalent verbal bases, as listed in Table 3.5. Contrasting with the affixation of bivalent bases, TER-affixation of monovalent bases is not a valency-changing operation, nor does it derive verbs with non-agent arguments. Instead, TER- downplays the level of control of its arguments by deriving monovalent verbs which denote accidental or unintentional states or actions, such as terlambat 'be late' or tersendiri 'be separate'. All five lexemes are low frequency words, attested with less than 20 tokens. Moreover, the token frequencies for the respective bases are (much) higher for four of the five derived words.

Table 3.5: Affixation with TER- of monovalent verbal bases

| BW | Gloss | Item | Gloss | TER- \# | BW \# |
| :--- | :--- | :--- | :--- | :--- | :--- |
| lambat | 'be slow' | terlambat | 'be late' | 10 | 3 |
| sendiri | 'be alone' | $\frac{\text { tersendiri }}{}$ | 'be separate' | 1 | 232 |
| biasa | 'be used to' | terbiasa <br> jatu | 'fall' | 'be accustomed' | 1 |
| terjatu | 'be dropped, fall' | 1 | 186 |  |  |
| sala | 'be wrong' | tasala | 'be mistaken' | 1 | 42 |

Two items indicating uncontrolled and/or unexpected actions are given in context: terjatu 'be dropped, fall' in (7) and terlambat 'be late' in (8). Both examples, along with the example in (9), show that the verbal valency is not further decreased and that the derivation does not result in a loss of agentivity. That is, the referents of the derived verbs terjatu 'be dropped, fall' and terlambat 'be late' and the referents of the bases jatu 'fall' and lambat 'be slow', respectively, have the same semantic functions. With TER-prefixed verbs, however, the level of control the referents have is downplayed, as mentioned above.
(7) dia ter-jatu de jatu baru motor tindis dia

3sG ACL-fall 3sg fall and.then motorbike overlap 3sG
'he fell (off unexpectedly), he fell (off), and then the motorbike crushed him'
[080923-010-CvNP.0012]
(8) kaka tadi ter-lambat karna lagi ada duka oSb earlier ACL-be.slow because again exist grief
'a short while ago I ('older brother') was (unintentionally) late because there was (still) mourning (going on)' [080918-001-CvNP.0003]
(9) kalo Niwerawar Aruswar nanti dia agak lambat sedikit
if Niwerawar Aruswar very.soon 3sG rather be.slow few
[About a road construction project:] 'as for (the area of) Niwerawar (and)
Aruswar, (there) it (the bulldozer) will be somewhat slow' [081006-033-Cv.0051]

### 3.1.2.4 Variables of the communicative event

To explore the issue of TER-productivity in Papuan Malay further, a domain analysis was conducted which focused on the variables of speaker education levels, topics, and role-relations (for details see "Language external factors" in §3.1.1, p. 124). In all, 43 TER-prefixed items, totaling 167 tokens, were examined:

- 38 prefixed items derived from bivalent verbal bases ( 153 tokens)
- Five prefixed items derived from monovalent verbal bases (14 tokens)

For the 43 prefixed lexemes, most tokens (143/167-86\%) can be accounted for in terms of speaker education levels, topics, and/or role-relations. The remaining 24/167 tokens ( $14 \%$ ), however, cannot be explained in terms of these variables of the communicative event. These tokens occurred when less-educated speakers (-EDC-SPK) conversed with fellow-Papuans of equally low social standing (-stat) about low topics, that is, casual daily-life issues. ${ }^{9}$ (See Table 3.6 and Figure 3.1.)

If the prefixed items were the result of a productive affixation process, one would expect the percentage of tokens that cannot be explained in terms of speaker education levels, topics, and/or role-relations to be much higher than $14 \%$. Instead, most tokens $(86 \%)$ seem to be conditioned by these variables of the communicative event. These findings do not support the conclusion that the respective lexemes result from a productive affixation process. Instead, they appear to be code-switches with Indonesian.

Table 3.6 and Figure 3.1 (p. 133, p. 135) present the token frequencies for TER-prefixed lexemes by speakers and topics/interlocutors. Before discussing the data in more detail, the layouts of Table 3.6 and Figure 3.1 are explained.

Table 3.6 is divided into three major parts. The top part lists the token frequencies for prefixed lexemes with bivalent bases, while the middle part gives the frequencies for prefixed lexemes with monovalent bases. The bottom part gives the frequencies for all verbal bases. The layout of each of these parts represents the three variables of speaker education levels, topics, and role relations (this layout also applies to the tables and figures

[^67]Table 3.6: Token frequencies for $T E R$-prefixed lexemes with bi- and monovalent verbal bases by speakers, topics, and interlocutors (43 items)

|  | Topics (TOP) |  |  |  | Interlocutors (ILCT) |  |  | Tokens |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prefixed lexemes with bivalent bases ( 38 items) |  |  |  |  |  |  |  |  |
|  | POL | EDC | REL | Low | +STAT | -Stat | outsd | Total |
| +EDC-SPK | 6 | 10 | 10 | 15 | --- | --- | 9 | 50 |
| -EDC-SPK | 2 | 1 | 26 | --- | 45 | 23 | 6 | 103 |
| Subtotal | 8 | 11 | 36 | 15 | 45 | 23 | 15 | 153 |
| Prefixed lexemes with monovalent bases ( 5 items) |  |  |  |  |  |  |  |  |
|  | POL | EDC | REL | Low | +STAT | -stat | outsd | Total |
| +EDC-SPK | 0 | 0 | 1 | 4 | --- | --- | 0 | 5 |
| -EDC-SPK | 0 | 1 | 5 | --- | 2 | 1 | 0 | 9 |
| Subtotal | 0 | 1 | 6 | 4 | 2 | 1 | 0 | 14 |
| TOTAL (43 items) |  |  |  |  |  |  |  |  |
|  | POL | EDC | REL | Low | +STAT | -Stat | outsd | Total |
| +EDC-SPK | 6 | 10 | 11 | 19 | --- | --- | 9 | 55 |
| -EDC-SPK | 2 | 2 | 31 | --- | 47 | 24 | 6 | 112 |
| Total | 8 | 12 | 42 | 19 | 47 | 24 | 15 | 167 |

presented in §3.1.3.3, §3.1.4.4, and §3.1.8). The token frequencies according to the variable "Speaker education levels" are given in the rows labeled "+EDC-SPK" and "-EDC-SPK", while the token frequencies according to the variables "Topics" and "Role-relations" are presented in the columns labeled "Topics (тор)" and "Interlocutors" (ІІст), respectively. The token frequencies by speaker education levels are presented in two rows: the first row labeled "+EDC-SPK" gives the token frequencies for better-educated speakers while the second row labeled "-EDC-SPK" lists the token frequencies for less-educated speakers. The token frequencies by topics are presented in the first four columns. The three columns headed "pol", "edc", and "rel" list the frequencies for tokens when speakers conversed about the HIGH topics of politics, education, and religion, respectively. The column headed "Low" lists the number of tokens produced during conversations about Low topics, that is, casual daily-life issues. The token frequencies by role-relations are presented in the next three columns. The columns headed with "+stat", "-stat", and "outsd" give the number of tokens produced during conversations with fellow-Papuans of higher social standing (+Stat), fellow-Papuans of lower social standing (-stat), and group outsiders (ouTsD), respectively.

The layout of Table 3.6 is based on four assumptions. First, when discussing high topics, the language behavior of Papuans is likely to show influences from Indonesian, regardless of their own education levels and also regardless of the social standing of
their fellow-Papuan interlocutors. Therefore, these token frequencies are totaled in the respective "Topics" cells and not broken down according to the social standing of their interlocutors. For TER-prefixed lexemes with bivalent bases, the respective token frequencies for better-educated speakers (+EDC-SPK) are as follows: 6 tokens for discussions about politics (POL), 10 about education (EDC), and 10 tokens about religion (REL). For lesseducated speakers (-EDC-SPK) the respective frequencies are 2, 1, and 26 tokens (See the left top part of Table 3.6).

Second, when discussing low topics, the language behavior of better-educated speakers (+EDC-SPK) is presumably not affected by the social standing of their fellow-Papuan interlocutors, given that they already have the general tendency to "dress-up" their Papuan Malay with Indonesian features. Therefore, these token frequencies are totaled in the Low-topic cell of the +EDC-SPK row. That is, in this total are included the token frequencies for interactions with interlocutors of equally high social standing (+Stat) and with those of lower status (-STAT). The columns to the right of the LOw-topic column give the token frequencies according to the social status of the speakers' interlocutors. However, given that for the better-educated speakers (+EDC-SPK), the total in the Low-topic cell includes both +STAT and -stat interlocutors, the respective cells for +STAT and -STAT interlocutors are left empty. For TER-prefixed lexemes with bivalent bases, the respective token frequency is 15 (see the Low-topic column in the top part of Table 3.6), while the +stat and -stat cells to the right are left empty.

Third, when discussing Low topics, the language behavior of less-educated speakers (-EDC-SPK) is likely to be affected by the status of their fellow-Papuan interlocutors. Therefore, these total token frequencies are not totaled in the Low-topic cell of the -EDC-SPK row. Instead the Low-topic token frequencies are broken down according to the status of their fellow-Papuan interlocutors; hence, the respective Low-topic cell is left empty. For TER-prefixed lexemes with bivalent bases, the respective token frequencies are 45 for +stat Papuan interlocutors and 23 for -stat Papuan interlocutors (see the +stat- and -stat -interlocutor columns in the top part of Table 3.6), while the Low-topic cell to the left is left empty.

Fourth, the language behavior of both better and less-educated speakers is likely to be affected when they converse with a non-Papuan outsider, regardless of the topic under discussion. Therefore, all tokens produced during conversations with an outsider, namely the author, are totaled in the outsd column of the +EDC-SPK and -EDC-SPK rows. For TER-prefixed lexemes with bivalent bases, this token frequency is nine for bettereducated speakers and six for less-educated speakers (see the OUTSD-interlocutor column in the top part of Table 3.6).

Figure 3.1 gives a graphic representation of the data listed in Table 3.6. The horizontal category $(\mathrm{X})$ axis presents the different categories according to which the token frequencies are listed, that is, the four topic categories and the three interlocutor categories. The vertical value ( Y ) axis gives the token totals for each of these categories, according to speaker education levels. The columns with the dots denote the token frequencies for the better-educated speakers, while the columns with the downward diagonal lines indicate the frequencies for the less-educated speakers.


Figure 3.1: Token frequencies for $T E R$-prefixed lexemes with bi- and monovalent verbal bases by speakers, topics, and interlocutors

The data given in Table 3.6 and Figure 3.1 shows that for the 43 TER-prefixed lexemes, most tokens (143/167-86\%) can be explained in terms of speaker education levels, topics, and/or role-relations between the speakers and their interlocutors; this total includes $130 / 153$ tokens ( $85 \%$ ) with bivalent bases, and $13 / 14$ tokens ( $93 \%$ ) with monovalent bases.

Only 55/167 tokens ( $33 \%$ ) were produced by better-educated speakers (+EDC-SPK) while most tokens ( $112 / 167-67 \%$ ) were produced by less-educated speakers (-EDC-SPK). The +EDC-SPK produced half of their tokens ( $27 / 55-49 \%$ ) during discussions about High topics, that is, political, educational or religious affairs (POL, EDC and REL, respectively). Another 19 tokens ( $35 \%$ ) occurred during conversations with fellow-Papuans (both +STAT and -stat speakers) about low topics. The remaining nine tokens ( $16 \%$ ) occurred while conversing with an outsider, namely the author (outsd).

The -EDC-SPK produced most of their tokens ( $47 / 112-42 \%$ ) while discussing low topics with +Stat speakers ( 47 tokens). Another $35 / 112$ tokens ( $31 \%$ ) were produced during discussions about HIGH topics, while $6 / 112$ tokens ( $5 \%$ ) occurred during conversations with the author. The remaining $24 / 112$ tokens ( $21 \%$ ) occurred when -EDC-SPK discussed low topics with -stat Papuans, and therefore cannot be explained in terms of speaker education levels, topics, and/or role-relations. This total of 24 tokens refers to $14 \%$ of all

167 TER-tokens, including 23/153 tokens (15\%) with bivalent bases and $1 / 14$ tokens (7\%) with monovalent bases. ${ }^{10}$

### 3.1.2.5 Summary and conclusions

For most of the derived verbs with bivalent bases, the data suggests a productive formfunction relationship between the derived lexemes and their bases. This conclusion is based on four observations: (1) the valency-decreasing or -reducing function of TERof removing or downplaying agent-like participants, (2) the transparent form-function relationships between derived lexemes and bases, (3) the large number of low frequency words and small number of high frequency words, and (4) the relative token frequencies with most bases having higher frequencies than the affixed lexemes.

For the prefixed verbs with monovalent bases, the derivation process also seems to be productive, given (1) the transparent form-function relationships between derived lexemes and bases, (2) the comparatively large number of low frequency words and small number of high frequency words, and (3) the relative token frequencies with most bases having higher frequencies than the affixed lexemes. However, the low type frequency, with only five derived verbs, suggests that TER-prefixation of monovalent bases plays a minor role.

As for the speech situations during which the derived lexemes occurred, a sizable number of verbs with bivalent bases cannot be explained in terms of pertinent variables of the communicative event. Most tokens, however, including those with bivalent bases, seem to be conditioned by the variables of speaker education levels, topics, and/or rolerelations and therefore are best explained as code-switches with Indonesian.

These findings suggest that in Papuan Malay TER-affixation is a productive process to derive monovalent verbs that denote accidental or unintentional actions. The degree of productivity appears to be limited, however, given that most of the attested tokens are best explained as code-switches with Indonesian.

### 3.1.3 Suffix -ang 'PAT'

Affixation with -ang 'pat' typically derives nominals from verbal bases. The derived nouns denote the patient or result of the action, event, or state specified by the verbal base, as illustrated in (10). Some lexical items are also derived from nominal and numeral bases. The derivation process seems to be productive in Papuan Malay to some degree, as discussed below.
(10) pake-ang itu basa smua
use-pat D.dist be.wet all
'all those clothes were wet' [080917-008-NP.0139]

[^68]Suffix -ang is a reflex of Proto-Malayic *-An, which "was a noun-forming suffix occurring on the basis of VTRs and denoting the goal or result of an act" (Adelaar 1992: 174). In Standard Malay, when affixed to monovalent bases, the suffix designates "something that has the quality of" the monovalent base, while with transitive bases it denotes the "goal or result of an action, or place where the action takes place" or "the instrument" (1992: 172-173). As for the eastern Malay varieties, the suffix is only mentioned for Ambon Malay. Also realized as -ang, it "refers to the object of the transitive verb or an instrument used in an act of V" (van Minde 1997: 106). It is left unclear, however, whether and to what degree the Ambon Malay suffix is productive. These observations are again an indication of the distinct history of Papuan Malay vis-à-vis the other Malay varieties, discussed in §1.8. Moreover, the similarities between Papuan Malay and Ambon Malay reflect the link between both speech communities, also discussed in §1.8.

The corpus contains 84 nouns ( 441 tokens) suffixed with -ang: ${ }^{11}$

1. Nouns with verbal bases ( 69 items with 403 tokens)
2. Nouns with nominal or numeral bases ( 15 items with 38 tokens)

The corpus also includes 28 formally complex words that have non-compositional semantics, such as kasiang 'pity', lapangang 'field', or grakang 'movement'.

Suffixed items with verbal bases are examined in §3.1.3.1, and those with nominal bases in §3.1.3.2. Variables of the communicative event that may impact the use of -ang are explored in §3.1.3.3. The main findings on suffix -ang are summarized and evaluated in §3.1.3.4.

### 3.1.3.1 Suffixed items derived from verbal bases

The corpus contains 69 -ang-suffixed items (with 403 tokens) with verbal bases, including bases such as bivalent pake 'use', monovalent dynamic jalang 'walk', or monovalent stative dulu 'be prior'. Affixation with -ang typically derives nouns that denote the object of the action, event, or state indicated by the verbal base.

Derived words with token frequencies of five or more are listed in Table 3.7. Most of the affixed lexemes are low frequency words ( 63 lexemes, attested with less than 20 tokens). Moreover, the token frequencies for the respective bases are (much) higher for most of the derived words ( 64 lexemes). While all 69 derived lexemes are structurally nouns, three of them have other than nominal functions in their actual uses: jualang 'merchandise', duluang 'be prior', and latiang 'practice'; illustrations are provided in (13) to (15).

Seven of the 69 lexemes were tentatively classified as borrowings from Standard Indonesian (SI-borrowings) (for more details see language internal factor (1f) in §3.1.1, p. 123). As their token frequencies are four or less, they are not included in Table 3.7.

[^69]Table 3.7: Affixation with -ang of verbal bases

| BW | Gloss | Item | Gloss | -ang \# BW \# |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| makang | 'eat' | makangang | 'food' | 57 | 414 |
| pake | 'use' | pakeang | 'clothes' | 38 | 218 |
| dulu | 'be prior' | duluang | 'be prior to others' | 29 | 351 |
| bagi | 'divide’ | bagiang | 'part' | 28 | 63 |
| pikir | 'think' | pikirang | 'thought' | 23 | 102 |
| $u j i$ | 'examine' | ujiang | 'examination, examine' | 21 | 1 |
| lati | 'practice' | latiang | 'practice' | 17 | 3 |
| kubur | 'burry' | kuburang | 'grave' | 14 | 8 |
| atur | 'arrange' | aturang | 'regulation' | 8 | 24 |
| ikat | 'tie up' | ikatang | 'tie' | 8 | 14 |
| jual | 'sell' | jualang | 'merchandise, sell' | 8 | 14 |
| turung | 'descend' | turungang | 'descendant' | 8 | 192 |
| ulang | 'repeat' | ulangang | 'repetition' | 8 | 16 |
| bantu | 'help' | bantuang | 'help' | 7 | 34 |
| alas | 'put down as base' | alasang | 'reason' | 6 | 7 |
| bangung | 'build' | bangungang | 'building' | 6 | 25 |
| libur | 'have vacation' | liburang | 'vacation' | 6 | 10 |
| campur | 'mix' | campurang | 'mixture' | 5 | 5 |
| jalang | 'walk' | jalangang | 'route' | 5 | 485 |
| lapor | 'report' | laporang | 'report' | 5 | 14 |
| tulis | 'write' | tulisang | 'writing' | 5 | 12 |

Affixing verbal bases with -ang typically derives nouns that denote the object of the action specified by the verbal base. The suffixed nouns include patients such as makangang 'that which is eaten' or 'food', or results such as bagiang 'that which is divided' or 'part'. "Objective nominalization" that derives "nouns designating the result, or the typical or 'cognate' object of an action" has also been observed for other languages (Comrie \& Thompson 2007: 340). This polysemy can be explained in terms of a "domain shift" in that "one may go from one semantic domain to another, related one, and thus derive new interpretations" (Booij 2007: 221). Hence, suffix -ang is glossed as 'pat' ('patient') in the sense of 'patients or results which are base-ed'.

Two derived nouns together with their bases are given in context: makangang 'food' with its bivalent base makang 'eat' in (11), and jalangang 'route' with its monovalent base jalang 'walk' in (12).

Suffix -ang: Semantics of verbal bases and derived lexemes
(11) maytua bilang, makang karna makang-ang suda masak wife say eat because eat-PAT already cook '(my) wife said, "eat, because the food has already been cooked"' [080919-004-NP.0039]
(12) trus kitong dua pulang, sampe di jalang-ang sa istirahat, de bilang, kitong next 1pl two go.home reach at walk-PAT 1sG rest 3sG say 1PL dua jalang suda!
two walk already
'and then we two went home, on the way I rested, he said, "let the two of us walk (on)!"' [081015-005-NP.0036]

Some of the suffixed items, listed in Table 3.7, differ from the other suffixed items, as for example jual-ang 'sell-pat' and dulu-ang 'be.prior-pat'. Suffixed with -ang, these items are structurally nouns. In a sentence, however, jualang also functions as the verb 'sell' in the same way as its base jual 'sell', as shown in (13). Likewise duluang 'be.prior-pat' in (14) is used in the same way as its base dulu 'be prior' in (15).

Suffix -ang: Verbal reading of derived lexemes
(13) mama saya pergi jual pinang, sa pu mama jual-ang pinang mother 1sG go sell betel.nut 1sG poss mother sell-pAT betel.nut 'my mother went to sell betel nuts, my mother sells betel nuts'
[081014-014-NP.0002]
(14) nanti kam dari blakang, bapa dulu-ang
very.soon 2pl from backside father be.prior-pat
[About an upcoming official meeting:] 'then you two (go in) second, (and) the gentleman (goes) ahead' [081011-001-Cv.0199]
(15) dua orang dulu
two person be.prior
[About the number of potential nominees for the upcoming local election:] 'two people (go) ahead' [080919-001-Cv.0065]

### 3.1.3.2 Suffixed items derived from nominal or numeral bases

The corpus contains 13 -ang-suffixed lexemes with nominal bases ( 36 tokens) and two derived lexemes with numeral bases ( 2 tokens), as listed in Table 3.8. In most cases, the bases and the derived nouns differ in their semantics. In some cases, the affixed nouns designate a magnification of the base, such as laut 'sea' and lautang 'ocean', or ruang 'room' and ruangang 'large room'. In some cases, the meanings of the derived nouns are
an extension of the meanings of their bases with suffix -ang having a generalizing function, as for instance ana 'child' and anaang 'offspring', or musim 'season' and musimang 'each season'. In yet other cases, the affixed nouns have unpredictable meanings compared to the semantics of their bases, such as rambut 'hair' and rambutang 'rambutan', or obat 'medicine' and obatang 'magic spell'. And in a few cases, the base and the derived noun have the same semantics, as in pasang 'pair' and pasangang 'pair' or pangkal 'base' and pangkalang 'base'.

All 13 derived lexemes are low frequency words, attested with less than 20 tokens. Moreover, the token frequencies for the respective bases are (much) higher for most of the derived words ( 10 lexemes); for one lexeme, the base is unattested in the corpus, although it does exist. Four of the 15 derived nouns were tentatively classified as SI-borrowings; in Table 3.8 these items are underlined (for more details see language internal factor (1f) in §3.1.1, p. 123).

Table 3.8: Affixation with -ang of nominal and numeral bases

| BW | Gloss | Item | Gloss | -ang \# | BW \# |
| :--- | :--- | :--- | :--- | ---: | ---: |
| bayang | 'image' | bayangang | 'shadow' | 6 | 2 |
| ana | 'child' | anaang | 'offspring' | 4 | 741 |
| tingkat | 'floor' | tingkatang | 'level' | 4 | 5 |
| hukum | 'law' | hukumang | 'punishment' | 4 | 3 |
| rambut | 'hair' | rambutang | 'rambutan' | 3 | 23 |
| obat | 'medicine' | obatang | 'magic spell' | 3 | 9 |
| pasang | 'pair' | pasangang | 'pair' | 3 | 2 |
| laut | 'sea' | lautang | 'ocean' | 2 | 68 |
| pinggir | ''border' | pinggirang | 'edges' | 2 | 23 |
| ruang | 'room', | ruangang | 'large room' | 2 | 3 |
| kandung | 'womb' | 年andungang | 'womb' | 1 | 8 |
| musim | 'season' | musimang | 'each season' | 1 | 5 |
| pangkal | 'base' | pangkalang | 'base' | 1 | 0 |
| pulu | 'tens' | puluang | 'tens' | 1 | 78 |
| ratus | 'hundreds' | ratusang | 'hundreds' | 1 | 34 |

The data listed in Table 3.8 shows that most of the nominal bases and affixed nouns differ in their semantics. The magnifying function of suffix -ang is illustrated in (16) and (17), the generalizing function in (18), and its unpredictable semantics in (19) and (20).

The magnifying function of -ang is demonstrated with laut 'sea' in (16) and lautang 'ocean' in (17). While laut refers to the 'sea' close to the coast, lautang denotes the open and deep 'ocean' off the coast.

Suffix -ang: Magnifying function
(16) dong dua pergi mancing di laut

3pl two go fish.with.rod at sea
'the two of them went fishing on the sea' [081109-005-JR.0005]
(17) banyak mati ... di pulow pulow banyak mati di laut-ang
sea-pat
many die at RDP~island many die at ocean
'many died ... on the islands, many died on the (open) ocean' [081029-002-Cv.0025]
The generalizing function of -ang is illustrated with ana 'child' and anaang 'offspring' in (18).

Suffix -ang: Generalizing function
(18) kalo mo antar ana prempuang ke ana laki~laki ... kitorang
if want bring child woman to child RDP~husband 1PL
itu harus ... bawa ana-ang pinang ana-ang sagu
child-PAT child-PAT
D.DIST have.to bring offspring betel.nut offspring sago
[About wedding preparations:] 'if we want to bring our daughter to (their) son ... we have to ... bring betel nut seedlings (and) sago seedlings' (Lit. 'female/male child; betel nut/sago offspring') [081110-005-CvPr.0055-0057]

In some cases, the semantics of the affixed nouns are unpredictable, although a connection between the base word and the derived word can still be seen. This is demonstrated with rambut 'hair' in (19) and rambutang 'rambutan' in (20), which refers to the fruit of the rambutan tree (Nephelium lappaceum). The leathery reddish skin of the fruit is covered with numerous hairy protuberances, which is depicted by the label rambut-ang 'hair-pat'.

Suffix -ang: Unpredictable semantics
(19) sa mo cuci de pu rambut

1sG want wash 3sg poss hair
'I want to wash her hair' [081025-001-CvHt.0006]
(20) di sini ada jambu di sini ada ada rambut-ang
hair-pat
at L.Prox exist rose.apple at L.PRox exist exist rambutan
'here are rose apples, here are are rambutan' [081029-001-Cv.0006]

### 3.1.3.3 Variables of the communicative event

To further investigate the issue of productivity of -ang in Papuan Malay, a domain analysis was conducted which focused on the variables of speaker education levels, topics, and/or role-relations (for details see "Language external factors" in §3.1.1, p. 124). In all, 84 items suffixed with -ang, totaling 441 tokens, were investigated:

- 69 suffixed items derived from verbal bases (403 tokens)
- 15 suffixed items derived from nominal or numeral bases ( 38 tokens)

For the 84 suffixed lexemes, 352/441 tokens ( $80 \%$ ) can be accounted for in terms of speaker education levels, topics, and/or role-relations. The remaining 89/441 tokens ( $20 \%$ ) occurred when less-educated speakers (-EDC-SPK) talked with fellow-Papuans of equally low social standing (-stat) about low topics. ${ }^{12}$ (See Table 3.9 and Figure 3.2.)

That is, a considerable number of tokens ( $20 \%$ ) cannot be explained in terms of these variables of the communicative event. Therefore, it cannot be concluded that the respective lexemes are code-switches with Indonesian. This total of 89/441 tokens (20\%) includes 80/403 tokens ( $20 \%$ ) with verbal bases and $9 / 38$ tokens ( $24 \%$ ) with nominal or numeral bases. The vast majority of -ang-suffixed tokens (352/441-80\%), however, seem to be conditioned by variables of the communicative event.

As for the rather high number of unaccounted tokens with nominal or numeral bases ( $9 / 38-24 \%$ ), one observation is made. Four of the nine tokens refer to the same lexeme produced by the same speaker during three conversations about the same topic, namely the death of a young mother. This speaker has a reputation of speaking incoherently due to his unsuccessful attempts to approximate Standard Indonesian. Excluding these four tokens brings down the number of unaccounted lexemes to $15 \%$ (5/34). If affixation of nominal bases was a productive process, however, one would expect this percentage to be much higher. In turn, this finding does not support the conclusion that the suffixed lexemes with nominal or numeral bases result from a productive derivation process. Instead, they seem to be code-switches with Indonesian.

The data presented in Table 3.9 and Figure 3.2 is discussed in more detail below.
The data given in Table 3.9 and Figure 3.2 shows that for the 84 -ang-suffixed lexemes, $352 / 441$ tokens ( $80 \%$ ) can be explained in terms of speaker education levels, topics, and/or role-relations between the speakers and their interlocutors; this includes 323/403 tokens $(80 \%)$ with verbal bases, and $29 / 38$ tokens $(76 \%)$ with nominal bases.

The better-educated speakers (+EDC-SPK) produced 209/441 tokens ( $47 \%$ ), while the less-educated speakers (-EDC-SPK) produced 232/441 (53\%) tokens.

In terms of topics (TOP), 187/441 tokens (42\%) occurred during conversations about high topics, that is, political, educational or religious affairs (POL, EDC and REL, respectively). This includes 76/209 +EDC-SPK tokens ( $36 \%$ ) and 111/232-EDC-SPK tokens ( $48 \%$ ).

[^70]Table 3.9: Token frequencies for -ang-suffixed lexemes with verbal, nominal, and numeral bases by speakers, topics, and interlocutors (84 items)

|  | Topics (TOP) |  |  |  | Interlocutors (ILCT) |  |  | Tokens |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Suffixed lexemes with verbal bases (69 items) |  |  |  |  |  |  |  |  |
|  | POL | EDC | REL | Low | +Stat | -stat | Outsd | Total |
| +EDC-SPK | 30 | 26 | 15 | 46 | --- | --- | 75 | 192 |
| -EDC-SPK | 15 | 40 | 47 | --- | 26 | 80 | 3 | 211 |
| Subtotal | 45 | 66 | 62 | 46 | 26 | 80 | 78 | 403 |
| Suffixed lexemes with nominal and numeral bases (15 items) |  |  |  |  |  |  |  |  |
|  | POL | EDC | REL | LOW | +Stat | -Stat | OUTSD | Total |
| +EDC-SPK | 4 | 1 | 0 | 4 | --- | --- | 8 | 17 |
| -EDC-SPK | 3 | 0 | 6 | --- | 1 | 9 | 2 | 20 |
| Subtotal | 7 | 1 | 6 | 4 | 1 | 9 | 10 | 38 |
| TOTAL (84 items) |  |  |  |  |  |  |  |  |
|  | POL | EDC | ReL | Low | + Stat | -stat | OUTSD | Total |
| +EDC-SPK | 34 | 27 | 15 | 50 | --- | --- | 83 | 209 |
| -EDC-SPK | 18 | 40 | 53 | --- | 27 | 89 | 5 | 232 |
| Total | 52 | 67 | 68 | 50 | 27 | 89 | 88 | 441 |

Another 88/441 tokens (20\%) were produced in conversations with an outsider, namely the author (OUTSD), including 83/209 +EDC-SPK tokens (40\%) and 5/232-EDC-SPK tokens (0.2\%).

This leaves 166/441 tokens ( $38 \%$ ) that were produced when the interlocutors discussed LOW topics. This includes $50 / 166$ +EDC-SPK tokens ( $30 \%$ ) and 116/166-EDC-SPK tokens $(70 \%)$. The 116 Low topic tokens produced by -EDC-SPK are distributed as follows. When conversing with +stat Papuans, 27 tokens were produced (that is, 27/232-EDC-sPK tokens $-12 \%$ ). The remaining 89 tokens (that is, 89/232-EDC-SPK tokens $-38 \%$ ) occurred when -edc-spk discussed low topics with -stat Papuans, and therefore cannot be explained in terms of speaker education levels, topics, and/or role-relations. This total of 89 tokens refers to $20 \%$ of all 441 -ang tokens. It includes $80 / 403$ tokens ( $20 \%$ ) with verbal bases and $9 / 38$ tokens ( $24 \%$ ) with nominal or numeral bases. ${ }^{13}$

[^71]
## 3 Word-formation

-ang: Verbal, nominal, and numeral bases (84 items with 441 tokens)


Figure 3.2: Token frequencies for -ang-suffixed lexemes with verbal, nominal, and numeral bases by speakers, topics, and interlocutors

### 3.1.3.4 Summary and conclusions

Suffix -ang is polyfunctional in that it derives nouns from verbal, nominal, and numeral bases. This polyfunctionality suggests that affixation with -ang is a somewhat productive process (see language internal factor (1c) in §3.1.1, p. 122).

Concerning -ang-affixation of verbal bases, four other observations support this conclusion: (1) the transparent form-function relationship between the derived nouns and their respective bases, (2) the large number of low frequency words and small number of high frequency words, (3) the relative token frequencies with most bases having higher frequencies than the affixed lexemes, and (4) the low number of derived lexemes tentatively classified as SI-borrowings.

To a lesser extent, the same observations apply to -ang-affixation of nominal bases: (1) the form-function relationships between derived lexemes and bases is more or less transparent, (2) all derived lexemes are low frequency words, (3) most bases have higher token frequencies than the affixed lexemes, and (3) the number of derived lexemes tentatively classified as SI-borrowings is rather low. These findings suggest that -ang-affixation of nominal bases is also a somewhat productive process.

With respect to the speech situations during which the derived nouns occurred, the following patterns emerge. For affixed nouns with verbal bases, one fifth of the attested tokens cannot be accounted for in terms of pertinent variables of the communicative event; that is, for these items there are no indications that they are code-switches with Indonesian. However, the vast majority of tokens with verbal bases ( $80 \%$ ) seem to be conditioned by the variables of speaker education levels, topics, and/or role-relations and are best explained as code-switches with Indonesian. The same applies to nouns with nominal bases for which most tokens also appear to be conditioned by the three mentioned variables of the communicative event. Hence, these items are also best explained as code-switches with Indonesian.

These findings suggest that in Papuan Malay -ang-affixation is a productive process to derive nouns from verbal and nominal bases. The degree of productivity appears to be limited, however, as most tokens seem to be code-switches with Indonesian.

### 3.1.4 Prefix $P E(N)$ - 'AG'

Affixation with $P E(N)-$ 'AG' typically derives nominals from verbal bases. The derived nouns denote the agent or instrument of the action, event, or state specified by the verbal base, as in (21). Some lexemes are also derived from nominal bases. The affixation process appears to be marginally productive in Papuan Malay, at best, as discussed below.
pokoknya orang pen-datang pulang
the.main.thing.is person AG-come go.home
'the main thing is (that) the strangers return home' (Lit. 'the one who comes')
[081029-005-Cv.0048]
Suffix $P E(N)$ - is a reflex of Proto-Malayic * $p A N$-, which "formed deverbal nouns that were used attributively, predicatively, and in prepositional phrases, and that had a nominal as head or subject. They denoted a purpose or instrument when prefixed to VDIs and VTRs. Moreover, *PAN- denoted an inclination or characteristic when prefixed to VSIs" (Adelaar 1992: 193). In Standard Malay, derived lexemes with a monovalent base "denote a characteristic" while forms with a bivalent base "usually denote an actor or instrument" or "a goal or result, or they form an abstract noun. Furthermore paN-forms are used attributively, and, on the basis of VSIs, they can function as VSIs" (1992: 183).

In some of the eastern Malay varieties, the prefix is also found. In Ambon Malay, the prefix occurs but it is unproductive (van Minde 1997: 109). In Manado Malay payalso occurs and is productive (in addition, a unproductive form pa- exists) (Stoel 2005: 18, 24). Likewise, in North Moluccan / Ternate Malay pa(N)- occurs, but its status is uncertain. While Voorhoeve (1983: 4) maintains that it "is no longer morphologically distinct", Litamahuputty (2012:30) states that the prefix is productive. In these varieties, the prefix usually denotes the actor or instrument of the event expressed by the base. In addition, however, some of prefixed forms can also receive a verbal reading, as discussed in more detail in §3.1.4.2.

## 3 Word-formation

The corpus contains 34 nouns ( 186 tokens) prefixed with $\operatorname{PE}(N)-:^{14}$

1. Nouns with verbal bases ( 29 items with 153 tokens)
2. Nouns with nominal bases (five items with 33 tokens)

The corpus also contains nine formally complex words with non-compositional semantics, such as peserta 'participant' or panggayu '(a/to) paddle'.

Before discussing PE $(N)$-affixation of verbal bases in §3.1.4.2 and of nominal bases in $\S 3.1 .4 .3$, the allomorphy of $P E(N)$ - is investigated in $\S 3.1 .4$.1. Variables of the communicative event that may impact the use of $P E(N)$ - are explored in §3.1.4.4. The main points on prefix $P E(N)$ - are summarized and evaluated in §3.1.4.5.

### 3.1.4.1 Allomorphy of $\operatorname{PE}(N)$ -

Prefix $P E(N)$ - has two allomorphs, $p e(N)$ - and $p a(N)$-(small-caps $N$ represents the different realizations of the nasal). The allomorphs are not governed by phonological processes.

The form $p e(N)$-, in turn, has seven allomorphs that result from morphologically conditioned phonological rules. More specifically, they are conditioned by the word-initial segment of the base word, as shown in Table 3.10: /pem-/, /pen-/, /pen-/, pen-/, /pe-/, $/ \mathrm{p}-/$, and / $\mathrm{pl}-/$. The prefix is realized as /pem-/ when the initial segment of the base is a bilabial stop. Onset voiced stops are retained, while voiceless stops are deleted. With onset bilabial $/ \mathrm{m} /$, the prefix is realized as $/ \mathrm{p} \varepsilon-/$. With alveolar stops, the prefix is very commonly realized as /pen-/. Again, the onset voiced stop is retained, while the onset voiceless stop is deleted. Alternatively, however, the onset voiceless stop can also be retained, in which case the prefix is realized as /p $\varepsilon-/$. With onset fricative /s/, the prefix is realized as /pen-/, with /s/ being deleted. With onset palato-alveolar affricates, pe( $N$ )is realized as /pen-/. With onset rhotic /r/, the affix is realized as /p $\varepsilon-/$. With onset velar stops and onset vowels, the prefix is realized as /pen-/. Finally, when prefixed to ajar 'teach', $p e(N)$ - is realized as $/ \mathrm{pl}-/$.

The allomorph $p a(N)$ - occurs considerably less frequently. Attested are only the four items listed in Table 3.11 with a total of $18 p a(N)$ - tokens. Form $p a(N)$ - has two attested allomorphs: /pan-/ and /pa-/. The phonological processes involved in the allomorphy are the same as those for $p e(N)$-, discussed above. For two of the items, the prefix is alternatively realized as allomorph $p e(N)$-. Therefore, for each item the token frequencies for $p a(N)$ - and for $p e(N)$ - are given. If the prefix is realized with $/ \mathrm{p} \varepsilon(\mathrm{N})-/$ in a greater number of tokens than with $/ \mathrm{pa}(\mathrm{N})-/$, then its orthographic representation is $P E(N)$ - as in pencuri 'thief, steal (EMPH)'.

In realizing the prefix typically as $p e(N)$ - rather than as $p a(N)$-, Papuan Malay differs from other eastern Malay varieties such as Ambon Malay (van Minde 1997: 109), Manado Malay (Stoel 2005: 23), and North Moluccan / Ternate Malay (Voorhoeve 1983: 4; Litamahuputty 2012: 30). In these varieties the prefix is always realized as $p a(N)$-. Instead, the $\operatorname{PE}(N)$-prefixed items have more resemblance with the corresponding items

[^72]Table 3.10: Realizations of allomorph $p e(N)$ -

| pe(N)-base | Orthogr. | Gloss |
| :---: | :---: | :---: |
| /pem-bantu/ | pembantu | 'house helper' |
| /pem-pili/ | pemili | 'voter' |
| /pe-muda/ | pemuda | 'youth' |
| /pen-datay/ | pendatang | 'newcomer' |
| /pen-tumpay/ | penumpang | 'passenger' |
| /pe-tugas/ | petugas | 'official' |
| /pen-sakit/ | penyakit | 'disease' |
| /pen-tJuri/ | pencuri | 'thief, to steal (EMPH)' |
| /pen-dzaga/ | penjaga | 'guard' |
| /pe-rentfana/ | perencana | 'planner' |
| /pey-acara/ | pengacara | 'master of ceremony' |
| /pey-ganti/ | pengganti | 'replacement' |
| /pl-adzar/ | plajar | 'teacher' |

Table 3.11: Realizations of allomorph $p a(N)$ -

| pa(N)-base | Orthogr. | Gloss | $p a(N)-\#$ | $p e(N)-\#$ |
| :--- | :--- | :--- | :--- | :--- |
| /pa-malas/ | pamalas | 'listless person, be very listless' | 12 | 2 |
| /pan-diam/ | pandiam | 'taciturn person, be very quiet' | 2 | 0 |
| /pan-takut/ | panakut | 'coward, be very fearful (of)' | 3 | 0 |
| /pan-tfuri/ | pencuri | 'thief, steal (EMPH)' | 1 | 11 |

in Standard Indonesian where the prefix is realized as $p e(N)$-. This is again an indication of the distinct history of Papuan Malay vis-à-vis the other eastern Malay varieties, discussed in §1.8.

### 3.1.4.2 Prefixed items derived from verbal bases

The corpus includes $29 \operatorname{PE}(N)$ - prefixed nouns (with 153 tokens) with verbal bases, listed in Table 3.12 and Table 3.13. Included are items with biverbal bases such as curi 'steal', monovalent dynamic bases such as $d u d u k$ 'sit', or monovalent stative bases such as muda 'be young'. The affixation process derives nouns that designate the subject of the action, event, or state specified by the verbal base.

All but one of the derived words are low frequency words ( 28 lexemes, attested with less than 20 tokens). In addition, the token frequencies for the respective bases are (much) higher for most of the derived words ( 24 lexemes). While the 29 prefixed items are structurally nouns, four of them also have verbal functions in their actual uses: pamalas 'list-
less person, be very listless', pandiam 'taciturn person, be very quiet', panakut 'coward, be very fearful (of)', and pencuri 'thief, steal (ЕмРн)'. These items are investigated in more detail in (26) to (29).

Of the 29 derived lexemes, more than half ( 17 items) were tentatively classified as borrowings from Standard Indonesian (SI-borrowings) (for details see language internal factor (1f) in §3.1.1, p. 123); in Table 3.12 and Table 3.13 these items are underlined.

Affixing verbal bases with $P E(N)$ - derives nouns that denote the subject of the action, event, or state specified by the verbal base. The prefixed nouns include personal agents such as pendatang 'newcomer', impersonal agents such as penyakit 'disease', or instruments such as penokok 'pounder'. This polysemy can be explained in terms of Booij's (1986: 509) "extension scheme" which shows that "the conceptual category Agent [...] derived from verbs with an Agent subject can be extended" to instruments such that "Personal Agent > Impersonal Agent > Instrument". In Papuan Malay, this extension schema also includes less typical agents derived from stative verbs, so-called "attributants", following Van Valin's (2005: 55) cross-linguistics definitions of thematic relations. Examples are pemuda 'youth', derived from muda 'be young'. Hence, prefix PE(N)- is glossed as 'AG' ('agent') in the sense of 'agents or instruments who/which habitually do BASE or have the characteristics of BASE'.

Two of the derived nouns together with their verbal bases are given in context: pemimping 'leader' and its bivalent base pimping 'lead' in (22) and (23), and pemuda 'youth' and its monovalent base muda 'be young' in (24) and (25), respectively.

$$
\text { Prefix } P E(N)-: \text { Semantics of verbal bases and derived lexemes }
$$

(22) pemimping (pem-pimping) mati, yo smua mati

AG-lead die yes all die
'(when) the leader dies, yes, all die' [081010-001-Cv.0026]
(23) o kenal karna bapa kang biasa pimping kor
oh! know because father you.know usual lead choir
'oh, (I) know (him), because, you know, the gentleman usually leads the choir'
[081011-022-Cv.0243]
(24) sa liat pe-muda di Takar banyak skali

1SG see AG-be.young at Takar many very
'I see (there are) very many young people in Takar' [080925-003-Cv.0176]
(25) kasi-ang masi muda baru janda
love-pat still be.young and.then widow
'poor thing, (she's) still young but now (she's) a widow' [081006-015-Cv.0032]
Four of the prefixed lexemes listed in Table 3.12 and Table 3.13 are nouns that can also receive an intensified verbal reading: pamalas 'be very listless' as in (26), pencuri 'steal (ЕМРн)' as in (27), panakut 'be very fearful (of)' as in (28), and pandiam 'be very

Table 3.12: Affixation with $P E(N)$ - of verbal bases

| BW | Gloss | Item | Gloss | PE(N)- \# | BW \# |
| :---: | :---: | :---: | :---: | :---: | :---: |
| muda | 'be young' | pemuda | 'youth' | 46 | 24 |
| malas | 'be listless' | pamalas | 'listless person, be very listless' | 14 | 19 |
| curi | 'steal' | pencuri | $\begin{aligned} & \text { 'thief, steal } \\ & (\text { EMPH)' } \end{aligned}$ | 12 | 4 |
| pimping | 'lead' | pemimping | 'leader' | 11 | 8 |
| datang | 'come' | pendatang | 'newcomer' | 10 | 447 |
| sakit | 'be sick' | penyakit | 'disease' | 7 | 155 |
| duduk | 'sit' | penduduk | 'inhabitant' | 5 | 167 |
| tunggu | 'wait' | penunggu | 'tutelary spirit' | 5 | 92 |
| pili | 'choose' | pemili | 'voter' | 5 | 25 |
| tanggungjawap | 'be responsible' | penanggung- jawap | 'responsible person' | 5 | 6 |
| tumpang | 'join in' | penumpang | 'passenger' | 5 | 1 |
| takut | 'feel afraid (of)' | panakut | 'coward, be very fearful (of)' | 3 | 154 |
| tokok | 'pound' | penokok | 'pounder' | 3 | 44 |
| antar | 'bring' | pengantar | 'escort' | 2 | 130 |
| diam | 'be quiet' | pandiam | 'taciturn person, be very quiet' | 2 | 58 |
| jaga | 'guard' | penjaga | 'guard' | 2 | 41 |
| ajar | 'teach' | plajar | 'teacher' | 2 | 41 |
| bantu | 'help' | pembantu | 'house helper' | 2 | 34 |
| urus | 'arrange' | pengurus | 'manager' | 2 | 28 |
| bicara | 'speak' | pembicara | 'speaker' | 1 | 332 |
| ikut | 'follow' | pengikut | 'follower' | 1 | 253 |
| dengar | 'hear' | pendengar | 'listener' | 1 | 130 |
| pikir | 'think' | pemikir | 'thinker' | 1 | 102 |

Table 3.13: Affixation with $P E(N)$ - of verbal bases continued

| BW | Gloss | Item | Gloss | PE (N)- \# BW \# |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ganti | 'replace' | pengganti | 'replacement' | 1 | 40 |
| tolong | 'help' | penolong | 'helper' | 1 | 39 |
| tunjuk | 'show' | petunjuk | 'guide' | 1 | 32 |
| tendang | 'kick' | penendang | ''kicker' | 1 | 4 |
| iris | 'slice' | pengiris | 'slicer' | 1 | 3 |
| tinju | 'box' | petinju | 'boxer' | 1 | 1 |

quiet' as in (29). In (26) pamalas 'be very listless' receives a verbal reading given that a nominal reading of pamalas kerja 'the lazy males work' is inappropriate. In (27), pencuri 'steal (EMPH)' has verbal function as only verbs are negated with tra 'NEG' (see §5.3.6 and §13.1.1). In (28) panakut 'be very fearful (of)' functions as a verb, which is intensified with sampe 'reach'. The utterance in (29) is ambiguous, as pandiam can receive the nominal reading 'taciturn person' or the verbal reading 'be very quiet'.

Prefix $\operatorname{PE}(N)$-: Verbal reading of derived lexemes
(26) jadi sampe skarang laki~laki pa-malas kerja
so until now RDP~husband AG-be.listless work
'so until now the men are too listless / don't like it at all to work'
[081014-007-CvEx.0087]
(27) dong tra pen-curi

3pl NEG AG-steal
'(nowadays), they don't steal (EMPH)!' [081011-022-Cv.0298]
(28) ...i biasa-nya panakut sampe bagemana
pan-takut
ugh! be.usual-3possr AG-feel.afraid(.of) reach how
[About a frightening event at night:] '[she started (running) past (us),] ugh, usually (she's) very fearful beyond words' [081025-006-Cv.0328]
(29) Sofia de bilang begini, sa ini pan-diam.

Sofia 3sG say like.this 1sG D.Prox AG-be.quiet
'Sofia said something like this, "I'm a taciturn person / I'm very quiet"' [081115-001a-Cv.0190]

As discussed in the introductory remarks in §3.1.4, the corresponding prefix in ProtoMalayic and Standard Malay also has verbal functions. That is, with monovalent stative bases, the derived lexemes "can function as VSIs" (Adelaar 1992: 183). This prefix does not, however, have the intensifying verbal function that Papuan Malay $P E(N)$ - has. This
intensified verbal reading of mono- and bivalent verbal bases prefixed with $P E(N)$ - could be an extension of the original functions of $p \partial N^{-}$found in Standard Malay or of *pANfound in Proto-Malayic.

In other eastern Malay varieties, lexical items prefixed with pa-can also receive a verbal reading. For Ambon Malay, van Minde (1997: 109) presents a number of examples, noting that "the word class of the $p a(N)$ - formation varies between transitive verb, intransitive verb and noun". For North Moluccan / Ternate Malay, Voorhoeve (1983: 4) presents two prefixed items with a basic verbal reading: pamalas 'lazy' and panggayung 'row'. Likewise, Litamahuputty (1994: 40) presents two such items: pamalas 'lazy' and panako 'afraid'; both "are considered to be monomorphemic", however. For Manado Malay, Stoel (2005: 24) also presents two such items: pancuri 'steal' and pandusta 'lie'. As mentioned, though, prefix $p a$ - is unproductive in Manado and North Moluccan / Ternate Malay.

### 3.1.4.3 Prefixed items derived from nominal bases

The corpus contains five $P E(N)$-prefixed nouns (with 33 tokens), listed in Table 3.14, which are derived from nominal bases and denote abstract concepts. In general, the derived lexemes denote an "agent who executes what bASE indicates". Four of the five lexemes are low frequency words, attested with less than 20 tokens. Moreover, the token frequencies for the respective bases are (much) higher for three of the five derived words. In addition, four items were tentatively classified as SI-borrowings (for details see language internal factor (1f) in §3.1.1, p. 123); in Table 3.14 these items are underlined.

Table 3.14: Affixation with $P E(N)$ - of nominal bases

| BW | Gloss | Item | Gloss | PE $(\mathrm{N})-\#$ | BW \# |
| :--- | :--- | :--- | :--- | ---: | ---: |
| printa | 'command' | pemrinta | 'government' | 23 | 5 |
| tugas | 'duty' | petugas | 'official' | 5 | 19 |
| usaha | 'effort' | pengusaha | 'entrepreneur' | 3 | 2 |
| acara | 'ceremony' | pengacara | 'master of | ce- | 1 |

In (30) and (31) one of the prefixed nouns and its nominal base are given in context, namely pemrinta 'government' and printa 'command', respectively.
(30) kalo de bilang spulu milyar pemrinta sanggup bayar
pem-printa
if 3sg say ten billion AG-command be.capable pay
'if he demands ten billion (then) the government is capable of paying'
[081029-004-Cv.0073]
(31) masi banyak yang melangar printa~printa Tuhang
still many REL collide.with RDP $\sim$ command God
'(there are) still many who violate God's commands' [081014-014-NP.0050]

### 3.1.4.4 Variables of the communicative event

To examine the issue of productivity of $\operatorname{PE}(N)$ - in Papuan Malay from a different perspective, a domain analysis was conducted which focused on the variables of speaker education levels, topics, and/or role-relations (for details see "Language external factors" in §3.1.1, p. 124). In all, 34 items prefixed with $P E(N)$-, totaling 186 tokens, were investigated:

- 29 prefixed items with verbal bases ( 153 tokens)
- Five prefixed items with nominal bases (33 tokens)

For the 34 prefixed lexemes, most tokens (167/186-90\%) can be accounted for in terms of speaker education levels, topics, and/or role-relations. The remaining 19/186 tokens $(10 \%)$ cannot be explained in terms of these variables of the communicative event. These tokens occurred when less-educated speakers (-EDC-SPK) conversed with fellow-Papuans of equally low social standing (-stat) about low topics, that is, casual daily-life issues ${ }^{15}$ (see Table 3.15 and Figure 3.3).
If the prefixed lexemes were the result of a productive affixation process, one would expect the percentage of tokens that cannot be explained in terms of speaker education levels, topics, and/or role-relations to be much higher than $10 \%$. Instead, most tokens $(90 \%)$ seem to be conditioned by these variables of the communicative event. These findings do not support the conclusion that the respective lexemes are the result of a productive derivation process. Instead, they seem to be code-switches with Indonesian.

The data presented in Table 3.15 and Figure 3.3 is discussed in more detail below.
The data given in Table 3.15 and Figure 3.3 shows that for the $34 \mathrm{PE}(\mathrm{N})$-prefixed lexemes, most tokens ( $167 / 186-90 \%$ ) can be explained in terms of speaker education levels, topics, and/or role-relations between the speakers and their interlocutors; this total includes $135 / 153(88 \%)$ tokens with verbal and $32 / 33$ tokens ( $97 \%$ ) with nominal bases.

More than half of the tokens were produced by better-educated speakers (+EDC-SPK) (103/186-55\%), while less-educated speakers (-EDC-SPK) produced 83/186 tokens ( $45 \%$ ).

Two thirds of the 186 tokens (123/186-66\%) occurred during conversations about high topics, that is, political, educational or religious affairs (POL, EDC and rel, respectively). This includes $68 / 103$ tokens ( $66 \%$ ) produced by + EDC-SPK and $55 / 83$ tokens ( $66 \%$ ) produced by -EDC-SPK. In addition, 11/186 tokens ( $6 \%$ ) occurred during conversations with an outsider, namely the author (OUTSD), all of them being +EDC-SPK tokens (11/103 $-11 \%$ ).

[^73]Table 3.15: Token frequencies for $P E(N)$-prefixed lexemes with verbal and nominal bases by speakers, topics, and interlocutors ( 34 items)

|  | Topics (TOP) |  |  |  | Interlocutors (ILCT) |  |  | Tokens |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prefixed lexemes with verbal bases (29 items) |  |  |  |  |  |  |  |  |
|  | POL | EDC | Rel | Low | +STAT | -Stat | OUTSD | Total |
| +EDC-SPK | 37 | 6 | 3 | 19 | --- | --- | 11 | 76 |
| -EDC-SPK | 11 | 2 | 37 | --- | 9 | 18 | 0 | 77 |
| Subtotal | 48 | 8 | 40 | 19 | 9 | 18 | 11 | 153 |
| Prefixed lexemes with nominal bases ( 5 items) |  |  |  |  |  |  |  |  |
|  | POL | EDC | Rel | Low | +STAT | -stat | Outsd | Total |
| +EDC-SPK | 10 | 0 | 12 | 5 | --- | --- | 0 | 27 |
| -EDC-SPK | 1 | 2 | 2 | --- | 0 | 1 | 0 | 6 |
| Subtotal | 11 | 2 | 14 | 5 | 0 | 1 | 0 | 33 |
| TOTAL (34 items) |  |  |  |  |  |  |  |  |
|  | POL | EDC | REL | Low | +STAT | -Stat | OUTSD | Total |
| +EDC-SPK | 47 | 6 | 15 | 24 | --- | --- | 11 | 103 |
| -EDC-SPK | 12 | 4 | 39 | --- | 9 | 19 | 0 | 83 |
| Total | 59 | 10 | 54 | 24 | 9 | 19 | 11 | 186 |

This leaves $52 / 186$ tokens ( $28 \%$ ) that were produced when the interlocutors discussed Low topics. This includes $24 / 103+$ EDC-SPK tokens ( $23 \%$ ) and 28/83-EDC-SPK tokens ( $34 \%$ ). The 28 low topic tokens produced by -edc-spk are distributed as follows. Nine tokens occurred during conversations with +STAT Papuans (that is, $9 / 83$-EDC-SPK tokens - 11\%). The remaining 19 tokens (that is, 19/83-EDC-SPK tokens - $23 \%$ ) occurred when -EDC-SPK discussed low topics with -stat Papuans, and therefore cannot be explained in terms of speaker education levels, topics, and/or role-relations. This total of 19 tokens refers to $10 \%$ of all 186 PE(N)-tokens, including $18 / 153$ tokens ( $12 \%$ ) with verbal bases and $1 / 33$ tokens (3\%) with nominal bases. ${ }^{16}$

### 3.1.4.5 Summary and conclusions

Prefix $P E(N)$ - is polyfunctional, in that it derives nouns from verbal and nominal bases. This polyfunctionality suggests that affixation with $P E(N)$ - is a somewhat productive process (see language internal factor (1c) in §3.1.1, p. 122).

[^74]$P E(N)$-: Verbal and nominal bases (34 items with 186 tokens)


Figure 3.3: Token frequencies for $P E(N)$-prefixed lexemes with verbal and nominal bases by speakers, topics, and interlocutors

Concerning $P E(N)$-affixation of verbal bases, three other observations support this conclusion: (1) the transparent form-function relationship between the derived nouns and their respective bases, (2) the large number of low frequency words and small number of high frequency words, and (3) the relative token frequencies with most bases having higher frequencies than the affixed lexemes. On the other hand, more than half of the derived lexemes were tentatively classified as SI-borrowings. These observations suggest that productivity of the affixation process is rather limited.

As for $P E(N)$-affixation of nominal bases, two observations suggest that this is a productive process: (1) most of the derived lexemes are low frequency words, and (2) most bases have higher token frequencies than the affixed lexemes. On the other hand, almost all derived lexemes were tentatively classified as SI-borrowings. These findings suggest that $P E(N)$-affixation of nominal bases has limited productivity

As for the speech situations during which the derived nouns occurred, the vast majority of the attested tokens are conditioned by the variables of speaker education levels, topics, and/or role-relations. Hence, these items are best explained as code-switches with Indonesian.

These findings suggest that in Papuan Malay PE(N)- affixation has, at best, marginal productivity.

### 3.1.5 Prefix BER- 'VBLZ'

Prefix ber- 'vblz' is typically attached to verbal bases, as in (32), or to nominal bases. Besides, the corpus also includes a few lexical items with numeral and quantifier bases. The prefixed lexemes have a verbal reading. As shown throughout this section, however, affixation with $B E R$ - ' $v$ blez' is not used as a productive derivation device in Papuan Malay.
(32) ... waktu saya ber-buru saya perlu makang pinang time 1sG vbiz-hunt 1sg need eat betel.nut '...when I hunt I need to chew betel nuts' [080919-004-NP.0011]

The corpus contains 62 derived verbs ( 602 tokens) prefixed with $B E R-:^{17}$

1. Verbs with verbal bases ( 29 items with 227 tokens)
2. Verbs with nominal, numeral, or quantifier bases ( 33 items with 375 tokens)

The corpus also includes 16 formally complex words with non-compositional semantics, such as bertriak 'scream', berjuang 'struggle', or berlabu 'anchor'.

Before discussing BER-affixation of verbal bases in §3.1.5.2 and of nominal, numeral, and quantifier bases in §3.1.5.3, the allomorphy of $B E R$ - is investigated in §3.1.5.1. Pertinent variables of the communicative event that may impact the use of $B E R$ - are explored in §3.1.8. The main findings on prefix $B E R$ - are summarized and evaluated in §3.1.5.4.

### 3.1.5.1 Allomorphy of BER-

Prefix $B E R$-has two allomorphs, ber- and $b a$-. The allomorphs are not governed by phonological processes.

Table 3.16: Realizations of allomorph ber-

| ber-base | Orthogr. | Gloss |
| :--- | :--- | :--- |
| /ber-d3uan/ | berjuang | 'struggle (for)' |
| /br-aykat/ | brangkat | 'leave' |
| /bl-adzar/ | blajar | 'study' |
| /be-kerd3a/ | bekerja | 'work' |
| /bs-brapa/ | bebrapa | 'be several' |

The form ber-, in turn, has four realizations that are effected by morphologically conditioned phonological rules. More specifically, the four allomorphs are conditioned by the word-initial segment of the base word, as illustrated in Table 3.16: /ber-/, /br-/, /bl-/, and /be-/. The prefix is typically realized as /ber-/. With an onset vowel, however, ber- is

[^75]very commonly realized as /br-/. When prefixed to ajar 'teach' the prefix is realized as /bl-/, while it is realized as /be-/ when affixed to kerja 'work' or brapa 'several'.

Allomorph ba- occurs much less frequently. Attested are only the 15 items listed in Table 3.17 with a total of 37 tokens. Some of these items are alternatively realized with allomorph ber-. Therefore, for each item the token frequencies for $b a$ - and for ber- are given. If in a greater number of tokens the prefix is realized with /ba-/ rather than with $/ \mathrm{b} \varepsilon \mathrm{r}-/$, then its orthographic representation is ba- as in bakalay 'fight'. If both realizations have the same token frequencies, then the orthographic representation follows its realization in the recorded texts, as in bergaya 'put on airs'.

In realizing prefix $B E R$ - most commonly as allomorph ber- rather than as $b a$-, Papuan Malay again contrasts with other eastern Malay varieties such as Ambon Malay (van Minde 1997: 95), Banda Malay (Paauw 2009: 249), Kupang Malay (Steinhauer 1983: 46), Manado Malay (Stoel 2005: 18), and North Moluccan / Ternate Malay (Taylor 1983: 18; Voorhoeve 1983: 4; Litamahuputty 2012: 125). In these varieties the prefix is always realized as $b a$-. Instead, the items prefixed with $B E R$ - have more resemblance with the corresponding Indonesian items where the prefix is realized as ber-. In addition, in Larantuka Malay the prefix is also realized as $b \partial(r)$ - (Paauw 2009: 253). Again this difference between Papuan Malay and the other eastern Malay varieties points to the distinct histories of both, discussed in §1.8.

Table 3.17: Realizations of allomorph ba-

| ba-base | Orthogr. | Gloss | ba- \# | ber- \# |
| :--- | :--- | :--- | ---: | ---: |
| /ba-kalaj/ | bakalay | 'fight' | 19 | 0 |
| /ba-taria/ | bertriak $^{\prime}$ | 'scream' | 3 | 18 |
| /ba-biyuy/ | babingung | 'be confused' | 2 | 0 |
| /ba-diam/ | badiam | 'be quiet' | 2 | 0 |
| /ba-diri/ | berdiri | 'stand' | 1 | 54 |
| /ba-dara/ | berdara | 'bloody' | 1 | 1 |
| /ba-duri/ | berduri | 'be thorny' | 1 | 1 |
| /ba-gaja/ | bergaya | 'put on airs' | 1 | 1 |
| /ba-gisi/ | bergisi | 'be nutritious' | 1 | 1 |
| /ba-jalang/ | berjalang | 'walk' | 1 | 1 |
| /ba-ribut// | beribut | 'be noisy' | 1 | 1 |
| /ba-gigit/ | bagigit | 'bite' | 1 | 0 |
| /ba-kumis/ | bakumis | 'have a beard' | 1 | 0 |
| /ba-isi/ | baisi | 'be muscular' | 1 | 0 |
| /ba-mعkap/ | bamekap | 'wear make-up' | 1 | 0 |

[^76]
### 3.1.5.2 Prefixed items derived from verbal bases

The corpus includes 29 BER-prefixed lexemes (with 227 tokens) with verbal bases, as listed in Table 3.18 and Table 3.19. Of the 29 lexemes, 11 have monovalent bases such as stative diam 'be quiet' or dynamic jalang 'walk'. The remaining 18 items have bivalent bases. Of these 18 prefixed lexemes, five have monotransitive as well as intransitive uses, while 11 lexemes have intransitive uses only. These 16 lexemes have the same semantics as their bivalent bases, as shown in (33) to (43). For the remaining two prefixed lexemes the semantics are distinct from those of their bases, as shown in (44) to (50). One of them has monotransitive as well as intransitive uses, while the other one has intransitive uses only.

Almost all of the derived lexemes are low frequency words (27 lexemes, attested with less than 20 tokens). Moreover, the token frequencies for the respective bases are (much) higher for most of the derived words ( 22 lexemes). This is due to the fact that the affixed lexemes and the bases have the same semantics and that, overall, speakers tend to use the bases rather than the prefixed forms, as shown in (33) to (43). Also, most of the 29 prefixed lexemes ( 24 items) were tentatively classified as borrowings from Standard Indonesian (SI-borrowings) (for details see language internal factor (1f) in §3.1.1, p. 123); in Table 3.18 and Table 3.19 these items are underlined.

Affixation with $B E R$ - of verbal bases derives lexemes that typically have the same semantics as their respective bases, with BER- being glossed as 'vblz' ("verbalizer"). This applies to $B E R$-prefixed lexemes with monovalent and with bivalent bases.

The fact that monovalent bases derive BER-prefixed lexemes with the same semantics is illustrated with stative bingung 'be confused' and prefixed berbingung 'be confused' in (33) and (34), and with dynamic ibada 'worship' and prefixed beribada 'worship' in (35) and (36), respectively.

Prefix BER-: Semantics of verbal bases and derived lexemes
(33) memang sa punya ade sa juga bingung dengang dia indeed 1sG poss ySb 1sG also be.confused with 3sG 'indeed (he was) my younger cousin, I'm also confused about him'
[080918-001-CvNP.0014]
(34) nanti di skola baru kamu ba-bingung dengang
very.soon at school and.then 2pl vblz-be.confused with
bahasa Inggris
language English
[Addressing lazy students:] 'later in school, then you'll be confused about
English' [081115-001a-Cv.0151]
(35) orang jalang itu mo pergi ibada
person walk D.DIST want go worship
[About a youth retreat:] 'people doing that traveling want to go (and) worship' [081006-016-Cv.0017]

Table 3.18: Affixation with $B E R$ - of verbal bases

| BW | Item | Gloss | BER-\# | BW \# |
| :--- | :--- | :--- | :--- | :--- |
| Monovalent bases: Bases and prefixed lexemes with same semantics |  |  |  |  |
| tobat | $\frac{\text { bertobat }}{\text { berbeda }}$ | 'repent' | 8 | 1 |
| beda | 'be different' | 7 | 34 |  |
| tanggung-jawap | $\frac{\text { bertanggung-jawap }}{\text { berbahaya }}$ | 'be responsible' | 5 | 6 |
| bahaya | 'be dangerous' | 3 | 3 |  |
| diam | $\frac{\text { 'be quiet' }}{\text { badiam }}$ | 'be confused' | 2 | 60 |
| bingung | $\frac{\text { berbingung }}{\text { berjalang }}$ | 'walk' | 2 | 30 |
| jalang | 'worship' | 1 | 480 |  |
| ibada | 'lean' | 1 | 11 |  |
| sandar | 'beribada | 1 | 6 |  |
| hati~hati | $\frac{\text { bersandar }}{\text { berhati~hati }}$ | 'be separeful' | 1 | 5 |
| pisa | $\underline{\text { berpisa }}$ |  | 1 | 4 |

Bivalent bases: Bases and prefixed lexemes with same semantics

| buru | berburu | 'hunt' | 10 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| buat | berbuat | 'make' | 7 | 100 |
| pikir | berpikir | 'think' | 8 | 102 |
| harap | berharap | 'hope' | 1 | 8 |
| ribut | bribut | 'trouble' | 1 | 5 |
| bicara | berbicara | 'speak' | 7 | 333 |
| kerja | bekerja | 'work' | 5 | 191 |
| tahang | bertahang | 'hold (out/back)' | 5 | 48 |
| uba | bruba | 'change' | 5 | 9 |
| gabung | bergabung | 'join' | 4 | 3 |
| maing | bermaing | 'play' | 3 | 113 |
| tindak | bertindak | 'act' | 2 | 1 |
| ikut | brikut | 'follow' | 1 | 259 |
| kumpul | berkumpul | 'gather' | 1 | 16 |
| bentuk | berbentuk | 'form' | 1 | 12 |
| gigit | bergigit | 'bite' | 1 | 10 |

Table 3.19: Affixation with $B E R$ - of verbal bases continued

| BW Item | Gloss | BER-\# | BW \# |
| :---: | :---: | :---: | :---: |
| Bivalent bases: Bases and prefixed lexemes with distinct semantics |  |  |  |
| Prefixed lexeme: Monotransitive and ajar ('teach') blajar | ransitive us 'study' | 51 | 41 |
| Prefixed lexeme: Monotransitive uses angkat ('lift') brangkat | 'leave' | 82 | 81 |

(36) nanti kita ber-ibada selesay malam ka baru sa pergi very.soon 1pl vblz-worship finish night maybe and.then 1sg go 'later, after we have worshipped, maybe in the evening, and then I'll go (there)' [080918-001-CvNP.0016]

Bivalent bases also derive BER-prefixed lexemes that have the same semantics as their bases, as shown in (37) to (43). As discussed in §11.1.2, bivalent verbs have not only monotransitive but also intransitive uses. The same applies to some of the BER-prefixed lexemes, as illustrated in (37) to (40).

Prefix BER-: Same semantics of verbal bases and derived lexemes
(37) jadi kitorang bingung pikir itu pen-jaga kubur-ang
so 1PL be.confused think D.DIST AG-guard bury-PAT
'so we're confused to think (about), what's-its-name, a guard (for) the grave' [080923-007-Cv.0024]
(38) ... tapi ana~ana ni dong tida taw ber-pikir itu
but RDP~child D.PROX 3PL NEG know vblz-think D.DIST
[About impolite teenagers:] '... but these kids they don't know (how) to think (about) those (feelings of mine)' [081115-001b-Cv.0037]
(39) skarang orang su tra pikirtentang hal ke-benar-ang now person already NEG think about thing nmLz-be.true-NMLZ
'nowadays, the people already don't think about things (related to) truth'
[081006-032-Cv.0016]
(40) ... karna dia ber-pikir tentang dia punya badang because 3sG vblz-think about 3sG poss body
'[she doesn't think about serving my or her guests] because she thinks about her body' [081006-032-Cv.0062]

[^77]
## 3 Word-formation

Most BER-prefixed lexemes with bivalent bases, however, have intransitive uses only, while their bases can be used mono- or intransitively. This is illustrated with bicara 'speak' and berbicara 'speak' in (41) to (43).

Prefix $B E R$-: Semantics and distribution of verbal bases and derived lexemes
(41) baru de bicara sa deng bahasa Inggris
and.then 3sG speak 1sG with language English
'and then she talked (to) me in English' [081115-001a-Cv.0229]
(42) de bicara trus

3sG speak be.continuous
'he kept talking' [080922-010a-CvNF.0145]
(43) baru nanti ber-bicara untuk nika
and.then very.soon vBLz-speak for marry.officially
[About wedding customs:] 'and then very soon (they'll) talk about marrying' [081110-006-CvEx.0050]

The corpus includes only two BER-prefixed lexemes that have distinct semantics vis-àvis their bivalent bases, namely ajar 'teach' and prefixed blajar 'study', and angkat 'lift' and prefixed brangkat 'leave' as shown in (44) to (50). Both ajar 'teach' and blajar 'study' are used monotransitively as in (44) and (45), as well as intransitively as in (46) and (47), respectively; in each case both lexemes maintain their distinct semantics.

Prefix BER-: Distinct semantics and same distribution of verbal bases and derived lexemes
(44) de ajar dorang tu untuk baik

3sG teach 3pl D.DIST for be.good
'she teaches them there for (their own) good' [081115-001a-Cv.0216]
(45) Ise de ... ikut bahasa Inggris bl-ajar kursus, bahasa Inggris dulu Ise 3sG follow language English vblz-teach course language English first 'Ise will participate in an English (course), (she'll) study a course, an English language course first' [081025-003-Cv.0223]
(46) de suda ajar bagus tiap sore itu

3sG already teach be.good every afternoon D.DIST
'she's already been teaching well, each and every afternoon' [081115-001a-Cv.0126]
(47) dong tida bl-ajar baik

3pl NEG vblz-teach be.good
'they don't study well' [081115-001b-Cv.0067]

Bivalent angkat 'lift' and prefixed brangkat 'leave' also have distinct semantics. In addition, they also have a distinct distribution. The base angkat 'lift' is used monotransitively, as well as intransitively, as in (48) and (49), respectively. By contrast, brangkat 'leave' is always used intransitively, as in (50).

Prefix BER-: Distinct semantics and distinct distribution of verbal base and derived lexeme
bapa de angkat rotang besar
father 3sG lift rattan be.big
'father picked up a big rattan (stick)' [080921-004a-CvNP.0084]
sa sendiri tra bisa angkat
1sg be.alone neg be.able lift
'[the pig was very big,] I alone could not transport (it)' [080919-003-NP.0008]
(50) skarang de mo br-angkat
now 3sG want vblz-lift
'then he wanted to leave' [080919-007-CvNP.0023]
In summary, with the exception of the last two lexemes, BER-prefixed verbs have the same semantics as their respective bases. This suggests that in Papuan Malay affixation of verbal bases with prefix BER- is not a productive process. Instead, the attested prefixed lexemes and their bases are taken as pairs of words from two different speech varieties: the unaffixed items are native Papuan Malay lexemes whereas the corresponding affixed items are SI-borrowings.

Given these properties, Papuan Malay BER- contrasts with the corresponding prefix in other Malay varieties. In most eastern Malay varieties, the corresponding prefix $b a$ forms verbs with a variety of meanings. The most common ones are durative and reflexive meanings, which are reported for Ambon Malay (van Minde 1997: 96-98), Banda Malay (Paauw 2009: 249-250), ${ }^{18}$ Manado Malay (Stoel 2005: 18-22), and North Moluccan / Ternate Malay (Taylor 1983: 18; Litamahuputty 2012: 125-127). In Kupang Malay (Steinhauer 1983: 46-49) and Larantuka Malay (Paauw 2009: 249-254-255), the prefix typically signals durative and reciprocal meanings. In Standard Indonesian, the main function of the corresponding prefix ber- is to create monovalent verbs (Englebretson 2003: 131; 2007: 96). When attached to verbal bases, the prefix indicates "that the subject of the utterance is the patient, that is, the experiencer of the action" (Mintz 1994: 134-138).

### 3.1.5.3 Prefixed items derived from nominal, numeral, or quantifier bases

The corpus contains 33 BER-prefixed lexemes (with 375 tokens), as listed in Table 3.20 and Table 3.21: 30 lexemes with nominal bases ( 362 tokens), two lexemes with numeral bases ( 7 tokens), and one lexeme with a quantifier base ( 6 tokens).

[^78]Most of the derived lexemes are low frequency words (29 lexemes, attested with less than 20 tokens). Besides, the token frequencies for the respective bases are (much) higher for most of the derived words ( 21 lexemes). This is due to the fact that Papuan Malay speakers typically use alternative analytical constructions to convey the meanings of the prefixed lexemes, as shown below in (51) to (56). Further, most of the 33 items ( 25 items) were tentatively classified as SI-borrowings (for details see language internal factor (1f) in §3.1.1, p. 123); in Table 3.20 and Table 3.21 these items are underlined.

Table 3.20: Affixation with BER- of nominal, numeral, and quantifier bases

| BW | Gloss | Item | Gloss | BER- \# | BW \# |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal bases |  |  |  |  |  |
| doa | 'prayer' | berdoa | 'pray' | 136 | 20 |
| arti | 'meaning' | brarti | 'mean' | 89 | 7 |
| diri | 'self' | berdiri | 'stand' | 55 | 14 |
| usaha | 'effort' | berusaha | 'attempt' | 25 | 2 |
| dosa | 'sin' | berdosa | 'sin' | 6 | 4 |
| saksi | 'witness' | bersaksi | 'testify' | 6 | 2 |
| hasil | 'result' | berhasil | 'succeed' | 6 | 13 |
| kwasa | 'power' | berkwasa | 'be powerful' | 4 | 25 |
| hak | 'right' | berhak | 'have right' | 4 | 15 |
| sodara | 'sibling' | bersodara | 'be siblings' | 3 | 127 |
| kebung | 'garden' | berkebung | 'do farming' | 3 | 61 |
| ade-kaka | 'siblings' | brade-kaka | 'be siblings' | 2 | 26 |
| malam | 'night' | bermalam | 'overnight' | 2 | 191 |
| bahasa | 'language' | berbahasa | 'speak' | 2 | 136 |
| temang | 'friend' | bertemang | 'be friends' | 2 | 85 |
| kluarga | 'family' | berkluarga | 'have family' | 2 | 49 |
| gaya | 'manner' | bergaya | 'put on airs' | 2 | 7 |
| ana | 'child' | brana | 'give birth' | 1 | 739 |
| bua | 'fruit' | berbua | 'have fruit' | 1 | 38 |
| dara | 'blood' | berdara | 'bleed' | 1 | 27 |
| sifat | 'characteristic' | bersifat | 'have characteristics of' | 1 | 18 |
| duri | 'thorn' | berduri | 'have thorns' | 1 | 8 |
| harga | 'value' | berharga | 'be valuable' | 1 | 4 |
| syukur | 'thanks' | bersyukur | 'give thanks' | 1 | 2 |
| fungsi | 'function' | berfungsi | 'function' | 1 | 1 |
| gisi | 'nutrient' | $\underline{\text { bergisi }}$ | 'be nutritious' | 1 | 1 |
| isi | 'content' | baisi | 'be muscular' | 1 | 1 |

Table 3.21: Affixation with $B E R$ - of nominal, numeral, and quantifier bases continued

| BW | Gloss | Item | Gloss | BER-\# | BW \# |
| :--- | :--- | :--- | :--- | ---: | :--- |
| komunikasi | 'communication' | berkomunikasi | 'communicate' | 1 | 1 |
| kumis | 'beard' | bakumis | 'have a beard' | 1 | 1 |
| mekap | 'make-up' | bamekap | 'wear make-up' | 1 | 1 |
| Numeral bases |  |  |  |  |  |
| satu | 'one' | bersatu | 'be one' | 6 | 516 |
| empat | 'four' | berempat | 'be four' | 1 | 66 |
| Quantifier base |  |  |  |  |  |
| brapa | 'several' | bebrapa | 'be several' | 6 | 109 |

Affixation with $B E R$ - derives monovalent verbs with the general meaning of 'be/have/ do BASE'. Examples are brarti 'have the meaning of' or 'mean', berdoa 'do prayer' or 'pray', bersatu 'be one', or bebrapa 'be several'. The monovalent verb berdiri 'stand' is an exception. Historically related to the noun diri 'self', it does not have a transparent formfunction relationship to its base. The transparent form-function relationship between the remaining 32 items and their bases suggests that these lexemes are the result of a productive affixation process. Two observations are made, however.

First, the data indicates that Papuan Malay speakers prefer to employ analytical constructions to express the meanings conveyed by the prefixed items, as illustrated in (51) to (56). To communicate 'have BASE', speakers typically use the existential verb ada 'exist' rather than the prefixed form, as shown in (51) with ada duri versus berduri 'have thorns'.
(51) ada ... dua macang jenis ada yang ber-duri ada yang
exist two variety kind exist rel vblz-thorn exist rel
tida ... kang ada sagu yang tida ada duri
NEG you.know exist sago rel neg exist thorn
'there are ... two kinds (of sago palms), ones that have thorns and ones that don't (have thorns) ... you know (there are) sago (palms) that don't have thorns' [081014-006-CvPr.0007/0009]

To express 'be BASE', speakers use a nominal predicate such as ade-kaka 'siblings' in (52), rather than the respective prefixed form brade-kaka 'be siblings' as in (53).
(52) jadi saya dengang dia ade-kaka sunggu
ySb-oSb
so 1 sg with 3 sg siblings be.true
'so I and she are full siblings' [080927-009-CvNP.0044]
(53) jadi saya dengang kaka Nofita masi br-ade-kaka so 1sG with oSb Nofita still vblz-siblings
'so I and older sister Nofita are still siblings' [080927-007-CvNP.0022]
To communicate 'do BASE', speakers typically employ alternative verbs. They tend to say, for example, biking kebung 'make/work a garden' as in (54), rather than use prefixed berkebung 'do farming' as in (55). Likewise, it is more common to say taw bahasa $X$ 'speak language $X$ ' than to use prefixed berbahasa $X$ 'speak language $X$ ' as in (56).
(54) kalo di Arbais prempuang bisa biking kebung
if at Arbais woman be.able make garden
'as for Arbais, (there) the women can work a garden' [081014-007-CvEx.0035]
(55) bapa pergi ber-kebung saya ikut
father go vBlz-garden 1sG follow
'(whenever my) father went to do farming I went with (him)'
[081110-008-CvNP.0002]
(56) jadi tong cuma taw bahasa Yali ... tapi sa bilang kamu ber-syukur so 1pl just know language Yali but 1sG say 2pl vblz-thank.God karna bisa ...ber-bahasa Yali
because be.able vbiz-language Yali
'so we only spoke Yali ... but I said, "you (should) be grateful because (you) can
speak Yali"" [081011-022-Cv.0101/0184]
Second, the exchange in (57) suggests that the high frequency items listed in Table 3.20 and Table 3.21 may well have non-compositional semantics for Papuan Malay speakers. In a conversation about religious affairs, the speaker produced diberdoa 'be prayed for'. This item is ungrammatical in both Papuan Malay and Standard Indonesian. Papuan Malay does not have a morphologically marked undergoer voice. The Standard Indonesian undergoer voice marker di- cannot co-occur with prefix ber-, but always replaces it. This example suggests that the speaker perceives berdoa 'pray' as a monomorphemic word to which she affixed the Indonesian undergoer voice marker di- in an attempt to approximate Indonesian.
(57) bebang masala de punya dia perlu ... harus di-ber-doa
burden problem 3sG poss 3sg need have.to uv-vblz-prayer
[Conversation about problems of a church congregation:] '(all) burdens (and) problems (that) it has, (the congregation) needs ... has to be prayed for'
[080917-008-NP.0089/0091]

### 3.1.5.4 Summary and conclusions

Prefix $B E R$ - is a polyfunctional affix that derives lexemes from verbal, nominal, numeral, and quantifier bases. This polyfunctionality suggests that in Papuan Malay affixation
with $B E R$ - is a somewhat productive process (see language internal factor (1c) in §3.1.1, p. 122). Two other observations support this conclusion: (1) the large number of low frequency words and small number of high frequency words, and (2) the relative token frequencies with most bases having higher frequencies than the affixed lexemes.

Four other observations, however, do not support the conclusion that affixation with $B E R$ - is a productive process: (1) for the prefixed lexemes with verbal bases, the derived lexemes have the same semantics as their bases, (2) for lexemes with nominal bases, speakers prefer to use alternative analytical constructions rather than the affixed lexemes, (3) high frequency items may well have non-compositional semantics for Papuan Malay speakers, and (4) most of the lexemes with verbal or nominal bases were tentatively classified as SI-borrowings.

Taken together, these findings indicate that Papuan Malay speakers do not employ prefix $B E R$ - as a productive device to derive new words. This conclusion is also supported by the findings of a domain analysis which indicate that most of the attested tokens can be accounted for in terms of the variables of speaker education levels, topics, and/or role-relations (details are discussed in §3.1.8, together with the findings for suffix -nya '3possr' and circumfix ke-/-ang 'nmlz'). Therefore, these lexemes are best explained as code-switches with Indonesian. (For a detailed discussion of prefix ber- in Standard Indonesian and Standard Malay see Adelaar 1992; Mintz 1994; Sneddon 2010.)

The conclusion that in Papuan Malay prefix BER- is unproductive again sets Papuan Malay apart from other eastern Malay varieties. In regional varieties such as Ambon Malay (van Minde 1997: 96-98), Banda Malay (Paauw 2009: 249-250), Larantuka Malay (Paauw 2009: 253-255), Manado Malay (Stoel 2005: 18-22), and North Moluccan / Ternate Malay (Taylor 1983: 18; Litamahuputty 2012: 125-127) the prefix is a productive derivational device. ${ }^{19}$ This distinction between Papuan Malay and the other eastern Malay varieties once again hints at the separate histories of both, discussed in §1.8.

### 3.1.6 Suffix -nya '3PossR'

Suffix -nya '3possr' is typically attached to nominal bases to indicate possessive relations, as illustrated in (58). In addition, a considerable number of suffixed lexemes have verbal bases, while a small number of lexemes have prepositional, adverbial, locative, or demonstrative bases. However, affixation with -nya '3pOSSR' is not used as a productive derivation device in Papuan Malay.
(58) jadi ana-nya hidup, ana itu masi ada
so child-3possr live child d.DIst still exist
'so her child lives, that child still exists' [080921-005-CvNP.0007]
The corpus contains 123 lexical items ( 387 tokens) suffixed with -nya: ${ }^{20}$

[^79]1. Suffixed items with nominal bases ( 82 items with 285 tokens)
2. Suffixed items with verbal bases ( 36 items with 82 tokens)
3. Suffixed items with other bases (five items with 20 tokens)

The corpus also contains seven formally complex words with non-compositional semantics. All seven items have adverbial function, such as misalnya 'for example' or akirnya 'finally'.

Suffixed lexemes with nominal bases are discussed in §3.1.6.1, those with verbal bases in $\S 3.1 .6 .2$, and those with other bases in §3.1.6.3. Pertinent variables of the communicative event that may impact the use of -nya are explored in §3.1.8. The main findings on suffix -nya are summarized and evaluated in §3.1.6.4.

### 3.1.6.1 Suffixed items derived from nominal bases

The corpus contains 82 -nya-suffixed lexemes (with 285 tokens) with nominal bases, where -nya typically signals possession. As an extension of the possessive-marking function, some of the derived items listed in Table 3.22 function as sentence adverbs, namely maksutnya 'that is to say' (literally 'the purpose of'), katanya 'it is being said' (literally 'the word of'), and artinya 'that means' (literally 'the meaning of').

Derived words with token frequencies of five or more are listed in Table 3.22. All but two of the derived lexemes are low frequency words ( 80 items, attested with less than 20 tokens). Besides, the token frequencies for the respective bases are (much) higher for most of the derived words ( 65 lexemes). Of the 82 suffixed lexemes, 76 were tentatively classified as borrowings from Standard Indonesian (SI-borrowings) (for details see language internal factor (1f) in §3.1.1, p. 123); in Table 3.22 these items are underlined. The exceptions are the three derived lexemes that function as sentence adverbs, two of which are presented in context in (61) and (62).

The low token frequencies for the derived lexemes result from the fact that Papuan Malay speakers usually use an alternative strategy to express possessive relations. Instead of suffixing -nya to a nominal base, Papuan Malay encodes adnominal possession by an analytical construction with punya, or reduced pu, 'poss' (see Chapter 9). The "punya \#" column in Table 3.22 lists the token frequencies for adnominal possessive constructions with punya/pu 'poss'. Examples are given in (59) and (60).

In (59), -nya is suffixed to the nominal base nama 'name', giving the possessive reading namanya 'her name'. By contrast, (60) shows the inherited analytical strategy of expressing the same meaning with possessive marker pu 'poss'.

Suffix -nya: Possessive reading of derived lexemes

```
nama-nya Madga
```

name-3possr Madga
'her name is Madga' [081011-005-Cv.0027]

Table 3.22: Affixation with -nya of nominal bases

| BW | Gloss | Item | Gloss | -nya \# | punya\# |
| :---: | :---: | :---: | :---: | :---: | :---: |
| nama | 'name' | namanya | 'the name of' | 23 | 38 |
| istri | 'wife' | istrinya | 'the wife of' | 11 | 22 |
| ana | 'child' | ananya | 'the child of' | 7 | 119 |
| orang | 'person' | orangnya | 'the person of' | 6 | 8 |
| ruma | 'house' | rumanya | 'the house of' | 5 | 43 |
| hasil | 'product' | hasilnya | 'the product of' | 5 | 2 |
| istila | 'term' | istilanya | 'the term of/for' | 5 | 1 |
| dalam | 'inside' | dalamnya | 'the inside of' | 5 | --- |
| maksut | 'purpose' | maksutnya | 'that is to say' | 70 | 3 |
| kata | 'word' | katanya | 'it is being said' | 19 | --- |
| arti | 'meaning' | artinya | 'that means' | 17 | --- |

(60) de pu nama Martin

3sG poss name Martin
'his name is Martin' [081011-022-Cv.0241]
The examples in (61) and (62) illustrate the uses of maksutnya 'that is to say' and katanya 'it is being said', respectively, as sentence adverbs.

Suffix -nya: Adverbial reading of derived lexemes
(61) ... maksut-nya saya harus dayung dulu dengang prahu purpose-3possr 1sG have.to row first with boat
'[I'm getting ready, I take my bow and arrows and an oar,] that is to say, I have to row first with a boat' [080919-004-NP.0008]
(62) kata-nya orang Sulawesi smua
word-3possr person Sulawesi all
'it's being said (that) they are all Sulawesi people' (Lit. '(the) Sulawesi people (are) all') [081029-005-Cv.0106]

### 3.1.6.2 Suffixed items derived from verbal bases

The corpus contains 36 -nya-suffixed lexemes (with 82 tokens) with verbal bases. Affixation with -nya derives nominals from verbal bases. Shifting from the possessive reading of -nya, the derived nominals have the general meaning of 'the BASE of', such as ceritranya 'the telling of' or 'his/her telling'. As an extension of the nominalizing and possessive-marking function of -nya, eight of the derived lexemes function as adverbs, such as biasanya 'usually' (literally 'its being usual') or kususnya 'especially' (literally
'its being special'). Derived words with token frequencies of three or more are listed in Table 3.23.

All 36 affixed lexemes are low frequency words, attested with less than 20 tokens. Moreover, the token frequencies for the respective bases are (much) higher for all but one of the derived words ( 35 lexemes). This is due to the fact that Papuan Malay speakers tend to use the respective bases, as in (63) to (66), rather than the suffixed forms. Of the 36 derived lexemes, nine were tentatively classified as SI-borrowings (for details see language internal factor (1f) in §3.1.1, p. 123); in Table 3.23 these items are underlined.

In (63), -nya is suffixed to the verbal base mo 'want' giving the nominalized form mawnya 'the wanting of'. The example in (64) illustrates the preferred strategy of expressing the same meaning in a verbal clause with the base mo 'want'.

Suffix -nya: Use patterns of base word mo 'want' versus derived lexeme
(63) maw-nya ke kampung maw biking apa di sana?
want-3posse to village want make what at L.DIST
[Addressing a teenager who plays hooky:] 'your wish (is to go) to the village, what do (you) want to do there?' (Lit. 'his wanting (is) to the village')
[081115-001a-Cv.0046]
(64) ko mo ke kampung tapi ko skola

2sG want to village but 2SG go.to.school
'you want (to go) to the village but you're going to school'
[080922-001a-CvPh.0734]
In (65), -nya is suffixed to the verbal base biasa 'be usual' with adverbially used biasanya 'usually' modifying the verb dansa 'dance'. More commonly, however, speakers employ the base biasa 'be usual', as in (66) with adverbially used biasa 'be usual' modifying the verb maing 'play'.

Table 3.23: Affixation with -nya of verbal bases

| BW | Gloss | Item | Gloss | -nya \# | BW \# |
| :---: | :---: | :---: | :---: | :---: | :---: |
| mo | 'want' | mawnya | 'the wanting of' | 6 | 972 |
| ceritra | 'tell' | ceritranya | 'the telling of' | 6 | 162 |
| pegang | 'hold' | pegangnya | 'the holding of' | 3 | 114 |
| hidup | 'live' | hidupnya | 'the living of' | 3 | 74 |
| biasa | 'be usual' | biasanya | 'usually' | 18 | 181 |
| harus | 'have to' | harusnya $^{\text {a }}$ | 'appropriately' | 7 | 379 |
| kusus | 'be special' | kususnya | 'especially' | 3 | 30 |

[^80]Suffix -nya: Use patterns of base word biasa 'be usual' versus derived lexeme
(65) ... dansa lemon-nipis itu biasa-nya dansa lemon-nipis
dance citron D.DIST be.usual-3posse dance citron
'[they make a ceremony, they sing on and on,] (they) dance that citron (group dance), usually (they) dance the citron (group dance)' [081110-005-CvPr.0098]
(66) Herman dorang biasa maing di sini tu

Herman 3pl be.usual play at L.Prox d.dist
'Herman and the others usually play right here' [080923-009-Cv.0017]

### 3.1.6.3 Suffixed items derived from other bases

The corpus contains five lexemes (with 20 tokens) which are derived from a number of different bases. Two lexemes have prepositional bases and one has an adverbial base, listed in Table 3.24, with -nya having adverb-marking function. In addition, one lexeme has a demonstrative base and one a locative base, listed in Table 3.25, with -nya having emphasizing function.
The two lexemes with prepositional bases and the one with an adverbial base have distinct meanings vis-à-vis their bases. These items usually function as sentence adverbs as shown in (67) and (68). Again, the adverbial-marking function of -nya seems to be an extension of its nominalizing and possessive-marking function. For instance, spertinya 'it seems' can be literally translated as 'its being similar to'. All five affixed lexemes are low frequency words, attested with less than 20 tokens. In addition, the token frequencies for the respective bases are (much) higher for all of the derived words. All five suffixed lexemes were tentatively classified as SI-borrowings; in Table 3.24 these items are underlined.

Table 3.24: Affixation with -nya of prepositional and adverbial bases

| BW | Gloss | Item | Gloss | -nya \# | BW \# |
| :--- | :--- | :--- | :--- | ---: | ---: |
| Prepositional base |  |  |  |  |  |
| sperti | 'similar to' | spertinya | 'it seems' | 12 | 217 |
| kaya | 'like' | $\underline{\text { kayanya }}$ | 'it looks like' | 5 | 61 |
| Adverbial bases |  |  |  |  |  |
| memang | 'indeed' | memangnya | 'actually' | 1 | 143 |

The examples in (67) and (68) illustrate the respective uses of spertinya 'it seems' and kayanya 'it looks like' as sentence adverbs.

Suffix -nya: Adverbial reading of derived lexemes
(67) sperti-nya de suda tinggalkang de punya orang-tua similar.to-3posse 3sG already leave 3sG poss parent 'it seems she already left her parents behind' [081110-005-CvPr.0086]
(68) kaya-nya munta~munta
like-3POSSR RDP-vomit
'it looked like (he was going to) vomit' [081025-008-Cv.0051]
When suffixed to demonstrative or locative bases, -nya functions as an emphasizer. This usage of -nya is very rare, however; attested are only the two lexemes listed in Table 3.25. Instead, to signal emphasis, Papuan Malay speakers typically employ a modifying demonstrative (see §7.1.2.3); this is shown with the token frequencies given in the "dem \#" column, which refer to modification with a demonstrative. Examples are presented in (69) and (70).

Table 3.25: Affixation with -nya of demonstrative and locative bases

| BW | Gloss | Item | Gloss | -nya \# | DEM \# |
| :--- | :--- | :--- | :--- | ---: | ---: |
| itu | 'D.DIST'' | itunya | 'it!' | 1 | 19 |
| sini | 'L.PROx' | $\underline{\text { sininya }}$ | 'right here' | 1 | 18 |

In (69), -nya is suffixed to the medial locative sini ' L .PRox', giving the emphatic reading sininya 'right here'. In (70) the same meaning is expressed with an analytical construction in which the distal demonstrative modifies the locative.

Suffix -nya: Emphatic reading of derived lexemes
(69) jatu di sana, di sini di sini-nya ter-kupas
fall at L.DIST at L.PROX at L.PROX-3POSSR ACL-peel
[About a motorbike accident:] 'he fell (with his bike) over there, here, right here (his skin) was peeled off' [081014-013-NP.0001]
(70) a disini tu bahaya
ah at L.Prox D.DIST be.dangerous
'ah, right here it is dangerous' [081011-001-Cv.0138]

### 3.1.6.4 Summary and conclusions

Suffix -nya is a polyfunctional affix that derives lexemes from nominal, verbal and a number of other bases. Three observations indicate that in Papuan Malay affixation with -nya is a productive process: (1) the polyfunctionality of the suffix and the transparent
form-function relationship between the derived lexemes and their respective bases, (2) the large number of low frequency words and small number of high frequency words, and (3) the relative token frequencies with most bases having higher frequencies than the affixed lexemes.

Two other observations, however, do not support this conclusion: (1) speakers usually employ alternative strategies that express the same meanings as the suffixed items, and (2) most of the suffixed items were tentatively classified as SI-borrowings. Also, the findings of a domain analysis suggest that most of the attested tokens can be accounted for in terms of the variables of speaker education levels, topics, and/or role-relations. (Details are discussed in §3.1.8, together with the findings for prefix $B E R$ - 'vblz' and circumfix ke-/-ang 'nmlz'.)

In considering these conflicting observations, two findings are given special weight, namely the fact that speakers prefer alternative strategies without affixation, and the findings of the domain analysis. Therefore, it is concluded that in Papuan Malay affixation with -nya is not used as a productive derivation device. Instead, the suffixed lexemes are best explained as code-switches with Indonesian. (For a detailed discussion of suffix -nya in Standard Indonesian and Standard Malay see Mintz 1994; Sneddon 2010.)

### 3.1.7 Circumfix ke-/-ang 'NMLz'

Circumfix ke-/-ang 'nmlz' is typically attached to verbs. The circumfixed lexemes have a nominal reading; usually they denote stable conditions or attributes, as in (71). Some lexical items also have nominal, numeral, or quantifier bases. Circumfixation with $\mathrm{ke}-/-$ ang ' nmlz ', however, is not used as a productive derivation device in Papuan Malay, as discussed below:
(71) jadi itu suda ke-biasa-ang dari dulu so D.DIST already nMLz-be.usual-NMLz from first
'so already that (has become) a habit from the past' [081014-007-CvEx.0063]
The corpus includes 65 lexical items ( 258 tokens) circumfixed with $\mathrm{ke} / /-$ ang: ${ }^{21}$

1. Circumfixed items with verbal bases ( 57 items with 239 tokens)
2. Circumfixed items with nominal, numeral, or quantifier bases (eight items with 19 tokens)

The corpus also contains three formally complex words with non-compositional semantics, kebaktiang 'religious service', kecelakaang 'accident', and kegia-tang 'activity'.

Circumfixed items with verbal bases are discussed in §3.1.7.1, and those with nominal, numeral, or quantifier bases in §3.1.7.2. Pertinent variables of the communicative event that may impact the use of $k e-/$-ang are examined in §3.1.8. The main findings on circumfix ke-/-ang are summarized and evaluated in §3.1.7.3.

[^81]
### 3.1.7.1 Circumfixed items derived from verbal bases

The corpus includes 57 ke -/-ang -circumfixed lexemes (with 238 tokens) with verbal bases, such as bivalent turung 'descend' or monovalent biasa 'be usual'. Of the 57 lexemes 52 are nouns and five are accidental verbs.

The 52 circumfixed nouns typically denote stable conditions or attributes in the sense of 'state/quality of being BASE'. Derived words with token frequencies of four or more are listed in Table 3.26. Examples are presented in (72) and (73). All but one of the affixed lexemes are low frequency words ( 51 lexemes, attested with less than 20 tokens). Moreover, the token frequencies for the respective bases are (much) higher for most of the derived words ( 41 lexemes). Of the 52 circumfixed nouns, more than half ( 27 items) were tentatively classified as borrowings from Standard Indonesian (SI-borrowings) (for details see language internal factor (1f) in §3.1.1, p. 123); in Table 3.26 these items are underlined.

Table 3.26: Affixation with $k e-/$-ang of verbal bases

| BW | Gloss | Item | Gloss | ke-/-ang \# | BW \# |
| :---: | :---: | :---: | :---: | :---: | :---: |
| biasa | 'be usual' | kebiasaang | 'habit' | 21 | 185 |
| merdeka | 'be independent' | kemerdekaang | 'freedom' | 14 | 42 |
| baik | 'be good' | kebaikang | 'goodness' | 13 | 182 |
| trang | 'be clear' | ketrangang | 'explanation' | 11 | 4 |
| tindis | 'overlap' | ketindisang | 'k.o. trap' | 10 | 13 |
| turung | 'descend' | keturungang | 'descendant' | 9 | 192 |
| sempat | 'have enough time' | kesempatang | 'opportunity' | 9 | 2 |
| benar | 'be true' | kebenarang | 'truth' | 9 | 16 |
| hidup | 'live' | kehidupang | 'life' | 8 | 74 |
| nyata | 'be obvious' | kenyataang | 'reality' | 8 | 1 |
| takut | 'feel afraid (of)' | ketakutang | 'fear' |  |  |
| sehat | 'be healthy' | kesehatang | 'health' | 7 | 11 |
| jahat | 'be bad' | kejahatang | 'evilness' | 7 | 10 |
| inging | 'wish' | keingingang | 'wish' | 6 | 6 |
| laku | 'do' | kelakuang | 'behavior' | 6 | 5 |
| mo | 'want' | kemawang | 'will' | 5 | 972 |
| $l e b i$ | 'be more' | kelebiang | 'surplus' | 5 | 467 |
| saksi | 'testify' | kesaksiang | 'testimony' | 5 | 2 |
| ada | 'exist' | keadaang | 'condition' | 4 | 1,742 |
| betul | 'be true' | kebetulang | 'chance' | 4 | 123 |
| kurang | 'lack' | kekurangang | 'shortage' | 4 | 40 |

One ke-/-ang-lexeme and its base are given in context: kebaikang 'goodness' in (72) and its base baik 'be good' in (73).

Circumfix ke-/-ang: Semantics of base words and derived lexemes
(72) dong masi ingat de pu ke-baik-ang

3PL pray 1PL 3sG poss nmlz-be.good-NMLZ
'they still remember his/her goodness' [081110-008-CvNP.0261]
(73) knapa orang bilang, adu, ko pu sifat baik
why person say oh.no! 2sG poss characteristic be.good
'why do people say, "oh no, your character is good"' [081110-008-CvNP.0134]
As an extension of its function to derive nouns that denote stable states or attributes, five $k e-/$-ang-circumfixed lexemes with verbal bases receive an accidental verbal reading, as listed in Table 3.27. ${ }^{22}$ That is, these items indicate that the referent has undergone an accidental or unintentional action or event, such as keliatang 'be visible' or ketinggalang 'be left behind'. An example is presented in (74). All five affixed lexemes are low frequency words, attested with less than 20 tokens. Besides, the token frequencies for the respective bases are (much) higher for all of the derived words. Two of the five accidental verbs were tentatively classified as SI-borrowings; in Table 3.27 these items are underlined.

Table 3.27: Verbs with circumfix $k e-/-a n g$ with verbal bases

| BW | Gloss | Item | Gloss | ke-/-ang \# | BW \# |
| :--- | :--- | :--- | :--- | ---: | ---: |
| liat | 'see' | keliatang | 'be visible' | 6 | 467 |
| tinggal | 'stay' | ketinggalang | 'be left behind' | 5 | 515 |
| taw | 'know' | ketawang | 'be found out' | 1 | 603 |
| lewat | 'pass by' | kelewatang | 'be overly abundant' | 1 | 140 |
| masuk | 'enter' | kemasukang | 'be possessed' | 1 | 261 |

One ke -/-ang-lexeme and its base are given in context: keliatang 'be visible' in (74) and liat 'see' in (75). The verbal status of keliatang 'be visible' is evidenced by the fact that it is negated with tida ' NEG ' (nominals cannot be negated with tida ' NEG '; see §5.2 and §13.1.1).

## Circumfix ke-/-ang: Verbal reading of derived lexemes

(74) taw taw orang itu tida ke-liat-ang
suddenly person that NEG NMLZ-see-NMLZ
‘suddenly, that person wasn't visible (any longer)' [080922-002-Cv.0123]

[^82](75) tukang ojek ini dia tida liat kolam ini
craftsman motorbike.taxi D.PRox 3sG NEG see big.hole D.PRox
'this motorbike taxi driver, he didn't see this big hole' [081015-005-NP.0009]

### 3.1.7.2 Circumfixed items derived from nominal, numeral, or quantifier bases

The corpus includes six $k e-/$-ang-circumfixed nouns with nominal bases (with eight tokens), and two nouns with numeral or quantifier bases (with 11 tokens), listed in Table 3.28. The lexemes with nominal bases express "abstract concepts associated with BASE", while those with numeral or quantifier bases denote stable conditions in the sense of "state of being base".

All eight affixed lexemes are low frequency words, attested with less than 20 tokens. Moreover, the token frequencies for the respective bases are (much) higher for all of the derived words. Seven of the eight derived lexemes were tentatively classified as SIborrowings (for details see language internal factor (1f) in §3.1.1, p. 123); in Table 3.28 these items are underlined.

Table 3.28: Affixation with $k e-/-a n g$ of nominal, numeral, and quantifier bases

| BW | Gloss | Item | Gloss | ke-/-ang \# | BW \# |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Nominal bases |  |  |  |  |  |
| budaya | 'culture' | $\frac{\text { kebudayaang }}{}$ | 'civilization' | 2 | 18 |
| untung | 'fortune' | keuntungang | 'advantage' | 2 | 26 |
| camat | 'subdistrict head' | $\frac{\text { kecamatang }}{}$ | 'subdistrict' | 1 | 22 |
| hutang | 'forest' | kehutangang | 'forestry' | 1 | 42 |
| pegaway | 'civil servant' | $\frac{\text { kepegawayang }}{}$ | 'civil service' | 1 | 16 |
| uang | 'money' | keuangang | 'finances' | 1 | 139 |
| Numeral and quantifier bases |  |  |  |  |  |
| banyak | 'many' | kebanyakang | 'majority' | 10 | 184 |
| satu | 'one' | kesatuang | 'unity' | 1 | 514 |

One ke-/-ang-item and its base are given in context: kebanyakang 'majority' in (76) and banyak 'many' in (77).
(76) smua orang ke-banyak-ang mempunyai masala tapi ...
all person nMLZ-many-NMLz have problem but
'all people, the majority have problems but ...' [080917-010-CvEx.0162]
bua apel di sini banyak
fruit apple at L.prox many
'here are many apples' (Lit. 'the apples here are many') [080922-001a-CvPh.0408]

### 3.1.7.3 Summary and conclusions

Circumfix ke-/-ang is a polyfunctional affix that derives lexemes from verbal, nominal, numeral, and quantifier bases. Three observations suggest that in Papuan Malay affixation with $k e-/-a n g$ is a productive process: (1) the polyfunctionality of the circumfix and the transparent form-function relationship between the derived lexemes and their respective bases, (2) the large number of low frequency words and small number of high frequency words, and (3) the relative token frequencies with most bases having higher frequencies than the affixed lexemes. On the other hand, however, more than half of the circumfixed lexemes were tentatively classified as SI-borrowings.

These findings are further qualified by the results of a domain analysis. These results suggest that most of the attested tokens (with verbal, nominal, numeral, or quantifier bases) can be accounted for in terms of the variables of speaker education levels, topics, and/or role-relations. Hence, it cannot be concluded that these items are the result of a productive derivation process. (Details are given in §3.1.8, together with the findings for prefix $B E R$ - 'vblz' and suffix -nya '3possr'.)

Considering the conflicting observations, and taking the findings of the domain analysis as the main decisive factor, it is concluded that in Papuan Malay affixation with ke-/-ang is not used as a productive derivation device. Instead, the circumfixed lexemes are best explained as code-switches with Indonesian. (For a detailed discussion of circumfix ke-/-ang in Standard Indonesian and Standard Malay see Adelaar 1992; Mintz 1994; Sneddon 2010.)

### 3.1.8 Variables of the communicative event: Affixes BER- 'VBLZ', -nya '3POSSR', and ke-/-ang 'NMLZ'

To further investigate the degrees of productivity for prefix BER- 'vblz', suffix -nya '3possr', and circumfix ke-/-ang 'nmlz' in Papuan Malay, a domain analysis was conducted. This analysis focused on the variables of speaker education levels, topics, and/or role-relations. In all, 243 items ${ }^{23}$ with a total of 739 tokens were examined:

- 27 items prefixed with BER- with verbal bases (94 tokens)
- 29 items prefixed with BER- with nominal, numeral, or quantifier bases (70 tokens)

[^83]- 81 items suffixed with -nya with nominal bases (215 tokens)
- 36 items suffixed with -nya with verbal bases ( 82 tokens)
- Five items suffixed with -nya with other bases (20 tokens)
- 57 items circumfixed with $k e-/-a n g$ with verbal bases ( 239 tokens)
- Eight items circumfixed with $\mathrm{ke}-/-a n g$ with nominal, numeral, or quantifier bases (19 tokens)

For the 243 affixed lexemes, most tokens (684/739-93\%) can be explained in terms of speaker education levels, topics, and/or role-relations. The remaining 55/739 tokens (7\%) cannot be accounted for in terms of these variables of the communicative event. These tokens occurred when less-educated speakers (-EDC-SPK) conversed with fellow-Papuans of equally low social standing (-stat) about low topics, that is, casual daily-life issues. ${ }^{24}$ (See Table 3.29 and Figure 3.4; see also Appendix F for detailed tables and figures for each of the three affixes.)

If the affixed items were the result of a productive affixation process, one would expect the percentage of tokens that cannot be explained in terms of speaker education levels, topics, and/or role-relations to be much higher than 7\%. Instead, most tokens ( $93 \%$ ) seem to be conditioned by these variables of the communicative event. In turn, these findings do not support the conclusion that the affixed lexemes are the result of a productive derivation process. Instead, they seem to be code-switches with Indonesian.

The data presented in Table 3.29 and Figure 3.4 is discussed in more detail below.
The data presented in Table 3.29 and Figure 3.4 shows that for the 243 affixed lexemes, most tokens ( $684 / 739-93 \%$ ) can be explained in terms of speaker education levels, topics, and/or role-relations between the speakers and their interlocutors (ilCT).

Most tokens (440/739-60\%) were produced by +EDC-SPK, while 299/739 tokens ( $40 \%$ ) were produced by -EDC-SPK.

The +EDC-SPK produced about half of their tokens (227/440-52\%) when talking about HIGH topics. Another 116/440 +EDC-SPK tokens ( $26 \%$ ) occurred during conversations with an outsider, namely the author (outs). The remaining 97/440 +EDC-SPK tokens ( $22 \%$ ) were produced during conversations with fellow-Papuans about low topics.

The -edc-spk produced $41 \%$ of their tokens ( $122 / 299$ ) while discussing high topics. Another 46/299-EDC-SPK tokens ( $15 \%$ ) occurred during conversations with the author. The remaining -EDC-SPK tokens (131/299-44\%) were produced during conversations about low topics. Of these, 76/299 tokens ( $25 \%$ ) occurred when -EDC-SPK discussed low topics with +STAT Papuans. The remaining 55/299-EDC-SPK tokens ( $18 \%$ ) were produced during conversations with -stat Papuans, and therefore cannot be explained in terms of

[^84]Table 3.29: Token frequencies for lexemes affixed with BER-, -nya, and ke-/-ang by speakers, topics, and interlocutors (246 items)

|  | Topics (TOP) |  |  |  | Interlocutors ( (LCT) |  |  | Tokens |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Affixation with BER- (56 items) |  |  |  |  |  |  |  |  |
|  | POL | EDC | Rel | Low | +STAT | -stat | OUTSD | Total |
| +EDC-SPK | 20 | 31 | 20 | 18 | --- | --- | 14 | 103 |
| -EDC-SPK | 4 | 9 | 11 | --- | 11 | 16 | 10 | 61 |
| Subtotal | 24 | 40 | 31 | 18 | 11 | 16 | 24 | 164 |
| Affixation with -nya (122 items) |  |  |  |  |  |  |  |  |
|  | POL | EDC | REL | Low | +STAT | -stat | outsd | Total |
| +EDC-SPK | 33 | 35 | 12 | 41 | --- | --- | 57 | 178 |
| -EDC-SPK | 16 | 11 | 28 | --- | 30 | 26 | 28 | 139 |
| Subtotal | 49 | 46 | 40 | 41 | 30 | 26 | 85 | 317 |
| Affixation with ke-/-ang (65 items) |  |  |  |  |  |  |  |  |
|  | POL | EDC | REL | Low | +STAT | -stat | OUTSD | Total |
| +EDC-SPK | 16 | 46 | 14 | 38 | --- | --- | 45 | 159 |
| -EDC-SPK | 7 | 20 | 16 | --- | 35 | 13 | 8 | 99 |
| Subtotal | 23 | 66 | 30 | 38 | 35 | 13 | 53 | 258 |
| TOTAL (246 items) |  |  |  |  |  |  |  |  |
|  | POL | EDC | REL | Low | +STAT | -Stat | OUTSD | Total |
| +EDC-SPK | 69 | 112 | 46 | 97 | --- | --- | 116 | 440 |
| -EDC-SPK | 27 | 40 | 55 | --- | 76 | 55 | 46 | 299 |
| Total | 96 | 152 | 101 | 97 | 76 | 55 | 162 | 739 |

speaker education levels, topics, and/or role-relations. This total of 55 tokens refers to $7 \%$ of the 739 tokens attested in the corpus. ${ }^{25}$

[^85]Lexemes affixed with BER-, -nya, or ke-/-ang (243 items with 739 tokens)


Figure 3.4: Token frequencies for lexemes affixed with BER-, -nya, or $k e-/-a n g$ by speakers, topics, and interlocutors

### 3.2 Compounding

Compounding denotes the "formation of a new lexeme by adjoining two or more lexemes" (Bauer 2003: 40). In Papuan Malay, however, the demarcation between compounds and phrasal expressions is unclear. That is, neither phonological, morphological, morphosyntactic, nor semantic criteria allow classifying word sequences unambiguously as either compounds or phrasal expressions, as shown in §3.2.1. The attested word combinations always have a binary structure in that they consist of two juxtaposed lexemes; the first component is always a noun. More specifically, three types of word sequences can be distinguished, namely endocentric, exocentric, and coordinative ones, as discussed in §3.2.2. The main points on compounding are summarized in §3.3.

### 3.2.1 Demarcation of compounds from phrasal expressions

Four different criteria have been suggested to distinguish compounds from phrasal expressions: phonological, morphological, morphosyntactic, and semantic criteria (Aikhenvald 2007: 24). They are discussed in turn in this section.

On phonological grounds, compounds can be distinguished from phrasal expressions in terms of their stress behavior. Compounds typically contain one primary stress, whereas in phrasal expressions each phonological word carries its own stress (Aikhenvald 2007: 25). This criterion also applies to Papuan Malay, as shown in (78) and (79). In the compound kacang-hijow 'mung bean' in (78), the penultimate syllable carries primary stress, while secondary stress is assigned to the alternating syllable preceding the one carrying the primary stress. By contrast, in the phrasal expression kacang hijow 'green bean' in (79) each constituent carries its own stress. In fast speech, however, it is difficult to distinguish both constructions on phonological grounds. Instead, the context is the determining factor to establish the intended meaning.

## Phonological criteria

$$
\begin{array}{ll}
\text { /.ka.tfay.'hi.dзow/ } & \text { kacang-hijow } \\
& \text { bean-be.green } \\
& \text { 'mung bean' } \tag{79}
\end{array}
$$

/'ka.tJaŋ 'hi.dzow/ kacang hijow
bean be.green
'green bean'
As for morphological criteria, compounds are typically distinct from phrasal expressions in that the former are marked with additional morphemes or have distinct constituent orders vis-à-vis phrasal expressions (Aikhenvald 2007: 26). In terms of morphological criteria, however, Papuan Malay compounds are not distinct from phrasal expressions. As illustrated in (78) and (79), neither construction has an additional morpheme that would mark it as a compound or phrasal expression. Neither are the two constructions distinct in terms of their constituent order, as in each case the head precedes the modifier.

On morphosyntactic grounds, compounds are usually distinct from phrasal expressions in that the components of a compound cannot be separated by inserting other morphemes (Aikhenvald 2007: 26). Such an insertion leads to the loss of their compound sense. This criterion also applies to Papuan Malay as shown in (80) and (81). When, for instance, the relativizer yang 'rel' is inserted in the compound lemon-manis 'orange' in (80), the compound sense is lost. The result is the phrasal expression lemon yang manis 'lemon which is sweet' or 'sweet lemon' in (81).

## Morphosyntactic criteria

(80) lemon-manis
lemon-be.sweet
'orange'
(81) lemon yang manis
lemon rel be.sweet
'sweet lemon' (Lit. 'lemon which is sweet')

## 3 Word-formation

In cases such as the compound orang-tua 'parent' in (82) or the phrasal expression orang tua 'old person' in (83), however, it is difficult to distinguish both constructions on morphosyntactic grounds. Again, the context is the determining factor to establish the intended meaning.

Ambiguities with respect to morphosyntactic criteria

```
orang-tua
person-be.old
'parent'
```

orang tua
person be.old
'old person'
Semantically, compounds and phrasal expressions can be arranged on a scale from less to more compositional (Aikhenvald 2007: 28). The corpus, however, does not contain non-compositional compounds with idiosyncratic semantics. ${ }^{26}$ This is illustrated in (84) to (88). Less compositional compounds are expressions such as kampung-tana 'home village' in (84), or paduang-swara 'choir' in (85). Compounds that are more compositional are those whose meaning is predictable from the meanings of its parts, such as air-mata 'tears' in (86) or tali-prut 'intestines' in (87). Very transparent compounds blend into phrasal expressions such as uang jajang 'pocket money' or 'money for snacks' in (88). On the one hand one could say that uang jajang 'pocket money' is a compound with an idiosyncratic meaning. On the other hand one could argue that this construction has a phrasal structure that denotes a purpose relation between the nominal head uang 'money' and its nominal modifier jajang 'snack'; hence, the construction uang jajang 'money for snacks' is a phrasal expression and not a compound. Finally, there are phrasal expressions with clear compositional semantics, such as air sagu 'liquid of the sago palm tree' in (89). (For details on noun phrases with nominal modifiers see §8.2.2.)

## Semantic criteria

(84) kampung-tana
village-ground
'home village'
(85) paduang-swara
fusion-voice
'choir'

[^86](86)
air-mata
water-eye
'tears'
tali-prut
cord-stomach
'intestines'
uang jajang
money snack
'pocket money' / 'money for snacks'

```
air sagu
```

water sago
'liquid of the sago palm tree'
The data presented in this section shows that in Papuan Malay neither phonological, morphological, morphosyntactic, nor semantic criteria allow the unambiguous classification of word sequences as either compounds or phrasal expressions. Instead the data suggests that, following Lieber \& Štekauer's (2009: 14) definition of compounding, some Papuan Malay word combinations are "more compoundlike" while others are "less compoundlike [...] with no clear categorical distinction" along this "cline". The combinations range from less compositional two-word expressions such as kampung-tana 'home village' to those with compositional transparent semantics such as air sagu 'liquid of the sago palm tree'. Given this lack of a clear demarcation between compounds and phrasal expressions, the term "collocation" rather than "compound" is used hereafter for such juxtaposed word sequences. ${ }^{27}$

### 3.2.2 Types of collocations

In Papuan Malay, three types of collocations are found: endocentric, exocentric, and coordinative ones. In the following they are discussed one by one.

In endocentric collocations, one component has head function while the subordinate component has modifying, content-specifying function, denoting "a sub-class of the items denoted by one of their elements" (Bauer 2003: 42). In Papuan Malay endocentric collocations, the head component always precedes the modifier component which can be a noun or a stative verb. Semantically, these " $\mathrm{N} N$ " or " N V" collocations encode different types of relationships between their components such as "part-whole", "subtype-of", or "characteristic-of" relations, as illustrated in Table 3.30. In addition, the corpus contains one collocation in which the modifying component is a numeral: segi-empat 'quadrangle' (literally ‘side-four').

[^87]Table 3.30: Endocentric " $\mathrm{N} \mathrm{N} / \mathrm{v}$ " collocations

| Item | Gloss | Literal translation | Semantic relation |
| :--- | :--- | :--- | :--- |
| tali-prut <br> cord-stomach | 'intestines' | 'cord of the stomach' | 'Part-whole' |
| lemon-manis <br> lemon-be.sweet | 'orange' | 'sweet lemon' | 'Subtype-of' |
| kreta-api <br> carriage-fire | 'train' | 'carriage of fire' | 'Characteristic-of' |

In exocentric collocations, none of the constituents functions as its head. They "denote something which is not a sub-class" of either of their components; that is, "they are not hyponyms of either of their elements" (Bauer 2003: 42), as shown in Table 3.31. In the collocation bapa-ade, literally 'father-younger.sibling', for instance, neither of the two components serves as the content-specifying element. Likewise kepala-batu, literally 'head-stone' does not refer to some kind of head. Instead, it denotes a 'pig-headed person'. These examples also show that exocentric collocations typically consist of two juxtaposed nouns.

Table 3.31: Exocentric " $\mathrm{N} N$ " collocations

| Item | Gloss |
| :--- | :--- |
| bapa-ade  <br> father-ySb 'father's younger brother'(FyB) / 'mother's <br> younger sister's husband' (MyZH)  <br> kepala-batu <br> head-stone 'pig-headed person' <br> mata-hari <br> eye-day 'sun' |  |

The distinction between endocentric and exocentric collocations is not always clearcut, however, as shown in Table 3.32. The kinship terms bapa-tua 'uncle' (literally 'fatherbe.old') and mama-tua 'aunt' (literally 'mother-be.old') qualify as exocentric collocations on semantic grounds but as endocentric collocations on syntactic grounds. Both terms are exocentric in that they designate something which is not a sub-class of either of their components: bapa-tua does not refer to an 'old father', neither does mama-tua refer to an 'old mother'. Instead, bapa-tua denotes a 'parent's older brother' ( PoB ) or a 'parent's older sister's husband' (PoZH), while mama-tua designates a 'parent's older
sister' (PoZ) or a 'parent's older brother's wife' (PoBW). Syntactically, however, tua 'be old' is subordinate to the head bapa/mama 'father/mother' and has modifying contentspecifying function. Hence, both kinship terms also qualify as endocentric collocations.

Table 3.32: Endocentric versus exocentric collocations: Ambiguities

| Item | Gloss |
| :--- | :--- |
| bapa-tua 'parent's older brother' (PeB) / 'mother's <br> father-be.old 'parent's older sister's husband' (PeZH) <br> mama-tua 'parent's older sister' (PeZ) / 'mother's <br> mother-be.old 'parent's older brother's wife' (PeBW) |  |

Table 3.33: Coordinative ' $\mathrm{N} N$ ' collocations

| Item | Gloss | Semantic relation |
| :--- | :--- | :--- |
| ade-kaka <br> ySb-oSb | siblings | Antonyms |
| kasi-sayang <br> love-love | 'deep love' | Synonyms |
| guntur-kilat <br> thunder-lightning | 'thunderstorm' | Different parts/aspects |
| tete-moyang <br> grandfather-ancestor | 'ancestors' | Different parts/aspects |

Coordinative collocations designate entities made up of two nominal components that "can be interpreted as being joined by 'and'" (Bauer 2009: 351). That is, in such collocations both components "are of semantically equal weight" (Bussmann 1996: 221). The nominal components can be antonyms, synonyms, or different parts or aspects of the designated concept, as shown in Table 3.33.

### 3.3 Summary

This section briefly summarizes the main points on affixation and compounding.

1. Affixation

Affixation in Papuan Malay has very limited productivity. This conclusion is based on an investigation of six affixes: the prefixes TER- 'ACL', PE (N)- 'AG', and BER'vBLz', the suffixes -ang 'PAT' and -nya '3possr', and the circumfix ke-/-ang 'nMLz'. Given the sociolinguistic profile of Papuan Malay (substantial language contact between Papuan Malay and Indonesian with both languages being in a diglossic distribution, positive to somewhat ambivalent language attitudes toward Papuan Malay, and lack of language awareness of many Papuan Malay speakers) no productivity testing was conducted, as a substantial amount of interference from Indonesian was expected. This interference would have skewed testees' naïve judgments. Instead, the six affixes were examined in terms of six language internal and three language external factors considered relevant in establishing the degree of productivity of these affixes.
The results of this investigation are as follows:
a) Papuan Malay TER- 'ACL' has limited productivity; it indicates accidental or unintentional actions or events. In other eastern Malay varieties and in Standard Malay, the prefix is rather productive; here it likewise signals accidental or unintentional actions or events.
b) Papuan Malay -ang 'pat' has limited productivity; it typically designates the patient or result of an action, event or state. As for other eastern Malay varieties, the suffix is only mentioned for Ambon Malay; its degree of productivity is unclear. In Standard Malay the suffix is very productive. Both in Ambon and in Standard Malay, the suffix also indicates the patient or product of an action, event or state.
c) Papuan Malay $\operatorname{PE}(\mathrm{N})-$ ' AG ' has marginal productivity, at best. It typically denotes the subject of the action, event, or state specified by the verbal base; some of the affixed lexemes also receive an intensified intransitive or monotransitive reading. As for other eastern Malay varieties, the prefix seems to have retained its productivity only in Ternate Malay. In Standard Malay, the suffix is very productive. In other Malay varieties the prefix likewise denotes the subject of the action, event, or state specified by the verbal base. A verbal interpretation, but not the intensified reading, is also reported for other eastern Malay varieties. In Standard Malay, by contrast, only derivations with monovalent stative bases can function as monovalent stative verbs.
d) In Papuan Malay, prefix $B E R$ - 'vbiz' is unproductive, whereas in other eastern Malay varieties and Standard Malay the prefix is very productive.
e) In Papuan Malay, -nya '3possr' and ke-/-ang 'nmlz' are unproductive. The same applies to other eastern Malay varieties, while both affixes are very productive in Standard Malay.

## 2. Compounding

In Papuan Malay, the demarcation between compounds and phrasal expressions is unclear. Neither phonological, morphological, morphosyntactic, nor semantic criteria allow the unambiguous classification of two juxtaposed nouns as compounds or phrasal expressions. Therefore, the term "collocation" is employed as a cover term for such word combinations that differ in transparency from non-compositional idiosyncratic semantics to compositional transparent semantics. Three different types of collocations are attested, endocentric, exocentric, and coordinative ones. Given the lack of a clear demarcation between compounds and phrasal expressions, it remains unclear to what degree compounding is a productive process.

## 4 Reduplication

Reduplication refers to "the morphological operation in which a new word (form) is created by copying a word or a part thereof, and affixing that copy to the base" (Booij 2007: 321). In Papuan Malay, as in other Austronesian languages (Himmelmann 2005: 121-125), reduplication is a very productive morphological device to derive new words.

With respect to lexeme formation, Papuan Malay makes use of three different types of reduplication: (1) full reduplication, (2) partial reduplication, and (3) imitative reduplication. Alternatively, Wiltshire \& Marantz (1978: 558) refer to these reduplication types as "exact total reduplication", "exact partial reduplication", and "inexact partial reduplication", respectively. In terms of lexeme interpretation, a variety of meanings can be attributed to the reduplicated lexemes, such as plurality and diversity, intensity, or continuation and repetition.

Reduplication in terms of lexeme formation is described in §4.1 while lexeme interpretation is discussed in §4.2. This discussion is followed by a comparison of reduplication across different eastern Malay varieties in §4.3. The main points of this chapter are summarized in §4.4.

### 4.1 Lexeme formation

A phonological approach to reduplication is Marantz's (1982: 436) prosodic template model which views reduplication as "normal affixation" with "one unique feature", i.e. "the resemblance of the added material to the stem being reduplicated". More specifically, "every reduplication process may be characterized by a 'skeleton' of some sort", either a phonemic melody, "a C-V skeleton, a syllabic skeleton, or a skeleton of morpheme symbols" (1982: 439). The four-tiered representation in (1), taken from Marantz (1982: 437), illustrates how the segments of the four skeleta are linked to each other.
(1) phonemic melody C-V skeleton
syllabic skeleton
morpheme symbol

p1 = phoneme
$\sigma=$ syllable

During reduplication, an affixed skeleton receives its phonemic content by "the copying of the stem's phonemic melody on the same tier as the melody and on the same side of the stem melody to which the affix is attached [...] along with some specific constraints on the autosegmental association of the phonemes of the copied melody with the Cs and Vs of reduplicating morphemes" (Marantz 1982: 445).

Full and partial reduplication use two different types of skeleta. In full reduplication, the affix is a morphemic skeleton or, more specifically, the morphological word. In partial reduplication, the added material is a syllabic skeleton. In Papuan Malay, this syllabic skeleton is a closed, heavy syllable which gets prefixed to the base. This shows, that in Papuan Malay reduplication in general is prefixal rather suffixal.

Both types of lexeme formation are described in §4.1.1.1 and §4.1.1.2, respectively. Imitative reduplication is discussed in §4.1.1.3.

### 4.1.1 Full reduplication

Full reduplication is very common in Papuan Malay. Cross-linguistically, in full reduplication "the reduplicant matches the base from which it is copied without phoneme changes or additions" (Rubino 2013: 2). That is, in terms of Marantz's (1982) prosodic template model, full morpheme reduplication involves "the addition of a morphemic skeleton to a stem. The morphemic skeleton, lacking a syllabic skeleton, a C-V skeleton, and a phonemic melody, borrows all three from the stem to which it attaches" (1982: 456).

Full reduplication of morphological words in Papuan Malay is illustrated with the two examples in (2): reduplication of the root dorang '3PL', resulting in dorang $\sim$ dorang 'RDP $\sim 3$ PL' in (2a), and reduplication of the derived word tingkatang 'level' (tingkatang 'floor-PAT'), resulting in tingkatang $\sim$ tingkatang 'rdp $\sim$ level' in (2b). In each case, the content of the reduplicative affix is obtained by copying the phonemic melody of the base over the morphemic skeleton of the reduplicating affix. This applies to roots as in (2a) as well as to derived words as in (2b).
(2) a. [do.rey.do.rey]

b. [tıŋ.ka.teŋ.tm.'ka.tey]


In Papuan Malay, only words are reduplicated; bound morphemes such as prefixes are never reduplicated (see Table 4.1 in $\S 4.1 .1 .1$ ). Full reduplication is attested for content words (§4.1.1.1) and some function words (§4.1.1.2). The corpus also includes a few reduplicated items that do not have an unreduplicated single base (§4.1.1.3). Reduplication of reduplicated bases is unattested.

### 4.1.1.1 Reduplication of content words

Full reduplication most commonly applies to content words. Attested are reduplicated nouns, verbs, adverbs, numerals, and quantifiers, as shown in Table 4.1.

Four of the content words listed in Table 4.1 involve affixation: bua 'fruit' and reduplicated bua~buaang (suffix -ang 'pat'), tumpuk 'pile' and reduplicated bertumpuk~tumpuk (prefix BER- 'vblz'), tingkatang 'level' and reduplicated tingkat-ang $\sim$ tingkat-ang (suffix -ang 'pAt'), and ta-lipat 'be folded' and reduplicated ta-lipat ta-lipat (prefix TER- 'ACl'). The four lexeme pairs illustrate that reduplication may precede affixation as with bua 'fruit' or tumpuk 'pile' or may follow affixation as with tingkatang 'level' or talipat 'be folded'. These examples also show that reduplication only affects free morphemes while affixes are never reduplicated.

Reduplication of content words is demonstrated with the three examples in (3) to (5). Reduplication of a noun is illustrated in (3); in this context reduplicated ade 'younger sibling' conveys plurality. The utterance in (4) includes a reduplicated verb; in this context, lari 'run' expresses continuation. And the elicited example in (5) illustrates reduplication of an adverb; in this context prohibitive jangang 'neg.IMP, don't' denotes intensity. The three examples illustrate only three of the different meanings expressed with reduplication. Depending on the context, a reduplicated noun can also signal repetition, to name just one other meaning aspect. Along similar lines, a reduplicated verb can also express aimlessness, among other meanings. This variety of different meanings is discussed in detail in §4.2.
(3) jadi saya, saya deng sa pu ade $\sim$ ade tinggal di ruma so 1SG 1sG with 1sG poss RDP $\sim y S b$ stay at house
Plurality: 'so I, I and my younger siblings stayed at the house'
[081014-014-NP.0002]

Table 4.1: Reduplication of content words ${ }^{a}$

| Word class | Base | Gloss | Reduplicated item |
| :---: | :---: | :---: | :---: |
| Nouns | ade | 'younger sibling' | ade~ade |
|  | bua | 'fruit' | bua~buaang |
|  | tingkatang | 'level' | tingkatang $\sim$ tingkatang |
|  | tulang | 'bone' | tulang tulang |
| Verbs | baik | 'be good' | baik~baik |
|  | ceritra | 'tell' | ceritra~ceritra |
|  | talipat | 'fold' | talipat talipat |
|  | tumpuk | 'pile' | bertumpuk~tumpuk |
| Adverbs | baru | 'recently' | baru~baru |
|  | skarang | 'now' | skarang skarang |
|  | sring | 'often' | sring sring |
| Numerals | satu | 'one' | satu satu |
|  | dua | 'two' | dua~dua |
|  | lima | 'five' | lima~lima |
| Quantifiers | banyak | 'many' | banyak~banyak |
|  | sedikit | 'few' | sedikit~sedikit |
|  | sembarang | 'any (kind of)' | sembarang sembarang |

[^88](4) kitong dua lari~lari sampe di Martewar

1PL two RDp $\sim$ run reach at Martewar
Continuation: 'the two of us kept running all the way to Martewar' [080923-010-CvNP.0009]
(5) ... tapi jangang~jangang hujang di tenga jalang
but RDP~NEG.IMP rain at middle walk
Intensity: '[I want to go to (my) gardens,] but let's hope it won't rain in the middle of the way' [Elicited BR120813.031]

### 4.1.1.2 Reduplication of function words

Some Papuan Malay functions words can also be reduplicated. Attested are reduplicated personal pronouns, demonstratives, locatives, ${ }^{1}$ interrogatives, the causative verb kasi 'give', and the reciprocity marker baku 'RесР', as listed in Table 4.2.

Table 4.2: Reduplication of function words

| Word class | Base | Gloss | Reduplicated item |
| :---: | :---: | :---: | :---: |
| Personal pronouns | saya | '1sG' | saya~saya |
|  | kamu | '2pl' | kamu~kamu |
|  | dorang | '3PL' | dorang~dorang |
| Demonstratives | ini | 'D.PRox' | ini~ini |
|  | itu | 'D.DIST' | itu itu |
| Locatives | sini | 'L.PROX' | sini~sini |
|  | situ | 'L.MED' | situ ${ }^{\text {citu }}$ |
|  | sana | 'L.DIST' | sana~sana |
| Interrogatives | siapa | 'who' | siapa~siapa |
|  | apa | 'what' | apa~apa |
|  | kapang | 'when' | kapang ${ }^{\text {kapang }}$ |
| Causative verb | kasi | 'give' | kas $\sim$ kas |
| Reciprocity marker | baku | 'RECP' | baku~baku |

Reduplication of three different types of functions words and the different meaning aspects conveyed is illustrated in (6) to (8): personal pronouns in (6), locatives in the elicited example in (7), and interrogatives in (8).
(6) kamu~kamu ini bangung, bangung

RDP $\sim 2$ PL $\quad$ D.PROX wake.up wake.up
Collectivity: 'you all here wake-up!, wake-up!' [081115-001a-Cv.0330]
(7) ko lari suda ke sana~sana

2sG run already to RDP $\sim$ LOC.DIST
Diversity: 'you run to somewhere over there!' [Elicited BR120813.016]
(8) ... sa tra perna lari ke siapa~siapa

1sG NEG once run to RDP $\sim$ who
Intensity: ‘[even (when) my children were already sick,] I've never run to anyone (for black-magic help)' [081006-034-CvEx.0028]

[^89]
### 4.1.1.3 Reduplication without corresponding single base

Across word classes, some reduplicated forms do not have an unreduplicated single base. Attested are four nouns, three verbs, one quantifier, and one conjunction, as listed in Table 4.3.

Table 4.3: Reduplication without corresponding single base

| Word class | Base | Reduplicated item | Gloss |
| :--- | :--- | :--- | :--- |
| Nouns | *alang | alang-alang | 'cogongrass' |
|  | *kura | kura-kura | 'turtle' |
|  | *pori | pori-pori | 'pore' |
|  | *soa | soa-soa | 'monitor lizard' |
| Verbs | *belit | belit-belit | 'curve' |
|  | "gong | gong-gong | 'bark (at)' |
|  | *tele | tele-tele | 'talk excessively' |
| Quantifier | " masing | masing-masing | 'each' |
| Conjunction | "gara | gara-gara | 'because' |

### 4.1.2 Partial reduplication

Partial reduplication is rare in Papuan Malay. Generally speaking, this type of reduplication "involves the reiteration of only part of the semantic-syntactic or phoneticphonological constituent whose meaning is accordingly modified" (Moravcsik 1978: 304).

That is, the added material is not a morphemic skeleton as in the case of full reduplication but the reduplicant is a C-V skeleton or a syllabic skeleton which gets prefixed to the base. If the reduplicant is a C-V skeleton, the "entire phonemic melody of the stem is copied over the affixed C-V skeleton and linked to C and V 'slots' in the skeleton" (Marantz 1982: 437) (concerning the principles involved in this linking, see Marantz 1982: 446-447). A "syllabic skeleton, lacking a phonemic melody and a C-V skeleton, borrows both from the stem to which it attaches" (1982: 437).

In Papuan Malay, the reduplicant is a closed heavy syllable which is prefixed to the stem from which it borrows the phonemic melody and C-V skeleton, as shown in (9). In (9a), for example, the initial closed syllable [bep] is copied over the reduplicating syllabic skeleton. With vowel-initial stems, the initial VC is copied over the reduplicating syllabic skeleton. This is shown in (9c) with the initial VC [an] which is copied over the prefixed CVC syllable. These examples also show that the prefixed syllable does not take into account the syllable structure of the base.
(9)


$=$ [bep.'ba.pa]
b.

= [ber.'ba.ru]
c.

$=$ [a.'na.na]
d.


In Papuan Malay, partial reduplication is only attested for disyllabic lexical roots with penultimate stress. It always involves the partial reduplication of the stressed penultimate syllable of the base, as shown in Table 4.4. The results are trisyllabic words with penultimate stress. If the base has a CV.CV(C) syllable structure, stress in the reduplicated word remains on the penultimate syllable of the base, as in bapa~bapa [bep.'ba.pa] 'fathers'. With vowel-initial stems, Papuan Malay copies the initial VC sequence, as in ana~ana [a.'na.na] 'children'. In this case, the reduplicant's segments do not originate from one and the same syllable of the base. Across languages this phenomenon is rather common. That is, as Wiltshire \& Marantz (1978: 562) note, partial reduplication can be "oblivious to the prosodic structure of the base from which it copies a melody".

The partially reduplicated forms are alternants of fully reduplicated ones and have the same semantics; [a.'na.na] 'children', for instance, is an alternant of [a.na.'a.na] 'children'.

Table 4.4: Partial reduplication

| Base | Gloss | Reduplicated item |  |
| :--- | :--- | :--- | :--- |
| ana | 'child' | ana $\sim$ ana | [a.'na.na] |
| apa | 'what' | apa apa | [a.'pa.pa] |
| bapa | 'father' | bapa ${ }^{2}$ bapa | [bep.'ba.pa] |
| baru | 'recently' | baru ${ }^{\text {baruaru }}$ | [ber.'ba.ru] |

### 4.1.3 Imitative reduplication

The third attested type of reduplication is imitative or rhyming reduplication. Crosslinguistically, this reduplication type is also being referred to as "echo construction"; it "involves reduplication with some different phonological material, such as a vowel or consonant change or addition, or morpheme order reversal" (Rubino 2013: 2).

Imitative reduplication in Papuan Malay is unproductive and rare; attested are only the three lexemes listed in Table 4.5. The reduplicated component resembles the base in part but also differs from it, in that imitative reduplication involves a vowel change. For one of the attested lexemes, the bare base is also inexistent: *ngyaung.

Table 4.5: Imitative reduplication with vowel change

| Reduplicated item | Gloss | Base | Gloss |
| :--- | :--- | :--- | :--- |
| ngying $\sim$ ngyaung | ideophone: cockatoo call | *ngyaung | - |
| tuk $\sim$ tak | ideophone: bang! | tak | ideophone: bang! |
| bola~balik | 'move back and forth' | balik | 'return' |

### 4.2 Lexeme interpretation

In Papuan Malay, as in other languages, reduplication conveys a variety of different meanings, such as plurality and diversity, intensity, or continuation and repetition. Some of these meaning aspects tend to be limited to certain word classes, while others are conveyed by a variety of different word classes.

The meaning aspects of reduplicated Papuan Malay content words are examined in $\S 4.2 .1$ to $\S 4.2 .4$, those of reduplicated function words in §4.2.5. The underlying general meaning or gesamtbedeutung of reduplication is explored in §4.2.6.

### 4.2.1 Reduplication of nouns

Across languages, reduplication of nouns has been found to express a variety of meanings such as "number [...], case, distributivity, indefiniteness, reciprocity, size (diminutive or augmentative), and associative qualities" (Rubino 2013). In Papuan Malay, the following meaning aspects are attested: collectivity and diversity (§4.2.1.1), repetition (§4.2.1.2), and indefiniteness (§4.2.1.3). Reduplicated nouns can also undergo an interpretational shift and receive a verbal or adverbial reading (§4.2.1.4).

### 4.2.1.1 Collectivity and diversity

A major function of noun reduplication is to signal plurality, given that in Papuan Malay bare nouns are not marked for number. Instead, speakers express plurality as deemed necessary. Depending on the context, the lexical item ana 'child', for instance, could also be read as 'children'. One strategy to express plurality overtly is the reduplication of nouns. Overall, however, speakers use reduplication only when an unambiguous plural reading is important to them and when the context does not allow such an unambiguous interpretation. (Alternative strategies to indicate plurality are modification with a numeral or quantifier, or with a plural personal pronoun; see §8.2.3 and §6.2.2, respectively.)

Cross-linguistically, three types of plurality have been identified which are encoded by noun reduplication (Wiltshire \& Marantz 1978: 561): collectivity, diversity (or variety), and distributivity. ${ }^{2}$ Of these three types, Papuan Malay uses two, namely collectivity as in (10) and (11), and diversity as in (12) and (13). Another type of plurality is indefiniteness (Rubino 2013), which is also found in Papuan Malay, as demonstrated in (16) and (17) in §4.2.1.3 (p. 196).

Reduplication of nouns most often indicates collectivity in the sense of "all BASE", as shown with ana~ana 'children' in (10) and orang~orang 'people' in (11).

Reduplicated nouns: Collectivity
(10) ana~ana su pergikerja, ana~ana su kawing

RDP $\sim$ child already go work RDP $\sim$ child already marry.inofficially
[Complaint of a lonely couple:] 'all (our) children already went to work (elsewhere), all (our) children are already married' [080917-010-CvEx.0071]
(11) e, orang~orang itu dong mara~mara
hey! RDP~person D.DIST 3PL RDP~feel.angry(.about)
'hey, all those people, they'll be really angry (with you)' [080917-008-NP.0053]
Less often, reduplicated nouns signal diversity such as bua~bua 'various fruit (trees)' in (12), or pohong pohong 'various trees' in (13).

[^90]Reduplicated nouns: Diversity
(12) bua~bua di sini banyak

RDP $\sim$ fruit at L.PROX many
'there are a many different kinds of fruit (trees) here' (Lit. 'the various fruit (trees) here are many') [080922-001a-CvPh.0425]
(13) ... ini suda tida begini lagi, suda ada pohong~pohong D.PROX already NEG like.this again already exist RDP $\sim$ tree
'[in five years, yes,] this (garden) won't be same (as) there will be already various trees (here)' [081029-001-Cv.0007]

### 4.2.1.2 Repetition

Reduplication of nouns denoting periods of the day can indicate repetition. This is illustrated with pagi~pagi 'every morning' in (14), and malam~malam 'every evening' in (15). (For alternative readings of reduplicated nouns expressing time divisions, see (17) in §4.2.1.3, p. 196, and (23) and (24) in §4.2.1.4, p. 198.)
(14) pagi~pagi biking te

RDP~morning make tea
'every morning (they) made tea' [081025-009a-Cv.0023]
(15) ko jangang ikut~ikut orang tua malam~malam

2SG NEG.IMP RDP $\sim$ follow person be.old RDP $\sim$ night
'don't keep hanging out with the grown-ups every evening' [081013-002-Cv.0005]

### 4.2.1.3 Indefiniteness

Depending on the context, reduplicated nouns may signal indefiniteness by referring to an unspecified group member, in the sense of "any" or "some". This is illustrated with om~om 'any one of the uncles' in (16), and malam~malam 'at some point in the evening' in (17). (For alternative interpretations of reduplicated nouns signaling time divisions, see (14) and (15) in §4.2.1.2, p. 196, and (23) and (24) in §4.2.1.4, p. 198.)
(16) baru titip di, ini, om~om dorang
and.then deposit at D.PROX RDP~uncle 3PL
'leave (the letter) with, what's-his-name, any one of the uncles and his family' [080922-001a-CvPh.0602]
(17) dia lewat pante malam~malam

3SG pass.by coast RDP~night
'he drove along the beach at some (point in) the evening' [081006-020-Cv.0016]

### 4.2.1.4 Interpretational shift

Reduplicated nouns can also undergo, what generally-speaking Booij (2007: 212) calls, an "interpretational shift" or "type coercion". In Papuan Malay, such a shift can result in a stative verbal reading of reduplicated nouns as in (18) to (20), or in an adverbial reading as in (21) to (24), depending on the larger linguistic context.

Interpretational shift resulting in a stative verbal reading of reduplicated nouns usually applies to reduplicated kinship terms, taking the predicate slot in nonverbal clauses. This is illustrated with ana 'child' in (18) and tete 'grandfather' in the elicited example in (19). In this context, the reduplicated nouns receive a stative verbal rather than a nominal reading. That is, referring to specific age groups, they designate pertinent attributes of their base words, as in ana~ana 'be quite small' (literally 'rdP $\sim$ child') in (18), or tete tete 'be quite old' (literally 'rdP~grandfather') in (19). In addition, the corpus contains one example in which a non-kinship term, namely the common noun rawa 'swamp', undergoes a similar interpretational shift, receiving the stative verbal reading in rawa~rawa 'be swampy', as shown in (20).

Reduplicated nouns: Stative verbal reading
(18) waktu itu sa masi ana~ana
time D.DIST 1sG still RDP~child
'at that time I was still quite small' [080922-008-CvNP.0004]
(19) pace ni de su tete~tete tapi masi maing deng ana~ana
man D.PROX 3SG already RDP~grandfather but still play with RDP~child
muda
be.young
'this guy, he's already quite old but he still hangs out with the young people'
[Elicited BR120813.003]

## (20)

masi rawa~rawa
still RDP $\sim$ swamp
[About a road building project:] '(the area is) still swampy' [081006-033-Cv.0027]
Interpretational shift can also affect reduplicated location nouns or nouns denoting periods of the day, with the reduplicated nouns receiving an intensified or emphatic adverbial reading. This is illustrated with the location nouns depang 'front' in (21) and samping 'side' in (22), and the temporal nouns pagi 'morning' in (23) and malam 'night' in (24). (For alternative readings of reduplicated nouns designating time divisions, see (14) and (15) in §4.2.1.2, p. 196, and (17) in §4.2.1.3, p. 196.)

Reduplicated nouns: Adverbial reading
(21) sa tunjuk depang~depang muka, blajar untuk mandiri

1sG show RDP front front study for stand.alone
'I point right into (their) faces (and tell them), "study to become independent"' [081115-001a-Cv.0054]
(22) jalang di samping samping itu pagar itu walk at RDP~side D.DIST fence D.DIST
'(he/she) walked right next to, what's-its-name, that fence' [081025-006-Cv.0094]
(23) ... pagi~pagi jam lima sa su masuk di kamar RDP~morning hour five 1sG already enter at room
[About disciplining ill-behaved teenagers:] '[tonight I'll still sleep,] (but tomorrow) early in the morning at five o'clock I will already have gone into (their) room' [081115-001a-Cv.0325]
(24) malam~malam Ise bawa pulang dia pi tidor dengang de punya mama RDP~night Ise bring go.home 3sG go sleep with 3sG poss mother [About a crying child:] 'late at night Ise brought (her) home so that she (would) go and sleep with her mother' [081006-025-CvEx.0007]

### 4.2.2 Reduplication of verbs

Cross-linguistically, reduplication of verbs tends to encode meaning aspects such as "distribution of an argument, tense, aspect (continued or repeated occurrence; completion; inchoativity), attenuation, intensity, transitivity (valence, object defocusing), or reciprocity" (Rubino 2013; see also Wiltshire \& Marantz 1978: 561). In Papuan Malay, the following meaning aspects are attested: continuation, repetition, and habit (§4.2.2.1), collectivity and diversity (§4.2.2.2), intensity (§4.2.2.3), immediacy (§4.2.2.4), aimlessness (§4.2.2.5), attenuation (4.2.2.6), and imitation (§4.2.2.7). Reduplicated verbs can also undergo interpretational shift, in that they can receive a nominal or adverbial reading (§4.2.2.8).

### 4.2.2.1 Continuation, repetition, and habit

A major function of verb reduplication is to indicate continuation, repetition, or habit. The function of signaling continuation is demonstrated with a dynamic verb in (25) and a stative verb in the elicited example in (26). The function of signaling repetition of an action is shown in (27).

Reduplicated verbs: Continuation and repetition
... ada setang datang ganggu~ganggu kitorang exist evil.spirit come RDP~disturb 1PL
'[when (we) sleep at night,] there is an evil spirit (who) comes and continuously
bothers (us)' [081006-022-CvEx.0168]
(26) sa pu temang de sakit~sakit di Dok-Dua

1sG poss friend 3sg rdp~be.sick at Dok-Dua
'my friend is being sick continuously in the Dok-Dua (hospital)' [Elicited BR120813.036]
(27) baru de pi bicara~bicara sa begini
and.then 3sG go rDp $\sim$ speak 1sg like.this
'but then he went to talk about me like this again and again'
[081025-009b-Cv.0006]
As an extension of marking continuation or repetition, reduplicated verbs may also signal habit, as shown in (28).

Reduplicated verbs: Habit
(28) begitu de besar baru de nakal~nakal begini like.that 3sG be.big and.then 3sG RDP~be.mischievous like.this
'he grew up like that, and now he's mischievous like this all the time'
[080917-010-CvEx.0044]

### 4.2.2.2 Collectivity and diversity

Verb reduplication may also indicate collectivity or diversity of the clausal subject. The function of signaling collectivity is illustrated with the examples in (29) and (30), while the diversity-marking function of reduplicated verbs is shown in the elicited examples in (31) and (32).
(29) dong taru piring~piring kaleng yang piring yang bagus~bagus

3pl put rdp $\sim$ plate tin.can rel plate rel rdp be.good
[About honoring guests:] 'they place tin plates (in front of them) that are plates that are all good' [081014-010-CvEx.0015]
(30) pisang Sorong sana tu, iii, besar~besar manis banana Sorong L.DIST D.DIST oh! RDP~be.big be.sweet
'those bananas (from) Sorong over there, oooh, (they) are all big (and) sweet' [081011-003-Cv.0017]
(31) ko pu kwe kras $\sim k r a s$

2sG poss cake RDP~be.harsh
'your various cakes are hard' [Elicited BR120813.034]
(32) mobil di jalang rusak~rusak karna banjir
car at walk RDP~be.damaged because flooding
'the various cars in the street were broken because of the flooding' [Elicited BR120813.035]

### 4.2.2.3 Intensity

Also, quite commonly reduplicated verbs signal intensity. In such cases, reduplicated dynamic verbs receive the reading "BASE intensely", as in (33) and (34), while reduplication of stative verbs translates with "very BASE", as in (35) and (36).

Reduplicated verbs: Intensity
(33) baru dia tertawa, de tertawa~tertawa
and.then 3sG laugh 3sG RDP~laugh
'but then he laughed, he laughed intensely' [080916-001-CvNP.0004]
(34) orang bertriak~triak tu
person RDP~scream D.DIST
'the people were really screaming intensely' [081006-022-CvEx.0007]
(35) sa jalang sampe sa su swak~swak

1sG walk until 1sG already rdp $\sim$ be.exhausted
'I walked until I was already very exhausted' [081025-008-Cv.0038]
(36) ... dong tu pintar~pintar

3PL D.DIST RDP~be.clever
'... they (ЕмРн) are very clever' [081109-001-Cv.0117]
When reduplicated verbs are negated with tra ' NEG ' or jangang 'don't', they express an intensified negative in the sense of "not bASE at all", as shown in (37) and (38).

Negation of reduplicated verbs
(37) sa tra takut~takut siapa pun

1SG NEG RDP~feel.afraid(.of) who even
'I'm not afraid at all of anybody' [081006-034-CvEx.0026]
(38) jangang bli~bli di sini, ini su malam NEG.IMP RDP~buy at L.PROX D.PROX already night
'(you) shouldn't buy (your sweets at the kiosk) here at all (because) it is already night' [080917-008-NP.0061]

### 4.2.2.4 Immediacy

Reduplicated verbs can indicate immediacy in the sense of "as soon as BASE". This is illustrated with the reduplicated dynamic verbs in the elicited examples in (39) and (40).
(39) pulang~pulang dari kantor pace de tidor RDP $\sim$ go.home from office man 3sG sleep 'as soon as (he) came home from the office, the man slept' [Elicited BR120813.007]
(40) mace ni datang datang trus de makang woman D.PRox rdp $\sim$ come next 3sG eat 'as soon as this woman arrived, she ate' [Elicited BR120813.008]

### 4.2.2.5 Aimlessness

Quite often, reduplication adds the connotation of aimlessness or casualness. That is, the reduplicated verb may signal that an activity is done repeatedly without a specific goal, as in (41) and (42).
(41) sa itu sa pegang sagu sa makangjalang~jalang 1sG D.DIST 1sG hold sago 1sG eat RDP $\sim$ walk 'as for me, I was holding (some) sago, I ate (it) while strolling around' [081025-009a-Cv.0073]
(42) malam kitong duduk~duduk kitong menyanyi~menyanyi
night 1PL RDP~sit 1PL RDP~sing
'in the evening we were sitting around, we were singing casually'
[081025-009a-Cv.0001]

### 4.2.2.6 Attenuation

Depending on the context, reduplicated stative verbs may signal attenuation in the sense of "rather BASE", as demonstrated in (43) and (44).
(43) ... biking macang kam pu fayapura pu sayur gnemo yang pahit~pahit make variety 2pl poss Jayapura poss vegetable melinjo ReL rdp~be.bitter itu
D.DIST
'[then she asked, 'you don't fear the bitter (taste of melinjos)?, then mama Pawla said,] "do you think this (melinjo) is like your Jayapura melinjo vegetable which is somewhat bitter?"' [080923-004-Cv.0016]
(44) badang kurus $\sim$ kurus, rambut ini tebal, de pu kuku ini
body RDP~be.thin hair D.Prox be.thick 3sG poss digit.nail D.Prox
panjang~panjang, kaki kurus $\sim$ kurus
RDP~be.long foot RDP~be.thin
'(his) body was somewhat thin, (his) hair was thick, his fingernails were rather long, (and his) legs were rather thin' [081006-035-CvEx.0077]

### 4.2.2.7 Imitation

Reduplicated verbs may also mark imitation in the sense of "something is an imitation of X" or "something is similar to X". This is illustrated with the dynamic verbs in (45) and (46), and the stative verbs in the elicited examples in (47) and (48).
(45) sa tendang dia di kaki sampe de lari~lari babi

1sG kick 3sG at leg until 3sG RDP~run pig
'I kicked him against (his) lower leg with the result that he staggered' (Lit. 'he ran $\sim$ ran (like) a pig (which has been shot)') [Elicited BR120813.004]
(46) dia mati~mati ayam

3sG RDP~die chicken
'he had an epileptic seizure' (Lit. 'he died $\sim$ died (like) a chicken'; that is, he was shaking like a chicken with its head cut off) [Elicited BR120813.006]
(47) paceni de su tua~tua kladi tapisuka cari prempuang man D.Prox 3sG already rdp~be.old taro.root but enjoy search woman muda
be.young
'this guy, he's already very old but (he) likes to have young women' (Lit. 'he's old old (like) a taro root)' [Elicited BR120813.038]
(48) prempuang itu de pu kulit hitam~hitam panta blanga woman D.DIST 3sG poss skin RDP~be.black buttock cooking.pot
'that woman, her skin is black (like) the bottom of a frying pan' (Lit. 'her skin is black~black (like) the bottom ...) [Elicited BR120813.046]

### 4.2.2.8 Interpretational shift

Reduplicated verbs can also undergo an interpretational shift. Such a shift can result in a nominal reading of reduplicated verbs, as in the elicited examples in (49) and (50), or an adverbial reading, as in (51) to (53).

Reduplicated verbs with a nominal reading typically denote the instrument of the action specified by the verbal base, such as garo~garo 'rake' (literally 'rdp scratch') in (49) or gait gait 'pole' (literally 'rdp $\sim h o o k ') ~ i n ~(50) . ~$.

Reduplicated verbs: Nominal reading
(49) tadi de pake garo~garo buat garo rumput
earlier 3sG use RDP~scratch for scratch grass
'earlier he took a rake to rake the grass' [Elicited BR120813.010]
(50) sa gait mangga deng gait~gait

1sG hook mango with RDP~hook
'I plucked mangoes with a pole' [Elicited BR120813.033]
Reduplicated verbs can also receive an adverbial reading, as in (51) to (53). Certain reduplicated dynamic verbs may take on the function as modal adverbs, such as taw taw 'suddenly' (literally 'rDP $\sim$ know') in (51). Some reduplicated stative verbs are used as temporal adverbs such as lama~lama 'gradually' (literally 'rDP~be.long (of.duration)') in (52), while others are used as manner adverbs, such as cepat~cepat 'quickly' (literally 'rdp~be.fast') in (53).

Reduplicated verbs: Adverbial reading
(51) taw taw orang itu tida keliatang

'suddenly, that person wasn't visible (any longer)' [080922-002-Cv.0123]
(52) lama~Iama de padat itu macang aspal

RDP $\sim$ be.long 3sG be.solid D.DIST variety asphalt
'gradually, it (the lime stone) becomes solid like asphalt' [081011-001-Cv.0304]
(53) yo, pak Hendrik ini de bilang, mandi cepat~cepat
yes father Hendrik D.prox 3sG say bathe rdp~be.fast
'yes, Mr. Hendrik here, he said, "bathe quickly"' [080917-008-NP.0133]

### 4.2.3 Reduplication of adverbs

Reduplication of adverbs typically signals intensity, similar to the reduplication of verbs, discussed in $\S 4.2 .2$ (concerning the similarities between adverbs and verbs, see also §5.4). This is illustrated with the grading adverb paling 'most', the temporal adverb skarang 'now', and the frequency adverb sring 'often' in the three elicited examples in (54) to (56).
(54) de bilang de mo kerja tapi paling $\sim$ paling de tidor 3SG say 3sG want work but rDp $\sim$ most $\quad$ 3sG sleep
'he says, he wants to work but most likely he'll sleep' [Elicited BR120813.015]
(55) skarang~skarang de ada di polisi

RDP~now 3sG exist at police
'right now he/she is at the police (station)' [Elicited BR131231.002]
(56) sa pu kaka sring~sring ke Jayapura

1sG poss oSb RDp~often to Jayapura
'my older sibling (travels) to Jayapura very often' [Elicited BR131231.001]

### 4.2.4 Reduplication of numerals and quantifiers

Across languages, reduplication of numerals "has been found to express various categories including collectives, distributives, multiplicatives, and limitatives" (Rubino 2013). In Papuan Malay, reduplicated numerals typically express collectivity or distributiveness, while quantifiers signal distributiveness.

Reduplicated numerals have two meaning aspects. They may express collectivity in the sense of "all bASE' as in (57) and the elicited example in (58), or signal distributiveness in the sense of "base by base" as in (59) and (60).

Reduplication of numerals: Collectivity and distributiveness
(57) yo, kas tinggal dua~dua
yes give stay RDp~two
'yes, let both of them stay' [080919-006-CvNP.0018]
(58) ... karna pesta tu de su kasi mati tiga~tiga because party D.DIST 3sG already give die RDP~three
'[he/she has three pigs (but)] because of that festivity he/she already killed all three of them' [Elicited BR120813.043]
(59) ... jadi lega ada lepas~lepas satu~satu
so be.relieved exist RDP~free RDP~one
'[fortunately, (the people) over there have already received Jesus,] so (you can feel) relieved, they were freed one-by-one' [081025-007-Cv.0017]
(60) sa minum lima~lima mangkok

1SG drink RDP~five cup
[About the lack of water during a retreat:] 'I drank five cups (every morning)' (Lit. 'five-by-five cups') [081025-009a-Cv.0070]

Reduplicated quantifiers signal distributiveness, as in (61) and (62).
Reduplication of quantifiers: Distributiveness
(61) ... kariawang dong banyak~banyak dong baru turung ini employee 3pl RDP~many 3pl recently descend d.PROX
[Waiting for other boat passengers:] 'the employees came recently down(stream) in groups of numerous people' (Lit. 'many-by-many') [080922-001a-CvPh.0812]
(62) dong blum isi, selaing dong isi sedikit sedikit to?

3pl not.yet fill besides 3pl fill RDp~few right?
[About how best to distribute food during a retreat:] 'they haven't yet filled (their plates), moreover each one of them (should) fill (their plates with) little (food), right?' (Lit. ‘little by little’) [081025-009a-Cv.0081]

### 4.2.5 Reduplication of function words

Reduplication of function words occurs considerably less often than that of content words. This section describes reduplication of the following function words: personal pronouns (§4.2.5.1), demonstratives and locatives (§4.2.5.2), interrogatives (§4.2.5.3), and the causative verb kasi 'give' and the reciprocity marker baku 'RECP' (§4.2.5.4).

### 4.2.5.1 Personal pronouns

Personal pronouns can be reduplicated when used pronominally (for details on their different uses, see $\S 5.5$ and §6.1). Reduplicated personal pronouns have three meaning aspects. Depending on the context, they signal collectivity, disparagement, or imitation, ${ }^{3}$ as in (63) and in the elicited examples in (64) and (65), respectively.
(63) kamu~kamu ini bangung bangung bangung bangung

RDP~2PL D.PROX wake.up wake.up wake.up wake.up
'all of you here wake-up, wake-up, wake-up, wake-up' [081115-001a-Cv.0329]
(64) knapa saya~saya saja yang bapa kasi tugas
why RDP~1SG just Rel father give duty
'why is it (always) poor me whom father gives chores' [Elicited BR120813.025]
(65) dorang~dorang tra perna kasi bersi halamang

RDP $\sim 3$ PL $\quad$ NEG ever give be.clean yard
'people like them never clean (their) yard’ [Elicited BR120813.024]

### 4.2.5.2 Demonstratives and locatives

Demonstratives and locatives can also be reduplicated when used pronominally (for details on their different uses, see $\S 5.6$ and $\S 5.7$, respectively). Reduplicated demonstratives express diversity as in (66) and (67). ${ }^{4}$ Depending on the context, reduplicated locatives may signal diversity as in (68), or emphasize the core meaning of the respective locative, as in (69).

[^91](66) setela itu nanti buat ini~ini
after D.DIST very.soon make RDP $\sim$ D.PRox
'soon after that (they) did these various (things)' [080923-013-CvEx.0030]
(67) ... yang laing itu~itu honorer smua itu

REL be.different RDP~D.DIST be.honorary all D.DIST
'[there are no school teachers, only him and Markus,] (as for) the others, those various (teachers) are all honorary (teachers)' [081011-024-Cv.0054]
(68) jadi de bapa ke fayapura tinggal situ $\sim$ situ
so 3sG father to Jayapura stay RDP~L.MED
'so her father (went) to Jayapura and lived there in a number of different places'
[081011-023-Cv.0163]
(69) ... di sini ada air, mari sini~sini at l.PROX exist water hither RDP $\sim$ L.PROX
' [(you) may fish from up here,] here is water, (come) here, right here' [081025-003-Cv.0093]

### 4.2.5.3 Interrogatives

Likewise, interrogatives can be reduplicated when used pronominally (for details on their different uses, see §5.8). Reduplicated interrogatives signal indefiniteness by referring to an unspecified group member, in the sense of "any" or "Wh-ever". This is illustrated with the examples in (70) to (73); the example in (73) is elicited.
(70) yo, tida bole kas taw siapa~siapa yes NEG may give know RDP~who 'yes, (you) must not tell anybody' [080922-001a-CvPh.0288]
(71) saya tida biking apa~apa karna babi suda mati

1SG NEG make RDP $\sim$ what because pig already die
[About hunting a wild pig:] 'I didn't do anything because the pig was already dead' [080919-004-NP.0023]
 very.soon RDP~when or 2SG RDP~walk to hither 'later whenever (you have time) you come here' [Elicited BR120813.029]
(73) di mana~mana smua pake ini, tajam besi ini at RDP $\sim$ where all use D.PRox be.sharp metal D.PRox
[About sagu production:] 'wherever everybody uses it, this sharp metal' [081014-006-CvPr.0059]

Alternatively, speakers may use the bare interrogative followed by the focus adverb saja 'just' to encode an indefinite referent, as discussed in §5.8.8.

### 4.2.5.4 Causative verb kasi 'give' and reciprocity marker baku 'reCP'

Reduplication of the causative verb kasi 'give' and reciprocity marker baku 'RECP', as in (74) and (75) respectively, signals repetition or continuation. (For more details on causative and reciprocal constructions, see $\S 11.2$ and $\S 11.3$, respectively.)
(74) knapa kam kas $\sim$ kas bangung dia, de masi mo tidor why 2PL RDP~give wake.up 3sG 3sG still want sleep
'why do you keep waking him up?, he still wants to sleep' (Lit. 'give~give to wake up') [080918-001-CvNP.0039]
(75) itu sampe tong baku~baku tawar ini deng doseng D.DIST until 1PL RDP~RECP bargain D.PROX with lecturer 'it got to the point that we and the lecturer were arguing constantly with each other' [080917-010-CvEx.0177]

### 4.2.6 Gesamtbedeutung of reduplication

Reduplication in Papuan Malay conveys a number of different meaning aspects ranging from continuation and diversity to disparagement and imitation. This variety in meaning raises two questions: first, does reduplication have a general meaning or gesamtbedeutung, and second, is there a specific relation between the meaning and the syntactic class of the base word.

Table 4.6 lists the Papuan Malay word classes which attract reduplication and the meaning aspects they convey.

Table 4.6: Word classes and meaning aspects in reduplication

| Dimension |  | Meaning aspects | Word class of base |
| :---: | :---: | :--- | :--- |
| AUG | QUANT | Continuation/repetition/habit | N, v, CAUS, RECP |
|  | QUANT | Collectivity | N, V, NUM, PRO |
|  | QUANT | Diversity | N, V, DEM, LOC |
|  | QUANT | Distributiveness | NUM, QT |
|  | INTENS | Intensity | v, ADV, LOC |
|  | INTENS | Immediacy | v |
| DIM |  | Disparagement | PRO |
|  |  | Indefiniteness | N, INT |
|  |  | Aimlessness | V |
|  | Attenuation | v |  |
|  |  | Imitation | v, PRO |

Some of the meaning aspects which reduplication in Papuan Malay conveys include, what cross-linguistically Moravcsik (2013: 130) refers to as "contradictory senses". The as-
pect "immediacy", for instance, represents an increase in intensity, while the aspect "aimlessness" refers to a decrease in intensity. This phenomenon that reduplication brings together a variety of meanings, some of which are opposite, is quite common crosslinguistically (see, for instance, Regier 1994; Mattes 2007: 124-125; Kiyomi 2009: 1151; Moravcsik 2013: 129-133).

Examining the "crosslinguistically recurrent semantic properties of reduplication", Moravcsik (2013: 131) comes to the conclusion that
reduplication may be viewed as a marking device to indicate that the word is to be understood in an out-of-the-ordinary sense: the meaning deviates from the normal sense of the base either by being "more" or by being "less".

These contradictory meaning aspects of augmentation and diminution have also been noted for Malayo-Polynesian languages. In her study on reduplication in 30 of these languages, Kiyomi (2009: 1151) considers these two meanings of reduplication to be
> two manifestations of the same semantic principle of 'a ...er degree of ...', which is projected in the opposite directions. Then one can postulate that the prototypical meanings of reduplication represent the semantic principle 'A HIGHER/LOWER degree of ...

The overview presented in Table 4.6 indicates that this semantic principle of "a ...er degree of ..." in terms of augmentation or diminution also accounts for the different meaning aspects of reduplication in Papuan Malay.

In Papuan Malay, the notion of "higher degree of ..." involves augmentation in terms of quantity or intensity. Cross-linguistically, Moravcsik (2013: 317, 321) specifies that in the context of reduplication quantity can refer to the "participants of [an] event or the events themselves", while intensity refers to the amount of "energy investment or size of effect". In Papuan Malay, the augmentation of quantity includes meaning aspects such as collectivity or repetition, while the increase in intensity includes the meaning aspects of intensity and immediacy, as listed in Table 4.6.

The notion of "lesser degree of ..." involves, generally speaking, diminution which typically "adds the meaning of smallness to the stem meaning" (Kiyomi 2009: 1153). As Jurafsky (1993: 424) points out, however, the diminutive exhibits a variety of "metaphorical extensions" which involve "meaning shifts from the physical world to the social domain, and from the physical world to the conceptual or category domain". Such semantic extensions of the diminutive are also found in Papuan Malay, in that the semantic effect of diminution brings together the meaning aspects of disparagement, indefiniteness, aimlessness, attenuation, and imitation.

The "disparagement" sense is linked to the notion of diminution metaphorically in that it has to do with social importance or power. The "indefiniteness" sense is also a metaphorical extension in that it conveys toned-down reference. Likewise, the "aimlessness" sense is linked to the notion of diminution in that it denotes actions which are done with less intensity. The "attenuation" sense is a metaphorical extension of the core sense
"size" in that it denotes properties which are weaker, or activities which are carried out less intensely. The "imitation" sense refers to objects or activities which copy or imitate what the base denotes. This sense is linked to the core sense of diminution in that the objects and activities are not identical with their models but merely resemble them a little bit. (See Jurafsky 1993: 426, 430; Mattes 2007: 125; V. Mattes p.c. 2013; Moravcsik 2013: 129-130.)

In summarizing the above and in applying Kiyomi's (2009: 1151) terminology, it is concluded that in Papuan Malay, the gesamtbedeutung of reduplication is "a HIGHER/LOWER degree of ...". Table 4.7 gives examples for the two dimensions of augmentation and diminution conveyed by reduplication.

Table 4.7: Gesamtbedeutung of reduplication

| Dimensions |  | Item | Gloss |  |
| :--- | :--- | :--- | :--- | :--- |
| Augmentation | Quantity | ana~ana | RDP~child | 'children' |
|  | Intensity | pintar~pintar | RDP $\sim$ be.clever | 'be very clever' |
| Diminution | Attenuation | kurus $\sim$ kurus | RDP~be.thin | 'be rather thin' |
|  | Imitation | mati~mati | RDP~die | 'die like ...' |

With respect to the relation between the meaning and the syntactic class of the base word, two major observations are made. First, across word classes, reduplicated lexemes differ in terms of the meaning aspects which they convey. Second, meaning aspects differ as regards the range of word classes they attract for reduplication. (See Table 4.6.)

First, concerning the reduplicated lexemes and the meaning aspects they convey, the gathered data indicates that within certain word classes reduplication tends to convey more than one specific meaning. Reduplication in certain verbs, for example, can express immediacy while in other verbs it signals continuation or repetition. It is notably content words which carry this variety of different meanings, that is, nouns, verbs, and numerals. In addition, reduplication within two classes of function words also conveys more than one meaning aspect, namely in the classes of personal pronouns and locatives. Reduplication within the other three classes of function words, by contrast, tends to carry specific meanings: reduplicated demonstratives express diversity, interrogatives indicate indefiniteness, and the causative and reciprocity markers signal continuation or repetition. In relating the word classes which attract reduplication to certain meaning aspects it is noted, however, that the meaning of a given reduplicated form is more than the meaning of its constituents. The fact that the entire reduplicated form and not its individual constituents carry this meaning, indicates, what Booij (2013: 260-261) calls, a "holistic" or constructional meaning of the reduplicated forms.

Second, regarding the meaning aspects and the range of word classes they attract for reduplication, three meaning aspects bring together the largest number of different word classes, namely four each. The continuation/repetition/habit meaning aspect brings together nouns, verbs, and the causative and reciprocity markers. The collectivity meaning
aspect brings together nouns, verbs, numerals, and personal pronouns. And the diversity meaning aspect brings together nouns, verbs, demonstratives, and locatives. Another pertinent meaning aspect is intensity, which attracts three different word classes for reduplication, namely verbs, adverbs, and locatives. Three more meaning aspects, which attract two word classes each for reduplication, are distributiveness, indefiniteness, and imitation. The remaining meaning aspects attract only one word class each for reduplication, that is, verbs for immediacy, aimlessness, and attenuation, and personal pronouns for disparagement. These observations suggest that there is not a specific, one-to-one relation between the meaning and the syntactic class of the base word.

### 4.3 Reduplication across eastern Malay varieties

Reduplication is also very common in other eastern Malay varieties, such as Ambon Malay (AM) (van Minde 1997: 112-140), Banda Malay (BM) (Paauw 2009: 160, 206), Kupang Malay (KM) (Paauw 2009: 160, 171-173, 206, 252-253), Larantuka Malay (LM) (Paauw 2009: 161, 171-173, 206, 256-258), Manado Malay (MM) (Stoel 2005: 25-28), and Ternate Malay (TM) Litamahuputty (2012: 136-139). This section compares reduplication across these Malay varieties in terms of lexeme formation (§4.3.1), lexeme interpretation (§4.3.2), and interpretational shift (§4.3.3), as far as mentioned in the literature. For comparison, reduplication in Papuan Malay (PM) is also included. Also included for comparison is Standard Indonesian (SI) (MacDonald 1976; Mintz 2002; Sneddon 2010).

### 4.3.1 Lexeme formation

Similar to Papuan Malay, the above-mentioned six Malay varieties also employ full reduplication, as shown in Table 4.8. Typically, reduplication affects content words, while reduplication of function words is rarer. Manado and Ternate Malay also employ reduplication of bound morphemes. The data in Table 4.8 also shows which varieties use a combination of reduplication and affixation, and in which varieties reduplicated forms without corresponding base words are found. Besides Papuan Malay, only two of the six other eastern Malay varieties use partial and imitative reduplication, namely Ambon and Larantuka Malay.

The data given in Table 4.8 shows that reduplication in Ambon Malay is about as pervasive as in Papuan Malay, with both varieties sharing many features. This applies to the attested reduplication types (full, partial, and imitative), as well as to the attested morpheme types which can be reduplicated. For the five other eastern Malay varieties and Standard Indonesian, reduplication seems to play a much lesser role, as shown by the gaps in Table 4.8. For the eastern Malay varieties, this applies especially to the reduplication of function words; furthermore, these varieties appear not to have reduplicated forms which lack a corresponding unreduplicated base.

Two explanations present themselves for these observations. One explanation is that the commonalities between Papuan Malay and Ambon Malay, together with the lack of

Table 4.8: Lexeme formation across eastern Malay varieties and Standard Indonesian

1. Full reduplication
a) Content words (productive)

| N | PM | AM | BM | KM | LM | MM | TM | SI |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| v | PM | AM |  | KM | LM | MM | TM | SI |
| ADV | PM | AM |  |  |  | MM |  | SI |
| NUM | PM | AM |  | KM |  | MM |  | SI |
| QT | PM |  |  | LM |  |  |  |  |

b) Function words (unproductive)

| PRO | PM | AM | KM | LM | MM |  | SI |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DEM | PM | AM |  |  |  |  |  |
| LOC | PM | AM |  |  |  |  |  |
| INT | PM | AM | KM | LM |  |  |  |
| caus | PM |  |  |  |  |  |  |
| RECP | PM |  |  |  | MM | TM |  |
| c) Bound morphemes (unproductive) |  |  |  |  |  |  |  |
| PFX |  |  |  | MM |  | TM |  |
| d) Reduplication and affixation (productive) |  |  |  |  |  |  |  |
| rdp prec. AFFX | PM | AM | KM | LM | MM | SI <br> SI |  |
| Affx prec. RDP | PM | AM |  |  |  |  |  |  |
| e) No corresponding base words (unproductive) |  |  |  |  |  |  |  |
| N |  | AM |  |  |  | SI |  |
| v |  | AM |  |  |  | SI |  |
| QT | PM |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { ADV } \\ & \text { CNJ } \end{aligned}$ |  | AM |  |  |  |  | SISI |
|  |  | AM |  |  |  |  |  |
| 2. Partial reduplication |  |  |  |  |  |  |  |
| productive unproductive |  |  |  | LM |  | SI |  |
| 3. Imitative reduplication (unproductive) |  |  |  |  |  |  |  |
|  | PM | AM |  | LM |  |  | SI |

overlap with the five other eastern Malay varieties, are due to the distinct history of Papuan Malay, argued for in §1.8. An alternative explanation is that the differences among the eastern Malay varieties are due to differing degrees of depth with which the different authors describe reduplication in the Malay varieties presented in Table 4.8. This grammar on Papuan Malay, as well as that of Ambon Malay, and also those of Standard Indonesian, describe reduplication as a word-formation process rather thoroughly, while the descriptions of the five other eastern Malay varieties mention only the most salient features of reduplication in these varieties; hence, the rather large number of gaps in Table 4.8.

### 4.3.2 Lexeme interpretation

As in Papuan Malay, the gesamtbedeutung of reduplication in the six other eastern Malay varieties is "a higher/Lower degree of ...". Table 4.9 gives examples for this gesamtbedeutung across the seven Malay varieties.

Table 4.10 demonstrates in more detail which word classes attract reduplication and which meaning aspects they convey in all seven Malay varieties.

First, the data in Table 4.10 shows that across the seven Malay varieties, reduplication of content words tends to convey more than one meaning aspect, while reduplicated function words tend to carry specific meaning aspects, such as indefiniteness for inter-

Table 4.9: Gesamtbedeutung of reduplication across eastern Malay varieties

| Dimensions | Malay | Item | Gloss |  |
| :---: | :---: | :---: | :---: | :---: |
| AUG.QUANT | PM | bua~bua | RDP $\sim$ fruit | 'various fruits' |
|  | AM | kata~kata | RDP $\sim$ word | 'words' |
|  | BM | orang~orang | RDP $\sim$ person | 'people' |
|  | KM | buku~buku | RDP $\sim$ book | 'books' |
|  | LM | ana~ana | RDP $\sim$ child | 'children' |
|  | MM | dua~dua | RDP $\sim$ two | 'all two, both' |
|  | TM | ular~ular | RDP $\sim$ snake | 'snakes' |
| AUG.INTENS | PM | pintar~pintar | RDP $\sim$ be.clever | 'be very clever' |
|  | AM | biru~biru | RDP $\sim$ blue | 'be very blue' |
|  | LM | uma~ame | RDP $\sim$ chew | 'chew wildly' |
|  | MM | kita kita | RDP $\sim 1 \mathrm{SG}$ | 'constantly me' |
|  | TM | ba~ba-diang | RDP $\sim$ INT-be.quiet | 'be very quiet' |
| DIM | PM | kurus kurus | RDP $\sim$ be.thin | 'rather thin' |
|  | AM | malu malu | RDP $\sim$ ashamed | 'shy as' |
|  | KM | apa~apa | RDP $\sim$ what | 'anything' |
|  | LM | apa~apa | RDP $\sim$ what | 'anything' |
|  | MM | saki~saki | RDP $\sim$ be.sick | 'sickly' |

rogatives. The exception is Manado Malay, where reduplication of content words tends to carry a specific meaning, such as plurality for nouns.

Second, the data in Table 4.10 illustrates that in the other eastern Malay varieties some meaning aspects also attract a wider range of word classes for reduplication than other meaning aspects. This applies to the plurality/diversity, the intensity, the continuation/repetition/habit, and the indefiniteness meaning aspects.

Of all the eastern Malay varieties, the different meaning aspects attested in Papuan Malay attract the widest range of different word classes. For Ambon Malay, the range of attracted word classes is also rather large. In the other eastern Malay varieties, however, the attracted range of word classes is much smaller. At this point, it remains unclear,

Table 4.10: Word classes and meaning aspects in reduplication across eastern Malay varieties ${ }^{a}$

|  | PM | AM | BM | KM | LM | MM | TM |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Augmentation (quantity) |  |  |  |  |  |  |  |
| Continuation/ repetition/habit | $\mathrm{N}, \mathrm{V}, \mathrm{ADV}$, <br> RECP, <br> CAUS | V |  | V | V | V, PFX | V, PFX |
| Plurality/ diversity | $\begin{aligned} & \mathrm{N}, \mathrm{~V}, \mathrm{DEM}, \\ & \text { LOC } \end{aligned}$ | $\mathrm{N}, \mathrm{V}$ | N | N | N | N | N, V |
| Collectivity | NUM, PRO | NUM |  |  |  | NUM |  |
| Distributiveness | NUM, QT |  |  |  |  |  |  |
| Involvement |  |  |  |  |  | PRO |  |
| Totality |  | N | N |  |  |  |  |
| Aimlessness | V |  |  |  | V |  | V |
| Augmentation (intensity) |  |  |  |  |  |  |  |
| Intensity | $\mathrm{V}, \quad \mathrm{ADV}$ | v, ADV |  |  | V | ADV | V, PFX |
| Immediacy | V |  |  |  |  |  |  |
| Diminution |  |  |  |  |  |  |  |
| Disparagement | PRO |  |  |  |  |  |  |
| Indefiniteness | N, INT | DEM, INT |  | PRO, INT | PRO, INT |  |  |
| Attenuation | V | V |  |  |  |  |  |
| Vagueness |  | ADV |  |  |  |  |  |
| Imitation | V, PRO | V, PRO |  |  |  |  |  |

[^92]though, whether these smaller ranges are due to inherent properties of these varieties or due to an incomplete documentation in the respective literature.

Overall, there is not a specific, one-to-one relation between the meaning aspects of the reduplicated lexemes and the syntactic class of the corresponding base words in any of the Malay varieties discussed here.

### 4.3.3 Interpretational shift

Interpretational shift of reduplicated lexemes, as described for Papuan Malay (see §4.2.1.4 and §4.2.2.8), is also attested for Ambon Malay (van Minde 1997: 118, 123, 125), Larantuka Malay (Paauw 2009: 126, 270), Manado Malay (Stoel 2005: 26), and Ternate Malay (Litamahuputty 2012: 220).

With respect to the patterns of interpretational shift, two observations are made which are summarized in Table 4.11. First, in each of the varieties for which interpretational shift is mentioned, it is content words that may undergo such a shift. Second, the Malay varieties differ in terms of the syntactic categories of the base and the readings which the reduplicated forms can receive. In Papuan and Ambon Malay, nouns and verbs can undergo interpretational shift, while in Manado Malay only nouns and in Larantuka and Ternate Malay only verbs are affected. Most often, such a shift results in the reduplicated form receiving an adverbial reading. Such is the case in Papuan, Ambon, Larantuka, and Ternate Malay; the exception is Manado Malay. Considerably less often the shift results in a nominal reading (Papuan and Ambon Malay) or a verbal reading (Papuan Malay) of reduplicated lexemes.

The ability of reduplicated lexemes to undergo interpretational shift seems to be best explained in terms of a slot filling-function of reduplication. Cross-linguistically, temporal noun phrases, for instance, are prone to fill adverbial slots; an example is the English sentence "she came home late at night".

Hence, in this grammar of Papuan Malay, the interpretational shifts described in §4.2.1.4 and §4.2.2.8 are taken to result from a slot filling-function of reduplication. That is, reduplication enables base words to fill different syntactic slots, such as an adverbial or a nominal slot.

In Ternate Malay, interpretational shifts also seem to be the results of a slot-filling function of reduplication, with Litamahuputty (2012: 220) noting that "both reduplicated quality words and activity words may serve to express manner when they immediately follow an activity". For Ambon Malay, by contrast, van Minde (1997: 118, 123, 125) considers the observed interpretational shifts as "transpositions" which result from "derivational" processes. For Manado Malay, Stoel (2005: 26) notes that when kinship terms or similar words are reduplicated "then the reduplicated form is an adjective referring to a certain age group". This statement suggests that Stoel (2005) considers interpretational shifts to result from a category-changing function of reduplication. For Larantuka Malay, Paauw (2009: 126, 270) does not discuss the attested interpretational shifts.

Table 4.11: Patterning of interpretational shift across eastern Malay varieties

| Syntactic category |  | Reduplicated forms and their meanings |  | Received |
| :---: | :---: | :---: | :---: | :---: |
| Nouns | PM | rawa~rawa | 'be swampy' | verbal |
|  |  | RDP $\sim$ swamp malam~malam RDP~night | 'late at night' | adverbial |
|  | AM | malang~malang RDP~night | 'during the night' | adverbial |
|  | MM | $\begin{aligned} & \text { opa~opa } \\ & \text { RDP~grandfather } \end{aligned}$ | 'quite old' | verbal |
| Verbs ${ }^{\text {a }}$ | PM | gait $\sim$ gait RDP~hook | 'pole' | nominal |
|  |  | taw~taw <br> RDP~know | 'suddenly' | adverbial |
|  | AM | gai~gai <br> RDP~hook | 'pole' | nominal |
|  |  | kamuka~kamuka RDP~go.first | 'formerly, earlier' | adverbial |
|  | LM | tiba~tiba <br> RDP~arrive | 'suddenly' | adverbial |
|  | TM | asik~asik RDP~busy | 'busily' | adverbial |

[^93]
### 4.4 Summary

Reduplication in Papuan Malay is a very productive morphological device for deriving new words. In terms of lexeme formation, three different types of reduplication are attested: full, partial, and imitative reduplication. The most common type is full reduplication, which involves the repetition of an entire root, stem, or word; bound morphemes are not reduplicated. Full reduplication usually applies to content words, although some function words can also be reduplicated. Partial and imitative reduplication are rare. The gesamtbedeutung of reduplication is "a HIGHER/LOWER DEGREE OF ..." in the sense of augmentation and diminution, applying Kiyomi's (2009: 1151) terminology. There is, however, no specific, one-to-one relation between the meaning aspects of the reduplicated lexemes and the syntactic class of the corresponding base words.

## 4 Reduplication

A comparison of reduplication in Papuan Malay and six other eastern Malay varieties shows that Papuan Malay shares many features with Ambon Malay. In both varieties, reduplication plays an important role. In Banda, Kupang, Manado, Larantuka, and Ternate Malay, by contrast, reduplication seems to be much less pervasive. These commonalities and differences may well point to the particular history of Papuan Malay, argued for in $\S 1.8$. The observed differences could, however, also result from gaps in the descriptions of Banda, Kupang, Manado, Larantuka, and Ternate Malay.

## 5 Word classes

### 5.1 Introduction

This chapter discusses the Papuan Malay word classes, or parts of speech. Some of the word classes are examined in more detail in separate chapters.

The notion of "word class" is defined as a class of "words that share morphological or syntactic properties" (Asher 1994: 5188). In general, pertinent criteria for establishing class membership are a "word's distribution, its range of syntactic functions, and the morphological or syntactic categories for which it is specifiable" (Schachter \& Shopen 2007: 1-2). In Papuan Malay, morphological criteria do not play a major role in distinguishing different word classes, given the lack of inflectional morphology and the rather limited productivity of derivational patterns (see §3.1). Instead the main criteria for defining distinct word classes are their syntactic properties.

Based on their syntactic properties, three open and several closed lexical classes are distinguished. It is acknowledged, however, that Papuan Malay has membership overlap between a number of categories (see §5.14). Most of this variation involves verbs, including overlap between verbs and nouns, which is typical of Malay varieties and other western Austronesian languages. In discussing lexical and syntactic categories in western Austronesian languages, ${ }^{1}$ Himmelmann (2005: 127) points out, that "the syntactic distinction between nouns and verbs is often somewhat less clearly delineated in that word-forms which semantically appear to be verbs easily and without further morphological modification occur in nominal functions and vice versa". This applies especially to languages with "multifunctional lexical bases", that is, "lexical bases which occur without further affixation in a variety of syntactic functions" (Himmelmann 2005: 129).

As for the analytical consequences of such overlap, Himmelmann (2005: 128) notes that most authors "assume underlying syntactic differences based on the semantics of the forms", analyzing such instances of variation "as involving zero conversion". As far as the description of regional Malay varieties is concerned, this approach is accepted, for example, by van Minde (1997) in his grammar of Ambon Malay, Stoel (2005) in his description of Manado Malay, and Paauw (2009: 250) in his discussion of regional Malay varieties such as Banda Malay, Kupang Malay, or Larantuka Malay. Some authors, however, "argue for a basic lack of a morphosyntactic noun/verb distinction", as Himmelmann (2005: 128) points out. Examples for this alternative approach are Gil's (2013b) description of

[^94]Riau Indonesian (see also Gil 1994), Himmelmann's (2008) analysis of Tagalog (see also Himmelmann 1991), and Litamahuputty's (2012) grammar of Ternate Malay.

In discussing Papuan Malay lexical and syntactic categories in this grammar, nouns and verbs are analyzed as belonging to distinct word classes, in spite of the attested variation in membership, discussed in §5.14. This approach is chosen because of the distinct syntactic properties of the categories under discussion, as shown in more detail throughout this chapter. In cases of variation, the category membership of a given lexeme can usually be deduced from the context in which an utterance occurs. Rather than proposing additional special word classes for lexical items with dual distribution, the lexemes in question are analyzed as having dual class membership and the variation as involving zero conversion.

In the next two sections, the two major open lexical classes of nouns and verbs are discussed. The class of nouns, described in §5.2, includes common nouns, proper nouns, location, and direction nouns. Verbs, discussed in §5.3, are divided into trivalent, bivalent, and monovalent verbs, with the class of monovalent verbs including dynamic and stative verbs. Adverbs, discussed in §5.4, constitute the third open word class. The closed word classes are then described, that is, personal pronouns in §5.5, demonstratives in $\S 5.6$, locatives in $\S 5.7$, interrogatives in $\S 5.8$, numerals in $\S 5.9$, quantifiers in $\S 5.10$, prepositions in $\S 5.11$, and conjunctions in $\S 5.12$. Tags, placeholder and hesitation makers, interjections, and ideophones are presented in §5.13. The categories with variation in word class membership are discussed (§5.14).The main points of this chapter are summarized in (§5.15).

### 5.2 Nouns

Papuan Malay has a large open class of nouns which refer to persons, things, and places, as well as abstract concepts and ideas. Typically, nouns have head-function in noun phrases and argument function in verbal clauses.

Based on their syntactic properties, the nouns are divided into common nouns (§5.2.1), proper nouns (§5.2.2), location nouns (§5.2.3), and direction nouns (§5.2.4). Their defining syntactic and functional properties are discussed in more detail in the respective sections.

Morphological properties do not play a major role in defining nouns as a distinct word class. This is due to the lack of inflectional morphology and the limited role of derivational processes. The latter include reduplication, and, to a limited extent, affixation with suffix -ang or prefix $P E(N)$ - (for details see §3.1.3 and §3.1.4, respectively).

Nouns are distinct from other word classes such as verbs (§5.3), adverbs (§5.4), personal pronouns (§5.5), and demonstratives (§5.6) in terms of the following distributional properties. Some of these properties, however, do not apply to all four noun types. The exceptions are mentioned below and discussed in more detail in the respective sections on the different noun types.

1. Nouns are distinct from verbs (a) in terms of their predominant functions as heads in noun phrases and as arguments in verbal clauses, (b) in that they can be quantified with numerals and quantifiers (this only applies to common and proper nouns), and (c) in that they are only negated with bukang ' NEG '.
2. Unlike adverbs, nouns (a) have predicative uses, and (b) can modify other nouns.
3. Nouns are distinct from personal pronouns, in that nouns (a) can be modified with personal pronouns, while personal pronouns are not modified with nouns, (b) can be modified with numerals/quantifiers in pre- or posthead position, while personal pronouns are only modified with numerals or quantifiers in posthead position, and (c) can express the possessum in adnominal possessive constructions, while personal pronouns do not take this slot. (Most of these properties only apply to common and (to a lesser extent to) proper nouns but not to location and direction nouns.)
4. Nouns can be modified with demonstratives, whereas demonstratives cannot be modified with nouns.

The following sections describe the four noun types in more detail: common nouns are discussed in §5.2.1, proper nouns in §5.2.2, location nouns in §5.2.3, and direction nouns in §5.2.4. Also included are brief descriptions of time-denoting nouns in §5.2.5, classifying nouns in §5.2.6, and kinship terms in §5.2.7.

### 5.2.1 Common nouns

Common nouns have general reference, in that they "do not refer to individual entities ('tokens') but only connote classes ('types') of entities" (Givón 2001: 58). They have the following defining syntactic and functional properties:

1. Head function in noun phrases is predominant (Chapter 8); in addition, they also have predicative function in nonverbal clauses (Chapter 12).
2. Argument function (subject or object) in verbal clauses is predominant (Chapter 11). ${ }^{2}$
3. Quantification (with numerals and quantifiers) and modification with adnominal constituents (including other nouns, verbs, personal pronouns, demonstratives, locatives, interrogatives, noun phrases, prepositional phrases, and/or relative clauses) (Chapter 8).
4. Negation only with bukang 'NEG' (§13.1.2).
5. In adnominal possessive constructions, common nouns can express the possessor and/or the possessum (Chapter 9).
[^95]
## 5 Word classes

Cross-linguistically, two types of common nouns can be distinguished, count nouns and mass nouns. While a count noun designates "a separate, one of a number of such entities which can be counted", a mass noun "denotes a quantity or mass of unindividuated material" (Asher 1994: 5108, 5144). Examples of Papuan Malay count and mass nouns, both concrete and abstract, are presented in Table 5.1.

Table 5.1: Count and mass nouns

| Concrete | count nouns | Abstract count nouns |  |
| :--- | :--- | :--- | :--- |
| ana | 'child' | adat | 'tradition' |
| bawang | 'onion' | berkat | 'blessing' |
| celana | 'trouser' | dosa | 'sin' |
| daung | 'leaf' | jatwal | 'schedule' |
| hutang | 'forest' | kwasa | 'power' |
| jaring | 'net' | pamali | 'taboo' |
| sumur | 'well' | tanggal | 'date' |
| tikus | 'rat' | tuju | 'goal' |
| Concrete | mass nouns | Abstract | mass nouns |
| ampas | 'waste' | cinta | 'love' |
| busa | 'foam', | baw | 'smell' |
| dara | 'blood' | dana | 'funds' |
| garam | 'salt' | duka | 'grief' |
| minyak | 'oil' | hikmat | 'wisdom' |
| nasi | 'cooked rice' | iman | 'faith' |
| susu | 'milk' | ongkos | 'expenses' |
| te | 'tea' | umur | 'age' |

Count nouns can be modified with numerals as in (1) and (2), or with quantifiers as in (3) to (6). The numerals and quantifiers can occur in prehead position, as in (1), (3), or (5), or in posthead position as in (2), (4), or (6). (Concerning the position of adnominal numerals vis-à-vis their head nominal and their semantics, see §5.9 and §8.3.1.)

$$
\text { Count nouns }{ }^{3}
$$

(1) dua orang
two person
'two people'
(2) orang dua
person two
'both people'

[^96](3) banyak orang
many person
'many people'
(4) orang banyak
person many
'many people'
(5) sedikit orang
few person
'few people’
(6) orang sedikit person few
'few people'
Mass nouns can be modified with quantifiers, which always occur in posthead position, as in (7) and (8). That is, the quantifiers cannot occur in prehead position, as shown with the elicited ungrammatical constructions in (9) and (10). Also, mass nouns cannot co-occur with numerals, neither in pre- nor in posthead position, as shown with the elicited ungrammatical examples in (11) and (12). (As for the position of adnominal quantifiers vis-à-vis their head nominal and the semantics involved, see §5.10 and §8.3.2.)

Mass nouns ${ }^{4}$
(7) sagu banyak
sago many
'lots of sago'
(8) sagu sedikit
sago few
'little sago'
(9) *banyak sagu
many sago
Intended reading: 'lots of sago'
(10) *sedikit sagu
few sago
Intended reading: ‘little sago’

[^97](11) *dua sagu
two sago
('two sago')
(12) *sagu dua
sago two
('two sago')

### 5.2.2 Proper nouns

Proper nouns have specific reference in that they "refer to individual entities (or specific groups)" (Givón 2001:58). Hence, proper nouns are distinct from common nouns, which have general reference. More specifically, proper nouns express the names of specific people and geographical places. In Papuan Malay proper nouns are distinct from common nouns in terms of the following properties:

1. Proper nouns can be modified with the following constituents: monovalent stative verbs, personal pronouns, demonstratives, locatives, interrogatives, numerals, quantifiers, and/or relative clauses (Chapter 8). Unlike common nouns, they are not readily modified with other nouns, noun phrases, or prepositional phrases.
2. Proper nouns always occur as bare nouns; reduplicated proper nouns are unattested (§4.1.1.1).
3. Proper nouns typically express the possessor but not the possessum in adnominal possessive constructions (Chapter 9).

Some examples of person and place names attested in the corpus are presented in Ta ble 5.2. Original Papuan Malay names, however, do not exist as such. The person names are very commonly taken from the Bible or originate from European languages. Family or clan names and place names originate from local languages, such as the Papuan language Isirawa (see also §1.4). The examples in Table 5.2 also illustrate that person names with more than two syllables are most commonly shortened to two-syllable names.

Modification of proper nouns with monovalent stative verbs, personal pronouns, demonstratives, locatives, interrogatives, numerals, quantifiers, and relative clauses is illustrated in (13) to (20), respectively. ${ }^{5}$
(13) Jayapura besar itu

Jayapura be.big. D.DIST.
'that big (city of) Jayapura'

[^98]Table 5.2: Proper nouns: Person and place names

| Male person names |  | Female person names |  |
| :--- | :--- | :--- | :--- |
| Long form | Short form | Long form | Short form |
| Abimelek | Abi | Antonia | Anto |
| Benyamin | Beni | Fransiska | Siska |
| Dominggus | Domi | Gerice | Ice |
| Edwart | Edo | Hendrika | Ika |
| Hermanus | Herman | Isabela | Ise |
| Kornelius | Kori | Magdalena | Magda |
| Lodowik | Lodo | Pawlina | Pawla |
| Martinus | Tinus | Samalina | Lina |
| Pontius | Ponti | Sarlota | Ota |
| Sokarates | Ates | Yohana | Hana |
| Clan and family names |  | Place names |  |
| Aweta | Manierong | Arbais | Mararena |
| Cawem | Merne | Betaf | Rotea |
| Catwe | Sefanya | Dabe | Sarmi |
| Domanser | Sope | Karfasia | Takar |
| Kaywor | Yapo | Liki | Webro |

(14) Iskia de

Iskia 3SG
'Iskia' (Lit. 'he Iskia')
(15) Sarmi itu

Sarmi D.DIST.
'that (city of) Sarmi'
(16) Paynete situ

Paynete L.MED
'Paynete there'
(17) Muay mana?

Muay where?
'which Muay?'
(18) Suebu satu ni

Suebu one D.prox
'this certain (member of the) Suebu (family)'
(19) Sope banyak

Sope many
'many Sope (family members)'
(20) Wili yang tinggal

Wili rel stay
'Wili who'll stay'
When addressing interlocutors or talking about others, speakers very commonly introduce person names with common nouns that indicate kinship relations or are used as honorifics, as shown in Table 5.3. Likewise, place names are often preceded by common nouns denoting geographical entities.

Table 5.3: Introduced person and place names ${ }^{a}$

| Introduced person names |  |
| :--- | :--- |
| ade Aris | 'younger sibling Aris' |
| mama Sance | 'mama Sance' |
| bapa-tua Fredi | 'uncle Fredi' |
| tete Daut | 'grandfather Daut' |
| mace Agustina | 'Ms. Agustina' |
| pace Alpeus | 'Mr. Alpeus' |
| Introduced places names |  |
| kampung Harapang | 'Harapang village' |
| kota Sarmi | 'Sarmi' city |
| kali Biri | 'Biri' river |
| pulow Sarmi | 'Sarmi island' |

[^99]
### 5.2.3 Location nouns

Location nouns, or locative nouns, designate locations rather than physical objects. The Papuan Malay location nouns are given in Table 5.4, together with their token frequencies in the corpus.

Location nouns are distinct from common nouns (§5.2.1) in terms of the following properties:

1. In their nominal uses, location nouns (a) only occur in prepositional phrases, (b) can be modified with nouns, demonstratives, or locatives, but with no other con-

Table 5.4: Papuan Malay location nouns

| Item | Gloss | \# tokens |
| :--- | :--- | ---: |
| atas | 'top' | 146 |
| bawa | 'bottom' | 116 |
| blakang | 'backside' | 92 |
| dalam | 'inside' | 230 |
| depang | 'front' | 102 |
| luar | 'outside' | 79 |
| pinggir | 'border' | 23 |
| samping | 'side' | 24 |
| sebla | 'side' | 110 |
| sekitar | 'vicinity' | 17 |
| tenga | 'middle' | 42 |

stituents, and (c) do not take the possessor or possessum slots in adnominal possessive constructions. ${ }^{6}$
2. In their adnominal uses, location nouns are juxtaposed to common nouns only; that is, unlike common nouns, they cannot be stacked.

Location nouns are distinct from direction nouns (§5.2.4) in that they can be modified with juxtaposed adnominal nouns, while direction nouns cannot be modified in this way.

The nominal uses of the location nouns are discussed in §5.2.3.1 and their adnominal uses in §5.2.3.2.

### 5.2.3.1 Nominal uses

In their nominal uses, the nouns always occur inside prepositional phrases and are typically modified with a juxtaposed adnominal noun such that "prep n.LOC n". Semantically, N.LOC N noun phrases are characterized by the subordination of the adnominal noun in N 2 position under the head nominal location noun in N 1 position (see also §8.2.2).

Generally speaking, the main function of location nouns is to specify the spatial relationship between a figure and the ground (Levinson \& Wilkins 2006: 3), with the ground being encoded by the juxtaposed adnominal noun. The same applies to the Papuan Malay location nouns, in that they more fully specify the spatial relationship between figure and ground than is achieved by a bare preposition that introduces the ground. This is illustrated with the contrastive examples in (21) to (23) and in (24) and (25).

[^100]"PREP N.LOC N" versus "PREP N" prepositional phrases ${ }^{7}$
(21) di atas pohong at top tree
'at the top of the tree'
(22) di bawa pohong
at bottom tree
'under the tree'
(23) di pohong
at tree
'in the tree'
(24) di pinggir kali
at border river
'alongside the river'
(25) di kali
at river
'in the river'
More examples illustrating the nominal uses of locations nouns in prepositional phrases are given in (26) to (36).

Location nouns with nominal modifier ${ }^{8}$
(26) atas dari atas kursi
'top' from top chair
'from the top of the chair'
(27) bawa dibawa meja
'bottom' at bottom table
'below the table'
(28) blakang dengang blakang kapak
'backside' with backside axe
'with the backside of the axe'

[^101]| (29) | dalam <br> 'inside' | di dalam kamar <br> at inside room |
| :---: | :---: | :---: |
|  |  | 'inside the room' |
| (30) | depang <br> 'front' | di depang greja tu at front church D.DIST |
|  |  | 'in front of that church' |
| (31) | luar <br> 'outside' | ke luar negri to outside country |
|  |  | 'abroad' |
| (32) | pinggir <br> 'border' | di pinggir jalang <br> at border walk |
|  |  | 'alongside the road' |
| (33) | samping 'side' | di samping ruma at side house |
|  |  | 'beside the house' |
| (34) | sebla | ke sebla darat |
|  | ‘side’ | to side land |
|  |  | 'landwards' |
| (35) | sekitar <br> 'vicinity' | di sekitar Pante-Barat at vicinity Pante-Barat |
|  |  | 'in the vicinity of Pante-Barat' |
| (36) | tenga | di tenga hutang |
|  | 'middle' | at middle forest |
|  |  | 'in the middle of the forest' |

In the examples in (26) to (36), the ground, encoded by the adnominal noun in N2 position, is mentioned overtly. If the ground is understood from the context, though, the adnominal noun denoting it can be omitted and the location noun is used as an independent nominal as in (37) to (40). In (37) the ground is understood from the speech situation: it is the house where the speech acts occurs. In (38) to (40) the ground is understood from the discourse: it is kitorang tiga 'we three' in (38), sumur 'well' in (39), and bandara 'airport' in (40).

Location nouns with omitted nominal modifier
(37) tida usa kamu duduk di depang, ana prempuang itu duduk di blakang NEG need.to 2PL sit at front child woman D.DIST sit at backside 'it's not necessary that you sit in front (of the house), as for girls, (they) sit in the back (of the house)' [081115-001a-Cv.0316]
(38) kitorang tiga ... naik di motor ... Martina di tenga

1PL three ascend at motorbike Martina at middle
'we three ... got onto the motorbike ... Martina was in the middle' [081015-005-NP.0020]
(39) sumur itu masi ada ... di dalam tu ada senjata well D.DIST still exist at inside D.DIST exist rifle 'that well still exists ... inside there are rifles' [080922-010a-CvNF.0120-0121]
(40) pas turung bandara Sentani pas de ketemu dengang Wamena precisely descend airport Sentani precisely 3sg meet with Wamena dorang, pas Wamena dong di pinggir situ
3pl precisely Wamena 3pl at border L.med
'the moment (he) landed (at) Sentani airport, he met the Wamena people, right then the Wamena people were (sitting) alongside (the airstrip) there' [081109-009-JR.0003]

The examples in (39) and (40) also illustrate that an independently used location noun can be modified with a demonstrative or a locative, respectively.

As shown so far, location nouns more fully specify the spatial relationship between a figure and the ground than is achieved by a bare preposition that introduces the ground. If the specific spatial relationship can be deduced from the context, though, the location noun can be omitted as illustrated with elided atas 'top' in (41) and dalam 'inside' in (42).

Omitted location nouns
(41) de kas turung mama Petrus dari atas kursi to?

3sG give descend mother Petrus from chair right?
'he (the evil spirit) threw mother Petrus from (the top of her) chair, right?'
[081025-008-Cv.0158]
(42) dong mandi di dalam kamar mandi sana

3PL bathe at inside room bathe L.DIST
'they were bathing in(side of) the bathroom over there' [081109-001-Cv.0081]

### 5.2.3.2 Adnominal uses

In their adnominal uses, the location nouns are juxtaposed to common nouns or, although much less frequently, to common nouns with juxtaposed adnominal personal pronouns, such that " N (PRO) N.LOC". In their adnominal uses, they signal locational relations. Overall, though, the adnominal uses of location nouns are marginal: of a total of 981 tokens, only $35(4 \%)$ have adnominal uses, whereas 946 have nominal uses $(96 \%)$.

In designating locational relations, the location nouns have restrictive function. That is, they signal that the referent encoded by the head nominal is precisely the one situated in the spatial location designated by the location noun. Thereby, the location noun aids the hearer in the identification of the referent, as in jalang atas 'upper road' in (43), rem blakang 'rear brakes' in (44), or tetangga dong sebla 'the neighbors next door' in (49). The locational relation can also be figurative as in generasi bawa 'next generation' in (51), or in dunia luar 'outside world' in (46), or temporal as in bulang depang 'next month' in (52). Adnominal uses for sekitar 'vicinity' are unattested in the corpus.

Locational relations: Spatial and figurative ${ }^{9}$

$$
\begin{array}{ll}
\text { atas } & \text { jalang atas }  \tag{43}\\
\text { 'top' } & \text { walk top }
\end{array}
$$

'the upper road' (Lit. 'walk on top xxx ')
(44) blakang rem blakang
'backside’ brake backside
'rear brakes'

$$
\begin{array}{ll}
\text { dalam } & \text { kolor dalam }  \tag{45}\\
\text { 'inside' } & \text { shorts inside }
\end{array}
$$

'undershorts'
(46) luar dunia luar
'outside' world outside
'outside world’
(47) pinggir tana pinggir
'border' ground border
'the ground along the side'

[^102]5 Word classes

| samping | sak samping <br> 'sag side' |
| :--- | :--- |
|  | sag side pocket' |


| sebla | tetangga dong sebla |
| :--- | :--- |
| 'side' | neighbor 3pL side | 'the neighbors next door'


| tenga | kolam tenga |
| :--- | :--- |
| 'middle' | big.hole middle |
|  | 'the pond in the middle' |

(51) bawa generasi bawa 'bottom' generation bottom 'next generation' (Lit. 'generation at bottom')
(52) depang bulang depang 'front' month front 'next month' (Lit. 'month in front')

### 5.2.4 Direction nouns

Direction nouns express cardinal directions and relative directions. The former designate the four principal compass points, while the latter express left-right orientation. The Papuan Malay direction nouns are presented in Table 5.5, together with their token frequencies in the corpus (given their low token frequencies, most examples in this section are elicited).

Table 5.5: Papuan Malay cardinal and relative directions

| Item | Gloss | \# tokens |
| :--- | :--- | ---: |
| utara | 'north' | --- |
| slatang | 'south' | --- |
| barat | 'west' | 10 |
| timur | 'east' | 5 |
| kiri | 'left' | 1 |
| kanang | 'right' | 2 |

Direction nouns have the following distributional properties:

1. Direction nouns occur in prepositional phrases as independent heads of the noun phrase within the prepositional phrase; they are unattested as head nominals in unembedded noun phrases.
2. Direction nouns have adnominal uses; that is, they occur in noun phrases with a preceding noun as nominal head.
3. Direction nouns can be modified with adnominally used demonstratives or locatives.

Direction nouns are distinct from common nouns (§5.2.1) and location nouns (§5.2.3) in terms of the following properties:

1. Contrasting with common nouns, direction nouns (a) are unattested as heads of unembedded noun phrases, (b) are only modified with demonstratives and locatives, and (c) are unattested in adnominal possessive constructions, neither as the possessor nor as the possessum.
2. Contrasting with location nouns, direction nouns with juxtaposed adnominal nouns are unattested when employed as nominals in prepositional phrases.

Direction nouns typically occur as complements in prepositional phrases, as shown with the four cardinal directions in (53) to (56) and the two relative directions in (57) and (58). Direction nouns can be modified with demonstratives as in utara ini 'this north' in (53) or kiri ini 'this left' in (57), or with locatives as in slatang sana 'south over there' in (54) or kanang sana 'right over there' in (58).

Direction nouns as complements in prepositional phrases
(53) sa pu prahu hanyut sampe ke utara ini

1sG poss boat drift reach to north D.Prox
'my boat drifted up to the north here' [Elicited BR130103.018]
(54) pohong gaharu tu paling banyak di slatang sana tree agarwood D.DIST most many at south L.DIST
'agarwood trees are most common in the south over there' [Elicited BR130103.017]
(55) de blang, a, sa datang dari barat

3sG say ah! 1sg come from west
'he said, "ah, I come from the west"' [080922-010a-CvNF.0237]
(56) pesawat ini de terbang ke timur dulu
airplane D.Prox 3sg fly to east first
'this plane it flies to the east first' [Elicited BR130103.014]
(57) pesawat de terbang dari kiri ini, baru lewat sana trus ke Wamena airplane 3sG fly from left D.Prox and.then pass.by l.dist next to Wamena 'the plane flies from the left here and passes by over there (and) then (it flies on) to Wamena' [Elicited BR130103.022]
(58) ko jalang trus, baru ko putar ke kanang sana 2sG walk be.continuous and.then 2sG turn.around to right L.DIST 'you walk on, only then you turn to the right over there' [Elicited BR130103.005]

In (57) and (58) the preposition is obligatory. With motion verbs that also express direction, however, the allative preposition $k e$ 'to' may also be omitted. This is illustrated in (59) with the motion verb belok 'turn'. (For details on the elision of prepositions encoding location, see §10.1.5.)

Elision of the preposition
(59) di jembatang depang ko belok Ø kanang trus di jembatang depang lagi ko at bridge front 2sG turn right next at bridge front again 2sG
belok Ø kiri
turn left
'at the bridge ahead you turn right, and then at the next bridge you turn left'
[Elicited BR130103.002]
In their adnominal uses, the direction nouns are juxtaposed to a head nominal. Semantically, these noun phrases designate "subtype-of" relations as in bagiang barat 'western part' and bagiang timur 'eastern part' in (60), or they denote locational relations as in sebla kiri 'left side' in (61), or in tangang kanang 'right hand/arm' in (62).

Adnominal uses of direction nouns
(60) kalo bagiang barat itu kasiang prempuang tokok prempuang ramas tapi kalo if part west D.DIST pity woman tap woman press but if bagiang timur tida
part east NEG
[About regional differences within the regency:] 'as for the western part there, (it's a) pity, the women tap (and) the women press (the sagu) but as for the eastern part (it's) not (like that)' [081014-007-CvEx.0025-0026]
(61) lapangang bola kaki ada di sebla kiri
field ball foot exist at side left
'the football field is on the left side' [Elicited BR130103.011]
(62) tulang yang tangang kanang ini su kluar ke samping
bone rel hand right D.prox already go.out to side
[About an accident:] 'the bone of the right arm here already stuck out sideways' [081108-003-JR.0006]

### 5.2.5 Time-denoting nouns

The label "time-denoting nouns" refers to nouns which denote time units (§5.2.5.1), the periods of the day (§5.2.5.2), the days of the week and months of the year (§5.2.5.3), and relative time (§5.2.5.4). Time-denoting nouns have the same syntactic properties as common nouns (for details see §5.2.1.)

### 5.2.5.1 Time units

Table 5.6 lists the different time-denoting nouns that divide a year into smaller units.
Table 5.6: Time units

| Item | Gloss | Item | Gloss |
| :--- | :--- | :--- | :--- |
| titik | 'second' | minggu | 'week' |
| minit | 'minute' | bulang | 'month' |
| jam | 'hour' | taung | 'year' |
| hari | 'day' |  |  |

The time units listed in Table 5.6 are count nouns that can be modified with numerals or quantifiers, as illustrated in (63) and (64). In addition to designating a time unit, minggu 'week' also denotes a day of the week, namely 'Sunday' (see Table 5.8).
(63) bapa bilang begini, tunggu lima blas minit to?
father say like.this wait five teens minute right?
'father said like this, "wait fifteen minutes, right?!"' [081025-006-Cv.0173]
(64) brapa bulang dorang skola ka mace, lima bulang ka?
several month 3.pl go.to.school or woman five month or
'for how many months have they been going to school, Madam, for five months, right?' [081025-003-Cv.0207]

### 5.2.5.2 Periods of the day

Table 5.7 presents the time-denoting nouns for the four periods of the day. More specifically, pagi 'morning' designates the period from just after midnight until about eleven o'clock, while siang 'midday' refers to the time from about eleven o'clock until about fourteen hours. The next period, sore 'afternoon', lasts until about eighteen hours when darkness sets in, while malam 'night' denotes nighttime.

The four periods-of-the-day expressions are count nouns that can be modified with numerals or quantifiers, as shown in (65) and (66). In addition, these expressions are also used as modifiers within noun phrases, as in (67) to (69).

Table 5.7: Periods of the day

| Item | Gloss | Item | Gloss |
| :--- | :--- | :--- | :--- |
| pagi | 'morning' | sore | 'afternoon' |
| siang | 'midday' | malam | 'night' |

Head and modifier functions
(65) saya hanya bisa makang, kasi makang dorang satu malam saja 1sG only be.able eat give eat 3pl one night just 'I can only eat, feed them just one night' [081011-020-Cv.0080]
(66) ko harus setiap pagi harus jalang trus

2SG have.to every morning have.to walk be.continuous
[About attending school:] 'you have to (go to school) every morning, (you) have to go regularly' [080917-007-CvHt.0004]
(67) tra ada snek pagi

NEG exist snack morning
'there was no morning snack' [081025-008-Cv.0079]
(68) hari sening sore itu smua harus hadir
day Monday afternoon D.DIST all have.to attend
[About volleyball training:] 'next Monday afternoon everyone has to attend' [081109-001-Cv.0053]
(69) dari jam dua blas tong makang sampe jam satu siang from hour two teens 1pl eat until hour one midday 'we ate from twelve o'clock until one o'clock midday' [081025-008-Cv.0085]

Within the clause, the four expressions typically occur at clause boundaries. Most often, they occur in clause-initial position where they set the temporal stage for the entire clause. Alternatively, although less often, the temporal expressions occur in clause-final position, where they are less prominent. This is illustrated in (70) to (73) with near contrastive examples. The time expression pagi 'morning' occurs in clause-initial position in (70) and in clause-final position in (71). Likewise, malam 'night' occurs in clause-initial position in (72) and in clause-final position in (73).

Positions within the clause
(70) pagi kitong datang lagi, dong kasi makang
morning 1PL come again 3pl give eat
[About a youth retreat:] 'in the morning, we came again, they fed (us)'
[081025-009a-Cv.0024]
(71) kemaring sa datang pagi
yesterday 1sG come morning
'yesterday I came in the morning' [080922-002-Cv.0021]
(72) ... malam sa berdoa
night 1sG pray
'[when they said (that) he was very very sick,] in the evening I prayed (for him)'
[080923-015-CvEx.0010]
(73) pas bapa berdoa malam itu, pagi de meninggal
precisely father pray night D.DIST morning 3sG die
'(my) father prayed that evening, and right away in the morning he (the boy)
died’ [081025-009b-Cv.0039]
The periods-of-the-day expressions are also used in greetings, as illustrated in (74) to (77).

Usage in greetings
(74) slamat pagi pak
be.safe morning father
'good morning Sir' [080923-011-Cv.0002]
(75) slamat siang ana
be.safe midday child
'good midday child’ [080922-001a-CvPh.1260]
(76) slamat sore smиа
be.safe afternoon all
'good afternoon (you) all' [081110-002-Cv.0001]
(77) slamat malam pak pendeta
be.safe night father pastor
'good evening Mr. Pastor’ [080925-003-Cv.0240]

### 5.2.5.3 Days of the week and months of the year

The seven days of the week and the twelve months of the year are listed in Table 5.8.
Typically, the days of the week and the months of the year occur in N 1 N 2 noun phrases, headed by the common nouns hari 'day' and bulang 'month', respectively (see Table 5.6; see also §8.2.2). Examples for the days of the week are given in (78) and (79) and for the months of the year in (80). Occasionally, however, speakers omit hari 'day' or bulang 'month' as with rabu 'Wednesday' in (79) and with oktober 'October' and januari 'January' in (81), respectively.

Table 5.8: Days of the week and months of the year

| Days of the week |  |  |  |
| :---: | :---: | :---: | :---: |
| Item | Gloss | Item | Gloss |
| sening | 'Monday' | jumat | 'Friday' |
| slasa | 'Tuesday' | saptu | 'Saturday' |
| rabu | 'Wednesday' | minggu | 'Sunday' |
| kamis | 'Thursday' |  |  |
| Months of the year |  |  |  |
| Item | Gloss | Item | Gloss |
| januari | 'January' | juli | 'July' |
| februari | 'February' | agustus | 'August' |
| maret | 'March' | september | 'September' |
| april | 'April' | oktober | 'October' |
| mey | 'May' | nofember | 'November' |
| juni | 'Juni' | desember | 'December' |

(78) yo bapa, hari minggu sa datang
yes father day Sunday 1 SG come
'yes father, on Sunday I'll come' [080922-001a-CvPh.0344]
(79) hari slasa itu ...de pu ana prempuang meninggal jaditong tinggal di day Tuesday d.DIST 3sG poss child woman die so 1PL stay at ruma sampe rabu
house until Wednesday
'that Monday ... his daughter died, so we stayed at home until Wednesday'
[080925-003-Cv.0001]
(80) ko pu alpa banyak di bulang oktober

2sG poss be.absent many at month October
'you have lots of (unexcused) absences in October' [081023-004-Cv.0015]
(81) o nanti oktober e januari baru kitong antar oh! very.soon October uh January and.then 1PL bring
[About wedding customs:] 'oh later in October uh January, and then we'll bring (our daughter to your house)' [081110-005-CvPr.0049]

### 5.2.5.4 Relative time

Relative time is expressed with the three time-denoting nouns and two phrasal expressions presented in Table 5.9.

Table 5.9: Relative time

| Item | Gloss |
| :--- | :--- |
| kemaring dulu <br> yesterday be.prior 'the day before yesterday' <br> kemaring 'yesterday, sometime ago' <br> hari ini  <br> day D.PROx 'today' <br> besok 'tomorrow, sometime in the future' <br> lusa  'the day after tomorrow' |  |

Within the clause, the relative-time denoting expressions typically occur in clauseinitial position. Here they set the temporal stage for the entire clause, similar to the nouns denoting periods of the day, discussed in §5.2.5.2. This is illustrated with the examples in (82) to (84). Alternatively, but less often, the relative-time expressions directly precede the predicate where they are less prominent, as shown in (85). The contrast in meaning conveyed by the different positions within the clause is illustrated with besok 'tomorrow' in the near contrastive examples in (84) and (85). By fronting besok 'tomorrow' in (84), the speaker accentuates the temporal setting of the entire clause. This is not the case in (85), where besok 'tomorrow' directly precedes the predicate, where it is less salient.

The examples in (82) and (84) also illustrate that the temporal scope of kemaring 'yesterday' and besok 'tomorrow' is larger than the preceding or following 24-hour period, respectively. Generally speaking kemaring 'yesterday' denotes a past point in time such as kemaring 'some time ago' in (82). Along similar lines, besok 'tomorrow' refers to a future point in time which in (84) is besok 'next year'.

Positions within the clause
(82) kemaring dulu sa deng nene, nene jam dua malam datang yesterday be.prior 1sG with grandmother grandmother hour two night come deng menangis
with cry
'the day before yesterday I and grandmother, at two in the morning grandmother came crying ...' [081014-008-CvNP.0001]
(83) yo, hari ini suda ko su skola yes day D.prox already 2 SG already go.to.school 'yes, today you already went to school' [080917-003a-CvEx.0006]
(84) kalo besok de itu hadir ke sana tu biking de sperti bos if tomorrow 3sG D.DIST attend to L.DIST D.DIST make 3sG similar.to boss
[About an event planned for the next year:] 'if next year he (the mayor), what's-its-name, (comes and) attends (the retreat) over there, treat him like a boss' [081025-009a-Cv.0172]
(85) bapa nanti besok hadir di ini retrit pemuda father very.soon tomorrow attend at D.PRox retreat youth
[About an event planned for the next year:] 'you ('father') (have to) attend, what's-its-name, the youth retreat next year' [081025-009a-Cv.0175]
In addition, the corpus includes a small number of utterances in which the nouns designating relative-time occur as subjects in nonverbal clauses. This is illustrated with besok 'tomorrow' and lusa 'the day after tomorrow' in (86).

Subject-function in nonverbal clauses
(86) besok hari kamis lusa harijumat baru
tomorrow day Thursday day.after.tomorrow day Friday and.then
'tomorrow is Thursday, the day after tomorrow is Friday and then ...'
[080917-003a-CvEx.0006]
Like other nouns, relative-time denoting nouns also have adnominal uses as shown in (87) and (88). In their adnominal uses, they occur in posthead position and have restrictive function. That is, they specify whether the period or point in time encoded by the head nominal is situated in the future or in the past, as in hari minggu besok 'next Sunday' in (87) or taung kemaring 'a few years back' in (88).

Adnominal uses
(87) yo memang hari minggu besok sa datang yes indeed day Sunday tomorrow 1sG come
'yes, indeed, next Sunday I'll come' [080922-001a-CvPh.0346]
(88) banyak mati di lautang kas tenggelam sampe taung kemaring taung ... dua many die at ocean give sink until year yesterday year two ribu dua
thousand two
[About people in a container who died in the ocean:] 'many died in the (open) ocean, (the murderers) sank (the containers), (many died in the open ocean) until a few years back, (until) the year 2002' [081029-002-Cv.0025]
Relative-time expressions also occur as complements in prepositional phrases as, for instance, in sampe besok 'until the next day' (literally 'until tomorrow') in (89). This example also illustrates that besok 'tomorrow' denotes relative time. As the events described here happened in the past, besok 'tomorrow' refers to a future point in time relative to the narrated events. Hence, besok translates as 'the next day'. (Prepositions encoding time are discussed in more detail in §10.1.)

Complements in prepositional phrases
(89) sa minum lagi trus sa tinggal sampe besok

1sG drink again next 1sG stay until tomorrow
[About recovering from an accident:] 'I took (medicine) again, then I stayed until the next day' (Lit. 'until tomorrow') [081015-005-NP.0042-0043]

### 5.2.6 Classifying nouns

Papuan Malay has a very reduced inventory of classifying nouns. Attested is only one, namely the common noun ekor 'tail' which is used to count animals. In this function, it always follows a posthead numeral, as shown in (90).

## Enumeration of animals

(90) dong dua dapat ikang ini tiga ekor dapat ikang tiga ekor dong dua ... 3pl two get fish D.prox three tail get fish three tail 3pl two 'the two of them get these fish, three (of them), having gotten three fish, the two of them ...' (Lit. 'three tails') [081109-011-JR.0003]

As a classifying noun, ekor 'tail' does not refer to the entities themselves being counted but rather to their form, as is rather common in Malay and other Austronesian varieties; see for instance Ambon Malay (van Minde 1997: 153), Ternate Malay (Litamahuputty 1994: 62), Tetun (van Klinken 1999), or Standard Malay (Mintz 2002: 321-323).

Enumeration of people and objects, by contrast, is done without a classifier as illustrated in (91) and (92), respectively.

Enumeration of people and objects
(91) jadi saya empat ana
so 1sG four child
'so I (have) four children' [081006-024-CvEx.0002]
(92) orang Sarmi harus siap untuk orang Sorong spulu kaing itu kaing person Sarmi have.to provide for person Sorong ten cloth D.DIST cloth adat itu
tradition D.DIST
[About bride-prices:] 'a Sarmi person has to provide a Sorong person with those ten cloths, those traditional cloths' [081006-029-CvEx.0012]

### 5.2.7 Kinship terms

This section presents the most common Papuan Malay terms for consanguineal and affinal kin. An initial investigation of the kinship system indicates that Papuan Malay
uses a combination of Iroquois and Hawaiian terminologies and makes a relative age discrimination.

Before presenting the Papuan Malay kinship terms, Table 5.10 lists the standard symbols used to abbreviate basic terms.

Table 5.10: Symbols for kinship terms

| Terms | Symbols | Terms | Symbols | Terms | Symbols |
| :--- | :--- | :--- | :--- | :--- | :--- |
| father | F | brother | B | husband | H |
| mother | M | sister | Z | wife | W |
| parent | P | sibling | Sb | spouse | Sp |
| son | S | older | o |  |  |
| daughter <br> child | D | C | younger | y |  |

More complex kinship terms are expressed by chains of these abbreviations, such as FZ for 'father's sister' or MF for 'mother's father'.

### 5.2.7.1 Consanguineal kin

The kinship system is Iroquois, in that Papuan Malay makes a distinction in the first ascending generation between same-sex and cross-sex parents' siblings in a bifurcate merging pattern, as demonstrated in Table 5.11. Contrasting with typical Iroquois systems, however, the cross-parallel distinction only applies to parents' younger siblings. That is, only parents' same-sexed younger siblings are considered as consanguines: bapaade 'uncle’ (literally ‘younger father') and mama-ade ‘aunt' (literally 'younger mother'). Parents' opposite-sexed younger siblings are called om 'uncle' and tanta 'aunt'; both terms are loanwords from Dutch. By contrast, Papuan Malay does not distinguish between parents' older siblings of opposite sex. That is, all parents' older siblings are considered as consanguines regardless of their sex: bapa-tua 'uncle' (literally 'old father') and mama-tua 'aunt' (literally 'old mother'). The six consanguineal terms also extend to affinal kin, as discussed in §5.2.7.2.

With respect to other generations, the kinship system is Hawaiian, in that it extends bilaterally, without making distinctions between lineal and collateral consanguines, or between cross and parallel consanguines. Consequently, Papuan Malay does not distinguish between siblings and cousins, as shown in Table 5.11. That is, children of parents' siblings are also classified as siblings. In addition, the system makes a relative age discrimination. Older siblings and children of parents' older siblings are called kaka 'older sibling' while younger siblings and children of parents' younger siblings are called ade 'younger sibling'. The same relative age discrimination applies to cousins in the second degree of collaterality: their relative ages are determined by the ages of the linking grandparents. With the exception of the reference term orang-tua 'parent', speakers use the consanguineal terms, listed in Table 5.11, both for reference and for address.

Table 5.11: Papuan Malay kinship terms: Consanguineal kin

| Item | Gloss | Symbol | Relation |
| :--- | :--- | :--- | :--- |
| bapa | 'father' | F | father |
| mama | 'mother' | M | mother |
| orang-tua | 'parent' | P | parent |
| ana | 'child' | C | child |
| kaka | 'older sibling' | oSb | older sibling |
|  |  | PoSbC | parent's older sibling's child |
| ade | 'younger sibling' | ySb | younger sibling |
|  |  | PySbC | parent's younger sibling's child |
| bapa-tua | 'uncle' | PoB | parent's older brother |
| bapa-ade | 'uncle' | FyB | father's younger brother |
| om | 'uncle' | MyB | mother's younger brother |
| mama-tua | 'aunt' | PoZ | parent's older sister |
| mama-ade | 'aunt' | MyZ | mother's younger sister |
| tanta | 'aunt' | FyZ | father's younger sister |
| tete | 'grandfather' | PF | parent's father |
|  |  | PPB | parent's parent's brother |
| nene | 'grandmother' | PM | parent's mother |
| cucu | 'grandchild' | PPZ | parent's parent's sister |

To signal the gender of a sibling or child, the kinship terms kaka 'older sibling', ade 'younger sibling', and ana 'child' are modified with the common nouns laki~laki 'man' or prempuang 'woman', giving kaka laki~laki 'older brother', ade prempuang 'younger sister', or ana laki~laki 'son'.

### 5.2.7.2 Affinal kin

The Papuan Malay affinal terms, listed in Table 5.12, include two terms for spouse, that is, paytua 'husband' and maytua 'wife', and two terms for in-laws, namely mantu '(parent/child) in-law' and ipar 'sibling in-law'. Speakers employ these terms for both reference and address.

Papuan Malay distinguishes between in-laws belonging to different generations and those belonging to the same generation, as illustrated in Table 5.12.

The expression for in-laws belonging to the first ascending or descending generation is the self-reciprocal term mantu '(parent/child) in-law'. This term, however, is unattested on its own. It is always modified with the common nouns bapa 'father', mama 'mother', or ana 'child' to specify the affinal relationship, giving bapa mantu 'father in-law', mama mantu 'mother in-law', or ana mantu 'child in-law'.

## 5 Word classes

The term for same-generation in-laws is ipar ‘sibling in-law'. This self-reciprocal term extends to spouses' siblings and those siblings' spouses, as well as to children's spouses' parents (co-parents-in-law). Again, a relative age discrimination is made similar to that for siblings: kaka ipar 'older sibling in-law' and ade ipar 'younger sibling in-law'.

Table 5.12: Papuan Malay kinship terms: Affinal kin

| Item | Gloss | Symbol | Relation |
| :---: | :--- | :--- | :--- |
| paytua | 'husband' | H | husband |
| maytua | 'wife' | W | wife |
| mantu | '(parent/child) in-law' | SpP | spouse's parents |
|  |  | CSp | child's spouse |
| ipar | 'sibling in-law' | SbSp | sibling's spouse |
|  |  | SpSb | spouse's sibling |
|  |  | SpSbSp | spouse's sibling's spouse |
|  |  | CSpP | child's spouse's parents |

The six consanguineal terms that distinguish between same-sex and cross-sex parents' siblings in the first ascending generation, mentioned in §5.2.7.1, also extend to affinal kin, as shown in Table 5.13.

Table 5.13: Papuan Malay consanguineal terms extending to affinal kin

| Item | Gloss | Symbol | Relation |
| :--- | :--- | :--- | :--- |
| bapa-tua | 'uncle' | PoZH | parent's older sister's husband |
| bapa-ade | 'uncle' | MyZH | mother's younger sister's husband |
| om | 'uncle' | FyZH | father's younger sister's husband |
| mama-tua | 'aunt' | PoBW | parent's older brother's wife |
| mama-ade | 'aunt' | FyBW | father's younger brother's wife |
| tanta | 'aunt' | MyBW | mother's younger brother's wife |

### 5.3 Verbs

Papuan Malay has a large open class of verbs which express actions, events, and processes, as well as states or more time-stable properties. They have the following defining syntactic and functional properties:

1. Valency: each verb takes a specific number of arguments (§5.3.1).
2. Predicative function is predominant; besides, verbs also have attributive uses in noun phrases (§5.3.2).
3. Modification with adverbs, including intensification and grading (§5.3.4 and §5.3.5).
4. Negation only with tida 'NEG' or tra 'NEG' (§5.3.6). ${ }^{10}$
5. Occurrence in causative and in reciprocal constructions (§5.3.7 and §5.3.8).

Morphological properties play only a minor role in defining verbs as a distinct word class, due to the lack of inflectional morphology and the limited role of derivational processes. The latter include reduplication (for details see §4.2.2), and, to a limited extent, affixation with prefix $T E R$ - or suffix -ang (§5.3.9; see also §3.1).

Verbs are divided into three classes on the basis of their valency and their tendency to function predicatively, namely trivalent, bivalent, and monovalent verbs. In turn, monovalent verbs are further divided into dynamic and stative verbs. That is, Papuan Malay does not have a distinct class of adjectives. Instead, monovalent stative verbs encode, what Dixon (2004: 4) calls "the four core semantic types" of dimension, age, value, and color which are "typically associated with the word class adjective". The two criteria of valency and prevalent predicative function also account for the other properties of verbs, listed above and discussed in more detail in the following sections.

Verbs are distinct from nouns (§5.2) and adverbs (§5.4) in terms of the following distributional properties:

1. Contrasting with nouns, verbs (a) have valency, ${ }^{11}$ and (b) are negated with tida/tra ' NEG'. In addition (c) verbs, except for monovalent stative ones, occur as predicates in reciprocal constructions, and (d) monovalent stative and bivalent verbs occur as predicates in comparative constructions.
2. Unlike adverbs, verbs (a) are used predicatively, and (b) can modify nouns.

The following sections explore the characteristics and properties of verbs in more detail. As for their syntactic properties the following topics are discussed: valency in §5.3.1, predicative and attributive functions in §5.3.2, adverbial modification in §5.3.3, intensification in $\S 5.3 .4$, grading in $\S 5.3 .5$, negation in $\S 5.3 .6$, occurrences in causative constructions in $\S 5.3 .7$, and uses in reciprocal constructions in $\S 5.3 .8$. Finally, the morphological properties of verbs are briefly examined in §5.3.9. In each section, dynamic verbs are discussed first, and stative verbs second. Dynamic verbs, in turn, are described in order from those with three arguments to those with one argument. Each section also discusses the type and token frequencies in the corpus for the respective properties and summarizes these frequencies in a table. These tables form the basis for the summary in §5.3.10.

[^103]
### 5.3.1 Valency

Valency is defined as a "weighting or quantification of verbs in terms of the number of dependents (or arguments or valents) they take" (Asher 1994: 5185). Papuan Malay verbs are classified into three classes on the basis of their valency, namely verbs with one, two, or three core arguments. Examples are given in Table 5.14 and Table 5.15: verbs that have two or three arguments are listed first, followed by verbs with one argument. Monovalent verbs are further distinguished according to their semantics into dynamic and stative verbs, and other properties, discussed in the following sections.

Table 5.14: Tri- and bivalent verbs

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Trivalent verbs |  |  |  |  |  |
| ambil | 'fetch' | kasi | 'give' |  |  |
| bawa | 'bring' | kirim | 'send' |  |  |
| bli | 'buy' | minta | 'request' |  |  |
| ceritra | 'tell' |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  | Bivalent verbs |
| antar | 'bring' | kubur | 'bury' |  |  |
| bunu | 'kill' | lawang | 'oppose' |  |  |
| cabut | 'pull out' | maki | 'abuse (verbally)' |  |  |
| dorong | 'push' | mara | 'feel angry (about)' |  |  |
| ejek | 'mock' | naik | 'ascend' |  |  |
| ganas | 'feel furious (about)' | pake | 'use' |  |  |
| ganggu | 'disturb' | rabik | 'tear' |  |  |
| hela | 'haul' | simpang | 'store' |  |  |
| ikut | 'follow' | tarik | 'pull' |  |  |
| jual | 'sell' | usir | 'chase away' |  |  |

Trivalent verbs have three core arguments, that is, a subject and two grammatical objects. This is illustrated with kasi 'give' in (93). It is important to note, however, that the attested trivalent verbs allow but do not require three syntactic arguments. (For details, see §11.1.3.)

Trivalent verbs with three core arguments
(93) dia kasi kitong daging

3sg give 1PL meat
'he gave us (fish) meat' [080919-004-NP.0061]
Bivalent verbs have two core arguments, a subject and one grammatical object. This is shown with pukul 'hit' in (94) and mara 'feel angry (about)' in (95). Bivalent verbs also allow, but do not require two syntactic arguments. (For details see §11.1.2.)

Table 5.15: Monovalent verbs

|  | Monovalent dynamic verbs |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| bernang | 'swim' | kembali | 'return' |  |  |  |
| bocor | 'leak' | lari | 'run' |  |  |  |
| datang | 'come' | maju | 'advance' |  |  |  |
| duduk | 'sit' | mandi | 'bathe' |  |  |  |
| gementar | 'tremble' | oleng | 'shake' |  |  |  |
| guling | 'roll over' | pergi | 'go' |  |  |  |
| hidup | 'live' | sandar | 'lean' |  |  |  |
| hosa | 'pant' | sante | 'relax' |  |  |  |
| jalang | 'walk' | terbang | 'fly' |  |  |  |
| jatu | 'fall' | tinggal | 'stay' |  |  |  |
|  |  |  |  |  | Monovalent stative verbs |  |
| abu | 'be dusty' | muda | 'be young' |  |  |  |
| bagus | 'be good' | nyamang | 'be comfortable' |  |  |  |
| cantik | 'be beautiful' | panas | 'be hot' |  |  |  |
| dinging | 'be cold' | puti | 'be white' |  |  |  |
| enak | 'be pleasant' | renda | 'be low' |  |  |  |
| gila | 'be crazy' | sakit | 'be sick' |  |  |  |
| hijow | 'be green' | swak | 'be exhausted' |  |  |  |
| jahat | 'be bad' | tinggi | 'be tall' |  |  |  |
| kecil | 'be small' | tua | 'be old' |  |  |  |
| lema | 'be weak' | waras | 'be sane' |  |  |  |

Bivalent verbs with two core arguments
(94) bapa de pukul sa deng pisow
father 3sG hit 1sG with knife
'(my) husband hit me with a knife' [081011-023-Cv.0167]
... jadi sa mara dia
so 1sg feel.angry(.about) 3sG
'[he doesn't report to me in a good way,] so I feel angry about him'
[081011-020-Cv.0107]
Monovalent verbs have only one core argument. They are further divided into dynamic and stative verbs. Dynamic verbs such as lari 'run' in (96) denote actions involving one participant, while stative verbs, such as besar 'be big' or kecil 'be small' in (97), express states or more time-stable properties.

Monovalent verbs with one core argument
(96) Nofita de lari dari saya

Nofita 3sg run from 1sG
'Nofita ran (away) from me' [081025-006-Cv.0322]
(97) kepala ni besarbaru badangni kecil
head D.prox be.big and.then body D.prox be.small
'(his) head here is big but (his) body here is small' [081025-006-Cv.0278]
In the corpus, the class of trivalent verbs is the smallest one with seven, as shown in Table 5.16. A small majority of attested verbs are bivalent with 535 entries ( $52 \%$ ), while 490 verbs are monovalent ( $48 \%$ ). Most of the monovalent verbs are stative (351/490 $72 \%$ ), while 139 verbs are dynamic ( $28 \%$ ).

Table 5.16: Verb type frequencies

|  | Frequencies |  |
| :--- | ---: | ---: |
| Verb class | $\#$ | $\%$ |
| V.TRI | 7 | $0.7 \%$ |
| V.BI | 535 | $51.8 \%$ |
| V.MO | 490 | $47.5 \%$ |
| V.MO(DY) | $(139)$ | $(28.4 \%)$ |
| V.MO(ST) | $(351)$ | $(71.6 \%)$ |
| Total | 1,032 | $100 \%$ |

In addition, the corpus contains 43 derived monovalent verbs prefixed with TER- that denote accidental or unintentional actions or events ( 167 tokens). These lexemes are examined in detail in §3.1.2, and briefly reviewed in §5.3.9; therefore, they are not further discussed in this section.

### 5.3.2 Predicative and attributive functions

Verbs can function predicatively as well as attributively. The identified verb classes display clear distributional preferences, however. Dynamic verbs usually function predicatively, and less frequently attributively. Monovalent stative verbs, by contrast, typically occur as adnominal modifiers in noun phrases, although they also have predicative function.

In their predicative uses, verbs act "as 'comment' on a given noun as 'topic'", using Dixon's (1994: 31) terminology. This typical function of dynamic verbs is demonstrated with bivalent bunu 'kill' in (98). The predicative use of monovalent stative verbs is illustrated with tinggi 'be high' in (99). In the corpus, all dynamic verbs have predicative function, while only $40 \%$ of the stative verbs ( $139 / 351$ ) are used predicatively.

Predicative uses
(98) bapa Iskia dong bunu babi
father Iskia 3pl kill pig
'father Iskia and his companions killed a pig' [080917-008-NP.0120]
(99) glombang itu tinggi
wave D.DIST be.high
'that wave was high' [080923-015-CvEx.0016]
In their attributive function within noun phrases, the modifying verbs serve to specify or restrict "the reference of the noun", in Dixon's (1994: 31) terminology. Crosslinguistically, this is achieved in one of two ways, as Dixon (1994) points out. One option is verb-via-juxtaposition modification; that is, the modifying verb is directly juxtaposed to a noun in a noun phrase. The second option is "verb-via-relative-clause modification" (Dixon 2004: 19); that is, modification is achieved by means of a relative clause. Papuan Malay also makes use of these two options, as illustrated in (100) to (104)

The first option of verb-via-juxtaposition modification is illustrated in (100). The examples show that all verb types can occur in noun phrases as adnominal modifiers in posthead position, both with agentive and non-agentive head nominals (the examples in (100a) and (100b) are elicited).

Attributive uses: Verb-via-juxtaposition modification
(100) Trivalent verbs
a. sifat kasi
spirit give
'disposition of giving'
b. tukang bli
craftsman buy
'one who likes to buy'
Bivalent verbs
c. ana angkat
child lift
'adopted child'
d. tukang minum
craftsman drink
'drunkard'

Monovalent dynamic verbs
e. sabung mandi
soap bathe
'bathing soap'
f. tukang jalang
craftsman walk
'one who likes to walk around'
Monovalent stative verbs
g. bua mera
fruit be.red
'red fruit'
h. orang tua
person be.old
'old person'
The second option of modifying nouns within a noun phrase is by placing the verb within a relative clause, as illustrated in (101) to (104). This verb-via-relative-clause modification typically applies to dynamic verbs, such as (monotransitively used) trivalent bawa 'bring' in the elicited example in (101), bivalent kawing 'marry unofficially' in (102), or monovalent dynamic tinggal 'stay' in (103).

Attributive uses: Verb-via-relative-clause modification
(101) ojek yang bawa tete tu su pulang motorbike.taxi REL bring grandfather D.DIST already go.home 'that motorbike taxi driver who brought grandfather has already returned home' [Elicited MY131119.001]
(102) orang Papua yang kawing orang pendatang de tinggal... person Papua Rel marry.inofficially person stranger 3sG stay 'a Papuan person who married a stranger, he/she'll stay (in Papua)' [081029-005-Cv.0046]
(103) ... buat sodara~sodara yang tinggal di kampung for RDP~sibling REL stay at village
'[we cut (the pig meat) up that day, we divided (it) for us who cut (it) up that day, (and) then] for the relatives and friends who live in the village' [080919-003-NP.0014]
(104) de ada potong ikang yang besar di pante

3sG exist cut fish reL be.big at coast
'at the beach he was cutting up a fish that was big' [080919-004-NP.0061]

All verb types can be used attributively. However, when comparing the attested attributively used verb tokens across the two types of noun phrase modification, a clear pattern emerges, shown in Table 5.17. The vast majority of attributively used monovalent stative verbs occur in noun phrases involving verb-via-juxtaposition modification, although stative verbs also occur in verb-via-relative-clause modification, such as besar 'be big' in (104). The vast majority of attributively used dynamic verbs, by contrast, occur in noun phrases involving verb-via-relative-clause modification. Cross-linguistically these preferences are rather common (Dixon 1994: 31).

Table 5.17: Attributive uses of verbs within noun phrases ${ }^{a}$

|  | Token frequencies |  | Type frequencies |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Via juxtaposition |  | Different verbs |  |
| Verb class | \# | \% | \# | \% |
| v.tri | 1 | 0.2\% | 1 | 1.0\% |
| v.bi | 61 | 10.0\% | 27 | 26.0\% |
| v.mo(Dy) | 30 | 4.9\% | 10 | 9.6\% |
| v.mo(st) | 520 | 85.0\% | 66 | 63.5\% |
| Total | 612 | 100.0\% | 104 | 100.0\% |
|  | Via relative-clause |  | Different verbs |  |
| Verb class | \# | \% | + | \% |
| v.tri | 35 | 4.2\% | 5 | 2.2\% |
| v.bi | 371 | 44.5\% | 119 | 51.5\% |
| v.Mo(Dy) | 140 | 16.8\% | 27 | 11.7\% |
| v.mo(st) | 288 | 34.5\% | 80 | 34.6\% |
| Total | 834 | 100.0\% | 231 | 100.0\% |
|  | Overall totals |  | Overall totals |  |
| Verb class | \# | \% | \# | \% |
| v.tri | 36 | 2.5\% | 6 | 1.8\% |
| v.bi | 432 | 29.9\% | 146 | 43.6\% |
| V.MO(DY) | 170 | 11.8\% | 37 | 11.0\% |
| v.mo(st) | 808 | 55.9\% | 146 | 43.6\% |
| Total | 1,446 | 100.0\% | 335 | 100.0\% |

${ }^{a}$ As percentages are rounded to one decimal place, they do not always add up to $100 \%$.
So far 612 noun phrases have been identified which involve verb-via-juxtaposition modification, and 834 noun phrases with verb-via-relative-clause modification. This total of 1,446 noun phrases involves 36 noun phrases ( $2.5 \%$ ) which are formed with seven distinct trivalent verbs, 432 noun phrases ( $29.9 \%$ ) formed with 146 distinct bivalent verbs, 170 noun phrases ( $11.8 \%$ ) formed with 37 distinct monovalent dynamic verbs, and 808
noun phrases ( $55.9 \%$ ) formed with 146 distinct monovalent stative verbs. About two thirds of the attested 808 attributively used monovalent stative verb tokens occur in noun phrases with verb-via-juxtaposition modification ( $520 / 808-64 \%$ ), while only about one third occurs in noun phrases with verb-via-relative-clause modification (288/808 $36 \%$ ). The opposite holds for dynamic verbs. The vast majority of attributively used dynamic verb tokens occur in noun phrases with verb-via-relative-clause modification: $35 / 36$ trivalent verb tokens ( $97 \%$ ), 371/432 bivalent verb tokens ( $86 \%$ ), and 140/170 monovalent dynamic verb tokens ( $82 \%$ ). By contrast, only few dynamic verbs are used in noun phrases with verb-via-juxtaposition modification: $1 / 36$ trivalent verb tokens (3\%), 61/432 bivalent verb tokens ( $14 \%$ ), and 30/170 monovalent dynamic verb tokens ( $18 \%$ ).

### 5.3.3 Adverbial modification

In their predicative uses, tri-, bi-, and monovalent verbs can be modified with adverbs, as shown in (105) to (112). In (105) to (108), the temporal adverb langsung 'immediately' modifies trivalent kasi 'give', bivalent tanya 'ask', monovalent dynamic pulang 'go home', and stative basa 'be wet', respectively; the example in (105) is elicited.

Adverbial modification with temporal adverb langsung 'immediately'
(105) pace dong langsung kasi dia senter
man 3pl immediately give 3sG flashlight
'the men immediately gave him a flashlight' [Elicited BR130221.013]
(106) sa langsung tanya dorang

1sG immediately ask 3pL
'I immediately asked them' [080919-007-CvNP.0045]
(107) sa langsung pulang

1sG immediately go.home
'I went home immediately' [081014-008-CvNP.0018]
(108) bapa langsung diam
father immediately be.quiet
'the gentleman was immediately quiet' [080917-010-CvEx.0213]
Along similar lines, frequency adverb lagi 'again, also' modifies the verbs in (109) to (112); the example in (109) is elicited. (For more details on adverbs see §5.4.)

Adverbial modification with frequency adverb lagi 'again, also'
(109) Dodo ambil Agus air lagi

Dodo fetch Agus water again
'Dodo fetched water for Agus again' [Elicited BR130409.001]
(110) sa tampeleng dia lagi

1sG slap.on.face/ears 3sG again
'I slapped him across the face again' [081013-002-Cv.0007]
(111) nanti Lodia dong datang lagi
very.soon Lodia 3pl come again
'very soon Lodia and her companions will also come' [081006-016-Cv.0010]
(112) ... sampe mungking dua taung baru rame lagi
until maybe two year and.then be.crowded again
'[it goes on like that] for maybe two years before (the situation gets) lively again' [081025-004-Cv.0102]

### 5.3.4 Intensification

In their predicative uses, monovalent stative and bivalent verbs can be intensified with the degree adverbs skali 'very' or terlalu 'too', as shown in (113) to (116). While skali 'very' follows the verb as in (113) and (114), terlalu 'too' precedes it as in (115) and (116). Intensification of predicatively used monovalent dynamic and trivalent verbs is unattested in the corpus. Furthermore, intensification of attributively used verbs is unattested. (For details on degree adverbs see §5.4.7.)

Intensification
(113) sa snang skali dong pu cara masak

1sG feel.happy(.about) very 3pl poss manner cook
'I very (much) enjoy their way of cooking' [081014-017-CvPr.0029]
(114) Aris tinggi skali

Aris be.high very
'Aris is very tall' [080922-001b-CvPh.0026]
(115) ... ade kecil terlalu menangis kitorang ySb be.small too cry 1pl
'[Hana's husband didn't come along,] the small younger sibling cried too much (for) us' [080921-002-Cv.0008]
(116) sa liat mama terlalu baik

1sG see mother exceedingly be.good
'I see you ('mother') are too good' [081115-001a-Cv.0324]
As mentioned, intensification of monovalent dynamic verbs is unattested in the corpus. According to one consultant, though, it is possible to intensify them with the expressions terlalu banyak 'too much' or terlalu sedikit 'too little', as in the elicited examples in (117) and (118).

Grading of monovalent dynamic verbs with terlalu banyak/sedikit 'too much/little'
(117) Dodo de terlalu banyak tidor

Dodo 3sG too many sleep
'Dodo sleeps too much' [Elicited BR130410.005]
(118) Dodo de terlalu sedikit lari

Dodo 3sG too few run
'Dodo runs too little' [Elicited BR130410.008]
In addition, one of the consultants came up with the two examples in (119) and (120), respectively, in which dynamic lari 'run' and tunduk 'bow' are directly modified with terlalu 'too'. In (119), however, lari means 'deviate' rather than 'run', and tunduk 'bow' in (120) receives the stative reading 'be obedient'.

Grading of monovalent dynamic verbs with terlalu 'too'
(119) prahu ini pu ukurang terlalu lari dari ukurang yang ko boat D.prox poss measurement too run from measurement rel 2sG
kasi
give
'the size of this boat deviates too much from the size that you gave' [Elicited BR130410.017]
(120) Agus de terlalu tunduk

Agus 3sg too bow
'Agus is too obedient' [Elicited BR130410.004]
When examining the attested intensified monovalent stative and bivalent verb tokens as to whether they are intensified with skali 'very' or with terlalu 'too', the data shows clear distributional preferences, presented in Table 5.18. The corpus contains 155 verb phrases, made up of 80 different verbs, in which skali 'very' intensifies a verb. Most of these verbs are stative ones ( $81 \%$ ), accounting for $80 \%$ of the skali-intensification tokens. The corpus also contains 33 verb phrases, formed with 27 different verbs, in which terlalu 'too' intensifies a verb. Again, most of the intensified verbs are stative ones (74\%) accounting for $73 \%$ of the terlalu-intensification tokens.

### 5.3.5 Grading

In their predicative uses, monovalent stative and bivalent verbs can occur with grading adverbs, as shown in (121) to (124), whereas grading of monovalent dynamic and trivalent verbs is unattested. The comparative degree is marked with the grading adverb lebi 'more' and the superlative degree with paling 'most'; both adverbs precede the verb. (For details on degree adverbs see §5.4.7; for details on comparative clauses see §11.5.)

Table 5.18: Intensification of verbs

|  | Token frequencies |  | Type frequencies |  |
| :---: | :---: | :---: | :---: | :---: |
|  | skali-intensification |  | Different verbs |  |
| Verb class | \# | \% | \# | \% |
| v.tri | 0 | --- | 0 | --- |
| v.bI | 31 | 20.0\% | 15 | 18.7\% |
| v.mo(DY) | 0 | --- | 0 | --- |
| v.mo(st) | 124 | 80.0\% | 65 | 81.3\% |
| Total | 155 | 100.0\% | 80 | 100.0\% |
|  | terlalu-intensification |  | Different verbs |  |
| Verb class | \# | \% | \# | \% |
| v.tri | 0 | --- | 0 | --- |
| v.bI | 9 | 27.3\% | 7 | 25.9\% |
| v.mo(DY) | 0 | --- | 0 | --- |
| v.mo(st) | 24 | 72.7\% | 20 | 74.1\% |
| Total | 33 | 100.0\% | 27 | 100.0\% |

Grading of bivalent verbs
(121) $a$, dong mala lebi sayang saya
ah! 3pl in.fact more love 1sG
'ah, they actually loved me more' [Elicited BR130221.034] ${ }^{12}$
(122) tempat itu sa paling takut
place D.DIST 1sg most feel.afraid(.of)
'that place I feel most afraid of' [081025-006-Cv.0285]

Grading of monovalent stative verbs
(123) yo kaka, itu yang lebi baik untuk saya
yes oSb D.DIST REL more be.good for 1sG
[Talking about her husband:] 'yes older sibling, that (is the one) who is better for me' [081110-008-CvNP.0178]
(124) puri tu paling besar
anchovy-like.fish D.DIST most be.big
'that anchovy-like fish is the biggest' [080927-003-Cv.0002]

[^104]Again, monovalent dynamic verbs differ from monovalent stative and bivalent verbs in that they are not directly modified with a grading adverb. Instead they are modified with lebi banyak '(do s.th.) more' to indicate comparative degree, as in the elicited example in (125), or with paling banyak '(do s.th.) most' to indicate superlative degree, as in the elicited example in (126).
'that anchovy-like fish is the biggest'
Grading of monovalent dynamic verbs
(125) Dodo lebi banyak bertriak dari Agus

Dodo more many scream with Agus
'Dodo screams more than Agus' [Elicited BR130221.025]
(126) Dodo paling banyak tertawa

Dodo most many scream
'Dodo laughs most' [Elicited BR130221.030]
With respect to the frequencies of the monovalent stative and bivalent verbs in comparative constructions, the data indicates a clear pattern, presented in Table 5.19. The vast majority of graded verbs are monovalent stative ones. The corpus contains 54 lebicomparative constructions, formed with 22 different verbs. Of these, $77 \%$ are monovalent stative, accounting for $89 \%$ of the attested comparative constructions. In addition, the corpus contains 46 paling-superlative constructions, formed with 30 different verbs.

Table 5.19: Grading of verbs

|  | Token frequencies |  | Type frequencies |  |
| :--- | :---: | ---: | :--- | ---: |
|  | CMPR-constructions |  | Different verbs |  |
| Verb class | $\#$ | $\%$ | $\#$ | $\%$ |
| V.TRI | 0 | --- | 0 | --- |
| V.BI | 6 | $11.1 \%$ | 5 | $22.7 \%$ |
| V.MO(DY) | 0 | --- | 0 | --- |
| V.MO(ST) | 48 | $88.9 \%$ | 17 | $77.3 \%$ |
| Total | 54 | $100 \%$ | 22 | $100 \%$ |
|  | SUPL-constructions |  | Different verbs |  |
| Verb class | $\#$ | $\%$ | $\#$ | $\%$ |
| V.TRI | 0 | --- | 0 | --- |
| V.BI | 8 | $17.4 \%$ | 6 | $20.0 \%$ |
| V.MO(DY) | 0 | --- | 0 | -- |
| V.MO(ST) | 38 | $82.6 \%$ | 24 | $80.0 \%$ |
| Total | 46 | $100 \%$ | 30 |  |

Again, most of these verbs are monovalent stative (80\%) which account for $83 \%$ of the superlative constructions. Cross-linguistically, this distributional pattern corresponds to the "prototypical comparative scheme" in which the parameter of comparison "is typically expressed by an adjective, in a language with a large open class of adjectives; or else by a stative verb (with an adjective-like meaning)" (Dixon 2008: 787).

### 5.3.6 Negation

Verbs are negated with tida ' NEG ' or tra ' NEG '. ${ }^{13}$ This is demonstrated with trivalent kasi 'give' in (127), bivalent pake 'use' in (128), monovalent dynamic datang 'come' in (129), and monovalent stative baik 'be good' in (130). These examples also illustrate that both negators are used interchangeably (for more details on negation see §13.1).
(127) kaka su bilang de begitu, sa tra kasi ko jempol oSb already say 3sG like.that 1sG NEG give 2sG thumb
'I ('older sibling') already told him like that, "I won't give you a thumbs up"' [081115-001a-Cv.0042]
(128) kalo saya berburu tida pake anjing malam hari saya kluar
if 1sG hunt neg use dog night day 1sg go.out
'if I hunt without taking dogs, I leave at night' [080919-004-NP.0002]
(129) de tra datang ... de tida datang

3sG NEG come 3sG neg come
'she did not come ... she did not come' [081010-001-Cv.0204-0205]
(130) nanti dia pikir saya tida baik
very.soon 3sg think 1sG NEG be.good
'later he'll think (that) I'm not good' [080919-004-NP.0052]

### 5.3.7 Causative constructions

Papuan Malay syntactic causatives are monoclausal $V_{1} V_{2}$ constructions. A causative verb $V_{1}$, encodes the notion of cause, while the $V_{2}$ denotes the notion of effect. Two full verbs both of which are still used synchronically function as causative verbs, namely trivalent kasi 'give', with its short form kas, and bivalent biking 'make'. Syntactic causatives have monovalent or bivalent bases, while causative constructions with trivalent verbs are unattested.

In kasi-causatives the $\mathrm{V}_{2}$ can be bivalent or monovalent, while in biking-causatives the $\mathrm{V}_{2}$ is always monovalent. (See $\S 11.2$ for a detailed discussion of causative constructions.)

[^105]
## 5 Word classes

Causative constructions with kasi 'give' are presented in (131) to (133). The $\mathrm{V}_{2}$ is bivalent masuk 'enter' in (131), monovalent dynamic bangung 'wake up' in (132), and stative sembu 'be healed' in (133). (For more details on kasi-causatives, see §11.2.1.2.)

Causative constructions with kasi 'give'
(131) dong kas masuk korek di sini

3PL give enter matches at L.PROX
'they inserted matches here' (Lit. 'give to enter') [081025-006-Cv.0180]
(132) sa takut skalijadi sa kas bangung mama

1sG feel.afraid(.of) very so 1 sg give wake.up mother
'I felt very afraid, so I woke up you ('mother')' (Lit. 'give to wake up')
[080917-008-NP.0031]
(133) ko kasi sembu sa punya ana ini

2sG give be.healed 1sG poss child d.prox
'[Addressing an evil spirit:] 'you heal this child of mine!' (Lit. 'give to be healed') [081006-023-CvEx.0031]

In causatives with biking 'make', the $\mathrm{V}_{2}$ is always monovalent. Most often, the monovalent verb is stative, such as pusing 'be dizzy, be confused' in (134). However, bikingcausatives can also be formed with non-agentive dynamic bases, such as tenggelam 'sink' in the elicited example in (135). If the causee is inanimate, or animate but helpless, the base can also be agentive dynamic, such as hidup 'live' in the elicited example in (136). (For more details on biking-causatives, see §11.2.1.3; see also examples (55) and (57) in §11.2.1.2, p. 483.)

Causative constructions with biking 'make'
(134) yo, dong dua deng Wili tu biking pusing mama
yes 3pl two with Wili d.dIst make be.dizzy mother
'yes!, he and Wili there worried (their) mother' (Lit. 'make to be dizzy/confused') [081011-003-Cv.0002]
(135) banyak mati di lautang, biking tenggelam
many die at ocean make sink
[About people in a container who died in the ocean:] 'many died in the (open) ocean, (the murderers) sank (the containers)' [Elicited BR131103.003]
(136) ... tapi dong biking bangkit dia lagi, biking hidup dia but 3pl make be.resurrected 3sG again make live 3sG
[About sorcerers who can resurrect the dead:] '[he's already (dead),] but they resurrect him again, make him live' [Elicited BR131103.005]

Table 5.20: Causative constructions with kasi 'give' and biking 'make'

|  | Token frequencies |  | Type frequencies |  |
| :--- | :---: | ---: | :---: | ---: |
|  | kasi-causatives |  | Different verbs |  |
| Verb class | $\#$ | $\%$ | $\#$ | $\%$ |
| V.TRI | 0 | --- | 0 | --- |
| V.BI | 327 | $68.4 \%$ | 39 | $48.1 \%$ |
| V.MO(DY) | 115 | $24.1 \%$ | 18 | $22.2 \%$ |
| V.MO(ST) | 36 | $7.5 \%$ | 24 | $29.6 \%$ |
| Total | 478 | $100 \%$ | 81 | $100 \%$ |
|  | $b i k i n g-c a u s a t i v e s$ | Different verbs |  |  |
| Verb class | $\#$ | $\%$ | $\#$ | $\%$ |
| V.TRI | 0 | --- | 0 | --- |
| V.BI | 0 | --- | 0 | --- |
| V.MO(DY) | 0 | --- | 0 | --- |
| V.MO(ST) | 25 | $100 \%$ | 16 | $100 \%$ |
| Total | 25 | $100.0 \%$ | 16 | $100.0 \%$ |

Concerning the frequencies of mono- and bivalent verbs in causative constructions, the following pattern emerges. Most of the attested verb tokens in kasi-causative constructions are bivalent or monovalent dynamic ones, whereas the attested verbs in bik-ing-causatives are always monovalent stative ones, as shown in Table 5.20. The corpus contains 478 kasi-causative constructions, formed with 81 different verbs. Most verbs in kasi-constructions are dynamic one ( $78 \%$ ), including $48 \%$ bivalent and $22 \%$ monovalent dynamic verbs. Together the attested dynamic verbs account for $92 \%$ of the kasicausatives. By contrast, biking-causatives are always formed with monovalent stative verbs. In all, the corpus contains 25 biking-causatives, formed with 16 different verbs.

### 5.3.8 Reciprocal constructions

Verbs can occur in reciprocal constructions in which the reciprocity marker baku 'recp' precedes the verb (for more details on reciprocal constructions, see $\S 11.3$ ). This is illustrated with trivalent ceritra 'tell' in the elicited example in (137), bivalent gendong 'hold' in (138), and monovalent dynamic saing 'compete' in (139). Reciprocal constructions with monovalent stative verbs are unattested.
(137) Markus deng Yan dong baku ceritra

Markus with Yan 3pl recp tell
'Markus and Yan were talking to each other' [Elicited BR130601.001] ${ }^{14}$

[^106](138) kitong baku gendong to? baku gendong

1PL RECP hold right? RECP hold
'we'll hold each other, right?, (we'll) hold each other' [080922-001a-CvPh.0695]
ade-kaka baku saing
ySb-oSb
siblings RECP compete
'the siblings were competing with each other' [080919-006-CvNP.0001]

Table 5.21: Reciprocal constructions

|  | Token frequencies |  | Type frequencies |  |
| :--- | ---: | ---: | ---: | ---: |
|  | RECP-constructions |  | Different verbs |  |
| Verb class | $\#$ | $\%$ | $\#$ | $\%$ |
| V.TRI | 1 | $1.0 \%$ | 1 | $2.4 \%$ |
| V.BI | 95 | $94.1 \%$ | 37 | $88.1 \%$ |
| V.MO(DY) | 5 | $5.0 \%$ | 4 | $9.5 \%$ |
| V.MO(ST) | 0 | --- | 0 | --- |
| Total | 101 | $100 \%$ | 42 | $100 \%$ |

The data in the corpus indicates the following frequency patterns for reciprocal constructions, as shown in Table 5.21. The corpus contains 101 reciprocal constructions formed with 42 different verbs. Most of these verbs are bivalent ( $88 \%$ ), accounting for $94 \%$ of the reciprocal constructions.

### 5.3.9 Morphological properties

Papuan Malay has only two somewhat productive affixes, as discussed in Chapter 3, prefix TER- 'ACl' and suffix -ang 'nMlz'. Mono- and bivalent verbs can be prefixed with TER'ACL' to derive verbs which denote accidental or unintentional actions or events. Examples are given in Table 5.22, such as bivalent angkat 'lift' and lempar 'throw', monovalent dynamic jatu 'fall', and stative lambat 'be slow' and sala 'be wrong'. Likewise, mono- and bivalent verbs can be suffixed with-ang 'NMLz' to derive nouns, such as bivalent jual 'sell' and pake 'use', monovalent dynamic jalang 'walk' and libur 'take vacation', and stative pica 'be broken' and sial 'be unfortunate'. Some lexemes suffixed with-ang 'nmlz' also function as verbs, such as jualang 'merchandise, to sell'. Affixation of trivalent verbs is unattested. (For details on affixation with TER- 'ACL' and-ang 'NMLZ' see §3.1.2 and §3.1.3, respectively).

In the corpus, affixation of bivalent bases occurs much more often than that of monovalent bases, as shown in Table 5.23. Regarding prefix TER- 'ACL', the corpus includes 43 lexemes derived from verbal bases with a total of 166 tokens. Most of them are bivalent

Table 5.22: Affixation of verbs

| BF | Gloss | Item | Gloss |
| :---: | :---: | :---: | :---: |
| Prefix TER-: Derived verbs denoting accidental actions |  |  |  |
| angkat | 'lift' | trangkat | 'be lifted up' |
| lempar | 'throw' | talempar | 'be thrown' |
| jatu | 'fall' | terjatu | 'be dropped, fall' |
| lambat | 'be slow' | terlambat | 'be late' |
| sala | 'be wrong' | tasala | 'be mistaken' |
| Suffix-ang: Derived nouns |  |  |  |
| jual | 'sell' | jualang | 'merchandise, to sell' |
| pake | 'use' | pakeang | 'clothes' |
| jalang | 'walk' | jalangang | 'route' |
| libur | 'take vacation' | liburang | 'vacation' |
| pica | 'be broken' | picaang | 'splinter' |
| sial | 'be unfortunate' | sialang | 's.o. unfortunate/ill-fated' |

Table 5.23: Affixation of verbs

|  | Token frequencies |  | Type frequencies |  |
| :--- | :---: | ---: | :---: | ---: |
|  | TER-affixation |  | Different verbs |  |
| Verb class | $\#$ | $\%$ | $\#$ | $\%$ |
| V.TRI | 0 | --- | 0 | --- |
| V.BI | 153 | $91.6 \%$ | 38 | $88.4 \%$ |
| V.MO(DY) | 1 | $0.6 \%$ | 1 | $2.3 \%$ |
| V.MO(ST) | 13 | $7.8 \%$ | 4 | $9.3 \%$ |
| Total | 167 | $100.0 \%$ | 43 | $100.0 \%$ |
|  | $-a n g$ affixation | Different verbs |  |  |
| Verb class | $\#$ | $\%$ | $\#$ | $\%$ |
| V.TRI | 0 | --- | 0 | --- |
| V.BI | 357 | $88.6 \%$ | 62 | $89.9 \%$ |
| V.MO(ST) | 12 | $3.0 \%$ | 3 | $4.3 \%$ |
| V.MO(DY) | 34 | $8.4 \%$ | 4 | $5.8 \%$ |
| Total | 403 | $100.0 \%$ | 69 | $100.0 \%$ |

verbs ( $88 \%$ ), accounting for $92 \%$ of all $T E R$-tokens. As for suffix-ang ' NMLZ ', the corpus contains 69 lexemes with verbal bases, with a total of 403 tokens. Again, most of the verbal bases are bivalent ( $90 \%$ ), accounting for $89 \%$ of all-ang-tokens.

### 5.3.10 Summary

Tri-, bi-, and monovalent verbs have partially distinct and partially overlapping properties, which are summarized in Table 5.24 (in this table bi- and trivalent verbs are listed summarily in the column "Valency of 2 or 3 "). They are distinct from each other in terms of two main criteria, namely their valency and their function, which is mainly predicative. Related to the criterion on valency is the ability of verbs to occur in causative and reciprocal expressions and to be affixed. Therefore, Table 5.24 lists these characteristic under the label "Valency". The criterion of function has to do with the predicative (PRED) and attributive (ATTR) uses of the verbs, their negation, and adverbial modification. Hence, Table 5.24 lists these characteristics under the label "Function".

In terms of valency, Papuan Malay has three verb classes, mono-, bi- and trivalent verbs. Related to the valency criterion is the ability of verbs to be used in causative constructions. All three verb types occur in causatives formed with kasi 'give'. Most often, however, kasi-causatives are formed with bi- or trivalent verbs. By contrast, causative

Table 5.24: Properties of tri-, bi-, and monovalent verbs ${ }^{a}$

| Main criteria | Properties | Valency of 2 or 3 | Valency of 1 |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | dynamic | stative |
|  | Adverbial modification | Yes | Yes | Yes |
|  | Negation (tida/tra) | Yes | Yes | Yes |
|  | pred uses | Most often | Most often | Less often |
|  | ATTR uses (via relative clause) | Most often | Less often | Less often |
| $\begin{aligned} & \text { ù } \\ & \frac{0}{0} \\ & \frac{\pi}{\pi} \end{aligned}$ | Base for TER-affixation | Most often | Less often | Less often |
|  | Base for -ang-affixation | Most often | Less often | Less often |
|  | Causative (kasi) | Most often | Less often | Less often |
|  | Reciprocal | Most often | Less often | No |
|  | Valency >1 | Yes | No | No |
|  | Causative (biking) | Less often | No | Most often |
|  | attr uses (via juxtaposition) | Less often | No | Most often |
|  | Intensification (skali) | Less often | No | Most often |
|  | Intensification (terlalu) | Less often | No | Most often |
|  | Grading (lebi) | Less often | No | Most often |
|  | Grading (paling) | Less often | No | Most often |

[^107]constructions with biking 'make' are typically formed with stative verbs; dynamic verbs are unattested in biking-causatives. Also related to the valency criterion is the ability of bi- and trivalent verbs to occur in reciprocal expressions. Monovalent dynamic verbs, by contrast, occur only rarely in such expressions, while reciprocal constructions with stative verbs are unattested. Finally, with respect to affixation, it is typically bivalent verbs that form the bases for lexemes prefixed with TER- or suffixed with -ang.

With respect to their function, all verbs are used predicatively, dynamic verbs much more often though, than stative verbs. In their predicate uses, all three verb types can be modified adverbially and all verbs are negated with tida/tra 'NEG'. Less often, verbs have attributive function in noun phrases. Verb-via-juxtaposition modification most commonly applies to stative verbs, while modification with dynamic verbs typically involves verb-via-relative-clause modification. Related to their attributive uses is the intensification and grading of verbs. Typically, this applies to monovalent stative verbs, while intensification and grading of bivalent verbs occurs much less often. Monovalent dynamic and trivalent verbs are neither intensified nor graded.

### 5.4 Adverbs

Papuan Malay has a large open class of adverbs, which modify constituents other than nouns. Their main function is to indicate aspect, frequency, affirmation and negation, modality, time, focus, and degree. Within the clause, the adverbs most commonly occur in prepredicate position. Unlike the other two open lexical classes of nouns and verbs, Papuan Malay adverbs are not used predicatively.

Cross-linguistically, Haser \& Kortmann (2006: 66) note that in terms of their semantics and morphology, "adverbs are most closely related to adjectives, from which they are often derived". With the restriction that Papuan Malay has a class of monovalent stative verbs instead of adjectives (see §5.3.1), this observation also seems to apply to the Papuan Malay adverbs. First, a number of adverbs are related to monovalent stative verbs, such as the temporal adverb dulu 'first, in the past' which is related to stative dulu 'be prior' (see §5.4.5), or the focus adverb pas 'precisely' which is related to stative pas 'be exact' (see §5.4.6; see also §5.14). Second, manner is expressed through stative verbs (see §5.4.8). Third, reduplicated verbs can receive an adverbial reading due to an interpretational shift. Examples are taw taw 'just now' with its base taw 'know' (see §5.4.5; see also §4.2.2.8). In Papuan Malay this link with verbs extends to dynamic verbs, in that reduplicated dynamic verbs can also receive an adverbial reading. Examples are the modal adverbs kira kira 'probably' and taw taw 'suddenly' which are related to the respective dynamic verbs kira 'think' and taw 'know' (see §5.4.4; see also §5.14).

In addition to this prominent link with verbs, Papuan Malay adverbs are also related to nouns, although this link appears to be less prominent. First, a number of modal adverbs are historically derived from nouns by unproductive affixation with -nya '3POSsR'. Examples are artinya 'that means' (literally 'the meaning of'), katanya 'it is being said' (literally 'the word of'), or maksutnya 'that is to say' (literally 'the purpose of'). Second, reduplicated nouns can receive an adverbial reading due to an interpretational shift (see §4.2.1.4).

The adverbs occur in different positions within the clause. They can take a prepredicate or postpredicate position, with the prepredicate position being the most common. There are also a fair number of adverbs which can occur in both positions. For the prepredicate adverbs two positions are possible, directly preceding the predicate and preceding the subject. Likewise, two positions are possible for the postpredicate adverbs, directly following the predicate and, in clauses with peripheral adjuncts, following the adjunct. Depending on their positions within the clause, the adverbs differ in terms of their semantic effect. Generally speaking, prepredicate adverbs which precede the subject have scope over the entire proposition. The semantic effect of prepredicate adverbs which directly precede the predicate and of postpredicate adverbs is more limited. On the whole, however, these distinctions are subtle, as shown with the temporal adverb langsung 'immediately' in §5.4.5.

The following sections describe the adverbs in terms of their positions within the clause and their overall semantic functions. Aspect adverbs are discussed in §5.4.1, frequency adverbs in §5.4.2, affirmation and negation adverbs in §5.4.3, modal adverbs in §5.4.4, temporal adverbs in §5.4.5, focus adverbs in §5.4.6, and degree adverbs in §5.4.7. Papuan Malay does not have manner adverbs; instead, manner is expressed through stative verbs which always follow the main verb, as briefly discussed in §5.4.8. Each of these sections includes a table which lists the different adverbs and indicates whether they take a prepredicate (PRE-PRED) and/or postpredicate (POST-PRED) position within the clause (empty cells signal unattested constituent combinations). The different positions are also illustrated with (near) contrastive examples. An investigation of the semantic effects encoded by these positions, however, is left for future research. Also left for future research is the question of which adverbs can co-occur and in which positions.

Following the description of the different types of adverbs, §5.4.9 summarizes the main points of this section, especially with respect to the interplay between syntactic properties and functions of the adverbs.

### 5.4.1 Aspectual adverbs

Aspectual adverbs provide temporal information about the event or state denoted by the verb in terms of their "duration or completion" (Asher 1994: 5094). Thereby they differ from the temporal adverbs which designate temporal points (Givón 2001: 91-92). The Papuan Malay aspectual adverbs are presented in Table 5.25.

Aspectual blum 'not yet' and masi 'still' have prospective meanings; that is, they point "forward to possible transitions in the future", using Smessaert and ter Meulen's (2004) terminology. More specifically, blum 'not yet' indicates that the event or state denoted by the verb is not yet completed or has not yet occurred, while masi 'still' signals that the event or state is still continuing. Aspectual suda 'already', by contrast, has a retrospective meaning; that is, it marks "a realized transition in the past", again employing Smessaert and ter Meulen's (2004: 221) terminology (suda 'already' is very often shortened to $s u$ ). Besides, suda 'already' can signal imperative mood, in which case it occurs in clause-final position, as discussed in $\S 13.3$. Progressive aspect is not encoded by an adverb but with
the existential verb ada 'exist'; for expository reasons, however, the progressive marking function of ada 'exist' is discussed here (existential clauses are discussed in §11.4).

The three adverbs always occur in prepredicate position, as shown in Table 5.25. This applies to their uses in verbal clauses, as in (140) and (141), and in nonverbal clauses, as in (144) to (146). Likewise, adverbially used ada 'exist' precedes the predicate, as shown in (142), (143), and (147).

Table 5.25: Aspectual adverbs and adverbially used ada 'exist' and their positions within the clause

| Item | Gloss | Position |  |
| :--- | :--- | :---: | :--- |
|  |  | PRE-PRED | POST-PRED |
| blum | 'not yet' | X |  |
| masi | 'still' | X |  |
| suda | 'already' | X |  |
| ada | 'exist' | X |  |

In verbal predicate clauses, the aspectual adverbs and adverbially used ada 'exist' modify dynamic verbs, as in (140) and (142), or stative verbs as in (141) and (143).

Aspectual adverbs and adverbially used ada 'exist' modifying verbal predicates
(140) a, mama blum mandi, mama masi bangung tidor ah! mother not.yet bathe mother still wake.up sleep
'ah, I ('mother') have not yet bathed, I ('mother') am still waking up' [080924-002-Pr.0007]
(141) ana itu de suda besar betul, de suda besar ... child D.DIST 3sG already be.big be.true 3sG already be.big
'(when) that child is already really grown-up, (when) he/she's already
grown-up, ...' [081006-025-CvEx.0005]
(142) sa pu maytua ada tidor karna hari blum siang

1sG poss wife exist sleep because day not.yet day
'my wife was sleeping because it wasn't daylight yet' [080919-004-NP.0026]
(143) dong bilang, a de ada sakit

3PL say ah! 3sG exist be.sick
'they said, "ah, he's being sick"' [080919-007-CvNP.0025]
The examples in (144) to (147) demonstrate the uses of the aspectual adverbs and adverbially used ada 'exist' in nonverbal predicate clauses. (An alternative analysis of clauses with ada 'exist', such as the one in (147), is presented in §11.4.1.)

Aspectual adverbs modifying nonverbal predicates
(144) itu kang blum musim ombak
D.DIST you.know not.yet season wave
[About traveling by high or low tide:] 'that is not yet the wavy season, you know' [080927-003-Cv.0020]
(145) Roni masi deng de pu temang $\sim$ temang

Roni still with 3sG poss RDP~friend
'Roni is still with his friends' [081006-031-Cv.0011]
(146) sa su di Arare sama Pawla

1sG already at Arare to Pawla
'I (would) already be in Arare with Pawla' [081025-009a-Cv.0110]
(147) ana~ana prempuang dong ada di depang

RDP $\sim$ child woman 3pl exist at front
'the girls are being in front' [080921-004a-CvNP.0066]

### 5.4.2 Frequency adverbs

Frequency adverbs "typically indicate the number of times something happened" during a given time interval (Doetjes 2007: 688). The Papuan Malay frequency adverbs are listed in Table 5.26 ; they always occur in prepredicate position. ${ }^{15}$
The prepredicate position of the frequency adverbs is illustrated in (148) to (151). The adverbs can directly precede the predicate, such as kadang kadang 'sometimes' in (148)

[^108]Table 5.26: Frequency adverbs and their positions within the clause

| Item | Gloss | Position |  |
| :--- | :--- | :--- | :--- |
|  |  | PRE-PRED | POST-PRED |
| biasanya $^{a}$ | 'usually' | X |  |
| perna | 'ever, once' | X |  |
| jarang | 'rarely' | X |  |
| kadang( $\sim$ kadang) | 'sometimes' | X |  |
| slalu | 'always' | X |  |
| sring | 'often' | X |  |

[^109]or perna 'ever' in (150), or they can precede the subject, such as kadang(~kadang) 'sometimes' in (149) or perna 'ever' in (151). These examples also show that frequency adverbs not only modify verbal predicates as in (148) to (150), but also nonverbal predicates as in (151). The semantics conveyed by the different positions have to do with scope.

Frequency adverbs in clause-initial and prepredicate positions
(148) yo, de kadang $\sim$ kadang terlalu, ini, egois
yes 3sG rdp $\sim$ sometimes too D.Prox be.egoistic
'yes, she's sometimes too, what's-its-name, egoistic' [081115-001a-Cv.0218/0220]
(149) kadang sa sa buang bola sama Wili deng Klara to?
sometimes 1sg 1sg discard ball to Wili with Klara right?
'sometimes I, I threw the ball to Wili and Klara, right?' [081006-014-Cv.0005]
(150) de perna kasi makang sa pu ana

3sG ever give eat 1sG poss child
'she once fed my child' [081110-008-CvNP.0050]
(151) ... perna kitong dua di apa kantor Golkar
ever 1PL two at what office Golkar
'[so I and, what's-his-name, Noferus here,] once the two of us were at, what-is-it, the Golkar office' [080923-009-Cv.0050]

### 5.4.3 Affirmation and negation adverbs

The affirmation and negation adverbs listed in Table 5.27 indicate general affirmation, negation, or prohibition, and provide responses to polar questions (see also Chapter 13).

Table 5.27: Papuan Malay affirmation and negation adverbs

| Item | Gloss | Position |  |
| :--- | :--- | :--- | :--- |
|  |  | PRE-PRED | POST-PRED |
| yo | 'yes' | X |  |
| bukang | 'NEG, no' | X |  |
| tida/tra | 'NEG, no' | X |  |
| jangang | 'NEG.IMP, don't' | X |  |

The four adverbs always take a prepredicate position. Affirmative yo 'yes' is always fronted, while the negative and prohibitive adverbs directly precede the predicate. Affirmative yo 'yes' is often realized as $y a$, and negative jangang 'NEG.IMP' is quite commonly shortened to jang. Examples are provided in (152) to (155): affirmation with yo 'yes' in (152), negation with interchangeably used tra 'NEG' and tida 'neG' in (153), and
with bukang 'neg' (154), and prohibition with jangang 'neg.Imp' in (155). Negation and prohibition are discussed in more detail in §13.1 and §13.3.3, respectively.

Affirmation and negation adverbs: Examples
(152) yo, tikus de loncat ke klapa lagi
yes rat 3sg jump to coconut again
'yes, the rat also jumped over to the coconut tree' [080917-003b-CvEx.0025]
(153) de tra datang ... de tida datang

3sg neg come 3sg neg come
'she did not come ... she did not come' [081010-001-Cv.0204-0205]
(154) saya bukang anjing hitam

1sG NEG dog be.black
'(the situation is) not (that) I am a black dog' [081115-001a-Cv.0266]
(155) Nofi jangang ganggu kaka, ade tu, e?

Nofi neg.Imp disturb oSb ySb D.DIST e?
'Nofi don't bother that older relative, younger relative, eh?' [081011-009-Cv.0013]

### 5.4.4 Modal adverbs

Modal adverbs "express the subjective evaluation of the speaker toward a state of affairs" (Bussmann 1996: 751). This includes "epistemic" adverbs which "denote the speaker's attitude toward the truth, certainty or probability of the state or event" and "evaluative" adverbs which express "the speaker's evaluative attitudes, i.e. judgments of preference for or desirability of a state or event" (Givón 2001: 92-93).

The Papuan Malay modal adverbs are presented in Table 5.28. Most of them are historically derived by (unproductive) affixation (for details on affixation see §3.1). All Papuan Malay modal adverbs take a pre-predicate position. Besides the adverbs listed in Table 5.28, degree adverb paling 'most' also has an epistemic function when it precedes the subject, as discussed in §5.4.7.

The prepredicate position of the modal adverbs is demonstrated in (156) to (159). Typically, they precede the subject. This is illustrated with epistemic memang 'indeed' in (156) and pasti 'definitely' in (157), and with evaluative akirnya 'finally' in (158) and taw taw 'suddenly' in (159). Functioning at clause level, the epistemic adverbs introduce propositions which offer explanations and clarifications for the events depicted in the preceding discourse, while the evaluative adverbs provide an evaluation of the events described in the preceding discourse.

Table 5.28: Papuan Malay modal adverbs and their positions within the clause

| Item | Literal | Gloss | Position |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | PRE-PRED | POST-PRED |
| Epistemic adverbs |  |  |  |  |
| kata-nya 'w | 'word-3possr' | 'it is being said' | X |  |
| kira~kira 'R | 'rDP~think' | 'probably' | X |  |
| memang |  | 'indeed' | X |  |
| misal-nya 'e | 'example-3possr' | 'for example' | X |  |
| mungking |  | 'maybe' | X |  |
| pasti |  | 'definitely' | X |  |
| pokok-nya 'm | 'main-3possr' | 'the main thing is' | X |  |
| sebenar-nya 'o | 'one:be.true-3possr' | 'actually' | X |  |
| sperti-nya 's | 'similar.to-3possr' | 'it seems' | X |  |
| arti-nya 'm | 'meaning-3possr' | 'that means' | X |  |
| maksut-nya 'p | 'purpose-3possr' | 'that is to say' | X |  |
| Evaluative adverbs |  |  |  |  |
| akir-nya | 'end-3possr' | 'finally' | X |  |
| coba | 'try' | 'if only' | X |  |
| harus-nya | 'have.to-3possr' | 'appropriately' | X |  |
| muda~muda-ang | ng 'rdp be.easy-Pat' | 'hopefully' | X |  |
| taw | 'RDP $\sim$ know' | 'suddenly' | X |  |

Modal adverbs in prepredicate position preceding the subject
(156) kas tinggal, memang de nakal
give stay indeed 3sG be.mischievous
'let it be, indeed, he is mischievous' [081015-001-Cv.0027]
(157) pasti de pulang
definitely 3sG go.home
'certainly, she'll come home' [081006-019-Cv.0010]
(158) akirnya asap~asap naik, langsung api menyala
finally $\quad$ RDP $\sim$ smoke ascend immediately fire flame
'finally smoke ascended, immediately the fire flared up' [080922-010a-CvNF.0079]
(159) taw~taw orang itu tida keliatang

RDP~know person D.DIST NEG be.visible
'suddenly that person wasn't visible (any longer)' [080922-002-Cv.0123]

While evaluative modal adverbs always precede the subject, most epistemic adverbs can take two prepredicate positions. Besides preceding the subject, as in (156) and (157), they can also directly precede the predicate. The exceptions are artinya 'that means' and maksutnya 'that is to say', both of which always precede the subject. This position directly preceding the predicate is illustrated with memang 'indeed' in (160) and with pasti 'definitely' in (161) (compare both examples with the examples in (156) and (157), respectively). Both examples also show that modal adverbs not only occur in verbal clauses as in (161), but also in nonverbal clauses, as in (160).

Modal adverbs in prepredicate position preceding the predicate
(160) jangang ko singgung, tapi ini memang bukti NEG.IMP 2SG offend but this indeed proof
[About problems with the local elections:] 'don't feel offended but this is indeed the proof' [081011-024-Cv.0150]
(161) ... tapi de pasti kasi swara
but 3sG definitely give voice
[About meeting strangers in remote areas:] '[most likely, he/she won't know your name yet,] but he/she'll definitely call (you)' [080919-004-NP.0078]

### 5.4.5 Temporal adverbs

Temporal adverbs designate temporal points (Givón 2001: 91-92). Thereby they differ from aspectual adverbs which provide temporal information about the event or state denoted by the verb in terms of their completion or duration (Asher 1994: 5094). The Papuan Malay temporal adverbs are listed in Table 5.29. Within the clause, almost all of them occur in prepredicate or in postpredicate position. The exceptions are baru 'recently' and baru~baru 'just now' which only occur in prepredicate position. ${ }^{16}$

Examples for the prepredicate position are given in (162) to (165), and for the postpredicate position in (166) to (169). The different meaning aspects conveyed by both positions are discussed in connection with the examples in (171) to (173).

In prepredicate position, the adverbs can directly precede the predicate, such as langsung 'immediately' in (162) and nanti 'very soon' in (164), or precede the subject, such as langsung 'immediately' in (163) and nanti 'very soon' in (165).

Temporal adverbs in prepredicate position
(162) de langsung ke asrama polisi cari bapa

3sG immediately to dormitory police search father
'he (went) immediately to the police dormitory to look for father'
[081011-022-Cv.0242]

[^110]Table 5.29: Temporal adverbs and their positions within the clause

| Item | Gloss | Position |  |
| :--- | :--- | :---: | :---: |
|  |  | PRE-PRED | POST-PRED |
| dulu | 'first, in the past' | X | X |
| lama $\sim$ lama | 'gradually' | X | X |
| langsung | 'immediately' | X | X |
| nanti | 'very soon' | X | X |
| sebentar | 'in/for a moment' | X | X |
| skarang | 'now' | X | X |
| tadi | 'earlier' | X | X |
| baru | 'recently' | X |  |
| baru baru | 'just now' | X |  |

(163) wa, ko datang, langsung ko lapar?
wow! 2sG come immediately 2sg be.hungry
'wow!, you come (here, and) immediately you're hungry?' [081110-002-Cv.0049]
(164) ... dang ko nanti kena picaang
and 2sG very.soon hit splinter
'[don't (go down to the beach, (it's) dirty,] and later you'll run into broken glass and cans' [080917-004-CvHt.0002]
(165) nanti bapa mo brangkat, nanti bapa kas taw samabapa-ade very.soon father want leave very.soon father give know with uncle pendeta
pastor
'very soon I ('father') will leave (and) then I ('father') will inform uncle pastor' [080922-001a-CvPh.0339]

The postpredicate position is illustrated in (166) to (169). In clauses with peripheral adjuncts, the adverb follows the predicate and precedes the adjunct, such as nanti 'very soon' in the elicited example in (166) and langsung 'immediately' in (168). Clauses, in which the temporal adverb follows the peripheral adjunct are either ungrammatical, such as nanti 'very soon' in the elicited examples in (167), or only marginally grammatical such as langsung 'immediately' in the elicited contrastive examples in (169).

Temporal adverbs in postpredicate position
(166) tong pergi nanti ke Sarmi

1Pl go very.soon to Sarmi
'we'll go very soon' to Sarmi' [Elicited MY131113.001]

* tong pergi ke Sarmi nanti
1pl come to Sarmi very.soon

Intended reading: 'we'll go to Sarmi very soon' [Elicited MY131113.002]
(168) ... tak!, masuk langsung di bawa meja sana bang! enter immediately at bottom table L.DIST
[About a small boy who had a collision with an evil spirit:] 'whump!, immediately (the kid) went under the table over there' [081025-009b-Cv.0029]
(169) ?? ... tak!, masuk di bawa meja sana langsung bang! enter at bottom table L.DIST immediately
Intended reading: 'whump!, (the kid) went under the table over there immediately' [Elicited MY131113.003]

The meaning aspects conveyed by the different positions of the temporal adverbs have to do with scope. This is demonstrated with langsung 'immediately' in three (near) contrastive examples: the prepredicate position following the subject is shown in (170), the prepredicate position preceding the subject in (171), and the postpredicate position in (172).

Positions and scope of temporal adverbs
(170) bapa langsung diam
father immediately be.quiet
'the gentleman was immediately quiet' [080917-010-CvEx.0186]
(171) langsung dong diam
immediately 3pl be.quiet
'immediately they were quiet' [080922-003-Cv.0085]
(172) bapa de diam langsung
father 3sG be.quiet immediately
'the gentleman was quiet immediately' [080917-010-CvEx.0191]
Only one temporal adverb has clear distinct meanings depending on its positions, namely dulu 'first, in the past'. Prepredicate dulu translates with 'in the past', whereas postpredicate dulu translates with 'first', as shown in (173).

Temporal dulu 'first, in the past' in clause-initial and postpredicate positions
(173) dulu kitong pu orang-tua itu tida bisa berhubungang dulu first 1PL poss parent D.DIST NEG be.able have.sexual.intercourse first
'in the past our parents couldn't have sex first (before getting married)'
[081110-006-CvEx.0012]
Temporal baru 'recently' and baru~baru 'just now' only occur in prepredicate position, as in (174) and (175). While baru 'recently' directly precedes the predicate, baru~baru 'just now' precedes the subject.

Temporal baru 'recently' and baru~baru 'just now' in prepredicate position only
(174) kariawang dong baru lewat
employee 3pl recently pass.by
'the employees recently walked by' [080922-001a-CvPh.0830]
(175) baru~baru de masuk ruma-sakit

RDP $\sim$ recently 3 sG enter hospital
'just now, he got into hospital' [081115-001a-Cv.0070]

### 5.4.6 Focus adverbs

Focus adverbs indicate "an accentual peak or stress which is used to contrast or compare [... an] item either explicitly or implicitly with a set of alternatives" (Hoeksema \& Zwarts 1991: 52). That is, focus adverbs highlight information and signal some kind of restriction, thereby adding emphasis to an utterance. Hence, they are also known as "emphatic" adverbs (Givón 2001: 94). In Papuan Malay, almost all focus adverbs take a prepredicate position, as shown in Table 5.30. The exceptions are juga 'also', lagi ‘again, also', and saja 'just' which take a postpredicate position. While the latter two only occur in postpredicate position, juga 'also' also takes a prepredicate position.

The prepredicate position of the focus adverbs is illustrated in (176) to (180). Focus adverbs typically precede the subject. This is shown with cuma 'just' in (176) and hanya

Table 5.30: Focus adverbs and their positions within the clause

| Item | Gloss | Position |  |
| :--- | :--- | :---: | :---: |
|  |  | PRE-PRED | Post-PRED |
| apalagi | 'moreover' | X |  |
| kecuali | 'except' | X |  |
| kususnya | 'especially' | X |  |
| cuma | 'just' | X |  |
| hanya | 'only' | X |  |
| justru | 'precisely' | X |  |
| mala | 'instead' | X |  |
| pas | 'precisely' | X |  |
| juga | 'rlso' | X | X |
| lagi | 'again, also' |  | X |
| saja | 'just' |  | X |

[^111]'only' in (178). Most of them can also take a prepredicate position directly preceding the predicate; the exceptions are apalagi 'moreover', kecuali 'except' and kususnya 'especially' which always precede the subject. The position directly preceding the predicate is shown with cuma 'just' in (177) and hanya 'only' in (179), respectively. Another exception is prepredicate juga 'also', which always directly precedes the predicate, as in (180); for its postpredicate uses see (181). These examples also illustrate that focus adverbs not only modify verbal predicates, as in (176), and (178) to (180), but also nonverbal predicates, such as the numeral predicate dua 'two' in (177).

Focus adverbs in clause-initial and prepredicate positions
(176) baru~baru de su turung, cuma de su pulang RDP $\sim$ recently 3sG already descend just 3sG already go.home
[Reply to an interlocutor who is looking for someone:] 'just now he already came by, (it's) just (that) he already went home' [080922-001a-CvPh.0554]
... tapi [sa pu alpa] cuma dua
but 1sG poss be.absent just two
[About unexcused school absences:] '[I was absent many times,] but I had just two (official) absences' (Lit. 'my being absent was just two') [081023-004-Cv.0014]
(178) jadi kalo nika di kantor itu begitu, hanya dong bilang nika sipil so if marry at office D.DIST like.that only 3pl say marry be.civil
[About marrying civically:] 'so if (one) marries at the office it's like that, only (that) they call (it) "marrying civically"' [081110-007-CvPr.0030]
(179) prempuang hanya duduk makang pinang saja
woman only sit eat betel.nut just
'the girls just sit (around) and eat betel nut' [081014-007-CvEx.0045]
(180) Ise dong juga duduk di sana

Ise 3pl also sit at l.DIST
'Ise and the others are also sitting over there' [081025-009b-Cv.0075]
Three focus adverbs take a postpredicate position, namely juga 'also', lagi ‘again, also', and saja 'just'. This is demonstrated with the examples in (181) to (183). (As shown in (180), juga 'also' can also take a prepredicate position.) In clauses with peripheral adjuncts, the three adverbs can directly follow the predicate, such as the first juga 'also' token in (181) and lagi 'again, also' in (182). Alternatively, they can follow the adjunct, such as the second juga 'also' token in (181) and lagi 'again, also' in (183). Focus adverb saja 'just' has the same distributional properties as lagi 'again, also'. The semantics expressed with the different positions again have to do with scope.

Focus adverbs in postpredicate position
(181) dari sini deng Papua-Lima, kembali juga deng Papua-Lima ... ke sana deng from l.Prox with Papua-Lima return also with Papua-Lima to L.DIST with Papua-Lima kembali deng Papua-Lima juga
Papua-Lima return with Papua-Lima also
'(I'll leave) from here with the Papua-Lima (ship) and return also with the
Papua-Lima (ship) ... (I'll get) over there with the Papua-Lima (ship and) return with the Papua-Lima (ship) also' [080922-001a-CvPh.0483/0493]
(182) de kembali lagi ke Papua

3sg return again to Papua
'he came back again to Papua' [081025-004-Cv.0008]
(183) sa pulang ke Waim lagi

1sG go.home to Waim again
'I went home to Waim again' [081015-005-NP.0051]

### 5.4.7 Degree adverbs

Degree adverbs "describe the extent of a characteristic", that is, they "emphasize that a characteristic is either greater or less than some typical level" (Biber, Conrad \& Leech 2002: 209). Amplifiers or intensifiers "increase intensity", while diminishers or downtoners "decrease the effect of the modified item" (2002: 209-210).

The Papuan Malay degree adverbs are presented in Table 5.31. The table includes four amplifiers/intensifiers and two diminishers/downtoners. Most of the adverbs occur in prepredicate position. The exception is skali 'very', which takes a postpredicate position. Two of the amplifiers modify gradable verbs, namely lebi 'more' and paling 'most'. The former signals comparative degree while the latter marks superlative degree.

The four amplifiers modify monovalent stative and bivalent verbs, as discussed in §5.3.4 and §5.3.5 (comparative constructions are discussed in §11.5). The amplifiers occur in prepredicate position, following the subject, such as paling 'most' in (184). Furthermore, paling 'most' can precede the subject, although not very often. In this clause-initial position it functions as an epistemic modal adverb which has scope over the entire proposition, as in (185) (modal adverbs are discussed in §5.4.4).

Amplifier degree adverbs
(184) ana ini paling bodo
child d.prox most be.stupid
'this child is most stupid' [081011-005-Cv.0035]

Table 5.31: Degree adverbs and their positions within the clause

| Item | Gloss | Position |  |
| :--- | :--- | :--- | :--- |
|  |  | PRE-PRED | POST-PRED |
| Amplifiers/intensifiers |  |  |  |
| lebi | 'more' | X |  |
| paling | 'most' | X |  |
| terlalu | 'too' | X |  |
| skali | 'very' |  | X |
| Diminishers/downtoners |  |  |  |
| agak | 'rather' | X |  |
| hampir | 'almost' | X |  |

(185) waktu saya bilang sa mo biking acara, paling sa tra kerja, sa sebagey time 1sg say 1sg want make ceremony most 1sg neg work 1sg as kepala acara head ceremony
'when I say, I want to hold a festivity, most likely I won't (have to) work, I'll be the head of the festivity' [080919-004-NP.0068]

The intensifier terlalu 'too' also occurs in prepredicate position, as in (186). By contrast, skali 'very' takes a postpredicate position, as illustrated in (187) to (189). In clauses with peripheral adjuncts, as in (188), skali 'very' follows the predicate, such as enak 'be pleasant' in (188). Clauses in which skali 'very' follows the peripheral adjunct, as in the elicited example in (189), are ungrammatical.

Intensifier degree adverbs
(186) $a$, ko terlalu bodo
ah! 2sG too be.stupid
'ah, you are too stupid' [080917-003a-CvEx.0009]
(187) ade bongso jadi ko sayang dia skali e?
ySb youngest.offspring so 2sG love 3sG very eh
'(your) youngest sibling, so you love her very much, eh?'
[080922-001a-CvPh.0302]
(188) kamu orang-tua enak skali di sana

2PL parent be.pleasant very at L.DIST
'you, the parents, (have) very pleasant (lives) over there' (Lit. 'you ... are very pleasant') [081115-001a-Cv.0106]

* kamu orang-tua enak di sana skali

2PL parent pleasant at l.DIST very
Intended reading: 'you, the parents, (have) very pleasant (lives) over there' [Elicited MY131113.004]

The diminishers agak 'rather' and hampir 'almost' also occur in prepredicate position, as illustrated in (190) to (193). Always directly preceding the verb, agak 'rather' modifies stative verbs, as in (190). Clauses in which agak 'rather' precedes the subject, as in the elicited example in (191), are ungrammatical. Diminisher hampir 'almost' typically modifies dynamic verbs, as in (192) and (193). ${ }^{17}$

The adverb can directly precede the predicate, as in the elicited example in (192), or precede the subject, as in (193). In the corpus, hampir 'almost' always occurs in the latter position, where the adverb has scope over the entire proposition.

Diminisher/downtoner degree adverbs

```
sa su agak besar
```

    1sG already rather be.big
    [About the speaker's childhood:] 'I was already rather big'
    [080922-008-CvNP.0025]
    (191) * agak sa su besar
rather 1sG already be.big
Intended reading: 'I was already rather big' [Elicited MY131113.006]
(192) dong hampir bunu bapa

3pl almost kill father
'they almost killed (my) father' [Elicited MY131113.005]
(193) hampir dong bunu bapa
almost 3pl kill father
'(it) almost (happened that) they killed (my) father' [081011-022-Cv.0210]

### 5.4.8 Expressing manner

Papuan Malay does not have manner adverbs. Instead, manner is expressed through stative verbs, as shown in (194) to (199). The modifying stative verbs always take a postpredicate position. In (194), for instance, postpredicate stative kras 'be harsh' modifies

[^112]stative sakit 'be sick', and in (197) trus 'be continuous' modifies tatap dia 'observe him'. In verbal clauses with peripheral adjuncts, the modifying stative verb can directly follow the predicate as in (198), or follow the adjunct, as in (199).
(194) baru satu kali sa sakit kras
and.then one time 1sG be.sick be.harsh
'but then one time I was badly sick' [080922-008-CvNP.0009]
(195) e, kam mandi cepat suda!
hey! 2pl bathe be.fast already
'hey, you bathe quickly!' [080917-008-NP.0128]
(196) dong dua lari trus

3PL two run be.continuous
[About a motorbike trip:] 'the two of them drove continuously'
[081015-005-NP.0011]
(197) langsung sa tatap dia trus
immediately 1 sG gaze.at 3 sG be.continuous
'immediately I gazed at him continuously' [081006-035-CvEx.0071]
(198) de buka trus siang malam

3SG open be.continuous day night
[About opening hours of an office] 'it is open continuously day and night' [081005-001-Cv.0003]
(199) ... terendam di air trus
be.soaked at water be.continuous
[About a motorbike that got stuck in a river:] '[(the motorbike) is still there ...,]
(it) is immersed in water continuously' [081008-003-Cv.0026]

### 5.4.9 Summary

The Papuan Malay adverbs take different positions within the clause, that is, they can occur in prepredicate or in postpredicate position. The most common position, however, is the prepredicate one. There are also a fair number of adverbs which can occur in both positions.

For the prepredicate adverbs two positions are attested, one directly preceding the predicate and one preceding the subject. A fair number of prepredicate adverbs can occur in both positions. Likewise, for the postpredicate adverbs two positions are attested, one directly following the predicate and, in clauses with peripheral adjuncts, one following the adjunct. Most postpredicate adverbs can occur in both positions. In terms of their functions, the adverbs designate aspect, frequency, affirmation and negation, modality, time, focus, and degree; manner is expressed through stative verbs in postpredicate position.

Listed according to their semantic functions, the adverbs have the following distributional preferences.

1. Aspect adverbs

They only occur in prepredicate position, directly preceding the predicate.
2. Frequency adverbs

They only occur in prepredicate position where they directly precede the predicate or the subject.
3. Affirmation and negation adverbs

They always occur in a predicate position. The affirmation adverb always precedes the subject, while the three negation adverbs directly precede the predicate.
4. Modal adverbs

All epistemic and evaluative adverbs take a prepredicate position, preceding the subject. Besides, most of the epistemic adverbs can also directly precede the predicate; the exceptions are artinya 'that means' and maksutnya 'that is to say' which always precede the subject.
5. Temporal adverbs

All but two can occur in pre- or in postpredicate position. In prepredicate position, the adverbs can directly precede the predicate or the subject. In postpredicate position, they always follow the predicate and, in clauses with peripheral adjuncts, precede the adjunct. Two adverbs only occur in prepredicate position, namely baru 'recently' and baru~baru 'just now'.
6. Focus adverbs

All but three only occur in prepredicate position where they can directly precede the predicate or the subject. The exceptions are juga 'also', lagi 'again, also', and saja 'just', which take a postpredicate position. While lagi 'again, also', and saja 'just' only occur in postpredicate position, juga 'also' also takes a prepredicate position. In postpredicate position, the three adverbs can either directly follow the predicate or, in clauses with peripheral adjuncts, follow the adjunct.
7. Degree adverbs

All but one only take a prepredicate position, where most of them directly precede the predicate. The exception is hampir 'almost' which can also precede the subject. The one degree adverb which is unattested in prepredicate position is skali 'very'. It only occurs in postpredicate position, directly following the predicate.

These distributional preferences are summarized in Table 5.32.

Table 5.32: Papuan Malay adverbs and their positions within the clause

| Adverb type | Positions within the clause |  |
| :--- | :--- | :--- |
|  | PRE-PRED | POST-PRED |
| Aspect | all ADV | none |
| Frequency | all ADV | none |
| Affirmation/negation | all ADV | none |
| Modal | all ADV | none |
| Temporal | all ADV | most ADV |
| Focus | most ADV | three ADV |
| Degree | most ADV | one ADV |

As for those adverbs which can take more than one position within the clause, the semantic distinctions conveyed by the different positions have to do with scope. Overall, however, these distinctions are subtle and require further investigation.

Papuan Malay does not have manner adverbs. Instead, manner is expressed with monovalent stative verbs which always take a postpredicate position.

### 5.5 Personal pronouns

The Papuan Malay personal pronoun system distinguishes singular and plural numbers and three persons; the personal pronouns do not mark case, clusivity, gender, or politeness. Referring to animate and inanimate entities, they allow the unambiguous identification of their referents. They do so by signaling not only the person-number values of their referents, but also their definiteness.

The Papuan Malay personal pronouns are presented in Table 5.33.
Table 5.33: Personal pronoun system with long and short forms

|  | Long forms | Short forms |
| :--- | :--- | :--- |
| 1SG | saya | sa |
| 2SG | ko | --- |
| 3SG | dia | de |
| 1PL | kitong | tong |
|  | kita | ta |
|  | kitorang | torang |
| 2PL | kamu | kam |
| 3PL | dorang | dong |

Each personal pronoun, except for 2sG, has at least one long and one short form. The use of the long and short pronoun forms does not mark grammatical distinctions but represents speaker preferences. These distributional preferences are discussed in detail in §6.1.1.

The Papuan Malay personal pronouns have the following distributional properties:

1. Substitution for noun phrases (pronominal uses) (§6.1).
2. Modification with demonstratives, locatives, numerals, quantifiers, prepositional phrases, and/or relative clauses (pronominal uses) (§6.1).
3. Co-occurrence with noun phrases (adnominal uses): $\mathrm{N} / \mathrm{NP}$ PRO (§6.2).

Personal pronouns are distinct from other word classes such as nouns (§5.2) and demonstratives (§5.6) in terms of the following distributional properties:

1. Personal pronouns are distinct from nouns in that personal pronouns (a) very commonly modify nouns, while nouns do not modify personal pronouns, (b) are modified with numerals or quantifiers in posthead position, while with nouns the modifying numerals/quantifiers can also occur in prehead position, and (c) only designate the possessor in adnominal possessive constructions, while nouns can also express the possessum.
2. Unlike demonstratives, personal pronouns (a) express person and number, (b) signal definiteness, while demonstratives indicate specificity, ${ }^{18}$ and (c) cannot be stacked.

The personal pronouns have pronominal and adnominal uses. This is illustrated with two examples. The utterance in (200) demonstrates the pronominal uses of short sa '1sG' and long dia '3sG', while the example in (201) shows the adnominal uses of short dong '3PL'. The personal pronouns are discussed in detail in Chapter 6.
(200) ana itu sa paling sayang dia tu ana itu
child d.DIST 1sG most love 3sg d.dIST child d.dist
'that child, I love her (EMPH) most, that child' [081011-023-Cv.0097]
(201) Natanael dong menang

Natanael 3pl win
[About a volleyball game:] 'Natanael and his friends won' [081109-001-Cv.0002]

[^113]
### 5.6 Demonstratives

Papuan Malay has a two-term demonstrative system: proximal ini 'd.prox' and distal itu 'd.DIST', together with their reduced fast-speech forms $n i$ ' $\mathrm{D} . \mathrm{PROX}$ ' and $t u$ 'D.DIST'. As deictic expressions they orient the hearers and signal specificity. That is, they draw the hearers' attention to particular occurrences of an entity in the surrounding situation or in the discourse. While ini 'd.Prox' indicates proximity of this entity, itu 'd.DIST' signals its distance - in spatial and in nonspatial terms.

Papuan Malay demonstratives have the following distributional properties:

1. Co-occurrence with noun phrases (adnominal uses): N/NP DEM (§5.6.1).
2. Substitution for noun phrases (pronominal uses) (§5.6.2).
3. Modification with relative clauses (pronominal uses (§5.6.2).
4. Co-occurrence with verbs or adverbs (adverbial uses) (§5.6.3).
5. Stacking of demonstratives: DEM DEM and n DEM DEM (§5.6.4).

Demonstratives are distinct from other word classes such as personal pronouns (§5.5) and locatives (§5.7) in terms of the following syntactic properties:

1. Demonstratives are distinct from personal pronouns, in that demonstratives (a) have adverbial uses, (b) can be stacked, (c) can take the possessum slot in adnominal possessive constructions, and (d) signal specificity, while personal pronouns express definiteness. ${ }^{19}$
2. Contrasting with locatives, demonstratives (a) are employed as independent nominals in unembedded noun phrases, (b) occur in adnominal possessive constructions either as the possessor or the possessum, and (c) can be stacked.

The adnominal uses of the demonstratives are discussed in §5.6.1, their pronominal uses in $\S 5.6 .2$, their adverbial uses in $\S 5.6 .3$, and stacking of demonstratives in $\S 5.6 .4$. A full discussion of the Papuan Malay demonstratives is presented in §7.1.

### 5.6.1 Adnominal uses

Adnominally used demonstratives occur in posthead position at the right periphery of the noun phrase. That is, all noun phrase constituents occur to the left of the demonstrative, with the demonstrative having scope over the entire noun phrase as illustrated in (202) to (204). Constituents occurring to the right of the demonstratives such as liar 'be wild' in (205) are not part of the noun phrase: liar 'be wild' is a clausal predicate. The examples in (202) and (203) show that the demonstratives signal specificity (and not

[^114]definiteness). The noun phrase tanta dia itu 'that aunt' (literally 'that she aunt') designates a specific and definite referent with distal itu 'd.DIST' indicating specificity while adnominally used dia ' 3 sG ' signals definiteness (§5.5). By contrast, the noun phrase ana kecil satu ini 'this particular small child' in (203) denotes a specific but indefinite referent with proximal ini 'd.prox' again indicating specificity while posthead satu 'one' signals indefiniteness (see also §5.9.4).

Posthead demonstratives: Scope
(202) Wili ko jangang gara~gara tanta dia itu!

Wili 2sG neg.Imp rdp $\sim$ irritate aunt 3sG d.DIST
'you Wili don't irritate that aunt!' [081023-001-Cv.0038]
(203) baru ana kecil satu ini de tra gambar ana murit satu ni and.then child be.small one D.PRox 3sG neg draw child pupil one d.prox de tra gambar
3sG neg draw
'but then this particular small child, he doesn't draw, this particular school kid, he doesn't draw' [081109-002-JR.0002]
(204) Papua-Satu ada muncul dari laut sana itu

Papua-Satu exist appear from sea L.DIST D.DIST
'(the ship) Papua-Satu is appearing from the sea over there (EMPH)'
[080917-008-NP.0129]
(205) ... karna babi ini liar because pig D.prox be.wild
'... because this pig is wild' [080919-004-NP.0019]
Demonstratives can also modify constituents other than nouns, namely personal pronouns as in (206), interrogatives as in (207), or locatives as in (208).

Posthead demonstratives: Modifying personal pronouns, interrogatives, or locatives
(206) ko itu manusia yang tra taw bicara temang 2SG D.DIST human.being rel neg know speak friend 'you (ЕмPH) are a human being who doesn't know how to talk (badly about) friends' [081115-001a-Cv.0245]
(207) ana laki~laki ini de mo ke mana ni
child RDP $\sim$ husband D.PROX 3 SG want to where D.PRox
'this boy, where (EMPH) does he want to (go)?' [080922-004-Cv.0017]
(208) disini tu ada orang swanggi satu at l.Prox d.dist exist person nocturnal.evil.spirit one
'here (EMPH) is a certain evil sorcerer' [081006-022-CvEx.0150]

### 5.6.2 Pronominal uses

In their pronominal uses, the demonstratives stand for noun phrases, as illustrated in (209) to (214). They occur in all syntactic positions within the clause. In (209), a demonstrative takes the subject slot, in (210) the direct object slot, and in (211) the oblique object slot.

Pronominal uses in argument position
(209) yo, itu mo putus
yes D.DIST want break
[About redirecting a river for a street building project:] 'yes, it (the river) is going to get dispersed' [081006-033-Cv.0064]
(210) ko suka makang ini?

2sg like eat D.PRox
[About fried bananas:] 'do you like to eat these?' [081006-023-CvEx.0071-0072]
(211) dong percaya sama itu

3pL trust to D.DIST
[About believing in evil spirits:] 'they believe in those' [081006-023-CvEx.0001]
In their pronominal uses, the demonstratives can be modified with relative clauses, as in the elicited example in (212).

Modification of pronominally used demonstratives with relative clauses
(212) sa pili ini yang mera, ade pili itu yang warna puti

1sG choose d.prox rel be.red ySb choose d.dist rel color be.white
[About buying new shirts:] 'I chose this (one) which is red, (my) younger sibling chose that (one) which is (of) white color' [Elicited MY131119.004]

Pronominally used demonstratives also occur in adnominal possessive constructions (see Chapter 9). They can designate the possessor as in (213) or the possessum as in (214).

Pronominal uses in adnominal possessive constructions
(213) bapa masi kenal ... ini pu muka?
father still know d.prox poss face
'do you ('father') still know ... this (one)'s face?' [080922-001a-CvPh.1123]
(214) ko ambil dulu ade pu itu

2SG fetch first ySb poss d.DIST
'you pick up (the fish) first, that (fish) of the younger sister' (Lit. 'younger
sibling's that') [081006-019-Cv.0002]

### 5.6.3 Adverbial uses

In their adverbial uses, the demonstratives co-occur with verbs as in pikir ni 'think (ЕМРн)' in (215) or with adverbs as in pasti tu 'exactly (EMPH)' in (216).
(215) de pikirni, dong ribut apa ka

3sG think D.Prox 3pl trouble what or
'he thought (EMPH), "what are they troubled about?"' [081014-005-Cv.0036]
(216) yo, brita pasti tu yang sa bilang
yes new definitely d.DIST ReL 1SG say
'yes, the news are exactly (EMPH) as I told (you)' [080922-001a-CvPh.0767]

### 5.6.4 Stacking of demonstratives

Papuan Malay also allows the stacking of demonstratives. Typically, only identical demonstratives are stacked, as in (217) and (218). To some degree, however, non-identical demonstratives can also be stacked, as shown in (219) and (220). ${ }^{20}$

In (217), short proximal ni 'd.prox' modifies the pronominally used long proximal demonstrative, such that "Dem dem". In (218), short distal tu 'd.DISt' modifies a nested noun phrase with the adnominally used long distal demonstrative, such that "[[N DEM] DEM]".
ada segala macang tulang dia buang $\left[\begin{array}{ll}\text { ini } & \text { ni }\end{array}\right]$ exist all variety bone 3sG throw(.away) D.prox d.prox
'there were all kinds of bones, he threw away these very (ones)'
[080922-010a-CvNF.0101]
(218) waktu kitorang masuk di [[ruma itu] tu] ... when 1PL go.in at house D.DIST D.DIST
'when we moved into that very house, ...' [081006-022-CvEx.0167]
While unattested in the corpus, speakers do allow one combination of non-identical demonstrative stacking in elicitation. Acceptable is the order of proximal ini 'd.prox' followed by short distal itu 'd.DIST', as shown in the elicited example in (219). The reverse order is not permitted by speakers even in elicitation, as illustrated in (220). At this point in the research on Papuan Malay, however, the semantics of " v ini tu" constructions as compared to " N ini ni"" and " v itu tu" constructions remain uncertain.

[^115](219) orang ini tu percaya sama Tuhang Yesus
person D.Prox d.dist trust to God Jesus
'that person here believes in God Jesus' [Elicited BR111017.009]
(220) * orang itu ni percaya sama Tuhang Yesus person D.DIST D.Prox trust to God Jesus
Intended reading: 'this person there believes in God Jesus' [Elicited BR111017.010]

### 5.7 Locatives

Papuan Malay has a distance oriented three-term locative system: proximal sini ' L . Prox', medial situ 'L.MED', and distal sana 'L.DISt'. The locatives provide orientation to the hearer in the outside world and in the speech situation by signaling distance, both spatial and nonspatial. Hence, they are similar to the demonstratives. The demonstratives, however, draw the hearer's attention to specific entities in the discourse or surrounding situation. The locatives, by contrast, focus the hearer's attention to the specific location of these entities and the relative distance of this location to the deictic center.

The distributional properties of the locatives are as follows:

1. Substitution for noun phrases embedded in prepositional phrases (pronominal uses) (§5.7.1).
2. Modification with demonstratives or relative clauses (pronominal uses) (§5.7.1).
3. Co-occurrence with noun phrases (adnominal uses): n/nP LOC (§5.7.2).

Locatives are distinct from other word classes such as personal pronouns (§5.5) or demonstratives (§5.6) in terms of the following syntactic properties:

1. Locatives only occur in prepositional phrases; that is, they are unattested as nominal heads in unembedded noun phrases.
2. Locatives can be modified with adnominally used demonstratives and relatives clauses, but with no other adnominal modifier; hence, locatives cannot be stacked.
3. Locatives are unattested in adnominal possessive constructions as possessor or as possessum.

The pronominal uses of the locatives are discussed in §5.7.1 and their adnominal uses in §5.7.2. Generally speaking, the pronominally used locatives provide additional information about the location of an entity, information nonessential for its identification. Adnominally used locatives, by contrast, limit the referential scope of their head nominals and thereby assist in the identification of their referents. A full discussion of the Papuan Malay locatives is found in $\S 7.2$.

[^116]
### 5.7.1 Pronominal uses

In their pronominal uses the locatives substitute or stand for noun phrases, as illustrated with the four elicited contrastive examples in (221). Distal sana ' L.DIST' in (221b) substitutes for the noun phrase ruma yang paling di bawa itu 'that house that's the furthest down' in (221a). The ungrammatical construction in (221c) shows that the locative replaces the entire noun phrase and not only its nominal head ruma 'house'.

Pronominal uses: Substitution for noun phrases
a. sa tinggal di ruma yang paling di bawa itu

1sG stay at house rel most at bottom D.DIST
'I live in the house that's the furthest down there' [Elicited FS120314-001.007]
b. sa tinggal di sana

1sG stay at L.DIST
'I live over there' [Elicited FS120314-001.008]
c. * sa tinggal di sana yang paling di bawa itu

1sG stay at l.DIST REL most at bottom D.DIST
Intended reading: 'I live over there that's the furthest down' [Elicited FS120314-001.010]

Locatives are always embedded in prepositional phrases. The prepositional phrase can be a peripheral adjunct, as in the first clause in (222) or in (224), a prepositional predicate, as in the second clause in (222), or an adnominal prepositional phrase, as in (223). Usually, the locatives are introduced with an overt preposition as in (222) or (223). The preposition may, however, also be elided as in (224): the omitted preposition is allative $k e$ 'to' (the elision of prepositions is discussed in §10.1.5).

Pronominal uses in prepositional phrases
(222) ko datang ke sini, nanti bapa ke situ ... 2SG come to L.PROX very.soon father to L.MED 'you come here, later I ('father') (go) there ...' [080922-001a-CvPh.0462]
(223) orang dari sana itu ... dorang itu kerja sendiri person from L.DIST D.DIST 3pl D.DIST work be.alone 'those people from over there, .... they work by themselves' [081014-007-CvEx.0050]
(224) kam datang $\varnothing$ sini, kam biking kaco saja 2pl come l.prox 2pl make be.confused just 'you come here, you're just stirring up trouble' [081025-007-Cv.0013]

The pronominally used locatives can be modified with demonstratives or relative clauses. Modification with the demonstratives typically involves short distal tu 'D.DIst' as in (225), while modification with long distal itu 'D.DIST' is only attested for the nonproximal locatives, as in sana itu 'over there (емPн)' in (226). These distributional patterns still require further investigation. Modification with proximal ini 'd.prox' is unattested but possible, as shown in the elicited example in (227). Modification with relative clauses is also possible, as illustrated for proximal sini ' L .Prox' in (228) and medial situ 'L.MED' in (229). In the corpus, however, such modification is rare and unattested for distal sana 'L.DIST'.

Modification of pronominally used locatives
sampe disini tu dia langsung sakit karna ... reach at L.PROX D.DIST 3SG immediately be.sick because
'having arrived here (ЕмРн), he was sick immediately because (he hadn't
eaten)' [081025-008-Cv.0050]
dong lobe ke sana itu
3PL walk.searchingly.with.lamp to L.DIST D.DIST
'they walk searchingly with lights to over there (EMPH)' [081108-001-JR.0002]
(227) di sini ni orang tida taw makang pinang at l.PROX D.PROX person NEG know eat betel.nut
'here (EMPH) people don't habitually eat betel nuts' [Elicited BR111017.001]
(228) di sini yang tra banyak
at L.PROX REL NEG many
[About logistic problems:] '(it's) here where there weren't many (passengers)' [081025-008-Cv.0140]
(229) ... sa mandi di situ, di situ yang mungking nangka

1sG bathe at L.MED at L.MED REL maybe jackfruit
'[I saw (the poles),] I bathed there, there where (there are) maybe jackfruits'
[080922-010a-CvNF.0298]

### 5.7.2 Adnominal uses

Adnominally used locatives always occur in posthead position. Most commonly, they occur in noun phrases embedded in prepositional phrases, as illustrated in (230). In (230a), proximal sini 'L.PRox' modifies the locational noun sebla 'side'; the noun phrase is introduced with allative $k e$ 'to'. In (230b), distal sana ' L .DIST' modifies the noun laut 'sea'; the preposition is locative $d i$ 'at, in'.

Adnominal uses in embedded noun phrases
(230)
a. ke sebla sini
to side L.prox
'to the side here' [081011-001-Cv.0148]
b. di laut sana
at sea L.DIST
'in the sea over there' [080917-006-CvHt.0004]
Adnominally used locatives also occur in unembedded noun phrases as in (231), although considerably less frequently. In (231a), proximal sini ' .Prox' modifies the personal pronoun dong '3pl', while in (231a) medial situ 'L.MED' modifies the noun phrase orang kantor 'office employees'.

Adnominal uses in unembedded noun phrases
a. dong sini

3pl L.prox
'they here' [080922-001a-CvPh.0556]
b. orang kantor situ
person office L.MED
'the office employees there' [081005-001-Cv.0018]

### 5.8 Interrogatives

Papuan Malay has six interrogatives which serve to form content questions. That is, marking a clause as a question, they signal to the hearer which piece of information is being asked for.

The Papuan Malay interrogatives and their functions within the clause are presented in Table 5.34 . All of them are used pronominally. Most of them also have predicative uses; the exception is kapang 'when'. Besides, the majority of interrogatives also have adnominal uses, except for bagemana 'how', kapang 'when', and knapa 'why' which are unattested. Furthermore, three interrogatives are used as placeholders. In their pronominal and adnominal uses, the interrogatives typically remain in-situ, that is, in the position of the constituents they replace.

Besides, the mid-range quantifier brapa 'several' (§5.10) also functions as an interrogative, which questions quantities in the sense of 'how many'. For expository reasons, this interrogative function of quantifier brapa 'several, how many' is discussed here.

In their predicative uses, most of the five interrogatives can take two positions, as shown in Table 5.35 ; the same applies to quantifier brapa 'several, how many'. That is, all of them can remain in-situ, in the unmarked clause-final position, following the clausal subject. Besides, most of them can also be fronted to the marked clause-initial

Table 5.34: Papuan Malay interrogatives and their functions within the clause

| Item | Gloss | Functions within the clause |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  |  | PRONOM | ADNOM | PRED | PL-HOLD |
| siapa | 'who' | X | X | X | X |
| apa | 'what' | X | X | X | X |
| mana | 'where, which' | X | X | X |  |
| bagemana | 'how' | X |  | X | X |
| kapang <br> knapa <br> brapa | 'when' | 'why' | X |  |  |

position, preceding the subject; the exception is knapa 'why'. In its interrogative uses, quantifier brapa 'several, how many' can also take two positions. That is, it can remain in-situ, in the clause-final position, or be fronted to the marked clause-initial position. These positions and the semantics they convey are discussed in detail in the following sections.

Table 5.35: Predicatively used interrogatives and their positions within the clause

| Item | Gloss | Position within the clause <br> CL-INITIAL |  |
| :--- | :--- | :---: | :---: |
|  |  | CL-FINAL |  |
| siapa | 'who' | X | X |
| apa | 'what' | X | X |
| mana | 'where, which' | X | X |
| bagemana | 'how' | X | X |
| knapa | 'why' |  | X |
| brapa | 'how many' | X | X |

In the following, the interrogatives are described in turn, siapa 'who' in §5.8.1, apa 'what' in §5.8.2, mana 'where, which' in §5.8.3, bagemana 'how' in §5.8.4, kapang 'when' in §5.8.5, and knapa 'why' in §5.8.6, and quantifier brapa 'several, how many' in §5.8.7. Some of the interrogatives also express non-interrogative indefinite meanings; this function is summarily discussed in §5.8.8.

### 5.8.1 siapa 'who'

The interrogative siapa 'who' questions the identity of human referents. Its pronominal uses are illustrated in (232) to (239), its adnominal uses in (240) and (241), and its predicative uses in (242) and (243). In addition, siapa 'who' serves as a placeholder as shown
in (244). Furthermore, the interrogative is also used in one-word utterances.
In its pronominal uses, siapa 'who' occurs in all syntactic positions, as shown (232) to (239), typically remaining in-situ. In the verbal clause in (232), siapa 'who' takes the subject slot. In the corpus, however, verbal clauses with siapa 'who' in the subject slot are rare. Typically, speakers use equative nominal clauses when they want to question the identity of the clausal subject. In such nonverbal clauses, siapa 'who' takes the subject slot while a headless relative clause takes the predicate slot. This is shown with the elicited contrastive example in (233). In this equative clause, siapa 'who' is the subject, while the headless relative clause yang suru ... '(the one) who ordered ...' is the predicate. Likewise in (234), the interrogative takes the subject slot while the headless relative clause yang datang ... '(the one) who came ...' takes the predicate slot. ${ }^{22}$ (For details on relative clauses see §14.3.2.)

Pronominal uses of siapa 'who': Subject slot
(232) e, siapa suru kam minum~minum di sini?
hey who order 2pl RDP~drink at L.PROX
'hey, who told you to keep drinking here' [081014-005-Cv.0006]
(233) e, siapa yang suru kam minum~minum di sini?
hey who REL order 2PL RDP~drink at L.PROX
'hey, who (is the one) who told you to keep drinking here' [Elicited MY131112.004]
(234) siapa yang datang jemput saya?
who Rel come pick.up 1sG
'who (is the one) who came (and) picked me up?' [080918-001-CvNP.0001]
Interrogative siapa 'who' also takes non-subject slots. In (235), siapa 'who' takes the direct object slot in a monotransitive clause, in (236) a direct object slot in a doubleobject construction, in (237) the oblique object slot, and in (238) the peripheral adjunct slot. ${ }^{23}$ In addition, siapa 'who' questions the possessor's identity in adnominal possessive constructions, as in (239).

Pronominal uses of siapa 'who': Non-subject slots
(235) dong cari siapa?

3pl search who
'for whom are they looking?' [080921-010-Cv.0010]
(236) kwe mo pi kasi siapa di sana?
cake want go give who at L.DIST
'as for the cake, to whom do (you) want to go and give (it) over there?'
[080922-001a-CvPh.0670]

[^117](237) ... ke mana?, ke kampung?, deng siapa?
to where to village with who
[Talking to her young son:] '[do you want to leave today?,] where to?, to the village?, with whom?' [080917-003a-CvEx.0048-0044]
(238) baru nanti minggu keduanya sembayang di siapa?
and.then very.soon week second:3posse worship at who
'then later in the second week (of this month), (we'll) worship at whose (place)?' (Lit. 'at who') [081011-005-Cv.0037]
(239) siapa pu mata yang buta?
who poss eye rel be.blind
'whose eyes are blind?' [080922-001a-CvPh.0142]
As a nominal modifier, siapa 'who' takes the position of a modifying noun which it replaces. This illustrated with the interrogative clauses (240) and (241.

Adnominal uses of siapa 'who'
(240) [prempuang siapa] biking sa jadi bingung?
woman who make 1sG become be.confused
'which woman made me become confused?' [080922-004-Cv.0028]
(241) skarang sa tanya, [orang siapa] yang benar?
now 1sG ask person who rel be.true
'now I asked, "which person (is the one) who is right?"' [080917-010-CvEx.0197]
In its predicative uses, siapa 'who' occurs in equative nominal predicate clauses where it questions the identity of the clausal subject, as shown in (242) and (243) (for more details on nominal clauses see $\S 12.2$ ). The interrogative can remain in-situ, in the clausefinal position, following the subject as in (242), or it can be fronted to the marked clauseinitial position, preceding the subject, as in (243). In the corpus, the token frequencies for both positions are about the same. When speakers want to accentuate the subject, such as ini 'd.Prox' in (242), the interrogative remains in-situ, where it is less prominent. When, by contrast, speakers want to stress the questioning of the subject's identity, they front siapa 'who' to the clause-initial position, as in (243). Besides their different functions, the contrastive examples in (242) and (243) also have distinct intonation contours. When siapa 'who' remains in-situ, as in (242), the clause has a rising intonation, typical of interrogatives. When it is fronted, the clause has a falling intonation, typical of declaratives. In both cases, siapa 'who' is marked with a slight increase in pitch of its stressed penultimate syllable ("' ").

Predicative uses of siapa 'who'

| -- | - | - | - |
| :--- | :--- | :--- | :--- |
| ini | siápa? | ini | siápa? |
| D.PROX | who | D.Prox | who |

'who is this? who is this?' [080916-001-CvNP.0006]
$--\quad-1$
siápa $\quad$ ini?
who $\quad$ D.PROX
'who is this?' [081011-023-Cv.0104]

In addition, siapa 'who' functions as a placeholder when speakers do not recall a referent's name, as in (244).

Placeholder uses of siapa 'who'

## (244) Sarles antar siapa, Bolikarfus

Sarles bring who Bolikarfus
'Sarles gave a ride to, who-is-it, Bolikarfus' [081002-001-CvNP.0031]
Rather commonly, speakers also employ the interrogative in one-word utterances, when they question the identity of a referent, in the sense of 'who (do you mean)?'

### 5.8.2 apa 'what'

The interrogative apa 'what' questions the identity of nonhuman referents, namely entities and events; in addition, it can question reason. The pronominal uses of apa 'what' are illustrated in (245) to (250), its adnominal uses in (251) and (252), and its predicative uses in (253) and (254). The interrogative is also used as a placeholder as shown in (255). Besides, apa 'what' is also used in one-word utterances.

In its pronominal uses, apa 'what' occurs in all syntactic positions, as demonstrated in (245) to (250), always remaining in-situ. In the elicited verbal clause in (245), apa 'what' takes the subject slot. While this construction is grammatically correct and acceptable, verbal clauses with apa 'what' in the subject slot are unattested in the corpus. Instead, speakers always use equative clauses when they want to question the identity of the clausal subject, similar to the questions formed with siapa 'who' in (233) and (234) (§5.8.1). This is demonstrated with the contrastive equative clause in (246). In this example, apa 'what' takes the subject slot, while the headless relative clause yang su gigit ... '(the one) who has already bitten ...' takes the predicate slot. ${ }^{24}$ (For details on relative clauses see §14.3.2.)

[^118]Pronominal uses of apa 'what': Subject slot
(245) apa su gigit sa pu lutut
what already bite 1sg poss knee
'what has bitten my knee?' [Elicited MY131112.005]
(246) apa yang su gigit sa pu lutut?
what Rel already bite 1sG poss knee
'what (is it) that has bitten my knee?' [080916-001-CvNP.0004]
Interrogative apa 'what' also takes non-subject slots. In (247), apa 'what' takes the direct object slot, in (248) the oblique object slot, and in (249) the peripheral adjunct slot. ${ }^{25}$ Besides, speakers use apa 'what' to question reasons or motives, as in (250).

Pronominal uses of apa 'what': Non-subject slots
(247) kam cari apa?

2pl search what
'what are you looking for?' [080917-006-CvHt.0001]
(248) tokok sagu tu deng apa ini?
tap sago D.DIST with what D.Prox
'what are you pounding that sagu with?' [081014-006-CvPr.0014]
(249) sa tra taw tugu ini dari apa?

1sG NEG know monument D.PRox from what
'I don't' know from where this monument comes?' (Lit. 'from what (place)')
[080917-008-NP.0003]
(250) de bilang, ko tidor apa?

3SG say 2sG sleep what
'he said, "why are you sleeping?"' [081006-034-CvEx.0022]
In its adnominal uses, apa 'what' takes the position of a nominal modifier which it replaces, such as the name of a weekday in (251), or the name of a clan in (252).

Adnominal uses of apa 'what'
(251) [hari apa] baru sa minta ijing?
day what and.then 1sG request permission
[A school boy asking his mother:] 'on which day will I ask for permission (to be absent)?' [080917-003a-CvEx.0003]

[^119](252) dia tanya saya, ko [marga apa]?

3sG ask 1sG 2sG clan what
'he asked me, "which clan do you (belong to)?"' (Lit. 'you are what clan') [080922-010a-CvNF.0281]

In its predicative uses, apa 'what' questions the identity or pertinent characteristics of the clausal subject (for more details on nominal predicate clauses see §12.2). Like siapa 'who' (§5.8.1), apa 'what' can remain in the unmarked clause-final position, as in (253). Alternatively, it can be fronted to the marked clause-initial position, as in (254), where it stresses the questioning of the subject's identity or characteristics. The contrastive clauses in (253) and (254) have the same distinct intonation contours as the corresponding questions with siapa 'who' in (242) and (243) (§5.8.1). Clauses with in-situ apa 'what', as in (253), have the typical rising interrogative intonation. Clauses with fronted apa 'what' have the typical falling declarative intonation. Like siapa 'who', apa 'what' is marked with a slight increase in pitch of its stressed penultimate syllable ("' ").

Predicative uses of apa 'what'

-     -         - 

ini ápa?
D.PROX what
'what is this?' [081109-001-Cv.0012]
(254)

| -1 | -- | -1 |
| :---: | :---: | :--- |
| $a d u$, | ápa | ini? |
| oh.no! what | D.PROX |  |

'oh no!, what is this?' [081109-001-Cv.0012]
In addition, apa 'what' functions as a placeholder, when speakers do not recall the name of a lexical item, as in (255).

Placeholder uses of apa 'what'
(255) de bisa bantu deng apa, ijasa

3sg be.able help with what diploma
'he can help (us) with, what-is-it, the diploma' [081011-023-Cv.0107]
Speakers also employ apa 'what' in one-word utterances to question the overall situation in the sense of 'what (is wrong)?', or to signal lack of understanding, in the sense of 'what?', for example during phone conversations with a bad connection.

### 5.8.3 mana 'where, which'

The interrogative mana 'where, which' questions locations and single items. Its pronominal uses are illustrated in (256) and (257), its adnominal uses in (258) and (259), and its

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predicative uses in (260) to (262). The interrogative is also used in one-word utterances, as shown in (263).
In its pronominal uses as the head of a noun phrase, mana 'where, which' questions locations, as in (256) and (257). More specifically, it functions as the complement in a prepositional phrase which is headed by a preposition encoding location (details on prepositional phrases are provided in Chapter 10).

Pronominal uses of mana 'where, which'
(256) ko tinggal di mana?

2SG stay at where
'where do you live?' [080922-010a-CvNF.0237]
(257) ko datang dari mana?

2sG come from where
'from where do you come?' [080922-010a-CvNF.0236]
In its adnominal uses, mana 'where, which' questions single entities among larger numbers of identical or similar entities expressed by its referents, as in (258) and (259).

Adnominal uses of mana 'where, which'
(258) kalo [ana mana] yang sa duduk ceritra deng dia, itu ana itu, de
if child where ReL 1sG sit tell with 3sG D.DIST child d.DIST 3sG
hormat torang
respect 1pl
[Conversation about a certain teenager:] 'as for which kid with whom I sit and talk with, that is that kid, she respects us' [081115-001a-Cv.0282]
(259) dong bilang, [badang mana] yang sakit?

3pl say body where rel be.sick
'they said, "which (part of your) body (is the one) that is hurting?""
[081015-005-NP.0031]
In its predicative uses, mana 'where, which' occurs in prepositional predicates which question the subject's location (for details on prepositional predicates see §12.4). Like predicate clauses with siapa 'who' (§5.8.1) and apa 'what' (§5.8.2), prepositional predicates with mana 'where, which' can take two positions. They can remain in-situ, following the clausal subject, as in (260). Alternatively, they can be fronted to the marked clause-initial position, where they stress the questioning of the subject's location, as in the elicited example in (261). In the corpus, though, the preposition is always omitted from fronted prepositional predicates, as in (262).

Predicative uses of mana 'where, which'
(260) sabung mandi di mana?
soap bathe at where
'where is (our) soap?' [081025-006-Cv.0026]
(261) di mana sabung mandi?
at where soap bathe
'where is (our) soap?' [Elicited MY131112.006]
(262) Nofi, Ø mana kitong pu ikang~ikang?

Nofi where 1PL poss RDp~fish
'Nofi, where are our fish?' [080917-006-CvHt.0002]
Quite commonly, the interrogative is used to form one-word utterances in which case it questions an entire proposition, as in (263).

One-word utterances with mana 'where, which'
(263) Speaker-2: di mana?
at where
[Speaker-1: '(I used to) stay with my aunt Marta']
Speaker-2: 'where?' [080922-002-Cv.0029-0030]

### 5.8.4 bagemana 'how'

The interrogative bagemana 'how' questions manner or circumstance in the sense of 'how, what (is it) like'. The interrogative has pronominal uses, as illustrated in (264) and (266), and predicative uses, as shown in (267) to (270). In addition, bagemana 'how' has placeholder uses as in (271). It also occurs in one-word utterances, as in (272) and (273).

In its pronominal uses, bagemana 'how' can remain in-situ, in the unmarked clausefinal position, or can occur in the marked clause-initial position. In the clause-final position, the interrogative questions the specific manner of an event or activity such as the best way of transporting a pig in (264). In the clause-initial position, the scope of bagemana 'how' is larger. Here it questions an entire proposition, as in (265) and (266), and not only a specific manner, as in (264). The example in (266) also shows that, depending on the context, fronted bagemana 'how' also question reasons.

Pronominal uses of bagemana 'how'
... adu, babini sa harus angkat bagemana? oh.no! pig D.Prox 1sG have.to lift how
'[the pig was very big, I alone could not transport it, I thought,] "oh no!, this pig, how am I going to transport it?"' [080919-003-NP.0008]
(265) bagemana kitong mo dapat uang?
how 1PL want get money
'how are we going to get money?' [080927-006-CvNP.0041]
(266) de tanya juga, bagemana ko bisa kasi ana ini?

3sG ask also how 2sg be.able give child D.Prox
[About bride-price children:] 'she also asked (me), "how can you give this child (of yours away)?"' [081006-026-CvEx.0003]

When used predicatively, bagemana 'how' can remain in-situ, as in (267) and (269), or can be fronted, as in (268) and (270). Similar to the predicative uses of the interrogatives discussed in the previous sections, the clause-final in-situ position is the unmarked one where the interrogative is less prominent in comparison to the clause-initial subject, as shown in (267). When placed in the marked clause-initial position, by contrast, bagemana 'how' accentuates the questioning of the subject's circumstance, as in (268). In addition, predicatively used bagemana 'how' inquires about the well-being of one's interlocutor(s) as in (269) and (270).

Predicative uses of bagemana 'how'
(267) dong tida taw itu, Yesus itu, injil itu bagemana?

3PL neg know d.dist Jesus d.dist Gospel d.dist how
'they don't know, what's-his-name, Jesus, (they don't know) what the Gospel (is like)' (Lit. 'the gospel is how?') [081006-023-CvEx.0005]
(268) ... susa liat setang itu, bagemana rupa setang be.difficult see evil.spirit D.DIST how form evil.spirit
[About evil spirits:] '[but for us who ... already believe in Jesus, we can't,] (for us) it is difficult to see that evil spirit, what the evil spirit's face (is like)' (Lit.
'how (is) the evil spirit's form?') [081006-022-CvEx.0069]
(269) yo, ko Herman bagemana?
yes 2sg Herman how
[Greeting a visitor:] 'yes, how are you, Herman?' [081014-011-CvEx.0072]
(270) eh, bagemana ipar?, sore, dari Jayapura?
hey! how sibling-in-law afternoon from Jayapura
[Greeting a visitor:] 'hey, how (is it going) brother-in-law?, (good) afternoon! (did you just get here) from Jayapura?' [081110-002-Cv.0003]

Another use of bagemana 'how' is that of a placeholder, as shown in (271).

Placeholder uses of bagemana 'how'
(271) ... sa macang, sa macang bagemana, e, rasa sa ... 1sG variety 1sG variety how uh feel 1sG
'[so when I (went) to Biak there, I felt very strange] I kind of, I kind of, what-is-it, uh, felt (that) I ...' [081011-013-Cv.0009]

In one-word utterances, bagemana 'how' questions the circumstances of an event or state, as in (272), or signals lack of understanding as in (273).

One-word utterances with bagemana 'how'
(272) saya tanya saya punya bapa, bagemana?

1sG ask 1sG poss father how
'I asked my father, "how (did this happen)?"' [080921-011-Cv.0012]
(273) bagemana? bagemana?
how how
[During a phone conversation with a bad connection:] 'what?, what?'
[080922-001b-CvPh.0027]

### 5.8.5 kapang 'when'

The interrogative kapang 'when' questions time. Always used pronominally, kapang 'when' usually occurs in clause-initial position, as shown with its first and third occurrences in (274). Here, kapang 'when' questions the temporal setting of the events or states expressed by the entire clause. When the temporal setting is less important, kapang 'when' occurs in clause-final position, as shown with the second kapang 'when' token in (274). Hence, the different positions of kapang 'when' within the clause have functions which parallel those of the time-denoting nouns which the interrogative replaces (see §5.2.5). Alternatively, but rarely, the interrogative occurs between the subject and the predicate, as in (275). According to one consultant, this position of kapang 'when' is acceptable, although the semantics conveyed by this position are still ill understood.

Pronominal uses of kapang 'when'
(274) kapang kita mo antar?, kitong antar kapang? ... kapang kitong antar dia? when 1PL want deliver 1PL deliver when when 1PL bring 3sG
[Discussing when the bride's parents will bring their daughter to the groom's parents:] '[they (the bride's parents) start asking, "...,] when should we bring her? we bring her when?, ... when do we bring her?"' [081110-005-CvPr.0043-0044]
(275) kasiang, sa kapang mandi deng dorang lagi $e$ ?
pity 1sG when bathe with 3pl again eh
[About a sick boy:] 'what a pity, when will I bathe with them (my friends) again, eh?' [081025-009b-Cv.0044]

### 5.8.6 knapa 'why'

The interrogative knapa 'why' questions reasons and motives. Its pronominal uses are illustrated in (276) to (278), its predicative uses in (279), and its uses in one-word utterances in (280).

Typically, knapa 'why' is used pronominally. Most often it occurs in clause-initial position, as in (276). In clauses marked with an initial conjunction, knapa 'why' follows the conjunction as in (277). Alternatively, but rarely, knapa 'why' occurs between the subject and the predicate, as in (278). According to one consultant, this position of knapa 'why' is acceptable; the semantics of this position still need to be investigated, though.

Pronominal uses of knapa 'why'
(276) e, knapa kam kas $\sim$ kas bangung dia?
hey! why 2PL RDP~give wake.up 3sG
'hey, why do you keep waking him up?' [080918-001-CvNP.0039]
(277) tapi knapa ana ini sakit?
but why child D.prox be.sick
'but why is this child sick' [080917-010-CvEx.0133]
(278) ... Matius itu dia knapa maju begitu?

Matius D.dist 3sG why advance like.that
'[as for Matius, I'm very surprised,] Matius there, how come he could advance like that?' [081006-032-Cv.0025]

Interrogative knapa 'what' can also be used predicatively. In this case, knapa 'what' remains in-situ, in the clause-final position, following the subject, as in (279).

Predicative uses of knapa 'why'
(279) bapa ko knapa?
father 2sG why
[After an accident]: 'Sir, what happened?' (Lit. 'you father (are) why?')
[081108-001-JR.0005]
The interrogative can also form one-word utterances in which case it questions an entire proposition, as in (280).

One-word utterances with knapa 'why'
(280) Speaker-2: e, knapa?
hey! why
[About the birth of twins] [Speaker-1: '... as for the girl, they say it's an evil spirit, so they kill (her)']
Speaker-2: ‘hey, why?' [081011-022-Cv.0147-0151]

### 5.8.7 Interrogative uses of mid-range quantifier brapa 'several'

In its interrogative uses, the mid-range quantifier brapa 'several' receives the reading 'how many'. It questions quantities of countable entities and, in combination with the mid-range quantifier banyak 'many', of non-countable entities. Its adnominal uses are shown in (281) to (283), and its predicative uses in (285) and (288).

Most often, brapa 'several, how many' functions as a nominal modifier which takes the position of the numeral or quantifier it replaces. Corresponding to the syntax of adnominally used numerals and quantifiers, it precedes or follows its head nominal, as in (281) to (283). In prehead position of countable referents, brapa 'several, how many' questions the absolute numbers of items denoted by the head nominals, as in (281). In posthead position of countable referents, it questions unique positions within series, as in (282). When following mass nouns, the interrogative questions the nonnumeric amounts of its referents, as in the elicited example in (283). Like other quantifiers, brapa 'several, how many' is unattested in prehead position of mass nouns. If the referent's identity is known from the context, the head nominal can be omitted, as with numerals and other quantifiers. This is illustrated in (284), where the omitted head is rupia 'rupiah'. (Details on numerals and quantifiers are given in §5.9 and §5.10, respectively.)

Adnominal uses of brapa 'how many'
(281) brapa bulang dorang skola ka?
several month 3pl go.to.school or
'(for) how many months will they go to school?' [081025-003-Cv.0207]
(282) jadi mama, mama pulang jam brapa?
so mother mother go.home hour several
'so mama, what time will you ('mother') come home?' (Lit. 'how manyeth
hour') [080924-002-Pr.0002]
(283) ko minta minyak brapa banyak?

2pl request oil several many
'how much oil do you request' [Elicited BR120520.001]
(284) kemaring dapat brapa Ø?
yesterday get several
[Collecting money for a project:] 'how many (rupiah) did (you) get yesterday?' [080925-003-Cv.0090]

The predicative uses of brapa 'several, how many' are shown in (285) to (288). Like siapa 'who' (§5.8.1), apa 'what' (§5.8.2), and mana 'where, which' (§5.8.3), brapa ‘several, how many' can remain in the unmarked clause-final position, as in (285) and 287), or it can be fronted to the marked clause-initial position, as in the elicited example in (286) and 288). Again, the fronting of the interrogative serves to emphasize the questioning, namely of numeric quantities in (286), and of nonnumeric quantities in (288). These
two examples are elicited, though, as interrogatives with fronted brapa 'several, how many' are unattested in the corpus. (See also $\S 12.3$ for details on numeral and quantifier predicate clauses.)

Predicative uses of brapa 'how many'
(285) bapa pu ana~ana brapa?
father poss RDP $\sim$ child several
'how many children do you ('father') have?' (Lit. 'father's children are how many?') [080923-009-Cv.0010]
(286) brapa bapa pu ana~ana?
several father poss RDP~child
'how many children do you ('father') have?' [Elicited MY131112.007]
(287) tong pu uang brapa?

1PL poss money several
'how much money do we have?' (Lit. 'our money is how many?')
[081006-017-Cv.0015]
(288) brapa tong pu uang?
several 1pl poss money
'how much money do we have?' [Elicited MY131112.008]

### 5.8.8 Interrogatives denoting indefinite referents

Cross-linguistically, interrogatives may also function as "general indefinites" by referring "to a general population, of unknown size" (Dixon 2010: 401). In this case, the interrogatives translate with 'whoever', 'whatever', 'wherever', etc.

In Papuan Malay, the indefinite reading is achieved by juxtaposing the focus adverb saja 'just' to the interrogative, as illustrated in (289) to (294). In the corpus, this function of the interrogatives is only attested for siapa 'who', apa 'what', and mana 'where, which', as shown in (289) to (292). The elicited respective examples in (292) to (294) illustrate, however, that bagemana 'how', kapang 'when', and knapa 'why' can also have this function.
(289) kalo ko liat ko pu sodara siapa saja, kalo dia ...
if 2 sg see 2 sg poss sibling who just if 3sG
'when you see your relatives whoever (they are), when he/she ...'
[080919-004-NP.0078]
(290) bicara apa saja, bicara saja
speak what just speak just
'speak (to me about) whatever, just speak (to me)' [080922-001a-CvPh.1174]
(291) di mana saja bapa bisa tinggal, di tempat mana saja at where just father be.able stay at place where just
'I ('father') can live wherever, (I can) live in whatever place'
[080922-001a-CvPh.1116]
(292) sa tra mo taw!, bagemana saja ko harus pigi skola! 1sG NEG want know how just 2sG have.to go school
[Addressing a child who does not want to go to school for various reasons:] 'I don't want to know!, you have to go to school, no matter what!' (Lit. 'however') [Elicited MY131112.001]
(293) kapang saja ko bisa datang
when just 2sG be.able come
'you can come whenever' [Elicited MY131112.002]
(294) knapa saja sa pu kaka de mo pulang Jayapura why just 1sg poss oSb 3sG want go.home Jayapura
'my older sibling wants to return to Jayapura, for whatever reason' (Lit. 'whyever') [Elicited MY131112.002]

### 5.8.9 Summary

In requesting specific types of information, the Papuan Malay interrogatives have a variety of functions within the clause. All of them have pronominal uses. In addition, five them also have predicative uses; the exception is kapang 'when'. Furthermore, three of them also have adnominal and/or placeholder uses.

In their pronominal and adnominal uses, the interrogatives typically remain in-situ. Besides, pronominally used kapang 'when' and knapa 'why' may also occur in a clauseinternal position, between the subject and the predicate. This position, however, is rare and the semantics conveyed still need to be investigated. In their predicative uses, four of the interrogatives can take two positions. That is, they can remain in situ, that is, in the clause-final position, or they can be fronted to the clause-initial position. When speakers want to accentuate the subject, the interrogative remains in-situ in the unmarked clausefinal position. When, by contrast, speakers want to emphasize the fact that they are requesting specific types of information, such as the identity of the subject or its location, they front the interrogative to the marked clause-initial position where it is more salient. The exception is knapa 'why', which is unattested clause-initially.

The mid-range quantifier brapa 'several' also functions as an interrogative, questioning quantities in the sense of 'how many'. It has, however, only adnominal and predicative, and no pronominal uses. In its adnominal uses, it remains in-situ, while in its predicative uses it can take two positions: it can remain in-situ or be fronted to the clause-initial position.

### 5.9 Numerals

As numeric expressions, the Papuan Malay numerals designate countable divisions of their referents. Cardinal numbers are presented in §5.9.1, ordinal numbers in §5.9.2, and distributive numbers in §5.9.3. In §5.9.4 an additional non-enumerating function of the numeral satu 'one' is presented.

### 5.9.1 Cardinal numerals

Papuan Malay has a decimal numeral system. The basic cardinal numerals, along with some examples of how they are combined, are presented in Table 5.36.
As illustrated in Table 5.36, complex numerals are formed by indicating the number of units of the highest power of ten, followed by the number of units of the next lower power down to the simple units or digits of one to ten. The individual components of complex numbers are combined by juxtaposition. The formulas for forming complex numerals are presented in (295) and (296):

Formulas for complex numerals
(295) Complex numerals with tens (pulu)
(DIGIT juta) (Digit ribu) (DIGIt ratus) (DIGIT pulu) digit
(296) Complex numerals with teens (blas).
(Digit juta) (Digit ribu) (Digit ratus) digit blas
Most often, cardinal numerals are used adnominally to enumerate entities. In this function they may precede or follow their head nominal. With a preposed numeral, the noun phrase signals the absolute number of items denoted by the head nominal, as in lima orang 'lima people' in (297). Thereby the composite nature of countable referents is underlined. Posthead numerals, by contrast, express exhaustivity of definite referents such as pace dua ini 'both of these men' in (298), or denote unique positions within a series. (For details on the adnominal uses of numerals see §8.3.1.)

Adnominally used numerals
mungking lima orang mati
maybe five person die
'about five people died' [081025-004-Cv.0033]
(298) pace dua ini dong dua dari pedalamang
man two D.DIST 3pl two from interior
'both these men, the two of them are from the interior' [081109-010-JR.0001]
When the identity of the referent was established earlier or can be deduced from the context, the head nominal can be omitted, as in (299).

Table 5.36: Basic Papuan Malay cardinal numerals ${ }^{a}$

| \# | Numbers | \# | Numbers |
| :---: | :---: | :---: | :---: |
| 1 | satu | 100 | sratus one:hundred |
| 2 | dua | 102 | sratus dua one:hundred two |
| 3 | tiga | 200 | dua ratus two hundred |
| 4 | empat | 234 | dua ratus tiga pulu empat two hundred three tens four |
| 5 | lima | 1,000 | sribu one:thousand |
| 6 | enam | 1,004 | sribu empat one:thousand four |
| 7 | tuju | 2,000 | dua ribu two thousand |
| 8 | dlapang | 2,013 | dua ribu tiga blas two thousand three teens |
| 9 | sembilang | 10,000 | spulu ribu one:tens thousand |
| 10 | spulu one:tens | 32,000 | tiga pulu dua ribu three tens two thousand |
| 11 | seblas one:teens | 980,000 | sembilang ratus dlapang pulu ribu nine hundreds eight tens thousand |
| 12 | dua blas two teens | 1,000,000 | satu juta one million |
| 20 | dua pulu two tens | 1,000,000,000 | satu milyar one billion |
| 21 | dua pulu satu two tens one | zero | kosong be empty |
| 30 | tiga pulu three tens |  |  |

[^120]Numerals with omitted head nominal
(299) Ika biasa angkat itu dlapang pulu sembilang $\varnothing$

Ika be.usual lift D.DIST eight ten nine
'Ika usually lifts, what's-its-name, eighty-nine (kilogram)' [081023-003-Cv.0004]
The examples in (297) and (299) also illustrate that numerals can be used with countable nouns that are animate or inanimate, respectively.

In addition to their adnominal uses, numerals are used predicatively. In (300), for example, the numeral dua blas 'twelve' functions as a predicate that provides information about the numeric quantity of its subject $d e$ ' 3 sG ' ('the moon'). (For details on numeral predicate clauses see $\S 12.3$ ).

Predicatively used numerals
(300) di kalender de dua blas
at calendar 3sG two teens
'in the calendar there are twelve (moons)' (Lit. 'it (the moon) is twelve')
[081109-007-JR.0002]
The basic mathematical functions of the cardinal numerals are presented in Table 5.37

Table 5.37: Mathematical functions

| Item | Sign | Gloss |
| :--- | :--- | :--- |
| tamba <br> add | + | 'plus' |
| kurang <br> lack | - | 'minus' |
| kali | x | 'times' |
| time <br> bagi <br> divide | / | 'divide' |

In natural conversations, however, calculations occur only very rarely. Therefore, the following examples are elicited: the function of addition is presented in (301), subtraction in (302), multiplication in (303), and division in (304).

Addition
(301) dua babi tamba tiga babi sama dengang lima babi two pig add three pig be.same with five pig
'two pigs plus three pigs are five pigs' [Elicited BR120820.001]

Subtraction
(302) lima babi kurang tiga babi sama dengang dua babi five pig lack three pig be.same with two pig 'five pigs minus three pigs are two pigs' [Elicited BR120820.002]

Multiplication
(303) dua babi kali tiga babi sama dengang enam babi two pig time three pig be.same with six pig 'two pigs times three pigs are six pigs' [Elicited BR120820.003]

Division
(304) enam babi bagi tiga babi sama dengang dua babi six pig divide three pig be.same with two pig 'six pigs divided (by) three pigs are two pigs' [Elicited BR120820.004]

### 5.9.2 Ordinal numerals

Papuan Malay employs two strategies to express the notion of ordinal numerals. For kinship terms the concept of ordinal numerals is encoded by a "NNum" noun phrase headed by the noun nomor 'number', as shown in (305) and (306). This noun phrase "nomor Num" gives the ordinal reading "Num-th" such as nomor tiga 'third' in (305) or nomor empat 'fourth' in the elicited example in (306).

Inherited strategy
(305) saya tida bole kasi sama bapa punya sodara ana prempuang yang sa bilang 1sG neg may give to father poss sibling child woman rel 1sg say nomor tiga
number three
[About bride-price children:] 'I shouldn't have given to father's sibling the daughter that, as I said, was (my) third (child)' (Lit. 'number three')
[081006-024-CvEx.0088]
(306) Aleks ini sa pu tete pu ade nomor empat

Aleks D.prox 1sG poss grandfather poss ySb number four
'Aleks here is my grandfather's fourth youngest sibling' (Lit. 'number four') [Elicited BR120821.002]

According to one consultant, the strategy presented in (305) and (306) is the inherited Papuan Malay strategy to express the notion of ordinal numbers. This strategy used to be employed not only for kinship terms but for countable nouns in general. With
the increasing influence of Standard Indonesian, however, Papuan Malay speakers have started employing ordinal numbers of Indonesian origins more frequently. Hence, in the corpus the ordinal numbers for countable nouns other than kinship terms are of Standard Indonesian origins, such as kedua 'second' in (307) or ketiga 'third' in the elicited example in (308). ${ }^{26}$

## Borrowed strategy

(307) distrik kedua di mana
district second at where
'where is the second district?' [081010-001-Cv.0071]
(308) ini bibit nangka yang ketiga yang sa bli
d.prox 1sG poss rel third rel 1sg buy
'this is the third jackfruit seedling that I bought' [Elicited BR120821.003]

### 5.9.3 Distributive numerals

Distributive numerals express that "a property or action" applies "to the individual members of a group, as opposed to the group as a whole" (Crystal 2008: 154). In Papuan Malay, this notion of "one by one" or "two by two" is expressed through reduplication of the numeral. This is illustrated with satu~satu 'one by one' or 'in groups of one each' in (309), and with dua~dua 'two by two' or 'in groups of two' in (310). (See also §4.2.4.)
(309) tong tiga cari jalang satu $\sim$ satu

1PL three search walk RDP~one
'the three of us looked for a path (through the river) one-by-one'
[081013-003-Cv.0003]
(310) tong minum dua~dua glas ato tiga~tiga glas

1PL drink RDP~two glass or RDP~three glass
[About the lack of water during a retreat:] 'we drank two glasses each or three glasses each (per day)' (Lit. 'two by two or three by three')
[081025-009a-Cv.0069]

### 5.9.4 Additional function of satu 'one'

In addition to its enumerating function in postposed position, adnominally used satu 'one' is employed to encode "specific indefiniteness", using Crystal's (2008: 444) terminology. That is, in nnum-nps adnominal satu 'one' denotes specific but nonidentifiable referents, giving the specific indefinite reading $N$ satu 'a certain $N$ '. The specific indefinite referent may be animate human such as ade satu 'a certain younger sibling' in

[^121](311) or inanimate such as kampung satu 'a certain village' in (312). The referent of ojek satu in (312) can be interpreted as the animate referent 'motorbike taxi driver', or as the inanimate referent 'motorbike taxi'.
(311) ada ade satu di situ
exist ySb one at L.MED
'(there) is a certain younger sibling there' [080922-004-Cv.0018]
(312) sa pas jalang kaki sampe di kampung satu Wareng ada ojek

1sG precisely walk foot reach at village one Wareng exist motorbike.taxi satu turung
one descend
'right at the moment when I was walking on foot as far as a certain village (named) Wareng, there was a certain motorbike taxi (driver) that(/who) came down (the road)' [080923-010-CvNP.0001]

### 5.10 Quantifiers

As nonnumeric expressions, the Papuan Malay quantifiers denote definite or indefinite quantities of their referents. The universal and mid-range quantifiers are discussed in §5.10.1, and distributive quantifiers in §5.10.2.

### 5.10.1 Universal and mid-range quantifiers

The Papuan Malay quantifiers are listed in Table 5.38, following Gil's (2013a) distinction of universal and mid-range quantifiers. ${ }^{27}$

Noun phrases with adnominal quantifiers have syntactic properties similar to those with adnominal numerals, as illustrated in (313) to (321). Noun phrases with prehead quantifiers ("OtN-NP") express nonnumeric amounts or quantities of the items indicated by their head nominals. Thereby, the composite nature of countable referents is accentuated. Posthead quantifiers, by contrast, may denote exhaustivity of indefinite referents or signal unknown positions within series or sequences; they modify countable as well as uncountable referents.

The data in (313) to (321) shows that not all quantifiers occur in all positions. Only five quantifiers occur in either pre- or posthead position, namely banyak 'many', brapa 'several', masing-masing 'each', sedikit 'few', and smua 'all'. While banyak 'many', sedikit 'few', and smиa 'all' can modify both count and mass nouns, brapa 'several' and masingmasing 'each' only modify count nouns. The remaining four quantifiers occur in prehead position only, namely segala 'all', sembarang 'any (kind of)', (se)tiap 'every', and stenga 'half'. These quantifiers modify count nouns only.

Five of the quantifiers are used with either animate or inanimate referents, namely banyak 'many', brapa 'several', masing-masing 'each', sedikit 'few', and smua 'all'. By

[^122]
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Table 5.38: Papuan Malay quantifiers

| Universal quantifiers |  |
| :--- | :--- |
| masing-masing | 'all' |
| segala | 'all' |
| sembarang | 'any (kind of)' |
| (se)tiap | 'every' |
| smua | 'all' |
| Mid-range quantifiers |  |
| banyak | 'many' |
| brapa | 'several' |
| sedikit | 'few' |
| stenga | 'half' |

contrast, sembarang 'any (kind of)' is only used with animate referents, and (se)tiap 'every' and stenga 'half' only with inanimate referents. ${ }^{28}$ Universal segala 'all' is only used in combination with the noun macang 'variety'. (The mid-range quantifier brapa 'several' also functions as an interrogative, which questions quantities in the sense of "how many", as discussed in §5.8.7). (For details on the adnominal uses of the quantifiers see §8.3.2.)

Adnominal quantifiers in preposed and postposed position
a. Count n: Prehead position
banyak orang
many person
'many people'
b.
.

Count N: Posthead position
orang banyak
person many 'many people'

Mass n: Posthead position
te banyak
tea many
'lots (of) tea'
Count N : Posthead position
kladi sedikit
taro.root few
'few taro roots'

[^123]b.
(315)
a. Count N: Prehead position smua masala
all problem
'all problems'
b.
(316) Count N : Prehead position brapa orang several person
'several people'
(317) Count n: Prehead position masing-masing trek each truck 'each truck'
(318) Count n: Prehead position segala macang
all variety
'everything, whatever'
(319) Count n: Prehead position sembarang orang any person 'any person, anybody'
(320) Count N: Prehead position setiap lagu
every song
'every song'
(321) Count n: Prehead position stenga jam
half hour
'half an hour'

Mass n: Posthead position
air sedikit
water few
'little water'
Count n: Posthead position pemuda smua youth all 'all (of) the young people'

Mass n: Posthead position
gula smua
sugar all
'all (of the) sugar'
Count n: Posthead position dorang brapa
3pl several
'several (of) them'
Count N : Posthead position
trek masing-masing
truck each
'each truck'

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When the identity of the referent was established earlier or can be deduced from the context, the head nominal can be omitted. Not all quantifiers, however, are used in noun phrases with elided head nominal. Attested are only banyak 'many' as in (322), brapa 'several' as in (323), sedikit 'few' as in (324), and smua 'all' as in (325).

Quantifiers with omitted head nominal
(322) banyak Ø mati di, e, di di pulow pulow, banyak Ø mati di lautang many die at uh at at rDp $\sim$ island many die at ocean
'[there are many Papuans who died,] many (Papuans) died on, uh, on on the islands, many (Papuans) died on the ocean' [081029-002-Cv.0024-0025]
(323) kalo suda ambil satu Ø, kasiang, kitong hanya brapa Ø saja if alreadytake one pity 1pl only several just 'once (they) have taken one (of our children), what a pity, we (have) just a few (children left)' (Lit. 'only several') [081006-024-CvEx.0070]
(324) di sini yo fam Yapo ini ada sedikit Ø at L.prox yes family.name Yapo d.prox exist few
'here, yes, there are (only) few Yapo family (members)' (Lit. 'this Yapo family is few (people)') [080922-010a-CvNF.0274]
(325) ... mobil blakos, $\quad \varnothing$ smua naik di blakang car pickup.truck all climb at backside
'[we took] a pickup truck, all (of the passengers) got onto its loading space' [081006-017-Cv.0001]

In addition to their adnominal uses, quantifies are also used predicatively. In (326), for instance, predicatively used banyak 'many' conveys information about the nonnumeric quantity of its subject picaang 'splinter'. (For details on quantifier predicate clauses see §12.3).

Predicatively used quantifier
... picaang juga banyak
splinter also many
'[at the beach] there are also lots (of) splinters' (Lit. 'the splinters (are) also many’) [080917-006-CvHt.0008]

### 5.10.2 Distributive quantifiers

The notion of "little by little" or "many by many" is expressed through reduplication of the quantifier, similar to the formation of distributive numerals presented in (309) and (310) (§5.9.3; see also §4.2.4). Distributive quantifiers denote events that affect an indefinite number of members of a group or set at different points in time. In (327), for example, uang banyak~banyak denotes 'sets of lots of money', while in (328) sedikit~sedikit designates 'sets of little (food)'.
father send money rdp $\sim$ many
[Phone conversation:] 'father send lots of money at regular intervals' (Lit.
'lots by lots of money') [080922-001a-CvPh.0440]
(328) dong blum isi selaing dong isi sedikit $\sim$ sedikit to?

3pl not.yet fill besides 3pl fill RDp~few right?
[About organizing the food distribution during a retreat:] 'they haven't yet filled (their plates), moreover they'll fill (their plates only) with little (food), right?' (Lit. 'little by little (food)') [081025-009a-Cv.0081]

### 5.11 Prepositions

Papuan Malay has eleven prepositions which serve to denote grammatical and semantic relations between their complements and the predicate. The prepositions have the following defining characteristics:

1. Prepositions introduce prepositional phrases with an overt noun phrase complement which may neither be fronted nor omitted (see Chapter 10).
2. All prepositions introduce peripheral adjuncts within the clause (see Chapter 10).
3. Most of the prepositions also introduce oblique arguments and/or nonverbal predicates (see §11.1.3.2 and §12.4, respectively).
4. Some of the prepositions also introduce prepositional phrases that function as modifiers within noun phrases (see §8.2.7).

The Papuan Malay prepositions are presented in Table 5.39. Three groups of prepositions are distinguished according to the semantic relations between their complements and the predicate: prepositions encoding (1) location in space and time, (2) accompaniment/instruments, goals, and benefaction, and (3) comparisons.

The complement in a prepositional phrase is obligatory. If the semantic relationship between this complement and the predicate can be deduced from the context, two of the prepositions of location may be omitted, locative di 'at, in' and allative ke 'to'. A full discussion of the Papuan Malay prepositions and prepositional phrases is given in Chapter 10.

A considerable number of the prepositions have dual word class membership, two have trial class membership. That is, three prepositions are also used as verbs: buat 'for', sama 'to', and sampe 'until' (see §5.3). Six prepositions are also used as conjunctions: dengang 'with', kaya 'like', sama 'to', sampe 'until', sperti 'similar to', and untuk 'for' (see $\S 5.12$ and Chapter 14). (Variation in word class membership is discussed in $\S 5.14$.)

Table 5.39: Papuan Malay prepositions according to the semantic relations between their complements and the predicate

1. Location in space and time (§10.1)

| Preposition | Gloss | Semantic relations |
| :---: | :---: | :---: |
| di | 'at, in' | static location |
| ke | 'to' | movement toward a referent |
| dari | 'from' | movement from a source location |
| sampe | 'until' | movement toward a nonspatial temporal endpoint |
| 2. Accompaniment/instruments, goals, and benefaction (§10.2) ${ }^{a}$ |  |  |
| Preposition dengang | Gloss 'with' | Semantic relations |
|  |  |  |
|  |  | accompaniment |
| sama <br> untuk | 'to' | goal |
|  | 'for' |  |
|  |  | benefaction |
| buat | 'for' | benefaction |
| 3. Comparison $(\S 10.3)^{b}$ |  |  |
| Preposition sperti | Gloss 'similar to' | Semantic relations |
|  |  | similarity |
| kaya | 'like' |  |
|  |  | similarity |
| sebagey | 'as' | equatability |

[^124]
### 5.12 Conjunctions

Papuan Malay has 23 conjunctions which serve to connect words, phrases, or clauses. They have the following defining characteristics:

1. Conjunctions combine different constituents, namely clauses, noun phrases, prepositional phrases, and verbs; they do not head phrases.
2. Conjunctions occur at the periphery of the constituents they mark.
3. Conjunctions form intonation units with the constituents they mark, although they do not belong to them semantically.

The Papuan Malay conjunctions can be divided into two major groups, namely those combining same-type constituents, such as clauses with clauses, and those linking dif-ferent-type constituents, such as verbs with clauses.

Conjunctions combining clauses are traditionally divided into coordinating and subordinating ones (Schachter \& Shopen 2007: 45). With respect to clause linking in Papuan Malay, however, there is no formal marking of this distinction. That is, in terms of their morphosyntax and word order, clauses marked with a conjunction are not distinct from those which do not have a conjunction. (For details see Chapter 14.)

Table 5.40 gives an overview of the Papuan Malay conjunctions attested in the corpus. They are grouped in terms of the types of constituents they combine and the semantic relations they signal. Two of the conjunctions are listed twice as they mark more than one type of semantic relation, namely baru 'and then, after all', and sampe 'until'.

A substantial number of the conjunctions have dual word class membership, two have trial class membership. More specifically, seven of them are also used as verbs, namely biar 'although', 'buat 'for', habis 'after all', jadi 'so, since', sama 'to', sampe 'until', and trus 'next' (see §5.3). Six conjunctions are also used as prepositions, namely dengang 'with', kaya 'like', sama 'to', sampe 'until', sperti 'similar to', and untuk 'for' (see §5.11 and Chapter 10). Besides, alternative-marking $k a$ 'or' is also used to mark interrogative clauses (see §13.2.3). (For details on variation in word class membership see §5.14.)

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Table 5.40: Papuan Malay conjunctions

| I. Conjunctions combining same-type constituents (§14.2) |  |  |
| :---: | :---: | :---: |
| 1. Conjunctions marking addition (§14.2.1) |  |  |
| Conjunction | Gloss | Semantic relations |
| dengang | 'with' | Addition |
| dang | 'and' | Addition |
| sama | 'to' | Addition |
| 2. Conjunctions marking alternative (§14.2.2) |  |  |
| Conjunction | Gloss | Semantic relations |
| ato | 'or' | Alternative |
| ka | 'or' | Alternative |
| 3. Conjunctions marking time and/or condition (§14.2.3) |  |  |
| Conjunction | Gloss | Semantic relations |
| trus | 'next' | Sequence (neutral) |
| baru | 'and then' | Sequence (contrastive) |
| sampe | 'until' | Anteriority |
| seblum | 'before' | Anteriority |
| kalo | 'if, when' | Posteriority / Condition |
| 4. Conjunctions marking consequence (§14.2.4) |  |  |
| Conjunction | Gloss | Semantic relations |
| jadi | 'so, since' | Result / Cause |
| supaya | 'so that' | Purpose |
| untuk | 'for' | Purpose |
| sampe | 'with the result that' | Result |
| karna | 'because' | Cause (neutral) |
| gara-gara | 'because' | Cause (emotive) |
| 5. Conjunctions marking contrast (§14.2.5) |  |  |
| Conjunction | Gloss | Semantic relations |
| tapi | 'but' | Contrast |
| habis | 'after all' | Contrast |
| baru | 'after all' | Contrast |
| padahal | 'but actually' | Contrast |
| biar | 'although' | Concession |
| 6. Conjunctions marking similarity (§14.2.6) |  |  |
| Conjunction | Gloss | Semantic relations |
| sperti | 'similar to' | Similarity (partial) |
| kaya | 'like' | Similarity (overall) |
| II. Conjunctions combining different-type constituents (§14.3) |  |  |
| Conjunction | Gloss | Syntactic function |
| bahwa | 'that' | Complementizer |
| yang | 'REL' | Relativizer |

### 5.13 Tags, placeholders and hesitation markers, interjections, and onomatopoeia

### 5.13.1 Tags

Papuan Malay has three tags, to 'right?', e 'eh?' and kang 'you know?', as shown in (329) to (335). They are short questions that are "tagged" onto the end of an utterance and have a rising intonation. Their main function is to confirm what is being said.

With to 'right?', speakers ask for agreement or disagreement, as in (329) and (330), ${ }^{29}$ while with kang 'you know?' speakers assume their interlocutors to agree with their statements, as in (330) and (331). Speakers use to 'right?' at the end of an utterance. When employing kang 'you know?', by contrast, they usually continue their utterance and add further information related to the issue under discussion. In this context, kang 'you know?' quite often co-occurs with to 'right?', as in (330).

Tags: to 'right?' and kang 'you know'
(329) sebentar pasti hujang karna awang hitam to?
in.a.moment definitely rain because cloud be.black right?
'in a bit it will certainly rain because of the black clouds, right?'
[080919-005-Cv.0016]
(330) de suda tidor, kang?, dia hosa to?

3sG already sleep you.know 3sG pant right?
'she was already sleeping, you know?, she has breathing difficulties, right?'
[080916-001-CvNP.0005]
(331) dong bilang soa-soa kang?, kaya buaya begitu

3pl say monitor.lizard you.know like crocodile like.that
'they call (it) a monitor lizard, you know?, (it's) like a crocodile'
[080922-009-CvNP.0053]
Like to 'right?', $e$ 'eh?' occurs at the end of an utterance, and like kang 'you know', it assumes agreement. Its uses seem to be more restricted, though, than those of the two other tags. Speakers tend to employ $e$ 'eh?' as a marker of assurance, that is, when they want to give assurance, as in (332), or ask for assurance as in (333) and (334). As an extension of this assurance-marking function, $e$ 'eh?' is also used to mark imperatives, as in (335) (see also §13.3.1).

Tags: $e$ 'eh?'
(332) saya cabut ko dari skola itu e? 1sG pull.out 2sG from school D.DIST eh
'T'll take you out of school there, eh?' [080922-001a-CvPh.0199]

[^125](333) bapa datang $\boldsymbol{e}$ ? bapa datang $\boldsymbol{e}$ ? father come eh father come eh 'you ('father') will come (here), eh?, you ('father') will come (here), eh?' [080922-001a-CvPh.1072]
(334) ade bongso jadi ko sayang dia skali e?
ySb youngest.offspring so 2 sG love 3 SG very eh
'(your) youngest sibling, so you love her very much, eh?' [080922-001a-CvPh.0302]
(335) hari minggu ko ke ruma $\boldsymbol{e}$ ? ke Siduas punya ruma $\boldsymbol{e}$ ?
day Sunday 2sg to house eh to Siduas poss house eh
'on Sunday you go to the house, eh?!, to Siduas' house, eh?!'
[080922-001a-CvPh.0341]

### 5.13.2 Placeholders and hesitation markers

Papuan Malay has five placeholders, namely the three interrogatives siapa 'who', apa 'what' and bagemana 'how', and the two demonstratives ini 'd.prox' and itu 'd.prox'. Their main function is to substitute for lexical items that the speaker has temporarily forgotten. The five placeholders are discussed in the respective sections on interrogatives (§5.8) and demonstratives (§7.1.2.6).

Hesitation markers, by contrast, have no lexical meaning. As vocal indicators they mainly serve to fill pauses. The main Papuan Malay hesitation marker is $e(m)$ 'uh', as in (336); alternative realizations are $u(m)$ 'uh' as in (337), or $a(m), m m m$, or $n n n$ 'uh'.
(336) kalo sa su pake, em, kaca-mata tu mungking...
if 1sG already use uh glasses D.DIST maybe
'if I'd been wearing, uh, those (sun)glasses, maybe ...' [080919-005-Cv.0007]
(337) pace Oktofernus de, u, masi urus dorang sana
man Oktofernus 3sG uh still arrange 3pl L.DIST
'Mr. Oktofernus, uh, was still taking care of them over there' [081025-008-Cv.0121]

### 5.13.3 Interjections

Interjections typically "constitute utterances by themselves and express a speaker's current mental state or reaction toward an element in the linguistic or extralinguistic context" (Ameka 2006: 743). Hence, "interjections are context-bound linguistic signs" (2006: 743). That is, their interpretation depends on the specific context in which they are uttered. This also applies to Papuan Malay, as illustrated with the interjection adu 'oh no!, ouch!'. Depending on the context, the interjection expresses disappointed surprise, 'oh no!', or pain, 'ouch!'.

Cross-linguistically, two major types of interjections are distinguished, namely primary and secondary interjections (Ameka 2006). Primary interjections are defined as
"little words or 'non-words', which [...] do not normally enter into construction with other word classes" (2006: 744). Secondary interjections, by contrast, are defined as "words that have an independent semantic value but which can be used conventionally as nonelliptical utterances by themselves to express a mental attitude or state" (2006: 744).

Papuan Malay primary interjections are presented in Table 5.41 and in the examples in (338) to (340), and secondary interjections in Table 5.42 and in the examples in (341) to (343).

The primary interjections, listed in Table 5.41 , include words used for expressing emotions such as $b a$ 'humph!', getting attention such as $e$ 'hey', or addressing animals, such as ceh 'shoo'.

Table 5.41: Papuan Malay primary interjections

| Item | Gloss | Semantics: Interjection used ... |
| :---: | :---: | :---: |
| $a$ | 'ah!, oh boy!, ugh!' | to express emotions ranging from contentment to acute discomfort or annoyance |
| $a d u$ | 'oh no!, ouch!' | to express disappointed surprise or pain |
| ale | 'wow!' | to express surprise or to attract attention |
| ay | 'aah!, aw!' | to express surprise or affection |
| $b a$ | 'humph!' | to express disgust or denigration |
| ceh | 'shoo!' | to chase something away |
| $e$ | 'hey!, ha!, eh?' | to express emphasis or astonishment or to attract attention |
| ha | 'huh?' | to express surprise, disbelief, or confusion |
| hm | 'pfft' | to express sarcasm or disagreement |
| hura | 'hooray!' | to express joy, approval, or encouragement |
| $i$ | 'ugh!, oh no!, oh!' | to express disgust, irritation or disappointed surprise |
| isss | 'stop!' | to stop someone/-thing or to attract attention |
| $m p / f f$ | 'ugh!' | to express displeasure, or incredulity |
| na | 'well' | to introduce a comment or statement, or to resume a conversation |
| $o$ | 'oh!' | to express surprise |
| oke | 'OK' | to express agreement |
| prrrt | 'pfft!' | to express sarcasm or disagreement |
| sio | 'alas!' | to express sorrow or pity |
| sss | 'pfft' | to express sarcasm or disagreement |
| sssyyyt | 'shhh!' | to silence someone |
| tsk-tsk | 'tsk-tsk' | to express disapproval |
| uy | 'o boy!' | to express surprise or to attract attention |
| wa | 'wow!' | to express surprise or exasperation |

Examples of primary interjections in natural discourse are presented in (338) to (340).
Primary interjections
(338) $\boldsymbol{a}$, saya bisa pulang karna sa su dapat babi ah! 1sG be.able go.home because 1sG already get pig
'ah!, I can return home because I already got the pig' [080919-004-NP.0024]
(339) mpfff, Yonece de liat~liat sa smes di net to? ugh! Yonece 3sG Rdp~see 1sg smash at (sport.)net right?
[About a volleyball game:] 'ugh!, Yonece saw (that) I was going to smash, right?' [081109-001-Cv.0160]
(340) o, dong mara e?
oh! 3pl feel.angry(.about) eh
'oh!, they'll be angry, eh?' [080917-008-NP.0054]
Examples of the Papuan Malay secondary interjections, listed in Table 5.42, include words for expressing emotions such as sunggu 'good grief', as well as routine expressions for thanking, greetings, or leave-taking, such as da 'goodbye'. Some of them also have independent uses in Papuan Malay, such as bahaya 'be dangerous' (see the column 'Basic meaning' in Table 5.42). Others, by contrast, are only used as interjections, such as ayo 'come on!'. Remarkably, many secondary interjections are loanwords, such as bahaya 'great!, be dangerous' (Sanskrit), mama 'oh boy, mother' (Dutch), or sip 'that's fine' (English).

Examples of secondary interjections are presented in (341) to (343).
Secondary interjections
(341) damay, sa bulang oktober sa pu alpa cuma dua saja peace 1sG month October 1sG poss be.absent just two just 'my goodness!, in October I, I had just only two absences' [081023-004-Cv.0014]
(342) sa bilang, o sunggu, ini kalo Hendro ini de su angkat deng 1sG say oh! be.true d.prox if Hendro D.prox 3sG already lift with piring plate
'I said, 'oh good grief!, what's-his-name, as for this Hendro, he would already have taken (all the cake) with the plate' [081011-005-Cv.0028]
(343) kasi nasi suda, ayo
give cooked.rice already come.on!
'give me rice!, come on!' [080922-001a-CvPh.1208]

Table 5.42: Papuan Malay secondary interjections

| Item | Gloss | Basic meaning | Source language |
| :---: | :---: | :---: | :---: |
| bahaya | 'great!' | 'be dangerous' | Sanskrit |
| damay | 'my goodness!' | 'peace' |  |
| mama | 'oh boy!' | 'mother' | Dutch |
| sialang | 'damn it!' | 'bad luck' |  |
| sunggu | 'good grief!' | 'be true' |  |
| tobat | 'go to hell!' | 'repent' | Arabic |
| tolong | 'please!' | 'help!' |  |
| amin | 'amen!' |  | Arabic |
| ayo | 'come on!' |  |  |
| da | 'goodbye!' |  | Dutch |
| enta | 'who knows!' |  |  |
| haleluya | 'hallelujah!' |  | Hebrew via Dutch |
| halow | 'hello!' |  | Dutch |
| shalom | 'peace be with you!' |  | Hebrew via Dutch |
| sori | 'excuse me!' |  | English |
| sip | 'that's fine!' |  | English |
| trima-kasi | 'thank you!' |  |  |

### 5.13.4 Onomatopoeia

Papuan Malay has a large set of onomatopoeic words which serve to imitate the natural sounds associated with their referents. Quite a few of the onomatopoeic words presented in Table 5.43 emulate the sound of a sudden percussion, such as cekkk 'wham'. Other words are fuuu 'fooo' which imitates the sound of blowing air, or piiip 'beep' which emulates the blowing of a horn.

Examples of onomatopoeic words in context are presented in (344) to (346).
(344) sa ayung dia tiga kali, pak pak pak 1sG hit 3sG three time bang! bang! bang!
'I hit him three times, bang!, bang!, bang!' [080923-010-CvNP.0018]
(345) ... kitong liat, uy cahaya syyyt de datang sperti lampu itu we see boy! glow swish 3sG come similar.to lamp D.DIST petromaks itu
kerosene.lantern D.DIST
'[when the evil spirit comes from afar,] we see, oh boy!, a glow, swish!, he/she comes (with a noise) like that, what's-its-name, kerosene pressure lantern' [081006-022-CvEx.0153]

Table 5.43: Papuan Malay onomatopoeic words

| Item | $\quad$ Semantics |
| :--- | :--- |
| cekkk | Sound of a heavy blow |
| dederet | Sound of a drum |
| fuuu |  |
| kkkhkh | Sound of blowing air |
| mmmuat | Sound of an object falling or collapsing with a dull or |
| heavy sound |  |
| ngying~ngyaung | Sound of kissing |
| pak, tak, tang, wreeek | Sound of a cockatoo calling |
|  | Sound of banging, of a punch to the jaw, or of colliding |
| piiip | bodies, slamming objects |
| syyyt | Sound of blowing a horn |
| srrrt | Sound of an object moving through air or water |
| ssst | Sound of pulling, tearing or cutting |
| tak | Sound of vomiting |
| $t p f$ | Sound of knocking |
| trrrt | Sound of spitting out a mouthful of liquid |
| wruaw | Sound of running feet |
| wuuu | Sound of heavy breathing or suffocation |

(346) de pegang di batang leher baru de ramas tete, tete 3sG hold at stick neck and.then 3sG press grandfather grandfather

## wruaw wruaw

wheeze! wheeze!
'he held (grandfather) by (his) throat, and then he pressed grandfather('s throat and) grandfather (went) "wheeze!, wheeze!"' [081015-001-Cv.0012/0014]

Across languages, onomatopoeic words belong to the larger class of ideophones, that "report an extralinguistic event like a sound, a smell, a taste, a visual impression, a movement, or a psychic emotion" (Kilian-Hatz 2006: 510). As for the Papuan Malay corpus, however, extralinguistic events other than the onomatopoeic sound imitations presented in Table 5.43 have not been identified.

### 5.14 Variation in word class membership

Papuan Malay has variation in word class membership between (1) verbs and nouns, (2) verbs and adverbs, (3) verbs and conjunctions, (4) verbs and prepositions, and (5) prepositions and conjunctions.

Cross-linguistically, the shift of word categories occurs quite commonly. Generally speaking, it "is a unidirectional process; that is, it leads from less grammatical to more grammatical forms and constructions" (Heine \& Kuteva 2002: 4). Or in other words, "the shift from major categories to minor ones ( $\mathrm{N}>$ Preposition/Conjunction, V > Auxiliary/Preposition) is much more frequent crosslinguistically than its opposite", as Wischer (2006: 133) points out.

Therefore, in discussing variation in Papuan Malay word class membership between verbs and adverbs, verbs and prepositions, and verbs and conjunctions, the verbs are taken as the source forms from which the respective adverbs, prepositions, and conjunctions derived. As for variation between prepositions and conjunctions, Heine \& Kuteva (2002: 4) note that cross-linguistically "[p]repositions often develop into conjunctions". Very likely, this observation also applies to the variation between prepositions and conjunctions in Papuan Malay. The dual membership of lexemes as verbs and nouns, however, is less clear-cut, as discussed in Paragraph 1 below.

1. Verbs and nouns (see $\S 5.2$ and $\S 5.3$ )

A number of lexemes have dual membership as verbs and nouns. So far, 41 such lexemes have been identified, some of which are listed in Table 5.44, together with the token frequencies of their uses as verbs and nouns.

The identified lexemes fall into two groups. First, verbs and their associated instrument, result, patient, agent, or location nouns. The corpus contains 32 such verb-noun pairs. In most cases, the verb is bivalent ( 29 verbs), while only few are monovalent ( 3 verbs). Table 5.44 presents eight of these verb-noun pairs. The first four lexemes are most often used as verbs, that is, gambar 'draw', jalang 'walk', jubi 'bow shoot', and skola 'go to school'. The remaining four lexemes are most often used as nouns, that is, dayung 'paddle', musu 'enemy', pana 'arrow', and senter 'flashlight'.
The second group of lexemes with dual membership are affixed items: two items suffixed with-ang and four prefixed with $P E(N)-$. Structurally, the six lexemes are nouns. In their actual uses, however, four of them are (more) often used as verbs (for a detailed discussion on affixation see §3.1).
2. Verbs and adverbs (see $\S 5.3$ and $\S 5.4$ )

Some verbs also have adverbial function. Five such lexemes have been identified so far, as listed in Table 5.45. All but one of them are more often used as adverbs than as verbs. The exception is bivalent coba 'try' which is more often used as a verb and less often as an evaluative modal adverb (§5.4.4).
In addition, the corpus includes six adverbs which are reduplicated verbs: baru baru 'just now', kira~kira 'probably', lama~lama 'gradually', muda~mudaang 'hopefully', and taw taw 'suddenly'. Their respective base words are baru 'be new', kira 'think', lama 'be long (of duration), muda 'be easy', and taw 'know'

Table 5.44: Variation in word class membership between nouns and verbs

| Item | VErb |  | Noun |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gloss |  | \# | >/< | Gloss |  | \# |
| gambar | 'draw' | V.BI | 21 | > | 'drawing' | RES | 2 |
| jalang | 'walk' | V.MO | 398 | > | 'road' | LOC | 71 |
| jubi | 'bow shoot' | v.bi | 20 | > | 'bow and arrow' | ins | 14 |
| skola | 'go to school' | v.mo | 148 | > | 'school' | Loc | 94 |
| dayung | 'paddle' | V.BI | 3 | < | 'paddle' | INS | 8 |
| musu | 'hate' | V.BI | 3 | < | 'enemy' | PAT | 7 |
| pana | 'bow shoot' | v.bi | 13 | < | 'arrow' | Ins | 39 |
| senter | 'light with flashlight' | v.bi | 5 | < | 'flashlight' | INS | 11 |
| jualang | 'sell' | v.bI | 7 | > | 'merchandise' | PAT | 1 |
| latiang | 'practice' | V.BI | 12 | > | 'practice' | PAT | 5 |
| pamalas | 'be very listless' | v.mo | 12 | > | 'lazy person' | AGT | 2 |
| panakut | 'be very fearful (of)' | v.bi | 2 | > | 'coward' | AGT | 1 |
| pandiam | 'be very quiet' ${ }^{\text {a }}$ | v.mo | (1) | OR | 'taciturn person' | AGT | (1) |
| pencuri | 'steal (EMPн)' | v.bi | 5 | < | 'thief' | AGT | 7 |

[^126]Table 5.45: Variation in word class membership between verbs and adverbs

|  | Source form: verb |  |  | > | Derived form: ADV |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | Gloss |  | \# |  | Gloss | \# |
| baru | 'be new' | v.mo | 24 | < | 'recently' | 66 |
| dulu | 'be prior' | V.MO | 63 | < | 'first, in the past' | 286 |
| pas | 'be exact' | v.mo | 26 | < | 'precisely' | 110 |
| skarang | 'be current' | v.mo | 21 | < | 'now' | 282 |
| coba | 'try' | v.bi | 36 | > | if only' | 14 |

3. Verbs and conjunctions (see §5.3 and §5.12)

Some verbs are zero-derived into the conjunction class, namely four monovalent stative and three bivalent verbs, as listed in Table 5.46. Again, the lexemes differ in terms of the relative token frequencies of the source forms and the derived conjunctional forms. For the first three items, the verbal source forms have higher token frequencies, whereas the last four lexemes are predominantly used as conjunctions.

Table 5.46: Variation in word class membership between verbs and conjunctions

| Source form: verb |  |  | > Derived form: CNJ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | Gloss |  | \# |  | Gloss | \# |
| biar | 'let' | v.bI | 67 | > | 'although' | 39 |
| habis | 'be used up' | v.mo | 48 | > | 'after all' | 21 |
| sama | 'be same' | v.mo | 60 | > | 'to' | 8 |
| baru | 'be new' | v.mo | 24 | < | 'and then, after all' | 986 |
| jadi | 'become' | v.bI | 173 | < | 'so, since' | 1,213 |
| sampe | 'reach' | v.bI | 251 | < | 'until' | 257 |
| trus | 'be continuous' | v.mo | 70 | < | 'next' | 396 |

4. Verbs and prepositions (see $\S 5.3$ and $\S 5.11)$

One preposition is derived from a monovalent verb and two from bivalent verbs:

- The goal preposition sama 'to' is derived from monovalent sama 'be same'.
- The benefactive preposition buat 'for' is derived from bivalent buat 'make'.
- The temporal preposition sampe 'until' is derived from bivalent sampe 'reach'.

5. Prepositions and conjunctions (see $\S 5.11$ and $\S 5.12$ )

Six Papuan Malay prepositions are also used as conjunctions:

- Temporal sampe 'until' also functions as a conjunction that introduces temporal or result clauses.
- Comitative dengang 'with' and goal preposition sama 'to' also function as conjunctions that combine noun phrases; occasionally, dengang 'with' also links verb phrases.
- Benefactive untuk 'for' also functions as a conjunction that introduces purpose clauses.
- Similative sperti 'similar to' and kaya 'like' also function as conjunctions that introduce simulative clauses.

Papuan Malay displays variation in word class membership, most of which involves verbs. Overall, the observed variation corresponds to similar processes observed crosslinguistically, in that it involves a shift of word categories from major ones to minor ones (see Heine \& Kuteva 2002: 4; Wischer 2006: 133). The exception is the dual membership of lexemes as verbs and nouns, which is typical, though, for Malay varieties and other western Austronesian languages.

### 5.15 Summary

In Papuan Malay, the main criteria for defining distinct word classes are their syntactic properties, due to the lack of inflectional morphology and the rather limited productivity of derivational patterns. Three open and a number of closed lexical classes can be distinguished. The open word classes are nouns, verbs, and adverbs. The major closed word classes are personal pronouns, interrogatives, demonstratives, locatives, numerals, quantifiers, prepositions, and conjunctions. At the same time, however, Papuan Malay has membership overlap between a number of categories, most of which involve verbs. This includes overlap between verbs and nouns which is typical of Malay varieties and other western Austronesian languages. However, nouns, verbs, and adverbs have distinct syntactic properties which warrant their analysis as distinct word classes.

Papuan Malay nouns and verbs are distinct in terms of the following syntactic properties: (a) nouns canonically function as heads in noun phrases and as arguments in verbal clauses; (b) verbs canonically function as predicates and have valency; (c) nouns are negated with bukang 'NEG', whereas verbs are negated with tida/tra 'NEG'; (d) only nouns can be quantified with numerals and quantifiers; and (e) only verbs occur as predicates in comparative constructions, and in reciprocal constructions. Based on their syntactic properties, nouns are divided into four groups, namely common, proper, location, and direction nouns. Verbs fall into four groups, namely trivalent, bivalent, monovalent dynamic and monovalent stative verbs which have partially distinct and partially overlapping properties. The four groups of verbs can be distinguished in terms of two main criteria which also account for most of their other properties, namely their valency and their function which is mainly predicative.

Adverbs are distinct from nouns and verbs in that adverbs, unlike nouns and verbs, (a) cannot be used predicatively; and (b) cannot modify nouns. Overall, adverbs are most closely related to verbs; some adverbs, however, are more closely linked with nouns than with verbs. Within the clause, adverbs can take different positions. The semantic effects of these positions are yet to be investigated, however.

Personal pronouns, interrogatives, demonstratives, and locatives are distinct from nouns in that (a) all four of them can modify nouns, while the opposite does not hold; and (b) in adnominal possessive constructions, personal pronouns and interrogatives only take the possessor slot while nouns also take the possessum slot. Personal pronouns, interrogatives, and demonstratives are distinct in that (a) personal pronouns express number and person, while interrogatives and demonstratives do not; (b) personal pronouns indicate definiteness, while demonstratives signal specificity; (c) only interrogatives can express indefinite referents; and (d) only demonstratives can be stacked. Demonstratives are distinct from locatives, in that demonstratives (a) are used as independent nominals in unembedded noun phrases while locatives always occur in prepositional phrases; (b) can take the possessor or the possessum slot in adnominal possessive constructions while locatives do no occur in these constructions; and (c) can be stacked.

## 6 Personal pronouns

This chapter describes the personal pronoun system in Papuan Malay. Generally speaking, personal pronouns are defined as "inherent referential and definite expressions"; their main function is to signal definiteness and person-number values, whereby they allow the unambiguous identification of their referents (Helmbrecht 2004: 26; see also Abbot 2006).

This main function also applies to the Papuan Malay personal pronouns, (henceforth "pronouns"). In addition to expressing person and number values, they also mark their referents' definiteness; the pronouns do not mark case, clusivity, gender, or politeness.

The pronouns have the following distributional properties:

1. Substitution for noun phrases (pronominal uses) (§6.1).
2. Modification with demonstratives, locatives, numerals, quantifiers, and/or relative clauses (pronominal uses) (§6.1).
3. Co-occurrence with noun phrases (adnominal uses): $\mathrm{N} / \mathrm{NP}$ PRO (§6.2).

The Papuan Malay pronoun system, presented in Table 6.1, distinguishes singular and plural numbers and three persons by the person and number values in what Daniel (2013: 3) calls "an unanalyzable person-number stem". Hence, in terms of Daniel's (2013:3) typology of personal pronouns, Papuan Malay is a "Type 4" language. The pronoun system does not mark case, clusivity, gender, or politeness. Also, the third person pronouns are unrelated to the demonstratives ini 'd.prox' and itu 'd.DIST'.'

Each pronoun has at least one long and one short form, except for second person singular $k o$ ' 2 sG '. The token frequencies and percentages given in Table 6.1 indicate clear preferences for most of the pronoun forms (the percentages for the most frequent forms are underlined). As for the first person singular and the third person singular pronouns, the short forms are used much more often than the respective long forms: for the first person singular there is a total of 3,465 short form tokens ( $77 \%$ ) versus a total of 1,014 long form tokens ( $23 \%$ ), and for the third person singular there is a total of 3,347 short form tokens $(72 \%)$ versus a total of 1,285 long form tokens $(28 \%)$. By contrast, for the first and second person plural pronouns, the long forms are used more frequently than the corresponding short forms, that is, for the first person plural there is a total of 1,107 long form tokens ( $63 \%$ ) versus a total of 639 short form tokens ( $37 \%$ ), and for the second

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## 6 Personal pronouns

Table 6.1: Pronoun system with long and short forms and token frequencies

|  | Long pronoun forms |  | Short pronoun forms |  |  | Total |  |
| :--- | :--- | ---: | :--- | :--- | ---: | ---: | ---: |
|  |  | $\#$ | $\%$ |  | $\#$ | $\%$ | $\#$ |
| 1SG | saya | 1,014 | $23 \%$ | sa | 3,465 | $\underline{77 \%}$ | 4,479 |
| 2SG | -- | --- | --- | ko | 1,338 | $100 \%$ | 1,338 |
| 3SG | dia | 1,285 | $28 \%$ | de | 3,347 | $\underline{72 \%}$ | 4,632 |
| 1PL | kitong | 604 | $50 \%$ | tong | 594 | $50 \%$ | 1,198 |
|  | kita | 391 | $\underline{95 \%}$ | ta | 11 | $5 \%$ | 402 |
|  | kitorang | 112 | $\underline{77 \%}$ | torang | 34 | $23 \%$ | 146 |
| 2PL | kamu | 337 | $\underline{53 \%}$ | kam | 300 | $47 \%$ | 637 |
| 3PL | dorang | 464 | $\underline{23 \%}$ | dong | 1,526 | $\underline{77 \%}$ | 1,990 |

person plural there is a total of 337 long form tokens ( $53 \%$ ) versus a total of 300 short form tokens ( $47 \%$ ). ${ }^{2}$ These distributional distinctions are not grammatically determined. Instead they represent speaker preferences which are discussed in more detail in the following two sections. ${ }^{3}$

Papuan Malay pronouns often co-occur with nouns or noun phrases, as shown in (1). This chapter argues that "PRO NP" constructions in which a pronoun precedes a noun or noun phrase, as in ko [sungay ko] 'you, [you river]', constitute appositional constructions, with the pronouns having pronominal function. "NP PRO" constructions in which the pronoun follows a noun or noun phrase, as in sungay ko 'you river', by contrast, are analyzed as noun phrases with adnominally used pronouns in post-head position. To demonstrate this distinction, appositional PRO NP constructions and adnominal NP PRO constructions are discussed in some detail in $\S 6.1 .6$ and $\S 6.2$, respectively.
(1) ... tida perna dia liat, ko sungay ko bisa terbuka begini NEG once 3sG see 2sG river 2sg be.able be.opened like.this
[Seeing the ocean for the first time:] '[never before has he seen, what, a river that is so very big like this ocean,] never before has he seen you, you river can be wide like this?' [080922-010a-CvNF.0212-0213] ${ }^{4}$

The following sections discuss the pronouns in more detail. Their pronominal uses are examined in §6.1, and their adnominal uses in §6.2. The main points of this chapter are summarized in §6.3.

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### 6.1 Pronominal uses

This section explores three major aspects with respect to the pronominal uses of the pronouns: (1) the distribution of the long and short pronoun forms within the clause (§6.1.1), (2) their modification (§6.1.2), and (3) their uses in different constructions, namely adnominal possessive constructions (§6.1.3), inclusory conjunction constructions (§6.1.4), summary conjunction constructions (§6.1.5), and appositional constructions (§6.1.6).

### 6.1.1 Distribution of personal pronouns within the clause

Regarding the distribution of the long and short pronoun forms within the clause, two topics are examined in more detail: (1) the syntactic slots that the pronouns take (§6.1.1.1), and (2) their positions within the clause (§6.1.1.2).

### 6.1.1.1 Personal pronouns in different syntactic slots

Both the long and the short pronoun forms occur in all syntactic positions within the clause, as illustrated in Table 6.2 to Table 6.6. ${ }^{5}$ In the corpus, all long pronoun forms can take the subject, direct object, and oblique object slots. Only one form is unattested: in double-object constructions kita '1pl' is unattested in a direct object slot. As for the short pronoun forms, all of them are attested for the subject slot. For the direct object slot, however, speakers use the long rather than the short forms much more often. This distinction in distribution is even more pronounced for the oblique object slot. As a result, not all short pronoun forms are attested in these positions. These preferences interrelate with the distributional patterns of the pronouns within the clause, as discussed in detail in §6.1.1.2.

Table 6.2 shows the uses of the pronouns in the subject slot.
Table 6.3 and Table 6.4 show the uses of the pronouns in the direct object slot in monotransitive constructions. In this position only short ta '1PL' is unattested, due to the overall low token frequencies for kita/ta '1pl' (see Table 6.1; see also Footnote 2, p. 326 ; for details on monotransitive clauses see §11.1.2).

Table 6.5 illustrates the uses of the pronouns in a direct object slot in double-object constructions. All long forms but one are attested; the exception is kita '1pl'. As for the short forms, only three are attested, namely sa '1sG', tong '1pl', and dong '3pl'. (For details on double-object constructions see §11.1.3.1.)

Table 6.6 and Table 6.7 show the uses of the pronouns in the oblique object slot. In this position, only three short forms are unattested, namely sa '1sG', kam '2PL', dong '3pl'.

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Table 6.2: Pronouns in the subject slot ${ }^{a}$

| Example | Literal translation | Free translation |
| :---: | :---: | :---: |
| Long pronoun forms |  |  |
| saya tidor | 1sg sleep | 'I slept' |
| ko ana mama | 2SG child mother | 'you're mama's child' |
| dia tertawa | 3sg laugh | 'he laughed' |
| kitorang bunu dorang | 1PL kill 3PL | 'we killed them' |
| kitong kembali dari sana | 1pl return from L.DIST | 'we returned from there' |
| kita jalang | 1PL walk | 'we walked' |
| kamu bisa blajar | 2pl be.able study | 'you can study' |
| dorang mara | 3pl feel.angry(.about) | 'they felt angry' |
| Short pronoun forms |  |  |
| sa bilang | 1sg say | 'I said' |
| de tertawa | 3sg laugh | 'he laughed' |
| torang berdoa | 1pl pray | 'we prayed' |
| tong jalang kaki | 1PL walk foot | 'we walked on foot' |
| ta potong babi | 1PL cut pig | 'we cut up the pig' |
| kam cari bapa | 2pl search father | 'you'll look for father' |
| dong bilang | 3pl say | 'they said' |

${ }^{a}$ Documentation: Long pronoun forms - 081006-025-CvEx.0006, 080917-003b-CvEx.0017, 080916-001CvNP.0004, 081006-022-CvEx.0116, 080917-008-NP.0113, 080919-004-NP.0033, 081115-001a-Cv.0160, 081011-023-Cv.0296; short pronoun forms - 080916-001-CvNP.0001, 080916-001-CvNP.0004, 081029-005-Cv.0007, 080917-008-NP.0113, 080919-004-NP.0036, 081011-022-Cv.0242, 081015-005-NP. 0039.

Table 6.3: Pronouns in the direct object slot in monotransitive constructions ${ }^{a}$

| Example | Free translation |
| :---: | :---: |
| Long pronoun forms |  |
| de tanya saya | 'he asked me' |
| 3 PL ask 1sG |  |
| nanti guru~guru cari ko very.soon RDP $\sim$ teacher search 2sG | 'very soon the teachers will look for you’ |
| sa tanya dia begini 1sG ask 3sg like.this | 'I asked him like this' |
| bapa de pukul kitorang di muka father 3sG hit 1pl at front | 'father hit us in the face' |
| dong tipu kitong 3pl cheat 1PL | 'they cheated us' |
| dong suru kita begitu 3pL order 1PL like.that | 'they order us like that' |
| sa masi tunggu kamu 1sG still wait 2pL | 'I still wait for you' |
| sa memang titip dorang sama tanta Defretes <br> 1sG indeed deposit 3PL to aunt Defretes | 'I indeed left them with aunt Defretes' |

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Table 6.4: Pronouns in the direct object slot in monotransitive constructions continued ${ }^{a}$

| Example | Free translation |
| :---: | :---: |
| Short pronoun forms |  |
| de pukul sa 3sg hit 1sG | 'he hit me' |
| sa tanya de begini 1sG ask 3sg like.this | 'I asked her like this' |
| bapa bawa torang ke Biak father bring 1PL to Biak | 'father brought us to Biak' |
| dong antar tong sampe muara Tor 3pl bring 1pl reach river.mouth Tor | 'they brought us as far as the mouth of the Tor river' |
| sa tunggu kam | 'I'll await you' |
| 1SG wait 2PL |  |
| sa titip dong sama Defretes | 'I left them with Defretes' |
| 1sG deposit 3pl to Defretes |  |

[^131]Table 6.5: Pronouns in a direct object slot in double-object constructions ${ }^{a}$

| Example | Free translation |
| :---: | :---: |
| Long pronoun forms |  |
| kasi saya ana satu! give 1sG child one | 'give me a certain child!' |
| mama bisa kasi ijing ko mother be.able give permission 2sG | 'I ('mother') can give you permission' |
| skarang dong kasi dia senter now 3pl give 3sG flashlight | 'now they give him a flashlight' |
| mace kasi nasihat kitorang woman give advice 3pl | 'the woman gave us advice' |
| dia kasi kitong daging 3sG give 1pl meat | 'he gave us meat' |
| minta~minta kamu uang? RDP~request 2PL money | '(who) keeps asking you for money?' |
| baru kasi dorang makangang and.then give 3pl food | 'and then (you) give them food' |
| Short pronoun forms |  |
| bli sa boneka! buy 1sG doll | 'buy me a doll!' |
| dong kasi tong playangang 3pl give 1pl service | 'they'll give us a service' |
| bawa dong pakeang come bring 3pl clothes | '(the pastors) brought them clothes' |

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Table 6.6: Pronouns in the oblique object slot - Long Pronoun Forms ${ }^{a}$

| Example | Free translation |
| :---: | :---: |
| baru dia yang ceritra sama saya and.then 3sG ReL tell to 1sG tida bisa sa kas taw untuk ko NEG be.able 1sg caus know for 2sg ... yang Aris dia kasi sama dia itu rel Aris 3sg give to 3sg D.DIST de minta sama Ida, sama kitorang 3sG request to Ida to 1PL de datang kas taw sama kitong 3sG come give know to 1PL jadi Raymon minta sama kita so Raymon request to 1PL ... kasi hadia itu untuk kamu itu give gift D.DIST for 2PL D.DIST baru de ceritra apa sama dorang ka and.then 3sG tell what to 3pl or | 'and then (it was) him who told this story to me' 'it's impossible that I inform you (about this issue)' <br> '[Oten's wife] (is the one) that Aris gave to him (ЕМРН)' 'he requested (a child) from Ida, from us' 'he'll come (and) inform us' <br> 'so Raymon requested (a child) from us' <br> '[immediately the government] will give that gift to you' 'and then maybe she told something to them' |

${ }^{a}$ Documentation: Long pronoun forms - 080917-008-NP.0004, 080922-010a-CvNF.0089, 080922-010aCvNF.0061, 081006-024-CvEx.0021, 081110-006-Pr.0014, 081006-024-CvEx.0021, 080922-001a-CvPh.0010, 080918-001-CvNP.0050; short pronoun forms - 080922-010a-CvNF.0209, 080922-001a-CvPh.0339, 080919-006-CvNP. 0011.

Table 6.7: Pronouns in the oblique object slot - Short Pronouns Forms

| Example | Free translation |
| :--- | :--- |
| bapa-tua itu de ceritra sama sa begini <br> uncle D.DIST 3sG tell to 1sG like.this | 'that uncle, he told me like this' |
| .. yang telpon sama kam dua <br> REL phone to 2PL two | '[very soon it'll be uncle pastor] |
| tete ini bilang sama dong |  |
| grandfather D.PROX say to 3PL | who'll phone you two' |

### 6.1.1.2 Personal pronouns within the clause

Concerning the syntactic slots that the pronouns take, the distributional distinctions between the long and short pronoun forms interrelate with the distributional pattern of the pronouns within the clause.

The data in the corpus shows a clear preference for the "heavy" long pronoun forms to occur in clause-final position, regardless of their grammatical functions. This preference does not apply to other positions. That is, in clause-initial or clause-internal position, the long and the short pronoun forms occur, regardless of their grammatical functions and their positions vis-à-vis the predicate. This observed distributional pattern is a reflection of the cross-linguistic tendency for the clause-final position to be "the preferred site for 'heavy' constituents" which has to do "with processing considerations" (Butler 2003: 179; see also Hawkins 1983: 88-114).

So far 710 clauses with clause-final pronouns have been identified in the corpus. In 62 clauses, ko '2sG' takes the clause-final position. Given that for the second person singular pronoun only one form exists, it is excluded from further analysis. This leaves 648 clauses with a clause-final pronoun. In almost all clauses, it is a long pronoun form that occurs in clause-final position ( $97 \%-630 / 648$ ), as shown in Table 6.8. Only rarely a short pronoun form occurs in this position $(3 \%-18 / 648)$, and two of the short forms are not attested at all in clause-final position, namely tong '1pl' and ta '1pl'.

Table 6.8: Pronouns in clause-final position

| Long pronoun forms |  |  |  | Short pronoun forms |  |  | Total |
| :--- | :--- | ---: | :--- | :--- | ---: | ---: | ---: |
|  |  | $\#$ | $\%$ |  | $\#$ | $\%$ | $\#$ |
| 1sG | saya | 210 | $97 \%$ | sa | 7 | $3 \%$ | 217 |
| 3sG | dia | 236 | $99 \%$ | de | 2 | $1 \%$ | 238 |
| 1PL | kitorang | 18 | $82 \%$ | torang | 4 | $18 \%$ | 22 |
| 1PL | kitong | 15 | $100 \%$ | tong | --- | --- | 15 |
| 1PL | kita | 7 | $100 \%$ | ta | --- | --- | 14 |
| 2PL | kamu | 49 | $98 \%$ | kam | 1 | $2 \%$ | 50 |
| 3PL | dorang | 95 | $96 \%$ | dong | 4 | $4 \%$ | 99 |
|  | Total | 630 | $97 \%$ |  | 18 | $3 \%$ | 648 |
| 2SG | ko |  |  |  |  |  | 62 |
|  | Total |  |  |  |  |  | 710 |

This tendency for the clause-final position to be the preferred site for the "heavy" long pronoun forms affects the choice of the pronoun form for the different object slots, as shown in (2) to (12).

In the examples in (2) to (5), the pronouns take the direct object slot in monotransitive clauses. When the direct object occurs in clause-internal position, both the long and the short pronoun forms are used, as shown with long dia ' 3 SG ' in (2) and short de ' 3 sG ' in

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(3). When the direct object occurs in clause-final position, speakers typically take the long pronoun form, such as saya '1sG' in (4). Only rarely do speakers employ a short pronoun form in clause-final position, such as sa '1sG' in (5).

Pronouns in the direct object slot in monotransitive clauses
(2) sa su pukul dia di kamar

1sG already hit 3sG at room
'I already hit her in (her) room' [081115-001a-Cv.0271]
(3) sa tanya de begini

1sG ask 3sg like.this
'I asked her like this' [081014-016-Cv.0001]
(4) nanti ko kejar saya
very.soon 2sG chase 1sG
'in a moment you chase me' [080917-004-CVHT.0001]
(5) dulu bole bapa gendong sa, skarang ...
first may father hold 1sG now
[Talking to her father:] 'in former times you ('father') were allowed to hold me, now ...' [080922-001a-CvPh.0699]

In the examples in (6) to (8), the pronouns take a direct object slot in double-object constructions. In this position the mentioned, distributional preferences are even more pronounced. In clause-internal position, both the long and the short pronoun forms occur, such as long saya ' 1 sG ' in (6) and short dong '3pl' in (7). In clause-final position, by contrast, only the long pronoun forms are attested, such as dorang '3pl' in (8). (Doubleobject constructions are discussed in detail in §11.1.3.1.)

Pronouns in a direct object slot in double-object constructions
(6) kasi saya ana satu!
kasi 1sG child one
'give me a certain child!' [081006-024-CvEx.0030]
(7) kaka kirim dong uang
oSb send 2PL money
'the older sibling sent them money' [080922-001a-CvPh.0860]
(8) sa mulay kasi nasihat dorang

1 sG start give advice 2pl
'I started giving them advice' [081115-001a-Cv.0100]
As for pronouns in oblique object slots, again both the long and the short pronoun forms are used, such as long dorang '3PL' in (9) or short sa '1sG' in (10). In clause-final position, however, typically the long pronoun forms are used, such as dorang '3pl' in (11), while short pronoun forms such as dong '3pl' in (12) are very rare.

Pronouns in the oblique object slot
(9) sa bilang sama dorang yang di kampung

1sG speak to 3PL REL at village
'I told them who are in the village' [080919-001-Cv.0157]
(10) de bilang sama sa begini, ...

3sG say to 1sg like.this
'he said to me like this, ...' [080917-008-NP.0163]
(11) itu yang sa kas taw sama dorang
D.DIST REL 1sG already know to 3pl
'that (is) what I let them know' [081006-009-Cv.0010]
(12) tete ini bilang sama dong
grandfather D.Prox say to 3pl
'this grandfather spoke to them' [080919-006-CvNP.0011]

### 6.1.2 Modification of personal pronouns

Pronouns are readily modified with a number of different constituents, namely demonstratives, locatives, numerals, quantifiers, prepositional phrases, and/or relative clauses, as illustrated with the examples in (13) to (24).

Proximal demonstrative ini 'd.Prox' modifies long saya '1sG' in (13), while distal itu 'D.DIST' modifies ko '2sG' in example (14). In both examples, the demonstratives signal the speaker's psychological involvement with the events being talked about. In (15), distal locative sana 'L.DIST' modifies short dong '3sG', designating the referent's location relative to that of the speaker. In the corpus, pronouns are quite often modified with demonstratives, while modification with locatives is rare. (For details on demonstratives and locatives and their different functions see Chapter 6.)

Modification of pronouns with demonstratives or locatives
(13) jadi saya ini ana mas-kawing
so 1sG D.Prox child bride.price
'so I (EMPH) am a bride-price child' [081006-028-CvEx.0016]
(14) $a$, ko ke laut dulu, dong ada tunggu ko itu
ah! 2sG to sea first 3pl exist wait 2sG D.DIST
'ah, you (go down) to the sea first, they are waiting for you (EMPH)!'
[081015-003-Cv.0003]
(15) dong sana cari anging

3pL L.DIST search wind
'they over there are looking for a breeze' [081025-009b-Cv.0076]

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Modification with numerals typically involves the numeral dua 'two', as with short tong '1pl' in (16), but constructions with tiga 'three' are also found. In the corpus, modification with quantifiers is limited to universal smиa 'all' and mid-range brapa 'several', as shown with long $k a m u$ ' 2 Pl ' in (17) and long dorang '3pl' in (18), respectively. Modification with other quantifiers is also possible, as shown with midrange banyak 'many' in the elicited example in (19). The examples in (16) to (19) also demonstrate that the numerals and quantifiers always occur in post-head position. That is, they cannot occur in pre-head position as illustrated with the elicited ungrammatical constructions in (20) and (21). (In this respect pronouns differ from nouns in that noun phrases with adnominally used numerals or quantifiers can have an N-MOD or a MOD-N structure, as discussed in §8.3.)

Modification of pronouns with numerals or quantifiers
(16) tong dua mandi, pas Nofita de datang

1PL two bathe precisely Nofita 3sG come
'the two of us were bathing, at that moment Nofita came' [081025-006-Cv.0326]
(17) saya liat kamu smua tapi kamu ...

1sG see 2PL all but 2pl
'I see all of you but you ...' [080921-006-CvNP.0006]
(18) sa maki dorang brapa itu

1sG abuse.verbally 3pl several D.DIST
'I verbally abused several of them there' [080923-008-Cv.0012]
(19) sa maki dorang banyak itu

1sG abuse.verbally 3PL many D.DIST
'I verbally abused many of them there' [Elicited BR111021.024]
(20) * dua tong mandi, pas Nofita de datang two 1pl bathe precisely Nofita 3sG come
Intended reading: 'the two of us were bathing, at that moment Nofita came'
[Elicited ME151112.001]
(21) * saya liat smua kamu tapi kamu ...

1sG see all 2pl but 2pl
Intended reading: 'I see all of you but you ...' [Elicited ME151112.002]
In the corpus, the numerals and quantifiers typically form constituents with the quantified pronouns. That is, floating numerals or quantifiers are unattested, with one exception though. Quantifier smua 'all' can also float to a clause-final position, as shown in (22). (This observation that among the numerals and quantifiers only quantifier smua 'all' floats also applies to the modification of nouns, as discussed in §8.3.)

Floating quantifier smua 'all'
(22) langsung mandi, kitong mulay mandi smua immediately bathe 1PL start bathe all
'[We arrived here, arrived by motorboat,] immediately (we) bathed, we started all bathing' [080917-008-NP.0131]

Further, pronouns can be modified with prepositional phrases as illustrated with dong '3PL' in (23), or with relative clauses as shown with short sa '1sG' in (24).

Modification of pronouns with prepositional phrases or relative clauses
(23) tapi dong di sana tu tida taw pencuri
but 3PL at L.DIST D.DIST NEG know thief/steal
'but them over there (ЕмPн) never steal' (Lit. 'don't know to steal')
[081011-022-Cv.0293]
(24) waktu de kawing mas-kawing itu sa yang ambil
when 3sg marry.unofficially bride.price that 1sG ReL get
'when she marries, that bride-price, (it's) me who'll get (it)'
[081006-025-CvEx.0024]

### 6.1.3 Personal pronouns in adnominal possessive constructions

Pronouns also take the possessor slot in adnominal possessive constructions. Overall, the short forms are preferred over the long forms, as shown in Table 6.9 (the percentages for the most frequent forms are underlined).

The corpus contains a total of 1,692 adnominal possessive constructions. In 160 constructions, $k o$ ' 2 SG' takes the possessor slot; again, it is excluded from further analysis given that it has only one form. This leaves 1,532 adnominal possessive constructions. In 1,097 constructions the possessor slot is filled with a short pronoun ( $72 \%$ ) as compared to only 435 constructions ( $28 \%$ ) in which a long pronoun takes the possessor slot. The exception is first person plural kitong/tong '1PL': speakers employ long kitong '1PL' almost as often as short tong '1pl'.

In (25), one possessive construction is presented in context with long dia ' 3 sG ' taking the possessor slot in (25). (For a detailed discussion of adnominal possessive constructions see Chapter 9.)
(25) nanti dia pu maytua tanya, ko dapat ikang di mana very.soon 3sG poss wife ask 2sg get fish at where 'later his wife will ask, "where did you get the fish?"' [080919-004-NP.0062]

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Table 6.9: Pronominally used pronouns in adnominal possessive constructions

| Long pronoun forms |  |  |  | Short pronoun forms |  |  | Total |
| :--- | :--- | ---: | :--- | :--- | ---: | ---: | ---: |
|  |  | $\#$ | $\%$ |  | $\#$ | $\%$ | $\#$ |
| 1SG | saya | 83 | $16 \%$ | sa | 422 | $\underline{84 \%}$ | 505 |
| 3SG | dia | 106 | $17 \%$ | de | 508 | $\underline{83 \%}$ | 614 |
| 1PL | kitorang | 9 | $\underline{90 \%}$ | torang | 1 | $10 \%$ | 10 |
| 1PL | kitong | 40 | $49 \%$ | tong | 42 | $51 \%$ | 82 |
| 1PL | kita | 17 | $93 \%$ | ta | 1 | $7 \%$ | 29 |
| 2PL | kamu | 12 | $27 \%$ | kam | 32 | $\underline{73 \%}$ | 44 |
| 3PL | dorang | 8 | $8 \%$ | dong | 91 | $\underline{92 \%}$ | 99 |
|  | Total | 435 | $28 \%$ |  | 1,097 | $\underline{72 \%}$ | 1,532 |
| 2SG | ko |  |  |  |  |  | 160 |
|  | Total |  |  |  |  |  | 1,692 |

### 6.1.4 Personal pronouns in inclusory conjunction constructions

Papuan Malay also employs plural pronouns in inclusory conjunction constructions, such that "pro-pl (dua) dengang NP" or "Pro-pl (two) with NP". The conjunct that designates the entire set is encoded by a plural pronoun. This conjunct is inclusory in that it "identifies a set of participants that includes the one or those referred to by the lexical noun phrase", as Lichtenberk (2000:1) points out. Hence it is an "inclusory pronoun" (2000: 2) or, as Haspelmath (2007a: 33) calls it, an "inclusory conjunct". In Papuan Malay, both conjuncts are linked by means of overt coordination with the comitative marker dengang 'with', with its short form deng. The inclusory conjunct precedes the included conjunct, as shown in (26) to (29).

Typically, the inclusory conjunct is encoded by a dual construction formed with a plural pronoun and the adnominally used numeral dua 'two', such that "pro-pl dua". In (26), for instance, the speaker talks about herself and her husband. That is, the entire set consists of two referents with the inclusory conjunct tong dua 'we two' including the conjunct bapa 'father' in its reference. Only rarely is the inclusory conjunct encoded by a bare plural pronoun, as in (27). In this example, the entire set consists of the speaker, his wife, and their children, with the included conjunct ana~ana 'children' being subsumed under the inclusory conjunct tong '1PL'.

Plural and dual inclusory conjunction constructions with the first person plural pronoun
(26) ... tong dua deng bapa tu sayang dia

1PL two with father d.DIST love 3sG
'[but this child] I and (my) husband (EMPH) love her' [081115-001a-Cv.0251]
(27) malam hari atur tong deng ana~ana makang
night day arrange 1PL with RDP~child eat
'in the evening (my wife) arranges (the food), we and the children eat'
[080919-004-NP.0007]
All three plural pronouns can take the inclusory conjunct slot, such as first person plural tong '1pl' in (26) and (27), second plural kam '2pL' in (28) and third person plural dong '3pl' in (29). Most often the included conjunct is encoded by a proper noun as in (28), or less frequently by a noun phrase as in (29), or also in (26).

Inclusory conjunction constructions formed with the second and third person plural pronouns
(28) kam dua deng Isabela pergi cek kapal di plabuang

2pl two with Isabela go check ship at harbor
'you(SG) and Isabela go check the ship at the harbor' [080922-001a-CvPh.0035]
(29) dong dua dengang Natanael pu maytua langsung pake spit

3pl two with Natanael poss wife immediately use speedboat
'he/she and Natanael's wife immediately took the speedboat'
[081014-008-CvNP.0006]
In addition, the corpus contains two inclusory conjunction constructions, presented in (30) and (31), in which the inclusory conjuncts are used for joining two noun phrases. Such inclusory conjunction constructions have also been described for other languages, especially in Polynesia, as Haspelmath (2007a) points out. More specifically, Haspelmath (2007a: 35) notes that in such a construction the "first conjunct precedes the inclusory pronoun, which is then followed by the other included conjunct(s) in the usual way".

Inclusory conjunction constructions conjoining two noun phrases
(30) Dodo kam dua deng Waim ceritrakang dulu

Dodo 2pl two with Waim tell first
'you (sG) Dodo and Waim talk first' [081011-001-Cv.0001]
(31) Tinus dorang dua dengang Martina ini, dong dua lari trus,

Tinus 3pl two with Martina D.PRox 3pl two run be.continuous dorang dua lari sampe di kali
3pl two run reach at river
'Tinus and Martina here, the two of them drove continuously, the two of them drove all the way to the river' [081015-005-NP.0011]

The inclusory conjunction constructions presented in (26) to (29) contrast with what Haspelmath (2007a: 33) calls "comitative conjunction constructions", which denote additive relations. In Papuan Malay, such comitative constructions are formed with comitative dengang 'with'. The inclusory conjunction constructions in (26) to (29) also contrast

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with " N PRO-PL" noun phrases with an associative inclusory reading. Both contrasts are illustrated with the examples in (32) and (33).

As for the distinction of comitative and inclusory conjunction constructions, Haspelmath (2007a: 33) makes the following cross-linguistic observations. In a comitative conjunction construction, the conjunction of "two set-denoting NPs [...] ' $\{\mathrm{A}, \mathrm{B}\}$ and $\{\mathrm{C}, \mathrm{D}\}$ ' yields the set $\{A, B, C, D\}$ " (2007a: 33). In inclusory conjunction constructions, by contrast, "some members of the second conjunct set are already included in the first conjunct set"; hence the result of the coordination is not the "union, but the unification of the sets [such that] '\{A, B, C\} and $\{B\}$ ' yields the set $\{\mathrm{A}, \mathrm{B}, \mathrm{C}\}$ " (2007a: 33). This distinction also applies to Papuan Malay. While the constructions in (26) to (29) receive an inclusory reading, the comitative ' N 1 dengang 'with' N 2 ' conjunction construction in (32) receives an additive reading. (Comitative conjunction constructions with dengang 'with' are discussed in see §14.2.1.1.)

Comitative "N1 dengang 'with' N2" conjunction construction
(32) baru siapa Sarles dengang dong dua turung bli ni and.then who Sarles with 3pl two descend buy d.prox
'and then, who-is-it, Sarles and the two of them came down and bought this' [081022-003-Cv.0012]

Papuan Malay inclusory conjunction constructions, that is, "Pro-pl (dua) dengang NP’ constructions, are also distinct from " N PRO-PL" noun phrases with an associative inclusory plural reading. The pragmatic differences between the constituent order found in (26) to (29) as compared to that found in (33) are similar to the differences found in Toqabaqit, another Austronesian language, as observed by Lichtenberk (2000: 27): the contrast concerns "the relative degrees of discourse salience of the two sets of participants, the overtly and the covertly encoded ones". This contrast also applies to Papuan Malay. In (28) to (29), the covertly encoded participants subsumed under the adnominal dual constructions are more salient and therefore mentioned first. The overtly encoded participants, by contrast, are less salient and therefore mentioned second. In the n ProPL noun phrase in (33), by contrast, the overtly encoded participant bapa 'father' is more salient and therefore mentioned first. The covertly encoded participants subsumed under the adnominal dual construction dorang dua 'they two' are less salient and of subordinate status. (For details on N PRO-PL noun phrases with an associative inclusory plural reading, see §6.2.2.2.)

N PRO-PL noun phrase with an associative reading
(33) bapa dorang dua pulang hari minggu cepat
father 3pl two go.home day Sunday be.fast
'father and he returned home quickly on Sunday' [080925-003-Cv.0163]

### 6.1.5 Personal pronouns in summary conjunctions

The plural pronouns also occur in "summary conjunction" constructions, a term adopted from Haspelmath's (2007a: 36) cross-linguistic study on coordination: following a set of conjoined noun phrases, a final constituent "sums up the set of conjuncts and thereby indicates that they belong together and that the list is complete". According to Haspelmath (2007a: 36), however, this final constituent is a "numeral or quantifier".

In Papuan Malay, by contrast, the final constituent that sums up the set of conjuncts is a plural pronoun. This is illustrated in the examples in (34) to (36). The set can consist of just two conjuncts as in (34), or of three or more as in (35). Typically the conjuncts are conjoined without an overt coordinator, as in (34) and (35). When the set of conjuncts is limited to two, as in (36), the conjuncts may also be linked with an overt coordinator, usually comitative dengang 'with'. (For details on the combining of noun phrases, see §14.2.)

Resumptive plural pronouns in summary conjunction constructions
(34) mama bapa tong mo sembayang
mother father 1pl want worship
'we mother and father want to worship' [080917-003b-CvEx.0020]
(35) ... Hurki e Herman Nusa, em, Oktofina kamu duduk situ Hurki uh Herman Nusa uh Oktofina 2pl sit L.MED
'[in the evening (I said),] "you (Pl) Hurki, uh Herman, Nusa, uh Oktofina sit there"' [081115-001a-Cv.0085]
(36) mama deng bapa dong su meninggal
mother with father 3pl already die
'they mother and father have already died' [080919-006-CvNP.0012]
When the number of conjuncts is limited to two, Papuan Malay speakers often employ a dual construction in which the adnominal pronoun is modified with the numeral dua 'two' as in (37) and (38). In such a "dual conjunction" construction, a term also adopted from Haspelmath (2007a: 36), the conjuncts are most often conjoined with an overt coordinator, as in (37), although coordination without an overt coordinator is also possible, as in (38).

Resumptive plural pronouns in dual conjunction constructions
(37) sa deng Eferdina kitong dua pi berdoa tugu itu 1sG with Eferdina 1pl two go pray monument D.DIST
'I and Eferdina, the two of us go (and) pray over that statue' [080917-008-NP.0003]
(38) Rahab de bilang, bapa mama kam dua liat dulu

Rahab 3sg say father mother 2pl two see first
'Rahab said, "father and mother, the two of you have a look!"'
[081006-035-CvEx.0044]

## 6 Personal pronouns

### 6.1.6 Personal pronouns in appositional constructions

Pronouns very commonly occur in PRO NP constructions in which a pronominally used pronoun precedes a noun or noun phrase. These constructions are analyzed as appositional constructions, with appositions being defined as "two or more noun phrases having the same referent and standing in the same syntactical relation to the rest of the sentence" (Asher 1994: 5193). Such PRO NP constructions are distinct from the NP PRO constructions discussed in §6.2, in which an adnominally used pronoun follows its head nominal. To validate this distinction, appositional PRO NP constructions are described in some detail in this section.

Appositions may be restrictive or nonrestrictive. In restrictive apposition, the second appositive limits or clarifies the first unit. In nonrestrictive apposition, by contrast, the second appositive is added as an optional additional piece of information (Morley 2000: 182-188). The same applies to Papuan Malay pro NP appositions; that is, depending on their semantic function within the clause, the appositions may be restrictive or nonrestrictive. The referent is typically human with consultants agreeing that PRO NP expressions with nonhuman referents are unacceptable. The corpus contains only one exception in which the referent is an inanimate entity, presented in (1), repeated as (41). The construction in (41), however, involves "a personification of the nonhuman object that is addressed", as Abrams \& Harpham (2009: 314) describe it (for details on such figures of speech see §6.2.1.1.3).

Appositional PRO NP constructions are formed with all persons and number; those with singular pronouns are presented in (39) to (43) and those with plural pronouns in (44) to (47). Dual constructions are also possible, as shown in (48). Appositions can be bare nouns as in (39), noun phrases with modifiers as in (40), or coordinate noun phrases as in (48). In terms of intonation, the data in the corpus does not indicate a clear pattern: the apposition can be set off from the preceding pronoun by a comma intonation ("|"), as in (39), or can follow it with no intonation break as in (40).

The appositional constructions with singular pronouns ("PRO-SG NP") in (39), (40) and (43) are nonrestrictive with the appositions mama 'mother' in (39), prempuang cantik 'beautiful woman' in (40), and ana 'child' in (43) providing additional optional information not needed for the identification of their pronominal referents. The constructions in (41) and (42), by contrast, are restrictive with the appositions sungay ko 'you river' and Agus ni 'this Agus' giving information needed for the identification of the referents ko '2sG' and dia ' 3 SG', respectively.

Appositions with singular pronouns: PRO-SG NP

```
... yo, akirnya sa | mama berdoa berdoa
yes finally 1sG mother pray pray
```

'[so in fifth grade she broke-off school,] yes, finally I, (a/her) mother, prayed (and) prayed' [081011-023-Cv.0178]
(40) kalo ko tida skola ko prempuang cantik nanti ...
if 2sG NEG go.to.school 2sG woman be.beautiful very.soon
'if you don't go to school, later you, a beautiful woman, ...' [081110-008-CvNP.0043]
(41) ... tida perna dia liat, ko sungay ko bisa terbuka begini NEG once 3sG see 2sG river 2sg be.able be.opened like.this
[Seeing the ocean for the first time:] '[never before has he seen, what, a river that is so very big like this ocean,] never before has he seen you, you river can be wide like this?' [080922-010a-CvNF.0212-0213]
(42) dia tanya dia | Agus ni, ko ada kapur ka?

3sg ask 3sg Agus d.prox 2sG exist lime or
'he asked him, Agus here, "do you have lime (powder)?"' [080922-010a-CvNF.0034]
(43) ... tapi de ana juga cepat ikut terpengaru but 3sG child also be.fast follow be.influenced
'...but he/she, a kid, also quickly follows (others) to be influenced'
[080917-010-CvEx.0001]
Most often appositional constructions are formed with plural pronouns, such that "Pro-pl Np". Semantically, PRO-PL NP are distinct from Pro-sG NP constructions in that they not only indicate the definiteness of the apposited noun phrases, but also their plurality, as shown in (44) to (47). For instance, pemuda 'youth' in (44) or IPA satu 'Natural Science I (student)' in (45) receive their plural reading from the preceding plural pronouns. If deemed necessary, speakers can specify the number of the apposited noun phrases with an adnominal numeral or quantifier, as in tiga orang itu 'those three people' in (46), or in brapa prempuang 'several women' in (47).

Appositions with plural pronouns: PRO-PL NP
(44) tong pemuda ini mati smua

1PL youth D.prox die all
'we, the young people here, have all lost enthusiasm' [081006-017-Cv.0014]
(45) tadi kam IPA satu tra maing
earlier 2pl natural.sciences one neg play
'earlier, you, the Natural Science I (students), didn't play' [081109-001-Cv.0162]
(46) dong tiga orang itu datang duduk

3PL three person D.DIST come sit
'they, those three people, came (and) sat (down)' [081006-023-CvEx.0074]
(47) ... sa maki dorang brapa prempuang di situ

1sG abuse.verbally 3pl several woman at L.MED
'[last month,] I verbally abused them, several women, there' [080923-008-Cv.0001]

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When the number of referents encoded by the apposited noun phrase is limited to two, Papuan Malay speakers also use dual constructions in which the pronoun is modified with the numeral dua 'two', such that "pro-pl dua NP", as in (48). In the corpus, however, such constructions are rare and the dual constructions are always formed with the third person plural pronoun. ${ }^{6}$

Appositions with dual constructions: Pro-pl dua 'two' NP

## (48) dorang dua ade kaka itu Agus dengang Fredi tra baik

3pl two ySb oSb D.DIST Agus with Fredi neg be.good
'the two of them, those siblings, Agus and Fredi, are not good'
[081014-003-Cv.0012]

### 6.2 Adnominal uses

Papuan Malay pronouns are very often employed as determiners in post-head position, such that "NP PRO". Cross-linguistically, this function of personal pronouns is rather common, as Lyons (1999: 141) points out: they "combine with nouns to produce expressions whose reference is thereby determined in terms of the identity of the referent"; hence, they are "personal determiners". In this function as "definite expressions", adopting Helmbrecht's (2004:26) terminology, they indicate that the addressees are assumed to be able to identify the referent of an expression (see also Bhat 2007: 11; Lyons 1999: 26-32; Lyons 1977: 454-455).

It is argued here that, given the lack of inflectional person-number marking on nouns and verbs, and further given the lack of definite articles, the adnominally used Papuan Malay pronouns also have this determiner function. That is, they allow the unambiguous identification of the referents as speakers or addressees, or as individuals or entities being talked about. Hence, Papuan Malay post-head pronouns are neither resumptive pronouns nor proclitic agreement markers on verbs.

This is illustrated with the example in (49). In the NP 2sG noun phrase Wili ko 'you Wili', the second person pronoun marks the person spoken to as the intended addressee. In the np 3sg noun phrase tanta dia itu 'that aunt' (literally 'that she aunt'), the third person pronoun signals that the interlocutors are assumed to know the referent. The brackets indicate the constituent structure within the noun phrase. Details are discussed in §6.2.1 and §6.2.2.

[^133]NP 2SG and NP 3SG noun phrases

## (49) [Wili ko] jangang gara~gara [tanta dia itu]!

Wili 2sG NEG.IMP RDP~irritate aunt 3sG D.DIST
[Addressing a young boy:] 'you Wili don't irritate that aunt!' [081023-001-Cv.0038]
Adnominal pronouns are available for all person-number values, with the exception of the first person singular. This unexpected restriction may have to do with the function of the adnominally used pronouns which is to disambiguate the participants in a speech act, as discussed in detail throughout this section. It seems that Papuan Malay presumes addressees to have difficulties in identifying first person plural, second person and third person participants. To disambiguate the referents, the respective nouns can be modified with the appropriate pronouns. With first person singular referents, however, no such difficulties are expected. Hence, such referents do not need to be disambiguated, as demonstrated with the example in (50). ${ }^{7}$

The utterances in (50) are part of a conversation between a mother and her son. As the family wants to go on a trip, the son wants to obtain a leave of absence from school. He is afraid, though, that his mother will not remind him in time to ask for this leave. In trying to soothe him, his mother tells him that she will remind him in time and that she will not depart without him. In doing so, the speaker alternatively refers to herself with the noun mama 'mother' and with first person singular sa '1sG'. In this context, mama 'mother' unambiguously refers to the speaker. Hence, there is no need to further disambiguate the referent by adding the first person singular pronoun.

Speech acts with first person singular referents
(50) hari jumat ko mo jalang, baru mama kas taw ... sa tida bisa kas day Friday 2sG want walk and.then mother give know 1sG neg be.able give tinggal ko ... hari jumat ko mo jalang, baru mama kasi ingat stay 2sG day Friday 2sG want walk and.then mother give remember 'on Friday (when) you want to go (and ask for the leave), I ('mama') will remind (you) ... I cannot leave you (behind) ... on Friday (when) you want to go, I ('mama') will remind you' [080917-003b-CvEx.0011/0015/0020]

Table 6.10 and Table 6.11 give an overview of the adnominal uses of pronouns as determiners.

Some of the examples in Table 6.10 and Table 6.11 do not readily translate into English, given that "personal determiners" in English are subject to constraints concerning their person-number values (Lyons 1999: 27). In English, only "we" and "you (PL)" occur freely as determiners, while 'you (sG)' occurs in exclamations only; the remaining pronouns

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Table 6.10: Adnominal pronouns as determiners - Long Pronouns Form ${ }^{a}$

| Example | Free translation |
| :---: | :---: |
| de bilang, a om ko ini tra liat ... | 'he said, "ah you |
| 3sG say ah uncle 2sG D.PRox NEG see | uncle here didn't see ..." |
| Wili ko jangang gara-gara tanta dia itu! | 'you Wili don't irritate |
| Wili 2sG IMP-NEG irritate aunt 3SG D.DIST | that aunt!' |
| jadi nene kitorang ini masak | 'so we grandmothers here |
| so grandmother 1PL D.PROX cook | cook' |
| jadi laki~laki kitong harus bayar... | 'so we men have to pay ...' |
| so RDP~husband 1pl have.to pay |  |
| bangsat kamu tu tinggal lari | 'you rascals there keep |
| rascal 2PL D.DIST stay run | running' |
| ... biking malam untuk anjing dorang make night for dog 3pl | '[ the sagu porridge that my wife] had made at night for the dogs' |

[^135]Table 6.11: Adnominal pronouns as determiners - Short Pronouns Form

| Example | Free translation |
| :---: | :---: |
| ... sampe bapa de pukul sa deng pisow until father 3sg hit 1sg with knife | '... until (my) husband hit me with a knife |
| itu yang Lodia torang bilang ... D.DIST Rel Lodia 1pl say | 'that's why Lodia and her companions including me said ...' |
| ... $\frac{\text { Pawlus tong bicara sama dia itu }}{\text { Pawlus 1PL speak to 3sG d.dIST }}$ | 'Pawlus and his companions including me spoke to him (EMPH)' |
| kamu ana prempuang kam latiang | 'you, you girls practice' |
| 2PL child woman 2Pl practice |  |
| tong biasa tanya sama kaka dong 1pl be.usual ask to oSb 3pl | 'we usually ask the older siblings' |

do not have any determiner uses. ${ }^{8}$ Other languages, however, are less constrained. In German, for example, the first and second persons, both singular and plural, occur as determiners, while the third person does not (Lyons 1999: 142; see also Helmbrecht 2004: 189) for the determiner uses of personal pronouns). Along similar lines, in the Oslo dialect of Norwegian, the female third person singular pronoun functions as a determiner (Johannessen 2006). In addition, pronouns can occur as determiners with proper names in some Germanic languages, such as German, Icelandic, and Norwegian. In German it is the first or second person singular pronouns (Roehr 2005: 264-269), in Icelandic it is the third person singular and the first and second person plural pronouns (Sigurðsson 2006: 218-224), and in Northern Norwegian it is the third person singular pronoun (Matushansky 2008: 581). Still other languages are "completely unconstrained in this respect" (Lyons 1999: 142), as for instance Warlpiri (Hale 1973 in Lyons 1999: 142).

Lyons (1999: 134) suggests "that personal pronouns are the pronominal counterpart of definite articles". This is the case for Warlpiri which has "no definite article" but "a full paradigm of personal determiners" (1999: 142, 144). And it is also the case for $\mathrm{Pa}-$ puan Malay which has no definite article either but an almost complete paradigm of personal determiners, the exception being the first singular person. Other Austronesian languages, by contrast, which do have a definite article also employ this article as a determiner with proper names. Examples, provided in Campbell (2000b), are Balinese (Kersten 1948), Chamorro (Topping \& Ogo 1960), and Fijian (Milner 1959; Schütz \& Komaitai 1971), and, presented in Campbell (2000a), Malagasy (Arakin 1963), Maori (Krupa 1967), Minangkabau (Moussay 1981), Tagalog (Bowen \& Philippine Center for Language Study 1965; Ramos 1971), Tahitian (Arakin 1981), and Tongan (Churchward 1953).

As for noun phrases with adnominal pronouns in other regional Malay varieties, only limited information is available. Brief descriptions or examples are offered for Ambon Malay (van Minde 1997), Balai Berkuak Malay (Tadmor 2002), Dobo Malay (R. Nivens p.c. 2013), Kupang Malay (Grimes \& Jacob 2008), Manado Malay (Stoel 2005), and Sri Lanka Malay (Slomanson 2013). In each case, however, the descriptions are limited to the associative plural interpretation of "NP PRO-PL" expressions (see §6.2.2.3). A determiner function of the pronouns is not mentioned in any of these descriptions.

In addition, some descriptions of regional Malay varieties mention NP PRO constructions, most of which are analyzed as topic-comment constructions.

- Ambon Malay: van Minde (1997: 284) mentions constructions in which "a preposed NP is copied by a coreferential pronoun in the remainder of the clause". In each case, the pronoun is the short third person singular de ' 3 sG '. In addition, van Minde (1997: 285) presents examples in which a pronoun follows a noun phrase with an adnominal demonstrative at its right periphery.
- Banda Malay: Paauw (2009: 165) gives examples of NP PRO constructions which he also analyzes as topic-comment constructions. The pronoun is third person singular dia ' 3 sG' and the preceding noun phrase is set off with an adnominal demonstrative.

[^136]- Northern Moluccan Malay: Voorhoeve (1983: 5) analyzes similar constructions as topic-comment constructions "in which the topic is cross-referenced by a pronoun subject in the comment". Again, the pronoun is third person singular dia ' 3 sG' and the preceding noun phrase is set off with an adnominal demonstrative.
- Papuan Malay: Paauw (2009: 166-168) presents NP PRO constructions in which the short third person forms $d e$ ' 3 sG' and dong ' 3 pl' occur between a subject and a verb. Paauw (2009) analyzes these pronouns as "proclitics" that function as subject agreement markers on verbs.

In the following sections, the adnominal uses of the pronouns are examined in detail. That is, these sections discuss the function of the pronouns to signal definiteness and person-number values, whereby they allow the unambiguous identification of the referents as speakers, addressees, or third-person participants.

The adnominal uses of the singular pronouns are discussed in §6.2.1 and those of the plural pronouns in $\S 6.2 .2$. For the singular pronouns a major issue is the question whether NP PRO expressions are indeed noun phrases with adnominal pronouns or whether these expressions should be analyzed as topic-comment constructions, as in other regional Malay varieties. For the plural pronouns, two interpretations of np PRO constructions are discussed, additive, and associative inclusory plurality. In giving examples for NP PRO expressions, brackets are used to signal the constituent structure within the noun phrase, where deemed necessary.

### 6.2.1 Adnominal singular personal pronouns

In their determiner uses, the singular personal pronouns indicate the definiteness as well as the person and the number values, namely singularity, of their referents. "NP PRO-SG" expressions with $k o$ ' 2 sG' are presented in $\S 6.2 .1 .1$, and those with dia/ $d e$ ' 3 sG ' in $\S 6.2 .1 .2$. In all examples given in $\S 6.2 .1 .1$ and $\S 6.2 .1 .2$, the NP PRO-SG expressions constitute intonation units, unless mentioned otherwise; that is, the pronouns are not set off from their head nominals by a comma intonation. In addition, however, the corpus also contains NP PRO-SG expressions in which the nouns are set off from the following pronouns by intonation; these noun phrases are briefly discussed in §6.2.1.3. Finally, §6.2.1.4 presents the reasons for analyzing NP PRO-SG expressions as noun phrases with adnominal pronouns rather than as topic-comment constructions.

### 6.2.1.1 NP 2sG noun phrases

NP 2SG noun phrases have three different functions: (1) in direct speech they mark the person spoken to as the intended addressee, (2) in direct quotations they signal that the referent is the addressee of the reported speech, and (3) as rhetorical figures of speech they give an unexpected emotional impulse to a speaker's discourse. These functions are explored one by one, followed by a summary of the syntactic and lexical properties of nP 2 sG noun phrases.

### 6.2.1.1.1 "NP 2SG" noun phrases in direct speech

In direct speech, speakers employ NP 2sG noun phrases when they want to send an unambiguous signal that the person spoken to is indeed the intended addressee. In such noun phrases, the second person $k o$ ' 2 sG' marks the referent encoded in the head nominal as the addressee of the utterance. The head nominal can be a common noun or a proper noun, as shown in (51) to (54).

NP 2sG noun phrases in direct speech
(51) [mama-ade ko] masak daging sa biking papeda e? aunt 2sG cook meat 1sG make sagu.porridge eh
'you aunt cook the meat, I make the sagu porridge, eh?' [080921-001-CvNP.0073]
(52) [mace ko] rasa lucu jadi
woman 2sg feel be.funny so
[Reaction to a narrative:] 'because you Madam would have felt funny'
[081010-001-Cv.0206]
(53) [Wili ko] jangang gara~gara tanta dia itu!

Wili 2sG NEG.IMP RDP~irritate aunt 3sG D.DIST
[Addressing a young boy:] 'you Wili don't irritate that aunt!' [081023-001-Cv.0038]
(54) [Susana ko] pigi kaka cebo

Susana 2sG go oSb wash.after.defecating
[Addressing her three-year old daughter:] 'you Susana, go, (your) older sister will wash (you)!' [081014-006-CvPr.0048]

When the head nominal is a common noun, second person ko ' 2 SG' indicates which particular individual is being referred to. Thereby the pronoun allows the unambiguous identification of the addressee as the intended referent. Often speakers choose this strategy when they address an individual in a group of several interlocutors as in (51) and (52), or when they give an order to someone, as in (53) and (54).

When ko '2sG' co-occurs with a proper noun, as in (53) or (54), one might argue that such noun phrases are redundant with the pronoun as adnominal determiner being superfluous, since proper nouns are inherently definite. In Papuan Malay, however, NP 2sG expressions constitute direct speech-act strategies which allow speakers to single out participants and to mark them unambiguously as the intended referents of the proper nouns. Being addressed with such a NP 2SG noun phrase leaves the addressees little room for interpretation. Thereby, NP 2SG nouns phrases are much more direct than the indirect strategies presented in (55) and (56),

Most often, speakers do not address their interlocutor with a direct NP 2sG expression. Instead, they tend to use more indirect, face-preserving strategies by addressing their interlocutor with a kinship term or their proper name. This applies especially when issuing a request or an order, as shown in (55) and (56). In (55), a daughter asks her

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father for money by addressing him with the kinship term bapa 'father'. In (56), a father requests his daughter to talk to him by addressing her with her proper name Nofela.

Indirect forms of address with bare proper nouns or kinship terms
(55) bapa ingat tong itu uang!
father remember 1PL D.DIST money
'you ('father') remember our, what's-its-name, money!' [080922-001a-CvPh.0857]
(56) Nofela bicara suda!

Nofela speak already
'you ('Nofela') speak (to me)!' [080922-001a-CvPh.0805]

### 6.2.1.1.2 "NP 2SG" noun phrases in reported speech

Speakers also employ NP 2sG noun phrases when they report direct speech. This reporting is usually done through quoting. Cross-linguistically, direct quotations serve "to dramatize and highlight important elements in a narrative", while indirect speech "seems less vivid and colorful", as Bublitz \& Bednarek (2006: 552) point out. The same applies to Papuan Malay, as speakers typically use quotes when reporting direct speech, as demonstrated in (57) and (58).

When relating what had been said to a particular individual, speakers usually begin the quote with an NP 2sG noun phrase, as (57) and (58). This has two functions. First, it indicates the referent as the addressee of the reported speech. Second, np 2sG noun phrases mark the referent as familiar or given. Thereby they signal to the hearers that they should be able to identify the referent. Subsequently, speakers continue the direct quote by referring to, or "addressing", the referent with bare ko ' 2 SG ', as in (58). Note that the first occurrence of Iskia in (58) is not part of the quote but the direct object of bilang 'say'.
(57) de bilang, Natalia ko bisa liat orang di luar?

3sG say Natalia 2sG be.able see person at outside
[About hospitality:] '[(my father said to me,) "if you close the door, can you see the people outside?",] he said, "can you Natalia see the people outside?"" [081110-008-CvNP.0104]
(58) tong dua bilang Iskia, Iskia ko temani, ko temani karna su 1PL two say Iskia Iskia 2SG accompany 2sG accompany because already larut malam sedikit be.protracted night few
'the two of us said to Iskia, "you Iskia come with (us), you come with (us) because it's already a bit late in the evening"' [081025-006-Cv.0323/0325]

### 6.2.1.1.3 "NP 2sG" noun phrases as rhetorical figures of speech ("apostrophes")

NP 2SG noun phrases also serve as rhetorical figures of speech. Speakers suddenly interrupt the flow of their discourse and employ a noun phrase modified with second person ko '2sG', whereby they unexpectedly address a different audience of absent persons or nonhuman entities.

This "turning away from an audience and addressing a second audience" as a rhetorical figure of speech has been termed "apostrophe" (Bussmann 1996: 75). Generally speaking, speakers employ apostrophes to give "a sudden emotional impetus" (Abrams \& Harpham 2009: 313) to their discourse and thereby to create an emotional reaction in their audience. Following Kacandes (1994), this emotional reaction to apostrophe can be explained "by its power of calling another into being"; that is, " $[t]$ he audience witnesses an invigoration of a being who previously was not 'present'". Moreover, the "[1]inguistic properties of the second-person pronoun invite the hypothesis that one also reacts strongly to apostrophe because one can so easily become the 'you' and thus feel oneself called into the relationship it creates" (1994).

This explanation also applies to NP 2sG noun phrase apostrophes in Papuan Malay as illustrated in (59) to (61). Structurally, these utterances resemble direct quotations. Contrasting with the direct speech situations in (51) to (54), however, the addressed referents were not present when the utterances occurred. And in contrast to the reported speech situation in (57) and (58), the speakers in (59) to (61) do not relate direct quotes. Instead, they "turn away" from their audience to "address a second audience" of human or nonhuman referents.

The example in (59) is part of a story about a fight between Martin and Fitri, with the speaker relating how Martin attacked Fitri. Notably, neither Martin nor Fitri were present when the speaker recounted the incident. When mentioned the first time, Martin is marked as a third-person actor, as is typical of narratives with non-speech-act participants. Later in the discourse, however, Martin is marked as the addressee. More specifically, the speaker first refers to Martin with the np 3sg noun phrase Martin dia lewat 'Martin went past' (literally 'he Martin') (see also §6.2.1.2). Next, the speaker refers to Martin with the third person singular pronoun in de lompat 'he jumped'. Now Fitri returns the attack and kicks Martin badly. At this point, the speaker interrupts the flow of her narrative about the two non-speech-act participants and employs the NP 2SG noun phrase Martin ko 'you Martin' to relate that Martin fell to the ground. In turning away from her audience and addressing absent Martin, the speaker gives "emotional impetus" to the fact that Martin went down after having been kicked by a woman, thereby creating an emotional reaction in her audience.

NP 2sG noun phrases in apostrophes: Human referents
(59) Martin dia lewat tete, de lompat mo pukul Fitri ... Fitri kas naik Martin 3sg pass.by grandfather 3sg jump want hit Fitri Fitri give ascend kaki di sini, Martin ko jatu, dia lari ke mari, dia mo pukulFitri foot at l.prox Martin 2sg fall 3sg run to hither 3sg want hit Fitri
[About a fight between Fitri and Martin:] 'Martin went past grandfather, he jumped (and) wanted to hit Fitri [and Fitri caught his foot and] Fitri kicked

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(Martin) here, you Martin fell, (then) he ran (over) here, he wanted to hit Fitri' [081015-001-Cv.0018-0019]

NP 2SG apostrophes are also formed with nonhuman referents. They "imply a personification of the nonhuman object that is addressed" (Abrams and Harpham 2009: 314). In (60), for instance, the speaker recounts a stormy boat trip. Suddenly, she turns away from her audience to address the main protagonist anging 'wind' with the NP 2sG noun phrase anging ko 'you wind'. In the example in (1), repeated as (61), the speaker relates how one of his ancestors came down to the coast. Seeing the ocean for the first time, he mistakes it for a wide river. At this point the speaker turns away from his audience to address this sungay 'river' with the Np 2sG noun phrase sungay ko 'you river'. Note that the apostrophe is part of an appositional PRO NP construction with preposed ko ' 2 SG ', such that ko sungay ko 'you, you river' (see §6.1.6).

NP 2sG noun phrases in apostrophes: Nonhuman referents
(60) ... anging ko datang suda, hujang besar datang suda wind 2sg come already rain be.big come already
[About a storm during a boat trip:] 'you wind already came up, a big rain already came up' [080917-008-NP.0137]
(61) ... tida perna dia liat, [ko] [sungay ko] bisa terbuka begini NEG once 3sg see 2sG river 2sG be.able be.opened like.this
[Seeing the ocean for the first time:] '[never before has he seen, what, a river that is so very big like this ocean,] never before has he seen you, you river can be wide like this?' [080922-010a-CvNF.0212-0213]

### 6.2.1.1.4 "NP 2sG" noun phrases and their head nominals

This section summarizes the syntactic and lexical properties of NP 2sG noun phrases.
In the corpus, NP 2sG noun phrases typically take the subject slot in clause-initial position, as in (57) to (61). There are a few exceptions, however: in (62) babi ko 'you pig' occurs as an exclamation in clause-final position; in (64) kaka ko 'you older sibling' denotes the possessor in an adnominal possessive construction which, in turn, takes the clausal object slot; and in (65) pace ko 'you man' expresses the possessor in an adnominal possessive construction which, in turn, takes the complement slot in a prepositional phrase. The referent can be encoded with a common noun as in (62), a proper noun as in (67), or a noun phrase with an adnominal modifier as in (63). The referent is typically human; it can, however, also be inanimate such as anging 'wind' in (60).

The utterances in (57) to (61) and (64) to (68) also show that $k o$ ' 2 sG ' is freely used as a determiner; that is, its uses are not limited to exclamations, such as babi (puti) ko 'you (white) pig' in (62) and (63).
(62) ... dasar bodo babi ko
base be.stupid pig 2sG
'[you (sG) here, do you (sG) have ears (or) not,] (you are of course) stupid, you pig' [081014-016-Cv.0047]
(63) babi puti ko dari atas turung
pig be.white 2sG from top descend
[About an acquaintance:] 'you white pig came down from up (there)' [081025-006-Cv.0260]
(64) sa taw kaka ko pu ruma

1sg know oSb 2sg poss house
'I know you older brother's house' [080922-010a-CvNF.0238]
(65) nanti kitong lewat di pace ko pu kampung itu
very.soon 1PL pass.by at man 2SG poss village D.DIST
'later we'll pass by you man's village there' [081012-001-Cv.0017]
(66) de blang, a, om ko ini tra liat...

3sG say ah! uncle 2sG d.prox neg see
'he said, "ah, you uncle here didn't see ..."' [080923-009-Cv.0051]
(67) Barce ko ini ko takut

Barce 2sG D.prox 2sG feel.afraid(.of)
'you Barce here, you feel afraid' [081109-001-Cv.0131]
(68) Eferdina ko itu ko taw kata pis ka tida

Eferdina 2sG D.DIST 2sG know word please[E] or NEG
'you Eferdina there, do you know the word "please" or not?' [081115-001a-Cv.0145]

### 6.2.1.2 NP 3sG noun phrases

In NP 3sG noun phrases, the determiner pronoun indicates and accentuates that the speakers assume their interlocutors to know the referents, encoded by the head nominals. That is, marking referents as familiar or given, dia/de '3sG' signals to the hearers that they should be in a position to identify them. The determiner uses of dia/ de ' 3 sG ' can be situational or anaphoric. Both uses are discussed one by one, followed by a summary of the syntactic and lexical properties of NP 3sG noun phrases.

### 6.2.1.2.1 Situational uses of dia/ de ' 3 sG ' in "NP 3sG" noun phrases

In the situational uses of adnominal pronouns, "the physical situation in which the speaker and hearer are located contributes to the familiarity of the referent of the definite noun phrase" (Lyons 1999: 4). This cross-linguistic observation also applies to the situational uses of adnominally used dia/de ' 3 sG', as illustrated in (69) to (71).

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In (69), the situation is an obvious one: the hearer Wili has been irritating his tanta 'aunt' and is told to stop doing this. In (70), the speaker illustrates local bride-price customs with an example. The determiner $d e$ ' 3 sG ' marks the familiarity of the referent bapa 'father'. This in turn leads the interlocutor to interpret bapa 'father' as the speaker's husband. In (71), the interlocutors discuss motorbike problems. Suddenly, the speaker quotes what Dodo de 'Dodo' (literally 'he Dodo') had said. Dodo had not been mentioned earlier and was not present at this conversation. Determiner $d e$ ' 3 sG ', however, signals to the hearers that they are familiar with the referent which, in turn, leads them to interpret the referent as the speaker's older brother Dodo.

Wili ko jangang gara~gara [tanta dia itu]!
Wili 2sG NEG.IMP RDP~irritate aunt 3sG D.DIST
'you Wili don't irritate that aunt!' [081023-001-Cv.0038]
(70) macang kalo [bapa de] kasi nona ini, a, nanti
variety if father 3sG give girl D.PRox ah! very.soon
[About bride-price children:] 'for example, if (my) husband gives this (our) girl (to our relatives), ah, later ...? [081006-024-CvEx.0079]
(71) [Dodo de] bilang, adu coba ko kas taw sa

Dodo 3sG say oh.no! if.only 2sG give know 1sG
'Dodo said, "oh no, if only you had let me know"' [081014-003-Cv.0029]

### 6.2.1.2.2 Anaphoric uses of dia/ de '3sG' in "NP 3sG" noun phrases

In the anaphoric uses of adnominal pronouns, the referents of the definite noun phrase are "familiar not from the physical situation but from the linguistic context" (Lyons 1999: 4), as they were mentioned earlier in the discourse. The same observation applies to the anaphoric uses of adnominally used dia/de ' 3 sG '.
In Papuan Malay, when introducing new protagonists, speakers typically introduce these individuals or entities with bare common or proper nouns. At their next mention, these non-speech-act participants are encoded with NP 3SG noun phrases, with the third person pronoun marking the referents as definite. This, in turn, signals to the hearers that they are assumed to be familiar with the referents. This strategy is illustrated with the two narrative extracts in (72) and (73). ${ }^{9}$

The utterances in (72) are part of a narrative about some bad news that the speaker received from his grandmother. The speaker introduces his grandmother as a new protagonist with the bare kinship term nene 'grandmother'. This introduction involves two mentions of nene 'grandmother'; the repetition gives the speaker time to reflect who it was that had been accompanying his grandmother when they met. Following this introduction, the speaker employs the NP 3sG noun phrase nene de 'grandmother' (literally 'she grandmother'), which marks the new character as given and familiar.

[^137]Anaphoric uses of dia/de '3sG': Example \#1
...pas ketemu deng sa pu nene, nene, trus kaka
precisely meet with 1sG poss grandmother grandmother next oSb
laki~laki, mama-tua pu ana
RDP~husband aunt poss child
'[I passed by (and) reached the village market there, I was sitting, standing there,] right then (I) met my grandmother, grandmother and then (my) older brother, aunt's child'
baru nene de mulay tanya saya, de blang...
and.then grandmother 3sG start ask 1SG 3sG say
'and then grandmother started asking me, she said, ...'
[080918-001-CvNP.0056-0057]
The utterance in (73) occurred during a narrative about a bad-mannered intruder and a young woman named Rahab who observed this person's behavior. Employing a bare proper noun, the speaker introduces Rahab as a new character on the scene. At her next mention, this new protagonist is encoded by the np 3sG noun phrase Rahab de 'Rahab' (literally 'she Rahab'), which marks this non-speech-act participant as given and familiar. In the following, the speaker refers to Rahab with the bare third person pronoun de ' 3 sG '.

Anaphoric uses of dia/de '3sG': Example \#2
(73) baru de luda~luda keee, ... Rahab yang liat, Rahab de jemur~jemur and.then 3sG RDP $\sim$ spit spoot! Rahab Rel see Rahab 3sG rDp $\sim b e . d r y$ pakeang begini baru de perhatikang, ...
clothes like.this and.then 3sG observe
[About a bad-mannered intruder:] 'and then he was spitting "spoot!" ... (it was) Rahab who saw (it), Rahab was drying clothes at that moment, then she noticed ..' [081006-035-CvEx.0042]

### 6.2.1.2.3 "NP 3SG" noun phrases and their head nominals

This section summarizes the syntactic and lexical properties of NP 3sG noun phrases.
NP 3sG noun phrases in the corpus typically take the subject slot in clause-initial position, as in (70) to (73). Other slots, however, are also possible, such as the direct object slot in (69), or the possessor slot in (74). The referent can be expressed with common nouns as in (72), proper nouns as in (73), or noun phrases with adnominal modifiers, as in (74). Further, determiner dia/ de '3sG' also occurs in complex noun phrases, as in bapa dari fepang dia 'the man from Japan' (literally 'he man from Japan') in (75), or kaka pendeta di Mambramo de tu 'that older pastor sibling in the Mambramo area' (literally 'that he older pastor in the Mambramo area') in (76). The referents in NP 3sG noun phrases are usually human, but they can also be animate nonhuman such as kaswari 'cassowary' in (77), or inanimate such as bua mangga 'mango fruit' in (78).

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(74) ... di dano situ di [[kaka laki~laki de] pu [tempat situ]] at lake L.MED at oSb RDP~husband 3sG poss place L.MED
'[we wanted to pray a whole night while picnicking, at what's-its-name,] at the lake there, at the older brother's place there' [080922-002-Cv.0090]
(75) ... karna ini bapa dari fepang dia suda kutuk kota ini because D.Prox father from Japan 3sG already curse city D.PRox
'... because, what's-his-name, the gentleman from Japan already cursed this city' [080917-008-NP.0021]
(76) kaka pendeta di Mambramo de tu jual RW
oSb pastor at Mambramo 3sG D.DIST sell cooked.dog.meat
'that older sibling pastor in (the) Mambramo (area) sells cooked dog meat'
[081011-022-Cv.0105]
(77) ... ato kaswari dia ada berdiri pas perhatikang begini ... or cassowary 3sG exist stand be.exact watch like.this
'[if you see a cassowary's footprint] or the cassowary is standing right there watching (you) like this, ...' [080923-014-CvEx.0022]
(78) ... bawa anaang pinang, anaang sagu, bibit klapa, bibit pisang, ...
bring offspring betel.nut offspring sago seedling coconut seedling banana mungking bua mangga de punya bibit
maybe fruit mango 3sG poss seedling
[About wedding customs:] '[(when) we bring (our son,] (we) bring betel nut seedlings, sago seedlings, coconut seedlings, banana seedlings, ... maybe
seedlings of the mango fruit, ...' [081110-005-CvPr.0056-0057]

### 6.2.1.3 NP PRO-SG expressions with comma intonation

The corpus also contains np PRo-SG expressions in which the nouns are set off from the following pronouns by a comma intonation ("|"), as in (79) to (82).

In NP PRO-SG expressions with second person $k o$ ' 2 SG', the marked-off nouns function as vocatives, that is, as forms of direct address, such that "voc Pro". Cross-linguistically, voc pro expressions serve to specify "a person out of a group of persons while using a second person singular pronoun" with the vocative noun being "separated from the rest of the sentence by intonation" (Bhat 2007: 46). This strategy of singling out and addressing particular individuals through a voc pro expression is shown in (79) and (80), respectively: mama 'mother' and Ise are vocatives which are set off from second person $k o^{\prime}$ ' 2 SG' with a distinct comma intonation ("|"). Hence, these expressions cannot be interpreted as NP 2sG noun phrases.

Topic-comment constructions with comma intonation: NP | 2SG
(79) trus Martina de tanya saya, mama | ko rasa bagemana? next Martina 3sg ask 1sG mother 2sg feel how 'and then Martina asked me, "mother, how do you feel?" [081015-005-NP.0018]
(80) jadi Ise ni tong su bilang dia, Ise | ko tinggal di sini suda! so Ise d.prox 1PL already say 3sG Ise 2sG stay at l.Prox already 'so Ise here, we already told her, "Ise, you stay here!"' [080917-008-NP.0026]

NP 3SG expressions with a comma intonation are analyzed as topic-comment constructions. Cross-linguistically, in topic-comment constructions, the "topic is generally expected to continue" and therefore "third person pronouns [...] are used in order to represent the continued occurrence of a topic" (Bhat 2007: 209). This observation also applies to Papuan Malay NP | 3sG expressions, that is, the preposed noun phrase signals the topic, while coreferential dia/ de ' 3 sG ' has comment function. This strategy of forming topiccomment constructions is shown in (81) and (82): orang Senggi and Klara designate the topics while dia ' 3 sG ' and de ' 3 sG ' function as comments, respectively.

Topic-comment constructions with comma intonation: NP | 3sG
(81) baru dia datang, orang fayapura sana, kawang itu, orang Senggi | and.then 3sG come person Jayapura L.DIST friend D.DIST person Senggi dia datang de duduk
3sG come 3sg sit
[Talking about a friend:] 'and then she came, (the) person (from) Jayapura over there, that friend, (the) person (from) Senggi, she came (and) she sat (down)' [080917-008-NP.0107]
(82) Klara $\mid$ de lompat satu kali tu

Klara 3sg jump one time D.DIST
'Klara, she jumped once (EMPH)' [081025-006-Cv.0216]
Topic-comment constructions with no comma intonation are also possible, however. In this type of constructions, the topic is expressed in a noun phrase with a pronoun determiner and demonstrative modifier, such that "n PRO-SG DEm". This is illustrated in (67), repeated as (83), and in (68) in $\S 6.2 .1 .1$ (p. 353). Very often, however, the preposed topical noun phrase does not contain a pronoun determiner, such that " N дем". This is demonstrated with the topic-comment constructions ade ini de this younger sibling, he/she' in (84), and Ise ni de 'Ise here, she' in (85). In [N (PRO-SG) DEM] PRO-SG topiccomment constructions, the demonstrative sets aside the topic, and therefore no comma intonation is needed.

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Topic-comment constructions with demonstrative: NP DEM PRO-SG
(83) [Barce ko ini] [ko] takut

Barce 2sG d.prox 2sG feel.afraid(.of)
'you Barce here, you feel afraid' [081109-001-Cv.0131]
(84) baru [ade ini] [de] sakit
and.then ySb D.Prox 3sG be.sick
'and then this younger sibling, he/she is sick' [080917-002-Cv.0020]
... [Ise ni] [de] su mulay takut ini
Ise D.PRox 3sG already start feel.afraid(.of) D.PRox
'[this tree began shaking, shaking like this, and] Ise here, she already started feeling afraid’ [080917-008-NP.0028]

At this stage in the research on Papuan Malay, it is not possible to tell if there are rules governing the choice between NP | PRO-SG and NP DEM PRO-SG topic-comment constructions. To answer this question more research is needed.

### 6.2.1.4 Analysis of NP PRO-SG expressions as noun phrases and not as topic-comment constructions

There are four reasons for analyzing the NP 2sG expressions in (51) to (68) and the NP 3sG constructions in (69) to (78) as noun phrases with a pronominal determiner and not as topic-comment constructions.

First, NP PRO-SG expressions can occur in positions other than the clause-initial subject slot, as shown with the NP 2sG noun phrases in (62), (64), and (65), and the NP 3sG noun phrases in (69) and (74). In these positions, however, the respective common nouns cannot be interpreted as topics in topic-comment constructions. This is due to the fact that topicalized constituents do not remain in-situ but are fronted to the clause-initial position (see also Example (4) in §1.6.1.4, p. 24).

Second, an NP PRO-SG expression can be modified with a demonstrative, as in the NP 2 sG noun phrases in (66) to (68), or the NP 3sG noun phrases in 69) and (76). In these "NP PRO-SG DEM" expressions, the demonstratives have scope over the pronouns. The fact that the pronouns occur in noun phrases with adnominal demonstrative, in turn, supports the conclusion that in NP PRO-SG expressions the pronouns function as determiners. Moreover, in two of the examples, the NP PRO-SG DEM expressions have topic function in topic-comment constructions, namely the NP 2SG DEM noun phrases in (67) and (68). In both cases, the preposed noun phrases are copied by coreferential $k{ }^{\text {a }}$ ' 2 SG ' which has comment function. ${ }^{10}$ Neither bare Barce in (67), nor bare Eferdina in (68) can be topics in topic-comment constructions. Instead it is the entire noun phrase, including

[^138]determiner $k o$ ' 2 SG ', which has topic function. This, in turn, also supports the conclusion that in NP PRO-SG expressions, the pronoun functions as a pronominal determiner.
Third, by indicating person, singularity, and definiteness of their referents, determiner pronouns have pertinent discourse functions. In direct speech, NP PRO-SG expressions with second person $k o$ ' 2 sG ' mark the referent of the head nominal unambiguously as the intended addressee. In reported speech, NP 2SG noun phrases indicate that the referent is the addressee of the direct quotation. In addition, they signal to the hearers that they are in a position to identify the referent. Finally, as apostrophes in rhetoric figures of direct speech, they serve as "exclamatory addressees". nP PRO-SG expressions with third person dia/ de ' 3 sG ' signal and accentuate that the speakers expect their hearers to be familiar with the referents encoded by their head nominals. In other words, it is communicated to the interlocutors that they should be able to identify the referents.

Fourth, the corpus includes a number of utterances, in which speakers repeat an NP PRO-SG expression as a form of hesitation or delay; in each case the pronoun is third person dia/de '3sG'. Two of these repetitions are presented in (86) and (87). It is noted that the speakers do not repeat the respective bare nouns pace 'man' and Markus, but the NP 3sG expressions pace de 'the man' (literally 'he man') and Markus de 'Markus' (literally 'he Markus'). This suggests that they perceive these expressions to be cohesive entities which, in turn, supports their analysis as single noun phrases.
(86) [pace de], [pace de] mandi rapi, de mandi rapi man 3sg man 3sg bathe be.neat 3sg bathe be.neat 'the man, the man bathed neatly, he bathed neatly' [081109-007-JR.0002]
(87) akirnya [Markus de], [Markus dia] turung begini
finally Markus 3sg Markus 3sg descend like.this
'finally Markus, Markus came down (to the coast) like this'
[080922-010a-CvNF.0204]

### 6.2.2 Adnominal plural personal pronouns

Plural pronouns also function as determiners in noun phrases, such that as illustrated in (88) and (89). They signal the definiteness and person-number values of their referents, and thereby allow their unambiguous identification.
(88) [pemuda dong] snang skali
youth 3pl feel.happy(.about) very
'the young people feel very happy' (Lit. 'youth they') [080925-003-Cv.0220]
(89) [Ise dong] su datang

Ise 3pl already come
'Ise and her companions including herself already came' (Lit. 'Ise they')
[080925-003-Cv.0169]

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The examples in (88) and (89) also show that N PRO-PL noun phrases have two readings.
First with an indefinite referent, such as pemuda 'youth' in (88), n Pro-pl noun phrases have an additive plural reading. Second with a definite referent such as Ise in (89), N Pro-Pl noun phrases receive an associative inclusory plural reading. This makes $\mathrm{Pa}-$ puan Malay belong to the large group of languages in Asia where the "associative plural marker [...] is also used to express additive plurals" (Daniel \& Moravcsik 2013: 5-6).

The additive plural interpretation of N Pro-pl noun phrases is discussed in §6.2.2.1 and the associative inclusory plural reading in §6.2.2.2. These descriptions are followed in §6.2.2.3 by a brief overview of the associative plural in other regional Malay varieties.

### 6.2.2.1 Additive plural interpretation

In N PRO-PL noun phrases with indefinite referents, adnominal plural pronouns have two functions. They signal the definiteness of their referents and an additive plural reading of the respective noun phrases with the basic meaning of "the Xs".

Cross-linguistically, the additive interpretation implies referential homogeneity of the group. That is, "every referent of the plural form is also a referent of the stem" (Daniel \& Moravcsik 2013: 1). This additive reading of Papuan Malay n Pro-pl is illustrated in (90) to (92). In (90), kitorang '1pl' denotes the plurality of its bare head nominal nene 'grandmother', while in (91) kamu '2pl' signals the plurality of bangsat 'rascal', and in (92) dong '3pl' indicates the plurality of anjing 'dog'. These examples also show that the referent is always animate. It can be human as in (90) and (91), or nonhuman as in (92); inanimate referents are unattested.

Additive plural interpretation with bare head nominal
(90) jadi nene kitorang ini masak
so grandmother 1PL D.PRox cook
'so we grandmothers here cook' [080924-001-Pr.0008]
(91) bangsat kamu tu tinggal lari ke sana ke mari
rascal 2PL D.DIST stay run to L.DIST to hither
'you rascals there keep running back and forth' [080923-012-CvNP.0011]
(92) ... di mana anjing dong gong-gong
at where dog 3pl bark(.at)
'[I just ran closing in on the pig] where the dogs were barking'
[080919-003-NP.0007]
In (90) to (92) the number of referents is left unspecified. When this number is limited to two, speakers very often use a dual construction, such that "bare n pro-pl dua". In such a construction, the two referents are not explicitly mentioned but subsumed under the postposed adnominal numeral dua 'two', as in (93) and (94).

Additive dual interpretation
(93) laki~laki kam dua sapu

RDP~husband 2PL two sweep
'you two boys sweep' [081115-001b-Cv.0010]
(94) pace dorang dua ini ke atas
man 3pl two D.prox to top
'the two men here (went) up (there)' [081006-034-CvEx.0010]

### 6.2.2.2 Associative inclusory plural interpretation

N PRO-PL noun phrases with a definite referent and an adnominal plural pronoun receive an associative inclusory plural reading.

In her cross-linguistic semantic analysis of associative plurals, Moravcsik (2003: 470471) defines "associative plurals as "constructions whose meaning is ' X and X 's associate(s)', where all members are individuals, X is the focal referent, and the associate(s) form a group centering around $X$ '. In Papuan Malay, the focal referent is always encoded with a noun or noun phrase heading the phrasal construction, while the associates are encoded with a post-head plural pronoun. In (95) and (96), for instance, Lodia and Pawlus are the focal referents while the pronouns torang '1PL' and dorang '3pl' denote the associates, respectively.

The reading of Papuan Malay n Pro-pl noun phrases is not only associative, however. Adopting Moravcsik's (2003: 479) analysis, the reading of such noun phrases is also "inclusory", in that "all members of the plural set are summarily referred to by a pronoun" (see also Haspelmath 2004: 25; Gil 2009). That is, the reference of the plural pronoun in a Papuan Malay n Pro-pl noun phrase includes the reference of the focal referent, such that "Pro including X". In (95), for instance, the pronoun kam '2PL' includes not only the companions and the speaker, but all members of the plural set, "including Oktofina". That is, the n PRo-pl noun phrase Oktofina kam does not signal an additive relation in the sense of "Oktofina plus you companions". Likewise in (96), the reference of dorang '3pl' includes not only the associates of the focal referent Pawlus, but all members of the plural set, "including Pawlus".

Associative inclusory plural interpretation
(95) tanta Oktofina kam pulang jam brapa? aunt Oktofina 2pl go.home hour several
'what time did you aunt Oktofina and your companions including you
(Oktofina) come home?' [081006-010-Cv.0001]
(96) tanta ada mara Pawlus dorang
aunt exist be.angry Pawlus 3pl
'aunt is being angry with Pawlus and his companions including Pawlus'
[081006-009-Cv.0002]

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In the following, the semantic properties of associative inclusory expressions are examined. Also discussed are the lexical classes used in these expressions and the types of relationships expressed within the associated groups.

Cross-linguistically, associative inclusory expressions imply three distinct semantic properties, namely "referential heterogeneity", "reference to groups", and "asymmetry" (Daniel \& Moravcsik 2013; Moravcsik 2003). The notion of "referential heterogeneity" implies that "the associative plural designates a heterogeneous set" (Daniel \& Moravcsik 2013: 1). The semantic property of "reference to groups" refers to a high degree of internal cohesion within the plural construction; that is, the focal referent and the associates form "a spatially or conceptually coherent group" (Moravcsik 2003: 471). The notion of "asymmetry" implies that the groups are "ranked", in that the associative plural names its pragmatically most salient or highest ranking member, the focal referent (Moravcsik 2003: 471).

Referential heterogeneity of Papuan Malay associative inclusory expressions is illustrated with the examples in (97) to (99). In (97), bapa Iskia dong 'father Iskia and them' does not denote several people called Iskia; neither does bapa desa dorang 'father mayor and them' refer to more than one mayor. The same applies to the examples in (98) and (99) (in this context dokter 'doctor' has a definite reading as the local hospital has only one doctor). In each case, the plural pronoun encodes a heterogeneous set of associates "centering around X", the focal referent. Moreover, the pronouns include the focal referents in their reference.

Associative inclusory plural interpretation with the third person plural pronoun
(97) bapa Iskia dong bunu babi, bapa desa dorang dong bunu babi
father Iskia 3pl kill pig father village 3pl 3pl kill pig
'father Iskia and his companions including Iskia killed a pig, father mayor and his companions including the mayor, they killed a pig' [080917-008-NP.0120]
(98) Ise ko tinggal di sini suda deng mama-tua dorang!

Ise 2sG stay at l.prox just with aunt 3pl
'you Ise just stay here with aunt and her companions including aunt!'
[080917-008-NP.0026]
(99) dokter dorang bilang begini ..
doctor 3pl say like.this
'the doctor and his companions including the doctor said like this, ...'
[081015-005-NP.0047]
The semantic property "reference to groups" is shown in (97) and (98). In the two examples, the N PRO-PL noun phrases denote coherent groups of inherently associated individuals, namely bapa Iskia dong 'father Iskia and them', bapa desa dorang 'father mayor and them', and mama-tua dorang 'aunt and them', respectively. These examples
also illustrate the notion of "ranking" in associative inclusory expressions. The pragmatically highest ranking members are the focal referents bapa Iskia 'father Iskia' and bapa desa 'father mayor' in (97), and mama-tua 'aunt' in (98). The remaining members of the plural sets, by contrast, are not fully enumerated but subsumed under the plural pronoun dong/dorang '3pl'.
Typically, the associates are encoded with the third person plural pronoun. Less frequently, the associates are encoded with the first person plural pronoun, as in (95), repeated as (101), or with the second person plural pronoun as in (101) and (102). In associative inclusory expressions formed with the second person plural pronoun, the focal referent is typically the addressee as in (101). Alternatively, although much less often, one of the associates can be the addressee as in (102) (the focal referent Lodia was not present during this conversation).

Associative inclusory plural interpretation with the first and second person plural pronouns
(100) itu yang Lodia torang bilang begini ... D.dist rel Lodia 1pl say like.this
'that's why Lodia and her companions including me said like this, ...' [081115-001a-Cv.0001]
(101) tanta Oktofina kam pulang jam brapa? aunt Oktofina 2pl go.home hour several 'what time did you aunt Oktofina and your companions including you (Oktofina) come home?' [081006-010-Cv.0001]
(102) Lodia kam pake trek ke sana baru sa ... Lodia 2pl use truck to L.DIST and.then 1sG
'Lodia and her companions including you (addressee) took the truck to (go) over there, and then I ...' [081022-001-Cv.0001]

In (95) to (102), the number of referents is not specified. When only two participants are involved, however, that is the focal referent plus one associate, Papuan Malay speakers very often use a dual construction, such that "bare n pro-pl dua", as in (103). Like dual constructions with an additive reading (§6.2.2.1), the associate is not explicitly mentioned but subsumed under the post-head numeral dua 'two'.

Associative inclusory dual interpretation
(103) om kitong dua kluar mo pergi cari pinang
uncle 1pl two go.out want go search betel.nut
'uncle and I went out and wanted to look for betel nuts' [081006-009-Cv.0014]
As for the lexical classes employed in associative plural expressions, Daniel \& Moravcsik (2013: 3) observe "a clear preference for associative plurals formed from proper names

## 6 Personal pronouns

over kin terms over non-kin human common nouns over nonhuman nouns". This also applies to Papuan Malay, in that the focal referents in associative inclusory expressions are formed from human nouns while nonhuman animate focal referents are unattested. Among human nouns in the corpus, however, kin terms as in (98) are more common than proper names as in (95). This has to do with the fact that culturally people prefer not to use proper names, if they have another option, especially if the person is older and/or present. In addition, although not very often, associative plural expressions are formed from non-kin terms such as the title noun expression bapa desa 'father mayor' in (97), or the common noun dokter 'doctor' in (99). (See also Moravcsik 2003: 471-473.)

Concerning the relationship between the focal referent X and the associates, Daniel and Moravcsik (2013: 3) note that "the group may be: (i) X's family, (ii) X's friends, or familiar associates, or (iii) an occasional group that X is a member of" with "kin forming the most commonly understood associates". Papuan Malay also conforms to this cross-linguistic finding in that the associates are most often X's family as in (98). Less commonly, X's associates are friends or companions in a shared activity as in (99). Associative plurals denoting occasional groups or, according to Moravcsik (2003: 473), "incidental association", have not been identified in the corpus.

### 6.2.2.3 Associative plural in other regional Malay varieties

The associative plural interpretation for noun phrases with adnominal plural pronoun is also quite common for other regional Malay varieties, such as Ambon, Bali Berkuak, Dobo, Kupang, Manado, or Sri Lanka Malay. In Ternate Malay, however, pronouns do not have adnominal functions (Litamahuputty 2012: 141). The associative plural reading of noun phrases with adnominal plural pronouns found in regional Malay varieties is illustrated in the examples in (104) to (109).

In Ambon, Dobo, Kupang, and Sri Lanka Malay, the adnominal pronoun is postposed as in Papuan Malay, as demonstrated in (104) to (107). In Balai Berkuak or Manado Malay, by contrast, the pronoun is in pre-head position, as shown in (108) and (109).

In all examples, the pronoun is the third person plural pronoun. In most varieties only the short pronoun form is used as for instance in Ambon or Dobo Malay, as shown in (104) and (105). Only in Manado Malay are the short and long forms used, as shown in (109). Contrasting with Papuan Malay, these regional Malay varieties do not use the first and second person plural pronouns to express associative plurality.

Ambon Malay (van Minde 1997: 169)

## mama dong

mother 3pL
'mother and the others'

Dobo Malay (R. Nivens p.c. 2013)
(105) pa Kace dong
man Kace 3pl
'Mr. Kace and his associates'

Kupang Malay (Grimes \& Jacob 2008)
(106) Yan dong

Yan 3pl
'Yan and his family / mates'

Sri Lanka Malay (Slomanson 2013)
(107) Miflal derang

Miflal 3pl
'Miflal and his friends'

Balai Berkuak Malay (Tadmor 2002: 7)
(108) sidaq Katalq

3pl Katalq
'Katalq and her gang'

Manado Malay (Stoel 2005: 30)
(109) dong/dorang Yoram

3pl Yoram
'Yoram and his family'
In short, among the eastern Malay varieties Papuan Malay is unique given that associative plural expressions are formed with all three plural persons, including the long and the short pronoun forms. This different behavior of Papuan Malay n pro-pl noun phrases supports the conclusion put forward in $\S 1.8$ that the history of Papuan Malay is different from that of the other eastern Malay varieties. ${ }^{11}$

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## 6 Personal pronouns

### 6.3 Summary

The Papuan Malay pronoun system distinguishes singular and plural numbers and three persons. In addition to signaling the person-number values of their referents they also signal their definiteness. Each pronoun has at least one long and one short form, with the exception of second person singular ko ' 2 sG '. The use of the long and short forms does not mark grammatical distinctions but represents speaker preferences. The pronouns have pronominal and adnominal uses.

In their pronominal uses, the pronouns substitute for noun phrases and designate speech roles. The long and short pronoun forms occur in all syntactic slots within the clause. For the direct and oblique object slots, however, speakers use the long forms much more often. These preferences interrelate with the preferred use of the "heavy" long pronoun forms in clause-final position. This, in turn, reflects the cross-linguistic tendency for the clause-final position to be taken by "heavy" constituents. In adnominal possessive constructions, the pronouns only take the possessor slot; most often it is the short pronouns that take this slot. Pronouns also occur in inclusory conjunction, summary conjunction, and appositional constructions.

In their adnominal uses, the pronouns occur in post-head position and function as determiners. That is, signaling definiteness and person-number values, the pronouns allow the unambiguous identification of their referents. As determiners, the pronoun forms of all person-number values are employed, with the exception of the first person singular. NP PRO noun phrases with plural pronouns have two possible interpretations. With indefinite referents, they have an additive plural reading, while with definite referents they have an associative inclusory reading.

## 7 Demonstratives and locatives

This chapter discusses the Papuan Malay demonstratives and locatives, focusing on their different functions and domains of use. Demonstratives and locatives are deictic expressions that provide orientation to the hearer in the outside world and in the speech situation. Papuan Malay employs a two-term demonstrative system and a three-term locative system as shown in Table 7.1.

Table 7.1: Papuan Malay demonstratives and locatives

| Papuan Malay DEM | Gloss |  |  |
| :--- | :--- | :--- | :--- |
| Proximal ini/ni 'D.PROX' 'this' <br> Distal itu / tu   | 'D.DIST' | 'that' |  |
| Papuan Malay Loc | Gloss |  |  |
| Proximal | sini | 'L.PROX' | 'here' |
| Medial | situ | 'L.MED' | 'there' |
| Distal | sana | 'L.DIST' | 'over there' |

Both systems are distance oriented. Cross-linguistically, such systems "indicate the relative distance of a referent in the speech situation vis-à-vis the deictic center" which "is defined by the speaker's location at the time of the utterance" (Diessel 2006: 430). The unmarked deictic center is defined by the speaker in the "here" and "now". In reported direct speech and narratives, however, the deictic center is readjusted to the reported speech situation and defined by the quoted speakers and the location and time of their speaking.

While their major domain of use is to provide spatial orientation, the demonstratives and locatives also signal distance in metaphorical terms. Their main domains of use are presented in Table 7.2.

In the following sections the demonstratives (§7.1) and locatives (§7.2) are investigated in more detail. The ways in which the demonstratives and locatives can be combined are discussed in $\S 7.3$. The different findings for the demonstratives and locatives are summarized and compared in §7.4.

Table 7.2: Demonstratives (DEM) and locatives (LOC) and their of domains of use

| Domains of use | Function | DEM | LOC |
| :---: | :---: | :---: | :---: |
| Spatial | to provide spatial orientation to the hearer | X | X |
| Figurative locational | to signal a figurative locational endpoint |  | X |
| Temporal | to indicate the temporal setting of the situation or event talked about | X | X |
| Psychological | to signal the speaker's psychological involvement with the situation or event talked about | X | X |
| Identificational | to aid in the identification of a referent | X |  |
| Textual anaphoric | to keep track of a discourse antecedent | X | X |
| Textual discourse deictic | to establish an overt link between two propositions | X |  |
| Placeholder | to substitute for specific lexical items in the context of word-formulation trouble | X |  |

### 7.1 Demonstratives

In the following sections, the syntactic properties and forms of the Papuan Malay demonstratives are reviewed and discussed (§7.1.1), followed by an in-depth discussion of their different functions and domains of use (§7.1.2).

### 7.1.1 Syntax and forms of demonstratives

The distributional properties of the demonstratives are briefly reviewed in §7.1.1.1. This review is followed in §7.1.1.2 by a discussion of the distribution and frequencies of the long and short demonstrative forms.

### 7.1.1.1 Distributional properties of demonstratives

The Papuan Malay demonstratives have the following distributional properties (for more details see §5.6):

1. Co-occurrence with noun phrases (adnominal uses): $\mathrm{N} / \mathrm{NP}$ DEM (§5.6.1)
2. Substitution for noun phrases (pronominal uses) (§5.6.2)
3. Modification with relative clauses (pronominal uses): DEM REL (§5.6.2).
4. Co-occurrence with verbs or adverbs (adverbial uses): v DEM and ADV DEM (§5.6.3)
5. Stacking of demonstratives: DEM DEM and n DEM DEM (§5.6.4)

### 7.1.1.2 Distribution of the long versus short demonstrative forms

This section investigates the distribution and frequencies of the long versus the short demonstrative forms and explores the factors that contribute to this distribution. The data shows that the reduced demonstrative forms are fast-speech phenomena that fulfill the same syntactic functions as the long forms. With two exceptions they are also employed in the same domains of use.

The corpus contains a total of 2,304 ini 'D.Prox' tokens of which 2,046 (88.8\%) are the long form and $258(11.2 \%)$ the short form, as shown in Table 7.3. The number of itu 'D.DIST' token is considerably larger with a total of 4,159 token of which $3,491(83.9 \%)$ are the long form and $668(16.1 \%)$ the short form.

Table 7.3: Demonstratives according to their phonological environment

|  | ini |  | itu |  | $n i$ |  | $t u$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Clause-initial | 86 | $4 \%$ | 279 | $8 \%$ | 7 | $3 \%$ | 28 | $4 \%$ |
| Post-vowel | 1,156 | $57 \%$ | 1,671 | $48 \%$ | 222 | $86 \%$ | 531 | $80 \%$ |
| Post-nasal | 432 | $21 \%$ | 833 | $24 \%$ | 18 | $7 \%$ | 67 | $10 \%$ |
| Post-consonant | 372 | $18 \%$ | 708 | $20 \%$ | 11 | $4 \%$ | 42 | $6 \%$ |
| Total | 2,046 | $100 \%$ | 3,491 | $100 \%$ | 258 | $100 \%$ | 668 | $100 \%$ |

The long forms occur in all phonological environments with Table 7.3 indicating some differences in their distribution, however. First, the high number of long demonstratives (about $50 \%$ ) that follow lexical items with word-final vowels is due to the fact that in Papuan Malay more lexical items have a word-final vowel than a word-final nasal or consonant. Second, the low number of long demonstratives ( $<10 \%$ ) in clause-initial position is due to the fact that the number of pronominally used demonstratives is much lower than that of adnominally or adverbially used ones.

The short forms also occur in all phonological environments. Table 7.3 shows, however, that most of them ( $\geq 80 \%$ ) occur after lexical items with a word-final vowel. The percentage of short demonstratives following lexical items with a word-final nasal or consonant is considerably lower compared to the long forms.

Interestingly, the short demonstratives also occur in clause-initial position: of the seven short ini 'd.prox' tokens occurring clause-initially, five occur at the beginning of an utterance. The remaining two tokens occur clause-initially in the middle of an utterance. In both cases the preceding clause-final lexical item has a word-final vowel which appears to condition these two short forms. Of the 28 short itu 'd.DIST' tokens occurring clause-initially, eleven occur at the beginning of an utterance. The remaining 17 tokens occur clause-initially in the middle of an utterance. Of these, 14 tokens are conditioned by the preceding word-final phoneme: in eleven cases the preceding clausefinal lexical item has a word-final vowel while in the remaining three cases the preceding clause-final lexical item has coda /t/.

## 7 Demonstratives and locatives

These findings suggest that for the most part the short demonstrative forms are conditioned by the environment of their occurrence and constitute fast-speech phenomena. The listed exceptions require further investigation.

The short demonstratives fulfill the same syntactic functions as the long ones. With two exceptions they are also employed in the same domains of use. The data does, however, suggest some preferences. Table 7.4 presents the short demonstratives according to their syntactic functions. The data shows a clear preference for their adnominal uses. Of the 209 adnominally used short ini 'D.Prox' tokens, 170 ( $81 \%$ ) modify noun phrases with nominal heads, while $34(16 \%)$ modify noun phrases with pronominal heads; the remaining five tokens modify interrogatives. Likewise, of the 482 adnominally used short itu 'D.DIST' tokens, $345(72 \%)$ modify noun phrases with nominal heads, while $105(22 \%)$ modify noun phrases with pronominal heads, and $30(6 \%)$ modify locatives; the remaining two tokens modify interrogatives. Considerably less frequently, the short demonstratives have pronominal uses ( $\leq 8 \%$ ) or adverbial uses ( $\leq 13 \%$ ). (Given their large numbers, the long demonstratives have not been quantified according to their syntactic functions.)

Table 7.4: Reduced demonstratives according to their syntactic functions

| Syntactic functions | $n i$ |  | $t u$ |  |
| :--- | ---: | ---: | ---: | ---: |
| Adnominal uses | 209 | $81 \%$ | 482 | $72 \%$ |
| Pronominal uses | 20 | $8 \%$ | 44 | $7 \%$ |
| Adverbial uses (verbal modifier) | 20 | $8 \%$ | 86 | $13 \%$ |
| Adverbial uses (adverbial modifier) | 9 | $3 \%$ | 56 | $8 \%$ |
| Total | 258 | $100 \%$ | 668 | $100 \%$ |

The short demonstratives are also employed in the same domains of use as the long ones, except for the identificational and placeholder uses. Given their rather frequent alternative readings (§7.1.2), the demonstratives have not been quantified according to their domains of use.

Examples (1) to (15) present an overview of the short demonstratives according to their syntactic functions and domains of use. For ini 'd.prox' in examples (1) to (7), its syntactic functions are exemplified as follows: adnominal in (1) to (4); pronominal in (5); and adverbial in (6) and (7). Its domains of use are given as follows: spatial in (1a) and (5a); temporal in (1b); psychological in (1c) (emotional involvement), (3), (4), (6), (7) (vividness), and (2) (contrast); and textual in (5b) (anaphoric) and (5c) (discourse deictic).

Short ini 'd.PRox': Syntactic functions and domains of use] ${ }^{1}$
(1) Adnominal uses (modifies nouns) / Spatial uses in (1a), temporal uses in (1b), psychological uses (emotional involvement) in (1c)
a. bawa mace ni ke ruma-sakit bring woman D.prox to hospital
'(I) brought (my) wife here to the hospital'
b. sekertaria ni pagi ni sedi ... secretariat D.PRox morning D.PRox be.sad
'this morning the secretary was (very) sad' ${ }^{2}$
c. kalo Ise ni selesay ...
if Ise D.prox finish
'when this (my daughter) Ise has finished (school) ...'3
(2) Adnominal uses (modifies personal pronouns) / Psychological uses (contrast) kitong ni tra bisa
1pl d.prox neg be.able
'we, by contrast, can't (work like that)'
(3) Adnominal uses (modifies demonstratives) / Psychological uses (vividness) dia buang ini ni
3SG throw(.away) D.PRox D.PRox
'he threw away these very (ones)'
(4) Adnominal uses (modifies interrogatives) / Psychological uses (vividness)
de mo ke mana ni?
3sG want to where D.PRox
'where (ЕМРН) does he want to go?'
(5) Pronominal uses / Spatial uses in (5a), textual uses (anaphoric) in (5b), textual uses (discourse deictic) in (5c)
a. ada ni
exist D.PRox
'(the fish) are here'

[^140]b. de menyala ni

3sG put.fire.to D.Prox
'he puts fire to this'
c. ni usul saja
D.prox proposal just
'this is just a proposal'
(6) Adverbial uses (modifies verbs) / Psychological uses (vividness)
sa masi hidup ni
1sG still live D.prox
'I'm still very much alive'
(7) Adverbial uses (modifies adverbs) / Psychological uses (vividness)
... tapi skarang ni ada libur
but now D.PROX exist vacation
'... but right now (we) are on vacation'
Examples (8) to (15) list the syntactic functions and domains of use of itu 'D.DIST'. Its syntactic functions are listed as follows: adnominal in (8) to (12); pronominal in (13); and adverbial in (14) and (15). Its domains of use are given as follows: spatial in (13a); temporal in (8a); psychological in (8b), (11) (emotional involvement), (10) (14) (vividness), and (9), (15) (contrast); textual in (8c) (anaphoric), and (13b), (13b) (discourse deictic).

Short itu 'D.DIST': Syntactic functions and domains of use ${ }^{4}$
(8) Adnominal uses (modifies nouns) / Temporal uses in (8a), psychological uses (emotional involvement) in (8b), discourse uses (anaphoric) in (8c)
a. rabu tu ... ko datang

Wednesday d.DIST 2 sG come
'next Wednesday you'll come'
b. ko pu swaratu bahaya

2sG poss voice D.DIST be.dangerous
'that voice of yours is dangerous'
c. Hermantu biasa tida ...

Herman D.dist be.usual neg
'that Herman usually (can)not ...'

[^141](9) Adnominal uses (modifies personal pronouns) / Psychological uses (contrast) sa tu rajing skola
1sG D.DIST be.diligent go.to.school
'I, nonetheless, go to school diligently'
(10) Adnominal uses (modifies demonstratives) / Psychological uses (vividness)
itu tu kata~kata dasar...
D.DIST D.DIST RDP $\sim$ word base
'that very (word belongs to) the basic words ...'
(11) Adnominal uses (modifies interrogatives) / Psychological uses (emotional involvement)
itu apa tu?
D.DIST what D.DIST
'what (EMPH) was that?
(12) Adnominal uses (modifies locatives) / Psychological uses (vividness)
disini tu ada orang swanggi satu at l.Prox d.dist exist person nocturnal.evil.spirit one 'here (ЕМРН) there is a certain evil sorcerer'
(13) Pronominal uses / Spatial uses in (13a), textual uses (discourse deictic) in (13b) and (13c)
a. de ada tu, de ada tu

3sG exist D.DIST 3sG exist D.DIST
'she is over there, she is over there'
b. dorang liat kitorang, tu herang

3PL see 1PL D.DIST feel.surprised(.about)
'they see us, that's surprising'
c. tu yang sa tampeleng Aleks
D.DIST REL 1SG slap.on.face/ears Aleks
'that's why I slapped Aleks in the face'
(14) Adverbial uses (modifies verbs) / Psychological uses (vividness)
tong maing tu hancur
1pl play D.DIST be.shattered
'we did our very playing poorly'
(15) Adverbial uses (modifies adverbs) / Psychological uses (contrast)
de skarang tu tida terlalu ...
3sG now D.DIST NEG too
'he's now (as opposed to the past) not too ...'

In summary, the data in the corpus suggests that the short demonstrative forms are fast-speech phenomena that for the most part are conditioned by their phonological environment. The data also shows that the long and short demonstrative forms fulfill the same syntactic functions. Moreover, they are employed in the same domains of use with two exceptions (the identificational and placeholder uses).

### 7.1.2 Functions of demonstratives

The Papuan Malay demonstratives have a range of different functions and uses which are discussed in more detail in the following sections: spatial uses in §7.1.2.1, temporal uses in §7.1.2.2, psychological uses in §7.1.2.3, identificational uses in §7.1.2.4, textual uses in $\S 7.1 .2 .5$, and placeholder uses in $\S 7.1 .2 .6$. Unless the context of an utterance is clear and explicit, the specific domain of use of the demonstrative may have multiple possible readings

### 7.1.2.1 Spatial uses of demonstratives

The major domain of use for the demonstratives is to provide spatial orientation. This is achieved by drawing the hearer's attention to specific entities in the discourse or surrounding situation. Proximal ini 'd.Prox' indicates that the referent is conceived as spatially close to the speaker, whereas itu 'D.DIST' signals that the referent is conceived as being located further away. This distinction is shown in three sets of contrastive examples.

In the first set of examples in (16) the contrast is illustrated for the adnominally used demonstratives, each of them modifying the common noun ruma 'house'. This example is part of a conversation that took place at the speaker's house. Employing ini 'd.prox', the speaker relates her plans to move from her current house, ruma ini 'this house', to a different house in a neighboring village. Because the new house is smaller than the older one, the speaker's husband is going to enlarge ruma itu 'that house', with itu 'd.dist' indicating that the new house is located at some distance.

Spatial uses: Examples set \#1
(16) ini kasi tinggal, ana~ana dong tinggal, tong pi tinggal di Sawar sana ... D.prox give stay RDP~child 3pl stay 1pl go stay at Sawar L.DIST ruma ini tinggal ... baru ruma itu biking besar house D.Prox stay and.then house D.DIST make be.big
'(we'll) leave this (house) behind, the children will stay (here), (and) we'll move to Sawar over there ..., (we'll) leave this house behind ... and then (we'll) make that house (in Sawar) bigger' [081110-001-Cv.0012/0022/0025/0027]

The second set of examples in (17) and (18) illustrates how the pronominally used demonstratives signal spatial distance. The example in (17) occurred when the speaker and his brother were fishing. When asked where he had put the fish they had just caught, the speaker employs ini 'd.prox' to convey that the fish ada ini 'are here', in the bucket
right next to him. In (18), the speaker replies to the question where a certain other person was. Employing itu 'd.DIST' the speaker states that de ada tu 'she is over there'.

Spatial uses: Examples set \#2
(17) ada ni
exist D.PROX
[Reply to a question:] '(the fish) are here' [080917-006-CvHt.0005]
(18) de ada tu, de ada tu

3sG exist D.DIST 3sG exist D.DIST
[Reply to a question:] 'she's over there, she's over there' [081025-009b-Cv.0006]
In the third set of examples in (19) and (20), the demonstratives are used adverbially. The utterance in (19) occurred during a discussion about the teenagers living in the house. Noting that they are ill-behaved, the speaker uses ini 'd.prox' to assert that they tinggal ini 'live here' in this house. In (20) the speaker relates that she used to live in a different part of the regency, namely in Takar. Employing itu 'D.DIST', the speaker maintains that she used to tinggal itu 'live there'.

Spatial uses: Examples set \#3

## (19) ko tinggal ini

2sG stay D.prox
'you live here' [081115-001b-Cv.0030]
(20) waktu kitong dari Jayapura baru pulang ke kampung di Takar when 1pl from Jayapura and.then go.home to village at Takar Pante-Timur, baru kitong tinggal itu
Pante-Timur and.then 1Pl stay D.DIST
'when we (were back) from Jayapura, then (we) returned home to the village at Takar at Pante-Timur, and then we lived there' [081006-022-CvEx.0159]

### 7.1.2.2 Temporal uses of demonstratives

In their temporal uses, the demonstratives signal the temporal setting of the situation or event talked about in terms of some temporal reference point. This function is attested for the adnominally, pronominally, and adverbially used demonstratives.

The (near) contrastive examples in (21) to (23) demonstrate the temporal uses of the adnominally used demonstratives. Proximal ini 'd.Prox' signals that the event is temporally close to the current speech situation, as in hari ni 'today' in (21). By contrast, itu 'D.DIST' indicates that the temporal reference point is located at some distance from the current speech situation, either in the past as in hari itu 'that day' in (22) or in the future as in rabu tu, hari kamis itu 'next Wednesday, next Thursday' in (23).

Temporal uses of the adnominally used demonstratives
(21) hari ni ko kasi makang, nanti ...
day D.prox 2 sG give food very.soon
[About helping each other:] 'today you feed (others), at some point in the future [they'll feed your children]' [081110-008-CvNP.0254]
(22) yo, dong dua pergi ke skola lagi, hari itu dong ada meter sedikit yes 3pl two go to school again day D.DIST 3pl exist meter few 'yes, they both went to school, that day they were a little drunk' [081115-001a-Cv.0038]
(23) rabu tu, hari kamis itu, ko datang...

Wednesday D.DIST day Thursday d.DIST 2sG come
'next Wednesday, next Thursday, you'll come ...' [081011-005-Cv.0001]
Pronominally used demonstratives also have temporal uses as shown in (24) and (25). Again, ini 'd.Prox' in (24) indicates that the event is temporally close to the current speech situation: ini 'right now' (literally 'this (is when)'). Distal itu 'd.DIst' in (25), by contrast, signals temporal distance: itu 'at that time' (literally 'that (is when)').

Temporal uses of the pronominally used demonstratives
(24) mandi cepat~cepat, ini tong mo lanjut lagi
bathe RDP~be.fast D.PROX 1PL want continue again
'bathe very quickly, right now we want to continue further' [080917-008-NP.0134]
(25) satu kali tong pergi berdoa ... itu de ikut one time 1PL go pray D.DIST 3sG follow
'one time we went to pray ..., at that time she (my daughter) also followed (us)' [080917-008-NP.0175]

The temporal uses of the adverbially used demonstratives are illustrated in (26) and (27). Again, ini 'D.Prox' signals temporal proximity as in ada datang ini 'is coming right now' in (26), while itu 'D.DIST' indicates temporal distance as in bangung itu 'woke up at that time' in (27).

Temporal uses of the adverbially used demonstratives
(26) ... o, betul, Papua-Satu ini ada datang ini
oh! be.true Papua-Satu D.prox exist come D.Prox
'[and then we saw,] "oh!, (it's) true, this Papua-Satu (ship) is coming right now"'
(Lit. 'this coming') [080917-008-NP.0130]
(27) sa bawa pulang ... mace bangung itu dia suda snang

1sG bring go.home woman wake.up D.DIST 3sG already feel.happy(.about)
karna liat ada makangang
because see exist food
'I brought home (the game that I had shot) ... (when my) wife got up at that time, already she was glad because (she) saw there was food' (Lit. 'that waking up') [080919-004-NP.0030/0032]

### 7.1.2.3 Psychological uses of demonstratives

In their psychological uses, the demonstratives signal the speakers' psychological involvement with the situation or event talked about (Lakoff 1974: 347). Three major domains of psychological use are attested: emotional involvement, vividness, and contrast.

### 7.1.2.3.1 Demonstratives signaling emotional involvement

Speakers employ the demonstratives to signal their emotional involvement, close association, and/or attitudes concerning the subject matter. Proximal ini 'd.Prox' indicates emotional proximity or positive attitudes, while itu 'D.DIST' signals emotional distance or negative attitudes, as illustrated in three sets of examples.

In the first set of examples in (28) and (29), the demonstratives modify the personal pronoun $k o$ ' 2 sG '. In (28), a mother scolds her daughter for having ripped off the blossoms of the garden's flowers. In shouting at her youngest, she uses ini 'd.prox', thereby signaling her nevertheless close emotional involvement with her daughter. By contrast, in (29) a teacher is exasperated with one of his students who does not know the English word "please". In voicing his frustration, the speaker uses itu 'D.DIst' and thereby signals his momentary emotional distance from the referent.

Demonstratives signaling emotional involvement: Examples set \#1
(28) ko liat Luisa pu bagus, suda kembang banyak, ko ini, bunga tida 2sG see Luisa poss be.good already flowering many 2 SG D.prox flower NEG slamat
safe
[After the speaker's daughter had ripped off blossoms:] 'you see Luisa's (flowers) are good, (they are) already flowering a lot, you (EMPH), the flowers (you picked) can't be saved' [081006-021-CvHt.0002]
(29) Dodo kipas de suda mo, ko tu, ora orang bilang please, Dodo beat 3 sG already want 2 sG D.DIST TRU-person person say please[E]
kata pis saja tida taw, goblok
word please[E] just NEG know be.stupid
'Dodo reprimanded her immediately, "you there, people[TRU], people say "please", don't (you) know the word "please"?!, (you're) stupid!"' [081115-001a-Cv.0140]

## 7 Demonstratives and locatives

In the second set of examples in (30) and (31), each demonstrative modifies the common noun ana 'child'. The utterance in (30) is part of a story about a motorbike accident that the speaker had in a remote area of the regency. The speaker relates how her nephew came and picked her up and took her all the way to the next hospital in the regency capital. In choosing ini 'D.prox', the speaker signals her emotional closeness to the referent, who was not present when the speaker related her story; in fact, at that time the nephew was living about 300 km away. The utterance (31) occurred during a conversation about the speaker's youngest brother. Her interlocutors relate several complaints about the referent, who was present during the conversation. Finally, the speaker joins her interlocutors and comments that ana kecil itu 'that small child' constantly changes his opinion. By employing itu 'd.DIST', the speaker, who often criticizes her brother publicly, signals that she wishes to dissociate herself from her brother.

Demonstratives signaling emotional involvement: Examples set \#2
(30) baru sa punya ana ini mantri de pi ambil saya
and.then 1sG poss child d.prox male.nurse 3sg go fetch 1sg
'and then this child of mine, the male nurse came to get me' [081015-005-NP.0044]
(31) putar putar ana kecil itu
turn.around turn.around child be.small D.DIST
'(he's) constantly changing (his opinion), that small child' [081011-003-Cv.0016]
In the third set of examples in (32) and (34), each demonstrative modifies an adnominal possessive construction with the possessum swara 'voice'. The utterance in (32) is part of a conversation about the young people living in the house, none of whom is present at this conversation. The speaker relates that the teenagers enjoy singing. Using direct speech, the speaker conveys her positive attitudes about the teenagers' singing: they should sing more in public because kamu pu swara ini 'these voices of yours' are good. The utterance in (33) occurred during a conversation outside at night. When one of the teenagers laughs out loudly, the others reprimand her. Employing itu 'd.dist' in ko pu swara $t u$ 'that voice of yours', the speaker conveys her negative attitudes about this behavior.

Demonstratives signaling emotional involvement: Examples set \#3
... dang menyanyi ... $\boldsymbol{k a m u} \boldsymbol{p u}$ swara ini bagus and sing 2pl poss voice D.prox be.good
'[come in front] and sing ... these voices of yours are good'
[081014-015-Cv.0026/0028]
(33) ko pu swara tu bahaya, ko stop 2sG poss voice D.DIST be.dangerous 2sG stop 'that voice of yours is dangerous, stop (it)!' [081025-009b-Cv.0016]

### 7.1.2.3.2 Demonstratives signaling vividness

The emotional involvement does not need to be as substantial as described in "Demonstratives signaling emotional involvement" (§7.1.2.3.1). The demonstratives are also used in more general terms to indicate that the subject matter is vivid "to the mind of the speaker", adopting Anderson \& Keenan's (1985: 278) terminology. To signal that an event or situation is of special interest to them, the speakers use the demonstratives adnominally or adverbially, or employ demonstrative stacking. This section discusses both of these strategies.

The first strategy to signal vividness is to employ the demonstratives adnominally or adverbially to modify and thereby intensify nominal and pronominal constituents as in (34) and (35), or verbs as in (36) and (37).

In the first set of examples in (34) and (35), the short demonstrative forms modify nominal and pronominal constituents.

The utterance in (34) occurred after the speaker had been provoked verbally by an older relative. In her reaction, the speaker modifies the constituents bapa-tua 'uncle' and emosi 'feel angry (about)' with ini 'D.Prox', thereby emphasizing them. In choosing the proximal rather than the distal demonstrative to modify the constituent bapa-tua 'uncle', the speaker also signals that the referent is still nearby.

The utterance in (35) is part of a conversation about the work stamina of a wife from the Pante-Barat area. When she and her husband lived in a different area, the women from that area were surprised how hard the Pante-Barat woman worked. The utterance in (35) relates the husband's response to these women. Having referred to his wife twice with the personal pronoun $d e$ ' 3 sG', the speaker refers to her again. This time he modifies the personal pronoun with short itu 'D.DIST', thereby emphasizing it. This example again illustrates the at times overlapping functions of the demonstratives. In addition to signaling vividness, the distal demonstrative also signals that the referent was not present in the speech situation.

Adnominal uses to signal vividness
(34) sa bilang, adu, bapa-tua ni mancing emosi ni 1sG say oh.no! uncle D.Prox fish.with.rod feel.angry(.about) D.Prox
[After having been provoked:] 'I said, "oh no, uncle (EMPH) is provoking (our) emotions (EMPH)"' [081025-008-Cv.0124]
... de bilang, ... de suda biasa de bisa kerja, de tu kerja kaya 3SG say 3SG already be.usual 3sG be.able work 3sG D.DIST work like
laki~laki
RDP~husband
'[and then my husband told (them),] he said, "... she's already used (to working like this), she can work (hard), she (EMPH) works like a man"'
[081014-007-CvEx.0049-0050]

In the second set of examples in (37) and (37), the demonstratives are used adverbially to signal vividness. In (36), ini 'd.Prox' modifies the verb hidup 'live', resulting in the emphatic reading hidup ini 'to be very much alive'. Along similar lines, in (37), itu 'D.DIST' modifies the verb lompat 'jump', giving the emphatic reading lompat itu 'really jumped'. Again, these examples illustrate the overlapping functions of the demonstratives: while indicating vividness, they also have temporal uses. They signal temporal proximity indicating present tense in (36), and temporal distance indicating past tense in (37).

Adverbial uses to signal vividness
(36) $\quad$ wa, sa masi hidup ni, kam suda hinggap di sa punyabadang wow! 1sG still live D.prox 2pl already perch at 1sG poss body
[After having been pestered by flies:] 'wow!, I'm still very much alive, you (blue flies) had already perched upon my body' [080919-005-Cv.0015]
(37) sunggu, sa lompat itu dengang tenaga
be.true 1sG jump D.DIST with energy
'truly, I really jumped with energy' [081025-006-Cv.0218]
The second, although less common, strategy to signal vividness is the stacking of demonstratives. In the corpus the first demonstrative is always a long one, while the second is always the corresponding short one. In these constructions, the first demonstrative may be used adnominally as in (38) and (39), or pronominally as in (40) and (41). In each case, the result of the stacking is an emphatic reading of the entire noun phrase.

In (38) and (39) the second demonstrative modifies a nested noun phrase with an adnominal demonstrative such that "[[N DEM] DEM]". The result of the stacking is an emphatic reading in the sense of "this/that very N ": orang ini ni 'this very person' in (38) and ruma itu tu 'that very house' in (39).

Adnominal uses of stacked demonstratives to signal vividness
(38) [[orang ini] ni] percaya sama Tuhang Yesus
person D.Prox d.Prox trust to God Jesus
'this very person believes in God Jesus' [081006-022-CvEx.0177]
(39) waktu kitorang masuk di [[ruma itu] tu] ...
when 1PL enter at house D.DIST D.DIST
'when we moved into that very house, ...' [081006-022-CvEx.0167]
In (40) and (41) the second demonstrative modifies a pronominally used first one. The result is an emphatic reading in the sense of 'this/that very (one)': ini ni 'these very (ones)' in (40), and itu tu 'those very (ones)' in (41).

Pronominal uses of stacked demonstratives to signal vividness
(40) ada segala macang tulang, dia buang [ini ni]
exist all variety bone 3sG throw(.away) D.Prox d.prox
'there were all kinds of bones, he threw away these very (ones)'
[080922-010a-CvNF.0101]
(41) ko taw kata pis ka tida, [itu tu] kata~kata dasar yang 2sG know word please[E] or NEG D.DIST D.DIST RDP $\sim$ word base REL
harusnya kamu taw
appropriately 2PL know
[Addressing a school student:] 'do you know the (English) word "please" or not?, that very (word belongs to) the basic words that you should know' [081115-001a-Cv.0145]

### 7.1.2.3.3 Demonstratives signaling contrast between two entities

In their contrastive uses, the demonstratives signal contrast between a discourse referent and another entity, thereby conveying the speakers' attitudes about the subject matter. This contrastive use is illustrated with three sets of examples.

In the first set of examples in (42) and (43), the demonstratives modify the personal pronoun saya ' 1 sG', each time indicating an explicit contrast.

In (42), the speaker compares the ill-behaved young people living in the house to himself. While they have the privilege of staying with relatives in the regional city to complete their secondary schooling, he had to stay with strangers when he was young. This contrast is indicated with ini 'd.Prox'.

Demonstratives signaling contrast: saya ini '1sG D.prox'
(42) kamu ana~ana skarang ini susa ... saya ini tinggal dengang 2PL RDP~child now D.Prox be.difficult 1sG D.PRox stay with orang person
'you, the young people, nowadays are difficult ... I, by contrast, stayed with (other) people' (Lit. 'this I') [081115-001b-Cv.0038/0040]

The exchange in (43) occurred during a phone conversation when a daughter asked her father to buy her a cell-phone. In (43a) her father suggests that a cell-phone would distract her from her studies. The daughter responds with the contrastive statement in (43b) in which itu 'D.DIST' modifies saya '1sG', resulting in the contrastive reading sa tu 'I, nevertheless'. The exact semantic distinctions between ini 'D.Prox' and itu 'D.DIST' need further investigation, though. The use of itu 'D.DIST' with saya '1sG' is especially surprising given that a first person singular pronoun is inherently proximal. A temporal non-contemporaneous interpretation is not likely since the speaker talks about her behavior in general.

Demonstratives signaling contrast: saya itu '1sG D.DIST'
(43) a. Father: kalo bli HP di situ nanti su tra bisa
if buy cell.phone at L.MED very.soon already NEG be.able
skola, maing HP saja go.to.school play cell.phone just
Father: 'if (you) buy a cell-phone there then (you) won't be able to do (any) schooling, (you'll) just play (with your) cell-phone'
b. Daughter: $\boldsymbol{s a} \boldsymbol{t u}$ rajing skola

1sG D.DIST be.diligent go.to.school
Daughter: 'I, nonetheless, go to school diligently' (Lit. 'that I') [080922-001a-CvPh.0448/0455]

In the second set of examples in (44) and (45), the demonstratives modify the personal pronoun $k o$ ' $2 \mathrm{SG}^{\prime}$ ' the contrast is implicit in (44), while it is explicit in (45).

The example in (44) is part of joke about a boy who chooses to attend a choir rather than a karate club together with his friends. The father is upset about his son's choice. Finally, he vents his anger with a contrastive statement in which ini 'd.prox' modifies $k o$ ' 2 sG'. Thereby, the father contrasts his son implicitly with his friends: ko ni 'and what about you'.

Demonstratives signaling contrast: ko ini '2sG D.Prox'
(44) ... sampe dep bapa su mara, ko ni setiap hari ko until 3sG:poss father already feel.angry(.about) 2sG D.Prox every day 2sG ikut latiang paduang-swara trus, kalo dong pukul ko ko bisa follow practice choir be.continuous if 3PL hit 2SG 2sG be.able tangkis ka tida ward.off or NEG
'[his father sees him (practicing in a choir) while his other friends practice self-defense] until his father gets angry (with his son), "and what about you, every day you attend the choir practice, (but) if someone hits you, can you defend (yourself) or not?"' (Lit. 'this you') [081109-006-JR.0001-0003]

In (45), an aunt gives advice to her niece who had been insulted by her younger cousin Agreeing that the younger cousin has lighter skin and longer hair than the referent, the speaker continues her advice with a contrastive statement in which itu 'd.DIst' modifies ko '2sG': ko itu 'you, however'.

Demonstrative signaling contrast: ko itu '2SG D.DIST'
(45) ade tu biar puti, rambut mayang tinggal rambut panjang, ko ySb d.DIst let be.white hair palm.blossom stay hair be.long 2sG itu jalang D.DIST walk
'let that younger sister have light skin, (let her have) hair that's long down to her bottom, you, however, go (your own way)' (Lit. 'that you') [081115-001a-Cv.0244]

In the third set in (46), the demonstratives modify temporal adverbs, thereby signaling temporal contrasts. In (46), a wife and her husband recount how a young man damaged his leg during a motorbike accident. In (46a) the wife relates that skarang 'now' the referent walks crookedly. Her husband continues the narrative in (46b) with a contrastive statement in which itu 'd.DIst' modifies the temporal adverb dulu 'first, in the past', thereby signaling a temporal contrast: dulu itu 'in the past, however'. Subsequently, the wife further elaborates on the referent's condition. She concludes the exchange with yet another contrastive statement in (46c) in which ini 'D.Prox' modifies the temporal adverb skarang 'now', again signaling a temporal contrast: skarang ini '(it's) just now'.

Demonstrative signaling contrast: Modifying temporal adverbs
(46) a. Wife: skarang ada jalang bengkok sedikit
now exist walk be.crooked few
Wife: 'now he's walking a little crookedly (because of his motorbike accident)'
b. Husband: dulu itu de jalang lurus
first D.DIST 3sG walk be.straight
Husband: 'in the past, however, he walked straight'
c. Wife: ... ini bengkok ini, kaki ini skarangini baru
D.PROX be.crooked D.PROX foot D.PROX now D.PROX recently
ada baik~baik
exist RDP~be.good
Wife: 'this (foot) was crooked here, this foot, (it's) just now that (it got) well' [081006-020-Cv.0006-0007/0013]

### 7.1.2.4 Identificational uses of demonstratives

The demonstratives have identificational uses when they appear in the subject slot of a nominal predicate clause ( $\S 12.2$ ). In this context, the demonstratives aid in the identification of a definite or identifiable referent encoded by the predicate. For instance, ini 'D.Prox' takes the subject slot in (47) and itu 'D.DIST' in (48). In this domain of use only the long demonstratives are attested.
(47) ini daging yang saya bawa antar buat sodara dorang D.prox meat rel 1 SG bring deliver for sibling 3pl
'this is the (wild pig) meat that I brought (and) delivered for (my) relatives' [080919-003-NP.0021]
(48) itu kali Biri
D.DIST river Biri
'that is the Biri river' [081025-008-Cv.0006]

### 7.1.2.5 Textual uses of demonstratives

In their textual uses, the demonstratives provide discourse orientation. Across languages, two major discourse uses of demonstratives can be distinguished, according to Diessel (1999: 95-105): "anaphoric" and "discourse deictic" uses. In their anaphoric uses, the demonstratives "are coreferential with a prior NP" and thereby "keep track of discourse participants" (1999: 93). In their discourse deictic uses, the demonstratives are not coreferent with the referent of a previously established noun phrase. Instead, they are coreferential with a preceding or following proposition. That is, they "establish an overt link between two propositions: the one in which they are embedded and the one to which they refer" (1999: 101). (See also Himmelmann 1996)

Both discourse functions also apply to the Papuan Malay demonstratives.

### 7.1.2.5.1 Anaphoric uses

The anaphoric uses of the Papuan Malay demonstratives are demonstrated in (49) to (54). Being coreferential with a preceding NP, they keep track of different discourse participants. In this use the demonstratives may be employed adnominally as in (49) and (50), pronominally as in (51) and (52), or adverbially as in (53) and (54). The exact semantic distinctions between ini 'D.Prox' and itu 'D.DIST' as participant tracking devices, however, are yet to be investigated in more detail.

The examples in (49) and (50) demonstrate the adnominal anaphoric uses of the demonstratives. The utterance in (49) is part of a joke about a school student who does not know to draw. The teacher orders the students to gambar monyet 'draw a monkey'. When the monyet 'monkey' is mentioned the next time, it is marked with ini 'd.prox' thereby indicating coreference with this specific monkey. The example in (50) is part of a narrative that describes how the speaker's ancestor first came down to the coast where he finds a bua mera 'red fruit'. At its next mention, the noun phrase bua mera 'red fruit' is marked with itu 'D.DIST' to signal coreference with that specific fruit.

Adnominal anaphoric uses
(49) ibu mulaysuru ana~ana murit mulay gambar monyet di atas pohong woman start order RDP $\sim$ child pupil start draw monkey at top tree pisang ... trus de gambar monyet ini di bawa pohong pisang banana next 3sG draw monkey d.prox at bottom tree banana 'Ms. (Teacher) starts ordering the school kids to start drawing a monkey on a banana tree ... and then he draws this monkey under the banana tree' [081109-002-JR.0001-0002]
(50) trus di situ ... ada bua mera ... de pegang bua mera itu dang de next at L.MED exist fruit be.red 3sg hold fruit be.red D.DIST and 3sG jalang
walk
'and then there ... was a red fruit ... he took that red fruit and he walked (further)' [080922-010a-CvNF.0218-219]

The examples in (51) and (52) illustrate the pronominal anaphoric uses of the demonstratives. The remark in (51) is part of a description of sagu production. After having introduced the main tool, penokok kayu 'wooden pounder', the speaker replaces it at its next mention with ini 'd.Prox'. In (52) the speaker talks about a female weight lifter. Noting that she is talking about weights in kilogram, she employs short itu 'D.DIST' which is coreferent with de pu brat 'her weights'.

Pronominal anaphoric uses
(51) ada penokok kayu ... smua orang tokok dengang ini exist pounder wood all person tap with D.Prox 'there is a wooden pounder ... all people pound (sagu) with this' [081014-006-CvPr.0011/0057]
(52) prempuang Bandung itu de pu brat yang itu sa angkat, tu woman Bandung d.DIST 3sG poss be.heavy rel d.DIST 1sg lift D.DIST
kilo ... dlapang pulu tiga
kilogram eight tens three
'that woman from Bandung, her weights which I lifted, that (is in) kilogram ...
eighty three (kilogram)' [081023-003-Cv.0003]
The examples in (53) and (54) illustrate the adverbial anaphoric uses of both demonstratives. The utterance in (53) is part of a narrative about a youth retreat. During their journey to the retreat, the teenagers meet an old woman who gives them advice for the retreat. The woman mentions the verb jalang 'walk' three times while advising the teenagers where to walk and how to behave. When she mentions jalang 'walk' again, she marks it with ini 'd.prox'.

Adverbial anaphoric uses of ini 'D.Prox'
(53) kamu jalang, jalang baik~baik saja, kamu tinggal, kamu jalang, tida bole 2PL walk walk RDP~be.good just 2PL stay 2PL walk NEG may ini ini ... kamu jalang ini untuk apa pekerjaang Tuhang D.Prox d.prox 2PL walk D.Prox for what work God 'you travel, (just) travel well, (when) you stay (at Takar and when you) walk around (in Takar), (you) shouldn't (do) this (and) this, ... you (do) this traveling for, what-is-it, God's work' [081025-008-Cv.0142/0144]

The exchange (54) occurred between two sisters just before the youth retreat. In (54a) the younger one states that she wants to jalang 'travel' to the youth retreat without, however, attending the services; instead she plans to stay at the guesthouse. Her older sister responds in (54b) that in that case it were better if she stayed home. Being upset about this reaction, the younger one asks her older sister in (54c) why she said so. In her reply in (54d), the older sister mentions jalang 'walk' again, this time modifying it with itu ' $\mathrm{D} . \mathrm{DIST}$ '.

Adverbial anaphoric uses of itu 'D.DIST'
a. Younger sister: sa jalang tra sembayang tinggal di ruma 1sG walk NEG worship stay at house
Young sister: 'I'll go (to the youth retreat, but) I won't worship, (I'll) stay at the house'
b. Older sister: kalo mo tinggal di ruma tinggal di ruma sini ... if want stay at house stay at house l.prox
Older sister: 'if (you) want to stay at the house, stay home ...'
c. Younger sister: knapa?
why
Young sister: 'why?'
d. Older sister: orang jalang itu mo pergi sembayang person walk D.DIST want go worship
Older sister: 'people (doing) that traveling want to go worship' [081006-016-Cv.0012-0015]

Alternatively, however, one might argue that in (53) and (54) the demonstratives do not function as participant tracking devices, but rather signal emotional involvement.

### 7.1.2.5.2 Discourse deictic uses

The discourse deictic uses of the Papuan Malay demonstratives are demonstrated in (55) to (59). In this use, they are coreferential with a preceding or following proposition. As
shown in (55) to (59), though, only the pronominally used demonstratives have discourse deictic uses.

Proximal ini 'd.Prox' may refer to a preceding statement as in (55) or to a following statement as in (56). The example in (55) is part of a conversation about difficult children. Maintaining that children should be disciplined, the speaker makes a number of suggestions how to do so. Employing short ini 'd.prox', the speaker summarizes her previous statements. Thereby she creates a link to her closing statement that her interlocutor should decide for herself what to make of these suggestions. In (56), ini 'd.prox' creates a link to the following direct quote.

Discourse deictic uses of ini 'D.PROX'

$$
\begin{align*}
& \text {... ni usul saja jadi kaka sendiri ... }  \tag{55}\\
& \text { D.Prox proposal just so oSb be.alone }
\end{align*}
$$

'this is just a proposal, so you ('older sister') (have to decide for) yourself ...' [080917-010-CvEx.0116]
(56) pace de bilang ini, mace ko sendiri yang ikut ... man 3sg say d.prox wife 2sg be.alone rel follow
'(my) husband said this, "you wife yourself (should) go (with them) ..."' (Lit.
'(it's) you wife yourself who ...') [081025-009a-Cv.0032]
Distal itu 'd.DIST' is used only to create a link to a preceding statement, as in (57). This example is part of joke about an uneducated person who notes that di kalender dua blas 'in the calendar are twelve (moons)' while di langit ini cuma satu 'in this sky is only one'. Distal itu 'd.DIST' summarizes these remarks, creating an overt link to the speaker's conclusion that this state of affairs is tipu skali 'very deceptive'.

Discourse deictic uses of itu 'D.DIST'
(57) masa di kalender dua blas, baru di langit ini cuma satu ...,
be.impossible at calendar two teens and.then at sky D.Prox just one
itu tipu skali
D.DIST cheat very
[Joke:] '(it's) impossible, in a calendar are twelve (moons), but in the sky here is only one (moon) ... that's very deceptive' [081109-007-JR.0003]

The discourse deictic uses of itu 'd.DIST' are very commonly extended to that of a "sentence connective" that signals "a causal link between two propositions", employing Diessel's (1999: 125) terminology. This is illustrated in (58) and (59). Standing alone, itu 'D.DIST' introduces a reason relation as in (58). When co-occurring with the relativizer yang 'Rel', itu 'D.DIST' marks a result relation as in (59).

In (55), the speaker recounts a conversation with a local doctor after a motorbike accident. In using itu 'd.DIST' the doctor summarizes the speaker's comments concerning her health and creates an overt link to his explanation why she is in pain. In this context itu 'd.DIST' functions as a causal link that marks a reason relation.

Discourse deictic uses of itu 'D.DIST': Marker of a reason relation
(58) sa bilang, tulang bahu yang pata, tulang rusuk, o, a, mama itu 1sG say bone shoulder rel break bone rib oh! ah! mother D.DIST hanya ko jatu kaget only 2 sG fall feel.startled(.by)
'I said, "(it's my) shoulder bone that is broken, (my) ribs", (the doctor said,) "oh!, ah, Mother that is just because you're in shock"' [081015-005-NP.0048]

The utterance in (59) is part of a conversation about the speaker's husband who had fallen sick after a straining journey. Recounting some details about the journey, the speaker relates that her husband had returned home hungry. At the beginning of the next clause itu 'd.DIst' summarizes this account and, combined with the relativizer yang 'rel', signals a result relation: itu yang de sakit 'that's why he's sick'.

Discourse deictic uses of itu 'D.DIST': Marker of a result relation
(59) pace de tida makang ... lapar, itu yang de sakit
man 3sG NEG eat be.hungry d.dist REL 3sG be.sick
'he (my) husband hadn't eaten ... (he was) hungry, that's why he's sick'
[080921-004b-CvNP.0003/0007]

### 7.1.2.6 Placeholder uses of demonstratives

Demonstratives are also rather commonly employed pronominally as "placeholders" in the context of "word-formulation trouble", as Hayashi \& Yoon (2006) show in their crosslinguistic study. In this function, they serve "as temporary substitutes for specific lexical items that have eluded the speaker" (2006: 499). Besides, demonstratives are also used as "interjective hesitators" that signal "the speaker's hesitation in utterance production" (2006: 512-513). (See also Dooley \& Levinsohn 2001: 36.)

The placeholder and hesitator uses also apply to the Papuan Malay demonstratives, as shown in (60) to (62) and in (63), respectively. In this function, however, only the long demonstrative forms are attested, while the short forms are unattested.

As placeholders, the demonstratives can substitute for any lexical item, such as nouns as in (60), personal pronouns as in (61), or verbs as in (62). More investigation is needed, though, to account for the alternation of ini 'd.Prox' and itu 'd.DIST' in this context. In most cases, as in (61) and (62), the demonstrative is set off from the subsequently produced target word by a comma intonation ("|"). Often, however, there is no audible pause between the placeholder and the target word as in (60).

Placeholder for a proper noun
(60) ... saya ingat ini Ise

1sG remember D.Prox Ise
'(at that particular time) I remembered, what's-her-name, Ise'
[080917-008-NP.0102]

Placeholder for a personal pronoun
(61) wa, ini | kitong lari~lari kemaring sampe ... wow d.PROX 1PL RDP~run yesterday reach
'wow!, what's-their-name, we drove yesterday all the way to ...'
[081006-033-Cv.0007]

Placeholder for a verb
(62) skarang sa itu | simpang sratus ribu now 1sG D.DIST store one.hundred thousand 'now I (already), what's-its-name, set aside one hundred thousand (rupiah)' [081110-002-Cv.0039]

While in (60) to (62), the demonstratives are used referentially to substitute for a lexical item, this is not the case in (63). In this example, itu 'D.DIsT' is used as a nonreferential interjective hesitator. This is evidenced by the fact that itu 'd.DIst' does not agree with adnominally used ini 'd.prox', which modifies the head nominal pace 'man'. Overall, however, the hesitator uses of the demonstratives are rare; most commonly, Papuan Malay speakers use the hesitator $e(m)$ 'uh' (see §5.13.2).

Interjective hesitator
(63) yo itu itu paceini de baru ambil...
oh! D.DIST D.DIST man D.PRox 3 sG recently fetch
'oh, umh, umh, this man, he recently took ...' [081011-009-Cv.0007]
Further investigation is required, to explore whether and in which ways Papuan Malay makes a distinction between the placeholder and nonreferential hesitator uses of its demonstratives and whether it may in fact be using the right-displacement attested in (63) as a deliberate construction for emphasis in some contexts.

### 7.2 Locatives

In the following sections, the syntactic properties and forms of the Papuan Malay locatives are reviewed and discussed (\$7.2.1), followed by an in-depth discussion of their different functions and domains of use (§7.2.2).

### 7.2.1 Syntax and forms of locatives

The distributional properties of the locatives are briefly reviewed in §7.2.1.1. This review is followed in $\S 7.2 .1 .2$ by a discussion of the distribution and frequencies of the pronominally versus the adnominally used locatives.

### 7.2.1.1 Distributional properties of locatives

The Papuan Malay locatives have the following distributional properties (for more details see §5.7):

1. Substitution for noun phrases that occur in prepositional phrases (pronominal uses) (§5.7.1)
2. Modification with demonstratives or relative clauses (pronominal uses) (§5.7.1)
3. Co-occurrence with noun phrases(adnominal uses): $\mathrm{n} / \mathrm{NP}$ LOC (§5.7.2)

### 7.2.1.2 Distribution of the pronominally versus the adnominally used locatives

This section describes the distribution and frequencies of the pronominally versus the adnominally used locatives (their semantic distinctions are discussed in §7.2.2).

The corpus includes a total of 1,366 locative tokens: 494 sini ' L .PRox' ( $36 \%$ ), 411 situ 'L.MED' ( $30 \%$ ), and 461 sana 'L.DIST' ( $34 \%$ ) tokens. Most commonly the locatives are employed pronominally ( $1,106 / 1,366$ tokens $-91 \%$ ), while their adnominal uses are considerably less common ( $260 / 1,366$ tokens $-19 \%$ ), as shown in Table 7.5.

Table 7.5: Locatives according to their syntactic functions

|  | sini 'L.PROX' |  | situ 'L.MED' | sana 'L.DIST |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Pronominal uses | 416 | $84 \%$ | 345 | $84 \%$ | 345 | $75 \%$ |
| Adnominal uses | 78 | $16 \%$ | 66 | $16 \%$ | 116 | $25 \%$ |
| Total | 494 | $100 \%$ | 411 | $100 \%$ | 461 | $100 \%$ |

The distribution of the pronominally used locatives is presented in Table 7.6. In their pronominal uses, as mentioned in §5.7.1, the locatives always occur in prepositional phrases. Most often they are introduced with an overt preposition: 384/416 sini ' '.Prox' ( $92 \%$ ), 302/345 situ 'L.MED' ( $87 \%$ ), and $311 / 345$ sana 'L.DIST' ( $90 \%$ ) tokens. When the context allows the disambiguation of the semantic role or relationship of the locative, however, the preposition can also be deleted (the elision of prepositions is discussed in §10.1.5): 32/416 sini 'L.PRox' ( $8 \%$ ), 45/345 situ 'L.MED' ( $13 \%$ ), and 34/345 sana 'L.DIST' ( $10 \%$ ) tokens. Overall, however, pronominally used locatives with zero-preposition are rather rare (109/1,106 tokens - 10\%) , as shown in Table 7.6.

The distribution of the adnominally used locatives is presented in Table 7.7. In their adnominal uses, as mentioned in §5.7.2, the locatives most commonly co-occur with noun phrases that occur in prepositional phrases ( $225 / 260$ tokens $-87 \%$ ). Like the pronominally used locatives, the vast majority of adnominally used locatives occur in prepositional phrases with an overt preposition: 46/78 sini 'L.PROX' ( $59 \%$ ), 55/66 situ 'L.MED' ( $84 \%$ ), and 86/116 sana 'L.DIST' ( $74 \%$ ) tokens. Far fewer locative tokens occur in prepositional phrases with zero preposition: 16/78 sini 'L.PROX' ( $21 \%$ ), 6/66 situ 'L.MED’ ( $9 \%$ ), and

Table 7.6: Pronominally used locatives in prepositional phrases (PP) with or without preposition (PREP)

|  | sini 'L.PROX' |  | situ ' L .MED' |  | sana 'L.DIST |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| PP with PREP | 384 | $92 \%$ | 302 | $88 \%$ | 311 | $90 \%$ |
| PP with zero PREP | 32 | $8 \%$ | 43 | $12 \%$ | 34 | $10 \%$ |
| Total | 416 | $100 \%$ | 345 | $100 \%$ | 345 | $100 \%$ |

16/116 sana 'L.DIST' ( $14 \%$ ) tokens. The number of locative tokens occurring in unembedded noun phrases is equally low or still lower: $16 / 78$ sini ' L .Prox' ( $21 \%$ ), $5 / 66$ situ 'L.med' (7\%), and 14/116 sana 'L.DIST' ( $12 \%$ ) tokens.

Table 7.7: Adnominally used locatives in prepositional phrases and unembedded noun phrases

|  | sini 'L.PROX' |  | situ 'L.MED' |  | sana 'L.DIST |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| PP with PREP | 46 | $59 \%$ | 55 | $84 \%$ | 86 | $74 \%$ |
| PP with zero PREP | 16 | $21 \%$ | 6 | $9 \%$ | 16 | $14 \%$ |
| Unembedded NP | 16 | $21 \%$ | 5 | $7 \%$ | 14 | $12 \%$ |
| Total | 78 | $100 \%$ | 66 | $100 \%$ | 116 | $100 \%$ |

### 7.2.2 Functions of locatives

The locatives have a number of different functions and uses which are discussed in more detail in the following sections: spatial uses in §7.2.2.1, figurative locational uses in §7.2.2.2, temporal uses in §7.2.2.3, psychological uses in §7.2.2.4, and textual uses in §7.2.2.5.

### 7.2.2.1 Spatial uses of locatives

In their spatial uses, the Papuan Malay locatives designate the location of an entity relative to that of the speaker and focus the hearer's attention to the specific location of these entities. In the following, two issues are explored in more detail: the semantic distinctions between the three locatives, and the semantic distinctions between the pronominally and adnominally used locatives.

### 7.2.2.1.1 Semantic distinctions between the three locatives

Generally speaking, proximal sini 'L.Prox' signals proximity to a deictic center, while distal sana 'L.DIST' expresses distance from this center. Medial situ 'L.MED' indicates mid
distance; that is, the referent is more remote from the speaker than the referent of sini 'L.Prox' but not as far as the referent of sana 'L.DISt'. The actual distances signaled with the locatives are relative, however, and depend on the speakers' perceptions. The data also shows that the locatives are very commonly used independently of the parameter of visibility. Although sini 'l.prox' most commonly denotes visible locations, it can also refer to invisible ones; likewise, the non-proximal locatives can refer to visible or invisible locations.

The spatial uses of sini 'L.Prox' are illustrated in (64) and (65). The semantic distinctions between sini 'l.prox' and sana 'l.Dist' are shown in (66). The spatial uses of situ 'L.MED' and its semantic distinctions from sini 'L.PROX' and sana 'L.DIST' are illustrated in (67) and (68).

The examples in (64) and (65) illustrate the spatial uses of sini 'L.Prox'. In both cases, adnominally used sini ' .Prox' indicates the location of an entity close to the speaker: ember sini 'the bucket here' in (64) and Sawar sini 'Sawar here' in (65). The actual distances signaled with sini 'L.prox' differ, however, depending on the speakers' perceptions. In (64), ember sini 'the bucket here' is standing right next to the speaker. By contrast in (65), Sawar sini 'Sawar here' denotes a location that is situated about ten kilometers away from the speaker's location. The speaker, however, perceives Sawar as being close to his own location given that Apawer is situated still further away. The examples in (64) and (65) also illustrate that sini 'L.Prox' is used independently of the parameter of visibility: the locative is used for a visible location in (64) and for an invisible one in (65).

Spatial uses of sini 'L.Prox'
(64) sa su taru di ember sini

1sG already put at bucket L.prox
'I already put (the fish) in the bucket here' [080917-006-CvHt.0003]
(65) de mulayturung dari Apawer ... sampe di Sawar sini

3sg start descend from Apawer reach at Sawar L.Prox
'he (the ancestor) started coming down from Apawer ... (and) reached Sawar here' [080922-010a-CvNF.0149]

The example in (66) illustrates the semantic distinctions between sini 'l.prox' and sana 'L.DIST'. The utterance occurred during a conversation outside at night. Noting that their neighbors are also sitting outside, the speaker employs the distal locative to refer to the neighbors' location sana 'over there' and the proximal locative to refer to their own location sini 'here'.

Spatial uses of sini 'L.PRox' and sana 'L.DIST'
(66) dong juga duduk di sana tong juga duduk di sini

3PL also sit at l.DIST 1PL also sit at l.Prox
'they also sit (outside) over there, we also sit (outside) here' [081025-009b-Cv.0075]

The examples in (67) and (68) show the spatial uses of situ 'L.MED' and its semantic distinctions from sini ' L .Prox' and sana ' l .DIST'.

The exchange in (67) took place at night in front of the house while a meeting took place inside in the living room where the teenagers usually sleep. The young people were waiting for the guests to leave so that they could go to sleep. Employing situ 'L.MED', the first teenager wonders what the adults are doing situ 'there' in the living room. Finally, the second teenager suggests they do not wait any longer: using sini ' L .Prox' she proposes that they sleep luar sini 'outside here'. The utterance in (68) occurred during a conversation about a road construction project. The speaker informs his interlocutor that the construction work has already reached the village of Warmer, located to the east of the interlocutors' location. Employing situ 'L.MED' and sana 'L.DIST', the speaker maintains that the construction work would continue dari situ 'from there (Warmer)' further eastwards ke sana 'to over there'.

Spatial uses of situ 'L.MED'
a. Teenager-1: dong dong biking apa situ ...

3pl 3pl make what l.MED
Teenager-1: 'what are they they doing there? ...'
b. Teenager-2: yo, kitong tidor luar sini
yes 1pl sleep outside L.Prox
Teenager-2: 'yes, we sleep outside here' [080921-009-Cv.0001/0013]
(68) yo, mulay menuju jembatang Warmer ... kalo dari situ ke sana, o, itu yes start aim.at bridge Warmer ... if from L.MED to L.DIST oh! D.DIST dia ...
3sG
'yes, (they) started working toward the Warmer bridge ... when (they'll work the stretch of the road) from there to over there, oh, what's-its-name, it ...' [081006-033-Cv.0013/0015/0017]

The examples in (66) and (68) again show that distances signaled with the non-proximal locatives are relative. In (66) sana ' L .DIST' refers to the neighbor's house, situated about fifty meters away from where the speakers are sitting. By contrast, situ 'L.MED' in (68) denotes the village of Warmer which is located several kilometers away from the speaker's location, while sana 'L.DIst' refers to the area beyond Warmer. Besides, these examples show that the non-proximal locatives are also used independently of the parameter of visibility. Distal sana 'L.DIST' is used for a visible location in (66) and an invisible one in (68). Medial situ 'L.MED' refers to a visible location in (67) and an invisible one in (68).

### 7.2.2.1.2 Semantic distinctions between the pronominally and adnominally used locatives

In designating the location of a referent relative to that of the speaker, Papuan Malay makes a distinction between the pronominally and the adnominally used locatives.

Pronominally used locatives provide additional information about the location of an entity or referent without restricting its referential scope. Adnominally used locatives, by contrast, have a restrictive function, thereby assisting the hearer in the identification of the referent. That is, by directing the hearer's attention to the referent's location, adnominal locatives indicate that the referent is precisely the one situated in the location designated by the locative. This distinction is illustrated with the (near) contrastive examples in (69) and (70).

The prepositional phrases with pronominally used sini 'L.PROX' in (69a) and (70a) provide additional information about the location of the referents, information that is nonessential for their identification: orang di sini 'the people here' in (69a) and dorang di sini 'them here' in (70a). By contrast, in (69b) and (70b) the respective head nominals orang 'person' and dorang ' 3 PL ' are modified with sini 'L.PROX'. In both cases, the locatives indicate that the referents of orang 'person' and dorang '3pl' are precisely the ones located sini 'here' as opposed to other locations: orang sini 'the people that are here' in 69b) and dorang sini 'they that are here' in (70b).

Adnominally versus pronominally used locatives
a. orang di sini bilang pake-pake
person at L.Prox say practice.black.magic
'the people here say "black magic"' [081006-022-CvEx.0028]
b. jadi orang sini bilang, kemaring dulu
so person l.Prox say yesterday be.prior
'so the people (that are) here say "the day before yesterday"'
[081006-019-Cv.0015]
a. Lodia datang ke mari, de kas bodo dorang di sini

Lodia come to hither 3sG give be.stupid 3PL at L.Prox
'(when) Lodia came here, she told them here how stupid they were' (Lit.
'made them here stupid') [081115-001a-Cv.0136]
b. baru sa liat dorang sini su terlalu enak and.then 1sG see 3pl L.PRox already too be.pleasant
[Comment about ill-behaved teenagers:] 'and then I see (that) they (that are) here already (have) too pleasant (lives)' [081115-001a-Cv.0311]

### 7.2.2.2 Figurative locational uses of locatives

The spatial uses of the locatives can be expanded to figurative locational uses in narratives. Employing a locative preceded by sampe di 'reach at', the narrators bring their
stories to a figurative locational endpoint. Such uses are attested for sini ' L . Prox' as in (71) and situ 'L.MED' as in (72), but not for sana 'L.DIST'.
(71) ... sa su sembu, trima-kasi sampe di sini

1sG already be.healed thank.you reach at L.PRox
'[after this accident] I already recovered, thank you! this is all' (Lit. 'reach here') [081015-005-NP.0051]
(72) sa pikir mungking sampe di situ dulu

1SG think maybe reach at L.MED first
'I think maybe that's all for now' (Lit. 'reach there') [080919-004-NP.0083]

### 7.2.2.3 Temporal uses of locatives

The locative situ 'L.MED' also has temporal uses. Preceded by the preposition dari 'from', situ 'L.MED' signals the temporal setting of the event talked about with respect to some temporal reference point in the past, as illustrated in (73). Overall, however, this domain of use is not very common, with the corpus containing only two such occurrences. The proximal and distal locatives are not attested to have temporal uses.
(73) dari situ sa punya mama tida maw jualang pagi lagi
from L.MED 1sG poss mother NEG want merchandise/sell morning again
'from that moment on my mother didn't want to do any more vending in the morning' (Lit. 'from there') [081014-014-NP.0006]

### 7.2.2.4 Psychological uses of locatives

The locatives also have limited psychological uses to signal the speakers' emotional involvement and attitudes. The corpus contains a fair number of utterances in which the speakers switch from sana 'L.DIST' to situ 'L.MED' to refer to the same location. With this switch the speakers indicate that the location has become vivid to their minds and psychologically closer than sana 'L.DIST' would signal, as illustrated in (74) and (75).

In (74), a father relates that he will bring his two oldest children to the provincial capital Jayapura for further schooling once the younger one has finished high school. Anaphorically used sana ' L.DIST' signals that Jayapura is at considerable distance from the speaker's current location ( ca .300 km ). The subsequent use of situ 'L.MED' indicates that with his two children going to live there, distant Jayapura has become psychologically much closer.

Psychological uses: Example \#1
(74) kalo Ise ni selesay saya mo bawa dong dua ke sana tinggal di situ if Ise d.prox finish 1sG want bring 3pl two to l.DIST stay at L.med 'when Ise here has finished (her schooling) I want to bring the two of them to (Jayapura) over there to live there' [081025-003-Cv.0135]

## 7 Demonstratives and locatives

Likewise in (75), the speaker switches from sana 'L.DIST' to situ 'L.MED' to refer to the Mambramo area sana 'over there', situated about 100 km to the west. The switch occurs at the moment when the speaker considers his own involvement with the Mambramo area, namely that he has never been situ 'there'. Again, this switch indicates that the location talked about has become more vivid and psychologically closer to the speaker's mind.

Psychological uses: Example \#2
(75) kaka dong di sana sodara banyak skali ... sa juga blum perna sa oSb 3pl at l.DIST sibling many very 1sG also not.yet once 1sg
kunjungang ke situ
visit to L.MED
'the older relatives over there, (the) relatives are very many in (the Mambramo area), ... me too, I have never been there' [080922-010a-CvNF.0158]

### 7.2.2.5 Textual anaphoric uses of locatives

In their textual uses, locatives are used anaphorically; that is, they are coreferential with a discourse antecedent that denotes a location. In (76) sini 'L.Prox' corefers with the place where the speaker was standing, namely where there were daung klapa ... itu 'those coconut leaves'. Medial situ 'L.MED' in (77) corefers with laut 'sea', and sana 'L.DISt' in (78) with sa pu temang 'my friend'. The three examples also show that in their anaphoric uses the locatives may be employed pronominally as in (76) and (77), or adnominally as in (78).
(76) baru daung klapa itu daung klapa yang saya ada berdiri itu and.then leaf coconut d.DIST leaf coconut rel 1sg exist stand D.DIST ... sa bilang ... dari sini sa kutuk dia 1sG say from l.Prox 1sG curse 3sG
'and then those coconut leaves, those coconut leaves where I was standing ... I said, "... from here I curse him (the evil spirit)"" [080917-008-NP.0101/0103]
(77) ey, kam dua pi mandi di laut suda!, trus kam dua cuci celana di situ hey! 2pl two go bathe at sea already next 2pl two wash trouser at l.med [A mother addressing her young sons:] 'hey, you two go bathe in the sea already!, then you two wash (your) trousers there!' [080917-006-CvHt.0007]
(78) tong dari sa pu temang pinjam trening untuk besok ...tu yang 1PL from 1sG poss friend borrow tracksuit for tomorrow D.DIST REL tadi sa ke temang sana earlier 1sG to friend L.DIST
'we (are back) from my friend (from whom we) borrowed a tracksuit for tomorrow ... that's why a short while ago I (went) to (my) friend (who is) over there' [081011-020-Cv.0052/0056]

### 7.3 Combining demonstratives and locatives

Demonstratives and locatives can be combined with an adnominally used demonstrative modifying a pronominally used locative as in (79) and (80), or an adnominally used locative as in (81). In these constructions, the demonstrative serves to intensify the locative, resulting in an emphatic reading that conveys vividness.

Short distal itu 'D.DIST' modifies proximal sini ' L .PROX' in (79) and medial situ 'L.MED' in (80). In (81) long distal itu 'D.DIST' modifies distal sana 'L.DIST'.
(79) dorang tida bisa dekat sama dorang ... di sini tu ada orang 3pl NEG be.able near with 3pl at L.PROX D.DIST exist person swanggi satu de bertobat ...
nocturnal.evil.spirit one 3sG repent
'they (the evil spirits) can't be close to them (God's children) ... here (EMPH) is one evil sorcerer, he has become a Christian' [081006-022-CvEx.0146/0150]
(80) tida bisa kamu tinggal disitu, di situ tu ruma tu ada setang NEG be.able 2PL stay at L.MED at L.MED D.DIST house D.DIST exist evil.spirit banyak
many
'you can't live there, there (EMPH), (in) that house are many evil spirits'
[081006-022-CvEx.0164]
(81) sana, te ada di sana itu
L.DIST tea exist at L.DIST D.DIST
'there, the tea (is) over there (EMPH)' [081014-011-CvEx.0010]
In all attested combinations, it is the distal demonstrative that modifies a locative. Modification of a locative with proximal ini 'D.PROX' is also possible although unattested, as discussed in §5.7.1).

### 7.4 Summary

The Papuan Malay demonstratives and locatives are deictic expressions. They provide orientation to the hearer in the outside world and in the speech situation, in spatial as well as in nonspatial domains. Both deictic systems are distance oriented, in that they signal the relative distance of an entity vis-à-vis a deictic center. At the same time, the two systems differ in a number of respects. They are distinct both in terms of their syntactic characteristics and forms and in terms of their functions.

The differences between the demonstratives and the locatives with respect to their syntactic characteristics and forms are summarized in Table 7.8.

The main distinctions between the demonstratives and the locatives in terms of their various functions are summarized in Table 7.9.

## 7 Demonstratives and locatives

In summary, with respect to their syntactic properties, the demonstratives have a wider range of uses (adnominal, pronominal, and adverbial uses) than the locatives. Likewise, in terms of their functions, the demonstratives have a wider range of uses than the locatives. The locative system, by contrast, allows finer semantic distinctions to be made than the demonstrative system, given that the former expresses a three-way deictic contrast, whereas the latter expresses a two-way deictic contrast.

Table 7.8: Syntax and forms of the demonstratives (Dem) and locatives (Loc)

| Syntax and forms | DEM | LOC |
| :---: | :---: | :---: |
| Deictic forms | Two term system: <br> - proximal ini 'd.Prox' <br> - distal itu 'D.DIST' | Three-term system: <br> - proximal sini ' L.prox’ <br> - medial situ 'L.MED' <br> - distal sana 'L.DIST' |
| Distributional properties | - adnominal uses <br> - pronominal uses <br> - adverbial uses | - adnominal uses <br> - pronominal uses |
| Pronominal uses | - in unembedded NPS <br> - in PPs <br> - in adnominal possessive constructions | - in PPS |
| Adnominal uses | - can be stacked | - unattested |

Table 7.9: Functions of the demonstratives (DEM) and locatives (LOC)

| Domains of use | DEM | LOC |
| :---: | :---: | :---: |
| Spatial | provide spatial orientation by drawing the hearer's attention to specific entities in the discourse or surrounding situation | provide spatial orientation by designating the location of an entity and focusing the hearer's attention to its specific location |
| Figurative locational | unattested | signal a figurative locational endpoint |
| Temporal | indicate the temporal setting of an event/situation | indicate the temporal setting of an event/situation (medial locative only) |
| Psychological | indicate the speaker's emotional involvement with an event/situation signal vividness indicate contrast | indicate the speakers' emotional involvement with an event/situation signal vividness |
| Identificational | aid in the identification of referents (long forms) | unattested |
| Textual anaphoric | keep track of discourse participants | keep track of the location of an entity |
| Textual discourse deictic | establish an overt link between two propositions | unattested |
| Placeholder | substitute for specific lexical items in the context of wordformulation trouble (long forms) | unattested |

## 8 Noun phrases

### 8.1 Introduction

This chapter describes the Papuan Malay noun phrase with its different types of structures. Also included is a description of noun phrase apposition; noun phrase coordination is not discussed here but in Chapter 14.

An overview of the possible constituents of the Papuan Malay noun phrase is given in Table 8.1 (the parenthesis in the table header signal that the modifiers are optional). Modifying elements listed in the same column represent choices; constituents in the same row do not necessarily co-occur.

Table 8.1: Possible constituents of the Papuan Malay noun phrase

| (MOD) | HEAD | (MOD) |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Post-1 | Post-2 | Post-3 | Post-4 |
| NUM | N | V | PRO | DEM | DEM |
| QT |  | N |  | LOC |  |
| POSSR-NP |  | PP |  | INT |  |
|  |  | RC |  | NUM |  |
|  |  |  |  | QT |  |
|  | PRO | PP |  | LOC | DEM |
|  |  | RC |  | NUM |  |
|  |  |  | QT |  |  |
| POSSR-NP | DEM | RC |  |  | DEM |
|  | LOC | RC |  |  | DEM |
| POSSR-NP | INT | RC |  |  | DEM |

In the following, examples are presented for the different types of constituents that can function as the head of a noun phrase. In giving examples, brackets are used to indicate the constituent structure within the noun phrase, where deemed necessary. In (1) the head is a noun, in (2) it is a personal pronoun, in (3) a demonstrative, in (4) a locative, and in (5) an interrogative. Head nouns allow the widest range of modifiers, while personal pronouns, demonstrative, locatives, and interrogatives allow only a subset of modifiers, as shown throughout this chapter.

Types of constituents functioning as heads in noun phrases
(1) kitong cari ana kecil itu

1pL search child be.small D.DIST
'we were looking for that small kid' [080921-004a-CvNP.0070]
(2) dong dua tu ikut

3pl two D.DIST follow
[About an upcoming event:] 'both of them (EMPH) are going to participate' [081115-001a-Cv.0115]
(3) itu tu rahasia mo mo biking apa ka, mo ...
D.DIST D.DIST secret want want make what or want
[About raising children:] 'that (ЕМРн) is the secret (when we) want want to do something or want to ...' [080917-010-CvEx.0160]
(4) $e$, sa tinggal di situ $t u$
uh 1sG stay at L.MED D.DIST
'uh, I lived there (EMPH)' [080922-002-Cv.0112]
(5) ana laki~laki ini de mo ke mana ni?
child RDP~husband D.PROX 3SG want to where D.PROX
'this boy, where (EMPH) does he want to (go)?' [080922-004-Cv.0017]
The minimal noun phrase consists of a bare head nominal. Modifiers are optional and occur in pre- and/or posthead position. Attested in the corpus is the co-occurrence of up to three posthead constituents. Modifiers listed in the same pre- or posthead slots in Table 8.1 are unattested. ${ }^{1}$ There is one exception, however, namely the quantifier brapa 'several', as shown in in (9).

Prehead modifiers can be numerals such as empat 'four' in (6), quantifiers such as sтиa 'all' in (7), or possessor noun phrases in adnominal possessive constructions such orang~orang besar 'big people' in (8). The co-occurrence of prehead modifers is unattested, with one exception. The mid-range quantifier brapa 'several' co-occurs with certain numerals, such as ratus 'hundred', or ribu 'thousand', as in brapa ratus orang 'several hundred people' in (9).

[^142](i) smua ana ini pu tugas su selesay
[[all] child [D.Prox]] poss duty already finish
'the duties of all these children are already taken care of' [Elicited ME151120.002]

MOD - HEAD
(6) jadi saya empat ana
so 1SG four child
NUM - HEAD: ‘so, I (have) four children' [081006-024-CvEx.0002]
(7) smua buku bisa basa
all book be.able be.wet
QT - HEAD: ‘all books could get wet’ [080917-008-NP.0189]
(8) ... bukang orang~orang besar pu ana ...

NEG [RDP~person big] poss child
'(she's the child of farmers) not the child of big people ...' [081110-005-Pr.0094]
(9) ...tentara itu ada brapa ratus orang
soldier D.DIST exist several hundred person
QT - NUM - HEAD: '[one time, I brought the military (into the forest), ] those soldiers were several hundred people' [081029-005-Cv.0131]

The posthead modifier slots attract a wider range of constituents: verbs, nouns, prepositional phrases, and relative clauses occur in slot Post-1, personal pronouns in slot Post2, and demonstratives, locatives, interrogatives, numerals, and quantifiers in slot Post-3. In addition, the demonstratives also occur in slot Post-4. The modifiers occurring in slot Post-1 have attributive function, while those in slot Post-2 to Post-4 have determining function.

Co-occurrences of modifiers listed in the same slot are unattested, whereas those listed in different slots are attested to co-occur, as demonstrated in (10) to (16). In tangang pendek satu tu 'that one short-handed (one)' in (10), an adnominally used stative verb co-occurs with a numeral and a demonstrative. In babi puti ko 'you white pig' in (11), an adnominally used verb co-occurs with a personal pronoun. In pisang Sorong sana tu 'those bananas (from) Sorong over there' in (12), an adnominally used noun co-occurs with a locative and a demonstrative. In pace dorang dua ini 'the two men here' in (13), an adnominally used personal pronoun co-occurs with a numeral and a demonstrative. In kaka dari Mambramo satu 'a certain older brother from (the) Mambramo (area)' in (14), an adnominally used prepositional phrase co-occurs with a numeral. In dong di Papua tu 'they in Papua there' in (15), an adnominally used prepositional phrase co-occurs with a demonstrative. Finally, in kata itu tu 'those very words' in (16) two adnominally used demonstratives co-occur.

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HEAD - MOD
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(10) tangang pendek satu tu ((laughter))
hand be.short one D.DIST
HEAD - V - NUM - DEM: [About an acquaintance:] 'that one short-armed (one) ((laughter))' [081006-016-Cv.0036]
(11) babi puti ko dari atas turung
pig be.white 2sg from top descend
HEAD - v - PRO: [About an acquaintance:] 'you white pig came down from up (there)' [081025-006-Cv.0260]
(12) pisang Sorong sana tu, iii, besar~besar manis
banana Sorong l.DIST D.Prox oh! RDP~be.big be.sweet
HEAD - N - LOC - DEM: 'those bananas (from) Sorong over there, oooh, (they) are all big (and) sweet' [081011-003-Cv.0017]
(13) pace dorang dua ini ke atas
man 3pl two D.prox to top
HEAD - PRO - NUM - DEM: 'both of the two men here (went) up (there)'
[081006-034-CvEx.0010]
(14) trus tamba kaka dari Mambramo satu
next add oSb from Mambramo one
HEAD - PP - NUM: [About forming a sports team:] 'then add a certain older
brother from (the) Mambramo (area)' [081023-001-Cv.0002]
(15) dong di Papua tu dong makang papeda

3pl at Papua D.DIST 3pl eat sagu.porridge
HEAD - PP - DEM: 'they in Papua there, they eat sagu porridge'
[081109-009-JR.0001]
(16) kata itu tu yang biking sa bertahang
word D.DIST D.DIST REL make 1sG hold.(out/back)
HEAD - DEM - DEM '(it was) those very words that made me hold out'
[081115-001a-Cv.0235]
This brief overview shows that Papuan Malay employs two distinct types of noun phrase structures: (1) a head - modifier or " N -MOD" structure, and (2) a modifier - head or "MOD-N" structure. The particular structure of a noun phrase depends on the syntactic properties of its adnominal constituents:

- N-MOD structure with adnominally used verbs, nouns, personal pronouns, demonstratives, locatives, interrogatives, prepositional phrases, and relative clauses.
- N -MOD or MOD-N structure with adnominally used numerals and quantifiers (the constituent order depends on the semantics of the phrasal structure).
- MOD-N structure in adnominal possessive constructions.

Noun phrases with an N-MOD structure are examined in §8.2 and those with an N-MOD or MOD-N structure in §8.3. Adnominal possessive constructions with a mOD-N structure are briefly mentioned in $\S 8.4$, and fully discussed in Chapter 9. In addition, apposition is discussed in §8.5. The main points of this chapter are summarized in §8.6.

## $8.2 \mathrm{~N}-\mathrm{MOD}$ structure

In noun phrases with an N -MOD structure, the head occurs in initial position followed by the modifying elements. The following modifiers are discussed: verbs (§8.2.1), nouns (§8.2.2), personal pronouns (§8.2.3), demonstratives (§8.2.4), locatives (§8.2.5), interrogatives (§8.2.6), prepositional phrases (§8.2.7), and relative clauses (§8.2.8).

### 8.2.1 Verbs [N v]

Adnominally used verbs always follow their head nominals such that " N v ", as shown in (17) to (26). Most often, the adnominal modifier is a stative verb, as in (17) to (20), although noun phrases with adnominally used dynamic verbs also occur, as in (21) to (24). (The distributional preferences of attributively used stative and dynamic verbs are discussed in §5.3.2).

In noun phrases with adnominally used stative verbs, as in (17) to (20), the head nominal is typically a bare noun as in (17), or a reduplicated noun as in (18). The adnominal modifier is usually a bare stative verb, such as besar 'be big' in (17) or panjang 'be long' in (18). However, the modifier can also be a multi-word phrase with an overt coordinator as in puti dengang hitam 'white and black' in (19), or with juxtaposed constituents as in the elicited near contrastive example in (20). Overall, though, multi-word modifier phrases are rare and limited to phrases with two adnominally used verbs.

Noun phrases with adnominal stative verbs
(17) sa su liat ada pohong besar di depang

1sG already see exist tree be.big at front
'I already saw there was a big tree in front' [081025-008-Cv.0019]
(18) langsung kuku~kuku panjang kluar
immediately RDP $\sim$ digit.nail be.long go.out
'immediately (his) long claws came out' [081115-001a-Cv.0077]
(19) sa pu bapa kubur sa pu tete pu [[kaing] [puti dengang 1sG poss father bury 1sG poss grandfather poss cloth be.white with hitam]]
be.black
'my father buried my grandfather's white and black cloth' [081014-014-NP.0047]
(20) sa pu bapa kubur sa pu tete pu [[kaing] [hitam puti]]

1sG poss father bury 1sG poss grandfather poss cloth be.black be.white 'my father buried my grandfather's white (and) black cloth' [Elicited BR130221.036] ${ }^{2}$

[^143]Adnominally used dynamic verbs denote activities, associated with the head nominal, as in (21) to (24). The head nominal can denote an agent who carries out the activity encoded by the verb, as with monovalent jalang 'walk' in (21), or a patient who undergoes this activity, as with bivalent bakar 'burn' in (22). The head can also express a spatial or temporal location where the activity occurs as with monovalent mandi 'bathe' in (23) and bangung 'get up' in (24), respectively.

Noun phrases with adnominal dynamic verbs
(21) ana itu tukang jalang
child D.DIST craftsman walk
'that kid doesn't like staying at home' (Lit. 'specialist (in) walk(ing)') [080927-001-Cv.0007]
(22) pi ambil kayu bakar, kayu bakar buat Natal go fetch wood burn wood burn for Christmas
'(we) went to get firewood, firewood for Christmas' (Lit. 'wood to burn') [081006-017-Cv.0014]
(23) tra ada kamar mandi

NEG exist room bathe
'there weren't (any) bathrooms' (Lit. 'room (where) to bathe')
[081025-009a-Cv.0059]
(24) sa pu jam~jam bangung bukang jam empat

1sG poss RDP $\sim$ hour get.up NEG hour four
'my time to get up is not four o'clock' (Lit 'hours (when) to wake-up')
[081025-006-Cv.0061]
Noun phrases with adnominally used verbs can further be modified with numerals. In the corpus, the adnominally used numeral is always the numeral satu 'one', as in (25) and (26) (the non-enumerating function of satu 'one' as a marker of "specific indefiniteness", as in (26), is discussed in §5.9.4).

Noun phrases with adnominal verbs and numerals
(25) [[[tangang pendek] satu] tu] ((laughter))
hand be.short one D.DIST
[About an acquaintance:] 'that one short-handed (one) ((laughter))' [081006-016-Cv.0036]
(26) [[kampung tua] satu] yang perna om Wili ...
village be.old one rel once uncle Wili
'a certain old village where uncle Wili once ...' [080922-010a-CvNF.0290]

### 8.2.2 Nouns [ $\mathrm{N} N$ ]

In noun phrases with adnominally used nouns, a posthead noun n2 modifies the head nominal N 1 , such that " N 1 N 2 ". Such constructions are characterized by the semantic subordination of the N 2 modifier under the head nominal N 1 .
In Papuan Malay, the distinction between a noun phrase with an adnominally used noun, hereafter N1N2-NP, and a compound with juxtaposed nominal constituents is not clear-cut, however. Word combinations or collocations range from two word expressions with compositional transparent semantics such as air sagu 'liquid of the sago palm tree', to less compositional two-word expressions, such as kampung-tana 'home village' (literally 'village-ground'). This section focuses on N1N2-nPs; the demarcation of such phrasal expression from compounds, and compounding in general, are discussed in §3.2.1.

N1N2-NPs denote important features for subclassification of the superordinate head nominal. Typically, the head of an N1N2-NP is a noun, as shown in (27) to (35c). Less often, the head is a deverbal constituent as in (36a) and (36b). Semantically, N1N2-NPs denote a wide range of associative relations between the N 1 and the N 2 , as shown in (27) to (36b): part-whole, property-of, affiliated-with, name-of, subtype-of, composed-of, and purpose-for relations, as well as locational, temporal, and event relations. N1N2-NPs encode inalienable and alienable concepts.

Inalienable "part-whole" relations of body parts and plants are given in (27) and (28), respectively, while (29) illustrates an alienable "part-whole" relation. (More types of "part-whole" relations are found in Table 8.2 and Table 8.3.)
"Part-whole" relations
(27) sa bilang, tulang bahu yang pata 1sG say bone shoulder rel break 'I said, "(it's my) shoulder bone that is broken"' [081015-005-NP.0048]
(28) adu, sa pu daung bawang itu oh.no! 1sG poss leaf onion D.DIST
[After someone had plucked some onion leaves:] 'oh no!, my onion leaves there!' [081006-024-CvEx.0043]
(29) ... pukul ... dengang blakang kapak juga bisa hit with backside axe also be.able
[About killing dogs] '[(it's) also possible to bow shoot him,] to beat (him to death) ... with the backside of an axe is also possible' [081106-001-CvPr.0002]

N1N2-NPs expressing "property-of" and "affiliated-with" relations are given in (30) and (31), respectively.
"Property-of" and "affiliated-with" relations
(30) dari situ kembali ambil seng greja from L.MED return fetch corrugated.iron church
'from there (I) returned (and) took the corrugated iron (sheets) of the church' [080927-004-CvNP.0005]
(31) ... sa su bakar ruma itu, ruma setang itu

1sG already burn house D.DIST house evil.spirit D.DIST
'[(if) I, umh, for example, were in Aruswar or Niwerawar,] I would already have burnt that house, that evil spirit's house' [081025-009a-Cv.0198]
"Name-of" relations are presented in (32a) and (32b). (Other types of "name-of" relations are found in Table 8.2 and Table 8.3.)
(32) "Name-of" relations
a. yo bapa, hari minggu sa datang
yes father day Sunday 1sG come
'yes father, on Sunday I'll come' (Lit. 'Sunday day') [080922-001a-CvPh.0344]
b. knapa ko gambar monyet di bawa pohong pisang? why 2sG draw monkey at under tree banana
'why did you draw the monkey under the banana tree?' [081109-002-JR.0004]
"Subtype-of" relations are presented in (33a) to (33b).
(33) "Subtype-of" relations
a. ... maka pake [[bahasa] orang bisu] therefore use language person be.mute
'[she couldn't speak the Indonesian language,] therefore (she) used sign language' (Lit. 'language of mute people') [081006-023-CvEx.0073]
b. ... supaya Sarmi ada [[petinju prempuang] satu] so.that Sarmi exist boxer woman one
'... so that Sarmi has a certain woman boxer' [081023-003-Cv.0005]
N1N2-NPs expressing "composed-of" and "purpose-for" relations are illustrated in (34a) and (34b), respectively.
(34) "Composed-of" and "purpose-for" relations
a. smua jalang kaya kapal kayu
all walk like ship wood
'(they) all were strolling around like wooden boats' [081025-009a-Cv.0188]

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b. yo, net laki~laki tong yang bli yes (sport.)net rdp \(\sim h u s b a n d\) 1pl Rel buy 'yes, the (volley-ball) net for men, (it was) us who (bought it)' [081023-001-Cv.0012]
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Locational and temporal relations between the N 1 and N 2 are illustrated in (35a) to (35c). The N 2 denotes a locational relation in (35a), and a temporal relation in (35b). In (35c) the first two nominals express a locational relation between the head ampas 'waste' and its modifier noun, the source pinang 'betel nut'. This n1N2 construction is modified with the third nominal malam 'night' which denotes a temporal relation (n1N2-NPS with more than three nominal constituents are unattested in the corpus). (Other types of locational relations are found in Table 8.2.)
(35) Locational and temporal relations
a. orang Papua bilang jing kayu person Papua say genie wood
'Papuans call (them) tree genies' [081006-022-CvEx.0054]
b. [[jam tiga] pagi]?
hour three morning
'(was it) three o'clock in the morning?' [080918-001-CvNP.0042]
c. [[[ampas pinang] malam] tu] sa taru
waste betel.nut night D.DIST 1sG put
'that evening's betel nut waste, I put (it aside)' [081025-006-Cv.0294]
An N1N2-NP can also be formed with a deverbal nominal head as in (36a) and (36b). Semantically, the N1N2-NP in (36a) expresses an event relation in which adnominal tugu 'monument' is affected by the event expressed by the deverbal head N 1 . The n1s2-np in (36b) denotes a locational relation with the deverbal head N 1 originating from the nominal spatial source N 2 .
(36) Subordinate N1N2-NPs with deverbal constituent
a. ada [[pasang tugu] itu]
exist install monument d.DIST
[Giving directions:] 'there is that statue installation' [080917-008-NP.0017]
b. kalo angkat air jemur di panas mata-hari
if lift water dry at be.hot sun
'when (you) fetch water, warm (it) up in the heat of the sun'
[081006-013-Cv.0005]
Table 8.2 and Table 8.3 give an overview of the different associative meaning relations expressed with N1N2-NPs.

Table 8.2: Associative meaning relations encoded by N1N2-NPs

|  | Papuan Malay N1N2 | Glosses |
| :--- | :--- | :--- |

Table 8.3: Associative meaning relations encoded by N1N2-NPs continued

|  | Papuan Malay N1N2 |  | Glosses |
| :---: | :--- | :---: | :--- |

### 8.2.3 Personal pronouns [N PRO]

Papuan Malay noun phrases are often modified with personal pronouns in posthead position, such that " N PRO", as illustrated in (37) to (39). Signaling the definiteness, person, and number of their referents, the adnominally used personal pronouns allow the unambiguous identification of their referents. They are available for all person-number values, except for first person singular saya/sa '1sG' which is unattested; the long and short pronoun forms are used interchangeably. (Personal pronouns and their adnominal uses are discussed in detail in Chapter 6; see also §5.5).

Adnominal singular personal pronouns indicate the singularity of their referents, as shown with $k o$ ' 2 sG ' and dia ' 3 sG ' in (37). In addition, they have pertinent discourse functions, discussed in detail in §6.2.1. Noun phrases with adnominally used plural personal pronouns have two readings. With an indefinite referent, such as laki~laki 'man' in (38), the noun phrase receives an additive plural reading. With a definite referent such as Roni in (39), the noun phrase receives an associative inclusory plural reading. Both readings are discussed in detail in §6.2.2.

Noun phrases with adnominal personal pronouns
(37) Wili ko jangang gara~gara tanta dia itu!

Wili 2sG NEG.IMP RDP~irritate aunt 3sG D.DIST
'you Wili don't irritate that aunt!' [081023-001-Cv.0038]
(38) jadi laki~laki kitong harus bayar spulu juta sama ... so RDP~husband 1pL have.to pay ten million with 'so we men have to pay ten million to ...' [081110-005-CvPr.0107]
(39) Roni dong kas tinggal itu babi di sini

Roni 3pl give stay D.DIST pig at l.Prox
'Roni and the others including Roni left, what's-its-name, the pig here' [080917-008-NP.0135]

### 8.2.4 Demonstratives [N DEM]

Within the noun phrase, adnominally used demonstratives are placed at the right periphery, where they have scope over the entire noun phrase, such that " N DEm": proximal ini 'D.PRox' or distal itu 'D.DIST', or their respective reduced forms ni 'd.Prox' and $t u$ 'D.DIST'. Like adnominally used personal pronouns (§8.2.3), the adnominal demonstratives function as determiners. Unlike the personal pronouns, however, they signal specificity rather than definiteness. ${ }^{3}$

The head nominal can be a noun such as ana 'child' in (40), a personal pronoun such as dia '3SG' in (40), a locative such as sana 'L.DIST' in (41), or another demonstrative such as itu 'd.DIST' in (42). (Demonstratives and their adnominal uses are discussed in detail in §7.1; see also §5.6).
(40) ana itu sa paling sayang dia tu
child d.DIST 1sg most love 3sg d.DIST
'that child, I love her (EMPH) most' [081011-023-Cv.0097]
(41) sana, te ada di sana itu
L.DIST tea exist at L.DIST D.DIST
'there, the tea is over there (EMPH)' [081014-011-CvEx.0010]
(42) ... itu tu kata~kata dasar yang harusnya kamu taw D.DIST D.DIST RDP~word base REL appropriately 2PL know
[Addressing a school student:] '[do you know the (English) word "please" or not?,] that very (word belongs to) the basic words that you should know' [081115-001a-Cv.0145]

[^144]
### 8.2.5 Locatives [ N LOC]

Adnominally used locatives occur in posthead position, such that " N Loc". This is illustrated with proximal sini 'l.prox' in (43), and distal sana 'l.DISt', as in (44). The head nominal may be a noun such as ana 'child' in (43), or a personal pronoun such as dong ' 3 PL' in (44). (A detailed discussion on locatives and their adnominal uses is found in §7.2; see also §5.7).
(43) kamu ana~ana sini tu enak skali

2PL RDP~child L.PROX D.DIST be.pleasant very
'you, the young people here (EMPH), (live) very pleasant (lives)'
[081115-001b-Cv.0060]
(44) dong sana cari anging

3pL L.DIST search wind
'they over there are looking for a breeze' [081025-009b-Cv.0076]

### 8.2.6 Interrogatives [N INT]

In their adnominal uses, the interrogatives occur in posthead position, such that " N INT". Syntactically, the interrogatives remain in-situ; that is, noun phrases with adnominally used interrogatives correspond to their non-interrogative expressions. This is illustrated with siapa 'who' in (45), apa 'what' in (46), and mana 'where, which' in (47).

The interrogatives always occur in noun phrases with a nominal head such as the common noun kaka 'older sibling' in (45). Modification of personal pronouns or other constituents is unattested. (More details on the interrogatives and their adnominal uses are found in §5.8).
(45) skarang sa tanya, [orang siapa] yang benar?
now 1sG ask person who ReL be.true
'now I asked, "which person (is the one) who is right?"' [080917-010-CvEx.0197]
(46) [hari apa] yang sa ketemu dia e?
day what rel 1sG meet 3sG eh
'which day (is the one) that I met her, eh?' [080922-004-Cv.0013]
(47) sa tanya dia, di [posisi mana] skarang?

1 sg ask 3 sg at position where now
'I asked him, "which position (is the one that are you) at now?"'
[081011-008-Cv.0023]

### 8.2.7 Prepositional phrases [N PP]

Noun phrases can be modified with prepositional phrases, such that " NPP ". Overall, however, such noun phrases are uncommon. In the corpus, four prepositions occur in
adnominally used prepositional phrases, namely locative di 'at, in' as in (15), repeated as (48), elative dari 'from' as in (49), benefactive untuk 'for' as in (50), and similative sperti 'like' as in (51). (For a detailed discussion on prepositions and prepositional phrases see Chapter 10; see also §5.11).

Noun phrases with adnominal prepositional phrases
(48) dong di Papua tu dong makang papeda

3pl at Papua D.DIST 3pl eat sagu.porridge
'they in Papua there, they eat sagu porridge' [081109-009-JR.0001]
(49) itu iblis~iblis dari ruangang ini yang ganggu
D.DIST RDP~devil from room D.prox rel disturb
'it's the devils from this room who are disturbing (you)' [081011-008-CvPh.0018]
(50) di sana kang masi tempat untuk kafir at l.DIST you.know still place for unbeliever
'(the area) over there, you know, is still a location for unbelievers' [081011-022-Cv.0238]
(51) orang~orang sperti begitu yang tida mengenal Kristus

RDP~person like like.that rel neg know Kristus
'(it's) people like those who don't know Christ ...' [081006-023-CvEx.0034]

### 8.2.8 Relative clauses [ N RC]

Relative clauses are introduced with the relativizer yang 'rel'. They always follow their head nominal, such that " N Rc". The head nominal can be a noun as in (52), a personal pronoun as in (53), a demonstrative as in (54), a locative as in (55), or an interrogative as in (56). The syntax of relatives clauses is discussed in detail in §14.3.2 (see also Chapter 5 for the respective word class sections, as well as Chapter 6, and Chapter 7).
(52) ... tapi di sini prempuang yang tokok
but at l.prox woman REL tap
'[at Pante-Timur all the men pound (sago),] but here (it's) the women who pound (sago)' [081014-007-CvEx.0073]
(53) a, ko yang tanya to?
ah! 2SG REL ask right?
'ah, (it was) you who asked, right?' [080923-014-CvEx.0010]
(54) itu yang orang Papua skarang maw
D.DIST REL person Papua now want
'(it's) that what Papuans want nowadays' [081025-004-Cv.0077]
(55) di sini yang tra banyak
at L.PROX REL NEG many
[About logistic problems:] '(it's) here where there weren't many (passengers)' [081025-008-Cv.0140]
(56) kamu tida perna dengar apa yang orang-tua bicara

2PL neg ever listen what rel parent speak
'because you never listened to what the elders said' [081115-001a-Cv.0338]

### 8.3 N-MOD / MOD-N structure

Noun phrases with adnominally used numerals or quantifiers can have an N-MOD or a MOD-N structure, depending on the semantics of the phrasal structure. When preposed, adnominal numerals and quantifiers signal individuality, while postposed numerals and quantifiers express exhaustivity or positions within series. Posthead numerals and quantifiers have scope over their head nominal including its verbal and/or nominal modifiers, while they, in turn, are within the scope of the demonstratives. Adnominally used numerals are discussed in §8.3.1, and adnominal quantifiers in §8.3.2.

### 8.3.1 Numerals [N NUM / NUM N]

Two types of noun phrases with adnominally used numerals can be distinguished: (1) noun phrases with prehead numerals, such that "num N", are presented in (57) to (60), and (2) noun phrases with posthead numerals, such that " N num", are illustrated in (61) to (64). (For a discussion of numerals as a word class see §5.9.)

Noun phrases with preposed numerals ("Numn-NP") express a sense of individuality by signaling the composite nature of their referents. This is achieved in that numn-nps denote absolute numbers of items expressed by their head nominals, including quantities as in (57) or periods of time as in (58).
numn-nps denoting definite quantities of countable referents: Individuality
(57) ... brarti suda empat orang bisa masuk
mean already four person be.able enter
[About local elections:] '... that means that already four people can be included (in the list of nominees)' [080919-001-Cv.0149]
(58) ini untuk balita dang bayi yang usia dari lima taung ke D.Prox for children.under.five and baby rel age from five year to bawa sampe dua bulang
bottom until two month
'this is for children and babies who are five years down to two months'
[081010-001-Cv.0197]

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If the exact absolute number of items is unknown, two numerals can be juxtaposed to indicate approximate quantities, as in (59) and (60). The approximated quantities are usually rather small, such as satu dua 'one or two' in (59) or tiga empat 'three or four' as in (60).

Numn-Numn-NPS denoting approximate quantities
(59) jangang ko lama ko satu dua hari saja

NEG.IMP 2sG be.long 2sG one two day just
'don't (stay) long, just one or two days' [080922-001a-CvPh.0736]
(60) tiga empat kluarga harus ada di situ
three four family have.to exist at L.MED
'three or four families have to be there' [080923-007-Cv.0018]
Noun phrases with posthead numerals ("Nnum-NP") signal exhaustivity of definite referents, as in (61) and (62), or mark unique positions within series or sequences as in (63) and (64).

With head nominals undifferentiated in terms of their ranking, nNum-NPs indicate exhaustivity of definite referents. The head can be a noun, as in the elicited example in (61), or a personal pronoun as in (62). ${ }^{4}$
nNum-NPS denoting definite quantities of countable referents: Exhaustivity
(61) trus tamba [[[kaka dari Mambramo] tiga] ni]
next add oSb from Mambramo one D.prox
[About forming a volleyball team:] 'and then add these three older brothers
from Mambramo' [Elicited BR111018.004]
(62) nanti kitong empat su tidor di luar
very.soon 1PL four already sleep at outside
'after the four of us had already been sleeping outside ...' [081025-009a-Cv.0004]
With head nominals differentiated in terms of their ranking within a series, NNum-NPS signal the unique position of a referent within such a ranking as in (63), or they specify unique points in time as in (64).
nNum-NPS denoting definite quantities of countable referents: Unique positions or points in time
(63) kitong lari~lari sampe di SP

## tuju

1PL RDP~run reach at transmigration.settlement seven
'we drove all the way to transmigration settlement number seven' (Lit. 'the seventh transmigration settlement') [081006-033-Cv.0007]

[^145](64) jam dua, tong kluar dari sini jam satu
hour two 1pl go.out from l.prox hour one
'(we arrived at) two o'clock, we left from here at one o'clock'
[081025-008-Cv.0099]
In (65) to (67), the opposition between the pre- and posthead positions is illustrated with (near) contrastive examples. In (65) prehead dua 'two' designates the absolute number of items expressed by its head. In (66) posthead dua 'two' modifies a head nominal undifferentiated in terms of its ranking, whereby it signals the exhaustivity of its referent. In (67) posthead dua 'two' signals a unique position within a series.

Opposition between Numn-NPs and nNum-Nps
(65) saya jaga dua jam, yo kurang lebi dua jam ...

1sG guard two hour yes lack more two hour
'I kept watch for two hours, yes, more or less for two hours ...'
[080919-004-NP.0016]
(66) sidi dua dia potong
CD.player two 3sG cut
'both CD players, he destroyed (them)' [081011-009-Cv.0006]
(67) ini suda jam dua malam
D.Prox already hour two night
'this is already two o'clock at night' [080916-001-CvNP.0001]
The data in (57) to (67) suggests that the nnum order is favored in more specific and definite constructions, namely to signal exhaustivity of definite referents or unique positions within series or sequences. The numn order, by contrast, is associated with less specific or less definite constructions which express the absolute number of items denoted by the head nominal. These patterns contrast with Greenberg's (1978: 284) crosslinguistic findings concerning the word order in noun phrases with adnominal numerals:
44. The order noun-numeral is favored in indefinite and approximative constructions.

Greenberg (1978: 284) does note, however, that this statement is a generalization rather than a universal, given cross-linguistic variations in quantifier-noun [Q-N] order. Noting that "in some languages either QN or NQ may occur with any numeral" and that this "contrast of order may then have semantic or syntactic function", Greenberg (1978: 284) presents a number of languages that, like Papuan Malay, employ nnum order in definite constructions rather than in indefinite ones.

Following Greenberg (1978: 284), the Papuan Malay nnum order in definite constructions is a variation of a much more common numn order for these constructions. In his critique of Greenberg's (1978: 284) generalization \#44, Donohue (2005a) demonstrates,

## 8 Noun phrases

however, that the nnum order in definite constructions is not a mere "variation" found in "some languages". Rather, "there is a strong tendency for postnominal numerals to be interpreted in highly specific, highly definite ways" (2005a: 34). The data presented here suggests that the Papuan Malay word order in noun phrases with adnominally used numerals follows this same "strong tendency".

### 8.3.2 Quantifiers [N QT / QT N]

Noun phrases with adnominally used quantifiers have syntactic properties similar to those with adnominally used numerals. Noun phrases with prehead quantifiers ("otnNP ") express nonnumeric amounts or quantities of the items indicated by their head nominals; they only modify countable referents. Noun phrases with posthead quantifier ("NQt-NP"), by contrast, either denote exhaustivity of indefinite referents or signal unknown positions within series or sequences; they modify countable as well as uncountable referents. (For a discussion of quantifiers as a word class see §5.10).

The following adnominal quantifiers are attested: universal masing-masing 'each', segala 'all', sembarang 'any (kind of)', (se)tiap 'every', and smua 'all', and mid-range banyak 'many', brapa 'several', sedikit 'few', and stenga 'half'.

Five quantifiers can occur in pre- or posthead position, namely banyak 'many', brapa 'several', masing-masing 'each', sedikit 'few', and smua 'all', as shown in (72) to (86). The other four quantifiers, that is, segala 'all', sembarang 'any (kind of)', (se)tiap 'every', and stenga 'half', only occur in prehead position where they signal nonnumeric quantities of countable referents, as illustrated in (68) to (71). While sembarang 'any (kind of)' is only used with animate referents as in (69), (se)tiap 'every' and stenga 'half' are only used with inanimate referents as in (70) and (71), respectively. ${ }^{5}$ Quantifier segala 'all' is always combined with the noun macang 'variety' with segala macang expressing the notion of "all kinds, whatever kind" as in (68).

QtN-NPS denoting indefinite quantities of countable referents: Individuality
(68) segala macang dia biking
all variety 3sG make
[About an ancestor's achievements:] 'all kinds (of things), he made (them)' [080922-010a-CvNF.0297]
(69) sa tra bisa kasi sembarang orang

1sG NEG be.able give any(.kind.of) person
'I can't give (the gasoline to just) any person' [081110-002-Cv.0080]
(70) setiap renungang pagi sa su kasi nasihat itu
every meditation morning 1sG already give advice D.DIST
'(during) each morning devotions, I already give (them) that (same) advice' [081115-001b-Cv.0008]

[^146](71) mungking stenga jam saja sa tidor maybe half hour just 1sG sleep
'I slept for maybe just half an hour' [081115-001b-Cv.0056]
The quantifiers banyak 'many', brapa 'several', masing-masing 'each', sedikit 'few', and sтиa 'all' can precede or follow their head nominals, as demonstrated in (72) to (86). Both phrasal structures serve distinct semantic functions similar to those of adnominal numerals, discussed in §8.3.1, although the contrast is more subtle. The examples presented in this section also illustrate that the quantifiers can be used with animate or inanimate referents.

QtN-NPs with prehead banyak 'many', brapa 'several', masing-masing 'each', sedikit 'few', and sтиа 'all' denote the nonnumeric quantities of countable referents. Thereby, QtN-NPs express the composite nature of their referents which conveys a sense of individuality, such that "Qt amount of N " as in (72) to (76). The corpus includes only few noun phrases with adnominally used sedikit 'few' all of which have sedikit 'few' in posthead position. According to one of the consultants, however, adnominal modification with prehead sedikit 'few' is natural and common, as illustrated with the elicited example in (75).

QtN-NPS denoting indefinite quantities of countable referents: Individuality
(72) de itu kalo banyak orang de biasa begitu

3sG d.DIST when many person 3sG be.usual like.that
'if there're many people, he's usually like that' [081025-006-Cv.0272]
(73) tentara itu ada brapa ratus orang, ada sekitar brapa pleton soldier D.DIst exist several hundred person exist vicinity several platoon 'those soldiers were several hundred people, (they) were approximately several platoons' [081029-005-Cv.0131]
(74) bayar mas-kawing ini laing masing-masing budaya pay bride.price D.Prox be.different each culture
'paying this bride price is different (for) each culture' [081006-029-CvEx.0014]
(75) de itu kalo sedikit orang de biasa begitu

3sG D.DIST when few person 3sg be.usual like.that
'if there're few people, he's usually like that' [Elicited BR111021.004]
(76) smua buku bisa basa
all book be.able be.wet
'all books could get wet' [080917-008-NP.0189]
NQt-NPS with posthead banyak 'many', brapa 'several', masing-masing 'each', sedikit 'few', and smua 'all' typically signal exhaustivity of indefinite countable referents, as
shown in (77) to (82). Besides, NQt-nPs with posthead brapa 'how many' can denote unknown positions within series of countable referents, as in (83). While the head in NQt-NPs is typically a noun, as in (77), it can also be a personal pronoun as in (78). Most often, NQt-nPs signal a contrastive sense of exhaustivity: n banyak translates with "many (and not just a few) N" as in (77), N masing-masing with "several (and not just a few) N " as in (78), N masing-masing with "each N (with nobody missing)" as in the elicited example in (79), N sedikit with "few (and not many) N " as in (80), and N smua with "the entire collection of N (with nobody/nothing missing)" as in (82). As mentioned above, the corpus includes only a few noun phrases with adnominally used sedikit 'few' one of which is presented in (80): ikang sedikit 'few fish'. Alternatively, however, ikang sedikit could receive the predicative reading 'the fish are few'. Therefore, an additional elicited example is given in (81).

NQt-NPS denoting indefinite quantities of countable referents: Exhaustivity
(77) ... baca buku banyak skali
read book many very
‘... (I've) read very many books' [080917-010-CvEx.0172]
(78) sa maki dorang brapa itu

1sG abuse.verbally 3PL several D.DIST
'I verbally abused several of them there' [080923-008-Cv.0012]
(79) dong antar petatas dengang sayur dulu taru tumpukang di klompok 3pl bring sweet.potato with vegetable first put pile at group masing-masing begitu
each like.that
'first they bring the sweet potatoes and vegetables (and) place the piles (of food) in (front of) each group like that' [Elicited BR111021.001] ${ }^{6}$
(80) kalo ikang sedikit, itu untuk tamu
if fish few D.DIst for guest
'as for the few fish, those are for the guests' [081014-011-CvEx.0008]
(81) sa ada bawa kladi sedikit buat mama dong

1sG exist bring taro.root few for mother 3pl
'I'm bringing a few taro roots for mother and the others' [Elicited BR111021.006]
(82) tong smua dari kampung

1pL all from village
'we all are from the village' [081010-001-Cv.0084]

[^147]Depending on the semantics of the head nominal, nQt-nPs with posthead brapa 'several' can also mark unknown positions within series expressed by their referents, as in (83).

NQt-NPS denoting indefinite quantities of countable referents: Exhaustivity or unknown positions within series
(83) kalo di situ kang, jam brapa saja bisa
if at L.MED you.know hour several just be.able
'as for (the office) there, you know, (you) can (go there) any time' (Lit. 'several hours') [081005-001-Cv.0001]

Noun phrases with uncountable referents are modified with posthead quantifiers only, as shown in (84) to (86). This restriction is due to the semantics of mass nouns which, per se, do not convey the sense of individuality encoded by the prehead position of the quantifiers, presented in (68) to (83). Adnominal quantifiers for mass nouns are banyak 'many' as in (84), sedikit 'few' as in (85), or smua 'all' as in (86).

NQt-NPS denoting indefinite quantities of uncountable referents: Exhaustivity
(84) minum te banyak, minum te dulu
drink tea many drink tea first
'drink lots of tea, drink tea for now!' [081011-001-Cv.0240]
(85) tida bisa air sedikit pung sentu sa pu mulut

NEG be.able water few even touch 1SG poss mouth
[About a sickness:] 'not even the least bit of water could touch my mouth' [081006-035-CvEx.0050]
(86) ... buka de pu kulit smua
open 3sg poss skin all
'(they) peel off his entire skin' [081029-004-Cv.0047]
Typically, posthead smиa 'all' forms a constituent with the quantified nominal. Alternatively, however, it can float to a clause-final position, as shown in (87) and (88).

Floating adnominal quantifier smua 'all'
(87) makangang kas tinggal smua
food give stay all
'(he was made) to leave all (his) food (untouched)' [081025-008-Cv.0048]
(88) dong diam smua

3pl be.quiet all
'they were all quiet' [080922-003-Cv.0095]

### 8.4 MOD-N structure: Adnominal possession

In Papuan Malay, adnominal possessive relations between two noun phrases are marked with the possessive ligature punya; alternative realization of the ligature are reduced $p u$, clitic $=p$, or a zero morpheme.

Such possessive constructions have a MOD-N constituent order which is opposite to the canonical N-MOD structure. That is, the head nominal encoding the possessum (POSSM) takes the N 2 slot, following the possessive ligature (Lig), whereas the modifier expressing the possessor (POSSR) takes the N 1 slot, such that "pOSSR-NP - LIG - possm-Np". This is shown with the adnominal possessive construction in (89).
POSSR LIG POSSM
nanti Hendro punya ade prempuang kawing .. very.soon Hendro poss ySb woman marry.inofficially 'eventually Hendro's younger sister would marry ...' [081006-028-CvEx.0007]

Syntactically, a variety of constituents can encode the possessor and the possessum, as shown in (90). The possessor slot can be taken by a lexical noun as in (90a, 90b, ) a personal pronoun as in ( $90 \mathrm{c}, 90 \mathrm{~d}$ ), a demonstrative as in ( 90 e ), the interrogative siapa 'who' as in ( 90 f ), or a noun phrase as in $(90 \mathrm{~g})$. The possessum can be encoded by a lexical noun as in ( $90 \mathrm{c}, 90 \mathrm{e}, 90 \mathrm{f}$ ), a demonstrative as in ( $90 \mathrm{a}, 90 \mathrm{~b}$ ), the interrogative siapa 'who' as in ( 90 d ), or a noun phrase as in $(90 \mathrm{~g})$. Possessive noun phrases with a personal pronoun possessum are unattested.

Syntactic constituents of adnominal possessive constructions ${ }^{7}$
(90) possr lig possm Adnominal possessive construction
a. $N$ pu DEM
b. $N$ pu $D E M$
c. PRO punya $N$
d. PRO pu INT
e. DEM pu N
f. $I N T p u N$
g. $N P p u N P$
ade pu itu
'younger sister's (fish)'
Fitri pu ini
'Fitri's (belongings)'
de punya bulu~bulu
'its (the dog's) body hair'
sa pu siapa
'who of my (relatives)'
ini pu muka
'this (one's) face'
siapa pu sandal
'whose sandals'
mama Klara pu ana prempuang
'mother Klara's daughter'

[^148]The examples in (89) and (90) show that adnominal possessive constructions designate possession of a definite possessum. Adnominal possession, including the noncanonical functions of the possessive marker, is discussed in detail in Chapter 9 (see also §11.4.1 for the uses of adnominal possessive constructions in two-argument existential clauses). Possession of an indefinite possessum is expressed with a two-argument existential clause or with a nominal clause; details are presented in §11.4.2 and §12.2, respectively.

### 8.5 Apposition

In an apposition two "or more noun phrases" have "the same referent" and stand "in the same syntactical relation to the rest of the sentence" (Asher 1994: 5093). Papuan Malay employs two types of appositional constructions, namely apposition of a noun with another noun or noun phrase, such that " $\mathrm{N} N \mathrm{~N}$ ", and apposition of a personal pronoun with a noun or noun phrase, such that "PRO NP". This section describes " N NP" appositions, while "PRO NP" appositions are discussed in §6.1.6.

Papuan Malay " $\mathrm{N} N \mathrm{NP}$ " appositions are restrictive. That is, the apposited or juxtaposed noun phrase is needed for the appropriate identification of the referent encoded by the initial noun. There are no formal distinctions, though, between the " $\mathrm{N} N \mathrm{~N}$ " appositions discussed here and noun phrases with adnominally used nouns (N1N2-NP), discussed in §8.2.2; the distinction is based on semantics.

In the corpus, " N NP" appositions are rare, and in each case the initial noun encodes a kinship term, as in (91) and (92). The juxtaposed noun phrase ibu pendeta 'Ms. Pastor' in (91) is appositional to the first noun kaka 'older sibling'. It provides information necessary for the identification of the referent. In (92), the appositional noun phrase ketua klasis 'church district chairperson' serves as an identifying explanation for the reference of the initial noun bapa 'father'.
(91) bapa-ade ini, kaka, [kaka] [ibu pendeta] dengang ini mama-tua, uncle D.Prox oSb oSb woman pastor with D.Prox aunt nene ini dong tertawa grandmother D.prox 3pl laugh
'uncle here (and) older sibling, older sibling, Ms. Pastor, and, what's-her-name, aunt, grandmother here, they were laughing' [080922-001a-CvPh.0824]
(92) ... bapa di dalam, [bapa] [ketua klasis]
father at inside father chairperson church.district
'[that's what I've never told older sibling, what's-his-name,] father (who's) inside, father, the church district chairperson' [080922-010a-CvNF.0104]

### 8.6 Summary

The head of a noun phrase is typically a noun or personal pronoun. Further, although less common, demonstratives, locatives, or interrogatives can also function as heads.

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The canonical word order within the noun phrase is head-modifier. Depending on the syntactic properties of the adnominal constituents, though, a mODIFIERHEAD order is also common. Attested in the corpus is the co-occurrence of up to three posthead modifiers. The possible constituents of the maximally extended noun phrase and the order of these constituents is summarized in the template in Table 8.4 (the items in parenthesis are optional).

Table 8.4: Template of the maximally extended noun phrase

| (NUM) |  | (v) |  | (DEM) |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| (QT) |  | (N) |  | (LOc) | (DEM) |
| (POSSR-NP) | HEAD | (PP) | (PRO) | (INT) | (DEM) |
|  |  | (RC) |  | (NUM) |  |
|  |  |  | (QT) |  |  |

The template in Table 8.4 shows that noun phrases with adnominally used verbs, nouns, personal pronouns, demonstratives, locatives, prepositional phrases, interrogatives, and relative clauses have an N-MOD structure. Adnominal possessive constructions, by contrast, have a MOD-N structure with the modifying possessor phrase occurring in prehead position. Noun phrases with adnominally used numerals and quantifiers have an N -MOD or MOD-N structure depending on the semantics of the phrasal structure. Adnominally used demonstratives can occur in two slots. They can take the same slot as adnominally used locatives, interrogatives, numerals, or quantifiers, and in addition they can occur at the right periphery of the noun phrase where they have scope over the entire noun phrase.

Papuan Malay uses two types of appositional constructions: those consisting of a noun followed by another noun or noun phrase, and those consisting of a personal pronoun followed by a noun or noun phrase, the latter being discussed in §6.1.6. Appositions with juxtaposed nouns or noun phrases are restrictive.

## 9 Adnominal possessive relations

In Papuan Malay, adnominal possessive relations between two noun phrases are encoded with the possessive ligature punya 'poss'. The noun phrase preceding the ligature (LIG) designates the possessor (pOSSR), while the noun phrase following it expresses the possessum (POSSM), such that "POSSR-NP - punya 'pOSs' - POSSM-NP".

The main function of adnominal possessive constructions is to denote possession of a definite possessum. In addition, punya 'poss' serves other functions in "pOSSR-Np punya 'pOSs' - pOSSM-NP" constructions. It is employed to mark and emphasize locational, temporal, or associative relations, to indicate beneficiary relations, or to signal speaker attitudes and evaluations. Besides, the ligature is also used in reflexive expressions. (Possession of an indefinite possessum is not expressed with an adnominal possessive construction, but with a two-argument existential clause or a nominal clause; details are presented in $\S 11.4 .2$ and $\S 12.2$, respectively.)

The three constituents of an adnominal possessive construction have different realizations, as illustrated in Table 9.1. The possessive marker can be realized with unreduced punya, reduced $p u$, clitic $=p$, or a zero morpheme. The noun phrases expressing the possessor and possessum can belong to different syntactic categories. The most common constituents are lexical nouns and noun phrases. Demonstratives can also take either slot. Also very common are personal pronoun possessors. In noncanonical possessive constructions, the possessor and possessum slots can also be filled by verbs. In addition, mid-range quantifiers, temporal adverbs and prepositional phrases can take the possessum slot. In both canonical and noncanonical possessive constructions, the possessum can be omitted.

Table 9.1: Adnominal possessive constructions

| POSSR | LIG | POSSM |
| :--- | :--- | :--- |
| Lexical nouns | $p u n y a$ | Lexical nouns |
| Noun phrases | $p u$ | Noun phrases |
| Demonstratives | $p u$ | Demonstratives |
| Personal pronouns | $=p$ | Verbs |
| Verbs | $\varnothing$ | Quantifiers |
|  |  | Adverbs |
|  |  | Prepositional phrases |
|  |  | $\varnothing$ |

## 9 Adnominal possessive relations

Semantically, the possessor and the possessum can designate human, nonhuman animate, or inanimate referents. Overall, adnominal possessive constructions do not make a distinction between alienable and inalienable possession, with one exception. Possessive constructions with the elided possessive marker signal inalienable possession of body parts or kinship relations (see §9.1.3).

In the following sections, adnominal possessive constructions are discussed in more detail. The possessive marker punya 'poss' with its different realizations is examined in §9.1. The different realizations of the possessor and possessum noun phrases are described in §9.2. Noncanonical possessive constructions are discussed in §9.3. The main points of this chapter are summarized in §9.4. (For the uses of adnominal possessive constructions in two-argument existential clauses, see §11.4.1.)

### 9.1 Possessive marker punya 'poss'

The possessive marker punya 'poss' is related to the full bivalent verb punya 'have' which is still used synchronically in two-argument clauses to predicate possession of an indefinite possessum. In such clauses, the possessor is encoded by the grammatical subject (s) while the indefinite possessum is the direct object (o) of the verb (v) punya 'have'. This is illustrated in (1): the possessor sa ' 1 sG' is the grammatical subject while the possessum rencana 'thought' is the direct object of punya 'have'. Overall, however, verbal clauses with punya 'have' are rather rare. Instead, speakers typically express possession of an indefinite possessum with a two-argument existential clause with ada 'exist'. This is demonstrated in (2): the possessor $s a$ ' 1 sG ' is the subject while the indefinite possessum ana 'child' is the direct object of existential ada 'exist'. (This type of two-argument existential clause is discussed in detail in §11.4.2.)

Predicative reading of punya 'have' constructions
S $\quad$ v o
malam saya suda punya rencana
night 1sG already have plan
'the night (before I go hunting) I already have a plan' [080919-004-NP.0002]

Two-argument existential clause denoting possession
(2) s v o
sa ada ana, jadi sa kasi untuk sa pu sodara
1sG exist child so 1sG give for 1sg poss sibling
'I have children, so I gave (one) to my relative' [081006-024-CvEx.0010]
The most common function of Papuan Malay punya 'poss' is that of a ligature in adnominal referential possessive constructions, that is, possessive constructions with definite referents. Such constructions have the syntactic structure "posse-Np punya possmNP". As shown in (3), this type of possessive construction contrasts with the verbal
constructions in (1) and (2): the possessive relation is not encoded by a two-argument clause but in a single construction which consists of two noun phrases, which in turn functions as an argument in a clause. Hence, Yosina in (3) is not a grammatical subject but the possessor. Likewise, swara 'voice' is not the direct object of a verbal clause, but a definite possessum. The entire possessive construction in (3) functions as the direct object of the bivalent verb dengar 'hear'. The contrastive examples in (2) and (3) also illustrate the distinctions between possession of an indefinite and a definite possessum, respectively.

Adnominal reading of punya 'poss' constructions
(3)

POSSR-NP LIG POSSM-NP
bapa kwatir tertarik dengar Yosina punya swara
father afraid be.pulled hear Yosina poss voice
'I ('father') was worried (and) longed to hear your ('Yosina's') voice'
[080922-001a-CvPh.0205]
Sometimes, however, it is ambiguous whether the punya construction should receive a predicative reading as in (4a) or an adnominal interpretation as in (4b), as there is no difference in intonation or stress between the utterances.

Predicative and adnominal readings of punya 'have/poss' constructions
(4)
a. [de] [punya] [piring kusus]

3sg have/poss plate be.special
Predicative reading: 'he/she has special plates' [081006-029-CvEx.0016]
b. [de punya piring] [kusus]

3sG have/poss plate be.special
Adnominal reading: 'his/her plates are special' [081006-029-CvEx.0016]
In adnominal possessive constructions, the ligature punya 'poss' has four different realizations which are discussed in the following sections: long punya 'poss' and its reduced form $p u$ in §9.1.1, the clitic $=p$ 'poss' in §9.1.2, and elision in §9.1.3. In §9.1.4, a possible grammaticalization of the possessive marker is examined.

### 9.1.1 POSSR-NP punya/pu POSSM-NP

In adnominal possessive constructions, the possessive marker is most commonly realized with the long form punya 'poss' or the reduced monosyllabic form pu 'poss'. This reduction is independent of the syntactic or semantic properties of the possessor or possessum, as illustrated in (5).

Both ligature forms occur with possessors encoded by lexical nouns as in ( $5 \mathrm{a}-5 \mathrm{~g}$, by personal pronouns as in $(5 \mathrm{~h}, 5 \mathrm{i})$, or by noun phrases as in ( $5 \mathrm{j}-5 \mathrm{l}$ ). With either ligature form, the possessor can denote a human referent as in (5a-5d, 5i-5k), a nonhuman animate referent as in ( $5 \mathrm{e}, 5 \mathrm{f}, 5 \mathrm{~h}$ ), or an inanimate referent as in ( $5 \mathrm{~g}, 5 \mathrm{l}$ ). Likewise, the

## 9 Adnominal possessive relations

reduction is independent of the possessum's properties. Both markers occur with possessa encoded by nouns as in ( $5 \mathrm{~b}, 5 \mathrm{e}, 5 \mathrm{f}, 5 \mathrm{l}$ ), by demonstratives as in ( $5 \mathrm{c}, 5 \mathrm{~d}$ ), or by noun phrases as in ( $5 \mathrm{a}, 5 \mathrm{~g}, 5 \mathrm{i}-5 \mathrm{k}$ ). With either marker, the possessum can express an inalienably possessed referent as in ( $5 \mathrm{a}, 5 \mathrm{~b}, 5 \mathrm{~h}, 5 \mathrm{k}$ ) or an alienably possessed referent as in (5c-5g, 5i, 5j, 5l).

Adnominal possessive constructions with the long possessive marker punya 'poss' and short pu 'poss'1


[^149]| i. PRO (HUM) pu NP (AL) | de pu sikat gigi deng odol <br> 3sG Poss toothbrush with toothpaste <br> 'her toothbrush and toothpaste' |
| :---: | :--- |
| j. NP (HUM) punya NP (AL)orang Isirawa punya, apa, cara kawing <br> person Isirawa poss what manner marry |  |
| k. NP (HUM) pu NP (INAL) $\quad$'the Isirawa's, what-is-it, way of marrying' <br> mama Klara pu ana prempuang <br> mother Klara POSs child woman |  |
| 'mother Klara's daughter' |  |

With respect to the possessive marking of personal pronouns, there are no prosodic restrictions on the use of the two possessive marker forms: either can occur with the long and the short pronoun forms, as illustrated in Table 9.2 and Table 9.3. ${ }^{3}$ (The pronoun ko ' 2 SG' does not have a short form.) (Pronouns are discussed in detail in Chapter 6.)

These examples show that the reduction of the disyllabic form punya 'poss' to monosyllabic pu 'poss' does not interact with the long versus reduced shape of the personal pronouns. These findings contrast with those of Donohue (2003) who found that the long pronoun forms may not co-occur with the reduced possessive marker pu 'poss' (for more details see Donohue 2003: 24-25).

Very occasionally, the reduced ligature takes on the form /pum/, /pun/, or /puy/ 'poss'. This variation is usually due to assimilation to the word-initial segment of the following possessum, as illustrated in Table 9.4. That is, speakers realize short pu 'poss' with a word-final nasal which receives its place features from the onset segment of the following prosodic word; when the following word has a vowel as onset, the nasal is typically realized as velar [ y$]$. (For more details on nasal place assimilation see §2.2.1.)

In a few cases, however, the reduced ligature takes on the form /pun/regardless of the form of the following segment, as illustrated in (6) to (8).
(6) ada sa/puy/dusung
exist 1sG poss garden
'(over there) is my garden' [081110-008-CvNP.0009]

[^150]Table 9.2: Possessive marking of personal pronouns ${ }^{a}$

| Possessive construction | Glosses | Free translation |
| :---: | :---: | :---: |
| Possessive marking with punya 'poss' Long personal pronoun form - punya 'poss' |  |  |
| saya punya sabit | 1sG poss sickle | 'my sickle' |
| ko punya barang | 2SG poss stuff | 'your belongings' |
| dia punya nama | 3SG poss name | 'his name' |
| kitorang punya kekurangang | 1pl poss shortcoming | 'our shortcomings' |
| kitong punya muka | 1pl poss face | 'our faces' |
| kita punya bapa | 1Pl poss father | 'our father' |
| kamu punya otak | 2pl poss brain | 'your brains' |
| dorang punya kampung | 3pl poss village | 'their village' |
| Short personal pronoun form - punya 'poss' |  |  |
| sa punya nokeng | 1SG POSs stringbag | 'my stringbag' |
| de punya swami | 3SG poss husband | 'her husband' |
| torang punya orang-tua | 1pl poss parent | 'our parents' |
| tong punya ipar | 1PL Poss sibling-in-law | 'our sister in-law' |
| ta punya kampung | 1pl poss village | 'our village' |
| kam punya nasip | 2pl poss destiny | 'your destiny' |
| dong punya ruma | 3pl poss house | 'their house' |
| Possessive marking with $p u$ 'poss' <br> Long personal pronoun form - pu 'poss' |  |  |
|  |  |  |
| saya pu hasil kebung | 1sG poss product garden | 'my garden products' |
| ko pu kampung | 2SG poss village | 'your village' |
| dia pu maytua | 3SG poss wife | 'his wife' |
| kitorang pu keadaang | 1PL poss condition | 'our condition' |
| kitong pu kawang | 1pl poss friend | 'our friend' |
| kita pu adat | 1pl poss customs | 'our customs' |
| kamu pu cara hidup | 2pl poss manner live | 'your ways of life' |

[^151]Table 9.3: Possessive marking of personal pronouns continued ${ }^{a}$

| Possessive construction | Glosses | Free translation |
| :--- | :--- | :--- |
| Short personal pronoun form - pu 'poss' |  |  |
| sa pu motor | 1sG poss motorbike | 'my motorbike' |
| de pu bahu | 3sG poss shoulder | 'her shoulder' |
| tong pu pakeang | 1pl poss clothing | 'our clothing' |
| ta pu orang-tua | 1pl poss parent | 'our parents' |
| kam pu sabung | 2PL poss soap | 'their soap' |
| dong pu jaring | 3pl poss net | 'their net' |

${ }^{a}$ Documentation: 080916-001-CvNP.0006, 080917-008-NP.0166, 080919-004-NP.0018, 080919-004-NP.0053, 080919-004-NP.0071, 080919-004-NP.0079, 080922-001a-CvPh.0834, 080922-002-Cv.0006, 080922-005CvEx.0004, 080922-010a-NF.0002, 080922-010a-NF.0288, 081006-022-CvEx.0043, 081006-022-CvEx.0047, 081006-029-CvEx.0015, 081011-011-Cv.0055, 081011-011-Cv.0057, 081015-005-NP.0011, 081015-005-NP.0023, 081110-001-Cv.0026, 081110-002-Cv.0015, 081110-002-Cv.0018, 081110-003-Cv.0023, 081110-008-CvHt.0058, 081110-008-CvHt.0101, 081115-001a-Cv.0275, 081115-001b-Cv.0026, 081115-001b-Cv.0026, 081115-001bCv. 0057 .

Table 9.4: Assimilation of short pu 'poss'

| Item | Orthogr. | Gloss |
| :---: | :---: | :---: |
| /d $\varepsilon$ pum bapa/ | de pu bapa | 'his/her father' |
| /d $\varepsilon$ pun teman $\sim$ temay/ | de pu temang temang | 'his/her friends' |
| /sa puy kaka/ | sa pu kaka | 'my older sibling' |
| /dom puy asrama/ | dong pu asrama | 'their dormitory' |

(7) dong /puy/ peserta juga macang tra ...

3pl poss participant also variety NEG
'their participants also, like (they) didn't ...' [081025-009a-Cv.0132]
(8) ... tong/puy/ cara makang babi juga

1pl poss manner eat pig also
'[our way of eating is just like the Toraja one,] our way of eating pigs also' [081014-017-CvPr.0053]

### 9.1.2 POSSR-NP = $\boldsymbol{p}$ POSSM-NP

The possessive marker can be reduced further to $=p$ 'poss', if the possessor noun phrase ends in a vowel, as in (9) to (11). In this case, the marker is cliticized to the possessor. In this type of reduced possessive construction, the possessor is almost always a singular personal pronoun, such as short first person sa '1sG', second person ko '2sG' in (9), or short third person de ' 3 sG ' as in (10). The possessor may, however, also be expressed by
a noun as in (11), although in the corpus this example is the only one attested. Again, the same construction is used for alienable and inalienable possession.
(9) sa bilang, i, sa=p kaka, de bilang $\boldsymbol{k} \boldsymbol{o}=\boldsymbol{p} \quad \boldsymbol{k} \boldsymbol{k} \boldsymbol{k} \boldsymbol{a}$ ? 1sG say ugh! 1sG=Poss oSb 3sG say $2 \mathrm{SG}=\mathrm{POSs}$ oSb
'I said, "ugh!, (that's) my older sister", she said, "your older sister?"'
[080919-006-CvNP.0026]
(10) de timbul de=p cucu tanya dia, tete knapa 3sG emerge 3sG=poss grandchild ask 3sG grandfather why
'(when) he (grandfather) emerged, his grandchild asked him, "grandfather, what happened?"' [081109-005-JR.0009]
(11) Fredi de pu ade=p motor ...

Fredi 3sG poss ySb=poss motorbike
'Fredi's younger brother's motorbike ...' [081002-001-CvNP.0058]

### 9.1.3 POSSR-NP Ø POSSM-NP

The possessive marker can also be elided, as illustrated in (12) to (16). The elision is limited, however, to certain semantic kinds of possession. Attested are inalienable possession of body parts, as in (12) and (13), and kinship relations, as in (14) and (15). Most commonly, the possessor is human as in (12) to (15), but it may also be animate nonhuman as in (16).
In possr-possm constructions, the possessor is usually encoded by a short personal pronoun form, as in (14) to (16). Much less often, the possessor is expressed with a lexical noun, such as bapa 'father' in (12). Also rather infrequently, the possessor is expressed by a noun phrase such as pace de 'the man' in (13), where adnominally used de '3sG' modifies pace 'man' (for details on the adnominal uses of the personal pronouns, see §6.2).
(12) adu, bapa Ø mulut jahat skali oh.no! father mouth be.bad very
'oh no!, father's language is very bad' (Lit. 'father's mouth') [080923-008-Cv.0019]
(13) pace de Ø tangang kluar ke samping
man 3sG hand go.out to side
[About an accident:] 'the man's arm stuck out sideways' [081108-001-JR.0003]
(14) de Ø mama ini ke atas

3sG see 3sG poss wife
'his mother here (went) up (there)' [080923-001-CvNP.0019]
(15) dia liat dia pu maytua ... ah, sa Ø maytua cantik

3sG see 3sG poss wife ah! 1sG wife be.beautiful
'he saw his wife ... "ah!, my wife is beautiful"' [080922-010a-CvNF.0020]
(16) langsung potong dia buang tali-prutnya de Ø tali-prut immediately cut 3sg throw(.away) intestines:3possr 3sG intestines
buang, tinggal isi saja
throw(.away) stay contents just
[About killing dogs:] 'cut him up at once (and) throw away the intestines, (after having) thrown away his intestines, just the meat remains'
[081106-001-CvPr.0005]
Contrary to the possessive constructions presented in §9.1.1 and §9.1.2, the data presented in (12) to (16) shows that Papuan Malay also has the option to signal inalienable possession by omitting the possessive marker.

This alienable versus inalienable distinction is also found in other Austronesian languages of the Papuan contact zone, whereas it is not found in Western Malayo-Polynesian languages. As in other Austronesian and Papuan languages of this contact zone (Klamer, Reesink \& van Staden 2008: 116), it is body parts and kinship terms that can be inalienably possessed. ${ }^{4}$

### 9.1.4 Grammaticalization of punya 'Poss'

In §9.1.1 to §9.1.3, the reduction of possessive marker punya 'poss' to its monosyllabic variants $p u$ or $=p$ 'pOSs' and its omission in POSSR-POSSM constructions was described.

One explanation for this reduction would be to consider it as the result of a grammaticalization process. As Bybee (2006: 719) observes, the phonetic reduction of highfrequency words "can lead to the establishment of a new construction with its own categories" and "the grammaticization of the new construction". One could argue that Bybee's (2006: 719) observation also applies to the high-frequency morpheme punya with its variable status between a full verb 'have', a clitic possessive marker, and a zero morpheme. That is, the variable status could be taken as an as-yet incomplete grammaticalization from the independent lexical item punya 'have' via the possessive marker punya 'poss' into a clitic $=p$ 'poss' or a new possessive construction without overt marker. ${ }^{5}$

In the corpus, reductions of the possessive marker to the clitic $=p$ 'poss' or a zero morpheme occur with about the same frequency. Typically, the two constructions occur when the possessor is expressed with a short singular personal pronoun. It remains to be seen whether and to what extent over time (1) one of the constructions is going to become dominant, and (2) one or both constructions are going to occur with possessors encoded by the plural personal pronouns or common nouns. Such developments could be taken as an indication of a grammaticalization process of the possessive marker.

[^152]
### 9.2 Realizations of POSSR-NP and POSSM-NP

This section discusses the different realizations of the possessor and possessum noun phrases in adnominal possessive constructions. The syntactic categories that can take the possessor or possessum slots, together with their semantic properties are discussed in §9.2.1. Elision of the possessum noun phrase is described in §9.2.2, followed by a brief discussion of recursive possessive constructions in §9.2.3.

### 9.2.1 Syntactic and semantic properties

In adnominal possessive constructions, the possessor and/or possessum can be expressed by lexical nouns as in (17) and (18), by demonstratives as in (19) and (20), or by noun phrases as in (21) to (26). Further, the possessor can be encoded by a personal pronoun as in (23) to (26). Semantically, the possessor and the possessum can be human as in (17), nonhuman animate as in (18), or inanimate as in (27), respectively.

In (17) and (18), the possessor and the possessum are expressed by lexical nouns.
Lexical nouns expressing the possessor / possessum
(17) sa masi ingat bapa pu muka 1sg still remember father poss front
'I still remember father's face' [080922-001a-CvPh.1307]
(18) ... pake setang punya kwasa use evil.spirit poss power
[About the power of evil spirits:] '[the sleeping person can't wake up because the sorcerers are] using the evil spirit's power' [081006-022-CvEx.0084]

In (19) the proximal demonstrative ini 'd.Prox' takes the possessor slot and in (20) distal itu 'd.DIST' takes the possessum slot.

Demonstratives expressing the possessor / possessum
(19) bapa masi kenal kaka Siduas pu, masi kenal ini pu muka
father still know oSb Siduas poss still know d.prox poss front
'do you ('father') still know Siduas', still know this (one)'s face?'
[080922-001a-CvPh.1123]
(20) ko ambil dulu ade pu itu

2sG fetch first ySb poss d.DIST
'you pick (it) up first, that (fish) of (your) younger sister' (Lit. 'younger sibling's that') [081006-019-Cv.0002]

In (21) to (26), noun phrases take the possessor or the possessum slot (the scope of the noun phrases is indicated with brackets). In (21) the possessor is encoded by a noun phrase with a verbal modifier plus an adnominal demonstrative, while in (22) the possessor is expressed by a coordinate noun phrase.

Noun phrases expressing the possessor
(21) sebut [[[orang mati] tu] pu [nama]] karna .. name person die D.DIST Poss name because
'(he has) to mention that dead person's name because ...' [080923-013-CvEx.0019]
(22) itu ko pu [[ko deng Mateus] pu [tugas]]
d.DIST 2sG poss 2sG with Mateus poss duty
'that is your, your and Mateus' duty' [081005-001-Cv.0035]
In (23), the possessum is encoded by a noun phrase with an adnominally used stative verb plus an adnominal demonstrative. In (24), a noun phrase with nominal modifier plus an adnominal demonstrative takes the possessum slot. In (25) the possessum is expressed by a coordinate noun phrase. In (8), repeated as (26), a noun phrase with a modifying non-finite clause takes the possessum slot. The examples in (23) to (26) also illustrate that a personal pronoun can take the possessor slot; personal pronouns do not take the possessum slot.

Noun phrases expressing the possessum
(23) [[de] pu [[cucu kecil] itu]] tiap haride menangistrus 3sG poss grandchild be.small D.DIST every day 3sG cry be.continuous
'that small grandchild of his, every day he/she cries continuously' [081011-009-Cv.0055]
(24) sa tida maw [[sa] punya [[sodara prempuang] itu]] mendrita 1sG NEG want 1sg poss sibling woman D.DIST suffer
'I don't want that sister of mine to suffer' [081006-024-CvEx.0108]
(25) nanti [[de] punya [bapa dengang mama]] langsung pergi... very.soon 3sG poss father with mother immediately go 'very soon her father and mother will go ...' [081110-005-CvPr.0079]
(26) $\ldots$ [[tong] pu [cara [makang babi $]$ ] juga

1PL poss manner eat pig also
'[our way of eating is just like the Toraja one,] our way of eating pigs also' [081014-017-CvPr.0053]

In (17) to (26) the possessor is always animate and/or human. It can, however, also be inanimate as shown in (27).

Inanimate possessor
(27) ... LNG pu terpol itu tinggal
liquefied.natural.gas poss container D.DIST stay
[About the need to buy gasoline:] '[those jerry cans] that LNG jerry can stays behind' (Lit. 'the LNG's container') [081110-002-Cv.0075]

### 9.2.2 Elision of the possessum noun phrase

It is also possible to omit the possessum when its identity was established earlier; this applies to inalienably as well as alienably possessed referents, as illustrated in (28) to (31). Such 'possessor punya' constructions are typically used in contexts where the possessor identity is under discussion.

In 'pOSSESSOR punya' constructions, speakers most commonly employ long punya 'poss', but as shown in (30) and (31), constructions with reduced pu 'poss' are also possible. ${ }^{6}$ Elision of the possessor is unattested. Instead speakers employ a demonstrative, as in (19), when the identity of the possessor has already been established.
(28) Nofi tu itu bukang bapa Lukas punya Ø mama Nofita punya Ø Nofi d.dist d.dist neg father Lukas poss mother Nofita poss
'Nofi here, that's not father Lukas' (son nor) mother Nofita's (son)'
[081006-024-CvEx.0011]
(29) itu de punya Ø
D.DIST 3sG poss
'those are his (banana plants)' [081110-008-CvNP.0121]
(30) sedangkang Pawlus ini itu jing pu $\varnothing$ whereas Pawlus D.prox d.dist genie poss
'whereas Pawlus here, that's the genie's (child)' [081025-006-Cv.0276]
(31) ko liat Luisa pu Øbagus, suda kembang banyak 2sG see Luisa poss be.good already flowering many
'you see Luisa's (flowers) are good, (they are) already flowering a lot' [081006-021-CvHt.0002]

### 9.2.3 Recursive adnominal possessive constructions

Adnominal possessive constructions can be stacked to form recursive possessive constructions, as illustrated in (32) to (34). Double possessive constructions, as in (32) and (33) are quite common, especially to express kinship and social relations, as in (32). Triple possessive constructions are also possible but extremely rare: the corpus contains only one such construction, which is presented in (34) in slightly modified form.

[^153](32) kalo memang ko punya maytua punya waktu pas di kapal... if indeed 2 sg poss wife poss time precisely at ship
'if indeed your wife's time (to give birth) is right then (when you're) on the ship ...' [080922-001a-CvPh.0010]
(33) ini kaka Natanael pu laki pu mobil
d.prox oSb Natanael poss husband poss car
'this is sister Natanael's husband's car' [081006-015-Cv.0001]
(34) $d e_{i}$ pu ana kawing de $\boldsymbol{p u}$ laki punya kaka prempuang

3sG poss child marry.inofficially 3sG poss husband poss oSb woman
pu ana
poss child
'her $r_{i}$ child (wants to) marry the son of her ${ }_{i}$ husband's older sister' [Elicited BR111020.026] ${ }^{7}$

As discussed in §9.1.1, the long ligature form punya 'poss' and short pu 'poss' are freely used in adnominal possessive constructions without any syntactic or semantic restrictions. This also applies to recursive possessive constructions, as illustrated in (32) to (34). In terms of the attested frequencies in such constructions, however, short $p u$ 'poss' is employed more often than long punya 'poss'.

### 9.3 Noncanonical adnominal possessive constructions

In addition to encoding adnominal possession, punya 'poss' (including its reduced forms) also serves other functions in possessive constructions, namely as (1) an emphatic marker that signals locational relations or association (§9.3.1), (2) a marker of beneficiary relations (§9.3.2), or (3) an attitudinal intensifier or stance (§9.3.3). And (4), the possessive ligature is also used in reflexive construction (§9.3.4).

Syntactically, not only nouns, personal pronouns, demonstratives, or noun phrases can take the possessor or possessum slots. In addition, these slots can be filled by verbs. Further, the possessum slot can be taken by mid-range quantifiers, temporal adverbs, or prepositional phrases. Finally, the possessum can be omitted.

### 9.3.1 Locational relations and association

Cross-linguistically, one noncanonical function of possessive constructions is to signal that the possessum is "perceived to be closely related" to the possessor (Dixon 2010: 278).

[^154]In Papuan Malay, this includes locational relations, both spatial and temporal, and relations that express an association, as illustrated in (35) to (41). With this function of punya 'poss', the possessive construction receives an emphatic reading; in the following examples the English translation attempts to convey this emphatic reading with the additional italicized information.

The possessive marker can signal locational relations, or, employing Dixon's (2010: 263) terminology, relations of "orientation or location". The locational relations can be spatial, as in (35) and (36), or temporal, as in (37) to (39). ${ }^{8}$

In (35) and (36), pu 'poss' marks spatial relations between the possessor and the possessum, with the possessive construction receiving an emphatic reading. In (36), a spatial referent, encoded with the proper noun fayapura, takes the possessor slot. It denotes the location or source for the referent expressed by the possessum, dua blas orang 'twelve people'. In (35), the spatial referent, encoded in the prepositional phrase di dalam itu 'in that inside', takes the possessum slot. ${ }^{9}$ It designates the location for the referent expressed by the pronominal possessor de ' 3 sG '.

Spatial locational relations
(35) Jayapura pu dua blas orang yang lulus ka?

Jayapura poss two teens person Rel pass(.a.test) or
'aren't there twelve people from Jayapura who graduated (as opposed to other cities with fewer graduates)?' (Lit. 'Jayapura's twelve people')
[081025-003-Cv.0311]
(36) baru ambil bayi tu, bayi yang de pu didalam itu and.then fetch palm.stem D.DIST palm.stem reL 3sG poss at inside D.DIST kang kaya kapas to? you.know like cotton right?
'and then (he) took that palm stem, that inside (part) of it (as opposed to other parts), you know, is like cotton, right?' [080922-010a-CvNF.0073]

In the elicited examples in (37) to (39), the possessive marker signals temporal locational relations. In these examples, the third person singular pronoun $d e$ ' 3 sG ' takes the possessor slot. It designates the temporal reference point for the event under discussion. The possessum slot is taken by a temporal expression such as besok 'tomorrow' in (37), pagi 'morning' in (38), and malam 'night' in (39). This temporal expression denotes a specific point in time relative to the temporal reference point expressed by the possessor.

[^155]Temporal locational relations
(37) ... trus sa tinggal di sana, trus de pu besok baru sa kembali... next 1sg stay at L.DIST next 3sG poss tomorrow and.then 1sg return
'[two days ago I went to Abepura,] and then I stayed there, and then the (very) next day only then did I return ...' (Lit. 'its tomorrow') [Elicited BR111020.008]
(38) dong kerja ruma dari pagi sampe malam de pu pagi, baru dong 3pl work house from morning until night 3sG poss morning and.then 3pl
kasi selesay smua
give finish all
'they worked on the house from morning until evening, the (very) next morning only then did they finish everything' (Lit. 'its morning') [Elicited BR111020.009]
(39) Petrus deng Tinus dong pi mandi di pante tadi pagi, de pu malam Petrus with Tinus 3pl go bathe at coast earlier morning 3sG poss night dong pi ke fayapura
3pl go to Jayapura
'Petrus and Tinus went bathing at the beach this morning (and) this (very) evening they went to Jayapura' (Lit. 'its night') [Elicited BR111020.009]

Another cross-linguistically rather common function of the possessive marker it to indicate an "association" between the possessum and the possessor (Dixon 2010: 285). This also applies to Papuan Malay, as shown in (40) and (41). In (40), punya 'poss' signals that the possessum $t u$ 'D.DIst' is associated with the possessor lima juta 'five million', giving the emphatic reading "a minimum of five-million (as opposed to lower prices)". ${ }^{10}$ Along similar lines, in (41), the ligature indicates an association between the possessum $t u$ 'D.DIst' and the possessor tingkat propinsi 'provincial level', resulting in the emphatic reading "(a meeting at) the provincial level (and not at the regency level)".

## Association

(40) yang mahal yang di atas satu jut lima juta punya tu
rel be.expensive rel at top one TRU-million five million poss D.DIST
'(traditional cloths from Sorong) which are expensive, which (cost) more than one million[TRU], a minimum of five million (as opposed to lower prices)' (Lit. 'that (price) of five million') [081006-029-CvEx.0009]
(41) kitong ikut ini tingkat propinsi punya tu

1pl follow d.prox floor province poss D.DIST
'we attended (a meeting at), what's-its-name, the provincial level (and not at the regency level)' (Lit. 'that (meeting) of the provincial level') [081010-001-Cv.0043]

[^156]
### 9.3.2 Beneficiary relations

The possessive marker punya 'poss' is also used to signal beneficiary relations. Speakers employ this construction when they want to signal that the recipient is the beneficiary of a definite theme, as discussed in §11.1.3.3. This is illustrated in (42) and (43). In the respective examples, the possessors mama 'mother' and de ' 3 sG ' express the recipients/beneficiaries of the events expressed by the verbs simpang 'store' and bli 'buy', while the possessa makang 'food' and alat~alat 'utensils' denote the anticipated objects of possession or themes.
(42) mama, kitong suda simpang mama punya makang mother 1pl already store mother poss food 'mother, we already put food for you aside' (Lit. 'mama's food') [080924-002-Pr.0005]
(43) dong su bli de punya alat~alat ini

3PL already buy 3sG poss RDP~equipment D.PROX
'they already bought these utensils for him' (Lit. 'his utensils')
[080922-001a-CvPh.0558]

### 9.3.3 Intensifying function of punya 'Poss'

Another noncanonical function of possessive punya 'poss' is that of an intensifier or stance that signals speaker attitudes or evaluations. The attested data suggests three different constructions in which Papuan Malay speakers use punya 'poss' in such a way: constructions with (1) a nominal possessor and a quantifier possessum (§9.3.3.1), (2) a nominal possessor and a verbal possessum (§9.3.3.2), and (3) a verbal possessor and a verbal possessum (§9.3.3.3).

### 9.3.3.1 N -POSSR - punya - QT-POSSM constructions

In the possessive constructions in (44) to (47), a nominal constituent takes the possessor slot while a quantifier takes the possessum slot.
Attested in the corpus is only the one example in (44) in which the mid-range quantifier banyak 'many' takes the possessum slot. A second, elicited example is presented in (45). Possessive constructions with the mid-range quantifier sedikit 'few' are also possible, as illustrated with the elicited examples in (46) and (47). In these examples punya 'poss' functions as an attitudinal intensifier, expressing speaker evaluations, such as feelings of annoyance in (44), of surprise in (45) and (46), or of alarm in (47).
(44) baru, mama, setang pu banyak disitu
and.then mother evil.spirit poss many at L.MED
'and then, mother, (there) are really many evil spirits over there' (Lit. 'many of')
[081025-006-Cv.0062]
(45) natal tu ana~ana dong maing kembang-api pu banyak

Christmas D.DIST RDP $\sim$ child 3pl play fire-cracker poss many
'(during) Christmas (time) the children play with really many fire-crackers' (Lit. 'many of') [Elicited BR111020.005]
(46) digunung itu pohong pu sedikit at mountain d.dist tree poss few 'on that mountain, there are very few trees' (Lit. 'few of') [Elicited BR111020.006]
(47) tete de minum air pu sedikit grandfather 3sG drink water poss few 'grandfather drinks very little water' (Lit. 'few of') [Elicited BR111020.007]

Possessive constructions with other quantifiers or with numerals taking the possessum slot are ungrammatical.

### 9.3.3.2 N-POSSR - punya - v-POSSM constructions

In the possessive constructions in (48) to (52), a nominal constituent takes the possessor slot while a mono- or bivalent verb takes the possessum slot. In these constructions, speakers typically use short pu 'poss' rather than long punya 'poss'; more investigation is needed however, to further explore these speaker preferences.

In the examples in (48) to (52), a monovalent verb takes the possessum slot. Again, the ligature functions as an attitudinal intensifier. In (48) pu 'poss' adds emphasis to stative malas 'be listless'. In (49), pu 'poss' precedes stative brat 'be heavy', and thereby signals feelings of annoyance. Finally, in (50), the possessive marker precedes dynamic mendrita 'suffer', thereby indicating negative feelings of disbelief.

Intensifying function of punya 'poss': Preceding monovalent verbs
(48) dong tida taw umpang, smua tra taw toser, adu, sa pu malas 3PL NEG know pass.ball all NEG know pass.ball oh.no! 1sG poss be.listless [About playing volleyball:] 'none of them knows (how) to pass a ball, none of them knows (how) to pass a ball, oh no!, I'm so very listless (to play with them)' (Lit. 'the being listless of') [081109-001-Cv.0127]
(49) damay, de pu brat
peace 3sG poss be.heavy
'my goodness!, he was so heavy' (Lit. 'the being heavy of') [081025-009b-Cv.0041]
(50) adu, dong dua $\boldsymbol{p u}$ mendrita
oh.no! 3pl two poss suffer
'oh no!, the two of them were suffering so much' (Lit. 'the suffering of') [081025-006-Cv.0059]

In (51) to (52), the possessum slot is taken by a bivalent verb. Again, the possessive marker has intensifying, asserting and/or evaluative function.

Intensifying function of punya 'poss': Preceding bivalent verbs
(51) ka Sarles juga de pu maing pisow
oSb Sarles also 3sg poss play knife
'older brother Sarles also, he has a fast and smart way of playing' (Lit. 'the knife playing of') [081023-001-Cv.0009]
(52) baru nanti tong pu lawang deng siapa
and.then very.soon 1PL poss oppose with who
'and then later who will be our opponent?' (Lit. 'the opposing of')
[081109-001-Cv.0136]

### 9.3.3.3 v-POSSR - punya - v-POSSM constructions

In noncanonical possessive constructions, both the possessor and the possessum slot can be taken by verbs, as illustrated in (53) to (56). More specifically, a dynamic verb takes the possessor slot, while a stative verb takes the possessum slot. The only example attested in the corpus is (53), while the examples in (54) to (56) are elicited.

With its intensifying function, punya 'poss' signals an emphatic reading of both the verbal possessor and the verbal possessum, as illustrated in (53): mandi punya 'really bathing' and punya jaw 'very far away (of)'.
(53) dong mandi di kali Biri, mm-mm, mandi punya jaw itu

3pl bathe at river Biri mhm bathe poss be.far D.DIST
[About a run-away boy:] 'they were bathing in the Biri river, mhm, (they were) really bathing very far away' (Lit. 'the being far away of the bathing')
[081025-008-Cv.0032-0033]
(54) de kerja punya cepat

3sG work poss be.fast
'he really worked very fast' (Lit. 'the being fast of the working') [Elicited BR111020.022]
(55) mama de masak punya enak
mother 3sG cook poss be.pleasant
'mother really cooks very tastily' (Lit. 'the being tasty of the cooking') [Elicited BR111020.023]
(56) Marice deng Matius dong dua bicara punya kras

Marice with Matius 3pl two speak poss be.harsh
'the two of them Marice and Matius really spoke very loudly (with each other)'
(Lit. 'the being loud of the speaking') [Elicited BR111020.024]

### 9.3.4 punya 'POss' in reflexive expressions

The possessive marker punya 'poss' is also used to create reflexive expressions. Generally speaking, reflexives designate constructions "where subject and object refer to the same entity, explicitly [...] or implicitly" (Asher 1994: 5164). Typically, explicit reflexive expressions are formed with a reflexive pronoun "which refers to the same person or thing as the subject of the verb" (Asher 1994: 5165). As Papuan Malay does not have reflexive pronouns, an alternative strategy is used. Reflexive relations are expressed with an adnominal possessive construction where a personal pronoun in the possessor slot and the reflexive noun diri 'self' in the possessum slot express the reflexive relationship between both, as illustrated with sa pu diri 'myself' in (57) and kita punya diri 'ourselves' in (58).
(57) bukang sa rasa bahwa sa ini sa banggakang sa pu diritapi itu NEG 1sG feel that 1sg d.Prox 1sg praise 1sG poss self but d.DIST
yang terjadi
REL happen
'it's not that I feel that I (EMPH), (that) I praise myself, but that's what happened' (Lit. 'the self of me') [081110-008-CvNP.0152]
(58) kita rencana, manusia yang mengatur kita punya diri

1pl plan human.being rel arrange 1pl poss self
'we make plans, (it's us) human beings who manage our own lives' (Lit. 'the self of us') [080918-001-CvNP.0032]

### 9.4 Summary and discussion

In Papuan Malay, adnominal possessive constructions consist of two noun phrases linked with the possessive marker punya 'poss', such that "possessor punya possessum". In addition to signaling adnominal possessive relations between two noun phrases, punya 'poss' has a number of derived, noncanonical functions, namely as (1) an emphatic marker of locational relations or relations of association, (2) a marker of beneficiary relations, (3) an attitudinal intensifier or stance, and (4) a ligature in reflexive constructions.

Such noncanonical functions of the possessive ligature have also been noted in other eastern Malay varieties. Examples are its functions as a marker of beneficiary relations in Ambon Malay (van Minde 1997: 164), as a marker of locational or temporal relations in Ternate Malay (Litamahuputty 1994: 52-53, 96-97), and as an attitudinal intensifier in Manado Malay (Stoel 2005: 45).

Two explanations have been suggested for the extended uses of the possessive marker in Malay speech varieties.

One is to propose a substratum influence of Chinese languages. Some of the noncanonical functions of the possessive marker have long been noted for Bazaar Malay and have been linked to the substratum influence of Chinese speech varieties, namely the function of punya 'poss' to link a locative or temporal modifier or a modifying adjective in the
possessor slot preceding the ligature with its head in the possessum slot (See Shellabear 1904: 6-7; Winstedt 1913: 115; 1938: 41; Lim 1988; Bao 2009). Yap (2007: 1, 8ff) argues that under the influence of southern Chinese speech varieties, the colloquial Malay possessive marker developed into an "attitudinal intensifier" or "stance" that transforms statements into evaluative "assertions that are often laced with strong feelings, including feelings of awe, [...] or feelings of incredulity or even annoyance". For the different synchronic functions of (em)punya in classical and colloquial Malay, Yap, Matthews \& Horie (2004: 159) propose the following development or grammaticalization path: "lexical verb > genitive > pronominal > stance development".

A second explanation proposes a grammaticalization process of the possessive marker without any substratum influence from Chinese varieties. Gil (1999: 2) argues that the influence of Chinese languages does not "account for the presence of the punya construction" in Malay varieties which have "little obvious contact with Chinese languages", such as Riau Indonesian or Papuan Malay; neither does this influence "account for the choice of the specific marker punya". Instead, Gil submits that the interpretation of the punya construction underwent a semantic change from predicative possessive to adnominal possessive to noncanonical possessive, such that: "thing associated with X's having" > "thing associated with X" > "property associated with X" (1999: 6, 8).

Possessive constructions with punya 'poss' have a number of different realizations. The possessive marker can be represented with unreduced punya, reduced $p u$, clitic $=p$, or a zero morpheme. There are no syntactic or semantic restrictions on the uses of the long and reduced possessive marker forms. By contrast, omission of punya only occurs when the possessive construction expresses inalienable possession of body parts or kinship relations. The possessor and the possessum can be expressed with different kinds of syntactic constituents, such as lexical nouns, noun phrases, or demonstratives. In addition, personal pronouns can also express the possessor. In noncanonical possessive constructions, verbs can also take the possessor and/or possessum slots. Further, mid-range quantifiers, temporal adverbs, and prepositional phrases can take the possessum slot. In canonical possessive constructions, the possessum can also be omitted. Semantically, the possessor and the possessum can denote human, nonhuman animate, or inanimate referents.

## 10 Prepositions and the prepositional phrase

This chapter describes prepositional phrases in Papuan Malay, that is, constructions which consist of a preposition followed by a noun phrase, such that "PREP NP".

Papuan Malay employs eleven prepositions that can be grouped semantically into (1) prepositions encoding location in space and time, (2) prepositions encoding accompaniment/instruments, goals, and benefaction, and (3) prepositions encoding comparisons. The defining characteristics of prepositions are discussed in §5.11.

Prepositional phrases have the following defining characteristics:

1. All prepositional phrases function as peripheral adjuncts; as such they do not have a grammatically restricted position within the clause but can be moved to different positions.
2. Most prepositional phrases also function as nonverbal predicates and/or oblique arguments (see $\S 12.4$ and $\S 11.1 .3 .2$, respectively).

Some prepositional phrases also function as modifiers within noun phrases (§8.2.7)
3. Prepositional phrases that function as nonverbal predicates can be modified by aspectual adverbs (§5.4.1), while such modification is unattested for prepositional phrases having other functions.

In the following, Papuan Malay prepositional phrases are discussed according to the semantics of their prepositional head: location in space and time in §10.1, accompaniment/instruments, goals, and benefaction in $\S 10.2$, and comparisons in $\S 10.3$. The main points of this chapter are summarized in §10.4.

### 10.1 Prepositions encoding location in space and time

Papuan Malay employs four prepositions that express location in space and time: locative di 'at, in' designates static location (§10.1.1), allative $k e$ 'to' denotes direction toward a location (§10.1.2), elative dari 'from' expresses direction away from or out of a location (§10.1.3), and lative sampe 'until' designates direction up to a nonspatial temporal location (§10.1.4).

### 10.1.1 di 'at, in'

Prepositional phrases introduced with locative $d i$ ' at, in' indicate static location in spatial and nonspatial figurative terms. Most often the preposition denotes location 'at' or 'in' a referent; depending on its context, though, it is also translatable as 'on'.

Very commonly, di 'at, in' introduces a peripheral location as in di kampung 'in the village' in (1), or di dia 'at hers' in (2). When following placement verbs such as taru 'put' in (3), di 'at, in' introduces oblique locative arguments that indicate the location of the referent, as in di sini 'here'. Frequently, di 'at, in' also introduces nonverbal predicates, as in (4) (see §12.4). Only rarely, di 'at, in' introduces locations encoded by adnominal prepositional phrases, as in pasar di bawa tu 'the market down there' in (5). The examples in (1) to (5) also show that $d i$ 'at, in' introduces animate and inanimate, as well as nominal and pronominal referents. ${ }^{1}$
(1) waktu saya dengang bapa tinggal di kampung saya kerja sperti time 1sG with father stay at village 1sG work similar.to laki~laki RDP~husband
'when I and (my) husband ('father') were living in the village, I worked like a man' [081014-007-CvEx.0048]
(2) jadi saya besar di Ida dengang de punya laki tu ... besar di dia so 1sG be.big at Ida with 3sg poss husband d.DIST be.big at 3sG 'so I grew up with Ida and that husband of hers ..., (I) grew up at hers' [080927-007-CvNP.0017/0019]
(3) skarang kamu kasi terpol~terpol, taru di sini
now 2Pl give rDP~jerry.can put at l.PRox
'now you give (me) the jerry cans, put (them) here' [081110-002-Cv.0065]
(4) sa di IPS satu

1sG at social.sciences one
[About course tracks in high school:] ' $\mathrm{I}(\mathrm{am})$ in Social Sciences I'
[081023-004-Cv.0020]
(5) pasar di bawa tu raaame
market at bottom D.DIST be.bustling
'the market down there is very bustling' [081109-005-JR.0008]

### 10.1.2 ke 'to'

Prepositional phrases introduced with allative $k e$ 'to' denote direction toward a referent. Following motion verbs such as lari 'run' in (6) or datang 'come' in (7), $k e$ 'to' introduces

[^157]oblique locative arguments which indicate the goal of the motion, as in ke pante 'to the beach' or ke kitong 'to us', respectively. Allative ke 'to' also very often introduces nonverbal predicates as in (8). The three examples also show that $k e$ 'to' introduces animate and inanimate, as well as nominal and pronominal referents. ${ }^{2}$
(6) dong lari ke pante

3pl run to coast
'they ran to the beach' [081115-001a-Cv.0008]
(7) ... dia punya aroa datang ke kitong kasi tanda

3sg poss departed.spirit come to 1pl give sign
'[so when there is another person (who) dies in a different village,] (then)
his/her departed spirit comes to us (and) gives (us) a sign' [081014-014-NP.0048]
(8) sa ke ruma-sakit

1sG to hospital
'I (went) to the hospital' [081015-005-NP.0047]

### 10.1.3 dari 'from'

Prepositional phrases introduced with elative dari 'from' designate direction away from or out of a source location; depending on its context, though, dari also translates with 'of'. Most commonly, the source location is spatial. In addition, dari 'from' expresses nonspatial figurative sources, temporal starting points, and the notions of superiority and dissimilarity in comparison constructions.
Elative dari 'from' forms peripheral adjuncts, as in dari blakang 'from the back' in (9). When following motion verbs such as kluar 'go out', it expresses the source of the motion in an oblique argument, as in (10). Besides, elative dari 'from' expresses spatial source locations in nonverbal predicates, as in (11). Much less often, dari 'from' introduces sources encoded by adnominal prepositional phrases, as in (12).

Introducing spatial source locations
(9) de tutup itu spit itu dari blakang...

3SG close D.DIST speedboat D.DIST from backside
'(this wave,) it totally covered, what's-its-name, that speedboat from the back
[to the front]' [080923-015-CvEx.0021]
(10) ... sa harus kluar dari kam pu kluarga

1sG have.to go.out from 2pl poss family
'[I hadn't thought that] I would have to depart from your family'
[080919-006-CvNP.0012]

[^158](11) tong smua dari kampung

1pl all from village
'we all are from the village' [081010-001-Cv.0084]
(12) satu kali ini de pu bapa pu temang dari skola, one time d.prox 3sg poss father poss friend from school
STT dorang pergi ...
theological.seminary 3pL go
'this one time her father's friends from school, theological seminary, they went ...' [081006-023-CvEx.0062]

The source location indicated with dari 'from' can also be nonspatial figurative as in the prepositional predicate clauses dari uang 'up to the money' in (13), or dari ko 'up to you' in (14).

Introducing nonspatial figurative source locations
(13) yo, tong mo biking cepat, smua itu dari uang
yes 1pl want make be.fast all D.DIST from money
'yes, we want to do (it) quickly, all that (is) up to the money' (Lit. 'from money') [080927-006-CvNP.0034]
(14) pinda ke IPA itu dari ko saja
move to natural.sciences D.DIST from 2sG just
'switching (from Social Sciences) to Natural Sciences, that (is) up to you alone'
(Lit. 'from you') [081023-004-Cv.0023]
The examples in (9) to (14) also illustrate that dari 'from' introduces animate and inanimate, as well as nominal and pronominal referents. ${ }^{3}$

Derived from its spatial semantics, dari 'from' also very commonly introduces nonspatial temporal source locations, which are always encoded by peripheral adjuncts. The temporal starting point can be encoded by a noun that indicates time as in dari pagi 'from the morning' in (15), or by a temporal adverb as in dari dulu 'from the past' in (16).

Introducing temporal starting points
(15) tra bole tutup pintu, dari pagi buka pintu sampe malam

NEG permitted close door from morning open door until night
'you shouldn't close the door, (you should keep it) open from morning until night' [081110-008-CvNP.0108]
(16) jadi itu suda kebiasaang dari dulu
so D.DIST already habit from first
'so that (tradition) has already become a custom from the past'
[081014-007-CvEx.0063]

[^159]Finally, elative dari 'from' is also used in comparative constructions marking degree or identity. In such constructions, dari 'from' functions as the mark of comparison which introduces the standard. In (17), for instance, dari 'from' serves as the mark in a comparative construction marking degree, namely superiority, while in (18) it serves as the mark in a comparative construction marking identity, namely dissimilarity (for details on comparative constructions, see $\S 11.5)$.

Introducing standards of comparison
(17) ... dia lebi besar dari smua ana~ana ...

3sG more be.big from all RDP~child
'[in that class] he's bigger than all the kids [in it]' [081109-003-JR.0001] ${ }^{4}$
(18) sifat ini laing dari ko
nature D.PRox be.different from 2sG
'this disposition is different from you' [081110-008-CvNP.0089]

### 10.1.4 sampe 'until'

The preposition sampe 'until' introduces nonspatial temporal endpoints which are always encoded by peripheral adjuncts. Given these semantics, sampe 'until' typically introduces nouns that indicate time, as in sampe sore 'until the afternoon' in (19); that is, animate or pronominal referents of sampe 'until' are unattested.

Introducing time-denoting nouns
(19) saya tidor sampe sore

1sG sleep until afternoon
'I slept until the afternoon' [081015-005-NP.0033]
Typically, peripheral prepositional phrases can be moved to other positions within the clause with no change in meaning. This does not, however, apply to the example in (19). When the prepositional phrase is moved to the front it denotes the temporal starting rather than the temporal endpoint of tidor 'sleep', as in (20). Hence, the meaning changes to 'come afternoon' (literally 'reaches the afternoon'). One initial explanation for this change in meaning is that the utterance in (20) expresses a sequence of two events, namely the sampe 'reaching' of the afternoon and subsequently the tidor 'sleeping'. In that case, sampe sore does not express the prepositional phrase 'until afternoon' but the verbal clause 'reached the afternoon' or 'come afternoon'. This explanation, however, requires further investigation.

[^160]Clause-initial position
(20) sampe sore saya tidor
reach afternoon 1sG sleep
'come afternoon I slept' (Lit. 'reach the afternoon') [Elicited BR120817.008]
Temporal sampe 'until' also introduces temporal adverbs that denote a temporal endpoint as in sampe skarang 'until now' in (21). Overall, however, these constructions are very rare in the corpus.

Introducing temporal adverbs
(21) ... tapi sampe skarang blum brangkat but until now not.yet leave
'... but until now (the team) hasn't yet left' [081023-002-Cv.0001]
The preposition sampe 'until' has trial word class membership. Besides introducing prepositional phrases, sampe is also used as the bivalent verb 'reach', or as an anterioritymarking conjunction that introduces temporal clauses (see §14.2.3.3 for its uses as a conjunction; see also §5.14).

### 10.1.5 Elision of prepositions encoding location

Two of the prepositions of location may be omitted if the semantic relationship between the complement and the predicate can be deduced from the context. The prepositions are locative di 'at, in', as illustrated with the contrastive examples in (22) and (23), and allative $k e$ 'to', as shown in (24) and (25).

When locative $d i$ 'at, in' introduces a spatial location and combines with a position verb such as tidor 'sleep', as in (22) and (23), the preposition can be elided. Both the preceding verb and the complement of di 'at, in' are already deictic and therefore allow the elision of $d i$ 'at, in': the position verb tidor 'sleep' implies the notion of static location, while the complement sana 'over there' signals the position of the location.

Prepositional phrases with elided locative $d i$ 'at, in'
(22) ko punya mama ada tidor di sana 2sg poss mother exist sleep at L.DIST 'your mother is sleeping over there' [081006-025-CvEx.0007]
(23) a, omong kosong, ko masuk tidor Ø sana suda ah! way.of.talking be.empty 2sG enter sleep L.DIST already 'ah, nonsense, you just go inside (and) sleep over there' [081023-001-Cv.0057]

Along similar lines allative $k e$ 'to' can be omitted, when the preposition introduces a location and combines with a motion verb that also expresses direction such as masuk
'enter' in (24) and (25). Again, both the verb and the complement of $k e$ 'to' are deictic, thereby allowing the elision of $k e$ 'to': the verb masuk 'enter' implies the notion of motion and direction, while the complement hutang 'forest' denotes the location toward which the motion is directed.

Prepositional phrases with elided allative $k e$ 'to'
(24) smua masarakat masuk ke hutang
all community enter to forest
'the entire community went into the forest' [081029-005-Cv.0012]
(25) smua masuk Ø hutang
all enter forest
'all went (into) the forest' [081029-005-Cv.0111]
The elision typically affects prepositional phrases with common nouns denoting locations as in (25), or locatives as in (23). In addition, the elision can also affect prepositional phrases with location nouns as in (26) and (27): in (26) the omitted preposition is locative $d i$ 'at, in', whereas in (27) it is allative $k e$ 'to'.

Prepositional phrases with elided preposition and location noun complement
(26) baru kitong taru $\varnothing$ depang to?
and.then 1pl put front right?
'and then we put (the cake down) (in) front, right?' [081011-005-Cv.0031]
(27) itu yang sa bilang, kalo dong pinda Ø sebla bole
D.DIST REL 1SG say if 3PL move side may
'that's why I said, "if they move (to) the (other) side (that's) alright"' [081011-001-Cv.0144]

Elision of di 'at, in' and $k e$ 'to' is not possible, though, in nonverbal prepositional predicate clauses as this would create nominal clauses with unacceptable semantics. This is illustrated with elided $d i$ 'at, in' in (28), which is based on the example in (4), and with elided $k e$ 'to' in (29), which is based on the example in (8).

Nonverbal prepositional predicate clauses with elided locative $d i$ 'at, in' and allative ke 'to'

```
* sa Ø IPS satu
```

1sG social.sciences one
[About course tracks in high school:] ('I (am) Social Sciences I') [based on 081023-004-Cv.0020]

* sa Ø ruma-sakit
1sG hospital
('I (am) the hospital') [based on 081015-005-NP.0047]

Elision of elative dari 'from' and temporal sampe 'until' is also not possible, as illustrated in (30) and (31). In the example in (30), which is based on (10), elative dari 'from' is omitted, resulting in an ungrammatical utterance. In the example in (31), which is based on (19), temporal sampe 'until' is elided. The result is a change in meaning of the entire utterance: 'I slept (the entire) afternoon'.

Prepositional phrases with elided elative dari 'from' and temporal sampe 'until'
(30) * ... sa harus kluar Ø kam pu kluarga

1sG have.to go.out 2PL POSs family
('[I hadn't thought that] I would have to depart your family') [Elicited BR120817.009]
(31) saya tidor Ø sore

1sG sleep afternoon
'I slept (the entire) afternoon' [Elicited BR120817.010]

### 10.2 Prepositions encoding accompaniment/instruments, goals, and benefaction

Papuan Malay employs four prepositions encoding accompaniment/instruments, goals, and benefaction: comitative dengang 'with’ (§10.2.1), goal-oriented sama 'to' (§10.2.2), benefactive untuk 'for' (§10.2.3), and buat 'for' (§10.2.4).

### 10.2.1 dengang 'with'

Prepositional phrases introduced with comitative dengang 'with', with its short form deng, typically express accompaniment with animate or inanimate associates. Also very often, dengang 'with' introduces instruments. In addition, dengang 'with' introduces objects of mental verbs and the notion of identity in comparison constructions.

The associates introduced with dengang 'with' are most commonly animate human as in deng mama-tua 'with aunt' in (32), deng de pu temang $\sim$ temang 'with his friends' in (33), or in deng kamu 'with you' in (34). These examples also show that the complements of dengang 'with' can be nouns or personal pronouns. Besides animate associates, dengang 'with' also introduces inanimate associates, as in deng motor 'with (his) motorbike' in (35), or in deng itu 'with those (spices)' in (36). The associates introduced with dengang 'with' are either encoded in peripheral adjuncts as in (32), or (34) to (36), or in nonverbal predicates as in (33). The example in (33) also illustrates that prepositional phrases functioning as nonverbal predicates can be modified by adverbs, such as prospective masi 'still'; such modification is unattested for prepositional phrases having other functions.
10.2 Prepositions encoding accompaniment/instruments, goals, and benefaction

Introducing associates
(32) sebentar Hurki datang ko pulang deng mama-tua in.a.moment Hurki come 2sG go.home with aunt
'in a moment (when) Hurki comes, you'll go home with me ('aunt')' [081011-006-Cv.0003]
(33) Roni masi deng de pu temang~temang

Roni still with 3sG poss RDP~friend
'Roni is still with his friends' [081006-031-Cv.0011]
(34) slama sa tinggal deng kamu sa kerja as.long.as 1sG stay with 2PL 1sG work 'as long as I stayed with you I worked' [080919-006-CvNP.0014]
(35) de jatu deng motor

3sg fall with motorbike
'he fell with (his) motorbike' [081006-020-Cv.0008]
(36) itu nanti kitong tumbuk baru masak deng itu
D.DIST very.soon 1pL pound and.then cook with D.DIST
'later we'll pound those (spices and) and then cook with them' [081010-001-Cv.0196]

Instruments introduced with comitative dengang 'with' are expressed in peripheral adjuncts as in deng pisow 'with a knife' in (37).

Introducing instruments
(37) bapa de pukul sa deng pisow
father 3sg hit 1sg with knife
'(my) husband stabbed me with a knife' [081011-023-Cv.0167]
In addition, comitative dengang 'with' introduces oblique arguments for mental verbs such as mara 'feel angry (about)' in (38), takut 'feel afraid (of)' in (39), or perlu 'need' in (40). ${ }^{5}$

Introducing objects of mental verbs
(38) kalo saya mara dengang orang begitu sa takut
if 1sG feel.angry(.about) with person like.that 1sG feel.afraid(.of)
'if I was angry with someone like that I'd feel afraid' [081110-008-CvNP.0067]

[^161](39) adu, kang dong terlalu takut dengang setang oh.no! you.know 3pl too feel.afraid(.of) with evil.spirit
'oh no!, you know, they feel too afraid of evil spirits' [081025-006-Cv.0198]
(40) mama-ade sa perlu deng mama-ade
aunt 1sG need with aunt
'aunt, I need you ('aunt')' (Lit. 'need with aunt') [081014-004-Cv.0004]
Comitative dengang 'with' is also used in comparative constructions. As the mark of comparison, dengang 'with' introduces the standard of comparison in identity-marking constructions. In (41), for example, dengang 'with’ serves as the mark in a similarity construction, while in (42) it is the mark in a dissimilarity construction (for more details on comparative constructions, see $\S 11.5$ ).

Introducing standards of comparison
(41) de sombong sama deng ko

3sg be.arrogant same with 2sG
'she'll be as arrogant as you (are)' [081006-005-Cv.0002]
(42) orang Papua beda dengang orang Indonesia
person Papua be.different with person Indonesia
'Papuans are different from Indonesians' [081029-002-Cv.0009]
The preposition dengang 'with' has dual word class membership; it is also used as an addition-marking conjunction (§14.2.1.1; see also §5.14).

### 10.2.2 sama 'to'

The goal preposition sama 'to' is rather general in its meaning. Typically, it translates with 'to' but depending on its context it also translates with 'of, from, with'. The complement always denotes an animate referent which can be encoded in a noun or in a personal pronoun.

As the exchange in (43) shows, sama 'to' usually introduces oblique goal or recipient arguments of transfer verbs, such as bawa 'bring' in (43a) or kasi 'give' in (43b).

Introducing goals or recipients
a. Speaker-1: ko bawa ke sana ko bawa sama ade 2SG take to L.DIST 2SG take to ySb
Speaker-1: 'bring (the ball) over there, bring (it) to (your) younger cousin'
b. Speaker-2: e, kasi bola sama ade hey! give ball to ySb
Speaker-2: 'hey, give the ball to (your) younger cousin' [081011-009-Cv.0015-0016]

Also very commonly, sama 'to' introduces oblique addressee arguments for communication verbs, such as bicara 'speak' in (44) or minta 'request' in (45).

Introducing addressees
(44) sa minta maaf, e tadi sa bicara kasar sama ko

1sG ask pardon uh earlier 1sG speak be.coarse to 2SG
'I apologize, uh, a short while ago I spoke to you harshly' [081115-001a-Cv.0277]
(45) de minta apa sama kitorang kitorang kasi

3sG ask what to 1PL 1PL give
'(whenever) she (our daughter) asks us (for) something, we give (it to her)'
[081006-025-CvEx.0022]
Goal preposition sama 'to' denotes the goal of a transfer or communication without concurrently marking this goal as the beneficiary of the event talked about. In this it contrasts with benefactive untuk 'for' and buat 'for'; compare the examples in (43b) and (44) with kasi/bicara untuk 'give/speak to and for' in (55) and (56) in $\S 10.2 .3$ (p. 458) and with kasi/bicara buat 'give/speak to and for' in (65) and (66) in §10.2.4 (p. 460).

In addition, sama 'to' introduces oblique arguments of mental verbs, such as ingat 'remember' in (46), mara 'feel angry (about)' in (47), or takut 'feel afraid (of)' in (48). Most of the objects of mental verbs introduced with sama 'to' can also occur with comitative dengang 'with' (§10.2.1): compare mara sama 'feel angry about' in (47) with mara dengang 'feel angry with' in (38), or takut sama 'feel afraid of' in (48) with takut dengang 'feel afraid of' in $(39)^{5}$.

Overall, however, the range of verbs is smaller for sama 'to' than for comitative dengang 'with'.

The semantic distinctions between sama 'to' and dengang 'with' are subtle. When speakers want to emphasize the agent of the mental verb they employ sama 'to'. If they want to signal that the object of the mental verb is also involved in the mental process talked about, they use comitative dengang 'with'. The contrastive examples in (47) and (48) illustrate this distinction. In (47a) sama 'to' emphasizes the fact that the agent $d e$ ' 3 sG ' mara 'feels angry' about the patient pak Bolikarfus 'Mr. Bolikarfus' whereas the patient himself is not involved in this mental process. By contrast, in (47b) deng(ang) 'with' signals that in some ways the patient pak Bolikarfus 'Mr. Bolikarfus' has contributed to the agent's anger. Likewise, in (48a) sama 'to' focuses on the fact that the agent dia '3sG' takut 'feels afraid (of)'; again, the patient ana~ana Tuhang 'God's children' is not involved in this mental process. In (48b), by contrast, deng(ang) 'with' signals that the patient ana~ana Tuhang 'God's children' has contributed in some ways to the agent's fear.

Introducing objects of mental verbs ${ }^{6}$
(46) biar dia masi muda tapi Fitri ingat sama Roni although 3sg still be.young but Fitri remember to Roni 'even though she was still young, Fitri was thinking of Roni' [081006-024-CvEx.0067]

a. de mara

sama pak Bolikarfus

3sG feel.angry(.about) to father Bolikarfus
'he was angry about Mr. Bolikarfus' [081014-016-Cv.0042]
b. de mara deng pak Bolikarfus

3sG feel.angry(.about) with father Bolikarfus
'he was angry with Mr. Bolikarfus' [Elicited BR120817.001]
a. memang dia takut sama ana~ana Tuhang
indeed 3sg feel.afraid(.of) to RDP~child God '(that evil spirit) indeed he/she feels afraid of God's children' [081006-022-CvEx.0175]
b. memang dia takut deng ana~ana Tuhang
indeed 3sG feel.afraid(.of) with RDp $\sim$ child God
'(that evil spirit) indeed he/she feels afraid of God's children' [Elicited BR120817.001]

Furthermore, although not very frequently, sama 'to' introduces animate associates. As with comitative dengang 'with' ( $\$ 10.2 .1$ ), associates are expressed in peripheral adjuncts as in sama dorang 'with them' in (49), or in nonverbal predicates as in sama saya 'with me' in (50).

Introducing animate associates
(49) Papeas maing~maing sama dorang

Papeas RDP~play to 3PL
'Papeas is going to play with them' [080918-001-CvNP.0040]
(50) hanya tiga saja sama saya
only three just to 1sG
'just only three (of my children) are with me' [081006-024-CvEx.0001]
The goal preposition sama 'to' has trial word class membership. That is, besides being used as a preposition, it is also used as the stative verb sama 'be same' and, although not very frequently, as an addition-marking conjunction (see §5.14; see also §14.2.1.3 for its uses as a conjunction). ${ }^{7}$

[^162]
### 10.2.3 untuk 'for'

The benefactive preposition untuk usually translates with 'for'; depending on its context, however, it also translates with 'to, about'. The preposition introduces animate and inanimate, as well as nominal and pronominal referents. In most cases, the referents are beneficiaries or recipients ( 148 tokens). In this regard, untuk 'for' is similar to benefactive buat 'for' (§10.2.4). Contrasting with buat 'for', however, untuk 'for' has a wider distribution and more functions in that it (1) combines with demonstratives, (2) introduces inanimate referents, and (3) introduces circumstance.

Beneficiaries introduced with untuk 'for' are typically animate human, as in (51), (53) or (54). The beneficiary can, however, also be animate nonhuman, as in untuk anjing dorang 'for the dogs' in (52).

Usually, untuk 'for' follows bivalent verbs such as buat 'make, do' or biking 'make', and introduces beneficiaries encoded by peripheral adjuncts, as in (51) or (52), respectively. Only rarely is the beneficiary encoded by a nonverbal prepositional predicate ( 2 tokens) as in untuk tamu 'for the guests' in (53), or an adnominal prepositional phrase (2 tokens) as in untuk kafir 'for unbelievers' in (54). As for the low token frequencies of two each, one consultant suggested that these constructions are not native Papuan Malay but represent instances of code-switching with Indonesian. The low frequencies support this statement.

Introducing animate beneficiaries
(51) Tuhang buat mujisat untuk kita

God make miracle for 1PL
'God made a miracle for us' [080917-008-NP.0163]
(52) ... yang sa pu bini biking malam untuk anjing dorang
rel 1sg poss wife make night for dog 3pl
'[I fed the dogs with papeda] which my wife had made in the evening for the dogs' [080919-003-NP.0002]
(53) ikang sedikit, itu untuk tamu
fish few D.DIST for guest
'(as for) the few fish, those are for the guests' [081014-011-CvEx.0008]
(54) di sana kang masi tempat untuk kafir
at l.DIST you.know still place for unbeliever
'(the area) over there, you know, is still a location for unbelievers'
[081011-022-Cv.0238]
With transfer verbs, untuk 'for' introduces benefactive recipients, and with communication verbs it introduces benefactive addressees. That is, the referent is not merely a recipient or addressee. Benefactive untuk 'for' indicates that the referent is also the
beneficiary of the transfer or communication, hence "benefactive recipient" and "benefactive addressee". This is illustrated with kasi untuk 'give to and for' in (55), and bicara untuk 'speak to and for' in (56).

Introducing benefactive recipients and addressees
(55) sa kasi hadia untuk kamu

1sG give gift for 2PL
'I'll give gifts to you for your benefit' [080922-001a-CvPh.1332]
(56) jadi sperti itu, harus bicara untuk dorang, ceritra untuk dorang so similar.to d.DIST have.to speak for 3pl tell for 3pL
'so it's like that, (we) have to speak to them (our children) for their benefit, talk to them for their benefit' [081014-007-CvEx.0136]

Besides introducing animate referents, untuk 'for' also introduces inanimate beneficiaries that are concrete, abstract, or temporal. In (57), the beneficiary is inanimate concrete: kamar mandi 'the bathroom'. In (58), the beneficiary is inanimate abstract: distal demonstrative itu 'D.DIST' summarizes the speaker's previous statements about balanced birth rates across families related by marriage. In (59) and (60), the beneficiary is temporal: taung ini 'this year' in (59) and besok 'tomorrow' in (60). Overall, however, these uses of benefactive untuk 'for' are quite rare, with the corpus including only very few examples.

Introducing inanimate beneficiaries
(57) tong mo pake untuk kamar mandi

1pl want use for room bathe
'we want to use (the corrugated iron sheets) for the bathroom (roof)'
[080925-003-Cv.0005]
(58) ... lahir ana suku A., a, saya lahir suku Y. ... give.birth child ethnic.group A. ah! 1sG give.birth ethnic.group Y.
tujuangnya hanya untuk itu
purpose:3posse only for D.DIST
[About the exchange of bride-price children:] '(our daughter) will give birth to a child (for) the A. family, well, I give birth for the Y. family ... its purpose is only for that (namely, a balanced birth rate across families)' [081006-024-CvEx.0079]
(59) untuk taung ini kamkas los sa dulu
for year d.prox 2pl give loosen 1sG first
'for (the rest of) this year you release me (from my duties) for now'
[080922-002-Cv.0084]
(60) tong dari sa pu temang pinjam trening untuk besok

1PL from 1sG poss friend borrow tracksuit for tomorrow
'we (are back) from my friend (from whom we) borrowed a tracksuit for
tomorrow' [081011-020-Cv.0052]

In addition, untuk 'for' introduces peripheral adjuncts that express the notion of circumstance, as in untuk seng itu 'about those corrugated iron sheets' in (61), or untuk masala tahang lapar 'about the problem of enduring to be hungry' in (62).

Introducing circumstance
(61) tanya Sarles, bapa, untuk seng itu
ask Sarles father for corrugated.iron D.DIST
'father, ask Sarles about/for those corrugated iron (sheets)' [080925-003-Cv.0003]
(62) sa bilang, untuk masala tahang lapar kitong bisa

1sG say for problem hold.(out/back) be.hungry 1pL be.able tahang lapar juga e?
hold (out/back) be.hungry also eh
'I say about the problem of enduring to be hungry, we can also endure being
hungry, eh?' [081025-009a-Cv.0118]
The preposition untuk 'for' has dual word class membership; it is also used as a conjunction that introduces purpose clauses (§14.2.4.3; see also §5.14).

### 10.2.4 buat 'for'

The core semantics of the preposition buat 'for' are benefactive; that is, it introduces beneficiaries and benefactive recipients. In this, it is similar to benefactive untuk 'for'. Otherwise, as already mentioned in $\S 10.2 .3$, buat 'for' is more restricted in its distribution and functions: (1) it is not attested to combine with demonstratives, (2) it only rarely introduces inanimate referents, and (3) it is not attested to introduce other complements such as circumstance.

Most commonly, buat 'for' follows bivalent action verbs such as putar 'stir', and introduces peripheral adjuncts denoting human beneficiaries as in buat de bapa 'for her father' in (63). Considerably less frequently, buat 'for' introduces beneficiaries encoded by adnominal prepositional phrases, as in buat torang 'for us' in the exchange in (64).

Introducing animate beneficiaries
(63) Ika biking papeda putar buat de bapa

Ika make sagu.porridge stir for 3sG father
'Ika made sagu porridge, she stirred (it) for her father' [081006-032-Cv.0071]
(64) a. Speaker-1: sa juga dengang ini kaka siapa tu

1sG also with D.Prox oSb who D.DIST
Speaker-1: 'I was also with, what's-his-name, that older brother, who-is-it?'
b. Speaker-2: satpam buat torang
security.guard for 1PL
Speaker-2: 'our security guard' (Lit. 'the security guard for us)' [081025-006-Cv.0109]

Benefactive buat 'for' also introduces benefactive recipients and addressees encoded by oblique arguments, as shown in (65) and (66), respectively. Hence, like untuk 'for' (§10.2.3), benefactive buat 'for' contrasts with goal-oriented sama 'to' (§10.2.2), which expresses recipients and addressees, as in (43) to (45), without, however, signaling the concurrent notion of beneficiary.

Introducing benefactive recipients and addressees
(65) slama ini de tida kasi uang buat saya
as.long.as D.Prox 3sG neg give money for 1sG
'so far he hasn't given (any) money to me for my benefit' [081014-003-Cv.0034]
(66) sa perna bicara buat satu ibu ...

1sG once speak for one woman
'once I talked to a woman for her benefit ...' [081011-024-Cv.0073]
Benefactive buat 'for' also introduces inanimate beneficiaries, as in the adnominal prepositional phrase buat natal 'for Christmas' in (67). This use, however, is very rare with the corpus including only this one example.

Introducing inanimate beneficiaries
(67) pi ambil kayu bakar, kayu bakar buat Natal
go fetch wood burn wood burn for Christmas
'(we) went to get firewood, firewood for Christmas' [081006-017-Cv.0014]
The preposition buat 'for' has dual word class membership; it is also used as the bivalent verb buat 'make' (see §5.14).

### 10.3 Prepositions encoding comparisons

Papuan Malay employs three prepositions of comparison: similative sperti 'similar to' (§10.3.1) and kaya 'like' (§10.3.2), and equative sebagey 'as' (§10.3.3). All three introduce similes that express explicit resemblance or equatability between two bases of comparison.

### 10.3.1 sperti 'similar to'

The preposition sperti 'similar to' introduces similes that highlight resemblance or likeness in some respect between the two bases of comparison. Hence, sperti ' like' is similar to kaya 'like'; for the distinctions between both similative prepositions see the discussion in §10.3.2.

Very commonly, sperti 'similar to' forms peripheral adjuncts, as in sperti klawar 'similar to a cave bat' in (68). Also quite frequently, sperti 'similar to' expresses resemblance in oblique arguments of some bivalent verbs, as in (69): sperti manusia 'similar to a human' is the oblique object of the change verb jadi 'become'. In addition, sperti 'similar to' introduces the simile in nonverbal predicates with the complement being a common noun, a personal pronoun as in sperti ko 'similar to you' in (70), or a demonstrative as in sperti itu' like that' in (71). Finally, although rather infrequently, sperti 'similar to' expresses resemblance in adnominal prepositional phrases, as in baju sperti ini 'clothes like these' (72). The examples in (68) to (72) also illustrate that sperti 'similar to' introduces animate and inanimate, as well as nominal and pronominal referents. ${ }^{8}$
(68) de bisa terbang sperti klawar

3sG be.able fly similar.to cave.bat
'he/she (the evil spirit) can fly similar to a cave bat' [081006-022-CvEx.0137]
(69) setang itu de bisa jadi sperti manusia evil.spirit D.DIST 3sG be.able become similar.to human.being 'that evil spirit, he/she can become similar to a human' [081006-022-CvEx.0010]
(70) kalo kaka sperti ko kaka malu
if oSb similar.to 2 sG oSb feel.embarrassed(.about)
'if I ('older sibling') were similar to you, I ('older sibling') would feel ashamed' [081115-001a-Cv.0040]
(71) mama pu hidup sperti itu
mother poss life similar.to d.DIST
'my ('mother's') life is like that' [080922-001a-CvPh.0932/0938]
(72) dorang tida pake baju sperti ini, pake daung $\sim$ daung

3Pl NEG use shirt similar.to D.prox use rdp~leaf
'they don't wear clothes like these, (they) wear leaves' [081006-023-CvEx.0007]
The preposition sperti 'similar to' has dual word class membership; it is also used as a conjunction that introduces similarity clauses (§14.2.6; see also §5.14).

[^163]
### 10.3.2 kaya 'like’

The core semantics of the preposition kaya 'like' are similative: it indicates likeness between the two bases of comparison, similar to sperti 'similar to'. ${ }^{\text {. }}$ Unlike sperti 'like', however, kaya 'like' is not attested to combine with demonstratives. Moreover, kaya 'like' is semantically distinct from sperti 'similar to', as discussed below.

Most commonly, kaya 'like' forms peripheral adjuncts, as in kaya burung 'like a bird' in (73). This example also illustrates that kaya 'like' co-occurs with some of the same verbs as sperti ‘similar to’, such as terbang 'fly’ in (68) (§10.3.1). Less frequently, kaya 'like' introduces the simile in nonverbal predicates as in kaya buaya 'like a crocodile' in (74). These examples also illustrate that typically the referent is animate and nominal; for an inanimate referent see the example in (77), and for a pronominal referent see (76b).

Signaling overall likeness or resemblance
(73) bisa terbang kaya burung, bisa merayap kaya ular be.able fly like bird be.able creep like snake
'(the evil spirit) can fly like a bird, can creep like a snake' [081006-022-CvEx.0031]
dong bilang soa-soa kang, kaya buaya
3pl say monitor.lizard you.know like crocodile
'they call (it) a monitor lizard, you know, (it's) like a crocodile'
[080922-009-CvNP.0053]
The semantic distinctions between kaya 'like' and sperti 'similar to' are subtle. While both signal likeness in terms of appearance or behavior, they differ in terms of their semantic effect. Similative kaya 'like' signals overall resemblance between the two bases of comparison. By contrast, the semantic effect of sperti 'similar to' is more limited: it signals likeness or resemblance in some, most often implied, respect. This distinction is illustrated in the contrastive examples in (75) and (76).

In (75a), kaya 'like' signals overall physical resemblance: the speaker's brother has the same facial features as their father. By contrast, in the elicited example in (75b) sperti 'similar to' signals limited or partial resemblance: that is, father and son share specific facial features. In (70), repeated as (76a), a teacher relates a conversation she had with a socially maladjusted student. Employing sperti 'similar to', the teacher signals that she refers to some specific aspects of the student's behavior: kalo kaka sperti ko 'if I ('older sibling') were similar to you (with respect to the behavior you're displaying at school)'. If, by contrast, the teacher had used kaya 'like', as in the elicited example in (76b), the semantic effect of the comparison would have been much wider, not only referring to the student's behavior at school but signaling overall resemblance between the speaker and her student.

[^164]Semantic distinctions between kaya 'like' and sperti 'similar to'
(75)
a. de pu muka kaya de pu bapa

3sG poss face like 3sG poss father
'his (my brother's) face is like his father's (face)' [080922-001a-CvPh.1445]
b. de pu muka sperti de pu bapa

3sG poss face similar.to 3sG poss father
'his (my brother's) face is similar to his father's (face)' [Elicited BR120817.007]
(76)
a. kalo kaka sperti ko kaka malu
if oSb similar.to 2sG oSb feel.embarrassed(.about)
'if I ('older sibling') were similar to you, I ('older sibling') would feel ashamed' [081115-001a-Cv.0040]
b. kalo kaka kaya ko kaka malu
if oSb like 2 sG oSb feel.embarrassed(.about)
'if I ('older sibling') were like you, I ('older sibling') would feel ashamed' [Elicited BR120817.006]

Signaling overall resemblance, similative kaya 'like' is also used when the speaker wants to make a more expressive, metaphorical comparison as in (77). This example also illustrates that the referent can be inanimate.

Introducing expressive similes
(77) smua jalang kaya kapal kayu
all walk like ship wood
'[because they were so hungry] (they) all were strolling around like wooden
boats' [081025-009a-Cv.0188]
The preposition kaya 'like' has dual word class membership; it is also used as a conjunction that introduces similarity clauses (§14.2.6; see also §5.14).

### 10.3.3 sebagey' 'as'

The equative preposition sebagey 'as' introduces similes that express equatability between the two bases of comparison in terms of specific roles or capacities. Hence, sebagey 'as' contrasts with the similarity prepositions sperti ‘similar to' (§10.3.1) and kaya 'like' (§10.3.2) which express resemblance and likeness.

Most commonly, the complement is expressed in an adnominal prepositional phrase. In (78), for example, sebagey 'as' links the head nominal torang '1pl' to the role-encoding adnominal constituent kepala kampung 'village heads'. Following mono- or bivalent action verbs, sebagey 'as' expresses equatability in peripheral adjuncts. In (79), for example, sebagey 'as' follows the communication verb bicara 'speak' and relates the role-encoding
complement ibu camat 'Ms. Subdistrict-Head' to the clausal subject ko ' 2 sG '. The corpus also includes two examples in which sebagey 'as' introduces nonverbal predicates to express equatability, as for example in (80) between the predicate kepala acara 'the head of the festivity' and the clausal subject sa '1sG'.
(78) torang sebagey kepala kampung juga penanggung-jawap 1PL as head village also responsibility 'we as village heads are also bearers of responsibility' [081008-001-Cv.0035]
(79) sebentar di Diklat ko bicara sebagey ibu
a.moment at government.education.program 2SG speak as woman
camat
subdistrict.head
'a bit later at the government education and training (office) you'll speak as Ms. Subdistrict-Head' [081010-001-Cv.0099]
(80) paling sa tra kerja, sa sebagey kepala acara
most 1sg Neg work 1sG as head festivity
[About organizing a festivity:] 'most likely I won't (have to) work, I'll be the head of the festivity' (Lit. 'as the head ...') [080919-004-NP.0068]

As for the syntactic properties of its complements, the examples in (78) to (80) show that equative sebagey 'as' introduces common nouns, as similative sperti 'similar to' (§10.3.1) and kaya 'like' ( $\S 10.3 .2$ ) do. Unlike the findings for both similative prepositions, however, the corpus does not include prepositional phrases in which sebagey 'as' introduces personal pronouns. Neither are examples attested in which sebagey 'as' combines with demonstratives as sperti 'similar to' does.

### 10.4 Summary

Prepositional phrases consist of a preposition and a noun phrase complement which is obligatory and may not be fronted. The preposition indicates the grammatical and semantic relationship of the complement to the predicate. Prepositional phrases in Papuan Malay are formed with eleven different prepositions:

1. Prepositions encoding location in space or time: $d i$ 'at, in', $k e$ 'to', dari 'from', and sampe 'until'
2. Prepositions encoding accompaniment/instruments, goals, or benefaction: dengang 'with', sama 'to', untuk 'for', and buat 'for'
3. Prepositions encoding comparisons: sperti 'similar to', kaya 'like', and sebagey 'as'

A substantial number of the prepositions have dual word class membership, two have trial class membership. That is, three prepositions are also used as verbs, namely buat
'for', sama 'to', and sampe 'until' (see §5.3). Six prepositions are also used as conjunctions, namely dengang 'with', kaya 'like', sama 'to', sampe 'until', sperti 'similar to', and untuk 'for' (see $\S 5.12$ and Chapter 14). (Variation in word class membership is discussed in §5.14.)

Prepositional phrases take on different functions within the clause and combine with different types of syntactic constituents. The complements of the prepositions take different semantic roles within the clause, depending on the prepositions they are introduced with. These findings are summarized in Table 10.1 to Table 10.3; in these tables, the prepositions are listed according to the order in which they are discussed in this chapter, starting with $d i$ 'at, in'. Empty cells signal unattested constituent combinations.

Table 10.1 lists the three syntactic functions that prepositional phrases can take within the clause according to the prepositions they are introduced with, that is, their functions as peripheral adjuncts, nonverbal predicates, and arguments. In addition, Table 10.1 lists those prepositions that introduce modifying, adnominal prepositional phrases and those that are also used as conjunctions.

Table 10.1: Syntactic functions of prepositional phrases

|  | Clausal functions |  |  |  | Additional functions |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  | ADJCT | PRED | ARGT | MOD | CNJ | ADV |  |
| di 'at, in' | X | X | X | X |  |  |  |
| ke 'to' | X | X | X |  |  |  |  |
| dari 'from' | X | X | X | X |  |  |  |
| sampe 'until' | X |  |  |  | X |  |  |
| dengang 'with' | X | X | X |  | X | X |  |
| sama 'to' | X | X | X |  | X |  |  |
| untuk 'for' | X | X | X | X | X |  |  |
| buat 'for' | X |  | X | X |  |  |  |
| sperti 'similar to' | X | X | X | X | X | X |  |
| kaya 'like' | X | X |  |  | X | X |  |
| sebagey 'as' | X | X |  | X |  |  |  |

With respect to their complements, the data in Table 10.2 shows that the prepositions combine with different constituents from different word classes, namely nouns, personal pronouns, demonstratives, locatives, and temporal adverbs.

Lastly, the complements of prepositions take different semantic roles within the clause, depending on the prepositions they are introduced with. These different semantic roles are summarized in Table 10.3 with the primary role underlined.

If the context allows the disambiguation of the semantic relationship of the complement to the predicate, two of the prepositions of location can be omitted: locative $d i$ ' at, in' and allative $k e$ 'to'.

Table 10.2: Word classes of complements

|  | N.COM | N.LOC | N.TIME | PRO | DEM | LOC | ADv.T |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| di 'at, in' | X | X |  | X |  | X |  |
| ke 'to' | X | X |  | X |  | X |  |
| dari 'from' | X | X | X | X |  | X | X |
| sampe 'until' |  |  | X |  |  |  | X |
| dengang 'with' | X |  |  | X | X |  |  |
| sama 'tt' | X |  |  | X | X |  |  |
| untuk 'for' | X |  | X | X | X |  | X |
| buat 'for' | X |  |  | X |  |  |  |
| sperti 'similar to' | X |  |  | X | X |  |  |
| kaya 'like' | X |  |  | X |  |  |  |
| sebagey 'as' | X |  |  |  |  |  |  |

Table 10.3: Semantic roles of complements

|  | LOCT | ASSCT | омV | INS | REC | BEN | CIRC | STD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| di 'at, in' | X |  |  |  |  |  |  |  |
| $k e$ 'to' | $\underline{X}$ |  |  |  |  |  |  |  |
| dari 'from' | X |  |  |  |  |  |  |  |
| sampe 'until' | $\underline{X}$ |  |  |  |  |  |  |  |
| dengang 'with' |  | $\underline{X}$ | X | X |  |  |  |  |
| sama 'to' |  | $\overline{\mathrm{X}}$ | X |  | X |  |  |  |
| untuk 'for' |  |  |  |  | $\overline{\mathrm{X}}$ | $\underline{X}$ | X |  |
| buat 'for' |  |  |  |  | X | $\underline{X}$ |  |  |
| sperti 'similar to' |  |  |  |  |  |  |  | $\underline{\mathrm{X}}$ |
| kaya 'like' |  |  |  |  |  |  |  | X |
| sebagey 'as' |  |  |  |  |  |  |  | $\underline{X}$ |

## 11 Verbal clauses

This chapter discusses different types of verbal predicate clauses in Papuan Malay, in which a verb occupies the syntactic and semantic core of the clause. In Papuan Malay verbal clauses, the predicate typically follows the subject and, in transitive clauses, precedes the direct object. In negated verbal clauses, the negator precedes the predicate.

Papuan Malay verbal clauses can be distinguished into intransitive and transitive clauses; this distinction is discussed in §11.1. The subsequent sections describe special types of (in)transitive clauses: causative clauses in §11.2, reciprocal clauses in §11.3, existential clauses in $\S 11.4$, and comparative clauses in $\S 11.5$. The main points of this chapter are summarized in $\S 11.6$. Negation is described in $\S 13.1$.

### 11.1 Intransitive and transitive clauses

Papuan Malay verbal clauses can be intransitive, monotransitive, or ditransitive. Typically, intransitive clauses are formed with monovalent verbs which take one core argument; as discussed below, though, bi- and trivalent verbs also occur in intransitive or monotransitive clauses. Monotransitive clauses are usually formed with bivalent verbs which take two core arguments, the subject and a direct object. These two types of verbs and verbal clauses are the most common ones in Papuan Malay. In addition, Papuan Malay has ditransitive clauses formed with a small number of trivalent verbs which take three core arguments, a subject and two objects.

It is important to note, though, that in Papuan Malay the trivalent verbs allow but do not require three syntactic arguments. Likewise, bivalent verbs allow but do not require two arguments. That is, in clauses with tri- or bivalent verbs, core arguments are often elided when they are understood from the context. (See also Margetts \& Austin's 2007 cross-linguistic typology for the rather common elision of syntactic arguments.)

Given this syntactic mismatch between valency and transitivity, this section on transitivity is not organized in terms of intransitive, monotransitive, and ditransitive clauses. Instead, it is organized in terms of the valency of the verbs, and describes how the three verb classes are used in transitive and/or intransitive clauses. Verbal clauses with monovalent verbs are discussed in §11.1.1, with bivalent verbs in §11.1.2, and with trivalent verbs in §11.1.3. (The properties of verbs are described in §5.3. For details on optional linguistic expressions providing additional information about the setting of the events or states depicted by the verbs, see Chapter 10 ; see also $\S 5.2 .5$.)

### 11.1.1 Verbal clauses with monovalent verbs

Papuan Malay has a large open class of monovalent verbs. Involving only one participant, they always occur in intransitive clauses ( 490 monovalent verbs are attested in the corpus; for a list of examples see Table 5.14 in §5.3.1).

Semantically, the attested 490 verbs can be divided into dynamic ones ( 139 verbs) and stative ones ( 351 verbs), as is typical of languages lacking a class of adjectives. The former denote actions, while the latter designate states or more time-stable properties. Syntactically, however, there are no distinctions between dynamic and stative verbs.

Typically, monovalent verbs follow their clausal subjects, as shown with dynamic lari 'run' in (1), and with stative bagus 'be good' in (2).

Monovalent verbs with canonical subject-verb word order
(1) o, babi lari
oh pig run
'o, the pig ran' [080919-004-NP.0021]
(2) itu bagus skali
D.DISt be.good very
'that is very good' [081025-003-Cv.0267]
If speakers want to emphasize the predicate with a monovalent stative verb, they can front it, such as stative bagus 'be good' in (3). In this case, the predicate is set-off by a boundary intonation, which is achieved by marking the stressed syllable of the verb with a slight increase in pitch ("' "). Consultants disagree, however, whether monovalent dynamic verbs can be fronted. While two consultants stated that dynamic jatu 'fall' in the elicited example in (4) can be fronted, a third one rejected the example as ungrammatical. Furthermore, one of the consultants who accepted the verbal clause in (4) suggested that the fronting of monovalent dynamic verbs is a recent development and that older Papuan Malay speakers would not use such a construction.

Preposed monovalent verbs
(3) bágus skali itu
be.good very D.DIST
'very good is that' [081025-003-Cv.0270]
(4) $o$, játu dia! oh fall 3sG
'oh, he fell!' [Elicited BR131227.001]
The subject can also be omitted if it can be inferred from the context. In (5) the elided subject is sa ' 1 sG ', and in (6) it is dia/ de ' 3 sG '.

Elision of the subject argument
(5) siang Ø jalang, trus malam Ø duduk menyanyi sampe jam dua day walk next night sit sing until hour two '(during) the day (I) went (over there), then in the evening (I) sat about (and) sang (songs) until two o'clock (in the morning)' [080923-003-CvNP.0002]
(6) Speaker-2: adu, Ø nakal
oh.no! be.mischievous
[Speaker 1: ah, that Petrus!]
Speaker-2: oh no!, (he's) mischievous' [081115-001a-Cv.0033]

### 11.1.2 Verbal clauses with bivalent verbs

Papuan Malay has a large open class of bivalent verbs (535 are attested in the corpus; for a set of examples see Table 5.14 in §5.3.1). Bivalent verbs have two core arguments, a subject and an object. In terms of their semantic roles, "two-place predicates take an agent-like argument A, and a non-agent-like argument P", adopting Margetts \& Austin's (2007: 396) terminology. As mentioned, though, bivalent verbs in Papuan Malay allow but do not require two syntactic arguments. Examples of bivalent verbs are bunu 'kill' in (7) and potong 'cut' in (8).

Bivalent verbs with two arguments and canonical subject-verb-object order
(7) kalo ko masi mo berjuang kitorang bunu ko
if 2SG still want struggle 1PL kill 2sG
'if you still want to fight, we'll kill you' [081029-004-Cv.0072]
(8) jadi kamu potong sapi
so 2pL cut cow
'so you cut up the cow' [080925-005-CvPh.0007]
The monotransitive clauses in (7) and (8) illustrate the canonical subject-verb-object order for bivalent verbs. If speakers want to emphasize the object, they can also front it. Unlike clauses with preposed monovalent verbs, though, there is no clear boundary intonation to set-off the preposed object arguments from the rest of the clause. In (9), the preposed object paylot 'pilot' is marked with a slight increase in pitch of its stressed penultimate syllable ("' ") and it is separated from the rest of the clause with a comma intonation ("|"). Besides, the ultimate syllable of bunu 'kill' receives final lengthening, signaled with the vowel tripling. In (10), the preposed object remains unmarked but the clause-final verb potong 'cut' is marked with a slight increase in pitch of its stressed penultimate syllable.

Bivalent verbs with preposed object arguments
(9) páylot | dorang bunuuu
pilot 3pl kill
'the pilot they killed' [081025-004-Cv.0040]
(10) dong dua pu telefisi sidi dua dia pótong

3pl two poss television CD.player two 3sG cut
'the television (and) both CDs of the two of them he destroyed' [081011-009-Cv.0006]

When one or both of the core arguments are understood from the context, they can be omitted, as shown in (11) to (16). ${ }^{1}$ Elision of the object argument is illustrated for bunu 'kill' in (11), and potong 'cut (up) in (12).

Elision of the object argument and retention of the subject argument
(11) ... kalo prempuang melahirkang laki~laki dong bunu Ø
if woman give.birth RDP~husband 3pl kill
'[indeed, these women can't live with men,] when a woman gives birth to a boy, they kill (him)' [081006-023-CvEx.0058]
(12) ... tong potong $\varnothing$ hari itu

1PL cut day D.DIST
'[we shouldered it, the pig, (and) carried (it) to the garden shelter,] we cut (it) up that day' [080919-003-NP.0013-0014]

Elision of the subject argument is demonstrated for bunu 'kill' in (13), and potong 'cut' in (14).

Elision of the subject argument and retention of the object argument
(13) Ø bunu dia, Ø bunu dia
kill 3sG kill 3sG
'(they) kill him, (they) kill him' [081006-022-CvEx.0088]
(14) baru $\quad$ potong pisang di tenga~tenga to?
and.then cut banana at RDP~middle right?
'and then (we) cut the bananas in the middle, right?' [080922-009-CvNP.0041]
Finally, speakers can also omit both core arguments at the same time, as shown for bunu 'kill' in (15), and potong 'cut' in (16).

[^165]Elision of the subject and object arguments
(15) Ø bunu Ø tapi kasi hidup lagi
kill but give live again
[About sorcerers who can resurrect the dead:] '(they) kill (him) but (they) make (him) live again' [081006-022-CvEx.0087]
(16) Ø potong $\varnothing$ kecil~kecil
cut RDP~be.small
'(I) cut (the meat) very small' [080919-003-NP.0016]

### 11.1.3 Verbal clauses with trivalent verbs

Papuan Malay has a small number of trivalent verbs with three core arguments, that is, a subject, and two objects. In the corpus seven trivalent verbs are attested: ambil 'fetch', bawa 'bring', bli 'buy', ceritra 'tell', kasi 'give', kirim 'send', and minta 'request'.
In terms of their semantic roles, three-place predicates "take an agent-like A, a participant that will label R on the basis of its most common role as recipient (but that may also be a beneficiary, goal, addressee, location, or source), and a T (typically some thing or information conveyed by A to R)", applying Margetts \& Austin's (2007: 396) terminology. As mentioned, though, trivalent verbs in Papuan Malay allow but do not require three syntactic arguments.

Trivalent verbs exhibit dative alternation in that they appear in ditransitive clauses with double-object constructions (§11.1.3.1), or in monotransitive clauses with oblique constructions (§11.1.3.2). Alternatively, the R and T arguments can be combined into one noun phrase with an adnominal possessor (§11.1.3.3). Another option is to omit the R and/or T arguments (§11.1.3.4). The distributional frequencies for these strategies are discussed in §11.1.3.5.

### 11.1.3.1 Double-object constructions

In Papuan Malay ditransitive clauses with double-object constructions, the R and T arguments are unflagged and occur in the order R-T. In this construction type, as Payne (1997: 173) puts it, the semantically peripheral R is brought "center-stage" while the T has "status as the 'second object'". Cross-linguistically, the R typically precedes the T which, as Malchukov, Haspelmath \& Comrie (2010: 16) suggest, "probably derives from the fact that the R is generally human (and often definite) and thus tends to be more topical than the T, which is typically inanimate (and often indefinite)".

Papuan Malay double object constructions with R-T word order are presented in (17) to (23). Overall, however, double-object constructions are not very common in Papuan Malay. The corpus contains only 30 constructions among a total of 1,160 verbal clauses formed with trivalent verbs ( $2.6 \%$ ). ${ }^{2}$

[^166]Double-object constructions: R-T word order
(17) mungking de suru dia, ko ambil sa air!
maybe 3 SG order 3SG 2SG fetch 1SG water
'maybe he/she'll order him/her, "you fetch me water!"' [081006-024-CvEx.0092]
(18) tiga orang itu datang ... bawa dong pakeang
three person D.DIST come bring 3pl clothes
'those three people came ... (and) brought them clothes' [081006-023-CvEx.0074]
(19) paytua dia bli Andi satu set
husband 3sg buy Andi one set
'the gentleman bought Andi one (TV/CD) set' [081011-009-Cv.0055]
(20) nanti waktu tidor de bilang, a, bapa ceritra ko dongeng $\sim$ dongeng dulu very.soon time sleep 3sG say ah! father tell 2SG RDP~legend first
'later at bed-time he'll say, "ah, I ('father') tell you some stories first"'
[081110-008-CvNP.0140]
(21) skarang dong kasi dia senter
now 3pl give 3sG flashlight
'now they give him a flashlight' [081108-003-JR.0002]
(22) sa baru~baru bilang, ... kaka kirim dong uang!

1sG RDP~recently say oSb send 3PL money
'just now I said, "older sibling send them money!"' [080922-001a-CvPh.0860]
(23) trus sa bukang orang miskin minta~minta kamu uang
next 1sG NEG person be.poor RDP~request 2PL money
'and I'm not a poor person (who) keeps begging you (for) money'
[081011-020-Cv.0043/0045]
The T can also precede the R in double-object constructions, as shown in (24) and (25). This T-R order "is relatively widespread in South-East Asia", as Malchukov, Haspelmath \& Comrie (2010: 17) point out. Building on Dik \& Hengeveld's (1997: 435-436) notion of "iconic sequencing", Malchukov, Haspelmath \& Comrie (2010: 17) suggest that "the order $\mathrm{T}-\mathrm{R}$ is more iconic than the order $\mathrm{R}-\mathrm{T}$, because in the unfolding of the event the T is first involved in the action, which reaches the R only in a second step".

In Papuan Malay, however, T-R constructions are even less common than R-T constructions; the corpus contains 17 constructions among the total of 1,160 verbal clauses formed with trivalent verbs ( $1.5 \%$ ). All of them are formed with kasi 'give', as in (24) and (25). In 12 of them, the T is nasihat 'advice' as in (24), in two it is ijing or ijing~ijing 'permission' as in (25), and in the remaining three the Ts are ana 'child', kemerdekaang 'independence' and swara 'voice'.

Double-object constructions: T-R word order
(24) sa bilang begini, sa kasi nasihat kamu

1sG say like.this 1sG give advice 2pl
'I said like this, "I give you advice"" [081115-001a-Cv.0332]
(25) adu, nene knapa kasi ijing~ijing dia begitu
oh.no! grandmother why give RDP~permission 3sG like.that
'oh no!, why did you ('grandmother') give him permission like that?' [081014-008-CvNP.0026]

In double-object constructions the R is most often encoded by a personal pronoun, namely in $42 / 47$ attested constructions ( $89 \%$ ), as in (17) and (18). In the remaining five constructions, the R is encoded by a nominal. Three nominals occur in R-T constructions, namely in bli Andi ‘buy Andi' in (19), and in kirim bapa 'send father', and minta Noferus 'request Noferus'. The remaining two occur in T-R constructions, namely in 'kasi nasihat R' constructions. The respective Rs are pendeta 'pastor' and ana~ana 'children'. These distributional frequencies are discussed in §11.1.3.5.

### 11.1.3.2 R-type oblique constructions

One common alternative to double-object constructions is the "oblique strategy" (Margetts \& Austin 2007: 411) in which "the verb takes only two direct arguments and the third participant is expressed as an oblique argument or an adjunct". Very commonly, it is the R that is expressed with a prepositional phrase; hence "R-type oblique". Alternatively, the T is encoded in this manner; hence, "T-type oblique". (Margetts \& Austin 2007: 413; see also Malchukov, Haspelmath \& Comrie 2010: 17.) ${ }^{3}$

In Papuan Malay oblique constructions, it is always the R that is expressed as an oblique, with the R following the T, as shown in (26) to (32). Overall, however, R-type oblique constructions are not very common. The corpus contains only 41 R-type obliques among the total of 1,160 verbal clauses formed with trivalent verbs ( $3.5 \%$ ). Moreover, in the corpus, R-type obliques are not attested for all seven verbs (the examples for bawa 'bring' in (27), bli ‘buy' in (28), and kirim 'send' in (31) are elicited). Most R-type obliques are introduced with the benefactive prepositions buat 'for' or untuk 'for' (26/41 tokens $-63 \%$ ), while the remaining 15 R-type obliques are formed with goal-oriented sama 'to'. (The semantics of the three prepositions are discussed in §10.2.)

R-type oblique constructions

## pi ambil bola sama ade

go fetch ball to ySb
[Talking to a young boy:] 'go (and) fetch the ball for the younger sibling!' [081011-009-Cv.0022]

[^167](27) kemaring Lukas de bawa kayu bakar buat Dodo dorang yesterday Lukas 3sg bring wood burn for Dodo 3pl
'yesterday Lukas brought fire wood to Dodo and his associates for their benefit' [Elicited BR130221.035]
(28) bapa de su bli baju natal buat sa pu ade father 3sG already buy shirt Christmas for 1sG poss ySb
'father already bought a Christmas shirt for my younger sibling' [Elicited BR130221.002]
(29) ... nanti sa ceritra ini sama dia
very.soon 1sG tell D.PRox to 3sG
'[when he has returned home,] then I'll tell this to him' [080921-010-Cv.0004]
(30) sa kasi hadia untuk kamu kalo kam kenal bapa

1sG give gift for 2PL if 2PL know father
'I'll give a gift to you for your benefit if you recognize me ('father')'
[080922-001a-CvPh.1334]
(31) kaka dorang su kirim uang banyak sama dong pu mama oSb 3pl already send money many to 3pl poss mother 'older sibling and his/her associates already sent lots of money to their mother' [Elicited BR130221.003]
(32) de bilang, yo, sa minta maaf sama paytua

3sG say yes 1sG request pardon to husband
'he said, "yes, I beg pardon of (your) husband"' [081011-024-Cv.0140]
In the R-type oblique constructions in the corpus, the R is most often encoded by a noun or a noun phrase, namely in 28/41 attested constructions ( $68 \%$ ), as for instance in (26) and (27). In the remaining 13 constructions (32\%), the R is encoded by a personal pronoun, as in (29) or (30). The distributional frequencies and possible explanations for them are further discussed in §11.1.3.5.

### 11.1.3.3 Adnominal possessive constructions

Another, cross-linguistic alternative to encode the R and T arguments is to express them in an adnominal possessive construction, in which "the agent and the theme are expressed as syntactic arguments of the verb, while the R-type participant, which will be the beneficiary with transfer verbs [...], is expressed as a grammatical dependent of the theme, namely as its possessor" (Margetts \& Austin 2007: 426).

In Papuan Malay, speakers use adnominal possessive constructions when the T is definite. The corpus includes 14 such constructions among the 1,160 clauses formed with trivalent verbs ( $1.2 \%$ ). Examples are given for ambil 'fetch' in (33), bli 'buy' in (34), and
kasi 'give' in (35). In each case, the possessor denotes the benefiting R of the event expressed by the verb; the possessum denotes the T as the anticipated object of possession. In the corpus, the possessor is typically encoded by a personal pronoun (13/14 tokens $93 \%$ ), as in (34) and (35). Only in one construction, presented in (33), the possessor is expressed with a noun, namely the proper noun Sofia. (Adnominal possession is described in detail in Chapter 9.)

Adnominal possessive constructions
(33) mama nanti ambil [Sofia pu ijasa SD]
mother very.soon fetch Sofia poss diploma primary.school
'later you ('mother') fetch the primary school diploma for Sofia' (Lit. 'Sofia's primary school diploma') [081011-023-Cv.0065]
(34) dia punya ulang-taung kita bli [de punya pakeang ulang-taung]

3sG poss birthday 1pl buy 3sg poss clothes birthday
'(for) her birthday we buy birthday clothes for her' (Lit. 'her birthday clothes') [081006-025-CvEx.0022]
(35) ibu distrik de kasi [kitong dua pu uang ojek]
woman district 3sG give 1PL two poss money motorbike.taxi
'Ms. District gave us two money for the motorbike taxis' (Lit. 'our two motorbike taxi money') [081110-002-Cv.0036]

### 11.1.3.4 Elision

Elision is a third alternative to double-object constructions and used when the T and/or R are understood from the context. In this case, one or both of them can be omitted. In the corpus, this strategy is used in 1,058 of 1,160 verbal clauses formed with trivalent verbs ( $91 \%$ ).

Most often the R is elided and the T retained ( $601 / 1,058$ tokens - $57 \%$ ); these distributional frequencies are further discussed in §11.1.3.5. Examples are given for bli 'buy' in (36), ceritra 'tell' in (37), and kirim 'send' in (38).

Elision of R and retention of T
(36) kalo besok ada berkat sa bli Ø komputer baru
if tomorrow exist blessing 1sg buy computer be.new
'if there is a (financial) blessing in the near future, I'll buy (us) a new computer' [081025-003-Cv.0086]
(37) malam nanti Matias bilang, mama ceritra $\varnothing$ dongeng ka?
night very.soon Matias say mothertell legend or
'later tonight Matias will say, "are you ('mother') going to tell (me) a story?"' [081110-008-CvNP.0142]
(38) bapa kirim Øuang banyak~banyak!
father send money RDP~many
'[father I want to buy a cell-phone for myself,] father send (me) lots of money!' [080922-001a-CvPh.0440]

Constructions with elided T and retained R occur less often in the corpus ( $75 / 1,058$ tokens $-7 \%$ ). In most cases, the retained $R$ is encoded as an oblique ( $49 / 75$ tokens $-65 \%$ ). This is demonstrated for bawa 'bring' in (39), ceritra 'tell' in (40), and kasi 'give' in (41).

Elision of T and retention of oblique R
(39) e, ko bawa Ø ke sana, ko bawa Ø sama ade hey! 2sG bring to l.DIST 2sG bring to ySb
[Talking to a young boy:] 'hey, bring (the ball) over there, bring (the ball) to the younger sibling' [081011-009-Cv.0015]
(40) ... baru dia yang ceritra Ø sama saya and.then 3sG REL tell to 1SG
'[I'd already forgotten who this gentleman was,] and then (it was) him (who) told (this story) to me' [080917-008-NP.0005]
(41) ko kasi Ø sama kaka mantri, $\quad e$ ?

2SG give with oSb male.nurse eh
'give (the keys) to the older brother nurse, eh?' [080922-010a-CvNF.0167]
Less often ( $26 / 75$ tokens $-35 \%$ ), the retained R is encoded as a direct object. This is illustrated for kasi 'give' in (42), and minta 'request' in (43).

Elision of T and retention of direct-object R
(42) ... hari ini dorang bisa kasi ko Ø
day d.prox 3pl be.able give 2sG
'[if (you) say (you also want) a trillion (rupiah),] today they can give you (the money)' [081029-004-Cv.0023]
(43) piring $\sim$ piring kosong, sa minta Ise Ø, sa bilang ...

RDP~plate be.empty 1sG request Ise 1sG say
'the (cake) plates were empty, I asked Ise (for a piece of cake), I said ...'
[081011-005-Cv.0034]
In constructions with elided T and retained R , the R is most often encoded by a nominal ( $56 / 75$ tokens $-75 \%$ ). This applies to oblique Rs ( $39 / 49-80 \%$ ), as in (39), as well as to direct-object Rs ( $17 / 26-65 \%$ ), as in (43). Retained pronominal Rs, by contrast, occur much less often (19/75 tokens - $25 \%$ ), be they oblique Rs as in (40), or direct-object Rs as in (42). These distributional frequencies are discussed in §11.1.3.5.

Finally, elision can also affect the R and the T at the same time. That is, both can be omitted at once if they are understood from the context. In the corpus, this applies to a substantial number of verbal clauses formed with trivalent verbs (382/1,160 tokens $36 \%$ ). This type of elision is illustrated for ambil 'fetch' in (44), bli 'buy' in (45), and kirim 'send' in (46).

Elision of R and T
(44) ... Matias nanti anjing, cepat, ko ambil $\varnothing \varnothing$ dulu!

Matias very.soon dog be.fast 2sg fetch first
'[Matias, younger sister's fish fell down,] Matias, very soon the dogs (will get it), quick, you fetch (your sister the fish)!' [081006-019-Cv.0002]
... de pu tete tanya dia, ko bli $\varnothing \varnothing$ di mana? 3sg poss grandfather ask 3sg 2sg buy at where
'[when the grandchild emerged, he was holding a fried banana,] then his grandfather asked him, "where did you buy (yourself the fried banana)?"' [081109-005-JR.0007]
(46) ... mama dong di kampung tra kirim $\varnothing \varnothing$ mother 3pl at village neg send
'[it's difficult, there is no money,] mother and the others in the village don't send (us money)' [080922-001a-CvPh.0943/0945]

### 11.1.3.5 Distributional frequencies

The above description of how Papuan Malay trivalent verbs are used in verbal clauses shows three types of variation, namely in word order, in encoding the R and T arguments, and in eliding one or both of these arguments. The data also indicates distributional preferences for these three variation types. Summarizing this variation, this section provides an explanation for the distributional frequencies and preferences in terms of salience.

Cross-linguistically, ditransitive alignment variation is related to distinctions between the R and T arguments in terms of three "salience scales (animacy, definiteness, person)", with Haspelmath (2007b: 84) presenting the following scale for "differential R marking": ${ }^{4}$

1st/2nd $>3$ rd $>$ proper noun $>$ human $>$ nonhuman
When the R is more salient than the T , speakers favor a double-object construction. This preference applies especially to pronominal Rs, which are the most salient ones. Otherwise, as Haspelmath (2007b: 83) states, the oblique construction is the favored one:

Special ("indirective" or "dative") R-marking is the more likely, the lower the R is on the animacy, definiteness, and person scales.

[^168]The same distributional preferences apply to Papuan Malay, as shown in Table 11.2. Before discussing the distribution of nominal and pronominal Rs, however, Table 11.1 gives an overview of the distributional frequencies for trivalent verbs in the different constructions types discussed in the preceding sections.

Table 11.1: Distributional preferences for trivalent verbs

|  | Token \# | $\%$ |
| :--- | ---: | ---: |
| DO | 47 | 4.1 |
| Obl. | 41 | 3.5 |
| AdPoss. | 14 | 1.2 |
| Elision | 1,058 | 91.2 |
| Total | 1,160 | 100 |

Table 11.1 shows that Papuan Malay disfavors clauses in which both the R and T arguments are overtly mentioned. Double-object constructions are rare (4.1\%); the 47 clauses include 30 clauses with R-T order and 17 with T-R order. Likewise, R-type oblique constructions are rare ( $3.5 \%$ ). Adnominal possessive constructions with an R possessor are even rarer ( $1.2 \%$ ). Instead, trivalent verbs usually occur in clauses with elided R and/or T arguments ( $91 \%$ ). Details on elision are presented in Table 11.3.

As for the distribution of nominal and pronominal Rs, Table 11.2 indicates clear preferences. Only five nominal Rs occur in double-object constructions ( $6 \%$ ), and about one third in R-type oblique constructions ( $28 / 90$ tokens $-31 \%$ ). Besides, one nominal R is used in an adnominal possessive construction (1\%). Instead, most nominal Rs occur in clauses with elided T arguments ( $56 / 90$ tokens $-62 \%$; Table 11.3 gives details on elision). By contrast, about half of the pronominal Rs occur in double-object constructions (42/87 tokens - 48\%), while 13 Rs are used in R-type oblique constructions ( $15 \%$ ). Another 13 Rs occur in adnominal possessive constructions ( $15 \%$; compare with one token for nominal

Table 11.2: Distribution of nominal and pronominal Rs

|  | DO | Obl. | AdPoss. | T Elision | Total $^{a}$ |
| :---: | ---: | ---: | ---: | ---: | ---: |
| NOM-R | 5 | 28 | 1 | 56 | 90 |
|  | $5.6 \%$ | $31.1 \%$ | $1.1 \%$ | $62.2 \%$ | $100 \%$ |
| PRO-R | 42 | 13 | 13 | 19 | 87 |
|  | $48.3 \%$ | $14.9 \%$ | $14.9 \%$ | $21.8 \%$ | $100 \%$ |
| Total | 47 | 41 | 14 | 75 | 177 |
|  | $26.6 \%$ | $23.2 \%$ | $7.9 \%$ | $42.4 \%$ | $100 \%$ |

[^169]Table 11.3: Distributional preferences for argument elision and retention

|  | Rels <br> T ret | $\begin{array}{r} \text { T ELS } \\ \text { DO-R RET } \end{array}$ | $\begin{array}{r} \text { T ELS } \\ \text { Obl.-R RET } \end{array}$ | $\begin{aligned} & \text { T els } \\ & \text { R els } \end{aligned}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Distribution of elided and retained arguments |  |  |  |  |  |
| Total | 601 | 26 | 49 | 382 | 1,058 |
|  | 57\% | $2 \%$ | 5\% | 36\% | 100\% |
| Encoding of retained Rs |  |  |  |  |  |
| Nom-R | - | 17 | 39 | - | 56 |
| PRo-R | - | 9 | 10 | - | 19 |
| Total | - | 26 | 49 | - | 75 |
|  |  | 25\% | 75\% |  | 100\% |

Rs). Yet another 19 Rs occur in clauses with elided T ( $22 \%$; compare with 56 nominal Rs).
This tendency for pronominal Rs to occur in double-object constructions, while nominal Rs are more often used in R-type oblique constructions is in line with Haspelmath's (2007: 84) scale for differential R marking, presented above. As mentioned, this scale suggests that speakers favor a double-object construction when the R is more salient than the T , a preference that applies especially to pronominal Rs. Otherwise, speakers favor an oblique construction.

There is one exception, though. When speakers want to signal that a pronominal $R$ is also the beneficiary of the transfer, they encode this R as an R-type oblique, which is introduced with benefactive buat 'for' or untuk 'for' (both prepositions and their semantics are discussed in $\S 10.2$ ). This benefactive marking of the R is not possible in double-object constructions. Hence, speakers have to use an R-type oblique construction; this also applies to the 13 pronominal Rs in the corpus occurring in R-type oblique constructions. In nine of them ( $70 \%$ ), the oblique is introduced with a benefactive preposition.

As already discussed, however, Papuan Malay disfavors constructions in which the R and T arguments are both overtly mentioned. Instead, trivalent verbs usually occur in clauses in which the R and/or T arguments are elided (1,058/1,160 tokens - $91 \%$; see Table 11.1). Most often, the more salient R is omitted while the less salient T is retained ( $601 / 1,058$ tokens $-57 \%$ ), as shown in Table 11.3. Clauses in which the R and the T are both elided at the same time are also rather common ( $382 / 1,058$ tokens $-36 \%$ ). Only rarely, the T is omitted while the R is retained ( $75 / 1,058$ tokens $-7 \%$ ).

Retention of the R most often affects nominal Rs (NOM-R) ( $56 / 75$ tokens - $75 \%$ ); most of them are encoded as R-type obliques ( $39 / 56$ tokens $-70 \%$ ). Retention of pronominal Rs (PRO-R), which are more salient than nominal ones, is much less frequent (19/75 tokens $-25 \%$ ). In light of the data given in Table 11.2, one would expect the 19 pronominal Rs to be encoded as direct objects rather than as R-type obliques. As shown in Table 11.3, however, ten of the 19 pronominal Rs are encoded as R-type obliques (53\%). Again, this
has to do with their marking as benefactive Rs: seven of the ten pronominal Rs are introduced with a benefactive preposition, similar to the 13 pronominal R-type obliques listed in Table 11.2.

An explanation for this preference to delete the R argument and to retain the T argument is given by Polinsky (1998) in her study on asymmetries in double-object constructions (DOC) in English. The author explains the optional deletion of the R arguments "as sensitive to topic", in that it applies "to those elements of [Information Structure ...] that have already been activated and are accessible to speaker and hearer. More topical information is easily backgrounded, which explains why the recipient is more easily deleted" (1998: 416). Hence, Polinsky (1998: 407) presents the following implication: "If the patient of DOC can undergo optional deletion, the recipient of DOC can undergo optional deletion, too".

This observation that the more accessible argument can be deleted also provides an explanation for the preference of Papuan Malay to elide the more salient R argument and to retain the less salient T argument.

The observed tendency to omit the R and/or T arguments has also been noted for western Austronesian languages in general. In these languages, as Himmelmann (2005: 171) points out, "there are few (if any) morphosyntactic constraints on the omission of coreferential arguments in clause sequences. That is, the possibility to omit a coreferential argument is not restricted to subject arguments". This also applies to other eastern Malay varieties, such as Ambon Malay (van Minde 1997: 209), and Manado Malay (Stoel 2005: 133-154). Along similar lines, Mosel (2010) notes for the Oceanic language Teop that "[all] three arguments of ditransitive constructions can be elided in both topical and non-topical positions". These studies, however, do not discuss whether the languages under investigation have a preference for omitting the R or the T arguments in ditransitive constructions, and what the reasons for such a preference might be. An exception is Klamer \& Moro's (2013) study on 'give'-constructions in heritage and baseline Ambon Malay. Noting that elision affects the R but not the T, the authors suggest that these distributional preferences are due to "a difference in the prominence of T and R" (2013: 9).

### 11.2 Causative clauses

Papuan Malay employs three types of causative constructions: syntactic, lexical, and periphrastic causatives.

Generally speaking, causative clauses are constructions which involve two events: "(1) the causing event in which the causer does something, and (2) the caused event in which the causee carries out an action or undergoes a change of condition or state as a result of the causer's action" (Song 2006: 265). Hence, causative constructions are the result of a valency-increasing operation: in addition to the arguments of the cause event, or "non-causative predicate", there is also the "causer" (Comrie 1989: 175). This valencyincreasing operation is possible with intransitive and transitive events.

Cross-linguistically, four major strategies of encoding the notion of causation can be distinguished: lexical, morphological, syntactic, and periphrastic causatives. These constructions differ with respect to the degree of "structural integration" between the causing event, or the "predicate of cause", and the caused event, or the "predicate of effect" (Payne 1997: 159-160). Lexical causatives show a maximal degree of structural integration in that the cause and effect are encoded in a single lexical item. Periphrastic causative constructions, by contrast, show the least degree of structural integration in that the cause and effect are encoded in two separate clauses. According to Kulikov (2001: 888889), however, lexical causatives do not "qualify as causatives sensu stricto" as they do not involve a morphological or syntactic change; neither do periphrastic constructions qualify as "causatives sensu stricto" given their biclausal structure.
Morphological and syntactic causatives differ from lexical and periphrastic causatives in that they integrate the cause with the caused event into a single predication. Hence, a causativized intransitive event yields a transitive causative construction, while a causativized transitive caused event yields a ditransitive construction. The integration of the causer is achieved by demoting the agent of the caused event, the causee. Crosslinguistically, Comrie (1989: 176) notes the following grammatical relation hierarchy for this process: "subject > direct object > indirect object > oblique object"; that is, "the causee occupies the highest (leftmost) position on this hierarchy that is not already filled".

As mentioned, Papuan Malay uses three of the four types of causative constructions: lexical, syntactic, and periphrastic causatives; morphological causatives are unattested. The main topic of this section is syntactic causatives ( $\$ 11.2 .1$ ), since only they qualify as "causatives sensu stricto" (Kulikov 2001: 888-889). Lexical and periphrastic causatives are mentioned only briefly in $\S 11.2 .2$ and $\S 11.2 .3$, respectively. The main points of this section are summarized in §11.2.4.

### 11.2.1 Syntactic causatives

In syntactic causatives, or "compound" causatives (Song 2013: 450), the notion of causation is encoded in a monoclausal construction which consists of two constituents, namely a causative verb, which expresses the notion of cause, and a second constituent that denotes the effect (Kulikov 2001: 887).

In Papuan Malay syntactic causatives, a serial verb construction $V_{1} V_{2}$ encodes the causation: the causative verb $V_{1}$ expresses the cause event and the $V_{2}$ the caused event. Two free verb forms are used as causative verbs: trivalent kasi 'give' and bivalent biking 'make'. In kasi-causatives the $\mathrm{V}_{2}$ can be monovalent or bivalent while in bikingcausatives the $V_{2}$ is always monovalent.

Semantically, causatives with kasi 'give' focus on the outcome of the causation or manipulation. Causatives with biking 'make', by contrast, focus on the manipulation of circumstances that ultimately leads to the caused event or effect. This is shown with the contrastive examples in (47) and (48) both of which are formed with monovalent stative bersi 'be clean'. In (47), kasi bersi 'cause to be clean' stresses the outcome of the washing
process, namely that the clothes are clean. In the elicited example in (48), by contrast, biking bersi 'make clean' focuses on the manipulation itself, which leads to the effect that the clothes are clean.
kasi 'give' versus biking 'make' causatives
(47) malam cuci pakeang kasi bersi jemur
night wash clothes give be.clean dry
'(if you have to do laundry at night time) wash (your clothes), clean (them, and hang them up) to dry' [081011-019-Cv.0009]
(48) malam cuci pakeang biking bersi jemur
night wash clothes make be.clean dry
'(if you have to do laundry at night time) wash (your clothes), clean (them, and hang them up) to dry' [Elicited BR131103.001]

The following sections discuss the syntax and semantics of Papuan Malay syntactic causatives in more detail. The two verbs that qualify as causative verbs are presented in §11.2.1.1, followed by a description of syntactic causatives with the causative verb kasi 'give' in §11.2.1.2, and with biking 'make' in §11.2.1.3.

### 11.2.1.1 Causative verbs

The Papuan Malay verbs which express the notion of cause in syntactic causatives, kasi 'give' and biking 'make', are used synchronically as full transitive verbs, as shown in (49) to (51). Trivalent kasi 'give' exhibits dative alternation, as illustrated with the double-object constructions in (49) and the R-type oblique construction in (50) (see §11.1.3 for more details on dative alternation). The transitive uses of biking 'make' are illustrated in (51).
(49) a, kam kasi sa air ka
ah 2PL give 1sG water or
'ah, you give me water, please' [080919-008-CvNP.0005]
(50) de kasi sratus ribu sama Madga

3sG give one.hundred thousand to Madga
'he gave one hundred thousand (rupiah) to Madga' [081014-003-Cv.0008]
(51) Ika biking papeda

Ika make sagu.porridge
'Ika made sagu porridge' [081006-032-Cv.0071]

### 11.2.1.2 Syntactic causatives with kasi 'give'

As a causative, trivalent kasi 'give', with its short form kas, is used with two types of verbal bases: monovalent ones (§11.2.1.2.1), or bivalent ones (§11.2.1.2.2). Semantically, causative kasi 'give' highlights the outcome of a causation.

### 11.2.1.2.1 Monovalent bases

Cross-linguistically, in causatives with monovalent bases, the agent of the caused event is demoted from its intransitive subject function (S) to the transitive object or patient (P) function, while the incoming causer takes the transitive subject or AGENT (A) function (Comrie 1989: 110-111). This strategy, which corresponds to Comrie's (1989: 176) mentioned causative hierarchy, is also used in Papuan Malay causatives with monovalent bases. This is illustrated with the monoclausal causative constructions in (52) to (59): causatives with monovalent non-agentive bases are presented in (52) to (55) and causatives with monovalent agentive bases in (56) to (59). (Compare also with the biclausal causative constructions in §11.2.3.)

In causatives with monovalent non-agentive bases, the effect expression can be a stative verb such as panjang 'be long' in (52), or a non-agentive dynamic verb such as gugur 'fall (prematurely)' in (54). The resulting $\mathrm{V}_{1} \mathrm{~V}_{2}$ expressions function as transitive predicates.

Causatives with monovalent non-agentive bases
(52) ... mama harus kas panjang kaki mother have.to give long foot
[Addressing someone with a bad knee:] '[you shouldn't fold (your legs) under!,] you ('mother') have to stretch out (your) legs' [080921-004a-CvNP.0069]
(53) ko kasi sembu sa punya ana ini!

2sG give be.healed 1sG poss child d.prox
[Addressing an evil spirit:] 'you heal this child of mine!' [081006-023-CvEx.0031]
(54) perna dia punya pikirang untuk de mo kasi gugur $\varnothing$ ever 3sg have thought for 3sg want give fall(.prematurely) 'once she had the thought that she wanted to abort (the child)' [080917-010-CvEx.0097]
(55) banyak mati di lautang, kas tenggelam $\varnothing$ many die at ocean give sink
[About people in a container who died in the ocean:] 'many died in the (open) ocean, (the murderers) sank (the containers)' [081029-002-Cv.0025]

In causatives with monovalent agentive bases, the effect expression is encoded by a monovalent dynamic verb, as shown in (56) to (59).

Causatives with monovalent agentive bases
(56) sa di bawa, Roni kas duduk sa di atas

1SG at bottom Roni give sit 1SG at top
[A ten-year old boy on a truck-trip:] 'I was down (in the cargo area, but) Roni
enabled me to sit on top (of the cab)' [081022-002-CvNP.0012]
(57) ... tapi dong kasi bangkit dia lagi, kasi hidup dia
but 3pl give be.resurrected 3sG again give live 3sG
[About sorcerers who can resurrect the dead:] '[he's already (dead),] but they resurrect him again, make him live' [081006-022-CvEx.0095]
(58) kam kas kluar pasir dulu!

2PL give go.out sand first
'you remove the sand first!' [080925-002-CvHt.0005]
(59) kam kas kluar Dodo dari dalam meja situ!

2PL give go.out Dodo from inside table L.MED
[About a fearful person hiding under the table:] 'you remove Dodo / enable
Dodo to get out from under the table there!' [081025-009b-Cv.0028]
Cross-linguistically, causative constructions receive different readings, depending on the causee's level of agentivity (Kulikov 2001: 891-893). This also applies to Papuan Malay. When the causee has no control, the causative receives a "manipulative or directive" reading, while it receives an "assistive or cooperative" reading, when the causee has some level of agentivity (2001: 892).

In causatives with monovalent non-agentive bases, as in (52) to (55), the causer controls the event while the causee has no control. Hence, these causatives always receive a directive reading. Likewise, causatives with monovalent agentive bases receive a directive reading when the causee is inanimate, or animate but helpless. This is the case in (57) and (58). When, by contrast, the causee has some level of control, as in (56), the causation is less direct; hence, the causative receives an assistive reading. Sometimes, however, the reading of a causative is ambiguous, as in (59). If the causee Dodo is unconscious out of fear and thereby helpless, the causative receives the directive reading 'remove'. But if Dodo is conscious and can move, the causative receives the assistive reading 'enable to come out'.

### 11.2.1.2.2 Bivalent bases

In causatives with bivalent bases, the cross-linguistically expected operation is for the patient ( P ) of the caused event to retain its P function and for the agent ( A ) of the caused event to be demoted to the indirect object function (Comrie 1989: 176).
Papuan Malay, however, uses a different strategy, in that all the arguments involved shift their functions. That is, the A of the caused event, or causee, is demoted to the P function. In turn, the P of the caused event is moved out of the core into an oblique slot; as an oblique, P is encoded in a prepositional phrase introduced with comitative dengang 'with', with its short form deng (see also §10.2.1). This is shown with the examples in (60) and (61).

In (60), for instance, the original A, or causee, anjing 'dog', is demoted to the P function and juxtaposed to the $V_{1} V_{2}$ construction. Semantically, the causee becomes the theme argument of the causative expression kas makang 'give to eat'. With the P slot being taken, the original P papeda 'sagu porridge' is moved out of the core into an oblique slot.

Causatives with bivalent bases: Demoting the A and P functions
(60) saya kas makang anjing deng papeda

1sG give eat dog with sagu.porridge
'I fed the dogs with papeda' [080919-003-NP.0002]
(61) dia kasi minum kitong dengang kopi air

3sG give drink 1pl with coffee water
'he'll give us coffee and water to drink' [080919-004-NP.0069]
In the attested causatives with bivalent bases, the causees are able to control their own actions. Therefore, kasi 'give' receives an assistive or cooperative reading, as in (60) and (61). Causative with bivalent bases and inanimate, or animate but helpless referents are unattested.

### 11.2.1.3 Syntactic causatives with biking 'make'

As a causative, bivalent biking 'make' is used with monovalent bases. Semantically, this causative type stresses the causer's manipulation of circumstances, which leads to the caused event or effect. That is, biking-causatives are causer-controlled, with the causee having no control. Therefore, causatives with biking 'make' are formed with monovalent non-agentive bases, or with monovalent agentive bases with inanimate or with animate but helpless causees. This is shown in (62) to (67). Overall, though, biking-causatives are rare in the corpus.

The causative in (62), for example, is formed with non-agentive stative pusing 'be dizzy, be confused'. The use of biking 'make' stresses the manipulating behavior of the causer ana~ana 'children' which leads to the effect pusing 'be worried'; the causee mama 'mother' has no control. The elicited examples in (63) and (64) contrast with the corresponding kasi-causatives in (54) and (55). They show that biking-causatives are also formed with monovalent non-agentive dynamic bases, such as gugur 'abort' or tenggelam 'sink', respectively. Again, the manipulation itself is stressed. The base can also be agentive dynamic if the causee is animate but helpless. This is illustrated with the elicited example in (65), which contrasts with the corresponding kasi-causative in (57). The base is agentive dynamic hidup 'live' but the animate causee is helpless and therefore has no control.

Causatives with monovalent non-agentive bases
(62) ana~ana biking pusing mama

RDP~child make be.dizzy mother
'the kids worry (their mother)' (Lit. 'make to be dizzy / confused')
[081014-007-CvEx.0047]
(63) perna dia punya pikirang untuk de mo biking gugur ever 3sG have thought for 3sG want make fall(.prematurely) 'once she had the thought that she wanted to abort (the child)' [Elicited BR131103.002]
(64) banyak mati di lautang, biking tenggelam
many die at ocean make sink
[About people in a container who died in the ocean:] 'many died in the (open) ocean, (the murderers) sank (the containers)' [Elicited BR131103.003]
(65) ... tapi dong biking bangkit dia lagi, biking hidup dia
but 3pl make be.resurrected 3sG again make live 3sG
[About sorcerers who can resurrect the dead:] '[he's already (dead),] but they resurrect him again, make him live' [Elicited BR131103.005]

Causatives with agentive bases are unacceptable. This is due to the fact that bikingcausatives focus on the causer's manipulation of circumstances itself while the causee has no control. This is illustrated with the unacceptable biking-causatives in (66) and (67), which are formed with monovalent dynamic duduk 'sit' and bivalent makang 'eat', respectively. The two elicited examples contrast with the corresponding kasi-causatives in (56) and (60).

Causatives with monovalent and bivalent agentive bases
(66) * sa di bawa, Roni biking duduk sa di atas

1sG at bottom Roni make sit 1sG at top
Intended reading: 'I was down (in the cargo area, but) Roni made me sit on top (of the cab)' [Elicited BR131103.006]

* saya biking makang anjing deng papeda
1sG make eat dog with sagu.porridge

Intended reading: 'I made the dogs eat papeda' [Elicited BR131103.009]

### 11.2.2 Lexical causatives

Generally speaking, lexical causatives "are in a suppletive relation with their non-causative counterparts" (Kulikov 2001: 887). That is, the notion of causation is encoded in the semantics of the causative verb itself and not in an additional morpheme as in syntactic causative constructions.

For Papuan Malay, this suppletive relation is illustrated with the lexical causatives bunu 'kill' and tebang 'fell' in (68) and (70), and their respective non-causative counterparts mati 'die' and jatu 'fall' in (68) and (69), respectively.
(68) de bisa jalang gigit, bunu manusia, sperti ular, de bisa gigit, 3sG be.able walk bite kill human.being similar.to snake 3sG be.able bite orang mati
person die
[About an evil spirit:] 'he/she can go (and) bite (and) kill humans like a snake, he/she can bite (and) someone dies' [081006-022-CvEx.0133]
(69) ... itu yang monyet jatu dari atas D.DIST REL monkey fall from top
'... that's why the monkey fell off from the top (of the banana plant)'
[081109-002-JR.0005]
(70) mo tebang sagu
want fell sago
'(I) want to fell a sago tree' [081014-006-CvPr.0069]

### 11.2.3 Periphrastic causative constructions

Cross-linguistically, periphrastic causative constructions are defined as constructions which involve two predicates: (1) a "matrix predicate" which "contains the notion of causation", the "predicate of cause", and (2) an embedded predicate which "expresses the effect of the causative situation", the "predicate of effect" (Payne 1997: 159-160).

Papuan Malay periphrastic causative constructions are presented in (71) to (74). The matrix verb is kasi 'give' in (71) and (72), and biking 'make' in (73) and (74). Besides, Papuan Malay forms periphrastic causatives with a wide range of speech verbs; they are not further discussed here.
(71) kalo de minta kesembuang, setang kasi de sembu if 3sG ask recovery evil.spirit give 3sG be.healed 'when she asks for recovery, the evil spirit has her healed' [081006-023-CvEx.0082]
(72) ... baru mo biking papeda kasi ana~ana makang and.then want make sagu.porridge give RDP $\sim$ child food
'[they said (they) wanted to catch chickens,] and then (they) wanted to make sagu porridge (and) have the children eat' [081010-001-Cv.0191]
(73) de pu swami biking de sakit hati to?

3sG poss husband make 3sG be.sick liver right?
'her husband made her feel miserable, right?' [081025-006-Cv.0161]
(74) kata itu tu yang biking sa bertahang word D.DIST D.DIST REL make 1 sG hold(.out/back)
'(it was) those very words that made me hold out' [081115-001a-Cv.0234]

### 11.2.4 Summary

Papuan Malay employs three different strategies to express the notion of causation: syntactic, periphrastic, and lexical causatives. The description of causation focused on the syntax and semantics of syntactic causatives. Lexical and periphrastic causatives were discussed only briefly.
Papuan Malay syntactic causatives are monoclausal $V_{1} V_{2}$ constructions in which a causative verb $\mathrm{V}_{1}$, namely trivalent kasi 'give' or bivalent biking 'make', encodes the notion of cause while the $V_{2}$ denotes the notion of effect. Syntactic causatives have monovalent or bivalent bases. In causatives with monovalent bases, the original A is demoted from its intransitive $S$ function to the transitive $P$ function, while the incoming causer takes the transitive A function. In causatives with bivalent bases, the original A is demoted to the P function while the original P is moved out of the core into an oblique slot. Hence, in causatives with monovalent bases the grammatical relations correspond to those established by Comrie (1989: 176), whereas in causatives with bivalent bases they do not correspond.

Semantically, causatives with kasi 'give' focus on the outcome of the manipulation, whereas causatives with biking 'make' focus on the manipulation of the circumstances itself, which results in the effect. Both causative verbs typically generate causer-controlled causatives, in which the causer controls the event while the causee has no agentivity. This applies especially to biking-causatives which stress the manipulation itself. Causatives with kasi 'give', however, can also receive an assistive, rather than the typical directive, reading. This applies to agentive monovalent or bivalent bases when the causee has some level of agentivity.

Most causative constructions in the corpus are formed with kasi 'give' while causatives with biking 'make' are much fewer. Table 11.4 lists the type and token frequencies for both causative verbs in the corpus.

Table 11.4: Frequencies of causative constructions

|  | kasi 'give' |  |  | biking 'make' |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Base | Type \# / $\%$ |  | Token \# / $\%$ |  | Type \# / $\%$ |  | Token \# / \% |  |
| v.Mo(st) | 24 | 30 | 36 | 8 | 16 | 100 | 25 | 100 |
| v.Mo(DY) | 18 | 22 | 115 | 24 | - | - | - | - |
| v.Bi | 39 | 48 | 327 | 68 | - | - | - | - |
| Total | 81 | 100 | 478 | 100 | 16 | 100 | 25 | 100 |

In the corpus, kasi 'give' is used most often with bivalent bases. Less often, kasi 'give' occurs with monovalent bases, which can be agentive or non-agentive. Most monovalent bases are dynamic, whereas stative bases, which are mostly non-agentive, are much rarer. Most monovalent dynamic bases, in turn, are agentive, while non-agentive dynamic bases are rare. By contrast, biking 'make' always takes monovalent bases which are typically stative and non-agentive. Causatives with monovalent non-agentive dynamic bases are also possible, although they are unattested in the corpus. Causatives with monovalent agentive bases are only possible if the causee is inanimate or animate but helpless. Table 11.5 shows these distributional patterns.

Table 11.5: Properties of causative constructions

| Base | Agentivity | kasi 'give' | biking 'make' |
| :--- | :--- | :--- | :--- |
| V.MO(ST) | NON-AGT | Less often | Most often |
| V.MO(DY) | NON-AGT | Rarely | Possible although unattested |
| V.MO(DY) | AGT | Less often | Possible with inanimate or with animate but <br> helpless causees although unattested |
| V.BI | AGT | Most often | Unacceptable |

### 11.3 Reciprocal clauses

Papuan Malay employs two different strategies to express reciprocal relations: a syntactic strategy with the dedicated reciprocity marker baku 'recp', and a lexical strategy.

Generally speaking, reciprocal clauses describe situations "in which two participants equally act upon each other" (Payne 1997: 181), with the two participants performing "two identical semantic roles" (Nedjalkov 2007: 6). That is, in reciprocal clauses "two subevents are shown as one event or situation" by presenting two predications as one (2007: 7).

Cross-linguistically, four major strategies of encoding the notion of reciprocity structurally are distinguished, according to Nedjalkov (2007: 9-16): syntactic, morphological, clitic, and lexical constructions. ${ }^{5}$ Syntactic reciprocals are formed with reciprocal pronouns or reciprocal adverbs. Morphological reciprocals are formed by means of affixation, reduplication, compounding, or periphrastic constructions involving an auxiliary.
Papuan Malay syntactic reciprocals are discussed in §11.3.1, and lexical reciprocals are briefly mentioned in §11.3.2. Morphological and clitic reciprocal constructions are unattested.

[^170]
### 11.3.1 Syntactic reciprocals

Papuan Malay forms syntactic reciprocals with the dedicated reciprocity marker baku 'recP'. A typical example is given in (75).

Papuan Malay reciprocity marker baku 'RECP'
(75) kitong dua baku melawang gara-gara ikang

1PL two RECP oppose because fish
'the two of us are fighting each other because of the fish' [081109-011-JR.0008]
The corpus contains 101 reciprocal clauses formed with 42 different verbs. The vast majority are bivalent: 37 verbs ( $88 \%$ ) accounting for 95 tokens ( $94 \%$ ). One reciprocal clause is formed with trivalent ceritra 'tell'. The remaining four verbs are monovalent dynamic (accounting for five tokens) (for details see §11.3.1.1).

Structurally, Papuan Malay uses two different types of syntactic reciprocals: (1) a "simple reciprocal construction" (§11.3.1.1), and (2) a "discontinuous construction" (§11.3.1.2), using Nedjalkov's (2007: 27-30) terminology. In simple reciprocals baku 'recp' can receive a reciprocal or a sociative reading, while in discontinuous reciprocals the marker always receives a reciprocal reading.

Cross-linguistically, the reciprocity marker is classified in different ways; in some languages it is classified as a pronoun or an adverb, in others as an affix or an auxiliary (see Nedjalkov's 2007: 9-16 above-mentioned distinction of syntactic and morphological reciprocals). As for the Papuan Malay reciprocity marker, this grammar analyzes baku 'RECP' as an independent word and not as an affix, without, however, further specifying its morphosyntactic status at this point. This analysis as a separate word is based on the fact that baku 'recp' can be reduplicated, as shown in (76). Affixes, by contrast, are not reduplicated in Papuan Malay, as discussed in §4.1.

> Reduplication of baku 'RECP'
(76) itu sampe tong baku~baku tawar ini deng doseng D.DIST until 1PL RDP~RECP bargain D.PROX with lecturer
'it got to the point that we and the lecturer were arguing constantly with each other' [080917-010-CvEx.0177]

This analysis of baku 'recp' as an independent word is also applied by Donohue (2003: 24), while other researchers, such as van Velzen (1995: 324), treat the reciprocity marker as a prefix. For most of the other eastern Malay varieties, the reciprocity marker is also treated as a prefix, namely for Ambon Malay (van Minde 1997: 101-105), Banda Malay (Paauw 2009: 250), Kupang Malay (Steinhauer 1983: 46), Manado Malay (Stoel 2005: 23), and North Moluccan / Ternate Malay (Taylor 1983: 19; Voorhoeve 1983: 4; Litamahuputty 2012: 130-133).

### 11.3.1.1 Simple reciprocal constructions

Most reciprocal constructions in the corpus (86/101-85\%) are "simple reciprocals". In such a construction, both participants are encoded as the clausal subject, which is called the "reciprocator", following Haspelmath's (2007: 2092) terminology. ${ }^{6}$ Hence, the typical structure for simple reciprocals is "reciprocator baku v", as shown in (77) to (85). The reciprocator can be a coordinate noun phrase such as nona~nona ana laki~laki 'the girls (and) boys' in (77), or a plural personal pronoun such as kamu '2pl' in (78).

In "reciprocator baku v" constructions, baku 'recp' can receive a reciprocal reading in the sense of "reciprocator v each other", or a sociative reading in the sense of "RECIPROCATOR V together".
"RECIPROCATOR baku v" constructions with a reciprocal reading are characterized by a reduction in syntactic valency, which corresponds to the reduction in semantic valency: with both participants being encoded by the clausal subject, the object that typically encodes a second participant is deleted. This is shown in (77) to (82); reciprocals with a sociative reading are given in (83) to (85).

Typically, the verbal base in a "reciprocator baku v" construction is bivalent (80/86 reciprocals - $93 \%$ ); the corpus also contains one reciprocal construction formed with trivalent ceritra 'tell'. Examples are given in (77) to (79). These examples show that the bases can have reciprocal/bidirectional semantics such as cium 'kiss' in (77), or nonreciprocal/unidirectional semantics such as benci 'hate' in (78). (Reciprocals with monovalent bases are presented in (80) and (81).)
"RECIPROCATOR baku v" constructions with bivalent verbs: Reciprocal reading
(77) nona~nona, ana laki~laki baku pacar di pinggir skola ... baku cium di RDP~girl child RDP~husband RECP date at edge school RECP kiss at pinggir~pinggir
RDP~edge
'the girls (and) boys are courting each other at the edge of the school (grounds), ... (they) are kissing each other at the edges (of the school grounds)'
[081115-001a-Cv.0017]
(78) kamu tida bole baku benci, tida bole baku mara

2Pl neg may recp hate neg may recp feel.angry(.about)
'you must not hate each other, (you) must not feel angry with each other'
[081115-001a-Cv.0271]
(79) Markus deng Yan dong baku ceritra

Markus with Yan 3sG Recp tell
'they Markus and Yan were talking to each other' ${ }^{[E l i c i t e d ~ B R 130601.001] ~}{ }^{7}$

[^171]"RECIPROCATOR baku v" constructions with monovalent dynamic bases are also possible, but rare. Of the attested 86 simple reciprocals, only five are formed with monovalent verbs ( $6 \%$ ), namely with bertengkar 'quarrel' ( 1 token), saing 'compete' ( 1 token), tampil 'perform' ( 2 tokens), and tanding 'compete' ( 1 token) (none of the four verbs occurs in a discontinuous reciprocal construction). Examples are given for saing 'compete' in (80) and for tanding 'compete' in (81).
"reciprocator baku v" constructions with monovalent dynamic verbs:
Reciprocal reading
(80) ade-kaka baku saing
ySb-oSb
siblings RECP compete
'the siblings were competing with each other' [080919-006-CvNP.0001]
(81) dong ada brapa orang itu baku tanding rekam

3PL exist several person D.DIST RECP compete record
'they were (indeed) several people (who) were competing with each other to record (their songs)' [080923-016-CvNP.0006]

Most of the verbs used in reciprocal clauses in the corpus also occur in nonreciprocal transitive clauses ( $38 / 42$ verbs). This is illustrated with gendong 'hold' in (82). The remaining four verbs are only used in reciprocal constructions: bivalent ancam 'threaten' ( 1 token) and cium 'kiss' ( 2 tokens), and monovalent bertengkar 'quarrel' ( 1 token) and tanding 'compete' ( 1 token). Whether these verbs can also occur in nonreciprocal transitive clauses requires further investigation.

Reciprocal and nonreciprocal uses of verbs
(82) Nofela gendong bapa ato bapa yang gendong Nofela deng Siduas ka... Nofela hold father or father rel hold Nofela with Siduas or kitong baku gendong to?
1pL RECP hold right?
[During a phone conversation between a father and his children:] 'you
('Nofela') will hold me ('father') or I ('father') will hold you ('Nofela') and
Siduas ... we'll hold each other, right?' [080922-001a-CvPh.0687/0695]
In the simple reciprocals presented so far, baku 'recp' denotes reciprocal relations. Alternatively, though, "reciprocator baku v" clauses can signal sociative relations in the sense of "reciprocator v together".

Generally speaking, the "sociative meaning (also called associative, collective, cooperative, etc.) suggests that an action is performed jointly and simultaneously by a group of people (at least two) named by the subject [...] and engaged in the same activity", as Nedjalkov (2007: 33) notes in his typology of reciprocal constructions. Reciprocals with a sociative reading are characterized by valency retention, in that "the number of the participants increases without changing the syntactic structure" (2007: 22).

This observation also applies to "reciprocator baku v" constructions, as shown in (83) and (85). That is, reciprocal clauses with a sociative reading are characterized by valency retention, although the number of participants increases.
"RECIPROCATOR baku v" constructions: Sociative reading
(83) baru kitong mulay baku ojek
and.then 1PL start RECP take.motorbike.taxi
'and then we started taking motorbike taxis together' [081002-001-CvNP.0004]
(84) kitong mo baku bagi swara bagemana?

1pl want recp divide voice how
[About upcoming local elections:] 'how do we want to share the votes
together?' [080919-001-Cv.0165]
(85) Aksamina deng Klara dong dua baku rampas bola

Aksamina with Klara 3pl two recp seize ball
'both Aksamina and Klara tackled the ball together' [081006-014-Cv.0007]
Overall, the corpus contains only few "reciprocator baku v" constructions with a sociative reading. Further research is needed to determine whether there are any formal criteria that allow "RECIPROCATOR baku v" constructions with a reciprocal reading to be distinguished from those with a sociative reading.

### 11.3.1.2 Discontinuous reciprocal constructions

In discontinuous reciprocal constructions, cross-linguistically, only one of the participants is expressed as the subject, while the second participant "is a comitative phrase", as Nedjalkov (2007: 29) points out. Given that the second participant is not encoded as the direct object but as a prepositional phrase, discontinuous reciprocals result in a reduction in syntactic valency. Hence, pragmatically and syntactically, the second, non-subject participant is "a constituent of lower [...] status" (2007: 28); semantically, however, it is of the same status as the subject reciprocator.

These observations also apply to Papuan Malay. In discontinuous reciprocal constructions, the second participant, or "reciprocee", adopting Haspelmath's (2007c: 2092) terminology, is encoded by a prepositional phrase. This prepositional phrase is introduced with the comitative preposition dengang 'with', with its short form deng (see also §10.2.1). ${ }^{8}$ Hence, the structure for discontinuous reciprocals is "reciprocator baku v dengang reciprocee".

In the corpus, however, discontinuous constructions occur much less often than simple ones; only 15 of the 101 reciprocals are discontinuous ( $15 \%$ ). All of them designate reciprocal relations in the sense of "reciprocator v with reciprocee", literally "reciproCATOR v each other with reciprocee". Unlike the simple reciprocals in §11.3.1.1, discontinuous constructions do not express sociative relations.

[^172]In most of the discontinuous reciprocals ( $10 / 15-67 \%$ ), the reciprocee is mentioned overtly, as in (86) to (88). (For discontinuous constructions with omitted reciprocee see the examples in (89) and (90).)
"reciprocator baku v deng (ang) reciprocee" constructions
(86) ... ko laki~laki bisa baku dapat deng bapa 2SG RDP $\sim h u s b a n d$ be.able RECP get with father
'[I thought,] you, a man, can meet with me ('father')' (Lit. 'can meet each other with father') [080922-001a-CvPh.0234]
(87) sa tida perna baku mara deng orang laing 1sG NEG ever RECP feel.angry(.about) with person be.different
'I never get angry with other people' (Lit. 'feel angry about each other with another person') [081110-008-CvNP.0067]
(88) ... de baku tabrak deng Sarles

3sG Recp hit.against with Sarles
'[right then Sarles was standing by the door,] he/she (the evil spirit) collided with Sarles’ (Lit. 'hit against each other with Sarles') [081025-009b-Cv.0026]

Given the lower pragmatic status of the reciprocee, it can also remain "unspecified" (Nedjalkov 2007: 42), as in (89) and (90). This applies to five of the 15 discontinuous constructions in the corpus ( $33 \%$ ). That is, if the second participant is understood from the context, or considered irrelevant, it can be omitted together with its preposition. In (89), the omitted reciprocee orang 'person' was mentioned earlier. In (90), the omitted reciprocee 'community' is understood from the context, as the topic of the narrative is communal life in the village.
"reciprocator baku v Ø" constructions
(89) saya kalo macang baku pukul Ø rasa takut

1sG if variety Recp hit feel feel.afraid(.of)
'(as for) me, when (I) kind of fight (with another person), I feel afraid' (Lit. 'hit each other') [081110-008-CvNP.0066]
(90) ... dia dapat babi, de biasa baku bagi Ø

3sG get pig 3sg be.usual recp divide
[How to be a good villager:] '[when he catches fish,] (when) he catches a pig, he usually shares (it with the community)' (Lit. 'divide each other')
[080919-004-NP.0063]

### 11.3.2 Lexical reciprocals

Lexical reciprocals are, generally speaking, "words with an inherent reciprocal meaning" (Nedjalkov 2007: 14). Therefore, they do not need to be marked with a reciprocity marker.

Papuan Malay lexical reciprocal are presented in (91) to (93). All three examples denote, what Kemmer (1993: 102) calls, "naturally reciprocal events", such as ketemu 'meet' in (91), nika 'marry' in (92), or cocok 'be suitable' in (93).
(91) sa ketemu de di kampus

1 sg meet 3 sG at campus
'I met him on the (university) campus' [080922-003-Cv.0102]
(92) dorang dua nika

3pl two marry.officially
'the two of them married' [081110-005-CvPr.0095]
(93) kam dua cocok

2pl two be.suitable
'the two of you match' [080922-004-Cv.0033]

### 11.3.3 Summary

In Papuan Malay, the dedicated reciprocity marker baku 'RECP' signals reciprocity. In reciprocity clauses two predications are presented with the two subjects of each predication equally acting upon each other. The present description focused on syntactic reciprocal constructions; lexical reciprocals were mentioned only briefly.

Two types of reciprocal constructions are attested, simple and discontinuous ones. In simple reciprocals, both participants are encoded by the clausal subject. The base is most often a bivalent verb, although reciprocals with monovalent verbs are also attested. Usually, these clauses are the result of a valency-reducing operation and receive the reciprocal reading "reciprocator v each other". Alternatively, these constructions can receive a sociative reading in which case the reciprocal clause is characterized by valency retention. Further investigation is needed to determine whether there are formal criteria to distinguish the reciprocal from the sociative readings. The basic scheme for simple reciprocals is given in (94).

Scheme for simple reciprocals

```
reciprocator baku V
```

In discontinuous reciprocals, one participant is encoded by the clausal subject while the second one, the reciprocee, is expressed in a prepositional phrase introduced with comitative dengang 'with'. This type of reciprocal also results from a valency-reducing operation and receives the reading "reciprocator v with reciprocee". The second participant can also be omitted if it is understood from the context. The basic scheme for discontinuous reciprocals is given in (95).

Scheme for discontinuous reciprocals

[^173]
### 11.4 Existential clauses

In Papuan Malay, existential clauses are formed with the existential verb ada 'exist'. Structurally, two types of existential clauses can be distinguished: (1) intransitive clauses with one core argument and (2) transitive clauses with two core arguments.

In one-argument clauses, ada 'exist' precedes or follows the theme expression depending on the theme's definiteness. This clause type asserts the existence of an entity, expresses its availability, or, with definite themes, denotes possession. In two-argument clauses, ada 'links' the subject with the direct object. This clause type signals possession of an indefinite possessum. One-argument clauses are described in $\S 11.4 .1$ and twoargument clauses in §11.4.2; §11.4.3 summarizes the main points of this section. (Negation of existential clauses is discussed in §13.1.1.2.)

### 11.4.1 One-argument existential clauses

In one-argument existential clauses, ada 'exist' precedes or follows the subject, or theme expression, such that "S ada" or "ada S". These differences in word order serve to distinguish nonidentifiable themes from identifiable ones, as shown with the near contrastive examples in (96) and (97). When the theme is pragmatically indefinite or nonidentifiable, ada 'exist' precedes it, such that "ada S", as in (96). When the theme is definite or identifiable, ada 'exist' follows it, such that "S ada", as in (97).

One-argument existential clauses: "ada S" versus "S ada" word order
(96) ke mari, ada nasi
to hither exist cooked.rice
'(come) here, there's cooked rice' [081006-035-CvEx.0052]
(97) nasi ada itu, timba suda!
cooked.rice exist D.DIST spoon already
'the cooked rice is there, just spoon (it)!' [081110-002-Cv.0051]
In existential clauses with indefinite or nonidentifiable themes, fronted ada 'exist' has two functions, as shown in (98) and (99). One is to convey the existence of an entity, such that "a theme exists", as in (98), where ada 'exist' signals the existence of babi 'pig'. A second function is to signal availability in the sense of "a тHEME is available", as in (99), where ada 'exist' asserts the availability of kuskus 'cuscus' and other game; see also the example in (96).
"ada S" word order: Existence or availability of an indefinite/nonidentifiable theme
(98) ada babi di situ
exist pig at l.MED
'there is a pig there' [081006-023-CvEx.0004]
(99) maytua liat, wa, kantong itu fol, ada kuskus, ada tikus-tana, wife see wow! bag D.DIsT be.full exist cuscus exist spiny.bandicoot ada kepiting e, ketang, ada ikang exist crab uh crab exist fish
[After a successful hunt:] '(my) wife saw, "wow!, that bag is full", there was cuscus, there were bandicoots, there were crabs, uh, crabs, there were fish' [080919-004-NP.0031]

In existential clauses with definite or identifiable themes, postposed ada 'exist' also has two functions, as demonstrated in (100) and (101). One function is to assert the existence of an already established theme, such that "the THEME exists". This is the case in the elicited example in (100), which contrasts with the existential clause in (98). This reading also applies to the examples in (101) and in (97).
"S ada" word order: Existence of a definite/identifiable theme
babi ada disitu
pig exist at L.MED
'the pig is there' [Elicited MY131105.004]
(101) saya ada

1SG exist
[About a motorbike accident:] 'I am alive' [081015-005-NP.0024]
A second function of postposed $a d a$ 'exist' is to designate possession of a definite or identifiable possessum, as shown in (102) and (103). To convey the notion of possession the theme is expressed in an adnominal possessive construction, such that "POSSESSIVE nP EXISTs" or "possessor has the possessum". The clause in (102) asserts the known existence of bapa pu motor 'father's motorbike'. In this adnominal possessive construction, the possessor noun phrase bapa 'father' modifies the identifiable possessum noun phrase motor 'motorbike'; both constituents are linked with the possessive marker $p u$ 'poss'. The same applies to the clause in (103) which signals possession of the definite possessum noun phrase dana 'funds'. (Adnominal possessive relations are discussed in detail in Chapter 9. Possession of an indefinite possessum is expressed with a twoargument existential clause or with a nominal clause, as described in $\S 11.4 .2$ and $\S 12.2$, respectively.)
"S ada" word order: Possession of a definite/identifiable theme
(102) bapa pu motor $a d a$
father poss motorbike exist
[Reply to a question:] 'father had a motorbike' (Lit. 'father's motorbike exists') [080919-002-Cv.0012]
(103) kalo sa pu dana suda ada brarti sa undang...
if 1sG poss fund already exist mean 1sG invite
[About a planned meeting:] 'if I already had the funds, that means, I would invite ...' (Lit. 'my funds already exist') [081010-001-Cv.0131]

If the theme can be inferred from the context it can also be omitted as in (104). In this example, the omitted theme is bagiang dana 'funding department'. Having been presented in the previous clause, it is now omitted, which leaves ada 'exist' as the sole constituent of the existential clause.

Omitted theme expression
Ø ada, de punya dana sendiri
exist 3sg have fund be.alone
'(the funding department) exists, it has its own funding' [081010-001-Cv.0174]
Definite or identifiable existential clauses also co-occur with prepositional phrases, such as the locational phrase di situ 'there' in (105). This clause can be analyzed in two ways. One analysis is that of an existential clause with a locational adjunct which gives additional information about the theme's current location. This analysis is substantiated by the contrastive example in (106), in which situ 'L.MED' is fronted to the clause-initial position. This possibility of fronting the prepositional phrase is typical for adjuncts. In (106) the fronting serves to emphasize the location (concerning the rather common elision of locative di 'at', see §10.1.5). An alternative analysis of (105) is that of a prepositional predicate clause with progressive reading. This analysis is substantiated with the (near) contrastive examples in (107) to (109). The example in (107) presents a nonverbal clause in which di situ 'there' serves as the predicate. The example in (108) shows how a prepositional predicate clause can undergo aspectual modification, as for instance with the prospective adverb masi 'still'. The example in (109) shows the progressive-marking function of existential ada 'exist' in verbal clauses (see also §5.4.1). When presented with both analyses, however, one of the consultants rejected the first analysis. Instead this consultant maintained that ada 'exist' in (105) has the same function as masi 'still' in (108), namely to modify the prepositional predicate di situ 'there'. The two analyses and the reading chosen by one of the consultants for the clauses in (105) require further investigation.

Alternative readings of clauses with definite/identifiable themes and postposed prepositional phrases
(105) de ada di situ, Martina ada di situ

3sG exist at L.MED Martina exist at L.MED
'she was (being) there, Martina was (being) there' [081109-001-Cv.0087]
(106) ... pace de tulis di kertas, suda, situ de ada, de su biking daftar man 3sG write at paper already L.MED 3sG exist 3sG already make list
[Enrolling for a sports team:] '[Herman gave his name,] the man wrote (it) on a paper, that's it, there it was!, he (the man) had already made a list' [081023-001-Cv.0001]
(107) de di situ

3sG at L.MED
'he (was) there' [080922-010a-CvNF.0256]
(108) de masi di situ

3sG still at L.med
'he (was) still there' [Elicited MY131105.002]
(109) de ada tidor di situ

3sG exist sleep at L.med
'he is sleeping there' [Elicited MY131105.003]

### 11.4.2 Two-argument existential clauses

In two-argument existential clauses, ada 'exist' links both core arguments. This type of existential clause expresses possession of an indefinite possessum. As shown in (110) and (111), the possessor noun phrase takes the subject slot and the possessum noun phrase takes the direct object slot, such that "pOSSESSOR EXISTS POSSESSUM" or "pOSSESSOR has a possessum". In (110) ada 'exist' links the possessor sa '1sG' with the possessum ana 'child' which gives the possessive reading 'I have children'. The possessum can be encoded by a bare noun as in (110), or by a noun phrase such as dia punya jing 'her genies' in (111). (Alternatively, possession of an indefinite possessum can be expressed with a nominal predicate; for details see $\S 12.2$. Possession of a definite possessum is encoded by an adnominal possessive construction; for details see Chapter 9, and also §11.4.1.)
(110) sa ada ana, jadi sa kasi untuk sa pu sodara 1sG exist child so 1sG give for 1sG poss sibling
'I have children, so I gave (one) to my relative' [081006-024-CvEx.0010]
(111) prempuang iblis itu ada dia punya jing
woman devil D.DIST exist 3sg poss genie
[About evil spirits taking on the form of women:] 'that woman spirit has her (own) genies' [081006-022-CvEx.0053]

Cross-linguistically, Stassen (2013b) identifies five major types of predicate possession: Have-Possessive, Oblique Possessive, Genitive Possessive, Topic Possessive, and

Conjunctional Possessive. In terms of this classification, the existential possessive constructions in (110) and (111) are best explained as Topic Possessives. ${ }^{9}$ According to Stassen (2009: 219),
[in] a standard Topic Possessive, the possessee is the subject of the be-verb. [...] The possessor is constructed as a sentential topic and may or may not be marked as such, for example by sentence-initial position [...]

Following this analysis, an alternative translation for the possessive construction $s a$ ada ana 'I have children' in (110) would be: '(as for) me, children exist'.

### 11.4.3 Summary

In Papuan Malay, existential clauses are formed with the existential verb ada 'exist'. Syntactically, two clause types can be distinguished: intransitive clauses with one core argument, and transitive clauses with two core arguments. Table 11.6 gives an overview of the different constructions and their functions, with one-argument clauses given in (I) and two-argument clauses in (II).

In one-argument clauses, $a d a$ 'exist' precedes the theme expression when this is pragmatically indefinite or nonidentifiable, as in (I.A). This construction conveys the existence or availability of an entity. When the theme is definite or identifiable, ada 'exist' follows it, as in (I.A). This construction asserts the existence of an already established theme or denotes possession of a definite/identifiable possessum. In two-argument clauses, ada
${ }^{9}$ As for the remaining four types of possessive constructions, the data in the corpus indicates the following: (1) the Have-Possessive is formed with the ditransitive verb punya 'have', as in (1) in $\S 9.1$ (p. 426), and the Genitive Possessive is used to encode possessive relations in which the possessum has a definite reading, as in (102) and (103) in $\S 11.4 .1$ (p. 497) (see also Chapter 9). The Oblique and Conjunctional Possessives are unattested.

Table 11.6: Overview of existential clause constructions

| I. One-argument existential clauses |  |
| :---: | :---: |
| A. ada 'exist' precedes an indefinite/nonidentifiable theme |  |
| ada theme 'a theme exists' | Existence |
| 'a THEME is available' | Availability |
| B. ada 'exist' follows a definite/identifiable theme |  |
| theme ada 'the theme exists' | Existence |
| 'pOSSESSOR has the possessum' | Possession |
| II. Two-argument existential clauses |  |
| Possession of an indefinite possessum |  |
| subject ada object 'possessor has a possessum' |  |

'exist' links the subject and direct object arguments. This type of existential clause indicates possession of an indefinite possessum, as in (II).

### 11.5 Comparative clauses

Papuan Malay employs two structurally distinct types of comparative constructions: degree-marking clauses as shown in the elicited example in (112), and identity-marking clauses as illustrated in (113).

Generally speaking, comparative clauses with gradable predicates involve "two participants being compared, and the property in terms of which they are compared" (Dixon 2008: 788). The two participants being compared are the comparee, that is, the object of comparison, and the standard of comparison, in Dixon's (2008) terminology. When the standard is expressed in a prepositional phrase, the preposition serves as the MARK of the comparison. The property attributed to the comparee and standard is the parameter of comparison. The parameter is marked with an index of comparison which signals the "ordering relation" between the comparee and the standard "to the degree or amount to which they possess some property" (Kennedy 2006: 690-691).

Degree-marking and identity-marking comparative clauses
(112) COMPAREE INDEX PARAMETER MARK STANDARD

| dia | lebi | tinggi | dari |
| :--- | :--- | :--- | :--- |
| 3saya |  |  |  |
| 3sG | more | be.high | from |

'he/she is taller than me' (Lit. 'be more tall from me') [Elicited BR111011.002]
(113) COMPAREE PARAMETER INDEX MARK STANDARD
de sombong sama deng ko
3sG be.arrogant be.same with 2sG
'she'll be as arrogant as you (are)' (Lit. 'be arrogant same with you')
[081006-005-Cv.0002]
Papuan Malay degree-marking clauses, expressing the notions of superiority, as in the elicited example in (112), inferiority, or superlative, are discussed in $\S 11.5$.1. Identitymarking clauses, signaling similarity, as in (113), or dissimilarity, are described in §11.5.2. Both clause types differ in terms of their word order. In degree-marking clauses the parameter follows the index, while in identity-marking clauses the parameter precedes the index or is omitted.

### 11.5.1 Degree-marking comparative clauses

Degree-marking comparative clauses convey the notions of superiority, inferiority, and superlative in the sense of "less than", "more than" and "most", respectively, such that "comparee is more/less/most parameter (than standard)". In this type of comparative clause, the parameter follows the index, as illustrated in the elicited superiority clause
in (112). The following constituents serve as index: the grading adverb lebi 'more' signals superiority while paling 'most' marks superlative; the bivalent verb kurang 'lack' marks inferiority. The standard can be stated overtly, as in (114) and (115), or be omitted as in (116) to (119).

In clauses with an overt standard, the standard is expressed in a prepositional phrase which is introduced with the elative preposition dari 'from', as illustrated in (114) and in the elicited example in (115). This preposition serves as the mark of the comparison. In the corpus, however, degree-marking clauses with an overt standard are rare. The corpus contains only two superiority clauses, one of which is given in (114). Inferiority clauses with an overt standard are also possible, as shown with the elicited example in (115). Superlative clauses with an overt standard are unattested.

Superiority and inferiority clauses with overt standard
di klas itu dia lebi besar dari smua ana~ana di dalam at class D.DIST 3sG more be.big from all RDP~child at inside
'in that class he's bigger than all the (other) kids in it' [081109-003-JR.0001] ${ }^{10}$

```
saya kurang tinggi dari dia
1SG lack be.high from 3SG
'I am shorter than him/her' (Lit. 'lack being tall') [Elicited BR111011.001]
```

Most often, the standard is elided in degree-marking clauses, as it is usually known from the discourse, as in the examples in (116) to (119). The superiority clause in (116) is part of a conversation about a village mayors' meeting which had been delayed several times. The speaker criticizes the fact that the mayors accepted this delay in spite of the fact that they had more authority than the elided standard 'those who caused the delay'. Likewise, in (117) to (119) the standard of comparison is known from the preceding discourse. Besides, the example in (119) shows that a superlative comparison can be reinforced with the degree adverb skali 'very'.

Degree-marking clauses with omitted standard
(116) kam punya fungsi wewenang lebi besar $\varnothing$

2pl POSS function authority more be.big
[About a mayors' meeting:] 'your function (and) authority is bigger (than that of those who caused the delay)' [081008-003-Cv.0056]
(117) ... karna itu kurang bagus $\varnothing$ because D.DIST lack be.good
'... because those (old ways) are less good (than our new ways)' (Lit. 'lack being good') [080923-013-CvEx.0010]

[^174](118) puri tu paling besar $\varnothing$
anchovy-like.fish D.DIST most be.big
'that anchovy-like fish is the biggest (among the larger pile of fish)'
[080927-003-Cv.0002]
(119) Aris paling tinggi skali $\varnothing$

Aris most be.high very
'Aris is the very tallest (among the two of you)' [080922-001b-CvPh.0026]
In the corpus, inferiority clauses formed with kurang 'lack' occur much less often than superiority clauses with lebi 'more'. Instead of stating that the comparee is inferior to the standard in terms of a specific quality, as in the elicited example in (115), repeated as (120), speakers prefer to use a superiority clause which asserts that the comparee is superior to the standard, as in the elicited example in (112), repeated as (121).

Inferiority versus superiority clauses
(120) saya kurang tinggi dari dia

1sG lack be.high from 3sG
'I am shorter than him/her' (Lit. 'lack being tall') [Elicited BR111011.001]
(121) dia lebi tinggi dari saya

3sg more be.high from 1sg
'he/she is taller than I am' [Elicited BR111011.002]
Alternatively, the attested inferiority clauses could be interpreted as instances of mitigation used for politeness. This mitigating function is also illustrated with the inferiority clauses in (122) and (123): the speakers assert that the respective referents possess less of the positive qualities of being ajar 'taught, educated' or hati~hati 'careful', instead of stating that they are 'impolite' or 'careless'.

Inferiority clauses: Mitigation function
(122) Klara kurang ajar

Klara lack teach
'Klara was impolite’ (Lit. 'lack being educated’) [081025-009a-Cv.0045]
(123) itu karna kurang hati~hati
D.DIST because lack RDP~liver
'that (happened) because (I) was careless' (Lit. 'lack being careful')
[081011-017-Cv.0009]
For the most part, mitigating inferiority constructions are fixed expressions, such as the kurang 'lack' constructions presented in (117), (122) and (123).
Superlative constructions have the additional function of expressing "high degrees of parameter", as illustrated in (124) and (125). In (124), the superlative construction
paling emosi 'feel most angry (about)' conveys that the speaker was 'very very angry'. Likewise in (125), the superlative construction signals "high degrees of parameter". The superlative clauses in (124) and (125) do not involve a comparison, unlike the superlative constructions in (118) and (119).

Superlative clauses: 'High degrees of parameter'
(124) paling emosi
most feel.angry(.about)
'(I) felt very very angry' (Lit. 'most angry') [081025-009a-Cv.0154]
(125) de paling takut

3sG most feel.afraid(.of)
'he felt very very afraid' (Lit. 'feel most afraid') [081115-001a-Cv.0060]
In summary, the scheme for degree-marking comparative constructions in Papuan Malay is "Comparee - index - parameter (- mark - standard)".

### 11.5.2 Identity-marking comparative clauses

Identity-marking comparative clauses express similarity or dissimilarity between a comparee and a standard, in the sense of "same as" or "different from", respectively. In this type of comparative clause, the index follows the parameter, as illustrated with the similarity clause in (113), repeated as (126).

Identity-marking comparative clauses
COMPAREE PARAMETER INDEX MARK STANDARD
de sombong sama deng ko
3SG be.arrogant be.same with 2SG
'she'll be as arrogant as you (are)' [081006-005-Cv.0002]
Similarity comparisons are presented in (127) to (132) and dissimilarity comparisons in (133) to (136).

In similarity clauses, the index is the stative verb sama 'be same', and the mark is the comitative preposition dengang 'with', with its short form deng. The standard can be encoded in two ways. One option is to express it in a prepositional phrase, as in (126) to (128); the second possibility is illustrated in (129) to (131). In the similarity comparison in (127), the comparee and standard are considered to be similar in terms of a specific property, such that "comparee is as parameter as standard". If, however, the parameter is known from the context, it can be omitted, such that "comparee is the same as stanDARD (in terms of an understood PARAMETER)", as in (128) where de ' 3 sG' is the COMPAREE and kitong '2pl' is the standard.

Similarity clauses: Standard is expressed in a prepositional phrase
(127) orang itu ganas sama deng dong pu penunggu person D.dIST feel.furious(.about) be.same with 3pl poss tutelary.spirit 'those people were as ferocious as their tutelary spirits' [081025-006-Cv.0286]
(128) de Ø sama dengang kitong juga

3sG be.same with 1pl also
'she is also the same as we are (in terms of being foreign)' [081010-001-Cv.0061]
Alternatively, the standard can be encoded as the clausal subject together with the comparee, such that "comparee \& standard are equally parameter", as in (129) to (131). The standard and comparee can be encoded by a coordinate noun phrase, as in (129), or a plural personal pronoun, as in (130). Again, the parameter can be omitted if it is understood from the context, such that "comparee \& standard are the same (in terms of an understood PARAMETER)", as in (131).

Similarity clauses: Standard is encoded as the clausal subject together with the comparee
(129) sa deng mace tu cocok sama

1sG with woman D.DIST be.suitable be.same
'I and that woman are equally well-matched' [081011-022-Cv.0016]
(130) kam dua pu mulut besar sama

2pl two poss mouth be.big be.same
'the two of yours mouth is equally big' [080922-004-Cv.0033]
(131) prempuang laki~laki Ø sama
woman RDP~husband be.same
'women (and) men are the same (in terms of having leadership qualities)'
[081011-023-Cv.0244]
Not only the parameter, but also the standard can be omitted if it is understood from the context. In (132), for instance, the omitted standard is 'the Yali children', while the omitted parameter has to do with the fact that both the comparee and standard are adventurous and would rather roam the forest than study.

Similarity clauses with omitted standard and parameter
(132) misionaris~misionaris dong punya ana~ana juga Ø sama saja Ø RDP~missionary 3pl poss rdp $\sim$ child also be.same just
'the missionaries' children are just the same (as the Yali children in terms of being adventurous)' [081011-022-Cv.0280]

Dissimilarity clauses are formed without an overt parameter. Instead, the comparee and standard are compared in terms of an understood attribute or quality, such that "COMPAREE is different from Standard (in terms of an understood PARAMETER)", as illustrated in (133) to (136).

The index is the stative verb laing 'be different' or beda 'be different', and the mark is elative dari 'from' or comitative dengang 'with'. Dissimilarity comparisons are typically formed with laing dari 'be different from' as in (133). They signal that the two participants are dissimilar in terms of their overall nature. If speakers want to indicate that the two participants diverge from each other in terms of specific attributes or features rather than their overall nature, they use a dissimilarity clause formed with beda dengang 'be different with'. This is demonstrated with the elicited example in (134), which contrasts with the clause in (133). Another example is the dissimilarity clause in (135). Clauses formed with beda dari 'be different from' are also acceptable but considered to be Indonesian-like rather than typical Papuan Malay. Clauses formed with laing dengang 'be different from' are unacceptable.

Dissimilarity clauses: 'comparee is different from standard'
(133) sifat ini laing dari ko
nature D.PRox be.different from 2sG
'this disposition (of mine) is different from you (in every aspect)'
[081110-008-CvNP.0089]
(134) sifat ini beda dengang ko
nature D.Prox be.different with 2sG
'this disposition (of mine) is different from you (in terms of some specific
aspect)' [Elicited BR111011.008]
(135) orang Papua beda dengang orang Indonesia person Papua be.different with person Indonesia
'Papuans are different from Indonesians (in terms of their physical features)' [081029-002-Cv.0009]

If the comparee is understood from the context, it can be omitted, as shown in (136).
Dissimilarity clauses with omitted comparee
(136) banyak, tapi Ø beda dengang fayapura punya many but be.different with Jayapura poss
[Comparing different melinjo varieties:] '(there're) lots (of melinjo), but (they're) different from Jayapura's (melinjos in terms of being bitter)' [080923-004-Cv.0010]

In summary, the typical scheme for identity-marking comparative constructions in Papuan Malay is "(COMPAREE - PARAMETER) - INDEX - MARK - STANDARD". Alternatively, the standard can be encoded as the clausal subject together with the comparee, such that "COMPAREE \& STANDARD are equally PARAMETER".

### 11.5.3 Summary

Papuan Malay employs two structurally distinct types of comparative constructions: (1) degree-marking clauses, and (2) identity-marking clauses.

Degree-marking clauses signal superiority, inferiority, or superlative. The following constituents serve as index: lebi 'more' (superiority), kurang 'lack' (inferiority), and paling 'most' (superlative). The mark is elative dari 'from'. The index precedes the parameter. The standard together with its mark can be omitted. The basic scheme for this type of comparative clauses is given in (137).

Scheme for degree-marking clauses
COMPAREE INDEX PARAMETER (MARK STANDARD)
Identity-marking clauses express similarity or dissimilarity. In similarity clauses the index is sama 'be same' and the mark is comitative dengang 'with'. In dissimilarity clauses, the index is laing 'be different' in combination with the mark dari 'from', or beda 'be different' in combination with the mark dengang 'with'. Clauses formed with laing dari 'be different from' indicate overall dissimilarity, whereas clauses with beda dengang 'be different from' signal dissimilarity in terms of some specific features. In identity-marking clauses the index follows the parameter, which is optional. The standard is typically encoded in a prepositional phrase, with the preposition serving as the mark of comparison. This scheme for identity-marking clauses is illustrated in (138). In similarity clauses, the standard can also be encoded as the clausal subject together with the comparee, as shown in (139).

Schemes for identity-marking clauses
(138) (COMPAREE PARAMETER) INDEX MARK STANDARD

COMPAREE STANDARD (PARAMETER) INDEX

### 11.6 Summary

This chapter has described different types of verbal clauses. The most pertinent distinction is that between intransitive and transitive clauses. It is important to note, though, that Papuan Malay verbs allow but do not require core arguments. Trivalent verbs most often occur in monotransitive or intransitive clauses rather than in ditransitive clauses. Along similar lines, bivalent verbs are very commonly used in intransitive clauses.

Also discussed are causative clauses. They are the result of a valency-increasing operation. Papuan Malay causatives are monoclausal $V_{1} V_{2}$ constructions in which causative $V_{1}$ encodes the notion of cause while $V_{2}$ expresses the notion of effect. Papuan Malay has two causative verbs which usually produce causer-controlled causatives: trivalent kasi 'give', and bivalent biking 'make'. While kasi-causatives stress the outcome of the manipulation, biking-causatives focus on the manipulation of circumstances, which leads
to the effect. Causatives with kasi 'give' can have mono- or bivalent bases, while bikingcausatives always have monovalent bases.

Reciprocal clauses are a third type of clauses described in this chapter. They are formed with the reciprocity marker baku 'RECP'. In these clauses, two predications are presented as one, with two participants equivalently acting upon each other. In simple reciprocals, both participants are encoded as the clausal subject. In discontinuous reciprocals, the reciprocee is expressed with a comitative phrase. Both clause types typically result in a reduction in syntactic valency. The exception is simple constructions with a sociative reading which are characterized by valency retention.

Also discussed are existential clauses formed with the existential verb ada 'exist'. Two clause types can be distinguished: intransitive clauses with one core argument, and transitive clauses with two core arguments. In one-argument clauses, ada 'exist' precedes or follows the subject, or theme, depending on its definiteness. Existential clauses express existence, availability, or possession.

A final type of verbal clauses discussed in this chapter are degree-marking and identi-ty-marking comparative clauses. Degree-marking clauses denote superiority, inferiority, or superlative. In these clauses, the parameter follows the index, the comparee takes the subject slot, and the optional standard is expressed in a prepositional phrase. Identitymarking clauses designate similarity or dissimilarity. In these constructions, the parameter either precedes the index or is omitted. The comparee takes the subject slot while the standard is usually expressed with a prepositional phrase. In similarity clauses, the standard can also be encoded as the clausal subject together with comparee.

## 12 Nonverbal clauses

This chapter discusses nonverbal predicate clauses in Papuan Malay, that is, clauses in which the main semantic content is not conveyed by a verb or verbal phrase, but by some other predicate category.

Papuan Malay has three syntactically distinct types of nonverbal predicate clauses, namely, nominal, numeral, quantifier, and prepositional predicate clauses. Nominal predicates have ascriptive or equative function and also encode possession. Numeral and quantifier predicates denote quantities. Prepositional predicates encode locational or nonlocational relations between a figure and the ground. As in verbal clauses, the nonverbal predicate typically follows the subject; no copula intervenes (see Chapter 11).

Before discussing the three types of nonverbal clauses in more detail, $\S 12.1$ explores which constituents can fill the subject slot in nonverbal clauses. Nominal predicate clauses are described in $\S 12.2$, numeral and quantifier clauses in $\S 12.3$, and prepositional clauses in $\S 12.4$. The main points of this chapter are summarized in $\S 12.5$. (Negation of nonverbal clauses is discussed in §13.1.)

### 12.1 Nonverbal clause subjects

In nonverbal clauses, the subject can be a noun or noun phrase, a personal pronoun, or a demonstrative, as shown in (1) to (6). Alternatively, the subject can be elided if it is understood from the context, as shown in (7) and (8).

In the nominal clause in (1) and the quantifier clause in (2), the subject is a noun phrase or a noun, respectively. In the nominal clause in (3) and the prepositional clause in (4) the subjects are encoded as personal pronouns. And in the numeral clause in (5) and the prepositional clause in (6), the subjects are expressed with demonstratives. (For a nominal clause with a demonstrative subject see (12) in $\S 12.2$, p. 512 , for a numeral clause with a personal pronoun subject see (19) in $\S 12.3$, p. 514 , and for a prepositional phrase with a noun phrase subject see (23) in §12.4.1, p. 515.)

Subjects in nonverbal clauses
(1) orang ini muka baru
person D.Prox face be.new
'this person is a new person' [080919-004-NP.0079]
(2) ... picaang juga banyak
splinter also many
'[at the beach] there are also lots of splinters' (Lit. 'the splinters (are) also many') [080917-006-CvHt.0008]
(3) ko prempuang Jayapura, de bilang, ko prempuang Demta

2sG woman Jayapura 3sG say 2sG woman Demta
"you're a Jayapura girl", he says, "you're a Demta girl"" [081006-025-CvEx.0014]
(4) baru Sarles ini de di blakang bapa
and.then Sarles D.PRox 3sG at backside father
'but then Sarles here, he was behind father' [081025-009b-Cv.0014]
(5) itu satu saja blum brapa ...
D.DIST one just not.yet several
[Conversation about cloths as a bride-price:] 'that is just one (cloth and) not yet several (cloths) ...' [081006-029-CvEx.0011]
(6) a itu di Wakde sana
ah! D.DIST at Wakde L.DIST
'ah, that's in Wakde over there' [081006-016-Cv.0030]
If the subject can be inferred from the context it can also be elided. This is illustrated with the two nominal clauses in (7) and the prepositional clause in (8). In the two nominal clauses in (7), the predicates kitong pu ana 'our child' and tong punya dara 'our blood' are coreferential with $d e$ ' 3 sG '. As the subject was already introduced at the beginning of the utterance, it is omitted in the nominal clause. In the prepositional clause in (8), the elided subject is $k o$ ' 2 sG ', that is, the addressee.

Elision of subjects in nonverbal clauses
(7) de minta apa, kitong kasi karna Ø kitong punya ana ... Ø masi tong

3sG request what 1PL give because 1PL poss child still 1PL
punya dara
poss blood
'she requests something, we give (it to her), because (she's) our child, ... (she's)
still our blood' [081006-025-CvEx.0020/0022]
(8) wa, sa pikir Ø masi di Arbais?
wow! 1sG think still at Arbais
[Addressing a guest:] 'wow!, I thought (you) were still in Arbais'
[081011-011-Cv.0044]

### 12.2 Nominal predicate clauses

In nonverbal clauses with nominal predicates, a noun or a noun phrase conveys the main semantic content.

In Papuan Malay, nominal clauses have three functions: (1) to describe the subject, (2) to identify the subject, and (3) to express possession of an indefinite possessum. Nominal predicates always receive a static reading.

Nominal predicates conveying a description of the subject are also referred to as "ascriptive predications", adopting Hengeveld's (1992: 101) terminology: they describe a particular entity that is denoted by the subject of the clause such that " $s$ is a member of $\mathrm{N} / \mathrm{NP}$ ". That is, an ascriptive clause asserts that this entity belongs to the class of entities specified in the nonreferential nominal predicate. By contrast, nominal predicates expressing identification are "equative predicates". They are referential and equate the particular entity denoted by the subject of the clause to the entity specified in the predicate such that "s is n/NP". (See Hengeveld 1992: 101; Payne 1997: 105.) In nominal clauses conveying the notion of possession the subject embodies the semantic role of possessor while the predicate functions as an indefinite possessum such that "possessor has a possessum".

Papuan Malay ascriptive, equative, and possessive nominal predicates are different in terms of their semantics, but not in terms of their structure. That is, Papuan Malay does not distinguish the three nominal predicate types as far as their syntactic or intonational features are concerned; all three are formed by juxtaposition of two noun phrases with the subject preceding the predicate. This is illustrated with the ascriptive clauses in (9) and (10), the equative clauses in (11) and (12), and the possessive clauses in (13) to (16).

In the ascriptive clause in (9), the subject saya '1sG' is asserted to belong to the class of manusia 'human being'. In the ascriptive clause in (10), the subject $k o$ ' 2 sG ' is part of the class of prempuang Demta 'Demta girls'. The equative clause in (11) identifies the predicate ade 'younger sibling' with the subject dia '3sG'. Along similar lines, the equative clause in (12) identifies the predicate klawar 'cave bat' with the subject itu 'D.DIST'. The example in (11) also shows that nonverbal predicates can be modified with adverbs, such as masi 'still'.

Ascriptive clauses
(9) misalnya saya manusia biasa
for.example 1sG human.being be.usual
[About humans and evil spirits:] 'for example, I am a normal human being' [081006-022-CvEx.0025]
(10) ko prempuang Demta, ko pulang ke Demta!

2sG woman Demta 2sG go.home to Demta
'you are a Demta girl, go home to Demta!' [081006-025-CvEx.0014]

Equative clauses
(11) dia masi ade

3SG still ySb
'she's still (my) younger sister' [080927-009-CvNP.0038]
(12) o, itu klawar
oh! D.DIST cave.bat
'oh, that was a bat' [081023-001-Cv.0041]
The nominal clauses in (13) to (16) express possession of an indefinite possessum. In (13), the subject saya ' 1 sG' has the semantic role of possessor, while the predicate empat ana 'four children' functions as the possessum. In (14), the possessor de ' 3 sG ' is juxtaposed to the possessum ana kecil 'small child'. The possessive clauses in (13) and (14) encode inalienable possession relations. The clauses in (15) and (16), by contrast, denote alienable possession relations, namely between a human referent and animate nonhuman ikang 'fish' in (15) and inanimate glang puti 'silver/tin bracelets' in (16). (Alternatively, possession of an indefinite possessum can be encoded by an existential clause; for details see §11.4.2. Possession of a definite possessum is encoded by an adnominal possessive construction; for details see Chapter 9 and also §11.4.1.)

Possessive clauses: Possession of an indefinite possessum
(13) saya empat ana

1sG four child
'I have four children' [081006-024-CvEx.0001]
(14) baru de ana kecil lagi
and.then 3sG child be.small again
'moreover, she has a small child again' [081010-001-Cv.0070] ${ }^{1}$
(15) de satu, sa satu

3sG one 1sG one
[Joke about two fishermen:] 'he has one (fish), I have one (fish)'
[081109-011-JR.0008]
(16) orang Biak kang glang puti
person Biak you.know bracelet be.white
[About bride-price customs:] 'you know, the Biak people have silver/tin bracelets' [081006-029-CvEx.0007]

These examples also show that the predicate of a nominal clause can be a noun such as ade 'younger sibling' in (11), or klawar 'cave bat' in (12), or a noun phrase, such as manusia biasa 'normal human being' in (9) or empat ana 'four children' in (13).

[^175]If speakers want to emphasize the predicate, they can front it as for instance orang pintar 'smart person' in (17). The predicate is set-off by a boundary intonation in that the stressed penultimate syllable of the verbal modifier pintar 'be clever' is marked with a slight increase in pitch ("' "). In the second clause in (17) the speaker repeats his statement, this time however returning to the canonical subject-predicate word order.

Fronted nominal predicates
(17) trus orang píntar dia, dia orang pintar
next person be.clever 3sG 3sG person be.clever
'and then a smart person he is, he's a smart person' [081029-005-Cv.0169]

### 12.3 Numeral and quantifier predicate clauses

In numeral and quantifier clauses, a numeral or quantifier conveys the main semantic content; again, these predicates receive a static reading. As in nominal clauses, the subject precedes the predicate. Structurally, numeral and quantifier predicates are identical to noun phrases with a postposed numeral or quantifier (see §8.3). Semantically, numeral and quantifier clauses have determining function in that they express specific properties of the subject, namely those of number and quantity, such that "s is nUm/QT" as illustrated in (18) to (21).

In (18), a husband relates that in a neighboring village a woman gave birth to a snake. His wife contradicts this statement, asserting that it was not one snake but that the ular 'snake' were dua 'two'. The analysis of the dua 'two' as a numeral predicate and not as an adnominal modifier is confirmed by the following fact. In the context of these utterances it is possible to insert existential ada 'exist' between the subject ular 'snake' and the predicate dua 'two' which gives the emphatic progressive reading ular ada dua 'the snakes were being two' or 'the snakes were indeed two' (see also §5.4.1). If ular dua was a noun phrase with the reading of 'two snakes', existential ada 'exist' would have to precede or follow the noun phrase such that ada ular dua 'there were two snakes' or ular dua ada 'the two snakes exist'. In (19), predicatively used satu 'one' and dua blas 'twelve' convey information about the numeric quantities of their respective subjects bulang 'moon' and $d e$ ' 3 sG '. The first clause di langit ini bulang satu cannot be interpreted as a prepositional predicate clause (see §12.4) in which bulang satu functions as a noun phrase which takes the subject slot. Such a reading would imply that there are several moons with the speaker talking about one of them: bulang satu 'a certain moon' (see §5.9.4 for a more detailed discussion of satu 'one').

Numeral predicates

## a. Husband: dia melahirkang ular <br> 3sG give.birth snake

Husband: 'she gave birth to a snake’
b. Wife: ular dua
snake two
Wife: 'two snakes' (Lit. 'the snakes (were) two') [081006-022-CvEx.0002-0003]
(19) di langit ini bulang satu tapi di kalender de dua blas at sky D.prox month one but at calendar 3sG two teens
'in this sky there is one moon, but in the calendar there are twelve' (Lit. 'the moon (is) one ... it (is) twelve') [081109-007-JR.0002]

In (20) and (21), predicatively-used universal quantifier smua 'all' and mid-range quantifier banyak 'many' express the nonnumeric quantities of their respective subjects orang Sulawesi 'Sulawesi people' and pisang masak itu 'that ripe banana'.

Quantifier predicates
(20) katanya orang Sulawesi smua it.is.being.said person Sulawesi all
'it's being said (that) they are all Sulawesi people' (Lit. 'Sulawesi people (are) all') [081029-005-Cv.0106]
(21) baru dong bawa pisang masak, pisang masak itu banyak and.then 3pl bring banana cook banana cook D.DIST many 'and then they brought ripe bananas, those ripe bananas were many' [081006-023-CvEx.0071]

### 12.4 Prepositional predicate clauses

Nonverbal clauses with prepositional predicates convey information about the relation between a figure and a ground, such that "FIGURE is in relation to Ground". The figure is encoded by the clausal subject and the ground by the complement of the prepositional phrase. This phrase is juxtaposed to the subject and functions as the clausal predicate. Semantically, two types of prepositional predicate clauses can be distinguished: locational clauses (§12.4.1), and nonlocational clauses (§12.4.2). The precise semantic relation between figure and ground is defined by the preposition that heads the prepositional phrase. (For a detailed discussion of prepositions and prepositional phrases see Chapter 10.)

### 12.4.1 Locational prepositional clauses

Locational predicate clauses typically express information about the locational relation, spatial or figurative, between a figure and the ground, as shown in (22) to (26). In addition, locational predicates can have presentative function, as shown in (28). In Papuan Malay, the specific kind of relation is conveyed by prepositions encoding location, namely locative di 'at, in', allative $k e$ 'to', or elative dari 'from', (see also §10.1). The
ground can be encoded by a common (proper) noun or a noun phrase. Unlike prepositional phrases in verbal clauses, locative di 'at, in' and allative $k e^{~ ' t o ' ~ c a n n o t ~ b e ~ o m i t t e d ~}$ from prepositional clauses with nominal complements as this would result in nominal clauses with unacceptable semantics (for more details on the omission of prepositions encoding location, see §10.1.5); the exceptions are preposed prepositional clauses with locative complements, as in (27) to (29).

Spatial locational predicates denote static or dynamic relations between a figure and the ground, depending on the semantics of the preposition. In (22), locative di 'at, in' expresses the spatial location of the figure dia ' 3 sG ' at the ground kampung 'village'. In (23) allative $k e$ 'to' signals the motion of the figure dep mama 'her mother' toward the goal Pante-Barat. ${ }^{2}$ In (24), elative dari 'from' conveys the motion of the figure sa '1sG' away from the source Sawar. ${ }^{3}$

Static and dynamic spatial locational relations between figure and ground
(22) memang dia di kampung
indeed 3sG at village
'indeed, he was in the village' [080918-001-CvNP.0014]
(23) dep mama ke ini Pante-Barat

3sG:poss mother to D.Prox Pante-Barat
'her mother (went) to, what's-its-name, Pante-Barat' [080919-006-CvNP.025]
(24) sa dari Sawar

1sg from Sawar
'I (just returned) from Sawar' [080927-004-CvNP.0003]
Locational predicates also express figurative locational relations between a figure and the ground. In (25), locative di 'at, in' conveys a figurative locational relation between the figure saya '1sg' and the ground IPS satu 'Social Sciences I'. Along similar lines, elative dari 'from' conveys a figurative relation in (26). This example is part of a conversation about a building project that was put on hold due to the lack of funding. The figure smua itu 'all that' refers to the delayed project while the ground uang 'money' denotes the nonspatial source from which this delay originates. Figurative predicates with allative $k e$ 'to' are unattested.

[^176]Figurative locational relation between figure and ground
(25) sa di IPS satu

1sG at social.sciences one
[About course tracks in high school:] 'I am in Social Sciences I'
[081023-004-Cv.0020]
(26) smиa itu dari uang
all D.DIST from money
'all that (depends) on the money' (Lit. 'from the money') [080927-006-CvNP.0034]
If speakers want to emphasize the predicate, they can front it. The corpus, however, includes only three utterances with fronted prepositional predicates, which are presented in (27) to (29). In each case the locative preposition di 'at, in' is omitted and the complement is a locative, such as proximal sini ' .Prox' in (27), or medial situ 'L.MED' in (28) and (29). ${ }^{4}$ Fronted prepositional predicates with distal sana 'L.DIST' are also possible, but unattested in the corpus. (For more details on the omission of prepositions encoding location, see §10.1.5.)

Fronting of prepositional predicates
(27) $\emptyset$ sini bua~bua banyak
L.PROX RDP $\sim$ fruit many
'here (EMPH) are many different kinds of fruit (trees)' [080922-001a-CvPh.0418] ${ }^{5}$
(28) sebla tida ada ruma Ø situ alang-alang
side NEG exist house L.MED cogongrass
'on that side aren't (any) houses, there (EMPH) (is only) cogongrass'
[081025-008-Cv.0149]
(29) ... Ø situ Natanael Ø situ Martin Ø situ Aleks L.med Natanael L.med Martin L.med Aleks
[Choosing among potential candidates for the upcoming local elections:]
'[Burwas (village can have) two candidates,] there (EMPH) is Natanael, there
(EMPH) is Martin, there (EMPH) is Aleks' [080919-001-Cv.0117]

[^177]
### 12.4.2 Nonlocational prepositional clauses

Prepositional clauses with nonlocational predicates convey information about the nonlocational, static relation between a figure and the ground. Semantically, Papuan Malay distinguishes three types of nonlocational predicates, namely "associative" or "comitative predicates", "simulative predicates", and "benefactive predicates", adopting Dryer's (2007: 248-249) terminology. Overall, however, nonlocational prepositional clauses do not appear to be very common; the corpus contains only few examples.

Papuan Malay comitative predicates are formed with prepositions encoding accompaniment/instruments or goals, namely comitative dengang 'with', with its short form deng, and goal preposition sama 'to' (see also §10.2.1 and §10.2.2). In (30), deng(ang) 'with' denotes the accompaniment of the figure Roni by the ground de pu temang $\sim$ temang 'his friends'. In (31), sama 'to' signals the association of the implied figure ana 'child' with the ground saya ' 1 sG '.

Comitative predicates
(30) Roni masi deng de pu temang~temang

Roni still with 3sG poss rdp $\sim$ friend
'Roni is still with his friends' [081006-031-Cv.0011]
(31) hanya tiga saja sama saya
only three just to 1sG
'just only three (of my children) are with me' [081006-024-CvEx.0001]
Simulative predicates are formed with prepositions encoding comparisons, that is, similative sperti 'similar to' and kaya 'like' and equative sebagey 'as' (see also §10.3). In (32) sperti 'similar to' establishes a simulative relation between the figure $d e$ ' 3 sG ' and the ground Sofia. Along similar lines, kaya 'like' denotes a simulative relation between the figure de 'sG' and the ground de pu bapa 'his father' / Siduas in (33). In (34), sebagey 'as' expresses equatability between the figure sa '1sG' and the ground kepala acara 'the head of the festivity’. (See $\S 10.3 .1$ and $\S 10.3 .2$ for a detailed discussion of the prepositions sperti 'similar to' and kaya 'like' and their semantics.)

Simulative predicates

## (32) de sperti Sofia

3sg similar.to Sofia
'she's similar to Sofia' [081115-001a-Cv.0283]
(33) de pu muka kaya de pu bapa e kaya Siduas

3sG poss face like 3sG poss father eh like Siduas
'his face is like his father, eh, like Siduas' (face)' [080922-001a-CvPh.1446]
(34) paling sa tra kerja, sa sebagey kepala acara most 1sG NEG work 1sG as head festivity
[About organizing a festivity:] 'most likely I won't (have to) work, I'll be the head of the festivity' (Lit. 'as the head ...') [080919-004-NP.0068]

Benefactive predicates are formed with the benefactive preposition untuk 'for' (see also $\S 10.2 .3$ ). In (35), for instance, untuk 'for' conveys a benefactive relation between the figure itu 'd.DIst' and the ground masarakat 'community'. In the corpus, however, benefactive predicates are rare.

Benefactive predicates
(35) uang besarnya itu untuk masarakat tapi pejabat yang makang money be.big: 3posse D.DIST for community but official REL eat banyak
many
'most of that money, that's for the community but (it's) the officials who take lots (of it)' [081029-004-Cv.0002]

### 12.5 Summary

Papuan Malay employs three syntactically distinct types of nonverbal predicate clauses, namely nominal, numeral, quantifier, and prepositional predicate clauses. These clauses are formed by juxtaposition of the two main constituents; no copula intervenes. The three clause types also have distinct semantic functions. Nominal predicates have ascriptive or equative function and also encode possession. Numeral and quantifier predicates have determining function. Prepositional predicates encode locational or nonlocational relations between a figure and the ground.

## 13 Negative, interrogative, and directive clauses

This chapter describes negative, interrogative, and directive clauses in Papuan Malay. Negative clauses formed with the negators tida/tra 'NEG' and bukang 'NEG' are discussed in §13.1. Interrogative clauses, including polar and alternative questions, are described in $\S 13.2$. Directive clauses, including imperatives, adhortatives, permissions, obligations, and prohibitives, are the topic of $\S 13.3$.

### 13.1 Negative clauses

In Papuan Malay, negative clauses are formed with the negation adverbs tida/tra ' NEG ' or bukang ' nEG '. Negator tida/tra ' NEG ' is used for the negation of verbal, existential, and nonverbal prepositional clauses (§13.1.1). Negator bukang 'NEG' is used to negate nonverbal clauses, other than prepositional ones, and to mark contrastive negation (§13.1.2). (Negative directives or prohibitives are discussed in §13.3.3.)

### 13.1.1 Negation with tida/tra 'NEG'

The negators tida 'NEG' and tra 'NEG' negate different types of clauses; they always precede the predicate which they negate. Negation of verbal clauses is discussed in §13.1.1.1, of existential clauses in §13.1.1.2, and of nonverbal prepositional clauses in §13.1.1.3. Negator tida 'NEG' also provides negative responses to polar questions, as discussed in §13.1.1.4. With the exception of negative responses to polar questions, both negators are used interchangeably.

### 13.1.1.1 Negation of verbal clauses

As a negator of verbal clauses, tida/tra 'NEG' negates stative verbs such as baik 'be good' in (1), dynamic verbs such as datang 'come' in (2), bivalent verbs such as pukul 'hit' in (3), or trivalent verbs such as bli 'buy' in (4). The example in (5) illustrates negation of a causative construction.

The contrastive examples in (1) and (2) also show that tida 'NEG' and tra 'NEG' are used interchangeably with no differences in function or meaning. In the corpus, however, speakers more often use tida 'NEG' than tra 'NEG' (1,491 vs. 794 tokens) (bukang 'NEG' is attested with 208 tokens; see §13.1.2).

Negation of verbal clauses with tida/tra 'NEG'
(1) nanti dia pikir saya tida baik ... nanti de pikir kitong tra
very.soon 3sG think 1sG NeG be.good very.soon 3sG think 1PL NEG
baik
be.good
'very soon he'll think that I'm not good ... very soon he'll think that we are not good' [080919-004-NP.0052-0053]
(2) de tra datang ... de tida datang

3sG NEG come 3sG NEG come
'she did not come ... she did not come' [081010-001-Cv.0204-0205]
(3) sa tida pukul dorang

1sG NEG hit 3pl
'I don't hit them' [080917-010-CvEx.0048]
(4) kalo bapa tra bli sa HP, biar suda tida apa~apa
if father NEG buy 1sG cell.phone let already NEG RDP $\sim$ what
'if you ('father') won't buy me a cell phone, just let it be, no problem'
[080922-001a-CvPh.0461]
(5) baru kamutra kas kluar uang bayar
and.then 2PL NEG give go.out money pay
[Encouraging teenagers to take free English classes:] 'and then you won't have to pay fees' (Lit. 'not give (to) come out') [081115-001a-Cv.0160]

### 13.1.1.2 Negation of existential clauses

Existential clauses are also negated with tida/tra 'neg', as illustrated in (6) to (10). Examples for negated one-argument clauses are given in (6) to (8), and for two-argument clauses in (9) to (10). (Existential clauses are discussed in detail in §11.4.)

The respective one-argument clauses in (6) and (7) illustrate negated existence and negated availability of indefinite/nonidentifiable theme expressions. The example in (8) demonstrates negation of a definite/identifiable theme expression. One-argument clauses denoting negative possession of a definite/identifiable possessum are unattested in the corpus; instead, the preferred type of existential clause to express negative possession is a two-argument clause, as shown in (9) and (10).

Negation of one-argument existential clauses with tida/tra 'NEG'
(6) tra ada kamar mandi

NEG exist room bathe
'(there) were no bathrooms' [081025-009a-Cv.0059]
(7) tida ada air minum
neg exist water drink
'(there) was no drinking water' [081025-009a-Cv.0060]
(8) Ketrampilang juga tra ada
skill also neg exist
[About training activities for women:] 'neither do (they) have (any) skills' (Lit. '(their) skills also don't exist') [081010-001-Cv.0145]

Negation of two-argument existential clauses is shown in (9) and (10). The negated clauses attested in the corpus always express absence of possession, such as the negative possession of ana 'child(ren)' in (9), or air 'water' in (10).

Negation of two-argument existential clauses denoting possession
(9) sodara prempuang itu tida ada ana
sibling woman D.DIST NEG exist child
'that sister doesn't have children' [081006-024-CvEx.0005]
(10) dong tra ada air

3pl neg exist water
'they didn't have water' [080919-008-CvNP.0013]

### 13.1.1.3 Negation of prepositional predicate clauses

Prepositional predicates are also negated with tida/tra 'NEG', as shown in (11) and (12). (Negation of other types of nonverbal clauses is discussed in §13.1.2; for more details on nonverbal clauses see Chapter 12.)

Negation of nonverbal prepositional clauses with tida/tra 'NEG'
(11) saya tida sperti prempuang laing to?

1sG NEG similar.to woman be.different right?
'I'm not similar to other women, right?' [081011-023-Cv.0173]
(12) tong tra ke kampung

1PL NEG to village
'we do not (go) to the village' [080917-003a-CvEx.0048]

### 13.1.1.4 Negation of polar questions

In addition, tida/tra 'NEG' provides negative responses to polar questions, when negating verbal constructions, as shown in (13) and (14). Negator tida 'NEG' can stand alone as in (13), or it can occur in the negative existential phrase tida ada 'no' (literally '(it) doesn't exist'). Negator tra ' ${ }^{\prime} E G$ ', by contrast, cannot stand alone; it always occurs in the negative existential phrase tra ada 'no', as in (14). (See also §13.2.2.1.)

Negator tida/tra 'NEG' in responses to polar questions
(13) Speaker-2: tida, dia balap

Neg 3sg race
[About an accident:] [Speaker-1: 'what did he do? (was he) drunk?']
Speaker-2: 'no, he was racing (his motorbike)' [081014-013-NP.0003-0004]
(14) Speaker-2: tra ada, muara baru ...

NEG exist river.mouth be.new
[Discussing the depth of a river mouth:] [Speaker-1: 'isn't (it) deep?']
Speaker-2: 'no, (this is) the new river mouth [(it's) the old river mouth that is (deep)]' [080927-003-Cv.0010-0011]

### 13.1.2 Negation with bukang 'NEG'

Negator bukang ' NEG ' has three functions. One function is to negate nonverbal clauses, a second one is to mark contrastive negation, and a third function is to provide negative responses to polar questions.

Nonverbal clauses are typically negated with bukang 'NEG', which always precedes the nonverbal predicate. Prepositional predicates are the exception; they are negated with tida/tra ' ${ }^{\text {NEG' }}$ (see §13.1.1.3). (In the corpus, bukang ' NEG ' is attested with 208 tokens, as compared to 1,491 tida 'NEG' and 794 tra ' NEG ' tokens.)

In (15) and (16), bukang 'NEG' negates nominal predicates, and in (17) a quantifier predicate. (Nonverbal clauses are discussed in detail in Chapter 12.)

Negation of nonverbal clauses with bukang 'NEG'
(15) de bukang gembala sidang di situ

3SG NEG pastor (church.)gathering at L.MED
'he's not a congregational pastor there' [080925-003-Cv.0032]
(16) sa bukang orang yang seraka

1sG NEG person ReL be.greedy
'I'm not a person who is greedy' [080917-010-CvEx.0214]
(17) pisang bukang sedikit
banana Neg few
'there (were) quite a few bananas' (Lit. 'the bananas (were) not few')
[080925-003-Cv.0158]
A second function of bukang ' NEG ' is to express contrastive negation of an entire proposition. Contrastive negation implies an alternative in the sense of "the situation is not that X (but Y)". Very often the alternative is expressed overtly, but this is not obligatory. Depending on its scope, bukang 'neg' occurs between the subject and the predicate or clause-initially. Its contrastive uses in prepredicate position are shown with the examples in (18) and (19). Unlike tida/tra 'NEG', contrastive bukang 'NEG' also occurs clause-initially, as shown in (20) and (21).

Contrastive negation with bukang ' NEG '
(18) mama ni bukang hidup deng orang-tua di kampung, mama ni mother d.Prox neg live with parent at village mother d.Prox hidup deng orang di luar
live with person at outside
'(the situation was) not (that) I ('mother') here lived with (my) parents in the village, (but) I ('mother') here lived with strangers away from home' [081115-001b-Cv.0043]
(19) pernikaang ini bukang dari manusia, dari Tuhang to? marriage D.Prox neg from human.being from God right?
'(the situation is) not (that) marriage is from man, (but it is) from God, right?' [081110-006-CvEx.0239]
(20) bukang dong maing, dong taguling di pecek
neg 3pl play 3pl be.rolled.over at mud
'(the situation was) not (that) they played (football, but) they got rolled over in the mud’ [081109-001-Cv.0025]
(21) bukang dong taru ijing tapi dong taru hadir
neg 3pl put permission but 3pl put attend
[About students who falsified the attendance book:] '(the situation is) not (that) they wrote down (their absences as) permitted (absences), but they wrote (them) down as (having) attended’ [081023-004-Cv.0018]

This function of bukang 'neg' to signal contrastive negation has also been noted for Ambon Malay (van Minde 1997: 278-279), Manado Malay (Stoel 2005: 59), Ternate Malay (Litamahuputty 1994: 224-225), and Standard Malay and Standard Indonesian (Himmelmann 2005: 127; Kroeger 2012).

Speakers also use bukang 'NEG' in single word clauses to contradict an interlocutor's statements. They may submit an alternative to the negated proposition as in (22), or they may reply with bare bukang 'neg'.

Contradiction of an interlocutor's statements with bukang 'NEG'
(22) Speaker-2: bukang, de punya pacar

NEG 3sg poss date
[Speaker-1: '(it was) her husband!']
Speaker-2: 'no, (it was) her lover' [081006-022-CvEx.0043-0045]
Finally, speakers employ bukang ' NEG ' to give contrastive negative responses to polar questions, as in the elicited example in (23). This example contrasts with the one in (13) in which the speaker uses tida 'neG' to respond to the same question as in (23). While tida ' NEG ' in (13) merely negates a verbal construction, bukang 'NEG' in (23) marks contrastive negation, similar to its uses in (18) to (21). Again, speakers can add the correct response as in (23) or reply with bare bukang ' NEG '. (For more details on polar questions see §13.2.2.)

Contrastive uses of bukang 'NEG' in responses to polar questions
(23) Speaker-2: bukang, dia balap
neg 3sg race
[About an accident:] [Speaker-1: 'what did he do? (was he) drunk?'] Speaker-2: 'no, (it happened because) he was racing (his motorbike)' [Elicited MY131126.001]

### 13.2 Interrogative clauses

In Papuan Malay, three types of interrogative clauses can be distinguished: (1) content, or information questions which elicit new information (§13.2.1), (2) polar questions which elicit yes-no answers (§13.2.2), and (3) alternative questions which require the interlocutor to choose the supposedly right answer from a list of possible answers (§13.2.3).

### 13.2.1 Content questions

In Papuan Malay, content questions eliciting new information are formed with the interrogatives, as discussed in §5.8. The discussion of their positions and functions within the clause entails a description of content questions. Therefore, content questions are not further discussed here.

### 13.2.2 Polar questions

Papuan Malay polar questions, that is questions that elicit yes-no answers, can be unmarked and neutral, or marked and biased, as shown in $\S 13.2 .2 .1$ and $\S 13.2 .2 .2$, respectively. Both sections also describe how polar questions are answered.

### 13.2.2.1 Unmarked neutral polar questions

Generally speaking, unmarked polar questions are "neutral with respect to the answer the speaker expects" (Sadock \& Zwicky 1985: 179). That is, neutral questions do not indicate whether speakers would like their interlocutors to answer with "yes" or with "no". More specifically, polar questions can express positive polarity or negative polarity. A negative polar question differs "from the positive question in communicating [...] that the speaker already has his own opinion, but that he is interested in getting the hearer's reaction" (Grimes 1975: 67).

These observations also apply to Papuan Malay, as demonstrated in the examples in (24) to (30).

Syntactically, the examples show that neutral polar questions have the same structure as the corresponding declarative clauses. The only distinction between the two clause types is that polar questions are marked with a rising intonation, as shown in (24a).

The examples also show that polar questions can express positive polarity as in (24), (25), (27), and (29), or negative polarity as in (26), (28), and (30).

Furthermore, the examples in (24) to (30) show how neutral polar questions are answered. Polar questions with positive answers are presented in (24) to (26), and those with negative answers in (27) to (29). An alternative strategy to answer polar questions is illustrated in (30).

Positive answers to polar questions are typically formed with affirmative yo 'yes' or the interjection $\mathrm{mm}-\mathrm{mm}$ ' mhm '. This applies to positive questions as in (24) and (25), as well as to negative ones as in (26). In answering, speakers may also echo part of the question and/or provide additional information, as in (24b) and (26b).

Polar questions: Positive answers
a.

Speaker-1: trek de isi minyak? truck 3sG fill oil

Speaker-1: 'does the truck load gasoline?'
b. Speaker-2: yo, minyak tana yes oil ground
Speaker-2: 'yes, kerosene’ [080923-009-Cv.0037-0038]
a. Speaker-1: o, Ise sakit? oh! Ise be.sick
Speaker-1: 'oh, is Ise sick?'
b. Speaker-2: $\boldsymbol{m m}-\boldsymbol{m m}$
mhm
Speaker-1: 'mhm' [080919-006-CvNP.0030-0031]
a. Speaker-1: ade hari ini ko tra skola? ySb day D.PRox 2sG NEG go.to.school
Speaker-1: 'younger sister, don't you go to school today?'
b. Speaker-2: yo, sa minta ijing yes 1sG request permission
Speaker-2: 'yes, I asked for a leave of absence' (Lit. 'request permission (to be absent from school)') [080922-001a-CvPh.0093-0094]

Negative answers to neutral positive or negative polar questions are formed in three ways, as discussed in §13.1.1.4 and §13.1.2. Negative replies to polar questions are formed with tida 'NEG' as shown in (13), repeated as (27), or with the negative existential phrase tida/tra ada '(it) doesn't exist', as in (14), repeated as (28), when negating verbal constructions. Negative answers to polar questions are formed with bukang ' NEG ', as in (23), repeated as (29), when negating nonverbal constructions.

Polar questions: Negative answers
a. Speaker-1: dia biking apa? mabuk?

3sg make what be.drunk
[About an accident:] Speaker-1: 'what did he do?, (was he) drunk?'
b. Speaker-2: tida, dia balap

NEG 3sG race
Speaker-2: 'no, he raced (his motorbike)' [081014-013-NP.0003-0004]
a. Speaker-1: tra dalam?
neg inside
[Discussing the depth of a river mouth:] Speaker-1: 'isn't (it) deep?'
b. Speaker-2: tra ada, muara baru ...

NEG exist river.mouth be.new
Speaker-2: 'no, (this is) the new river mouth [(it's) the old river mouth that is (deep)]' [080927-003-Cv.0010-0011]
a. Speaker-1: de punya paytua?

3sg poss husband
Speaker-1: '(was it) her husband?'
b. Speaker-2: bukang, de punya pacar
neg 3sg poss date
Speaker-2: 'no, (it was) her lover' [081006-022-CvEx.0044-0045]
At times, speakers employ an alternative strategy to respond to polar questions as shown in (30). Speakers may reply to a polar question without giving an explicit answer in the affirmative or negative. Instead they provide additional information and leave it to their interlocutor to interpret this answer as a positive or a negative reply. This is shown with the implied negative answer in (30b). When interlocutors do not know the answer, they typically reply with tida/tra taw '(I) don't know'.

Alternative answers to polar questions
a. Speaker-1: di sini tra pahit?
at L.PROX NEG be.bitter
[Discussing various melinjo varieties] Speaker-1: '(the melinjo varieties) here are not bitter?'
b. Speaker-2: Ø, Jayapura pu pahit

Jayapura poss be.bitter
Speaker-2: '(no, the ones from) Jayapura are bitter' [080923-004-Cv.0011-0012]

### 13.2.2.2 Marked biased polar questions

Marked polar questions are defined as questions which convey a bias toward the expected answer, hence "biased" questions (Moravcsik 1971 in Sadock \& Zwicky 1985: 180). Biased questions allow speakers "to express [... their] belief that a particular answer is likely to be correct and to request assurance that this belief is true" (Sadock \& Zwicky 1985: 180). More specifically, positively biased questions signal that the speaker is in favor of a positive answer, while negatively biased questions indicate that the speaker expects a negative answer.

Papuan Malay biased questions are presented in (31) to (35). While the corpus contains both positively and negatively biased questions, positively biased ones, as in (31) to (33), occur much more often than negatively biased ones, as in (34) or (35).

Biased questions are usually formed with the tags to 'right?' or $e$ 'eh?'. Prosodically, these questions are marked with a rising pitch on the tag (see §5.13.1 for more details concerning the semantics of both tags). The examples in (31a) and (32a) show positive bias, while (34a) and (35a) show negative bias, using the negator tida/tra 'NEG'. Less often, a positive bias is marked with affirmative yo 'yes' as in (33a). Answers to biased polar questions follow the same patterns as answers to unbiased ones, as discussed in §13.2.2.1.

Positively biased polar questions
a. Speaker-1: yang dekat ada ruma to?

REL near exist house right?
[Asking about a certain tree:] Speaker-1: '(the one that's) close by (where) the houses are, right?'
b. Speaker-2: mm-mm, ruma di pante
mhm house at coast
Speaker-2: 'mhm, the houses along the beach' [080917-009-CvEx.0012-0013]
(32) a. Speaker-1: o, skarang orang su daftar e? oh! now person already enroll eh
[About local elections:] Speaker-1: 'oh, now people already (started) enrolling, eh?'
b. Speaker-2: yo, tu sa pu urusang
yes D.DIST 1sG poss affairs
Speaker-2: 'yes, that's my responsibility' [081005-001-Cv.0031-0032]
a. Speaker-1: jadi itu nomor rekening itu pace Natanael punya yo? so D.DIST number bank.account D.DIST man Natanael poss yes Speaker-1: ‘so, what's-its-name, that bank account number is Mr. Natanael's, yes?'
b. Speaker-2: yo, bukang sa punya
yes neg 1sG poss
Speaker-2: 'yes, (it's) not mine' [080922-001a-CvPh.0078-0079]

Negatively biased polar questions
a. Speaker-1: ko tra taw sa skola dari mana to?

2SG NEG know 1sG school from where right?
Speaker-1: 'you don't know from which school I am, right?'
b. Speaker-2: Ø sa tida taw ((laughter))

1sG neg know
Speaker-2: '(yes), I don't know ((laughter))' [080922-003-Cv.0031-0032]
a. Speaker-1: tida di Beneraf e?

NEG at Beneraf eh
Speaker-1: '(they) are not in Beneraf, eh?'
b. Speaker-2: $\boldsymbol{m m}-\boldsymbol{m m}$
mhm
Speaker-2: 'mhm' [080925-003-Cv.0173-0174]

### 13.2.3 Alternative questions

In Papuan Malay, alternative questions are formed with the alternative-marking conjunction $k a$ 'or' (see also §14.2.2.2). They require the interlocutor to choose the supposedly right answer from a list of possible answers, as shown in (36) to (41).

The alternatives can be overtly listed as in (36) or (37), in which case they are linked with postposed $k a$ 'or'. The question can also contain just one proposition and its negation, as in (38) or (39), in which case the proposition is marked with $k a$ 'or' followed by negator tida 'NEG'. Rather often, though, the negator is omitted, as in (40) and (41).
(36) bapa pake kartu apa ka? AS ka? Simpati ka?
father use card what or AS or Simpati or
'you ('father') use what (kind of SIM) card? AS or Simpati?' [081014-016-Cv.0012]
(37) sa tu biasa bilang sama ana~ana di skola, sala ka? benar ka? 1sG D.DIST be.usual say with RDP~child at school be.wrong or be.true or 'I (ЕМРН) usually ask the kids in school, "(is this) right or wrong?"'
[081014-015-Cv.0029]
(38) kira~kira bisa kenal bapa ka tida?

RDP $\sim$ think be.able know father or NEG
'do you think you can recognize me ('father') or not?' [080922-001a-CvPh.1301]
(39) mama Rahab ada datang ke ruma ka tida?
mother Rahab exist come to house or NEG
'did mother Rahab come (ЕмРн) to the house or not?' [081110-003-Cv.0001]
(40) de su datang $\boldsymbol{k a}$ ?

3sG already come or
'did he already come or (not)?' [080925-003-Cv.0138]
(41) ko ada karet ka?

2SG exist rubber or
'do you have rubber bands or (not)?' [081110-004-Cv.0008]

### 13.3 Directive clauses

In Papuan Malay, three different types of directive clauses can be distinguished: imperatives and hortatives (§13.3.1), permissions and obligations (§13.3.2), and prohibitives (§13.3.3). They are used with any kind of predicate. Syntactically, directive clauses have the same structure as declarative clauses.

### 13.3.1 Imperatives and hortatives

Papuan Malay employs imperatives and hortatives to issues commands. Imperatives always involve the second person, given that the addressee is the one who is expected to carry out the requested action, as shown in (42) to (46). In hortatives, by contrast, any person other than the addressee is expected to carry out the requested action. Hence, hortatives involve first and third persons, as shown in (47) to (51). In addition, Papuan Malay also employs a number of strategies to strengthen or soften commands, as demonstrated in (52) to (61).

Imperative constructions have a second person subject, as shown in (42) and (43). The clauses in (42a) and (43a) are formed with second singular ko '2sG' subjects. Depending on the context they can receive a declarative or an imperative reading. It is also possible to omit the addressee, as demonstrated in (42b) and (43b). Single word imperatives, as in (42b), are rare, however. (The uses of suda 'already' in directive clauses, as in (43b), are discussed together with the examples in (54) and (55).)

Imperatives: Syntactic structure ${ }^{1}$
a. ko bangung!
2SG wake.up
'you wake up!
b. e bangung!
hey! wake.up 'hey, wake up!'

[^178]a. ko pulang(!)
2sG go.home
'you went home'/you go home!'
b. pulang suda! go.home already 'go home already!'

More examples of imperatives clauses are presented in (44) to (46), with second person singular addressees in (44) and (46), and second person plural addressees in (45). These examples also illustrate that imperatives are formed with trivalent verbs as in (44), bivalent verbs as in (45), or monovalent verbs such as stative diam 'be quiet' in (46); see also monovalent dynamic pulang 'go home' in (43).

Imperatives formed with tri-, bi-, and monovalent verbs
(44) ko ambil sa air!

2SG fetch 1sG water
'you fetch me water!' [081006-024-CvEx.0092]
(45) ... trus kam dua cuci celana di situ!
next 2PL two wash trousers at L.MED
[A mother addressing her young sons:] '[hey, you two go bathe in the sea already!,] then you two wash (your) trousers there!' [080917-006-CvHt.0007]
(46) ko jangang bicara lagi, ko diam!

2SG NEG.IMP speak again 2SG be.quiet
'you don't talk again!, you be quiet!' [081029-004-Cv.0072]
Hortatives are typically expressed with clause-initial biar 'let'. It exhorts the addressee to let or allow the desired future state of affairs come true, as illustrated in (47) to (50).

Hortatives with clause-initial biar 'let'
(47) kalo nanti tong maing biar sa cadangang!
if very.soon 1pl play let 1sG reserve
'later when we play (volleyball), let me be a reserve!' [081109-001-Cv.0154]
(48) biar tong tinggal di situ!
let 1pl stay at L.MED
'let us live there!' [081110-008-CvNP.0091]
(49) yo, biar de juga liat sa!
yes let 3 sg also see 1sG
'yes, let her also see me!' [081015-005-NP.0013]
(50) biar dong ejek~ejek bapa!, tida apa~apa to?
let 3PL RDP~mock father NEG RDP~what right?
'let them mock me ('father')!, it doesn't matter, right?' [080922-001a-CvPh.0180]

First person plural hortatives can also be formed without biar 'let', as shown in (51). In this case, the context shows whether the utterance is a hortative such as the first kitong dua pulang '(let) the two of us go home!' token, or a declarative such as the second occurrence of kitong dua pulang 'the two of us went home'.

First person plural hortatives without clause-initial biar 'let'
(51) dia bilang, Ø kitong dua pulang! ... trus kitong dua pulang

3sg say 1PL two go.home next 1pl two go.home
'he said, '(let) the two of us go home!' ... then the two of us went home' [081015-005-NP.0035]

Papuan Malay also uses a number of strategies to strengthen or soften commands. Strengthening is illustrated in (52) to (55) and softening in (56) to (61).

Speakers can add ayo 'come on' or suda 'already' to commands or requests to make them more urgent and to strengthen them. Urgency-marking ayo 'come on' can occur clause-initially, as in the imperative in (52) and in the hortative in (53), or clause-finally, also in (52); ayo 'come on!' is unattested in hortatives with third persons. Urgencymarking suda 'already', by contrast, always takes a postpredicate position as in the imperative in (54) and the hortative in (55).

Strengthening commands with ayo 'come on' or suda 'already'
(52) ayo!, jalang ke Ise, ayo!
come.on! walk to Ise come.on!
'come on!, go to Ise, come on!' [080917-008-NP.0065]
(53) ayo, kitong dua jalang cepat!, kitong dua jalang cepat!
come.on! 1pL two walk be.fast 1pl two walk be.fast
'come on!, (let) the two of us walk fast!, (let) the two of us walk fast!'
[081015-005-NP.0037]
(54) ey, kam dua pi mandi di laut suda!
hey! 2pl two go bathe at sea already
'hey, you two go bathe in the sea already!' [080917-006-CvHt.0007]
(55) ana kecil biar dong makang suda!
child be.small let 3pl eat just
'(as for) the small children, let them eat already!' [081002-001-CvNP.0051]
Requests or commands can be softened by adding clause-initial coba 'try' as in (56), mari 'hither, (come) here' as in (57), or tolong 'please' (literally 'help') as in (58). This applies most often to imperatives, as in (56) and (58), and less often to hortatives, as in (57).

Softening commands with clause-initial coba 'try', mari 'hither, (come) here', or tolong 'help'
(56) sa bilang, coba ko tanya dorang!

1sG say try 2SG ask 3PL
'I said, "try asking them!"' [081025-008-Cv.0076]
(57) a, mari kitong turung olaraga!
ah! hither 1pl descend do.sports
'ah, come, (let) us go down (to the beach) to do sports!' [080917-001-CvNP.0003]
(58) tolong ceritra tu plang~plang!
help tell D.DIST RDP~be.slow
[Addressing another adult:] 'please, talk (ЕмРн) slowly!' [081015-005-NP.0015]
Requests or commands can also be mitigated by adding in postpredicate position the temporal adverb dulu 'first, in the past' as in (59), the focus adverb saja 'just' as in (60), or the clause-final tag $e$ 'eh?' as in (61). (For more details on adverbs see $\S 5.4$ and on tags see §5.13.1.)

Softening commands with clause-final dulu 'first, in the past', saja 'just', or $e$ 'eh'
(59) sabar dulu!, sabar dulu!
be.patient first be.patient first
'be patient for now!, be patient for now!' [080921-004b-CvNP.0051]
(60) sa blang, jalang saja!

1pl say walk just
'I said, "just walk!"' [080917-008-NP.0117]
(61) ko kasi sama kaka mantri e?!

2sG give to oSb male.nurse eh
'give (the keys) to the male nurse, eh?!' [080922-010a-CvNF.0167]

### 13.3.2 Permissions and obligations

Papuan Malay permissions are expressed with the auxiliary verb bole 'may', as illustrated in (62) to (65), while obligations are formed with the auxiliary verb harus 'have to', as shown in (66) and (67).

Permission-marking bole 'may' most often occurs in single-word clauses, following a clause which depicts the permitted event or state, as in (62) or (63). Less often, bole 'may' occurs between the subject and the predicate, as in (64). Only rarely, bole 'may' occurs clause-initially, where it has scope over the entire clause, as (65).

Permissions with bole 'may'
(62) kamu mo pacar, bole

2PL want date may
[Addressing teenagers:] '(if) you want to date (someone) you may / are allowed to (do so)' [081011-023-Cv.0269]
(63) ko mancing dari jembatang, bole

2sG fish from bridge may
[Addressing her son:] '(if) you're fishing from the bridge, (you) may (do so) / are allowed to (fish)' [081025-003-Cv.0058]
(64) setiap kegiatang apa saja dorang bole kerja every activity what just 3pl may work
'whatever activity, they may / are allowed to carry (it) out' [080923-007-Cv.0013]
(65) ... kalo tinggal di Arbais, bole ko tokok sama~sama dengang kaka if stay at Arbais may 2sG tap RDp~be.same with oSb
'[my husband said, '(here in my village) don't extract and crush the sago, you just knead and filter it,] when you're staying in Arbais, (it is) allowed (that) you (extract and) crush (the sago) together with (your) older sibling' [081014-007-CvEx.0058]

Obligation-marking harus 'have to' typically takes a prepredicate position, as in (66). Alternatively, harus 'have to' can occur clause-initially, where it has scope over the entire clause and reinforces the obligation, as in (67).

Obligations with harus 'have to'
(66) besok pagi sayaharus cari batrey, sa harus bli pecis, sa tomorrow morning 1sG have.to search battery 1sg have.to buy light.bulb 1sg harus ambil senter
have.to fetch flashlight
[Getting ready for hunting:] 'tomorrow morning I have to get batteries, I have to buy small light bulbs, I have to take a flashlight' [080919-004-NP.0003]
(67) harus kitong baik deng orang
have.to 1PL be.good with person
'we have to (ЕМРн) be / (it's) obligatory (that) we are good to (other) people' [081110-008-CvNP.0166]

### 13.3.3 Prohibitives

Papuan Malay prohibitives are typically formed with the negative imperative jangang 'nEG.IMP, don't'. Its main function is to signal the addressee that the action of the verb is forbidden, as illustrated in (68) to (71). Quite often, however, a prohibitive is softened, as shown in (73) to (77).

The main function of negative imperative jangang 'neg.IMP', with its short form jang, is to signal a straight-out prohibitive. It occurs between the subject and the predicate, as in (68) and (69), or clause-initially where it has scope over the entire clause and reinforces the prohibitive, as in (70) and (71). Besides, speakers also employ jangang 'neg.IMP' as stand-alone clauses which provide a response to a preceding prohibitive, in the sense of "(I would) never (do such a thing)", as in (72).

Prohibitives with jangang 'NEG.IMP'
(68) Wili ko jangang gara~gara tanta dia itu!

Wili 2sG NEG.IMP RDP~irritate aunt 3sG D.DIST
[Addressing a young boy:] 'you Wili don't irritate that aunt!'
[081023-001-Cv.0038]
(69) kamorang jangang pukul dia!

2PL NEG.IMP hit 3sG
'don't beat him!' [081015-005-NP.0024]
(70) jangang ko pergi!

NEG.IMP 2SG go
'don't you go!' [081025-006-Cv.0192]
(71) Klara, jangang ko gara gara dia!

Klara neg.IMP 2sg RDP~irritate 3sG
'Klara, don't you irritate him!' [080917-003b-CvEx.0027]
(72) ... a, jangang!, sa tida bisa buang takaroang ah NEG.IMP 1sG NEG be.able discard be.chaotic
'[he said (to me), 'don't throw away (your betel nut waste)', (I said),] "ah, never!, I can't throw (it) away randomly"' [081025-008-Cv.0012]

Prohibitives can be softened by employing tida/tra bole 'shouldn't' (literally 'may not'). Most often, tida/tra bole 'may not' occurs between the subject and the predicate, as in (73) and (74). Alternatively, although rarely, it occurs clause-initially, where it has scope over the entire clause, as in (75). In addition, speakers use tida/tra bole 'may not' as standalone clauses, which refer back to the speakers' own or their interlocutors' preceding statements about a state of affairs, as in (76) and (77), respectively.

Prohibitives with tida/tra bole 'may not'
(73) sa tida bole di depang!, saya harus di blakang skali

1sG neg may at front 1sG have.to at backside very
'I shouldn't be in front!, I had to stay in the very back' [081029-005-Cv.0133]
(74) mama tra bole lipat!, mama harus kas panjang kaki mother NEG may fold mother have.to give be.long foot
[Addressing someone with a bad knee:] 'you ('mother') shouldn't fold (your legs) under!, you ('mother') have to stretch out (your) legs'
[080921-004a-CvNP.0069]
(75) tida bole ko ceritra orang!

NEG may 2sG tell person
'you shouldn't (EMPH) tell other people!' [081110-008-CvNP.0072]
(76) ... bunga~bunga suda habis, tida bole!
rDp $\sim f l o w e r ~ a l r e a d y ~ b e . u s e d . u p ~ N E G ~ m a y ~$
[Addressing a child who had picked the speaker's flowers:] '[(the flowers) over there (you) already picked (them) until (they were) all gone,] the flowers are already gone, (you) shouldn't (have done that)!' [081006-021-CvHt.0001]
(77) Speaker-2: a, tida bole!
ah! NeG may
[About membership in a committee:] [Speaker-1: 'the two of them are the committee']
Speaker-2: ‘ah, (that) shouldn't be!’ [080917-002-Cv.0015-0016]

## 14 Conjunctions and constituent combining

### 14.1 Introduction

This chapter describes how Papuan Malay combines constituents such as clauses or phrases by overt marking with conjunctions. The Papuan Malay conjunctions can be divided into two major groups, those combining same-type constituents, such as clauses with clauses, and those linking different-type constituents, such as verbs with clauses. In combining constituents, the conjunctions belong to neither of the conjuncts they combine in semantic terms. They do, however, form intonation units with the constituents they mark. Most conjunctions occur at the left periphery of the clause. Typically, an intonational break separates the conjunction from a preceding constituent. A second strategy to combine constituents is juxtaposition which is mentioned only briefly.

Papuan Malay has 21 conjunctions which link same-type constituents and two which combine different-type constituents. Most of the conjunctions conjoining same-type constituents link clauses with clauses. Traditionally, clause-linking conjunctions are divided into coordinating and subordinating ones: "coordinating conjunctions are those that assign equal rank to the conjoined elements" whereas "subordinating conjunctions are those that assign unequal rank to the conjoined elements, marking one of them as subordinate to the other" (Schachter \& Shopen 2007: 45). Modifying this terminology by employing the more general term "dependency" rather than "subordination", Haspelmath (2007a: 46) defines the distinction between coordination and dependency as follows:

In a coordination structure of the type $A(-$ link- $) B, A$ and $B$ are structurally symmetrical in some sense, whereas in a dependency structure of the type $X($-link- $) Y, X$ and $Y$ are not symmetrical, but either $X$ or $Y$ is the head and the other element is a dependent.

According to Haspelmath (2007a: 46), this distinction between coordination and dependency in terms of symmetry "is often thought of as a difference in the syntactic/structural relations of the elements". As Haspelmath (2007a: 46) points out, however, "it is sometimes not evident whether a construction exhibits a coordination relation or a dependency relation"; this applies, for instance, to "languages that lack agreement and case-marking".

The lack of a clear opposition between coordination and dependency in terms of structural relations also applies to clause combining in Papuan Malay: clauses marked with a
conjunction are not distinct from unmarked clauses in terms of their morphosyntax and word order. This is shown in (1) to (3) with purpose-marking supaya 'so that'. Omitting the conjunction from the two purpose clauses in (1) leaves two grammatically complete and correct clauses: saya harus kas makang dia 'I have to give him/her food' and dia kenal saya lebi 'he/she can know me better'.

Purpose marking supaya 'so that' linking two clauses
(1) saya harus kas makang dia, supaya dia kenal saya lebi dekat, supaya de 1sg have.to give eat 3sg so.that 3sg know 1sg more near so.that 3sg bisa taw saya punya nama be.able know 1sG poss name
'I have to give him/her food so that he/she can know me better, so that he/she can know my name' [080919-004-NP.0079]

When a conjunction is missing an argument, the result is still a grammatically complete and correct clause. In the purpose clause in (2), for instance, the subject obat 'medicine' is elided. This elision, however, does not signify a grammaticalized gap that signals the dependent status of the purpose clause marked with supaya 'so that'. Instead, the elision is due to the fact that speakers often omit arguments and other constituents if these can be inferred. In (2) the elided subject obat 'medicine' is understood from the context.

Purpose clause with elided subject argument
(2) ibu itu de mo kasi obat, tapi ko harus priksa dara, supaya Ø woman D.DIST 3sG want give medicine but 2sg have.to check blood so.that harus cocok
have.to be.suitable
'that lady, she wants to give (you) medicine, but you have to (get your) blood checked so that (the medicine) fits' [080917-007-CvHt.0003]

In Papuan Malay, elision of core arguments is not limited to clauses marked with conjunctions. It is a generalized phenomenon, as demonstrated with the reported direct speech in (3) (see also §11.1). The original utterance is given in (3a), while in (3b) the elided constituents are given in brackets, such as purposive supaya 'so that' ${ }^{1}$ or the subject of the purpose clause, kaki 'foot, leg'.

Elision as a generalized phenomenon
(3) a. ... malam Kapolsek bilang, kalo dapat tembak kaki pata
night head.of.district.police say if get shoot foot break

[^179]> b. ... malam Kapolsek bilang, kalo [kam] dapat [dia,] tembak night head.of.district.police say if [2PL] get [3sG] shoot [de pu] kaki [supaya] [kaki] pata [3sG poss] foot [so.that] [foot] break
> [Reply to the question about who the police were looking for:] '[(they're looking for Martin ....] (last) night the head of the district police said, "if (you) get (him), shoot (his) leg (so that it) breaks"' [081011-009-Cv.0048/0050]

This data shows that, in terms of structural relations, the opposition between coordination and dependency does not apply to purpose-marking supaya 'so that'. Neither does the distinction apply to the other clause-combining conjunctions.

Given that cross-linguistically this lack of a clear-cut opposition between coordination and dependency in terms of structural relations is not uncommon, Haspelmath (2007a: 46) suggests defining "both coordination and dependency in semantic terms". He also notes, however, that even the distinction on semantic grounds "is often difficult to apply" (2007a: 47; see also Cristofaro 2005: 1-50; Dixon \& Aikhenvald 2009).

This difficulty also applies to clause combining in Papuan Malay. Therefore, in discussing clause combining in Papuan Malay at this point in the current research, no attempt is being made to distinguish between coordination and dependency on semantic grounds. Instead, this chapter describes the following aspects: (1) the meaning which the different Papuan Malay conjunctions convey, (2) the position which a given conjunction takes within its clause, and (3) the position which the clause marked with a conjunction takes vis-à-vis the clause it is conjoined with. For lack of a better term, the clause that is not marked with a conjunction is labeled as the "unmarked clause" throughout the remainder of this chapter. This label is used as a working term only for practical purposes.

In addition to the 21 conjunctions combining same-type constituents, Papuan Malay also has two conjunctions which link different-type constituents, namely complementizer bahwa 'so that' and relativizer yang 'rel'. Both are subordinating conjunctions, in that they "serve to integrate a ... clause into some larger construction", adopting Schachter \& Shopen’s (2007: 45) definition. Complementizer bahwa 'that' marks a clause as an argument of the verb as illustrated in (4), while relativizer yang 'rel' integrates a relative clause within a noun phrase as demonstrated in (5).

Conjunctions combining different-type constituents
(4) sa cuma taw bahwa de ada di sini

1sg just know that 3sG exist at l.Prox
'I just know that he was here' [080922-010a-CvNF.0180]
(5) baru Iskia dia pegang sa punya lutut yang tida baik and.then Iskia 3sg hold 1sg poss knee rel neg be.good 'and then Iskia held my knee that is not well' [080916-001-CvNP.0003]

Conjunctions linking same-type constituents are described in §14.2 and those linking different-type constituents are discussed in §14.3. Unless mentioned otherwise, the clausal conjunctions combine clauses with same-subject coreference as well as those with a switch in reference. Juxtaposition is briefly mentioned in §14.4. The main points of this chapter are summarized in $\S 14.5$.

### 14.2 Conjunctions combining same-type constituents

This section discusses conjunctions which combine same-type constituents. In terms of the semantic relations which they signal, the conjunctions fall into six groups, that is conjunctions marking addition (§14.2.1), alternative (§14.2.2), time and/or conditions (§14.2.3), consequence (§14.2.4), contrast (§14.2.5), and similarity (§14.2.6).

### 14.2.1 Addition

Addition-marking conjunctions combine constituents denoting events, states, or entities which are "closely linked and ... valid simultaneously", employing Rudolph's (1996: 20) definition.

Papuan Malay employs three addition-marking conjunctions. Most often addition is encoded with the comitative preposition dengang 'with' (670 tokens); as a conjunction, it typically conjoins noun phrases, as discussed in §14.2.1.1. Much less often, Papuan Malay employs conjunctive dang 'and' ( 24 tokens); it typically joins two clauses, as described in §14.2.1.2. Even less often, addition is encoded with the goal-oriented preposition sama 'to'; as a conjunction it links noun phrases with human referents (8 tokens), as shown in §14.2.1.3. (For details on variation in word class membership see §5.14.)

### 14.2.1.1 Comitative dengang 'with'

The comitative preposition dengang 'with', with its short form deng, typically conjoins noun phrases (654 tokens). The conjoined referents can be animate as in (6), or inanimate as in (7). The fact that Papuan Malay employs the same marker for "noun phrase conjunction and comitative phrases" suggests that, in terms of Stassen's (2013: 1) typology, Papuan Malay is a "with-language". Occasionally, deng(ang) 'with' also links verb phrases ( 16 tokens) as in (8). The linking of clauses with comitative dengang 'with' is unattested in the corpus. (Besides, comitative dengang 'with' is also used to encode inclusory conjunction constructions, as discussed in §6.1.4; for a detailed discussion of preposition dengang 'with', see §10.2.1.)
(6) bapa dengang bapa-tua pi biking kebung ...
father with older.uncle go make garden
'father and uncle went to work (together) in the garden ...'
[080922-001a-CvPh.0629]
(7) ... apa biologi dengang apa astronomi dengang bahasa Inggris what biology with what astronomy with language England
[About a school competition] '[later they'll participate in the Olympiad contest in,] what-is-it, biology and, what-is-it, astronomy and English'
[081115-001a-Cv.0111-0113]
(8) nene jam dua malam datang deng menangis
grandmother hour two night come with cry
'at two o'clock in the morning grandmother came crying' (Lit. 'come with cry')
[081014-008-CvNP.0001]

### 14.2.1.2 Conjunctive dang 'and'

The conjunction dang 'and’ typically links two clauses (168 tokens), as in (9). Less often, it links noun phrases ( 24 tokens) as in (10) and (11), or verb phrases (10 tokens) as in (12). Usually, the noun phrases have human referents as in (10); coordination of inanimate referents, as in (11), is rare.
(9) de pegang de punya prahu, dang de dayung, dang de bilang, ... 3sg hold 3sg poss boat and 3sg paddle and 3sg say
'he took his boat and he paddled and he said, ...' [080917-008-NP.0018]
(10) sa kas taw mama dang mama-ade, nanti kam...

1sG give know mother and aunt very.soon 2PL
'I let mother and aunt know, "later you ..."' [080919-007-CvNP.0001]
(11) de suda taw ruma dang kampung

3sG already know house and village
'he already knew the house and the village' [080923-006-CvNP.0002]
(12) pagi helikopter turung dang kembali ke Anggruk morning helicopter descend and return to Anggruk
'in the morning the helicopter came down and returned to Anggruk'
[081011-022-Cv.0228]

### 14.2.1.3 Goal-oriented sama 'to'

The goal-oriented preposition sama 'to' occasionally links noun phrases with human referents (8 tokens), as in (13). The coordination of clauses or verb phrases with sama 'to' is unattested in the corpus. Goal-oriented sama 'to' has trial word class membership. That is, besides being used as a preposition and an addition-marking conjunction, it is also used as the stative verb sama 'be same’ (see §5.14; see also §10.2.2 for a detailed discussion of preposition sama 'to' and how it is distinct from comitative dengang 'with'). ${ }^{2}$

[^180](13) ... Aris sama Siduas ${ }_{i}$ deng de $e_{i}$ pu maytua, sama dep ${ }_{i}$, de punya maytua Aris to Siduas with 3sg poss wife to 3sG:Poss 3sg poss wife '[all (of you will) be taken (on board ...,)] Aris and Siduas ${ }_{i}$ and his wife ${ }_{i}$, and his ${ }_{i}$, his $_{\mathrm{i}}$ wife' $[080922-001 \mathrm{a}-\mathrm{CvPh} .0493 / 0497]^{3}$

### 14.2.2 Alternative

In Papuan Malay, two conjunctions mark alternative, namely disjunctive ato 'or’ (§14.2.2.1) and disjunctive $k a$ 'or' (§14.2.2.2).

### 14.2.2.1 Disjunctive ato 'or'

Generally speaking, the notion of disjunction is defined as "a logical relationship between propositions" in the sense that "[i]f the logical disjunction of two propositions is true, then one or both of the component propositions can be true" (Payne 1997: 305).

In Papuan Malay, disjunction is marked with ato 'or' which always occurs at the left periphery of the constituents it combines. Most often, disjunctive ato 'or' joins clauses, as in (14). Also quite often, ato 'or' links noun phrases as in (15). Only rarely ato 'or' links prepositional phrases as in (16), or verb phrases as in (17).
(14) kalo saya susa, ato saya biking acara, nanti dia bantu saya if 1sG be.difficult or 1 sG make ceremony very.soon 3sg help 1sg 'if I have difficulties or I make a festivity, then he'll help me' [080919-004-NP.0065]
(15) kalo tong pu uang satu juta, ato satu juta lima ratus, tong bisa if 1pl poss money one million or one million five hundred 1pl be.able bakar natal burn Christmas
'if we had one million or one million five hundred (thousand rupiah), we could have a Christmas party' (Lit. 'burn (the) Christmas (fire)') [081006-017-Cv.0016]
(16) jadi kalo dia, suku dari situ, dari Masep suda bunu orang di, a, so if 3sG ethnic.group from L.MED from Masep already kill person at umh Karfasia, ato di Waim, na ... Karfasia or at Waim well
'so if it, the ethnic group from there, from Masep has already killed someone at, umh, Karfasia or at Waim, well ...' [081006-027-CvEx.0002]
(17) dong bilang, a, tunggu minum dulu, ato makang dulu

3pl say ah! wait drink first or eat first
'they said, "ah, wait, please drink or eat"' (Lit. 'drink first or eat first')
[080925-003-Cv.0111]

[^181]
### 14.2.2.2 Disjunctive $k \boldsymbol{a}$ 'or'

Disjunctive $k a$ 'or' signals series or sequences of alternatives. Occurring at the right periphery of a constituent, it indicates that a list of alternatives is not exhaustive. That is, a few possible options are overtly mentioned, while others are implied. To make the notion of "non-exhaustive list of alternatives" explicit, the conjunction marks an interrogative as the final enumerated constituent. Typically, disjunctive ka 'or' links noun phrases, as in (18) and (19). In (18), the notion of a "non-exhaustive list" is implied, while in (19) it is overtly marked with apa $k a$ 'or something else' (literally 'what or'). Less often, $k a$ 'or' combines prepositional phrases as in (20), or clauses as in (21); the linking of verbs with $k a$ 'or' is unattested in the corpus. Another function of $k a$ 'or', not discussed here, is to mark interrogative clauses (see §13.2.3).
(18) ...nanti banjir $\boldsymbol{k} \boldsymbol{a}$, hujang $\boldsymbol{k} \boldsymbol{a}$, guntur $\boldsymbol{k} \boldsymbol{a}$ very.soon flooding or rain or thunder or
'[it's not allowed to kill the snake otherwise] later (there'll be) flooding, or rain, or thunder (or something else)' [081006-022-CvEx.0004]
(19) sa deng kaka Petrus pikir, mungking klapa ka, apa ka yang ada di depang 1sG with oSb Petrus think maybe coconut or what or rel exist at front [About a motorbike trip:] 'I and older brother Petrus thought, "maybe it is a coconut or something else that is in front (of us)"' [081023-004-Cv.0002]
(20) ko lapor di umum $\boldsymbol{k} \boldsymbol{a}$, di keuangang $\boldsymbol{k} \boldsymbol{a}$

2sG report at general or at finance.affairs or
[About a government office:] 'you (should) report to the general (office), or the finance (office) (or some other office)' [081005-001-Cv.0011]
(21) ... waktu ko ada potong babi ka, potong ikang ka, ato dapat ikang ka kuskus time 2sg exist cut pig or cut fish or or get fish or cuscus ka, waktu lewat kasi saja
or time pass.by give just
'[when (your) friends and relatives,] when you are carving a pig or carving fish (or carving something else), or (when you) get a fish or cuscus (or something else), when (they) walk by, just share (it with them)' [080919-004-NP.0060]

### 14.2.3 Time and/or condition

Papuan Malay conjunctions marking temporal relations indicate relative time; that is, the temporal reference point is determined by the context. Providing a reference point for the events or states depicted in the unmarked clause, time-marking conjunctions signal sequence relations, anteriority, or posteriority. Condition-marking conjunctions introduce clauses which expresses conditions, while the unmarked clauses describe events or states which could come about once the conditions have been met.

In many languages, there is no distinction between conditional "if" and temporal "when" clauses, as Thompson, Longacre \& Hwang (2007: 257) point out. This also applies to Papuan Malay. Therefore, both types of linkings are discussed here.

This section describes five conjunctions: sequential trus 'next' (§14.2.3.1) and baru 'and then' (§14.2.3.2), anteriority-marking sampe 'until' (§14.2.3.3) and seblum 'before' (§14.2.3.4), and posteriority-marking/conditional kalo 'when, if' (§14.2.3.5). ${ }^{4}$

### 14.2.3.1 Sequential trus 'next'

The sequential conjunction trus 'next' marks temporal relations between clauses or phrases in an iconic way by organizing events in their logical and temporal order. When combining clauses, trus 'next' always occurs in clause-initial position. The conjunction has dual word class membership; it is also used as the monovalent verb trus 'be continuous' (see §5.14).

In terms of subject reference, an initial investigation of the attested trus 'next' tokens in the corpus suggests the following. The conjunction more often links clauses with a switch in reference ( 269 tokens), as in (22), than those with same-subject coreference (101 tokens). This quantitative data modifies Donohue's (2003: 31) observations that trus 'next' "is a commonly used connective when there is same-subject coreference condition between clauses". Less often, trus 'next' combines noun phrases, as in (23), or prepositional phrases, as in (24).
(22) waktu Sofia lewat mandi to? di kamar mandi, trus Nusa juga lewat, Sofia when Sofia pass.by bathe right? at room bathe next Nusa also pass.by Sofia ikat handuk, de mo lewat masuk ke kamar, trus Nusa de bicara dia tie.up towel 3sg want pass.by enter to room next Nusa 3sg speak 3sg 'when Sofia passed by to bathe, right?, in the bathroom, then Nusa also passed by, Sofia had tied (her) towel (around her waist), she wanted to pass by (and) enter the (bath)room, then Nusa spoke to her' [081115-001a-Cv.0263]
(23) de pu potong selesay ambil ubi, trus daung petatas daung 3sG poss cut finish get purple.yam next leaf sweet.potato leaf singkong, trus apa lagi sayur bayam cassava next what again vegetable amaranth
[A recipe:] '(once) the cutting up (of the pig meat) is done, take purple yam, then sweet potato leaves, cassava leaves, then, what else, amaranth vegetables' [081014-017-CvPr.0033]

[^182](24) ... jalang banyak to?, di atas, tenga, trus di laut, trus di pante sana walk many right? at top middle next at sea then at coast L.DIST
'[I was confused (about) the road, you know,] (there) were many roads, right?, in the upper part (of the village), in the middle, and then at the sea, and then at the beach over there' [081025-008-Cv.0018]

### 14.2.3.2 Sequential baru 'and then'

The sequential conjunction baru 'and then' most commonly also marks temporal succession by ordering events in their logical and temporal sequence, as shown in (25). In addition, although less often, the conjunction introduces contrast clauses, as illustrated in (26). The conjunction has trial word class membership; that is, besides being used as a conjunction, it is also used as the stative verb baru 'be new' and as the temporal adverb baru 'recently' (see §5.14; see also §5.4.5 for its adverbial uses).

Typically, baru 'and then' occurs in clause-initial position where it marks an immediate subsequent event or action, similar to sequential trus 'next' (§14.2.3.1). Concurrently, however, the conjunction signals another piece of information, as shown in (25) (note that this example presents contiguous text). Depending on the context, the conjunction marks noteworthy parts and/or signals a new aspect or perspective regarding the event or discourse unfolding. In this case baru translates with 'but then', as in (25b) or 'and then' as in (25c). Alternatively, the conjunction signals that the event depicted in its clause does not occur until after the event of the preceding clause. In this case, it translates with 'only then', as in (25a). In marking contrastive sequentiality, baru 'and then' differs from trus 'next' which indicates neutral sequentiality (see §14.2.3.1).

As for subject reference, an initial inspection of the baru 'and then' tokens in the corpus suggests that the conjunction more often links clauses with a switch in reference ( 524 tokens), as in (25b), than clauses with same-subject coreference ( 455 tokens), as in (25a and 25c). In this respect, baru 'and then' behaves like trus 'next' (see §14.2.3.1).

Combining clauses with baru 'and then' in clause initial position: Sequential reading
a. tong ... jaga dia $a_{i}$ sampe jam satu, baru tong tidor, 1PL guard 3sG until hour one and.then 1PL sleep
[About a sick relative:] 'we ... watched her until one o'clock, only then did we sleep'.
b. baru Pawlus de $e_{j}$ sandar di de $e_{i}$ pu badang begini, and.then Pawlus 3sg lean at 3sG poss body like.this 'but then Pawlus was leaning against her body like this'
c. baru de kas pata leher ke bawa di atas de $e_{i}$ pu bahu and.then 3sG give break neck to bottom at top 3sG Poss shoulder 'and then he bent his neck down onto her shoulder' (Lit. 'give to break neck') [080916-001-CvNP.0005-0006]

Occasionally, the conjunction occurs at the right periphery of a contrast clause. Summarizing what has been said before, it marks the propositional content of its clause as true despite the contents of the preceding unmarked clause. In this case, the conjunction receives the counter-expectational reading 'after all', as in (26). As this contrast-marking function of the conjunction is marginal, it is not further discussed in $\S 14.2 .5$.

Combining clauses with baru 'and then' in clause final position:
Counter-expectational reading
(26) sa tra akang kasi kaing, sa juga dinging stenga mati, ada anging baru 1sG NEG will give cloth 1sG also be.cold half dead exist wind and.then 'I wasn't going to give (her my) cloth, I was also half dead (from being) cold, it was windy after all' [081025-006-Cv.0048]

### 14.2.3.3 Anteriority-marking sampe 'until'

The conjunction sampe 'until' introduces a temporal clause which follows the unmarked clause. The conjunction has trial word class membership; that is, besides being used as a conjunction, it is also used as the bivalent verb sampe 'reach' and as the temporal preposition sampe 'until’ (see §5.14; see also §10.1.4 for its prepositional uses).

Usually, sampe 'until' marks anteriority. That is, it signals that the event or state of the unmarked clause occurs prior to that of the temporal clause, as shown in (27). Concurrently, sampe 'until' marks temporal extent in that it indicates that the event or state of the unmarked clause continues until the event or state of the temporal clause comes about. Depending on the context, temporal sampe 'until' can also receive a resultative reading in the sense of "with the result that", as in (28). Given that the resultative reading of sampe 'until' is the derived, marginal one, this result-marking function of sampe 'until' is not further discussed in §14.2.4.
(27) ... de harus taru di mata-hari, sampe de jadi papeda 3sg have.to put at sun until 3sg become sagu.porridge
[Before an ancestor had fire to heat water:] '[when he wanted to make sagu porridge,] he had to leave (the sago) out in the sun until it turned into sagu porridge' [080922-010a-CvNF.007-0008]
(28) Fredi pu tangang dia palungku kaca, jadi dia rabik, sampe brapa jahitang Fredi poss hand 3sG punch glass so 3sG tear until several stitch
[About an accident:] 'Fredi's hand hit glass, so it was torn with the result that (he got) several stitches' [081006-032-Cv.0066]

### 14.2.3.4 Anteriority-marking seblum 'before'

Anteriority-marking seblum 'before' also introduces a temporal clause. ${ }^{5}$ It indicates similar to sampe 'until' - that the event or state of the unmarked clause occurs prior to

[^183]that of the temporal clause. Unlike sampe 'until', however, seblum 'before' does not signal extent. The temporal clause with seblum 'before' can precede or follow the unmarked clause, as shown in (29) and (30), respectively. In the corpus, however, the temporal clause more often precedes the unmarked clause (21 tokens) rather than follows it (8 tokens).
(29) de bilang, seblum kitong pergi ke kota, kitong cuci muka dulu 3sG say before 1PL go to city 1PL wash front first 'he said, "before we go to the city, we wash (our) faces first"' [080917-008-NP.0126]
(30) ... saya suda punya rencana juga, seblum sa kluar 1sG already have plan also before 1sG go.out
'[when I hunt without taking dogs, I leave in the night,] I also already have a plan before I leave' [080919-004-NP.0002]

### 14.2.3.5 Posteriority-marking/conditional kalo 'when, if'

The conjunction kalo 'when, if' signals temporal relations, namely posteriority, and/or conditional relations between two clauses. The clause it introduces always precedes the unmarked clause.

Whether kalo 'when, if' receives a temporal reading as in (31) and (32), or a conditional reading, as in (33) and (34), is context-dependent. Quite often, though, both interpretations are possible, as shown in (35). As mentioned, this lack of a "distinction between 'if' clauses and 'when' clauses" is also found in other languages; examples are "Indonesian and certain languages of Papua New Guinea" (Thompson, Longacre \& Hwang 2007: 257).

When marking posteriority, kalo translates with 'when'; it signals that the event or state of the unmarked main clause occurs subsequent to that of the temporal clause, as in (31). When the conjunction co-occurs with the retrospective adverb suda 'already', or with its short form $s u$, it projects these events or states to the future; in this case kalo translates with 'once'. That is, in combination with suda 'already', the conjunction signals that the event or state of the unmarked clause will eventuate, once that of the temporal clause has come about, as in (32).

Combining clauses with kalo 'when/after': Temporal reading
(31) kalo dong tendang de pu kakitu, dia pegang bola when 3PL kick 3sG poss foot D.DIST 3sG hold ball
[About a football match:] 'when they kicked those legs of his, he grabbed the ball' [081006-014-Cv.0004]
(32) jadi kalo dong su tinggal di kota begini, dong snang tinggal, so if 3pl already stay at city like.this 3pl feel.happy(.about) stay tida maw pulang ke kampung
NEG want go.home to village
'so once they've lived in the city like this, they're happy to stay (here), (they) don't want to return home to the village' [080927-009-CvNP.0059]

## 14 Conjunctions and constituent combining

In a different context, the conjunction receives a conditional reading and signals, what Kaufmann (2006: 6) calls, "indicative conditional" relations or "counterfactual conditional" relations. In such a context kalo translates with 'if'. An indicative conditional relation indicates that it is possible for the condition presented in its clause to be met. In this case the event or state of the unmarked clause will also come about, as shown in (33). When conditional kalo 'if' co-occurs with retrospective suda 'already', the clause receives a counterfactual conditional reading. That is, it signals that the condition was not met in the past. If the condition had been met, however, then the event or state of the unmarked clause would also have come about. This is illustrated in (34).

Combining clauses with kalo 'if': Conditional reading
(33) kalo ko alpa, kitong tra jalang if 2 sg be.absent 1pl NEG walk
[Talking to her son about an upcoming trip:] 'if you play hooky, we won't go' [080917-003a-CvEx.0038]
(34) kalo sa su pake em kaca-mata tu, mungking sa su gila if 1sG already use uh glasses D.DIst maybe 1sG already be.crazy 'if I'd been wearing, uh, those (sun)glasses, I might already be crazy' [080919-005-Cv.0007]

Rather commonly, kalo 'when, if' allows both a temporal and a conditional reading, as in (35).

Combining clauses with kalo 'when, if': Temporal and/or conditional reading
(35) kalo bapa datang, pluk bapa
when/if father come embrace father
'when/if you ('father') come (here), (I'll) embrace you ('father')'
[080922-001a-CvPh.0360]

### 14.2.4 Consequence

A consequence-marking conjunction indicates that the event or state of its clause is the outcome of an event or state depicted in the unmarked clause. Papuan Malay has five such conjunctions: resultative/causal jadi ‘so, since’ (§14.2.4.1), purposive supaya ‘so that' (§14.2.4.2), purposive untuk 'for' (§14.2.4.3), causal karna 'because’ (§14.2.4.4), and causal gara-gara 'because' ( $\$ 14.2 .4 .5$ ). In addition, although rarely, temporal sampe 'until' has result-marking function in the sense of "with the result that"; given that this function is marginal, it is discussed in §14.2.3.3 and not here.

### 14.2.4.1 Resultative/causal jadi 'so, since'

The resultative/causal conjunction jadi 'so, since' most often marks a resultative relation between two clauses, as shown in (36). In addition, although less often, the conjunction signals a causal relation, as illustrated in (37). The conjunction has dual word class membership; it is also used as the bivalent verb jadi 'become’ (see §5.14).
Typically, jadi 'so, since' occurs in initial position of a result clause that follows the unmarked clause. Here, the conjunction signals that the event or state of its clause results from that of the unmarked clause, as in (36); hence, jadi translates with 'so'.

Combining clauses with jadi 'so, since': Clause-initial position
(36) tong tra snang dengang dia, jadi kitong malas datang dia pu 1PL NEG feel.happy(.about) with 3sG so 1PL be.listless come 3sG poss ruma
house
'we don't feel happy about her, so we don't want (to) come to her house' [080927-006-CvNP.0032]

Alternatively, but less often, the conjunction occurs in clause-final position of a cause clause where it marks a causal relation with the preceding unmarked clause, as in (37). In this position, the conjunction signals that something depicted in its clause is the cause for the event or state of the unmarked clause, and that the result depicted in the unmarked clause is anticipated. Hence, jadi translates with 'since'. In that the result is expected, causal jadi ‘since’ differs from neutral causality-marking karna 'because’ (see §14.2.4.4).

Combining clauses with jadi 'so, since': Clause-final position
(37) Musa ini, e, de loyo~loyo ini, de bangung tidor jadi

Musa d.Prox uh 3sG RDP~be.weak this 3sG wake.up sleep so
[About a small boy:] 'Musa here, uh, right now he's kind of weak since he woke up from sleeping' [080922-001a-CvPh.1435/1437]

### 14.2.4.2 Purposive supaya 'so that'

Purposive supaya 'so that' introduces a purpose clause which follows the unmarked clause. The conjunction signals that the event or state of its clause is the intended outcome of the deliberate activity depicted in the unmarked clause. Most often, supaya 'so that' introduces a purpose clause with an overt subject ( $96 / 129$ tokens $-74 \%$ ), as in (38). Less often, the conjunction introduces a purpose clause with elided subject (33/129 tokens - $26 \%$ ), as in (39).
(38) mace ko sendiri yang ikut, supaya ko atur makangang di sana! wife 2 SG alone REL follow so.that 2SG arrange food at L.DIST 'you wife yourself (should) go with (them) so that you organize the catering over there!' (Lit. '(it's) you wife yourself who ...') [081025-009a-Cv.0032]
(39) e, angkat muka, supaya Ø liat orang!
hey! lift front so.that see person
'hey, lift (your) face so that (you) see (the other) people!' [081110-008-CvNP.0101]

### 14.2.4.3 Purposive untuk 'for'

As a conjunction, the benefactive preposition untuk 'for' signals a purpose relation between two clauses (for a description of preposition untuk 'for', see §10.2.3). Purposive untuk 'for', like supaya 'so that' (see §14.2.4.2), introduces a purpose clause which expresses the intended outcome of the purposeful activity depicted in the preceding unmarked clause, as shown in (40) and (41). Usually, untuk 'for' introduces a purpose clause with an elided subject ( $115 / 163$ tokens - $71 \%$ ), as shown with the second untuk 'for' token in (40). Much less often the conjunction introduces a purpose clause with an overt subject ( $48 / 163$ tokens $-29 \%$ ), as shown with the first untuk 'for' token in (40), or as in (41).
(40) tadi ana bilang, ... bapa dorang siap saja, untuk kita ke sana $a$, sa earlier child say father 3pl get.ready just for 1PL to L.DIST ah! 1sG juga siap, untuk Ø bawa kamu ke sini
also get.ready for bring 2PL to L.Prox
'a short while ago you ('child') said, "... father and the others are ready for us (to move) to (Sarmi over) there", ah, (in that case) I'm also ready to bring you (to Sarmi) here' (Lit. 'for (me to) bring you') [080922-001a-CvPh.1241]
(41) ... tida bole, ini, kamu datang, untuk kamu skola NEG may D.Prox 2pl come for 2pl go.to.school
'[you shouldn't hate each other, (you) shouldn't infuriate each other,] (you) shouldn't (do all this), what's-its-name, you came (here) to go to school' (Lit. 'for you (to) go to school') [081115-001a-Cv.0272]

The attested data indicates that untuk 'for' differs from supaya 'so that' in that untuk 'for' most often introduces purpose clauses with elided subjects. By contrast, supaya 'so that' most often introduces purpose clauses with overt subjects.

### 14.2.4.4 Causal karna 'because'

Causal karna 'because' signals a neutral causal relation between two clauses by introducing a cause clause which gives the reason for the event or state depicted in the unmarked clause. Usually the cause clause follows the unmarked clause, as in (42). In combination with adversative tapi 'but' (see §14.2.5.1), however, it can precede the unmarked clause, as in (43). In this case the unmarked clause is often introduced with resultative jadi 'so'. Signaling neutral causality, karna 'because' is distinct from causal jadi 'since' which marks expected results (see §14.2.4.1), and from causal gara-gara 'because' which marks emotive causal relations (see §14.2.4.5).
(42) saya bisa pulang, karna sa su dapat babi

1sG be.able go.home because 1sG already get pig
[Hunting a wild pig:] 'I can return home because I already got the pig' [080919-004-NP.0024]
(43) dong memang piara de di situ, tapi karna mama dong pu bapa-ade..., 3PL indeed raise 3sG at L.MED but because mother 3pl poss uncle tapi karna tete meninggal, jadi dong pu kluarga ini yang piara but because grandfather die so 3pl poss family D.Prox rel raise 'they took indeed care of him there, but because the uncle of mama and her companions [umh, who's actually the youngest offspring,] but because grandfather died, so (it's) their family here who took care of him' [080919-006-CvNP.0006-0008]

### 14.2.4.5 Causal gara-gara 'because'

The causal conjunction gara-gara 'because' indicates an emotive causal relation between two clauses by introducing a cause clause which gives the reason for the circumstances depicted in the unmarked clause. Thereby, gara-gara 'because' is distinct from karna 'because' which marks neutral causal relations. The conjunction has dual word class membership; it is also used as the bivalent verb gara 'irritate' (see §5.14).

Most often, the cause clause marked with gara-gara 'because' follows the unmarked clause, as in (44). Alternatively, the cause clause can precede the unmarked clause. In this case, adversative tapi 'but' (see §14.2.5.1) precedes gara-gara 'because', as in (45), in the same way as tapi 'but' precedes karna 'because' (see §14.2.4.4).
(44) sap prut sakit, gara-gara sa makang nasi

1sG:Poss stomach be.sick because 1sG eat cooked.rice
'my stomach was sick because I ate rice' [081025-009a-Cv.0046]
(45) ... tapi gara-gara Nofela bi, gara-gara Nofela bicara deng bapa, bapa
but because Nofela TRU-speak because Nofela speak with father father pu hati tergrak ... poss liver be.moved
[Phone conversation between a father and his daughter:] '[(if) I had just spoken to Siduas, maybe I wouldn't have felt moved to come (and pick you up), right?,] but because you ('Nofela') spoke[TRU], because you ('Nofela') spoke with me, my ('father's) heart was moved [so I'll definitely come (and pick you up)]' [080922-001a-CvPh.1082-1083]

### 14.2.5 Contrast

Contrast-marking conjunctions are cross-linguistically defined as conjunctions that signal that the events or states described in two clauses "are valid simultaneously", but
that the information given in one clause "marks a contrast to the information" given in the other clause (Rudolph 1996: 20). This section describes four Papuan Malay contrastmarking conjunctions: adversative tapi ‘but’ and habis 'after all’ (§14.2.5.2 and §14.2.5.1), oppositive padahal 'but actually' (§14.2.5.3), and concessive biar 'although' (§14.2.5.4). In addition, temporal baru 'and then' has contrast-marking function in that it signals counter-expectation in the sense of "after all"; as this function is marginal it is discussed in $\S 14.2$.3.2 and not here.

### 14.2.5.1 Adversative tapi 'but'

Adversative tapi 'but' occurs in interclausal position. It marks an adversative contrast relation between the clause it introduces and the preceding unmarked clause, as shown in (46) and (47).
(46) de bisa maing gitar, tapi de malu

3sG be.able play guitar but 3sG feel.embarrassed(.about)
'she can play the guitar but she feels shy (about it)' [081014-015-Cv.0008]
(47) jadi sa punya bapa kasi saya untuk Iskia, tapi Iskia kawing sala, Iskia so 1sG poss father give 1sg for Iskia but Iskia marry be.wrong Iskia kawing sa punya kaka marry 1sG poss oSb
'so my father gave me to Iskia, but Iskia married improperly, Iskia married my older sister' [081006-028-CvEx.0005]

### 14.2.5.2 Adversative habis 'after all'

Adversative habis 'after all' also marks an adversative relation between two clauses. The conjunction has dual word class membership; it is also used as the monovalent verb habis 'be used up’ (see §5.14).

Introducing a contrast clause that follows the unmarked clause, habis 'after all' summarizes what has been said before and signals that the propositional content of its clause is true in spite of the content of the preceding unmarked clause, as shown in (48) and (49). At the same time, the conjunction signals that the interlocutor is expected to know that this content is true. Thereby habis 'after all' is distinct from adversative tapi 'but' (see §14.2.5.2). Adversative habis 'after all' is also distinct from counter-expectational baru 'after all' which merely summarizes what has been said before (see §14.2.3.2). The exchange in (49) illustrates that there does not need to be an overt unmarked clause which precedes the contrast clause: speakers also use habis 'after all' to reply to an interlocutor's statements.
(48) bilang bapa, kirim tong uang, habis sa susa to?
say father send 1PL money after.all 1sG difficult right?
'say (to) father, "send us money, after all, I have difficulties, right?"'
[080922-001a-CvPh.0866]
a. Speaker-1: ko baru masuk klas satu ini?

2sG recently enter class one D.PRox
Speaker-1: 'recently you got into first grade (of middle school)?'
b. Speaker-2: yo, habis sa gagal
yes after.all 1sg fail
Speaker-2: 'yes, after all, I failed (the last exams)'
[080922-001a-CvPh.0965-0966]

### 14.2.5.3 Oppositive padahal 'but actually'

The conjunction padahal 'but actually' introduces a contrast clause, which follows the unmarked clause. Concurrent to marking contrast, the conjunction signals that the propositional content of its clause is surprising and unexpected given the content of the unmarked clause. Thereby, padahal 'but actually' is more oppositive than tapi 'but' (see §14.2.5.1). This is illustrated in (50) and (51).
(50) ana ini, sa pikir de suda lewat, padahal de tidor di atas child D.Prox 1sg think 3sG already pass.by but.actually 3sg sleep at top kayu~kayu RDP~wood
'this child, I thought he'd already passed by, but actually he was sleeping on top of the wood' [081013-004.Cv.0004]
(51) bulang oktober sa pu alpa cuma dua saja, bayangkang, padahal sa month October 1sg poss be.absent just two just image but.actually 1sG alpa banyak
be.absent many
[About the speaker's school attendance:] 'imagine!, in October I had just only two (official) absences, but actually I was absent many times' (Lit. 'my absences were many') [081023-004-Cv.0014]

### 14.2.5.4 Concessive biar 'although'

Concessive biar 'although' marks concessive relations between two clauses. The conjunction has dual word class membership; it is also used as the bivalent verb biar 'let' (see §5.14).

Introducing a concession clause, biar 'although' signals that despite the event or state depicted in its clause, the event or state depicted in the unmarked clause occurred. Usually, the concession clause precedes the unmarked clause, whereby the concession is emphasized, as in (52). Alternatively, although less often, it can follow the unmarked clause, in which case the content of the latter clause is emphasized, as in (53).
(52) yo, biar makangang tinggi, de ambil
yes although food be.high 3sg fetch
[About a greedy child:] 'yes, although the food is (placed) high (up on a shelf), he takes (it)' [081025-006-Cv.0254]
(53) ... jangang tinggal di ruma, tida bole, biar dulu orang-tua dong bilang neg.IMP stay at house neg may although first parent 3pl say
begini
like.this
'[so you kids have to go to school,] don't stay home, (that's) not allowed, although the parents said so in the past' [081110-008-CvNP.0036]

### 14.2.6 Similarity

As conjunctions, the similative prepositions sperti 'similar to' and kaya 'like' mark similarity between two clauses. Introducing similarity clauses, both signal that the event or state depicted in the unmarked clause is similar to that described in the similarity clause. The similarity clause always follows the unmarked clause.

Derived from their prepositional semantics, sperti ‘similar to' signals likeness in some, often implied, respect, while kaya 'like' marks overall resemblance, as shown in (54) and (55), respectively. (See $\S 10.3 .1$ and $\S 10.3 .2$ for a detailed discussion of the prepositions sperti 'similar to' and kaya 'like' and their semantics.)
(54) mama dia lupa kamu, sperti kacang lupa kulit mother 3sG forget 2PL similar.to bean forget skin
'mother forgot you (in a way that is) similar to a bean forgetting its skin' [080922-001a-CvPh.0932]
... tong taputar kaya kitong ni ana~ana perjalangang yang 1pL be.turned.around like 1PL D.PROX RDP~child journey REL taputar
be.turned.around
'[we were looking for a bathroom ..., good grief! there were no bathrooms,] we wandered around like we here were children on a trip wandering around' [081025-009a-Cv.0059]

### 14.3 Conjunctions combining different-type constituents

This section describes two conjunctions which combine different-type constituents. Complementizer bahwa 'that' links a clause to a bivalent verb (§14.3.1), while relativizer yang 'REL' integrates a relative clause within a noun phrase (§14.3.2).

### 14.3.1 Complementizer bahwa 'that'

The complementizer bahwa 'that' marks a clause as the complement of a verb. Crosslinguistically, it is typically bivalent "verbs of utterance and cognition" that take complements (Payne 1997: 279). This also applies to Papuan Malay. The corpus contains 68 complement clauses with bahwa 'that'. In 37 cases ( $54 \%$ ), the complement-taking verb is taw 'know', followed by bilang 'say' ( 5 tokens), ceritra 'tell'(4 tokens), and liat 'see' (3 tokens).

Two structural patterns are attested for complementation with bahwa 'that'. Usually, the verb is followed by the clausal complement with bahwa 'that' (61 tokens), as in (56) and (57). Alternatively, although much less often, the verb is followed by an object which is followed by the clausal complement ( 8 tokens), as in (58). ${ }^{6}$

> VERb - bahwa 'that' (овJECT) - CLAUSAL COMPLEMENT
(56) sa tida taw bahwa jam tiga itu de su meninggal

1sG neg know that hour three D.DIST 3sG already die
'I didn't know that by three o'clock she had already died' [080917-001-CvNP.0005]
(57) kalo blum nika itu, greja bilang bahwa dong dua blum jadi
if not.yet marry d.DIST church say that 3pl two not.yet become
swami istri
husband wife
'if (they) haven't (officially) married yet, (then) the church says that the two of them haven't yet become husband and wife' [081110-006-CvEx.0196]
(58) jadi Raymon tuntut sama kita to?, sama kitorang bahwa kamu harus so Raymon demand from 1PL right? from 1PL that 2PL have.to ganti lagi replace also
[About bride-price customs:] 'so Raymon demanded from us, right?, from us that we also had to compensate (for that wife)' (Lit. '... from us that you had to replace') [081006-024-CvEx.0019]

### 14.3.2 Relativizer yang 'REL'

Relativizer yang 'rel' introduces relative clauses which function as modifiers within noun phrases (see also §8.2.8). Typically, the relative clause follows its head nominal, as in (59) and (61a). However, yang 'rel' can also introduce a headless relative clause. Cross-linguistically, headless relative clauses can be used "when the head noun is nonspecific" or when "the specific reference to the head is clear" (Payne 1997: 295). This also applies to Papuan Malay. In (60), for instance, the head nominal is non-specific, while in (61b) the reference to the head is clear (" $\emptyset$ " signifies the implied head nominal).

[^184]Relative clauses with overt head nominal and headless relative clauses
(59) kitong mo hancurkang tugu yang ada di Sarmi itu

1PL want shatter monument reL exist at Sarmi d.DIST
'we want to destroy the statue that is in Sarmi there' [080917-008-NP.0043]
(60) tong tra ke kampung, tra ada Ø yang jalang ke kampung 1PL NEG to village NEG exist REL walk to village 'we don't (go) to the village, there is (nobody) who goes to the village' [080917-003a-CvEx.0048]
a. Speaker-1: Nelci itu yang mana?

Nelci d.dist rel where
Speaker-1: 'which one is that Nelci?'
b. Speaker-2: Ø yang kecil~kecil ... Ø yang rajing~rajing

REL RDP~be.small REL RDP~be.diligent
Speaker-2: '(the one) who's kind of small ... (the one) who's very diligent' [081115-001a-Cv.0285-0292]

The remainder of this section describes the grammatical positions which can be relativized in Papuan Malay. The data in the corpus shows that, in terms of Keenan \& Comrie's (1977) "Accessibility Hierarchy", Papuan Malay allows relativization on all five positions, namely:
SUBJECT > DIRECT OBJECT > INDIRECT OBJECT > OBLIQUE > POSSESSOR

Cross-linguistically, as Payne (1997: 297, 298) points out, relativization of these positions involves two different "case recoverability strategies" which allow to identify "the role of the referent of the head noun within the relative clause", namely the "gap strategy" or "pronoun retention". Both strategies are also found in Papuan Malay. Relativization of subject, direct and oblique object arguments is achieved with the gap strategy, while relativization of obliques and possessors involves pronoun retention.

When core arguments are relativized, a gap is left. This gap, signified with " $\varnothing$ ", occurs where the relativized noun phrase would be situated if it were expressed overtly. Relativization of the subject argument is illustrated in (62), and of the direct object argument of a bivalent verb, namely biking 'make', in (63). The examples in (64) and (65) illustrate the relativization of the direct object positions in double-object constructions; in both examples the trivalent verb is kasi 'give'. In (64), the R argument papeda 'sagu porridge' is relativized. In (65), the T argument Efana ini 'this Efana' is relativized. (Verbal clauses with bivalent and trivalent verbs are discussed in detail in §11.1.2 and §11.1.3, respectively.)

Relativization of the subject and direct object positions
(62) tong bagi buat kitorang yang Ø potong itu ..., buat sodara~sodara yang 1PL divide for 1PL REL cut D.DIST for RDP~sibling REL Ø tinggal di kampung stay at village
[About hunting a wild pig:] we divided (the meat) for us who cut (it) up that day, (and) then for the relatives and friends who live in the village' [080919-003-NP.0014]
(63) saya kas makang anjing deng papeda yang sa pu bini biking $\varnothing$ 1sG give eat dog with sagu.porridge rel 1sg poss wife make malam untuk anjing dorang
night for dog 3pl
'I fed the dogs with the sagu porridge which my wife had prepared for the dogs in the evening' [080919-003-NP.0002]
(64) Fitri yang de bapa kasi Ø ijing mo ikut ke kampung

Fitri REL 3sG father give permission want follow to village
'(it was) Fitri whom her husband gave permission to go with (us) to the village' (Lit. 'her (daughter's) father ...') [080925-003-Cv.0211]
(65) Efana ini yang dia ${ }_{i} k a s \operatorname{dia}_{j} \emptyset$

Efana D.prox rel 3sG give 3sg
[About an ancestor's first wife:] '(it was) this Efana that he ('Aris') gave (to) him $_{\mathrm{j}}$ ('Oten')' [080922-010a-CvNF.0062] ${ }^{7}$

Obliques and possessors are relativized via pronoun retention. That is, a retained personal pronoun explicitly marks the relativized position within the relative clause. This is illustrated with the relativization of an oblique argument in (66), and of a possessor in (67). (For a discussion of interrogative mana 'where, which' and its adnominal uses, see §5.8.3; for details on adnominal possessive constructions, see Chapter 9.)
(66) kalo ana mana yang sa duduk ceritra deng dia, itu ana itu, de if child where ReL 1sg sit tell with 3sg d.DIST child d.DIST 3sG hormat torang
respect 1pl
'as for which kid with whom I sit and talk, that is that kid, she respects us' [081115-001a-Cv.0282]

[^185](67) itu kaka satu itu yang dia punya ade prempuang itu tinggal deng d.DIST oSb one D.DIST REL 3sG poss ySb woman d.DIST stay with Natanael tu
Natanael D.DIST
'that is that one older brother whose younger sister is staying with Natanael'
[080922-001a-CvPh.0888]

### 14.4 Juxtaposition

Juxtaposition is another strategy in Papuan Malay to link constituents, namely sametype constituents, such as noun phrases, prepositional phrases, verbs, or clauses.
Juxtaposition of noun phrases, as in (68) to (73), occurs considerably less often in the corpus than conjoining with a conjunction. Most often, three, four or five noun phrases are juxtaposed to enumerate entities, while juxtaposition of just two noun phrases occurs less often. These findings reflect the results of Stassen's (2000) typological study of noun phrase conjunction which shows that juxtaposition is "a minor strategy" which is often used "in list-like enumerations". ${ }^{8}$

Papuan Malay combines different prosodic features to indicate the structure of the juxtaposed noun phrases: final vowel lengthening (orthographically represented by a sequence of three vowels), slight increase in pitch of the stressed syllable ("' "), intonation breaks ("|"), non-final intonation pattern with level pitch (" - "), and end-of-list intonation with fall pitch ("\"). The enumeration structure in (68) is indicated with an increase in pitch, and the last item is marked off by the demonstrative itu 'd.dist'. In (69), the enumeration is signaled with an increase in pitch as well as intonation breaks; the last item has an end-of-list intonation. In (70), the structure is marked with a slight increase in pitch and final vowel lengthening of the first and third coordinands while the fourth item has an end-of-list intonation. The second and third coordinands form a compact intonation unit, separated from the first and fourth coordinands by intonation breaks. After another intonation break following the fourth coordinand, the fifth coordinand is added as an afterthought.

[^186]Juxtaposition of noun phrases
(68) gúntur kílat hújangitu dia sambar ruma itu thunder lightning rain D.DIST 3sG strike.one.after.the.other house D.DIST sampeee
reach
'that thunder, lightning, (and) rain, it hit one house after the other on and on' [081006-022-CvEx.0007]
(69) káing $\mid$ bántal $\mid$ smúa $\mid$ tíkar
cloth pillow all plaited.mat
[Listing laundry items:] 'the cloths, pillows, everything, the plaited mats' [081025-006-Cv.0057]
(70) kita pake búmbuuu $\mid$ fetsin gáraaam $\mid$ sere $\quad \mid$ ricaaa 1PL use spice MSG salt lemon.grass red.pepper 'we used spices, flavoring spice, salt, lemongrass, red pepper' [080919-004-NP.0037]

Juxtaposition of prepositional phrases, verbs, or clauses is illustrated in (71) to (73). Three prepositional phrases introduced with elative dari 'from' are juxtaposed in (71), three verbs in (72), and four clauses in (73) (for easier recognition the first constituent of each of the linked clauses is bolded).

Juxtaposition of prepositional phrases, verbs, or clauses
(71) baru sa punya bapa dia turung dari atas dari pedalamang dari and.then 1sG poss father 3sG descend from top from interior from Siantoa Siantoa
'and then my father came down from the hills, from the interior, from Siantoa' [080927-009-CvNP.0010]
(72) kepala desa mantang Arbais ada duduk ceritra minum head village former Arbais exist sit tell drink 'the former mayor of Arbais was sitting (there and) talking (and) drinking' [081011-024-Cv.0135]
(73) Oktofernus tra makang, Mateus tra makang, Wili tra makang, e, paytua Oktofernus neg eat Mateus neg eat Wili neg eat uh husband tra makang NEG eat
'Oktofernus didn't eat, Mateus didn't eat, Wili didn't eat, uh, (my) husband didn't eat' [080921-003-CvNP.0005]

### 14.5 Summary

Papuan Malay conjunctions typically conjoin same-type constituents. Most of them combine clauses with clauses. Only two link different-type constituents, such as verbs with clauses. Typically, the conjunctions occur at the left periphery of the constituent they mark.

The 21 conjunctions linking same-type constituents are divided into six groups according to the semantic relations they signal:

1. Addition: dengang 'with', dang 'and', sama 'to'.
2. Alternative: ato 'or' and $k a$ 'or'.
3. Time and/or condition: trus 'next', baru 'and then', sampe 'until', seblum 'before', and kalo 'when, if'.
4. Consequence: jadi 'so, since', supaya 'so that', untuk 'for', karna 'because', and gara-gara 'because'; time-marking sampe also has result-marking function in the sense of "with the result that".
5. Contrast: tapi 'but', habis 'after all', padahal 'but actually', and biar 'although'; time-marking baru also marks contrast in the sense of "after all".
6. Similarity: sperti 'similar to' and kaya 'like'.

A substantial number of the conjunctions have dual word class membership, two have trial class membership. More specifically, seven conjunctions are also used as verbs, namely baru 'and then, after all', biar 'although', habis 'after all', jadi 'so, since', sama 'to', sampe 'until', and trus 'next' (see §5.3). Six conjunctions are also used as prepositions, namely dengang 'with', kaya 'like', sama 'to', sampe 'until', sperti ‘similar to', and untuk 'for' (see §5.11 and Chapter 10). One conjunction is also used as an adverb, namely baru 'and.then'. Besides, alternative-marking $k a$ 'or' is also used to mark interrogative clauses (see $\S 13.2 .3$ ). Variation in word class membership is discussed in $\S 5.14$.

The main features of the conjunctions are summarized in two tables. Table 14.1 lists the conjunctions and the different types of constituents they link. For those linking more than one constituent type, the primary type is underlined. Empty cells signal unattested constituent combinations.

Table 14.2 gives an overview of the positions which the conjunctions take within the clause, and the position the clause marked with a conjunction takes vis-à-vis the unmarked clause. Almost all conjunctions occur in clause-initial position, while only two occur in clause-final position. Typically, the clause marked with a conjunction follows the unmarked clause; only a few conjunctions mark clauses which precede the unmarked clause. Two of the conjunctions have two functions each, which belong to different semantic groupings, namely baru 'and then, after all' and sampe 'until, with the result that'. Both conjunctions are listed in each of the respective groupings.

The conjunctions combining different-type constituents discussed in this chapter are the complementizer bahwa 'that' and the relativizer yang 'rel'. Complementizer bahwa 'that' links a clause to a bivalent verb, while relativizer yang 'reL' integrates a relative clause within a noun phrase.

Table 14.1: Conjunctions linking same-type constituents and the constituents they combine

| conjunctions | CL-CL | NP-NP | PP-PP | VP-VP |
| :---: | :---: | :---: | :---: | :---: |
| Addition |  |  |  |  |
| dengang 'with' |  | X |  | X |
| dang 'and' | $\underline{X}$ | X |  | X |
| sama 'to' |  | X |  | X |
| Alternative |  |  |  |  |
| ato 'or' | X | X | X | X |
| ka 'or' | X | $\underline{X}$ | X |  |
| Time and Condition |  |  |  |  |
| trus 'next' | X | X | X |  |
| baru 'and then' | X |  |  |  |
| sampe 'until' | X |  |  |  |
| seblum 'before' | X |  |  |  |
| kalo 'when, if' | X |  |  |  |
| Consequence |  |  |  |  |
| jadi 'so, since' | X |  |  |  |
| supaya 'so that' | X |  |  |  |
| untuk 'for' | X |  |  |  |
| sampe 'with the result that' | X |  |  |  |
| karna 'because' | X |  |  |  |
| gara-gara 'because' | X |  |  |  |
| Contrast |  |  |  |  |
| tapi 'but' | X |  |  |  |
| habis 'after all' | X |  |  |  |
| baru 'after all' | X |  |  |  |
| padahal 'but actually' | X |  |  |  |
| biar 'although' | X |  |  |  |
| Similarity |  |  |  |  |
| sperti 'similar to' | X |  |  |  |
| kaya 'like' | X |  |  |  |

Table 14.2: Conjunctions linking same-type constituents and their positions

| conjunctions | CL [CNJ CL] | [CNJ CL] CL | CL [ CL CNJ ] |
| :---: | :---: | :---: | :---: |
| Addition |  |  |  |
| dengang 'with' | X |  |  |
| dang 'and' | X |  |  |
| sama 'to' | X |  |  |
| Alternative |  |  |  |
| ato 'or' | X |  |  |
| ka 'or' | X |  |  |
| Time and Condition |  |  |  |
| trus 'next' | X |  |  |
| baru 'and then' | X |  |  |
| sampe 'until' | X |  |  |
| seblum 'before' | X | X |  |
| kalo 'when, if' |  | X |  |
| Consequence |  |  |  |
| jadi 'so, since' | X |  | X |
| supaya 'so that' | X |  |  |
| untuk 'for' | X |  |  |
| sampe 'with the result that' | X |  |  |
| karna 'because' | X | X |  |
| gara-gara 'because' | X |  |  |
| Contrast |  |  |  |
| tapi 'but' | X |  |  |
| habis 'after all' | X |  |  |
| baru 'after all' |  |  | X |
| padahal 'but actually' | X |  |  |
| biar 'although' | X | X |  |
| Similarity |  |  |  |
| sperti 'similar to' | X |  |  |
| kaya 'like' | X |  |  |

## Appendices

## Appendix A: Word lists

This appendix presents 2,215 lexemes which form the basis for the phonological analysis in Chapter 2. ${ }^{1}$ Included are 1,117 Papuan Malay lexical roots, listed in Appendix A. 1 (see also §2.1), and 719 loanwords, listed in Appendix A. 2 (see also §2.5). Also included are 380 items, historically derived by (unproductive) affixation of Malay roots, listed in Appendix A. 3 (see also §2.4.4.2). Upon further investigation some of the words listed as inherited Papuan Malay lexemes in Appendix A. 1 and Appendix A. 3 may also turn out to be loanwords.

The lexemes listed in the following sections are presented in their alphabetical order. For each lexeme the following details are included: their phonetic transcription, word class, and English gloss. As discussed in §2.4.4 and §2.5.3.3, lexical roots in Papuan Malay typically carry penultimate stress. In the following sections, lexemes which do not have penultimate but ultimate or antepenultimate stress are marked with " $x$ " for easier recognition.

## A. 1 Papuan Malay roots

| Lexeme | Transcription | Word class | English gloss |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| A |  |  |  |
| $a b u$ | 'a.bu | v.MO(st) | be dusty |
| $a d a$ | 'a.da | v.BI | exist |
| $a d e$ | 'a.d | N | younger sibling |
| aduk | 'a.drk' | v.BI | beat |
| agak | 'a.gek' | ADV | rather |
| air | 'a.Ir | N | water |
| ajak | 'a.d3ek | v.BI | invite |
| ajar | 'a.d3er | V.BI | teach |
| alas | 'a.les | V.BI | put down as base |
| ambil | 'em.bil | V.TRI | fetch |
| ampas | 'em.pes | N | waste |
| ampung | 'em.prn | N | forgiveness |

[^187]A Word lists

| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| ana | 'a.nek | N | child |
| ancam | 'en.tfem | v.BI | threaten |
| andal | 'en.del | v.mo(st) | be reliable |
| ane | 'a.n $\varepsilon$ | v.mo(st) | be strange |
| anggap | 'ey.gep | v.bi | regard as |
| anging | 'a.yın | N | wind |
| angkat | 'ey.ket' | v.bi | lift |
| anjing | 'en.d3ı | N | dog |
| antar | 'en.ter | v.bi | bring |
| anyam | 'a.nem | v.bi | plait |
| apa | 'a.pa | INT | what |
| api | 'a.pi | N | fire |
| arang | 'a.rey | N | charcoal |
| asap | 'a.sep | N | smoke |
| asing | 'a.sin | v.mo(st) | be salty |
| asing | 'a.sıy | v.mo(st) | be foreign |
| atas | 'a.tes | N -LOCT | top |
| atur | 'a.tvr | v.bi | arrange |
| awang | 'a.wey | N | cloud |
| awas | 'a.wes | v.Mo(DY) | watch out |
| ayam | 'a.jem | N | chicken |
| ayung | 'a.jon | v.bi | hit |
| B |  |  |  |
| babat | 'ba.bet' | v.bi | clear away |
| babi | 'ba.bi | N | pig |
| bagus | 'ba.grs | v.mo(st) | be good |
| baik | 'ba.rk' | v.mo(st) | be good |
| bakar | 'ba.ker | v.bi | burn |
| baku | 'ba.ku | RECP | reciprocal |
| balap | 'ba.lep' | v.bi | race |
| balas | 'ba.les | v.bi | reply |
| balay | 'ba.lpj | N | meeting hall |
| balik | 'ba.lık' | v.bi | turn around |
| balok | 'ba.low' | N | wooden beam |
| balut | 'ba.lst | v.BI | bandage |
| bambu | 'bem.bu | N | bamboo |
| banci | 'ben.tfi | N | homosexual male |
| bandar | 'ben.der | N | stick |
| banding | 'ben.dın | v.bI | compare |
| bangga | 'bey.ga | v.mo(st) | be proud |
| bangkit | 'bey.ktt' | v.mo(st) | be resurrected |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | bangung | 'ba.yชn | v.bi | build |
|  | bangung | 'ba.yชn | v | wake up |
|  | banjir | 'ben.d3ir | N | flooding |
|  | bantal | 'ben.tel | N | pillow |
|  | banting | 'ben.tın | v.bI | throw |
|  | bantu | 'ben.tu | v.bi | help |
|  | banyak | 'ba.jek' | QT | many |
|  | bapa | 'ba.pa | N | father |
|  | barang | 'ba.rey | N | stuff |
|  | barapeng | ba.'ra.pẹn | V.BI | cook with hot stones |
|  | baring | 'ba.fıy | V.mo(Dy) | lie down |
|  | baris | 'ba.ris | N | row |
|  | baru | 'ba.rs | v.mo(ST) | be new |
|  |  |  | ADV | recently |
|  |  |  | CNJ | and then, after all |
|  | barusang | ba.'ru.sen | ADV | just now |
|  | basa | 'ba.sa | v.mo(st) | be wet |
|  | batang | 'ba.tey | N | stick |
|  | batas | 'ba.tes | N | border |
|  | batu | 'ba.tu | N | stone |
|  | bawa | 'ba.wa | N-LOCT | bottom |
|  | bawa | 'ba.wa | V.tri | bring |
|  | bawang | 'ba.wen | N | onion |
|  | bayam | 'ba.jem | N | amaranth |
|  | bayang | 'ba.jey | N | image |
|  | bayar | 'ba.jer | v.bI | pay |
|  | bayi | 'ba.ji | N | baby |
|  | bayi | 'ba.ji | N | palm stem |
| x | bebang | be.'ben | N | burden |
|  | bebas | 'be.bes | v.mo(st) | be free |
|  | bebek | 'be.bẹk | N | duck |
|  | begini | be.'gi.ni | ADV | like this |
|  | begitu | be.'gi.tu | ADV | like that |
| x | bekal | be.'kel | v.mo(st) | be equipped |
| x | bekas | ba.'kes | N | trace |
|  | belalang | bs.'la.ley | N | grasshopper |
|  | belok | 'be.lopk | v.mo(Dy) | turn |
| x | benang | be.'ney | N | thread |
| x | benar | be.'ner | v.mo(st) | be true |
|  | bencong | 'be̦n.tfon | N | transvestite |
| x | bengkak | bę..'kek' | v.mo(st) | be swollen |
|  | bengkok | 'bęn.kopk' | v.mo(st) | be crooked |

A Word lists

|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
| x | bentuk | bęn.tok | v.bi | form |
|  | bera | 'be̦.ra | V.bI | defecate |
|  | beres | 'be̦.ç̦s | v.Mo(st) | be in order |
|  | berhala | bçr.'ha.la | N | idol |
| x | bernang | bçr.'ney | v.mo(Dy) | swim |
| x | bersi | bç.'si | v.mo(st) | be clean |
| x | besar | be.'ser | v.mo(st) | be big |
|  | besi | 'be.si | N | metal |
|  | besok | 'be.sọk' | N | tomorrow |
|  | bete | 'be.te | N | taro |
| x | betul | be.tol | v.mo(st) | be true |
|  | biang | 'bi.ey | N | main root stock |
|  | biar | 'bi.er | v.bi | let |
|  |  |  | CNJ | although |
|  | bibit | 'bi.bit | N | seed |
|  | biking | 'bi.km | V.BI | make |
|  | bilang | 'bi.ley | v.bi | say |
|  | bimbing | 'bim.bıy | v.bi | lead |
|  | binatang | bi.'na.ten | N | animal |
|  | bingung | 'bi.yชn | v.mo(st) | be confused |
|  | bini | 'bi.ni | N | wife |
|  | bintang | 'bin.tey | N | star |
|  | biru | 'bi.ru | v.mo(st) | be blue |
|  | bisa | 'bi.sa | v.mo(st) | be able |
|  | bisik | 'bi.sik' | v.bi | whisper |
|  | bisu | 'bi.su | v.mo(st) | be mute |
|  | bla | 'bla | v.bi | split |
|  | blakang | 'bla.key | N -LOCT | backside |
|  | blanga | 'bla.ya | N | cooking pot |
|  | blanja | 'blen.dza | v.bi | shop |
|  | blas | 'bles | num.c | teens |
|  | bli | 'bli | v.tri | buy |
|  | blimbing | 'blım.bin | N | star fruit |
|  | blum | 'blom | ADV | not yet |
|  | bobo | 'bo.bo | N | Nipah palm fruit schnapps |
|  | bocor | 'bo.tfor | V.Mo(DY) | leak |
|  | bodo | 'bo.do | v.mo(st) | be stupid |
|  | bole | 'bo.le | V.AUX | may |
|  | bongkar | 'bọp.ker | v.bi | unload |
|  | bongkok | 'bọn.kopk' | v.mo(st) | be bent over |
|  | bongso | 'bop.sp | N | youngest offspring |
|  | borgol | 'bo̦.go̦ | v.bI | handcuff |


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| bosang | 'bo.sen | v.mo(st) | be bored |
| botak | 'bo.tek' | v.mo(st) | be bald |
| brani | 'bra.ni | v.mo(st) | be courageous |
| brapa | 'bra.pa | QT | several, how many |
| bras | 'bres | N | hulled rice |
| brat | 'bret' | v.mo(st) | be heavy |
| bua | 'bu.a | N | fruit |
| buang | 'bu.ey | v.bi | discard |
| buat | 'bu.et | v.bi | make |
| buat | 'bu.et | PREP | for |
| buaya | bs.'a.ja | N | crocodile |
| bubar | 'bu.ber | v.bi | scatter |
| bujang | 'bu.dzen | v.mo(st) | be unmarried |
| bujuk | 'bu.d3ok | v.bi | trick |
| buka | 'bu.ka | v.bi | open |
| bukang | 'bs.ken | ADV | NEG |
| bukit | 'bu.kıt | N | mountain |
| bulang | 'bu.len | N | month |
| bulat | 'bu.let' | v.mo(st) | be round |
| bule | 'bu.le | N | white person |
| bulu | 'bu.lu | N | body hair |
| bumbu | 'bum.bv | N | spice |
| bunga | 'bu.ya | N | flower |
| bungkus | 'bur.kvs | v.bi | pack |
| buntu | 'bun.ts | v.mo(st) | be blocked |
| bunu | 'bu.nu | v.bi | kill |
| bunyi | 'bu.ni | N | sound |
| buru | 'bu.ru | v.BI | hunt |
| burung | 'bo.con | N | bird |
| busa | 'bu.sa | N | foam |
| busuk | 'bu.ssk' | v.mo(st) | be rotten |
| busur | 'bu.svr | N | bow |
| buta | 'bu.ta | v.mo(st) | be blind |
| butu | 'bu.tu | v.bi | need |
| C |  |  |  |
| cabang | 'taa.bey | N | branch |
| cabut | t ta.bst | v.bi | pull out |
| cacat | 'tfa.tfet' | v.mo(st) | be disabled |
| cakar | 'tfa.ker | v.bi | scratch |
| calong | 'tfa.lon | N | candidate |
| camat | 'tfa.met | N | subdistrict head |

A Word lists


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | dapur | 'da.pzr | N | kitchen |
|  | dara | 'da.ra | N | blood |
|  | darat | 'da.ret | N | land |
|  | dari | 'da.ri | PREP | from |
|  | dasar | 'da.ser | N | base |
|  | datang | 'da.tey | V.mo(Dy) | come |
|  | daung | 'da.sn | N | leaf |
|  | dayung | 'da.jon | V.BI/N | paddle |
|  | de | 'd $\varepsilon$ | PRO | 3sG |
| x | dekat | de.'ket' | v.bi | near |
| x | dengang | de.'ŋn | PREP/CNJ | with |
| x | dengar | de.'prer | V.BI | hear |
|  | depang | 'de.pen | N-LOCT | front |
| x | desak | de.'sek | v.bI | urge |
|  | di | 'di | PREP | at, in |
|  | dia | 'di.a | PRO | 3sG |
|  | diam | 'di.em | v.mo(st) | be quiet |
|  | didik | 'di.dik | v.bi | educate |
|  | dinding | 'dın.dın | N | interior wall |
|  | dinging | 'di.jın | v.mo(st) | be cold |
|  | diri | 'di.ri | N | self |
|  | dlapang | 'dla.pen | num.C | eight |
|  | dong | 'dọ | PRO | 3pl |
|  | dongeng | 'do.ye̦n | N | legend |
|  | dorang | 'do.rey | PRO | 3pl |
|  | dorong | 'd..ron | v.bI | push |
|  | dua | 'du.a | NUM.C | two |
|  | duduk | 'dv.drk | V.mo(Dy) | sit |
|  | dukung | 'dv.kァn | v.bI | support |
|  | dulu | 'du.lu | v.mo(st) | be prior |
|  |  |  | ADV | first, in the past |
|  | dumpul | 'dvm.prl | v.bI | hit |
|  | duri | 'du.ri | N | thorn |
|  | dusung | 'dv.son | N | garden |
|  | E |  |  |  |
|  | ejek | 'ع.d3¢ָ ${ }^{\text {en }}$ ' | v.BI | mock |
|  | ekor | ' $\varepsilon . \mathrm{k}_{\text {¢ }}^{\text {¢ }}$ | N | tail |
| x | emas | ع.'mes | N | gold |
| x | empat | әm.'pet' | num.C | four |
|  | enak | 'ع.nek' | v.mo(ST) | be pleasant |
| x | enam | ع.'nem | num.C | six |

A Word lists

| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| epeng | 'દ̇.p¢ָ | v.mo(ST) | be important |
| G |  |  |  |
| gaba | 'ga.ba | N | unhulled paddy |
| gabung | 'ga.bァn | v.bI | join |
| gagal | 'ga.gel | v.bI | fail |
| gale | ga.lę | v.bI | dig up |
| gambar | 'gem.ber | V.BI/N | draw / drawing |
| gampang | gem.pen | v.mo(st) | be easy |
| ganas | 'ga.nes | v.bI | feel furious (about) |
| gandeng | gen.dẹy | v.bI | hold |
| ganggu | 'gey.gu | v.bI | disturb |
| ganjal | 'gen.dzel | v.bI | prop up |
| ganteng | gen.tẹn | v.mo(ST) | be handsome |
| ganti | gen.ti | v.bI | replace |
| gantong | 'gen.tọn | v.bI | hang |
| gara | 'ga.ra | v.bI | irritate |
| garam | ga.rem | N | salt |
| garo | 'ga.rs | v.bI | scratch |
| gatal | ga.tel | v.mo(st) | be itchy |
| gate | 'ga.tع | v.bI | hook |
| gawang | 'ga.wen | N | goal posts |
| gawat | 'ga.wet' | v.mo(ST) | be terrible |
| gaya | 'ga.ja | N | manner |
| gedi | 'ge.di | N | aibika |
| x gedung | ge.'dry | N | building |
| x geli | ge.'li | v.bI | tickle |
| gementar | ,ge.męn.ter | V.Mo(dy) | tremble |
| x gemuk | ge.'mək' | v.mo(st) | be fat |
| $x$ gencar | ge̦n.'tfer | v.mo(st) | be incessant |
| gendong | 'ge̦n.do̦ | v.bI | hold |
| gepe | 'ge.pe | v.BI | clamp |
| x gertak | ge̦r.'tek | v.bI | intimidate |
| giawas | gi.'a.wes | N | guava |
| gigi | 'gi.gi | N | tooth |
| gigit | 'gi.git | v.BI | bite |
| gila | gi.la | v.mo(st) | be crazy |
| giling | g. l lı | v.bI | grind |
| glang | gley | N | bracelet |
| glap | 'glep' | v.MO(ST) | be dark |
| glombang | 'glom.bey | N | wave |
| gnemo | 'gne.mo | N | melinjo |


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| goblok | 'go.blọk' | v.mo(st) | be stupid |
| gode | 'go.de | v.mo(st) | be fat |
| gonceng | 'gonn.tfen | v.bi | give a ride |
| gondrong | 'gọn.drov | v.mo(st) | be long haired |
| gora | 'g..га | N | water apple |
| goreng | 'go.sçy | v.bi | fry |
| goso | 'go.so | v.bi | rub |
| goyang | 'go.jen | v.bI | shake |
| gugat | 'gu.get | v.bi | demand |
| gugur | 'gv.gvr | v.Mo(DY) | fall (prematurely) |
| guling | 'gu.lıy | v.Mo(DY) | roll over |
| guntur | 'grn.tvr | N | thunder |
| gunung | 'gv.nชท | N | mountain |
| gurango | gช.'га.ŋァ | N | shark |
| gurita | gu.'ci.ta | N | octopus |
| H |  |  |  |
| habis | 'ha.bis | v.mo(st) | be used up |
|  |  | CNJ | after all |
| hajar | 'ha.d3er | V.BI | beat up |
| halamang | ha.la.men | N | yard |
| halus | 'ha.lvs | v.mo(st) | be soft |
| hamba | 'hem.ba | N | servant |
| hambat | 'hem.bet' | v.bi | block |
| hambur | 'hem.brr | v.bi | scatter |
| hampir | 'hem.prr | ADV | almost |
| hancur | 'hen.tfor | v.mo(st) | be shattered |
| hangus | 'ha.yos | v.mo(st) | be singed |
| hantam | 'hen.tem | v.bi | strike |
| hanya | 'ha.na | ADV | only |
| hapus | 'ha.pos | v.bi | completely remove |
| harap | 'hа.гер | v.bI | hope |
| harus | 'ha.rus | v.AUX | have to |
| hati | 'ha.ti | N | liver |
| haus | 'ha.ss | v.mo(st) | be thirsty |
| hela | 'he̦.la | V.BI | haul |
| hias | 'hi.es | v.bi | decorate |
| hidup | 'hi.dvp' | v.Mo(DY) | live |
| hijow | 'hi.d3ow | v.mo(st) | be green |
| hilang | 'hi.ley | v.mo(st) | be lost |
| hinggap | 'hır.gep' | v.Mo(DY) | perch |
| hitam | 'hi.tem | v.mo(St) | be black |

A Word lists

| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| hitung | 'hi.toy | v.bi | count |
| hoki | 'ho.ki | N | plant stem |
| hosa | 'ho̦.sa | v.mo(DY) | pant |
| hujang | 'hu.d3en | N | rain |
| hutang | 'ho.ten | N | debt |
| hutang | 'hu.ten | N | forest |
| I |  |  |  |
| $i b u$ | 'i.bu | N | woman |
| ikang | 'i.ken | N | fish |
| ikat | 'i.ket' | v.bI | tie up |
| ikut | 'i.kvt' | v.bI | follow |
| ingat | 'i.jet' | v.bi | remember |
| inging | 'i.ym | v.bi | wish |
| ingus | 'i.jos | N | snot |
| ini | 'i.ni | DEM | D.Prox |
| injak | 'm.dza | v.bi | step on |
| ipar | i.per | N | sibling in-law |
| iris | 'i.fis | v.bi | cut |
| isap | 'i.sep ${ }^{\text {² }}$ | v.bi | smoke |
| isi | 'i.si | v.BI/N | fill / filling |
| itu | 'i.tu | DEM | D.DIST |
| J |  |  |  |
| jadi | 'dza.di | v.bi | become |
|  |  | CNJ | so, since |
| jago | 'dya.go | N | candidate |
| jagung | 'dza.gon | N | corn |
| jahat | 'dza.het' | v.mo(st) | be bad |
| jahe | 'dza.he | N | ginger |
| jahit | 'dza.hit' | v.bi | sew |
| jaja | 'dza.dza | v.bi | colonize |
| jajang | 'dza.dzen | N | snack |
| jalang | 'dya.len | v.Mo(DY)/n | walk / road |
| jalur | 'dza.lor | N | traffic lane |
| jangang | 'dza.jen | ADV | NEG.IMP |
| jangkrik | 'd3ey.krık' | N | cricket |
| janji | 'd3en.d3i | v.bi | promise |
| jantung | 'd3en.toy | N | heart |
| jarak | 'dza.rek | N | distance between |
| jarang | 'dza.rey | ADV | rarely |
| jari | 'dza.ri | N | digit |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | jaring | 'dga.rın | N | net |
|  | jata | 'dza.ta | N | allotment |
|  | jatu | 'dya.tu | v.Mo(DY) | fall |
|  | jaw | 'd3ew | v.mo(st) | be far |
|  | jaya | 'dya.ja | v.mo(st) | be glorious |
| x | jelas | d3c.'les | v.mo(st) | be clear |
| x | jelek | d3c.'lewk' | v.mo(st) | be bad |
|  | jembatang | d3¢̣m.'ba.ten | N | bridge |
| x | jempol | d3¢̦m.'pol | N | thumb |
| x | jemput | d3¢̣m.'pvt | v.bi | pick up |
| x | jemur | dзe.'mor | v.bi | dry in sun |
|  | jenggot | 'd3¢̣y.gãt' | N | beard |
|  | jengkel | 'd3¢̧̣.kęl | v.bi | annoy |
| x | jerat | d3ع.'ret' | N | trap |
|  | jerawat | dze.'ra.wet' | N | acne |
|  | jeruk | 'd3e.rvk' | N | citrus fruit |
|  | jintang | 'd3In.ten | N | caraway seed |
|  | jual | 'duu.el | v.bI | sell |
|  | juara | d3u.'a.ra | N | champion |
|  | jubi | 'dzu.bi | v.BI/N | bow shout / bow and arrow |
|  | juga | 'dzu.ga | ADV | also |
|  | jujur | 'dzu.dyrr | v.mo(st) | be honest |
|  | jungkir | 'dzrn.kır | v.bi | flip over |
|  | jurang | 'dzu.ren | N | steep decline |
|  | jurus | 'd3u.rvs | N | steps |
|  | K |  |  |  |
|  | ka | 'ka | CNJ | or |
|  | kabur | 'ka.bor | v.mo(st) | be hazy |
|  | kabut | 'ka.bot' | N | fog |
|  | kacang | 'ka.tfen | N | bean |
|  | kaco | 'ka.t5o | v.mo(st) | be confused |
|  | kadang | 'ka.dey | ADV | sometimes |
|  | kaget | 'ka.ge̦t ${ }^{\text {t }}$ | v.bI | feel startled (by) |
|  | kaing | 'ka.m | N | cloth |
|  | kaka | 'ka.ka | N | older sibling |
|  | kaki | 'ka.ki | N | foot, leg |
|  | kala | 'ka.la | v.mo(st) | be defeated |
|  | kalangang | ka.'la.jen | N | circle |
|  | kaleng | 'ka.le̦y | N | tin can |
|  | kali | 'ka.li | N | river |
|  | kalong | 'ka.lọy | N | necklace |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | kam | 'kem | PRO | 2PL |
|  | kamorang | ka.'mo.rey | Pro | 2PL |
|  | kampung | 'kem.pъท | N | village |
|  | kamu | 'ka.mu | PRO | 2pL |
|  | kanang | 'ka.nen | ADV | right |
|  | kancing | 'ken.tfin | v.bi | lock |
|  | kandam | 'ken.dem | N | stable |
|  | kandung |  | N | womb |
|  | kangkung | 'ken.kzy | N | water spinach |
|  | kapak | 'ka.pek | N | axe |
|  | kapang | 'ka.pen | INT | when |
|  | kapur | 'ka.por | N | lime |
|  | karang | 'ka.rey | N | lime stone |
|  | karet | 'ka.re̦t | N | rubber |
|  | karong | 'ka.¢ŋ¢ | N | bag |
|  | kasar | 'ka.ser | v.Mo(ST) | be coarse |
|  | kasbi | 'kes.bi | N | cassava |
|  | kasi | 'kes | V.tri | give |
|  | kasi | 'ka.si | N | love |
|  | kaswari | ka.'swa.ci | N | cassowary |
|  | kawang | 'ka.wen | N | friend |
|  | kaya | 'ka.ja | PREP/CNJ | like |
|  | kayu | 'ka.ju | N | wood |
|  | ke | 'k $\varepsilon$ | PREP | to |
| x | kebung | kc.'bon | N | garden |
| x | kecil | ke.'tfil | v.mo(ST) | be small |
|  | kecuali | , ke.tJv.'a.li | ADV | except |
| x | kejar | ke.'d3er | v.bi | chase |
|  | kemaring | ke.'ma.rın | N | yesterday |
|  | kembali | ke̦m.'ba.li | V.MO(DY) | return |
| x | kembang | kęm.'bey | N | flower |
| x | kembar | ke̦m.'ber | N | twin |
|  | kempes | 'kęm.pęs | V.mo(st) | be deflated |
| x | kena | ke.'na | v.bi | hit |
| x | kenal | ke.'nel | v.bi | know |
| x | kencang | kę.'tfey | V.mo(st) | be speedy |
|  | kendali | kęn.'da.li | N | reins |
|  | kendara | kęn.'da.ra | v.bI | ride |
| x | kental | kęn.'tel | v.mo(st) | be fluent |
|  | kentara | ke̦n.'ta.ra | v.Mo(sT) | be visible |
| x | kenyang | ke.'ney | v.mo(st) | be satisfied |
|  | kepiting | ke.'pi.tıy | N | crab |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
| xxx | kepung | ke.'pon | v.bi | surround |
|  | kera | ke.'ra | N | ape |
|  | ketang | ke.'tey | N | crab |
|  | ketapang | ke.ta.pen | N | tropical almond |
| x | ketuk | ke.tık' | v.bi | knock |
|  | kewa | 'ke.wa | N | dance party |
|  | kicaw | 'ki.tfew | v.mo(st) | be naughty |
|  | kikir | 'ki.krı | v.mo(st) | be stingy |
|  | kikis | 'ki.kıs | v.bi | scrape |
|  | kilat | 'ki.let' | N | lightning |
|  | kincing | 'kın.tSin | v.bi | pee |
|  | kintal | 'kin.tel | N | yard |
|  | kipas | 'ki.pes | v.bi | beat |
|  | kira | 'ki.ra | v.mo(Dy) | think |
|  | kiri | 'ki.ri | ADV | left |
|  | kirim | 'ki.rım | V.tri | send |
|  | kita | 'ki.ta | PRO | 1pl |
| x | kitong | ki.'tọ | Pro | 1PL |
|  | kitorang | ki.'to.rey | PRo | 1pL |
|  | kladi | 'kla.di | N | taro root |
|  | klambu | 'klem.bu | N | mosquito net |
|  | klapa | 'kla.pa | N | coconut |
|  | klawar | 'kla.wer | N | cave bat |
|  | klereng | 'kle̦. ç̧̦ $^{\prime}$ | N | marbles |
|  | kliling | 'kli.lıy | v.bi | travel around |
|  | klompok | 'klowm.pôk | N | group |
|  | kluar | 'klv.er | v.mo(Dy) | go out |
|  | knapa | 'kna.pa | INT | why |
|  | ko | 'ko | PRO | 2SG |
|  | koco | 'ko.tfo | v.bI | tell off |
|  | kodok | 'kap.dok | N | frog |
|  | kolam | 'ko̦.lem | N | big hole |
|  | kolong | 'kọ.lọ | N | space below |
|  | korek | 'ko.r¢̦k | v.BI/N | scrape / matches |
|  | kos | 'kọs | N | boarding house |
|  | kosong | 'koָ.sọ | v.mo(st) | be empty |
|  | kota | 'ko.ta | N | city |
|  | kotor | 'kọ.tor | v.mo(st) | be dirty |
|  | kras | 'kres | v.mo(st) | be harsh |
|  | kring | 'krın | v.mo(st) | be dry |
|  | kringat | 'kri.get' | v.Mo(DY) | sweat |
|  | kriting | 'krı.tıy | v.mo(st) | be curly |

A Word lists

| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| kuca | 'ku.tfa | v.bi | rub with hands |
| kucing | 'ku.tfrn | N | cat |
| kuku | 'ku.ku | N | digit nail |
| kukus | 'ku.kəs | v.bi | steam |
| kulit | 'ku.lit | N | skin |
| kumis | 'ku.mis | N | mustache |
| kumpul | 'kvm.pol | v.bi | gather |
| x kumur | kv.'mor | v.bi | rinse mouth |
| kunya | 'kv.na | v.bi | chew |
| kupas | 'ku.pes | v.bi | peel |
| kurang | 'ku.cen | v.bi | lack |
| kurung | 'kv.rvn | v.bi | imprison |
| kurus | 'kr.cos | v.mo(st) | be thin |
| x kuskus | kvs.'kvs | N | cuscus |
| kutik | 'ku.trk' | v.bi | snap |
| kutu | 'ku.tu | N | louse |
| kutuk | 'ku.trk | V.BI/N | curse |
| kwali | 'kwa.li | N | frying pan |
| L |  |  |  |
| lada | 'la.da | N | pepper |
| ladang | 'la.dey | N | field |
| lagi | 'la.gi | ADV | also, again |
| $\operatorname{lag} u$ | 'la.gu | N | song |
| laing | 'la.m | V.mo(st) | be different |
| laju | 'la.dzu | v.mo(st) | be quick |
| laki | 'la.ki | N | husband |
| laki~laki | , la.ki'la.ki | N | man |
| lalapang | la.la.pen | N | k. o. vegetable dish |
| lalat | 'la.let | N | fly |
| laley | 'la.lęj | V.mo(st) | be careless |
| lama | 'la.ma | v.mo(st) | be long (of duration) |
| lamar | 'la.mer | v.bi | apply for |
| lambat | 'lem.bet | v.mo(st) | be slow |
| lancar | 'len.tfer | v.mo(st) | be fluent |
| langar | 'la.per | v.bi | collide with |
| langit | 'la.yıt' | N | sky |
| langka | 'ley.ka | N | step |
| langsung | 'ley.sชy | ADV | directly |
| lanjut | 'len.dzot' | v.bi | continue |
| lante | 'len.te | N | floor |
| lantik | 'len.trk' | v.bi | inaugurate someone |


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| lapang | 'la.pen | v.mo(st) | be spacious |
| lapar | 'la.per | v.mo(ST) | be hungry |
| lapis | 'la.pis | QT | all |
| lapuk | 'la.pzk | v.Mo(DY) | decompose |
| larang | 'la.rey | v.bi | forbid |
| lari | 'la.ri | v.Mo(DY) | run |
| larut | 'la.rst | v.mo(st) | be protracted |
| lati | 'la.ti | v.bi | practice |
| lauk | 'la.sk | N | side dish |
| laut | 'la.zt' | N | sea |
| lawang | 'la.wen | v.bi | oppose |
| layak | 'la.jek | v.mo(st) | be suitable |
| layang | 'la.jen | v.bi | serve |
| layar | 'la.jer | v.mo(DY) | sail |
| lebar | 'le.ber | v.mo(st) | be wide |
| lebarang | le.'ba.ren | N | end of fasting month |
| $\times \quad l e b i$ | lع.'bi | ADV | more |
| $\mathrm{x} \quad \operatorname{leg} a$ | le.'ga | v.mo(st) | be relieved |
| leher | 'le.he̦r | N | neck |
| x lema | le.'ma | v.mo(st) | be weak |
| x lemba | lęm.'ba | N | valley |
| lembaga | lęm.'ba.ga | N | institute |
| x lembar | lęm.'ber | N | sheet |
| lembek | 'le̦m.bęk | v.mo(st) | be soft |
| lempar | 'lęm.per | v.bi | throw |
| x lengkap | l¢̣n.'kep | v.mo(st) | be complete |
| x lepas | l.'pes | v.bi | free |
| lewat | 'le.wet' | v.bi | pass by |
| liar | 'li.er | v.mo(st) | be wild |
| liat | 'li.et' | v.bi | see |
| libur | 'li.bor | v.Mo(DY) | take vacation |
| licing | 'li.tfin | v.mo(st) | be straight |
| lida | 'li.da | N | tongue |
| liling | 'li.lm | N | candle |
| lima | 'li.ma | NUM.C | five |
| limpa | 'lim.pa | v.mo(st) | be abundant |
| lingkar | 'lin.ker | v.bi | circle |
| lipat | 'li.pet' | v.bi | fold |
| lobe | 'lo.bs | v.bi | night hunt |
| lomba | 'lowm.ba | N | contest |
| lompat | 'lowm.pa | V.BI | jump |
| loncat | 'lown.tfet' | v.bI | jump |


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| longgar | 'loy.ger | v.mo(st) | be thin |
| loyang | 'lo.jen | N | large bowl |
| loyo | 'lo.jo | v.mo(st) | be weak |
| luar | 'lo.er | N-LOCT | outside |
| luas | 'lo.es | v.Mo(st) | be vast |
| lubang | 'lo.bey | N | hole |
| lucu | 'lu.tfu | v.mo(st) | be funny |
| luda | 'lu.da | v.bi | spit |
| luka | 'lv.ka | N | wound |
| lulus | 'lu.los | V.BI | pass (a test) |
| lumayang | lu.'ma.jen | V.Mo(st) | be moderate |
| lunas | 'lu.nes | v.mo(st) | be paid |
| luncur | 'lon.tfor | v.bi | slide |
| lupa | 'lu.pa | v.bi | forget |
| lur | 'lor | v.bI | spy on |
| luru | 'lu.ru | v.bi | chase after |
| lurus | 'lo.ros | v.mo(st) | be straight |
| lusa | 'lu.sa | N | day after tomorrow |
| lutut | 'lu.tst | N | knee |
| M |  |  |  |
| mabuk | 'ma.bok' | v.mo(st) | be drunk |
| macang | 'ma.tfem | N | variety |
| mace | 'ma.tfe | N | woman |
| macet | 'ma.t\¢̣t | v.mo(st) | be stuck |
| mahal | 'ma.hel | v.mo(st) | be expensive |
| maing | 'ma.m | v.bi | play |
| maju | 'ma.dzu | v.Mo(Dy) | advance |
| makang | 'ma.ken | v.bI | eat |
| maki | 'ma.ki | v.bi | abuse verbally |
| making | 'ma.kin | ADV | increasingly |
| mala | 'ma.la | ADV | even |
| malam | 'ma.lem | N | night |
| malas | 'ma.les | v.mo(st) | be listless |
| maling | 'ma.lı | N | thief |
| malu | 'ma.lu | V.bI | feel embarrassed (about) |
| татри | 'mem.pu | v.mo(st) | be capable |
| mana | 'ma.na | INT | where, which |
| mancing | 'men.tfin | v.bI | fish with rod |
| mandi | 'men.di | v.mo(DY) | bathe |
| mandiri | men.'di.ri | v.mo(DY) | stand alone |
| mandul | 'men.dsl | v.Mo(st) | be sterile |


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| mangkok | 'mey.kôk | N | cup |
| manis | 'ma.nıs | v.mo(st) | be sweet |
| manja | 'men.dza | v.bI | spoil |
| mantang | 'men.ten | v.mo(st) | be former |
| mantap | 'men.tep' | v.mo(st) | be good |
| mantu | 'men.tu | N | in-law |
| mara | 'ma.ra | v.bI | feel angry (about) |
| mari | 'ma.ri | LOC | hither |
| masa | 'ma.sa | v.mo(st) | impossible |
| masak | 'ma.sek | v.bi | cook |
| masi | 'ma.si | ADV | still |
| masuk | 'ma.svk' | v.bi | enter |
| mata | 'ma.ta | N | eye |
| mati | 'ma.ti | v.Mo(DY) | die |
| maw | 'mew | v.bi | want |
| mayana | ma.ja.na | N | painted nettle |
| mayang | 'ma.jen | N | palm blossom |
| x mekar | me.'ker | V.MO(DY) | blossom |
| melulu | me.'lu.lu | ADV | exclusively |
| memang | 'me.mey | ADV | indeed |
| x menang | me.'ney | v.bi | win |
| x menta | męn.ta | v.mo(st) | be uncooked |
| mera | 'me.ra | v.mo(st) | be red |
| mesti | 'męs.ti | v.AUX | have to |
| meti | 'me.ti | N | low tide |
| mewa | 'me.wa | v.mo(st) | be luxurious |
| mimpi | 'mım.pi | v.bI | dream (of) |
| minang | 'mi.ney | v.bi | propose |
| minta | 'min.ta | v.bi | request |
| minum | 'mi.nsm | v.bi | drink |
| minyak | 'mi.nek | N | oil |
| miring | 'mi.fin | v.mo(st) | be sideways |
| mirip | 'mi.sıp' | v.bi | resemble |
| mo | 'mo | v.bI | want |
| molo | 'mo.lo | v.BI | dive, drown |
| mono | 'mo.nง | v.mo(st) | be stupid |
| monyet | 'mo.nçt | N | monkey |
| moyang | 'mo.jen | N | ancestor |
| muara | mv.'a.ra | N | river mouth |
| muat | 'mv.et' | v.BI | hold |
| muda | 'mu.da | v.mo(st) | be easy |
| mujair | mu.'dza.ir | N | tilapiine fish |


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| muka | 'mu.ka | N | front |
| mulut | 'mv.lut' | N | mouth |
| muncul | 'mon.tfor | v.mo(Dy) | appear |
| mundur | 'mon.dor | v.Mo(DY) | back up |
| mungking | 'mon.kın | ADV | maybe |
| munta | 'mon.ta | v.bI | vomit |
| mura | 'mv.ra | v.mo(st) | be cheap |
| murni | 'mvr.ni | v.mo(st) | be pure |
| musu | 'mu.su | v.BI/N | hate / enemy |
| N |  |  |  |
| naik | 'na.rk' | V.BI | ascend |
| nakal | 'na.kel | v.mo(ST) | be mischievous |
| nangka | 'ney.ka | N | jackfruit |
| nanti | 'nen.ti | ADV | very soon |
| nasi | 'na.si | N | cooked rice |
| nekat | 'ne.ket' | v.bI | determine |
| nene | 'n¢.n¢ | N | grandmother |
| nika | 'ni.ka | v.bI | marry officially |
| nokeng | 'no.kẹn | N | stringbag |
| nontong | 'noָ.ton | v.bI | watch for entertainment |
| nyamang | 'na.men | v.mo(st) | be comfortable |
| nyawa | 'na.wa | N | soul |
| nyonyor | 'no.nor | v.mo(st) | be black and blue |
| O |  |  |  |
| obat | 'o.bet | N | medicine |
| ojek | 'o.d3¢̦k' | v.BI/N | take motorbike taxi / motorbike taxi |
| olaraga | , ola.'ra.ga | V.Mo(DY) | do sports |
| oleng | 'o.lẹŋ | v.mo(DY) | shake |
| ombak | 'om.bek | N | wave |
| omel | '0.męl | v.bi | complain |
| orang | 'о.rey | N | person |
| otak | 'o.tek | N | brain |
| otot | 'o.topt' | N | muscle |
| P |  |  |  |
| pacar | 'pa.tfer | v.BI/N | date / lover |
| pace | 'pa.tโe | N | man |
| padam | 'pa.dem | v.bi | extinguish |
| padat | 'pa.det | v.mo(ST) | be solid |


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| padede | pa.'de̦.d $\varepsilon$ | V.bI | whine (for) |
| padu | 'pa.du | v.mo(st) | be fused |
| pagi | 'pa.gi | N | morning |
| paha | 'pa.ha | N | thigh |
| pahit | 'pa.hit | v.mo(st) | be bitter |
| pajak | 'pa.djek | N | tax |
| pake | 'pa.ke | v.bi | use |
| paku | 'pa.ku | N | nail |
| paling | 'pa.lıy | ADV | most |
| palungku | pa.'lın.kv | v.bi | punch |
| pamali | pa.'ma.li | N | taboo |
| pamang | 'pa.men | N | uncle |
| pamer | 'pa.męr | v.bi | show off |
| pana | 'pa.na | v.BI/N | bow shoot / arrow |
| panas | 'pa.nes | v.mo(st) | be hot |
| panggal | 'pey.gel | N | fragment |
| panggil | 'pey.gil | V.BI | call |
| pangkal | 'pey.kel | N | base |
| pangkat | 'pey.ket | N | rank |
| pangku | 'pey.ku | v.bi | hold on lap |
| panjang | 'pen.d3en | v.mo(sT) | be long |
| panjat | 'pen.d3et' | v.bi | climb |
| panta | 'pen.ta | N | buttock |
| pantas | 'pen.tes | v.mo(st) | be proper |
| pante | 'pen.te | N | coast |
| pantul | 'pen.tol | v.Mo(DY) | bounce back |
| pantung | 'pen.ton | N | k. o. traditional poetry |
| papang | 'pa.pen | N | plank |
| papeda | pa.'pe.da | N | sagu porridge |
| para | 'pa.ra | v.mo(st) | be in serious condition |
| parang | 'pa.ren | N | short machete |
| parit | 'pa.rıt | N | ditch |
| parut | 'pa.rst' | v.bi | scrape |
| pasang | 'pa.sey | N | pair |
| pasang | 'pa.sey | v.bi | install |
| pasar | 'pa.ser | N | market |
| pasir | 'pa.srı | N | sand |
| pasti | 'pes.ti | ADV | definitely |
| pasukang | pa.su.ken | N | troops |
| pata | 'pa.ta | v.bi | break |
| patung | 'pa.ton | N | statue |
| pecek | 'pe.tfęk | N | mud |

A Word lists

|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | pecis | 'pe.tJfis | N | light bulb |
| x | pedang | pe.den | N | sword |
| x | pedis | pe.'dıs | v.mo(st) | be spicy |
| x | pegang | pe.'gen | v.bI | hold |
|  | pegaway | p..'ga.wej | N | government employee |
|  | pele | 'pe.le | v.bi | cover |
| x | pelepa | ,pe.lc.'pa | N | palm stem and midrib |
|  | pendek | 'pe̦n.de̦k | v.mo(st) | be short |
| x | penting | pe̦n.tı | v.mo(st) | be important |
| x | репи | pe.'nu | v.mo(st) | be full |
| x | pergi | per.'gi | v.mo(DY) | go |
| x | perna | pęt.'na | ADV | ever |
| x | pesang | pe.'sen | v.bI | order |
|  | pesawat | pe.'sa.wet | N | airplane |
|  | pesisir | pe.'si.sir | N | shore |
|  | petatas | pe.ta.tes | N | sweet potato |
|  | pete | 'pe.te | v.bI | pick |
|  | piatu | pi.'a.tu | v.mo(st) | be motherless |
|  | pica | 'pi.tJa | v.mo(ST) | be broken |
|  | pijit | 'pi.d3ıt' | v.bI | massage |
|  | pikol | 'pi.kọl | v.bI | shoulder |
|  | pikung | 'pi.kon | v.mo(st) | be senile |
|  | pili | 'pi.li | v.bI | choose |
|  | pimping | 'pim.pın | v.bI | lead |
|  | pinang | 'pr.ney | N | betel nut |
|  | pinda | 'pin.da | v.bI | move |
|  | pinggang | 'pı.gey | N | loins |
|  | pinggir | 'pin.gır | N-LOCT | border |
|  | pinjam | 'pin.dzem | v.bI | borrow |
|  | pintar | 'pin.ter | V.MO(sT) | be clever |
|  | pintu | 'pin.tu | N | door |
|  | pisa | 'pi.sa | v.mo(st) | be separate |
|  | pisang | 'pi.sey | N | banana |
|  | pisow | 'pi.sow | N | knife |
|  | pita | 'pi.ta | N | ribbon of volleyball net |
|  | plaka | 'pla.ka | v.bi | fall over |
|  | plang | 'plen | v.mo(st) | be slow |
|  | pluk | 'plok' | v.bi | embrace |
|  | pohong | 'pọ.họn | N | tree |
|  | potong | 'pop.top | v.bI | cut |
|  | prahu | 'pra.ho | N | boat |
|  | prang | 'prey | N | war |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | prempuang | pre̦m.'pv.en | N | woman |
|  | printa | 'prin.ta | V.BI/N | command |
|  | prut | 'prost | N | stomach |
|  | pu | 'pu | V.POSS | Poss |
|  | puas | 'pv.es | V.mo(ST) | be satisfied |
|  | pukul | 'pz.kəl | V.BI | hit |
|  | pulang | 'pu.ley | V.BI | go home (to) |
|  | pulow | 'pu.low | N | island |
|  | pulu | 'pu.lu | NUM.C | tens |
|  | puntung | 'prn.tชŋ | N | butt |
|  | punya | 'pu.na | V.POSS/V.BI | poss / have |
|  | puri | 'pu.ri | N | anchovy-like fish |
|  | pusing | 'pu.sin | V.MO(ST) | be dizzy, be confused |
|  | putar | 'pu.ter | V.BI | turn around |
|  | puti | 'pu.ti | V.MO(ST) | be white |
|  | putus | 'pu.tos | V.MO(ST) | be broken |
|  | R |  |  |  |
|  | raba | 'ra.ba | V.BI | grope |
|  | rabik | 'ra.bık' | V.BI | tear |
|  | ragu | 'ra.gu | V.BI | doubt |
|  | rajing | 'ra.d3In | V.MO(ST) | be diligent |
|  | rakit | 'ra.kıt | N | raft |
|  | rakus | 'ra.kəs | V.BI | crave |
|  | ramas | 'ra.mes | V.BI | press |
|  | rambut | 'rem.bst' | N | hair |
|  | rame | 'ra.me | V.MO(ST) | be bustling |
|  | rampas | 'rem.pes | V.BI | seize |
|  | rangkap | 'rey.kep' | V.MO(ST) | be doubled |
|  | rapat | 'ra.pet | V.MO(DY)/N | move close / meeting |
|  | rapi | 'ra.pi | V.MO(ST) | be neat |
|  | rata | 'ra.ta | V.MO(ST) | be even |
|  | ratus | 'ra.tos | NUM.C | hundred |
|  | rawa | 'ra.wa | N | swamp |
|  | rawang | 'ra.wen | V.mo(ST) | be haunted |
|  | rawat | 'ra.wet' | V.BI | take care of |
| X | rebus | re.'bos | V.BI | boil |
| X | rebut | re.'bชt' | V.BI | race each other |
| x | renda | re̦n. ${ }^{\text {da }}$ | V.MO(ST) | be low |
| x | rendam | re̦n.dem | V.BI | soak |
|  | repot | 're.pot | V.MO(ST) | be busy |
|  | ribu | 'ri.bu | NUM.C | thousand |

A Word lists

| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| ribut | 'ri.bst | v.BI | trouble |
| rica | 'ri.t5a | N | red pepper |
| rindu | 'rin.du | v.bi | long for |
| ringang | 'ri.pen | v.mo(st) | be light |
| rokok | 'rọ.kọk | N | cigarette |
| ruang | 'rv.ey | N | room |
| rubu | 'ru.bu | v.MO(DY) | collapse |
| rugi | 'ru.gi | v.bi | lose out |
| ruma | 'ru.ma | N | house |
| rumput | 'rom.pst | N | grass |
| runcing | 'ron.tfin | v.mo(st) | be pointed |
| rusak | 'ru.sek | v.mo(st) | be damaged |
| rusuk | 'ru.ssk | N | rib |
| S |  |  |  |
| sa | 'sa | PRO | 1sG |
| sabit | 'sa.bit | N | sickle |
| sadap | 'sa.dep' | v.mo(st) | be delicious |
| sadar | 'sa.der | v.mo(st) | be aware |
| sagu | 'sa.gu | N | sago |
| saing | 'sa.in | v.Mo(Dy) | compete |
| sakit | 'sa.kıt' | v.mo(St) | be sick |
| sala | 'sa.la | v.mo(st) | be wrong |
| salip | 'sa.lip' | v.bi/n | crucify / cross |
| sambar | 'sem.ber | v.bi | seize |
| sambil | 'sem.brl | CNJ | while |
| sambung | 'sem.bry | v.bi | continue |
| sambut | 'sem.bot' | v.bi | welcome |
| sampa | 'sem.pa | N | trash |
| sampe | 'sem.pe | v.bi | reach |
|  |  | PREP | until |
|  |  | CNJ | until, with the result that |
| samping | 'sem.pıy | N -LOCT | side |
| sana | 'sa.na | LOC | L.DIST |
| sandar | 'sen.der | v.Mo(DY) | lean |
| sanggup | 'sey.gup | v.mo(st) | be capable |
| santang | 'sen.ten | N | coconut milk |
| sante | 'sen.te | v.Mo(DY) | relax |
| sapi | 'sa.pı | N | cow |
| sapu | 'sa.pu | v.BI/N | sweep / broom |
| sarana | sa.'ra.na | N | facility |
| sarang | 'sa.cen | N | suggestion |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | sarat | 'sa.ret' | v.mo(ST) | be loaded |
|  | saring | 'sa.rıy | v.bI | filter |
|  | sarung | 'sa.ron | N | protective sleeve |
|  | sasarang | sa.'sa.rey | N | target |
|  | satu | 'sa.tu | NUM.C | one |
|  | saya | sa.ja | Pro | 1SG |
|  | sayang | 'sa.jen | v.bI | love |
|  | sayur | 'sa.jvr | N | vegetable |
| x | sebut | sc.'bst' | v.bi | name |
| x | sedi | sc.'di | v.mo(st) | be sad |
|  | sedikit | se.'d..kit' | QT | few |
| x | sedot | sع.'dगָt' | v.bI | suck |
| x | segar | sع.'grer | v.mo(st) | be fresh |
|  | seher | 'sę.hęr | N | piston |
| x | sejak | sc.'d3ek' | ADV | since |
| x | selesay | ,sc.le.'sej | v.bI | finish |
|  | semang | 'se.men | N | outrigger |
| x | semba | se̦m.'ba | v.bI | worship |
|  | sembayang | səm.'ba.jen | v.bI | worship |
|  | sembilang | səm.'bi.len | NUM.C | nine |
| x | sembu | sçm.bu | v.mo(st) | be healed |
|  | sembuni | se̦m.bu.ni | v.bI | hide |
| x | sempat | sęm.'pet' | v.mo(Dy) | have enough time |
| x | sempit | se̦m.'pit | v.mo(st) | be narrow |
|  | sendiri | sęn.'di.ri | v.mo(sT) | be alone |
|  | sendok | 'sęn.dọk | v.BI/N | spoon |
|  | seneng | 'sع.nẹn | v.bI | sign |
|  | sentu | 'sęn.tu | v.bI | touch |
| x | senyum | sع.'nəm | V.MO(DY) | smile |
| x | sepi | sع.'pi | v.mo(st) | be quiet |
|  | seraka | sc.'ra.ka | v.mo(st) | be greedy |
| x | serang | sع.'rey | v.bI | attack |
| x | serey | sع.'ז¢¢¢ | N | lemongrass |
| x | sesak | sع.'sek | v.mo(st) | be crowded |
|  | sial | si.el | v.mo(st) | be unfortunate |
|  | siang | si.mp | N | midday |
|  | siap | 'si.ep' | V.bI | get ready |
|  | siapa | si.'a.pa | INT | who |
|  | sibuk | 'si.bok | v.mo(ST) | be busy |
|  | sidang | 'si.dey | N | meeting |
|  | sikakar | si.'ka.ker | v.bI | hold onto tightfisted |
|  | sikap | 'si.kep' | N | attitude |

A Word lists

| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| sikat | 'si.ket | N | brush |
| simpang | 'sim.pen | V.BI | store, prepare |
| singgung | 'sıj.gən | v.bi | offend |
| singkat | 'sin.ket | v.mo(st) | be brief |
| sini | 'si.ni | LOC | L.prox |
| siram | 'si.rem | v.bi | pour over |
| siri | 'si.ci | N | betel vine |
| sisi | 'si.si | N | side |
| sisir | 'si.ssr | v.bi | comb |
| situ | 'si.tu | LOC | L.MED |
| skarang | 'ska.rey | v.mo(st) | be current |
|  |  | ADV | now |
| slak | 'slek | v.Mo(DY) | want to |
| slatang | 'sla.ten | N | south |
| slimut | 'sli.mvt | N | blanket |
| smangat | 'sma.yet | v.mo(st) | be enthusiastic |
| smut | 'smot | N | ant |
| snang | 'sney | v.bi | feel happy (about) |
| sobek | 'so.bçk' | v.bi | tear |
| sombong | 'sowm.bop | v.mo(st) | be arrogant |
| sopang | 'so.pen | v.mo(st) | be respectful |
| sore | 'so.ce | N | afternoon |
| sorong | 'sọ.rọ | v.bi | slide |
| sperti | 'spect.ti | PREP/CNJ | similar to |
| srabut | 'sra.bst | N | fiber |
| sring | 'srıj | ADV | often |
| subu | 'su.bu | N | very early morning |
| subur | 'su.bor | v.mo(st) | be fertile |
| sudut | 'su.drt | N | direction |
| suka | 'su.ka | v.bi | enjoy |
| suku | 'su.ku | N | ethnic group |
| sulit | 'su.lit | v.mo(st) | be difficult |
| sumbang | 'sum.ben | v.bi | donate |
| sumber | 'sชm.bẹr | N | source |
| sumbur | 'ssm.bsr | v.bi | spit at |
| sumur | 'sv.mvr | N | well |
| sungay | 'su.jpj | N | river |
| sunggu | 'ssy.gu | v.mo(st) | be true |
| suntik | 'son.trk' | v.bi | inject |
| surat | 'sv.cet | N | letter |
| suru | 'su.cu | v.bi | order |
| susa | 'su.sa | v.mo(st) | be difficult |


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| susu | 'su.su | N | milk |
| susung | 'su.ssn | v.bI | arrange |
| swak | 'swek | v.mo(st) | be exhausted |
| swanggi | 'swey.gi | N | nocturnal evil spirit, sorcerer |
| T |  |  |  |
| tabrak | 'ta.brek | v.bI | hit against |
| tadi | 'ta.di | ADV | earlier |
| tahang | 'ta.hen | V.BI | hold (out/back) |
| tahap | 'ta.hep' | N | phase |
| tajam | 'ta.d3em | v.mo(st) | be sharp |
| takut | 'ta.kvt' | v.bi | feel afraid (of) |
| tali | 'ta.li | N | cord |
| talut | 'ta.lot | v.bi | build protection wall |
| tamba | 'tem.ba | V.BI | add |
| tampar | 'tem.per | v.bi | beat |
| tampeleng | tem.'pę.lęy | v.bi | slap on face/ears |
| tampil | 'tem.pıl | v.Mo(DY) | perform |
| tampung | 'tem.pry | v.bi | receive |
| tamu | 'ta.mu | N | guest |
| tana | 'ta.na | N | ground |
| tanam | 'ta.nem | v.bi | plant |
| tanda | 'ten.da | N | sign |
| tandang | 'ten.dey | N | banana plant stem |
| tanding | 'ten.din | v.Mo(DY) | compete |
| tangang | 'ta.yen | N | hand, arm |
| tangga | 'ten.ga | N | ladder |
| tanggal | 'tey.gel | N | date |
| tanggap | 'tey.gep' | v.mo(st) | be perceptive |
| tanggulang | tey.'gv.ley | v.bi | cope with |
| tanggung | 'tey.g\%n | v.bI | bear |
| tangkap | 'tey.kep' | v.bI | catch |
| tangkis | 'tey.kıs | v.bI | ward off |
| tanjung | 'ten.d3ヶท | N | cape |
| tanjung | 'ten.d3ən | v.mo(st) | be tired |
| tantang | ten.tey | v.bi | challenge |
| tanya | 'ta.na | v.bi | ask |
| tapis | 'ta.pıs | v.bi | sieve |
| tara | 'ta.ca | v.mo(st) | be matching |
| tarik | 'ta.rık | v.bi | pull |
| taru | 'ta.cu | v.bi | put |
| tatap | 'ta.tep' | v.bI | gaze at |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | taung | 'ta.sn | N | year |
|  | taw | 'tew | V.bI | know |
|  | tawar | 'ta.wer | v.bi | bargain |
|  | tawong | 'ta.wọn | N | bee |
|  | tay | 'tej | N | excrement |
| x | tebal | te.'bel | v.mo(ST) | be thick |
| x | tebang | tع.'bey | v.bI | fell |
| x | tedu | te.'du | v.mo(st) | be calm |
| x | tegang | tع.'gen | v.mo(st) | be tight |
| x | tegas | tع.'ges | v.mo(st) | be firm |
| x | tegur | tz.'gər | v.bI | reprimand |
| x | tekang | tع.'ken | v.bI | press |
|  | telinga | tع.'li.ŋn | N | ear |
| x | telur | te.'lor | N | egg |
| x | temang | tع.'men | N | friend |
|  | tembak | 'tęm.bek' | v.bi | shoot |
| x | tembus | te̦m.'bus | v.mo(Dy) | emerge |
| x | tempat | te̦m.'pet | N | place |
|  | tempe | 'tẹm.pe | N | tempeh |
|  | tenaga | te.'na.ga | N | energy |
| x | tenang | te.'ney | v.mo(st) | be quiet |
| x | tendang | te̦n.'dey | v.bi | kick |
| x | tenga | te.'ıa | N -LOCT | middle |
| x | tenggelam | ,tẹn.ge.'lem | V.Mo(DY) | sink |
| x | tengking | tẹy.'kıy | v.bi | exorcize |
|  | tengok |  | v.bI | view something |
|  | tepu | 'tı.pu | v.bI | clap |
| x | tepung | tع.'pıท | N | flour |
| x | terbang | tçr.'ben | v.mo(Dy) | fly |
| x | terbit | te̦r.'bit | v.mo(dy) | rise |
| x | tetap | tع.'tep' | v.mo(st) | be unchanged |
|  | tete | 'te.t¢ | N | grandfather |
|  | tiang | 'ti.en | N | pole |
|  | tiap | 'ti.ep' | QT | every |
|  | tiarap | ti.'a.rep' | v.mo(Dy) | lie face downward |
|  | tiba | 'ti.ba | v.mo(DY) | arrive |
|  | tida | 'ti.dek' | ADV | NEG |
|  | tidor | 'ti.dor | V.MO(DY) | sleep |
|  | tiga | 'ti.ga | num.C | three |
|  | tikam | 'ti.kem | v.bI | stab |
|  | tikar | 'ti.ker | N | plaited mat |
|  | tikung | 'ti.kvy | V.MO(DY) | curve |


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| tikus | 'ti.kvs | N | rat |
| timba | 'tim.ba | V.BI | fetch |
| timbang | 'trm.ben | v.bi | weigh |
| timbul | 'tim.bsl | v.mo(Dy) | emerge |
| timbung | 'trm.bon | v.bi | pile up |
| timpang | 'trm.pen | v.mo(st) | be unbalanced |
| timur | 'ti.mor | N | east |
| tindak | 'tin.dek | v.bi | act |
| tindas | 'tin.des | v.bi | crush |
| tindis | 'tin.dis | v.bi | overlap |
| tinggal | 'tim.gel | v.mo(Dy) | stay |
| tinggi | 'tro.gi | v.mo(st) | be high |
| tingkat | 'tır.ket | N | floor |
| tinju | 'tin.d3u | v.bI | box |
| tipis | 'ti.pıs | v.Mo(st) | be thin |
| tipu | 'ti.pu | v.bI | cheat |
| tiru | 'ti.ru | v.bi | imitate |
| titik | 'tr.trk | N | period |
| titip | 'ti.trp | v.bi | deposit |
| tiup | 'ti.vp' | v.bi | blow |
| tladang | 'tla.den | v.mo(st) | be exemplary |
| tlanjang | 'tlen.d3en | v.mo(st) | be naked |
| tobo | 'to.bs | v.Mo(DY) | dive |
| toki | 'to.ki | v.bi | beat |
| tokok | 'to.kok | v.bI | tap |
| tolak | 'to.lek | v.bi | push away |
| tolok | 'to.lok | N | standard |
| tolong | 'tọ.lon | v.bi | help |
| tombak | 'tom.bek' | N | spear |
| tong | 'top | PRO | 1PL |
| tongkat | 'tọy.ket | v.BI/N | cane |
| torang | 'to.rey | PRO | 1pl |
| tra | 'tra | ADV | NEG |
| trampil | 'trem.pıl | v.mo(st) | be skilled |
| trang | 'trey | v.mo(st) | be clear |
| trik | 'trik' | v.mo(st) | be intense |
| trima | 'tri.ma | v.bI | receive |
| trus | 'tros | v.mo(st) | be continuous |
|  |  | CNJ | next |
| tua | 'tr.a | v.mo(st) | be old |
| tuang | 'tr.en | N | head |
| tuay | 'tv.ej | v.bI | harvest |

A Word lists

| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| tubir | tu.brr | v.mo(st) | be steep |
| tubu | 'tu.bu | N | body |
| tugas | 'to.ges | N | duty |
| tugu | 'tu.gu | N | monument |
| Tuhang | 'to.hen | N | God |
| tuju | 'tu.dzu | num.C | seven |
| tukang | 'to.ken | N | craftsman |
| tukar | 'tu.ker | v.bI | exchange |
| tulang | 'tu.ley | N | bone |
| tuli | 'tu.li | v.mo(ST) | be deaf |
| tulis | 'tu.lis | v.bi | write |
| tum | 'tom | v.mo(Dy) | dive |
| tumbu | 'tom.bu | v.mo(Dy) | grow |
| tumbuk | 'tom.bok | v.bI | pound |
| tumis | 'tu.mis | v.bI | sauté very hot |
| tumpang | 'trom.pey | v.bI | join in |
| tumpuk | 'trm.psk | v.bI | pile |
| tunda | 'ton.da | v.bI | delay |
| tunduk | 'ton.d ${ }^{\text {k }}$ | V.Mo(Dy) | bow |
| tunggu | 'try.gu | v.bi | wait (for) |
| tunjuk | 'ton.d3*k' | v.bI | show |
| tuntung | 'ton.ton | v.bi | guide |
| tuntut | 'ton.tot | v.bi | demand |
| tupay | 'tu.pej | N | squirrel |
| turung | 'to.ron | v.bI | descend |
| tusu | 'tu.su | v.bI | stab |
| tutup | 'tu.top | V.BI | close |
| U |  |  |  |
| uang | 'v.ey | N | money |
| $u b a$ | 'u.ba | v.bI | change |
| ubi | 'u.bi | N | purple yam |
| udang | 'u.dey | N | shrimp |
| udik | 'u.drk | v.bI | observe in amazement |
| $u j i$ | 'u.dzi | v.bi | examine |
| ujung | 'u.dzry | N | end |
| ukir | 'u.krı | v.bI | carve |
| ukur | 'v.kðr | v.bi | measure |
| ulang | 'u.ley | v.bI | repeat |
| ular | 'u.ler | N | snake |
| umpang | 'rm.pen | v.bI | pass ball |
| undang | 'on.den | v.bI | invite |


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| unggung | 'ชŋ.gən | N | campfire |
| untuk | 'ъn.tヶk' | PREP/CNJ | for |
| untung | 'vn.try | N | fortune |
| urat | 'u.ret' | N | vein |
| urus | 'v.ros | v.bi | arrange |
| urut | 'ช.rost | v.bi | massage |
| usa | 'u.sa | v.bi | need to |
| usir | 'u.sir | v.bi | chase away |
| usus | 'v.sus | N | intestines |
| utus | 'v.tos | v.BI | delegate |
| W |  |  |  |
| wada | 'wa.da | N | umbrella organization |
| waras | 'wa.res | v.mo(st) | be sane |
| warung | 'wa.cvy | N | food stall |
| watak | 'wa.tek | N | character |
| wewenang | we.'we.ney | N | authority |
| Y |  |  |  |
| yahanam | ja.'ha.nem | v.mo(st) | be rebellious |
| yang | 'jen | CNJ | REL |

## A. 2 Loanwords

| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| A |  |  |  |
| abadi | a.'ba.di | v.mo(st) | be eternal |
| acara | a.tfa.ra | N | ceremony |
| adat | 'a.det | N | tradition |
| adil | 'a.dil | v.mo(st) | be fair |
| adopsi | a.'dọp.si | N | adoption |
| agama | a.'ga.ma | N | religion |
| agenda | a.'ge̦n.da | N | agenda |
| agraria | a.'gra.ci., a | N | agrarian affairs |
| ajaip | a.'dza.rp' | v.mo(st) | be miraculous |
| akal | 'a.kel | N | reason |
| akibat | a.'ki.bet | N | consequence |
| akta | 'ek.ta | N | certificate |


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| aktif | 'ek.tıf | v.mo(st) | be active |
| alam | 'a.lem | N | world |
| alamat | a.'la.met | N | address |
| alat | 'a.let | N | equipment |
| alergi | a.'lecr.gi | v.mo(st) | be allergic |
| alkitap | el.'ki.tep' | N | Bible |
| alpa | 'el.pa | v.mo(st) | be absent |
| alumni | a.'lom.ni | N | alumnus |
| amang | 'a.men | v.mo(st) | be safe |
| amplop | 'em.plop | N | envelope |
| anggota | eg.'go.ta | N | member |
| antifirus | , en.ti.'fi.ros | N | antivirus |
| aparat | a.pa.ret | N | apparatus |
| apel | 'a.pęl | N | apple |
| apsen | 'ep.sę̧ | v.mo(st) | be absent |
| aroa | a.'¢ָ.a | N | departed spirit |
| arti | 'er.ti | N | meaning |
| asal | 'a.sel | N | origin |
| asar | 'a.ser | v.bI | smoke |
| asik | 'a.sık' | v.mo(st) | be passionate |
| asli | 'es.li | v.mo(st) | be original |
| aspal | 'es.pel | N | asphalt |
| asrama | es.'ra.ma | N | dormitory |
| astronomi | , es.tro.'no.mi | N | astronomy |
| x ato | a. 'to | CNJ | or |
| ayat | 'a.jet | N | verse |
| B |  |  |  |
| baca | 'ba.t $\int$ a | v.bi | read |
| badang | 'ba.den | N | body |
| bagi | 'ba.gi | v.bi | divide |
| bahas | 'ba.hes | v.bI | discuss |
| bahasa | ba.'ha.sa | N | language |
| bahaya | ba.'ha.ja | v.mo(st) | be dangerous |
| bahu | 'ba.h\% | N | shoulder |
| bahwa | 'beh.wa | CNJ | that |
| baju | 'ba.dzo | N | shirt |
| bak | 'bek | N | basin |
| ban | 'ben | N | tire |
| bangku | 'bey.kr | N | bench |
| bangsa | 'bey.sa | N | people group |
| bangsat | 'bey.set | N | rascal |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | baptis | 'bep.tis | v.bi | baptize |
|  | barat | 'ba.cet | N | west |
|  | batal | 'ba.tel | v.bi | cancel |
| x | batrey | ba.'trę̣ | N | battery |
|  | baw | 'bew | N | smell |
|  | beda | 'be.da | v.mo(st) | be different |
|  | bel | 'bęl | v.bi | ring |
|  | bendera | bęn.'dẹ.ra | N | flag |
|  | bengkel | 'be̦ŋ.kę̦ | N | repair shop |
| x | bensing | bẹn.'sin | N | gasoline |
|  | berkat | 'besr.ket | N | blessing |
|  | biasa | bi.'a.sa | v.mo(st) | be usual |
|  | biaya | bi.'a.ja | v.bI/N | pay |
|  | bicara | bi.'tJa.ra | v.bi | speak |
|  | bijaksana | ,bi.d3ek."sa.na | v.mo(st) | be wise |
|  | biji | 'bi.d3i | N | seed |
|  | biodata | ,bi.o.da.ta | N | biodata |
|  | biologi | ,bi.o.'lo.gi | N | biology |
|  | bis | 'bis | N | bus |
| x | biskwit | bis.'kwit | N | cracker |
|  | bisnis | 'bis.nıs | N | business |
| x | bistir | bis.'tri | N | subdistrict head |
|  | bola | 'bo.la | N | ball |
|  | bolpen | 'bōl.pęn | N | ballpoint pen |
|  | boneka | bo.'nc.ka | N | doll |
|  | bos | 'bo̦s | N | boss |
|  | botol | 'bọ.tọl | N | bottle |
|  | brita | 'bri.ta | N | news |
|  | budaya | br.'da.ja | N | culture |
|  | bukti | 'brk.ti | N | proof |
|  | buku | 'bu.ku | N | book |
|  | bumi | 'bu.mi | N | earth |
|  | bupati | bu.'pa.ti | N | regent |
|  | busi | 'bu.si | N | sparkplug |
|  | C |  |  |  |
|  | cahaya | t ta .'ha.ja | N | glow |
|  | cap | 'tfep' | N | stamp |
|  | cara | 'tfa.ra | N | manner |
|  | cari | 'tfa.ci | v.bi | search |
|  | cek | ${ }^{\text {t }}$ ¢¢¢ k | v.bi | check |
|  | celana | t ¢. 'la.na | N | trousers |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | cemara | tfe.'ma.ra | N | casuarina tree |
|  | ceria | tfe.'ri.a | v.mo(st) | be cheerful |
|  | ceritra | t $\int$ ع.'ri.tra | V.TRI | tell |
|  | cinta | 'tfin.ta | N | love |
|  | coklat | 'tJowk.let | N | chocolate |
|  | cuci | 'tfu.tfi | v.bI | wash |
|  | cuma | tfu.ma | ADV | just |
|  | curi | 'tfu.ri | v.bI | steal |
|  | cuti | 'tfu.ti | v.mo(Dy) | take leave |
|  | D |  |  |  |
|  | daera | da.'̨̨.ra | N | area |
|  | daftar | 'def.ter | v.BI/N | list |
|  | dana | 'da.na | N | fund |
|  | dansa | 'den.sa | V.MO(DY) | dance |
|  | dasyat | 'da.s ${ }^{\text {j }}$ et | v.mo(st) | be terrifying |
|  | daya | 'da.ja | N | energy |
| x | debat | de.'bet | N | debate |
|  | debel | 'dę.bęl | v.bi | double |
|  | delegasi | ,de.lc.'ga.si | N | delegation |
|  | demo | 'de.mo | N | demonstration |
|  | desember | dع.'sçm.ber | N | December |
|  | dewan | 'de.wen | N | council (member) |
|  | dewasa | d. ''wa.sa | N | adult |
|  | dialek | di.'a.lęk | N | dialect |
|  | dikta | 'drk.'ta | N | written lectures summary |
|  | dinas | 'di.nes | N | department |
|  | disain | di.'sa.m | N | design |
|  | disko | 'dis.ko | N | discotheque |
|  | distrik | 'dis.trik | N | district |
|  | doa | 'do.a | N | prayer |
|  | dobrak | 'do.brek' | V.BI | smash |
|  | dokter | 'dōk.ter ${ }^{\text {r }}$ | N | doctor |
| x | dokumen | ,do.ku.'męn | N | document |
|  | dol | 'do̦l | v.mo(st) | be damaged |
|  | domba | 'dọm.ba | N | sheep |
| x | dominan | ,do.mi.'nen | v.mo(st) | dominate, master |
|  | dompet | 'dọm.p¢̣t | N | wallet |
|  | donat | 'do.net | N | doughnut |
|  | dosa | 'do.sa | N | $\sin$ |
| x | doseng | do.'se̦n | N | lecturer |
|  | doser | 'do.scror | N | bulldozer |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | dramben | 'drem.bẹn | N | marching band |
|  | drop | 'drowp' | v.bI | drop |
|  | drum | 'drom | N | drum |
|  | duka | 'du.ka | N | grief |
|  | dunia | du.'ni.a | N | world |
|  | E |  |  |  |
|  | egois | ع.'go.is | v.mo(st) | be egoistic |
|  | ekstra | 'ęk.'stra | v.mo(st) | be extra |
|  | emansipasi | ع.,men.si.'pa.si | N | emancipation |
|  | ember | 'ęm.b¢్¢ | N | bucket |
|  | emosi | ع.'mo.si | v.bi | feel angry (about) |
|  | erport | 'ęr.port | N | airport |
|  | etnis | 'çt.nıs | N | ethnic |
|  | F |  |  |  |
|  | fajar | 'fa.d3er | N | dawn |
|  | fam | 'fem | N | family name |
| x | fasilitas | fa., si.li.'tes | N | facility |
|  | februari | ,fe.brv.'a.ci | N | February |
|  | federasi | , fe.de.'ra.si | N | federation |
| x | ferban | ferr.'ben | N | bandage |
|  | fetsin | 'fe̦t.s.sm | N | flavoring spice |
|  | fideo | fi.'dع. ${ }^{\text {d }}$ | N | video |
|  | figur | 'fi.gvr | N | figure |
|  | filem | 'fr.le̦m | N | film |
|  | final | 'fi.nel | N | finals |
|  | firman | 'frrmen | N | divine saying |
|  | fit | 'fit | N | Fit-drinking water |
| x | fitamin | fi.ta.'mın | N | vitamins |
|  | fokal | 'fo.kel | N | song |
|  | fol | 'fọ1 | v.mo(st) | be full |
|  | foli | 'fo.li | N | volleyball |
|  | fondasi | fọn.'da.si | N | foundation |
|  | formasi | fọr.'ma.si | N | formation |
|  | formulir | forr.'mu.lır | N | form |
|  | forum | 'fo.rom | N | forum |
|  | foto | 'fo.to | N | photograph |
|  | fotokopi | fo.to.'ko.pi | N | photocopy |
|  | frey | 'fręj | v.mo(st) | be blank |
|  | fungsi | 'forn.si | N | function |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | G |  |  |  |
|  | gaja | 'ga.d3a | N | elephant |
|  | gaji | 'ga.d3i | N | salary |
|  | gas | ges | N | gas |
|  | gembala | ge̦m.'ba.la | N | pastor |
|  | generasi | .ge.ne.'ra.si | N | generation |
|  | gergaji | gęr.'ga.d3i | N | saw |
|  | gisi | 'gi.si | N | nutrient |
| x | gitar | gi.'ter | N | guitar |
|  | glas | 'gles | N | glass |
|  | glojo | 'glo.d30 | v.bi | crave |
|  | got | 'got | N | gutter |
|  | gratis | 'gra.tis | v.mo(st) | be gratis |
|  | greja | gre.dja | N | church |
|  | grobak | 'gro.bek | N | wheelbarrow |
|  | grup | grop | N | group |
| x | gubernur | , gu.be̦r.'nชr | N | governor |
|  | gudang | 'gv.den | N | storeroom |
|  | gula | gu.la | N | sugar |
|  | guru | 'gu.ru | N | teacher |
|  | H |  |  |  |
|  | hadia | ha.'dı.a | N | gift |
|  | hadir | 'ha.dir | V.MO(DY) | attend |
|  | hafal | 'ha.fel | v.bi | memorize |
|  | hak | 'hek | N | right |
|  | hal | 'hel | N | thing |
| x | halal | ha.'lel | v.mo(st) | be permitted |
|  | hamil | 'ha.mıl | v.mo(st) | be pregnant |
|  | handuk | 'hen.dvk | N | towel |
|  | hantu | 'hen.tu | N | ghost |
|  | harga | 'her.ga | N | price |
|  | hari | 'ha.ri | N | day |
|  | harta | 'her.ta | N | wealth |
|  | hasil | 'ha.sıl | N | product |
|  | hebat | 'he.bet' | v.mo(st) | be great |
|  | heking | 'he.kıy | v.Mo(DY) | hiking |
|  | hektar | 'he̦k.ter | N | hectare |
|  | helem | 'he.le̦m | N | helmet |
|  | helikopter | ,he.li.'koָp.terr | N | helicopter |
|  | hemat | 'he.met | v.bI | economize |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | herang | 'he.ren | V.BI | feel surprised (about) |
|  | hikmat | 'hik.met' | N | wisdom |
|  | hina | 'hi.na | V.BI | humiliate |
|  | hobi | 'ho.bi | N | hobby |
| x | honay | ho.'nej | N | traditional Dani hut |
|  | honor | 'ho̦.nจิ | N | honorarium |
| x | honorer | hว.n๑.'r¢̦r | V.MO(ST) | be honorary |
|  | hordeng | 'hơr.dę | N | curtains |
|  | hormat | 'hor.met | V.BI | respect |
|  | hotba | 'ho̦t.ba | V.BI | preach |
| x | hotel | ho.'t¢̦ | N | hotel |
|  | hukum | 'hu.kəm | N | law |
|  | humur | 'hv.mvr | N | joke |
|  | I |  |  |  |
|  | ibada | i. 'ba.da | V.MO(DY) | worship |
|  | iblis | 'r.blis | N | devil |
|  | ide | 'i.d $\varepsilon$ | N | idea |
|  | ijasa | i.'dza.sa | N | diploma |
|  | ijing | 'i.dzın | N | permission |
|  | ilmu | 'Il.mu | N | knowledge |
| x | iman | i.'men | N | faith |
|  | informasi | ,in.foָr.'ma.si | N | information |
|  | infus | 'in.fos | N | give an infusion |
|  | injil | 'in.dzıl | N | Gospel |
|  | insentif | m.'se̦n.tif | N | incentive |
| x | insinyur | , in.si.'n ${ }^{\text {r }}$ | N | engineer |
|  | instansi | m.'sten.si | N | level |
|  | intel | 'in.te̦l | N | intelligence service |
|  | intro | 'in.tro | V.BI | play musical introduction |
|  | istila | is.'tr.la | N | term |
|  | istimewa | ,Is.ti.'me.wa | V.MO(ST) | be special |
|  | istirahat | ,Is.ti.'ra.het ${ }^{\prime}$ | V.MO(DY) | rest |
|  | istri | 'ıs.tri | N | wife |
|  | J |  |  |  |
|  | jaga | 'dja.ga | V.BI | guard |
|  | jam | 'd3em | N | hour |
|  | jaman | 'dza.men | N | period |
|  | jambu | 'dzem.bu | N | rose apple |
|  | janda | 'dzen.da | N | widow |
|  | januari | ,dza.nช.'a.ri | N | January |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | jatwal | 'dzet.wel | N | schedule |
|  | jawap | 'dya.wep | v.bI | answer |
|  | jeket | 'd3ę.kęt ${ }^{\text {c }}$ | N | jacket |
|  | jemaat | d38.'ma.et' | N | congregation |
|  | jenasa | d3e.'na.sa | N | corpse |
|  | jendela | djẽ̦.'de̦.la | N | window |
| x | jenis | d3c.'nıs | N | kind |
| x | jeriken | 'd3e.ri., kẹn | N | jerry can |
|  | jing | 'd3in | N | genie |
|  | jiwa | 'dzi.wa | N | soul |
|  | jonson | 'd3ọn.son | N | motorboat |
|  | jumat | 'dzu.met' | N | Friday |
|  | jumla | 'dzəm.la | N | sum |
|  | justru | 'dzvs.tru | ADV | precisely |
|  | juta | 'dzu.ta | NUM.C | million |
|  | K |  |  |  |
|  | kabul | 'ka.bəl | v.bI | grant |
|  | kaca | 'ka.tfa | N | glass |
|  | kader | 'ka.dçr | N | cadre |
|  | kafir | 'ka.frr | N | unbeliever |
| x | kakaw | ka.'kew | N | cacao |
|  | kalender | ka.'le̦n.de̦r | N | calendar |
|  | kali | 'ka.li | N | time |
|  | kalo | 'ka.lo | CNJ | if |
|  | kamar | 'ka.mer | N | room |
|  | kamis | 'ka.mıs | N | Thursday |
|  | kampus | 'kem.pos | N | campus |
|  | kantong | 'ken.ton | N | bag |
|  | kantor | 'ken.topr | N | office |
|  | kapal | 'ka.pel | N | ship |
|  | kapas | 'ka.pes | N | cotton |
|  | karakter | ka.'rek.'ter | N | character |
|  | karate | ka.'ra.te | v.BI/N | karate |
|  | kariawang | ,ka.ri.'a.wen | N | employee |
| x | karna | ker.'na | CNJ | because |
|  | karpet | 'ker.pșt | N | plastic carpet |
| x | kartapel | , ker.ta.'p¢̣l | N | slingshot |
|  | kartu | 'ker.tu | N | card |
|  | karunia | ,ka.ru.'ni.a | N | gift |
| x | kaset | ka.'sșt' | N | cassette |
|  | kasir | 'ka.sır | N | cashier |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | kata | 'ka.ta | N | word |
|  | kawal | 'ka.wel | v.bi | escort |
|  | kawing | 'ka.win | v.bi | marry unofficially |
|  | kaya | 'ka.ja | v.MO(ST) | be rich |
|  | kecap | 'ke.tfep' | N | soy sauce |
|  | kejora | ke.'dзo.ra | N | morning star |
|  | kem | 'kęm | N | camp |
|  | kepala | ke.'pa.la | N | head |
|  | keponakan | ,ke.po.'na.ken | N | nephew, niece |
| x | kerja | k¢̧r.'dza | v.bi | work |
| x | kertas | kę̦.'tes | N | paper |
| x | ketik | ke.t'tk' | v.bi | type |
|  | ketumbar | ke.tom.ber | N | coriander |
| x | kilogram | , ki.lo.'grem | N | kilogram |
|  | kilometer | , ki.lo.'mę.tter | N | kilometer |
|  | kios | 'ki.ops | N | kiosk |
|  | kip | 'kıp' | v.bi | unloading truck |
|  | klakson | 'klek.'son | v.bi | blow horn |
|  | klas | 'kles | N | class |
|  | klasis | 'kla.sis | N | ecclesiastical district |
|  | klet | 'klçt | N | dress |
|  | klinik | 'klı.nık | N | clinic |
|  | kluarga | klv.'r.ga | N | family |
|  | knalpot | 'knel.pott | N | muffler |
|  | kode | 'ko.de | N | code |
|  | kolor | 'koָ.lor | N | undershorts |
| x | komandan | , ko.men.'den | N | commandant |
|  | komando | ko.'men.do | v.bI | command |
| x | kombong | koָm.'boŋ | v.Mo(st) | be inflated |
| x | komentar | , ko.męn.ter | N | commentary |
|  | komitmen | ko.'mit'.męn | N | commitment |
|  | kompi | 'kom.pi | N | military company |
|  | kompleks | 'ko̦m.ple̦ks | N | complex |
|  | komplotang | kow.'plo.ten | N | (half) circle |
|  | komputer | kow.'pu.ter | N | computer |
|  | komunikasi | ,ko.mu.ni.'ka.si | N | communication |
|  | kondisi | koָn.'di.si | N | condition |
|  | konsep | 'ko̦n.sęp ${ }^{\text {c }}$ | N | concept |
|  | konsumsi | kọn.'ssm.si | N | consumption |
| x | kontak | kopn.tek' | v.bi | contact |
| x | kontan | kọn.ten | N | cash |
|  | kontener | koָn.tę.nçr | N | container (ship) |


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| kontrak | 'ko̦n.trek | N | contract |
| kontrol | 'ko̦n.trọl | v.bi | control |
| kopeng | 'ko.pęp | v.bi | head |
| koper | 'ko.p¢ֻ\% | N | suitcase |
| kopi | 'ko.pi | N | coffee |
| kopling | 'kop. l . | N | clutch |
| kor | 'korr | N | choir |
| korbang | 'kopr.ben | N | sacrifice |
| kordinasi | , koָr.di.'na.si | v.bi | coordinate |
| kordinator | , koָr.di.'na.tor | N | coordinator |
| koreksi | ko.'ç̦k.si | N | correction |
| korupsi | ko.'rvp.si | N | corruption |
| kostum | 'ko̦s.tom | N | costume |
| koteka | ko.'tz.ka | N | penis sheath |
| kram | 'krem | N | cramps |
| kremasi | kre.'ma.si | N | cremation |
| krempeng | 'kręm.pę | v.Mo(st) | be thin |
| kreta | 'kre.ta | N | carriage |
| kubur | 'kv.bur | v.bi | bury |
| x kudus | kv.'dzs | V.mo(st) | be sacred |
| kulia | ku.'li.a | v.bi | study |
| kunci | 'kın.tSi | N | key |
| kursi | 'kzr.si | N | chair |
| kursus | 'kvr.sus | N | course |
| kusus | 'kv.sus | V.Mo(st) | be special |
| kwa | 'kwa | N | broth |
| kwasa | 'kwa.sa | N | power |
| kwat | 'kwet | v.mo(st) | be strong |
| kwatir | 'kwa.trr | v.bi | frighten |
| kwe | 'kwe | N | cake |
| L |  |  |  |
| labu | 'la.bu | N | gourd |
| lahir | 'la.hrr | v.Mo(DY) | give birth |
| lampu | 'lem.pu | N | lamp |
| lap | 'lep' | v.bi | wipe |
| lapor | 'la.por | v.bi | report |
| lego | 'le.go | v.bi | throw away |
| lem | 'lı̦m | v.bi | glue |
| lemari | le.'ma.ri | N | cupboard |
| lep | 'lẹp | N | laboratory |
| lesmen | 'lẹs.męn | N | line judge |

\begin{tabular}{|c|c|c|c|c|}
\hline \& Lexeme \& Transcription \& Word class \& English gloss <br>
\hline \& lipstik \& 'lip.stık \& N \& lipstick <br>
\hline \& liter \& 'li.t¢̦¢ \& N \& liter <br>
\hline \& lobi \& 'lo.bi \& N \& lobby <br>
\hline \& logat \& 'lo.get' \& N \& speech variety <br>
\hline \& lokasi \& l.'ka.si \& N \& location <br>
\hline \& lonceng \& 'lọn.t¢¢¢ \& N \& bell <br>
\hline \& los \& 'los \& v.BI \& loosen <br>
\hline \multirow{3}{*}{x} \& M \& \& \& <br>
\hline \& maaf \& ma.'ef \& N \& pardon <br>
\hline \& mahir \& 'ma.hr \& v.bI \& master <br>
\hline \multirow[t]{19}{*}{x} \& majelis \& ma.d3c.'lis \& N \& church elder <br>
\hline \& makam \& 'ma.kem \& N \& grave <br>
\hline \& makna \& 'mek.na \& N \& meaning <br>
\hline \& maksut \& 'mek.ssst \& N \& purpose <br>
\hline \& malaria \& .ma.la.'ri.a \& N \& malaria <br>
\hline \& malaykat \& ma.'lej.ket' \& N \& angel <br>
\hline \& mama \& 'ma.ma \& N \& mother <br>
\hline \& manfaat \& men.'fa.et' \& v.mo(Dy) \& benefit <br>
\hline \& mangga \& 'men.ga \& N \& mango <br>
\hline \& mantri \& 'men.tri \& N \& male nurse <br>
\hline \& manusia \& , ma.nu.'si.a \& N \& human being <br>
\hline \& marga \& 'mer.ga \& N \& clan <br>
\hline \& martabat \& mer.ta.bet \& N \& status <br>
\hline \& masala \& ma.'sa.la \& N \& problem <br>
\hline \& masarakat \& ,ma.sa.'ra.ket' \& N \& community <br>
\hline \& matematika \& ma.tz.ma.'ti.ka \& N \& mathematics <br>
\hline \& materi \& ma.'te̦.ri \& N \& material <br>
\hline \& maut \& 'ma.vt \& N \& death <br>
\hline \& mayat \& 'ma.jet \& N \& corpse <br>
\hline \multirow[t]{2}{*}{x} \& mayoritas \& ma.jo.ri.'tes \& N \& majority <br>
\hline \& meja \& 'me.d3a \& N \& table <br>
\hline x \& mental \& męn.tel \& N \& emotion <br>
\hline x \& mentri \& męn.'tri \& N \& cabinet minister <br>
\hline \& merdeka \& mę.'de.ka \& v.mo(st) \& be independent <br>
\hline \multirow[t]{7}{*}{x

x} \& mesing \& me.'sin \& N \& engine <br>
\hline \& meter \& 'me̦.tęr \& N \& meter <br>
\hline \& milyar \& 'mil.jer \& num.C \& billion <br>
\hline \& mimbar \& 'mim.ber \& N \& pulpit <br>
\hline \& minggu \& 'mıj.gu \& N \& week, Sunday <br>
\hline \& mini \& 'mi.ni \& v.mo(st) \& be mini <br>
\hline \& minit \& mı.'nt \& N \& minute <br>
\hline
\end{tabular}

A Word lists

| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| misionaris | mi., si.o.'na.rıs | N | missionary |
| miskin | 'mis.kın | v.mo(st) | be poor |
| mobil | 'mo.brl | N | car |
| modal | 'mo.del | N | means |
| x model | mo.'d ${ }^{\text {l }}$ l | N | model |
| mop | 'mopp' | N | joke |
| motor | 'mo.tor | N | motorbike |
| mujisat | mu.'dzi.set | N | miracle |
| mulay | 'mu.lej | N | start |
| mulia | mu.'li.a | v.mo(st) | be sublime |
| murit | 'mu.rıt | N | pupil |
| musim | 'mu.srm | N | season |
| N |  |  |  |
| nabi | 'na.bi | N | prophet |
| nama | 'na.ma | N | name |
| napas | 'na.pes | N | breath |
| nasihat | na.'sı.het | v.BI/N | advise / advice |
| x nasional | , ne.si.o.'nel | v.mo(st) | be national |
| nasip | 'na.sip | N | destiny |
| natal | 'na.tel | N | Christmas |
| neces | 'nc.t5¢¢ | v.mo(st) | be neat |
| negara | nع.'ga.ra | N | state |
| x negri | n..'gri | N | state |
| neraka | ne.'ra.ka | N | hell |
| net | 'nçt | N | (sport) net |
| nilay | 'ni.lej | N | value |
| nofember | no.'fe̦m.bẹr | N | November |
| nomor | 'no̦.mor | N | number |
| nona | 'no.na | N | girl |
| nyonya | 'no.na | N | lady |
| nyora | 'ло.га | N | teacher's wife |
| 0 |  |  |  |
| odol | 'ヤ.dọ1 | N | toothpaste |
| ofor | 'op.for | v.bI | give |
| oktober | Əָk.tọ.bçr | N | October |
| oli | 'o.li | N | oil |
| olimpiade | ग. lmm. pi.'a.d $\varepsilon$ | N | olympiad |
| om | 'om | N | uncle |
| ота | 'o.ma | N | great-great-grandmother |
| ondoafi | ,T. T . d .'a. af | N | traditional chief |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
| x | ongkos | 'ọp.kọs | N | expenses |
|  | opa | 'o.pa | N | great-great-grandfather |
|  | opname | эp.'na.mı | v.mo(st) | be hospitalized |
|  | oprasi | э.'pra.si | N | operation |
|  | otomatis | , o.to.'ma.tis | v.mo(st) | be automatic |
|  | otonom | .o.tọ.'nowm | v.mo(st) | be autonomous |
|  | otonomi | , o.to.'no.mi | N | autonomy |
| P |  |  |  |  |
|  | pagar | 'pa.ger | N | fence |
|  | paham | 'pa.hem | N | understanding |
|  | pakem | 'pa.kęm | N | break disk |
|  | paket | 'pa.kęt | N | package |
|  | paksa | 'pek.sa | v.bI | force |
|  | pakwel | 'pek.wẹl | N | k. o. crowbar |
|  | panci | 'pen.tfi | N | pan |
|  | panitia | ,pa.n.'ti.a | N | committee |
|  | parte | 'per.te | N | party |
|  | pas | 'pes | v.mo(st) | be exact |
|  |  |  | ADV | precisely |
|  | pena | 'pe.na | N | pen |
|  | pendeta | pęn.de.ta | N | pastor |
|  | penjara | pe̦n.'dza.ra | v.BI/N | jail |
|  | pepaya | рع.'pa.ja | N | papaya |
|  | percaya | pęr.'tja.ja | v.bi | trust |
|  | peristiwa | .pe.ris.'ti.wa | N | incident |
|  | perkosa | p¢̧r.'ko.sa | V.bI | rape |
| x | perlu | pėr.'lu | v.bI | need |
|  | permanen | pe̦r.'ma.nęn | v.mo(st) | be permanent |
|  | permisi | pesr.'mi.si | V.MO(DY) | ask permission |
| x | persen | pe̦r.'se̦n | N | percent |
| x | persis | pęt.'sıs | v.mo(st) | be precise |
|  | pertama | pe̦r.'ta.ma | num.o | first |
|  | pesta | 'pess.ta | N | party |
| x | peta | pe.ta | N | map |
| x | peti | pe.'ti | N | box |
| x | petromaks | ,pe.tro.'meks | N | kerosene lantern |
|  | piara | pi.'a.ra | v.bI | raise |
|  | pikir | 'pi.krr | v.bI | think |
|  | piknik | 'prk.nık' | v.mo(Dy) | picnic |
|  | pilot | 'pi.lot | N | pilot |
|  | piring | 'pı.rın | N | plate |

A Word lists

|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
| x | pisikologi | .pi.si.,ko.lo.'gi | N | psychology |
|  | plastik | 'ples.trk | N | plastic |
|  | plat | 'plet | v.mo(ST) | be flattened |
| x | pleton | ple.'tọn | N | platoon |
|  | plita | 'pli.ta | N | oil lamp |
|  | polisi | po.'li.si | N | police |
|  | politik | p.'li.trk | N | politics |
|  | pondok | 'pọn.dọk | N | shelter |
|  | porsi | 'por.si | N | portion |
|  | pos | 'pọs | N | post |
|  | posisi | po.'si.si | N | position |
|  | praktek | 'prek.'țk | N | practicum |
| x | presiden | .pre.si.'dẹn | N | president |
|  | pribadi | pri.'ba.di | N | personal property |
|  | priksa | 'prik.sa | v.BI | check |
|  | prinsip | 'prin.sip' | N | principle |
|  | priode | pri.'ว.dع | N | period |
| x | prioritas | pri., o.ri.'tes | N | priority |
| x | profesor | pro.fe.'sspr | N | professor |
|  | program | 'pro.grem | v.bI/N | program |
|  | propinsi | pro.'pin.sı | N | province |
| x | proposal | .pro.po.'sel | N | proposal |
|  | proses | 'prosęs | v.BI/N | process |
| x | protes | pro.'tęs | v.bI | protest |
|  | proyek | 'pro.j¢̣k | N | project |
|  | puasa | pv.'a.sa | v.bI | fast |
|  | puji | 'pu.d3i | v.bI | praise |
|  | pul | 'pul | N | pool |
|  | pulsa | 'pol.sa | N | pulse |
|  | R |  |  |  |
|  | rabu | 'ra.bu | N | Wednesday |
|  | radio | ra.'di.s | N | radio |
|  | rahasia | ,ra.ha.'sı.a | N | secret |
|  | raja | 'ra.dza | N | king |
|  | rakyat | 'rek.jet | N | citizenry |
|  | rangsel | 'rey.sçl | N | backpack |
|  | raport | 'ra.port | N | school report book |
|  | rasa | 'ra.sa | v.bi | feel |
|  | rasul | 'ra.sol | N | prophet |
|  | reaksi | re.'ek.'si | N | reaction |
|  | referendum | .re.fe.'ręn.dvm | N | referendum |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | reformasi | re.fọr.'ma.si | N | reformation |
| x | rejeki | ,re.dze.'ki | N | livelihood |
| x | rekam | re.'kem | v.bI | record |
| x | rekening | , re.ke.'nıŋ | N | bank account |
|  | rekreasi | ,re.kre.'a.si | N | recreation |
|  | rel | 'rçl | N | railway track |
|  | rela | 're.la | v.mo(ST) | be willing |
|  | rem | 're̦m | v.BI/N | brake |
|  | rencana | re̦n.tfa.na | v.BI/N | plan |
|  | rengking | 're̦y.kı | N | ranking |
| x | republik | ,re.pu.'blik | N | republic |
|  | resiko | re.'si.ko | N | risk |
| x | resmi | re̦s.'mi | v.mo(ST) | be official |
| x | retrit | re.'trıt | N | retreat |
|  | ring | 'rin | N | ring |
|  | ro | ro | N | spirit |
|  | roda | 'ro.da | N | wheel |
|  | rok | 'rok | N | skirt |
|  | rol | 'ropl | N | roll |
|  | rotang | 'ro.ten | N | rattan |
|  | rupa | 'rs.pa | N | form |
|  | rupia | ru.pi.a | N | rupiah |
|  | S |  |  |  |
|  | sabar | 'sa.ber | v.mo(st) | be patient |
|  | sabung | 'sa.brn | N | soap |
|  | saja | 'sa.dya | ADV | just |
|  | sak | 'sek | N | bag |
|  | saksi | 'sek.'si | N | witness |
|  | salam | 'sa.lem | v.bI | greet |
|  | salju | 'sel.d3u | N | snow |
|  | salon | 'sa.lon | N | console |
|  | sama | sa.ma | v.mo(ST) | be same |
|  |  |  | PREP/CNJ | to |
|  | sandal | 'sen.del | N | sandal |
|  | sangka | 'sey.ka | v.bI | assume |
|  | saptu | 'sep.tu | N | Saturday |
|  | sarjana | ser.'dya.na | N | academic degree |
|  | sasar | 'sa.ser | v.mo(st) | be insane |
| x | sebap | ss.'bep' | CNJ | because |
| x | sebentar | ,sع.be̦n.ter | ADV | in a moment |
|  | segala | se.'ga.la | QT | all |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | sehat | 'se.het' | v.mo(st) | be healthy |
|  | sejara | sع.'dзa.ra | N | history |
|  | sekertaria | se.kę̦.ta.'ri.a | N | secretariat |
|  | sekertaris | , se.ke̦r.'ta.rıs | N | secretary |
|  | seksi | 'se̦k.si | N | section |
|  | sel | 'sçl | N | cell |
|  | semester | sc.'męs.ter ${ }_{\text {r }}$ | N | semester |
|  | sempurna | sęm.'por.na | v.mo(st) | be perfect |
|  | seng | 'sęy | N | corrugated iron |
|  | sengaja | sc.'na.dza | v.bi | do intentionally |
|  | sengsara | se̦y.'sa.ra | v.Mo(DY) | suffer |
| x | sening | se.'nın | N | Monday |
|  | senjata | se̦n.'dza.ta | N | rifle |
|  | senter | 's¢̣n.t¢̧\% | v.BI/N | light with flashlight / flashlight |
|  | senyor | 'se.nor | N | senior |
|  | serfen | 'sşr.fẹn | v.bI | serve |
|  | serfis | 'sęr.fis | v.bi | process documents |
| x | serius | ,se.ri.'ws | v.mo(st) | be serious |
|  | sersang | sçr.'sen | N | sergeant |
|  | set | 'se̦t | N | set |
|  | setang | 'se.ten | N | evil spirit |
|  | setia | se.ti.a | v.mo(st) | be faithful |
|  | sidi | 'si.di | N | CD player |
|  | sifat | 'si.fet | N | characteristic |
|  | sihir | 'sı.hir | v.bi | practice black magic on s.o. |
|  | silet | 'si.lçt | N | razor blade |
|  | singga | 'sin.ga | v.Mo(DY) | stop by |
|  | sinode | si.'no.d $\varepsilon$ | N | synod |
|  | sipil | 'si.prl | v.mo(st) | be civil |
|  | sisa | 'si.sa | N | residue |
|  | siswa | 'sis.wa | N | student |
|  | siswi | 'sis.wi | N | female student |
|  | skaf | 'skef | V.BI | plane wood |
|  | skola | 'sko.la | v.mo(DY)/n | go to school / school |
|  | skop | 'skopp' | v.bI/N | shovel |
|  | skot | 'skōt' | v.bi | hit |
|  | skripsi | 'skrrp.si | N | minithesis |
|  | skutu | 'sku.tu | N | partner |
|  | slamat | 'sla.met' | v.mo(st) | be safe |
|  | slang | 'sley | N | hose |
|  | slasa | 'sla.sa | N | Tuesday |


|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | slenger | 'sle.jer | N | sling |
|  | smeng | 'smęn | v.BI/N | cement |
|  | smes | 'smęs | v.bi | smash |
|  | smua | 'smv.a | QT | all |
|  | snek | 'sn¢̦k | N | snack |
|  | soak | 'so.ek | v.mo(ST) | be weak |
|  | soal | 'soָ.el | N | problem |
|  | sodara | so.'da.ra | N | sibling |
|  | solar | 'so.ler | N | diesel fuel |
|  | sono | 'so.no | V.MO(DY) | sleep soundly |
| x | sopir | so.'pro | N | driver |
|  | sorga | 'sọr.ga | N | heaven |
|  | sos | 'so̦s | N | sauce |
| x | sosial | ,so.si.'el | v.mo(st) | be social |
|  | spak | 'spek' | v.bI | kick |
|  | spang | 'spery | v.bI | spank |
|  | spatu | 'spa.tu | N | shoe |
|  | speda | 'spe.da | N | bicycle |
|  | spit | 'spit | N | speedboat |
|  | sprey | 'spręj | N | bedsheet |
|  | spul | 'spol | v.bi | rinse |
|  | staf | 'stef | N | staff |
|  | standar | 'sten.der | N | motorbike kickstand |
|  | stang | 'stey | v.mo(Dy) | boast |
|  | star | 'ster | v.bI | start engine |
|  | status | 'sta.tos | N | status |
|  | stel | 'stęl | v.bI | tune |
|  | step | 'stepp' | v.mo(DY) | fall unconsciously |
|  | stir | 'strir | v.BI/N | steer / steering wheel |
|  | stop | 'stopp' | v.bI | stop |
|  | stor | 'stor | V.bI | deposit |
|  | strap | 'strep' | v.bI | punish |
|  | strategi | stra.'tع.gi | N | strategy |
|  | stres | 'stress | v.mo(st) | be stressed |
|  | strika | 'stri.ka | v.BI/N | iron |
|  | strom | 'strọm | N | electric current |
|  | suda | 'su.da | ADV | already |
|  | sukses | 'suk.şșs | N | success |
|  | supaya | su.'pa.ja | CNJ | so that |
| x | supermi | ,su.p¢̦.'mi | N | instant noodles |
|  | suster | 'sus.t¢¢ | N | female nurse |
|  | suting | 'su.tim | v.bI | shoot |

A Word lists

| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| swami | 'swa.mi | N | husband |
| swara | 'swa.ra | N | voice |
| syarat | 's ${ }^{\text {ja.ret }}$ | N | condition |
| syukur | 's ${ }^{\text {j}} \mathrm{u} . \mathrm{kv}$ r | N | thanks to God |
| T |  |  |  |
| taat | 'ta.et | v.mo(st) | be obedient |
| takraw | 'ta.krew | N | Takraw ball game |
| talenta | ta.'le̦n.ta | N | gift |
| tang | 'tey | N | pliers |
| tanpa | 'ten.pa | PREP | without |
| tanta | 'ten.ta | N | aunt |
| tapi | 'ta.pi | CNJ | but |
| taplak | 'tep.lek | N | tablecloth |
| target | 'ter.gçt | N | target |
| tas | 'tes | N | bag |
| taykondo | trj.'kọn.do | N | taekwondo |
| te | 't $\varepsilon$ | N | tea |
| teko | 'te.ko | N | teapot |
| telaga | tع.'la.ga | N | lake |
| telefisi | ,tc.lc.'fi.si | N | television |
| telpon | 'te̦l.pon | v.bI | phone |
| tembaga | te̦m.'ba.ga | N | copper |
| tempo | 'tẹm.po | v.mo(ST) | be quick |
| tempramen | te̦m.'pra.męn | N | temperament |
| tempres | 'tęm.pręs | N | medical compress |
| tenda | 'te̦n.da | N | tent |
| tengki | 'tȩy.ki | N | tank |
| tenis | 'tı.nıs | N | tennis |
| tentara | te̦n.'ta.ra | N | soldier |
| x teologia | ,te.o.'lo.gi., a | N | theology |
| teras | 'tı.res | N | porch |
| termos | 't¢̣r.mo̦ | N | thermos bottle |
| x terpal | tȩr.'pel | N | canvas |
| terpol | 'te̦r.pop | N | container |
| tes | 'tȩs | v.bi | test |
| tifa | 'ti.fa | N | k. o. drum |
| tim | 'tim | N | delegation |
| tipe | 'ti.pe | N | type |
| to | to | TAG | right? |
| toa | 'țT.a | N | field loudspeaker |
| tobat | 'to.bet | v.Mo(DY) | repent |


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| toko | 'to.ko | N | shop |
| top | 'topp | v.mo(st) | be good |
| topi | 'to.pi | N | hat |
| toser | 'to.sçr | v.bi | pass ball |
| tradisi | tra.'di.si | N | tradition |
| transfer | 'trens.fe̦r | v.bi | transfer |
| trawma | 'trew.ma | N | trauma |
| trek | 'tręk | N | truck |
| trening | 'tre.nıy | N | tracksuit |
| trilyun | 'tril.jon | NUM.C | trillion |
| U |  |  |  |
| umat | 'v.met | N | congregation |
| итит | 'v.mom | v.mo(st) | be public |
| umur | 'ช.mชr | N | age |
| ungsi | 'vŋ.si | V.BI | flee |
| x unifersitas | ,u.ni. fęr.si.'tes | N | university |
| usaha | u.'sa.ha | v.bI | attempt |
| usia | u.'si.a | N | age |
| usul | 'v.ssl | N | proposal |
| utama | u.ta.ma | v.mo(st) | be prominent |
| W |  |  |  |
| wakil | 'wa.kıl | N | deputy |
| waktu | 'wek.tu | N | time |
| walikota | , wa.li.'ko.ta | N | mayor |
| wanita | wa.'ni.ta | N | woman |
| warna | 'wer.na | N | color |
| wasit | 'wa.sit | N | referee |
| wawancara | ,wa.wen.'tfa.ra | v.bI | interview |
| wesel | 'we.sçl | v.bi | transfer money |
| wilaya | wi.'la.ja | N | district |
| wisuda | wi.'su.da | N | graduation ceremony |
| Y |  |  |  |
| yakin | 'ja.kın | v.Mo(sT) | be certain |
| yatim | 'ja.tım | v.mo(st) | be fatherless |
| yayasan | ja.ja.sen | N | foundation |
| yo | 'jo | ADV | yes |

## A. 3 Lexical items historically derived by (unproductive) affixation of Malay roots

|  | Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | A |  |  |  |
|  | anaang | a.'na.ken | N | offspring |
|  | B |  |  |  |
|  | babingung | ba.'bi.yชn | v.mo(ST) | be confused |
|  | badani | ba.'da.ni | v.mo(st) | be physical |
|  | badara | ba.'da.ra | v.mo(ST) | be bloody |
|  | badiam | ba.'di.em | v.mo(st) | be quiet |
|  | baduri | ba.'du.ci | v.mo(ST) | be thorny |
|  | bergaya | ba.'ga.ja | v.mo(Dy) | put on airs |
|  | bagigit | becr.'gi.grt' | v.mo(Dy) | bite |
|  | baisi | ba.'ı.si | v.mo(st) | be muscular |
|  | bajalang | ba.'dza.len | v.mo(Dy) | walk |
|  | bakumis | ba.'ku.mıs | v.mo(st) | be with beard |
|  | bangungang | ba.'pu.yen | N | building |
|  | bantuang | ben.tr.en | N | help |
|  | baribut | ba.'ri.bst' | v.bI | trouble |
|  | bayangang | ba.ja.jen | N | shadow |
|  | bayangkang | ba.'jey.ken | v.bi | imagine |
|  | bebrapa | be.'bra.pa | QT | be several |
| x | berbentuk | , be̦r.be̦n.tık' | v.mo(st) | be with shape of |
|  | berbua | bçr.'bu.a | v.mo(ST) | be with fruit |
|  | berbuat | besr.'bu.et' | v.bI | make |
|  | berburu | bęr.'bu.ru | v.bI | hunt |
|  | berdasarkang | , b¢̧.da.'ser.ken | V.mo(st) | be based on |
| x | berdebar | , bçr.de.'ber | v.mo(Dy) | pulsate |
|  | berdiri | bȩr.'di.ci | V.Mo(DY) | stand |
| x | berempat | , be.sçm.'pet' | V.mo(st) | be four |
|  | bergabung | bęr.'ga.bvy | V.MO(DY) | join |
|  | bergaul | bęr.'ga.sl | v.mo(DY) | associate |
| x | bergrak | bęr.'grek' | V.MO(DY) | move |
|  | bergumul | bçr.'gu.mol | V.MO(DY) | struggle |
|  | berharap | bęr.'ha.cep' | v.bi | hope |
|  | berhasil | be̦r.'ha.sil | v.mo(Dy) | succeed |
|  | berhubungang | , bçr.hu.'bu.yen | V.MO(DY) | have sexual intercourse |
|  | berjuang | bęr.'dzu.en | V.mo(DY) | struggle |
| x | berkebung | , be̦r.kẹ.'bsn | V.MO(DY) | do farming |

A. 3 Lexical items historically derived by (unproductive) affixation of Malay roots

| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| berkumpul | bçr.'kvm.pol | v.mo(dy) | gather |
| berlabu | bçr.'la.bu | v.mo(DY) | anchor |
| berlaku | bçr.'la.ku | v.mo(ST) | be valid |
| berlindung | bç.'lin.d $\quad$ n | v.Mo(DY) | take shelter |
| bermaing | becr.'ma.in | v.mo(DY) | play |
| bermalam | bęr.'ma.lem | v.Mo(DY) | overnight |
| berpakeang | , bęr.pa.'ke.en | v.mo(st) | be with clothes |
| berpikir | be̦r.'pi.kır | V.MO(DY) | think |
| berpisa | bç.'pi.sa | v.mo(st) | be separate |
| bersaling | bsț.'sa.lı | v.Mo(DY) | give birth |
| bersandar | bç.'sen.der | v.mo(DY) | lean |
| bersangkutang | , bçr.sey.'ku.ten | v.mo(St) | be concerned with |
| bersatu | betr.'sa.tu | v.mo(st) | be one |
| bersina | bç.'si.na | v.Mo(DY) | commit adultery |
| bertahang | be̦r.'ta.hen | V.MO(DY) | hold (out/back) |
| x bertemang | , bçr.te̦.'men | v.mo(ST) | be friends |
| bertemu | bęr.tet.'mu | v.Mo(DY) | meet |
| bertengkar | becr.tẹy.'ker | V.Mo(DY) | quarrel |
| bertentangang | , bẹr.ț̦n.ta.yen | v.mo(st) | be in conflict |
| bertindak | bçr.'tin.dek | v.mo(DY) | act |
| bertriak | , ba.ta.'ıı.a | v.bi | scream (at) |
| bertukarang | , bçr.tu.'ka.ren | v.mo(DY) | mutually exchange |
| brade | 'bra.de | v.mo(st) | be younger sibling |
| brali | 'bra.li | v.mo(DY) | shift |
| branak | 'bra.nek' | v.bi | give birth (to) |
| brangkat | 'brey.ket' | v.Mo(DY) | leave |
| brenti | 'bre̦n.ti | V.MO(DY) | stop |
| brikut | 'bri.kst | v.mo(DY) | follow |
| brontakkang | brown.ta.ken | v.bi | fight |
| bruba | 'bru.ba | v.mo(DY) | change |
| buatang | bv.'a.ten | N | deed |
| buruang | bu.'rv.en | N | prey |
| C |  |  |  |
| cadangang | t $\int$ a.da.yen | N | reserve |
| campurang | t $\int$ em.'pu.ren | N | mixture |
| catatang | t $\int$ a.ta.ten | N | note |
| cobaang | tfo.'ba.en | N | trial |
| D |  |  |  |
| didikang | di.'di.ken | N | upbringing |
| duluang | dv.'lv.en | v.Mo(st) | be prior to others |


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| G |  |  |  |
| gambarang | gem.'ba.ren | N | illustration |
| gangguang | gen.'gv.en | N | disturbance |
| golongang | gã.'lo.yen | N | group |
| grakang | 'gra.ken | N | movement |
| H |  |  |  |
| halangang | ha.'la.pen | N | hindrance |
| harapang | ha.'ra.pen | N | hope |
| harapkang | ha.'rep.'ken | V.bI | hope for |
| harusnya | ha.'rus.na | ADV | appropriately |
| hubungang | hu.'bu.gen | N | connection |
| hubungi | hu.'bu.pi | V.BI | contact |
| I |  |  |  |
| ikatang | i.'ka.ten | N | tie |
| ingatang | i.'ya.ten | N | memory |
| J |  |  |  |
| jabatang | dya.'ba.ten | N | position |
| jahitang | d3a.'hi.ten | N | stitch |
| jajaang | dya.'dza.en | N | colony |
| jalangang | dya.'la.nen | N | route |
| jalangkang | dza.'len.ken | v.bI | put into operation |
| jalani | dza.'la.ni | v.bi | undergo |
| jelaskang | d3c.les.ken | v.bI | explain |
| jemputang | d3ẹm.'pu.ten | N | pick up service |
| jualang | dzv.'a.len | v.BI/N | sell / merchandise |
| jurusang | d3u.'ru.sen | N | department |
| K |  |  |  |
| kabulkang | ka.'bwl.ken | v.bI | fulfill a request |
| kasiang | ka.'si.en | v.BI/N | pity |
| keadaang | ,ke.a.da.en | N | condition |
| kebaikang | ,ke.ba.'ı.ken | N | goodness |
| kebalikang | ,ke.ba.'lę.en | N | opposite |
| kebanyakang | , ke.ba.'na.ken | N | majority |
| kebenarang | , ke.be.'na.ren | N | truth |
| kebetulang | , ke.be.tr.len | N | chance |
| kebodoang | , ke.bo.'do.en | N | stupidity |
| kebrapa | kع.'bra.pa | INT | how manyeth |


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| kebutuang | ke.bu.tr.en | N | need |
| kecamatang | ke.tfa.'ma.ten | N | subdistrict |
| kedua | ke.'du.a | num.o | second |
| kedudukang | ,ke.du.'du.ken | N | position |
| x keempat | ,ke.ETm.'pet' | num.o | fourth |
| kegiatang | ke.gi.'a.ten | N | activity |
| keglapang | ke.'gla.pen | N | darkness |
| kehidupang | ,ke.hi.'du.pen | N | life |
| keingingang | ke.i.'ni.nen | N | wish |
| kejahatang | ,ke.dya.'ha.ten | N | evilness |
| kekurangang | ,ke.ku.'ra.ŋen | N | shortage |
| kelakuang | ,ke.la.'kv.en | N | behavior |
| kelaleyang | ,ke.la.'lı.jen | N | neglect |
| kelebiang | ,ke.lع.'bi.en | N | surplus |
| kelemaang | ,ke.le.'ma.en | N | weakness |
| kelewatang | .ke.le.'wa.ten | V.mo(ACL) | be overly abundant |
| keliarang | ,ke.li.'a.ren | V.Mo(DY) | roam about |
| keliatang | ,ke.li.'a.ten | v.mo(ACL) | be visible |
| kemajuang | ,ke.ma.'dzu.en | N | progress |
| kemaluang | , ke.ma.'lv.en | N | genitals |
| kematiang | ,ke.ma.'ti.en | N | death |
| kemawang | ke.'maw. ${ }^{\text {w }}$ ¢ ${ }^{\text {a }}$ | N | will |
| kemenangang | , ke.me.'na.ŋpn | N | victory |
| kenalang | ke.'na.len | N | acquaintance |
| kendaraang | , kẽ̦.da.'ra.en | N | vehicle |
| kepentingang | ,ke.pe̦n.'ti.ŋen | N | importance |
| keputusang | , ke.pu.tu.sen | N | decision |
| kesadarang | , ke.sa.da.ren | N | awareness |
| kesalaang | ke.s.'la.en | N | mistake |
| kesehatang | , ke.se.'ha.ten | N | health |
| kesempatang | ,ke.sçm.'pa.ten | N | opportunity |
| kesulitang | ,ke.su.'li.ten | N | difficulty |
| ketakutang | , ke.ta.'ku.ten | N | fear |
| ketawa | ke.'ta.wa | v.bi | laugh |
| ketawang | ke.taw. ${ }^{\text {w }}$ en | v.mo(ACL) | be found out |
| x ketemu | , ke.ts.'mu | v.bi | meet |
| ketiga | ke.'ti.ga | num.o | third |
| ketindisang | ,ke.tın.di.sen | N | k. o. trap |
| ketinggalang | ,ke.tın.'ga.len | v.mo(ACL) | be left behind |
| ketrangang | ke.'tra.yen | N | explanation |
| ketua | ke.'tr.a | N | chairperson |
| keturungang | ,ke.tu.'ru.nen | N | descendant |


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| keuntungang | ke.vn.'tv.引en | N | advantage |
| kunjungang | kon.'dzu.yen | N | visit |
| kunjungi | kzn.'d3u.gi | v.bI | visit |
| kutukang | ku.'tu.ken | N | curse |
| L |  |  |  |
| lalapang | la.'la.pen | N | k. o. vegetable dish |
| lamarang | la.'ma.cen | N | application, proposal |
| lapangang | la.'pa.yen | N | field |
| latiang | la.'ti.en | v.BI/N | practice |
| lautang | la.'v.ten | N | ocean |
| layani | la.ja.ni | v.bI | serve |
| liburang | li.'bu.ren | N | vacation |
| lingkarang | lin.'ka.cen | N | circle |
| M |  |  |  |
| maingang | ma.'İnen | N | toy |
| makangang | ma.'ka.nen | N | food |
| makanya | ma.'ka.na | ADV | for that reason |
| masakang | ma.'sa.ken | N | cooking |
| melalui | ,me.la.'lu.i | v.bi | pass by |
| melamar | me.'la.mer | v.bi | apply for, propose |
| melancong | me.'len.tfy | v.mo(Dy) | take a pleasure trip |
| melawang | me.la.wen | v.bI | oppose |
| melayani | ,me.la.ja.ni | v.bi | serve |
| x melekat | , me.le.'ket' | v.mo(DY) | stick |
| meleset | me.'lę.sęt ${ }^{\text {c }}$ | v.Mo(DY) | miss a target |
| melintang | me.'lin.tey | V.MO(DY) | lie across |
| melulu | me.lu.lu | ADV | exclusively |
| menangis | me.'na.yıs | v.bi | cry (for) |
| menari | me.'na.ri | v.mo(DY) | dance |
| mendadak | me̦n.'da.dek' | v.mo(ST) | be sudden |
| mendarat | me̦n.da.ret | v.mo(DY) | land |
| mendidi | męn.'di.di | v.Mo(DY) | boil |
| mendukung | me̦n.'dr.k | v.bI | support |
| mengaku | me.'ja.ku | v.bi | confess |
| mengala | me.'ya.la | v.mo(DY) | yield |
| mengalir | me.'ya.lr | v.Mo(DY) | flow |
| mengantuk | me.'yen.trk' | v.mo(st) | be sleepy |
| mengasii | .me.ya.'si.i | v.bI | love |
| mengelu | me.'nع.lu | v.Mo(DY) | complain |
| meninggal | me.'nıj.gel | v.Mo(DY) | die |

A. 3 Lexical items historically derived by (unproductive) affixation of Malay roots

| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| menjadi | me̦n.'dza.di | V.BI | become |
| menjelang | me̦n.d3¢.'len | v.bI | approach |
| menuju | me.'nu.ḑu | v.bI | aim at |
| menurut | me.'nv.rvt' | PREP | according to |
| menyala | me.'na.la | v.mo(Dy) | shine |
| menyangkal | me.'nen.kel | v.bI | deny |
| menyanyi | me.'na.ni | v.bi | sing |
| menyapu | me.'na.pu | v.bi | sweep |
| x menyebrang | , me.ne.'brey | v.bi | cross |
| x menyesal | , me.je.'sel | v.mo(st) | regret |
| menyusul | me.'nu.svl | v.bi | follow |
| merangkap | mع.'геу.kep' | V.BI | double as |
| merantaw | me.'ren.tew | v.mo(dy) | wander about |
| merayap | mع.'ra.jep' | v.bI | creep (over) |
| minumang | mi.'nu.men | N | beverage |
| muatang | mv.'a.ten | N | cargo, contents |
| O |  |  |  |
| obatang | э.'ba.ten | N | magic spell |
| P |  |  |  |
| paginya | pa.'gi.na | ADV | next morning |
| pakeang | pa.'ke.en | N | clothes |
| pamalas | pe.'ma.les | v.Mo(ST)/n | be very listless / listless person |
| pamerang | pa.'me.ren | N | exhibition |
| panakut | ps.'na.kot' | v.BI/N | be very fearful (of) / coward |
| pandangang | pen.'da.jen | N | view |
| pandiam | pe̦n.'di.em | v.mo(st)/n | be very quiet / taciturn person |
| panggayu | реу.'ga.ju | v.bI/N | paddle |
| panggilang | pey.'gi.len | N | call, summons |
| pangkalang | peg.'ka.len | N | base |
| pasangang | pa.'sa.引en | N | pair |
| pedalamang | .pe.da.'la.men | N | interior |
| pembangungang | .pęm.ba.'nu.nen | N | building |
| pembantu | pam.'ben.tu | N | house helper |
| pembayarang | .pe̦m.ba.'ja.ren | N | payment |
| pembunuang | .pẹm.bu.'nu.en | N | killing |
| pemekarang | ,pe.me.'ka.ren | N | development |
| pemiliang | ,pe.mi.'li.en | N | election |
| pemimping | pe.'mım.pın | N | leader |
| pemrinta | pəm.'rın.ta | N | government |

A Word lists

| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| pemrintaang | ,pəm.rın.ta.en | N | governance |
| ретиda | pe.'mu.da | N | youth |
| penani | pe.'na.ni | N | farmer |
| penantar | pe.'nen.ter | N | escort |
| penasarang | .pe.na.'sa.ren | v.mo(st) | be curious |
| pendatang | pe̦n.'da.tey | N | stranger |
| pendidikang | .pe̦n.di.'di.ken | N | education |
| pendiriang | ,pẹn.di.'rı.en | N | convictions |
| penduduk | pe̦n.dr.dชk' | N | inhabitant |
| penentuang | .pe.nęn.'to.en | N | determination |
| pengakuang | ,pe.ja.'kv.en | N | confession |
| pengarui | .pe.j..'ru.i | v.bI | influence |
| pengasu | pe.'ya.su | N | Sunday school teacher |
| pengetawang | .pe.ye.'taw. ${ }^{\text {w }}$ en | N | knowledge |
| pengganti | pən.'gen.ti | N | replacement |
| pengirimang | .pe.ni.'ri.men | N | dispatch |
| pengurus | ре.'ŋช.cชs | N | manager |
| peninju | pe.'nın.dzu | N | boxer |
| penjelasang | ,pẹn.dze.'la.sen | N | explanation |
| penolakang | .pe.no.'la.ken | N | rejection |
| penolong | pe.'nọ.lọ | N | helper |
| penugas | pe.'nu.ges | N | official |
| penumpang | pe.'nชm.pey | N | passenger |
| penunggu | pe.'nvy.gv | N | tutelary spirit |
| penunjuk | pe.'nvn.dzrk' | N | guide |
| penutupang | ,pe.nu.tu.pen | N | closure |
| penyalaang | ,pe.na.'la.en | N | ignition |
| penyeraang | .pe.nc.'ra.en | N | dedication |
| penyesalang | ,pe.nc.'sa.len | N | remorse |
| perbedaang | .pęr.be.'da.en | N | difference |
| perbuatang | ,pçr.bv.'a.ten | N | act, action |
| perhitungang | ,pe̦r.hi.'tu.jen | N | calculation |
| peringatang | ,pe.ri.'na.ten | N | reminder, warning |
| perjalangang | ,per.dza.'la.nen | N | journey |
| perjanjiang | ,p¢̧.d3en.'dzi.en | N | promise |
| perlengkapang | .pẹr.lẹn.'ka.pen | N | equipment |
| permaingang | ,p¢̧r.ma.'̇.nen | N | game |
| persiapang | .pęr.si.'a.pen | N | preparation |
| pertahangang | .pęr.ta.'ha.nen | N | defense |
| pertandingang | ,per.ten.'di.yen | N | competition |
| pertanyaang | .pęr.ta.'na.en | N | question |
| pertemuang | ,pe̦r.tz.'mช.en | N | meeting |

A. 3 Lexical items historically derived by (unproductive) affixation of Malay roots


| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| sialang | sı.'a.len | N | s. o. unfortunate |
| siapkang | sı.'ep.'ken | V.BI | prepare |
| silakang | si.'la.ken | V.BI | invite |
| slalu | 'sla.lu | ADV | always |
| slama | sc.'la.ma | ADV | as long as, while |
| sorenya | so.'זе.na | ADV | this afternoon |
| spertinya | spe̦r.'ti.na | ADV | it seems |
| spulu | 'spu.lu | num.C | ten |
| sratus | 'sca.tos | num.c | one hundred |
| sribu | 'sri.bu | num.c | one thousand |
| stuju | 'stu.d3u | V.MO(DY) | agree |
| sumbangang | ssm.'ba.yen | N | donation |
| T |  |  |  |
| tabalik | ta.'ba.le | v.mo(ACL) | be turned over |
| tabanting | ta.'ben.tı | v.mo(ACL) | be tossed around |
| x tabla | ta.'bla | v.mo(ACL) | be cracked open |
| tacukur | ta.'tJu.kzr | v.mo(ACL) | be scalped |
| tagait | ta.'ge.ft' | v.mo(ACL) | be hooked |
| tagoyang | ta.'g?.jen | v.mo(ACL) | be shaken |
| taguling | ta.'gu.lin | v.mo(ACL) | be rolled over |
| tahambur | ta.'hem.bwr | v.mo(ACL) | be scattered about |
| tahangang | ta.'ha.nen | N | detention |
| takancing | ta.'ken.tfin | v.mo(ACL) | be locked |
| takumpul | ta.'krm.pvl | v.mo(ACL) | be collected |
| takupas | ta.'ku.pes | v.mo(ACL) | be peeled |
| talipat | te̦r.'li.pet' | v.mo(ACL) | be folded |
| tamasuk | ta.'ma.ssk' | v.mo(ACL) | be included |
| tambaang | tem.'ba.en | N | extra amount |
| tanamang | ta.'na.men | N | plants |
| tanggapang | tey.'ga.pen | N | response, idea |
| tanggulangi | ,tey.gu.'la.pi | v.bI | ward off, cope with |
| tantangang | ten.'ta.yen | N | challenge |
| tapisang | ta.'pi.sen | N | filter |
| taputar | ta.'pu.ter | v.Mo(ACL) | be turned around |
| tasala | ta.'sa.la | v.Mo(ACL) | be mistaken |
| tatikam | ta.'ti.kem | v.mo(ACL) | be stabbed |
| tatongkat | ta.'tọy.ket' | v.Mo(ACL) | be beaten |
| tatutup | ta.'tr.tsp' | v.mo(ACL) | be closed |
| tendangang | te̦n.'da.jen | N | kicking |
| tentukang | te̦n.'tro.ken | v.bi | determine |
| terbakar | t¢̧.'ba.ker | v.Mo(ACL) | be burnt |

A. 3 Lexical items historically derived by (unproductive) affixation of Malay roots

| Lexeme | Transcription | Word class | English gloss |
| :---: | :---: | :---: | :---: |
| terbuka | te̦r.'bu.ka | v.mo(ACL) | be opened |
| terendam | te̦.'ręn.dem | v.mo(ACL) | be soaked |
| terganggu | te̦r.'gey.gu | v.mo(ACL) | be disturbed |
| tergantong | ta.'gen.tọy | v.mo(ACL) | be dependent |
| terjadi | te̦r.'dza.di | v.mo(ACL) | happen |
| terjatu | t¢̧r.'dza.tu | v.mo(ACL) | be fallen |
| terkenal | tęr.ke.'nel | v.mo(ACL) | be well-known |
| terlambat | tęr.'lem.bet' | v.mo(ACL) | be late |
| terlanjur | te̦r.'len.dzor | v.mo(st) | be beyond bounds |
| terlempar | te̦r.'licm.per | v.mo(ACL) | be thrown |
| x terlepas | ,tçr.lc.'pes | v.mo(ACL) | be loose |
| terpukul | tçr.'pv.kol | V.mo(ACL) | be beaten |
| tersendiri | ,te̦.sçn.'di.ri | v.mo(ACL) | be separate |
| x tersera | ,te̦.sc.'ra | v.bI | up to s. o. |
| tersinggung | tęr.'sin.gon | v.mo(ACL) | be offended |
| tertarik | t¢̧..'ta.rık' | v.mo(ACL) | be pulled |
| tertawa | te̦r.ta.wa | v.bI | laugh |
| x tertentu | , ţ̦r.te̦n.tu | v.mo(st) | be specific |
| tertolak | t¢̣.'to.lek' | v.mo(ACL) | be rejected |
| tertukar | t¢̧r.'tu.ker | v.mo(ACL) | get changed |
| tikungang | ti.'ku.gen | N | bend in road |
| timbulkang | tm.'bul.ken | v.bI | emerge |
| tindakang | tm.'da.ken | N | action |
| tingkatang | tıy.'ka.ten | N | level |
| titipang | ti.ti.pen | N | entrusted goods |
| trangkang | 'trey.ken | v.bi | clarify |
| trangkat | 'trey.ket' | V.mo(ACL) | be lifted |
| trapkang | 'trep.ken | v.bI | implement, apply |
| trapung | 'tra.p₹n | V.mo(ACL) | be drifting |
| tujuang | tu.'dzu.en | N | purpose |
| tulisang | tu.'li.sen | N | writing |
| tumpukang | tom.'pv.ken | N | pile |
| turungang | tu.'cu.nen | N | descendant |
| U |  |  |  |
| ucapkang | u.tfep.ken | V.bI | express |
| ujiang | u.'d3ı.en | v.BI/N | examine / examination |
| ukirang | u.'ki.ren | N | carved object |
| ukurang | u.'ku.ren | N | measurement |
| ulangang | ข.'la.yen | v.BI/N | test |
| utusang | u.tu.sen | N | messenger |

## Appendix B: Texts

This appendix presents a sample of twelve texts. Included are three spontaneous conversations, one spontaneous narrative, two elicited narratives, two expositories, two hortatories, and two elicited jokes. For each text the following meta data is provided: the file name, the text type, the interlocutors, and the length (in minutes). For additional information see also $\S 1.11$ and Appendix C.

## B. 1 Conversation: Playing volleyball; morning chores

| File name: | $081023-001-\mathrm{Cv}$ |
| :--- | :--- |
| Text type: | Conversation, spontaneous |
| Interlocutors: | 1 younger male, 2 younger females |
| Length (min.): | $4: 52$ |

(1) Oten: [UP] blang, kam dari mana? trus [UP] tong dari Arbais, kam pu nama say 2pl from where next 1pl from Arbais 2pl poss name siapa~siapa? Herman de bilang de pu nama, pace de tulis dikertas, RDP $\sim$ who Herman 3sG say 3sG poss name man 3sG write at paper su, situ de ada, de su biking daftar already L.MED 3sG exist 3sG already make list Oten: [UP] said, 'where are you from?', then [UP], 'we are from Arbais', 'what are your names?' Herman gave his name, the man wrote (it) on a paper, that's it, there it was!, he (the man) had already made a list
(2) $s u$ biking daftar, pertama di atas sa liat nama tu Lukas ini T., already make list first at top 1sG see name d.dist Lukas d.prox T. bencong satu, Lukas T. dia, trus suda spulu, pas tong, trus tamba transvestite one Lukas T. 3sG next already one-tens precisely 1pl next add kaka dari Mamberamo satu, Agus, Agus Y oSb from Mamberamo one Agus Agus Y.
(he) had already made a list, the first one on top, I saw that name, Lukas, what's-his-name, T., a certain transvestite, Lukas T., then (there were) already ten (names on that list), at that moment we, then add a certain older brother from (the) Mambramo (area), Agus, Agus Y.
(3) tadi di pasar sa ada pegang tangang deng dia, de pake baju mera earlier at market 1sG exist hold hand with 3sg 3sg use shirt be.red earlier in the market I was holding hands with him, he was wearing a red shirt
(4) Klara: o, [UP] oh!
Klara: oh, [up]
(5) Otend: badang besar~besar body RDP~be.big
Oten: (his) body is very big
(6) Klara: ((laughter))

Klara: ((laughter))
(7) Oten: pace de tulis tong pu nama selesay, de bilang, besok, jam, seblum man 3sG write 1PL poss name finish 3sg say tomorrow hour before jam tiga kamu su ada disini untuk latiang, trus sa tanya, tong hour three 2PL already exist at L.Prox for practice next 1sg ask 1PL latiang ini mo ke mana?
practice D.Prox want to where
Oten: after the man had written down our names, he said, 'tomorrow, o'clock, before three o'clock you'll already be here to practice', then I asked, 'we (do) our very practicing to go where?'
(8) de blang, a, latiang saja, katanya bupati bilang, ada mo pergi 3sG say ah! practice just it.is.being.said regent say exist want go maing di ini Serui ka itu yang de ada cari ana~ana untukpergi play at D.Prox Serui or D.DIST REL 3sG exist search RDP~child for go maing, suda, baru sa bilang masi bisa ada yang masuk ato su play already and.then 1SG say still be.able exist REL enter or already tra ada? NEG exist
he said, 'ah, just practice, it's being said that the regent says that we are going to go to play maybe on, what's-its-name, Serui (Island), that's why he's looking for young people to go play', alright, and then I said, 'can one still be included (on that list) or already not any longer?'
(9) de blang, kalo ada yang mo masuk, bisa, trus kaka wa, yang nanti 3sg say if exist rel want enter be.able next oSb spm rel very.soon kasi latiang itu kaka polisi yang baru~baru deng Hurki jalang ke give practice d.DIST oSb police Rel RDP~recently with Hurki walk to Jakarta sana, ka Sarles, ka Sarles juga, de pu maim pisow Jakarta L.DIST oSb Sarles oSb Sarles also 3sg poss play knife he said, 'if there is someone who wants to be included, (he/she) can (be
included), then, older brother [SPM], (the one) who will give the training, what's-his-name, the older brother (who's a) police (officer) who just now went to Jakarta over there together with Hurki, older brother Sarles, older brother Sarles also, he has a fast and smart way of playing' (Lit. 'the knife playing of')
(10) Klara: bola fol
ball volleyball
Klara: volleyball
(11) Oten: yo, bola foli ini, tanta Nelci yes ball volleyball D.prox aunt Nelci
Oten: yes, this volleyball, [addressing Nelci] aunt Nelci
(12) Klara: yo, net laki~laki, tong yang bli, yang sebla darat [UP] yes (sport.)net rdp $\sim h u s b a n d$ 1pl rel buy rel side land Klara: yes, the (volleyball) net for men, (it was) us who (bought it), (the one) which is off the beach [up]
(13) Oten: yang sebla, yo sebla, di pinggir kali tu rel side yes side at border river D.DIST
Oten: (the one) which is off (the beach), yes, off (the beach), on the banks of that river
(14) Klara: itu kalo memang bola~bola tinggi kalo smes itu memang masuk D.DIST if indeed RDP~ball be.high if smash D.DIST indeed enter kali, bola~bola terlalu [UP]
river RDP~ball too
Klara: so, if indeed the balls are high, if (one) smashes them, indeed they go into the river, the balls are too [UP]
(15) Oten: sa lompat itu frey, tangang lewat 1sG jump D.DIST be.free hand pass.by
Oten: I jump high, free (of the net), (my) hands surpass (the net)
(16) $M Y:[\mathrm{UP}]$

MY: [UP]
(17) Klara: kemaring saya, Herman, Maa, Markus, siapa ni, Nofita, sa yesterday 1sG Herman tru-Markus Markus who D.Prox Nofita 1sG bilang begini, sa juga naik frey
say like.this 1sG also ascend be.free
Klara: yesterday, I, Herman, Markus[Tru], Markus, (and) who-is-it, Nofita, I said like this, 'I also jump free (of the net)'
(18) Oten: Nofita, Nofita pu bagi~bagi tu

Nofita Nofita poss rdp $\sim$ divide d.dist
Oten: Nofita, Nofita tosses well (Lit. 'Nofita’s dividing')
(19) Nelci: kalo Nofita kena itu tubir
if Nofita hit D.DIST steep
Nelci: whenever Nofita hits (the ball, it comes down in a) steep (angle)
(20) Klara: adu, tong maing tu hancur, tong maing net sebla oh.no! 1pl play D.dist be.shattered 1pl play (sport.)net side baru ada, a, sebla darat tapi dong bilang begini, sebla net darat and.then exist ah! side land but 3PL say like.this side (sport.)net land tu tinggi~tinggi to?, tinggi itu suda
D.DIST RDP $\sim$ be.high right? be.high D.DIST already

Klara: oh no!, we did our very playing poorly, we played the net off (the beach), and then there is (one), ah, off the beach, but they talked like this, the net off the beach is very high, right?, its height is fixed
(21) Oten: $y o, d e$ yes 3sG
Oten: yes, it
(22) Klara: de tinggi itu suda 3sG be.high D.DIST already
Klara: its height is fixed
(23) Oten: de $p u$ 3sG poss
Oten: its
(24) Klara: pita di atas
ribbon.of.volleyball.net at top
Klara: the upper ribbon of the volleyball net
(25) Oten: yang pita di bawa itu

REL ribbon.of.volleyball.net at bottom D.DIST
Oten: (its) lower ribbon
(26) Klara: batas
border
Klara: (its) height
(27) Oten: sa berdiripas batas ini, angkat tangang tapi [UP] lewat 1SG stand be.exact border D.Prox lift hand but pass.by
Oten: (when) I'm standing the lower ribbon is exactly on this height, (when I) lift (my) hand [ur]
(28) Klara: makanya kalo bola su mo turung, jang ko lompat, bola for.that.reason if ball already want descend NEG.IMP 2sG jump ball tinggi tu yang ko lompat deng akang to?, karna bola turung tra be.high D.DIST REL 2sG jump with it[SI] right? because ball descend neg akang sampe
will[SI] reach
Klara: so, when the ball is already coming down, don't jump, (when) the ball is really high, you jump for it, right?, because the ball (that's) coming down won't hit the ground
(29) Oten: tadi tong cara maing juga, bola~bola pul, kejar, tangang kembali earlier 1pl manner play also RDp~ball pool chase hand return Oten: earlier the way we played (was) also (good in some way), we played beautifully, chasing and passing (the ball)
(30) Klara: memang, baru net de spang itu, mantap skali to?, jadi indeed and.then (sport.)net 3sG spank D.DIST be.good very right? so tong kemaring maing deng net itu dua kali saja 1PL yesterday play with (sport.)net d.DIST two time just Klara: indeed, and then the net was really tight, (it was) very good, right?, so yesterday we played at that net only twice
(31) Wili: sa yang [UP]

1SG REL
Wili: it was me who [up]
(32) Nelci: siapa yang ganggu [UP]
who Rel disturb
Nelci: who was it who disturbed [up]
(33) Klara: tong maing [UP]

1PL play
Klara: we were playing [up]
(34) Oten: lo, de yang gara, ko jang mo bilang saya laing, ko apa? right![SI] 3sG REL irritate 2sG NEG.IMP want say 1sG again 2sG what siapa? siapa lu, siapa gua?
who who $2 \mathrm{SG}[\mathrm{JI}]$ who $1 \mathrm{sG}[\mathrm{JI}]$
Oten: right!, it was him who irritated (you), don't you accuse me again, who in the world do you think you are?, who are you?, who am I? ${ }^{1}$

[^188](35) Klara: net sebla kitong, itu yang langsung tong turung maing di (sport.)net side 1PL D.DIST REL immediately 1PL descend play at net ini
(sport.)net D.Prox
Klara: the net on the other side, we, that's where we immediately went to play at this net
(36) Oten: o!
oh!
Oten: oh!
(37) Klara: net prempuang to?
(sport.)net woman right?
Klara: the women's net, right?
(38) Oten: Wili ko jang gara~gara tanta dia itu!

Wili 2sG NEG.IMP RDP~irritate aunt 3sG D.DIST
Oten: you Wili don't irritate that aunt!
(39) Wili: $\mathrm{mm}-\mathrm{mm}$
mhm
Wili: mhm
(40) Klara: Wili ko masuk suda, ko tadi dengar itu burung itu ka tida? Wili 2sG enter already 2sG earlier hear D.DIST bird D.DIST or NEG Klara: you Wili go inside!, earlier you heard, what's-its-name, that bird or not?
(41) Oten: o, itu klawar, de makang ini, mangga ka, apa, ketapang oh! D.DIST cave.bat 3sG eat D.PRox mango or what tropical-almond
Oten: oh, that was a bat, it was eating, what's-its-name, maybe mangos, what-is-it, tropical-almonds
(42) Klara: tida, ana~ana kecil kaya begini, ana~ana kecil nanti de NEG RDP $\sim$ child be.small like like.this RDP~child be.small very.soon 3sG bangung terlambat, lebi bagus ko masuk tidor sana suda wake.up be.late more be.good 2sG enter sleep L.DIST already Klara: no, young children like him, young children, later he'll wake up too late, it's better you go inside and just sleep over there
(43) Oten: baru ko? and.then 2sG
Oten: and (what about) you?
(44) Klara: ko jang bergabung, sa masi bisa pu kesadarang sa bangung 2sG NEG.IMP join 1sG still be.able poss awareness 1sG wake.up
tempo
quick
Klara: don't stay with us any longer, I have enough mindfulness, I wake up early
(45) Oten: dari tadi siang sa yang kasi bangung ko from earlier midday 1SG REL give wake.up 2sG
Oten: earlier this noon, (it was) me who woke you up
(46) Nelci: $i$, malam de bangung, e yo hampir ugh! night 3sG wake.up uh yes almost
Nelci: ugh!, (last) night she got up, uh yes, (it was) almost
(47) Oten: lo hampir siang sa yang bangung lebi cepat right![SI] almost day 1SG ReL wake.up more be.fast
Oten: right, (it was) almost daylight, (it was) me who woke up earlier
(48) Klara: em? $e$ ? uh uh
Klara: uh, uh
(49) Oten: knapa ka? why or
Oten: what happened?
(50) Nelci: sa bangung stenga empat, stenga lima 1sG wake.up half four half five
Nelci: I got up at half past three, half past four
(51) Klara: sa bangung, sa kluar pas ana ini, Nusa juga kluar dari 1sG wake.up 1sG go.out precisely child D.Prox Nusa also go.out from dalam, de kas bangung ana ini, dong dua kluar cuci piring, dong dua inside 3sG give wake.up child d.Prox 3PL two go.out wash plate 3PL two biking te pagi, memang hampirsiang tu dong dua yang kluar make tea morning indeed almost day D.DIST 3pl two ReL go.out bangung pagi
wake.up morning
Klara: I got up, I went outside, in that moment this kid here, Nusa came outside, she woke up this kid, ${ }^{2}$ the two of them went outside (and) washed the plates, the two of them made the morning tea, indeed (it was) almost daylight, (it was) the two of them who came outside and woke up the morning

[^189](52) Oktofina: e, mama bilang masuk hey! mother say enter
Oktofina [addressing Wili]: hey, mother said (you should) go inside
(53) Nelci: Nusa cuci piring, sa goreng nasi Nusa wash plate 1sg fry cooked.rice
Nelci: Nusa washed the plates (and) I fried the cooked rice
(54) Wili: de tipu, sa tadi liat dia tida ada di dalam 3sG cheat 1sG earlier see 3 sG NEG exist at inside
Wili: she's deceiving (me), earlier I saw (that) she (mother) wasn't inside
(55) Oktofina: a, betul, ma bilang ah! be.true mother say
Oktofina: ah, it's true, mother said
(56) Oten: siapa yang bla kayu? who ReL split wood
Oten: who (was it) who split (the fire)wood?
(57) Klara: a, omong kosong, ko masuk tidor sana suda ah! gossip[SI] empty 2sG enter sleep L.DIST already
Klara [addressing Wili]: ah, nonsense, you just go inside (and) sleep over there
(58) Nelci: yo, itu om siapa ni Hendrikus pu maytua yes D.DIST uncle who D.Prox Hendrikus poss wife
Nelci: yes, that was uncle, who is this, Hendrikus' wife
(59) Oten: hm
pfft
Oten: pfft!
(60) Nelci: kapang ko bla? when 2sg split
Nelci [addressing Oten]: when did you split (the firewood)?
(61) Klara: RW, RW cooked.dog.meat cooked.dog.meat
Klara [responding to another interlocutor]: cooked dog meat, cooked dog meat
(62) Oten: sa yang bla sore 1sG REL split afternoon
Oten: (it was) me who split (the firewood) in the afternoon
(63) Klara: RW, tra ada RW
cooked.dog.meat NEG exist cooked.dog.meat
Klara: cooked dog meat, there's no cooked dog meat
(64) Nelci:pagi, bukang ko, itu su kemaring sore yang ko bla, morning NEG 2sG D.DIST already yesterday afternoon Rel 2SG split ini pagi lagi om Hendrikus yang bla d.prox morning again uncle Hendrikus rel split

Nelci: in the morning!!, (that) wasn't you, that was already yesterday afternoon that you split (firewood), this morning, (it was) again uncle Hendrikus who split (the firewood)

## B. 2 Conversation: Buying soap; bringing gasoline to Webro

| File name: | $081110-002-\mathrm{Cv}$ |
| :--- | :--- |
| Text type: | Conversation, spontaneous |
| Interlocutors: | 2 older males, 2 older females |
| Length (min.): | $3: 55$ |

(1) Ida: slamat sore smua
be.safe afternoon all
Ida: good afternoon you all
(2) Natalia: sore, sore
afternoon afternoon
Natalia: afternoon, afternoon
(3) Natalia: eh, bagemana ipar? sore, dari fayapura?
hey! how sibling.in-law afternoon from Jayapura
Natalia [greeting another visitor]: hey, how is it going brother-in-law?, good afternoon!, (did you just get here) from Jayapura?
(4) $M O-1:[\mathrm{UP}]$

MO-1: [up]
(5) Natalia: aah, yo! baru mana tong pu ipar prempuang?
ah! yes and.then where 1pl poss sibling.in-law woman
Natalia: ah, yes! so where is our sister-in-law?
(6) Ida: ipar prempuang yang baru lewat deng ojek sibling.in-law woman REL recently pass.by with motorbike.taxi ((laughter))

Ida: (it's our) sister-in-law who passed by with a motorbike taxi a short while ago ((laughter))
(7) Natalia: ey! baru lewat?
hey! recently pass.by
Natalia: hey, did (she) pass by a short while ago?
(8) MO-1: tadi lewat deng ojek earlier pass.by with motorbike.taxi
MO-1: earlier she passed by on a motorbike taxi
(9) Natalia: yo?
yes
Natalia: yes?
(10) Ida: de tadi lewat deng ojek

3sG earlier pass.by with motorbike.taxi
Ida: earlier she passed by with a motorbike taxi
(11) Natalia: ibu, de su bawa de pu maytua? ((laughter))
woman 3sG already bring 3sG poss wife
Natalia: mother, did he already bring his wife? ((laughter))
(12) Ida: tra taw, tanya dia, sa tra taw neg know ask 3sg 1sg neg know
Ida: I don't know, ask him, I don't know
(13) $M O-1:[\mathrm{UP}]$

MO-1: [up]
(14) MO-2: sa ada lewat deng mobil 1sG exist pass.by with car
MO-2: I was passing by in a car
(15) Natalia: bahaya!, ((pause)) ko punya barang itu masi ada?, ini sa mo danger 2sG poss stuff D.DIST still exist D.Prox 1sG want pi, dong ada pesang, sa mo bawa titip di depang situ, bawa ke depang, go 3pl exist order 1sG want bring deposit at front L.MED bring to front bukang titip tapi sa pi bawa, kemaring sampe sa sibuk NEG deposit but 1sg go bring yesterday until 1sg be.busy
Natalia: great!, ((pause)) is your stuff still (here)?, right now, I want to go, they ordered (s.th.), I want to bring (and) deposit (it) in front over there, (I want to)
bring (it) to the front, not to deposit (it) but I want to go and bring (it), yesterday, (when I) arrived, I was (too) busy (to do it)
(16) Ida: ini sa ada cari, yo, ini, sa ada cari uang, ini, D.PROX 1sG exist search yes D.PROX 1sG exist search money D.PRox ojek
motorbike.taxi
Ida: what's-its-name, I'm looking for, yes, what's-its-name, I'm looking for money, what's-its-name, (for) the motorbike taxi
(17) Natalia: perjalangang, kemaring sa mo bawa, kemaring dulu karna journey yesterday 1sG want bring yesterday be.prior because
Natalia: (for your) trip, yesterday I wanted to bring (the stuff), the day before yesterday because
(18) Ida: [UP] sabung saja, kam pu sabung ada di situ soap just 2pl poss soap exist at L.MED
Ida: [UP] just (laundry) soap, your (laundry) soap is there
(19) Natalia: damay!, kitong tra ada sabung ini peace 1PL nEG exist soap D.Prox
Natalia: my goodness!, we don't have any soap right now!
(20) Ida: yo, suda, kalo begitu tinggal suda!
yes already if like.that stay already
Ida: yes!, alright!, if it's like that, no problem!
(21) Natalia: simpang, sa simpang sratus ribu tu, de pu store 1sG store/prepare one:hundred thousand D.DIST 3sG poss bapa ar ambil, de ada du d ikut platiang satu father SPM-fetch fetch 3sG exist TRU-be.prior TRU-be.prior follow training one minggu di atas, karna tadi sa mo cuci pakeang ada taro tinggal [UP] week at top because earlier 1sG want wash use-pat exist put stay
Natalia: (I) set aside, I set aside one hundred thousand, my husband ${ }^{3}$ took[spm] took it, he was[TRU] was[TRU] attending a one-week training (course) up there (at the regent's office), because earlier I wanted to wash (his) clothes, (but I) had to put it off, [UP]
(22) Ida: supaya, sa mo cuci dong dua pu pakeang itu yang
so.that 1sG want wash 3pl two poss use-pat d.dist rel
Ida: so that, I want to wash both of their clothes which

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(23) Natalia: tra ada ma neg exist mother

Natalia: (there) isn't (any), mother
(24) Ida: su tra ada sabung already NEG exist soap
Ida: alright, there's no soap
(25) Natalia: tunggu, sabar, kalo mo sabar, kalo masi besok mo wait be.patient if want be.patient if still tomorrow want naik, ini bawa ke mari, nanti sa yang cuci ascend D.Prox bring to hither very.soon 1sG rel wash
Natalia: wait, be patient, if you want to be patient, if tomorrow (you) still want to go up (to the regent's office and), what's-its-name, bring (the clothes) there, I'll wash (them)
(26) Ida: tra ada, ini suda selesay, jadi besok [up] NEG exist D.PRox already finish so tomorrow
Ida: no, this (meeting) is already over, so tomorrow [UP]
(27) Natalia: i, kam su selesay? ugh! 2pl already finish
Natalia: ugh!, you already finished?
(28) Ida: $a$, itu bukang apa, hanya penyeraang uang ah! D.DIST NEG what only dedication money
Ida: ah, that's not, what-is-it, (it's) only the distribution (of) the funds
(29) Natalia: o! oh!

Natalia: oh!
(30) Ida: saja [UP]
just
Ida: just [up]
(31) Natalia: $o, y o$
oh! yes

Natalia: oh, yes
(32) Ida: ibu bupati bicarakang uang ke ibu distrik woman regent speak-APP money to woman district Ida: Ms. Regent talked to Ms. District (about the) money
(33) Natalia: o, begitu, PKK
oh! like.that family.welfare.program
Natalia: oh it's like that, (about) the family welfare program
(34) Ida: yo
yes
Ida: yes
(35) Natalia: o, kalo begitu siang, tu yang, sa, siri sa bawa ke sana oh! if like.that midday D.DIST REL 1 sg betel.vine 1 sg bring to L.DIST dulu, depang dulu, ini su mo sore jadi, sa masak sayur first front first D.prox already want afternoon so 1sG cook vegetable [UP], bapa dong dari Yawar
father 3pl from Yawar
Natalia: oh, if it's like that, (I assume the meeting was over) at midday, that's why, I, the betel vine I'll bring (it) over there first, (I'll bring it) to the front first, because now it's already turning afternoon, I'm cooking the vegetables [UP], the men from Yawar
(36) Ida: hari ini yo suda selesay, jadi ibu distrik de kasi kitong dua day D.Prox yes already finish so woman district 3sG give 1PL two
pu uang ojek pulang pergi
poss money motorbike.taxi go.home go
Ida: today, yes, (the meeting) is already over, so Ms. District gave the two of us money (for) our return fare for the motorbike taxis
(37) Natalia: kasiang
pity
Natalia: poor thing!
(38) Ida:jadisa in mo ini, ini
so 1sG tru-d.prox want D.Prox d.prox
Ida: so, I here[TRU] want this (or) this (but I can't with these limited funds)
(39) Natalia: tong dua tra ada, yang pertama itu sa su kasi dorang, 1PL two NEG exist REL first D.DIST 1sG already give 3pl makanya wa mana itu, dong su mo bli batu, jadi skarang sa, for.that.reason SPM where D.DIST 3PL already want buy stone so now 1sG itu, simpang sratus ribu
D.DIST store one:hundred thousand

Natalia: the two of us haven't (gotten any money left), I already gave the first (one hundred thousand) to them, that is to say [SPM] what-is-it, they already wanted to buy stones, so now I (already), what's-its-name, set aside one hundred thousand (rupiah)
(40) Ida: yo suda kegiatang yes already activity
Ida: yes, well, the activity
(41) Natalia: de bapa, dua ratus de pu bapa, trus dep bapa-ade Martin 3sG father two hundred 3sG poss father next 3sG:poss uncle Martin dia bawa lari prempuang, adu, in tong lagi masala lagi, de 3sG bring run woman oh.no! D.Prox 1Pl again problem again 3sG bapa-ade Martin
uncle Martin
Natalia: my husband ${ }^{4}$, two hundred (thousand for) my husband, and my brother-in-law Martin ${ }^{5}$ took a woman away (with him), oh no!, here, we are having problems again, my brother-in-law Martin
(42) Ida: naik motor? ascend motorbike
Ida: (he) took (her) on a motorbike?
(43) Natalia: prempuang, kapal Papua-Lima woman ship Papua-Lima
Natalia: the woman, (she came with) the Papua-Lima ship
(44) Ida: ya Tuhang yes God
Ida: oh God!
(45) Natalia: de bawa prempuang Bagayserwar 3sG bring woman Bagayserwar
Natalia: he brought a woman (from) Bagayserwar
(46) Ida: ya ampung yes forgiveness
Ida: for mercy's sake!
(47) Natalia: kemaring de pigi, sa pikir mungking de sendiri pigi yesterday 3sG go 1sG think maybe 3sG alone go
Natalia: yesterday he left, I thought, maybe he went by himself
(48) Ida: i, e, jang ceritra banyak, kasi sayur sa makang, sa ugh!, hey!, NEG.IMP tell many give vegetable 1sG eat 1sG lapar
be.hungry
Ida: ugh!, hey, don't talk a lot, give me vegetables to eat, I'm hungry

[^191](49) Natalia: wa, ko datang langsung ko lapar?
wow! 2SG come immediately 2SG be.hungry
Natalia: wow!, you come (here, and) immediately you're hungry?
(50) All: ((laughter))

All: ((laughter))
(51) Natalia: nasi ada itu, timba suda
cooked.rice exist D.DIST spoon already
Natalia: the cooked rice is over there, just spoon (it)!
(52) Ida: ah, sa tida makang nasi
ah! 1sG NEG eat cooked.rice
Ida: ah, I don't eat rice
(53) Natalia: habis apa?
after.all what
Natalia: so what (do you want)?
(54) Ida: sa mo makang sayur saja

1sG want eat vegetable just
Ida: I just want to eat vegetables
(55) Natalia: yo, ambil piring suda di dalam, sa deng Angela ada duduk, yes fetch plate already at inside 1sg with Angela exist sit
mama ambil piring
mother fetch plate
Natalia: alright, just get a plate from inside, I and Angela are sitting around, take a plate, mama
(56) Ida: yo, suda, sebentar
yes already in.a.moment
Ida: yes, alright, (I'll get one) in a moment
(57) Natalia: suda, isi sayur suda, masakpertama habis, e bapa dong already fill vegetable already cook first be.used.up uh father 3pl
dari Wari, Aruswar tra dapat, itu yang sa ada masak kangkung from Wari Aruswar neg get D.DIST rel 1sg exist cook water.spinach Natalia: alright, just fill (the plate with) vegetables, (the food that I) cooked first is finished, uh, the men from Wari, Aruswar didn't get (any of the food), that's why I'm cooking water spinach
(58) de pu tanta dong dari Tarfia dorang ini, dep ma, apa, dong 3sg poss aunt 3pl from Tarfia 3pl d.prox 3sG:Poss Tru-aunt what 3pl pu bapa-ade bli [Is], suda, trus sa masaknasi pertama poss uncle buy already next 1sG cook cooked.rice first my sister-in-law ${ }^{6}$ and the others from Tarfia, my sister-in-law, what-is-it, their uncle bought [Is], well, then I cooked the first meal
(59) Ida: baru [Is]?
and.then
Ida: and then [Is]?
(60) Natalia: mama-tua de, e, kemaring dia kas taw sayani, mama-tua, sa aunt 3 sG uh yesterday 3 sG give know 1sG D.Prox aunt 1 SG masi sibuk, tunggu, sa blum pigi, sebentar baru still be.busy wait 1sG not.yet go in.a.moment and.then Natalia: the aunt, yesterday, she let me here know, aunt, I was still busy, (you) waited, I hadn't gone yet, a moment later and then
(61) Ida: sebentar bilang kaka Nelci yang ganti sa pu karong lagi in.a.moment say oSb Nelci rel replace 1sG poss bag again Ida: then tell older sister Nelci who also replaced my bag
(62) Natalia: e, Ise o, Ise, sa lupa, kamu bawa pulang mama-tua pu cobe, uh Ise oh! Ise 1sG forget 2pl bring go.home aunt poss mortar kam bawa [Is]
2pl bring
Natalia [addressing her daughter Ise]: uh, Ise oh, Ise, I forgot, you return aunt's mortar!, you return [Is]
(63) Ida: itu yang sa tadi bilang tu, tadi sa bilang mama-tua, tolong D.dist rel 1sG earlier say d.dist earlier 1sG say aunt help karna besok
because tomorrow
Ida: that's what I said earlier, earlier I said to aunt, 'please, because tomorrow'
(64) Natalia: mo pulang, [UP] sa bawa
want go.home 1sG bring
Natalia: (I) want to go home, [UP] I bring
(65) Ida: skarang kamu kasi terpol~terpol taru di sini now 2PL give RDP $\sim$ container put at L.PROX Ida: now you give (me) the jerry cans, put (them) here

[^192](66) Natalia: terpol [Is], ey, yang besar~besar itu jangang container hey! REL RDP~be.big D.DIST NEG.IMP

Natalia: the jerry cans, [Is], hey, those big ones, don't (take them)!
(67) Ida: a, yang kecil~kecil
ah! REL RDP~be.small
Ida: ah, (I take the ones) that are small
(68) Natalia: ey, ada tu, silakang, ko mo bawa pergi, ko bawa duluang hey! exist d.DIST please 2SG want bring go 2sG bring be.prior-PAT
Natalia: hey, (they) are there, please, (if) you want to take (them) away, take (them) and go ahead
(69) Ida: yo itu smua
yes D.DIST all
Ida: yes, all (of them)
(70) Natalia: ko bawa duluang 2SG bring be.prior-pat
Natalia: take them (and) go ahead
(71) Ida: smua kasi ke mari, sa mo bawa, [UP] di sana tida ada
all give to hither 1sG want bring at L.DIST NEG exist
Ida: give all of them to (me) here, I want to take (them) [UP], over there aren't (any)
(72) Natalia: sa stembay, sa stembay, ini, bensing 1SG stand.by.for 1sG stand.by.for D.Prox gasoline
Natalia: I stand by, I stand by (with), what's-its-name, the gasoline
(73) Ida: ko stembay bensing, ko bli bensing

2SG stand.by.for gasoline 2sG buy gasoline
Ida: you stand by (with) the gasoline, you buy gasoline
(74) Natalia: yo yes
Natalia: yes
(75) Ida:terpol itu, LNG pu terpol itu tinggal, itu container D.DIST liquefied.natural.gas poss container D.DIST stay D.DIST ko isi bensing di situ
2sG fill gasoline at L.MED
Ida: those jerry cans, that LNG jerry can stays behind, that (metal one), you fill the gasoline in there

B Texts
(76) Natalia: yo
yes
Natalia: yes
(77) Ida: empat liter saja
four liter just
Ida: just four liters
(78) Natalia: ey, empat e, kasiang, mama kampung di ba laut mo bli hey! four uh pity mother village at Tru-bottom sea want buy
Natalia: hey, four (liters), uh, poor thing, Ms. Mayor down[Tru] (at the) seaside wants to buy
(79) Ida: o yo suda
oh! yes already
Ida: yes, that's it
(80) Natalia: sa tra bisa kasi sembarang orang, mama kampung 1sG NEG be.able give any(.kind.of) person mother village
Natalia: I can't give (the gasoline to just) any person, (but) Ms. Mayor
(81) Ida: [Is]

Ida: [Is]
(82) Natalia: Nusa mama

Nusa mother
Natalia: Nusa's mother
(83) Ida: [Is]

Ida: [Is]
(84) Natalia: kitong lima liter, itu saja, yang laing~laing mmm, sa su

1PL five liter D.DIST just REL RDP~be.different uh 1SG already
tra maw, sembuni mati, jadi ko bawa laing, laing sa
NEG want hide die so 2 sg bring be.different be.different 1sg
tahang, $e$, sa tahang, kas tinggal, sa spulu
hold(.out/back) uh 1sG hold(.out/back) give stay 1sG one-tens
Natalia: we'll (buy) five liters, that's it, the others, uh, I already don't want (to buy gasoline for them), hide (it) from sight, so you take some, I keep some, uh, I keep (some), leave it, I'll (buy) ten (liters)
(85) MO-1: [Is]

MO-1: [Is]
(86) Ida: [Is], sa liat dulu, nanti sa sendiri yang pili mana yang sa 1sg see first very.soon 1sg be.alone rel choose where rel 1sg $m \quad$ bawa TRU-want bring
Ida: [Is], I'll have a look first, then (it'll be) me who'll choose which (jerry can) I want[TRU] to take
(87) Natalia: yang itu, yang itu tu, adu ini, ana~ana ini dong REL D.DIST REL D.DIST D.DIST oh.no! D.PROX RDP~child D.PROX 3PL tra menyimpang, ini bapa-tua kampung, u, Arbais, Arbais punya neg store/prepare d.prox uncle village uh Arbais Arbais poss Natalia: that one, that one there, oh no!, what's-its-name, these children they didn't store (the jerry cans well), this one is (the jerry can) of uncle Mayor, umh (from) Arbais, Arbais
(88) Ida: yo, sa tra minta yang besar, yang kecil yes 1sG NEG request ReL be.big ReL be.small
Ida: yes, I don't ask for (the one) that is big, (I ask for the one) that is small

## B. 3 Conversation: Wanting bananas

| File name: | $081011-003-\mathrm{Cv}$ |
| :--- | :--- |
| Text type: | Conversation, spontaneous |
| Interlocutors: | 1 male child, 2 younger females, 2 older females |
| Length (min.): | $0: 35$ |

(1) Fanceria: kecil malam dia menangis pisang goreng be.small night 3sG cry banana fry
Fanceria: (this) little (boy Nofi), (last) night he cried (for) fried bananas
(2) Marta: yo, dong dua deng Wili tu biking pusing mama yes 3pl two with Wili d.dIST make be.dizzy mother
Marta: yes!, he and Wili there worried (their) mother
(3) Fanceria: ay, pisang di sana itu yang mo bli
aw! banana at L.DIST D.DIST REL want buy
Fanceria: aw!, (it was) the bananas (from) over there which (Nofi) wanted to buy
(4) Marta: [UP] ni tra rasa sakit, dapat pukul trus
D.PROX NEG feel be.sick get hit be.continuous

Marta: [UP] here doesn't feel sick, (he) gets beaten continuously
(5) Nofi: sa pu sribu

1sG poss one-thousand
Nofi: (that's) my one thousand (rupiah bill)
(6) Fanceria: yo, ini kertas ((laughter)) yes D.Prox paper
Fanceria: yes, this is (only) paper (but not money) ((laughter))
(7) Nof: ko gila ka?

2sg be.crazy or
Nofi: are you crazy?
(8) Nofita: terlalu nakal ana~ana di sini too be.mischievous RDP~child at L.PRox
Nofita: (they are) too mischievous the children here
(9) Fanceria: $a$, Nofi [UP] ah! Nofi

Fanceria: ah, Nofi [up]
(10) Marta: [Is]

Marta: [Is]
(11) Fanceria: $\mathrm{mm}-\mathrm{mm}$
mhm
Fanceria: mhm
(12) Marta: tida ada pisang goreng, menangis pisang goreng NEG exist banana fry cry banana fry
Marta: (when) there aren't (any) fried bananas, (then Nofi) cries (for) fried bananas
(13) Fanceria: ((laughter))

Fanceria: ((laughter))
(14) Nofita: ada pisang goreng, tra maw makang exist banana fry NEG want eat
Nofita: (when) there are fried bananas, (he) doesn't want to eat (them)
(15) Marta: ada pisang goreng, tida maw makang pisang goreng exist banana fry NEG want eat banana fry
Marta: (when) there are fried bananas, (he) doesn't want to eat fried bananas
(16) Klara: putar balik, ana kecil itu turn.around turn.around child be.small D.DIST
Klara: (Nofi) constantly changes (his) opinion, that small child
(17) Fanceria: pisang goreng, pisang Sorong sana tu iii, besar~besar manis banana fry banana Sorong L.DIST D.DIST oh RDp $\sim$ be.big be.sweet Fanceria: fried bananas, those bananas (from) Sorong over there, oooh, (they) are all big (and) sweet

## B. 4 Narrative: A drunkard in the hospital at night

File name: 080916-001-CvNP
Text type: Conversation, spontaneous: Personal narrative
Interlocutors: 2 older females
Length (min.): 2:33
(1) Marta: ... de bilang, mama-ade bangung pergi makang di warung, sa bilang, 3SG say aunt wake.up go eat at food.stall 1sg say Tuhang ini jaw malam begini makang di warung ini suda jam God D.Prox far night like.this eat at food.stall D.Prox already hour dua malam
two night
Marta: ... he (Pawlus) said (to me), 'aunt get-up, go and eat at the food stall', I said, 'God, it's too late at night to eat at the food stall, this is already two o'clock at night'
(2) sa bilang, ap [Up] Pawlus kalo ko simpang musu di luar, yo 1sG say TRU-what Pawlus if 2sG store enemy at outside yes suda, biar mama mati ko hidup suda, de bilang, tida, mama pergi already let mother die 2sg live already 3sg say NEG mother go makang, sa bilang ko kluar pergi bungkus nasi untuk saya eat 1sg say 2sG go.out go pack cooked.rice for 1sG I said, 'what[TRU] [UP] Pawlus, if you have enemies outside, alright, let me ('mother') die and you just live', he said, 'no, you ('mother') go and eat', I said, 'you go out, go, and (get) wrapped-up rice for me'
(3) baru Iskia dia pegang sa punya lutut yang tida baik, sa pu lutut and.then Iskia 3sg hold 1sg poss knee rel neg be.good 1sg poss knee yang suda sakit ini, bekas ini baru dia gepe begini deng REL already be.sick D.Prox trace D.Prox and.then 3sG clamp like.this with kuku, de kasi, de balut putar sa punya lutut digit.nail 3sG give 3sg bandage turn.around 1sG poss knee and then Iskia held my knee that is not well, this knee which has already been sick, this scar (is still hurting), then he clamped (it) like this, he put, he bandaged my knee
(4) ibu Marta bertriak sampe, sa bilang, Tuhang tolong saja apa yang su woman Marta scream reach 1sg say God help just what rel already gigit sa pu lutut?, baru dia tertawa, de tertawa~tertawa, sa blang, bite 1sG poss knee and.then 3sg laugh 3sG rdp $\sim$ laugh 1sG say adu Tuhang ko begini ka?
oh.no! God 2sG like.this or
I ('Ms. Marta') screamed strongly, I said, 'God help me!, what (is it) that has bitten my knee?' but then he laughed, he laughed intensely, I said, 'oh God!, why does this have to happen?' (Lit. 'you God are like this?')
(5) baru Pawlus dia mabuk s ini, ibu guru Maria ini and.then Pawlus 3sG be.drunk SPM D.Prox woman teacher Maria D.Prox kasiang, de suda tidor, kang dia hosa to?, tong ja jaga dia love-pat 3sG already sleep you.know 3sG pant right? 1PL TRU-guard guard 3sG sampe jam satu, baru tong tidor until hour one and.then 1PL sleep and then Pawlus was drunk [sPM], what's-her-name, Ms. Teacher Maria here, poor thing, she was already sleeping, you know?, she has breathing difficulties, right?, we watched[TRU] watched her until one o'clock, only then did we sleep
(6) baru Pawlus de sandar di de pu badang begini, baru de kas and.then Pawlus 3sg lean at 3sG poss body like.this and.then 3sG give pata leher ke bawa di atas de pu bahu, de bilang, adu Tuhang break neck to bottom at top 3sG poss shoulder 3sg say oh.no! God tolong, ini siapa?, Tuhang tolong, ini siapa? ini siapa? help D.prox who God help D.prox who d.prox who but then Pawlus leaned on her body like this, and then he bent his neck down onto her shoulder, she said, 'oh God!, who is this?, God help me, who is this? who is this?' (Lit. 'caused his head to be broken')
(7) baru de su tekang dia ke bawa sini, hampir de mati, mace and.then 3 sG already press 3 sG to bottom l.prox almost 3 sG die woman de berdiri, de berdiri sampe di luar, dia lapor ke
3sG stand 3sG stand reach at outside 3sG report to
but he had already pressed her down, she almost died, the lady got up, she got up and went outside and reported (everything) to
(8) Efana: mabuk, tra, macang tida punya istri saja, mabuk takaroang be.drunk NEG variety NEG poss wife[SI] just be.drunk be.chaotic Efana: to be drunk!, doesn't, like he doesn't have a wife, (getting) drunk at random (like this)!
(9) Marta: de lapor ke suster, suster kluar, dia lapor sama polisi, 3sG report to female.nurse female.nurse go.out 3sG report to police
penjagaang di luar, tinggal tunggu dorang dua, dong dua di dalam, sampe guard at outside stay wait 3pl two 3pl two at inside until dong dua pu kluar dang polisi pegang dang dong borgol dorang dua 3pl two poss go.out and police hold and 3pl handcuff 3pl two Marta: she reported (everything) to the female nurse, the female nurse went outside, she reported (everything) to the police, the security outside, it remained for the two of them to wait, the two of them (who were) inside, until the two of them came out and the police got (them) and they handcuffed the two of them ${ }^{7}$
(10) skarang ada di sel, masuk sel ada tidor, siram dengang air baru now exist at cell enter cell exist sleep pour.over with water and.then dong dua tidor
3pl two sleep
now they were in a cell, (they) went into a cell to sleep, (the police) splashed (them) with water and the two of them slept
(11) Efana: ditahang, dikurung
uv-hold(.out/back) uv-imprison
Efana: (they were) detained, imprisoned
(12) Marta: ditahangang, polisi kurung, mm-mm tobat to?, karna uv-hold(.out/back)-pat police imprison mhm repent right? because orang~orang kejahatang nakal RDP~person evilness be.mischievous
Marta: (they were) detained, the police imprisoned (them), mhm, to hell with them, right?, because (they are) bad, mischievous people

## B. 5 Narrative: A motorbike accident

| File name: | $081015-005-\mathrm{NP}$ |
| :--- | :--- |
| Text type: | Elicited text: Personal narrative ${ }^{8}$ |
| Interlocutors: | 2 older males, 3 older females |
| Length (min.): | 10:29 |

(1) Maria: saya, Martina, Tinus, kitong 1sg Martina Tinus 1pL
Maria: I, Martina, Tinus, we

[^193](2) Hurki: kitong tiga orang

1PL three person
Hurki: we (were) three people
(3) Maria: tiga orang, tra ada, tra usa
three person NEG exist NEG need.to
Maria: three people, no, no need (to mention that)
(4) Marta: kitong tiga orang

1PL three person
Marta: we (were) three people
(5) Maria: nene, kitorang tiga orang ((pause)), kitong lari ke mari sampe grandmother 1PL three person 1PL run to hither reach di jalangang
at route
Maria: (we) grandmothers, we were three people ((pause)), we drove (along the beach back to Sarmi) here (until we) reached the road (Lit. 'reached the route')
(6) Hurki: sampe di tenga jalang
reach at middle walk
Hurki: (until we) reached the middle of the road
(7) Maria: a, hssst, tida bole begitu, itu suda baik maksut jadi ah! shhh! NEG may like.that D.DIST already good purpose so ((laughter))

Maria: ah, shhh!, (you) shouldn't (correct me), that's already good (enough), since the meaning (is already clear) ((laughter))
(8) Hurki: adu, sampe di jalangang oh.no!, reach at journey
Hurki: oh boy!, (until we) reached the road (Lit. 'reached the route')
(9) Maria: ini sampe di jalangang, trus tukang ojek ini dia D.Prox reach at route next craftsman motorbike.taxi D.PRox 3sG tida liat kolam ini, langsung dia tabrak itu, kolam ke sana, NEG see big.hole D.PROX immediately 3sG hit.against D.DIST big.hole to L.DIST langsung mama jatu
immediately mother fall
Maria: what's-its-name, until (we) reached the road, then this motorbike taxi driver, he didn't see this big hole, immediately, he hit, what's-its-name, the hole headlong, (and) immediately, I ('mother') fell off
(10) sa jatu ke blakang, Tinus ini de lari trus, saya suda jatu di 1sG fall to backside Tinus d.Prox 3sG run be.continuous 1sG already fall at blakang, sa jatu begini, langsung sa taguling, sa guling~guling di backside 1sG fall like.this immediately 1sG be.rolled.over 1sG RDP~roll.over at situ

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I fell off backwards, Tinus here, he continued on, I had already fallen off the back (of the motorbike-taxi), as I fell, I rolled over immediately, I rolled over and over there
(11) Tinus, dorang dua dengang Martina ini, dong dua lari trus, dong Tinus 3pl two with Martina D.prox 3pl two run be.continuous 3pl dua lari sampe di kali, baru Martina ini de kas taw sama tukang two run reach at river and.then Martina D.Prox 3sG give know to craftsman ojek ini, de bilang, a, tukang ojek, itu kitong motorbike.taxi D.Prox 3sG say ah! craftsman motorbike.taxi D.DIST 1PL pu kawang suda jatu, yang tadi kitong lari ke mari tu poss friend already fall rel earlier 1pl run to hither D.DIST
Tinus, he and Martina here, the two of them drove continuously, the two of them drove on all the way to the river, but then Martina here, she let this motorbike taxi driver know, she said, 'ah, motorbike taxi driver, what's-her-name, our friend already fell off, with whom we were driving here earlier'
(12) Nofita: [Is] ko liat~liat ke sini, baru ko ceritra, ceritra, ko ceritra 2SG RDP~see to L.PRox and.then 2SG tell tell 2SG tell suda [UP]
already
Nofita: [Is] you (have to) look over here, and then you tell the story, tell the story!, just tell the story! [UP]
(13) Maria: yo, biar de juga liat sa ((laughter))
yes let 3sg also see 1sG
Maria: yes, (but) let her also see me ${ }^{9}$
(14) skarang tukang ojek ini de pulang lagi sampe di tempat now craftsman motorbike.taxi D.Prox 3sG go.home again reach at place yang dia buang saya
ReL 3sG discard 1sG
now this motorbike taxi driver, he returned again all the way to the place where he'd thrown me off

[^194](15) Iskia: minta maaf $e$ ?, tolong ceritra tu plang $\sim$ plang request pardon eh? help tell D.DIST RDP $\sim$ be.slow
Iskia: excuse me, eh?, please talk slowly
(16) Maria: de buang saya, trus dorang dua turung dari motor, dorang dua 3sG discard 1sG next 3pl two descend from motorbike 3pl two liat sa begini, sa su plaka ke bawa see 1sg like.this 1sG already fall.over to bottom Maria: he'd thrown me off, then the two of them got off the motorbike, the two of them saw me like this, I had already fallen over to the ground
(17) dong dua bilang, adu kasiang, ko jatu ka?, yo, dorang dua angkat saya, trus 3pl two say oh.no! love-pat 2sG fall or yes 3pl two lift 1sG next sa tida swara
1sg NEG voice
the two of them said, 'oh no!, poor thing!, did you fall?' 'yes', the two of them lifted me, and I couldn’t speak (Lit. ‘didn’t (have) a voice')
(18) dorang dua goyang $\sim$ goyang saya, dong dua goyang $\sim$ goyang saya, trus sa 3pL two RDp~shake 1sG 3pl two rdp~shake 1sg next 1sg angkat muka, trus Martina de tanya saya, mama ko rasa bagemana? lift front next Martina 3sG ask 1sg mother 2sg feel how the two of them shook me repeatedly, the two of them shook me repeatedly, then I lifted (my) face, then Martina asked me, 'mother, how do you feel?'
(19) sa bilang begini, sa pusing, mata saya ini glap, trus Tinus ini 1sg say like.this 1sG be.dizzy eye 1sg d.prox be.dark next Tinus d.prox de bilang begini sama saya, sa bisa bawa ko ke Webro ka?, trus sa 3sg say like.this to 1sG 1sg be.able bring 2sG to Webro or next 1sG bilang begini, yo, sa jatu, sa rasa kepala pusing, bawa saya ke Webro say like.this yes 1sg fall 1sg feel head be.dizzy bring 1sg to Webro I said like this, 'I'm dizzy, my eyes here are dark', then Tinus here, he said to me like this, 'can I bring you to Webro?', then I said like this, 'yes, I fell, my head feels dizzy, bring me to Webro'
(20) trus kitorang tiga, kitorang tiga naik di motor, sa di blakang, Martina next 1PL three 1PL three ascend at motorbike 1sG at backside Martina di tenga at middle
then, we three, we three got onto the motorbike, I (was) in the back (and) Martina was in the middle
(21) trus tukang ojek ini de bawa, de bawa kitorang next craftsman motorbike.taxi D.Prox 3sg bring 3sg bring 1pl
menyebrang, menyebrang ka kali, menyebra menyebrang kali
cross cross TRU-river river TRU-cross cross river
then this motorbike taxi driver, he took, he took us (and we) crossed, crossed the river[TRU] river, (we) crossed[TRU] crossed the river
(22) sampe di Webro sa pu bapa, sa pu kaka dorang tanya saya, reach at Webro 1sg poss father 1sG poss oSb 3pl ask 1sG sodara sodara dorang, knapa?, ko sakit ka?
RDP $\sim$ sibling 3PL why 2sG be.sick or
having arrived in Webro, my father (and) my older siblings asked me, (my) relatives and friends (asked me), 'what happened? are you hurt?'
(23) sa bilang begini, ojek yang buang saya, dong bilang, 1sG say like.this motorbike.taxi rel discard 1sG 3PL say ojek mana?, a, sa pu motor ini, sa pu tukang motorbike.taxi where ah! 1sG poss motorbike D.Prox 1sG poss craftsman ojek yang buang saya, kurang ajar, kitong pukul dia suda motorbike.taxi rel discard 1sG lack teach 1pl hit 3sg already I said like this, '(it was) the motorbike taxi driver who threw me off', they said, 'which motorbike taxi?', 'ah, (it's) my motorbike here, (it's) my motorbike taxi driver who threw me off', 'damn him!, let us beat him up!'
(24) trus sa bilang begini, jangang, jangang pukul dia!, kasiang, itu next 1sg say like.this neg.IMP NEG.IMP hit 3sG pity D.DIST manusia, kamorang jangang pukul dia!, saya tida mati, saya ada human.being 2PL NEG.IMP hit 3sG 1sG NEG die 1sG exist then I said like this, 'don't, don't beat him!, poor thing, he's a human being, don't beat him!, I'm not dead, I'm alive' (Lit. 'I exist')
(25) trus sa tidor, tidor, dorang dua pulang ke Waim, tukang ojek next 1sG sleep sleep 3pl two go.home to Waim craftsman motorbike.taxi sama Martina, dong dua pulang sendiri ke Waim, sa tinggal karna sa rasa to Martina 3pl two go.home alone to Waim 1sg stay because 1sg feel masi pusing
still be.dizzy
then I slept, (I) slept, the two of them went home to Waim, the motorbike taxi driver and Martina, the two of them went home alone to Waim, I stayed (in Webro) because I still felt dizzy
(26) Nofita: sap badang sakit

1sG:Poss body be.sick
Nofita: my body was hurting
(27) Maria: badang sakit, saya tidor body be.sick 1sG sleep
Maria: (my) body was hurting, I slept
(28) Nofita: masak air panas cook water be.hot
Nofita: (they) boiled hot water
(29) Maria: masak air panas cook water be.hot
Maria: (they) boiled hot water
(30) Nofita: Roni yang masak air panas

Roni rel cook water be.hot
Nofita: (it was) Roni who boiled hot water
(31) Maria: Roni, ana mantri ini, de masak air panas, dorang tolong, Roni child male.nurse D.PROX 3sG cook water be.hot 3PL help dorang bawa air, dorang bawa daung, baru dorang urut sa deng 3PL bring water 3PL bring leaf and.then 3PL massage 1sG with itu, dong bilang, badang mana yang sakit?
D.DIST 3pl say body where Rel be.sick

Maria: Roni, this young male nurse, he boiled hot water, they helped, they brought water, they brought leaves, then they massaged me with those (leaves), they said, 'which (part of your) body is hurting?'
(32) adu, sa pu bahu sakit, sa pu pinggang sakit, sa pu blakang oh.no! 1sG poss shoulder be.sick 1sG poss loins be.sick 1sG poss backside sakit, trus ana mantri ini, de urut~urut saya, de be.sick next child male.nurse D.Prox 3sG RDP~massage 1sG 3sG
pegang~pegang di bahu, de pegang~pegang blakang RDP $\sim$ hold at shoulder 3sG RDP $\sim$ hold backside
'ouch!, my shoulder is hurting, my loins are hurting, my back is hurting', then this young male nurse, he massaged me, he massaged (my) shoulder, he massaged (my) back
(33) suda, saya tidor sampe sore, sa pu laki datang, Lukas already 1sG sleep until afternoon 1sG poss husband come Lukas eventually I slept until the afternoon, (then) my husband came, Lukas
(34) Nofita: sa pu pacar 1sg poss date
Nofita: my lover
(35) Maria: a ini orang Papua bilang, sa pu laki, sa pu laki ah! D.Prox person Papua say 1sg poss husband 1sg poss husband datang, dia bilang, kitong dua pulang, sa tanya, kitong dua pulang ke come 3SG say 1PL two go.home 1SG ask 1PL two go.home to mana?, pulang ke Waim
where go.home to Waim
Maria: ah, this (is what) Papuans say 'my husband', my husband came, he said, 'we two go home', I asked, 'where do we two go home to?', '(we) go home to Waim'
(36) trus kitong dua pulang, sampe di jalangang sa istirahat, de bilang, kitong next 1pl two go.home reach at route 1sG rest 3sg say 1PL dua jalang suda, mata-hari suda masuk, nanti kitong dua dapat two road already sun already enter very.soon 1PL two get glap, jalang cepat suda
be.dark walk be.fast already
and then we two went home, on the way I rested, he said, 'let the two of us walk (on)!, the sun is already going down, in a short while, we'll be in the dark, walk fast already!'
(37) sa dengang pace ini kitong dua jalang, ayo, kitong dua jalang cepat, 1sG with man D.Prox 1PL two walk come.on! 1PL two walk be.fast kitong dua jalang cepat, kitong dua jalang, sampe di Waim, dorang $\sim d o r a n g ~ d i$ 1PL two walk be.fast 1PL two walk reach at Waim RDP~3pL at situ, masarakat dong datang L.MED community 3pl come

I and the man here, we two walked, 'come on!, we two walk fast already!, we two walk fast already!', the two of us walked, having arrived in Waim, all of them there, the whole community came
(38) dong bilang, ibu desa ko jatu ka? yo sa jatu, knapa? sa jatu dari 3PL say woman village[SI] 2sG fall or yes 1sG fall why 1sg fall from motor, ko pu tulang su pata ka? tra ada, kosong, tra ada, motorbike 2sG poss bone already break or NEG exist be.empty NEG exist tulang tra pata
bone NEG break
they said, 'Ms. Mayor, did you fall?', 'yes, I fell', 'what happened?', 'I fell off the motorbike', 'are your bones already broken?', 'no, nothing (like that), no, the bones aren't broken'
(39) suda, saya sampe, sa tidor, tidor, sa bangung, suda dong bilang already 1sg reach 1sG sleep sleep 1sg wake.up already 3pl say eventually I arrived, I slept, (I) slept, I woke up, then they said
(40) Nofita: minum obat
drink medicine
Nofita: take (your) medicine
(41) Maria: ko minum obat, suda sa ambil sa pu obat, tulang sakit 2sG drink medicine already 1sG fetch 1sG poss medicine bone be.sick punya, bahu yang sakit poss shoulder rel be.sick
Maria: 'take (your) medicine!', then I took my medicine for (my) hurting bone, (it was my) shoulder which was hurting (Lit. 'the hurting bone's (medicine)')
(42) sa minum, sa minum, sampe tenga malam sa minum lagi, pagi sa 1sG drink 1sG drink until middle night 1sG drink again morning 1sG bangung, sa makang sagu, makang kasbi, sa minum lagi wake.up 1sG eat sago eat cassava 1sG drink again
I took (medicine), I took (medicine), when it was the middle of the night, I took (medicine) again, in the morning I woke up, I ate sago, (I) ate cassava, I took (medicine) again
(43) trus sa tinggal sampe besok, suda sa rasa badang suda baik next 1sG stay until tomorrow already 1sG feel body already be.good then I stayed until the next day, by then my body already felt good
(44) baru sa punya ana ini, mantri, de pi ambil saya, kitong dua lari and.then 1sG poss child d.prox male.nurse 3sG go fetch 1sG 1PL two run deng motor, dengang Roni, sa pu ana mantri di fayapura ini with motorbike with Roni 1sG poss child male.nurse at Jayapura D.Prox and then, my child here, the male nurse, he came to pick me up, the two of us drove with (his) motorbike, with Roni, my young male nurse from Jayapura
(45) MO: malam
night
[A guest arrives] MO: good evening
(46) Maria: kitorang dua datang sampe di sini, ibu pendeta ini dia tanya, 1PL two come reach at L.Prox woman pastor D.Prox 3sG ask ko jatu ka? yo sa jatu dari motor, kasiang sayang 2sg fall or yes 1sg fall from motorbike pity love the two of us came all the way here, Ms. Pastor here, she asked (me), 'did you fall?', 'yes, I fell off the motorbike', 'poor thing, (my) dear'
(47) sa tinggal di sini, sa ke ruma-sakit, sa ceritra sama dokter, dokter, sa jatu 1sG stay at l.Prox 1sG to hospital 1sG tell to doctor doctor 1sG fall
dari motor, dokter dorang bilang begini, ko jatu bagemana? from motorbike doctor 3pl say like.this 2sg fall how

I stayed here, I went to the hospital, I talked to the doctor, 'doctor, I fell off a motorbike', the doctor and his companions said like this, 'how did you fall off?'
(48) sa bilang, sa jatu balik begini, trus tulang pata, sa bilang, tulang 1sG say 1sg fall turn.around like.this next bone break 1sG say bone bahu yang pata, tulang rusuk, o, a mama itu hanya ko jatu shoulder ReL break bone rib oh! ah! mother D.DIST only 2sG fall kaget
feel.startled(.by)
I said, 'I fell backwards like this, then the bone broke', I said, '(it's my) shoulder bone which is broken, (my) ribs', 'oh!, ah, mother that is just because you're under shock'
(49) sa bilang begini, adu dokter, ini sa jatu sengsara ini, harus 1sG say like.this oh.no! doctor D.Prox 1sg fall suffer D.Prox have.to tolong saya, a mama, sa kasi obat, mama minum, sa bilang, dokter help 1sG ah! mother 1sG give medicine mother drink 1sG say doctor trima-kasi
thank.you
I said like this, 'oh no!, doctor, what's-its-name, I fell really painfully, (you) have to help me', 'ah mother, I give (you) medicine (and) you ('mother') take (it)', I said, 'doctor, thank you'
(50) sa pulang sampe di sini, sa bilang ibu pendeta, ibu ko kas sa 1sg go.home reach at L.Prox 1sg say woman pastor woman 2sg give 1sg air, sa minum obat, sa tinggal di sini satu minggu, e, dua minggu, water 1sG drink medicine 1sG stay at l.Prox one week uh two week baru sa pulang
and.then 1sG go.home
I went home all the way to here, I told Ms. Pastor, 'Madam, give me water (so that) I (can) take (my) medicine', I stayed here for one week, uh, two weeks, only then did I return home
(51) sa pulang ke Waim lagi, baru kitorang tinggal, baru sa pu 1sG go.home to Waim again and.then 1pL stay and.then 1sG poss masarakat dong tanya saya, ibu ko su sembu ka? sa bilang, sa community 3PL ask 1sG woman 2sG already be.healed or 1sG say 1sG su sembu, trima-kasi, sampe di sini already be.healed thank.you reach at L.Prox
I went home to Waim again, and then we stayed (there), and then my community asked me, 'Madam, have you recovered?', I said, 'I've recovered', thank you!, this is all (Lit. 'reach here')

# B. 6 Narrative: Pig hunting with dogs 

| File name: | $080919-003-\mathrm{NP}$ |
| :--- | :--- |
| Text type: | Elicited text: Personal narrative ${ }^{10}$ |
| Interlocutors: | 1 older male, 1 older female |
| Length (min.): | $4: 20$ |

(1) Iskia: jadi satu waktu saya ada di ruma, malam hari saya suda pikir, sa so one time 1sg exist at house night day 1sG already think 1sG bilang sama ibu, besok sa bawa anjing cari babi, sa say to woman tomorrow 1sg bring dog search pig 1sG snang makang babi
feel.happy(.about) eat pig
Iskia: so, one time I was at home, at night I had already thought, I told (my) wife, 'tomorrow I take the dogs and look for pigs', I like eating pig
(2) tong tidor malam sampe pagi saya kas makang anjing deng papeda 1PL sleep night until morning 1sG give eat dog with sagu.porridge yang sa pu bini biking malam untuk anjing dorang ReL 1sg poss wife make night for dog 3pl
we slept through the night until morning, I fed the dogs with papeda which my wife had prepared in the evening for the dogs
(3) jadi pagi saya bangung, sa kasi makang anjing, sa pegang sa pu so morning 1sG wake.up 1sg give eat dog 1sg hold 1sg poss parang, sa punyajubi, sa tokiang pana, sa toki pana short.machete 1sG poss bow.and.arrow 1SG SPM-beat arrow 1sG beat arrow so, in the morning I got up, I fed the dogs, I took my short machete, my bow and arrows, I banged[spm] (my) arrows, I banged my arrows
(4) Sarlota: jubi
bow.and.arrow
Sarlota: (I banged my) bow and arrows
(5) Iskia: jubi, anjing ikut saya masuk di hutang bow.and.arrow dog follow 1sG enter at forest
Iskia: (I banged my) bow and arrows, the dogs followed me entering the forest

[^195](6) saya jalang sampe di blakang kebung, anjing mulay gong-gong babio, tida 1sG walk reach at backside garden dog start bark(.at) pig oh! NEG lama lagi dong su kasi berdiri be.long again 3pl already give stand I walked all the way to the back of (my) garden, the dogs start barking (because they smelt) a pig, oh, not long after that they already had (the pig) standing (still)
(7) sa lari suda, mendekati babi di mana anjing dong gong-gong, baru sa 1sG run already near pig at where dog 3pl bark(.at) and.then 1sG mulaypana dia, pana dengangjubi, sa jubi dia, start bow.shoot 3sG bow.shoot with bow.and.arrow 1sG bow.shoot 3sG langsung babi mati
immediately pig die
I just ran closing in on the pig where the dogs were barking, then I started bow shooting (it), bow shooting (it) with (my) bow and arrows, I bow shot it, immediately the pig died
(8) wa, babi besar skali, sa sendiri tra bisa angkat, sa pikir, adu, babi wow! pig be.big very 1sG alone neg be.able lift 1sG think oh.no! pig ni sa harus angkat bagemana, ini besar ini D.Prox 1sG have.to lift how D.Prox be.big D.Prox wow!, the pig was very big, I alone could not transport it, I thought, 'oh no!, this pig, how am I going to transport (it), this (one) here is really big'
(9) tida lama sa dengar ada swara, orang, baru saya panggil neg be.long 1sg hear exist voice person and.then 1sg call not long after that I heard there were voices, (there were) people, and then I called (them)
(10) mereka ada tiga orang, dorang datang, dengar ini, anjing gong-gong babi, 3PL[SI] exist three person 3pl come hear d.prox dog bark(.at) pig tapi sementara, karna mereka jaw, lari mo pana babi bantu sama but in.meantime[SI] because 3pl[SI] far run want bow.shoot pig help to dengang saya, tapi saya suda bunu, pana dia kemuka with 1sG but 1sG already kill bow.shoot 3sG first.before.others they were three people, they came (and) heard, what's-its-name, the dogs barking at the pig, but in the meantime, because they were far away, (they) ran wanting to bow shoot the pig, to help me, but I had already killed (it), had bow shot (it) before the others
(11) waktu mereka sampe dekat saya, babi suda mati jadi tinggal sa bilang saja, time 3 PL[SI] reach near 1sG pig already die so stay 1sG say just
babi suda mati
pig already die
when they arrived near me the pig was already dead, so it just remained for me to say, 'the pig is already dead'
(12) jadi nanti kitong berusaha pikol ke ruma kebung, baru nanti so very.soon 1PL attempt shoulder to house garden and.then very.soon kita potong, baru nanti bagi
1pl cut and.then very.soon divide
so later we'll try to carry the pig on our shoulders to the garden shelter, only then we'll cut it up, and then we'll distribute (it)
(13) itu juga, a, tong langsung ambil itu, pikol itu, babi, bawa ke D.DIST also ah! 1PL immediately fetch D.DIST shoulder D.DIST pig bring to ruma kebung
house garden
right after that, ah, we took it immediately, we shouldered it, the pig, (and) carried (it) to the garden shelter
(14) tong potong hari itu, tong bagi buat kitorang yang potong itu hari, 1pl cut day d.DIST 1pl divide for 1pl rel cut D.DIST day kemudiang buat sodara~sodara yang tinggal di kampong, kitong hitung ada then[SI] for RDP~sibling REL stay at village 1PL count exist dua pulu satu KK di sa punya kampung itu two tens one household.head at 1sG poss village D.DIST
we cut (it) up that day, we divided (it) for us who cut (it) up that day, (and) then for the relatives and friends who live in the village, we counted (them), there are twenty one heads of households in that village of mine
(15) jadi, waktu saya potong babi ini, daging saya memperkecil, saya bagi juga so time 1sg cut pig D.Prox meat 1sG make.smaller 1sg divide also so, when I cut up this pig, the meat, I cut (it) into small pieces, (and) I distributed them
(16) Sarlota: potong kecil~kecil
cut RDP~be.small
Sarlota: (I) cut (it into) small (pieces)
(17) Iskia: kecil~kecil, baru saya bagi sampe dua pulu bagi, dua pulu RDP $\sim$ be.small and.then 1sG divide reach two tens TRU-part two tens satu bagiang
one part
Iskia: small (pieces), and then I divided (them) into twenty parts[TRU], twenty one parts
(18) waktu kita pulang, ta p, empat orang itu, kita suda bawa, time 1pl go.home 1pl tru-go.home four person d.DIST 1Pl already bring masing-masing, kita suda baku bagi
each 1pl already recp divide
when we went home, (when) we went home[TRU], those four people, we brought (the meat) already (having been divided up), each of us, we had already divided (the meat) with each other
(19) nanti ko kasi sodara yang laing, saya juga nanti bagi very.soon 2sG give sibling ReL be.different 1sG also very.soon divide so sodara yang laing suda punya bagiang, tinggal kita bawa TRU-sibling sibling REL be.different already have part stay 1PL bring sampe di ruma, suda sore hari, kita bagi malam reach at house already afternoon day 1PL divide night
later you give (the meat) to other friends and relatives, later I'll also distribute (it to) other friends and relatives, (we) already have (our) share, it remains that we bring (our share home), having arrived home, it was already afternoon, we distributed (the meat until) the evening
(20) sodara~sodara dorang mo masak sayur, liat begini, ta bawa daging, RDP~sibling 3PL want cook vegetable see like.this 1pl bring meat siapa yang dapat?
who ReL get
the relatives and friends wanted to cook vegetables, as (they) saw that we brought (them) meat (they asked us), 'who (is the one) who got (the pig)?'
(21) bilang, saya yang tadi pagi berburu, bawa anjing, baru dapat babi say 1SG REL earlier morning hunt bring dog and.then get pig ini, betulang, ini daging yang saya bawa, antar buat sodara dorang D.prox chance d.prox meat rel 1sg bring deliver for sibling 3pl (I) said, '(it was) me who went hunting this morning, (who) took the dogs and then got this pig, coincidentally, this is the meat which I brought, (which I) delivered for (my) relatives'
(22) dong bilang, trima-kasi, tong mo makang sayur malam ini, tapi ya 3pl say thank.you 1pl want eat vegetable night d.prox but yes sodara ko bawa daging, kitong trima-kasi, karna kitong bisa masak sibling 2sG bring meat 1PL thank.you because 1PL be.able cook daging, sodara berburu daging, babi meat sibling hunt meat pig
they said, 'thank you!, we were going to eat vegetables tonight, but, yes, you brother brought (us) meat, we say thank you, because (now) we can cook meat, (you) brother hunted meat, a pig'
(23) jadi ini kehidupang orang Papua ini sperti begini, kalo mo so D.Prox life person Papua D.Prox similar.to like.this if want makang babi, harus bawa anjing
eat pig have.to bring dog
so, what's-its-name, the life of (us) Papuan people here is like this: if (you) want to eat pig, (you) have to take dogs (with you)
(24) kemudiang, itu ceritra waktu kita berburu pake anjing, ya, sperti itu then[SI] D.DIST tell time 1pl hunt use dog yes similar.to D.DIST then, this was the story when we go hunting and use dogs, yes, it's like that

## B. 7 Expository: Directions to a certain statue and tree

After having recounted a story about a certain statue in Sarmi which was built close to a certain tree, a boy asked the narrator for directions to the statue and the tree.

| File name: | $080917-009-\mathrm{CvEx}$ |
| :--- | :--- |
| Text type: | Conversation, spontaneous: Expository |
| Interlocutors: | 2 male child, 1 older female |
| Length (min.): | $0: 50$ |

(1) Natalia: ... greja sebla, pokoknya ruma tingkat itu, ruma-sakit church side the.main.thing.is house floor D.DIST hospital itu sebla itu ada [UP] D.DIST side D.DIST exist
[Reply about the directions to a certain statue:] Natalia: ... next to the church, the main landmark is the multistoried house, that hospital next to it is [UP]
(2) Wili: yang Matias de ada sakit itu?
rel Matias 3sG exist be.sick D.DIST
Wili: where Matias was sick?
(3) Natalia: yo, Matias ada sakit itu, liat sebla laut itu dong ada biking yes Matias exist be.sick D.DIST see side sea D.DIST 3Pl exist make begini, besar de pu tugu, baru, a, dong biking bagus, smeng like.this be.big 3sG poss monument and.then ah! 3pl make be.good cement bagus skali, nanti kalo ko blum taw be.good very very.soon if 2sG not.yet know
Natalia: yes, Matias was sick there, look toward the ocean, they made (the statue) like this, big is its statue, and then, ah, they built it well, (they) cemented it very well, later (you'll see it), if you don't know (it) yet
(4) nanti tanya Matias, bilang, Matias ko bawa sa pergi liat tugu very.soon ask Matias say Matias 2sg bring 1sG go see monument itu $k a$ ?
D.DIST or
later ask Matias, say (to him), 'will you Matias take me to go and see that statue?'
(5) Wili: naik ke atas?
ascend to top
Wili: (to get there one has to) climb up (the hill)?
(6) Natalia: tra naik, di dekat puskesmas itu, ruma-sakit situ NEG ascend at near government.clinic D.DIST hospital L.MED Natalia: (you) don't (have to) climb, (the statue) is close to that government clinic, the hospital there
(7) Wili: tra liat

NEG see
Wili: (I) didn't see (it)
(8) Natalia: ko blum liat, a, nanti baru Matias ka ato nanti 2SG not.yet see ah! very.soon and.then Matias or or very.soon besok ka, deng mama-ade jalang, baru mama-ade kas tunjuk, baru tomorrow or with aunt walk and.then aunt give show and.then sa kas tunjuk pohong yang Matias de takut, pohong tagoyang, e, 1sG give show tree rel Matias 3sg feel.afraid(.of) tree be.shaken uh Ise, Ise dia takut pohong tagoyang, jadi de menangis
Ise Ise 3sg feel.afraid(.of) tree be.shaken so 3sg cry
Natalia: you haven't yet seen (the statue)?, ah, later on, maybe Matias or maybe tomorrow (you) walk (there) with me ('aunt'), and then I ('aunt') will show, and then I'll show (you) the tree which Matias was afraid of, the shaking tree, uh Ise, Ise was afraid of the shaking tree, so she cried
(9) Wili: yang dekat ruma-sakit?

Rel near hospital
Wili: (the one) which is close to the hospital?
(10) MC: di mana?
at where
MC: where?
(11) Natalia: di dekat ruma-sakit sebla laut dulu at near hospital side sea first
Natalia: (it) is close to the hospital toward the ocean, in the past
(12) Wili: yang dekat ada ruma to?

REL near exist house right?
Wili: close by where the houses are, right?
(13) Natalia: mm-mm, ruma di pante, jadi luar biasa ((pause)) sampe mhm house at coast so outside be.usual until

Natalia: mhm, the houses along the beach, so this has been magnificent ${ }^{11}$ ((pause)) until
(14) Wili: skarang ini
now D.prox
Wili: now!
(15) Natalia: skarang, say kembali, pulang dari skola, sa di Pante-Timur, Takar, now 1sG return go.home from school 1sG at Pante-Timur Takar ke sini, itu Tuhang buat luar biasa itu
to L.PRox D.DIST God make outside be.usual D.DIST
Natalia: now (after this experience with the statue and the tree), I returned (to Jayapura), (I) went home (after having finished) college, (then) I (stayed) in Pante-Timur, (in) Takar, (then I came) here, all this, God made it wonderful

## B. 8 Expository: Sterility

| File name: | $081006-030-\mathrm{CvEx}$ |
| :--- | :--- |
| Text type: | Conversation with the author: Expository |
| Interlocutors: | 1 older female |
| Length (min.): | $1: 56$ |

(1) Natalia: jadi ada dua, kalo misalnya, kita suda, kitong su bayar so exist two if for.example 1pl already 1pl already pay mas-kawing to?, baru prempuang itu de tra hamil, na, bride.price right? and.then woman D.DIST 3sG NEG be.pregnant well mungking ada masala menge, dari kesehatang, kita bisa liat maybe exist problem TRU-concern[SI] from health 1pl be.able see dari kesehatang, a
from health ah!
Natalia: so there're two (issues related to sterility), if, for example, we've already, (if) we've already paid the bride price, right? and (if) that woman, (if) she doesn't get pregnant, well, maybe there is a problem regarding[TRU], due to

[^196]health (issues), we can see (that the problem of sterility) is due to a health (problem), ah! (Lit. 'from health')
(2) bisa juga ada pikirang laki~laki itu de mandul ato prempuang be.able also exist thought RDP~husband D.DIST 3sG be.sterile or woman itu de mandul, makanya tida ada ana sama skali D.DIST 3sG be.sterile for.that.reason NEG exist child same very
it's also possible that there is the thought, (that) that man, (that) he's sterile or (that) that woman, (that) she's sterile, for that reason there aren't any children at all
(3) a, nanti liat, tinggal, tinggal, tinggal
ah! very.soon see stay stay stay
ah, later (we'll) see, (we'll) wait, wait, (and) wait
(4) kalo prempuang, laki~laki itu dia maw turungang to?, dia maw if woman RDP~husband D.DIST 3sG want descendant right? 3sG want ada ana lagi, orang Papua punya kebiasaang, a, dia e kawing exist child again person Papua poss habit ah! 3sG uh marry.unofficially ini harus ada ana karna dia harus ada turungang, a, nanti D.Prox have.to exist child because 3sG have.to exist descendant ah! very.soon laki~laki itu dia kawing prempuang laing RDP~husband D.DIST 3sG marry.unofficially woman be.different if that woman (or) man, (if) he/she wants offsprings, right?, (if) he/she also wants to have children, the Papuan people's habit, ah, (when) he/she here, what's-its-name, marries (then) there have to be children because he/she has to have offsprings, ah, (otherwise) later that man, he'll marry a different woman
(5) $a$, de kawing prempuang laing, prempuang itu ada ana ah! 3sG marry.unofficially woman be.different woman D.DIST exist child o, kalo begitu, prempuang ini yang mandul, prempuang ini tra oh! if like.that woman D.Prox rel be.sterile woman d.Prox neg ada ana, begitu
exist child like.that
ah, (when) he marries a different woman, (and when) that woman has children (we'll know), 'oh, in that case, (it's) this (first) woman who's sterile, this (first) woman doesn't have children', (it's) like that
(6) tapi kalo, macang prempuang de kasi tinggal laki~laki, prempuang de but if variety woman 3sG give stay RDP~husband woman 3sG kawing deng laki~laki laing, prempuang itu dapat marry.unofficially with RDP $\sim h u s b a n d$ be.different woman D.DIST get
ana o, laki~laki yang mandul, kalo itu memang, e, diliat dari child oh! RDP~husband REL be.sterile if D.DIST indeed uh UV-see from kesehatang
health
but if, for example, the woman leaves (her) husband (and if) the woman marries a different man (and if) that woman has children (we'll know), 'oh, (it's) the (first) man who's sterile', if it's like that indeed, umh, (the issue of sterility) is due to a health (problem)
(7) Author: yo
yes
Author: yes
(8) Natalia: begitu, tapi kalo kita suda bayar mas-kawing, kalo kita pikir to? like.that but if 1PL already pay bride.price if 1PL think right?

Natalia: (it's) like that, but if we've already paid the bride price, if we think, right?
(9) o, mungking kitong blum bayar mas-kawing, de tra hamil, baru oh! maybe 1pL not.yet pay bride.price 3sG NEG be.pregnant and.then kitong bayar mas-kawing, tinggal, tinggal, tinggal, tinggal, bereskang smua 1pl pay bride.price stay stay stay stay clean.up all masala apa, prempuang tra hamil, o, ini prempuang de problem what woman NEG be.pregnant oh! d.Prox woman 3sG mandul be.sterile
'oh, maybe we haven't yet paid the bride price, (and that's the reason why) she's not pregnant', but then we pay the bride price, (and we) wait, wait, wait, (and) wait, (we) settle all problems what(ever they may be, and) the woman is (still) not pregnant, (then we'll know,) 'oh, this is because the woman is sterile'
(10) kalo orang yang blum bertobat, bukang hamba Tuhang, dia if person ReL not.yet repent NEG servant God 3sG kawing satu lagi, de kawing satu, prempuang itu marry.unofficially one again 3sG marry.unofficially one woman D.DIST ada ana, kawing satu, prempuang ada ana, baru $o$, kalo exist child marry.unofficially one woman exist child and.then oh! if begitu prempuang ini mandul
like.that woman D.Prox be.sterile
if someone isn't a Christian yet (and) is not a servant of God, (if) he marries another woman, (if) he marries another (woman and) that woman has children, (if) he marries another (woman and) the woman has children, then (we'll know),
'oh, if it's like that, (then) this (first) woman is sterile' (Lit. 'if someone hasn't yet repented')
(11) de tida, orang Papua bilang [Is] makanya orang itu tida ada ana, 3sG NEG person Papua say for.that.reason person D.DIST NEG exist child mandul, jadi de pu, tida ada ana jadi mandul, begitu be.sterile so 3sG poss neg exist child so be.sterile like.that he/she doesn't, the Papuan people say '[Is]', that is to say, that person doesn't have children, (he/she's) sterile, so, his/her, (he/she) doesn't have children, so (he/she's) sterile, (it's) like that

## B. 9 Hortatory: Don't get dirty!

| File name: | $080917-004-\mathrm{CvHt}$ |
| :--- | :--- |
| Text type: | Conversation, spontaneous: Hortatory |
| Interlocutors: | 2 male children, ${ }^{12} 1$ older female |
| Length (min.): | $0: 10$ |

(1) Wili: Nofi nanti ko kejar saya, ko liat, ko tunggu, tong dua bla, Nofi very.soon 2sG chase 1sG 2sG see 2sG wait 1PL two split baru and.then
Wili: Nofi, in a moment you chase (me down to the water), you observe (me), you wait, we two crack (the coconut) open, and then
(2) Nofita: tida usa, kotor dang ko nanti kena picaang, kam dengar ato neg need.to be.dirty and 2sG very.soon hit splinter 2PL hear or tida, terlalu nakal NEG too be.mischievous
Nofita: don't (go down to the beach, it's) dirty, and later you'll run into broken glass and cans, are you listening or not?!, (you're) too naughty!

## B. 10 Hortatory: Bathe in the ocean!

| File name: | $080917-006-\mathrm{CvHt}$ |
| :--- | :--- |
| Text type: | Conversation, spontaneous: Hortatory |
| Interlocutors: | 3 male children, ${ }^{13}$ 2 older females |
| Length (min.): | 1:00 |

[^197](1) Nofita: kepala sakit sa tra bisa bicara banyak, kam dengar~dengarang, head be.sick 1sG neg be.able speak many 2pl Rdp~hear:pat kam cari apa?
2pl search what
Nofita: (I have) a headache, I can't talk much, you listen to me!, what are you looking for?
(2) Wili: a, jangang, Nofi mana kitong pu ikang~ikang?
ah! neg.imp Nofi where 1PL poss rdp $\sim$ fish
Wili: ah, don't!, Nofi, where are our fish?
(3) Nofi: sa su taru di ember sini

1sG already put at bucket L.PRox
Nofi: I already put (the fish) in the bucket here
(4) Nofita: kam dua pi spul badang di laut sana

2pl two go rinse body at sea L.DIST
Nofita: you two go rinse (your) bodies in the ocean over there
(5) Nofi: ada ni
exist D.prox
Nofi: (the fish) are here
(6) Nofita: spul badang, trus celana cuci di laut, baru pake ke mari, biking rinse body next trousers wash at sea and.then use to hither make
kotor saja, saya stenga mati cuci, cape cuci pakeang juga, ana~ana be.dirty just 1sG half die wash be.tired wash clothes also RDP~child ini kotor~kotor, dong [UP] adu
D.PROX RDP~be.dirty 3PL oh.no!

Nofita: rinse (your) bodies, then wash (your) trousers in the ocean, and then put them on (and) come here, (they) make (all their clothes) dirty, I'm half dead (from) washing, I'm also tired of washing clothes, these kids make (their trousers) dirty, they [UP] oh no!
(7) ey, kam dua pi mandi di laut suda, trus kam dua cuci celana di situ, hey! 2pl two go bathe at sea already next 2pl two wash trousers at l.med baru pake,naik, tra usa loncat~loncat, situ ada besi~besi banyak and.then use ascend NEG need.to RDP $\sim$ jump L.MED exist RDP $\sim$ metal many hey, you two go bathe in the ocean already!, and then you two wash (your) trousers there, after that put (them) on (and) come up (to the house), don't jump up and down, there are lots of metal pieces over there
(8) Anelia: mm-mm, picaang juga banyak $\mathrm{mhm} \quad$ splinter also many
Anelia: mhm, (at the beach there) are also lots of broken glass and cans (Lit. 'the splinters are also many')
(9) Nofita: picaang banyak splinter many
Nofita: (there) are lots of broken glass and cans

## B. 11 Joke: Drawing a monkey

| File name: | $081109-002-\mathrm{JR}$ |
| :--- | :--- |
| Text type: | Joke (Elicited text) |
| Interlocutors: | 2 younger males |
| Length (min.): | $0: 59$ |

(1) skola ini ibu mulaysuru ana~ana murit mulay gambar monyet di school D.PRox woman start order RDP $\sim$ child pupil start draw monkey at atas pohong pisang, suda, ibu mulay suru gambar, suda dong mulay, top tree banana already woman start order draw already 3pl start smua dong gambar
all 3pl draw
(in) this school, Ms. (Teacher) starts ordering the school kids to start drawing a monkey on a banana tree, well, Ms. Teacher orders (them to) draw, well, they start, they all draw (a picture)
(2) baru ana kecil satu ini de tra gambar, ana murit satu ni and.then child be.small one D.Prox 3sG neg draw child pupil one D.Prox de tra gambar, suda, begini de gambar batu, trus de gambar monyet 3SG NEG draw already like.this 3sG draw stone next 3sG draw monkey ini di bawa pohong pisang, begini dong bawa ke depang D.prox at bottom tree banana like.this 3pl bring to front
but then this particular small child, he doesn't draw, this particular school kid, he doesn't draw, well, he draws a stone (instead), and then he draws this monkey under the banana tree, it goes on like this (and) they bring (their drawings) to the front
(3) ibu bilang, ibu kalo toki meja langsung kumpul ke depang, suda woman say woman if beat table immediately gather to front already pace de pikir~pikir sampe tra jadi, suda begini langsung man 3sG RDP~think until NEG become already like.this immediately $i \quad i b u \quad b a g i$ meja, pak!, langsung pace gambar [UP] itu, TRU-woman woman divide table bang! immediately man draw D.DIST monyet di bawa pohong pisang, bawa ke sana monkey at bottom tree banana bring to L.DIST
Ms. (Teacher) says, 'when I ('Ms.') knock (on) the table, (you) bring (your pictures) together to the front immediately', then the guy thinks on and on (but)
nothing happens, as it goes on like this immediately Ms.[TRU], Ms. (Teacher) hits the table, 'bang!', immediately the guy draws [UP], what's-its-name, a monkey under a banana tree (and) brings it to the front
(4) ibu bilang, e, ibu priksa selesay, ibu tanya, ini siapa punya? woman say uh woman check finish woman ask D.Prox who poss de bilang, ibu, sa punya, de tanya, pace maju ke sana, ibu tanya 3sG say woman 1sg poss 3sG ask man advance to l.DIST woman ask dia, knapa ko gambar monyet di bawa pohong pisang?
3sG why 2 SG draw monkey at bottom tree banana
Ms. (Teacher) says, uh, after Ms. (Teacher) has finished checking (the pictures), Ms. (Teacher) asks (them), 'this (picture here), whose is (it)?', he says, 'Madam, (it's) mine', she asks (him), the guy comes to the front, Ms. (Teacher) asks him, 'why did you draw the monkey under the banana tree?'
(5) de blang, adu ibu, tadi ibu toki meja itu yang monyet de 3sG say oh.no! woman earlier woman beat table D.DIST REL monkey 3sG jatu dari atas fall from top
he says, 'oh no!, Madam!, a little bit earlier you ('Madam') knocked on the table, that's why the monkey fell off from the top (of the banana plant)'

## B. 12 Joke: Dividing three fish

| File name: | $081109-011-\mathrm{JR}$ |
| :--- | :--- |
| Text type: | Joke (Elicited text) |
| Interlocutors: | 2 younger males |
| Length (min.): | $1: 07$ |

(1) pace orang Biak dong dua mancing, dong dua mancing, mancing man person Biak 3pl two fish.with.rod 3pl two fish.with.rod fish.with.rod mancing mancing, suda dong dua dapat ikang ini tiga ekor, fish.with.rod fish.with.rod already 3pL two get fish D.prox three tail dapat ikang tiga ekor, dong dua mulay mendarat ke darat get fish three tail 3pl two start land to land the two Biak guys are fishing, they are fishing, fishing, fishing, fishing, eventually the two of them get these fish, three (of them), having gotten three fish, the two of them start landing on the shore
(2) sampe di darat, suda dong dua mulay bagi ikang itu, de mulay, reach at land already 3pl two start divide fish D.DIST 3sG start
dep kawang, e, mulay bilang, kawang ko bawa satu, sa bawa satu 3sG:Poss friend uh start say friend 2sG bring one 1sG bring one having arrived on the shore, the two of them start dividing the fish, he starts to, his friend, uh, starts to say, 'you friend take one (and) I take one'
(3) trus de bilang, i, baru yang satu ini, de dep temang tu, next 3sg say ugh! and.then rel one D.Prox 3sG 3sg:poss friend d.dist a, ko sala bagi, gabung lagi, temang satu bagi lagi ah! 2sG wrong divide join again friend one divide again then he says, 'ugh!, but what about this one?', he, his friend says, 'ah, you've divided (the fish) incorrectly', (they) put (the fish back) together again, (that) one friend divides them again
(4) dapat satu, sa satu, yang ini?, de pu temang tra trima baik lagi, de get one 1sg one ReL d.prox 3sg poss friend neg receive good again 3sg gabung lagi ((laughter))
join again
'(you) get one, I (get) one', '(and) this one?' again his friend doesn't accept (the result of this dividing,) well, he puts (them back) together again ((laughter))
(5) dong dua bagi su begitu trus, suda orang Ayamaru 3pl two divide already like.that be.continuous already person Ayamaru datang, datang de bilang, eh, kam dua baku melawang apa? come come 3sg say hey! 2pl two recp fight what the two of them continue dividing (the fish) just like that, eventually an Ayamaru guy comes by, having come by, he says, 'hey, about what are you two fighting with each other?'
(6) de bilang, om, ini, kitong dua baku melawang gara-gara ikang, kitong 3sG say uncle d.prox 1pl two rece fight because fish 1pl dua bagi, de satu, sa satu baru yang ini nanti ke mana? two divide 3sG one 1sG one and.then Rel D.Prox very.soon to where he says, 'uncle, what's-its-name, the two of us are fighting each other because of the fish, we two divide (it), he (has) one (fish), I (have) one (fish), but where does this one go?'
(7) de bilang, itu yang masi tunggu saya, de pegang dang dong jalang, de 3sG say D.DIST 3sG still wait 1sG 3sG hold and 3PL walk 3sG bilang, pas to?
say be.exact right?
he says, 'that (is one) which is still waiting for me' he takes (it) and they walk (away), and he says, 'that fits, right?'

## B Texts

(8) de bilang, itu kawang sa su bilang, makanya skola 3SG say D.DIST friend 1sG already say for.that.reason go.to.school baru pintar and.then be.clever
he says, 'friend, that's (what) I already told (you), that's why you should go to school, then you'll be clever'

## Appendix C: Overview of recorded corpus

This appendix gives an overview of the recorded 220 texts which form the basis for the present description of Papuan Malay (see also §1.11.4 and §1.11.5). For each text the following information is provided:

File name For each text the name of the respective WAV file and Toolbox record is given. This name specifies the date of its recording, a running number for all texts recorded during one day, and a code for the type of text recorded. This is illustrated with the record number 080919-007-CvNP: 080919 stands for "2008, September 19"; 007 stands for "recorded text \#7 of that day"; and CvNP stands for "Personal Narrative (NP) which occurred during a Conversation (Cv)". The same record numbers are used for the examples given in this book (see 'Conventions for examples', p. xxiii) and the transcribed texts presented in Appendix A.

Text type The meta data specifies the genre of the recorded texts, such as conversation, narrative, expository, hortatory, or joke, and whether the recorded texts occurred spontaneously or were elicited.

Interlocutors The meta data gives information about the gender and age group of the recorded interlocutors.

Topics For each recorded text the overall topic is given.

## Length in minutes

## C Overview of recorded corpus

Table C.1: The following abbreviations are being used:

| File name: |  |  |  |
| :---: | :---: | :---: | :---: |
| Cv | conversation | NF | narrative, folk story |
| Ex | expository | NP | narrative, personal experience |
| JR | Joke/Riddle | Ph | phone conversation |
| Ht | hortatory | Pr | procedural |
| Text type: |  |  |  |
| Cas | casual conversation | Hortat | hortatory |
| CvSp | spontaneous conversation | NarrF | narrative, folk story |
| Cv-w/auth | conversation with the author | NarrP | narrative, personal experience |
| Elicit | elicited text | ph. | phone conversation |
| Expos | expository | Proc | procedural |
| Interlocutors: |  |  |  |
| C | children of about five to 13 years of age | O | older adults in their thirties or older |
| F | females | Y | young adults in teens or twenties |
| M | males |  |  |

Table C.2: List of file names

| File name | Text type / Length | Topic / Interlocutors |
| :--- | :--- | :--- |
| $080916-001-\mathrm{CvNP}$ | CvSp_NarrP | A drunkard in the hospital at night |
|  | 2:33:00 | 2 FO |
| $080917-001-\mathrm{CvNP}$ | CvSp_NarrP | Woken up by a friend |
|  | $0: 40: 00$ | 1 MY, 1 MO |
| $080917-002-\mathrm{Cv}$ | CvSp_Cas | Organizing a youth event got interrupted |
|  | $1: 25: 00$ | 1 MO, 1 MY, 1 FO |
| $080917-003 \mathrm{a}-\mathrm{CvEx}$ | CvSp_Expos | Asking for a leave of absence 1 |
|  | 2:11:00 | 1 MC, 2 FY, 1 FO |
| $080917-003 \mathrm{~b}-\mathrm{CvEx}$ | CvSp_Expos | Asking for a leave of absence 2 |
|  | 2:27:00 | 1 MC, 2 FY, 1 FO |
| $080917-004-C v H t$ | CvSp_Hort | Don't get dirty! |
|  | $0: 10: 00$ | 2 MC, 1 FO |
| $080917-005-C v$ | CvSp_Cas | What is this? |
|  | $0: 02: 00$ | 1 MC |
| $080917-006-C v H t$ | CvSp_Hort | Bathe in the ocean! |


| File name | Text type / Length | Topic / Interlocutors |
| :---: | :---: | :---: |
| 080917-007-CvHt | 1:00:00 | $3 \mathrm{MC}, 2 \mathrm{FO}$ |
|  | CvSp_Hort | Get a Malaria blood test! |
|  | 1:05:00 | $1 \mathrm{MY}, 1 \mathrm{FO}$ |
| 080917-008-NP | Elicit_NarrP | Deliverance for Sarmi |
|  | 26:00:00 | 1 FO |
| 080917-009-CvEx | CvSp_Expos | Directions to a certain statue and tree |
|  | 0:50:00 | $2 \mathrm{MC}, 1 \mathrm{FO}$ |
| 080917-010-CvEx | CvSp_Expos | Raising children well |
|  | 16:00:00 | $1 \mathrm{FY}, 1 \mathrm{FO}$ |
| 080918-001-CvNP | CvSp_NarrP | Two sudden deaths |
|  | 5:30:00 | $2 \mathrm{MY}, 1 \mathrm{FO}$ |
| 080919-001-Cv | CvSp_Cas | Candidates for local elections |
|  | 8:30:00 | 1 MO |
| 080919-002-Cv | CvSp_Cas | Transport options to the regent's office |
|  | 0:45:00 | 2 FY, 2 FO |
| 080919-003-NP | Elicit_NarrP | Pig hunting with dogs |
|  | 4:20:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 080919-004-NP | Elicit_NarrP | Pig hunting with bow and arrows |
|  | 13:38:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 080919-005-Cv | CvSp_Cas | Wearing glasses |
|  | 1:45:00 | $1 \mathrm{MY}, 1 \mathrm{FY}$ |
| 080919-006-CvNP | CvSp_NarrP | The speaker and her niece |
|  | 4:30:00 | 1 MY, 2 FY |
| 080919-007-CvNP | CvSp_NarrP | A drunkard dies in hospital |
|  | 6:00:00 | $1 \mathrm{MY}, 1 \mathrm{FO}, 2 \mathrm{FY}$ |
| 080919-008-CvNP | CvSp_NarrP | A dying mother sees snow 1 |
|  | 2:40:00 | $1 \mathrm{MY}, 1 \mathrm{FY}$ |
| 080921-001-CvNP | CvSp_NarrP | Trip to Pante Timur 1 |
|  | 3:00:00 | $1 \mathrm{MO}, 1 \mathrm{FY}, 3 \mathrm{FO}$ |
| 080921-002-Cv | CvSp_Cas | Coming to Sarmi |
|  | 0:35:00 | $1 \mathrm{MY}, 1 \mathrm{MO}, 1 \mathrm{FY}, 1 \mathrm{FO}$ |
| 080921-003-CvNP | CvSp_NarrP | Trip to Pante Timur 2 |
|  | 0:55:00 | $1 \mathrm{MY}, 1 \mathrm{MO}, 1 \mathrm{FY}, 1 \mathrm{FO}$ |
| 080921-004a-CvNP | CvSp_NarrP | Trip to Pante Timur 3a |
|  | 4:00:00 | $1 \mathrm{MY}, 1 \mathrm{MO}, 1 \mathrm{FY}, 1 \mathrm{FO}$ |
| 080921-004b-CvNP | CvSp_NarrP | Trip to Pante Timur 3b |
|  | 2:00:00 | $1 \mathrm{MY}, 1 \mathrm{MO}, 1 \mathrm{FY}, 1 \mathrm{FO}$ |
| 080921-005-CvNP | CvSp_NarrP | A dying mother sees snow 2 |
|  | 1:00:00 | $1 \mathrm{MY}, 1 \mathrm{FY}$ |
| 080921-006-CvNP | CvSp_NarrP | A dying mother sees snow 3 |
|  | 1:20:00 | $1 \mathrm{MY}, 1 \mathrm{FY}$ |
| 080921-007-CvNP | CvSp_NarrP | Trip to Pante Timur 4 |
|  | 1:00:00 | $1 \mathrm{MY}, 1 \mathrm{MO}, 1 \mathrm{FY}, 1 \mathrm{FO}$ |
| 080921-008-Cv | CvSp_Cas | Swimming in the ocean |
|  | 1:00:00 | $1 \mathrm{MY}, 1 \mathrm{FY}$ |

## C Overview of recorded corpus

| File name | Text type / Length | Topic / Interlocutors |
| :---: | :---: | :---: |
| 080921-009-Cv | CvSp_Cas | Feeling sleepy at night |
|  | 0:30:00 | $1 \mathrm{MY}, 2 \mathrm{FY}$ |
| 080921-010-Cv | CvSp_Cas | A funny relative |
|  | 0:45:00 | $1 \mathrm{MY}, 1 \mathrm{FY}$ |
| 080921-011-Cv | CvSp_Cas | Picnic at the beach |
|  | 2:00:00 | $1 \mathrm{MY}, 1 \mathrm{FY}$ |
| 080922-001a-CvPh | CvSp_Cas (ph.) | Trip to Sorong 1 |
|  | 66:00:00 | $1 \mathrm{MY}, 1 \mathrm{MO}, 1 \mathrm{FY}$ |
| 080922-001b-CvPh | CvSp_Cas (ph.) | Trip to Sorong 2 |
|  | 1:45:00 | $1 \mathrm{MY}, 1 \mathrm{MO}, 1 \mathrm{FY}$ |
| 080922-002-CV | CvSp_Cas | Various topics 1 |
|  | 7:54:00 | 1 MY, 1 FY |
| 080922-003-Cv | CvSp_Cas | Various topics 2 |
|  | 6:23:00 | $1 \mathrm{MY}, 1 \mathrm{FY}$ |
| 080922-004-Cv | CvSp_Cas | Meeting a certain woman |
|  | 2:03:00 | $1 \mathrm{MY}, 1 \mathrm{FY}$ |
| 080922-005-CvEx | CvSp_Expos | Bride-exchange customs |
|  | 1:52:00 | $1 \mathrm{MY}, 1 \mathrm{FY}$ |
| 080922-006-CvEx | CvSp_Expos | Children's future |
|  | 0:46:00 | $1 \mathrm{MY}, 1 \mathrm{FY}$ |
| 080922-007-CvNP | CvSp_NarrP | A child's magic thinking |
|  | 1:12:00 | 1 MY, 1 FY |
| 080922-008-CvNP | CvSp_NarrP | Various childhood experiences |
|  | 6:12:00 | $1 \mathrm{MY}, 1 \mathrm{FY}$ |
| 080922-009-CvNP | CvSp_NarrP | Playing as children |
|  | 2:57:00 | $1 \mathrm{MY}, 1 \mathrm{FY}$ |
| 080922-010a-CvNF | CvSp_NarrF | Origins of a certain clan 1 |
|  | 39:00:00 | $1 \mathrm{MC}, 1 \mathrm{MY}, 1 \mathrm{FY}$ |
| 080922-010b-CvNF | CvSp_NarrF | Origins of a certain clan 2 |
|  | 0:45:00 | $1 \mathrm{MY}, 1 \mathrm{FY}$ |
| 080923-001-CvNP | CvSp_NarrP | A crying child; looking for someone |
|  | 1:50:00 | 2 MO |
| 080923-002-CvEx | CvSp_Expos | Working moral |
|  | 1:10:00 | $1 \mathrm{MY}, 1 \mathrm{MO}$ |
| 080923-003-CvNP | CvSp_NarrP | Getting up early |
|  | 0:23:00 | $1 \mathrm{MO}, 2 \mathrm{FY}$ |
| 080923-004-Cv | CvSp_Cas | Cooking |
|  | 2:30:00 | $1 \mathrm{MO}, 1 \mathrm{FY}$ |
| 080923-005-Cv | CvSp_Cas | A sudden death |
|  | 0:19:00 | $1 \mathrm{MO}, 1 \mathrm{FY}$ |
| 080923-006-CvNP | CvSp_NarrP | An incident with a young person |
|  | 1:25:00 | $1 \mathrm{MO}, 1 \mathrm{FY}$ |
| 080923-007-Cv | CvSp_Cas | A sparrow in the kitchen; bridges are needed |
|  | 1:45:00 | $1 \mathrm{MO}, 1 \mathrm{FY}$ |
| 080923-008-Cv | CvSp_Cas | Reprimanding a young teacher |


| File name | Text type / Length | Topic / Interlocutors |
| :---: | :---: | :---: |
| 080923-009-Cv | 2:12:00 | $1 \mathrm{MO}, 1 \mathrm{FY}$ |
|  | CvSp_Cas | The speaker's personal background |
|  | 4:55:00 | $1 \mathrm{MO}, 1 \mathrm{FY}$ |
| 080923-010-CvNP | CvSp_NarrP | An accident with a motorbike taxi driver |
|  | 2:16:00 | $1 \mathrm{MO}, 1 \mathrm{FY}$ |
| 080923-011-Cv | CvSp_Cas | A sudden death; about a sick relative |
|  | 1:40:00 | $1 \mathrm{MO}, 1 \mathrm{FO}, 1 \mathrm{FY}$ |
| 080923-012-CvNP | CvSp_NarrP | Being sick from eating grass-cutters |
|  | 4:14:00 | $1 \mathrm{MY}, 1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 080923-013-CvEx | CvSp_Expos | How to find out whether a sick person will survive 1 |
|  | 3:45:00 | $1 \mathrm{MY}, 1 \mathrm{MO}$ |
| 080923-014-CvEx | CvSp_Expos | How to find out whether a sick person will survive 2 |
|  | 2:59:00 | $1 \mathrm{MY}, 1 \mathrm{MO}$ |
| 080923-015-CvEx | CvSp_Expos | Getting a sign about a dying person |
|  | 5:20:00 | $1 \mathrm{MY}, 1 \mathrm{MO}$ |
| 080923-016-CvNP | CvSp_NarrP | Making a song book |
|  | 1:48:00 | $1 \mathrm{MY}, 1 \mathrm{MO}$ |
| 080924-001-Pr | Elicit_Proc | Making sago |
|  | 1:21:00 | 1 FO |
| 080924-002-Pr | Elicit_Proc | Working in the garden |
|  | 1:57:00 | 1 FO |
| 080925-001-CvEx | CvSp_Expos | Children's language proficiency |
|  | 1:17:00 | $1 \mathrm{FY}, 1 \mathrm{FO}$ |
| 080925-002-CvHt | CvSp_Hort | Clean the water filter! |
|  | 0:19:00 | 1 FO |
| 080925-003-Cv | CvSp_Cas | Construction work on the new church in Sawar 1 |
|  | 13:19:00 | $1 \mathrm{MO}, 2 \mathrm{FO}$ |
| 080925-004-Cv | CvSp_Cas | Evening tea |
|  | 1:32:00 | 1 FO |
| 080925-005-CvPh | CvSp_Cas (ph.) | Talking on the phone with his children in Jayapura |
|  | 1:15:00 | 1 MO |
| 080927-001-Cv | CvSp_Cas | Going on vacation |
|  | 0:39:00 | 1 FO |
| 080927-002-CvNP | CvSp_NarrP | Eating food that is too spicy |
|  | 1:33:00 | 1 FO |
| 080927-003-Cv | CvSp_Cas | Transporting goods by a Johnson motorboat |
|  | 1:53:00 | 2 FO |
| 080927-004-CvNP | Cv-w/auth_NarrP | Construction work on the new church in Sawar 2a |
|  | 1:00:00 | 1 FO |
| 080927-005-CvNP | Cv-w/auth_NarrP | Construction work on the new church in Sawar 2b |

## C Overview of recorded corpus

| File name | Text type / Length | Topic / Interlocutors |
| :---: | :---: | :---: |
|  | 1:30:00 | 1 FO |
| 080927-006-CvNP | $\begin{aligned} & \text { Cv-w/auth_NarrP } \\ & \text { 4:02:00 } \end{aligned}$ | The speaker's work in Sawar 1 FO |
| 080927-007-CvNP | $\begin{aligned} & \text { Cv-w/auth_NarrP } \\ & \text { 2:06:00 } \end{aligned}$ | The speaker's family relations 1 $1 \mathrm{FO}$ |
| 080927-008-CvEx | Cv-w/auth_Expos 1:04:00 | Metallic blue water color 1 FO |
| 080927-009-CvNP | $\begin{aligned} & \text { Cv-w/auth_NarrP } \\ & \text { 6:47:00 } \end{aligned}$ | The speaker's family relations 2 ; life in Sarmi 1 FO |
| 081002-001-CvNP | $\begin{aligned} & \text { CvSp_NarrP } \\ & \text { 4:39:00 } \end{aligned}$ | Traveling from Webro to Sarmi 2 FY |
| 081002-002-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & 0: 25: 00 \end{aligned}$ | Eating and bathing $2 \mathrm{FY}$ |
| 081002-003-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & 0: 38: 00 \end{aligned}$ | Eating betel nut 2 FY |
| 081005-001-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & \text { 1:43:00 } \end{aligned}$ | Visiting and calling government offices $2 \mathrm{MO}$ |
| 081006-001-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & 0: 56: 00 \end{aligned}$ | Visiting a sick person $1 \mathrm{MY}, 1 \mathrm{MO}$ |
| 081006-002-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & 0: 43: 00 \end{aligned}$ | Returning from Sarmi to Jayapura $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081006-003-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & 0: 32: 00 \end{aligned}$ | Traveling by low tide $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081006-004-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & 0: 33: 00 \end{aligned}$ | Waiting for the village mayor $2 \mathrm{MO}$ |
| 081006-005-CV | $\begin{aligned} & \text { CvSp_Cas } \\ & 0: 22: 00 \end{aligned}$ | A proud person 2 FY |
| 081006-006-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & 0: 02: 00 \end{aligned}$ | What's his/her name? $2 \mathrm{FY}$ |
| 081006-007-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & 0: 20: 00 \end{aligned}$ | Traveling to Arso 2 FY |
| 081006-008-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & \text { 1:35:00 } \end{aligned}$ | Celebrating a birthday 2 FY |
| 081006-009-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & \text { 2:07:00 } \end{aligned}$ | An angry person 2 FY |
| 081006-010-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & 0: 32: 00 \end{aligned}$ | Returning from Webro 2 FY |
| 081006-011-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & 0: 12: 00 \end{aligned}$ | Going home $1 \mathrm{MO}, 1 \mathrm{FY}$ |
| 081006-012-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & 0: 19: 00 \end{aligned}$ | A church meeting 4 MO |
| 081006-013-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & 0: 57: 00 \end{aligned}$ | Taking a hot bath when sick with malaria $1 \mathrm{MO}, 4$ FO |
| 081006-014-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & 3: 43: 00 \end{aligned}$ | Playing football at the beach 5 FY |


| File name | Text type / Length | Topic / Interlocutors |
| :---: | :---: | :---: |
| 081006-015-Cv | CvSp_Cas | The car outside and their owners |
|  | 1:52:00 | 5 FY |
| 081006-016-Cv | CvSp_Cas | The upcoming youth retreat |
|  | 2:17:00 | 5 FY |
| 081006-017-Cv | CvSp_Cas | Driving around Sarmi; preparing for Christmas |
|  | 3:13:00 | 5 FY |
| 081006-018-Cv | CvSp_Cas | Playing music and irritating others |
|  | 0:26:00 | 5 FY |
| 081006-019-Cv | Cv-w/auth_Cas | A trip to Webro and returning to Sarmi |
|  | 0:50:00 | 1 FO |
| 081006-020-Cv | Cv-w/auth_Cas | A motorbike accident |
|  | 2:46:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081006-021-CvHt | CvSp_Hort | Picking flowers |
|  | 1:14:00 | $1 \mathrm{FC}, 1 \mathrm{FY}$ |
| 081006-022-CvEx | Cv-w/auth_Expos | Evil spirits in humans |
|  | 15:43:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081006-023-CvEx | Cv-w/auth_Expos | What non-Christians believe; heaven and hell |
|  | 12:36:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081006-024-CvEx | Cv-w/auth_Expos | Exchanging children 1 |
|  | 17:39:00 | 1 FO |
| 081006-025-CvEx | Cv-w/auth_Expos | Exchanging children 2 |
|  | 4:07:00 | 1 FO |
| 081006-026-CvEx | Cv-w/auth_Expos | Exchanging children 3 |
|  | 2:06:00 | 1 FO |
| 081006-027-CvEx | Cv-w/auth_Expos | Exchanging children 4 |
|  | 2:21:00 | 1 FO |
| 081006-028-CvEx | Cv-w/auth_Expos | Exchanging children 5 |
|  | 2:44:00 | 1 FO |
| 081006-029-CvEx | Cv-w/auth_Expos | Bride price customs |
|  | 5:29:00 | 1 FO |
| 081006-030-CvEx | Cv-w/auth_Expos | Sterility |
|  | 1:56:00 | 1 FO |
| 081006-031-Cv | CvSp_Cas | Returning to Jayapura |
|  | 0:48:00 | $2 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081006-032-Cv | CvSp_Cas | An anniversary; Papuans and outsiders; elections |
|  | 7:17:00 | $2 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081006-033-Cv | CvSp_Cas | Building a road to Webro |
|  | 5:01:00 | $2 \mathrm{MO}, 2 \mathrm{FO}$ |
| 081006-034-CvEx | CvSp_Expos | Spiritual warfare 1 |
|  | 6:50:00 | $1 \mathrm{MY}, 1 \mathrm{FO}$ |
| 081006-035-CvEx | CvSp_Expos | Spiritual warfare 2 |
|  | 11:40:00 | $1 \mathrm{MY}, 1 \mathrm{FO}$ |

## C Overview of recorded corpus

| File name | Text type / Length | Topic / Interlocutors |
| :---: | :---: | :---: |
| 081006-036-CvEx | CvSp_Expos | Spiritual warfare 3 |
|  | 2:41:00 | $1 \mathrm{MY}, 1 \mathrm{FO}$ |
| 081008-001-Cv | CvSp_Cas | A meeting of village mayors 1 |
|  | 4:43:00 | $2 \mathrm{MY}, 3 \mathrm{MO}$ |
| 081008-002-Cv | CvSp_Cas | A meeting of village mayors 2 |
|  | 0:30:00 | $2 \mathrm{MY}, 2 \mathrm{MO}$ |
| 081008-003-Cv | CvSp_Cas | Motorbike problems |
|  | 5:17:00 | 3 MO |
| 081010-001-Cv | CvSp_Cas | A women's meeting at the regent's office |
|  | 9:41:00 | 5 FO |
| 081011-001-Cv | CvSp_Cas | Development of Sarmi |
|  | 15:08:00 | $2 \mathrm{MY}, 2 \mathrm{MO}$ |
| 081011-002-Cv | CvSp_Cas | Islamic service at school |
|  | 0:03:00 | 1 FY |
| 081011-003-Cv | CvSp_Cas | Wanting bananas |
|  | 0:35:00 | $1 \mathrm{MC}, 2 \mathrm{FY}, 2 \mathrm{FO}$ |
| 081011-004-Cv | CvSp_Cas | Traveling to Jayapura |
|  | 0:23:00 | $1 \mathrm{FY}, 1 \mathrm{FO}$ |
| 081011-005-Cv | CvSp_Cas | A youth retreat and youth meetings |
|  | 4:22:00 | 2 FY |
| 081011-006-Cv | CvSp_Cas | Going to school |
|  | 0:11:00 | $1 \mathrm{MC}, 1 \mathrm{MO}, 2 \mathrm{FO}$ |
| 081011-007-Cv | CvSp_Cas | Songs in the vernacular |
|  | 0:40:00 | 1 FO |
| 081011-008-CvPh | CvSp_Cas (ph.) | Looking for someone |
|  | 1:17:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081011-009-Cv | CvSp_Cas | A drunken youth |
|  | 2:49:00 | $2 \mathrm{MO}, 1 \mathrm{FY}, 1 \mathrm{FO}$ |
| 081011-010-Cv | CvSp_Cas | A small plane circling Sarmi |
|  | 1:00:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081011-011-Cv | CvSp_Cas | Obtaining a school certificate 1; a drunken youth |
|  | 3:41:00 | $2 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081011-012-Cv | CvSp_Cas | Obtaining a school certificate 2 |
|  | 1:37:00 | $1 \mathrm{FY}, 1 \mathrm{FO}$ |
| 081011-013-Cv | CvSp_Cas | Living in Wamena |
|  | 0:52:00 | $1 \mathrm{MO}, 1 \mathrm{FY}$ |
| 081011-014-Cv | CvSp_Cas | About shortening something |
|  | 1:03:00 | $1 \mathrm{FY}, 1 \mathrm{FO}$ |
| 081011-015-Cv | CvSp_Cas | Using different kinds of oil as medicine |
|  | 0:34:00 | $1 \mathrm{FY}, 1 \mathrm{FO}$ |
| 081011-016-Cv | CvSp_Cas | A certain river |
|  | 0:28:00 | 1 FO |
| 081011-017-Cv | CvSp_Cas | Problems with a muffler |
|  | 0:12:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |


| File name | Text type / Length | Topic / Interlocutors |
| :---: | :---: | :---: |
| 081011-018-Cv | CvSp_Cas | Obtaining a school certificate 3 |
|  | 2:17:00 | 1 MY , 2 FO |
| 081011-019-Cv | CvSp_Cas | Electricity problems |
|  | 1:30:00 | 2 FO |
| 081011-020-Cv | CvSp_Cas | Traveling to Pante Timur 1 |
|  | 10:59:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081011-021-Cv | CvSp_Cas | Traveling to Pante Timur 2 |
|  | 1:36:00 | 1 FY, 1 FO |
| 081011-022-Cv | CvSp_Cas | Hosting many people; killing one of two twins |
|  | 15:52:00 | $1 \mathrm{MO}, 1 \mathrm{FY}, 1 \mathrm{FO}$ |
| 081011-023-Cv | CvSp_Cas | Obtaining a school certificate 4; rural school education |
|  | 21:45:00 | $1 \mathrm{FY}, 1 \mathrm{FO}$ |
| 081011-024-Cv | CvSp_Cas | Rural school education and politics |
|  | 9:13:00 | 4 MO |
| 081012-001-CvPh | CvSp_Cas (ph.) | Wanting to visit his friend |
|  | 3:02:00 | 1 MO |
| 081013-001-Cv | CvSp_Cas | Obtaining a school certificate 5 |
|  | 0:39:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081013-002-Cv | CvSp_Cas | The bridge at Muara |
|  | 0:58:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081013-003-Cv | CvSp_Cas | A motorbike accident 1 |
|  | 0:46:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081013-004-Cv | CvSp_Cas | A motorbike accident 2 |
|  | 0:54:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081014-001-Cv | CvSp_Cas | Feeling hot and cold |
|  | 0:29:00 | 1 FO |
| 081014-002-Cv | CvSp_Cas | School problems |
|  | 0:17:00 | 1 FO |
| 081014-003-Cv | CvSp_Cas | Motorbike problems |
|  | 3:30:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081014-004-Cv | CvSp_Cas | The upcoming local elections |
|  | 4:15:00 | 1 FO |
| 081014-005-Cv | CvSp_Cas | Problems with a drunken person |
|  | 4:10:00 | 1 FY |
| 081014-006-CvPr | Cv-w/auth_Proc | Making sago |
|  | 8:30:00 | 1 FO |
| 081014-007-CvEx | Cv-w/auth_Expos | Women and men's roles in Webro |
|  | 15:18:00 | 1 FO |
| 081014-008-CvNP | Cv-w/auth_NarrP | A motorbike accident |
|  | 3:30:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081014-009-CvEx | Cv-w/auth_Expos | Honoring guests 1 |
|  | 3:00:00 | 1 FO |
| 081014-010-CvEx | Cv-w/auth_Expos | Honoring guests 2 |

## C Overview of recorded corpus

| File name | Text type / Length | Topic / Interlocutors |
| :---: | :---: | :---: |
| 081014-011-CvEx | 2:06:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |
|  | Cv-w/auth_Expos | Honoring guests 3 |
|  | 7:02:00 | $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081014-012-NP | Elicit_NarrP | A bicycle accident |
|  | 1:16:00 | 1 FY |
| 081014-013-NP | Elicit_NarrP | A motorbike accident |
|  | 1:06:00 | 1 FY |
| 081014-014-NP | Elicit_NarrP | Departed spirits |
|  | 9:58:00 | 1 FY |
| 081014-015-Cv | CvSp_Cas | Making music |
|  | 1:43:00 | 3 FO |
| 081014-016-Cv | CvSp_Cas | Cell phones |
|  | 2:56:00 | $1 \mathrm{MY}, 1 \mathrm{FO}$ |
| 081014-017-CvPr | CvSp_Proc | Cooking pigs |
|  | 6:10:00 | $1 \mathrm{MY}, 1 \mathrm{MO}, 1 \mathrm{FY}, 2 \mathrm{FO}$ |
| 081015-001-Cv | CvSp_Cas | A fight |
|  | 2:31:00 | 1 FO |
| 081015-002-Cv | CvSp_Cas | On a plane |
|  | 0:22:00 | 1 FO |
| 081015-003-Cv | CvSp_Cas | Traveling to Sarmi 1 |
|  | 1:38:00 | $1 \mathrm{FY}, 1 \mathrm{FO}$ |
| 081015-004-Cv | CvSp_Cas | Traveling to Sarmi 2 |
|  | 1:40:00 | 2 FY, 1 FO |
| 081015-005-NP | Elicit_NarrP | A motorbike accident |
|  | 10:29:00 | $2 \mathrm{MO}, 3 \mathrm{FO}$ |
| 081022-001-Cv | CvSp_Cas | Returning from Takar |
|  | 0:42:00 | $1 \mathrm{MC}, 2 \mathrm{FY}$ |
| 081022-002-CvNP | CvSp_NarrP | Retreat in Takar 1 |
|  | 1:40:00 | $1 \mathrm{MC}, 1 \mathrm{FY}$ |
| 081022-003-Cv | CvSp_Cas | Retreat in Takar 2 |
|  | 1:25:00 | $1 \mathrm{MC}, 1 \mathrm{FY}$ |
| 081023-001-Cv | CvSp_Cas | Playing volleyball; morning chores |
|  | 4:52:00 | 1 MY, 2 FY |
| 081023-002-Cv | CvSp_Cas | The taekwondo team |
|  | 0:46:00 | 1 MY, 2 FY |
| 081023-003-Cv | CvSp_Cas | Women's sports |
|  | 0:54:00 | 1 MY, 2 FY |
| 081023-004-Cv | CvSp_Cas | Retreat in Takar 3; school absences |
|  | 3:16:00 | 1 MY, 2 FY |
| 081025-001-CvHt | Cv-w/auth_Hort | Put your trousers on! |
|  | 0:46:00 | $1 \mathrm{FC}, 1 \mathrm{FO}$ |
| 081025-002-Cv | Cv-w/auth_Cas | Papeda and fish |
|  | 0:13:00 | 1 FO |
| 081025-003-Cv | Cv-w/auth_Cas 16:53:00 | Certain acquaintances; workshops in Sentani <br> $1 \mathrm{MO}, 1 \mathrm{FO}$ |


| File name | Text type / Length | Topic / Interlocutors |
| :---: | :---: | :---: |
| 081025-004-Cv | Cv-w/auth_Cas 12:35:00 | Politics in Papua 1 several MO, 1 FO |
| 081025-005-Cv | $\begin{aligned} & \text { Cv-w/auth_Cas } \\ & 0: 55: 00 \end{aligned}$ | Demonstrations several MO, 1 FO |
| 081025-006-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & 24: 49: 00 \end{aligned}$ | Retreat in Takar 4; spiritual warfare 1 $3 \mathrm{FY}, 1 \mathrm{FO}$ |
| 081025-007-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & \text { 2:10:00 } \end{aligned}$ | Retreat in Takar 5; spiritual warfare 2 $3 \text { FY, } 1 \text { FO }$ |
| 081025-008-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & \text { 11:14:00 } \end{aligned}$ | Retreat in Takar 6; spiritual warfare 3 $3 \mathrm{FY}, 1 \mathrm{FO}$ |
| 081025-009a-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & \text { 10:46:00 } \end{aligned}$ | Retreat in Takar 7; spiritual warfare 4a 3 FY, 1 FO |
| 081025-009b-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & 7: 04: 00 \end{aligned}$ | Retreat in Takar 8; spiritual warfare 4b 3 FY, 1 FO |
| 081029-001-Cv | $\begin{aligned} & \text { Cv-w/auth_Cas } \\ & \text { 1:06:00 } \end{aligned}$ | Garden plants 1 MO |
| 081029-002-Cv | Cv-w/auth_Cas 5:44:00 | Politics in Papua 2 1 MO |
| 081029-003-Cv | $\begin{aligned} & \text { Cv-w/auth_Cas } \\ & \text { 1:00:00 } \end{aligned}$ | Politics in Papua 3 $1 \mathrm{MO}$ |
| 081029-004-Cv | Cv-w/auth_Cas 12:16:00 | Politics in Papua 4 1 MO |
| 081029-005-Cv | Cv-w/auth_Cas 19:43:00 | Politics in Papua 5 $1 \mathrm{MO}$ |
| 081106-001-CvPr | Cv-w/auth_Proc $0: 49: 00$ | Killing dogs <br> $1 \mathrm{MO}, 1 \mathrm{FO}$ |
| 081108-001-JR | $\begin{aligned} & \text { Elicit_Joke } \\ & \text { 0:37:00 } \end{aligned}$ | Joke: Killing a cow 1 (false start) 2 MY |
| 081108-002-JR | $\begin{aligned} & \text { Elicit_Joke } \\ & 0: 51: 00 \end{aligned}$ | Joke: Drawing an elephant 2 MY |
| 081108-003-JR | $\begin{aligned} & \text { Elicit_Joke } \\ & \text { 1:21:00 } \end{aligned}$ | Joke: Killing a cow 2 2 MY |
| 081109-001-Cv | $\begin{aligned} & \text { CvSp_Cas } \\ & \text { 14:47:00 } \end{aligned}$ | Doing sports 1 MY, 2 FY |
| 081109-002-JR | $\begin{aligned} & \text { Elicit_Joke } \\ & \text { 0:59:00 } \end{aligned}$ | Joke: Drawing a monkey 2 MY |
| 081109-003-JR | $\begin{aligned} & \text { Elicit_Joke } \\ & \text { 1:06:00 } \end{aligned}$ | Joke: Drawing a banana 2 MY |
| 081109-004-JR | $\begin{aligned} & \text { Elicit_Joke } \\ & 0: 29: 00 \end{aligned}$ | Joke: Taking singing lessons (false start) 2 MY |
| 081109-005-JR | $\begin{aligned} & \text { Elicit_Joke } \\ & \text { 1:15:00 } \end{aligned}$ | Joke: Grandfather and grandchild go fishing 2 MY |
| 081109-006-JR | $\begin{aligned} & \text { Elicit_Joke } \\ & 0: 44: 00 \end{aligned}$ | Joke: Taking singing lessons 2 MY |
| 081109-007-JR | Elicit_Joke | Joke: Twelve moons |

## C Overview of recorded corpus

| File name | Text type / Length | Topic / Interlocutors |
| :---: | :---: | :---: |
| 081109-008-JR | 1:24:00 | 2 MY |
|  | Elicit_Joke | Joke: A ship arriving at the harbor |
|  | 0:29:00 | 2 MY |
| 081109-009-JR | Elicit_Joke | Joke: A Javanese asking for papeda |
|  | 1:13:00 | 2 MY |
| 081109-010-JR | Elicit_Joke | Joke: Seeing a turtle for the first time |
|  | 0:42:00 | 2 MY |
| 081109-011-JR | Elicit_Joke | Joke: Dividing three fish |
|  | 1:07:00 | 2 MY |
| 081109-012-JR | Elicit_Joke | Joke: Sleeping in church |
|  | 0:55:00 | 2 MY |
| 081110-001-Cv | Cv-w/auth_Cas | Moving to Sawar |
|  | 2:16:00 | 1 FO |
| 081110-002-Cv | CvSp_Cas | Buying soap; bringing gas to Webro |
|  | 3:55:00 | 2 FO |
| 081110-003-Cv | CvSp_Cas | Forgetting chili peppers in Webro |
|  | 1:17:00 | 2 FO |
| 081110-004-Cv | Cv-w/auth_Cas | Forgetting betel vine; getting ready to go out |
|  | 0:48:00 | 1 FO |
| 081110-005-CvPr | Cv-w/auth_Proc | Wedding preparations 1 |
|  | 20:23:00 | 1 FO |
| 081110-006-CvEx | Cv-w/auth_Expos | Sexual relations and marriage |
|  | 15:29:00 | 1 FO |
| 081110-007-CvPr | Cv-w/auth_Proc | Wedding preparations 2 |
|  | 2:32:00 | 1 FO |
| 081110-008-CvNP | Cv-w/auth_NarrP | Parents' advice |
|  | 29:35:00 | 1 FO |
| 081115-001a-Cv | CvSp_Cas | Problems with children 1 |
|  | 22:24:00 | $2 \mathrm{MO}, 3 \mathrm{FO}$ |
| 081115-001b-Cv | CvSp_Cas | Problems with children 2 |
|  | 4:51:00 | $2 \mathrm{MO}, 3 \mathrm{FO}$ |

## Appendix D: OLAC resources for the languages of the Sarmi regency

Table D. 1 and Table D. 2 give an overview of the resources available in and about the Austronesian and Papuan languages spoken in the Sarmi regency. The information is a summary of the information provided by OLAC, the Open Language Archives Community; OLAC is available at http://www.language-archives.org (accessed 8 January 2016).

Table D.1: OLAC resources available in and about the Austronesian languages spoken in the Sarmi regency. Abbreviations: Sur. = sociolinguistic survey; Lex. = lexical resources; Gr. = grammatical resources; Lit. = literacy resources; Ant. $=$ anthropological resources; L1 = resources in the respective languages; NT = New Testament of the Bible in the respective languages.

| Name \& ISO 639-3 code |  | Sur. | Lex. | Gr. | Lit. | Ant. | L1 | NT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Anus | [auq] |  | X |  |  |  |  |  |
| Bonggo | [bpg] |  | X |  |  |  |  |  |
| Fedan | [pdn] |  |  |  |  |  |  |  |
| Kaptiau | [kbi] |  |  |  |  |  |  |  |
| Liki | [lio] |  |  |  |  |  |  |  |
| Masimasi | [ism] |  |  |  |  |  |  |  |
| Mo | [wkd] |  | X |  |  |  |  |  |
| Sobei | [sob] |  | X | X |  | X | X |  |
| Sunum | [ynm] |  |  |  |  |  |  |  |
| Tarpia | [tpf] |  | X |  |  |  |  |  |
| Yarsun | [ yrs ] |  |  |  |  |  |  |  |

Table D.2: OLAC resources available in and about the Papuan languages spoken in the Sarmi regency.

| Name \& ISO 639-3 code |  | Sur. | Lex. | Gr. | Lit. | Ant. | L1 | NT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aironan | [air] | X |  |  |  |  |  |  |
| Bagusa | [bqb] |  |  |  |  |  |  |  |
| Beneraf | [bnv] |  | X |  |  |  |  |  |
| Berik | [bkl] |  | X | X | X | X | X |  |
| Betaf | [bfe] |  |  |  |  |  |  |  |
| Dabe | [dbe] |  | X |  |  |  |  |  |
| Dineor | [mrx] |  | X |  |  |  |  |  |
| Isirawa | [srl] |  | X | X | X | X | X | X |
| Itik | [itx] |  | X |  |  |  |  |  |
| Jofotek-Bromnya | [jbr] |  |  |  |  |  |  |  |
| Kauwera | [xau] |  | X |  |  |  |  |  |
| Keijar | [kdy] |  |  |  |  |  |  |  |
| Kwerba | [kwe] |  | X | X | X | X | X |  |
| Kwerba Mamberamo | [xwr] |  |  |  |  |  |  |  |
| Kwesten | [kwt] |  | X |  |  |  |  |  |
| Kwinsu | [kuc] |  |  |  |  |  |  |  |
| Mander | [mqr] |  | X |  |  |  |  |  |
| Massep | [mvs] | X |  |  |  |  |  |  |
| Mawes | [mgk] |  | X |  |  |  |  |  |
| Samarokena | [tmj] | X | X |  |  |  |  |  |
| Trimuris | [tip] |  |  |  |  |  |  |  |
| Wares | [wai] |  |  |  |  |  |  |  |
| Yoke | [yki] | X | X |  |  |  |  |  |

## Appendix E: Population totals for West Papua

Table E. 1 presents the population totals for Papua province and Papua Barat province by regencies (coastal versus interior) and ethnicity (Papuan versus non-Papuan). The figures are based on the 2010 census data (Bidang Neraca Wilayah dan Analisis Statistik 2011a: 11-14; 2012a: 92). ${ }^{1}$ (For more details see §1.7.1).

Table E.1: Population totals by coastal and interior regencies and ethnicity

| Regency | Papuan | non-Papuan | Total |
| :--- | ---: | ---: | ---: |
| Papua province |  |  |  |
| Coastal regencies | 756335 | 608170 | 1364505 |
| Interior regencies | 1394041 | 51462 | 1445503 |
| Subtotal | 2150376 | 659632 | 2810008 |
| Papua Barat province |  |  |  |
| Coastal regencies | 373302 | 354039 | 727341 |
| Interior regencies | 31772 | 1309 | 33081 |
| Subtotal | 405074 | 355348 | 760422 |
| Total | 2555450 | 1014980 | 3570430 |

The total of 3,570,430 in Table E. 1 more or less matches the total of 3,593,803 provided by Bidang Neraca Wilayah dan Analisis Statistik (2012a: 92) (see §1.7.1). The difference of 23,373 is due to a mismatch between the overall population total of $2,833,381$ for Papua province (Bidang Neraca Wilayah dan Analisis Statistik 2012a: 92) and the population details by regency, religious affiliation and ethnicity, which gives a total of $2,810,008{ }^{2}$ see also Footnote 37 in §1.7.1 (p. 38).

Tables E. 2 and E. 3 list the population totals by ethnicity for each of the regencies of Papua province and Papua Barat province, respectively.

[^198]Table E.2: Papua province: Population details by regency and ethnicity

| Regency | Papuan | non-Papuan | Total |
| :---: | :---: | :---: | :---: |
| Costal regencies |  |  |  |
| Asmat | 68598 | 7943 | 76541 |
| Biak Numfor | 93340 | 33136 | 126476 |
| Jayapura | 68116 | 42812 | 110928 |
| Jayapura Kota | 89164 | 166465 | 255629 |
| Keerom | 19698 | 27873 | 47571 |
| Kepulauan Yapen | 64034 | 17969 | 82003 |
| Mamberamo Raya | 17092 | 1273 | 18365 |
| Mappi | 72134 | 9261 | 81395 |
| Merauke | 72554 | 122312 | 194866 |
| Mimika | 71672 | 96855 | 168527 |
| Nabire | 61364 | 67761 | 129125 |
| Sarmi | 22890 | 9695 | 32585 |
| Supiori | 15297 | 558 | 15855 |
| Waropen | 20382 | 4257 | 24639 |
| Interior regencies |  |  |  |
| Boven Digoel | 37309 | 18133 | 55442 |
| Deiyai | 61557 | 538 | 62095 |
| Dogiyai | 83400 | 830 | 84230 |
| Intan Jaya | 40413 | 77 | 40490 |
| Jayawijaya | 177581 | 18093 | 195674 |
| Lanny Jaya | 148367 | 155 | 148522 |
| Mamberamo Tengah | 39329 | 208 | 39537 |
| Nduga | 78389 | 664 | 79053 |
| Paniai | 147680 | 3389 | 151069 |
| Pegunungan Bintang | 62343 | 3091 | 65434 |
| Puncak | 92532 | 686 | 93218 |
| Puncak Jaya | 99368 | 1780 | 101148 |
| Tolikara | 113226 | 1090 | 114316 |
| Yahukimo | 162192 | 2320 | 164512 |
| Yalimo | 50355 | 408 | 50763 |

Table E.3: Papua Barat province: Population details by regency and ethnicity

| Regency | Papuan | non-Papuan | Total |
| :---: | ---: | ---: | ---: |
| Coastal regencies |  |  |  |
| Fakfak | 36409 | 30419 | 66828 |
| Kaimana | 24412 | 21837 | 46249 |
| Manokwari | 107857 | 79869 | 26321 |
| Raja Ampat | 31160 | 11347 | 52422 |
| Sorong | 26400 | 44219 | 187726 |
| Sorong Kota | 62070 | 128555 | 37900 |
| Sorong Selatan | 30988 | 6912 | 70619 |
| Tambrauw | 5878 | 266 | 42507 |
| Teluk Bintuni | 27947 | 24475 | 6144 |
| Teluk Wondama | 20181 | 6140 | 190625 |
| Interior regencies |  |  |  |
| Maybrat | 31772 | 1309 | 33081 |

## Appendix F: Affixation

The following sections present tables and figures which give the token frequencies by speakers, topics, and interlocutors for the affixes discussed in §3.1. The frequencies for prefix TER- are given in Appendix F.1, for suffix -ang in Appendix F.2, for prefix PE(N)in Appendix F.3, for prefix BER- in Appendix F.4, for suffix -nya in Appendix F.5, and for circumfix $k e-/-a n g$ in Appendix F.6.

## F. 1 Prefix TER-

The tables and figures give the token frequencies for TER-prefixed words with bi- and monovalent verbal bases.

Table F.1: Tokens for TER-prefixed words with bivalent verbal bases (38 items)

| Speakers | Topics (TOP) |  |  |  | Interlocutors (ILCT) |  |  | Tokens Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | POL | EDC | REL | Low | +STAT | -stat | OuTSD |  |
| +EDC-SPK | 6 | 10 | 10 | 15 | - | - | 9 | 50 |
| -EDC-SPK | 2 | 1 | 26 | - | 45 | 23 | 6 | 103 |
| Total | 8 | 11 | 36 | 15 | 45 | 23 | 15 | 153 |

Table F.2: Tokens for TER-prefixed words with monovalent verbal bases (5 items)

| Speakers | Topics (TOP) |  |  |  | Interlocutors (iLCT) |  |  | Tokens Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | POL | EDC | REL | Low | +Stat | -Stat | OutsD |  |
| +EDC-SPK | 0 | 0 | 1 | 4 | - | - | 0 | 5 |
| -EDC-SPK | 0 | 1 | 5 | - | 2 | 1 | 0 | 9 |
| Total | 0 | 1 | 6 | 4 | 2 | 1 | 0 | 14 |

## $F$ Affixation



Figure F.1: Tokens for TER-prefixed words with bivalent verbal bases


Figure F.2: Tokens for TER-prefixed words with monovalent verbal bases

## F. 2 Suffix -ang

The tables and figures give the token frequencies for -ang-suffixed words with verbal, nominal, and numeral bases.

Table F.3: Tokens for -ang-suffixed words with verbal bases (69 items)

| Speakers | Topics (TOP) |  |  |  | Interlocutors (ILCT) |  |  | Tokens <br> Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | POL | EDC | REL | Low | +Stat | -Stat | OUTSD |  |
| +EDC-SPK | 30 | 26 | 15 | 46 | - | - | 75 | 192 |
| -EDC-SPK | 15 | 40 | 57 | - | 26 | 80 | 3 | 211 |
| Total | 45 | 66 | 62 | 46 | 26 | 80 | 78 | 403 |



Figure F.3: Tokens for -ang-suffixed words with verbal bases

## $F$ Affixation

Table F.4: Tokens for - ang-suffixed words with nominal and numeral bases (15 items)

| Speakers | Topics (TOP) |  |  |  | Interlocutors (ILCT) |  |  | Tokens <br> Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | POL | EDC | REL | LOW | +STAT | -STAT | OUTSD |  |
| +EDC-SPK | 4 | 1 | 0 | 4 | - | - | 8 | 17 |
| -EDC-SPK | 3 | 0 | 6 | - | 1 | 9 | 2 | 21 |
| Total | 7 | 1 | 6 | 4 | 1 | 9 | 10 | 38 |

-ang: Nominal and numeral bases (15 items with 38 tokens)


Figure F.4: Tokens for - ang-suffixed items derived from nominal and numeral bases

## F. 3 Prefix PE(N)-

The tables and figures give the token frequencies for $\operatorname{PE}(N)$-prefixed words with verbal and nominal bases.

Table F.5: Tokens for $P E(N)$-prefixed words with verbal bases (29 items)

| Speakers | Topics (TOP) |  |  |  | Interlocutors (ILCT) |  |  | Tokens Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | POL | EDC | REL | Low | +STAT | -Stat | OUTSD |  |
| +EDC-SPK | 37 | 6 | 3 | 19 | - | - | 11 | 76 |
| -EDC-SPK | 11 | 2 | 37 | - | 9 | 18 | 0 | 77 |
| Total | 48 | 8 | 40 | 19 | 9 | 18 | 11 | 153 |



Figure F.5: Tokens for $P E(N)$-prefixed words with verbal bases
Table F.6: Tokens for $\operatorname{PE}(N)$-prefixed words with nominal bases ( 5 items)

|  | Topics (TOP) |  |  | Interlocutors (iLCT) |  |  |  | Tokens |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Speakers | POL | EDC | REL | LOW | +STAT | -STAT | OUTSD | Total |
| +EDC-SPK | 10 | 0 | 12 | 5 | - | - | 0 | 27 |
| -EDC-SPK | 1 | 2 | 2 | - | 0 | $\mathbf{1}$ | 0 | 6 |
| Total | 11 | 2 | 14 | 5 | 0 | $\mathbf{1}$ | 0 | 33 |

$P E(N)-$ : Nominal bases ( 5 items with 33 tokens)


Figure F.6: Tokens for $\operatorname{PE}(N)$-prefixed words with nominal bases

## $F$ Affixation

## F. 4 Prefix BER-

The tables and figures give the token frequencies for $B E R$-prefixed words with verbal, nominal, numeral, and quantifier bases.

Table F.7: Tokens for $B E R$-prefixed words with verbal bases (27 items)

| Speakers | Topics (TOP) |  |  |  | Interlocutors (ILCT) |  |  | Tokens Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | POL | EDC | REL | LOW | +STAT | -Stat | OutsD |  |
| +EDC-SPK | 7 | 22 | 9 | 12 | - | - | 7 | 57 |
| -EDC-SPK | 3 | 7 | 5 | - | 7 | 8 | 7 | 37 |
| Total | 10 | 29 | 14 | 12 | 7 | 8 | 14 | 94 |



Figure F.7: Tokens for $B E R$-prefixed words with verbal bases

Table F.8: Tokens for $B E R$-prefixed words with nominal, numeral, and quantifier bases (29 items)

| Speakers | Topics (TOP) |  |  |  | Interlocutors (ILCT) |  |  | Tokens Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | POL | EDC | REL | LOW | +STAT | -stat | OUTSD |  |
| +EDC-SPK | 13 | 9 | 11 | 6 | - | - | 7 | 46 |
| -EDC-SPK | 1 | 2 | 6 | - | 4 | 8 | 3 | 24 |
| Total | 14 | 11 | 17 | 6 | 4 | 8 | 10 | 70 |



Figure F.8: Tokens for $B E R$-prefixed words with nominal, numeral, and quantifier bases

## $F$ Affixation

## F. 5 Suffix -nya

The tables and figures give the token frequencies for -nya-suffixed words with nominal, verbal, prepositional, and adverbial bases.

Table F.9: Tokens for -nya-suffixed words with nominal bases (81 items)

| Speakers | Topics (TOP) |  |  |  | Interlocutors (ILCT) |  |  | Tokens Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | POL | EDC | REL | LOW | + Stat | -stat | OUTSD |  |
| +EDC-SPK | 28 | 21 | 9 | 29 | - | - | 38 | 125 |
| -EDC-SPK | 12 | 5 | 14 | - | 20 | 16 | 23 | 90 |
| Total | 40 | 26 | 23 | 29 | 20 | 16 | 61 | 215 |



Figure F.9: Tokens for -nya-suffixed words with nominal bases

Table F.10: Tokens for -nya-suffixed words with verbal bases (36 items)

| Speakers | Topics (TOP) |  |  |  | Interlocutors (ILCT) |  |  | Tokens <br> Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | POL | EDC | REL | LOW | +STAT | -STAT | OUTSD |  |
| +EDC-SPK | 5 | 14 | 3 | 11 | - | - | 16 | 49 |
| -EDC-SPK | 3 | 3 | 8 | - | 9 | 8 | 2 | 33 |
| Total | 8 | 17 | 11 | 11 | 9 | 8 | 18 | 82 |

-nya: Verbal bases (36 items with 82 tokens)


Figure F.10: Tokens for -nya-suffixed words with verbal bases

Table F.11: Tokens for -nya-suffixed words with prepositional and adverbial bases (5items)

| Speakers | Topics (TOP) |  |  |  | Interlocutors (ILCT) |  |  | Tokens <br> Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | POL | EDC | REL | LOW | +STAT | -STAT | OUTSD |  |
| +EDC-SPK | 0 | 0 | 0 | 1 | - | - | 3 | 4 |
| -EDC-SPK | 1 | 3 | 6 | - | 1 | 2 | 3 | 16 |
| Total | 1 | 3 | 6 | 1 | 1 | 2 | 6 | 20 |

## $F$ Affixation

-nya: Prepositional and adverbial bases (5 items with 20 tokens)


Figure F.11: Tokens for -nya-suffixed words with prepositional and adverbial bases

## F. 6 Circumfix ke-/-ang

The tables and figures give the token frequencies for ke-/-ang-circumfixed words with verbal, nominal, numeral, and quantifier bases.

Table F.12: Tokens for ke-/-ang-circumfixed words with verbal bases (57 items)

| Speakers | Topics (TOP) |  |  |  | Interlocutors (ILCT) |  |  | Tokens Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | POL | EDC | REL | Low | +STAT | -stat | OuTSD |  |
| +EDC-SPK | 14 | 36 | 13 | 38 | - | - | 43 | 144 |
| -EDC-SPK | 5 | 19 | 16 | - | 35 | 12 | 8 | 95 |
| Total | 19 | 55 | 29 | 38 | 35 | 12 | 51 | 239 |

Table F.13: Tokens for ke-/-ang-circumfixed words with nominal, numeral, and quantifier bases (8 items)

| Speakers | Topics (TOP) |  |  |  | Interlocutors (ILCT) |  |  | Tokens <br> Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | POL | EDC | REL | Low | +stat | -Stat | OUTSD |  |
| +EDC-SPK | 2 | 10 | 1 | 0 | - | - | 2 | 15 |
| -EDC-SPK | 2 | 1 | 0 | - | 0 | 1 | 0 | 4 |
| Total | 4 | 11 | 1 | 0 | 0 | 1 | 2 | 19 |

ke-/-ang: Verbal bases (57 items with 239 tokens)


Figure F.12: Tokens for $k e-/-$ ang-circumfixed words with verbal bases
ke-/-ang: Verbal, nominal, and quantifier bases (84 items with 441 tokens)


Topics (T) and interlocutors (I)
Figure F.13: Tokens for $k e-/-a n g$-circumfixed words with nominal, numeral, and quantifier bases

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## A grammar of Papuan Malay

This book presents an in-depth linguistic description of Papuan Malay, a nonstandard variety of Malay. The language is spoken in coastal West Papua which covers the western part of the island of New Guinea. The study is based on sixteen hours of recordings of spontaneous narratives and conversations between Papuan Malay speakers, recorded in the Sarmi area on the northeast coast of West Papua. Papuan Malay is the language of wider communication and the first or second language for an ever-increasing number of people of the area. While Papuan Malay is not officially recognized and therefore not used in formal government or educational settings or for religious preaching, it is used in all other domains, including unofficial use in formal settings, and, to some extent, in the public media. After a general introduction to the language, its setting, and history, this grammar discusses the following topics, building up from smaller grammatical constituents to larger ones: phonology, word formation, noun and prepositional phrases, verbal and nonverbal clauses, non-declarative clauses, and conjunctions and constituent combining. Of special interest to linguists, typologists, and Malay specialists are the following in-depth analyses and descriptions: affixation and its productivity across domains of language choice, reduplication and its gesamtbedeutung, personal pronouns and their adnominal uses, demonstratives and locatives and their extended uses, and adnominal possessive relations and their noncanonical uses. This study provides a starting point for Papuan Malay language development efforts and a point of comparison for further studies on other Malay varieties.



[^0]:    ${ }^{1}$ Formerly, West Papua was known as "Irian Jaya" or "West Irian".
    ${ }^{2}$ The Malayic branch also includes other eastern Malay varieties as well as Standard Malay and Indonesian (Blust 2013: xxiv-xl). (See $\S 1.2$ for more details on the genetic affiliations of Papuan Malay.)

[^1]:    ${ }^{3}$ The term 'West Papua' is also used in the literature, as for instance in King (2004), Kingsbury \& Aveling (2002), and Tebay (2005). More recently, Gil (2014) has proposed the Malay term Tanah Papua 'Land of Papua' for the western part of the island of New Guinea.

[^2]:    ${ }^{4}$ The term "low Malay" refers to "the colloquial form of Malay", a trade language "existing in a diglossic situation [...] with "High Malay" [...] (which is usually defined as the classical literary language based upon the court language of Riau-Johor [...])" (Paauw 2003: 18-19; see also Paauw 2009: 18-25).

[^3]:    ${ }^{5}$ One anonymous reviewer suggests an alternative analysis for the example in (1). Rather than being ambiguous and exemplifying a case of "hidden complexity", the kalo ... suda 'when/if ... already' construction expresses an unspecified reason-consequence relation, with the context supplying the information on whether the reason has place.

[^4]:    ${ }^{6}$ The word-final rhotic trill, however, may be devoiced if it occurs before a pause or in utterance-final position (§2.3.1.3).

[^5]:    ${ }^{7}$ The ISO 639-3 standard applies three basic criteria for defining a language in relation to varieties which may be considered dialects. The first criterion considers intelligibility between speech varieties: "Two related varieties are normally considered varieties of the same language if speakers of each variety have inherent understanding of the other variety at a functional level (that is, can understand based on knowledge of their own variety without needing to learn the other variety)" (Lewis, Simons \& Fennig 2016b).

[^6]:    ${ }^{8}$ For a discussion of the term 'Papuan languages' see Footnote 24 in §1.6.2 (p. 27).
    ${ }^{9}$ The Ethnologue (Lewis, Simons \& Fennig 2016b) lists Papuan Malay as a Malay-based creole, while here it is counted among the Austronesian languages (see also $\S 1.2 .2$ ). A listing of West Papua’s languages is available at http://www.ethnologue.com/country/id/languages and http://www.ethnologue.com/map/ID_ pe_ (accessed 8 January 2016).

[^7]:    ${ }^{a}$ See also Footnote 10 on p. 13 for more information.

[^8]:    ${ }^{12}$ Not further taken into account here is the growing influence of the mass media, namely TV, even in more remote areas which exposes Papuans more and more to colloquial varieties of Indonesian, especially Jakartan Indonesian (see also Sneddon 2006).

[^9]:    ${ }^{13}$ For detailed grammatical descriptions of Indonesian see for instance Mintz (1994) and Sneddon (2010).

[^10]:    ${ }^{14}$ All observed Papuans of higher social standing were also better educated, whereas none of the observed less-educated Papuans was of high social standing.

[^11]:    ${ }^{15}$ Masinambow \& Haenen (2002) uses "High Malay" as a cover term which also includes Standard Indonesian.
    ${ }^{16}$ The report in King (2004) is based on an Agence France Presse summary, dated 6 January 2000, which is titled "The constitution of the 'State of Papua' as envisaged in Jayapura".

[^12]:    ${ }^{17}$ Velar / $\mathrm{y} /$ however, only occurs in the root-internal and not in the word-initial onset position.
    ${ }^{18}$ The small caps designate the abstract representation of affixes that have more than one form of realization; prefixes TER- and $P E(N)$ - have two allomorphs each, namely ter- and ta- (§3.1.2.1), and $p e(N)$ - and $p a(N)$ -(small-caps $N$ represents the different realizations of the nasal) (§3.1.4.1), respectively.
    ${ }^{19}$ In this book, Papuan Malay strategies to express passive voice are not further discussed; instead, this topic is left for future research.

[^13]:    ${ }^{20}$ Himmelmann (2005: 111) employs the term "western Austronesian" as a "rather loose geographical expression"; it is "strictly equivalent to non-Oceanic Austronesian languages".
    ${ }^{21}$ Donohue (2011: 433) suggests that the frequent topicalization of non-subject arguments "is an adaptive strategy that allows the OV order of the substrate languages in New Guinea [...] to surface in what is nominally a VO language, Papuan Malay".
    In this book the issue of topicalization is not further discussed; instead, this topic is left for future research.

[^14]:    ${ }^{22}$ Dryer (2007c: 130) uses the term "marker" rather than "mark". The terminology for comparative constructions employed in this book, however, follows Dixon's (2008) terminology; hence, "mark" rather thản "marker" (see §11.5).
    ${ }^{23}$ Auxiliary verbs are briefly mentioned in $\S 13.3$, in Chapter 13 ; a detailed description of these verbs is left for future research.

[^15]:    ${ }^{24}$ The term "Papuan" is a collective label used for "the non-Austronesian languages spoken in New Guinea and archipelagos to the West and East"; that is, the term "does not refer to a superordinate category to which all the languages belong" (Klamer, Reesink \& van Staden 2008: 107).

[^16]:    ${ }^{25}$ As Klamer \& Ewing (2010: 1) point out, though, there is an ongoing discussion about "the exact geographic delimitations of the East Nusantara region" and "whether (parts of) New Guinea are also considered to be

[^17]:    part of it" (see also Footnote 3 in Klamer \& Ewing 2010: 1).
    ${ }^{26}$ The noun-genitive order is not explicitly mentioned in Klamer, Reesink \& van Staden (2008).
    ${ }^{27}$ This list of features in Klamer \& Ewing (2010) builds on Klamer (2002), Himmelmann (2005), Donohue (2007c), and Klamer, Reesink \& van Staden (2008).

[^18]:    ${ }^{28}$ As mentioned in §1.6.1.2, passive constructions are not further discussed in this book; instead, this topic is left for future research.
    ${ }^{29}$ Klamer (2002: 370, 371) defines 'Parallelisms without stylistic optionality' as follows: "Many languages in Eastern Indonesia employ the verbal art form of parallelism [... It] is a structurally defined verbal art form that functions as a stylistic device in the ritual language [...] In parallelism, semantically synonymic words or phrases are combined in (minimally two) parallel utterances. [...] Though parallelism is a property of oral literature, it is not purely stylistic: the pairings are obligatory; there is generally no stylistic optionality involved in the choice of a proper pair."
    ${ }^{30}$ This list of features in Klamer \& Ewing (2010) builds on Foley (1986; 2000), Pawley (2005), and Aikhenvald \& Stebbins (2007).
    Tail-head linkage is not mentioned in Klamer, Reesink \& van Staden (2008). It is, however, a typical Papuan feature (see Foley 1986: 200-201; 2000: 390).

[^19]:    ${ }^{31}$ In their contributions, Taylor (1983) and Voorhoeve (1983) label the Malay variety spoken in the northern Moluccas as North Moluccan Malay, while Litamahuputty (2012) uses the term Ternate Malay for the same variety in her in-depth grammar. Given that the three studies differ in depth, all three of them are included here, with Taylor's (1983) and Voorhoeve's (1983) summarily listed under North Moluccan Malay.

[^20]:    ${ }^{32}$ Voorhoeve (1983: 4), by contrast, suggests that pa- "is no longer morphologically distinct".

[^21]:    ${ }^{33}$ Adnominal uses of the third person plural pronoun are also reported for Balai Berkuak Malay (Tadmor 2002: 7), Dobo Malay (R. Nivens p.c. 2013), and Sri Lanka Malay (Slomanson 2013); in Balai Berkuak Malay and Manado Malay the personal pronoun occurs in prehead position.

[^22]:    ${ }^{34}$ Statistics from BPS-Statistics Indonesia are available at http://www.bps.go.id/ (accessed 8 January 2016). Statistics for Papua province are available at http://papua.bps.go.id (accessed 8 January 2016), and statistics for Papua Barat province are available at http://irjabar.bps.go.id/ (accessed 8 January 2016).
    ${ }^{35}$ Population totals for Papua province are also available at http://papua.bps.go.id/yii/9400/index.php/post/ 552/JumlahPendudukPapua (accessed 21 Oct 2013), and for Papua Barat province at http://irjabar.bps.go. id/publikasi/2011/StatistikDaerahProvinsiPapuaBarat2011/baca_publikasi.php (accessed 21 Oct 2013).
    ${ }^{36}$ A "Papuan" is defined as someone who has at least one Papuan parent, is married to a Papuan, has been adopted into a Papuan family, or has been living in Papua for 35 years (Bidang Neraca Wilayah dan Analisis Statistik 2011a: 11).
    ${ }^{37}$ The statistics for Papua province do not give population details by regency and ethnicity per se. They do, however, include this information in providing population details by religious affiliation under the category Sosial Budaya 'Social (affairs) and Culture'; see http://papua.bps.go.id/yii/9400/index.php/site/page?view= sp2010 (accessed 21 Oct 2013). By adding up the population details according to religious affiliation it is possible to arrive at overall totals by regency and ethnicity.

[^23]:    ${ }^{38}$ Coastal regencies: Asmat, Biak Numfor, Jayapura, Kota Jayapura, Keerom, Yapen, Mamberamo Raya, Mappi, Merauke, Mimika, Nabire, Sarmi, Supiori, Waropen.
    Interior regencies: Boven Digoel, Deiyai, Dogiyai, Intan Jaya, Jayawijaya, Lanny Jaya, Mamberamo Tengah, Nduga, Paniai, Pegunungan Bintang, Puncak, Puncak Jaya, Tolikara, Yahukimo, Yalimo.
    ${ }^{39}$ Papua Barat regencies: Fakfak, Kaimana, Kota Sorong, Manokwari, Maybrat, Raja Ampat, Sorong, Sorong Selatan, Tambrauw, Teluk Bintuni, and Teluk Wondama.

[^24]:    40 "Transmigration" is a program by the Indonesian government to resettle millions of inhabitants. Coming from the overcrowded islands of Java, Madura, Bali, and Lombok, they settle in the less populated areas of the archipelago, such as West Papua. The first transmigration project was launched in 1905 (Fearnside 1997: 553). During the second World War, the project was put on hold, "until the current transmigration program was launched in 1950" (Fearnside 1997: 554). Between 1905 and 1989, "a cumulative total of approximately [...] five million people [...] had been shipped to the outer islands as part of the official program, plus anywhere from two to three times this many had moved independent of the program" (Fearnside 1997: 554; see also Embassy of the Republic of Indonesia in London 2009).
    ${ }^{41}$ The school participation rates by age groups in Table 1.12 are available at http://www.bps.go.id/eng/tab_ sub/view.php?kat=1\&tabel=1\&daftar=1\&id_subyek=28\&notab=3 (accessed 21 Oct 2013).

[^25]:    ${ }^{42}$ The enrollment rates by school types in Table 1.13 are available at http://www.bps.go.id/eng/tab_sub/view. php?kat=1\&tabel=1\&daftar=1\&id_subyek=28\&notab=4 (accessed 21 Oct 2013).
    ${ }^{43}$ The literacy rates in Table 1.14 are available at http://www.bps.go.id/eng/tab_sub/view.php?kat=1\&tabel= $1 \&$ daftar=1\&id_subyek=28\&notab=2 (accessed 21 Oct 2013).

[^26]:    ${ }^{44}$ Detailed data by regency is available under the category Sosial Budaya 'Social (affairs) and Culture' at http://papua.bps.go.id/yii/9400/index.php/site/page?view=sp2010 (accessed 21 Oct 2013).

[^27]:    ${ }^{45}$ While Haga (1884: 192-195) gives no further bibliographical details for this memorandum, the following details are found in Andaya (1993: 262): VOC 1794. Memorie van overgave, Jacob Claaszoon, 14 July 1710, fols 55-56.
    ${ }^{46}$ Along similar lines Samaun (1979: 3) states that Malay, namely Ambon or Ternate Malay, "was long ago introduced" in West Papua. The author does not, however, provide a more precise date, instead maintaining that Malay has been used in West Papua "for more than a century" (1979:3).

[^28]:    ${ }^{47}$ In 1828, the Dutch annexed today's West Papua as far as 141 degrees of east longitude (today's border with Papua New Guinea) (Burke 1831: 509).

[^29]:    ${ }^{48}$ With respect to this quote, R. Nivens (p.c. 2013) suggests that van Velzen (1995: 315) made this comment
    "because the sultan of Tidore once claimed sovereignty over parts of Papua", but it is doubtful "that he had any actual linguistic data to back up this claim".

[^30]:    ${ }^{49}$ The basis for the description of Papuan Malay is textual data collected in Manokwari (Paauw 2009: 35), as well as data available in previous studies: Suharno (1981); van Velzen (1995); Donohue (2003); Burung \& Sawaki (2007); Kim et al. (2007) (this study is an earlier version of Scott et al. 2008); Sawaki (2007).
    ${ }^{50}$ Donohue (2007a) refers to Papuan Malay as spoken in the area of Serui as "Serui Malay".

[^31]:    ${ }^{51}$ Donohue (1997) refers to Papuan Malay as spoken in the Merauke area as "Merauke Malay".

[^32]:    ${ }^{52}$ MopPapua is available at https://instagram.com/moppapua/ (accessed 8 January 2016).
    Epen ka, cupen toh is available at http://www.youtube.com/watch? $\mathrm{v}=\mathrm{IWiQK0qKIj} 8$ (accessed 8 May 2015).
    ${ }^{53}$ Denias is available at http://www.youtube.com/watch?v=kc683zv6H_E (accessed 8 January 2016).

[^33]:    54 'West Papua Web' is available at http://www.papuaweb.org/ (last updated in January 2012) (accessed 8
    January 2016).

[^34]:    ${ }^{55}$ Detailed 2010 census data is available at http://bps.go.id/eng/download_file/Population_of_Indonesia_by_ Village_2010.pdf (accessed 21 Oct 2013) (see also §1.7.1).

[^35]:    ${ }^{56}$ In expository discourse the speaker describes or explains a topic. In hortatory discourse the speaker attempts to persuade the addressee to fulfill the commands given in the discourse. In procedural discourse the speaker describes how to do something. (Loos et al. 2003)

[^36]:    ${ }^{57}$ Speech Analyzer is available at http://www-01.sil.org/computing/sa/ (accessed 8 January 2016).
    ${ }^{58}$ Toolbox is available at http://www-01.sil.org/computing/toolbox/ (accessed 8 January 2016).

[^37]:    ${ }^{59}$ Phonology Assistant is available at http://phonologyassistant.sil.org (accessed 8 January 2016).

[^38]:    ${ }^{1}$ Two important sources for the description of the Papuan Malay phonology are Donohue (2003) and Sutri
    Narfafan \& Donohue (under review).

[^39]:    ${ }^{2}$ The diacritic "," signals that the vowel is lowered.

[^40]:    ${ }^{3}$ The vowel space in Figure 2.1 is based on the author's impressions rather than on measured spectrographic data.

[^41]:    ${ }^{4}$ One anonymous reviewer suggests, however, a different analysis. Given that the nasal in this position obtains its place features from the following segment, not two, but only one nasal phoneme (or "archiphoneme") occurs in the word-internal coda position.

[^42]:    ${ }^{5}$ In the examples in this chapter, the first line gives the orthographic representation, while the second lines gives the IPA transcription.

[^43]:    ${ }^{6}$ One lexical item in particular undergoes lenition of its word-initial stop: the long and the short forms of the third person singular pronoun, dia/de ' 3 sG '. Onset / $\mathrm{d} / \mathrm{can}$ be lenited to $[\mathrm{j}$ ] when following a lexical item with a voiceless stop, the alveolar fricative $/ \mathrm{s} /$, or the rhotic $/ \mathrm{r} /$ in word-final coda position.

[^44]:    ${ }^{7}$ More in-depth acoustic phonetic analysis is needed to determine whether the nasalized vowels remain centralized. Since these vowels occur in open syllables they are represented as their non-centralized allophones (for more details see §2.2.3) pending further results.
    ${ }^{8}$ The broad transcription of the 16 -hour corpus makes no distinction between the unpalatalized and the palatalized realizations of siapa 'who', [si.'a.pa] and ['s'a.pa], respectively. Hence, a more thorough transcription of all 196 /siapa/ tokens is required to establish whether speakers sometimes realize the interrogative as the trisyllabic item [si.'a.pa] or whether they always palatalize the fricative and thereby realize the item as disyllabic ['s'a.pa]. In the more thoroughly transcribed 150 -minute extract of the corpus the trisyllabic siapa [si.'a.pa] 'who' is unattested.

[^45]:    ${ }^{9}$ Concerning the elision of the word-final stop see §2.3.1.2.

[^46]:    ${ }^{10}$ All ten participants in a unrepresentative rapid orthography test, by contrast, realized laley 'be careless' as ['la.lej] and not as ['la.le̦j]. At this point in the research on Papuan Malay the reasons for the realization as ['la.lej] remain uncertain, however.

[^47]:    ${ }^{13}$ Additional input was provided by A. Clynes, R. van den Berg, C. Williams-van Klinken, W. Mahdi, R. Mills, R. A. Blust and C. E. Grimes (all p.c. 2012).
    ${ }^{14}$ This restricted phonotactic distribution of the velar nasal is cross-linguistically rather common. Following Anderson (2013: 7), it has to do with "word-edge" and "word-medial" phonotactics in general: "word-edge coda and onset positions seem to be more restricted than corresponding coda and onset positions in nonedge positions".
    ${ }^{15}$ In the word-final coda position, the glottal fricative /h/ is only attested in interjections.

[^48]:    ${ }^{16}$ Very commonly, speakers realize a /i.V/ sequence with a brief transitional glide. Since this is an almost universal phenomenon, the transitional glide is not transcribed.

[^49]:    ${ }^{a}$ The corpus includes eight CV roots all of which are function words, that is, personal pronouns, prepositions, or conjunctions.

[^50]:    ${ }^{a}$ The second item displaying a V.VC syllable structure is uang 'money'. In Jones (2007), uang 'money' is not listed as a loanword, whereas Tadmor (2009b) classifies it as a "probably borrowed".
    ${ }^{b}$ The second item with a CVC.CCVC syllable structure is gondrong 'be long haired'.
    ${ }^{c}$ Neither Jones (2007) nor Tadmor (2009b) list kluar 'go out' as a loanword.

[^51]:    ${ }^{17}$ Neither item is listed as a loan in Jones (2007). In addition, A. Clynes (p.c. 2012) and W. Mahdi (p.c. 2012)
    maintain that both items are morphologically indivisible Malay roots.

[^52]:    ${ }^{18}$ The three items are: kitong /ki.'toy/ '1pl', kumur /ku.'mur/ 'rinse mouth', and kuskus /kus.'kus/ 'cuscus'.
    ${ }^{19}$ Examples are bebas /'be.bas/ 'be free' (see Table 2.39), leher /'le.her/ 'neck', or sentu /'sen.tu/ 'touch'.

[^53]:    ${ }^{20}$ The four items are: papeda /pa.'pe.da/ 'sagu porridge', padede pa.d $\varepsilon . \mathrm{d} \varepsilon /$ 'whine', tampeleng /tam.'pe.ley/
    'slap on face/ears', and wewenang /we.'we.nay/ 'authority'.

[^54]:    ${ }^{21}$ The historical root gait does not exist in Papuan Malay.

[^55]:    ${ }^{a}$ Note that the (historical) affixes have phonological allomorphs: /ta-/ and /ter-/, for example, are allomorphs of prefix TER-,/pl-/ is an allomorph of prefix PE(N)-, and /br-/ and /ba-/ are allomorphs of prefix BER- (the small caps designate abstract representations of the affixes as they have more than one form of realization). (For details see §3.1.2.1, §3.1.4.1, and §3.1.5.1, respectively.)

[^56]:    ${ }^{22}$ Mintz (2002: 13) represents $/ \mathrm{J} /$ as /š/ and defines it as "a palatal fricative": syurga/šur.ga/ 'heaven'.

[^57]:    ${ }^{23}$ Notably, for both loanwords, the source forms contain fricative /f/ rather than stop /p/: the source form for kopi 'coffee' is Dutch koffie and the source form for pikir 'think' is Arabic fikr.
    ${ }^{24}$ Loanwords with a/si.o/ sequence in which the syllable containing /s/ is stressed are unattested.

[^58]:    ${ }^{a}$ In Jones (2007), tanpa 'without' is not listed as a loanword. Tadmor (2009b), however, classifies the item as "clearly borrowed", listing Sudanese, Balinese, and Javanese as "uncertain" donor languages.

[^59]:    ${ }^{25}$ Four loanwords are attested with word-final CC cluster: erport 'airport', kompleks 'complex', petromaks 'kerosene lantern' and raport 'school report book'. Rather commonly, however, these items are realized without the word-final CC cluster, as in ['¢̣.pọr] 'airport', ['kom.ple̦k] 'complex', or [.pe.tro.mes] 'kerosene lantern'.

[^60]:    ${ }^{a}$ As nasals and approximants do not occur in $\mathrm{C}_{1}$ position, they are excluded from Table 2.54.

[^61]:    ${ }^{a}$ The Dutch examples are taken from Woorden.org MMXI (2010-) and the English examples from Oxford University Press (2000-).

[^62]:    ${ }^{1}$ The small caps designate the abstract representation of affixes that have more than one form of realization; prefixes TER-, PE (N)-, and BER-, have two allomorphs each, namely ter- and ta- (§3.1.2.1), pe(N)- and $p a(N)-($ small-caps $N$ represents the different realizations of the nasal) (§3.1.4.1), and ber- and ba- (§3.1.5.1), respectively.

[^63]:    ${ }^{2}$ Pike (1967: 169-171) talks about the "activeness of morphemes" rather than of "morphological patterns".
    ${ }^{3}$ As Bauer (2001: 125) elaborates, however, there is an ongoing discussion among scholars "whether productivity is a gradable/scalar phenomenon or not".

[^64]:    ${ }^{4}$ Type frequency is defined as "the number of types of a class of linguistic units in a corpus", while token frequency refers to "the number of tokens of a linguistic unit or a class of linguistic units in a corpus" (Booij 2007: 323). Hapaxes are "new word types that occur only once in the corpus, and clearly do not belong to the set of established words" (2007: 69).

[^65]:    ${ }^{5}$ While Taylor (1983: 18) considers the prefix to be productive, Voorhoeve (1983: 4) believes that it is unproductive.
    ${ }^{6}$ The 43 verbs include 21 hapaxes ( $\mathrm{P}=0.1257$ ); the 38 bivalent verbs include 17 hapaxes ( $\mathrm{P}=0.1111$ ); the five monovalent verbs include four hapaxes ( $\mathrm{P}=0.2857$ ).
    ${ }^{7}$ The historical roots tawa, grak, or apung do not exist in Papuan Malay.

[^66]:    ${ }^{8}$ In addition, the 2,459-item word list (see Chapter 2, p. 65) contains five items realized with /ta-/ rather than with /ttr-/: /tabla/ 'be cracked open', /takumpul/ 'be gathered', /takupas/ 'be peeled', /tamasuk/ 'be included', and /tatutup/ 'be closed'. In the corpus these items are realized with /ter-/. Further, the word list also includes three items realized with /ter-/ whereas in the corpus these items are most commonly realized with /ta-/: talempar 'be thrown', talipat 'be folded', and tarangkat 'be lifted up'.

[^67]:    ${ }^{9}$ As mentioned under Factor 3 "Relationships between interlocutors" in $\S 1.5 .1$ (p. 17), all of the recorded less-educated speakers belong to the group of Papuans with lower social status (-stat), while the recorded Papuans with higher social status (+STAT), such as teachers, government officials, or pastors, are all better educated.

[^68]:    ${ }^{10}$ As for the 21 hapaxes ( 17 with bivalent and four with monovalent bases), 18 appear to be conditioned by the variables of speaker education levels, topics, and/or role-relations, and therefore seem to be code-switches with Indonesian. This leaves only three hapaxes (with bivalent bases) that are unaccounted for in terms of language external factors and that might result from a productive derivation process. For three hapaxes, $\mathrm{P}=0.0180$ as opposed to $\mathrm{P}=0.1257$ for 21 hapaxes $(\mathrm{N}=167)$.

[^69]:    ${ }^{11}$ The 84 nouns include 28 hapaxes ( $\mathrm{P}=0.0635$ ); the 69 nouns with verbal bases include 23 hapaxes ( $\mathrm{P}=0.0571$ ); the 15 nouns with nominal or numeral bases include five hapaxes ( $\mathrm{P}=0.1316$ ).

[^70]:    ${ }^{12}$ As mentioned under Factor 3 "Relationships between interlocutors" in $\S 1.5 .1$ (p. 17), all of the recorded less-educated speakers belong to the group of Papuans with lower social status (-stat), while the recorded Papuans with higher social status (+STAT), such as teachers, government officials, or pastors, are all better educated.

[^71]:    ${ }^{13}$ As for the 28 hapaxes ( 23 with verbal bases, and five with nominal bases), 17 appear to be conditioned by the variables of speaker education levels, topics, and/or role-relations, and therefore are best explained as codeswitches with Indonesian. This leaves 11 hapaxes that are unaccounted for in terms of language external factors and that might be the result of a productive word-formation process. For 11 hapaxes, $\mathrm{P}=0.0249$ as opposed to $\mathrm{P}=0.0635$ for 28 hapaxes $(\mathrm{N}=441)$. The total of 11 hapaxes includes nine with verbal bases ( $\mathrm{P}=0.0223$ ) and two with nominal or numeral bases $(\mathrm{P}=0.0526)$.

[^72]:    ${ }^{14}$ The 34 nouns include 11 hapaxes ( $\mathrm{P}=0.0591$ ); the 29 nouns with verbal bases include nine hapaxes ( $\mathrm{P}=0.0588$ ); the five nouns with nominal bases include two hapaxes ( $\mathrm{P}=0.0606$ ).

[^73]:    ${ }^{15}$ As mentioned under Factor 3 "Relationships between interlocutors" in $\S 1.5 .1$ (p. 17), all of the recorded less-educated speakers belong to the group of Papuans with lower social status (-stat), while the recorded Papuans with higher social status (+STAT), such as teachers, government officials, or pastors, are all better educated.

[^74]:    ${ }^{16}$ Concerning the 11 hapaxes (nine with verbal and two with nominal bases), the data suggests that seven are conditioned by the variables of speaker education levels, topics, and/or role-relations, and therefore are best explained as code-switches with Standard Indonesian. This leaves only four hapaxes (with verbal bases) that cannot be accounted for in terms of language external factors and that are likely to result from a productive word-formation process. For four hapaxes $\mathrm{P}=0.0376$ as opposed to $\mathrm{P}=0.0591$ for 11 hapaxes ( $\mathrm{N}=186$ ).

[^75]:    ${ }^{17}$ The 62 verbs include 25 hapaxes ( $\mathrm{P}=0.0415$ ); the 29 verbs with verbal bases include 11 hapaxes ( $\mathrm{P}=0.0484$ ); the 33 verbs with nominal, numeral, or quantifier bases include 14 hapaxes ( $\mathrm{P}=0.0373$ ).

[^76]:    ${ }^{a}$ The root is realized as /triak/ when speakers employ allomorph ber-, whereas it is realized as /taria/ when speakers use allomorph $b a$-.

[^77]:    ${ }^{17}$ The original recording says kita i beribada selesay. Most likely the speaker wanted to say kita ibada selesay
    'after we have worshipped' but cut himself off to replace ibada 'worship' with beribada 'worship'.

[^78]:    ${ }^{18}$ For Banda Malay, Paauw (2009: 249) reports that ba-does not form verbs with reflexive meanings.

[^79]:    ${ }^{19}$ Voorhoeve (1983: 4) considers prefix $b a$ - to be unproductive.
    ${ }^{20}$ The 123 suffixed lexemes include 68 hapaxes ( $\mathrm{P}=0.1757$ ); the 81 lexemes with nominal bases include 44 hapaxes ( $\mathrm{P}=0.1549$ ); the 36 lexemes with verbal bases include 21 hapaxes ( $\mathrm{P}=0.2561$ ); the five lexemes with other bases include three hapaxes $(\mathrm{P}=0.1500)$.

[^80]:    ${ }^{a}$ Included in the six harusnya 'appropriately' tokens is one seharusnya token which also means 'appropriately'. According to one consultant, harusnya 'appropriately' is the more common form.

[^81]:    ${ }^{21}$ The 65 circumfixed lexemes include 22 hapaxes ( $\mathrm{P}=0.0853$ ); the 57 lexemes with verbal bases include 17 hapaxes ( $\mathrm{P}=0.0711$ ); the eight lexemes verbs with nominal, numeral, or quantifier bases include five hapaxes ( $\mathrm{P}=0.2632$ ).

[^82]:    ${ }^{22}$ In discussions about ke-/-ang-circumfixed lexemes with a verbal reading in Standard Indonesian or Malay, the circumfix is typically glossed as 'ADVRS' ("adversative") (Englebretson 2003; Kroeger 2005) or 'NoNvoL' ("nonvolitional") (Englebretson 2007).

[^83]:    ${ }^{23}$ Six items with high token frequencies are excluded from the analysis: five BER-prefixed items with more than 50 tokens (in all 413 tokens) and one -nya-suffixed item with 70 tokens. Given their high token frequencies, it was assumed that speakers employ these items regardless of the variables of speaker education levels, topics, and/or role-relations.
    In addition, the derivation berusaha 'attempt' was excluded due to questions concerning the reliability of the recorded tokens. Of its 25 occurrences, 11 were produced by the same speaker during a phone conversation which was characterized by many repetitions due to a bad connection.

[^84]:    ${ }^{24}$ As mentioned under Factor 3 "Relationships between interlocutors" in $\S 1.5 .1$ (p. 17), all of the recorded less-educated speakers belong to the group of Papuans with lower social status (-stat), while the recorded Papuans with higher social status (+STAT), such as teachers, government officials, or pastors, are all better educated.

[^85]:    ${ }^{25}$ As for the attested hapaxes, the findings of this domain analysis suggest that most are conditioned by the variables of speaker education levels, topics, and/or role-relations: $22 / 25$ hapaxes prefixed with $B E R-, 59 / 68$ hapaxes suffixed with -nya, and 18/22 hapaxes circumfixed with $k e-/-a n g$. These items are best explained as code-switches with Indonesian. This leaves only three BER-hapaxes, nine -nya-hapaxes, and four ke-/-ang-hapaxes that are unaccounted for in terms of language external factors and that are likely to be the result of a productive word-formation process. This, in turn, decreases the respective P values:
    (1) for three $B E R$-hapaxes $\mathrm{P}=0.0183(\mathrm{~N}=164)$ as opposed to $\mathrm{P}=0.0415$ for 25 hapaxes ( $\mathrm{N}=602$ ) ( N differs for the two P values, as six of the derived lexemes were excluded from the domain analysis),
    (2) for nine -nya-hapaxes $\mathrm{P}=0.0284(\mathrm{~N}=317)$ as opposed to $\mathrm{P}=0.1758$ for 68 hapaxes $(\mathrm{N}=387)(\mathrm{N}$ differs for the two P values, as one derived lexeme was excluded from the domain analysis), and
    (3) for four $k e-/$-ang-hapaxes $\mathrm{P}=0.0155$ as opposed to $\mathrm{P}=0.0853$ for 22 hapaxes $(\mathrm{N}=258)$.

[^86]:    ${ }^{26}$ While Aikhenvald (2007: 28) suggests that compounds can also be compositional, Dryer (2007b: 175) maintains that compounds have "an idiosyncratic meaning not predictable from the meaning of the component parts, as compared with syntactic compounds, in which one noun is modifying a second noun in a productive syntactic construction".

[^87]:    ${ }^{27}$ Collocations are defined as "word combinations which have developed an idiomatic semantic relation based on their frequent co-occurrence" (Bussmann 1996: 200; see also Krishnamurthy 2006).

[^88]:    ${ }^{a}$ As discussed in $\S 4.2$, reduplication conveys a variety of different meanings. Hence, a reduplicated item can receive different interpretations, depending on the context. The reduplicated noun tulang~tulang, for instance, can receive the following readings: 'any one of the bones', 'different kinds of bones', 'all of the bones'. Hence, no translation is given for the reduplicated items in Table 4.1. The same applies to Table 4.2 in §4.1.1.2.

[^89]:    ${ }^{1}$ While reduplication of sana ' L.DIST' is unattested in the corpus, it does occur, following one consultant.

[^90]:    ${ }^{2}$ Wiltshire \& Marantz (1978: 561) refer to "collectivity" as "simple plurality".

[^91]:    ${ }^{3}$ As mentioned in $\S 4.2 .2 .7$, the term "imitation" includes meanings such as "something is an imitation of X" or "something is similar to X".
    ${ }^{4}$ Demonstrative sequences such as itu tu 'D.DIST D.DIST' also convey intensity or emphasis, as discussed in detail in §7.1.2.3. Given its phonological properties, however, juxtaposed itu tu 'D.DIST D.DIST' is not taken as an instance of partial reduplication. As discussed in §4.1.2, partial reduplication of the stem itu 'D.DIST' should result in the reduplicated form it $\sim i t u$ 'D.DIST~D.DIST'. Therefore, itu $t u$ 'D.DIST D.DIST' is taken as an instance of demonstrative stacking (see §5.6.4).

[^92]:    ${ }^{a}$ In Table 4.10, the category of prefixes in Manado Malay (Stoel 2005: 27) and Ternate Malay (Litamahuputty 2012: 139) includes the reciprocal marker baku 'RCP'. Reduplicated Ternate Malay "activity words" (Litamahuputty 2012: 136-138) are included in the word class of verbs.

[^93]:    ${ }^{a}$ The "verb" category includes Manado Malay adjectives and Ternate Malay "quality words" (Litamahuputty 2012: 136-138).

[^94]:    ${ }^{1}$ More specifically, Himmelmann (2005: 112) refers to western Austronesian "symmetrical voice languages", that is languages that have "at least two voice alternations marked on the verb, neither of which is clearly the basic form".

[^95]:    ${ }^{2}$ As Givón (2001:59) points out, it is technically speaking "not the noun but rather the noun phrase that assumes the various grammatical roles [...] However, within the noun phrase, a noun is typically the syntactic and semantic head, defining the type of entity involved. All other elements in the noun phrase are modifiers of that head noun".

[^96]:    ${ }^{3}$ Documentation: dua 'two' 080919-001-Cv.0022, BR111017-002.003, banyak 'many' 081006-023-CvEx.0007, 081029-004-Cv.0021, sedikit 'few' BR111021.014, BR111021.015.

[^97]:    ${ }^{4}$ Documentation: banyak 'many' BR111021.015, BR111021.017, sedikit 'few' BR111021.016, BR111021.018, dua 'two' BR111021.019, BR111021.020.

[^98]:    ${ }^{5}$ Documentation: verb 081011-024-Cv.0142, personal pronoun 080916-001-CvNP.0003, demonstrative 080917-008-NP.0043, locative 080917-008-NP.0118, interrogative 080922-001a-CvPh.1245, numeral 080922-002Cv.0052, quantifier 080922-010a-NF.0269, relative clause 080919-006-CvNP. 0017 .

[^99]:    ${ }^{a}$ Documentation of person names: 080922-001a-CvPh.1096, 081011-024-Cv.0123, 081014-005-Cv.0002, 081014-$014-\mathrm{CvNP} .0084$. Documentation of place names: 080922-002-Cv.0049, 080917-008-NP.0018, 081025-008Cv.0008, 080917-008-NP. 0126.

[^100]:    ${ }^{6}$ The exception is blakang 'backside'. It also has the body part meaning 'back'. As such it can denote the possessum in an adnominal possessive construction such as sa pu blakang '1sG poss backside' 'my back' [081015-005-NP.0032].

[^101]:    ${ }^{7}$ Documentation: 081006-023-CvEx.0061, 081109-002-JR.0002, 081006-023-CvEx.0080, 081011-001-Cv.0167, 080919-004-NP.0030.
    ${ }^{8}$ Documentation: atas 'top' 081025-008-Cv.0162, bawa 'bottom' 081025-009b-Cv.0018, blakang 'backside' 081106-001-Ex.0002, dalam 'inside' 081025-006-Cv.0039, depang 'front' 081115-001a-Cv.0139, luar 'outside' 081025-003-Cv.0159, pinggir 'border' 080918-001-CvNP.0060, samping 'side' 081014-014-CvNP.0046, sebla 'side' 081109-001-Cv.0026, sekitar 'vicinity' 081011-024-Cv.0140, tenga 'middle' 080927-009-CvNP.0037.

[^102]:    ${ }^{9}$ Documentation: atas 'top' BR111031-001.005, blakang 'backside' 081022-002-Cv.0013, dalam 'inside' 081025-006-Cv.0023, luar 'outside’ 081029-002-Cv.0033, pinggir 'edge' 080923-010-CvNP.0010, samping 'side' BR111031-001.004, sebla 'side' 081006-035-CvEx.0067, tenga 'middle' 081014-006-Pr.0037, bawa 'bottom' 081011-024-Cv.0148, depang 'front' 080921-011-Cv.0012.

[^103]:    ${ }^{10}$ As for the occurrence of bukang 'NEG' in verbal clauses, see Footnote 13 in §5.3.6 (p. 255).
    ${ }^{11}$ It is acknowledged that some authors maintain that nouns have valency. Van Valin \& LaPolla (1997), for instance, discuss the "layered structure of adpositional and noun phrases" (1997:52-67) and the "semantic representation of nouns and noun phrases" (1997: 184-195), and Van Valin (2001: 89-92) examines "[t]ypes of dependencies". See also Croft's (1991: 62-79) discussion on "structural markedness and the semantic prototypes", as well as Allerton (2006), Sommerfeldt \& Schreiber (1983), and van Durme \& Institut for Sprog og Kommunikation (1997).

[^104]:    ${ }^{12}$ The elicited example in (121) is the corrected version of the original recording dong mana lebi sayang saya 'they actually[SPM] loved me more' [081110-008-NPHt.0021]. That is, the speaker mispronounced mala 'in.fact', realizing it as mana.

[^105]:    ${ }^{13}$ The negator bukang 'NEG' also occurs in verbal clauses. However, it does not negate the verb as tida/tra 'NEG' does. Instead, bukang 'NEG' has scope over the entire proposition and expresses contrastive negation of that proposition as a whole (for details see §13.1.2).

[^106]:    ${ }^{14}$ The corpus contains one reciprocal construction formed with trivalent ceritra 'tell', similar to the elicited example in (137). Most of the utterance is unclear, however, as the speaker mumbles.

[^107]:    ${ }^{a}$ See van Klinken (1999: 51-53) for a similar approach to distinguishing different verb classes.

[^108]:    ${ }^{15}$ In the corpus only biasanya 'usually' and perna 'ever' are attested in the clause-initial position; for the remaining frequency adverbs, their uses in this position were established by means of elicitation.

[^109]:    ${ }^{a}$ The adverb biasanya 'usually' is historically derived: biasa-nya 'be.usual-3poss' (for details on suffixation with -nya '3poss', see §3.1.6).

[^110]:    ${ }^{16}$ Three of the adverbs listed in Table 5.29 have dual word class membership with monovalent stative verbs: baru 'recently', dulu 'be prior', and skarang 'now' (variation in word class membership is discussed in §5.14).

[^111]:    ${ }^{a}$ The adverb kususnya 'especially' is historically derived: kusus-nya 'be.special-3poss' (for details on suffixation with -nya '3poss', see §3.1.6).
    ${ }^{b}$ The focus adverb pas 'precisely' has dual word class membership with the monovalent stative verb pas 'be exact' (variation in word class membership is discussed in §5.14).

[^112]:    ${ }^{17}$ According to one consultant, some Papuan Malay speakers also use hampir 'almost' to modify stative verbs. Much more often though they employ a construction with su mulay 'already start to' as in (i) below:
    (i) baru kita pergi skola, suda mulay sembu and.then 1PL go school already start be.healed
    [After an accident:] 'and then we went (back) to school, (our wounds) were almost healed' (Lit. 'already started to be healed') [081014-012-NP.0005]

[^113]:    ${ }^{18}$ According to Andrews (2007: 148), definiteness indicates that "an np has [...] a referent uniquely identifiable to the hearer". Hence, the hearer is expected to be in a position to identify the referent. Specificity, by contrast, signals that "the speaker is referring to a particular instance of an entity as opposed to any instance of it" (Andrews 2007: 148). That is, the identifiability of the referent is not presupposed. Instead, the speaker makes the entity under discussion identifiable to the hearer by pointing out "a particular instance of an entity" among other possible referents (2007: 148). (See also Abbot 2006.)

[^114]:    ${ }^{19}$ Concerning the semantic distinctions between the notion of definiteness and the notion of specificity see Footnote 18 in §5.5 (p. 279).

[^115]:    ${ }^{20}$ Juxtaposed ini ni 'd.prox d.prox' and itu tu 'd.DIST D.DIST' are not taken as instances of partial reduplication. As discussed in §4.1.2, partial reduplication of the stems ini 'D.Prox' and itu 'd.DIST' should result in the reduplicated forms in $\sim$ ini ' D. PROX $\sim$ D.PROX' and $i t \sim i t u$ 'D.DIST~D.DIST', respectively. Therefore, ini ni 'D.PROX D.PROX' and itu tu 'D.DIST D.DIST' are taken as instances of demonstrative stacking. Reduplication of demonstratives does occur, however, as discussed in §4.2.5.2.

[^116]:    ${ }^{21}$ The elicited examples are based on the example in (38) in §7.1.2.3 (p. 380).

[^117]:    ${ }^{22}$ Alternatively, as one anonymous reviewer points out, one could argue that in (233) and (234) the typical subject-predicate word order is inverted and that siapa 'who' does not take the subject but the predicate slot, whereas the relative clause introduced with yang 'rel' takes the subject slot.
    ${ }^{23}$ Alternatively, one could argue that in (237) siapa 'who' does not take an oblique object but an adjunct slot.

[^118]:    ${ }^{24}$ Similar to the comment in Footnote 22 in $\S 5.8 .1$ (p. 289), one could argue that in (245) the subject-predicate word order is inverted and that apa 'what' fills the predicate rather than the subject slot, while the relative clause introduced with yang 'reL' takes the subject slot.

[^119]:    ${ }^{25}$ Alternatively, one could argue that in (248) apa 'what' does not take an oblique object but an adjunct slot.

[^120]:    ${ }^{a}$ The numerals sratus 'one hundred' and sribu 'one thousand' are historically derived by unproductive affixation with the prefix $s(e)$-.

[^121]:    ${ }^{26}$ In Standard Indonesian, ordinal numerals, with the exception of pertama 'first', are derived by prefixing $k e$ - to the cardinal number (for details see Mintz 1994: 293).

[^122]:    ${ }^{27}$ Following Gil (2013a: 1), the expression sembarang 'any' is a "free-choice universal quantifier".

[^123]:    ${ }^{28}$ To express the notion of 'every person', speakers prefer quantification with masing-masing 'each'.
    ${ }^{28}$ Documentation: banyak 'many' 081006-023-CvEx.0007, 081029-004-Cv.0021, 081011-001-Cv.0240; brapa 'several' 080919-001-Cv.0049, 080923-008-Cv.0012; masing-masing 'each' BR111021.010, BR111021.009; sedikit 'few' BR111021-001.004, BR111021-001.006, 081006-035-CvEx.0050; segala 'all' 081006-032-Cv.0017; sembarang 'any' 080927-006-CvNP.0035; setiap 'every' 080923-016-CvNP.0002; smua 'all' 081006-030CvEx.0009, 080921-004b-Cv.0026, BR111021.012; stenga 081115-001b-Cv.0056.

[^124]:    ${ }^{a}$ Both untuk 'for' and buat 'for' introduce beneficiaries and benefactive recipients. Benefactive untuk 'for', however, has a wider distribution and more functions than buat 'for' in that untuk 'for' (1) combines with demonstratives, (2) introduces inanimate referents, and (3) introduces circumstance. For details see §10.2.3 and §10.2.4.
    ${ }^{b}$ Both kaya 'like' and sperti 'similar to' signal likeness in terms of appearance or behavior. They differ in scope, however. Similative kaya 'like' signals overall resemblance between the two bases of comparison. The scope of sperti 'similar to', by contrast, is more limited: it signals likeness or resemblance in some, typically implied, respect. For details see $\S 10.3 .1$ and $\S 10.3 .2$.

[^125]:    ${ }^{29}$ The tag to 'right?' is a loanword from Dutch, which uses toch 'right?' as a tag.

[^126]:    ${ }^{a}$ The corpus includes only one token of pandiam 'taciturn person / be very quiet'; its reading is ambiguous, that is, it can receive a verbal or a nominal reading (see example (29) in §3.1.4.2, p. 150).

[^127]:    ${ }^{1}$ For detailed discussions of these otherwise rather common features of pronouns see the following studies: case (Bhat 2007), clusivity (Filimonova 2005), gender (Siewierska 2013), politeness (Helmbrecht 2013), third person pronouns and demonstratives (Bhat 2013).

[^128]:    ${ }^{2}$ First person plural: Alternatively, one could argue that long kitong '1pl' and kitorang '1pl' and short tong '1PL' and torang '1PL' are not distinct forms but allomorphs. As for short ta '1PL', one could argue that, given its low token numbers, this is not a phonologically distinct form but the result of a phonetic deletion of the first syllable (U. Tadmor p.c. 2013).
    Second person plural: In addition, the corpus contains one token of an alternative long form, namely kamorang '2pl'. Its origins are yet to be established.
    ${ }^{3}$ A topic for further investigation is whether these distributional distinctions are possibly phonologically determined.
    ${ }^{4}$ Addressing a non-speech-act participant such as sungay 'river' with second person $k o$ ' 2 sG ' serves as a rhetorical figure of speech (for details see §6.2.1.1.3).

[^129]:    ${ }^{5}$ The free translations in Table 6.2 to Table 6.6 are taken from the glossed recorded texts. Therefore, the tenses may vary; likewise, the translations for dia/de ' 3 sG ' vary.

[^130]:    ${ }^{a}$ Documentation: Long pronoun forms - 080922-010a-CvNF.0281, 080917-007-CvHt.0005, 081025-006Cv.0150, 081110-008-CvNP.0106, 080922-001a-CvPh.0143, 081115-001a-Cv.0169, 081010-001-Cv.0161, 081006-009-Cv.0010; short pronoun forms - 081011-023-Cv.0167, 081014-016-Cv.0001, 081115-001a-Cv.0283, 080925-003-Cv.0221, 081025-009a-Cv.0026, 081006-009-Cv.0017.

[^131]:    ${ }^{a}$ Documentation: Long pronoun forms - 080922-010a-CvNF.0281, 080917-007-CvHt.0005, 081025-006Cv.0150, 081110-008-CvNP.0106, 080922-001a-CvPh.0143, 081115-001a-Cv.0169, 081010-001-Cv.0161, 081006-009-Cv.0010; short pronoun forms - 081011-023-Cv.0167, 081014-016-Cv.0001, 081115-001a-Cv.0283, 080925-003-Cv.0221, 081025-009a-Cv.0026, 081006-009-Cv.0017.

[^132]:    ${ }^{a}$ Documentation: Long pronoun forms - 081006-024-CvEx.0030, 080925-003-Cv.0209, 081108-003-JR.0002, 081025-008-Cv.0145, 080919-004-NP.0061, 081011-020-Cv.0045, 081010-001-Cv.0195; short pronoun forms -080922-001a-CvPh.1010, 080922-002-Cv.0127, 080922-001a-CvPh.0339, 081006-023-CvEx.0074.

[^133]:    ${ }^{6}$ The PRO NP constructions presented in this section were analyzed as appositions. One question for further research is whether these constructions could instead be analyzed as noun phrases with pre-head pronouns. It is expected that such preposed pronouns would have an individuating function given that other prehead determiners, namely numerals and quantifiers, also have an individuating function (see §8.3). One problem with such an analysis, however, would be PRO NP constructions with singular pronouns, as in (39) to (43), given that singular pronouns would hardly have an individuating function. (For a discussion of the determiner function of post-head pronouns see §6.2.)

[^134]:    ${ }^{7}$ See also Bickel and Witzlack-Makarevich's (2008: 15) cross-linguistic study on "Referential scales and case alignment", which shows that "first person singular is indeed often treated differently from other persons".
    ${ }^{7}$ The free translations in Table 6.10 and Table 6.11 are taken from the glossed texts. Therefore, the tenses may vary; likewise, the translations for dia/de '3sG' vary.

[^135]:    ${ }^{a}$ Documentation: Long pronoun forms - 080923-009-Cv.0051, 081023-001-Cv.0038, 080924-001-Pr.0008, 081110-005-Pr.0107, 080923-012-CNP.0011, 080919-003-NP.0002; short pronoun forms - 081011-023-Cv.0167, 081115-001a-Cv.0001, 081006-009-Cv.0013, 081014-015-Cv.0006, 081006-024-CvEx. 0043.

[^136]:    ${ }^{8}$ English examples are "we teachers", "you students", or "you idiot" (Lyons 1999: 451-442).

[^137]:    ${ }^{9}$ Introducing new characters with a bare noun and subsequently marking them as familiar with the adnominally used third person pronoun as a potential discourse strategy in Papuan Malay was brought to the author's attention by A. van Engelenhoven (p.c. 2013).

[^138]:    ${ }^{10}$ There is no comma intonation between the topical noun phrases and the pronominal comments in (67) and (69).

[^139]:    ${ }^{11}$ It is important to note, though, that the observed differences could also result from gaps in the descriptions of the other eastern Malay varieties.

[^140]:    ${ }^{1}$ Documentation: (1) 081025-003-Cv.0042, 080918-001-CvNP.0055, 081025-003-Cv.0135; (2) 081014-007Pr.0053; (3) 080922-010a-NF.0101; (4) 080922-004-Cv.0017; (5) 080922-010a-NF.0081, 080917-006CvHtEx.0005, 080917-010-CvEx.0116; (6) 080919-005-Cv.0015; (7) 080922-001a-CvPh. 0735.
    ${ }^{2}$ The speaker made a mistake; instead of saying sekertaris 'secretary', he produced sekertaria 'secretariat'.
    ${ }^{3}$ The referent Ise was not present when the speaker talked about his daughter; hence proximal ini 'D.Prox' does not have spatial uses in this context.

[^141]:    ${ }^{4}$ Documentation: (1) 081011-005-Cv.0001, 081025-009b-Cv.0016, 081014-004-Cv.0019; (2) 080922-001aCvPh.0455; (3) 081115-001a-Cv.0145; (4) 081109-001-Cv.0092; (5) 081006-022-CvEx.0150; (6) 081025-009bCv.0006, 081006-022-CvEx.0113, 081013-002-Cv.0003; (7) 081023-001-Cv.0020; (8) 081115-001a-Cv.0058.

[^142]:    ${ }^{1}$ This observation also applies to adnominal possessive relations where a numeral or quantifier precedes a possessor. Such pre-possessor numerals or quantifiers are not analyzed as "co-occurring" with the possessor noun phrase. Instead they are analyzed as prehead modifiers of the possessor noun phrase. This is shown in the elicited example in (i): the prehead modifier smua 'all' modifies the head nominal of the possessor phrase, ana 'child'. (For details on adnominal possession see $\S 8.4$ and Chapter 9.)

[^143]:    ${ }^{2}$ According to one consultant, Papuan Malay speakers prefer hitam puti 'black (and) white' over puti hitam
    'white (and) black', although both constructions are acceptable.

[^144]:    ${ }^{3}$ Concerning the semantic distinctions between the notion of definiteness and the notion of specificity, see Footnote 18 in §5.5 (p. 279).

[^145]:    ${ }^{4}$ The elicited example in (61) is based on the example in (14) in $\S 8.1$ (p. 404).

[^146]:    ${ }^{5}$ To express the notion of "every person", speakers prefer quantification with masing-masing 'each'.

[^147]:    ${ }^{6}$ The elicited example in (79) is the corrected version of the original recording tumpukang masing klompok masing-masing 'pile each[TRU] group each' [081014-017-CvPr.0043]. That is, the speaker started off by saying tumpukang masing-masing but she corrected herself, resulting in the truncated quantifier masing 'each[TRU]' and the missing locative preposition di 'at'.

[^148]:    ${ }^{7}$ Documentation: 080919-006-CvNP.0028, 080921-009-Cv.0020, 080922-001a-CvPh.1123, 080925-004Cv.0006, 081006-019-Cv.0002, 081025-006-Cv.0058, 081106-001-Ex. 0007.

[^149]:    ${ }^{1}$ Documentation: $080919-004-\mathrm{NP} .0013, \quad 080919-006-\mathrm{CvNP} .0028, \quad 080922-001 a-C v P h .0141, \quad 081006-019-$ Cv.0002, 081006-022-CvEx.0029, 081006-022-CvEx.0084, 081110-002-Cv.0075, 081006-024-CvEx.0016, 081011-007-Cv.0003, 081011-022-Cv.0200, 081025-006-Cv.0021, 081106-001-Ex.0007.
    ${ }^{2}$ The proper noun $L N G$ has developed from the noun phrase 'Liquefied Natural Gas'.

[^150]:    ${ }^{3}$ In the corpus there are only two unattested combinations, namely the marking with short pu 'poss' of long third person plural dorang '3pl' and of short first person plural torang '1pl'. The elicited examples in (i) show, however, that possessive constructions with torang/dorang pu 'our/their' are possible:
    (i) torang/dorang pu ruma ada di situ

    1pL / 3pL poss house exist at L.MED
    'our/their house is over there' [Elicited BR111020-001.002-003]

[^151]:    ${ }^{a}$ Documentation: 080916-001-CvNP.0006, 080917-008-NP.0166, 080919-004-NP.0018, 080919-004-NP.0053, 080919-004-NP.0071, 080919-004-NP.0079, 080922-001a-CvPh.0834, 080922-002-Cv.0006, 080922-005CvEx.0004, 080922-010a-NF.0002, 080922-010a-NF.0288, 081006-022-CvEx.0043, 081006-022-CvEx.0047, 081006-029-CvEx.0015, 081011-011-Cv.0055, 081011-011-Cv.0057, 081015-005-NP.0011, 081015-005-NP.0023, 081110-001-Cv.0026, 081110-002-Cv.0015, 081110-002-Cv.0018, 081110-003-Cv.0023, 081110-008-CvHt.0058, 081110-008-CvHt.0101, 081115-001a-Cv.0275, 081115-001b-Cv.0026, 081115-001b-Cv.0026, 081115-001bCv. 0057 .

[^152]:    ${ }^{4}$ Klamer, Reesink \& van Staden (2008: 116) note that this "innovation must have occurred prior to the population of Oceania", a conclusion that is based on Ross' (2001) hypothesis that it "is also probable that the formal distinction between alienable and inalienable possession entered Proto-Oceanic or an immediate precursor through Papuan contact".
    ${ }^{5}$ One reason why punya constructions are so frequent in Papuan Malay and other eastern Malay varieties, is that unlike the western Malay varieties, the eastern Malay varieties do not use suffix -nya '3poss' as a marker of possessive relations, as for instance in western Malay tangangnya 'his/her hand' (H. Hammarström p.c. 2013).

[^153]:    ${ }^{6}$ In their analysis of similar possessive constructions in Classical Malay, Yap, Matthews \& Horie (2004: 157) conclude that Classical Malay (em)punya constructions with omitted possessum denote "pronominal possessive constructions". More specifically, Yap (2007:7) maintains that "in such constructions (em)punya identifies a possessee in relation to its possessor (the genitive function), while at the same time alluding to the morphologically unrealized possessee as well (the pronominal function). Consequently, possessive pronominal (em)punya allows us to focus on the possessor, while still referring to the possessee". It seems that this analysis is also applicable to Papuan Malay.

[^154]:    ${ }^{7}$ The elicited utterance in (34) is based on an original triple possessive construction which contains the demonstrative ini 'd.prox': ... de pu laki, ini, punya kaka prempuang pu ana. In this context, ini 'd.prox' functions as a placeholder and therefore is not part of the noun phrase de pu laki 'her husband' (see §7.1.2.6 for a discussion of the placeholder uses of demonstratives).
    The subscript letters indicate which personal pronouns have which referents.

[^155]:    ${ }^{8}$ Dixon's (2010: 263) term "orientation/location" refers to spatial relations; temporal relations are not mentioned.
    ${ }^{9}$ The locative preposition di 'at, in' can also be deleted (see §10.1.5) resulting in de pu dalam itu 'that inside (part) of it'.

[^156]:    ${ }^{10}$ Alternatively, one might classify the possessive construction in (40) as an "appositive genitive', where the two noun phrases are equated denotatively", adopting the terminology used by Quirk, Leech \& Svartvik (1972: 193).

[^157]:    ${ }^{1}$ In the corpus only the following pronominal complements of $d i$ 'at, in' are attested: 2sG, 1PL, and 3pL.

[^158]:    ${ }^{2}$ In the corpus only the following pronominal complements of $k e$ 'to' are attested: 1sG, 3sG, 2PL.

[^159]:    ${ }^{3}$ In the corpus one pronominal complement of dari 'from' is unattested, namely 2pl.

[^160]:    ${ }^{4}$ The original recording says dari smuat rather than dari smua 'than all'. Most likely the speaker wanted to say dari smua temang 'than all friends' but cut himself off to replace temang 'friend' with ana~ana 'children'.

[^161]:    ${ }^{5}$ Bivalent verbs such as mara 'feel angry (about)' or takut 'feel afraid (of)' do not require but allow two syntactic arguments (see §5.3.1 and §11.1). That is, speakers quite commonly encode patients, such as orang in (38) or setang 'evil spirit' in (39), as oblique arguments rather than as direct objects.

[^162]:    ${ }^{6}$ The examples in (47a) and (48a) are taken from the corpus while the examples in (47b) and (48b) are elicited.
    ${ }^{7}$ In terms of its etymology, U. Tadmor (p.c. 2013) notes that "sama was borrowed from Sanskrit into Malay in ancient times with the meaning 'same'. Much later it also came to mean 'with' in Bazaar Malay".

[^163]:    ${ }^{8}$ In the corpus only singular pronominal complements of sperti 'similar to' are attested.

[^164]:    ${ }^{9}$ In terms of its etymology, U. Tadmor (p.c. 2013) notes that the preposition kaya 'like' is distinct from the stative verb kaya 'be rich': stative "kaya 'be rich' "was borrowed from Persian into Classical Malay" while similative kaya 'like' "was borrowed from Javanese into colloquial varieties of Indonesian many centuries later. There is no etymological connection between the two".

[^165]:    ${ }^{1}$ At this point in the research, the number of clauses with overt and elided core arguments has not been quantified to examine which strategy is the preferred one.

[^166]:    ${ }^{2}$ This total excludes serial verb constructions formed with kasi 'give' (see §11.2.1.2).

[^167]:    ${ }^{3}$ Alternatively, the oblique strategy is also called "'dative alternation', earlier 'dative shift' or 'dative movement'" (Malchukov, Haspelmath \& Comrie 2010: 18); an alternative term for "R-type obliques" is "indirective alignment" (Malchukov, Haspelmath \& Comrie 2010: 3).

[^168]:    ${ }^{4}$ See also Comrie's (1989) animacy hierarchy, Dixon's (1979:85) agency scale, and Silverstein's (1976) hierarchy of features.

[^169]:    ${ }^{a}$ As percentages are rounded to one decimal place, they do not always add up to $100 \%$.

[^170]:    ${ }^{5}$ Nedjalkov (2007: 10) groups syntactic, morphological, and clitic reciprocal constructions together as grammatical or derived reciprocals.

[^171]:    ${ }^{6}$ Nedjalkov (2007: 6) uses the term "reciprocant" rather than "reciprocator".
    ${ }^{7}$ The corpus contains one reciprocal construction formed with trivalent ceritra 'tell', similar to the elicited one in (79). For the most part, however, the original utterance it unclear, as the speaker mumbles.

[^172]:    ${ }^{8}$ Nedjalkov (2007: 8) refers to non-subject reciprocants as "co-participants".

[^173]:    (95) RECIPRocator baku V (dengang reciprocee)

[^174]:    ${ }^{10}$ The original recording says dari smuat rather than dari smua 'than all'. Most likely the speaker wanted to say dari smua temang 'than all friends' but cut himself off to replace temang 'friend' with ana~ana 'children'.

[^175]:    ${ }^{1}$ In a different context, de ana kecil can also receive the equative reading 'she (is) a small child'.

[^176]:    ${ }^{2}$ While this kind of prepositional predicate is not possible in English, it does occur in other languages such as colloquial German. Hence, (23) easily translates into ihre Mutter ist nach ... Pante-Barat.
    ${ }^{3}$ More frequently, however, motion away from a source is encoded by a verbal phrase such as kluar dari ruma 'left home' in (i) below:
    (i) sa kluar dari ruma sa punya orang-tua 1sg go.out from house 1sg poss parent 'I left home, my parents' (Lit. 'went out from the house') [081115-001b-Cv.0045]

[^177]:    ${ }^{4}$ One anonymous reviewers suggests an alternative reading of the situ-clause. The clause situ alang-alang 'there (ЕМРн) (is only) cogongrass' parallels the preceding clause sebla tida ada ruma 'on that side aren't (any houses)'. Hence, the predicate is not situ 'L.MED' but ada 'exist', with the latter having been elided: situ Ø alang-alang 'there (ЕМРН) (is only) cogongrass'.
    ${ }^{5}$ Alternatively, the utterance in (27) could be interpreted as a numeral predicate clause with a locational adjunct, with bua~bua 'rdp-fruit' as the subject, banyak 'many' as the predicate, and sini 'L.Prox' as a preposed locational adjunct, giving the literal reading 'here the various fruit (trees) are many'.

[^178]:    ${ }^{1}$ Documentation: bangung 'wake up' $081006-022-\mathrm{CvEx} .0081,080918-001-\mathrm{CvNP} .0038$; pulang 'go home' 081006-025-CvEx.0013, 081006-007-Cv. 0001 .

[^179]:    ${ }^{1}$ Alternatively, the conjunction sampe 'until, with the result that' could fill this slot.

[^180]:    ${ }^{2}$ As mentioned in $\S 10.2 .2$, the goal preposition sama 'to' is rather general in its meaning. Typically it translates with 'to' but depending on its context it also translates with 'of, from, with'. For more information regarding the etymology of sama 'to', see Footnote 7 in §10.2.2 (p. 456).

[^181]:    ${ }^{3}$ The subscript letters indicate which personal pronouns have which referents.

[^182]:    ${ }^{4}$ Papuan Malay does not have a conjunction that marks temporal simultaneity between two clauses. Instead speakers use the common noun waktu 'time' when they want to signal that the events described in each clause happened at the same time, as in (i) below:
    (i) waktu saya ... tinggal di kampung sa kerja sperti laki~laki
    time 1sG ...stay at village 1SG work similar.to RDP~husband
    'when I ... lived in the village, I worked like a man' (Lit. '(at that) time') [081014-007-Pr.0048]

[^183]:    ${ }^{5}$ The conjunction seblum 'before' is historically derived from the aspectual adverb blum 'not yet': se-blum 'one-not.yet' (see §5.4.1).

[^184]:    ${ }^{6}$ Typically, speakers report speech in the form of direct speech rather than indirect speech as in (58) (see also §6.2.1.1).

[^185]:    ${ }^{7}$ The subscript letters indicate which personal pronouns have which referents.

[^186]:    ${ }^{8}$ According to Stassen (2000: 7-8), "the general trend all over the world is that zero-coordination tends to be marginalized into specific functions or is replaced altogether by overt marking strategies". Mithun (1988: 351-357) suggests that this development is due to the global increase in bilingualism and in literacy. With respect to bilingualism, Mithun (1988: 351) observes that "an astonishing number of coordinating conjunctions have been recently borrowed into languages that previously had none". As for the role of literacy, Mithun (1988: 356) notes that, whereas in oral language intonation suffices to signal the syntactic structure of juxtaposed constituents, written language requires the overt and "systematic specification of the precise nature of link" to disambiguate syntactic relations.

[^187]:    ${ }^{1}$ The 2,215 lexemes are extracted from the 2,458 -item list, discussed in $\S 1.11 .6$. The remaining 243 items include lexemes historically derived by (unproductive) affixation of loanwords, such as berkomunikasi 'communicate' as well as collocations such as ade-kaka 'siblings' (see $\S 3.1$ and $\S 3.2$, respectively).

[^188]:    ${ }^{1}$ The use of the second singular person serves as a rhetorical figure of speech ("apostrophe") and refers to the absent person who irritated the players (see also §6.2.1.1.3).

[^189]:    ${ }^{2}$ Klara refers to Nelci (see (50) and (53)).

[^190]:    ${ }^{3}$ Lit. 'her father' ( $d e$ ' 3 sG ' refers to the speaker's daughter).

[^191]:    ${ }^{4}$ Lit. 'her father' ( $d e$ ' 3 sG ' refers to the speaker's daughter).
    ${ }^{5}$ Lit. 'her uncle' ( $d e$ ' 3 sG ' refers to the speaker's daughter).

[^192]:    ${ }^{6}$ Lit. 'her aunt' ( $d e$ ' 3 sG' refers to the speaker's daughter).

[^193]:    ${ }^{7}$ One of the two detained persons is Pawlus. It is unclear whether the second person is Iskia or someone else.
    ${ }^{8}$ The previous evening, the narrator had already told the same story, but due to logistical problems, the author was not able to record the text. The next morning, however, the narrator was willing to retell her story, with the same audience being present.

[^194]:    ${ }^{9}$ The personal pronoun $d e$ ' 3 SG ' refers to the recording author.

[^195]:    ${ }^{10}$ This narrative is one of the three personal narratives mentioned in §1.11.4.1, which the author recorded with the help of her host Sarlota Merne. Being aware of the target language variety, she was present during these elicitations and explained to the narrator that he should narrate his story in logat Papua 'Papuan speech variety'. Being one of the early recordings, the text includes quite a few instances of code-switches with Indonesian, which are marked with "[SI]".

[^196]:    ${ }^{11}$ This clause refers to the story about the statue and the tree which the narrator had told before being asked for directions.

[^197]:    ${ }^{12}$ The second male child did not participate in this exchange.
    ${ }^{13}$ The third male child did not participate in this exchange.

[^198]:    ${ }^{1}$ Population totals for Papua province are also available at http://papua.bps.go.id/yii/9400/index.php/post/ 552/JumlahPendudukPapua (accessed 21 Oct 2013), and for Papua Barat province at http://irjabar.bps.go. id/publikasi/2011/StatistikDaerahProvinsiPapuaBarat2011/baca_publikasi.php (accessed 21 Oct 2013).
    ${ }^{2}$ This data is available under the category Sosial Budaya 'Social (affairs) and Culture' at http://papua.bps.go. id/yii/9400/index.php/site/page?view=sp2010 (accessed 21 Oct 2013).

