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Angela Kluge

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buat Kori†, Sarlota†, Nela† dorang

Contents

Preface xv

Acknowledgments xvii

Abbreviations xxi

Conventions for examples xxiii

Maps xxvii

1 Introduction 1
- 1.1 Geographical setting . . . 1
- 1.2 Genetic affiliations . . . 2
  - 1.2.1 Papuan Malay, a Malayic language . . . 3
  - 1.2.2 Papuan Malay, a non-creole descendant of low Malay . . . 4
  - 1.2.3 Papuan Malay, a distinct language within the Malay continuum . . . 8
- 1.3 Dialect situation . . . 10
- 1.4 Linguistic setting . . . 12
- 1.5 Sociolinguistic profile . . . 14
  - 1.5.1 Language use . . . 16
  - 1.5.2 Language attitudes . . . 19
- 1.6 Typological profile of Papuan Malay . . . 21
  - 1.6.1 General typological profile . . . 21
  - 1.6.2 Papuan Malay as a language of the Papuan contact zone . . . 27
  - 1.6.3 Papuan Malay as an eastern Malay variety . . . 33
- 1.7 Demographic information . . . 37
  - 1.7.1 Speaker numbers . . . 37
  - 1.7.2 Occupation details . . . 39
  - 1.7.3 Education and literacy rates . . . 40
  - 1.7.4 Religious affiliations . . . 42
- 1.8 History of Papuan Malay . . . 42
- 1.9 Previous research on Papuan Malay . . . 47
  - 1.9.1 Early linguistic studies on the Malay varieties of West Papua . . . 47
  - 1.9.2 Recent linguistic descriptions of Papuan Malay . . . 49
  - 1.9.3 Sociolinguistic and sociohistorical studies . . . 50
- 1.10 Available materials in Papuan Malay . . . 51

1.11 Present study . . . 52
1.11.1 Theoretical considerations . . . 52
1.11.2 Setting of the research location . . . 53
1.11.3 Methodological approach and fieldwork . . . 55
1.11.4 Papuan Malay corpus and speaker sample . . . 56
1.11.5 Data transcription, analysis, and examples . . . 60
1.11.6 Word list . . . 62

2 Phonology 65
2.1 Segment inventory . . . 65
2.1.1 Consonant system . . . 66
2.1.2 Vowel system . . . 70
2.2 Phonological processes . . . 74
2.2.1 Nasal place assimilation . . . 74
2.2.2 Tap/trill alternation of the alveolar rhotic . . . 76
2.2.3 Centralization of vowels . . . 77
2.3 Phonetic processes . . . 77
2.3.1 Phonetic processes for consonants . . . 78
2.3.2 Phonetic processes for vowels . . . 82
2.3.3 Alternative realizations of the VC sequences /aj/ and /aw/ . . . 84
2.4 Phonotactics . . . 86
2.4.1 Consonant phoneme distribution and sequences . . . 87
2.4.2 Vowel phoneme distribution and sequences . . . 89
2.4.3 Syllable structures . . . 93
2.4.4 Stress patterns . . . 96
2.5 Non-native segments and loanwords . . . 99
2.5.1 Non-native segments . . . 99
2.5.2 Phonological and phonetic processes in loanwords . . . 102
2.5.3 Phonotactics in loanwords . . . 103
2.6 Orthographic conventions . . . 116
2.7 Summary . . . 117

3 Word-formation 119
3.1 Affixation . . . 119
3.1.1 Introduction . . . 119
3.1.2 Prefix *TER-* 'ACL' . . . 126
3.1.3 Suffix *-ang* 'PAT' . . . 136
3.1.4 Prefix *PE(N)-* 'AG' . . . 145
3.1.5 Prefix *BER-* 'VBLZ' . . . 155
3.1.6 Suffix *-nya* '3POSSR' . . . 165
3.1.7 Circumfix *ke-/-ang* 'NMLZ' . . . 171
3.1.8 Variables of the communicative event . . . 175
3.2 Compounding . . . 178
3.2.1 Demarcation of compounds from phrasal expressions . . . 178

3.2.2 Types of collocations . . . 181
3.3 Summary . . . 184

4 Reduplication **187**
4.1 Lexeme formation . . . 187
4.1.1 Full reduplication . . . 188
4.1.2 Partial reduplication . . . 192
4.1.3 Imitative reduplication . . . 194
4.2 Lexeme interpretation . . . 194
4.2.1 Reduplication of nouns . . . 195
4.2.2 Reduplication of verbs . . . 198
4.2.3 Reduplication of adverbs . . . 203
4.2.4 Reduplication of numerals and quantifiers . . . 204
4.2.5 Reduplication of function words . . . 205
4.2.6 Gesamtbedeutung of reduplication . . . 207
4.3 Reduplication across eastern Malay varieties . . . 210
4.3.1 Lexeme formation . . . 210
4.3.2 Lexeme interpretation . . . 212
4.3.3 Interpretational shift . . . 214
4.4 Summary . . . 215

5 Word classes **217**
5.1 Introduction . . . 217
5.2 Nouns . . . 218
5.2.1 Common nouns . . . 219
5.2.2 Proper nouns . . . 222
5.2.3 Location nouns . . . 224
5.2.4 Direction nouns . . . 230
5.2.5 Time-denoting nouns . . . 233
5.2.6 Classifying nouns . . . 239
5.2.7 Kinship terms . . . 239
5.3 Verbs . . . 242
5.3.1 Valency . . . 244
5.3.2 Predicative and attributive functions . . . 246
5.3.3 Adverbial modification . . . 250
5.3.4 Intensification . . . 251
5.3.5 Grading . . . 252
5.3.6 Negation . . . 255
5.3.7 Causative constructions . . . 255
5.3.8 Reciprocal constructions . . . 257
5.3.9 Morphological properties . . . 258
5.3.10 Summary . . . 260
5.4 Adverbs . . . 261
5.4.1 Aspectual adverbs . . . 262

5.4.2 Frequency adverbs . . . 264
5.4.3 Affirmation and negation adverbs . . . 265
5.4.4 Modal adverbs . . . 266
5.4.5 Temporal adverbs . . . 268
5.4.6 Focus adverbs . . . 271
5.4.7 Degree adverbs . . . 273
5.4.8 Expressing manner . . . 275
5.4.9 Summary . . . 276
5.5 Personal pronouns . . . 278
5.6 Demonstratives . . . 280
5.6.1 Adnominal uses . . . 280
5.6.2 Pronominal uses . . . 282
5.6.3 Adverbial uses . . . 283
5.6.4 Stacking of demonstratives . . . 283
5.7 Locatives . . . 284
5.7.1 Pronominal uses . . . 285
5.7.2 Adnominal uses . . . 286
5.8 Interrogatives . . . 287
5.8.1 *siapa* 'who' . . . 288
5.8.2 *apa* 'what' . . . 291
5.8.3 *mana* 'where, which' . . . 293
5.8.4 *bagemana* 'how' . . . 295
5.8.5 *kapang* 'when' . . . 297
5.8.6 *knapa* 'why' . . . 298
5.8.7 Interrogative uses of mid-range quantifier *brapa* 'several' . . . 299
5.8.8 Interrogatives denoting indefinite referents . . . 300
5.8.9 Summary . . . 301
5.9 Numerals . . . 302
5.9.1 Cardinal numerals . . . 302
5.9.2 Ordinal numerals . . . 305
5.9.3 Distributive numerals . . . 306
5.9.4 Additional function of *satu* 'one' . . . 306
5.10 Quantifiers . . . 307
5.10.1 Universal and mid-range quantifiers . . . 307
5.10.2 Distributive quantifiers . . . 310
5.11 Prepositions . . . 311
5.12 Conjunctions . . . 313
5.13 Tags, placeholders etc. . . . 315
5.13.1 Tags . . . 315
5.13.2 Placeholders and hesitation markers . . . 316
5.13.3 Interjections . . . 316
5.13.4 Onomatopoeia . . . 319
5.14 Variation in word class membership . . . 320

5.15 Summary . . . 324

6 Personal pronouns 325
6.1 Pronominal uses . . . 327
6.1.1 Distribution of personal pronouns within the clause . . . 327
6.1.2 Modification of personal pronouns . . . 335
6.1.3 Personal pronouns in adnominal possessive constructions . . . 337
6.1.4 Personal pronouns in inclusory conjunction constructions . . . 338
6.1.5 Personal pronouns in summary conjunctions . . . 341
6.1.6 Personal pronouns in appositional constructions . . . 342
6.2 Adnominal uses . . . 344
6.2.1 Adnominal singular personal pronouns . . . 348
6.2.2 Adnominal plural personal pronouns . . . 359
6.3 Summary . . . 366

7 Demonstratives and locatives 367
7.1 Demonstratives . . . 368
7.1.1 Syntax and forms of demonstratives . . . 368
7.1.2 Functions of demonstratives . . . 374
7.2 Locatives . . . 389
7.2.1 Syntax and forms of locatives . . . 389
7.2.2 Functions of locatives . . . 391
7.3 Combining demonstratives and locatives . . . 397
7.4 Summary . . . 397

8 Noun phrases 401
8.1 Introduction . . . 401
8.2 N-MOD structure . . . 405
8.2.1 Verbs [N V] . . . 405
8.2.2 Nouns [N N] . . . 407
8.2.3 Personal pronouns [N PRO] . . . 411
8.2.4 Demonstratives [N DEM] . . . 412
8.2.5 Locatives [N LOC] . . . 413
8.2.6 Interrogatives [N INT] . . . 413
8.2.7 Prepositional phrases [N PP] . . . 413
8.2.8 Relative clauses [N RC] . . . 414
8.3 N-MOD/MOD-N structure . . . 415
8.3.1 Numerals [N NUM / NUM N] . . . 415
8.3.2 Quantifiers [N QT / QT N] . . . 418
8.4 MOD-N structure: Adnominal possession . . . 422
8.5 Apposition . . . 423
8.6 Summary . . . 423

9 Adnominal possessive relations 425
9.1 Possessive marker *punya* 'POSS' . . . 426
9.1.1 POSSR-NP *punya*/*pu* POSSM-NP . . . 427
9.1.2 POSSR-NP =*p* POSSM-NP . . . 431
9.1.3 POSSR-NP Ø POSSM-NP . . . 432
9.1.4 Grammaticalization of *punya* 'POSS' . . . 433
9.2 Realizations of POSSR-NP and POSSM-NP . . . 434
9.2.1 Syntactic and semantic properties . . . 434
9.2.2 Elision of the possessum noun phrase . . . 436
9.2.3 Recursive adnominal possessive constructions . . . 436
9.3 Noncanonical adnominal possessive constructions . . . 437
9.3.1 Locational relations and association . . . 437
9.3.2 Beneficiary relations . . . 440
9.3.3 Intensifying function of *punya* 'POSS' . . . 440
9.3.4 *punya* 'POSS' in reflexive expressions . . . 443
9.4 Summary and discussion . . . 443

10 Prepositions and the prepositional phrase 445
10.1 Prepositions encoding location in space and time . . . 445
10.1.1 *di* 'at, in' . . . 446
10.1.2 *ke* 'to' . . . 446
10.1.3 *dari* 'from' . . . 447
10.1.4 *sampe* 'until' . . . 449
10.1.5 Elision of prepositions encoding location . . . 450
10.2 Prepositions encoding accompaniment/instruments, goals, and benefaction 452
10.2.1 *dengang* 'with' . . . 452
10.2.2 *sama* 'to' . . . 454
10.2.3 *untuk* 'for' . . . 457
10.2.4 *buat* 'for' . . . 459
10.3 Prepositions encoding comparisons . . . 460
10.3.1 *sperti* 'similar to' . . . 461
10.3.2 *kaya* 'like' . . . 462
10.3.3 *sebagey* 'as' . . . 463
10.4 Summary . . . 464

11 Verbal clauses 467
11.1 Intransitive and transitive clauses . . . 467
11.1.1 Verbal clauses with monovalent verbs . . . 468
11.1.2 Verbal clauses with bivalent verbs . . . 469
11.1.3 Verbal clauses with trivalent verbs . . . 471
11.2 Causative clauses . . . 480
11.2.1 Syntactic causatives . . . 481
11.2.2 Lexical causatives . . . 486
11.2.3 Periphrastic causative constructions . . . 487

11.2.4 Summary . . . 488
11.3 Reciprocal clauses . . . 489
11.3.1 Syntactic reciprocals . . . 490
11.3.2 Lexical reciprocals . . . 494
11.3.3 Summary . . . 495
11.4 Existential clauses . . . 496
11.4.1 One-argument existential clauses . . . 496
11.4.2 Two-argument existential clauses . . . 499
11.4.3 Summary . . . 500
11.5 Comparative clauses . . . 501
11.5.1 Degree-marking comparative clauses . . . 501
11.5.2 Identity-marking comparative clauses . . . 504
11.5.3 Summary . . . 507
11.6 Summary . . . 507

12 Nonverbal clauses **509**
12.1 Nonverbal clause subjects . . . 509
12.2 Nominal predicate clauses . . . 511
12.3 Numeral and quantifier predicate clauses . . . 513
12.4 Prepositional predicate clauses . . . 514
12.4.1 Locational prepositional clauses . . . 514
12.4.2 Nonlocational prepositional clauses . . . 517
12.5 Summary . . . 518

13 Negative, interrogative, and directive clauses **519**
13.1 Negative clauses . . . 519
13.1.1 Negation with *tida*/*tra* 'NEG' . . . 519
13.1.2 Negation with *bukang* 'NEG' . . . 522
13.2 Interrogative clauses . . . 524
13.2.1 Content questions . . . 524
13.2.2 Polar questions . . . 524
13.2.3 Alternative questions . . . 528
13.3 Directive clauses . . . 529
13.3.1 Imperatives and hortatives . . . 529
13.3.2 Permissions and obligations . . . 532
13.3.3 Prohibitives . . . 534

14 Conjunctions and constituent combining **537**
14.1 Introduction . . . 537
14.2 Conjunctions combining same-type constituents . . . 540
14.2.1 Addition . . . 540
14.2.2 Alternative . . . 542
14.2.3 Time and/or condition . . . 543
14.2.4 Consequence . . . 548

14.2.5 Contrast . . . 551
14.2.6 Similarity . . . 554
14.3 Conjunctions combining different-type constituents . . . 554
14.3.1 Complementizer *bahwa* 'that' . . . 555
14.3.2 Relativizer *yang* 'REL' . . . 555
14.4 Juxtaposition . . . 558
14.5 Summary . . . 560

Appendix A: Word lists **565**
A.1 Papuan Malay roots . . . 565
A.2 Loanwords . . . 593
A.3 Lexical items historically derived by (unproductive) affixation of Malay roots . . . 612

Appendix B: Texts **623**
B.1 Conversation: Playing volleyball; morning chores . . . 623
B.2 Conversation: Buying soap; bringing gasoline to Webro . . . 631
B.3 Conversation: Wanting bananas . . . 641
B.4 Narrative: A drunkard in the hospital at night . . . 643
B.5 Narrative: A motorbike accident . . . 645
B.6 Narrative: Pig hunting with dogs . . . 654
B.7 Expository: Directions to a certain statue and tree . . . 658
B.8 Expository: Sterility . . . 660
B.9 Hortatory: Don't get dirty! . . . 663
B.10 Hortatory: Bathe in the ocean! . . . 663
B.11 Joke: Drawing a monkey . . . 665
B.12 Joke: Dividing three fish . . . 666

Appendix C: Overview of recorded corpus **669**

Appendix D: OLAC resources for the languages of the Sarmi regency **681**

Appendix E: Population totals for West Papua **683**

Appendix F: Affixation **687**
F.1 Prefix *TER-* . . . 687
F.2 Suffix *-ang* . . . 689
F.3 Prefix *PE(N)-* . . . 690
F.4 Prefix *BER-* . . . 692
F.5 Suffix *-nya* . . . 694
F.6 Circumfix *ke-/-ang* . . . 696

References **699**

Index **723**
Name index 723
Language index 727
Subject index 731

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
ACL	accidental
ADJCT	adjunct
ADNOM	adnominal
AdPoss.	adnominal possessive
ADV	adverb
ADV.T	adverb, temporal
ADVS	adversative
AFFR	affricate
AFFX	affixation
AG	agent
AGT	agentive
AL	alienable
Alt.	alternative
ALV	alveolar
AN	animate
APR	approximant
A-P-ULT	antepenultimate
ARGT	argument
ASSCT	association
ATTR	attributive
AUG	augmentation
BEN	beneficiary
BW	base word
C	consonant
CAUS	causative
CIRC	circumstance
CL	clause
CMPR	comparative
CNJ	conjunction
CST	contrastive
D.DIST	demonstrative, distal
D.PROX	demonstrative, proximal
DEM	demonstrative
DIM	diminution
DIPH	diphthong
DO	direct object
DY	dynamic
EDC	education
+EDC	better educated
-EDC	less educated
ELS	elision
EMPH	emphasis, emphatic
FRIC	fricative
GLOT	glottal
HUM	human
ILCT	interlocutor
INAL	inalienable
INAN	inanimate
INS	instrument
INT	interrogative
INTENS	intensity
INTR	intransitive
Is	Isirawa
k.o.	kind of
L.DIST	locative, distal
L.MED	locative, medial
L.PROX	locative, proximal
LAB	labial
LAT-APRX	lateral-approximant
LIG	ligature
lim.	limited
LIQ	liquid
LOC	locative
LOCT	location
marg.	marginal
med.	medium
MOD	modifier
N	noun
N.COM	noun, common
N.LOC	noun, location
N.TIME	noun, time-denoting

NAS	nasal
NEG	negation, negative
NEG.IMP	negative imperative
NMLZ	nominalizer
NOM	nominal
NP	noun phrase
NUM	numeral
O	object
Obl.	oblique
OBSTR	obstruent
OMV	object of mental verb
ORTH	orthography
Orthogr.	orthography
oSb	older sibling
OUTSD	outsider
PAL	palatal
PAL-ALV	palato-alveolar
PAT	patient
PFX	prefix
PHON	phoneme
PL	plural
PL-HOLD	placeholder
PLOS	plosive
PN	proper noun
POL	politics
POSS	possessive
POSSM	possessum
POSSR	possessor
PP	prepositional phrase
prec.	precedes
PRED	predicate, predicative
PRO	personal pronoun
PROD	productivity
PRONOM	pronominal
P-ULT	penultimate
QT	quantifier
QUANT	quantity
RC	relative clause
RDP	reduplicant
REC	recipient
RECP	reciprocal
REL	religion
REL	relativizer
RES	result
RET	retention
RHOT	rhotic
S	subject
s.o.	someone
s.th.	something
SG	singular
SI	Standard Indonesian
Sim.	similarity
SPK	speaker
SPM	speech mistake
ST	stative
STAT	status
+STAT	higher social status
-STAT	lower social status
STD	standard of comparison
SUPL	superlative
SYLB	syllable
TOP	topic
TRU	truncated
ULT	ultimate
UP	unclear pronunciation
UV	undergoer voice
V	vowel
V	verb
V.BI	verb, bivalent
V.MO	verb, monovalent
V.TRI	verb, trivalent
VBLZ	verbalizer
VDI	verb, ditransitive
VEL	velar
VOC	vocative
VP	verb phrase
VSI	verb, intransitive stative
VTR	verb, transitive
ySb	younger sibling

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
~	separates reduplicant and base
–	morpheme boundary
=	clitic boundary
Ø	omitted constituent
…	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
??	precedes only marginally grammatical examples
á	acute accent signals a slight increase in pitch of the stressed syllable
VVV	vowel lengthening
Is	utterance in the Isirawa language
UP	unclear pronunciation
$_{i, j}$	subscript letters keep track of what different terms refer to

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'
:	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'
[]	surrounds truncated utterances, or speech mistakes
TRU	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	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, 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 "Word-formation". 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.

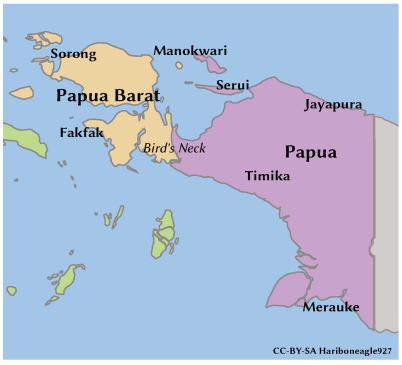
In the translations, gender, tense, and aspect are often not deducible; they are given as in the original context.

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

Maps



(a) Southeast Asia with West Papua



(b) West Papua with its provinces Papua and Papua Barat



(c) Sarmi regency with some of its towns and villages

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 §1.2 and §1.3, respectively. The linguistic setting of Papuan Malay is examined in §1.4, followed in §1.5 by a description of its sociolinguistic profile and in §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 §1.8. Previous research on the language is summarized in §1.9, followed in §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.

[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 §1.2 for more details on the genetic affiliations of Papuan Malay.)

"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 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 Malayo-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.

[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.

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 Malayo-Polynesian" 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 Malayo-Sumbawan. 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 non-creole 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 §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: 197–251). 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

[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).

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 "contact-induced language change". Following this framework, nativized pidgins are the long-term "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 non-pidgin 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-

[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.

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 ("Ø" 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 bicara bahasa, maka* ***Ø*** *pake bahasa orang*
because 3SG NEG be.able speak language therefore use language person
bisu, ... baru ***Ø Ø*** *foto, 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 [ə] 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.

[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).

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

[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).

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	6a
Threatened	6b
Shifting	7
Moribund	8a
Nearly extinct	8b

[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 §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).

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; 8a (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).

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

[a] See also Footnote 10 on p. 13 for more information.

- 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 Papuan 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: 10–18). 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	[auq]	(Shifting)	320
Bonggo	[bpg]	(Moribund)	320
Fedan	[pdn]	(Moribund)	280
Kaptiau	[kbi]	(Shifting)	230
Liki	[lio]	(Moribund)	11
Masimasi	[ism]	(Nearly extinct)	10
Mo	[wkd]	(Shifting)	550
Sobei	[sob]	(Shifting)	1,850
Sunum	[ynm]	(Threatened)	560
Tarpia	[tpf]	(Moribund)	630
Yarsun	[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

[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).

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.dɪk] 'younger sibling' or *tidak* ['ti.dɐk] 'NEG', instead of Papuan Malay *ade* ['a.dɛ] '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

[13] For detailed grammatical descriptions of Indonesian see for instance Mintz (1994) and Sneddon (2010).

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.

[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.

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', *bahasa 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).

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 Jiwa* '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.)

[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".

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 §1.6.1, followed in §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 §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, tʃ, dʒ, s, h, m, n, ɲ, ŋ, r, l, j, w/. All

consonants occur as onsets,[17] while the range of consonants occurring in the coda position is much smaller. The five vowels are /i, ɛ, u, ɔ, 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* 'PAT' 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, *PE(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]

[17] Velar /ŋ/ 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 *PE(N)-* have two allomorphs each, namely *ter-* and *ta-* (§3.1.2.1), and *pe(N)-* and *pa(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.

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 §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*** *Ø*
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]

[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.

(4) ***bapa desa pu motor itu*** *Hurki de ada taru* ***Ø*** *di Niwerawar*
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 aspect-marking 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]

[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 than "marker" (see §11.5).

[23] Auxiliary verbs are briefly mentioned in §13.3, in Chapter 13; a detailed description of these verbs is left for future research.

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 1SG
'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** punya jubi ...*
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 *ka* '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 (§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]

[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).

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.

[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

Table 1.5: Pertinent features of Austronesian languages in general vis-à-vis Papuan Malay features

Austronesian languages	Papuan Malay	
Phonemic l/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)

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).

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 nouns	no	(Chap. 3 & 5)
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

[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).

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 nouns	no	(Chap. 3 & 5)
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 §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 (NM-M/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.)

[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.

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 *ta-*, *pa(N)-*, and *ba-*. 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 *TER-* has only limited productivity, while prefix *BER-* is unproductive. In the other eastern Malay varieties, by contrast, the corresponding prefixes *ta-* and *ba-* are very productive. Papuan Malay prefix *PE(N)-* is, at best, marginally productive. In Manado Malay *paŋ-* 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	*TER-*	*ta-*	*ta-*	*ta-*	*tə(r)-*	*ta-*	*ta-*	*ta-*
PROD	lim.	yes	yes	yes	yes	yes	yes	yes
Prefix *PE(N)-*								
Form	*PE(N)-*	*pa(N)-*				*paŋ-*	*pa-*	*pang-*
PROD	marg.	no				yes	no	yes
Prefix *BER-*								
Form	*BER-*	*ba-*	*ba-*	*ba-*	*bə(r)-*	*ba-*	*ba-*	*ba-*
PROD	no	yes	yes	yes	yes	yes	yes	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

[32] Voorhoeve (1983: 4), by contrast, suggests that *pa-* "is no longer morphologically distinct".

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	AM	BM	KM	LM	NMM /	TM
Type of reduplication							
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 (§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* 'NEG' 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

[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.

Table 1.11: Some phonological and syntactic features in Papuan Malay and other eastern Malay varieties

Phonology: Diphthongs								
	PM	AM	BM	KM	LM	MM	NMM / TM	
DIPH	no	yes			no	no	yes	yes
Adnominal possessive constructions: Noncanonical uses of the ligature (LIG)								
	PM	AM	BM	KM	LM	MM	NMM / TM	
LIG use	yes	yes						yes
Verbal clauses: Argument elision								
	PM	AM	BM	KM	LM	MM	NMM / TM	
Elision	yes	yes				yes		
Verbal clauses: Morphosyntactic status of reciprocity marker *baku* 'RECP'								
	PM	AM	BM	KM	LM	MM	NMM / TM	
RECP	word	prefix	prefix	prefix		prefix	prefix	prefix
Negative clauses: Contrastive function of *bukang* 'NEG'								
	PM	AM	BM	KM	LM	MM	NMM / TM	
CST	yes	yes				yes		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 Papuan 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 non-Papuans 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-

[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.

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).

[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.

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

[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).

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-

[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).

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

[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).

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]

[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).

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]

[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).

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.

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 §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 non-Indonesian.

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]

[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".

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

[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".

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 §1.3, §1.5, and §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

[51] Donohue (1997) refers to Papuan Malay as spoken in the Merauke area as "Merauke Malay".

(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)

[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?v=IWiQK0qKIj8 (accessed 8 May 2015).
[53] *Denias* is available at http://www.youtube.com/watch?v=kc683zv6H_E (accessed 8 January 2016).

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 §1.11.2. The methodological approach and the field work are described in §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 §1.11.5. Finally, §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 §1.4 and §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.

[54] 'West Papua Web' is available at http://www.papuaweb.org/ (last updated in January 2012) (accessed 8 January 2016).

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.

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.

[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).

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 §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† Merne, his wife Sarlota†, 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 §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 Papua*. 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.

[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)

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

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-minute 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

[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).

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* ___
1SG not.yet know 2SG POSS word D.DIST word ___
'I don't yet know that word of yours, the word ___'

(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 Blust 2013: 151–156). 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 *desa* 'village' and *mereka* '3PL' (the corresponding Papuan 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.

[59] Phonology Assistant is available at http://phonologyassistant.sil.org (accessed 8 January 2016).

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 §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 /ʃ/. 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 §2.6 and a summary in §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.

[1] Two important sources for the description of the Papuan Malay phonology are Donohue (2003) and Sutri Narfafan & Donohue (under review).

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					tʃ	dʒ				
NAS		m		n			ɲ		ŋ	
FRIC			s							h
RHOT				r						
LAT-APRX				l						
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 §2.2.2 and §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
		[p̚],	an unreleased voiceless bilabial stop
	/b/	[b],	a voiced bilabial stop
	/t/	[t],	a voiceless alveolar stop
		[t̚],	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	/ʧ/	[ʧ],	a voiceless palato-alveolar affricate
	/dʒ/	[dʒ],	a voiced palato-alveolar affricate
Nasal	/m/	[m],	a voiced bilabial nasal
	/n/	[n],	a voiced alveolar nasal
	/ɲ/	[ɲ],	a voiced palatal nasal
	/ŋ/	[ŋ],	a voiced velar nasal
Fricative	/s/	[s],	a voiceless alveolar fricative
	/h/	[h],	a voiceless glottal fricative
Liquid	/r/	[r],	a voiced alveolar trill
		[r̥],	a voiceless alveolar trill
		[ɾ],	a voiced alveolar tap
	/l/	[l],	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
p~b~m		[ˈpu.lu]	*pulu*	‘tens’
		[ˈbu.lu]	*bulu*	‘body hair’
		[ˈmu.lʊt̚]	*mulut*	‘mouth’
t~d~n	t~d	[ˈtᵩŋ]	*tong*	‘1PL’
		[ˈdᵩŋ]	*dong*	‘3PL’
	t~n	[ˈti.kɐr]	*tikar*	‘plaited mat’
		[ˈni.ka]	*nika*	‘marry officially’
	d~n	[ˈdɛ.kɐt̚]	*dekat*	‘near’
		[ˈnɛ.kɐt̚]	*nekat*	‘be determined’
k~g		[ˈka.ja]	*kaya*	‘like’
		[ˈga.ja]	*gaya*	‘manner’
ʧ~dʒ~t/d	ʧ~dʒ	[ˈʧu.ɾɐŋ]	*curang*	‘be dishonest’
		[ˈdʒu.ɾɐŋ]	*jurang*	‘steep decline’
	ʧ~t	[ˈʧɐm.pʊr]	*campur*	‘mix’
		[ˈtɐm.pɐr]	*tampar*	‘beat’
	dʒ~d	[ˈdʒa.ɾi]	*jari*	‘digit’
		[ˈda.ɾi]	*dari*	‘from’
s~h		[ˈsɐn.tɐŋ]	*santang*	‘coconut milk’
		[ˈhɐn.tɐm]	*hantam*	‘strike’
m~n~ɲ	m~n	[ˈma.si]	*masi*	‘still’
		[ˈna.si]	*nasi*	‘cooked rice’
	m~ɲ	[ˈmɛ.mɐŋ]	*memang*	‘indeed’
		[ˈɲa.mɐŋ]	*nyamang*	‘be comfortable’
	n~ɲ	[ˈna.kɐl]	*nakal*	‘be mischievous’
		[ˈɲa.wa]	*nyawa*	‘soul’
l~r		[ˈra.wɐŋ]	*rawang*	‘be haunted’
		[ˈla.wɐŋ]	*lawang*	‘oppose’
j~ɲ		[ˈjɐŋ]	*yang*	‘REL’
		[ˈɲa.wa]	*nyawa*	‘soul’
j~w		[ˈjɐŋ]	*yang*	‘REL’
		[ˈwa.ɾʊŋ]	*warung*	‘food stall’

Table 2.4: Consonant contrast in root-internal position

Contrast		Item	Orthogr.	Gloss
p~b~m	p~b	[ˈkɛ.pʊŋ]	*kepung*	‘surround’
		[ˈkɛ.bʊŋ]	*kebung*	‘garden’
	p~m	[ˈra.pi]	*rapi*	‘be neat’
		[ˈra.mɛ]	*rame*	‘be bustling’
	b~m	[ˈsu.bʊr]	*subur*	‘be fertile’
		[ˈsu.mʊr]	*sumur*	‘(a) well’
t~d~n	t~d	[ˈhi.tʊŋ]	*hitung*	‘count’
		[ˈhi.dʊŋ]	*hidung*	‘nose’
	t~n	[ˈbu.tu]	*butu*	‘need’
		[ˈbu.nu]	*bunu*	‘kill’
	d~n	[ˈa.dɛ]	*ade*	‘younger sibling’
		[ˈa.nɛ]	*ane*	‘be strange’
k~g~ŋ		[ˈla.ki]	*laki*	‘husband’
		[ˈla.gi]	*lagi*	‘again’
		[ˈla.ŋɪt̚]	*langit*	‘sky’
ʧ~dʒ~t/d	ʧ~dʒ	[ˈbɐn.ʧi]	*banci*	‘homosexual male’
		[ˈbɐn.dʒɪr]	*banjir*	‘flood’
	ʧ~t	[ˈʧa.ʧɐt̚]	*cacat*	‘be disabled’
		[ˈʧa.tɐt̚]	*catat*	‘make a note’
	dʒ~d	[ˈtʊn.dʒʊk]	*tunjuk*	‘show’
		[ˈtʊn.dʊk]	*tunduk*	‘bow’
s~h		[ˈpa.sɪr]	*pasir*	‘sand’
		[ˈpa.hɪt̚]	*pahit*	‘be bitter’
m~n~ɲ~ŋ	m~n	[ˈmɛ.mɐŋ]	*memang*	‘indeed’
		[mɛ.ˈnɐŋ]	*menang*	‘win’
	m~ɲ	[ˈta.mu]	*tamu*	‘guest’
		[ˈta.ɲa]	*tanya*	‘ask’
	m~ŋ	[ˈla.mɐr]	*lamar*	‘apply for’
		[ˈla.ŋɐr]	*langar*	‘collide with’
	n~ɲ~ŋ	[ˈta.nɐm]	*tanam*	‘plant’
		[ˈta.ɲa]	*tanya*	‘ask’
		[ˈta.ŋɐŋ]	*tangang*	‘hand’

Table 2.5: Consonant contrast in root-internal position continued

Contrast	Item	Orthogr.	Gloss
l~r	[ˈbu.lu]	*bulu*	‘body hair’
	[ˈbu.ɾu]	*buru*	‘hunt’
j~ɲ	[ˈa.jɐm]	*ayam*	‘chicken’
	[ˈa.ɲɐm]	*anyam*	‘plait’
j~w	[ˈla.jɐŋ]	*layang*	‘serve’
	[ˈla.wɐŋ]	*lawang*	‘oppose’
w~ŋ	[ˈba.wɐŋ]	*bawang*	‘onion’
	[ˈba.ŋʊŋ]	*bangung*	‘wake up’

Table 2.6: Consonant contrast in word-final position

Contrast		Item	Orthogr.	Gloss
STOP~NASAL	p~m	[ˈa.sɐpˀ]	*asap*	‘smoke’
		[ˈa.sɐm]	*asam*	‘sour’
	t~ŋ	[ˈbu.ɐt]	*buat*	‘make’
		[ˈbu.ɐŋ]	*buang*	‘discard’
	k~ŋ	[ˈdʒa.ɾɐk]	*jarak*	‘distance between’
		[ˈdʒa.ɾɐŋ]	*jarang*	‘rarely’
l~r		[ˈmɐn.dʊl]	*mandul*	‘be sterile’
		[ˈmʊn.dʊr]	*mundur*	‘smoke’
j~w		[ˈtɐj]	*tay*	‘excrement’
		[ˈtɐw]	*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], [ɪ], or [e], /u/ as [u], [ʊ], or [o], and /ɛ/ as [ɛ], [ɛ̨], or [ə]. The remaining two vowels have two allophones each: /ɔ/ can be realized as [ɔ] or [ɔ̝], and /a/ as [a] or [ɐ].[2] While the centralized allophones for the two close vowels /i/ and /u/ and for the open vowel /a/ are represented with distinct entries in the IPA chart, this is not the case for the open-mid vowels /ɛ/ and /ɔ/. In terms of their degree of openness, their centralized allophones

[2] The diacritic “ ̝” signals that the vowel is lowered.

Table 2.7: Papuan Malay vowel inventory

	FRONT	CENTRAL	BACK
CLOSE	i		u
OPEN-MID	ɛ		ɔ
OPEN		a	

[ɛ̝] and [ɔ̝] are distinctly lower than their non-centralized allophones [ɛ] and [ɔ]. They are higher, however, than the respective open-near vowels /æ/ and /ɒ/ 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 [ɛ̞] and [ɔ̞]. Figure 2.1 presents the vowel space for the five vowels and their allophones.[3]

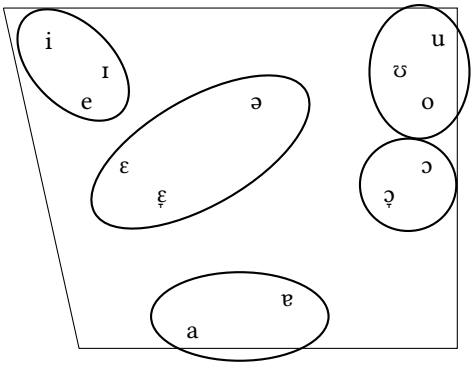


Figure 2.1: Vowel space for the Papuan Malay vowels

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.

[3] The vowel space in Figure 2.1 is based on the author's impressions rather than on measured spectrographic data.

Table 2.8: Vowel contrast in open stressed penultimate syllables

Contrast	Item	Orthogr.	Gloss
i~ɛ	[ˈi.kʊtˀ]	*ikut*	‘follow’
	[ˈɛ.kɻr]	*ekor*	‘tail’
i~a	[ˈi.ŋɪŋ]	*inging*	‘wish’
	[ˈa.ŋɪŋ]	*anging*	‘wind’
i~u	[ˈɪ.ɾɪs]	*iris*	‘cut’
	[ˈʊ.ɾʊs]	*urus*	‘arrange’
i~ɔ	[ˈi.tu]	*itu*	‘ᴅ.ᴅɪsᴛ’
	[ˈɔ.tɻtˀ]	*otot*	‘muscle’
ɛ~a	[ˈɛ.dʒɻk]	*ejek*	‘mock’
	[ˈa.dʒɐk]	*ajak*	‘invite’
ɛ~u	[ˈɛ.kɻr]	*ekor*	‘tail’
	[ˈu.kʊr]	*ukur*	‘measure’
ɛ~ɔ	[ˈɛ.dʒɻkˀ]	*ejek*	‘mock’
	[ˈɔ.dʒɻkˀ]	*ojek*	‘motorbike taxi’
a~u	[ˈa.ɾa]	*ara*	‘direction’
	[ˈu.ɾɐtˀ]	*urat*	‘vein’
u~ɔ	[ˈu.dʒʊŋ]	*ujung*	‘end’
	[ˈɔ.dʒɻkˀ]	*ojek*	‘motorbike taxi’

Table 2.9: Vowel contrast in closed stressed penultimate syllables

Contrast	Item	Orthogr.	Gloss
i~u	[ˈmɪn.ta]	*minta*	‘request’
	[ˈmʊn.ta]	*munta*	‘vomit’
i~ɛ	[ˈtɪm.bɐŋ]	*timbang*	‘weigh’
	[ˈtɐ̟m.bɐk]	*tembak*	‘shoot’
i~a	[ˈtɪm.ba]	*timba*	‘fetch’
	[ˈtɐm.ba]	*tamba*	‘add’
i~ɔ	[ˈtɪŋ.kɐt̚]	*tingkat*	‘level’
	[ˈtɔ̟ŋ.kɐt̚]	*tongkat*	‘cane’
ɛ~a	[ˈsɐ̟n.tu]	*sentu*	‘touch’
	[ˈsɐn.tɛ]	*sante*	‘relax’
ɛ~u	[ˈtɐ̟m.bɐk]	*tembak*	‘shoot’
	[ˈtʊm.bʊk]	*tumbuk*	‘pound’
ɛ~ɔ	[ˈbɐ̟ŋ.kɔ̟k]	*bengkok*	‘be crooked’
	[ˈbɔ̟ŋ.kɔ̟k]	*bongkok*	‘be bent over’
a~u	[ˈbɐn.tu]	*bantu*	‘help’
	[ˈbʊn.tu]	*buntu*	‘be blocked’
a~ɔ	[ˈsɐm.bʊŋ]	*sambung*	‘continue’
	[ˈsɔ̟m.bɔ̟ŋ]	*sombong*	‘be arrogant’
u~ɔ	[ˈsʊm.bɐŋ]	*sumbang*	‘donate’
	[ˈsɔ̟m.bɔ̟ŋ]	*sombong*	‘be arrogant’

Table 2.10: Vowel contrast in open unstressed syllables

Contrast	Item	Orthogr.	Gloss
i~ɛ	['pi.li]	*pili*	'choose'
	['pɛ.lɛ]	*pele*	'cover'
i~a	['ka.li]	*kali*	'river'
	['ka.la]	*kala*	'be defeated'
i~u	['la.gi]	*lagi*	'again'
	['la.gu]	*lagu*	'song'
i~ɔ	['ba.bi]	*babi*	'pig'
	['bɔ.bɔ]	*bobo*	'palm liquor'
ɛ~u	['pa.kɛ]	*pake*	'use'
	['pa.ku]	*paku*	'nail'
ɛ~ɔ	['ga.lɛ]	*gale*	'dig up'
	['ga.ɾɔ]	*garo*	'scratch'
a~u	['bi.sa]	*bisa*	'be able'
	['bi.su]	*bisu*	'mute'
u~ɔ	['tu.bu]	*tubu*	'body'
	['tɔ.bɔ]	*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 /ŋ/ only occurs in the word-internal onset position), only two nasals occur as coda, namely bilabial /m/ and velar /ŋ/, 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 [ŋ], 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 *PE(N)-* 'AG' (§3.1.4). When preceding the alveolar fricative /s/, the nasal is not realized as alveolar [n] but as palatal [ɲ], as in *penyakit* [pɛ̟ɲ–sakɪt] 'disease', with /s/ being deleted (see also Blust 2012; for the allomorphy of *PE(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]	[ˈsɪ**m**.pɐŋ]	*simpang*	'store'
		[kɐ̟**m**.ˈ**b**a.li]	*kembali*	'return'
/ŋ/	[n]	[ˈmɪ**n**.ta]	*minta*	'ask'
		[ˈmɐ**n**.**d**i]	*mandi*	'bathe'
		[ˈhɐ**n**.**ʧ**ʊr]	*hancur*	'be shattered'
		[ˈɪ**n**.**dʒ**ɐk]	*injak*	'step on'
	[ŋ]	[ˈɐ**ŋ**.kɐt̚]	*angkat*	'lift'
		[ˈtɪ**ŋ**.**g**i]	*tinggi*	'be tall'
		[ˈbɔ̟**ŋ**.sɔ̟]	*bongso*	'youngest offspring'
		[ˈlɐ**ŋ**.**s**ʊŋ]	*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 /m/ is preserved, velar /ŋ/ 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 [ŋ]. 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 /m/ and velar /ŋ/, with the latter assimilating to a following stop or affricate.

[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.

Table 2.12: Nasal place assimilation in the word-final coda position

Phoneme	Item	Orthogr.	Gloss
/m/	[ˈmi.nʊ**m** ˈ**b**ɔ.bɔ]	*minum bobo*	‘drink schnapps’
	[ˈmi.nʊ**m** ˈ**d**u.lu]	*minum dulu*	‘drink first’
	[… ˈmi.nʊ**m** ˈ**k**i.ˈtn̥ŋ]	*… minum kitong*	‘(give) us to drink’
	[ˈmi.nʊ**m** ˈ**i**.tu]	*minum itu*	‘drink that’
	[ˈmi.nʊ**m**, ˈ**t**a.pi]	*minum, tapi*	‘drink, but’
/ŋ/	[ˈbi.kɪ**m** ˈ**b**a.gʊs]	*biking bagus*	‘make good’
	[ˈbi.kɪ**n** ˈ**d**ɪ.a]	*biking dia*	‘make him/her’
	[ˈbi.kɪ**ŋ** ˈ**k**ɔ.tn̥r]	*biking kotor*	‘make dirty’
	[ˈbi.kɪ**ŋ** ˈ**s**a]	*biking sa*	‘make me’
	[ˈbi.kɪ**ŋ** ˈ**a**.pa]	*biking apa*	‘make what’
	[ˈbi.kɪ**ŋ**, ˈ**m**ɛ.mɐŋ]	*biking, memang*	‘make, indeed’
/ŋ/	[ˈbi.lɐ**m** ˈ**b**a.pa]	*bilang bapa*	‘tell father’
	[ˈbi.lɐ**n** ˈ**d**ɪ.a]	*bilang dia*	‘tell him/her’
	[ˈbi.lɐ**ŋ** ˈ**k**a.ka]	*bilang kaka*	‘tell older sibling’
	[ˈbi.lɐ**ŋ** ˈ**s**a.ma]	*bilang sama*	‘say to’
	[ˈbi.lɐ**ŋ** ˈ**i**.ni]	*bilang ini*	‘say this’
	[ˈbi.lɐ**ŋ**, ˈ**b**lʊm]	*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 [ɾ] as illustrated in (1) and Table 2.13.[5] In the 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 … ga**ɾ**ɐɐɐm s**r**ej **r**iʧaaa … dagɪŋ ini saja asa**r** dia*
1PL take salt lemongrass red.pepper meat D.PROX 1SG smoke 3SG
*kasi k**r**ing di pa**r**apa**r**a*
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]

[5] In the examples in this chapter, the first line gives the orthographic representation, while the second lines gives the IPA transcription.

Table 2.13: Tap/trill alternation of rhotic /ɾ/

Realization	Item	Orthogr.	Gloss
[ɾ]	[ˈɾa.kʊs]	*rakus*	‘be greedy’
	[ˈkɾi.ŋɐt̚]	*kringat*	‘sweat’
	[ˈmʊɾ.ni]	*murni*	‘be pure’
	[ˈdʒɐŋ.kɾɪk̚]	*jangkrik*	‘cricket’
[ɾ]	[ˈba.ɾɐŋ]	*barang*	‘stuff’
	[ˈgɔ.ɾɛ̝ŋ]	*goreng*	‘fry’
	[ˈʊ.ɾʊs]	*urus*	‘arrange’

2.2.3 Centralization of vowels

In closed syllables the five vowels are centralized. Close /i/ is centralized to [ɪ] and /u/ to [ʊ], open-mid /ɛ/ is centralized to [ɛ̝] and /ɔ/ to [ɔ̝], and open /a/ is centralized to [ɐ], as illustrated in Table 2.14. In unstressed closed syllables with a coda nasal, open-mid /ɛ/ can alternatively be centralized to [ə] rather than to [ɛ̝].

Table 2.14: Vowel centralization in closed syllables

Phoneme	Realization	Item	Orthogr.	Gloss
/i/	[ɪ]	[ˈtɪŋ.gi]	*tinggi*	‘be high’
		[ˈa.dɪl]	*adil*	‘be fair’
/u/	[ʊ]	[ˈbʊŋ.kʊs]	*bungkus*	‘pack’
		[ˈi.kʊt̚]	*ikut*	‘follow’
/ɛ/	[ɛ̝]	[ˈgɛ̝n.dɔ̝ŋ]	*gendong*	‘hold’
		[ˈdɔ.ŋɛ̝ŋ]	*dongeng*	‘legend’
	[ə]	[əm.ˈpɐt̚]	*empat*	‘four’
		[səm.ˈbi.lɐŋ]	*sembilang*	‘nine’
/ɔ/	[ɔ̝]	[ˈlɔ̝m.ba]	*lomba*	‘contest’
		[ˈbɛ.lɔ̝k̚]	*belok*	‘turn’
/a/	[ɐ]	[ˈɐn.dʒɪŋ]	*anjing*	‘dog’
		[ˈbɪn.tɐŋ]	*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

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 word-internal 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 word-internally, as shown in Table 2.16. Also, /p/ can be lenited to [f], and /d/ and /dʒ/ can be lenited to [j]. Word-initial lenition to a fricative is also attested for /b/, /d/, and /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 /g/.[6]

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

Phoneme	Item	Orthogr.	Gloss
/p/	[ˈba.**ɸ**a]	*bapa*	‘father’
/b/	[ˈsa.**β**ɐr]	*sabar*	‘be patient’
/d/	[ˈsʊ.**ð**a]	*suda*	‘already’
/k/	[ˈma.**x**ɐŋ]	*makang*	‘eat’
/g/	[ˈba.**ɣ**i]	*bagi*	‘divide’
/dʒ/	[ˈsa.**ʝ**a]	*saja*	‘just’
/tʃ/	[ˈpa.**j**ɛ]	*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 [ɸ], /b/ to [β], /d/ to [ð], /k/ to [x], /g/ to [ɣ], and /dʒ/ to [ʝ]. This process is unattested, however, for the voiceless

[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* ‘3SG’. Onset /d/ can be lenited to [j] when following a lexical item with a voiceless stop, the alveolar fricative /s/, or the rhotic /r/ in word-final coda position.

Table 2.16: Lenition of stops and affricates in word-initial position

Phoneme	Item	Orthogr.	Gloss
/p/	[ˈdɛ **ɸ**u]	*de pu* 3SG POSS	‘his (grandson)’
	[ˈdi.a ˈ**f**luŋ.ku]	*dia palungku* 3SG punch	‘he punched’
/b/	[ˈjɛ ˈ**β**i.lɐŋ]	*de bilang* 3SG say	‘he/she said’
	[ˈdʒa.rɪm ˈ**β**ɔ.lɛ]	*jaring bole* net may	(the) net (is) permitted
/d/	[mˈla, ɛ ˈ**ð**ɛpˈ]	*mulay, eh dep* start uh 3SG:POSS	‘(he) started, uh his’
	[ˈsa.dʒa **j**ɛ̣.ˈŋɐŋ]	*saja dengang* just with	‘just with’
	[ˈspʊl ˈba.ðɐn ˈ**ð**i]	*spul badang di* wash body at	‘wash (your) body in’
	[ˈki.tn̩ ˈ**n**u.a]	*kitong dua* 1PL two	‘we two’
/k/	[ˈa.dɛ̣.ˈ**x**a.xa]	*ade-kaka* ySb oSb	‘siblings’
	[dɛ̣.ˈŋɐŋ ˈ**x**a.xa]	*dengang kaka* with oSb	‘with (the) older sibling’
/dʒ/	[ˈsa pu ˈ**j**ɛ̣.kɛ̣tˈ]	*sa pu jeket* 1SG POSS jacket	‘my jacket’
	[… ˈi.tu, ˈ**j**a.ŋɐŋ]	*… itu, jangang* D.DIST NEG.IMP	‘those (big ones), don’t’

alveolar and palato-alveolar segments. The voiceless affricate /tʃ/ can be lenited to the palatal approximant [j], while lenition of alveolar /t/ 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 150-minute extract of the corpus, fortition of /tʃ/ is attested once and strengthening of /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 /k/. Elision of /t/ occurs less frequently and is unattested for /p/. Word-final /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/: ['ɐm.bi] (48 tokens) and ['ɐm.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 [r̥], as illustrated in (2).

(2) ***skarɐn*** *dᵑŋ kasi dɪa* ***sᶝntᶝr̥,*** *kasi* ***sᶝntᶝr*** *dᵑŋ 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 /i/, which reduces the number of syllables by one, as illustrated in Table 2.19. Hence, /si.V/ is realized as [sʲV]. 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 /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-H-C) and the more thoroughly transcribed 150-minute extract (150-M-C).[8]

[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.ˈa.pa] and [sʲa.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.ˈa.pa] or whether they always palatalize the fricative and thereby realize the item as disyllabic [sʲa.pa]. In the more thoroughly transcribed 150-minute extract of the corpus the trisyllabic *siapa* [si.ˈa.pa] 'who' is unattested.

Table 2.17: Fortition of the voiceless affricate and the voiced palatal approximant

Phoneme	Item	Orthogr.	Gloss
/ʧ/	[ˈdɛpˀ ˈ**tu**.ʧu]	*de pu cucu* 3SG POSS grandchild	‘his grandchild’
/j /	[ˈej ˈ**dʒ**ɐŋ bɛ.ˌsɐr~bɛ.ˈsɐr]	*ey yang besar~besar* hey REL RDP ~be.big	‘hey those big ones’
	[ˈ**j**a]	*yo* yes	‘yes’[a]

[a] Affirmative *yo* ‘yes’ is frequently realized as *ya* (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
/t/	[ˈsa.ki]	*sakit*	‘be sick’
/k/	[ˈma.sa]	*masak*	‘cook’
/s/	[ˈtru]	*trus*	‘be continuous’
/ŋ/	[ˈɐn.dʒĩ]	*anjing*	‘dog’
/r/	[ˈla.pa]	*lapar*	‘be hungry’
/l/	[ˈɐm.bi / ˈɐm.be.a]	*ambil*	‘fetch’

Table 2.19: Palatalization of the alveolar fricative in loanwords

Stress	Orthogr.	Gloss	Realization	Freq. 16-H-C	Freq. 150-M-C
/si/ unstressed	*siapa*	‘who’	[**si**.ˈ**a**.pa]	196	---
			[ˈ**sʲa**.pa]	---	40
			[ˈ**sa**.pa]	115	10
/ˈsi/ stressed	*sial*	‘be unfortunate’	[ˈ**si**.ɐl]	1	1
	siang	‘midday’	[ˈ**si**.ɐŋ]	55	6
	siap	‘be ready’	[ˈ**si**.ɐpˀ]	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 /ɛ/ can alternatively be centralized to [ə] rather than to [ɐ̟].

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

Phoneme	Realization	Item	Orthogr.	Gloss
/i/	[ɪ]	[ˈdɪ.a]	*dia*	‘3SG’
		[ˈhɪ.lɐŋ]	*hilang*	‘be lost’
/u/	[ʊ]	[ˈlʊ.ɐs]	*luas*	‘be vast’
		[ˈbʊ.kɐŋ]	*bukang*	‘NEG’
/ɛ/	[ɐ̟]	[ˈbɐ̟.ɾa]	*bera*	‘defecate’
		[ˈhɐ̟.la]	*hela*	‘haul’
	[ə]	[bə.ˈkɐs]	*bekas*	‘trace’
		[lə.ˈpɐs]	*lepas*	‘free’
/ɔ/	[ɔ̟]	[ˈhɔ̟.sa]	*hosa*	‘pant’
		[ˈkɔ̟.lɐm]	*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 /i/ and /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 [ˈka.se], and in (4) the verb *balik* ‘turn around’ is realized as [ˈba.le].[9] In (5) the numeral *dua* ‘two’ is realized as [ˈdo.a] and in (6) the common noun *lubang* ‘hole’ is realized as [ˈlo.bɐŋ]

(3) *… mɔ bikɪn papɛda mɔ **kase** anana makɐn*
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]

[9] Concerning the elision of the word-final stop see §2.3.1.2.

Table 2.21: Vowel centralization harmony[a]

Phoneme	Environment	Item	Orthogr.	Gloss
/i/	[ɪ] in open SYLB	[prɔ.ˈpɪn.sɪ]	*propinsi*	'province'
	preceded by [ɪC]	[ˈskrɪp̚.sɪ]	*skripsi*	'minithesis'
	[ɪ] in open SYLB	[ˈmɪ.ɾɪŋ]	*miring*	'be sideways'
	followed by [ɪC]	[ˈgɪ.lɪŋ]	*giling*	'grind'
/u/	[ʊ] in open SYLB	[ˈbʊm.bʊ]	*bumbu*	'bamboo'
	preceded by [ʊC]	[ˈbʊn.tʊ]	*buntu*	'be blocked'
	[ʊ] in open SYLB	[ˈlʊ.ɾʊs]	*lurus*	'be straight'
	followed by [ʊC]	[ˈtʊ.ɾʊŋ]	*turung*	'descend'
/ɛ/	[ɛ̰] in open SYLB	[bɛ̰r.ˈtɛ̰.mu]	*bertemu*	'be friends'
	preceded by [ɛ̰C]	[ˌbɛ̰r.kɛ̰.ˈbʊŋ]	*berkebung*	'do farming'
	[ɛ̰] in open SYLB	[ˈɛ̰.pɛ̰ŋ]	*epeng*	'important'
	followed by [ɛ̰C]	[mɛ.ˈlɛ̰.sɛ̰t̚]	*meleset*	'miss a target'
/ɔ/	[ɔ̰] in open SYLB	[ˈbɔ̰ŋ.sɔ̰]	*bongso*	'youngest child'
	preceded by [ɔ̰C]	[ˈʧɔ̰n.tɔ̰]	*conto*	'example'
	[ɔ̰] in open SYLB	[ˈrɔ̰.kɔ̰k̚]	*rokok*	'cigarette'
	followed by [ɔ̰C]	[ˈkɔ̰.dɔ̰k]	*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 Bɔp Bɔp 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) *skaɾɐn dɔ̰ŋ* ***doa*** *mɐn.ʧɪŋ*
now 3PL two fish
'now the **two** of them are fishing' [081109-010-JR.0002]

(6) *dɛ masʊk̚* ***lobɐŋ*** *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, ɛ, ɔ, a can be nasalized and realized as [ĩ, ũ, ɛ̃, ɔ̃, ã], as shown in Table 2.22. This nasalization is a result of the elision of the word-final velar nasal /ŋ/, discussed in §2.3.1.2.

Table 2.22: Nasalization of the vowels

Phoneme	Item	Orthogr.	Gloss
/i/	[ˈɐn.dʒĩ]	*anjing*	‘dog’
/u/	[ˈlaŋ.sũ]	*langsung*	‘immediately’
/ɛ/	[ˈdẽ]	*dengang*	‘with’[a]
/ɔ/	[ˈdɔ̃]	*dong*	‘3PL’
/a/	[ˈbilã]	*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*
kitọŋ dʊa tʊɾʊn **sɛmpɛ**ːː di pɔhọn
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 **bɛlʊ**ːː**m** tọŋ blʊ̈m dʒalɐn
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 [ɐ̟j] and [ɐ̟w], respectively, as shown in Table 2.23, or they can be reduced to the open-mid vowels [ɛ] and [ɔ], 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 [ɐ̟j] and [ɐ̟w], respectively, in the following environments (see Table 2.23). The VC sequence /aj/ is centralized to [ɐ̟j] when following a liquid, as in *serey* [sɛ.ˈrɐ̟j] ‘lemongrass’ or *laley* [ˈla.lɐ̟j] ‘be careless’.[10] With other onset consonants /aj/ remains unaffected. As for the centralization of /aw/ to [ɐ̟w], the data is less clear. Attested are only three lexical

[10] All ten participants in a unrepresentative rapid orthography test, by contrast, realized *laley* ‘be careless’ as [ˈla.lɐj] and not as [ˈla.lɐ̟j]. At this point in the research on Papuan Malay the reasons for the realization as [ˈla.lɐj] remain uncertain, however.

Table 2.23: Realization of /aj/ as [ɐ̟j] and of /aw/ as [ɔ̟w]

Phoneme	Realization	Item		Gloss
/aj/	[ɐj] vs. [ɐ̟j]	[ʧɛ.ˈɾɐ̟**j**]	*cerey*	‘divorce’
		[ˈla.lɐ̟**j**]	*laley*	‘be careless’
		[sɛ.ˈɾɐ̟**j**]	*serey*	‘lemongrass’
		[ˈda.mɐ**j**]	*damay*	‘peace’
		[ˈtu.pɐ**j**]	*tupay*	‘squirrel’
/aw/	[ɐw] vs. [ɔ̟w]	[ˈhi.dʒɔ̟**w**]	*hijow*	‘green’
		[ˈpi.sɔ̟**w**]	*pisow*	‘knife’
		[ˈpu.lɔ̟**w**]	*pulow*	‘island’
		[ˈhi.ɾɐ**w**]	*hiraw*	‘heed’
		[ˈki.ʧɐ**w**]	*kicaw*	‘be naughty’

items: /aw/ is centralized to [ɔ̟w] following the lateral /l/ in *pulow* [ˈpu.lɔ̟w] ‘island’, the affricate /dʒ/ in *hijow* [ˈhi.dʒɔ̟w] ‘green’, and the fricative /s/ in *pisow* [ˈpi.sɔ̟w] ‘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 /a/; that is, /aj/ is realized as front /ɛ/, and /aw/ as back /ɔ/.

The tendency to realize /aj/ as [ɛ] applies especially to unstressed CVC syllables with an onset stop, as shown in Table 2.24. In this environment, the realization of /aj/ as [ɐj] 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 [ɔ] 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 /a/, the VC sequence typically remains unaffected, and its realization as [ɔ] is rare. The corpus includes only one lexeme with an alternative [ɔ] 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 /ɔ/:

(1) *ato* ‘or’: /ˈa.tɔ/ (113 tokens) vs. /ˈa.taw/ (85 tokens)

(2) *kalo* ‘if’: /ˈka.lɔ/ (1,028 tokens) vs. /ˈka.law/ (230 tokens).

(3) *sodara* ‘sibling’: /sɔ.ˈda.ra/ (138 tokens) vs. /saw.ˈda.ra/ (14 tokens).

Table 2.24: Realization of /aj/ as [ɐj] or [ɛ]

[ɐj] Item	Freq.	[ɛ] Item	Freq.	Orthogr.	Gloss
[ˈʧa.pɐ**j**]	1	[ˈʧa.pɛ]	23	*cape*	‘be tired’
---[a]	---	[ˈpa.kɛ]	213	*pake*	‘use’
[ˈsɐn.tɐ**j**]	1	[ˈsɐn.tɛ]	7	*sante*	‘relax’
[ˈda.mɐ**j**]	9	---	---	*damay*	‘peace’
[pɛ.ˈga.wɐ**j**]	110	[pɛ.ˈga.wɛ]	3	*pegaway*	‘employee’
[ˌsɛ.lɛ.ˈsɐ**j**]	154	---	---	*selesay*	‘finish’
[ˈsu.ŋɐ**j**]	6	---	---	*sungay*	‘river’
[ˈtu.pɐ**j**]	1	---	---	*tupay*	‘squirrel’

[a] Standard Malay realizes this lexical item orthographically as <*pakai*> ‘use, wear’ (Mintz 2002).

Table 2.25: Realization of /aw/ as [ɐw] or [ɔ]

[aw] Item	Freq.	[ɔ] Item	Freq.	Orthogr.	Gloss
[ˈda.nɐ**w**]	1	[ˈda.nɔ]	3	*dano*	‘lake’
[ˈka.ʧɐ**w**]	2	[ˈka.ʧɔ]	12	*kaco*	‘be confused’
[ˈhi.dʒɐ**w**]	1	---	---	*hijow*	‘be green’
[ˈhi.rɐ**w**]	2	---	---	*hiraw*	‘heed’
[ˈki.ʧɐ**w**]	1	---	---	*kicaw*	‘be naughty’
[ˈpu.lɐ**w**]	7	[ˈpu.lɔ]	5	*pulow*	‘island’
[ˈpɪs.ɐ**w**]	5	---	---	*pisow*	‘knife’

In monosyllabic words, /aj/ and /aw/ are never realized as /ɛ/ and /ɔ/, 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 /mɔ/ (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 §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 /ŋ/. 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 /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 /m/ and velar /ŋ/ 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

	STOP						AFFR		FRIC		NAS				LIQ		APR	
	p	b	t	d	k	g	ʧ	ʤ	s	h	m	n	ɲ	ŋ	r	l	j	w
ONSET	+	+	+	+	+	+	+	+	+	+	+	+	+	(+)	+	+	+	+
CODA	+	−	+	−	+	−	−	−	+	−	m	ŋ	ŋ	ŋ	+	+	+	+

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, C_1 "may be added to the onset only if it is less sonorous" than C_2 (1994: 255). Hence, CC

[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 non-edge positions".

[15] In the word-final coda position, the glottal fricative /h/ is only attested in interjections.

Table 2.27: CC clusters – Examples

Word-initial position			Word-internal position		
Stops in C_1 position					
pC_2/	/ˈ**pr**aŋ/	‘war’			
	/ˈ**pl**aŋ/	‘be slow’			
bC_2/	/ˈ**br**at/	‘be heavy’	/bC_2/	/ˈta.**br**ak/	‘hit against’
	/ˈ**bl**a.kaŋ/	‘back’		/ˈʧɔ.**bl**ɔs/	‘punch’
tC_2/	/ˈ**tr**aŋ/	‘be clear’			
	/ˈ**tl**an.dʒaŋ/	‘be naked’			
dC_2/	/ˈ**dl**a.paŋ/	‘eight’	/dC_2/	/ˈgɔn.**dr**ɔŋ/	‘be long haired’
ʧC_2/	/ˈ**ʧr**ɛ.wɛt/	‘chatty’			
kC_2/	/ˈ**kn**a.pa/	‘why’	/kC_2/	/ˈdʒaŋ.**kr**ik/	‘cricket’
	/ˈ**kr**iŋ/	‘be dry’			
	/ˈ**kl**ɔm.pɔk/	‘group’			
	/ˈ**kw**ali/	‘frying pan’			
gC_2/	/ˈ**gn**ɛ.mɔ/	‘melinjo tree’			
	/ˈ**gl**ap/	‘be dark’			
Fricatives in C_1 position					
sC_2/	/ˈ**sp**ɛr.ti/	‘like’	/sC_2/	/ka.ˈ**sw**a.ri/	‘cassowary’
	/ˈ**sk**a.raŋ/	‘now’			
	/ˈ**sm**ut/	‘ant’			
	/ˈ**sn**aŋ/	‘be happy’			
	/ˈ**sr**iŋ/	‘often’			
	/ˈ**sl**a.taŋ/	‘south’			
	/ˈ**sw**ak/	‘be exhausted’			

clusters are most commonly formed with an obstruent in C_1 position and a glide in C_2 position. The second most common are liquids or nasals occurring in C_2 position, while CC clusters with an obstruent in 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 C_1 position and /p/ or /k/ in 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 C_2 position (29 entries), followed by clusters with rhotic /r/ in C_2 position (18 entries). CC clusters with the velar approximant /w/ (4

entries) or a nasal (3 entries) in C_2 position are much less common. Clusters with a stop in C_2 position are even less common (2 entries).

Table 2.28: CC clusters – Overview

C_1C_2		OBSTR										NAS				LIQ		APR	
		p	b	t	d	ʧ	ʤ	k	g	s	h	m	n	ɲ	ŋ	r	l	j	w
OBSTR	p															pr	pl		
	b															br	bl		
	t															tr	tl		
	d															dr	dl		
	ʧ															ʧr			
	ʤ																		
	k												kn			kr	kl		kw
	g												gn				gl		
	s	sp						sk				sm	sn			sr	sl		sw
	h																		
NAS	m																		
	n																		
	ɲ																		
	ŋ																		
LIQ	r																		
	l																		
APR	j																		
	w																		

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 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]

[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.

Table 2.29: Distribution of vowels in stressed and unstressed syllables

Phoneme	Stressed open SYLB		Stressed closed SYLB	
/i/	/ˈbi.su/	‘be mute’	/ˈtim.ba/	‘fetch’
/u/	/ˈpu.ti/	‘be white’	/ˈmun.ta/	‘vomit’
/ɛ/	/ˈmɛ.ra/	‘be red’	/ˈsɛn.tu/	‘touch’
/ɔ/	/ˈgɔ.dɛ/	‘be fat’	/ˈlɔm.ba/	‘contest’
/a/	/ˈra.dʒu/	‘pout’	/ˈgaŋ.gu/	‘disturb’
Phoneme	Unstressed open SYLB		Unstressed closed SYLB	
/i/	/ˈba.bi/	‘pig’	/ˈma.nis/	‘be sweet’
/u/	/ˈka.ju/	‘wood’	/ˈta.kut/	‘fear’
/ɛ/	/ˈʧa.pɛ/	‘be tired’	/ˈsɔ.bɛk/	‘tear’
/ɔ/	/ˈga.rɔ/	‘scratch’	/ˈbɛ.sɔk/	‘tomorrow’
/a/	/ˈbu.ta/	‘be blind’	/ˈli.pat/	‘fold’

Table 2.30: V.V sequences – Examples

$V_1.V_2$	Stress	Item	Gloss	Freq.
/i.u/	/ˈCi.u/	/ˈʧi.um/	‘kiss’	2
/i.a/	/ˈCi.a/	/ˈdi.am/	‘be quiet’	12
	/Ci.ˈa/	/gi.ˈa.was/	‘guava’	4
/u.a/	/ˈu.a/	/ˈu.aŋ/	‘money’	1
	/ˈCu.a/	/ˈbu.at/	‘make’	15
	/Cu.ˈa/	/bu.ˈa.ja/	‘crocodile’	4
/a.i/	/ˈa.i/	/ˈa.ir/	‘water’	1
	/ˈCa.i/	/ˈba.ik/	‘be good’	7
/a.u/	/ˈCa.u/	/ˈda.uŋ/	‘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 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 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

V_1.V_2	i		u		a		Total
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* /ˈba.ik/ 'be good' or *laut* /ˈla.ut/ 'sea'. When /ai/ and /au/ occur at syllable boundaries, they are analyzed as the VC sequences /aj/ and /aw/, respectively. Examples are *damay* /ˈda.maj/ 'peace' and *baw* /ˈbaw/ '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 [ɛɪ]) 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 [ˈtaʊ] 'know' and five closed items such as [ˈdaʊŋ] '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	
/ai/	[ʧɛ.ˈrɛɪ]	'divorce'	[mu.ˈdʒaɪr]	'tilapiine fish'
/au/	([ˈtaʊ]	'know')	([ˈdaʊŋ]	'leaf')
	Unstressed open SYLB		Unstressed closed SYLB	
/ai/	[ˈtu.paɪ]	'squirrel'	---	---
/au/	[ˈki.ʧaʊ]	'be naughty'	---	---

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* /ʧɛ.ˈrɛj/ 'divorce', *taw* /ˈtaw/ 'know', *tupay* /ˈtu.paj/ 'squirrel', and *kicaw* /ˈki.ʧaw / 'be naughty'. By contrast, when the second vowel, that is /i/ or /u/, occurs in a closed syllable, /ai/ and /au/ are analyzed as vowel sequences. Examples are *mujair* /mu.ˈdʒa.ir/ 'tilapiine fish', and *daung* /ˈda.uŋ/ '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 /j/ and /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 /aj/ and /aw/ at syllable boundaries fills this gap. Given, however, that coda /j/ and /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 CV(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.ˈdʒa.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.ˈdʒair]. 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	[ˌkɛ.ba.ˈɪ.kɐŋ]	'goodness'	*baik*	/ˈba.ik/	'be good'
maingang	[ma.ˈɪ.ŋɐŋ]	'toy'	*maing*	/ˈma.iŋ/	'play'
lautang	[la.ˈʊ.tɐŋ]	'ocean'	*laut*	/ˈla.ut/	'sea'
permaingang	[ˌpɐr.ma.ˈɪ.ŋɐŋ]	'game'	*maing*	/ˈma.iŋ/	'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 combinations 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 diphthongs, /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 preference for disyllabic roots and for CV(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 abovementioned 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 C(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 Table 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	/ˈkɔ/	‘2sg’
CVC	13	/ˈlur/	‘spy on’
CCV	3	/ˈbli/	‘buy’
CCVC	20	/ˈglap/	‘dark’

[a] The corpus includes eight CV roots all of which are function words, that is, personal pronouns, prepositions, or conjunctions.

Table 2.35: Disyllabic roots (1,004 items)

Syllable types	Count	Item	Gloss
V.VC	2	/ˈa.ir/	‘water’[a]
V.CV	15	/ˈa.pi/	‘fire’
V.CVC	52	/ˈi.kaŋ/	‘fish’
VC.CVC	17	/ˈam.pas/	‘waste’
CV.V	4	/ˈdua/	‘two’
CV.VC	35	/ˈbu.at/	‘make’
CV.CV	223	/ˈba.bi/	‘pig’
CV.CVC	392	/ˈgɔ.rɛŋ/	‘fry’
CV.CCVC	3	/ˈta.brak/	‘hit against’
CVC.CV	60	/ˈpan.tɛ/	‘coast’
CVC.CVC	162	/ˈtum.buk/	‘pound’
CVC.CCVC	2	/ˈdʒaŋ.krik/	‘cricket’[b]
CCV.VC	1	/ˈklʊ.ɐr/	‘go out’[c]
CCV.CV	11	/ˈbra.ni/	‘be courageous’
CCV.CVC	14	/ˈbla.kaŋ/	‘backside’
CCVC.CV	5	/ˈklam.bu/	‘mosquito net’
CCVC.CVC	6	/ˈglɔm.baŋ/	‘wave’

[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.

Table 2.36: Trisyllabic roots (67 items)[a]

Syllable types	Count	Item	Gloss
CV.V.CV	5	/bu.ˈa.ja/	‘crocodile’
CV.V.CVC	2	/ti.ˈa.rap/	‘lie face downward’[b]
CV.CV.VC	1	/mu.ˈdʒa.ir/	‘tilapiine fish’
CV.CV.CV	14	/tɛ.ˈli.ŋa/	‘ear’
CV.CV.CVC	26	/bɛ.ˈla.laŋ/	‘grasshopper’
CV.CVC.CV	1	/pa.ˈluŋ.ku/	‘punch’
CV.CVC.CVC	1	/ˌgɛ.mɛn.ˈtar/	‘tremble’
CV.CCV.CV	1	/ka.ˈswa.ɾi/	‘cassowary’
CVC.CV.CV	9	/sɛn.ˈdi.ri/	‘be alone’
CVC.CV.CVC	6	/tam.ˈpɛ.lɛŋ/	‘slap on face/ears’
CCVC.CV.VC	1	/prɛm.ˈpu.aŋ/	‘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	/ˌɔ.la.ˈra.ga/	‘do sports’
CV.CV.V.CV	1	/ˌkɛ.ʧu.ˈa.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 CV(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.

[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.

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 /ɛ/. In the remaining three lexical roots, the unstressed penultimate syllable contains a close vowel (one item with front /i/ and two items with back /u/).[18] Front open-near /ɛ/, however, does not condition ultimate stress, as in 61 of the 900 lexical roots with penultimate stress (7%) the stressed syllable also contains front /ɛ/.[19]

[18] The three items are: *kitong* /kiˈtɔŋ/ ‘1PL’, *kumur* /kuˈmur/ ‘rinse mouth’, and *kuskus* /kusˈkus/ ‘cuscus’.
[19] Examples are *bebas* /ˈbɛ.bas/ ‘be free’ (see Table 2.39), *leher* /ˈlɛ.hɛr/ ‘neck’, or *sentu* /ˈsɛn.tu/ ‘touch’.

Table 2.39: Stress patterns for disyllabic lexical roots (1,004 items)

Stress	Item	Orthogr.	Gloss
P-ULT	/ˈu.aŋ/	*uang*	‘money’
	/ˈa.pi/	*api*	‘fire’
	/ˈi.kaŋ/	*ikang*	‘fish’
	/ˈbu.at/	*buat*	‘make’
	/ˈbɛ.bas/	*bebas*	‘be free’
	/ˈgɔ.rɛŋ/	*goreng*	‘fry’
	/ˈtum.buk/	*tumbuk*	‘pound’
	/ˈbla.kaŋ/	*blakang*	‘backside’
ULT	/ɛ.ˈnam/	*enam*	‘six’
	/ɛm.ˈpat/	*empat*	‘four’
	/pɛ.ˈnu/	*penu*	‘be full’
	/ku.ˈmur/	*kumur*	‘rinse mouth’
	/rɛn.ˈda/	*renda*	‘be low’
	/dʒɛm.ˈpɔl/	*jempol*	‘thumb’

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

Stress	Item	Orthogr.	Gloss
P-ULT	/bu.ˈa.ja/	*buaya*	‘crocodile’
	/ti.ˈa.rap/	*tiarap*	‘lie face downward’
	/mu.ˈdʒa.ir/	*mujair*	‘tilapiine fish’
	/tɛ.ˈli.ŋa/	*telinga*	‘ear’
	/bɛ.ˈla.laŋ/	*belalang*	‘grasshopper’
	/tam.ˈpɛ.lɛŋ/	*tampeleng*	‘slap on face/ears’
	/prɛm.ˈpu.aŋ/	*prempuang*	‘woman’
ULT	/ˌpɛ.lɛ.ˈpa/	*pelepa*	‘palm stem/midrib’
	/ˌsɛ.lɛ.ˈsaj/	*selesay*	‘finish’
	/ˌgɛ.mɛn.ˈtar/	*gementar*	‘tremble’
	/ˌtɛŋ.gɛ.ˈlam/	*tenggelam*	‘sink’

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

Stress	Item	Orthogr.	Gloss
P-ULT	/ˌɔ.la.ˈra.ga/	*olaraga*	‘do sports’
	/ˌkɛ.ʧu.ˈa.li/	*kecuali*	‘except’

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 /ɛ/. As in disyllabic roots, however, front open-near /ɛ/ does not condition ultimate stress, as in four of the 63 lexical roots with penultimate stress (6%) the stressed syllable contains front ɛ/.[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 /ɛ/. 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 above-mentioned 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* /ˈbraŋ.kat/ 'leave' or *spulu* /ˈspu.lu/

[20] The four items are: *papeda* /pa.ˈpɛ.da/ 'sagu porridge', *padede* pa.ˈdɛ.dɛ/ 'whine', *tampeleng* /tam.ˈpɛ.lɛŋ/ 'slap on face/ears', and *wewenang* /wɛ.ˈwɛ.naŋ/ 'authority'.

'ten'. In items with an unreduced prefix, stress remains on the lexical root and thereby on the ultimate syllable, as in *bergrak* /bɛr.ˈgrak/ '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* /ˈi.kat/ 'tie up' versus *ikatang* /i.ˈka.taŋ/ '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* /kɛ.ˈbuŋ/ 'garden' versus *berkebung* /ˌbɛr.kɛ.ˈbuŋ/ '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* /ˈda.lam/ 'inside' versus *pedalamang* /ˌpɛ.da.ˈla.maŋ/ '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 /ʃ/.

[21] The historical root *gait* does not exist in Papuan Malay.

Table 2.43: Stress patterns for disyllabic affixed lexical items[a]

Stress	Item	Affix	Orthogr.	Gloss
P-ULT	/ˈbraŋ.kat/	/br−__/	*brangkat*	‘leave’
	/ˈpla.dʒar/	/pɛl−__/	*plajar*	‘teacher’
	/ˈspu.lu/	/sɛ−__/	*spulu*	‘ten’
	/ˈgra.kaŋ/	/__−aŋ/	*grakang*	‘movement’
ULT	/bɛr.ˈgrak/	/bɛr−__/	*bergrak*	‘move’
	/sɛ.ˈblas/	/sɛ−__/	*seblas*	‘eleven’
	/ta.ˈbla/	/ta−__/	*tabla*	‘be cracked open’

[a] Note that the (historical) affixes have phonological allomorphs: /ta-/ and /tɛr-/, 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.)

Table 2.44: Stress patterns for trisyllabic affixed lexical items

Stress	Item	Affix	Orthogr.	Gloss
P-ULT	/ba.ˈi.si/	/ba−__	*baisi*	‘be muscular’
	/pɛ.ˈmu.da/	/pɛ−__/	*pemuda*	‘young person’
	/kɛ.ˈdu.a/	/kɛ−__/	*kedua*	‘second’
	/ta.ˈgɔ.jaŋ/	/ta−__/	*tagoyang*	‘be shaken’
	/sɛ.ˈti.ap/	/sɛ−__/	*setiap*	‘every’
	/i.ˈka.taŋ/	/__−aŋ/	*ikatang*	‘tie’
	/mi.ˈsal.ɲa/	/__−ɲa/	*misalnya*	‘for example’
ULT	/ˌbɛr.kɛ.ˈbuŋ/	/bɛr−__/	*berkebung*	‘do farming’
	/ˌkɛ.ɛm.ˈpat/	/kɛ−__/	*keempat*	‘fourth’
	/ˌmɛ.ɲɛ.ˈbraŋ/	/mɛ−__/	*menyebrang*	‘cross’
	/ˌtɛr.lɛ.ˈpas/	/tɛr−__/	*terlepas*	‘be loose’

Table 2.45: Stress patterns for quadrisyllabic affixed lexical items

Stress	Item	Affix	Orthogr.	Gloss
P-ULT	/ˌpɛ.daˈla.maŋ/	/pɛ–__–aŋ/	*pedalamang*	‘interior’
	/ˌkɛ.giˈa.taŋ/	/kɛ–__–aŋ/	*kegiatang*	‘activity’
	/ˌkɛn.daˈra.aŋ/	/__–aŋ/	*kendaraang*	‘vehicle’
	/ˌsɛ.bɛˈnar.ɲa/	/sɛ–__–ɲa/	*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 word-initial 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	[ˈfa.dʒɐˌr]	*fajar*	‘dawn’	Arabic
	[ˈfɔ.tɔ]	*foto*	‘photo’	Dutch
Word-internal onset	[ˈsi.fɐt̚]	*sifat*	‘characteristic’	Arabic
	[ˈtrɐns.fɐr]	*transfer*	‘transfer’	English
Word-final coda	[ma.ˈɐf]	*maaf*	‘pardon’	Arabic
	[ɪn.ˈsɐn.tɪf]	*insentif*	‘incentive’	English

The second non-native segment occurs in loanwords of Arabic origins containing the voiceless postalveolar fricative /ʃ/. Standard Malay and Standard Indonesian have adopted the fricative into their consonant inventory, realizing it as /ʃ/ <*sy*> 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

[22] Mintz (2002: 13) represents /ʃ/ as /š/ and defines it as “a palatal fricative”: *syurga* /šur.ga/ ‘heaven’.

replace /ʃ/ with the alveolar fricative [s]. Alternative strategies are to substitute /ʃ/ with the palatalized alveolar fricative [sʲ], 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 [sʲ]. Alternatively, speakers sometimes replace /ʃ/ with the consonant sequence [s.j], thereby changing the syllable pattern of the target item as in *dasyat* [ˈdɐs.jɐt̚] 'terrifying'.

Table 2.48: Strategies to realize the Standard Indonesian postalveolar fricative

Orthogr.	Gloss	Realization	Freq.	Item in SI
masarakat	'community'	[ˌma.**s**a.ˈɾa.kɐt̚]	27	*masyarakat*
		[ˌma.**s**ʲa.ˈɾa.kɐt̚]	11	
asik	'be passionate'	[ˈa.**s**ɪk]	1	*asyik*
dasyat	'terrifying'	[ˈda.**s**ʲɐt̚]	2	*dasyat*
		[ˈdɐ**s.j**ɐt̚]	4	
syarat	'condition'	[ˈ**s**ʲa.ɾɐt̚]	2	*syarat*
syukur	'thanks to God'	[**s**ʲu.kʊr]	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 §2.2 and §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 /ŋ/. 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* [ˈkɔ.pi] 'coffee' can be lenited by means of spirantization to fricative [f] giving [ˈkɔ.fi] 'coffee'. When following a lexeme with word-final vowel, the word-initial stop in *pikir* [ˈpi.kɪr] 'think' can be lenited to [f], as in [ˈsa ˈfi.kɪr] *sa pikir* 'I think' or [ˈsu.da ˈfi.kɪr] *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.ɔ/ or /si.a/ sequences, presented in Table 2.50. Again, the palatalization of /s/ co-occurs with the elision of close front /i/, which reduces the number of syllables by one. Hence, /si.ɔ/ is realized as [sʲɔ] and /si.a/ as [sʲa]. 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.

[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.ɔ/ sequence in which the syllable containing /s/ is stressed are unattested.

Table 2.49: Lack of nasal place assimilation in the word-internal coda in loanwords

Realization	Item	Orthogr.	Gloss	Donor language
[m]	[aˈlʊ**m.**ni]	*alumni*	'alumnus'	Latin
	[ˈdzʊ**m.**la]	*jumla*	'sum'	Arabic
	[kn̩ˈsʊ**m.**si]	*konsumsi*	'consumption'	Dutch
[n]	[ˈta**n.**pa]	*tanpa*	'without'	(uncertain[a])
	[mɐ**n.**ˈfa.ɐt̚]	*manfaat*	'benefit'	Arabic
	[ˌɪ**n.**fɔr.ˈma.si]	*informasi*	'information'	Dutch

[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.

Table 2.50: Palatalization of the alveolar fricative in loanwords

Stress	Orthogr.	Gloss	Realization	Freq.
/si/ unstressed	*misionaris*	'missionary'	[ˌmi.**si**.ɔ.ˈna.rɪs]	1
			[ˌmi.**sʲ**ɔ.ˈna.rɪs]	10
	nasional	'national'	[ˌna.**si**.ɔ.ˈnɐl]	1
			[ˌna.**sʲ**ɔ.ˈnɐl]	2
	sosial	'social'	[ˌsɔ.**sɪ**.ˈɐl]	2
			[sɔ.ˈ**sʲ**ɐl]	3
/ˈsi/ stressed	*manusia*	'human being'	[ˌma.nu.ˈ**si.a**]	49
	rahasia	'secret'	[ˌra.ha.ˈ**sɪ.a**]	4
	usia	'age'	[u.ˈ**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 /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 word-internal clusters, similar to their distribution in inherited Malay roots.

Table 2.51: Onset CC clusters – Stops in C_1 position

Word-initial position			Word-internal position		
/pC_2/	/ˈ**pr**ak.tɛk/	'practicum'	/pC_2/	/ɔ.ˈ**pr**a.si/	'operation'
	/ˈ**pl**as.tik/	'plastic'		/ˈam.**pl**ɔp/	'envelop'
/bC_2/	/ˈ**br**i.ta/	'news'	/bC_2/	/ˈdɔ.**br**ak/	'smash'
				/ˈi.**bl**is/	'devil'
/tC_2/	/**tr**a.ˈdi.si/	'tradition'	/tC_2/	/ba.ˈ**tr**ɛj/	'battery
/dC_2/	/ˈ**dr**am.bɛn/	'marching band'			
/kC_2/	/ˈ**kn**al.pɔt/	'muffler'	/kC_2/	/ˌrɛ.**kr**ɛ.ˈa.si/	'recreation'
	/**kr**ɛ.ˈma.si/	'cremation'		/bis.ˈ**kw**it/	'cracker'
	/ˈ**kl**as/	'class'			
	/ˈ**kw**a/	'broth'			
/gC_2/	/ˈ**gr**ɔ.bak/	'wheelbarrow'	/gC_2/	/nɛ.ˈ**gr**i/	'state'
	/ˈ**gl**ɔ.dʒɔ/	'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/, /ʧr/, /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/.

[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 ['ɛr.pɔr] 'airport', ['kɔm.plɛk] 'complex', or [ˌpɛ.trɔ.'mɛs] 'kerosene lantern'.

Table 2.52: Onset CC and CCC clusters – Fricatives in C_1 position

Word-initial position			Word-internal position		
/fC_2/	/ˈ**fr**ɛj/	‘be blank’			
/sC_2/	/ˈ**sp**a.tu/	‘shoe’	/sC_2/	/in.ˈ**st**an.si/	‘level’
	/ˈ**st**a.tus/	‘status’			
	/ˈ**sk**ɔ.la/	‘school’			
	/ˈ**sm**ɛn/	‘cement’			
	/ˈ**sn**ɛk/	‘snack’			
	/ˈ**sl**a.mat/	‘be safe’			
	/ˈ**sw**a.mi/	‘husband’			
	/ˈ**spr**ɛj/	‘bedsheet’			
	/ˈ**str**ap/	‘punish’			
	/ˈ**skr**ip.si/	‘minithesis’			

Table 2.53: Coda CC clusters

Word-final position		
/rt/	/ˈɛr.pɔ**rt**/	‘airport’
/ks/	/ˈkɔm.plɛ**ks**/	‘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]

C_1C_2		OBSTR											NAS				LIQ		APR	
		p	b	t	d	ʧ	ʤ	k	g	f	s	h	m	n	ɲ	ŋ	r	l	j	w
OBSTR	p																pr	pl		
	b																br	bl		
	t																tr			
	d																dr			
	ʧ																			
	ʤ																			
	k										ks			kn			kr	kl		kw
	g																gr	gl		
	f																fr			
	s	sp		st				sk					sm	sn			spr	sl		sw
																	str			
																	skr			
	h																			
LIQ	r			rt																
	l																			

[a] As nasals and approximants do not occur in C_1 position, they are excluded from Table 2.54.

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 /ˈ(C)V.V/ stress pattern with the syllable containing V_1 being stressed. The second example has a /CV.ˈV/ stress pattern in which V_2 is stressed. Of the 56 loanwords with V.V sequences, 36 items (56%) have a /ˈCV.V/ stress pattern, while 20 items (44%) show a /CV.ˈV/ stress pattern. Again, the V.V sequences are realized without an inserted glottal stop.

Table 2.55: V.V sequences – Examples

V_1.V_2	Stress	Item	Gloss	Freq.
/i.u/	/Ci.ˈu/	/ˌsɛ.ri.ˈus/	‘be serious’	1
/i.ɔ/	/ˈCi.ɔ/	/ˈki.ɔs/	‘kiosk’	6
	/Ci.ˈɔ/	/pri.ˈɔ.dɛ/	‘period’	2
/i.a/	/ˈCi.a/	/ʧɛ.ˈri.a/	‘be cheerful’	15
	/Ci.ˈa/	/pi.ˈa.ra/	‘raise’	8
/u.a/	/ˈCu.a/	/ˈsmu.a/	‘all’	1
	/Cu.ˈa/	/pu.ˈa.sa/	‘fast’	4
/ɛ.ɔ/	/ˈCɛ.ɔ/	/fi.ˈdɛ.ɔ/	‘video’	2
/ɛ.a/	/Cɛ.ˈa/	/rɛ.ˈak.si/	‘reaction’	2
/ɔ.i/	/ˈCɔ.i/	/ɛ.ˈgɔ.is/	‘be egoistic’	1
/ɔ.a/	/ˈCɔ.a/	/ˈsɔ.ak/	‘be weak’	5
	/Cɔ.ˈa/	/ˌɔn.dɔ.ˈa.fi/	‘traditional chief’	1
/a.i/	/ˈCa.i/	/a.ˈdʒa.ip/	‘be miraculous’	2
/a.u/	/ˈCa.u/	/ˈma.ut/	‘death’	1
/a.ɛ/	/Ca.ˈɛ/	/da.ˈɛ.ra/	‘area’	1
/a.a/	/ˈCa.a/	/dʒɛ.ˈma.at/	‘congregation’	3
	/Ca.ˈa/	/ma.ˈaf/	‘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

V_1.V_2	i		u		ɛ		ɔ		a		Total
i	---	0	i.u	1	---	0	i.ɔ	8	i.a	23	32
u	---	0	---	0	---	0	---	0	u.a	5	5
ɛ	---	0	---	0	---	0	ɛ.ɔ	2	ɛ.a	2	4
ɔ	ɔ.i	1	---	0	---	0	---	0	ɔ.a	6	7
a	a.i	2	a.u	1	a.ɛ	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/, /ɛ.ɔ/ and /a.a/), and five V.V sequences of falling sonority (/ɔ.i/, /a.i/, /a.u/, and /a.ɛ/).

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	/ˈɔm/	‘uncle’
CV	4	ˈ/tɛ/	‘tea’
CVC	45	/ˈdʒiŋ/	‘genie’
CCV	2	/ˈkwa/	‘broth’
CCVC	30	/ˈtrɛk/	‘truck’
CCCVC	4	/ˈstrɔm/	‘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).

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

Syllable types	Count	Item	Gloss
V.CV	1	/a.ˈtɔ/	‘or’
V.CVC	1	/i.ˈman/	‘faith’
CV.VC	1	/ma.ˈaf/	‘pardon’
CV.CV	2	/pɛ.ˈta/	‘map’
CV.CVC	18	/mi.ˈnit/	‘minute’
CV.CCV	1	/nɛ.ˈgri/	‘state’
CV.CCVC	2	/rɛ.ˈtrit/	‘retreat’
CVC.CV	4	/pɛr.ˈlu/	‘need’
CVC.CVC	12	/kɔm.ˈbɔŋ/	‘be inflated’
CVC.CCV	1	/mɛn.ˈtri/	‘cabinet minister’
CVC.CCVC	1	/bis.ˈkwit/	‘cracker’
CCV.CVC	2	/plɛ.ˈtɔn/	‘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	/ˈi.dɛ/	‘idea’
V.CVC	18	/ˈi.dʒiŋ/	‘permission’
V.CCVC	1	/ˈi.blis/	‘devil’
VC.CV	6	/ˈil.mu/	‘knowledge’
VC.CVC	9	/ˈɛm.bɛr/	‘bucket’
VC.CVCC	1	/ˈɛr.pɔrt/	‘airport’
VC.CCV	2	/ˈin.trɔ/	‘introduction’
VC.CCCV	1	/ˈɛk.stra/	‘extra’
VC.CCVC	1	/ˈam.plɔp/	‘envelope’
CV.V	2	/ˈdɔ.a/	‘prayer’
CV.VC	5	/ˈta.at/	‘be obedient’
CV.CV	72	/ˈka.ja/	‘be rich’
CV.CVC	103	/ˈhɔ.nɔr/	‘honorarium’
CV.CVCC	1	/ˈra.pɔrt/	‘school report book’
CV.CCVC	2	/ˈdɔ.brak/	‘smash’
CVC.CV	48	/ˈwak.tu/	‘time’
CVC.CVC	51	/ˈkɔr.baŋ/	‘sacrifice’
CVC.CCV	2	/ˈman.tri/	‘male nurse’
CVC.CCVC	5	/ˈdis.trik/	‘district’
CVC.CCVCC	1	/ˈkɔm.plɛks/	‘complex’
CCV.V	1	/ˈsmu.a/	‘all’
CCV.CV	13	/ˈkwa.sa/	‘power’
CCV.CVC	11	/ˈsla.mat/	‘be safe’
CCV.CCVC	1	/ˈprɔ.gram/	‘program’
CCVC.CV	2	/ˈprik.sa/	‘check’
CCVC.CVC	9	/ˈknal.pɔt/	‘muffler’
CCVCC.CVC	1	/ˈtrans.fɛr/	‘transfer’
CCCV.CV	1	/ˈstri.ka/	‘iron’
CCCVC.CV	1	/ˈskrip.si/	‘minithesis’

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

Syllable types	Count	Item	Gloss
V.CV.CVC	1	/ˌɔ.tɔ.ˈnɔm/	‘autonomous’
VC.CV.CVC	1	/ˌin.si.ˈɲur/	‘engineer’
CV.CV.VC	2	/ˌsɛ.ri.ˈus/	‘be serious’
CV.CV.CV	1	/ˌrɛ.dʒɛ.ˈki/	‘livelihood’
CV.CV.CVC	6	/ˌdɔ.mi.ˈnan/	‘dominate’
CV.CV.CCVC	2	/ˌrɛ.pu.ˈblik/	‘republic’
CV.CCV.CVCC	1	/ˌpɛ.trɔ.ˈmaks/	‘kerosene lantern’
CV.CVC.CV	1	/ˌsu.pɛr.ˈmi/	‘instant noodles’
CV.CVC.CVC	4	/ˌkɔ.man.ˈdan/	‘commandant’
CCV.CV.CVC	3	/ˌprɛ.si.ˈdɛn/	‘president’
CVC.CV.CVC	1	/ˌkar.ta.ˈpɛl/	‘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 CV(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.ˈrɔ.a/	‘departed spirit’
V.CV.VC	2	/ɛ.ˈgɔ.is/	‘be egoistic’
V.CV.CV	8	/a.ˈca.ra/	‘ceremony’
V.CV.CVC	3	/a.ˈla.mat/	‘address’
V.CCV.CV	1	/ɔ.ˈpra.si/	‘surgery’
V.CVC.CV	4	/a.ˈgɛn.da/	‘agenda’
VC.CV.CV	4	/as.ˈra.ma/	‘dormitory’
VC.CV.CVC	2	/ɔk.ˈtɔ.bɛr/	‘October’
VC.CVC.CVC	1	/in.ˈsɛn.tif/	‘incentive’
VC.CCVC.CV	1	/in.ˈstan.si/	‘level’
CV.V.CV	5	/pi.ˈa.ra/	‘raise’
CV.V.CVC	1	/di.ˈa.lɛk/	‘dialect’
CV.VC.CV	1	/rɛ.ˈak.si/	‘reaction’
CV.CV.V	9	/ʧɛ.ˈri.a/	‘be cheerful’
CV.CV.VC	2	/dʒɛ.ˈma.at/	‘congregation’
CV.CV.CV	35	/pɛ.ˈpa.ja/	‘papaya’
CV.CV.CCV	1	/ʧɛ.ˈri.tra/	‘talk’
CV.CV.CVC	4	/na.ˈsi.hat/	‘advice’
CV.CVC.CV	4	/ta.ˈlɛn.ta/	‘gift’
CV.CVC.CVC	8	/kɛ.ˈtum.bar/	‘coriander’
CCV.V.CV	1	/pri.ˈɔ.dɛ/	‘period’
CCV.VC.CV	1	/klu.ˈar.ga/	‘family’
CCV.CV.CV	3	/pri.ˈba.di/	‘be private’
CCV.CVC.CV	1	/prɔ.ˈpin.si/	‘province’
CCCV.CV.CV	1	/stra.ˈtɛ.gi/	‘strategy’
CVC.CV.VC	1	/man.ˈfa.at/	‘benefit’
CVC.CV.CV	20	/pɛr.ˈʧa.ja/	‘trust’
CVC.CV.CVC	5	/kɔm.ˈpu.tɛr/	‘computer’
CVC.CVC.CV	3	/sɛm.ˈpur.na/	‘be perfect’
CVC.CCV.CVC	2	/kɔm.ˈplɔ.taŋ/	‘(half)circle’

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

Syllable types	Count	Item	Gloss
CV.CV.CVC	1	/ˈdʒɛ.ri.ˌkɛn/	‘jerry can’

Table 2.63: Quadrisyllabic loanwords (42 items)

Syllable types	Count	Item	Gloss
Ultimate stress			
VC.CV.CV.CVC	1	/is.ˌti.ra.ˈhat/	‘rest’
CV.CV.V.CVC	1	/ˌna.si.ɔ.ˈnal/	‘national’
CV.CV.CV.CVC	2	/ma.ˌjɔ.ri.ˈtas/	‘majority’
CCV.V.CV.CVC	1	/pri.ˌɔ.ri.ˈtas/	‘priority’
Penultimate stress			
V.CV.CV.CV	1	/ˌɔ.tɔ.ˈnɔ.mi/	‘autonomy’
V.CV.CV.CVC	1	/ˌɔ.tɔ.ˈma.tis/	‘be automatic’
VC.CV.V.CV	1	/ˌɔn.dɔ.ˈa.fi/	‘traditional chief’
VC.CV.CV.CV	1	/ˌis.ti.ˈmɛ.wa/	‘be special’
VC.CV.CV.CVC	1	/ˌan.ti.ˈfi.rus/	‘antivirus’
VC.CCV.CV.CV	1	/ˌas.trɔ.ˈnɔ.mi/	‘astronomy’
VC.CVC.CV.CV	1	/ˌin.fɔr.ˈma.si/	‘information’
CV.V.CV.CV	2	/ˌbi.ɔ.ˈlɔ.gi/	‘biology’
CV.CV.CV.V	5	/ˌma.nu.ˈsi.a/	‘human being’
CV.CV.V.CV	1	/ˌdʒa.nu.ˈa.ri/	‘January’
CV.CV.V.CVC	1	/ˌka.ri.ˈa.waŋ/	‘employee’
CV.CV.CV.CV	6	/ˌtɛ.lɛ.ˈfi.si/	‘television’
CV.CV.CV.CVC	3	/ˌma.sa.ˈra.kat/	‘community’
CV.CV.CVC.CVC	2	/ˌrɛ.fɛ.ˈrɛn.dum/	‘referendum’
CV.CVC.CV.CV	4	/ˌwa.wan.ˈʧa.ra/	‘interview’
CV.CVC.CV.CVC	1	/ˌsɛ.kɛr.ˈta.ris/	‘secretary’
CV.CCV.V.CV	2	/ˌfɛ.bru.ˈa.ri/	‘February’
CVC.CV.CV.CV	1	/ˌkɔr.di.ˈna.si/	‘coordinate’
CVC.CV.CV.CVC	1	/ˌkɔr.di.ˈna.tɔr/	‘coordinator’
Antepenultimate stress			
V.CCV.CV.V	1	/a.ˈgra.ri.ˌa/	‘agrarian affairs’

Table 2.64: Pentasyllabic roots (9 items)

Syllable types	Count	Item	Gloss
Ultimate stress			
V.CV.CVC.CV.CVC	1	/ˌu.ni.ˌfɛr.si.ˈtas/	‘university’
CV.CV.CV.CV.CV	1	/ˌpi.si.ˌkɔ.lɔ.ˈgi/	‘psychology’
Penultimate stress			
V.CVC.CV.V.CV	1	/ɔ.ˌlɪm.pi.ˈa.dɛ/	‘Olympiad’
V.CVC.CV.CV.CV	1	/ɛ.ˌman.si.ˈpa.si/	‘emancipation’
CV.CV.V.CV.CVC	1	/mi.ˌsi.ɔ.ˈna.ris/	‘missionary’
CV.CV.CV.CV.CV	2	/ma.ˌtɛ.ma.ˈti.ka/	‘mathematics’
CV.CVC.CV.CV.V	1	/sɛ.ˌkɛr.ta.ˈri.a/	‘secretariat’
Antepenultimate stress			
CV.V.CV.CV.V	1	/ˌtɛ.ɔ.ˈlɔ.gi.ˌa/	‘theology’

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

Syllable types	Stress patterns			Total
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	ˌɐs.trɔ.ˈnɔ.mi	‘astronomy’	ɑs.tro.no.ˈmi	ə.ˈstrɑ.nə.mi
strategi	stra.ˈtɛ.gi	‘strategy’	stra.tə.ˈxi	ˈstræ.tɪ.dʒɪ
transfer	ˈtrɐns.fɐr	‘transfer’	trɑns.ˈfʏːr	trɑːns.ˈfɜː(r)

[a] The Dutch examples are taken from Woorden.org MMXI (2010-) and the English examples from Oxford University Press (2000-).

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	ʧ	dʒ	k	g	s	h	m	n	ɲ	ŋ	r	l	j	w
ORTH	p	b	t	d	c	j	k	g	s	h	m	n	ny	ng	r	l	y	w
Vowels																		
PHON	i		ɛ		u		ɔ		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, [sʲ] 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-ˈkalaj/ 'to fight' versus *bertriak* /bɛr-ˈtriak/ 'to scream' or *talipat* /talipat/ 'be folded' versus *terpaksa* /tɛr-ˈpaksa/ 'be forced' (see §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 §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 palato-alveolar 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 cross-linguistically 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.

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 /ʃ/ 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 word-formation 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 §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.

[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 *pa(N)-* (small-caps *N* represents the different realizations of the nasal) (§3.1.4.1), and *ber-* and *ba-* (§3.1.5.1), respectively.

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: 62–100), 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 semi-productive 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 semi-productive 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 §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

[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".

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).

[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).

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 **P** of a particular morphological process as the proportion between the number of hapaxes of that type (n_1) to the total number of tokens N" for that particular affix; a definition which is based on Baayen's (1992: 115) formula $P = n_1/N$.

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 class-preserving 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 code-switches 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 §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 *PE(N)-* 'AG' 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 *PE(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 §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, "*tər-* 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]

[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 (P=0.1257); the 38 bivalent verbs include 17 hapaxes (P=0.1111); the five monovalent verbs include four hapaxes (P=0.2857).

[7] The historical roots *tawa*, *grak*, or *apung* do not exist in Papuan Malay.

Before discussing TER-affixation of bivalent bases in §3.1.2.2 and of monovalent bases in §3.1.2.3, the allomorphy of TER- is examined in §3.1.2.1. Variables of the communicative event that may impact the use of TER- 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 TER- has two allomorphs, *ter-* and *ta-*. 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: /tɛr-/, /tɛ-/, and /tr-/. Most commonly, *ter-* is realized as /tɛr-/. With onset rhotic /r/, however, it is realized as /tɛ-/. With onset vowels, the prefix is usually realized as /tr-/.

Table 3.1: Realizations of allomorph *ter-*

ter-base	Orthogr.	Gloss
/tɛr–pukul/	*terpukul*	'be beaten'
/tɛ–rɛndam/	*terendam*	'be soaked'
/tr–aŋkat/	*trangkat*	'be lifted'

Allomorph *ta-* 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 *ta-* and for *ter-* are given.[8] If in a greater number of tokens the prefix is realized with /ta-/ than with /tɛr-/, 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 *ta-*, 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 *ta-*. 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 *tə(r)-* (Paauw 2009: 253). The different behavior of Papuan Malay TER- supports

[8] In addition, the 2,459-item word list (see Chapter 2, p. 65) contains five items realized with /ta-/ rather than with /tɛr-/: /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 /tɛr-/. Further, the word list also includes three items realized with /tɛr-/ whereas in the corpus these items are most commonly realized with /ta-/: *talempar* 'be thrown', *talipat* 'be folded', and *tarangkat* 'be lifted up'.

Table 3.2: Realizations of allomorph *ta-*

ta-base	Orthogr.	Gloss	*ta-* #	*ter-* #
/ta–gɔjaŋ/	*tagoyang*	'be shaken'	9	0
/ta–putar/	*taputar*	'be turned around'	7	2
/ta–lipat/	*talipat*	'be folded'	6	1
/ta–lɛmpar/	*talempar*	'be thrown'	4	1
/ta–guliŋ/	*taguling*	'be rolled over'	3	0
/ta–gantɔŋ/	*tergantong*	'be dependent'	1	6
/ta–lɛpas/	*terlepas*	'be loose'	1	1
/ta–balik/	*tabalik*	'be turned upside down'	1	0
/ta–bantiŋ/	*tabanting*	'be tossed around'	1	0
/ta–tʃukur/	*tacukur*	'be scalped'	1	0
/ta–gait/	*tagait*	'be hooked	1	0
/ta–hambur/	*tahambur*	'be scattered about'	1	0
/ta–kantʃiŋ/	*takancing*	'be locked'	1	0
/ta–lɛm/	*talem*	'be glued'	1	0
/ta–sala/	*tasala*	'be mistaken'	1	0
/ta–tikam/	*tatikam*	'be stabbed'	1	0
/ta–tɔŋkat/	*tatongkat*	'be beaten'	1	0

the conclusion put forward in §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 *TER-* removes 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	12
rendam	'soak'	*terendam*	'be soaked'	5	1
pukul	'beat'	*terpukul*	'be beaten'	4	59
bakar	'burn'	*terbakar*	'be burnt'	3	55
guling	'roll over'	*taguling*	'be rolled over'	3	2
tutup	'close'	*tertutup*	'be closed'	3	53
bagi	'divide'	*terbagi*	'be split up'	2	66
tarik	'pull'	*tertarik*	'be pulled'	2	32
lepas	'free'	*talepas*	'be loose'	2	23
kumpul	'gather'	*terkumpul*	'be collected'	2	16
tolak	'push away'	*tertolak*	'be rejected'	2	11
kupas	'peel'	*terkupas*	'be peeled'	2	1
buat	'make'	*terbuat*	'be made'	1	135
kenal	'know'	*terkenal*	'be well-known'	1	57
balik	'turn over'	*tabalik*	'be turned over'	1	37
ganggu	'disturb'	*terganggu*	'be disturbed'	1	18
bla	'split'	*terbla*	'be split'	1	13
pengaru	'influence'	*terpengaru*	'be affected'	1	7
banting	'throw'	*tabanting*	'be tossed around'	1	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 *TER-* 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

(5) *... 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'	*tersendiri*	'be separate'	1	232
biasa	'be used to'	*terbiasa*	'be accustomed'	1	186
jatu	'fall'	*terjatu*	'be dropped, fall'	1	64
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

[9] As mentioned under Factor 3 "Relationships between interlocutors" in §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.

Table 3.6: Token frequencies for *TER*-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 (TOP)" and "Interlocutors" (ILCT), 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 less-educated 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 better-educated 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 (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.

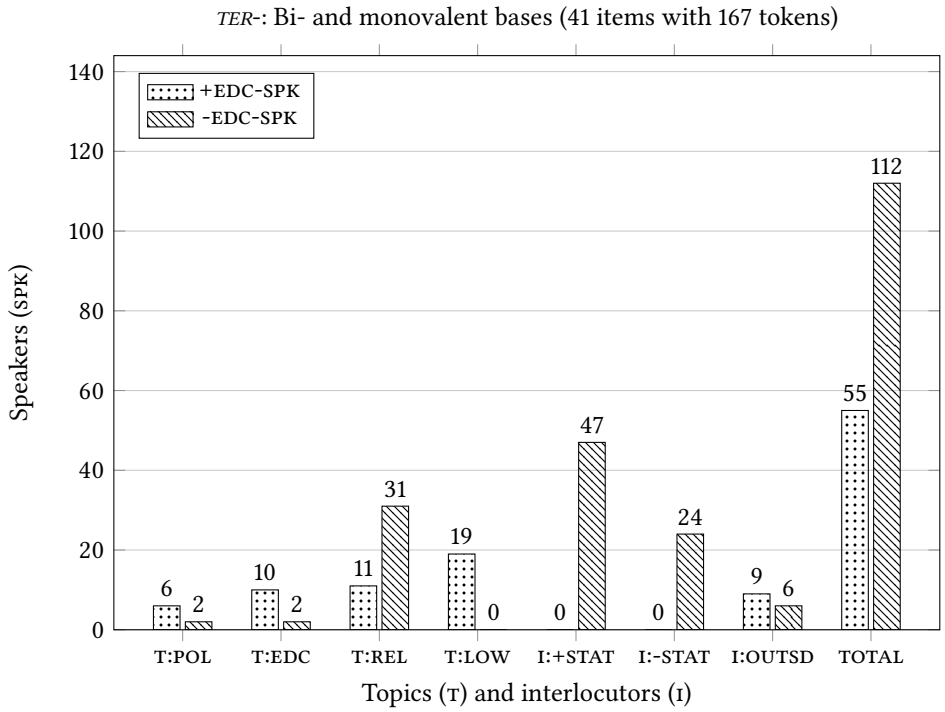


Figure 3.1: Token frequencies for *TER*-prefixed lexemes with bi- and monovalent verbal bases by speakers, topics, and interlocutors

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 form-function relationship between the derived lexemes and their bases. This conclusion is based on four observations: (1) the valency-decreasing or -reducing function of *TER*- of 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 role-relations 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]

[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, P=0.0180 as opposed to P=0.1257 for 21 hapaxes (N=167).

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.

[11] The 84 nouns include 28 hapaxes (P=0.0635); the 69 nouns with verbal bases include 23 hapaxes (P=0.0571); the 15 nouns with nominal or numeral bases include five hapaxes (P=0.1316).

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
uji	'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 dua* ***jalang*** *suda!*
next 1PL two go.home reach at walk–PAT 1SG rest 3SG say 1PL 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'	*kandungang*	'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%).

[12] As mentioned under Factor 3 "Relationships between interlocutors" in §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.

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]

[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 code-switches 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, P=0.0249 as opposed to P=0.0635 for 28 hapaxes (N=441). The total of 11 hapaxes includes nine with verbal bases (P=0.0223) and two with nominal or numeral bases (P=0.0526).

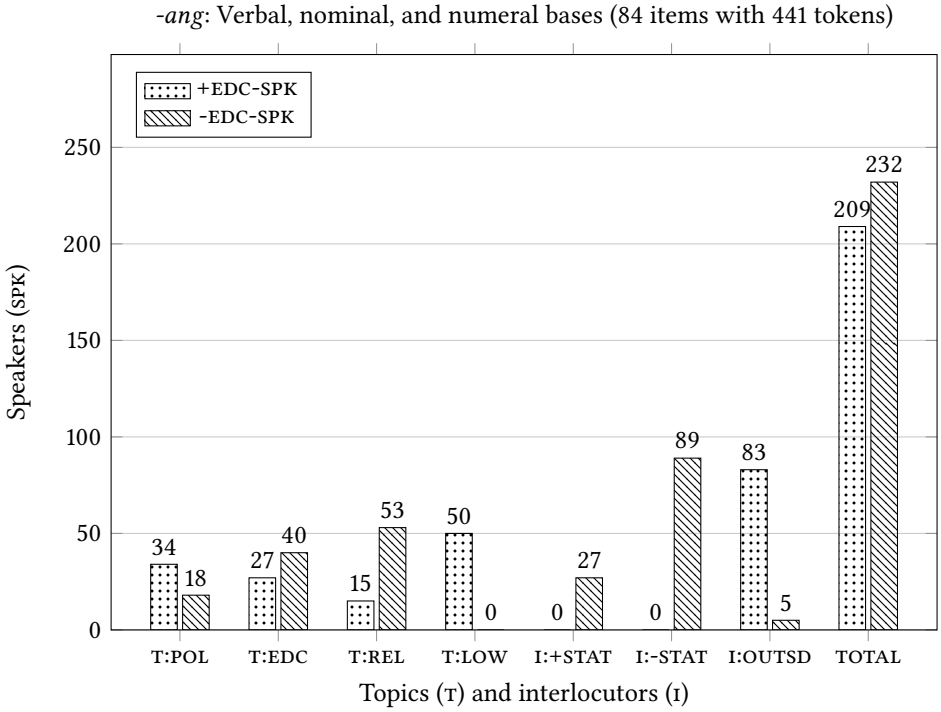


Figure 3.2: Token frequencies for *-ang*-suffixed lexemes with verbal, nominal, and numeral bases by speakers, topics, and interlocutors

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 *PE(N)-* 'AG'

Affixation with *PE(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.

(21) *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 *PE(N)-* is a reflex of Proto-Malayic **pAN-*, 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 *paŋ-* also 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.

The corpus contains 34 nouns (186 tokens) prefixed with *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 §3.1.4.3, the allomorphy of *PE(N)-* is investigated in §3.1.4.1. Variables of the communicative event that may impact the use of *PE(N)-* are explored in §3.1.4.4. The main points on prefix *PE(N)-* are summarized and evaluated in §3.1.4.5.

3.1.4.1 Allomorphy of *PE(N)-*

Prefix *PE(N)-* has two allomorphs, *pe(N)-* and *pa(N)-* (small-caps *N* represents the different realizations of the nasal). The allomorphs are not governed by phonological processes.

The form *pe(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: /pɛm-/, /pɛn-/, /pɛɲ-/, pɛŋ-/, /pɛ-/, /p-/, and /pl-/. The prefix is realized as /pɛm-/ when the initial segment of the base is a bilabial stop. Onset voiced stops are retained, while voiceless stops are deleted. With onset bilabial /m/, the prefix is realized as /pɛ-/. With alveolar stops, the prefix is very commonly realized as /pɛn-/. 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 /pɛ-/. With onset fricative /s/, the prefix is realized as /pɛɲ-/, with /s/ being deleted. With onset palato-alveolar affricates, *pe(N)-* is realized as /pɛn-/. With onset rhotic /r/, the affix is realized as /pɛ-/. With onset velar stops and onset vowels, the prefix is realized as /pɛŋ-/. Finally, when prefixed to *ajar* 'teach', *pe(N)-* is realized as /pl-/.

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

In realizing the prefix typically as *pe(N)-* rather than as *pa(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 *pa(N)-*. Instead, the *PE(N)*-prefixed items have more resemblance with the corresponding items

[14] The 34 nouns include 11 hapaxes (P=0.0591); the 29 nouns with verbal bases include nine hapaxes (P=0.0588); the five nouns with nominal bases include two hapaxes (P=0.0606).

Table 3.10: Realizations of allomorph *pe(N)-*

pe(N)-base	Orthogr.	Gloss
/pɛm–bantu/	*pembantu*	'house helper'
/pɛm–pili/	*pemili*	'voter'
/pɛ–muda/	*pemuda*	'youth'
/pɛn–dataŋ/	*pendatang*	'newcomer'
/pɛn–tumpaŋ/	*penumpang*	'passenger'
/pɛ–tugas/	*petugas*	'official'
/pɛɲ–sakit/	*penyakit*	'disease'
/pɛn–tʃuri/	*pencuri*	'thief, to steal (EMPH)'
/pɛn–dʒaga/	*penjaga*	'guard'
/pɛ–rɛntʃana/	*perencana*	'planner'
/pɛŋ–acara/	*pengacara*	'master of ceremony'
/pɛŋ–ganti/	*pengganti*	'replacement'
/pl–adʒar/	*plajar*	'teacher'

Table 3.11: Realizations of allomorph *pa(N)-*

pa(N)-base	Orthogr.	Gloss	*pa(N)-* #	*pe(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–tʃuri/	*pencuri*	'thief, steal (EMPH)'	1	11

in Standard Indonesian where the prefix is realized as *pe(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 *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 *duduk* '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 (EMPH)'. 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 *PE(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.

Prefix *PE(N)-*: 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 (EMPH)' as in (27), *panakut* 'be very fearful (of)' as in (28), and *pandiam* 'be very

Table 3.12: Affixation with *PE(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*	'thief, steal (EMPH)'	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
tanggung-jawap	'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 *PE(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 *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 Proto-Malayic 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 *PE(N)-* has. This

intensified verbal reading of mono- and bivalent verbal bases prefixed with *pe(n)-* could be an extension of the original functions of *pəN-* found in Standard Malay or of **pAN-* found 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 *pa(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 *pa-* is unproductive in Manado and North Moluccan / Ternate Malay.

3.1.4.3 Prefixed items derived from nominal bases

The corpus contains five *pe(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 *pe(n)-* of nominal bases

BW	Gloss	Item	Gloss	*pe(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 ceremony'	1	40
rencana	'plan'	*perencana*	'planner'	1	17

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~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 *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 *PE(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 *PE(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%).

[15] As mentioned under Factor 3 "Relationships between interlocutors" in §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.

Table 3.15: Token frequencies for *PE(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 *PE(N)*- is polyfunctional, in that it derives nouns from verbal and nominal bases. This polyfunctionality suggests that affixation with *PE(N)*- is a somewhat productive process (see language internal factor (1c) in §3.1.1, p. 122).

[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 P=0.0376 as opposed to P=0.0591 for 11 hapaxes (N=186).

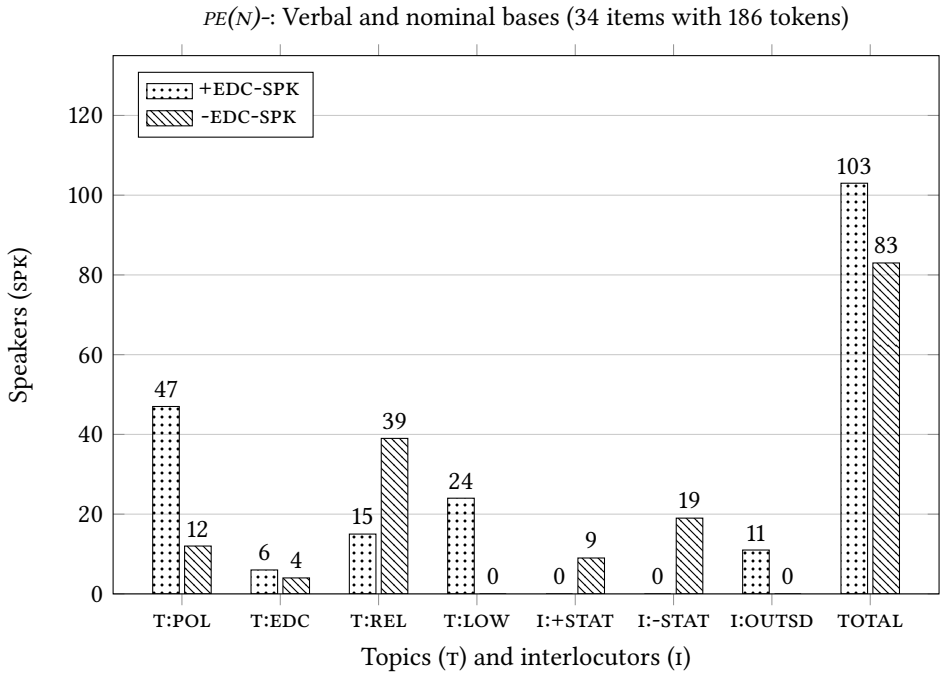


Figure 3.3: Token frequencies for *PE(N)*-prefixed lexemes with verbal and nominal bases by speakers, topics, and interlocutors

Concerning *PE(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 *PE(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 *PE(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 *BER-* 'VBLZ' is not used as a productive derivation device in Papuan Malay.

(32) *... waktu saya* ***ber–buru*** *saya perlu makang pinang*
time 1SG VBLZ–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 *BER-*:[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 *BER-* is investigated in §3.1.5.1. Pertinent variables of the communicative event that may impact the use of *BER-* are explored in §3.1.8. The main findings on prefix *BER-* are summarized and evaluated in §3.1.5.4.

3.1.5.1 Allomorphy of *BER-*

Prefix *BER-* has two allomorphs, *ber-* and *ba-*. The allomorphs are not governed by phonological processes.

Table 3.16: Realizations of allomorph *ber-*

ber-base	Orthogr.	Gloss
/bɛr–dʒuaŋ/	*berjuang*	'struggle (for)'
/br–aŋkat/	*brangkat*	'leave'
/bl–adʒar/	*blajar*	'study'
/bɛ–kɛrdʒa/	*bekerja*	'work'
/bɛ–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: /bɛr-/, /br-/, /bl-/, and /bɛ-/. The prefix is typically realized as /bɛr-/. With an onset vowel, however, *ber-* is

[17] The 62 verbs include 25 hapaxes (P=0.0415); the 29 verbs with verbal bases include 11 hapaxes (P=0.0484); the 33 verbs with nominal, numeral, or quantifier bases include 14 hapaxes (P=0.0373).

very commonly realized as /br-/. When prefixed to *ajar* 'teach' the prefix is realized as /bl-/, while it is realized as /bɛ-/ 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 *ba-* and for *ber-* are given. If in a greater number of tokens the prefix is realized with /ba-/ rather than with /bɛr-/, 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 BER- most commonly as allomorph *ber-* rather than as *ba-*, 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 *ba-*. Instead, the items prefixed with BER- 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 *bə(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*[a]	'scream'	3	18
/ba–biŋuŋ/	*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–mɛkap/	*bamekap*	'wear make-up'	1	0

[a] The root is realized as /triak/ when speakers employ allomorph *ber-*, whereas it is realized as /taria/ when speakers use allomorph *ba-*.

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 *BER*- 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 *BER*-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 *BER-* of verbal bases

BW	Item	Gloss	*BER-* #	BW #
Monovalent bases: Bases and prefixed lexemes with same semantics				
tobat	*bertobat*	'repent'	8	1
beda	*berbeda*	'be different'	7	34
tanggung-jawap	*bertanggung-jawap*	'be responsible'	5	6
bahaya	*berbahaya*	'be dangerous'	3	3
diam	*badiam*	'be quiet'	2	60
bingung	*berbingung*	'be confused'	2	30
jalang	*berjalang*	'walk'	1	480
ibada	*beribada*	'worship'	1	11
sandar	*bersandar*	'lean'	1	6
hati~hati	*berhati~hati*	'be careful'	1	5
pisa	*berpisa*	'be separate'	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 *BER-* of verbal bases continued

BW	Item	Gloss	*BER-* #	BW #
Bivalent bases: Bases and prefixed lexemes with distinct semantics				
Prefixed lexeme: Monotransitive and intransitive uses				
ajar ('teach')	*blajar*	'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 **pikir** tentang 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]

[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'.

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 *BER*-: 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-à-vis 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

(48) *bapa de* ***angkat*** *rotang besar*
father 3SG lift rattan be.big
'father **picked up** a big rattan (stick)' [080921-004a-CvNP.0084]

(49) *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 *ba-* 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).

[18] For Banda Malay, Paauw (2009: 249) reports that *ba-* does not form verbs with reflexive meanings.

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'	*bergisi*	'be nutritious'	1	1
isi	'content'	*baisi*	'be muscular'	1	1

Table 3.21: Affixation with *BER-* 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 *BER-* 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 form-function 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 1SG with 3SG 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 VBLZ–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 *BER-* is a polyfunctional affix that derives lexemes from verbal, nominal, numeral, and quantifier bases. This polyfunctionality suggests that in Papuan Malay affixation

with *BER-* 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 *BER-* 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 *BER-* 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]

[19] Voorhoeve (1983: 4) considers prefix *ba-* to be unproductive.

[20] The 123 suffixed lexemes include 68 hapaxes (P=0.1757); the 81 lexemes with nominal bases include 44 hapaxes (P=0.1549); the 36 lexemes with verbal bases include 21 hapaxes (P=0.2561); the five lexemes with other bases include three hapaxes (P=0.1500).

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 §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

(59) ***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–3POSSR 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*[a]	'appropriately'	7	379
kusus	'be special'	*kususnya*	'especially'	3	30

[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.

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–3POSSR 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'	*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–3POSSR 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'	*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 di* ***sini*** ***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 *BER-* '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 *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 *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 *ke-/-ang* are examined in §3.1.8. The main findings on circumfix *ke-/-ang* are summarized and evaluated in §3.1.7.3.

[21] The 65 circumfixed lexemes include 22 hapaxes (P=0.0853); the 57 lexemes with verbal bases include 17 hapaxes (P=0.0711); the eight lexemes verbs with nominal, numeral, or quantifier bases include five hapaxes (P=0.2632).

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 *ke-/-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
lebi	'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 *ke-/-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 *ke-/-ang* 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]

[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).

(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 *ke-/-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 SI-borrowings (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 *ke-/-ang* of nominal, numeral, and quantifier bases

BW	Gloss	Item	Gloss	*ke-/-ang* #	BW #
Nominal bases					
budaya	'culture'	*kebudayaang*	'civilization'	2	18
untung	'fortune'	*keuntungang*	'advantage'	2	26
camat	'subdistrict head'	*kecamatang*	'subdistrict'	1	22
hutang	'forest'	*kehutangang*	'forestry'	1	42
pegaway	'civil servant'	*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]

(77) *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 *ke-/-ang* 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 *BER-* '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)

[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.

- 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 *ke-/-ang* with verbal bases (239 tokens)
- Eight items circumfixed with *ke-/-ang* 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

[24] As mentioned under Factor 3 "Relationships between interlocutors" in §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.

Table 3.29: Token frequencies for lexemes affixed with *BER-*, *-nya*, and *ke-/-ang* by speakers, topics, and interlocutors (246 items)

	Topics (TOP)				Interlocutors (ILCT)			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]

[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 *BER-*, 59/68 hapaxes suffixed with *-nya*, and 18/22 hapaxes circumfixed with *ke-/-ang*. 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 *BER*-hapaxes P=0.0183 (N=164) as opposed to P=0.0415 for 25 hapaxes (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 P=0.0284 (N=317) as opposed to P=0.1758 for 68 hapaxes (N=387) (N differs for the two P values, as one derived lexeme was excluded from the domain analysis), and

(3) for four *ke-/-ang*-hapaxes P=0.0155 as opposed to P=0.0853 for 22 hapaxes (N=258).

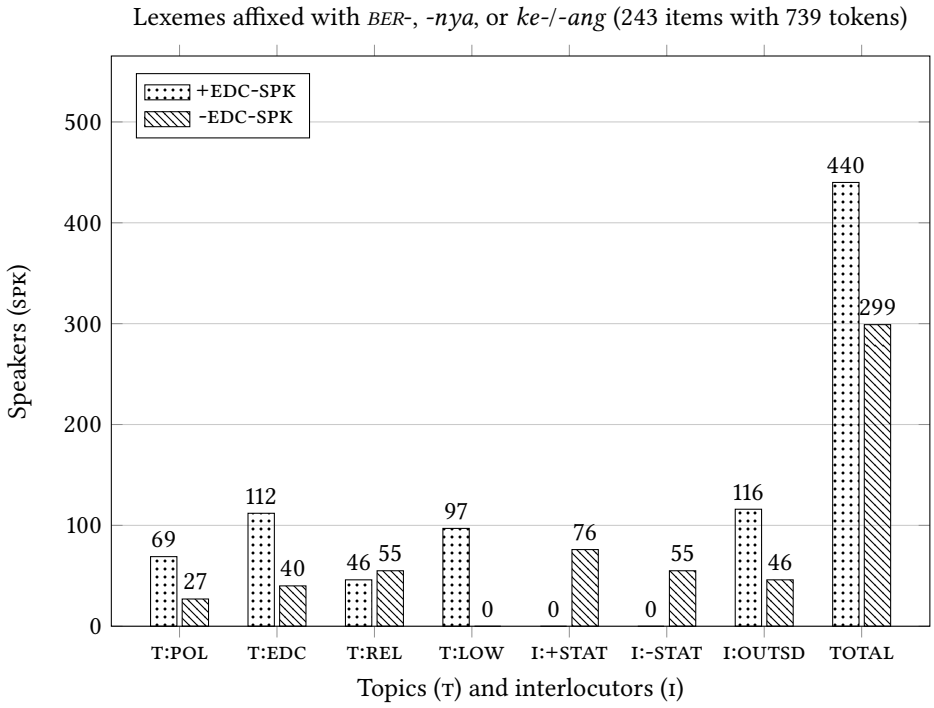


Figure 3.4: Token frequencies for lexemes affixed with BER-, *-nya*, or *ke-/-ang* by speakers, topics, and interlocutors

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

(78) /ˌka.tʃaŋ.ˈhi.dʒɔw/ *kacang-hijow*
bean-be.green
'mung bean'

(79) /ˈka.tʃaŋ ˈhi.dʒɔw/ *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')

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

(82) *orang-tua*
person-be.old
'parent'

(83) *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'

[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".

(86) *air-mata*
water-eye
'tears'

(87) *tali-prut*
cord-stomach
'intestines'

(88) *uang jajang*
money snack
'pocket money' / 'money for snacks'

(89) *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 "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').

[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).

Table 3.30: Endocentric "N N/V" collocations

Item	Gloss	Literal translation	Semantic relation
tali-prut cord-stomach	'intestines'	'cord of the stomach'	'Part-whole'
lemon-manis lemon-be.sweet	'orange'	'sweet lemon'	'Subtype-of'
kreta-api 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 "N N" collocations

Item	Gloss
bapa-ade father-ySb	'father's younger brother'(FyB) / 'mother's younger sister's husband' (MyZH)
kepala-batu head-stone	'pig-headed person'
mata-hari eye-day	'sun'

The distinction between endocentric and exocentric collocations is not always clear-cut, however, as shown in Table 3.32. The kinship terms *bapa-tua* 'uncle' (literally 'father-be.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 content-specifying function. Hence, both kinship terms also qualify as endocentric collocations.

Table 3.32: Endocentric versus exocentric collocations: Ambiguities

Item	Gloss
bapa-tua father-be.old	'parent's older brother' (PeB) / 'mother's 'parent's older sister's husband' (PeZH)
mama-tua mother-be.old	'parent's older sister' (PeZ) / 'mother's 'parent's older brother's wife' (PeBW)

Table 3.33: Coordinative 'N N' collocations

Item	Gloss	Semantic relation
ade-kaka ySb-oSb	siblings	Antonyms
kasi-sayang love-love	'deep love'	Synonyms
guntur-kilat thunder-lightning	'thunderstorm'	Different parts/aspects
tete-moyang 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 *PE(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 *BER-* 'VBLZ' 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.

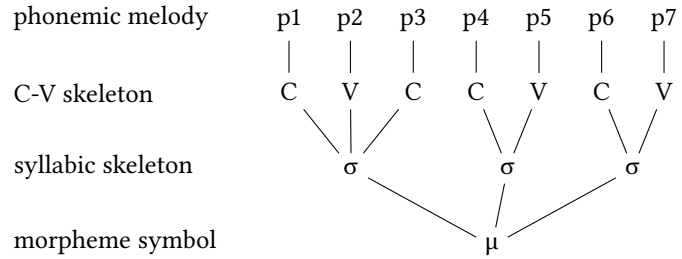
With respect to lexeme formation, Papuan Malay makes use of three different types of reduplication: (1) full reduplication, (2) partial reduplication, and (3) imitative reduplication. Alternatively, Wiltshire & Marantz (1978: 558) refer to these reduplication types as "exact total reduplication", "exact 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)



p1 = phoneme
σ = 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.

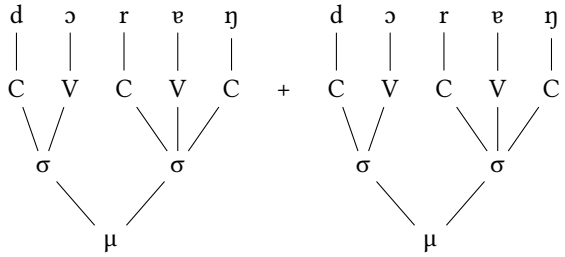
Both types of lexeme formation are described in §4.1.1.1 and §4.1.1.2, respectively. Imitative reduplication is discussed in §4.1.1.3.

4.1.1 Full reduplication

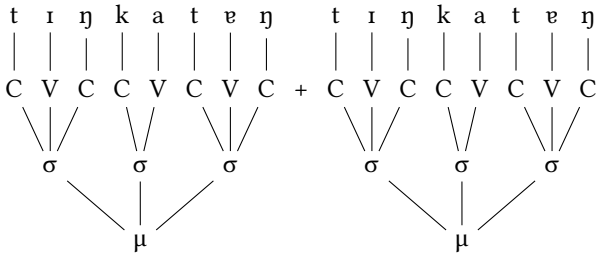
Full reduplication is very common in Papuan Malay. Cross-linguistically, in full reduplication "the reduplicant matches the base from which it is copied without phoneme changes or additions" (Rubino 2013: 2). That is, in terms of Marantz's (1982) prosodic template model, full morpheme reduplication involves "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~dorang* 'RDP~3PL' in (2a), and reduplication of the derived word *tingkatang* 'level' (*tingkatang* 'floor-PAT'), resulting in *tingkatang~tingkatang* 'RDP~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. [ˌdɔ.rɐŋ.ˈdɔ.rɐŋ]



b. [tɪŋ.ˌka.tɐŋ.tɪŋ.ˈka.tɐŋ]



In Papuan Malay, only words are reduplicated; bound morphemes such as prefixes are never reduplicated (see Table 4.1 in §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~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~ade*** *tinggal di ruma*
so 1SG 1SG with 1SG POSS RDP~ySb 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~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*

[a] As discussed in §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.

(4) *kitong dua **lari~lari** sampe di Martewar*
1PL two RDP~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* 'RECP', 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~situ*
	sana	'L.DIST'	*sana~sana*
Interrogatives	*siapa*	'who'	*siapa~siapa*
	apa	'what'	*apa~apa*
	kapang	'when'	*kapang~kapang*
Causative verb	*kasi*	'give'	*kas~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~2PL 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~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~who
Intensity: '[even (when) my children were already sick,] I've never run to **anyone** (for black-magic help)' [081006-034-CvEx.0028]

[1] While reduplication of *sana* 'L.DIST' is unattested in the corpus, it does occur, following one consultant.

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

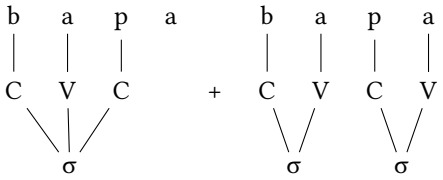
Word class	Base	Reduplicated item	Gloss
Nouns	**alang*	*alang-alang*	'cogongrass'
	**kura*	*kura-kura*	'turtle'
	**pori*	*pori-pori*	'pore'
	**soa*	*soa-soa*	'monitor lizard'
Verbs	**belit*	*belit-belit*	'curve'
	**gong*	*gong-gong*	'bark (at)'
	**tele*	*tele-tele*	'talk excessively'
Quantifier	**masing*	*masing-masing*	'each'
Conjunction	**gara*	*gara-gara*	'because'

4.1.2 Partial reduplication

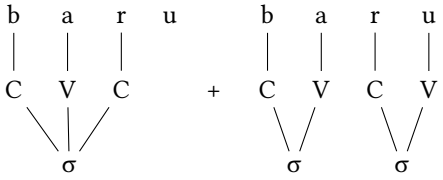
Partial reduplication is rare in Papuan Malay. Generally speaking, this type of reduplication "involves the reiteration of only part of the semantic-syntactic or phonetic-phonological constituent whose meaning is accordingly modified" (Moravcsik 1978: 304).

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).

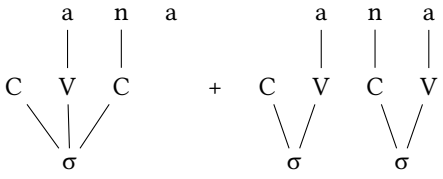
In Papuan Malay, the reduplicant is a closed heavy syllable which is prefixed to the stem from which it borrows the phonemic melody and C-V skeleton, as shown in (9). In (9a), for example, the initial closed syllable [bɐp] is copied over the reduplicating syllabic skeleton. With vowel-initial stems, 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) a.


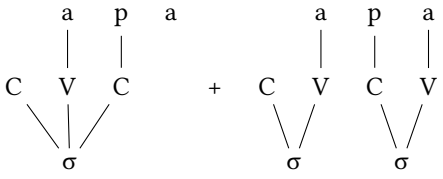
= [bɐp.ˈba.pa]

b.


= [bɐr.ˈba.ru]

c.


= [a.ˈna.na]

d.


= [a.ˈpa.pa]

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* [bɐp.ˈba.pa] 'fathers'. With vowel-initial stems, Papuan Malay copies the initial VC sequence, as in *ana~ana* [a.ˈna.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.ˈna.na] 'children', for instance, is an alternant of [ˌa.na.ˈa.na] 'children'.

Table 4.4: Partial reduplication

Base	Gloss	Reduplicated item	
ana	'child'	*ana~ana*	[a.ˈna.na]
apa	'what'	*apa~apa*	[a.ˈpa.pa]
bapa	'father'	*bapa~bapa*	[bɐp.ˈba.pa]
baru	'recently'	*baru~baru*	[bɐr.ˈba.ru]

4.1.3 Imitative reduplication

The third attested type of reduplication is imitative or rhyming reduplication. Cross-linguistically, 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~ngyaung	ideophone: cockatoo call	**ngyaung*	–
tuk~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 §4.2.1 to §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* *pergi kerja,* ***ana~ana*** *su* *kawing*
RDP~child already go work RDP~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).

[2] Wiltshire & Marantz (1978: 561) refer to "collectivity" as "simple plurality".

Reduplicated nouns: Diversity

(12) ***bua~bua*** *di sini banyak*
RDP~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~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~follow person be.old RDP~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~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 muda*
man D.PROX 3SG already RDP~grandfather but still play with RDP~child 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~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

(25) *… 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~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~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~kras***
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~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 (EMPH) 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~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~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 makang* ***jalang~jalang***
1SG D.DIST 1SG hold sago 1SG eat RDP~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 Jayapura 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~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~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~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~died** (like) **a chicken**'; that is, he was shaking like a chicken with its head cut off) [Elicited BR120813.006]

(47) *pace ni de su* ***tua~tua kladi*** *tapi suka 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~hook') in (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~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*
RDP~know person D.DIST NEG be.visible
'**suddenly**, that person wasn't visible (any longer)' [080922-002-Cv.0123]

(52) ***lama~lama*** *de padat itu macang aspal*
RDP~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 §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~paling*** *de tidor*
3SG say 3SG want work but RDP~most 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 §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~3PL 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 §5.6 and §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).

[3] As mentioned in §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~itu* 'D.DIST~D.DIST'. Therefore, *itu tu* 'D.DIST D.DIST' is taken as an instance of demonstrative stacking (see §5.6.4).

(66) *setela itu nanti buat* ***ini~ini***
after D.DIST very.soon make RDP~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 Jayapura tinggal* ***situ~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~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~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]

(72) *nanti* ***kapang~kapang*** *ka ko jalang~jalang ke mari*
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~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 §11.2 and §11.3, respectively.)

(74) *knapa kam* ***kas~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~be.clever	'be very clever'
Diminution	Attenuation	*kurus~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			LM	MM		SI
	AFFX prec. RDP	PM	AM		KM				SI
	e) No corresponding base words (unproductive)								
	N	PM	AM						SI
	V	PM	AM						SI
	QT	PM							
	ADV		AM						SI
	CNJ	PM	AM						SI
2.	Partial reduplication								
	productive	PM	AM			LM			
	unproductive								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~fruit	'various fruits'
	AM	*kata~kata*	RDP~word	'words'
	BM	*orang~orang*	RDP~person	'people'
	KM	*buku~buku*	RDP~book	'books'
	LM	*ana~ana*	RDP~child	'children'
	MM	*dua~dua*	RDP~two	'all two, both'
	TM	*ular~ular*	RDP~snake	'snakes'
AUG.INTENS	PM	*pintar~pintar*	RDP~be.clever	'be very clever'
	AM	*biru~biru*	RDP~blue	'be very blue'
	LM	*uma~ame*	RDP~chew	'chew wildly'
	MM	*kita~kita*	RDP~1SG	'constantly me'
	TM	*ba~ba–diang*	RDP~INT–be.quiet	'be very quiet'
DIM	PM	*kurus~kurus*	RDP~be.thin	'rather thin'
	AM	*malu~malu*	RDP~ashamed	'shy as'
	KM	*apa~apa*	RDP~what	'anything'
	LM	*apa~apa*	RDP~what	'anything'
	MM	*saki~saki*	RDP~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	N, V, ADV, RECP, CAUS	V		V	V	V, PFX	V, PFX
Plurality/ diversity	N, V, DEM, LOC	N, 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	V, ADV, LOC	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					

[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.

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 reading
Nouns	PM	*rawa~rawa* RDP~swamp	'be swampy'	verbal
		malam~malam RDP~night	'late at night'	adverbial
	AM	*malang~malang* RDP~night	'during the night'	adverbial
	MM	*opa~opa* RDP~grandfather	'quite old'	verbal
Verbs[a]	PM	*gait~gait* RDP~hook	'pole'	nominal
		taw~taw RDP~know	'suddenly'	adverbial
	AM	*gai~gai* RDP~hook	'pole'	nominal
		kamuka~kamuka RDP~go.first	'formerly, earlier'	adverbial
	LM	*tiba~tiba* RDP~arrive	'suddenly'	adverbial
	TM	*asik~asik* RDP~busy	'busily'	adverbial

[a] The "verb" category includes Manado Malay adjectives and Ternate Malay "quality words" (Litamahuputty 2012: 136–138).

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.

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 §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

[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".

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 §5.6, locatives in §5.7, interrogatives in §5.8, numerals in §5.9, quantifiers in §5.10, prepositions in §5.11, and conjunctions in §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 *PE(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).

[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".

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.)

Count nouns[3]

(1) *dua orang*
two person
'two people'

(2) *orang dua*
person two
'both people'

[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.

(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'

[4] Documentation: *banyak* 'many' BR111021.015, BR111021.017, *sedikit* 'few' BR111021.016, BR111021.018, *dua* 'two' BR111021.019, BR111021.020.

(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 Table 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'

[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 080922-002-Cv.0052, quantifier 080922-010a-NF.0269, relative clause 080919-006-CvNP.0017.

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'

[a] Documentation of person names: 080922-001a-CvPh.1096, 081011-024-Cv.0123, 081014-005-Cv.0002, 081014-014-CvNP.0084. Documentation of place names: 080922-002-Cv.0049, 080917-008-NP.0018, 081025-008-Cv.0008, 080917-008-NP.0126.

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 N2 position under the head nominal location noun in N1 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).

[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].

"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* 'top' — *dari atas kursi*
from top chair
'from the top of the chair'

(27) *bawa* 'bottom' — *di bawa meja*
at bottom table
'below the table'

(28) *blakang* 'backside' — *dengang blakang kapak*
with backside axe
'with the backside of the axe'

[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.

(29) *dalam* 'inside'
di dalam kamar
at inside room
'inside the room'

(30) *depang* 'front'
di depang greja tu
at front church D.DIST
'in front of that church'

(31) *luar* 'outside'
ke luar negri
to outside country
'abroad'

(32) *pinggir* 'border'
di pinggir jalang
at border walk
'alongside the road'

(33) *samping* 'side'
di samping ruma
at side house
'beside the house'

(34) *sebla* 'side'
ke sebla darat
to side land
'landwards'

(35) *sekitar* 'vicinity'
di sekitar Pante-Barat
at vicinity Pante-Barat
'in the vicinity of Pante-Barat'

(36) *tenga* 'middle'
di tenga hutang
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 dorang, pas Wamena dong **di pinggir situ***
precisely descend airport Sentani precisely 3SG meet with Wamena 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 ~~top~~ 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]

(43) *atas* 'top'
jalang atas
walk top
'the upper road' (Lit. 'walk on top xxx')

(44) *blakang* 'backside'
rem blakang
brake backside
'rear brakes'

(45) *dalam* 'inside'
kolor dalam
shorts inside
'undershorts'

(46) *luar* 'outside'
dunia luar
world outside
'outside world'

(47) *pinggir* 'border'
tana pinggir
ground border
'the ground along the side'

[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.

(48) *samping* 'side'
sak samping
bag side
'side pocket'

(49) *sebla* 'side'
tetangga dong sebla
neighbor 3PL side
'the neighbors next door'

(50) *tenga* 'middle'
kolam tenga
big.hole middle
'the pond in the middle'

(51) *bawa* 'bottom'
generasi bawa
generation bottom
'next generation' (Lit. 'generation at bottom')

(52) *depang* 'front'
bulang depang
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 *ke* '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*** *smua*
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 N1N2 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 1SG come
'yes father, **on Sunday** I'll come' [080922-001a-CvPh.0344]

(79) ***hari slasa*** *itu ... de pu ana prempuang meninggal jadi tong 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 yesterday be.prior	'the day before yesterday'
kemaring	'yesterday, sometime ago'
hari ini day D.PROX	'today'
besok	'tomorrow, sometime in the future'
lusa	'the day after tomorrow'

Within the clause, the relative-time denoting expressions typically occur in clause-initial 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 2SG 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*** *hari jumat 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 ribu dua*
many die at ocean give sink until year yesterday year two 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 adat itu***
person Sarmi have.to provide for person Sorong ten cloth D.DIST cloth 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	D	younger	y		
child	C				

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: *bapa-ade* '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
		PPZ	parent's parent's sister
cucu	'grandchild'	CC	child's child

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'.

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 *TER-* 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 §5.3.4, grading in §5.3.5, negation in §5.3.6, occurrences in causative constructions in §5.3.7, and uses in reciprocal constructions in §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.

[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).

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]

(95) *... 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* ***besar*** *baru badang ni* ***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. Cross-linguistically, 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 kasi*
boat D.PROX POSS measurement too run from measurement REL 2SG 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]

[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*.

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 *lebi*-comparative 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	100%

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_1V_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 V_2 can be bivalent or monovalent, while in *biking*-causatives the V_2 is always monovalent. (See §11.2 for a detailed discussion of causative constructions.)

[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).

Causative constructions with *kasi* 'give' are presented in (131) to (133). The 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 skali jadi sa* ***kas bangung*** *mama*
1SG feel.afraid(.of) very so 1SG 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 V_2 is always monovalent. Most often, the monovalent verb is stative, such as *pusing* 'be dizzy, be confused' in (134). However, *biking*-causatives 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%
	biking-causatives		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 *biking*-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 *kasi*-causatives. 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 §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]

[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.

(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]

(139) *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%
	-ang 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 *TER*-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	Valency of 1 stative
Function	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
Valency	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
Function	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

[a] See van Klinken (1999: 51–53) for a similar approach to distinguishing different verb classes.

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 *su*). Besides, *suda* 'already' can signal imperative mood, in which case it occurs in clause-final position, as discussed in §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~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~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)

[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.

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(~kadang)	'sometimes'	X	
slalu	'always'	X	
sring	'often'	X	

[a] The adverb *biasanya* 'usually' is historically derived: *biasa-nya* 'be.usual-3POSS' (for details on suffixation with *-nya* '3POSS', see §3.1.6).

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~kadang*** *terlalu, ini, egois*
yes 3SG RDP~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 *ya*, 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	'word-3POSSR'	'it is being said'	X	
kira~kira	'RDP~think'	'probably'	X	
memang		'indeed'	X	
misal-nya	'example-3POSSR'	'for example'	X	
mungking		'maybe'	X	
pasti		'definitely'	X	
pokok-nya	'main-3POSSR'	'the main thing is'	X	
sebenar-nya	'one:be.true-3POSSR'	'actually'	X	
sperti-nya	'similar.to-3POSSR'	'it seems'	X	
arti-nya	'meaning-3POSSR'	'that means'	X	
maksut-nya	'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	'RDP~be.easy-PAT'	'hopefully'	X	
taw~taw	'RDP~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 RDP~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]

[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).

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~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 sama bapa-ade pendeta*
very.soon father want leave very.soon father give know with uncle 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]

(167) * *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~recently 3SG 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[a]	'especially'	X	
cuma	'just'	X	
hanya	'only'	X	
justru	'precisely'	X	
mala	'instead'	X	
pas[b]	'precisely'	X	
juga	'also'	X	X
lagi	'again, also'		X
saja	'just'		X

[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).

'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~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]

(177) *... 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 Papua-Lima kembali deng Papua-Lima* ***juga***
from L.PROX with Papua-Lima return also with Papua-Lima to L.DIST with 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]

(189) * *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

(190) *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

[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]

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 1SG gaze.at 3SG 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): N/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]

[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.)

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 *ni* 'D.PROX' and *tu* '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 §5.6.2, their adverbial uses in §5.6.3, and stacking of demonstratives in §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

[19] Concerning the semantic distinctions between the notion of definiteness and the notion of specificity see Footnote 18 in §5.5 (p. 279).

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* '3SG' 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~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 (EMPH)** 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~husband D.PROX 3SG want to where D.PROX
'this boy, **where (EMPH)** does he want to (go)?' [080922-004-Cv.0017]

(208) *di* ***sini 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 (EMPH)' in (215) or with adverbs as in *pasti tu* 'exactly (EMPH)' in (216).

(215) *de* ***pikir ni***, *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]".

(217) *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]

(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 "N *ini tu*" constructions as compared to "N *ini ni*"' and "N *itu tu*" constructions remain uncertain.

[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~ini* 'D.PROX~D.PROX' and *it~itu* '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.

Non-identical stacked demonstratives[21]

(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 §7.2.

[21] The elicited examples are based on the example in (38) in §7.1.2.3 (p. 380).

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

(221) 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 *ke* '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* ***Ø 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 non-proximal locatives, as in *sana itu* 'over there (EMPH)' 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

(225) *sampe di **sini** **tu** dia langsung sakit karna …*
reach at L.PROX D.DIST 3SG immediately be.sick because
'having arrived **here (EMPH)**, he was sick immediately because (he hadn't eaten)' [081025-008-Cv.0050]

(226) *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 *ke* 'to'. In (230b), distal *sana* 'L.DIST' modifies the noun *laut* 'sea'; the preposition is locative *di* '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* 'L.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

(231) 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	'when'	X			
knapa	'why'	X		X	
brapa	'how many'		X	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	
		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 double-object 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]

[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.

(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:3POSSR 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 §12.2). The interrogative can remain in-situ, in the clause-final position, following the subject as in (242), or it can be fronted to the marked clause-initial 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'

(242)
ini	**siápa**?	ini	**siápa**?
D.PROX	who	D.PROX	who

'**who** is this? **who** is this?' [080916-001-CvNP.0006]

(243)
siápa	ini?
who	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.)

[24] Similar to the comment in Footnote 22 in §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.

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]

[25] Alternatively, one could argue that in (248) *apa* 'what' does not take an oblique object but an adjunct slot.

(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'

(253) – – ¯ _
ini *ápa*?
D.PROX what
'**what** is this?' [081109-001-Cv.0012]

(254) – \ – – – \
adu, *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

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 clause-final 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'

(264) *... adu, babi ni 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~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 §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~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 2SG see 2SG 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 clause-internal 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 clause-final 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

(297) *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		

[a] The numerals *sratus* 'one hundred' and *sribu* 'one thousand' are historically derived by unproductive affixation with the prefix *s(e)-*.

Numerals with omitted head nominal

(299) *Ika biasa angkat itu* ***dlapang pulu sembilang*** *Ø*
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 *de* '3SG' ('the moon'). (For details on numeral predicate clauses see §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 add	+	'plus'
kurang lack	–	'minus'
kali time	x	'times'
bagi 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~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

[26] In Standard Indonesian, ordinal numerals, with the exception of *pertama* 'first', are derived by prefixing *ke-* to the cardinal number (for details see Mintz 1994: 293).

(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*** ***satu*** *turung*
1SG precisely walk foot reach at village one Wareng exist motorbike.taxi 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 ("QTN-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 *smua* 'all' can modify both count and mass nouns, *brapa* 'several' and *masing-masing* '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

[27] Following Gil (2013a: 1), the expression *sembarang* 'any' is a "free-choice universal quantifier".

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

(313) a. Count N: Prehead position
banyak *orang*
many person
'**many** people'

Count N: Posthead position
orang ***banyak***
person many
'**many** people'

b. Mass N: Posthead position
te ***banyak***
tea many
'**lots** (of) tea'

(314) a. Count N: Prehead position
sedikit *orang*
few person
'**few** people'

Count N: Posthead position
kladi ***sedikit***
taro.root few
'**few** taro roots'

[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' 081006-030-CvEx.0009, 080921-004b-Cv.0026, BR111021.012; *stenga* 081115-001b-Cv.0056.

b. Mass N: Posthead position
air ***sedikit***
water few
'**little** water'

(315) a. Count N: Prehead position
smua *masala*
all problem
'**all** problems'

Count N: Posthead position
pemuda ***smua***
youth all
'**all** (of) the young people'

b. Mass N: Posthead position
gula ***smua***
sugar all
'**all** (of the) sugar'

(316) Count N: Prehead position
brapa *orang*
several person
'**several** people'

Count N: Posthead position
dorang ***brapa***
3PL several
'**several** (of) them'

(317) Count N: Prehead position
masing-masing *trek*
each truck
'**each** truck'

Count N: Posthead position
trek ***masing-masing***
truck each
'**each** truck'

(318) Count N: Prehead position
segala *macang*
all variety
'**every**thing, what**ever**'

(319) Count N: Prehead position
sembarang *orang*
any person
'**any** person, **any**body'

(320) Count N: Prehead position
setiap *lagu*
every song
'**every** song'

(321) Count N: Prehead position
stenga *jam*
half hour
'**half** an hour'

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~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 already take 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, Ø* ***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

(326) *... 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)'.

(327) *bapa kirim* ***uang banyak~banyak***
father send money RDP~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~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 §5.12 and Chapter 14). (Variation in word class membership is discussed in §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	Gloss	Semantic relations
dengang	'with'	accompaniment
sama	'to'	goal
untuk	'for'	benefaction
buat	'for'	benefaction
3. Comparison (§10.3)[b]		
Preposition	Gloss	Semantic relations
sperti	'similar to'	similarity
kaya	'like'	similarity
sebagey	'as'	equatability

[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 §10.3.1 and §10.3.2.

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 different-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 *ka* 'or' is also used to mark interrogative clauses (see §13.2.3). (For details on variation in word class membership see §5.14.)

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
'I'll take you out of school there, **eh?**' [080922-001a-CvPh.0199]

[29] The tag *to* 'right?' is a loanword from Dutch, which uses *toch* 'right?' as a tag.

(333) *bapa datang **e**? bapa datang **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 2SG love 3SG very eh
'(your) youngest sibling, so you love her very much, **eh?**' [080922-001a-CvPh.0302]

(335) *hari minggu ko ke ruma **e**? ke Siduas punya ruma **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)*, *mmm*, or *nnn* '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 *ba* '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
adu	'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
ba	'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
mpfff	'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) ***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	Semantics
cekkk	Sound of a heavy blow
dederet	Sound of a drum
fuuu	Sound of blowing air
kkkhkh	Sound of an object falling or collapsing with a dull or heavy sound
mmmuat	Sound of kissing
ngying~ngyaung	Sound of a cockatoo calling
pak, tak, tang, wreeek	Sound of banging, of a punch to the jaw, or of colliding bodies, slamming objects
piiip	Sound of blowing a horn
syyyt	Sound of an object moving through air or water
srrrt	Sound of pulling, tearing or cutting
ssst	Sound of vomiting
tak	Sound of knocking
tpf	Sound of spitting out a mouthful of liquid
trrrt	Sound of running feet
wruaw	Sound of heavy breathing or suffocation
wuuu	Sound of shouting

(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 (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 §5.2 and §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 *PE(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 §5.3 and §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

	VERB			>/<	NOUN		
Item	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'[a]	V.MO	(1)	OR	'taciturn person'	AGT	(1)
pencuri	'steal (EMPH)'	V.BI	5	<	'thief'	AGT	7

[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).

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 §5.3 and §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 §5.11 and §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 cross-linguistically, 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): N/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'.[1]

Each pronoun has at least one long and one short form, except for second person singular *ko* '2SG'. 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

[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).

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	77%	4,479
2SG	---	---	---	*ko*	1,338	100%	1,338
3SG	*dia*	1,285	28%	*de*	3,347	72%	4,632
1PL	*kitong*	604	50%	*tong*	594	50%	1,198
	kita	391	95%	*ta*	11	5%	402
	kitorang	112	77%	*torang*	34	23%	146
2PL	*kamu*	337	53%	*kam*	300	47%	637
3PL	*dorang*	464	23%	*dong*	1,526	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 §6.1.6 and §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.

[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 *ko* '2SG' serves as a rhetorical figure of speech (for details see §6.2.1.1.3).

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'.

[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* '3SG' vary.

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, 080916-001-CvNP.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 3PL ask 1SG	'he asked me'
nanti guru~guru cari ko very.soon RDP~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 1SG indeed deposit 3PL to aunt Defretes	'I indeed left them with aunt Defretes'

[a] Documentation: Long pronoun forms – 080922-010a-CvNF.0281, 080917-007-CvHt.0005, 081025-006-Cv.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.

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 1SG wait 2PL	'I'll await you'
sa titip dong sama Defretes 1SG deposit 3PL to Defretes	'I left them with Defretes'

[a] Documentation: Long pronoun forms – 080922-010a-CvNF.0281, 080917-007-CvHt.0005, 081025-006-Cv.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.

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'

[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.

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	'and then (it was) him who told this story to me'
tida bisa sa kas taw untuk ko NEG be.able 1SG CAUS know for 2SG	'it's impossible that I inform you (about this issue)'
... yang Aris dia kasi sama dia itu REL Aris 3SG give to 3SG D.DIST	'[Oten's wife] (is the one) that Aris gave to him (EMPH)'
de minta sama Ida, sama kitorang 3SG request to Ida to 1PL	'he requested (a child) from Ida, from us'
de datang kas taw sama kitong 3SG come give know to 1PL	'he'll come (and) inform us'
jadi Raymon minta sama kita so Raymon request to 1PL	'so Raymon requested (a child) from us'
... kasi hadia itu untuk kamu itu give gift D.DIST for 2PL D.DIST	'[immediately the government] will give that gift to you'
baru de ceritra apa sama dorang ka and.then 3SG tell what to 3PL or	'and then maybe she told something to them'

[a] Documentation: Long pronoun forms – 080917-008-NP.0004, 080922-010a-CvNF.0089, 080922-010a-CvNF.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 uncle D.DIST 3SG tell to 1SG like.this	'that uncle, he told me like this'
... yang telpon sama kam dua REL phone to 2PL two	'[very soon it'll be uncle pastor] who'll phone you two'
tete ini bilang sama dong grandfather D.PROX say to 3PL	'this grandfather spoke to them'

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* '3SG' in (2) and short *de* '3SG' in

(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* '1SG' 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). (Double-object 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***
1SG 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]

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 *smua* 'all' and mid-range *brapa* 'several', as shown with long *kamu* '2PL' 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 (EMPH)** 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, *ko* '2SG' 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* '3SG' 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]

Table 6.9: Pronominally used pronouns in adnominal possessive constructions

	Long pronoun forms			Short pronoun forms			Total
		#	%		#	%	#
1SG	*saya*	83	16%	*sa*	422	84%	505
3SG	*dia*	106	17%	*de*	508	83%	614
1PL	*kitorang*	9	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	73%	44
3PL	*dorang*	8	8%	*dong*	91	92%	99
	Total	435	28%		1,097	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

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 […] '{A, B} and {C, 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 {A, B, C}" (2007a: 33). This distinction also applies to Papuan Malay. While the constructions in (26) to (29) receive an inclusory reading, the comitative 'N1 *dengang* 'with' N2' 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 PRO-PL 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]

6.1.6 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* '3SG', respectively.

Appositions with singular pronouns: PRO-SG NP

(39) *... 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]

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.

[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 pre-head 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.)

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

[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.

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*	'[the sagu porridge that my
make night for dog 3PL	wife] had made at night for the dogs'

[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.

Table 6.11: Adnominal pronouns as determiners - Short Pronouns Form

Example	Free translation
… *sampe bapa de pukul sa deng pisow*	'… until (my) husband hit me with
until father 3SG hit 1SG with knife	a knife
itu yang Lodia torang bilang …	'that's why Lodia and her
D.DIST REL Lodia 1PL say	companions including me said …'
… *Pawlus tong bicara sama dia itu*	'Pawlus and his companions
Pawlus 1PL speak to 3SG D.DIST	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	'we usually ask the older siblings'
1PL be.usual ask to oSb 3PL	

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 Papuan 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* '3SG'. 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* '3SG' and the preceding noun phrase is set off with an adnominal demonstrative.

[8] English examples are "we teachers", "you students", or "you idiot" (Lyons 1999: 451–442).

- 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* '3SG' 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 *de* '3SG' and *dong* '3PL' 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 §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 *ko* '2SG' are presented in §6.2.1.1, and those with *dia*/*de* '3SG' in §6.2.1.2. In all examples given in §6.2.1.1 and §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 2SG 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 *ko* '2SG' 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* '2SG' 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

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* '2SG', 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 "[l]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 pukul Fitri*
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

(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* '2SG', 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 *ko* '2SG' 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* '3SG' 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* '3SG' 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* '3SG', as illustrated in (69) to (71).

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 *de* '3SG' 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 *de* '3SG', 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*.

(69) *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* '3SG'.

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.

[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).

Anaphoric uses of *dia*/*de* '3SG': Example #1

(72) *... 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* '3SG'.

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~spit spoot! Rahab REL see Rahab 3SG RDP~be.dry
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 Jepang 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).

(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 Jepang 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 *ko* '2SG', 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 *ko* '2SG' 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* '3SG' has comment function. This strategy of forming topic-comment constructions is shown in (81) and (82): *orang Senggi* and *Klara* designate the topics while *dia* '3SG' and *de* '3SG' function as comments, respectively.

Topic-comment constructions with comma intonation: NP | 3SG

(81) *baru dia datang, orang Jayapura 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* | ***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 §6.2.1.1 (p. 353). Very often, however, the preposed topical noun phrase does not contain a pronoun determiner, such that "N DEM". 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 topic-comment constructions, the demonstrative sets aside the topic, and therefore no comma intonation is needed.

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]

(85) *... **[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 2SG 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 *ko* '2SG' 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

[10] There is no comma intonation between the topical noun phrases and the pronominal comments in (67) and (69).

determiner *ko* '2SG', 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 *ko* '2SG' 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* '3SG' 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]

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 Papuan 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: 470–471) 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]

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

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)

(104) ***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 §1.8 that the history of Papuan Malay is different from that of the other eastern Malay varieties.[11]

[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.

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* '2SG'. 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'
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 §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): N/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*		*ni*		*tu*	
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 clause-final lexical item has a word-final vowel while in the remaining three cases the preceding clause-final lexical item has coda /t/.

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 (≤8%) or adverbial uses (≤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	*ni*		*tu*	
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 (EMPH)** 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**'

[1] Documentation: (1) 081025-003-Cv.0042, 080918-001-CvNP.0055, 081025-003-Cv.0135; (2) 081014-007-Pr.0053; (3) 080922-010a-NF.0101; (4) 080922-004-Cv.0017; (5) 080922-010a-NF.0081, 080917-006-CvHtEx.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.

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 2SG come
'**next Wednesday** you'll come'

b. ***ko pu swara tu bahaya***
2SG POSS voice D.DIST be.dangerous
'**that voice of yours** is dangerous'

c. ***Herman tu*** *biasa tida ...*
Herman D.DIST be.usual NEG
'**that Herman** usually (can)not ...'

[4] Documentation: (1) 081011-005-Cv.0001, 081025-009b-Cv.0016, 081014-004-Cv.0019; (2) 080922-001a-CvPh.0455; (3) 081115-001a-Cv.0145; (4) 081109-001-Cv.0092; (5) 081006-022-CvEx.0150; (6) 081025-009b-Cv.0006, 081006-022-CvEx.0113, 081013-002-Cv.0003; (7) 081023-001-Cv.0020; (8) 081115-001a-Cv.0058.

(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~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)
di ***sini tu*** *ada orang swanggi satu*
at L.PROX D.DIST exist person nocturnal.evil.spirit one
'**here (EMPH)** 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 §7.1.2.5, and placeholder uses in §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 2SG 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 *ko* '2SG'. 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 2SG 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 3SG already want 2SG 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]

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 tu* 'that voice of yours', the speaker conveys her negative attitudes about this behavior.

Demonstratives signaling emotional involvement: Examples set #3

(32) *... dang menyanyi ...* ***kamu pu 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 *de* '3SG', 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]

(35) *… 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) *wa, sa masi **hidup ni**, kam suda hinggap di sa punya badang*
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~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* '1SG', 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:* ***sa tu*** *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 *ko* '2SG': 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 *ko* '2SG'. 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*** *itu jalang*
ySb D.DIST let be.white hair palm.blossom stay hair be.long 2SG 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* ***skarang ini*** *baru ada baik~baik*
D.PROX be.crooked D.PROX foot D.PROX now D.PROX recently 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 (§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 1SG 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 mulay suru ana~ana murit mulay gambar* ***monyet*** *di atas pohong*
woman start order RDP~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* 'D.DIST'.

Adverbial anaphoric uses of *itu* 'D.DIST'

(54) 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'

(55) *... **ni** usul saja jadi kaka sendiri ...*
D.PROX proposal just so oSb be.alone
'**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 2SG 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 cross-linguistic 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 pace ini*** *de baru ambil …*
oh! D.DIST D.DIST man D.PROX 3SG 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 §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): N/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* 'L.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* 'L.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 mulay turung 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'

(67) 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 dia …*
yes start aim.at bridge Warmer … if from L.MED to L.DIST oh! D.DIST 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* '3PL' 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

(69) 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]

(70) 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]

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 di situ, 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.

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: • proximal *ini* 'D.PROX' • distal *itu* 'D.DIST'	Three-term system: • proximal *sini* 'L.PROX' • medial *situ* 'L.MED' • distal *sana* 'L.DIST'
Distributional properties	• adnominal uses • pronominal uses • adverbial uses	• adnominal uses • pronominal uses
Pronominal uses	• in unembedded NPs • in PPs • 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 word-formulation 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** (EMPH) is the secret (when we) want want to do something or want to ...' [080917-010-CvEx.0160]

(4) *e, sa* *tinggal di* ***situ*** *tu*
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 *smua* '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).

[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 §8.4 and Chapter 9.)

(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 Post-2, 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.

HEAD – MOD

(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 §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 N-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~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** **hitam**]]*
1SG POSS father bury 1SG POSS grandfather POSS cloth be.white with 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]

[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.

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~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 [N N]

In noun phrases with adnominally used nouns, a posthead noun N2 modifies the head nominal N1, such that "N1N2". Such constructions are characterized by the semantic subordination of the N2 modifier under the head nominal N1.

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 N1 and the N2, 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]

b. *yo,* ***net*** ***laki~laki*** *tong yang bli*
yes (sport.)net RDP~husband 1PL REL buy
'yes, the (volley-ball) **net for men**, (it was) us who (bought it)'
[081023-001-Cv.0012]

Locational and temporal relations between the N1 and N2 are illustrated in (35a) to (35c). The N2 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 N1. The N1N2-NP in (36b) denotes a locational relation with the deverbal head N1 originating from the nominal spatial source N2.

(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	Free translations
1.	"Part-whole" relation – N1 is a part of N2: (a) human body part, (b) nonhuman body part, (c) plant part, (d) spatial location of a concrete object, (e) temporal location of an abstract object, (f) time segment within a time period, (g) member of an institution		
(a)	*urat kaki*	tendon foot	'foot tendon'
(b)	*duri ikang*	thorn fish	'fish bone'
(c)	*pelepa sagu*	stem sago	'sago stem'
(d)	*blakang kapak*	backside axe	'backside of an axe'
(e)	*tenga sembayang*	middle worship	'middle of the worship'
(f)	*malam hari*	night day	'evening (of the day)'
(g)	*petugas polisi*	official police	'police official'
2.	"Property-of" relation – N1 is a property of N2		
	ruma orang	house person	'(other) people's house'
	cara orang Papua	way person Papua	'Papuan traditions'
3.	"Affiliated-with" relation: N1 is affiliated with N2		
	ruma setang	house evil.spirit	'house of an evil spirit'
	ana~ana iblis	RDP~child devil	'children of the devil'
4.	"Name-of"relation – N2 designates the name of N1: (a) animal, (b) plant, (c) personal name, (d) clan/ethnic group, (e) disease, (f) building/institution, (g) language, (h) religion, (i) spatial location, (j) temporal location		
(a)	*ikang gurango*	fish shark	'shark fish'
(b)	*sayur bayam*	vegetable amaranth	'amaranth vegetable'
(c)	*nama Nofela*	name Nofela	'(of the) name Nofela
(d)	*marga Sope*	clan Sope	'Sope clan'
(e)	*penyakit malaria*	disease malaria	'malaria disease'
(f)	*greja Kema-Injil*	church Kema-Injil	'Kema-Injil church'
(g)	*bahasa Inggris*	language England	'English language'
(h)	*agama Kristen*	religion Christian	'Christian religion'
(i)	*kota Sarmi*	city Sarmi	'Sarmi city'
(j)	*hari kamis*	day Thursday	'Thursday'

Table 8.3: Associative meaning relations encoded by N1N2-NPs continued

	Papuan Malay N1N2	Glosses	Free translation
5.	"Subtype-of" relation – N2 designates a specific type of N1		
	ana murit	child school	'school kid'
	kaing sprey	cloth bed sheet	'bed sheets'
6.	"Composed-of" relation – N1 is composed of / made from N2		
	ruma batu	house stone	'stone house'
	kantong plastik	bag plastic	'plastic bag'
7.	"Purpose-for" relation: N1 is intended for / at the disposal of N2		
	net laki~laki	net RDP~husband	'(volleyball) net for men'
	sikat gigi	brush tooth	'toothbrush'
8.	Locational relation: (a) N1 contains N2; (b) N1 is located at/in/on N2; (c) N1 originates from spatial source N2; (d) N1 originates from nonspatial source N2		
(a)	*lampu gas*	lamp gas	'gas lamp'
(b)	*jing~jing kayu*	RDP~genie wood	'tree genies'
(c)	*pisang Sorong*	banana Sorong	'bananas from Sorong'
(d)	*mop orang Sarmi*	joke people Sarmi	'joke by the Sarmi people'
9.	Temporal relation – N2 gives temporal specifications for N1		
	jam dua pagi	hour two morning	'two o'clock in the morning'
	hari sening depang	day Monday front	'next Monday'
10.	Event relation: N2 is affected by event N1		
	pasang tugu	install monument	'statue installation'

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 *ko* '2SG' and *dia* '3SG' 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 *tu* '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]

[3] Concerning the semantic distinctions between the notion of definiteness and the notion of specificity, see Footnote 18 in §5.5 (p. 279).

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* '3PL' 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?*
1sg ask 3sg 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 "N PP". 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]

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]

[4] The elicited example in (61) is based on the example in (14) in §8.1 (p. 404).

(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) cross-linguistic 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,

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 ("QtN-NP") 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]

[5] To express the notion of "every person", speakers prefer quantification with *masing-masing* 'each'.

(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 *smua* '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 *smua* '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]

[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'.

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 *smua* '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 *pu*, 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 N2 slot, following the possessive ligature (LIG), whereas the modifier expressing the possessor (POSSR) takes the N1 slot, such that "POSSR-NP – LIG – POSSM-NP". This is shown with the adnominal possessive construction in (89).

(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 (90c, 90d), a demonstrative as in (90e), the interrogative *siapa* 'who' as in (90f), or a noun phrase as in (90g). The possessum can be encoded by a lexical noun as in (90c, 90e, 90f), a demonstrative as in (90a, 90b), the interrogative *siapa* 'who' as in (90d), or a noun phrase as in (90g). 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*	*ade pu itu* 'younger sister's (fish)'
b.	*N pu DEM*	*Fitri pu ini* 'Fitri's (belongings)'
c.	*PRO punya N*	*de punya bulu~bulu* 'its (the dog's) body hair'
d.	*PRO pu INT*	*sa pu siapa* 'who of my (relatives)'
e.	*DEM pu N*	*ini pu muka* 'this (one's) face'
f.	*INT pu N*	*siapa pu sandal* 'whose sandals'
g.	*NP pu NP*	*mama Klara pu ana prempuang* 'mother Klara's daughter'

[7] Documentation: 080919-006-CvNP.0028, 080921-009-Cv.0020, 080922-001a-CvPh.1123, 080925-004-Cv.0006, 081006-019-Cv.0002, 081025-006-Cv.0058, 081106-001-Ex.0007.

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 "N NP", 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 "N 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 "N NP" 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.

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) (QT) (POSSR-NP)	HEAD	(V) (N) (PP) (RC)	(PRO)	(DEM) (LOC) (INT) (NUM) (QT)	(DEM)

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 §11.4.2 and §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 *pu*, 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	*punya*	Lexical nouns
Noun phrases	*pu*	Noun phrases
Demonstratives	*pu*	Demonstratives
Personal pronouns	*=p*	Verbs
Verbs	Ø	Quantifiers
		Adverbs
		Prepositional phrases
		Ø

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* '1SG' 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 *sa* '1SG' 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

(1) S 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 "POSSR-NP *punya* POSSM-NP". 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 *pu* 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 (5a-5g, by personal pronouns as in (5h, 5i), or by noun phrases as in (5j-5l). With either ligature form, the possessor can denote a human referent as in (5a-5d, 5i-5k), a nonhuman animate referent as in (5e, 5f, 5h), or an inanimate referent as in (5g, 5l). Likewise, the

reduction is independent of the possessum's properties. Both markers occur with possessa encoded by nouns as in (5b, 5e, 5f, 5l), by demonstratives as in (5c, 5d), or by noun phrases as in (5a, 5g, 5i-5k). With either marker, the possessum can express an inalienably possessed referent as in (5a, 5b, 5h, 5k) 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]

(5)

	POSSR LIG POSSM	Possessive construction
a.	(N (HUM) *punya* NP (INAL)	*mama punya ade laki~laki* mother POSS ySb RDP~husband 'mother's younger brother'
b.	N (HUM) *pu* N (INAL)	*bapa pu mata* father POSS eye 'father's eyes'
c.	N (HUM) *punya* DEM (AL)	*de punya ini* 3SG POSS D.PROX 'his/her (customs)'
d.	N (HUM) *pu* DEM (AL)	*ade pu itu* ySb POSS D.DIST 'younger sister's (fish)'
e.	N (AN) *punya* N (AL)	*setang punya kwasa* evil.spirit POSS power 'force of an evil spirit'
f.	N (AN) *pu* N (AL)	*setang pu pake-pake* evil.spirit POSS black.magic 'an evil spirit's black magic'
g.	N (INAN) *pu* NP (AL)	*LNG pu terpol itu* LNG POSS container D.DIST 'metal jerry can'[2]
h.	PRO (AN) *punya* N (INAL)	*de punya bulu~bulu* 3SG POSS RDP~body.hair 'its (the dog's) body hair'

[1] Documentation: 080919-004-NP.0013, 080919-006-CvNP.0028, 080922-001a-CvPh.0141, 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 *LNG* has developed from the noun phrase 'Liquefied Natural Gas'.

i.	PRO (HUM) *pu* NP (AL)	*de pu sikat gigi deng odol* 3SG POSS toothbrush with toothpaste 'her toothbrush and toothpaste'
j.	NP (HUM) *punya* NP (AL)	*orang Isirawa punya, apa, cara kawing* person Isirawa POSS what manner marry 'the Isirawa's, what-is-it, way of marrying'
k.	NP (HUM) *pu* NP (INAL)	*mama Klara pu ana prempuang* mother Klara POSS child woman 'mother Klara's daughter'
l.	NP (INAN) *punya* N (AL)	*kebung ini punya hasil* garden D.PROX POSS product 'this garden's products'

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* '2SG' 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 /puŋ/ '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 [ŋ]. (For more details on nasal place assimilation see §2.2.1.)

In a few cases, however, the reduced ligature takes on the form /puŋ/ regardless of the form of the following segment, as illustrated in (6) to (8).

(6) *ada sa* /**puŋ**/ ***d**usung*
exist 1SG POSS garden
'(over there) is **my** garden' [081110-008-CvNP.0009]

[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]

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 *pu* 'POSS' 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'

[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, 080922-005-CvEx.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, 081115-001b-Cv.0057.

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, 080922-005-CvEx.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, 081115-001b-Cv.0057.

Table 9.4: Assimilation of short *pu* ‘POSS’

Item	Orthogr.	Gloss
/dɛ pu**m** **b**apa/	*de pu bapa*	‘his/her father’
/dɛ pu**n** **t**ɛman~tɛmaŋ/	*de pu temang~temang*	‘his/her friends’
/sa pu**ŋ** **k**aka/	*sa pu kaka*	‘my older sibling’
/dɔm pu**ŋ** **a**srama/	*dong pu asrama*	‘their dormitory’

(7) *dong* /**puŋ**/ ***p**eserta* *juga macang tra* *...*
3PL POSS participant also variety NEG
‘**their** participants also, like (they) didn’t ...’ [081025-009a-Cv.0132]

(8) *... tong* /**puŋ**/ ***c**ara* *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 *=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* ‘3SG’ 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* ***ko=p kaka****?*
1SG say ugh! 1SG=POSS oSb 3SG say 2SG=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 *pu* 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 high-frequency 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.

[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).

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 hari de menangis trus*
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) *… [[**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 Ø***
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 Ø*** *bagus, 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.

[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.

(32) *kalo memang* ***ko punya maytua punya waktu*** *pas di kapal …*
if indeed 2SG 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) *de$_i$ pu ana kawing* ***de$_i$ pu laki punya kaka prempuang pu ana***
3SG POSS child marry.inofficially 3SG POSS husband POSS oSb woman POSS child
'her$_i$ 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 *pu* '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).

[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.

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 *Jayapura*, 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* '3SG'.

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 di dalam 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 *de* '3SG' 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.

[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'.

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 Jayapura
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 *tu* '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 *tu* '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]

[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).

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* '3SG' 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*** *di situ*
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~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) *di gunung 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* ***pu 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 diri*** *tapi 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 *pu*, 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 §12.4 and §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 §10.2, and comparisons in §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 *ke* '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 *di* '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 *di* '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:] 'I (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 *ke* 'to' denote direction toward a referent. Following motion verbs such as *lari* 'run' in (6) or *datang* 'come' in (7), *ke* 'to' introduces

[1] In the corpus only the following pronominal complements of *di* 'at, in' are attested: 2SG, 1PL, and 3PL.

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 *ke* '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]

[2] In the corpus only the following pronominal complements of *ke* 'to' are attested: 1SG, 3SG, 2PL.

(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]

[3] In the corpus one pronominal complement of *dari* 'from' is unattested, namely 2PL.

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 §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.

[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'.

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 anteriority-marking 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 *ke* 'to', as shown in (24) and (25).

When locative *di* '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 *di* '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 *di* '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 *ke* '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 *ke* 'to' are deictic, thereby allowing the elision of *ke* '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 *ke* '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 *di* 'at, in', whereas in (27) it is allative *ke* 'to'.

Prepositional phrases with elided preposition and location noun complement

(26) *baru kitong taru* ***Ø 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 *ke* 'to' is not possible, though, in nonverbal prepositional predicate clauses as this would create nominal clauses with unacceptable semantics. This is illustrated with elided *di* 'at, in' in (28), which is based on the example in (4), and with elided *ke* 'to' in (29), which is based on the example in (8).

Nonverbal prepositional predicate clauses with elided locative *di* 'at, in' and allative *ke* 'to'

(28) * *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]

(29) * *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~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.

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]

[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.

(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 §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

(43) 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 §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 *de* '3SG' *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]

(47) 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]

(48) 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~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]

[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".

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:3POSSR 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*** *kam kas 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 §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 2SG 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~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).

[8] In the corpus only singular pronominal complements of *sperti* ‘similar to’ are attested.

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'.[9] 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]

(74) *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.

[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".

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 2SG 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* '2SG'. 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 camat***
a.moment at government.education.program 2SG speak as woman 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' (§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: *di* 'at, in', *ke* '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 §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 *di* '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 *di* 'at, in' and allative *ke* '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 'to'	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	OMV	INS	REC	BEN	CIRC	STD
di 'at, in'	X							
ke 'to'	X							
dari 'from'	X							
sampe 'until'	X							
dengang 'with'		X	X	X				
sama 'to'		X	X		X			
untuk 'for'					X	X	X	
buat 'for'					X	X		
sperti 'similar to'								X
kaya 'like'								X
sebagey 'as'								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 §11.4, and comparative clauses in §11.5. The main points of this chapter are summarized in §11.6. Negation is described in §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 §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* '1SG', and in (6) it is *dia*/*de* '3SG'.

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*** *Ø 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 Ø* ***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).

[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.

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*** *Ø 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]

[2] This total excludes serial verb constructions formed with *kasi* 'give' (see §11.2.1.2).

Double-object constructions: R-T word order

(17) *mungking de suru dia, ko* ***ambil*** *sa air!*
maybe 3SG 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~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 T-R is more iconic than the order R-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

(26) *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]

[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).

(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*** *Ø dongeng ka?*
night very.soon Matias say mother tell legend or
'later tonight Matias will say, "are you ('mother') going to **tell** (me) a story?"' [081110-008-CvNP.0142]

(38) *bapa* ***kirim*** *Ø uang 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, 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~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*** *Ø Ø 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]

(45) *... de pu tete tanya dia, ko* ***bli*** *Ø Ø 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*** *Ø Ø*
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 > 3rd > 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.

[4] See also Comrie's (1989) animacy hierarchy, Dixon's (1979: 85) agency scale, and Silverstein's (1976) hierarchy of features.

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%

[a] As percentages are rounded to one decimal place, they do not always add up to 100%.

Table 11.3: Distributional preferences for argument elision and retention

	R ELS T RET	T ELS DO-R RET	T ELS Obl.-R RET	T ELS R ELS	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 §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 valency-increasing 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: 888–889), 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. Cross-linguistically, 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 §11.2.2 and §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_1V_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 V_2 can be monovalent or bivalent while in *biking*-causatives 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 V_1V_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*** *Ø*
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*** *Ø*
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_1V_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 *biking*-causatives 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]

(67) * *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~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 1SG 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_1V_2 constructions in which a causative verb 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 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.

[5] Nedjalkov (2007: 10) groups syntactic, morphological, and clitic reciprocal constructions together as grammatical or derived reciprocals.

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 pinggir~pinggir*
RDP~girl child RDP~husband RECP date at edge school RECP kiss at 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**' [Elicited BR130601.001][7]

[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.

"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.

[8] Nedjalkov (2007: 8) refers to non-subject reciprocants as "co-participants".

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~husband 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*
1SG meet 3SG 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

(94) 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

(95) RECIPROCATOR *baku* V (*dengang* RECIPROCEE)

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 §11.4.1 and two-argument 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 THEME 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

(100) ***babi*** *ada di situ*
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 *ada* '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 *pu* '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 two-argument existential clause or with a nominal clause, as described in §11.4.2 and §12.2, respectively.)

"S *ada*" word order: Possession of a definite/identifiable theme

(102) ***bapa pu motor*** *ada*
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

(104) ***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** sleep**ing** 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 §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 *sa 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, *ada* '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 §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 §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 saya
3SG more be.high from 1SG
'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 §11.5.1. Identity-marking 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

(114) *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]

(115) *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** Ø*
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** Ø*
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]

[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'.

(118) *puri* *tu* ***paling besar*** *Ø*
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* *Ø*
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

(126)

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* '3SG' 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~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*** *Jayapura 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

(137) 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

(139) 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_1V_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 *biking*-causatives 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 identity-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. Identity-marking 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, §12.1 explores which constituents can fill the subject slot in nonverbal clauses. Nominal predicate clauses are described in §12.2, numeral and quantifier clauses in §12.3, and prepositional clauses in §12.4. The main points of this chapter are summarized in §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 §12.2, p. 512, for a numeral clause with a personal pronoun subject see (19) in §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 *de* '3SG'. 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 *ko* '2SG', that is, the addressee.

Elision of subjects in nonverbal clauses

(7) ***de** minta apa, kitong kasi karna **Ø** kitong punya ana … **Ø** masi tong punya dara*
3SG request what 1PL give because 1PL POSS child still 1PL 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 N/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 *ko* '2SG' 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* '1SG' has the semantic role of possessor, while the predicate *empat ana* 'four children' functions as the possessum. In (14), the possessor *de* '3SG' 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).

[1] In a different context, *de ana kecil* can also receive the equative reading 'she (is) a small child'.

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 *de* '3SG'. 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

(18) a. *Husband: dia melahirkang ular*
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 *ke* '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 *ke* 'to' cannot be omitted 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* '3SG' at the ground *kampung* 'village'. In (23) allative *ke* '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 *ke* 'to' are unattested.

[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]

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) *smua 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* 'L.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) ***Ø sini*** *bua~bua* *banyak*
L.PROX RDP~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]

[4] One anonymous reviewers suggests an alternative reading of the *situ*-clause. The clause *situ alang-alang* 'there (EMPH) (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 (EMPH) (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'.

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~temang* 'his friends'. In (31), *sama* 'to' signals the association of the implied figure *ana* 'child' with the ground *saya* '1SG'.

Comitative predicates

(30) *Roni masi* ***deng de pu temang~temang***
Roni still with 3SG POSS RDP~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 *de* '3SG' 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 §10.3.1 and §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 §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 banyak*
money be.big: 3POSSR D.DIST for community but official REL eat 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 §13.2. Directive clauses, including imperatives, adhortatives, permissions, obligations, and prohibitives, are the topic of §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*** ***baik***
very.soon 3SG think 1SG NEG be.good very.soon 3SG think 1PL NEG 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~what
'if you ('father') **won't buy** me a cell phone, just let it be, no problem' [080922-001a-CvPh.0461]

(5) *baru kamu* ***tra 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* 'NEG', 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* '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 §13.2.2.1 and §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 *mm-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

(24) 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]

(25) a. *Speaker-1: o, Ise sakit?*
oh! Ise be.sick
Speaker-1: 'oh, is Ise sick?'

b. *Speaker-2:* ***mm-mm***
mhm
Speaker-1: '**mhm**' [080919-006-CvNP.0030-0031]

(26) 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

(27) 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]

(28) 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]

(29) 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

(30) 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

(31) 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]

(33) 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

(34) 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]

(35) a. *Speaker-1:* ***tida*** *di Beneraf* ***e****?*
NEG at Beneraf eh
Speaker-1: '(they) are **not** in Beneraf, **eh?**'

b. *Speaker-2:* ***mm-mm***
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 *ka* '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 *ka* '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 *ka* '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 (EMPH) usually ask the kids in school, "(is this) right **or** wrong?"'
[081014-015-Cv.0029]

(38) *kira~kira bisa kenal bapa* ***ka tida****?*
RDP~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 (EMPH) to the house **or not**?' [081110-003-Cv.0001]

(40) *de su datang* ***ka****?*
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]

(42) a. ***ko*** *bangung!*
2SG wake.up
'**you** wake up!

b. *e bangung!*
hey! wake.up
'hey, wake up!'

[1] Documentation: *bangung* 'wake up' 081006-022-CvEx.0081, 080918-001-CvNP.0038; *pulang* 'go home' 081006-025-CvEx.0013, 081006-007-Cv.0001.

(43) 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 3SG 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. Urgency-marking *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 (EMPH) 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 §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 saya* ***harus*** *cari batrey, sa* ***harus*** *bli pecis, sa* ***harus*** *ambil senter*
tomorrow morning 1SG have.to search battery 1SG have.to buy light.bulb 1SG 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 (EMPH)** 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 stand-alone 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~flower already be.used.up NEG may
[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

[1] Alternatively, the conjunction *sampe* 'until, with the result that' could fill this slot.

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 §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]

[2] As mentioned in §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).

(13) *… Aris* ***sama*** *Siduas$_i$ deng de$_i$ pu maytua,* ***sama*** *dep$_i$, de$_i$ 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$_i$ wife' [080922-001a-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 *ka* '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 1SG 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 bakar natal*
if 1PL POSS money one million or one million five hundred 1PL be.able 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, Karfasia,* ***ato*** *di Waim, na …*
so if 3SG ethnic.group from L.MED from Masep already kill person at umh 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]

[3] The subscript letters indicate which personal pronouns have which referents.

14.2.2.2 Disjunctive *ka* 'or'

Disjunctive *ka* '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 ka* 'or something else' (literally 'what or'). Less often, *ka* 'or' combines prepositional phrases as in (20), or clauses as in (21); the linking of verbs with *ka* 'or' is unattested in the corpus. Another function of *ka* 'or', not discussed here, is to mark interrogative clauses (see §13.2.3).

(18) *... nanti banjir **ka**, hujang **ka**, guntur **ka***
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 **ka**, di keuangang **ka***
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]

[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]

(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

(25) a. *tong ... jaga dia$_i$ 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$_j$ sandar di de$_i$ 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$_j$ kas pata leher ke bawa di atas de$_i$ 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 §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

[5] The conjunction *seblum* 'before' is historically derived from the aspectual adverb *blum* 'not yet': *se-blum* 'one-not.yet' (see §5.4.1).

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 *su*, 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 kaki tu, 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]

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 2SG 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 ruma*
1PL NEG feel.happy(.about) with 3SG so 1PL be.listless come 3SG POSS 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 2SG 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 (48/163tokens – 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 contrast-marking 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 §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 kawing sa punya kaka*
so 1SG POSS father give 1SG for Iskia but Iskia marry be.wrong Iskia 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]

(49) 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 kayu~kayu*
child D.PROX 1SG think 3SG already pass.by but.actually 3SG sleep at top 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 alpa banyak*
month October 1SG POSS be.absent just two just image but.actually 1SG 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 §10.3.1 and §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]

(55) *... 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. Cross-linguistically, 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' (OBJECT) – 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 non-specific" 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 ("Ø" signifies the implied head nominal).

[6] Typically, speakers report speech in the form of direct speech rather than indirect speech as in (58) (see also §6.2.1.1).

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]

(61) 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 "Ø", 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* ***Ø***
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*$_i$ *kas dia*$_j$ ***Ø***
Efana D.PROX REL 3SG give 3SG
[About an ancestor's first wife:] '(it was) **this Efana that** he$_i$ ('Aris') gave (to) him$_j$ ('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]

[7] The subscript letters indicate which personal pronouns have which referents.

(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 same-type 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.

[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.

Juxtaposition of noun phrases

(68) ***gúntur kílat hújang itu*** *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*** | ***bántal*** | ***smúa*** | ***tíkar***
cloth pillow all plaited.mat
[Listing laundry items:] '**the cloths, pillows, everything, the plaited mats**'
[081025-006-Cv.0057]

(70) *kita pake* ***búmbuuu*** | ***fetsin gáraaam*** | ***sere*** | ***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 *ka* '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 *ka* 'or' is also used to mark interrogative clauses (see §13.2.3). Variation in word class membership is discussed in §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'	X	X		X
sama 'to'		X		X
Alternative				
ato 'or'	X	X	X	X
ka 'or'	X	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			
abu	ˈa.bu	V.MO(ST)	be dusty
ada	ˈa.da	V.BI	exist
ade	ˈa.dɛ	N	younger sibling
aduk	ˈa.dʊkˀ	V.BI	beat
agak	ˈa.gɐkˀ	ADV	rather
air	ˈa.ɪr̥	N	water
ajak	ˈa.dʒɐk	V.BI	invite
ajar	ˈa.dʒɐr̥	V.BI	teach
alas	ˈa.lɐs	V.BI	put down as base
ambil	ˈɐm.bɪl	V.TRI	fetch
ampas	ˈɐm.pɐs	N	waste
ampung	ˈɐm.pʊn	N	forgiveness

[1] The 2,215 lexemes are extracted from the 2,458-item list, discussed in §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 §3.1 and §3.2, respectively).

Lexeme	Transcription	Word class	English gloss
ana	ˈa.nɐk	N	child
ancam	ˈɐn.tʃɐm	V.BI	threaten
andal	ˈɐn.dɐl	V.MO(ST)	be reliable
ane	ˈa.nɛ	V.MO(ST)	be strange
anggap	ˈɐŋ.gɐp	V.BI	regard as
anging	ˈa.ŋɪn	N	wind
angkat	ˈɐŋ.kɐtˀ	V.BI	lift
anjing	ˈɐn.dʒɪŋ	N	dog
antar	ˈɐn.tɐr̥	V.BI	bring
anyam	ˈa.ɲɐm	V.BI	plait
apa	ˈa.pa	INT	what
api	ˈa.pi	N	fire
arang	ˈa.ɾɐŋ	N	charcoal
asap	ˈa.sɐp	N	smoke
asing	ˈa.sɪn	V.MO(ST)	be salty
asing	ˈa.sɪŋ	V.MO(ST)	be foreign
atas	ˈa.tɐs	N-LOCT	top
atur	ˈa.tʊr̥	V.BI	arrange
awang	ˈa.wɐŋ	N	cloud
awas	ˈa.wɐs	V.MO(DY)	watch out
ayam	ˈa.jɐm	N	chicken
ayung	ˈa.jʊn	V.BI	hit
B			
babat	ˈba.bɐtˀ	V.BI	clear away
babi	ˈba.bi	N	pig
bagus	ˈba.gʊs	V.MO(ST)	be good
baik	ˈba.ɪkˀ	V.MO(ST)	be good
bakar	ˈba.kɐr̥	V.BI	burn
baku	ˈba.ku	RECP	reciprocal
balap	ˈba.lɐpˀ	V.BI	race
balas	ˈba.lɐs	V.BI	reply
balay	ˈba.lɐj	N	meeting hall
balik	ˈba.lɪkˀ	V.BI	turn around
balok	ˈba.l̥kˀ	N	wooden beam
balut	ˈba.lʊt	V.BI	bandage
bambu	ˈbɐm.bu	N	bamboo
banci	ˈbɐn.tʃi	N	homosexual male
bandar	ˈbɐn.dɐr̥	N	stick
banding	ˈbɐn.dɪŋ	V.BI	compare
bangga	ˈbɐŋ.ga	V.MO(ST)	be proud
bangkit	ˈbɐŋ.kɪtˀ	V.MO(ST)	be resurrected

	Lexeme	Transcription	Word class	English gloss
	bangung	ˈba.ŋʊn	V.BI	build
	bangung	ˈba.ŋʊn	V	wake up
	banjir	ˈbɐn.dʒɪɾ̥	N	flooding
	bantal	ˈbɐn.tɐl	N	pillow
	banting	ˈbɐn.tɪŋ	V.BI	throw
	bantu	ˈbɐn.tu	V.BI	help
	banyak	ˈba.ɲɐkˀ	QT	many
	bapa	ˈba.pa	N	father
	barang	ˈba.ɾɐŋ	N	stuff
	barapeng	baˈ.ɾa.pɛ̝n	V.BI	cook with hot stones
	baring	ˈba.ɾɪŋ	V.MO(DY)	lie down
	baris	ˈba.ɾɪs	N	row
	baru	ˈba.ɾʊ	V.MO(ST)	be new
			ADV	recently
			CNJ	and then, after all
	barusang	baˈ.ɾu.sɐn	ADV	just now
	basa	ˈba.sa	V.MO(ST)	be wet
	batang	ˈba.tɐŋ	N	stick
	batas	ˈba.tɐs	N	border
	batu	ˈba.tu	N	stone
	bawa	ˈba.wa	N-LOCT	bottom
	bawa	ˈba.wa	V.TRI	bring
	bawang	ˈba.wɐn	N	onion
	bayam	ˈba.jɐm	N	amaranth
	bayang	ˈba.jɐŋ	N	image
	bayar	ˈba.jɐɾ̥	V.BI	pay
	bayi	ˈba.ji	N	baby
	bayi	ˈba.ji	N	palm stem
x	*bebang*	bɛ.ˈbɐn	N	burden
	bebas	ˈbɛ.bɐs	V.MO(ST)	be free
	bebek	ˈbɛ.bɛ̝k	N	duck
	begini	bɛ.ˈgi.ni	ADV	like this
	begitu	bɛ.ˈgi.tu	ADV	like that
x	*bekal*	bɛ.ˈkɐl	V.MO(ST)	be equipped
x	*bekas*	bə.ˈkɐs	N	trace
	belalang	bɛ.ˈla.lɐŋ	N	grasshopper
	belok	ˈbɛ.lɔ̝k	V.MO(DY)	turn
x	*benang*	bɛ.ˈnɐŋ	N	thread
x	*benar*	bɛ.ˈnɐr	V.MO(ST)	be true
	bencong	ˈbɛ̝n.tʃɔ̝ŋ	N	transvestite
x	*bengkak*	bɛ̝ŋ.ˈkɐkˀ	V.MO(ST)	be swollen
	bengkok	ˈbɛ̝ŋ.kɔ̝kˀ	V.MO(ST)	be crooked

	Lexeme	Transcription	Word class	English gloss
x	*bentuk*	bɐ̣n.ˈtɔk	V.BI	form
	bera	ˈbɐ̣.ɾa	V.BI	defecate
	beres	ˈbɐ̣.ɾɐ̣s	V.MO(ST)	be in order
	berhala	bɐ̣r.ˈha.la	N	idol
x	*bernang*	bɐ̣r.ˈnɐŋ	V.MO(DY)	swim
x	*bersi*	bɐ̣r.ˈsi	V.MO(ST)	be clean
x	*besar*	bɛ.ˈsər	V.MO(ST)	be big
	besi	ˈbɛ.si	N	metal
	besok	ˈbɛ.sɔ̣kˀ	N	tomorrow
	bete	ˈbɛ.tɛ	N	taro
x	*betul*	bɛ.ˈtɔl	V.MO(ST)	be true
	biang	ˈbɪ.ɐŋ	N	main root stock
	biar	ˈbi.ər	V.BI	let
			CNJ	although
	bibit	ˈbɪ.bɪt	N	seed
	biking	ˈbi.kɪn	V.BI	make
	bilang	ˈbi.lɐŋ	V.BI	say
	bimbing	ˈbɪm.bɪŋ	V.BI	lead
	binatang	bi.ˈna.tɐn	N	animal
	bingung	ˈbi.ŋʊŋ	V.MO(ST)	be confused
	bini	ˈbi.ni	N	wife
	bintang	ˈbɪn.tɐŋ	N	star
	biru	ˈbi.ɾu	V.MO(ST)	be blue
	bisa	ˈbi.sa	V.MO(ST)	be able
	bisik	ˈbi.sɪkˀ	V.BI	whisper
	bisu	ˈbi.su	V.MO(ST)	be mute
	bla	ˈbla	V.BI	split
	blakang	ˈbla.kɐŋ	N-LOCT	backside
	blanga	ˈbla.ŋa	N	cooking pot
	blanja	ˈblɐn.dʒa	V.BI	shop
	blas	ˈblɐs	NUM.C	teens
	bli	ˈbli	V.TRI	buy
	blimbing	ˈblɪm.bɪŋ	N	star fruit
	blum	ˈblʊm	ADV	not yet
	bobo	ˈbɔ.bɔ	N	Nipah palm fruit schnapps
	bocor	ˈbɔ.tʃɔ̣r	V.MO(DY)	leak
	bodo	ˈbɔ.dɔ	V.MO(ST)	be stupid
	bole	ˈbɔ.lɛ	V.AUX	may
	bongkar	ˈbɔ̣ŋ.kɐ̣r	V.BI	unload
	bongkok	ˈbɔ̣ŋ.kɔ̣kˀ	V.MO(ST)	be bent over
	bongso	ˈbɔ̣ŋ.sɔ̣	N	youngest offspring
	borgol	ˈbɔ̣r.gɔ̣l	V.BI	handcuff

Lexeme	Transcription	Word class	English gloss
bosang	ˈbɔ.sɐn	V.MO(ST)	be bored
botak	ˈbɔ.tɐkˀ	V.MO(ST)	be bald
brani	ˈbɾa.ni	V.MO(ST)	be courageous
brapa	ˈbra.pa	QT	several, how many
bras	ˈbrɐs	N	hulled rice
brat	ˈbɾɐtˀ	V.MO(ST)	be heavy
bua	ˈbu.a	N	fruit
buang	ˈbu.ɐŋ	V.BI	discard
buat	ˈbu.ɐt	V.BI	make
buat	ˈbʊ.ɐt	PREP	for
buaya	bʊ.ˈa.ja	N	crocodile
bubar	ˈbu.bɐɾ̥	V.BI	scatter
bujang	ˈbu.dʒɐŋ	V.MO(ST)	be unmarried
bujuk	ˈbu.dʒʊk	V.BI	trick
buka	ˈbu.ka	V.BI	open
bukang	ˈbʊ.kɐn	ADV	NEG
bukit	ˈbu.kɪt	N	mountain
bulang	ˈbu.lɐn	N	month
bulat	ˈbu.lɐtˀ	V.MO(ST)	be round
bule	ˈbu.lɛ	N	white person
bulu	ˈbu.lu	N	body hair
bumbu	ˈbʊm.bʊ	N	spice
bunga	ˈbu.ŋa	N	flower
bungkus	ˈbʊŋ.kʊs	V.BI	pack
buntu	ˈbʊn.tʊ	V.MO(ST)	be blocked
bunu	ˈbu.nu	V.BI	kill
bunyi	ˈbu.ɲi	N	sound
buru	ˈbu.ɾu	V.BI	hunt
burung	ˈbʊ.ɾʊŋ	N	bird
busa	ˈbu.sa	N	foam
busuk	ˈbʊ.sʊkˀ	V.MO(ST)	be rotten
busur	ˈbu.sʊɾ̥	N	bow
buta	ˈbu.ta	V.MO(ST)	be blind
butu	ˈbu.tu	V.BI	need
C			
cabang	ˈʧa.bɐŋ	N	branch
cabut	ˈʧa.bʊt	V.BI	pull out
cacat	ˈʧa.tʃɐtˀ	V.MO(ST)	be disabled
cakar	ˈʧa.kɐɾ̥	V.BI	scratch
calong	ˈʧa.lɔ̰n	N	candidate
camat	ˈʧa.mɐt	N	subdistrict head

	Lexeme	Transcription	Word class	English gloss
	campur	ˈtsɐm.pʊr̥	V.BI	mix
	canggi	ˈʧɐŋ.gi	V.MO(ST)	be sophisticated
	cangkul	ˈʧɐŋ.kʊ̈l	N	mattock
	cantik	ˈʧɐn.tɪkˀ	V.MO(ST)	be beautiful
	cape	ˈʧa.pɛ	V.MO(ST)	be tired
	catat	ˈʧa.tɐt	V.BI	note
	cebo	ˈʧɛ.bɔ	V.BI	wash after defecating
	cece	ˈʧɛ.tʃɛ	N	great-grandchild
x	*cegat*	tʃɛ.ˈgɐtˀ	V.BI	hold up
	cengeng	ˈʧɛ̝.ŋɛ̝ŋ	V.MO(ST)	be a crybaby
x	*cepat*	tʃɛ.ˈpɐtˀ	V.MO(ST)	be fast
x	*cerey*	tʃɛ.ˈrɛ̝j	V.BI	divorce
	cetak	ˈʧɛ.tɐk	V.BI	print
	cewe	ˈʧɛ.wɛ	N	girl
	cici	ˈʧi.tʃi	N	great-great-grandchild
	cincang	ˈʧɪn.tʃɐŋ	V.BI	chop up
	ciri	ˈʧi.ɾi	N	feature
	cium	ˈʧi.ʊm	V.BI	kiss
	coba	ˈʧɔ.ba	V.BI	try
			ADV	if only
	cobe	ˈʧɔ.bɛ	N	mortar
	coblos	ˈʧɔ.blo̞s	V.BI	punch
	cocok	ˈʧɔ.tʃo̞kˀ	V.MO(ST)	be suitable
	colo	ˈʧɔ.lɔ	V.BI	immerse
	conto	ˈʧo̞n.to̞	N	example
	crewet	ˈʧrɛ.wɛ̝tˀ	V.MO(ST)	be chatty
	cucu	ˈʧu.tʃu	N	grandchild
	cuki	ˈʧu.ki	V.BI	fuck
	cukup	ˈʧu.kʊ̈p	V.MO(ST)	be enough
	cukur	ˈʧu.kʊ̈r̥	V.BI	level
	culik	ˈʧu.lɪk	V.BI	kidnap
	curang	ˈʧu.ɾɐŋ	V.MO(ST)	be dishonest
	D			
	dada	ˈda.da	N	chest
	daging	ˈda.gɪŋ	N	meat
	daki	ˈda.ki	N	grime
	dalam	ˈda.lɐm	N-LOCT	inside
	damay	ˈda.mɐj	N	peace
	dang	ˈdɐn	CNJ	and
	dano	ˈda.nɔ	N	lake
	dapat	ˈda.pɐtˀ	V.BI	get

	Lexeme	Transcription	Word class	English gloss
	dapur	ˈda.pʊɻ	N	kitchen
	dara	ˈda.ɾa	N	blood
	darat	ˈda.ɾɐt	N	land
	dari	ˈda.ɾi	PREP	from
	dasar	ˈda.sɐɻ	N	base
	datang	ˈda.tɐŋ	V.MO(DY)	come
	daung	ˈda.ʊn	N	leaf
	dayung	ˈda.jʊŋ	V.BI/N	paddle
	de	ˈdɛ	PRO	3SG
x	*dekat*	dɛ.ˈkɐtˀ	V.BI	near
x	*dengang*	dɛ.ˈŋɐn	PREP/CNJ	with
x	*dengar*	dɛ.ˈŋɐɻ	V.BI	hear
	depang	ˈdɛ.pɐn	N-LOCT	front
x	*desak*	dɛ.ˈsɐk	V.BI	urge
	di	ˈdi	PREP	at, in
	dia	ˈdɪ.a	PRO	3SG
	diam	ˈdi.ɐm	V.MO(ST)	be quiet
	didik	ˈdi.dɪk	V.BI	educate
	dinding	ˈdɪn.dɪŋ	N	interior wall
	dinging	ˈdi.ŋɪn	V.MO(ST)	be cold
	diri	ˈdi.ɾi	N	self
	dlapang	ˈdla.pɐn	NUM.C	eight
	dong	ˈdɔŋ	PRO	3PL
	dongeng	ˈdɔ.ŋɛn	N	legend
	dorang	ˈdɔ.ɾɐŋ	PRO	3PL
	dorong	ˈdɔ.ɾɔŋ	V.BI	push
	dua	ˈdu.a	NUM.C	two
	duduk	ˈdʊ.dʊk	V.MO(DY)	sit
	dukung	ˈdʊ.kʊŋ	V.BI	support
	dulu	ˈdu.lu	V.MO(ST)	be prior
			ADV	first, in the past
	dumpul	ˈdʊm.pʊl	V.BI	hit
	duri	ˈdu.ɾi	N	thorn
	dusung	ˈdʊ.sʊn	N	garden
	E			
	ejek	ˈɛ.dʒɛk	V.BI	mock
	ekor	ˈɛ.kɔɻ	N	tail
x	*emas*	ɛ.ˈmɐs	N	gold
x	*empat*	əm.ˈpɐtˀ	NUM.C	four
	enak	ˈɛ.nɐkˀ	V.MO(ST)	be pleasant
x	*enam*	ɛ.ˈnɐm	NUM.C	six

	Lexeme	Transcription	Word class	English gloss
	epeng	ˈɛ̟.pɛ̟ŋ	V.MO(ST)	be important
	G			
	gaba	ˈga.ba	N	unhulled paddy
	gabung	ˈga.bʊŋ	V.BI	join
	gagal	ˈga.gɐl	V.BI	fail
	gale	ˈga.lɛ̟	V.BI	dig up
	gambar	ˈgɐm.bɐ̟	V.BI/N	draw / drawing
	gampang	ˈgɐm.pɐŋ	V.MO(ST)	be easy
	ganas	ˈga.nɐs	V.BI	feel furious (about)
	gandeng	ˈgɐn.dɛ̟ŋ	V.BI	hold
	ganggu	ˈgɐŋ.gu	V.BI	disturb
	ganjal	ˈgɐn.dʒɐl	V.BI	prop up
	ganteng	ˈgɐn.tɛ̟ŋ	V.MO(ST)	be handsome
	ganti	ˈgɐn.ti	V.BI	replace
	gantong	ˈgɐn.tɔ̟ŋ	V.BI	hang
	gara	ˈga.ɾa	V.BI	irritate
	garam	ˈga.ɾɐm	N	salt
	garo	ˈga.ɾɔ	V.BI	scratch
	gatal	ˈga.tɐl	V.MO(ST)	be itchy
	gate	ˈga.tɛ	V.BI	hook
	gawang	ˈga.wɐŋ	N	goal posts
	gawat	ˈga.wɐtˀ	V.MO(ST)	be terrible
	gaya	ˈga.ja	N	manner
	gedi	ˈgɛ.di	N	aibika
x	*gedung*	gɛ.ˈdʊŋ	N	building
x	*geli*	gɛ.ˈli	V.BI	tickle
x	*gementar*	ˌgɛ.mɛ̟n.ˈtɐ̟	V.MO(DY)	tremble
x	*gemuk*	gɛ.ˈmʊkˀ	V.MO(ST)	be fat
x	*gencar*	gɛ̟n.ˈʧɐr	V.MO(ST)	be incessant
	gendong	ˈgɛ̟n.dɔ̟ŋ	V.BI	hold
	gepe	ˈgɛ.pɛ	V.BI	clamp
x	*gertak*	gɛ̟r.ˈtɐk	V.BI	intimidate
	giawas	gɪ.ˈa.wɐs	N	guava
	gigi	ˈgi.gi	N	tooth
	gigit	ˈgi.gɪt	V.BI	bite
	gila	ˈgi.la	V.MO(ST)	be crazy
	giling	ˈgɪ.lɪŋ	V.BI	grind
	glang	ˈglɐŋ	N	bracelet
	glap	ˈglɐpˀ	V.MO(ST)	be dark
	glombang	ˈglɔ̟m.bɐŋ	N	wave
	gnemo	ˈgnɛ.mɔ	N	melinjo

Lexeme	Transcription	Word class	English gloss
goblok	ˈgɔ.blo̞kˀ	V.MO(ST)	be stupid
gode	ˈgɔ.dɛ	V.MO(ST)	be fat
gonceng	ˈgo̞n.tʃɛ̟ŋ	V.BI	give a ride
gondrong	ˈgo̞n.dro̞ŋ	V.MO(ST)	be long haired
gora	ˈgɔ.ɾa	N	water apple
goreng	ˈgɔ.ɾɛ̟ŋ	V.BI	fry
goso	ˈgɔ.sɔ	V.BI	rub
goyang	ˈgɔ.jɐŋ	V.BI	shake
gugat	ˈgu.gɐt	V.BI	demand
gugur	ˈgʊ.gʊɾ̟	V.MO(DY)	fall (prematurely)
guling	ˈgu.lɪŋ	V.MO(DY)	roll over
guntur	ˈgʊn.tʊɾ̟	N	thunder
gunung	ˈgʊ.nʊŋ	N	mountain
gurango	gʊ.ˈra.ŋɔ	N	shark
gurita	gu.ˈɾi.ta	N	octopus
H			
habis	ˈha.bɪs	V.MO(ST)	be used up
		CNJ	after all
hajar	ˈha.dʒɐɾ̟	V.BI	beat up
halamang	ha.ˈla.mɐn	N	yard
halus	ˈha.lʊs	V.MO(ST)	be soft
hamba	ˈhɐm.ba	N	servant
hambat	ˈhɐm.bɐtˀ	V.BI	block
hambur	ˈhɐm.bʊɾ̟	V.BI	scatter
hampir	ˈhɐm.pɪɾ	ADV	almost
hancur	ˈhɐn.tʃʊr	V.MO(ST)	be shattered
hangus	ˈha.ŋʊs	V.MO(ST)	be singed
hantam	ˈhɐn.tɐm	V.BI	strike
hanya	ˈha.ɲa	ADV	only
hapus	ˈha.pʊs	V.BI	completely remove
harap	ˈha.ɾɐp	V.BI	hope
harus	ˈha.ɾʊs	V.AUX	have to
hati	ˈha.ti	N	liver
haus	ˈha.ʊs	V.MO(ST)	be thirsty
hela	ˈhe̞.la	V.BI	haul
hias	ˈhɪ.ɐs	V.BI	decorate
hidup	ˈhi.dʊpˀ	V.MO(DY)	live
hijow	ˈhi.dʒo̞w	V.MO(ST)	be green
hilang	ˈhɪ.lɐŋ	V.MO(ST)	be lost
hinggap	ˈhɪŋ.gɐpˀ	V.MO(DY)	perch
hitam	ˈhi.tɐm	V.MO(ST)	be black

Lexeme	Transcription	Word class	English gloss
hitung	ˈhi.tʊŋ	V.BI	count
hoki	ˈhɔ.ki	N	plant stem
hosa	ˈhɔ̣.sa	V.MO(DY)	pant
hujang	ˈhu.dʒɐn	N	rain
hutang	ˈhʊ.tɐŋ	N	debt
hutang	ˈhu.tɐn	N	forest
I			
ibu	ˈi.bu	N	woman
ikang	ˈi.kɐn	N	fish
ikat	ˈi.kɐtˀ	V.BI	tie up
ikut	ˈi.kʊtˀ	V.BI	follow
ingat	ˈi.ŋɐtˀ	V.BI	remember
inging	ˈi.ŋɪn	V.BI	wish
ingus	ˈi.ŋʊs	N	snot
ini	ˈi.ni	DEM	D.PROX
injak	ˈɪn.dʒa	V.BI	step on
ipar	ˈi.pɐr	N	sibling in-law
iris	ˈɪ.ɾɪs	V.BI	cut
isap	ˈi.sɐpˀ	V.BI	smoke
isi	ˈi.si	V.BI/N	fill / filling
itu	ˈi.tu	DEM	D.DIST
J			
jadi	ˈdʒa.di	V.BI	become
		CNJ	so, since
jago	ˈdʒa.gɔ	N	candidate
jagung	ˈdʒa.gʊn	N	corn
jahat	ˈdʒa.hɐtˀ	V.MO(ST)	be bad
jahe	ˈdʒa.hɛ	N	ginger
jahit	ˈdʒa.hɪtˀ	V.BI	sew
jaja	ˈdʒa.dʒa	V.BI	colonize
jajang	ˈdʒa.dʒɐn	N	snack
jalang	ˈdʒa.lɐn	V.MO(DY)/N	walk / road
jalur	ˈdʒa.lʊr	N	traffic lane
jangang	ˈdʒa.ŋɐn	ADV	NEG.IMP
jangkrik	ˈdʒɐŋ.krɪkˀ	N	cricket
janji	ˈdʒɐn.dʒi	V.BI	promise
jantung	ˈdʒɐn.tʊŋ	N	heart
jarak	ˈdʒa.ɾɐk	N	distance between
jarang	ˈdʒa.ɾɐŋ	ADV	rarely
jari	ˈdʒa.ɾi	N	digit

	Lexeme	Transcription	Word class	English gloss
	jaring	ˈdʒa.ɾɪŋ	N	net
	jata	ˈdʒa.ta	N	allotment
	jatu	ˈdʒa.tu	V.MO(DY)	fall
	jaw	ˈdʒɐw	V.MO(ST)	be far
	jaya	ˈdʒa.ja	V.MO(ST)	be glorious
x	*jelas*	dʒɛ.ˈlɐs	V.MO(ST)	be clear
x	*jelek*	dʒɛ.ˈlɛ̰kˀ	V.MO(ST)	be bad
	jembatang	dʒɛ̰m.ˈba.tɐn	N	bridge
x	*jempol*	dʒɛ̰m.ˈpɔ̰l	N	thumb
x	*jemput*	dʒɛ̰m.ˈpʊt	V.BI	pick up
x	*jemur*	dʒɛ.ˈmʊr	V.BI	dry in sun
	jenggot	ˈdʒɛ̰ŋ.gɔ̰tˀ	N	beard
	jengkel	ˈdʒɛ̰ŋ.kɛ̰l	V.BI	annoy
x	*jerat*	dʒɛ.ˈɾɐtˀ	N	trap
	jerawat	dʒɛ.ˈɾa.wɐtˀ	N	acne
	jeruk	ˈdʒɛ.ɾʊkˀ	N	citrus fruit
	jintang	ˈdʒɪn.tɐŋ	N	caraway seed
	jual	ˈdʒu.ɐl	V.BI	sell
	juara	dʒu.ˈa.ɾa	N	champion
	jubi	ˈdʒu.bi	V.BI/N	bow shout / bow and arrow
	juga	ˈdʒu.ga	ADV	also
	jujur	ˈdʒu.dʒʊr	V.MO(ST)	be honest
	jungkir	ˈdʒʊŋ.kɪr	V.BI	flip over
	jurang	ˈdʒu.ɾɐn	N	steep decline
	jurus	ˈdʒu.ɾʊs	N	steps
	K			
	ka	ˈka	CNJ	or
	kabur	ˈka.bʊr	V.MO(ST)	be hazy
	kabut	ˈka.bʊtˀ	N	fog
	kacang	ˈka.tʃɐŋ	N	bean
	kaco	ˈka.tʃɔ	V.MO(ST)	be confused
	kadang	ˈka.dɐŋ	ADV	sometimes
	kaget	ˈka.gɛ̰tˀ	V.BI	feel startled (by)
	kaing	ˈka.ɪn	N	cloth
	kaka	ˈka.ka	N	older sibling
	kaki	ˈka.ki	N	foot, leg
	kala	ˈka.la	V.MO(ST)	be defeated
	kalangang	ka.ˈla.ŋɐn	N	circle
	kaleng	ˈka.lɛ̰ŋ	N	tin can
	kali	ˈka.li	N	river
	kalong	ˈka.lɔ̰ŋ	N	necklace

	Lexeme	Transcription	Word class	English gloss
	kam	ˈkɐm	PRO	2PL
	kamorang	kaˈmɔ.ɾɐŋ	PRO	2PL
	kampung	ˈkɐm.pʊŋ	N	village
	kamu	ˈka.mu	PRO	2PL
	kanang	ˈka.nɐn	ADV	right
	kancing	ˈkɐn.tʃɪŋ	V.BI	lock
	kandam	ˈkɐn.dɐm	N	stable
	kandung	ˈkɐn.dʊŋ	N	womb
	kangkung	ˈkɐŋ.kʊŋ	N	water spinach
	kapak	ˈka.pɐk	N	axe
	kapang	ˈka.pɐn	INT	when
	kapur	ˈka.pʊr̥	N	lime
	karang	ˈka.ɾɐŋ	N	lime stone
	karet	ˈka.ɾɛt	N	rubber
	karong	ˈka.ɾɔŋ	N	bag
	kasar	ˈka.sɐr̥	V.MO(ST)	be coarse
	kasbi	ˈkɐs.bi	N	cassava
	kasi	ˈkɐs	V.TRI	give
	kasi	ˈka.si	N	love
	kaswari	kaˈswa.ɾi	N	cassowary
	kawang	ˈka.wɐn	N	friend
	kaya	ˈka.ja	PREP/CNJ	like
	kayu	ˈka.ju	N	wood
	ke	ˈkɛ	PREP	to
x	*kebung*	kɛ.ˈbʊn	N	garden
x	*kecil*	kɛ.ˈtʃɪl	V.MO(ST)	be small
	kecuali	ˌkɛ.tʃʊ.ˈa.li	ADV	except
x	*kejar*	kɛ.ˈdʒɐr	V.BI	chase
	kemaring	kɛ.ˈma.ɾɪn	N	yesterday
	kembali	kɐ̟m.ˈba.li	V.MO(DY)	return
x	*kembang*	kɐ̟m.ˈbɐŋ	N	flower
x	*kembar*	kɐ̟m.ˈbɐr̥	N	twin
	kempes	ˈkɐ̟m.pɐ̟s	V.MO(ST)	be deflated
x	*kena*	kɛ.ˈna	V.BI	hit
x	*kenal*	kɛ.ˈnɐl	V.BI	know
x	*kencang*	kɐ̟n.ˈtʃɐŋ	V.MO(ST)	be speedy
	kendali	kɐ̟n.ˈda.li	N	reins
	kendara	kɐ̟n.ˈda.ɾa	V.BI	ride
x	*kental*	kɐ̟n.ˈtɐl	V.MO(ST)	be fluent
	kentara	kɐ̟n.ˈta.ɾa	V.MO(ST)	be visible
x	*kenyang*	kɛ.ˈɲɐŋ	V.MO(ST)	be satisfied
	kepiting	kɛ.ˈpi.tɪŋ	N	crab

	Lexeme	Transcription	Word class	English gloss
x	*kepung*	kɛ.ˈpʊn	V.BI	surround
x	*kera*	kɛ.ˈɾa	N	ape
x	*ketang*	kɛ.ˈtɐŋ	N	crab
	ketapang	kɛ.ˈta.pɐŋ	N	tropical almond
x	*ketuk*	kɛ.ˈtʊkˀ	V.BI	knock
	kewa	ˈkɛ.wa	N	dance party
	kicaw	ˈki.tʃɐw	V.MO(ST)	be naughty
	kikir	ˈki.kɪr̥	V.MO(ST)	be stingy
	kikis	ˈki.kɪs	V.BI	scrape
	kilat	ˈki.lɐtˀ	N	lightning
	kincing	ˈkɪn.tʃɪŋ	V.BI	pee
	kintal	ˈkɪn.tɐl	N	yard
	kipas	ˈki.pɐs	V.BI	beat
	kira	ˈki.ɾa	V.MO(DY)	think
	kiri	ˈki.ɾi	ADV	left
	kirim	ˈki.ɾɪm	V.TRI	send
	kita	ˈki.ta	PRO	1PL
x	*kitong*	ki.ˈtɔŋ	PRO	1PL
	kitorang	ki.ˈtɔ.ɾɐŋ	PRO	1PL
	kladi	ˈkla.di	N	taro root
	klambu	ˈklɐm.bu	N	mosquito net
	klapa	ˈkla.pa	N	coconut
	klawar	ˈkla.wɐr̥	N	cave bat
	klereng	ˈklɛ̝.ɾɛ̝ŋ	N	marbles
	kliling	ˈklɪ.lɪŋ	V.BI	travel around
	klompok	ˈklɔ̝m.pɔ̝k	N	group
	kluar	ˈklʊ.ɐr	V.MO(DY)	go out
	knapa	ˈkna.pa	INT	why
	ko	ˈkɔ	PRO	2SG
	koco	ˈkɔ.tʃɔ	V.BI	tell off
	kodok	ˈkɔ̝.dɔ̝k	N	frog
	kolam	ˈkɔ̝.lɐm	N	big hole
	kolong	ˈkɔ̝.lɔ̝ŋ	N	space below
	korek	ˈkɔ.ɾɛ̝k	V.BI/N	scrape / matches
	kos	ˈkɔ̝s	N	boarding house
	kosong	ˈkɔ̝.sɔ̝ŋ	V.MO(ST)	be empty
	kota	ˈkɔ.ta	N	city
	kotor	ˈkɔ̝.tɔ̝r̥	V.MO(ST)	be dirty
	kras	ˈkrɐs	V.MO(ST)	be harsh
	kring	ˈkrɪŋ	V.MO(ST)	be dry
	kringat	ˈkri.ŋɐtˀ	V.MO(DY)	sweat
	kriting	ˈkrɪ.tɪŋ	V.MO(ST)	be curly

	Lexeme	Transcription	Word class	English gloss
	kuca	ˈku.tʃa	V.BI	rub with hands
	kucing	ˈku.tʃɪŋ	N	cat
	kuku	ˈku.ku	N	digit nail
	kukus	ˈku.kʊs	V.BI	steam
	kulit	ˈku.lɪt	N	skin
	kumis	ˈku.mɪs	N	mustache
	kumpul	ˈkʊm.pʊl	V.BI	gather
x	*kumur*	kʊ.ˈmʊr	V.BI	rinse mouth
	kunya	ˈkʊ.ɲa	V.BI	chew
	kupas	ˈku.pɐs	V.BI	peel
	kurang	ˈku.ɾɐŋ	V.BI	lack
	kurung	ˈkʊ.ɾʊŋ	V.BI	imprison
	kurus	ˈkʊ.ɾʊs	V.MO(ST)	be thin
x	*kuskus*	kʊs.ˈkʊs	N	cuscus
	kutik	ˈku.tɪkˀ	V.BI	snap
	kutu	ˈku.tu	N	louse
	kutuk	ˈku.tʊk	V.BI/N	curse
	kwali	ˈkwa.li	N	frying pan
	L			
	lada	ˈla.da	N	pepper
	ladang	ˈla.dɐŋ	N	field
	lagi	ˈla.gi	ADV	also, again
	lagu	ˈla.gu	N	song
	laing	ˈla.ɪn	V.MO(ST)	be different
	laju	ˈla.dʒu	V.MO(ST)	be quick
	laki	ˈla.ki	N	husband
	laki~laki	ˌla.kiˈla.ki	N	man
	lalapang	la.ˈla.pɐn	N	k. o. vegetable dish
	lalat	ˈla.lɐt	N	fly
	laley	ˈla.lɛ̨j	V.MO(ST)	be careless
	lama	ˈla.ma	V.MO(ST)	be long (of duration)
	lamar	ˈla.mɐr	V.BI	apply for
	lambat	ˈlɐm.bɐt	V.MO(ST)	be slow
	lancar	ˈlɐn.tʃɐ̟r	V.MO(ST)	be fluent
	langar	ˈla.ŋɐr	V.BI	collide with
	langit	ˈla.ŋɪtˀ	N	sky
	langka	ˈlɐŋ.ka	N	step
	langsung	ˈlɐŋ.sʊŋ	ADV	directly
	lanjut	ˈlɐn.dʒʊtˀ	V.BI	continue
	lante	ˈlɐn.tɛ	N	floor
	lantik	ˈlɐn.tɪkˀ	V.BI	inaugurate someone

	Lexeme	Transcription	Word class	English gloss
	lapang	ˈla.pɐŋ	V.MO(ST)	be spacious
	lapar	ˈla.pɐr̥	V.MO(ST)	be hungry
	lapis	ˈla.pɪs	QT	all
	lapuk	ˈla.pʊk	V.MO(DY)	decompose
	larang	ˈla.ɾɐŋ	V.BI	forbid
	lari	ˈla.ɾi	V.MO(DY)	run
	larut	ˈla.ɾʊt	V.MO(ST)	be protracted
	lati	ˈla.ti	V.BI	practice
	lauk	ˈla.ʊk	N	side dish
	laut	ˈla.ʊtˀ	N	sea
	lawang	ˈla.wɐn	V.BI	oppose
	layak	ˈla.jɐk	V.MO(ST)	be suitable
	layang	ˈla.jɐn	V.BI	serve
	layar	ˈla.jɐr	V.MO(DY)	sail
	lebar	ˈlɛ.bɐr̥	V.MO(ST)	be wide
	lebarang	lɛ.ˈba.ɾɐn	N	end of fasting month
x	*lebi*	lɛ.ˈbi	ADV	more
x	*lega*	lɛ.ˈga	V.MO(ST)	be relieved
	leher	ˈlɛ.hɐ̟r̥	N	neck
x	*lema*	lɛ.ˈma	V.MO(ST)	be weak
x	*lemba*	lɐ̟m.ˈba	N	valley
	lembaga	lɐ̟m.ˈba.ga	N	institute
x	*lembar*	lɐ̟m.ˈbɐr	N	sheet
	lembek	ˈlɐ̟m.bɐ̟k	V.MO(ST)	be soft
	lempar	ˈlɐ̟m.pɐr	V.BI	throw
x	*lengkap*	lɐ̟ŋ.ˈkɐp	V.MO(ST)	be complete
x	*lepas*	lə.ˈpɐs	V.BI	free
	lewat	ˈlɛ.wɐtˀ	V.BI	pass by
	liar	ˈlɪ.ɐr̥	V.MO(ST)	be wild
	liat	ˈlɪ.ɐtˀ	V.BI	see
	libur	ˈli.bʊr̥	V.MO(DY)	take vacation
	licing	ˈli.tʃɪn	V.MO(ST)	be straight
	lida	ˈli.da	N	tongue
	liling	ˈlɪ.lɪn	N	candle
	lima	ˈli.ma	NUM.C	five
	limpa	ˈlɪm.pa	V.MO(ST)	be abundant
	lingkar	ˈlɪŋ.kɐr̥	V.BI	circle
	lipat	ˈli.pɐtˀ	V.BI	fold
	lobe	ˈlɔ.bɛ	V.BI	night hunt
	lomba	ˈlɐ̟m.ba	N	contest
	lompat	ˈlɐ̟m.pa	V.BI	jump
	loncat	ˈlɐ̟n.tʃɐtˀ	V.BI	jump

Lexeme	Transcription	Word class	English gloss
longgar	ˈlɔŋ.gɐr̥	V.MO(ST)	be thin
loyang	ˈlɔ.jɐŋ	N	large bowl
loyo	ˈlɔ.jɔ	V.MO(ST)	be weak
luar	ˈlʊ.ɐr̥	N-LOCT	outside
luas	ˈlʊ.ɐs	V.MO(ST)	be vast
lubang	ˈlʊ.bɐŋ	N	hole
lucu	ˈlu.tʃu	V.MO(ST)	be funny
luda	ˈlu.da	V.BI	spit
luka	ˈlʊ.ka	N	wound
lulus	ˈlu.lʊs	V.BI	pass (a test)
lumayang	lu.ˈma.jɐn	V.MO(ST)	be moderate
lunas	ˈlu.nɐs	V.MO(ST)	be paid
luncur	ˈlʊn.tʃʊr	V.BI	slide
lupa	ˈlu.pa	V.BI	forget
lur	ˈlʊr	V.BI	spy on
luru	ˈlu.ɾu	V.BI	chase after
lurus	ˈlʊ.ɾʊs	V.MO(ST)	be straight
lusa	ˈlu.sa	N	day after tomorrow
lutut	ˈlu.tʊt	N	knee
M			
mabuk	ˈma.bʊkˀ	V.MO(ST)	be drunk
macang	ˈma.tʃɐm	N	variety
mace	ˈma.tʃɛ	N	woman
macet	ˈma.tʃɛ̝t	V.MO(ST)	be stuck
mahal	ˈma.hɐl	V.MO(ST)	be expensive
maing	ˈma.ɪn	V.BI	play
maju	ˈma.dʒu	V.MO(DY)	advance
makang	ˈma.kɐn	V.BI	eat
maki	ˈma.ki	V.BI	abuse verbally
making	ˈma.kɪn	ADV	increasingly
mala	ˈma.la	ADV	even
malam	ˈma.lɐm	N	night
malas	ˈma.lɐs	V.MO(ST)	be listless
maling	ˈma.lɪŋ	N	thief
malu	ˈma.lu	V.BI	feel embarrassed (about)
mampu	ˈmɐm.pu	V.MO(ST)	be capable
mana	ˈma.na	INT	where, which
mancing	ˈmɐn.tʃɪŋ	V.BI	fish with rod
mandi	ˈmɐn.di	V.MO(DY)	bathe
mandiri	mɐn.ˈdi.ɾi	V.MO(DY)	stand alone
mandul	ˈmɐn.dʊl	V.MO(ST)	be sterile

	Lexeme	Transcription	Word class	English gloss
	mangkok	ˈmɐŋ.kɔ̰k	N	cup
	manis	ˈma.nɪs	V.MO(ST)	be sweet
	manja	ˈmɐn.dʒa	V.BI	spoil
	mantang	ˈmɐn.tɐn	V.MO(ST)	be former
	mantap	ˈmɐn.tɐpˀ	V.MO(ST)	be good
	mantu	ˈmɐn.tu	N	in-law
	mara	ˈma.ɾa	V.BI	feel angry (about)
	mari	ˈma.ɾi	LOC	hither
	masa	ˈma.sa	V.MO(ST)	impossible
	masak	ˈma.sɐk	V.BI	cook
	masi	ˈma.si	ADV	still
	masuk	ˈma.sʊkˀ	V.BI	enter
	mata	ˈma.ta	N	eye
	mati	ˈma.tɪ	V.MO(DY)	die
	maw	ˈmɐw	V.BI	want
	mayana	ma.ˈja.na	N	painted nettle
	mayang	ˈma.jɐŋ	N	palm blossom
x	*mekar*	mɛ.ˈkɐr	V.MO(DY)	blossom
	melulu	mɛ.ˈlu.lu	ADV	exclusively
	memang	ˈmɛ.mɐŋ	ADV	indeed
x	*menang*	mɛ.ˈnɐŋ	V.BI	win
x	*menta*	mɐ̰n.ˈta	V.MO(ST)	be uncooked
	mera	ˈmɛ.ɾa	V.MO(ST)	be red
	mesti	ˈmɐ̰s.ti	V.AUX	have to
	meti	ˈmɛ.ti	N	low tide
	mewa	ˈmɛ.wa	V.MO(ST)	be luxurious
	mimpi	ˈmɪm.pi	V.BI	dream (of)
	minang	ˈmi.nɐŋ	V.BI	propose
	minta	ˈmɪn.ta	V.BI	request
	minum	ˈmi.nʊm	V.BI	drink
	minyak	ˈmi.ɲɐk	N	oil
	miring	ˈmɪ.ɾɪŋ	V.MO(ST)	be sideways
	mirip	ˈmɪ.ɾɪpˀ	V.BI	resemble
	mo	ˈmɔ	V.BI	want
	molo	ˈmɔ.lɔ	V.BI	dive, drown
	mono	ˈmɔ.nɔ	V.MO(ST)	be stupid
	monyet	ˈmɔ.ɲɐ̰t	N	monkey
	moyang	ˈmɔ.jɐŋ	N	ancestor
	muara	mʊ.ˈa.ɾa	N	river mouth
	muat	ˈmʊ.ɐtˀ	V.BI	hold
	muda	ˈmu.da	V.MO(ST)	be easy
	mujair	mu.ˈdʒa.ɪr	N	tilapiine fish

Lexeme	Transcription	Word class	English gloss
muka	ˈmu.ka	N	front
mulut	ˈmʊ.lʊtˀ	N	mouth
muncul	ˈmʊn.tʃʊl	V.MO(DY)	appear
mundur	ˈmʊn.dʊr	V.MO(DY)	back up
mungking	ˈmʊŋ.kɪn	ADV	maybe
munta	ˈmʊn.ta	V.BI	vomit
mura	ˈmʊ.ɾa	V.MO(ST)	be cheap
murni	ˈmʊr.ni	V.MO(ST)	be pure
musu	ˈmu.su	V.BI/N	hate / enemy
N			
naik	ˈna.ɪkˀ	V.BI	ascend
nakal	ˈna.kɐl	V.MO(ST)	be mischievous
nangka	ˈnɐŋ.ka	N	jackfruit
nanti	ˈnɐn.ti	ADV	very soon
nasi	ˈna.si	N	cooked rice
nekat	ˈnɛ.kɐtˀ	V.BI	determine
nene	ˈnɛ.nɛ	N	grandmother
nika	ˈni.ka	V.BI	marry officially
nokeng	ˈnɔ.kɛ̰n	N	stringbag
nontong	ˈnɔ̰n.tɔ̰ŋ	V.BI	watch for entertainment
nyamang	ˈɲa.mɐn	V.MO(ST)	be comfortable
nyawa	ˈɲa.wa	N	soul
nyonyor	ˈɲɔ.ɲɔ̰ɾ̰	V.MO(ST)	be black and blue
O			
obat	ˈɔ.bɐt	N	medicine
ojek	ˈɔ.dʒɛ̰kˀ	V.BI/N	take motorbike taxi / motorbike taxi
olaraga	ˌɔ.laˈɾa.ga	V.MO(DY)	do sports
oleng	ˈɔ.lɛ̰ŋ	V.MO(DY)	shake
ombak	ˈɔ̰m.bɐk	N	wave
omel	ˈɔ.mɛ̰l	V.BI	complain
orang	ˈɔ.ɾɐŋ	N	person
otak	ˈɔ.tɐk	N	brain
otot	ˈɔ̰.tɔ̰tˀ	N	muscle
P			
pacar	ˈpa.tʃɐɾ̰	V.BI/N	date / lover
pace	ˈpa.tʃɛ	N	man
padam	ˈpa.dɐm	V.BI	extinguish
padat	ˈpa.dɐt	V.MO(ST)	be solid

Lexeme	Transcription	Word class	English gloss
padede	pa.ˈdɛ̟.dɛ	V.BI	whine (for)
padu	ˈpa.du	V.MO(ST)	be fused
pagi	ˈpa.gi	N	morning
paha	ˈpa.ha	N	thigh
pahit	ˈpa.hɪt	V.MO(ST)	be bitter
pajak	ˈpa.dʒɐk	N	tax
pake	ˈpa.kɛ	V.BI	use
paku	ˈpa.ku	N	nail
paling	ˈpa.lɪŋ	ADV	most
palungku	pa.ˈlʊŋ.kʊ	V.BI	punch
pamali	pa.ˈma.li	N	taboo
pamang	ˈpa.mɐn	N	uncle
pamer	ˈpa.mɛ̟r	V.BI	show off
pana	ˈpa.na	V.BI/N	bow shoot / arrow
panas	ˈpa.nɐs	V.MO(ST)	be hot
panggal	ˈpɐŋ.gɐl	N	fragment
panggil	ˈpɐŋ.gɪl	V.BI	call
pangkal	ˈpɐŋ.kɐl	N	base
pangkat	ˈpɐŋ.kɐt	N	rank
pangku	ˈpɐŋ.ku	V.BI	hold on lap
panjang	ˈpɐn.dʒɐŋ	V.MO(ST)	be long
panjat	ˈpɐn.dʒɐtˀ	V.BI	climb
panta	ˈpɐn.ta	N	buttock
pantas	ˈpɐn.tɐs	V.MO(ST)	be proper
pante	ˈpɐn.tɛ	N	coast
pantul	ˈpɐn.tʊl	V.MO(DY)	bounce back
pantung	ˈpɐn.tʊn	N	k. o. traditional poetry
papang	ˈpa.pɐn	N	plank
papeda	pa.ˈpɛ.da	N	sagu porridge
para	ˈpa.ɾa	V.MO(ST)	be in serious condition
parang	ˈpa.ɾɐŋ	N	short machete
parit	ˈpa.ɾɪt	N	ditch
parut	ˈpa.ɾʊtˀ	V.BI	scrape
pasang	ˈpa.sɐŋ	N	pair
pasang	ˈpa.sɐŋ	V.BI	install
pasar	ˈpa.sɐr	N	market
pasir	ˈpa.sɪr̥	N	sand
pasti	ˈpɐs.ti	ADV	definitely
pasukang	pa.ˈsu.kɐn	N	troops
pata	ˈpa.ta	V.BI	break
patung	ˈpa.tʊŋ	N	statue
pecek	ˈpɛ.tʃɛ̟k	N	mud

	Lexeme	Transcription	Word class	English gloss
	pecis	ˈpɛ.tʃɪs	N	light bulb
x	*pedang*	pɛ.ˈdɐŋ	N	sword
x	*pedis*	pɛ.ˈdɪs	V.MO(ST)	be spicy
x	*pegang*	pɛ.ˈgɐŋ	V.BI	hold
	pegaway	pə.ˈga.wɐj	N	government employee
	pele	ˈpɛ.lɛ	V.BI	cover
x	*pelepa*	ˌpɛ.lɛ.ˈpa	N	palm stem and midrib
	pendek	ˈpɛn.dɛk	V.MO(ST)	be short
x	*penting*	pɛn.ˈtɪŋ	V.MO(ST)	be important
x	*penu*	pɛ.ˈnu	V.MO(ST)	be full
x	*pergi*	pɛr.ˈgi	V.MO(DY)	go
x	*perna*	pɛr.ˈna	ADV	ever
x	*pesang*	pɛ.ˈsɐn	V.BI	order
	pesawat	pɛ.ˈsa.wɐt	N	airplane
	pesisir	pɛ.ˈsɪ.sɪr	N	shore
	petatas	pɛ.ˈta.tɐs	N	sweet potato
	pete	ˈpɛ.tɛ	V.BI	pick
	piatu	pi.ˈa.tu	V.MO(ST)	be motherless
	pica	ˈpi.tʃa	V.MO(ST)	be broken
	pijit	ˈpi.dʒɪtˀ	V.BI	massage
	pikol	ˈpi.kɔl	V.BI	shoulder
	pikung	ˈpi.kʊn	V.MO(ST)	be senile
	pili	ˈpi.li	V.BI	choose
	pimping	ˈpɪm.pɪn	V.BI	lead
	pinang	ˈpɪ.nɐŋ	N	betel nut
	pinda	ˈpɪn.da	V.BI	move
	pinggang	ˈpɪŋ.gɐŋ	N	loins
	pinggir	ˈpɪŋ.gɪr	N-LOCT	border
	pinjam	ˈpɪn.dʒɐm	V.BI	borrow
	pintar	ˈpɪn.tɐr	V.MO(ST)	be clever
	pintu	ˈpɪn.tu	N	door
	pisa	ˈpi.sa	V.MO(ST)	be separate
	pisang	ˈpi.sɐŋ	N	banana
	pisow	ˈpi.sɔw	N	knife
	pita	ˈpi.ta	N	ribbon of volleyball net
	plaka	ˈpla.ka	V.BI	fall over
	plang	ˈplɐn	V.MO(ST)	be slow
	pluk	ˈplʊkˀ	V.BI	embrace
	pohong	ˈpɔ.hɔn	N	tree
	potong	ˈpɔ.tɔŋ	V.BI	cut
	prahu	ˈpra.hʊ	N	boat
	prang	ˈprɐŋ	N	war

	Lexeme	Transcription	Word class	English gloss
	prempuang	prɐ̟m.ˈpʊ.ɐn	N	woman
	printa	ˈprɪn.ta	V.BI/N	command
	prut	ˈprʊt	N	stomach
	pu	ˈpu	V.POSS	POSS
	puas	ˈpʊ.ɐs	V.MO(ST)	be satisfied
	pukul	ˈpʊ.kʊl	V.BI	hit
	pulang	ˈpu.lɐŋ	V.BI	go home (to)
	pulow	ˈpu.lo̞w	N	island
	pulu	ˈpu.lu	NUM.C	tens
	puntung	ˈpʊn.tʊŋ	N	butt
	punya	ˈpu.ɲa	V.POSS/V.BI	POSS / have
	puri	ˈpu.ɾi	N	anchovy-like fish
	pusing	ˈpu.sɪŋ	V.MO(ST)	be dizzy, be confused
	putar	ˈpu.tɐr	V.BI	turn around
	puti	ˈpu.ti	V.MO(ST)	be white
	putus	ˈpu.tʊs	V.MO(ST)	be broken
	R			
	raba	ˈra.ba	V.BI	grope
	rabik	ˈra.bɪkˀ	V.BI	tear
	ragu	ˈra.gu	V.BI	doubt
	rajing	ˈra.dʒɪn	V.MO(ST)	be diligent
	rakit	ˈra.kɪt	N	raft
	rakus	ˈra.kʊs	V.BI	crave
	ramas	ˈra.mɐs	V.BI	press
	rambut	ˈrɐm.bʊtˀ	N	hair
	rame	ˈra.mɛ	V.MO(ST)	be bustling
	rampas	ˈrɐm.pɐs	V.BI	seize
	rangkap	ˈrɐŋ.kɐpˀ	V.MO(ST)	be doubled
	rapat	ˈra.pɐt	V.MO(DY)/N	move close / meeting
	rapi	ˈra.pi	V.MO(ST)	be neat
	rata	ˈra.ta	V.MO(ST)	be even
	ratus	ˈra.tʊs	NUM.C	hundred
	rawa	ˈra.wa	N	swamp
	rawang	ˈra.wɐn	V.MO(ST)	be haunted
	rawat	ˈra.wɐtˀ	V.BI	take care of
x	*rebus*	rɛ.ˈbʊs	V.BI	boil
x	*rebut*	rɛ.ˈbʊtˀ	V.BI	race each other
x	*renda*	rɐ̟n.ˈda	V.MO(ST)	be low
x	*rendam*	rɐ̟n.ˈdɐm	V.BI	soak
	repot	ˈrɛ.po̞t	V.MO(ST)	be busy
	ribu	ˈri.bu	NUM.C	thousand

Lexeme	Transcription	Word class	English gloss
ribut	ˈri.bʊt	V.BI	trouble
rica	ˈri.tʃa	N	red pepper
rindu	ˈrɪn.du	V.BI	long for
ringang	ˈri.ŋɐn	V.MO(ST)	be light
rokok	ˈrɔ̰.kɔ̰k	N	cigarette
ruang	ˈrʊ.ɐŋ	N	room
rubu	ˈru.bu	V.MO(DY)	collapse
rugi	ˈru.gi	V.BI	lose out
ruma	ˈrʊ.ma	N	house
rumput	ˈrʊm.pʊt	N	grass
runcing	ˈrʊn.tʃɪŋ	V.MO(ST)	be pointed
rusak	ˈrʊ.sɐk	V.MO(ST)	be damaged
rusuk	ˈrʊ.sʊk	N	rib
S			
sa	ˈsa	PRO	1SG
sabit	ˈsa.bɪt	N	sickle
sadap	ˈsa.dɐpˀ	V.MO(ST)	be delicious
sadar	ˈsa.dɐr̰	V.MO(ST)	be aware
sagu	ˈsa.gu	N	sago
saing	ˈsa.ɪŋ	V.MO(DY)	compete
sakit	ˈsa.kɪtˀ	V.MO(ST)	be sick
sala	ˈsa.la	V.MO(ST)	be wrong
salip	ˈsa.lɪpˀ	V.BI/N	crucify / cross
sambar	ˈsɐm.bɐr	V.BI	seize
sambil	ˈsɐm.bɪl	CNJ	while
sambung	ˈsɐm.bʊŋ	V.BI	continue
sambut	ˈsɐm.bʊtˀ	V.BI	welcome
sampa	ˈsɐm.pa	N	trash
sampe	ˈsɐm.pɛ	V.BI	reach
		PREP	until
		CNJ	until, with the result that
samping	ˈsɐm.pɪŋ	N-LOCT	side
sana	ˈsa.na	LOC	L.DIST
sandar	ˈsɐn.dɐr̰	V.MO(DY)	lean
sanggup	ˈsɐŋ.gʊ̰p	V.MO(ST)	be capable
santang	ˈsɐn.tɐn	N	coconut milk
sante	ˈsɐn.tɛ	V.MO(DY)	relax
sapi	ˈsa.pɪ	N	cow
sapu	ˈsa.pu	V.BI/N	sweep / broom
sarana	sa.ˈra.na	N	facility
sarang	ˈsa.ɾɐn	N	suggestion

	Lexeme	Transcription	Word class	English gloss
	sarat	ˈsa.ɾɐtˀ	V.MO(ST)	be loaded
	saring	ˈsa.ɾɪŋ	V.BI	filter
	sarung	ˈsa.ɾʊn	N	protective sleeve
	sasarang	sa.ˈsa.ɾɐŋ	N	target
	satu	ˈsa.tu	NUM.C	one
	saya	ˈsa.ja	PRO	1SG
	sayang	ˈsa.jɐŋ	V.BI	love
	sayur	ˈsa.jʊɻ̩	N	vegetable
x	*sebut*	sɛ.ˈbʊtˀ	V.BI	name
x	*sedi*	sɛ.ˈdi	V.MO(ST)	be sad
	sedikit	sɛ.ˈdɪ.kɪtˀ	QT	few
x	*sedot*	sɛ.ˈdɔ̝tˀ	V.BI	suck
x	*segar*	sɛ.ˈgɐɻ̩	V.MO(ST)	be fresh
	seher	ˈsɛ̝.hɛ̝ɻ̩	N	piston
x	*sejak*	sɛ.ˈdʒɐkˀ	ADV	since
x	*selesay*	ˌsɛ.lɛ.ˈsɐj	V.BI	finish
	semang	ˈsɛ.mɐn	N	outrigger
x	*semba*	sɛ̝m.ˈba	V.BI	worship
	sembayang	səm.ˈba.jɐŋ	V.BI	worship
	sembilang	səm.ˈbi.lɐn	NUM.C	nine
x	*sembu*	sɛ̝m.ˈbu	V.MO(ST)	be healed
	sembuni	sɛ̝m.ˈbu.ni	V.BI	hide
x	*sempat*	sɛ̝m.ˈpɐtˀ	V.MO(DY)	have enough time
x	*sempit*	sɛ̝m.ˈpɪt	V.MO(ST)	be narrow
	sendiri	sɛ̝n.ˈdi.ɾi	V.MO(ST)	be alone
	sendok	ˈsɛ̝n.dɔ̝k	V.BI/N	spoon
	seneng	ˈsɛ.nɛ̝n	V.BI	sign
	sentu	ˈsɛ̝n.tu	V.BI	touch
x	*senyum*	sɛ.ˈɲʊm	V.MO(DY)	smile
x	*sepi*	sɛ.ˈpi	V.MO(ST)	be quiet
	seraka	sɛ.ˈɾa.ka	V.MO(ST)	be greedy
x	*serang*	sɛ.ˈɾɐŋ	V.BI	attack
x	*serey*	sɛ.ˈɾɛ̝j	N	lemongrass
x	*sesak*	sɛ.ˈsɐk	V.MO(ST)	be crowded
	sial	ˈsi.ɐl	V.MO(ST)	be unfortunate
	siang	ˈsi.ɐŋ	N	midday
	siap	ˈsi.ɐpˀ	V.BI	get ready
	siapa	si.ˈa.pa	INT	who
	sibuk	ˈsi.bʊk	V.MO(ST)	be busy
	sidang	ˈsi.dɐŋ	N	meeting
	sikakar	si.ˈka.kɐɻ̩	V.BI	hold onto tightfisted
	sikap	ˈsi.kɐpˀ	N	attitude

Lexeme	Transcription	Word class	English gloss
sikat	ˈsi.kɐt	N	brush
simpang	ˈsɪm.pɐn	V.BI	store, prepare
singgung	ˈsɪŋ.gʊŋ	V.BI	offend
singkat	ˈsɪŋ.kɐt	V.MO(ST)	be brief
sini	ˈsi.ni	LOC	L.PROX
siram	ˈsi.ɾɐm	V.BI	pour over
siri	ˈsi.ɾi	N	betel vine
sisi	ˈsi.si	N	side
sisir	ˈsi.sɪr	V.BI	comb
situ	ˈsi.tu	LOC	L.MED
skarang	ˈska.ɾɐŋ	V.MO(ST)	be current
		ADV	now
slak	ˈslɐk	V.MO(DY)	want to
slatang	ˈsla.tɐn	N	south
slimut	ˈslɪ.mʊt	N	blanket
smangat	ˈsma.ŋɐt	V.MO(ST)	be enthusiastic
smut	ˈsmʊt	N	ant
snang	ˈsnɐŋ	V.BI	feel happy (about)
sobek	ˈsɔ.bɐ̤kˀ	V.BI	tear
sombong	ˈsɔ̤m.bɔ̤ŋ	V.MO(ST)	be arrogant
sopang	ˈsɔ.pɐn	V.MO(ST)	be respectful
sore	ˈsɔ.ɾɛ	N	afternoon
sorong	ˈsɔ̤.ɾɔ̤ŋ	V.BI	slide
sperti	ˈspɐ̤r.ti	PREP/CNJ	similar to
srabut	ˈsra.bʊt	N	fiber
sring	ˈsrɪŋ	ADV	often
subu	ˈsu.bu	N	very early morning
subur	ˈsu.bʊɾ̤	V.MO(ST)	be fertile
sudut	ˈsʊ.dʊt	N	direction
suka	ˈsu.ka	V.BI	enjoy
suku	ˈsu.ku	N	ethnic group
sulit	ˈsu.lɪt	V.MO(ST)	be difficult
sumbang	ˈsʊm.bɐŋ	V.BI	donate
sumber	ˈsʊm.bɐ̤ɾ̤	N	source
sumbur	ˈsʊm.bʊr	V.BI	spit at
sumur	ˈsʊ.mʊɾ̤	N	well
sungay	ˈsu.ŋɐj	N	river
sunggu	ˈsʊŋ.gu	V.MO(ST)	be true
suntik	ˈsʊn.tɪkˀ	V.BI	inject
surat	ˈsʊ.ɾɐt	N	letter
suru	ˈsu.ɾu	V.BI	order
susa	ˈsu.sa	V.MO(ST)	be difficult

Lexeme	Transcription	Word class	English gloss
susu	ˈsu.su	N	milk
susung	ˈsu.sʊn	V.BI	arrange
swak	ˈswɐk	V.MO(ST)	be exhausted
swanggi	ˈswɐŋ.gi	N	nocturnal evil spirit, sorcerer
T			
tabrak	ˈta.brɐk	V.BI	hit against
tadi	ˈta.di	ADV	earlier
tahang	ˈta.hɐn	V.BI	hold (out/back)
tahap	ˈta.hɐpˀ	N	phase
tajam	ˈta.dʒɐm	V.MO(ST)	be sharp
takut	ˈta.kʊtˀ	V.BI	feel afraid (of)
tali	ˈta.li	N	cord
talut	ˈta.lʊt	V.BI	build protection wall
tamba	ˈtɐm.ba	V.BI	add
tampar	ˈtɐm.pɐr̝	V.BI	beat
tampeleng	tɐm.ˈpɐ̟.lɐ̟ŋ	V.BI	slap on face/ears
tampil	ˈtɐm.pɪl	V.MO(DY)	perform
tampung	ˈtɐm.pʊŋ	V.BI	receive
tamu	ˈta.mu	N	guest
tana	ˈta.na	N	ground
tanam	ˈta.nɐm	V.BI	plant
tanda	ˈtɐn.da	N	sign
tandang	ˈtɐn.dɐŋ	N	banana plant stem
tanding	ˈtɐn.dɪŋ	V.MO(DY)	compete
tangang	ˈta.ŋɐn	N	hand, arm
tangga	ˈtɐŋ.ga	N	ladder
tanggal	ˈtɐŋ.gɐl	N	date
tanggap	ˈtɐŋ.gɐpˀ	V.MO(ST)	be perceptive
tanggulang	tɐŋ.ˈgʊ.lɐŋ	V.BI	cope with
tanggung	ˈtɐŋ.gʊŋ	V.BI	bear
tangkap	ˈtɐŋ.kɐpˀ	V.BI	catch
tangkis	ˈtɐŋ.kɪs	V.BI	ward off
tanjung	ˈtɐn.dʒʊŋ	N	cape
tanjung	ˈtɐn.dʒʊŋ	V.MO(ST)	be tired
tantang	ˈtɐn.tɐŋ	V.BI	challenge
tanya	ˈta.ɲa	V.BI	ask
tapis	ˈta.pɪs	V.BI	sieve
tara	ˈta.ɾa	V.MO(ST)	be matching
tarik	ˈta.ɾɪk	V.BI	pull
taru	ˈta.ɾu	V.BI	put
tatap	ˈta.tɐpˀ	V.BI	gaze at

	Lexeme	Transcription	Word class	English gloss
	taung	ˈta.ʊn	N	year
	taw	ˈtɐw	V.BI	know
	tawar	ˈta.wɐr̥	V.BI	bargain
	tawong	ˈta.wo̤n	N	bee
	tay	ˈtɐj	N	excrement
x	*tebal*	tɛ.ˈbɐl	V.MO(ST)	be thick
x	*tebang*	tɛ.ˈbɐŋ	V.BI	fell
x	*tedu*	tɛ.ˈdu	V.MO(ST)	be calm
x	*tegang*	tɛ.ˈgɐŋ	V.MO(ST)	be tight
x	*tegas*	tɛ.ˈgɐs	V.MO(ST)	be firm
x	*tegur*	tɛ.ˈgʊr̥	V.BI	reprimand
x	*tekang*	tɛ.ˈkɐn	V.BI	press
	telinga	tɛ.ˈli.ŋa	N	ear
x	*telur*	tɛ.ˈlʊr̥	N	egg
x	*temang*	tɛ.ˈmɐn	N	friend
	tembak	ˈtɐ̤m.bɐkˀ	V.BI	shoot
x	*tembus*	tɐ̤m.ˈbʊs	V.MO(DY)	emerge
x	*tempat*	tɐ̤m.ˈpɐt	N	place
	tempe	ˈtɐ̤m.pɛ	N	tempeh
	tenaga	tɛ.ˈna.ga	N	energy
x	*tenang*	tɛ.ˈnɐŋ	V.MO(ST)	be quiet
x	*tendang*	tɐ̤n.ˈdɐŋ	V.BI	kick
x	*tenga*	tɛ.ˈŋa	N-LOCT	middle
x	*tenggelam*	ˌtɐ̤ŋ.gɛ.ˈlɐm	V.MO(DY)	sink
x	*tengking*	tɐ̤ŋ.ˈkɪŋ	V.BI	exorcize
	tengok	ˈtɛ.ŋo̤k	V.BI	view something
	tepu	ˈtɛ.pu	V.BI	clap
x	*tepung*	tɛ.ˈpʊŋ	N	flour
x	*terbang*	tɐ̤r.ˈbɐŋ	V.MO(DY)	fly
x	*terbit*	tɐ̤r.ˈbɪt	V.MO(DY)	rise
x	*tetap*	tɛ.ˈtɐpˀ	V.MO(ST)	be unchanged
	tete	ˈtɛ.tɛ	N	grandfather
	tiang	ˈtɪ.ɐŋ	N	pole
	tiap	ˈti.ɐpˀ	QT	every
	tiarap	ti.ˈa.ɾɐpˀ	V.MO(DY)	lie face downward
	tiba	ˈti.ba	V.MO(DY)	arrive
	tida	ˈti.dɐkˀ	ADV	NEG
	tidor	ˈti.do̤r̥	V.MO(DY)	sleep
	tiga	ˈti.ga	NUM.C	three
	tikam	ˈti.kɐm	V.BI	stab
	tikar	ˈti.kɐr̥	N	plaited mat
	tikung	ˈti.kʊŋ	V.MO(DY)	curve

Lexeme	Transcription	Word class	English gloss
tikus	ˈti.kʊs	N	rat
timba	ˈtɪm.ba	V.BI	fetch
timbang	ˈtɪm.bɐn	V.BI	weigh
timbul	ˈtɪm.bʊl	V.MO(DY)	emerge
timbung	ˈtɪm.bʊn	V.BI	pile up
timpang	ˈtɪm.pɐŋ	V.MO(ST)	be unbalanced
timur	ˈti.mʊr	N	east
tindak	ˈtɪn.dɐk	V.BI	act
tindas	ˈtɪn.dɐs	V.BI	crush
tindis	ˈtɪn.dɪs	V.BI	overlap
tinggal	ˈtɪŋ.gɐl	V.MO(DY)	stay
tinggi	ˈtɪŋ.gi	V.MO(ST)	be high
tingkat	ˈtɪŋ.kɐt	N	floor
tinju	ˈtɪn.dʒu	V.BI	box
tipis	ˈti.pɪs	V.MO(ST)	be thin
tipu	ˈti.pu	V.BI	cheat
tiru	ˈti.ɾu	V.BI	imitate
titik	ˈtɪ.tɪk	N	period
titip	ˈti.tɪp	V.BI	deposit
tiup	ˈti.ʊpˀ	V.BI	blow
tladang	ˈtla.dɐn	V.MO(ST)	be exemplary
tlanjang	ˈtlɐn.dʒɐŋ	V.MO(ST)	be naked
tobo	ˈtɔ.bɔ	V.MO(DY)	dive
toki	ˈtɔ.ki	V.BI	beat
tokok	ˈtɔ.kɔ̰k	V.BI	tap
tolak	ˈtɔ.lɐk	V.BI	push away
tolok	ˈtɔ.lɔ̰k	N	standard
tolong	ˈtɔ̰.lɔ̰ŋ	V.BI	help
tombak	ˈtɔ̰m.bɐkˀ	N	spear
tong	ˈtɔ̰ŋ	PRO	1PL
tongkat	ˈtɔ̰ŋ.kɐt	V.BI/N	cane
torang	ˈtɔ.ɾɐŋ	PRO	1PL
tra	ˈtra	ADV	NEG
trampil	ˈtɾɐm.pɪl	V.MO(ST)	be skilled
trang	ˈtrɐŋ	V.MO(ST)	be clear
trik	ˈtɾɪkˀ	V.MO(ST)	be intense
trima	ˈtri.ma	V.BI	receive
trus	ˈtɾʊs	V.MO(ST)	be continuous
		CNJ	next
tua	ˈtʊ.a	V.MO(ST)	be old
tuang	ˈtʊ.ɐn	N	head
tuay	ˈtʊ.ɐj	V.BI	harvest

Lexeme	Transcription	Word class	English gloss
tubir	ˈtu.bɪr	V.MO(ST)	be steep
tubu	ˈtu.bu	N	body
tugas	ˈtʊ.gɐs	N	duty
tugu	ˈtu.gu	N	monument
Tuhang	ˈtʊ.hɐn	N	God
tuju	ˈtu.dʒu	NUM.C	seven
tukang	ˈtʊ.kɐn	N	craftsman
tukar	ˈtu.kɐr̥	V.BI	exchange
tulang	ˈtu.lɐŋ	N	bone
tuli	ˈtu.li	V.MO(ST)	be deaf
tulis	ˈtu.lɪs	V.BI	write
tum	ˈtʊm	V.MO(DY)	dive
tumbu	ˈtʊm.bu	V.MO(DY)	grow
tumbuk	ˈtʊm.bʊk	V.BI	pound
tumis	ˈtu.mɪs	V.BI	sauté very hot
tumpang	ˈtʊm.pɐŋ	V.BI	join in
tumpuk	ˈtʊm.pʊk	V.BI	pile
tunda	ˈtʊn.da	V.BI	delay
tunduk	ˈtʊn.dʊkˀ	V.MO(DY)	bow
tunggu	ˈtʊŋ.gu	V.BI	wait (for)
tunjuk	ˈtʊn.dʒʊkˀ	V.BI	show
tuntung	ˈtʊn.tʊn	V.BI	guide
tuntut	ˈtʊn.tʊt	V.BI	demand
tupay	ˈtu.pɐj	N	squirrel
turung	ˈtʊ.rʊn	V.BI	descend
tusu	ˈtu.su	V.BI	stab
tutup	ˈtu.tʊp	V.BI	close
U			
uang	ˈʊ.ɐŋ	N	money
uba	ˈu.ba	V.BI	change
ubi	ˈu.bi	N	purple yam
udang	ˈu.dɐŋ	N	shrimp
udik	ˈu.dɪk	V.BI	observe in amazement
uji	ˈu.dʒi	V.BI	examine
ujung	ˈu.dʒʊŋ	N	end
ukir	ˈu.kɪr̥	V.BI	carve
ukur	ˈʊ.kʊr	V.BI	measure
ulang	ˈu.lɐŋ	V.BI	repeat
ular	ˈu.lɐr̥	N	snake
umpang	ˈʊm.pɐn	V.BI	pass ball
undang	ˈʊn.dɐŋ	V.BI	invite

	Lexeme	Transcription	Word class	English gloss
	unggung	ˈʊŋ.gʊn	N	campfire
	untuk	ˈʊn.tʊkˀ	PREP/CNJ	for
	untung	ˈʊn.tʊŋ	N	fortune
	urat	ˈu.ɾɐtˀ	N	vein
	urus	ˈʊ.ɾʊs	V.BI	arrange
	urut	ˈʊ.ɾʊt	V.BI	massage
	usa	ˈu.sa	V.BI	need to
	usir	ˈu.sɪr	V.BI	chase away
	usus	ˈʊ.sʊs	N	intestines
	utus	ˈʊ.tʊs	V.BI	delegate
	W			
	wada	ˈwa.da	N	umbrella organization
	waras	ˈwa.ɾɐs	V.MO(ST)	be sane
	warung	ˈwa.ɾʊŋ	N	food stall
	watak	ˈwa.tɐk	N	character
	wewenang	wɛ.ˈwɛ.nɐŋ	N	authority
	Y			
	yahanam	ja.ˈha.nɐm	V.MO(ST)	be rebellious
	yang	ˈjɐŋ	CNJ	REL

A.2 Loanwords

	Lexeme	Transcription	Word class	English gloss
	A			
	abadi	a.ˈba.di	V.MO(ST)	be eternal
	acara	a.ˈtʃa.ɾa	N	ceremony
	adat	ˈa.dɐt	N	tradition
	adil	ˈa.dɪl	V.MO(ST)	be fair
	adopsi	a.ˈdɔpˀ.si	N	adoption
	agama	a.ˈga.ma	N	religion
	agenda	a.ˈgɐn.da	N	agenda
x	*agraria*	a.ˈgɾa.ɾi.ˌa	N	agrarian affairs
	ajaip	a.ˈdʒa.ɪpˀ	V.MO(ST)	be miraculous
	akal	ˈa.kɐl	N	reason
	akibat	a.ˈki.bɐt	N	consequence
	akta	ˈɐkˀ.ta	N	certificate

	Lexeme	Transcription	Word class	English gloss
	aktif	ˈɐkˀtɪf	V.MO(ST)	be active
	alam	ˈa.lɐm	N	world
	alamat	a.ˈla.mɐt	N	address
	alat	ˈa.lɐt	N	equipment
	alergi	a.ˈlɛ̟r.gi	V.MO(ST)	be allergic
	alkitap	ɐl.ˈki.tɐpˀ	N	Bible
	alpa	ˈɐl.pa	V.MO(ST)	be absent
	alumni	a.ˈlʊm.ni	N	alumnus
	amang	ˈa.mɐn	V.MO(ST)	be safe
	amplop	ˈɐm.plo̞p	N	envelope
	anggota	ɐŋ.ˈgɔ.ta	N	member
	antifirus	ˌɐn.ti.ˈfi.ɾʊs	N	antivirus
	aparat	a.ˈpa.ɾɐt	N	apparatus
	apel	ˈa.pɛ̟l	N	apple
	apsen	ˈɐpˀ.sɛ̟n	V.MO(ST)	be absent
	aroa	a.ˈɾo̞.a	N	departed spirit
	arti	ˈɐr.ti	N	meaning
	asal	ˈa.sɐl	N	origin
	asar	ˈa.sɐɻ̊	V.BI	smoke
	asik	ˈa.sɪkˀ	V.MO(ST)	be passionate
	asli	ˈɐs.li	V.MO(ST)	be original
	aspal	ˈɐs.pɐl	N	asphalt
	asrama	ɐs.ˈra.ma	N	dormitory
	astronomi	ˌɐs.trɔ.ˈnɔ.mi	N	astronomy
x	*ato*	a.ˈtɔ	CNJ	or
	ayat	ˈa.jɐt	N	verse
	B			
	baca	ˈba.tʃa	V.BI	read
	badang	ˈba.dɐn	N	body
	bagi	ˈba.gi	V.BI	divide
	bahas	ˈba.hɐs	V.BI	discuss
	bahasa	ba.ˈha.sa	N	language
	bahaya	ba.ˈha.ja	V.MO(ST)	be dangerous
	bahu	ˈba.hʊ	N	shoulder
	bahwa	ˈbɐh.wa	CNJ	that
	baju	ˈba.dʒʊ	N	shirt
	bak	ˈbɐk	N	basin
	ban	ˈbɐn	N	tire
	bangku	ˈbɐŋ.kʊ	N	bench
	bangsa	ˈbɐŋ.sa	N	people group
	bangsat	ˈbɐŋ.sɐt	N	rascal

	Lexeme	Transcription	Word class	English gloss
	baptis	ˈbɐpˀ.tɪs	V.BI	baptize
	barat	ˈba.ɾɐt	N	west
	batal	ˈba.tɐl	V.BI	cancel
x	*batrey*	ba.ˈtɾɛj	N	battery
	baw	ˈbɐw	N	smell
	beda	ˈbɛ.da	V.MO(ST)	be different
	bel	ˈbɛ̰l	V.BI	ring
	bendera	bɛ̰n.ˈdɛ̰.ɾa	N	flag
	bengkel	ˈbɛ̰ŋ.kɛ̰l	N	repair shop
x	*bensing*	bɛ̰n.ˈsɪn	N	gasoline
	berkat	ˈbɛ̰r.kɐt	N	blessing
	biasa	bi.ˈa.sa	V.MO(ST)	be usual
	biaya	bi.ˈa.ja	V.BI/N	pay
	bicara	bi.ˈtʃa.ɾa	V.BI	speak
	bijaksana	ˌbi.dʒɐkˀ.ˈsa.na	V.MO(ST)	be wise
	biji	ˈbi.dʒi	N	seed
	biodata	ˌbi.ɔ.ˈda.ta	N	biodata
	biologi	ˌbi.ɔ.ˈlɔ.gi	N	biology
	bis	ˈbɪs	N	bus
x	*biskwit*	bɪs.ˈkwɪt	N	cracker
	bisnis	ˈbɪs.nɪs	N	business
x	*bistir*	bɪs.ˈtɪr̰	N	subdistrict head
	bola	ˈbɔ.la	N	ball
	bolpen	ˈbɔ̰l.pɛ̰n	N	ballpoint pen
	boneka	bɔ.ˈnɛ.ka	N	doll
	bos	ˈbɔ̰s	N	boss
	botol	ˈbɔ̰.tɔ̰l	N	bottle
	brita	ˈbri.ta	N	news
	budaya	bʊ.ˈda.ja	N	culture
	bukti	ˈbʊkˀ.ti	N	proof
	buku	ˈbu.ku	N	book
	bumi	ˈbu.mi	N	earth
	bupati	bu.ˈpa.ti	N	regent
	busi	ˈbu.si	N	sparkplug
	C			
	cahaya	tʃa.ˈha.ja	N	glow
	cap	ˈtʃɐpˀ	N	stamp
	cara	ˈtʃa.ɾa	N	manner
	cari	ˈtʃa.ɾi	V.BI	search
	cek	ˈtʃɛ̰k	V.BI	check
	celana	tʃɛ.ˈla.na	N	trousers

	Lexeme	Transcription	Word class	English gloss
	cemara	tʃɛ.ˈma.ɾa	N	casuarina tree
	ceria	tʃɛ.ˈɾi.a	V.MO(ST)	be cheerful
	ceritra	tʃɛ.ˈɾi.tra	V.TRI	tell
	cinta	ˈtʃɪn.ta	N	love
	coklat	ˈtʃɔ̰k̚lɐt	N	chocolate
	cuci	ˈtʃu.tʃi	V.BI	wash
	cuma	ˈtʃu.ma	ADV	just
	curi	ˈtʃu.ɾi	V.BI	steal
	cuti	ˈtʃu.ti	V.MO(DY)	take leave
	D			
	daera	da.ˈɻ̩.ɾa	N	area
	daftar	ˈdɐf.tɐɻ̩	V.BI/N	list
	dana	ˈda.na	N	fund
	dansa	ˈdɐn.sa	V.MO(DY)	dance
	dasyat	ˈda.sʲɐt	V.MO(ST)	be terrifying
	daya	ˈda.ja	N	energy
x	*debat*	dɛ.ˈbɐt	N	debate
	debel	ˈdɻ̩.bɻ̩l	V.BI	double
	delegasi	ˌdɛ.lɛ.ˈga.si	N	delegation
	demo	ˈdɛ.mɔ	N	demonstration
	desember	dɛ.ˈsɻ̩m.bɛɻ̩	N	December
	dewan	ˈdɛ.wɐn	N	council (member)
	dewasa	dɛ.ˈwa.sa	N	adult
	dialek	dɪ.ˈa.lɻ̩k	N	dialect
	dikta	ˈdɪk̚ta	N	written lectures summary
	dinas	ˈdi.nɐs	N	department
	disain	di.ˈsa.ɪn	N	design
	disko	ˈdɪs.kɔ	N	discotheque
	distrik	ˈdɪs.trɪk	N	district
	doa	ˈdɔ.a	N	prayer
	dobrak	ˈdɔ.brɐk̚	V.BI	smash
	dokter	ˈdɔ̰k̚tɛɻ̩	N	doctor
x	*dokumen*	ˌdɔ.ku.ˈmɻ̩n	N	document
	dol	ˈdɔ̰l	V.MO(ST)	be damaged
	domba	ˈdɔ̰m.ba	N	sheep
x	*dominan*	ˌdɔ.mi.ˈnɐn	V.MO(ST)	dominate, master
	dompet	ˈdɔ̰m.pɻ̩t	N	wallet
	donat	ˈdɔ.nɐt	N	doughnut
	dosa	ˈdɔ.sa	N	sin
x	*doseng*	dɔ.ˈsɻ̩n	N	lecturer
	doser	ˈdɔ.sɛɻ̩	N	bulldozer

	Lexeme	Transcription	Word class	English gloss
	dramben	ˈdrɐm.bɻn	N	marching band
	drop	ˈdrɔpˀ	V.BI	drop
	drum	ˈdrʊm	N	drum
	duka	ˈdu.ka	N	grief
	dunia	du.ˈni.a	N	world
	E			
	egois	ɛ.ˈgɔ.ɪs	V.MO(ST)	be egoistic
	ekstra	ˈɻkˀstra	V.MO(ST)	be extra
	emansipasi	ɛ.ˌmɐn.si.ˈpa.si	N	emancipation
	ember	ˈɻm.bɻɽ	N	bucket
	emosi	ɛ.ˈmɔ.si	V.BI	feel angry (about)
	erport	ˈɻr.pɔɽt	N	airport
	etnis	ˈɻtˀ.nɪs	N	ethnic
	F			
	fajar	ˈfa.dʒɐɽ	N	dawn
	fam	ˈfɐm	N	family name
x	*fasilitas*	fa.ˌsi.li.ˈtɐs	N	facility
	februari	ˌfɛ.brʊ.ˈa.ɾi	N	February
	federasi	ˌfɛ.dɛ.ˈɾa.si	N	federation
x	*ferban*	fɻr.ˈbɐn	N	bandage
	fetsin	ˈfɻtˀ.sɪn	N	flavoring spice
	fideo	fi.ˈdɛ.ɔ	N	video
	figur	ˈfi.gʊɽ	N	figure
	filem	ˈfɪ.lɻm	N	film
	final	ˈfi.nɐl	N	finals
	firman	ˈfɪr.mɐn	N	divine saying
	fit	ˈfɪt	N	Fit-drinking water
x	*fitamin*	ˌfi.ta.ˈmɪn	N	vitamins
	fokal	ˈfɔ.kɐl	N	song
	fol	ˈfɽl	V.MO(ST)	be full
	foli	ˈfɔ.li	N	volleyball
	fondasi	fɽn.ˈda.si	N	foundation
	formasi	fɽr.ˈma.si	N	formation
	formulir	fɽr.ˈmu.lɪɽ	N	form
	forum	ˈfɔ.ɾʊm	N	forum
	foto	ˈfɔ.tɔ	N	photograph
	fotokopi	ˌfɔ.tɔ.ˈkɔ.pi	N	photocopy
	frey	ˈfrɻj	V.MO(ST)	be blank
	fungsi	ˈfʊŋ.si	N	function

	Lexeme	Transcription	Word class	English gloss
	G			
	gaja	ˈga.dʒa	N	elephant
	gaji	ˈga.dʒi	N	salary
	gas	ˈgɐs	N	gas
	gembala	gɻm.ˈba.la	N	pastor
	generasi	ˌgɛ.nɛ.ˈɾa.si	N	generation
	gergaji	gɻr.ˈga.dʒi	N	saw
	gisi	ˈgi.si	N	nutrient
x	*gitar*	gi.ˈtɐr̥	N	guitar
	glas	ˈglɐs	N	glass
	glojo	ˈglɔ.dʒɔ	V.BI	crave
	got	ˈgɒt	N	gutter
	gratis	ˈgɾa.tɪs	V.MO(ST)	be gratis
	greja	ˈgrɛ.dʒa	N	church
	grobak	ˈgrɔ.bɐk	N	wheelbarrow
	grup	ˈgrʊp	N	group
x	*gubernur*	ˌgu.bɻr.ˈnʊr̥	N	governor
	gudang	ˈgʊ.dɐŋ	N	storeroom
	gula	ˈgu.la	N	sugar
	guru	ˈgu.ɾu	N	teacher
	H			
	hadia	ha.ˈdɪ.a	N	gift
	hadir	ˈha.dɪr̥	V.MO(DY)	attend
	hafal	ˈha.fɐl	V.BI	memorize
	hak	ˈhɐk	N	right
	hal	ˈhɐl	N	thing
x	*halal*	ha.ˈlɐl	V.MO(ST)	be permitted
	hamil	ˈha.mɪl	V.MO(ST)	be pregnant
	handuk	ˈhɐn.dʊk	N	towel
	hantu	ˈhɐn.tu	N	ghost
	harga	ˈhɐr.ga	N	price
	hari	ˈha.ɾi	N	day
	harta	ˈhɐr.ta	N	wealth
	hasil	ˈha.sɪl	N	product
	hebat	ˈhɛ.bɐtˀ	V.MO(ST)	be great
	heking	ˈhɛ.kɪŋ	V.MO(DY)	hiking
	hektar	ˈhɻk̚.tɐr	N	hectare
	helem	ˈhɛ.lɻm	N	helmet
	helikopter	ˌhɛ.li.ˈkɒpˀ.tɻr	N	helicopter
	hemat	ˈhɛ.mɐt	V.BI	economize

	Lexeme	Transcription	Word class	English gloss
	herang	ˈhɛ.ɾɐn	V.BI	feel surprised (about)
	hikmat	ˈhɪkˌmɐtˀ	N	wisdom
	hina	ˈhi.na	V.BI	humiliate
	hobi	ˈhɔ.bi	N	hobby
x	*honay*	hɔ.ˈnɐj	N	traditional Dani hut
	honor	ˈhɻ.nɻr	N	honorarium
x	*honorer*	ˌhɔ.nɔ.ˈɾɽr	V.MO(ST)	be honorary
	hordeng	ˈhɻr.dɽŋ	N	curtains
	hormat	ˈhɻr.mɐt	V.BI	respect
	hotba	ˈhɻtˀ.ba	V.BI	preach
x	*hotel*	hɔ.ˈtɽl	N	hotel
	hukum	ˈhu.kʊm	N	law
	humur	ˈhʊ.mʊr	N	joke
	I			
	ibada	i.ˈba.da	V.MO(DY)	worship
	iblis	ˈɪ.blɪs	N	devil
	ide	ˈi.dɛ	N	idea
	ijasa	i.ˈdʒa.sa	N	diploma
	ijing	ˈi.dʒɪn	N	permission
	ilmu	ˈɪl.mu	N	knowledge
x	*iman*	i.ˈmɐn	N	faith
	informasi	ˌɪn.fɻr.ˈma.si	N	information
	infus	ˈɪn.fʊs	N	give an infusion
	injil	ˈɪn.dʒɪl	N	Gospel
	insentif	ɪn.ˈsɽn.tɪf	N	incentive
x	*insinyur*	ˌɪn.si.ˈɲʊr	N	engineer
	instansi	ɪn.ˈstɐn.si	N	level
	intel	ˈɪn.tɽl	N	intelligence service
	intro	ˈɪn.trɔ	V.BI	play musical introduction
	istila	ɪs.ˈtɪ.la	N	term
	istimewa	ˌɪs.ti.ˈmɛ.wa	V.MO(ST)	be special
	istirahat	ˌɪs.ti.ˈɾa.hɐtˀ	V.MO(DY)	rest
	istri	ˈɪs.tri	N	wife
	J			
	jaga	ˈdʒa.ga	V.BI	guard
	jam	ˈdʒɐm	N	hour
	jaman	ˈdʒa.mɐn	N	period
	jambu	ˈdʒɐm.bu	N	rose apple
	janda	ˈdʒɐn.da	N	widow
	januari	ˌdʒa.nʊ.ˈa.ɾi	N	January

	Lexeme	Transcription	Word class	English gloss
	jatwal	ˈdʒɐtˈwɐl	N	schedule
	jawap	ˈdʒa.wɐp	V.BI	answer
	jeket	ˈdʒɛ̝.kɛ̝tˈ	N	jacket
	jemaat	dʒɛ.ˈma.ɐtˈ	N	congregation
	jenasa	dʒɛ.ˈna.sa	N	corpse
	jendela	dʒɛ̝n.ˈdɛ̝.la	N	window
x	*jenis*	dʒɛ.ˈnɪs	N	kind
x	*jeriken*	ˈdʒɛ.ɾi.ˌkɛ̝n	N	jerry can
	jing	ˈdʒɪn	N	genie
	jiwa	ˈdʒi.wa	N	soul
	jonson	ˈdʒɔ̝n.sɔ̝n	N	motorboat
	jumat	ˈdʒu.mɐtˈ	N	Friday
	jumla	ˈdʒʊm.la	N	sum
	justru	ˈdʒʊs.tɾu	ADV	precisely
	juta	ˈdʒu.ta	NUM.C	million
	K			
	kabul	ˈka.bʊl	V.BI	grant
	kaca	ˈka.tʃa	N	glass
	kader	ˈka.dɛ̝r	N	cadre
	kafir	ˈka.fɪr	N	unbeliever
x	*kakaw*	ka.ˈkɐw	N	cacao
	kalender	ka.ˈlɛ̝n.dɛ̝r	N	calendar
	kali	ˈka.li	N	time
	kalo	ˈka.lɔ̝	CNJ	if
	kamar	ˈka.mɐr	N	room
	kamis	ˈka.mɪs	N	Thursday
	kampus	ˈkɐm.pʊs	N	campus
	kantong	ˈkɐn.tɔ̝ŋ	N	bag
	kantor	ˈkɐn.tɔ̝ɾ	N	office
	kapal	ˈka.pɐl	N	ship
	kapas	ˈka.pɐs	N	cotton
	karakter	ka.ˈɾɐkˈtɛ̝r	N	character
	karate	ka.ˈɾa.tɛ	V.BI/N	karate
	kariawang	ˌka.ɾi.ˈa.wɐn	N	employee
x	*karna*	kɐr.ˈna	CNJ	because
	karpet	ˈkɐr.pɛ̝t	N	plastic carpet
x	*kartapel*	ˌkɐr.ta.ˈpɛ̝l	N	slingshot
	kartu	ˈkɐr.tu	N	card
	karunia	ˌka.ɾu.ˈni.a	N	gift
x	*kaset*	ka.ˈsɛ̝tˈ	N	cassette
	kasir	ˈka.sɪɾ̝	N	cashier

	Lexeme	Transcription	Word class	English gloss
	kata	ˈka.ta	N	word
	kawal	ˈka.wɐl	V.BI	escort
	kawing	ˈka.wɪn	V.BI	marry unofficially
	kaya	ˈka.ja	V.MO(ST)	be rich
	kecap	ˈkɛ.tʃɐpˀ	N	soy sauce
	kejora	kɛ.ˈdʒɔ.ɾa	N	morning star
	kem	ˈkɐ̟m	N	camp
	kepala	kɛ.ˈpa.la	N	head
	keponakan	ˌkɛ.pɔ.ˈna.kɐn	N	nephew, niece
x	*kerja*	kɐ̟r.ˈdʒa	V.BI	work
x	*kertas*	kɐ̟r.ˈtɐs	N	paper
x	*ketik*	kɛ.ˈtɪkˀ	V.BI	type
	ketumbar	kɛ.ˈtʊm.bɐɾ̝	N	coriander
x	*kilogram*	ˌki.lɔ.ˈgɾɐm	N	kilogram
	kilometer	ˌki.lɔ.ˈmɐ̟.tɐ̟ɾ̝	N	kilometer
	kios	ˈki.ɔ̟s	N	kiosk
	kip	ˈkɪpˀ	V.BI	unloading truck
	klakson	ˈklɐkˀsɔ̟n	V.BI	blow horn
	klas	ˈklɐs	N	class
	klasis	ˈkla.sɪs	N	ecclesiastical district
	klet	ˈklɐ̟t	N	dress
	klinik	ˈklɪ.nɪk	N	clinic
	kluarga	klʊ.ˈɐr.ga	N	family
	knalpot	ˈknɐl.pɔ̟t	N	muffler
	kode	ˈkɔ.dɛ	N	code
	kolor	ˈkɔ̟.lɔ̟r	N	undershorts
x	*komandan*	ˌkɔ.mɐn.ˈdɐn	N	commandant
	komando	kɔ.ˈmɐn.dɔ	V.BI	command
x	*kombong*	kɔ̟m.ˈbɔ̟ŋ	V.MO(ST)	be inflated
x	*komentar*	ˌkɔ.mɐ̟n.ˈtɐɾ̝	N	commentary
	komitmen	kɔ.ˈmɪtˀmɐ̟n	N	commitment
	kompi	ˈkɔ̟m.pi	N	military company
	kompleks	ˈkɔ̟m.plɐ̟ks	N	complex
	komplotang	kɔ̟m.ˈplɔ.tɐn	N	(half) circle
	komputer	kɔ̟m.ˈpu.tɐ̟ɾ̝	N	computer
	komunikasi	ˌkɔ.mu.ni.ˈka.si	N	communication
	kondisi	kɔ̟n.ˈdi.si	N	condition
	konsep	ˈkɔ̟n.sɐ̟pˀ	N	concept
	konsumsi	kɔ̟n.ˈsʊm.si	N	consumption
x	*kontak*	kɔ̟n.ˈtɐkˀ	V.BI	contact
x	*kontan*	kɔ̟n.ˈtɐn	N	cash
	kontener	kɔ̟n.ˈtɐ̟.nɐ̟ɾ̝	N	container (ship)

	Lexeme	Transcription	Word class	English gloss
	kontrak	ˈkɔ̪n.tɾɐk	N	contract
	kontrol	ˈkɔ̪n.trɔ̪l	V.BI	control
	kopeng	ˈkɔ.pɛ̪ŋ	V.BI	head
	koper	ˈkɔ.pɛ̪ɾ̪	N	suitcase
	kopi	ˈkɔ.pi	N	coffee
	kopling	ˈkɔ̪pˀ.lɪŋ	N	clutch
	kor	ˈkɔ̪r	N	choir
	korbang	ˈkɔ̪r.bɐn	N	sacrifice
	kordinasi	ˌkɔ̪r.diˈ.na.si	V.BI	coordinate
	kordinator	ˌkɔ̪r.diˈ.na.tɔ̪ɾ̪	N	coordinator
	koreksi	kɔˈ.ɾɛ̪kˀ.si	N	correction
	korupsi	kɔˈ.ɾʊpˀ.si	N	corruption
	kostum	ˈkɔ̪s.tʊm	N	costume
	koteka	kɔˈ.tɛ.ka	N	penis sheath
	kram	ˈkɾɐm	N	cramps
	kremasi	kɾɛˈ.ma.si	N	cremation
	krempeng	ˈkɾɛ̪m.pɛ̪ŋ	V.MO(ST)	be thin
	kreta	ˈkɾɛ.ta	N	carriage
	kubur	ˈkʊ.bʊr	V.BI	bury
x	*kudus*	kʊˈ.dʊs	V.MO(ST)	be sacred
	kulia	kuˈ.li.a	V.BI	study
	kunci	ˈkʊn.tʃi	N	key
	kursi	ˈkʊr.si	N	chair
	kursus	ˈkʊr.sʊs	N	course
	kusus	ˈkʊ.sʊs	V.MO(ST)	be special
	kwa	ˈkwa	N	broth
	kwasa	ˈkwa.sa	N	power
	kwat	ˈkwɐt	V.MO(ST)	be strong
	kwatir	ˈkwa.tɪɾ̪	V.BI	frighten
	kwe	ˈkwɛ	N	cake
	L			
	labu	ˈla.bu	N	gourd
	lahir	ˈla.hɪr	V.MO(DY)	give birth
	lampu	ˈlɐm.pu	N	lamp
	lap	ˈlɐpˀ	V.BI	wipe
	lapor	ˈla.pɔ̪ɾ̪	V.BI	report
	lego	ˈlɛ.gɔ	V.BI	throw away
	lem	ˈlɛ̪m	V.BI	glue
	lemari	lɛˈ.ma.ɾi	N	cupboard
	lep	ˈlɛ̪p	N	laboratory
	lesmen	ˈlɛ̪s.mɛ̪n	N	line judge

	Lexeme	Transcription	Word class	English gloss
	lipstik	ˈlɪpˌstɪk	N	lipstick
	liter	ˈli.tɛ̰ɾ̰	N	liter
	lobi	ˈlɔ.bi	N	lobby
	logat	ˈlɔ.gɐt̚	N	speech variety
	lokasi	lɔ.ˈka.si	N	location
	lonceng	ˈlo̰n.tʃɛ̰ŋ	N	bell
	los	ˈlo̰s	V.BI	loosen
	M			
x	*maaf*	ma.ˈɐf	N	pardon
	mahir	ˈma.hɪɾ̰	V.BI	master
x	*majelis*	ˌma.dʒɛ.ˈlɪs	N	church elder
	makam	ˈma.kɐm	N	grave
	makna	ˈmɐkˀna	N	meaning
	maksut	ˈmɐkˀsʊt	N	purpose
	malaria	ˌma.la.ˈɾi.a	N	malaria
	malaykat	ma.ˈlɐj.kɐt̚	N	angel
	mama	ˈma.ma	N	mother
	manfaat	mɐn.ˈfa.ɐt̚	V.MO(DY)	benefit
	mangga	ˈmɐŋ.ga	N	mango
	mantri	ˈmɐn.tɾi	N	male nurse
	manusia	ˌma.nu.ˈsi.a	N	human being
	marga	ˈmɐr.ga	N	clan
	martabat	mɐr.ˈta.bɐt	N	status
	masala	ma.ˈsa.la	N	problem
	masarakat	ˌma.sa.ˈɾa.kɐt̚	N	community
	matematika	ma.ˌtɛ.ma.ˈti.ka	N	mathematics
	materi	ma.ˈtɛ̰.ɾi	N	material
	maut	ˈma.ʊ̯t	N	death
	mayat	ˈma.jɐt	N	corpse
x	*mayoritas*	ma.ˌjɔ.ɾi.ˈtɐs	N	majority
	meja	ˈmɛ.dʒa	N	table
x	*mental*	mɛ̰n.ˈtɐl	N	emotion
x	*mentri*	mɛ̰n.ˈtri	N	cabinet minister
	merdeka	mɛ̰r.ˈdɛ.ka	V.MO(ST)	be independent
x	*mesing*	mɛ.ˈsɪn	N	engine
	meter	ˈmɛ̰.tɛ̰ɾ̰	N	meter
	milyar	ˈmɪl.jɐr	NUM.C	billion
	mimbar	ˈmɪm.bɐɾ̰	N	pulpit
	minggu	ˈmɪŋ.gu	N	week, Sunday
	mini	ˈmi.ni	V.MO(ST)	be mini
x	*minit*	mɪ.ˈnɪt	N	minute

	Lexeme	Transcription	Word class	English gloss
	misionaris	mi.ˌsi.ɔ.ˈna.rɪs	N	missionary
	miskin	ˈmɪs.kɪn	V.MO(ST)	be poor
	mobil	ˈmɔ.bɪl	N	car
	modal	ˈmɔ.dɐl	N	means
x	*model*	mɔ.ˈdɻl	N	model
	mop	ˈmɔpˀ	N	joke
	motor	ˈmɔ.tɔ̣r̥	N	motorbike
	mujisat	mu.ˈdʒi.sɐt	N	miracle
	mulay	ˈmu.lɐj	N	start
	mulia	mu.ˈli.a	V.MO(ST)	be sublime
	murit	ˈmu.rɪt	N	pupil
	musim	ˈmu.sɪm	N	season
	N			
	nabi	ˈna.bi	N	prophet
	nama	ˈna.ma	N	name
	napas	ˈna.pɐs	N	breath
	nasihat	na.ˈsɪ.hɐt	V.BI/N	advise / advice
x	*nasional*	ˌnɐ.si.ɔ.ˈnɐl	V.MO(ST)	be national
	nasip	ˈna.sɪp	N	destiny
	natal	ˈna.tɐl	N	Christmas
	neces	ˈnɛ.tʃɻs	V.MO(ST)	be neat
	negara	nɛ.ˈga.ra	N	state
x	*negri*	nɛ.ˈgri	N	state
	neraka	nɛ.ˈra.ka	N	hell
	net	ˈnɻt	N	(sport) net
	nilay	ˈni.lɐj	N	value
	nofember	nɔ.ˈfɻm.bɻr̥	N	November
	nomor	ˈnɔ̣.mɔ̣r̥	N	number
	nona	ˈnɔ.na	N	girl
	nyonya	ˈɲɔ.ɲa	N	lady
	nyora	ˈɲɔ.ɾa	N	teacher's wife
	O			
	odol	ˈɔ̣.dɔ̣l	N	toothpaste
	ofor	ˈɔ̣.fɔ̣r	V.BI	give
	oktober	ɔ̣kˀˈtɔ̣.bɻr̥	N	October
	oli	ˈɔ.li	N	oil
	olimpiade	ɔ.ˌlɪm.pi.ˈa.dɛ	N	olympiad
	om	ˈɔ̣m	N	uncle
	oma	ˈɔ.ma	N	great-great-grandmother
	ondoafi	ˌɔ̣n.dɔ̣.ˈa.fi	N	traditional chief

	Lexeme	Transcription	Word class	English gloss
	ongkos	ˈɔŋ.kɔs	N	expenses
	opa	ˈɔ.pa	N	great-great-grandfather
	opname	ɔpˈ.ˈna.mɛ	V.MO(ST)	be hospitalized
	oprasi	ɔ.ˈpɾa.si	N	operation
	otomatis	ˌɔ.tɔ.ˈma.tɪs	V.MO(ST)	be automatic
x	*otonom*	ˌɔ.tɔ.ˈnɔm	V.MO(ST)	be autonomous
	otonomi	ˌɔ.tɔ.ˈnɔ.mi	N	autonomy
	P			
	pagar	ˈpa.gɐr	N	fence
	paham	ˈpa.hɐm	N	understanding
	pakem	ˈpa.kɛm	N	break disk
	paket	ˈpa.kɛt	N	package
	paksa	ˈpɐkˈ.sa	V.BI	force
	pakwel	ˈpɐkˈ.wɛl	N	k. o. crowbar
	panci	ˈpɐn.tʃi	N	pan
	panitia	ˌpa.nɪ.ˈti.a	N	committee
	parte	ˈpɐr.tɛ	N	party
	pas	ˈpɐs	V.MO(ST)	be exact
			ADV	precisely
	pena	ˈpɛ.na	N	pen
	pendeta	pɛn.ˈdɛ.ta	N	pastor
	penjara	pɛn.ˈdʒa.ɾa	V.BI/N	jail
	pepaya	pɛ.ˈpa.ja	N	papaya
	percaya	pɛr.ˈtʃa.ja	V.BI	trust
	peristiwa	ˌpɛ.ɾɪs.ˈti.wa	N	incident
	perkosa	pɛr.ˈkɔ.sa	V.BI	rape
x	*perlu*	pɛr.ˈlu	V.BI	need
	permanen	pɛr.ˈma.nɛn	V.MO(ST)	be permanent
	permisi	pɛr.ˈmi.si	V.MO(DY)	ask permission
x	*persen*	pɛr.ˈsɛn	N	percent
x	*persis*	pɛr.ˈsɪs	V.MO(ST)	be precise
	pertama	pɛr.ˈta.ma	NUM.O	first
	pesta	ˈpɛs.ta	N	party
x	*peta*	pɛ.ˈta	N	map
x	*peti*	pɛ.ˈti	N	box
x	*petromaks*	ˌpɛ.tɾɔ.ˈmɐks	N	kerosene lantern
	piara	pi.ˈa.ɾa	V.BI	raise
	pikir	ˈpi.kɪr	V.BI	think
	piknik	ˈpɪkˈ.nɪkˈ	V.MO(DY)	picnic
	pilot	ˈpi.lɔt	N	pilot
	piring	ˈpɪ.ɾɪŋ	N	plate

	Lexeme	Transcription	Word class	English gloss
x	*pisikologi*	ˌpi.si.ˌkɔ.lɔ.ˈgi	N	psychology
	plastik	ˈplɐs.tɪk	N	plastic
	plat	ˈplɐt	V.MO(ST)	be flattened
x	*pleton*	plɛ.ˈtɔ̩n	N	platoon
	plita	ˈpli.ta	N	oil lamp
	polisi	pɔ.ˈli.si	N	police
	politik	pɔ.ˈlɪ.tɪk	N	politics
	pondok	ˈpɔ̩n.dɔ̩k	N	shelter
	porsi	ˈpɔ̩r.si	N	portion
	pos	ˈpɔ̩s	N	post
	posisi	pɔ.ˈsi.si	N	position
	praktek	ˈprɐk̚.tɛ̩k	N	practicum
x	*presiden*	ˌprɛ.si.ˈdɛ̩n	N	president
	pribadi	pri.ˈba.di	N	personal property
	priksa	ˈprɪk̚.sa	V.BI	check
	prinsip	ˈprɪn.sɪp̚	N	principle
	priode	pri.ˈɔ.dɛ	N	period
x	*prioritas*	pri.ˌɔ.ɾi.ˈtɐs	N	priority
x	*profesor*	ˌprɔ.fɛ.ˈsɔ̩ɾ̩	N	professor
	program	ˈprɔ.grɐm	V.BI/N	program
	propinsi	prɔ.ˈpɪn.sɪ	N	province
x	*proposal*	ˌprɔ.pɔ.ˈsɐl	N	proposal
	proses	ˈprɔ.sɛ̩s	V.BI/N	process
x	*protes*	prɔ.ˈtɛ̩s	V.BI	protest
	proyek	ˈprɔ.jɛ̩k	N	project
	puasa	pʊ.ˈa.sa	V.BI	fast
	puji	ˈpu.dʒi	V.BI	praise
	pul	ˈpʊl	N	pool
	pulsa	ˈpʊl.sa	N	pulse
	R			
	rabu	ˈra.bu	N	Wednesday
	radio	ra.ˈdɪ.ɔ	N	radio
	rahasia	ˌra.ha.ˈsɪ.a	N	secret
	raja	ˈra.dʒa	N	king
	rakyat	ˈrɐk̚.jɐt	N	citizenry
	rangsel	ˈrɐŋ.sɛ̩l	N	backpack
	raport	ˈra.pɔ̩rt	N	school report book
	rasa	ˈra.sa	V.BI	feel
	rasul	ˈra.sʊl	N	prophet
	reaksi	rɛ.ˈɐk̚.si	N	reaction
	referendum	ˌrɛ.fɛ.ˈɾɛ̩n.dʊm	N	referendum

	Lexeme	Transcription	Word class	English gloss
	reformasi	ˌrɛ.fɔr.ˈma.si	N	reformation
x	*rejeki*	ˌrɛ.dʒɛ.ˈki	N	livelihood
x	*rekam*	rɛ.ˈkɐm	V.BI	record
x	*rekening*	ˌrɛ.kɛ.ˈnɪŋ	N	bank account
	rekreasi	ˌrɛ.krɛ.ˈa.si	N	recreation
	rel	ˈrɛ̝l	N	railway track
	rela	ˈrɛ.la	V.MO(ST)	be willing
	rem	ˈrɛ̝m	V.BI/N	brake
	rencana	rɛ̝n.ˈtʃa.na	V.BI/N	plan
	rengking	ˈrɛ̝ŋ.kɪŋ	N	ranking
x	*republik*	ˌrɛ.pu.ˈblɪk	N	republic
	resiko	rɛ.ˈsi.kɔ	N	risk
x	*resmi*	rɛ̝s.ˈmi	V.MO(ST)	be official
x	*retrit*	rɛ.ˈtrɪt	N	retreat
	ring	ˈrɪn	N	ring
	ro	ˈrɔ	N	spirit
	roda	ˈrɔ.da	N	wheel
	rok	ˈrɔ̝k	N	skirt
	rol	ˈrɔ̝l	N	roll
	rotang	ˈrɔ̝.tɐn	N	rattan
	rupa	ˈrʊ.pa	N	form
	rupia	ru.ˈpi.a	N	rupiah
	S			
	sabar	ˈsa.bɐɻ	V.MO(ST)	be patient
	sabung	ˈsa.bʊn	N	soap
	saja	ˈsa.dʒa	ADV	just
	sak	ˈsɐk	N	bag
	saksi	ˈsɐkˀsɪ	N	witness
	salam	ˈsa.lɐm	V.BI	greet
	salju	ˈsɐl.dʒu	N	snow
	salon	ˈsa.lɔ̝n	N	console
	sama	ˈsa.ma	V.MO(ST)	be same
			PREP/CNJ	to
	sandal	ˈsɐn.dɐl	N	sandal
	sangka	ˈsɐŋ.ka	V.BI	assume
	saptu	ˈsɐpˀ.tu	N	Saturday
	sarjana	sɐr.ˈdʒa.na	N	academic degree
	sasar	ˈsa.sɐɻ	V.MO(ST)	be insane
x	*sebap*	sɛ.ˈbɐpˀ	CNJ	because
x	*sebentar*	ˌsɛ.bɛ̝n.ˈtɐr	ADV	in a moment
	segala	sɛ.ˈga.la	QT	all

	Lexeme	Transcription	Word class	English gloss
	sehat	ˈsɛ.hɐtˀ	V.MO(ST)	be healthy
	sejara	sɛ.ˈdʒa.ɾa	N	history
	sekertaria	sɛ.ˌkɻr.ta.ˈri.a	N	secretariat
	sekertaris	ˌsɛ.kɻr.ˈta.ɾɪs	N	secretary
	seksi	ˈsɻkˀ.si	N	section
	sel	ˈsɻl	N	cell
	semester	sɛ.ˈmɻs.tɻr̥	N	semester
	sempurna	sɻm.ˈpʊr.na	V.MO(ST)	be perfect
	seng	ˈsɻŋ	N	corrugated iron
	sengaja	sɛ.ˈŋa.dʒa	V.BI	do intentionally
	sengsara	sɻŋ.ˈsa.ɾa	V.MO(DY)	suffer
x	*sening*	sɛ.ˈnɪn	N	Monday
	senjata	sɻn.ˈdʒa.ta	N	rifle
	senter	ˈsɻn.tɻr̥	V.BI/N	light with flashlight / flashlight
	senyor	ˈsɛ.ɲɔr̥	N	senior
	serfen	ˈsɻr.fɻn	V.BI	serve
	serfis	ˈsɻr.fɪs	V.BI	process documents
x	*serius*	ˌsɛ.ɾi.ˈʊs	V.MO(ST)	be serious
x	*sersang*	sɻr.ˈsɐŋ	N	sergeant
	set	ˈsɻt	N	set
	setang	ˈsɛ.tɐn	N	evil spirit
	setia	sɛ.ˈti.a	V.MO(ST)	be faithful
	sidi	ˈsi.di	N	CD player
	sifat	ˈsi.fɐt	N	characteristic
	sihir	ˈsɪ.hɪr	V.BI	practice black magic on s.o.
	silet	ˈsi.lɻt	N	razor blade
	singga	ˈsɪŋ.ga	V.MO(DY)	stop by
	sinode	sɪ.ˈnɔ.dɛ	N	synod
	sipil	ˈsi.pɪl	V.MO(ST)	be civil
	sisa	ˈsi.sa	N	residue
	siswa	ˈsɪs.wa	N	student
	siswi	ˈsis.wi	N	female student
	skaf	ˈskɐf	V.BI	plane wood
	skola	ˈskɔ.la	V.MO(DY)/N	go to school / school
	skop	ˈskɔ̰pˀ	V.BI/N	shovel
	skot	ˈskɔ̰tˀ	V.BI	hit
	skripsi	ˈskrɪpˀ.sɪ	N	minithesis
	skutu	ˈsku.tu	N	partner
	slamat	ˈsla.mɐtˀ	V.MO(ST)	be safe
	slang	ˈslɐŋ	N	hose
	slasa	ˈsla.sa	N	Tuesday

	Lexeme	Transcription	Word class	English gloss
	slenger	ˈslɛ.ŋɛɻ̊	N	sling
	smeng	ˈsmɛ̨n	V.BI/N	cement
	smes	ˈsmɛ̨s	V.BI	smash
	smua	ˈsmʊ.a	QT	all
	snek	ˈsnɛ̨k	N	snack
	soak	ˈsɔ.ɐk	V.MO(ST)	be weak
	soal	ˈsɔ̣.ɐl	N	problem
	sodara	sɔ.ˈda.ɾa	N	sibling
	solar	ˈsɔ.lɐɻ̊	N	diesel fuel
	sono	ˈsɔ.nɔ	V.MO(DY)	sleep soundly
x	*sopir*	sɔ.ˈpɪɻ̊	N	driver
	sorga	ˈsɔ̣r.ga	N	heaven
	sos	ˈsɔ̣s	N	sauce
x	*sosial*	ˌsɔ.si.ˈɐl	V.MO(ST)	be social
	spak	ˈspɐkˀ	V.BI	kick
	spang	ˈspɐŋ	V.BI	spank
	spatu	ˈspa.tu	N	shoe
	speda	ˈspɛ.da	N	bicycle
	spit	ˈspɪt	N	speedboat
	sprey	ˈsprɛ̨j	N	bedsheet
	spul	ˈspʊl	V.BI	rinse
	staf	ˈstɐf	N	staff
	standar	ˈstɐn.dɐɻ̊	N	motorbike kickstand
	stang	ˈstɐŋ	V.MO(DY)	boast
	star	ˈstɐr	V.BI	start engine
	status	ˈsta.tʊs	N	status
	stel	ˈstɛ̨l	V.BI	tune
	step	ˈstɛ̨pˀ	V.MO(DY)	fall unconsciously
	stir	ˈstɪɻ̊	V.BI/N	steer / steering wheel
	stop	ˈstɔ̣pˀ	V.BI	stop
	stor	ˈstɔ̣r	V.BI	deposit
	strap	ˈstrɐpˀ	V.BI	punish
	strategi	stra.ˈtɛ.gi	N	strategy
	stres	ˈstrɛ̨s	V.MO(ST)	be stressed
	strika	ˈstrɪ.ka	V.BI/N	iron
	strom	ˈstɾɔ̣m	N	electric current
	suda	ˈsu.da	ADV	already
	sukses	ˈsʊkˀ.sɛ̨s	N	success
	supaya	su.ˈpa.ja	CNJ	so that
x	*supermi*	ˌsu.pɛ̨r.ˈmi	N	instant noodles
	suster	ˈsʊs.tɛ̨ɻ̊	N	female nurse
	suting	ˈsu.tɪŋ	V.BI	shoot

	Lexeme	Transcription	Word class	English gloss
	swami	ˈswa.mi	N	husband
	swara	ˈswa.ɾa	N	voice
	syarat	ˈsʲa.ɾɐt	N	condition
	syukur	ˈsʲu.kʊ̯ʊ̯	N	thanks to God
	T			
	taat	ˈta.ɐt	V.MO(ST)	be obedient
	takraw	ˈta.krɐw	N	Takraw ball game
	talenta	ta.ˈlɐ̯n.ta	N	gift
	tang	ˈtɐŋ	N	pliers
	tanpa	ˈtɐn.pa	PREP	without
	tanta	ˈtɐn.ta	N	aunt
	tapi	ˈta.pi	CNJ	but
	taplak	ˈtɐpˀ.lɐk	N	tablecloth
	target	ˈtɐr.gɐ̯t	N	target
	tas	ˈtɐs	N	bag
	taykondo	tɐj.ˈkɔ̯n.dɔ	N	taekwondo
	te	ˈtɛ	N	tea
	teko	ˈtɛ.kɔ	N	teapot
	telaga	tɛ.ˈla.ga	N	lake
	telefisi	ˌtɛ.lɛ.ˈfi.si	N	television
	telpon	ˈtɐ̯l.pɔ̯n	V.BI	phone
	tembaga	tɐ̯m.ˈba.ga	N	copper
	tempo	ˈtɐ̯m.pɔ	V.MO(ST)	be quick
	tempramen	tɐ̯m.ˈpɾa.mɐ̯n	N	temperament
	tempres	ˈtɐ̯m.pɾɐ̯s	N	medical compress
	tenda	ˈtɐ̯n.da	N	tent
	tengki	ˈtɐ̯ŋ.ki	N	tank
	tenis	ˈtɛ.nɪs	N	tennis
	tentara	tɐ̯n.ˈta.ɾa	N	soldier
x	*teologia*	ˌtɛ.ɔ.ˈlɔ.gɪ.ˌa	N	theology
	teras	ˈtɛ.ɾɐs	N	porch
	termos	ˈtɐ̯r.mɔ̯s	N	thermos bottle
x	*terpal*	tɐ̯r.ˈpɐl	N	canvas
	terpol	ˈtɐ̯r.pɔ̯l	N	container
	tes	ˈtɐ̯s	V.BI	test
	tifa	ˈti.fa	N	k. o. drum
	tim	ˈtɪm	N	delegation
	tipe	ˈti.pɛ	N	type
	to	ˈtɔ	TAG	right?
	toa	ˈtɔ̯.a	N	field loudspeaker
	tobat	ˈtɔ.bɐt	V.MO(DY)	repent

	Lexeme	Transcription	Word class	English gloss
	toko	ˈtɔ.kɔ	N	shop
	top	ˈtɒp	V.MO(ST)	be good
	topi	ˈtɔ.pi	N	hat
	toser	ˈtɔ.sɐr	V.BI	pass ball
	tradisi	traˈdɪ.si	N	tradition
	transfer	ˈtrɐns.fɐr	V.BI	transfer
	trawma	ˈtrɐw.ma	N	trauma
	trek	ˈtrɐk	N	truck
	trening	ˈtrɛ.nɪŋ	N	tracksuit
	trilyun	ˈtrɪl.jʊn	NUM.C	trillion
	U			
	umat	ˈʊ.mɐt	N	congregation
	umum	ˈʊ.mʊm	V.MO(ST)	be public
	umur	ˈʊ.mʊr	N	age
	ungsi	ˈʊŋ.si	V.BI	flee
x	*unifersitas*	ˌu.ni.ˌfɐr.si.ˈtɐs	N	university
	usaha	u.ˈsa.ha	V.BI	attempt
	usia	u.ˈsi.a	N	age
	usul	ˈʊ.sʊl	N	proposal
	utama	u.ˈta.ma	V.MO(ST)	be prominent
	W			
	wakil	ˈwa.kɪl	N	deputy
	waktu	ˈwɐkˀtu	N	time
	walikota	ˌwa.li.ˈkɔ.ta	N	mayor
	wanita	wa.ˈni.ta	N	woman
	warna	ˈwɐr.na	N	color
	wasit	ˈwa.sɪt	N	referee
	wawancara	ˌwa.wɐn.ˈtʃa.ɾa	V.BI	interview
	wesel	ˈwɛ.sɐl	V.BI	transfer money
	wilaya	wi.ˈla.ja	N	district
	wisuda	wi.ˈsu.da	N	graduation ceremony
	Y			
	yakin	ˈja.kɪn	V.MO(ST)	be certain
	yatim	ˈja.tɪm	V.MO(ST)	be fatherless
	yayasan	ja.ˈja.sɐn	N	foundation
	yo	ˈjɔ	ADV	yes

A.3 Lexical items historically derived by (unproductive) affixation of Malay roots

	Lexeme	Transcription	Word class	English gloss
	A			
	anaang	a.ˈna.kɐn	N	offspring
	B			
	babingung	ba.ˈbi.ŋʊŋ	V.MO(ST)	be confused
	badani	ba.ˈda.ni	V.MO(ST)	be physical
	badara	ba.ˈda.ɾa	V.MO(ST)	be bloody
	badiam	ba.ˈdi.ɐm	V.MO(ST)	be quiet
	baduri	ba.ˈdu.ɾi	V.MO(ST)	be thorny
	bergaya	ba.ˈga.ja	V.MO(DY)	put on airs
	bagigit	bɐ̟r.ˈgi.gɪt̚	V.MO(DY)	bite
	baisi	ba.ˈɪ.si	V.MO(ST)	be muscular
	bajalang	ba.ˈdʒa.lɐn	V.MO(DY)	walk
	bakumis	ba.ˈku.mɪs	V.MO(ST)	be with beard
	bangungang	ba.ˈŋu.ŋɐn	N	building
	bantuang	bɐn.ˈtʊ.ɐn	N	help
	baribut	ba.ˈri.bʊt̚	V.BI	trouble
	bayangang	ba.ˈja.ŋɐn	N	shadow
	bayangkang	ba.ˈjɐŋ.kɐn	V.BI	imagine
	bebrapa	bɛ.ˈbra.pa	QT	be several
x	*berbentuk*	ˌbɐ̟r.bɐ̟n.ˈtʊk̚	V.MO(ST)	be with shape of
	berbua	bɐ̟r.ˈbu.a	V.MO(ST)	be with fruit
	berbuat	bɐ̟r.ˈbʊ.ɐt̚	V.BI	make
	berburu	bɐ̟r.ˈbu.ɾu	V.BI	hunt
	berdasarkang	ˌbɐ̟r.da.ˈsɐr.kɐn	V.MO(ST)	be based on
x	*berdebar*	ˌbɐ̟r.dɛ.ˈbɐr	V.MO(DY)	pulsate
	berdiri	bɐ̟r.ˈdi.ɾi	V.MO(DY)	stand
x	*berempat*	ˌbɛ.ɾɐ̟m.ˈpɐt̚	V.MO(ST)	be four
	bergabung	bɐ̟r.ˈga.bʊŋ	V.MO(DY)	join
	bergaul	bɐ̟r.ˈga.ʊl	V.MO(DY)	associate
x	*bergrak*	bɐ̟r.ˈgrɐk̚	V.MO(DY)	move
	bergumul	bɐ̟r.ˈgu.mʊl	V.MO(DY)	struggle
	berharap	bɐ̟r.ˈha.ɾɐp̚	V.BI	hope
	berhasil	bɐ̟r.ˈha.sɪl	V.MO(DY)	succeed
	berhubungang	ˌbɐ̟r.hu.ˈbu.ŋɐn	V.MO(DY)	have sexual intercourse
	berjuang	bɐ̟r.ˈdʒʊ.ɐŋ	V.MO(DY)	struggle
x	*berkebung*	ˌbɐ̟r.kɐ̟.ˈbʊn	V.MO(DY)	do farming

	Lexeme	Transcription	Word class	English gloss
	berkumpul	bɐr.ˈkʊm.pʊl	V.MO(DY)	gather
	berlabu	bɐr.ˈla.bu	V.MO(DY)	anchor
	berlaku	bɐr.ˈla.ku	V.MO(ST)	be valid
	berlindung	bɐr.ˈlɪn.dʊŋ	V.MO(DY)	take shelter
	bermaing	bɐr.ˈma.ɪn	V.MO(DY)	play
	bermalam	bɐr.ˈma.lɐm	V.MO(DY)	overnight
	berpakeang	ˌbɐr.pa.ˈkɛ.ɐn	V.MO(ST)	be with clothes
	berpikir	bɐr.ˈpi.kɪr	V.MO(DY)	think
	berpisa	bɐr.ˈpi.sa	V.MO(ST)	be separate
	bersaling	bɐr.ˈsa.lɪŋ	V.MO(DY)	give birth
	bersandar	bɐr.ˈsɐn.dɐr	V.MO(DY)	lean
	bersangkutang	ˌbɐr.sɐŋ.ˈku.tɐn	V.MO(ST)	be concerned with
	bersatu	bɐr.ˈsa.tu	V.MO(ST)	be one
	bersina	bɐr.ˈsi.na	V.MO(DY)	commit adultery
	bertahang	bɐr.ˈta.hɐn	V.MO(DY)	hold (out/back)
x	*bertemang*	ˌbɐr.tɐ.ˈmɐn	V.MO(ST)	be friends
	bertemu	bɐr.tɐ.ˈmu	V.MO(DY)	meet
	bertengkar	bɐr.tɐŋ.ˈkɐr	V.MO(DY)	quarrel
	bertentangang	ˌbɐr.tɐn.ˈta.ŋɐn	V.MO(ST)	be in conflict
	bertindak	bɐr.ˈtɪn.dɐk	V.MO(DY)	act
	bertriak	ˌba.ta.ˈrɪ.a	V.BI	scream (at)
	bertukarang	ˌbɐr.tu.ˈka.ɾɐn	V.MO(DY)	mutually exchange
	brade	ˈbra.dɛ	V.MO(ST)	be younger sibling
	brali	ˈbra.li	V.MO(DY)	shift
	branak	ˈbra.nɐkˀ	V.BI	give birth (to)
	brangkat	ˈbrɐŋ.kɐtˀ	V.MO(DY)	leave
	brenti	ˈbrɐn.ti	V.MO(DY)	stop
	brikut	ˈbri.kʊt	V.MO(DY)	follow
	brontakkang	brɔn.ˈta.kɐn	V.BI	fight
	bruba	ˈbru.ba	V.MO(DY)	change
	buatang	bʊ.ˈa.tɐn	N	deed
	buruang	bu.ˈɾʊ.ɐn	N	prey
	C			
	cadangang	tʃa.ˈda.ŋɐn	N	reserve
	campurang	tʃɐm.ˈpu.ɾɐn	N	mixture
	catatang	tʃa.ˈta.tɐn	N	note
	cobaang	tʃɔ.ˈba.ɐn	N	trial
	D			
	didikang	di.ˈdi.kɐn	N	upbringing
	duluang	dʊ.ˈlʊ.ɐn	V.MO(ST)	be prior to others

Lexeme	Transcription	Word class	English gloss
G			
gambarang	gɐm.ˈba.ɾɐn	N	illustration
gangguang	gɐŋ.ˈgʊ.ɐn	N	disturbance
golongang	gɧ.ˈlɧ.ŋɐn	N	group
grakang	ˈgra.kɐn	N	movement
H			
halangang	ha.ˈla.ŋɐn	N	hindrance
harapang	ha.ˈɾa.pɐn	N	hope
harapkang	ha.ˈɾɐpˀ.kɐn	V.BI	hope for
harusnya	ha.ˈɾʊs.ɲa	ADV	appropriately
hubungang	hu.ˈbu.ŋɐn	N	connection
hubungi	hu.ˈbu.ŋi	V.BI	contact
I			
ikatang	i.ˈka.tɐn	N	tie
ingatang	i.ˈŋa.tɐn	N	memory
J			
jabatang	dʒa.ˈba.tɐn	N	position
jahitang	dʒa.ˈhi.tɐn	N	stitch
jajaang	dʒa.ˈdʒa.ɐn	N	colony
jalangang	dʒa.ˈla.nɐn	N	route
jalangkang	dʒa.ˈlɐn.kɐn	V.BI	put into operation
jalani	dʒa.ˈla.ni	V.BI	undergo
jelaskang	dʒɛ.ˈlɐs.kɐn	V.BI	explain
jemputang	dʒɛ̝m.ˈpu.tɐn	N	pick up service
jualang	dʒʊ.ˈa.lɐn	V.BI/N	sell / merchandise
jurusang	dʒu.ˈɾu.sɐn	N	department
K			
kabulkang	ka.ˈbʊl.kɐn	V.BI	fulfill a request
kasiang	ka.ˈsi.ɐn	V.BI/N	pity
keadaang	ˌkɛ.a.ˈda.ɐn	N	condition
kebaikang	ˌkɛ.ba.ˈɪ.kɐn	N	goodness
kebalikang	ˌkɛ.ba.ˈlɛ̝.ɐn	N	opposite
kebanyakang	ˌkɛ.ba.ˈɲa.kɐn	N	majority
kebenarang	ˌkɛ.bɛ.ˈna.ɾɐn	N	truth
kebetulang	ˌkɛ.bɛ.ˈtʊ.lɐn	N	chance
kebodoang	ˌkɛ.bɔ.ˈdɔ.ɐn	N	stupidity
kebrapa	kɛ.ˈbra.pa	INT	how manyeth

	Lexeme	Transcription	Word class	English gloss
	kebutuang	ˌkɛ.buˈtʊ.ɐn	N	need
	kecamatang	ˌkɛ.tʃaˈma.tɐn	N	subdistrict
	kedua	kɛˈdu.a	NUM.O	second
	kedudukang	ˌkɛ.duˈdu.kɐn	N	position
x	*keempat*	ˌkɛ.ɐ̯mˈpɐt̚	NUM.O	fourth
	kegiatang	ˌkɛ.giˈa.tɐn	N	activity
	keglapang	kɛˈgla.pɐn	N	darkness
	kehidupang	ˌkɛ.hiˈdu.pɐn	N	life
	keingingang	ˌkɛ.iˈŋi.nɐn	N	wish
	kejahatang	ˌkɛ.dʒaˈha.tɐn	N	evilness
	kekurangang	ˌkɛ.kuˈɾa.ŋɐn	N	shortage
	kelakuang	ˌkɛ.laˈkʊ.ɐn	N	behavior
	kelaleyang	ˌkɛ.laˈlɛ.jɐn	N	neglect
	kelebiang	ˌkɛ.lɛˈbi.ɐn	N	surplus
	kelemaang	ˌkɛ.lɛˈma.ɐn	N	weakness
	kelewatang	ˌkɛ.lɛˈwa.tɐn	V.MO(ACL)	be overly abundant
	keliarang	ˌkɛ.liˈa.ɾɐn	V.MO(DY)	roam about
	keliatang	ˌkɛ.liˈa.tɐn	V.MO(ACL)	be visible
	kemajuang	ˌkɛ.maˈdʒu.ɐn	N	progress
	kemaluang	ˌkɛ.maˈlʊ.ɐn	N	genitals
	kematiang	ˌkɛ.maˈti.ɐn	N	death
	kemawang	kɛˈmawʷɐn	N	will
	kemenangang	ˌkɛ.mɛˈna.ŋɐn	N	victory
	kenalang	kɛˈna.lɐn	N	acquaintance
	kendaraang	ˌkɛ̯n.daˈɾa.ɐn	N	vehicle
	kepentingang	ˌkɛ.pɛ̯nˈti.ŋɐn	N	importance
	keputusang	ˌkɛ.puˈtu.sɐn	N	decision
	kesadarang	ˌkɛ.saˈda.ɾɐn	N	awareness
	kesalaang	ˌkɛ.saˈla.ɐn	N	mistake
	kesehatang	ˌkɛ.sɛˈha.tɐn	N	health
	kesempatang	ˌkɛ.sɛ̯mˈpa.tɐn	N	opportunity
	kesulitang	ˌkɛ.suˈli.tɐn	N	difficulty
	ketakutang	ˌkɛ.taˈku.tɐn	N	fear
	ketawa	kɛˈta.wa	V.BI	laugh
	ketawang	kɛˈtawʷɐn	V.MO(ACL)	be found out
x	*ketemu*	ˌkɛ.tɛˈmu	V.BI	meet
	ketiga	kɛˈti.ga	NUM.O	third
	ketindisang	ˌkɛ.tɪnˈdi.sɐn	N	k. o. trap
	ketinggalang	ˌkɛ.tɪŋˈga.lɐn	V.MO(ACL)	be left behind
	ketrangang	kɛˈtɾa.ŋɐn	N	explanation
	ketua	kɛˈtʊ.a	N	chairperson
	keturungang	ˌkɛ.tuˈɾu.nɐn	N	descendant

	Lexeme	Transcription	Word class	English gloss
	keuntungang	ˌkɛ.ʊn.ˈtʊ.ŋɐn	N	advantage
	kunjungang	kʊn.ˈdʒu.ŋɐn	N	visit
	kunjungi	kʊn.ˈdʒu.ŋi	V.BI	visit
	kutukang	ku.ˈtu.kɐn	N	curse
	L			
	lalapang	la.ˈla.pɐn	N	k. o. vegetable dish
	lamarang	la.ˈma.ɾɐn	N	application, proposal
	lapangang	la.ˈpa.ŋɐn	N	field
	latiang	la.ˈti.ɐn	V.BI/N	practice
	lautang	la.ˈʊ.tɐn	N	ocean
	layani	la.ˈja.ni	V.BI	serve
	liburang	li.ˈbu.ɾɐn	N	vacation
	lingkarang	lɪŋ.ˈka.ɾɐn	N	circle
	M			
	maingang	ma.ˈɪ.nɐn	N	toy
	makangang	ma.ˈka.nɐn	N	food
	makanya	ma.ˈka.ɲa	ADV	for that reason
	masakang	ma.ˈsa.kɐn	N	cooking
	melalui	ˌmɛ.la.ˈlu.i	V.BI	pass by
	melamar	mɛ.ˈla.mɐr	V.BI	apply for, propose
	melancong	mɛ.ˈlɐn.tʃɔŋ	V.MO(DY)	take a pleasure trip
	melawang	mɛ.ˈla.wɐn	V.BI	oppose
	melayani	ˌmɛ.la.ˈja.ni	V.BI	serve
x	*melekat*	ˌmɛ.lɛ.ˈkɐtˀ	V.MO(DY)	stick
	meleset	mɛ.ˈlɛ̟.sɛ̟tˀ	V.MO(DY)	miss a target
	melintang	mɛ.ˈlɪn.tɐŋ	V.MO(DY)	lie across
	melulu	mɛ.ˈlu.lu	ADV	exclusively
	menangis	mɛ.ˈna.ŋɪs	V.BI	cry (for)
	menari	mɛ.ˈna.ɾi	V.MO(DY)	dance
	mendadak	mɐ̟n.ˈda.dɐkˀ	V.MO(ST)	be sudden
	mendarat	mɐ̟n.ˈda.ɾɐt	V.MO(DY)	land
	mendidi	mɐ̟n.ˈdi.di	V.MO(DY)	boil
	mendukung	mɐ̟n.ˈdʊ.kʊŋ	V.BI	support
	mengaku	mɛ.ˈŋa.ku	V.BI	confess
	mengala	mɛ.ˈŋa.la	V.MO(DY)	yield
	mengalir	mɛ.ˈŋa.lɪr	V.MO(DY)	flow
	mengantuk	mɛ.ˈŋɐn.tʊkˀ	V.MO(ST)	be sleepy
	mengasii	ˌmɛ.ŋa.ˈsi.i	V.BI	love
	mengelu	mɛ.ˈŋɛ.lu	V.MO(DY)	complain
	meninggal	mɛ.ˈnɪŋ.gɐl	V.MO(DY)	die

	Lexeme	Transcription	Word class	English gloss
	menjadi	mɛn.ˈdʒa.di	V.BI	become
	menjelang	mɛn.dʒɛ.ˈlɐŋ	V.BI	approach
	menuju	mɛ.ˈnu.dʒu	V.BI	aim at
	menurut	mɛ.ˈnʊ.ɾʊtˀ	PREP	according to
	menyala	mɛ.ˈɲa.la	V.MO(DY)	shine
	menyangkal	mɛ.ˈɲɐŋ.kɐl	V.BI	deny
	menyanyi	mɛ.ˈɲa.ɲi	V.BI	sing
	menyapu	mɛ.ˈɲa.pu	V.BI	sweep
x	*menyebrang*	ˌmɛ.ɲɛ.ˈbrɐŋ	V.BI	cross
x	*menyesal*	ˌmɛ.ɲɛ.ˈsɐl	V.MO(ST)	regret
	menyusul	mɛ.ˈɲu.sʊ̈l	V.BI	follow
	merangkap	mɛ.ˈɾɐŋ.kɐpˀ	V.BI	double as
	merantaw	mɛ.ˈɾɐn.tɐw	V.MO(DY)	wander about
	merayap	mɛ.ˈɾa.jɐpˀ	V.BI	creep (over)
	minumang	mi.ˈnu.mɐn	N	beverage
	muatang	mʊ.ˈa.tɐn	N	cargo, contents
	O			
	obatang	ɔ.ˈba.tɐn	N	magic spell
	P			
	paginya	pa.ˈgi.ɲa	ADV	next morning
	pakeang	pa.ˈkɛ.ɐn	N	clothes
	pamalas	pɛ.ˈma.lɐs	V.MO(ST)/N	be very listless / listless person
	pamerang	pa.ˈmɛ.ɾɐn	N	exhibition
	panakut	pɛ.ˈna.kʊtˀ	V.BI/N	be very fearful (of) / coward
	pandangang	pɐn.ˈda.ŋɐn	N	view
	pandiam	pɐn.ˈdi.ɐm	V.MO(ST)/N	be very quiet / taciturn person
	panggayu	pɐŋ.ˈga.ju	V.BI/N	paddle
	panggilang	pɐŋ.ˈgi.lɐn	N	call, summons
	pangkalang	pɐŋ.ˈka.lɐn	N	base
	pasangang	pa.ˈsa.ŋɐn	N	pair
	pedalamang	ˌpɛ.da.ˈla.mɐn	N	interior
	pembangungang	ˌpɐm.ba.ˈŋu.nɐn	N	building
	pembantu	pəm.ˈbɐn.tu	N	house helper
	pembayarang	ˌpɐm.ba.ˈja.ɾɐn	N	payment
	pembunuang	ˌpɐm.bu.ˈnu.ɐn	N	killing
	pemekarang	ˌpɛ.mɛ.ˈka.ɾɐn	N	development
	pemiliang	ˌpɛ.mi.ˈli.ɐn	N	election
	pemimping	pɛ.ˈmɪm.pɪn	N	leader
	pemrinta	pəm.ˈrɪn.ta	N	government

Lexeme	Transcription	Word class	English gloss
pemrintaang	ˌpəm.rɪn.ˈta.ɐn	N	governance
pemuda	pɛ.ˈmu.da	N	youth
penani	pɛ.ˈna.ni	N	farmer
penantar	pɛ.ˈnɐn.tɐr	N	escort
penasarang	ˌpɛ.na.ˈsa.ɾɐn	V.MO(ST)	be curious
pendatang	pɐ̣n.ˈda.tɐŋ	N	stranger
pendidikang	ˌpɐ̣n.di.ˈdi.kɐn	N	education
pendiriang	ˌpɐ̣n.di.ˈɾɪ.ɐn	N	convictions
penduduk	pɐ̣n.ˈdʊ.dʊk̚	N	inhabitant
penentuang	ˌpɛ.nɐ̣n.ˈtʊ.ɐn	N	determination
pengakuang	ˌpɛ.ŋa.ˈkʊ.ɐn	N	confession
pengarui	ˌpɛ.ŋa.ˈɾu.i	V.BI	influence
pengasu	pɛ.ˈŋa.su	N	Sunday school teacher
pengetawang	ˌpɛ.ŋɛ.ˈtaw.ʷɐn	N	knowledge
pengganti	pəŋ.ˈgɐn.ti	N	replacement
pengirimang	ˌpɛ.ŋi.ˈɾi.mɐn	N	dispatch
pengurus	pɛ.ˈŋʊ.ɾʊs	N	manager
peninju	pɛ.ˈnɪn.dʒu	N	boxer
penjelasang	ˌpɐ̣n.dʒɛ.ˈla.sɐn	N	explanation
penolakang	ˌpɛ.nɔ.ˈla.kɐn	N	rejection
penolong	pɛ.ˈnɔ̣.lɔ̣ŋ	N	helper
penugas	pɛ.ˈnu.gɐs	N	official
penumpang	pɛ.ˈnʊm.pɐŋ	N	passenger
penunggu	pɛ.ˈnʊŋ.gʊ	N	tutelary spirit
penunjuk	pɛ.ˈnʊn.dʒʊk̚	N	guide
penutupang	ˌpɛ.nu.ˈtu.pɐn	N	closure
penyalaang	ˌpɛ.ɲa.ˈla.ɐn	N	ignition
penyeraang	ˌpɛ.ɲɛ.ˈɾa.ɐn	N	dedication
penyesalang	ˌpɛ.ɲɛ.ˈsa.lɐn	N	remorse
perbedaang	ˌpɐ̣r.bɛ.ˈda.ɐn	N	difference
perbuatang	ˌpɐ̣r.bʊ.ˈa.tɐn	N	act, action
perhitungang	ˌpɐ̣r.hi.ˈtu.ŋɐn	N	calculation
peringatang	ˌpɛ.ɾi.ˈŋa.tɐn	N	reminder, warning
perjalangang	ˌpɐ̣r.dʒa.ˈla.nɐn	N	journey
perjanjiang	ˌpɐ̣r.dʒɐn.ˈdʒi.ɐn	N	promise
perlengkapang	ˌpɐ̣r.lɐ̣ŋ.ˈka.pɐn	N	equipment
permaingang	ˌpɐ̣r.ma.ˈɪ.nɐn	N	game
persiapang	ˌpɐ̣r.si.ˈa.pɐn	N	preparation
pertahangang	ˌpɐ̣r.ta.ˈha.nɐn	N	defense
pertandingang	ˌpɐ̣r.tɐn.ˈdi.ŋɐn	N	competition
pertanyaang	ˌpɐ̣r.ta.ˈɲa.ɐn	N	question
pertemuang	ˌpɐ̣r.tɛ.ˈmʊ.ɐn	N	meeting

	Lexeme	Transcription	Word class	English gloss
	pertumbuang	ˌpɐr.tʊm.ˈbʊ.ɐn	N	growth
	picaang	pi.ˈʧa.ɐn	N	splinter
	pimpingang	pɪm.ˈpi.nɐn	N	leadership
	plabuang	pla.ˈbu.ɐn	N	harbor
	plantikang	plɐn.ˈti.kɐn	N	inauguration
	platiang	pla.ˈtɪ.ɐn	N	training
	playangang	pla.ˈja.nɐn	N	service
	pokoknya	pɔ.ˈkɔ̰k̚.ɲa	ADV	the main thing is
	praliang	pɾa.ˈlɪ.ɐn	N	transition
	pranaang	pra.ˈna.kɐn	N	mixed ethnic origins
	praturang	pra.ˈtu.ɾɐn	N	regulation
	prubaang	pru.ˈba.ɐn	N	change
	pukulang	pu.ˈku.lɐn	N	stroke
	puluang	pu.ˈlu.ɐn	N	tens
	putarang	pu.ˈta.ɾɐn	N	circle
	R			
	rambutang	rɐm.ˈbu.tɐn	N	rambutan
	ramuang	ra.ˈmʊ.ɐn	N	ingredients
	ratusang	ra.ˈtu.sɐn	N	hundreds
	renungang	rɛ.ˈnu.ŋɐn	N	meditation
	rombongang	rɔ̰m.ˈbɔ̰.ŋɐn	N	group of people
	ruangang	ru.ˈa.ŋɐn	N	room
	S			
	salakang	sa.ˈla.kɐn	V.BI	blame
	saringang	sa.ˈɾi.ŋɐn	N	filter
	sebapnya	sɛ.ˈbɐp̚.ɲa	ADV	for that reason
	sebenarnya	ˌsɛ.bɛ.ˈnɐr.ɲa	ADV	actually
x	*sebla*	sɛ.ˈbla	N-LOCT	side
x	*seblas*	sɛ.ˈblɐs	NUM.C	eleven
x	*seblum*	sɛ.ˈblʊ̰m	CNJ	before
	sekitar	sɛ.ˈki.tɐr	N	vicinity
	selaing	sɛ.ˈla.ɪn	ADV	besides
	sembarang	sɐ̰m.ˈba.ɾɐŋ	QT	any (kind of)
	sepakat	sɛ.ˈpa.kɐt̚	V.MO(ST)	be agreed
	sepanggal	sɛ.ˈpɐŋ.gɐl	N	a fragment
	serakang	sɛ.ˈɾa.kɐn	V.BI	surrender
	serangang	sɛ.ˈɾa.ŋɐn	N	attack
	seswai	sɛ.ˈswa.ɪ	V.MO(ST)	be appropriate
	seswaikang	ˌsɛ.swa.ˈɪ.kɐn	V.BI	adjust
	setiap	sɛ.ˈti.ɐp̚	QT	every

	Lexeme	Transcription	Word class	English gloss
	sialang	sɪ.ˈa.lɐn	N	s. o. unfortunate
	siapkang	sɪ.ˈɐp̚.kɐn	V.BI	prepare
	silakang	si.ˈla.kɐn	V.BI	invite
	slalu	ˈsla.lu	ADV	always
	slama	sɛ.ˈla.ma	ADV	as long as, while
	sorenya	sɔ.ˈrɛ.ɲa	ADV	this afternoon
	spertinya	spɐ̟r.ˈti.ɲa	ADV	it seems
	spulu	ˈspu.lu	NUM.C	ten
	sratus	ˈsɾa.tʊs	NUM.C	one hundred
	sribu	ˈsri.bu	NUM.C	one thousand
	stuju	ˈstu.dʒu	V.MO(DY)	agree
	sumbangang	sʊm.ˈba.ŋɐn	N	donation
	T			
	tabalik	ta.ˈba.lɛ	V.MO(ACL)	be turned over
	tabanting	ta.ˈbɐn.tɪŋ	V.MO(ACL)	be tossed around
x	*tabla*	ta.ˈbla	V.MO(ACL)	be cracked open
	tacukur	ta.ˈtʃu.kʊr	V.MO(ACL)	be scalped
	tagait	ta.ˈgɐ.ɪt̚	V.MO(ACL)	be hooked
	tagoyang	ta.ˈgo̞̟.jɐŋ	V.MO(ACL)	be shaken
	taguling	ta.ˈgu.lɪŋ	V.MO(ACL)	be rolled over
	tahambur	ta.ˈhɐm.bʊr	V.MO(ACL)	be scattered about
	tahangang	ta.ˈha.nɐn	N	detention
	takancing	ta.ˈkɐn.tʃɪŋ	V.MO(ACL)	be locked
	takumpul	ta.ˈkʊm.pʊl	V.MO(ACL)	be collected
	takupas	ta.ˈku.pɐs	V.MO(ACL)	be peeled
	talipat	tɐ̟r.ˈli.pɐt̚	V.MO(ACL)	be folded
	tamasuk	ta.ˈma.sʊk̚	V.MO(ACL)	be included
	tambaang	tɐm.ˈba.ɐn	N	extra amount
	tanamang	ta.ˈna.mɐn	N	plants
	tanggapang	tɐŋ.ˈga.pɐn	N	response, idea
	tanggulangi	ˌtɐŋ.gu.ˈla.ŋi	V.BI	ward off, cope with
	tantangang	tɐn.ˈta.ŋɐn	N	challenge
	tapisang	ta.ˈpi.sɐn	N	filter
	taputar	ta.ˈpu.tɐr	V.MO(ACL)	be turned around
	tasala	ta.ˈsa.la	V.MO(ACL)	be mistaken
	tatikam	ta.ˈti.kɐm	V.MO(ACL)	be stabbed
	tatongkat	ta.ˈto̞̟ŋ.kɐt̚	V.MO(ACL)	be beaten
	tatutup	ta.ˈtʊ.tʊp̚	V.MO(ACL)	be closed
	tendangang	tɐ̟n.ˈda.ŋɐn	N	kicking
	tentukang	tɐ̟n.ˈtʊ.kɐn	V.BI	determine
	terbakar	tɐ̟r.ˈba.kɐr	V.MO(ACL)	be burnt

	Lexeme	Transcription	Word class	English gloss
	terbuka	tɐr.ˈbu.ka	V.MO(ACL)	be opened
	terendam	tɐ.ˈrɐn.dɐm	V.MO(ACL)	be soaked
	terganggu	tɐr.ˈgɐŋ.gu	V.MO(ACL)	be disturbed
	tergantong	ta.ˈgɐn.tɔŋ	V.MO(ACL)	be dependent
	terjadi	tɐr.ˈʤa.di	V.MO(ACL)	happen
	terjatu	tɐr.ˈʤa.tu	V.MO(ACL)	be fallen
	terkenal	tɐr.kɛ.ˈnɐl	V.MO(ACL)	be well-known
	terlambat	tɐr.ˈlɐm.bɐt̚	V.MO(ACL)	be late
	terlanjur	tɐr.ˈlɐn.ʤʊr	V.MO(ST)	be beyond bounds
	terlempar	tɐr.ˈlɐm.pɐr	V.MO(ACL)	be thrown
x	*terlepas*	ˌtɐr.lɛ.ˈpɐs	V.MO(ACL)	be loose
	terpukul	tɐr.ˈpʊ.kʊl	V.MO(ACL)	be beaten
	tersendiri	ˌtɐr.sɐn.ˈdi.ɾi	V.MO(ACL)	be separate
x	*tersera*	ˌtɐr.sɛ.ˈɾa	V.BI	up to s. o.
	tersinggung	tɐr.ˈsɪŋ.gʊŋ	V.MO(ACL)	be offended
	tertarik	tɐr.ˈta.rɪk̚	V.MO(ACL)	be pulled
	tertawa	tɐr.ˈta.wa	V.BI	laugh
x	*tertentu*	ˌtɐr.tɐn.ˈtu	V.MO(ST)	be specific
	tertolak	tɐr.ˈtɔ.lɐk̚	V.MO(ACL)	be rejected
	tertukar	tɐr.ˈtu.kɐr	V.MO(ACL)	get changed
	tikungang	ti.ˈku.ŋɐn	N	bend in road
	timbulkang	tɪm.ˈbʊl.kɐn	V.BI	emerge
	tindakang	tɪn.ˈda.kɐn	N	action
	tingkatang	tɪŋ.ˈka.tɐn	N	level
	titipang	ti.ˈti.pɐn	N	entrusted goods
	trangkang	ˈtrɐŋ.kɐn	V.BI	clarify
	trangkat	ˈtrɐŋ.kɐt̚	V.MO(ACL)	be lifted
	trapkang	ˈtrɐp̚.kɐn	V.BI	implement, apply
	trapung	ˈtra.pʊŋ	V.MO(ACL)	be drifting
	tujuang	tu.ˈʤu.ɐn	N	purpose
	tulisang	tu.ˈli.sɐn	N	writing
	tumpukang	tʊm.ˈpʊ.kɐn	N	pile
	turungang	tu.ˈɾu.nɐn	N	descendant
	U			
	ucapkang	u.ˈʧɐp̚.kɐn	V.BI	express
	ujiang	u.ˈʤɪ.ɐn	V.BI/N	examine / examination
	ukirang	u.ˈki.ɾɐn	N	carved object
	ukurang	u.ˈku.ɾɐn	N	measurement
	ulangang	ʊ.ˈla.ŋɐn	V.BI/N	test
	utusang	u.ˈtu.sɐn	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 §1.11 and Appendix C.

B.1 Conversation: Playing volleyball; morning chores

File name:	081023-001-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 di kertas,
RDP~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) *su 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 di sini 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 untuk pergi
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~husband 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) *MY:* [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~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~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: yo, de*
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 pu*
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 berdiri pas 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 [UP]

(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 2SG[JI] who 1SG[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]

[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).

(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: mm-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~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 hampir siang 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

[2] *Klara* refers to *Nelci* (see (50) and (53)).

(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 3SG 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-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 Jayapura?*
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) *MO-1:* [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) *MO-1:* [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

[3] Lit. 'her father' (*de* '3SG' refers to the speaker's daughter).

(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, yo*
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 1SG betel.vine 1SG 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: jadi sa 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

[4] Lit. 'her father' (*de* '3SG' refers to the speaker's daughter).
[5] Lit. 'her uncle' (*de* '3SG' refers to the speaker's daughter).

(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, masak pertama 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 masak nasi 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 saya ni, mama-tua, sa*
aunt 3SG uh yesterday 3SG give know 1SG D.PROX aunt 1SG
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~container put at L.PROX

Ida: now you give (me) the jerry cans, put (them) here

[6] Lit. 'her aunt' (*de* '3SG' refers to the speaker's daughter).

(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

(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 2SG 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 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-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) *Nofi: 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: mm-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~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~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 3SG already press 3SG to bottom L.PROX almost 3SG 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-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

[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.

(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 di jalangang*
grandmother 1PL three person 1PL run to hither reach 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 ((laughter))*
ah! shhh! NEG may like.that D.DIST already good purpose so
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 tida liat kolam ini, langsung dia tabrak itu, kolam ke sana, langsung mama jatu*
D.PROX reach at route next craftsman motorbike.taxi D.PROX 3SG NEG see big.hole D.PROX immediately 3SG hit.against D.DIST big.hole to L.DIST 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
L.MED

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

[9] The personal pronoun *de* '3SG' refers to the recording author.

(15) *Iskia: minta maaf e?, tolong ceritra tu plang~plang*
request pardon eh? help tell D.DIST RDP~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~goyang saya, dong dua goyang~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~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~hold at shoulder 3SG RDP~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~dorang di
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 Jayapura 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-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 punya jubi, 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

[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]".

(6) *saya jalang sampe di blakang kebung, anjing mulay gong-gong babi o, 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
mulay pana dia, pana dengang jubi, 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 3PL[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~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-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 ka?
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-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

[11] This clause refers to the story about the statue and the tree which the narrator had told before being asked for directions.

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~husband 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-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-CvHt
Text type:	Conversation, spontaneous: Hortatory
Interlocutors:	3 male children,[13] 2 older females
Length (min.):	1:00

[12] The second male child did not participate in this exchange.
[13] The third male child did not participate in this exchange.

(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~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~jump L.MED exist RDP~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*
mhm 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-JR
Text type:	Joke (Elicited text)
Interlocutors:	2 younger males
Length (min.):	0:59

(1) *skola ini ibu mulay suru ana~ana murit mulay gambar monyet di*
school D.PROX woman start order RDP~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 ibu bagi 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 2SG 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-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 RECP 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?'

(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

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-CvNP	CvSp_NarrP	A drunkard in the hospital at night
	2:33:00	2 FO
080917-001-CvNP	CvSp_NarrP	Woken up by a friend
	0:40:00	1 MY, 1 MO
080917-002-Cv	CvSp_Cas	Organizing a youth event got interrupted
	1:25:00	1 MO, 1 MY, 1 FO
080917-003a-CvEx	CvSp_Expos	Asking for a leave of absence 1
	2:11:00	1 MC, 2 FY, 1 FO
080917-003b-CvEx	CvSp_Expos	Asking for a leave of absence 2
	2:27:00	1 MC, 2 FY, 1 FO
080917-004-CvHt	CvSp_Hort	Don't get dirty!
	0:10:00	2 MC, 1 FO
080917-005-Cv	CvSp_Cas	What is this?
	0:02:00	1 MC
080917-006-CvHt	CvSp_Hort	Bathe in the ocean!

File name	Text type / Length	Topic / Interlocutors
	1:00:00	3 MC, 2 FO
080917-007-CvHt	CvSp_Hort	Get a Malaria blood test!
	1:05:00	1 MY, 1 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 MC, 1 FO
080917-010-CvEx	CvSp_Expos	Raising children well
	16:00:00	1 FY, 1 FO
080918-001-CvNP	CvSp_NarrP	Two sudden deaths
	5:30:00	2 MY, 1 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 MO, 1 FO
080919-004-NP	Elicit_NarrP	Pig hunting with bow and arrows
	13:38:00	1 MO, 1 FO
080919-005-Cv	CvSp_Cas	Wearing glasses
	1:45:00	1 MY, 1 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 MY, 1 FO, 2 FY
080919-008-CvNP	CvSp_NarrP	A dying mother sees snow 1
	2:40:00	1 MY, 1 FY
080921-001-CvNP	CvSp_NarrP	Trip to Pante Timur 1
	3:00:00	1 MO, 1 FY, 3 FO
080921-002-Cv	CvSp_Cas	Coming to Sarmi
	0:35:00	1 MY, 1 MO, 1 FY, 1 FO
080921-003-CvNP	CvSp_NarrP	Trip to Pante Timur 2
	0:55:00	1 MY, 1 MO, 1 FY, 1 FO
080921-004a-CvNP	CvSp_NarrP	Trip to Pante Timur 3a
	4:00:00	1 MY, 1 MO, 1 FY, 1 FO
080921-004b-CvNP	CvSp_NarrP	Trip to Pante Timur 3b
	2:00:00	1 MY, 1 MO, 1 FY, 1 FO
080921-005-CvNP	CvSp_NarrP	A dying mother sees snow 2
	1:00:00	1 MY, 1 FY
080921-006-CvNP	CvSp_NarrP	A dying mother sees snow 3
	1:20:00	1 MY, 1 FY
080921-007-CvNP	CvSp_NarrP	Trip to Pante Timur 4
	1:00:00	1 MY, 1 MO, 1 FY, 1 FO
080921-008-Cv	CvSp_Cas	Swimming in the ocean
	1:00:00	1 MY, 1 FY

File name	Text type / Length	Topic / Interlocutors
080921-009-Cv	CvSp_Cas	Feeling sleepy at night
	0:30:00	1 MY, 2 FY
080921-010-Cv	CvSp_Cas	A funny relative
	0:45:00	1 MY, 1 FY
080921-011-Cv	CvSp_Cas	Picnic at the beach
	2:00:00	1 MY, 1 FY
080922-001a-CvPh	CvSp_Cas (ph.)	Trip to Sorong 1
	66:00:00	1 MY, 1 MO, 1 FY
080922-001b-CvPh	CvSp_Cas (ph.)	Trip to Sorong 2
	1:45:00	1 MY, 1 MO, 1 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 MY, 1 FY
080922-004-Cv	CvSp_Cas	Meeting a certain woman
	2:03:00	1 MY, 1 FY
080922-005-CvEx	CvSp_Expos	Bride-exchange customs
	1:52:00	1 MY, 1 FY
080922-006-CvEx	CvSp_Expos	Children's future
	0:46:00	1 MY, 1 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 MY, 1 FY
080922-009-CvNP	CvSp_NarrP	Playing as children
	2:57:00	1 MY, 1 FY
080922-010a-CvNF	CvSp_NarrF	Origins of a certain clan 1
	39:00:00	1 MC, 1 MY, 1 FY
080922-010b-CvNF	CvSp_NarrF	Origins of a certain clan 2
	0:45:00	1 MY, 1 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 MY, 1 MO
080923-003-CvNP	CvSp_NarrP	Getting up early
	0:23:00	1 MO, 2 FY
080923-004-Cv	CvSp_Cas	Cooking
	2:30:00	1 MO, 1 FY
080923-005-Cv	CvSp_Cas	A sudden death
	0:19:00	1 MO, 1 FY
080923-006-CvNP	CvSp_NarrP	An incident with a young person
	1:25:00	1 MO, 1 FY
080923-007-Cv	CvSp_Cas	A sparrow in the kitchen; bridges are needed
	1:45:00	1 MO, 1 FY
080923-008-Cv	CvSp_Cas	Reprimanding a young teacher

File name	Text type / Length	Topic / Interlocutors
	2:12:00	1 MO, 1 FY
080923-009-Cv	CvSp_Cas	The speaker's personal background
	4:55:00	1 MO, 1 FY
080923-010-CvNP	CvSp_NarrP	An accident with a motorbike taxi driver
	2:16:00	1 MO, 1 FY
080923-011-Cv	CvSp_Cas	A sudden death; about a sick relative
	1:40:00	1 MO, 1 FO, 1 FY
080923-012-CvNP	CvSp_NarrP	Being sick from eating grass-cutters
	4:14:00	1 MY, 1 MO, 1 FO
080923-013-CvEx	CvSp_Expos	How to find out whether a sick person will survive 1
	3:45:00	1 MY, 1 MO
080923-014-CvEx	CvSp_Expos	How to find out whether a sick person will survive 2
	2:59:00	1 MY, 1 MO
080923-015-CvEx	CvSp_Expos	Getting a sign about a dying person
	5:20:00	1 MY, 1 MO
080923-016-CvNP	CvSp_NarrP	Making a song book
	1:48:00	1 MY, 1 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 FY, 1 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 MO, 2 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

File name	Text type / Length	Topic / Interlocutors
	1:30:00	1 FO
080927-006-CvNP	Cv-w/auth_NarrP	The speaker's work in Sawar
	4:02:00	1 FO
080927-007-CvNP	Cv-w/auth_NarrP	The speaker's family relations 1
	2:06:00	1 FO
080927-008-CvEx	Cv-w/auth_Expos	Metallic blue water color
	1:04:00	1 FO
080927-009-CvNP	Cv-w/auth_NarrP	The speaker's family relations 2; life in Sarmi
	6:47:00	1 FO
081002-001-CvNP	CvSp_NarrP	Traveling from Webro to Sarmi
	4:39:00	2 FY
081002-002-Cv	CvSp_Cas	Eating and bathing
	0:25:00	2 FY
081002-003-Cv	CvSp_Cas	Eating betel nut
	0:38:00	2 FY
081005-001-Cv	CvSp_Cas	Visiting and calling government offices
	1:43:00	2 MO
081006-001-Cv	CvSp_Cas	Visiting a sick person
	0:56:00	1 MY, 1 MO
081006-002-Cv	CvSp_Cas	Returning from Sarmi to Jayapura
	0:43:00	1 MO, 1 FO
081006-003-Cv	CvSp_Cas	Traveling by low tide
	0:32:00	1 MO, 1 FO
081006-004-Cv	CvSp_Cas	Waiting for the village mayor
	0:33:00	2 MO
081006-005-Cv	CvSp_Cas	A proud person
	0:22:00	2 FY
081006-006-Cv	CvSp_Cas	What's his/her name?
	0:02:00	2 FY
081006-007-Cv	CvSp_Cas	Traveling to Arso
	0:20:00	2 FY
081006-008-Cv	CvSp_Cas	Celebrating a birthday
	1:35:00	2 FY
081006-009-Cv	CvSp_Cas	An angry person
	2:07:00	2 FY
081006-010-Cv	CvSp_Cas	Returning from Webro
	0:32:00	2 FY
081006-011-Cv	CvSp_Cas	Going home
	0:12:00	1 MO, 1 FY
081006-012-Cv	CvSp_Cas	A church meeting
	0:19:00	4 MO
081006-013-Cv	CvSp_Cas	Taking a hot bath when sick with malaria
	0:57:00	1 MO, 4 FO
081006-014-Cv	CvSp_Cas	Playing football at the beach
	3:43:00	5 FY

File name	Text type / Length	Topic / Interlocutors
081006-015-Cv	CvSp_Cas 1:52:00	The car outside and their owners 5 FY
081006-016-Cv	CvSp_Cas 2:17:00	The upcoming youth retreat 5 FY
081006-017-Cv	CvSp_Cas 3:13:00	Driving around Sarmi; preparing for Christmas 5 FY
081006-018-Cv	CvSp_Cas 0:26:00	Playing music and irritating others 5 FY
081006-019-Cv	Cv-w/auth_Cas 0:50:00	A trip to Webro and returning to Sarmi 1 FO
081006-020-Cv	Cv-w/auth_Cas 2:46:00	A motorbike accident 1 MO, 1 FO
081006-021-CvHt	CvSp_Hort 1:14:00	Picking flowers 1 FC, 1 FY
081006-022-CvEx	Cv-w/auth_Expos 15:43:00	Evil spirits in humans 1 MO, 1 FO
081006-023-CvEx	Cv-w/auth_Expos 12:36:00	What non-Christians believe; heaven and hell 1 MO, 1 FO
081006-024-CvEx	Cv-w/auth_Expos 17:39:00	Exchanging children 1 1 FO
081006-025-CvEx	Cv-w/auth_Expos 4:07:00	Exchanging children 2 1 FO
081006-026-CvEx	Cv-w/auth_Expos 2:06:00	Exchanging children 3 1 FO
081006-027-CvEx	Cv-w/auth_Expos 2:21:00	Exchanging children 4 1 FO
081006-028-CvEx	Cv-w/auth_Expos 2:44:00	Exchanging children 5 1 FO
081006-029-CvEx	Cv-w/auth_Expos 5:29:00	Bride price customs 1 FO
081006-030-CvEx	Cv-w/auth_Expos 1:56:00	Sterility 1 FO
081006-031-Cv	CvSp_Cas 0:48:00	Returning to Jayapura 2 MO, 1 FO
081006-032-Cv	CvSp_Cas 7:17:00	An anniversary; Papuans and outsiders; elections 2 MO, 1 FO
081006-033-Cv	CvSp_Cas 5:01:00	Building a road to Webro 2 MO, 2 FO
081006-034-CvEx	CvSp_Expos 6:50:00	Spiritual warfare 1 1 MY, 1 FO
081006-035-CvEx	CvSp_Expos 11:40:00	Spiritual warfare 2 1 MY, 1 FO

File name	Text type / Length	Topic / Interlocutors
081006-036-CvEx	CvSp_Expos	Spiritual warfare 3
	2:41:00	1 MY, 1 FO
081008-001-Cv	CvSp_Cas	A meeting of village mayors 1
	4:43:00	2 MY, 3 MO
081008-002-Cv	CvSp_Cas	A meeting of village mayors 2
	0:30:00	2 MY, 2 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 MY, 2 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 MC, 2 FY, 2 FO
081011-004-Cv	CvSp_Cas	Traveling to Jayapura
	0:23:00	1 FY, 1 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 MC, 1 MO, 2 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 MO, 1 FO
081011-009-Cv	CvSp_Cas	A drunken youth
	2:49:00	2 MO, 1 FY, 1 FO
081011-010-Cv	CvSp_Cas	A small plane circling Sarmi
	1:00:00	1 MO, 1 FO
081011-011-Cv	CvSp_Cas	Obtaining a school certificate 1; a drunken youth
	3:41:00	2 MO, 1 FO
081011-012-Cv	CvSp_Cas	Obtaining a school certificate 2
	1:37:00	1 FY, 1 FO
081011-013-Cv	CvSp_Cas	Living in Wamena
	0:52:00	1 MO, 1 FY
081011-014-Cv	CvSp_Cas	About shortening something
	1:03:00	1 FY, 1 FO
081011-015-Cv	CvSp_Cas	Using different kinds of oil as medicine
	0:34:00	1 FY, 1 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 MO, 1 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 MO, 1 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 MO, 1 FY, 1 FO
081011-023-Cv	CvSp_Cas	Obtaining a school certificate 4; rural school education
	21:45:00	1 FY, 1 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 MO, 1 FO
081013-002-Cv	CvSp_Cas	The bridge at Muara
	0:58:00	1 MO, 1 FO
081013-003-Cv	CvSp_Cas	A motorbike accident 1
	0:46:00	1 MO, 1 FO
081013-004-Cv	CvSp_Cas	A motorbike accident 2
	0:54:00	1 MO, 1 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 MO, 1 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 MO, 1 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

File name	Text type / Length	Topic / Interlocutors
	2:06:00	1 MO, 1 FO
081014-011-CvEx	Cv-w/auth_Expos	Honoring guests 3
	7:02:00	1 MO, 1 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 MY, 1 FO
081014-017-CvPr	CvSp_Proc	Cooking pigs
	6:10:00	1 MY, 1 MO, 1 FY, 2 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 FY, 1 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 MO, 3 FO
081022-001-Cv	CvSp_Cas	Returning from Takar
	0:42:00	1 MC, 2 FY
081022-002-CvNP	CvSp_NarrP	Retreat in Takar 1
	1:40:00	1 MC, 1 FY
081022-003-Cv	CvSp_Cas	Retreat in Takar 2
	1:25:00	1 MC, 1 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 FC, 1 FO
081025-002-Cv	Cv-w/auth_Cas	Papeda and fish
	0:13:00	1 FO
081025-003-Cv	Cv-w/auth_Cas	Certain acquaintances; workshops in Sentani
	16:53:00	1 MO, 1 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	Cv-w/auth_Cas 0:55:00	Demonstrations several MO, 1 FO
081025-006-Cv	CvSp_Cas 24:49:00	Retreat in Takar 4; spiritual warfare 1 3 FY, 1 FO
081025-007-Cv	CvSp_Cas 2:10:00	Retreat in Takar 5; spiritual warfare 2 3 FY, 1 FO
081025-008-Cv	CvSp_Cas 11:14:00	Retreat in Takar 6; spiritual warfare 3 3 FY, 1 FO
081025-009a-Cv	CvSp_Cas 10:46:00	Retreat in Takar 7; spiritual warfare 4a 3 FY, 1 FO
081025-009b-Cv	CvSp_Cas 7:04:00	Retreat in Takar 8; spiritual warfare 4b 3 FY, 1 FO
081029-001-Cv	Cv-w/auth_Cas 1:06:00	Garden plants 1 MO
081029-002-Cv	Cv-w/auth_Cas 5:44:00	Politics in Papua 2 1 MO
081029-003-Cv	Cv-w/auth_Cas 1:00:00	Politics in Papua 3 1 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 MO
081106-001-CvPr	Cv-w/auth_Proc 0:49:00	Killing dogs 1 MO, 1 FO
081108-001-JR	Elicit_Joke 0:37:00	Joke: Killing a cow 1 (false start) 2 MY
081108-002-JR	Elicit_Joke 0:51:00	Joke: Drawing an elephant 2 MY
081108-003-JR	Elicit_Joke 1:21:00	Joke: Killing a cow 2 2 MY
081109-001-Cv	CvSp_Cas 14:47:00	Doing sports 1 MY, 2 FY
081109-002-JR	Elicit_Joke 0:59:00	Joke: Drawing a monkey 2 MY
081109-003-JR	Elicit_Joke 1:06:00	Joke: Drawing a banana 2 MY
081109-004-JR	Elicit_Joke 0:29:00	Joke: Taking singing lessons (false start) 2 MY
081109-005-JR	Elicit_Joke 1:15:00	Joke: Grandfather and grandchild go fishing 2 MY
081109-006-JR	Elicit_Joke 0:44:00	Joke: Taking singing lessons 2 MY
081109-007-JR	Elicit_Joke	Joke: Twelve moons

File name	Text type / Length	Topic / Interlocutors
	1:24:00	2 MY
081109-008-JR	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 MO, 3 FO
081115-001b-Cv	CvSp_Cas	Problems with children 2
	4:51:00	2 MO, 3 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.

[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).

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 *ke-/-ang* 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)

	Topics (TOP)				Interlocutors (ILCT)			Tokens
Speakers	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
Total	8	11	36	15	45	**23**	15	153

Table F.2: Tokens for *TER-*prefixed words with monovalent verbal bases (5 items)

	Topics (TOP)				Interlocutors (ILCT)			Tokens
Speakers	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
Total	0	1	6	4	2	**1**	0	14

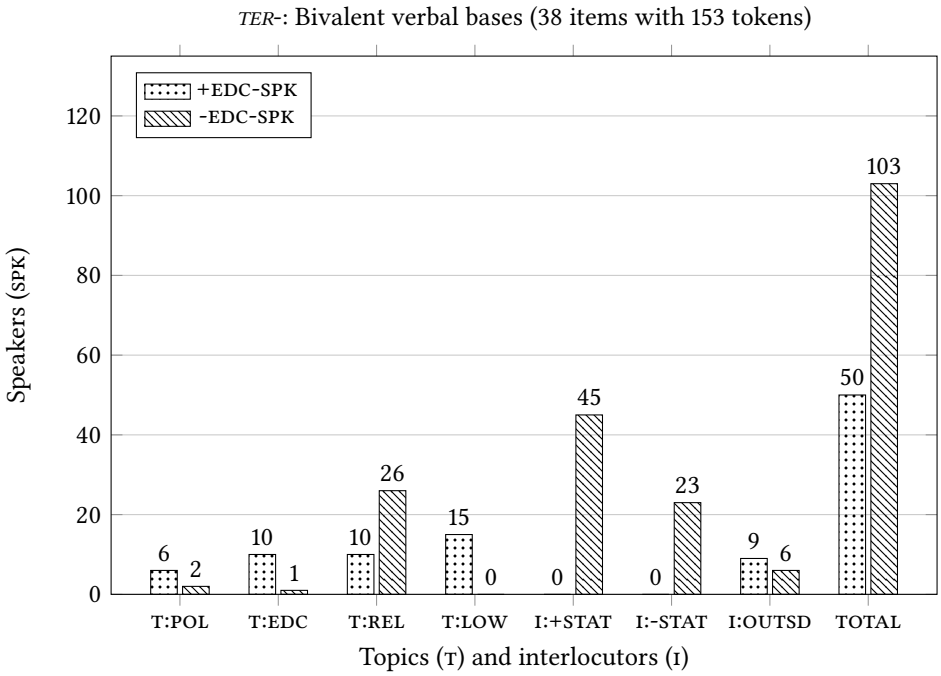


Figure F.1: Tokens for *TER*-prefixed words with bivalent verbal bases

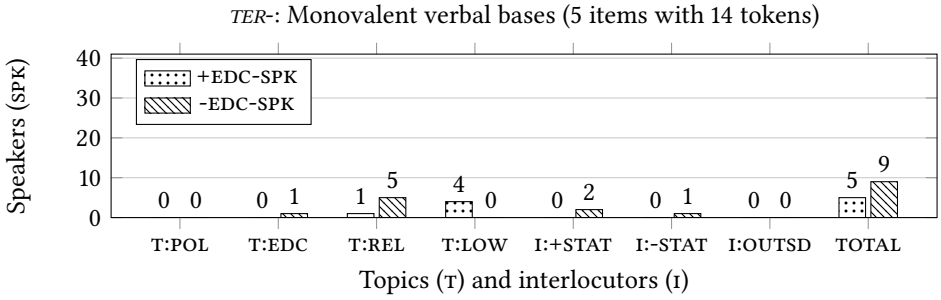


Figure F.2: Tokens for *TER*-prefixed words with monovalent verbal bases

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)

	Topics (TOP)				Interlocutors (ILCT)			Tokens
Speakers	POL	EDC	REL	LOW	+STAT	−STAT	OUTSD	Total
+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

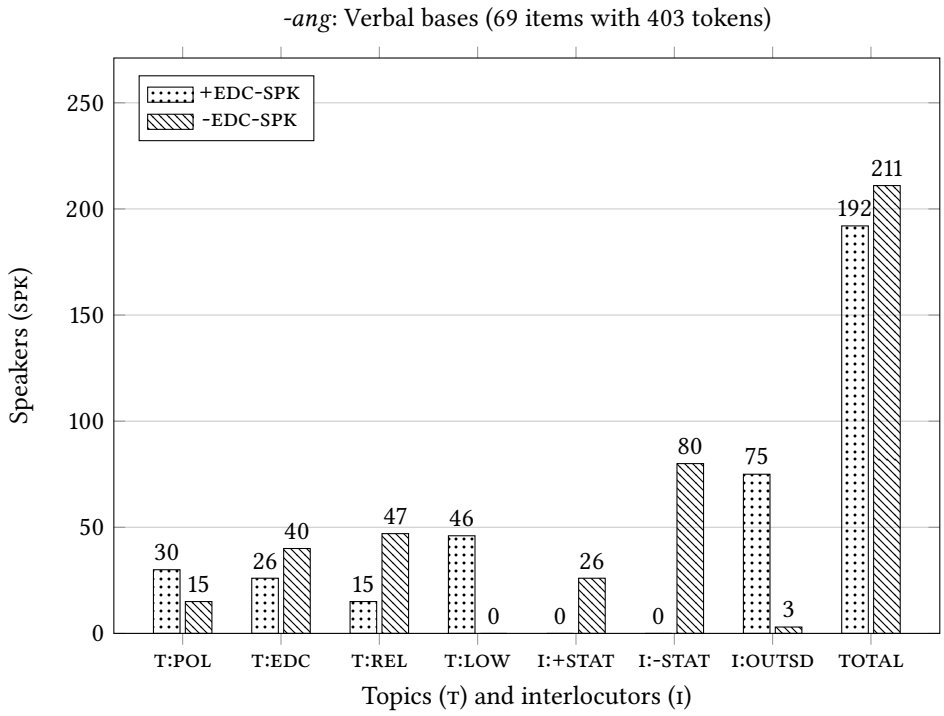


Figure F.3: Tokens for *-ang*-suffixed words with verbal bases

Table F.4: Tokens for *-ang*-suffixed words with nominal and numeral bases (15 items)

	Topics (TOP)				Interlocutors (ILCT)			Tokens
Speakers	POL	EDC	REL	LOW	+STAT	−STAT	OUTSD	Total
+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

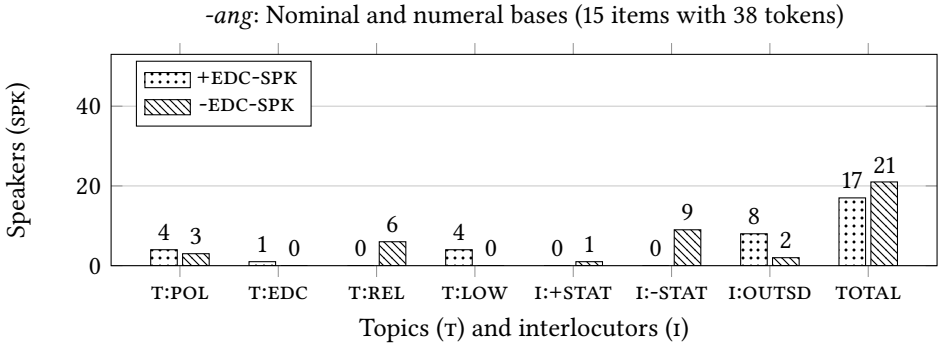


Figure F.4: Tokens for *-ang*-suffixed items derived from nominal and numeral bases

F.3 Prefix *PE(N)-*

The tables and figures give the token frequencies for *PE(N)*-prefixed words with verbal and nominal bases.

Table F.5: Tokens for *PE(N)*-prefixed words with verbal bases (29 items)

	Topics (TOP)				Interlocutors (ILCT)			Tokens
Speakers	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
Total	48	8	40	19	9	**18**	11	153

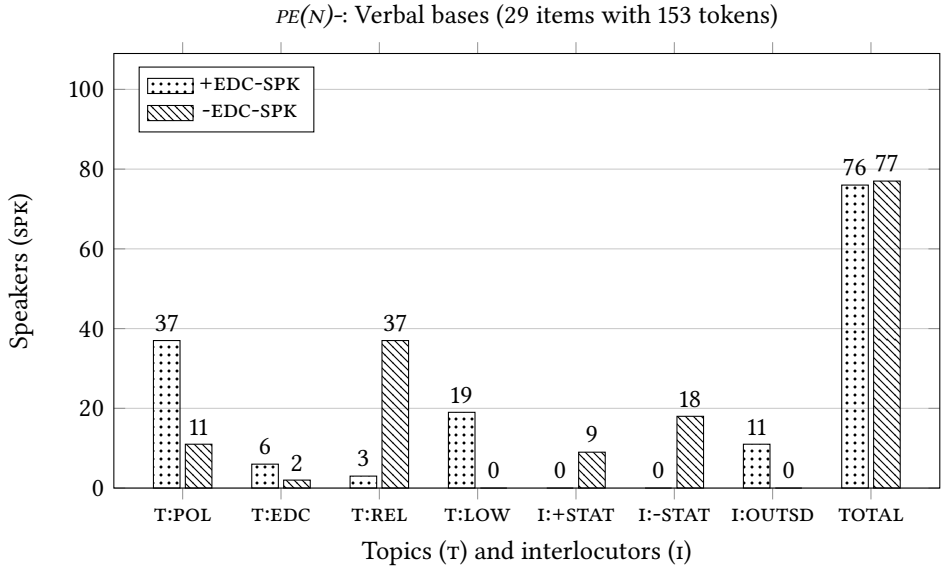


Figure F.5: Tokens for *PE(N)*-prefixed words with verbal bases

Table F.6: Tokens for *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	**1**	0	6
Total	11	2	14	5	0	**1**	0	33

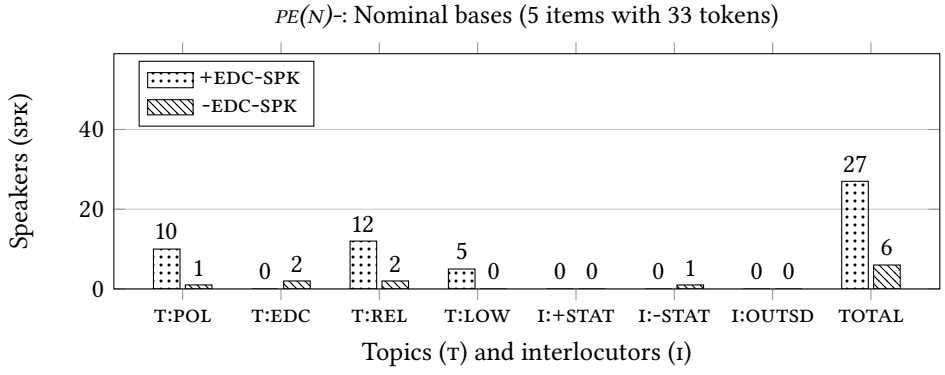


Figure F.6: Tokens for *PE(N)*-prefixed words with nominal bases

F.4 Prefix *BER-*

The tables and figures give the token frequencies for *BER*-prefixed words with verbal, nominal, numeral, and quantifier bases.

Table F.7: Tokens for *BER*-prefixed words with verbal bases (27 items)

	Topics (TOP)				Interlocutors (ILCT)			Tokens
Speakers	POL	EDC	REL	LOW	+STAT	−STAT	OUTSD	Total
+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

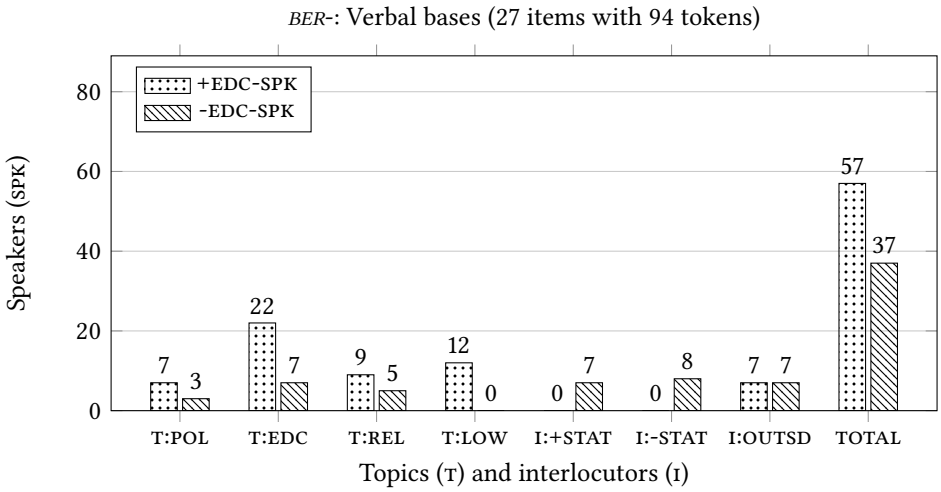


Figure F.7: Tokens for *BER*-prefixed words with verbal bases

Table F.8: Tokens for *BER*-prefixed words with nominal, numeral, and quantifier bases (29 items)

	Topics (TOP)				Interlocutors (ILCT)			Tokens
Speakers	POL	EDC	REL	LOW	+STAT	−STAT	OUTSD	Total
+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

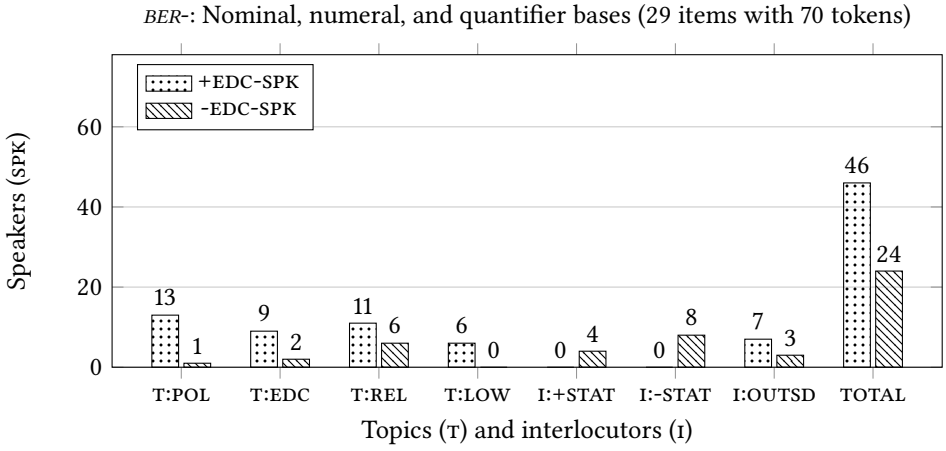


Figure F.8: Tokens for *BER*-prefixed words with nominal, numeral, and quantifier bases

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)

	Topics (TOP)				Interlocutors (ILCT)			Tokens
Speakers	POL	EDC	REL	LOW	+STAT	−STAT	OUTSD	Total
+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

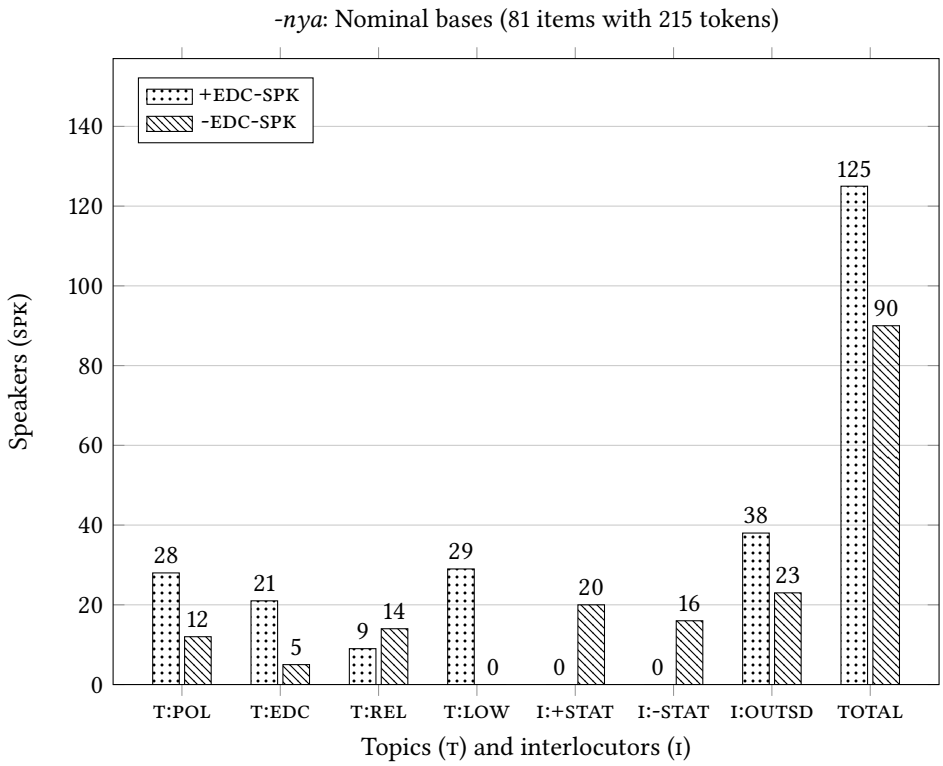


Figure F.9: Tokens for *-nya*-suffixed words with nominal bases

Table F.10: Tokens for *-nya*-suffixed words with verbal bases (36 items)

	Topics (TOP)				Interlocutors (ILCT)			Tokens
Speakers	POL	EDC	REL	LOW	+STAT	−STAT	OUTSD	Total
+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

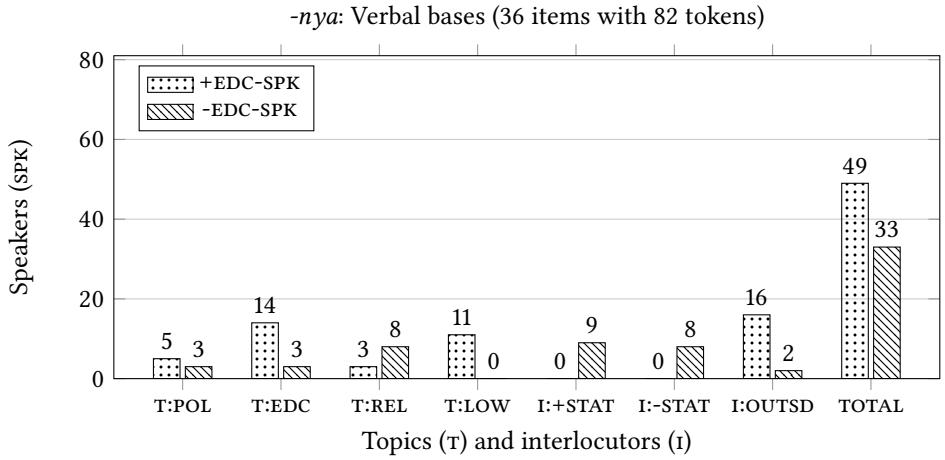


Figure F.10: Tokens for *-nya*-suffixed words with verbal bases

Table F.11: Tokens for *-nya*-suffixed words with prepositional and adverbial bases (5 items)

	Topics (TOP)				Interlocutors (ILCT)			Tokens
Speakers	POL	EDC	REL	LOW	+STAT	−STAT	OUTSD	Total
+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

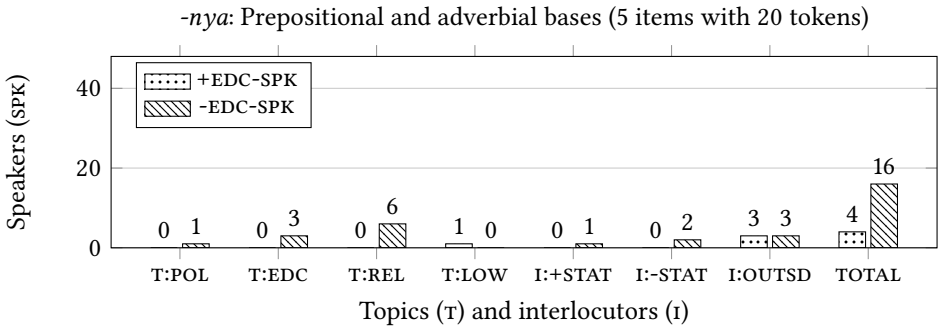


Figure F.11: Tokens for *-nya*-suffixed words with prepositional and adverbial bases

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)

	Topics (TOP)				Interlocutors (ILCT)			Tokens
Speakers	POL	EDC	REL	LOW	+STAT	−STAT	OUTSD	Total
+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)

	Topics (TOP)				Interlocutors (ILCT)			Tokens
Speakers	POL	EDC	REL	LOW	+STAT	−STAT	OUTSD	Total
+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

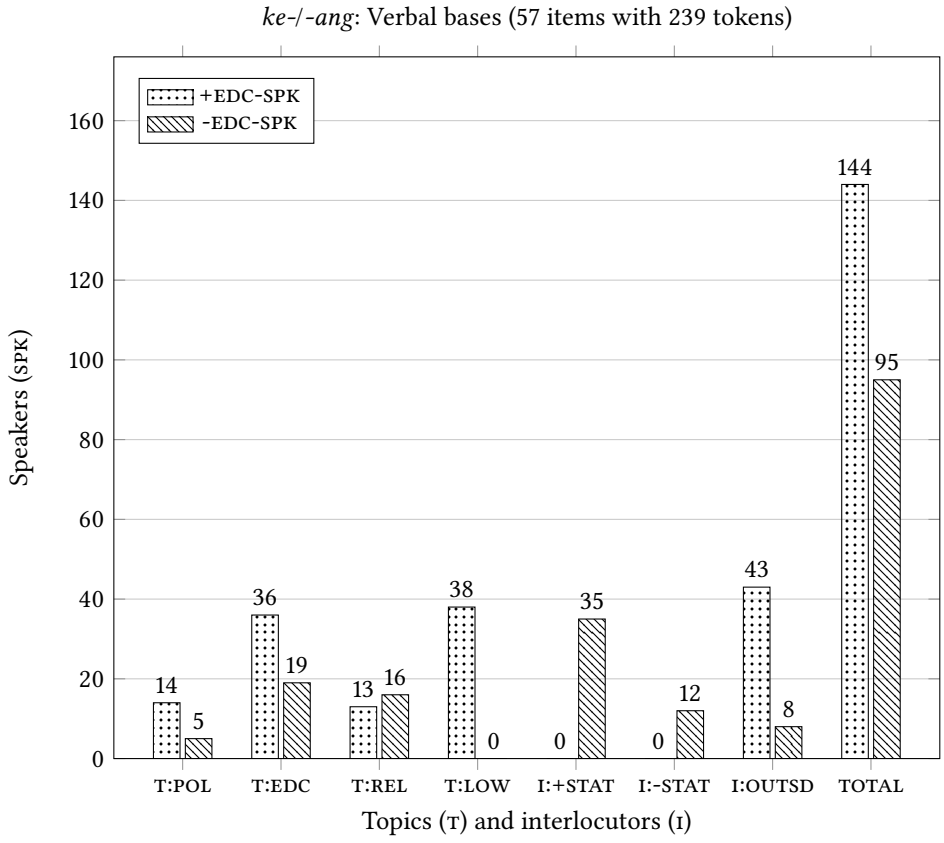


Figure F.12: Tokens for *ke-/-ang*-circumfixed words with verbal bases

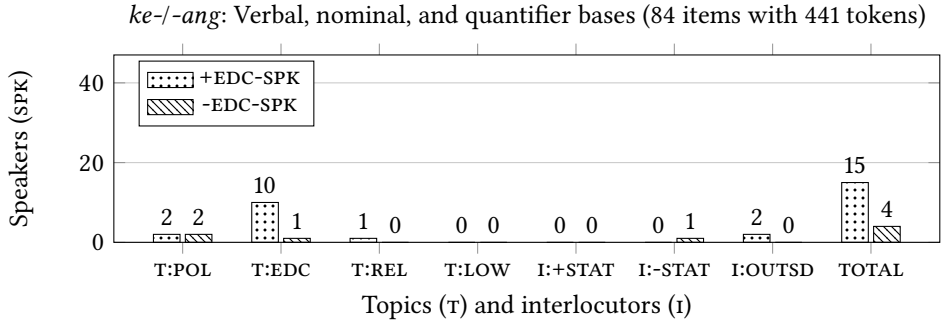


Figure F.13: Tokens for *ke-/-ang*-circumfixed words with nominal, numeral, and quantifier bases

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Name index

Abbot, Barbara, 279, 325
Abrams, Meyer Howard, 342, 351
Adelaar, K. Alexander, 3, 4, 6, 7, 42, 46, 47, 50, 51, 126, 128, 137, 145, 150, 165, 175
Agheyisi, Rebecca, 19
Aikhenvald, Alexandra Y., 31, 120, 123, 178–180, 539
Ajamiseba, Daniel C., 48
Allerton, David J., 243
Alua, Agus A., 20
Ameka, Felix K., 316
Anceaux, Johannes C., 47
Andaya, Leonard Y., 43
Anderbeck, Karl R., 9, 11
Anderson, Gregory D. S, 87
Anderson, Stephen R., 379
Andrews, Avery D., 279
Arakin, Vladimir D., 347
Aronoff, Mark, 120
Asher, Robert E., 217, 220, 244, 262, 268, 342, 423, 443
Austin, Peter K., 467, 469, 471, 473, 474
Aveling, Harry, 2
Aweta, Lodowik, 56, 63

Baayen, R. Harald, 122
Baker, Colin, 19
Bao, Zhiming, 444
Bauer, Laurie, 120, 178, 181–183
Bednarek, Monika, 350
Besier, Dominik, 20, 21, 50
Bhat, Darbhe N. S., 325, 344, 356, 357
Biber, Douglas, 273
Bink, G. L., 45
Bisang, Walter, 4, 5, 7
Blust, Robert A., 1, 3, 5, 7, 63, 74
Booij, Geert E., 120–123, 127, 138, 148, 187, 197, 209
Bosch, C. J., 43
Bowen, J. Donald, 347
Bublitz, Wolfram, 350
Burke, Edmund, 44
Burung, Willem, 5, 21, 38, 49, 50
Bussmann, Hadumod, 181, 183, 266, 351
Butler, Christopher, 333
Bybee, Joan L., 433

Campbell, George L., 347
Chauvel, Richard, 9, 40, 46
Churchward, C. Maxwell, 347
Clouse, Duane A., 13, 38
Collins, James T., 4–7, 42, 46, 47
Comrie, Bernard, 138, 471–473, 477, 480, 481, 483, 484, 488, 556
Conrad, Susan, 273
Cooper, Robert L., 19
Cristofaro, Sonia, 539
Crystal, David, 306

Daniel, Michael, 325, 360, 362, 363
de Lacy, Paul V., 74, 75
de Saussure, Ferdinand, 53
de Vries, Lourens, 32
Diessel, Holger, 367, 384, 387
Dik, Simon C., 472
Dixon, Robert M. W., 24, 243, 247, 249, 255, 300, 437–439, 477, 501, 539
Doetjes, Jenny, 264
Donohue, Mark, 3–5, 7, 9, 11, 13, 23, 24, 26, 29, 31, 43, 46, 49, 50, 65, 417, 429, 490, 544

Dooley, Robert A., 388
Dryer, Matthew S., 24–27, 180, 517
Dumont d'Urville, Jules-Sébastien-César, 44

Encyclopædia Britannica Inc., 2, 39
Englebretson, Robert, 161, 173
Errington, Joseph, 21
Ewing, Michael C., 28, 29, 31

Fasold, Ralph W., 16, 19
Fearnside, Philip M., 40
Fennig, Charles D., 3, 4, 9–14
Ferguson, Charles A., 15, 16, 120
Filimonova, Elena, 325
Fishman, Joshua A., 16–19, 124, 125
Foley, William A., 15, 31, 32

Gal, Susan, 21
Gil, David, 2, 4–6, 50, 51, 218, 307, 361, 444
Givón, Talmy, 219, 222, 262, 266, 268, 271
Goodman, Thomas, 42
Greenberg, Joseph H., 417
Grimes, Barbara D., 5
Grimes, Charles E., 3, 5, 347, 365
Grimes, Joseph E., 524
Grosjean, François, 121

Haenen, Paul, 20
Haga, A., 43
Hale, Kenneth L., 347
Harpham, Geoffrey Galt, 342, 351
Hartanti, 50
Haser, Verena, 261
Haspelmath, Martin, 338–341, 361, 471–473, 477, 479, 491, 537, 539
Hawkins, John A., 333
Hay, Jennifer, 121, 122
Hayashi, Makoto, 388
Heine, Bernd, 321, 323
Helmbrecht, Johannes, 325, 344, 347
Hengeveld, Kees, 472, 511
Himmelmann, Nikolaus P., 23, 26, 27, 29, 187, 217, 218, 384, 480, 523
Hoeksema, Jack, 271
Horie, Kaoru, 436, 444
Huizinga, F., 43
Hwang, Shin Ja J., 544, 547
Hymes, Dell H., 9

Irvine, Judith T., 21

Jacob, June A., 5, 347, 365
Johannessen, Janne Bondi, 347
Jones, Russell, 30, 63, 87, 94, 95, 103, 124
Jurafsky, Dan, 208, 209

Kacandes, Irene, 351
Karam, Francis X., 8
Kaufman, Terrence, 5
Kaufmann, Stefan, 548
Keenan, Edward L., 379, 556
Kelman, Herbert C., 19
Kemmer, Suzanne, 495
Kennedy, Christopher, 501
Kenstowicz, Michael J., 87, 106
Kersten, J. P. F., 347
Kilian-Hatz, Christa, 320
Kim, Hyun, 49
King, Peter, 2, 9, 20
Kingsbury, Damien, 2
Kiyomi, Setsuku, 22, 208, 215
Klamer, Marian, 27–29, 31, 433, 480
Kluge, Angela, 56, 63
Komaitai, Rusiate T., 347
Kortmann, Bernd, 261
Krishnamurthy, Ramesh, 181
Kroeger, Paul R., 173, 523
Krupa, Viktor, 347
Kulikov, Leonid I., 481, 484, 486
Kuteva, Tania, 321, 323

Lakoff, Robin, 377
LaPolla, Randy J., 243
Lass, Roger, 117
Leech, Geoffrey N., 273, 439

Levinsohn, Stephen H., 388
Levinson, Stephen C., 225
Lewis, M. Paul, 3, 4, 9–14
Lichtenberk, Frantisek, 338, 340
Lieber, Rochelle, 181
Lim, Sonny, 444
Litamahuputty, Betty, 5, 33, 34, 93, 126, 127, 145, 146, 151, 156, 161, 165, 210, 213, 214, 239, 364, 443, 490, 523
Longacre, Robert R., 544, 547
Loos, Eugene E., 58
Lumi, Johnli H., 50
Lyons, Christopher, 344, 345, 347, 353, 354
Lyons, John, 344

Ma, Felix, 13
MacDonald, R. Ross, 210
Maddieson, Ian, 95, 96, 117
Malchukov, Andrej L., 471–473
Marantz, Alec, 187, 188, 192, 193, 195, 198
Margetts, Anna, 467, 469, 471, 473, 474
Masinambow, Eduard K. M., 20
Mattes, Veronika, 208, 209
Matthews, Stephen, 436, 444
Matushansky, Ora, 347
McWhorter, John H., 4, 5
Milner, George B., 347
Mintz, Malcolm W., 17, 86, 101, 161, 165, 171, 175, 210, 239, 306
Mithun, Marianne, 558
Moeliono, Anton M., 47
Moravcsik, Edith A., 192, 207–209, 360–364, 527
Morley, G. David, 342
Moro, Francesca Romana, 480
Mosel, Ulrike, 480
Moussay, Gérard, 347
Mundhenk, A. Norm, 50
Mühlhäusler, Peter, 15

Nedjalkov, Vladimir P., 489–494
Nordhoff, Sebastian, 13, 14
Nothofer, Bernd, 3

Ogo, Pedro, 347
Overweel, Jeroen A., 43

Paauw, Scott H., 4–6, 9, 10, 21, 33, 38, 42, 46, 47, 49–51, 93, 123, 126, 127, 156, 161, 165, 210, 214, 217, 347, 348, 490
Padgett, Jaye, 74
Parker, Steve, 90
Parkinson, Richard H. R., 44
Pawley, Andrew, 31
Payne, Thomas E., 471, 481, 487, 489, 511, 542, 555, 556
Pike, Kenneth L., 120
Plag, Ingo, 119, 122
Podungge, Nurhayati, 50
Polinsky, Maria, 480
Prentice, David J., 4, 6, 7, 42, 46, 47, 50, 51
Prentice, Jack, 5

Quirk, Randolph, 439

Ramos, Teresita V., 347
Reesink, Gerard P., 27–29, 31, 433
Regier, Terry, 208
Robidé van der Aa, Pieter J. B. C., 45
Roehr, Dorian, 347
Roosman, Raden S., 5, 46, 48
Ross, Malcolm D., 433
Rowley, Charles D., 43–45
Rubino, Carlo, 188, 194, 195, 198, 204
Rudolph, Elisabeth, 540, 552
Rumaropen, Ben E. W., 56, 63
Rutherford, Danilyn, 20

Sadock, Jerrold M., 524, 527
Samaun, 43, 48
Saragih, Chrisma Fernando, 49
Sawaki, Yusuf W., 5, 38, 46, 49, 50
Schachter, Paul, 217, 313, 537, 539
Schreiber, Herbert, 243

Schvaneveldt, Roger, 120
Schütz, Albert J., 347
Scott, Graham R., 2, 9–12, 15–21, 39, 49, 50, 61
Seiler, Walter, 43–45
Shellabear, William G., 444
Shopen, Timothy, 217, 313, 537, 539
Siewierska, Anna, 325
Sigurðsson, Halldór Ármann, 347
SIL International, 50, 61, 63, 71
Silverstein, Michael, 477
Silzer, Peter J., 50
Simons, Gary F., 3, 4, 9–14
Slomanson, Peter, 36, 347, 365
Smith, John Charles, 4, 5, 7, 49
Sneddon, James N., 16, 17, 20, 165, 171, 175, 210
Sommerfeldt, Karl-Ernst, 243
Song, Jae Jung, 480, 481
Stassen, Leon, 499, 500, 540, 558
Stebbins, Tonya, 31
Steinhauer, Hein, 6, 33, 126, 127, 156, 161, 490
Štekauer, Pavol, 181
Stoel, Ruben, 5, 33, 93, 126, 127, 145, 146, 151, 156, 161, 165, 210, 213, 214, 217, 347, 365, 443, 480, 490, 523
Suharno, Ignatius, 9, 48, 49
Sutri Narfafan, 65
Svartvik, Jan, 439

Tadmor, Uri, 3, 36, 50, 51, 63, 87, 94, 103, 124, 347, 365
Taylor, Paul M., 33, 93, 126, 127, 156, 161, 165, 490
Tebay, Neles, 2
Teeuw, Andries, 47
Teutscher, Henk J., 47
Thomason, Sarah G., 5
Thompson, Sandra A., 138, 544, 547
Timmer, Jaap, 43
Topping, Donald M., 347

van der Eng, Pierre, 43
van Durme, Karen, 243
van Hasselt, Frans J. F., 44, 45
van Klinken, Catharina Lumien, 239, 260
van Marle, Jaap, 121
van Minde, Don, 33, 34, 93, 126, 127, 137, 145, 146, 151, 156, 161, 165, 210, 214, 217, 239, 347, 364, 443, 480, 490, 523
van Oldenborgh, J., 43
van Staden, Miriam, 27–29, 31, 433
Van Valin, Robert D., 148, 243
van Velzen, Paul, 43, 48, 49, 490
Veldkamp, F., 47
Voorhoeve, Clemens L., 11, 33, 34, 93, 126, 127, 145, 146, 151, 156, 165, 348, 490

Walker, Roland W., 43, 48, 50
Wallace, Alfred Russel, 44
Warami, Hugo, 50
Weinreich, Uriel, 120
Wichmann, Arthur, 45
Wilkins, David P., 225
Wiltshire, Caroline, 187, 193, 195, 198
Winstedt, Richard O., 444
Wischer, Ilse, 321, 323
Wolff, John U., 5, 6
Woorden.org MMXI, 115

Yap, Foong Ha, 436, 444
Yembise, Yohana Susana, 9
Yoon, Kyung-Eun, 388

Zsiga, Elizabeth, 74
Zwanenburg, Wiecher, 121
Zwarts, Frans, 271
Zwicky, Arnold M., 524, 527
Zöller, Hugo, 47

Language index

Airoran, 12
Ambon Malay, 5–7, 11, 33–37, 43, 46, 48, 55, 59, 93, 126, 127, 137, 145, 146, 151, 156, 161, 165, 184, 210, 212–214, 216, 217, 239, 347, 364, 443, 480, 490, 523
Anus, 12, 15, 681
Arabic, 63, 99, 101, 103, 103[23], 118, 319
Austronesian, xviii, 1, 2, 4, 6, 7, 10, 12, 12[9], 13, 15, 21, 23, 23[20], 26, 27, 27[24], 28–31, 49, 55, 59, 187, 217, 217[1], 239, 323, 324, 340, 347, 433, 480, 681

Bagusa, 12–14, 682
bahasa Indonesia, 20
Balai Berkuak Malay, 36[33], 347, 365
Balinese, 3, 103, 347
Banda Malay, 33, 126, 127, 156, 161, 161[18], 165, 210, 217, 347, 490
Banjarese Malay, 6
Bazaar Malay, 5, 443, 456[7]
Beneraf, 12–14, 528, 682
Berik, 12–14, 682
Betaf, 12–14, 682
Biak, 2, 11, 39[38], 43, 46, 55, 59, 61, 297, 330, 512, 666, 684
Bird's Head Malay, 11
Bonggo, 12, 15, 54, 681

Chamic, 3, 7
Chamorro, 347
Chinese, 63, 99, 443, 444
colloquial Malay, 444
creole, 2, 4–7, 12[9]

Dabe, 12–14, 682
Dani, 47, 599
Dineor, 12–14, 682
Dobo Malay, 36[33], 347, 364, 365
Dutch, 43, 44, 44[47], 45–48, 63, 99, 101, 103, 103[23], 112, 240, 315[29], 318, 319

eastern Malay varieties, 1[2], 2, 4–7, 9, 20, 21, 26, 33–37, 47, 49, 51, 53, 93, 124, 126–128, 137, 145–147, 151, 156, 161, 165, 184, 187, 210, 212, 213, 216, 365, 365[11], 433[5], 443, 480, 490
Eastern-Malayo-Polynesian, 3

Fedan, 12, 14, 15, 681
Fijian, 347

German, 45, 47, 347, 515[2]
Germanic, 347

Hebrew, 319
High Malay, 4[4], 20, 20[15]

Icelandic, 347
Irian Indonesian, 48
Isirawa, xxiii, xxiv, 12–14, 18, 28, 53, 55, 59, 222, 429, 682
Itik, 12–14, 682

Javanese, 43, 103, 462[9], 680
Jofotek-Bromnya, 12–14, 682

Kaptiau, 12, 14, 15, 681
Kauwera, 12–14, 682
Keijar, 12–14, 682
Kupang Malay, 5, 33, 47, 126, 127, 156, 161, 210, 217, 347, 365, 490

Kwerba, 12–14, 28, 55, 59, 682
Kwesten, 12–14, 28, 682
Kwinsu, 12–14, 682

Larantuka Malay, 6, 33, 34, 93, 126, 127, 156, 161, 165, 210, 214, 217
Liki, 12, 14, 15, 681
lingua franca, 42, 47, 48, 51
low Malay, 4, 4[4]
Lower Mamberamo, 12

Madurese, 3
Malayo-Polynesian, 2
Malagasy, 347
Malay continuum, 1, 8, 10
Malay-based creoles, 2, 4
Malay-lexified pidgin, 5
Malayic, 1, 1[2], 2, 3, 126, 137, 145, 150, 151
Malayo-Polynesian, 433
Malayo-Polynesian, 2, 3, 208
Malayo-Sumbawan, 3
Manado Malay, 5, 11, 33–36, 36[33], 47, 93, 126, 127, 145, 146, 151, 156, 161, 165, 210, 213–215, 217, 347, 364, 365, 443, 480, 490, 523
Mander, 12–14, 682
Maori, 47, 347
Masimasi, 12, 14, 15, 681
Massep, 12–14, 682
Mawes, 13, 14, 682
Melanesian, 7, 49
Merauke Malay, 50[51]
Minangkabau, 347
Mo, 12, 15, 28, 681

North Papua Malay, 11
Northern Moluccan Malay, 348
Northern Norwegian, 347
Norwegian, 347

Oceanic, 23[20], 433[4], 480
old Malay, 6

Papuan languages, 12, 12[8], 13, 21, 27, 28, 31, 55, 59, 433, 681, 682
Persian, 63, 99, 462[9]
pidgin Malay, 48
Portuguese, 63, 99

regional Malay varieties, 5–7, 9, 217, 347, 348, 360, 364
Riau Indonesian, 6, 218, 444

Samarokena, 12–14, 28, 55, 59, 682
Samoan, 47
Sanskrit, 30, 63, 99, 318, 319, 456[7]
Sarmi, xvii, xxvii, 1, 2, 11, 12, 15, 16, 18, 21, 28, 39[38], 40, 45, 52–56, 58, 60, 62, 126, 223, 224, 239, 269, 270, 408, 410, 411, 550, 556, 646, 658, 671, 674–676, 678, 681, 682, 684
Sasak, 3
Sentani, xviii, 55, 59, 62, 228, 678
Serui Malay, 11, 48, 49[50]
Sobei, 12, 13, 15, 28, 681
South Coast Malay, 11
Sri Lanka Malay, 36[33], 347, 364, 365
Standard Indonesian, 9, 20[15], 34, 40, 46, 48, 50, 63, 99, 101, 116, 130, 137, 142, 147, 148, 153[16], 157, 161, 164–166, 171, 172, 173[22], 175, 210, 212, 306, 306[26], 523
Sundanese, 3
Sunum, 12, 14, 15, 681

Tagalog, 218, 347
Tahitian, 347
Tarpia, 12, 15, 681
Teop, 480
Ternate Malay, 5, 33, 33[31], 34–36, 43[46], 93, 126, 127, 145, 146, 151, 156, 161, 165, 184, 210, 214–216, 218, 239, 364, 443, 490, 523
Tidorese, 43, 48
Tok Pisin, 20
Tongan, 347
Toqabaqit, 340
Tor, 12, 28, 54, 55, 59, 330

Trengganu, 5, 6
Trimuris, 12–14, 682

Wakde, 510
Wares, 12–14, 682
Warlpiri, 347
western Malay varieties, 4, 9, 433[5]

Yarsun, 12, 14, 15, 681
Yoke, 12–14, 682

Subject index

accompaniment, 311, 312, 445, 452, 464, 517
additive plural interpretation, 360
adnominal possession, 26, 28, 166, 402[1], 437
adnominal possessive construction, 225[6], 352, 378, 422, 425, 443, 474, 478, 497, 499, 512
adversative, 173[22], 550–552
affinal kin, 239, 240, 242
affirmation, 261, 262, 265, 276, 277
affixation, xxv, 22, 36, 63, 65, 83, 96, 98, 99, 117, 119, 121, 123, 124, 126–128, 131, 132, 136, 142, 144–147, 152–155, 161, 163–165, 170, 171, 175, 176, 184, 187, 189, 210, 211, 217, 218, 243, 258, 260, 261, 266, 303, 321, 489, 565, 565[1]
aimlessness, 189, 198, 201, 208, 210
allomorphy, 74, 127, 146, 155
anteriority, 543, 546
apostrophe, 351, 352, 627[1]
apposition, 342, 401, 404, 423
assimilation, 7, 10, 74–76, 80, 102, 103, 118, 429
associative, 35, 195, 340, 348, 360–364, 366, 407, 409, 411, 425, 492, 517
associative plural, 35, 347, 360, 362–365
attenuation, 198, 201, 208, 210
attributive function, 247, 261, 403

basic word order, 21
benefaction, 311, 312, 445, 452, 464
bivalent, 15, 19, 21–23, 120, 126, 126[6], 127–136, 136[10], 137, 138, 145, 148, 151, 157, 159, 160, 172, 184, 218, 243, 244, 246, 248–258, 260, 261, 273, 321–324, 406, 426, 427, 441, 442, 450, 457, 459–461, 463, 467, 469, 481, 482, 484–486, 488–492, 495, 502, 507, 508, 519, 530, 546, 549, 551, 553–556, 560, 687, 688

causal, 387, 548–551
causative, 49, 191, 205, 207, 209, 243, 255, 257, 260, 467, 480–489, 507, 519
centralization, 74, 77, 78, 82–85
collectivity, 195, 195[2], 198, 199, 204, 205, 208, 209
collocation, 181, 182, 185
comitative, 338–341, 452, 453, 455, 456, 484, 493, 495, 504, 506–508, 517, 540, 541
comma intonation, 342, 348, 356, 357, 358[10], 388, 469
communicative event, 52, 124, 126, 127, 132, 136, 137, 142, 145, 146, 152, 155, 166, 171, 176
comparative clause, 501, 504
complementizer, 24–26, 30, 539, 555, 560
compound, 179–181, 407, 481
compounding, 30, 119, 178, 181, 184, 185, 407, 489
concessive, 552, 553
condition, 32, 80, 96, 98, 102, 123, 172, 314, 369, 383, 430, 480, 544, 548, 560, 583, 601, 610, 614
conditional, 544, 547, 548

conjunction, 27, 31, 32, 192, 298, 313, 322, 323, 327, 338–341, 366, 450, 454, 456, 459, 461, 463, 528, 537, 538, 538[1], 539–541, 543, 544, 544[4], 545, 546, 546[5], 547–553, 558, 560
conjunctive, 540
consonant inventory, 66, 96, 99, 101
consonant sequence, 102
consonant system, 21, 22, 65, 118
constituent combining, 1
continuation, 6, 187, 189, 194, 198, 199, 207, 209, 213

data transcription, 52
definite, 281, 302, 307, 325, 344, 347, 349, 353, 354, 360–362, 366, 383, 411, 415–418, 423, 425–427, 440, 471, 474, 496–500, 500[9], 512, 520
degree-marking, 25, 501, 502, 504, 507, 508
demographic information, 1, 37
demonstrative, 26, 165, 169, 170, 205[4], 222[5], 228, 280, 282, 283, 283[20], 335, 347, 348, 357, 358, 367–370, 374, 378–380, 388, 397, 398, 401, 403, 412, 414, 422, 434–436, 437[7], 458, 461, 509, 558
devoicing, 78
dialect situation, 1
direct speech, 348–351, 359, 367, 378, 538, 555[6]
discontinuous reciprocal, 493
disjunctive, 542, 543
double-object, 289, 327, 331, 334, 471–473, 475, 477–480, 482, 556

elision, 7, 23, 33, 36, 78–80, 82[9], 83, 103, 232, 285, 390, 427, 432, 450, 451, 467, 477–480, 498, 538
emotional involvement, 370–373, 377–379, 386, 395

existential clause, 426, 497–501, 512, 520

focused elicitation, 55, 60
fortition, 78, 79

gesamtbedeutung, 194, 207, 209, 212, 215
goal-oriented, 452, 460, 473, 540, 541
grading, 203, 243, 252, 254, 261, 502
grammaticality judgment, 55
grammaticalization, 427, 433, 444

hesitation marker, 316
historically derived, 63, 65, 83, 96, 98, 99, 101, 117, 261, 264, 266, 271, 303, 546[5], 565, 565[1]
hortative, 531

identity-marking, 508
identity-marking, 25, 454, 501, 506, 507
imitation, 198, 202, 205, 205[3], 207–210
immediacy, 198, 201, 208–210
imperative, 262, 529, 531, 534
inclusory plural interpretation, 361–363
indefinite, 206, 281, 288, 300, 306, 307, 310, 324, 360, 366, 411, 417–421, 423, 425–427, 471, 496, 497, 499–501, 511, 512, 520
indefiniteness, 195, 196, 206, 208–210, 212, 213, 281, 306, 406
intensification, 243, 251, 252, 261
intensifying function, 442
intensity, 187, 189, 194, 198, 200, 203, 205[4], 208, 210, 213, 273
interjection, 316, 525
interpretational shift, 35, 195, 197, 198, 202, 210, 214, 215, 261
interrogative, 24, 27, 80[8], 206, 222[5], 287–291, 293–301, 308, 313, 401, 413, 414, 422, 519, 524, 543, 557, 560

juxtaposition, 247, 250, 260, 261, 302, 511, 518, 537, 558

kinship term, 197, 349, 350, 354, 423

language use, 16, 48, 50
lengthening, xxiii, 78, 84, 117, 469, 558
lenition, 77, 78, 78[6], 79, 102
lexeme formation, 22, 187, 188, 210, 215
lexeme interpretation, 187, 210
lexical reciprocal, 495
lexical root, 80, 92, 96, 98, 99, 119
linguistic setting, 1, 10, 11
locational, 229, 232, 286, 368, 391, 394, 395, 399, 407, 409, 425, 437–439, 443, 498, 509, 514–516, 516[5], 517, 518
locative, 165, 169, 170, 205, 222[5], 224, 228, 284–286, 311, 335, 367, 390–392, 394, 395, 397–399, 401, 403, 412, 414, 420[6], 438[9], 443, 445–447, 450, 451, 465, 498, 514–516
lowering, 78, 377, 436

methodological approach, 52, 55
modification, 170, 195, 217, 219, 243, 247–250, 260, 261, 286, 327, 335, 336, 419, 445, 452, 498
monovalent, 22, 23, 26, 27, 126, 126[6], 127, 128, 131–133, 135, 136, 136[10], 137, 138, 145, 147, 148, 150, 157, 161, 163, 172, 184, 218, 222, 243, 246, 248–258, 260, 261, 268[16], 271, 273, 278, 321–324, 406, 441, 467–469, 481–486, 488–492, 495, 508, 530, 544, 552, 687, 688
morphology, 4, 6, 7, 21–23, 33, 48, 49, 119, 217, 218, 243, 261, 324

nasalization, 78, 80, 83
negation, 27, 243, 255, 255[13], 260–262, 265, 266, 276–278, 519, 520, 522, 523, 528
nominal base, 151, 166
nominal predicate clause, 383
non-native segment, 65, 101
noun, 1, 24–26, 28–32, 49, 82, 140, 145, 151, 163, 178, 180, 180[26], 181, 189, 190, 195, 197, 214, 217–219, 219[2], 220, 222, 225, 227–229, 231–233, 235, 239, 242, 243[11], 246–250, 261, 279–287, 290, 294, 302, 305, 308, 310, 311, 313, 321, 323–326, 332, 336, 338–344, 344[6], 345, 347–354, 354[9], 355–358, 358[10], 359–362, 364–366, 368, 370, 374, 378, 380, 384, 390, 391, 401, 402, 402[1], 403–405, 407, 409, 411–420, 422–428, 431, 432, 434, 435, 437, 437[7], 439[10], 443–445, 448, 451, 454, 461, 464, 471, 474, 475, 491, 497, 499, 505, 509, 511–513, 515, 539–544, 544[4], 554–556, 558–560, 733, 734
numeral, 26, 29, 82, 136, 137, 137[11], 139, 140, 142, 143, 143[13], 144, 155, 155[17], 161–164, 171, 171[21], 174–176, 181, 195, 222[5], 239, 272, 299, 300, 302, 304, 306, 336, 338, 341, 343, 344, 360, 363, 402[1], 403, 406, 417, 509, 513, 516[5], 518, 689, 690, 692, 693, 696, 697

obligation, 533
oppositive, 552, 553

palatalization, 80, 102, 103
Papuan contact zone, 433
periphrastic causative, 487
phonology, 1, 10, 21, 33, 48, 49, 56, 61, 63, 65, 65[1]
phonotactic, 87[14]
phrasal expression, 179, 180, 407
placeholder, 218, 288, 291, 293, 295, 296, 301, 370, 374, 388, 389, 437[7]
polar question, 524, 526
possessor noun phrase, 402[1], 431, 497, 499

possessum noun phrase, 434, 497, 499
posteriority-marking, 544
predicative function, 219, 243, 246
preposition, 225, 228, 232, 285, 286, 294, 323, 390, 391, 395, 420[6], 438[9], 445, 446, 449–451, 454–457, 459–462, 462[9], 463, 464, 479, 480, 493, 494, 501, 502, 504, 507, 514–518, 540, 541, 541[2], 546, 550
prepositional phrase, 24, 25, 231, 285, 294, 311, 352, 403, 438, 449, 457, 460, 463, 473, 484, 493, 495, 498, 501, 502, 504, 505, 507–509, 514
prepositional predicate clause, 498, 513
prohibitive, 189, 265, 534
pronoun, 35, 36[33], 49, 78[6], 195, 222[5], 278, 279, 287, 325–334, 337–339, 341, 342, 344–349, 351, 353, 354, 354[9], 355–357, 359, 361–366, 377, 379, 381, 382, 389, 401, 403, 411–414, 416, 420, 422–425, 429–435, 438, 443, 454, 461, 473–475, 490, 491, 505, 509, 556, 557, 647[9]
proper noun, 339, 349, 352, 355, 388, 428, 438, 475, 477
psychological use, 377
purposive, 538, 548

quantifier, 155, 155[17], 161–164, 171, 171[21], 174–176, 192, 195, 222[5], 287, 288, 299–301, 308, 310, 336, 337, 341, 343, 402, 402[1], 418, 420[6], 421, 440, 509, 513, 514, 518, 522, 692, 693, 696, 697

R-type oblique, 473, 474, 478, 479, 482
reciprocal clause, 490, 495
reciprocal construction, 257[14], 491, 491[7], 492
reciprocity marker, 33, 36, 37, 191, 205, 207, 257, 489, 490, 494, 495, 508
recorded text, 56, 669
recursive, 434, 436, 437
reduplication, 22, 34–36, 119, 187–190, 191[1], 192–195, 198–201, 203–205, 205[4], 207–216, 218, 243, 283[20], 306, 310, 489
relative time, 233, 238, 543
relativizer, 179, 387, 388, 414, 539, 554, 560
repetition, 138, 187, 189, 194–196, 198, 199, 207–209, 213, 215, 354
reported speech, 348, 350, 351, 359, 367
research location, 2, 52
resultative, 546, 548–550
rhetorical figures of speech, 348, 351

sequential, 544, 545
similarity, 8, 9, 25, 312, 314, 447, 449, 454, 461, 463, 501, 504, 506–508, 540, 554
simple reciprocal, 490
sociolinguistic profile, 1, 14, 46, 120, 124, 184
sociolinguistic study, 13
stress pattern, 80, 89, 99, 107, 117
summary conjunction, 327, 341, 366
syllable structure, 92–96, 110, 112, 117, 192, 193
syntactic causative, 486
syntactic reciprocal, 495

tag, 315[29], 527, 532
time unit, 233
transitive clause, 289
trivalent, 23, 24, 218, 243, 244, 246, 248–252, 255, 257, 257[14], 258, 260, 261, 324, 467, 471–475, 477–479, 481, 482, 488, 490, 491, 491[7], 507, 519, 530, 556
two-argument existential clause, 423, 425, 426, 497
typological profile, 1, 21, 28, 49

universal quantifier, 307[27], 514

valency, 128, 131, 243, 243[11], 244, 260, 261, 324, 467, 491–493, 495, 508
variation, 7, 49, 66, 71, 77, 217, 218, 268[16], 271, 313, 320, 321, 323, 417, 418, 429, 477, 540
verb, 7, 24–27, 29–32, 49, 50, 82, 137, 139, 150, 151, 163, 168, 181, 189, 191, 198, 201, 203, 205–207, 215, 217, 217[1], 222[5], 232, 242, 246–252, 254, 255, 255[13], 256, 257, 260–264, 266, 268–273, 275–278, 300, 321, 323, 348, 380, 383, 385, 389, 403, 405, 406, 426, 427, 433, 435, 441–444, 448, 450, 451, 455, 456, 460, 461, 462[9], 463, 467–469, 471[2], 473–475, 481–483, 486–488, 490, 495, 496, 498, 500, 500[9], 502, 504, 506, 508, 509, 532, 534, 539–542, 544–546, 546[5], 547, 549, 551–556, 560
verbal base, 22, 128, 136–138, 145, 147, 148, 161, 168, 184, 202, 491
verbal clause, 168, 289, 291, 427, 449, 468, 498
vividness, 370–373, 377, 379–381, 397, 399
vowel inventory, 63, 70, 71
vowel sequence, 90
vowel system, 65

word class membership, 218, 268[16], 271, 311, 313, 320–323, 450, 454, 456, 459–461, 463–465, 540, 541, 544–546, 549, 551–553, 560
word list, xviii, 47, 52, 55, 56, 62, 63, 65, 93, 96, 98, 99, 109, 119, 127[8]
word-formation, 22, 119, 120, 122, 143[13], 153[16], 177[25], 212