Topics in the Grammar of Binumarien
Tone and switch reference in a Kainantu language of Papua New Guinea

Renger van Dasselaar
s1392190
The cover picture shows the house of Aka and Sero, at their request. It was taken in November 2018, during the author’s linguistic fieldwork in Binumarien.
# Table of Contents

Acknowledgements............................................................................................................. v
List of abbreviations and glosses........................................................................................ vi

1 Introduction .......................................................................................................................... 1
  1.1 Background ..................................................................................................................... 1
     1.1.1 The Binumarien language ....................................................................................... 1
     1.1.2 The Binumarien community .................................................................................... 2
     1.1.3 Surrounding and related languages ......................................................................... 3
  1.2 Fieldwork in Binumarien............................................................................................... 4
  1.3 Database for this study ................................................................................................. 5
  1.4 Content overview .......................................................................................................... 6

2 Phonology .......................................................................................................................... 7
  2.1 Consonant inventory ..................................................................................................... 7
     2.1.1 The glottal stop ........................................................................................................ 8
     2.1.2 Complex consonants ............................................................................................... 9
  2.2 Vowel inventory ............................................................................................................ 11
     2.2.1 Vowel length .......................................................................................................... 12
     2.2.2 Diphthongs ............................................................................................................ 12
  2.3 Syllable structure .......................................................................................................... 13
  2.4 Whistled language ........................................................................................................ 16
  2.5 Conclusion ..................................................................................................................... 16

3 Tone in the Binumarien NP ............................................................................................... 17
  3.1 Nominal roots ................................................................................................................ 17
  3.2 Compounds .................................................................................................................. 22
  3.3 Adjective-noun combinations ....................................................................................... 22
  3.4 Tone on utterance level ............................................................................................... 23
     3.4.1 Obligatory high tone ............................................................................................... 23
     3.4.2 Downstep .............................................................................................................. 24
  3.5 Conclusion ..................................................................................................................... 25

4 Concise overview of Binumarien clause structure ......................................................... 26
  4.1 Parts of speech ............................................................................................................. 26
  4.2 The verb phrase .......................................................................................................... 26
# Table of Contents

4.3  The noun phrase .................................................................................. 27
    4.3.1  Nominal morphology .............................................................. 27
    4.3.2  Adjectives ............................................................................... 32
    4.3.3  Summary .............................................................................. 33
4.4  Possession ............................................................................................ 33
    4.4.1  Pronominal possessor ............................................................ 33
    4.4.2  Nominal possessor ................................................................. 35
    4.4.3  Predicative possessive constructions ..................................... 35
4.5  Conclusion ............................................................................................ 36

5  Binumarien switch reference marking ..................................................... 37
    5.1  Binumarien verbal morphology .................................................. 37
        5.1.1  Dependent and independent forms .................................... 37
        5.1.2  Personal pronouns and person affixes ............................. 38
        5.1.3  Verb stems and vowel changes ......................................... 42
        5.1.4  Tense, aspect and mood ................................................... 43
        5.1.5  Summary ........................................................................ 47
    5.2  Switch reference marking ................................................................. 47
        5.2.1  Same subject .................................................................... 48
        5.2.2  Different subject ............................................................... 49
        5.2.3  Sequentiality and simultaneousness .................................. 53
        5.2.4  Summary ........................................................................ 56
    5.3  Conclusion ...................................................................................... 57

6  Conclusions .............................................................................................. 58

7  References ................................................................................................ 60

Appendix 1: Book of birds .......................................................................... 61
Appendix 2: Frog Story .................................................................................. 80
Appendix 3: Binumarien dictionary ............................................................. 101
    Binumarien - English ..................................................................... 102
    Binumarien affixes ........................................................................ 117
    English - Binumarien .................................................................. 118
Acknowledgements

First of all, I would like to say a brief word in Tok Pisin to thank the Binumarien people, especially Keke, Aka and Sero. Mi laik givim bikpela tok tenkyu long Keke. Sapos em i no bin lainim mi tok ples Binumarien, mi no inap long wokim dispela tisis. Bikpela tok tenkyu I go tu long Aka na Sero na pikinini bilong tupela. Ol i bin lukautim mi gut, ol i toktok wantaim mi na givim mi gutpela kaikai. Mi laik tok tenkyu long ol femili bilong Aka na Sero; yupela bin sapotim Aka na Sero na was long mi. Mi amamas tru mi stap wantaim yupela. Tok tenkyu i go tu long Rume, Qafuana, Fasu, Raysen, Noko na Johan, Alex, Sau, na ol lain i bin helpim mi long sios i stap long Ubandeena. Bikpela tok tenkyu i go long olgeta Binumarien komyuniti, na long Namondi. Em i bin welkamim mi ‘on behalf of the community’. Mi stap gut tru na mi pilim sef wantaim yupela. Dúfi dúfi!

I thank my parents for their ongoing support during my journey to Papua New Guinea. I am grateful to Antje Kieviet for arranging contacts with SIL, and SIL-PNG and their members for the incredible opportunity they gave me. Many thanks to my fieldwork supervisor René van den Berg for bringing me into contact with the Binumarien people, his cultural advice, the linguistic discussions, and social support. I also thank Job and Margret Boone and their four children for their friendliness, hospitality and delicious meals. Thanks to Marian Klamer for the linguistic discussions and practical advice, to second reader Mily Crevels, and to my fellow students Anne Marije de Goeijen and Niels Dingemanse for their feedback.

I am grateful for the financial support provided by the University of Leiden. The fieldwork trip that allowed for the collection of data for this thesis was funded by the LISF (LUF International Study Fund), part of the Leiden University Fund; by the Uhlenbeck Scholarship Programme and the Trustee Funds of Leiden University. I collected part of the data during an internship at SIL-PNG. The internship was supported by the Leiden University Sustainable Humanities Internship Fund.
List of abbreviations and glosses

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALLA</td>
<td>allative</td>
</tr>
<tr>
<td>AUD</td>
<td>auditory (evidential)</td>
</tr>
<tr>
<td>AZR</td>
<td>adjectiviser</td>
</tr>
<tr>
<td>BEN</td>
<td>benefactive</td>
</tr>
<tr>
<td>COM1</td>
<td>comitative 1</td>
</tr>
<tr>
<td>COM2</td>
<td>comitative 2</td>
</tr>
<tr>
<td>COMP</td>
<td>completive</td>
</tr>
<tr>
<td>DEM</td>
<td>demonstrative</td>
</tr>
<tr>
<td>DEP</td>
<td>dependent verb</td>
</tr>
<tr>
<td>DS</td>
<td>different subject</td>
</tr>
<tr>
<td>DU</td>
<td>dual</td>
</tr>
<tr>
<td>DUR</td>
<td>durative</td>
</tr>
<tr>
<td>ELA</td>
<td>elative</td>
</tr>
<tr>
<td>EQ</td>
<td>equative</td>
</tr>
<tr>
<td>FPST</td>
<td>far past</td>
</tr>
<tr>
<td>FUT</td>
<td>future</td>
</tr>
<tr>
<td>H</td>
<td>high tone</td>
</tr>
<tr>
<td>IMM</td>
<td>immediacy</td>
</tr>
<tr>
<td>IMP</td>
<td>imperative</td>
</tr>
<tr>
<td>INAL</td>
<td>inalienable</td>
</tr>
<tr>
<td>IND</td>
<td>indicative</td>
</tr>
<tr>
<td>INSTR</td>
<td>instrumental</td>
</tr>
<tr>
<td>INT</td>
<td>intensifier</td>
</tr>
<tr>
<td>L</td>
<td>low tone</td>
</tr>
<tr>
<td>LOC</td>
<td>locative</td>
</tr>
<tr>
<td>n</td>
<td>noun</td>
</tr>
<tr>
<td>NEG</td>
<td>negation</td>
</tr>
<tr>
<td>NZR</td>
<td>nominaliser</td>
</tr>
<tr>
<td>nprop</td>
<td>proper noun</td>
</tr>
<tr>
<td>NPST</td>
<td>near past</td>
</tr>
<tr>
<td>NSBJ</td>
<td>non-subject</td>
</tr>
<tr>
<td>NSPC</td>
<td>non-specific</td>
</tr>
<tr>
<td>PL</td>
<td>plural</td>
</tr>
<tr>
<td>PROG</td>
<td>progressive</td>
</tr>
<tr>
<td>pron</td>
<td>pronoun</td>
</tr>
<tr>
<td>PROX</td>
<td>proximal</td>
</tr>
<tr>
<td>QUOT</td>
<td>quotative (evidential)</td>
</tr>
<tr>
<td>SBJ</td>
<td>subject</td>
</tr>
<tr>
<td>SEQ</td>
<td>sequential</td>
</tr>
<tr>
<td>SG</td>
<td>singular</td>
</tr>
<tr>
<td>SPC</td>
<td>specific</td>
</tr>
<tr>
<td>SS</td>
<td>same subject</td>
</tr>
<tr>
<td>STAT</td>
<td>stative</td>
</tr>
<tr>
<td>TEL</td>
<td>telic</td>
</tr>
<tr>
<td>v</td>
<td>verb</td>
</tr>
</tbody>
</table>
1 Introduction

This thesis aims to present the results of the linguistic fieldwork in Binumarien from September 2018 to January 2019. I describe basic parts of Binumarien phonology and morphology, with a focus on tone in noun phrases and switch reference marking on verbs.

Tone is an understudied topic in the languages of New Guinea. William Foley (1986, 64) writes on tone in Papuan languages: “the languages with the most elaborate accent systems, which, with more detailed analysis, might turn out to be true tone systems, are those of the Kainantu family in the Eastern Highlands”. With my analysis on tone in Binumarien, I aim to contribute to a better understanding of tone in Binumarien and in New Guinea as a whole. Due to the scope of this thesis, the tonal analysis is limited to the noun phrase.

Switch reference is an understudied topic of Binumarien grammar, as are most aspects of Binumarien verbal morphology. According to a survey by Roberts (1997, 113), switch reference is marked in many Papuan languages, and perhaps even all languages of the Kainantu-Goroka subgroup, to which Binumarien belongs. Roberts includes Binumarien in his survey, but states: “[i]t is probably the case that this language has SS/DS but it is unclear […] how it is marked”. The objective of the description of Binumarien switch reference morphology in this thesis is to add to the understanding of the Binumarien verb system and its place in the typology of switch reference marking in languages of the world.

The rest of this chapter provides information about the Binumarien community and language, my fieldwork and the database for this study. It concludes with an overview of the content of this thesis.

1.1 Background

1.1.1 The Binumarien language
The Binumarien language is spoken in a place of the same name, which covers several hamlets or villages in one valley. Binumarien is located in Kainantu District, near the easternmost corner of the Eastern Highlands Province of Papua New Guinea (McKaughan 1973). According to Eberhard, Simons, and Fennig (2019), the Binumarien language was spoken by 520 people in 2000. During my fieldwork in 2018, community members reported a number of 1,200 speakers.

In their own language, the Binumarien people refer to their place as Afaqinnaasa and to their language as Afaqinna ufa.¹ When Binumarien people speak Tok Pisin, they refer to themselves as ‘Binumarien’. According to Oatridge & Oatridge (1973a), the exonym ‘Binumarien’ was used in Australian administration and is derived from Pinumareena, the name of a former Binumarien village.

Oatridge and Oatridge published short articles on Binumarien phonology (1973a), noun affixes (1973b) and final verbs (1965). Bee (1966) wrote a grammar sketch of 27

¹ Ufa means ‘talk’ or ‘language’.
pages based on the findings of Oatridge and Oatridge. The sketch by Bee contains much of the information that was later published in the articles by Oatridge and Oatridge.

Map 1: The Country of Papua New Guinea; the coloured area is the Eastern Highlands Province. The arrow points to the place where Binumarien is spoken.

1.1.2 The Binumarien community

In 1973, McKaughan wrote that Binumarien was spoken by 117 people living in three small villages. Oatridge & Oatridge (1973a) stated that the Binumarien used to be more numerous according to the memory of older people, but tribal fighting and malaria greatly reduced their numbers. Oates (1992) writes that SIL members Desmond and Jenny Oatridge lived in the Binumarien community from 1959 to 1986. They were involved in the development of an orthography for Binumarien and worked on a translation of the New Testament, which was published in 1983. Nowadays, Binumarien is a thriving language. Within the community, people of all ages speak Binumarien. Binumarien is the dominant language in most households, during community gatherings and in church services. Children grow up with Binumarien as their primary language, often together with other languages spoken by family members. Many Binumarien people are fluent in one of the neighbouring languages, especially Gadsup, and in Tok Pisin, the lingua franca and a national language of Papua New Guinea.

Officially, English is the instruction language at school. Children from Binumarien, and some children from nearby villages Atuka and Abonamu, go to school at Ken, a place in the valley of Binumarien. In 2018, a new school building was built that offers classes up to grade eight.

The sweet potato is the main component of Binumarien diet. Yam, taro and bananas and several types of greens are other basic crops that they grow themselves. Binumarien
people regularly hunt in the forest for meat. Some keep pigs and chicken. The main cash crop of the Binumarien people is coffee.

The Binumarien people are protestant Christian. There are five churches in the village, each of a different denomination.

1.1.3 Surrounding and related languages

Binumarien is a Papuan language. The term ‘Papuan’ refers to languages spoken in the Pacific that are not part of the Austronesian family. Not all Papuan languages are genetically related to each other (Foley 1986). The Binumarien language is surrounded by the related language Gadsup in the south and west, and the Austronesian language Adzera in the north and east. The area where Kambaira is spoken borders Binumarien in the southeast, but this language is a nearly extinct (Eberhard, Simons, and Fennig 2019). Binumarien is most closely related to the Tairora languages, a language beyond the Gadsup area in the south (Oatridge and Oatridge 1973a).

Although the classification of many Papuan languages and language groups is yet to be determined, there is consensus on the view that Binumarien belongs to the Tairora branch of the Kainantu languages, members of the Trans New Guinea family (Wurm 1975; Xiao 1990; Hammarström 2012; Pawley and Hammarström 2018). Graph 1 presents the
genetic affiliation of Binumarien as it is classified in Eberhard, Simons and Fennig (2019). The dotted lines indicate that there are more languages in a subgroup that are not shown here. The graph includes Waffa, North Tairora and South Tairora, the languages that are most closely related to Binumarien. Usarufa is also included, a language of which an extensive tone analysis was done by Bee and Glasgow (1962) and Donohue (1997). In chapter 2.5, we will see that Binumarien shares some tonal features with Usarufa. In addition, the geographically neighbouring languages Gadsup and Kambaira are presented in the graph.

Graph 1: Genetic affiliation of Binumarien according to Eberhard, Simons, and Fennig (2019).

### 1.2 Fieldwork in Binumarien

I was in Papua New Guinea for approximately five months, from 17 August 2019 to 14 January 2019. For two months, I worked as an intern at the Language Services department at SIL (Summer Institute of Linguistics) in Ukarumpa. This is also the place where I stayed most of my time in Papua New Guinea. As an intern, I gathered data about the Binumarien language and organised literacy activities with the Binumarien community. I extended my fieldwork after the internship, in order to expand the dataset for this thesis. After I left Papua New Guinea, I had two video calls with speakers of Binumarien in March and June 2019 in order to run a last check on some of the data.

During my time in Papua New Guinea, I visited Binumarien six times. In total, I stayed in the village for two months. Binumarien is only 23 kilometres from Ukarumpa as the crow flies, but it is a five- or six-hours journey. I travelled from Ukarumpa to Samera

---

2 The analysis of Pawley and Hammarström (2018) only differs in the position of Kambaira, which they classify as a member of the Tairora subgroup.
Junction by PMV, the local form of public transport, with transfers in Kainantu and Akamore. It is a 2.5-hour hike from Samera to Binumarien. Usually, I would meet people from Binumarien at the market in Akamore, so we could hike to Binumarien together. I stayed with the family of Aka and Sero and their two daughters. Sero is the daughter of Keke, the village elder who worked with me. They had two houses in Kaubanis and reserved one for me during my stays. They provided me with food and company.

### 1.3 Database for this study

The result of the linguistic fieldwork I conducted is a corpus, consisting of recorded texts (audio and video), transcriptions and fieldwork notes. The texts that I refer to in this thesis are stored in the SIL-PNG Language & Culture Archives. The materials in this archive are listed in Table 1. The leftmost column lists the type of materials, followed by a column with the Binumarien speaker or author, the duration or number of pages, and date. The rightmost column present the codes that I use to refer to the materials.

Not all recordings that I made during fieldwork are in the Language & Culture Archives, due to the limited storage space. The recordings that are not in the archive are mainly recordings of elicitation sessions on tone and verbal morphology. They are stored on a private drive. I refer to them as ‘Fieldwork notes’ in example sentences.

<table>
<thead>
<tr>
<th>Type of material</th>
<th>Speaker or author</th>
<th>Length</th>
<th>Date</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>spoken every-day activities 1</td>
<td>Keke</td>
<td>01:36</td>
<td>05-Oct-2018</td>
<td>SEA1</td>
</tr>
<tr>
<td>spoken every-day activities 2</td>
<td>Keke</td>
<td>00:45</td>
<td>06-Oct-2018</td>
<td>SEA2</td>
</tr>
<tr>
<td>spoken every-day activities 3</td>
<td>Johan</td>
<td>01:16</td>
<td>08-Oct-2018</td>
<td>SEA3</td>
</tr>
<tr>
<td>spoken video description(^4)</td>
<td>Keke</td>
<td>04:10</td>
<td>23-Nov-2018</td>
<td>SVD</td>
</tr>
<tr>
<td>spoken Frog Story(^5)</td>
<td>Noko</td>
<td>07:55</td>
<td>14-Dec-2018</td>
<td>SFS</td>
</tr>
<tr>
<td>spoken elicited sentences 1</td>
<td>Johan</td>
<td>02:20</td>
<td>08-Sep-2018</td>
<td>SES1</td>
</tr>
<tr>
<td>spoken elicited sentences 2</td>
<td>Keke</td>
<td>02:08</td>
<td>29-Sep-2019</td>
<td>SES2</td>
</tr>
<tr>
<td>spoken elicited sentences 3</td>
<td>Raysen</td>
<td>09:38</td>
<td>01-Oct-2018</td>
<td>SES3</td>
</tr>
<tr>
<td>spoken elicited sentences 4</td>
<td>Keke</td>
<td>07:08</td>
<td>02-Oct-2018</td>
<td>SES4</td>
</tr>
<tr>
<td>spoken elicited sentences 5</td>
<td>Keke</td>
<td>26:42</td>
<td>06-Oct-2018</td>
<td>SES5</td>
</tr>
<tr>
<td>spoken elicited sentences 6</td>
<td>Johan</td>
<td>01:01:51</td>
<td>09-Oct-2018</td>
<td>SES6</td>
</tr>
<tr>
<td>spoken elicited sentences 7</td>
<td>Keke</td>
<td>01:03:10</td>
<td>30-Oct-2018</td>
<td>SES7</td>
</tr>
</tbody>
</table>

(Table continues on the next page.)

---

3 Kaubanis is a village in Binumarien. The name means ‘cow pen’ in Tok Pisin. Villagers reported that the Oatridge family kept cows here.


<table>
<thead>
<tr>
<th>religious songs</th>
<th>Keke</th>
<th>36:00</th>
<th>17-Nov-2018</th>
<th>RLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>written literacy booklet 1 (ufiniuqa akara ‘book of birds’) 6</td>
<td>Adoo</td>
<td>16 pages</td>
<td>1973</td>
<td>WLB1</td>
</tr>
<tr>
<td>written literacy booklet 2 (aandau akara ‘book of animals’)</td>
<td>Adoo</td>
<td>11 pages</td>
<td>1973</td>
<td>WLB2</td>
</tr>
<tr>
<td>written literacy booklet 3 (doodaani akara ‘book of insects’)</td>
<td>Taraarai</td>
<td>19 pages</td>
<td>1973</td>
<td>WLB3</td>
</tr>
<tr>
<td>written literacy booklet 4 (ufaana akara ‘book of traps’)</td>
<td>Taraarai</td>
<td>10 pages</td>
<td>1973</td>
<td>WLB4</td>
</tr>
</tbody>
</table>

Table 1: The Binumarien corpus used in this study.

1.4 Content overview

This chapter provided background information about the Binumarien community and their language. The Binumarien language is a Trans-New Guinea language of the Kainantu subgroup, spoken in the Eastern Highlands Province of Papua New Guinea. I conducted fieldwork in the area from September 2018 to January 2019, which resulted in the corpus that forms the basis for this thesis. For the main part, the texts of this corpus are stored in the SIL-PNG Language & Culture Archives.

Chapter 2 presents segments in the phonology of Binumarien and the structure of syllables. Tone in the Binumarien noun phrase is discussed in chapter 3, starting with the tone patterns of noun roots. This is followed by a description of tone in affixes and compounds, and a discussion on utterance-level prosody. Chapter 4 provides a concise overview of Binumarien clause structure, focusing on the noun phrase and possessive constructions. In chapter 5, the Binumarien switch reference system is discussed. It starts with a discussion of dependent and independent verb forms, followed by an overview of pronominal affixes and verbal morphology, same subject and different subject marking and expressing sequentiality and simultaneousness in dependent verbs. Chapter 6 provides conclusions and suggestions for further research.

The appendices contain two glossed texts and a dictionary. The first text is about birds that live in and around Binumarien, the second is an elicited retelling of the Frog Story. The dictionary in the third appendix contains a list of Binumarien headwords with information in English, and a list of Binumarien affixes. In addition, the appendix provides a list of English entries with a short Binumarien translation.

---

6 The literacy booklets were in the archive of the literacy department at SIL, Ukarumpa. Keke and I translated them to Tok Pisin. They were published together in a 64 page booklet. Oatridge, Des, and Jenny Oatridge eds. 1973. Oosana oosana aandau ufa. Ukarumpa: SIL Press.
2 Phonology

In this chapter, I discuss sequential segments of Binumarian. Tone, being one of the main topics of this thesis, is extensively discussed in chapter 2.5. In this chapter, tone is marked only if relevant in this chapter. Binumarian distinguishes between high tone, indicated with an acute accent, and low tone, which is left unmarked.

2.1 Consonant inventory

Binumarian has thirteen phonetic consonants, as presented in Table 2. The upper row displays the point of articulation, the manner of articulation is in the leftmost column. In this thesis, I use the orthographic conventions, which are rendered between angle brackets.

<table>
<thead>
<tr>
<th></th>
<th>Labial</th>
<th>Coronal</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plosives</strong> voiceless</td>
<td>p</td>
<td>t</td>
<td>k</td>
<td>? ⟨q⟩</td>
</tr>
<tr>
<td>voiced</td>
<td>b</td>
<td>d</td>
<td></td>
<td></td>
</tr>
<tr>
<td>prenasalised</td>
<td>mb ⟨mb⟩</td>
<td>n d ⟨nd⟩</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fricatives</strong></td>
<td>Γ ⟨f⟩</td>
<td>s</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nasals</strong> short</td>
<td>m</td>
<td>n</td>
<td></td>
<td></td>
</tr>
<tr>
<td>long</td>
<td>m: ⟨mm⟩</td>
<td>n: ⟨nn⟩</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Approximants</strong></td>
<td>w</td>
<td>j ⟨y⟩</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Liquids</strong></td>
<td></td>
<td>r ⟨r⟩</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Binumarian consonant segments.

Table 3 provides (near) minimal pairs for Binumarian consonants. I included minimal pairs for initial consonants whenever possible, but some consonants in my data occur only intervocalically in minimal pairs. Note that tone is phonemic in Binumarian, which means some of the examples are not exact minimal pairs.
| /t/ vs /d/ | átí | ‘family member’ | adí | ‘peel’ |
| /p/ vs /b/ | arapéépoona | ‘spider’ | sábééná | ‘type of tree’ |
| /k/ vs /q/ | koofi | ‘coffee’ | qoofi | ‘millipede’ |
| /m/ vs /n/ | ámbéesa | ‘tail’ | ámbéesa | ‘hornbill’ |
| /p/ vs /t/ | putaá | ‘rotten’ | fukaá | ‘tobacco’ |
| /t/ vs /s/ | túká | ‘jar for lime powder’ | suká | ‘sour’ |
| /∅_/ vs /q_/ | ikóó | ‘seed’ | qíkóó | ‘I don’t want to’ |
| /Vː/ vs /VʔV/ | duú | ‘type of yam’ | dúqú | ‘my name’ |

Table 3: (Near) minimal pairs for Binumarien consonants.

The labial fricative /ɸ/ can be realised both as a bilabial [ɸ] and a labiodental [f]. Variation occurs without conditions, even in one speaker. Coronal liquid /ɾ/ may be realised as an alveolar or retroflex tap.

The voiced stops /b/ and /d/ are most likely realised as implosives. Oatridge & Oatridge (1973a) analyse these sounds as preglottalised voiceless stops /p/ and /t/, presumably because the glottis is indeed closed when implosive stops are realised (Greenberg 1970). An argument against analysing preglottalised stops here, is that /b/ and /d/ can occur word-initially; analysing a complex consonant at the beginning of a word is questionable in a language that has no other word-initial complex consonants. In addition, Oatridge & Oatridge seem to represent the voiced quality to /b/ and /d/ in their orthography, rendering them as ⟨b⟩ and ⟨d⟩. My corpus lacks exact minimal pairs for /b/ versus /p/ and /d/ versus /t/, probably because /b/ and /d/ do not occur very often. /b/ hardly occurs word-initially in my corpus, except in loanwords and the exclamatory interjection boo.

Liquids /j/ and /w/ do not occur frequently. Oatridge & Oatridge (1973a) state that /w/ mainly occurs in proper names, which corresponds to my findings. The male proper name Qawaya serves as an example. /j/ also occurs in question words like yafee ‘who’, yaifee ‘where’ and yairee ‘when’.

Voiced velar stop /g/ only occurs in loanwords like sugura ‘school’. The prenasalised velar stop /ŋg/ is also restricted to loanwords, like sanguma ‘corn’.

2.1.1 The glottal stop

The glottal stop /ʔ/ is not always realised, especially in fast speech. Oatridge & Oatridge (1973a) stated that younger speakers tended to omit a glottal stop between two long vowels; for example, /faaqóótáná/ ‘type of nettle’ was pronounced [faaóótáná]. However, the glottal stop still constitutes a phonemic segment in present-day Binumarien. Word-initially, /ʔ/ is visible because it prevents final vowel deletion of the previous word. This...
is illustrated in (1). In fast speech, the last vowel of maana ‘this’ is elided when followed by a word that starts with a vowel, like ufai in (1a). The last vowel of maana is maintained when followed by a word starting with /ʔ/, like qusa ‘short’ (1b). The glottal stop is between brackets because it is not always clearly pronounced. The fact that the last /a/ of maana is maintained, demonstrates that qusa starts with a glottal stop.

(1) a. Maana úfáí. > [maːn úfáí]
   this wind
   ‘This is wind.’
   Fieldwork notes

   b. Maana qúsá. > [maːn (ʔ)úsá]
   this short
   ‘This is short.’
   Fieldwork notes

Intervocally, /q/ is often not realised, but observable when speakers are asked to whistle the tone pattern of a word. For example, /áí/ in /áíká/ ‘stick’ (2a) is whistled with a long high tone. This contrasts with /káqí/ in /káqíkaa/ ‘small’, which is whistled with two short high tones. Correspondingly, /ruá/ in /ruándí/ ‘type of frog’ is whistled with a rising tone (2b), whereas /uqá/ ‘string bag’ is whistled as a short level low tone, followed by a short level high tone (2c).

\[
\begin{array}{|c|c|}
\hline
\text{Spoken word} & \text{Whistled tone} \\
\hline
\text{áíká} & \text{H:-H} \\
\text{stick} & \\
\hline
\text{káqíkaa} & \text{H-H-L} \\
\text{'small'} & \\
\hline
\text{ruándí} & \text{R-H} \\
\text{'type of frog'} & \\
\hline
\text{uqá} & \text{L-H} \\
\text{'string bag'} & \\
\hline
\end{array}
\]

A typical feature of the glottal stop is labialisation. /q/ is labialised when preceded by /u/ and followed by /a/. Thus, /uqá/ ‘string bag’ is pronounced [uʔwá], /kúáráuqa/ ‘pigs’ is pronounced [kúáráʔwá]. Oatridge and Oatridge state /k/ is also labialised between /u/ and /a/, but my data do not support this. /fúka/ ‘new’ is pronounced [fúka], /musúká/ is [musúká], without a labialised /k/.

2.1.2 Complex consonants

Complex consonants are an understudied topic in Binumarien phonology. I do not aim to provide a comprehensive analysis of Binumarien complex consonants in this section, but merely discuss some features as starting points for further research.
2.1.2.1 Prenasalised stops

Binumarien has a labial and an alveolar prenasalised stop, /m̥b/ and /n̥d/. They constitute phonetic identities of their own, but also occur as allophones of /f/ and /q/. First, Table 4 provides near minimal pairs to show that the prenasalised stops are phonemic segments in Binumarien.

| /f/ vs /m̥b/ | ufá ‘talk’ | súmba type of sweet potato |
| /q/ vs /n̥d/ | áfũqákí ‘in the garden’ | áfũndáná ‘thigh’ |

Table 4: (Near) minimal pairs for Binumarien prenasalised stops.

Second, examples (3) and (4) serve to illustrate that /m̥b/ and /n̥d/ also appear as allophones of /f/ and /q/ respectively. /finoo/ ‘he went’ is realised as [m̥binoː] in fast speech (3).

(3)  
Maqoo niniiseenoo mbinoo.  
here nini-i-sa-i-noo fu-i-noo  
here go.around.DEF-DUR-SEQ-SS-3SG go-IND-3SG  
‘He walked here for a while and then he went away.’ Fieldwork notes

Similarly, /q/ in niqafamaseenoo ‘he saw them’ is realised as /nd/ in fast speech (4).

(4)  
... niqafaamaseenoo ...  
ni-qafa-ma-sa-i-noo  
2/3PL.0-see-COMP-SEQ-SS-3SG  
‘... he saw them ...’ SFS

More research could show in what contexts /m̥b/ and /n̥d/ are realised as /f/ and /q/.

2.1.2.2 Preglottalised stops

As discussed in section 2.1, Oatridge & Oatridge (1973a) analyse preglottalised stops /q̥p/ and /q̥t/ where I suggest voiced stops /b/ and /d/, which are probably realised as implosives. It is possible however, to analyse both preglottalised stops and implosives. I have several instances where a voiceless /p/ or /t/ seems to be preceded by a glottal stop, e.g. [kuʔpɛː] ‘ant’ and [fəraməʔtanə] ‘type of frog’. Moreover, in some cases nasals also seem to be preglottalised, as in [máːmândũnã] ‘type of frog’ and [ánãːnaː] ‘type of greens’. Preglottalised stops are rare in my corpus; a larger dataset could provide more insights in their occurrence.

2.1.2.3 Long consonants

Oatridge & Oatridge state that /p/, /t/ and /k/ are lengthened intervocally. This would mean that long plosives are allophones of their short counterparts. In contrast,
length in nasals is phonemic in the analysis of Oatridge & Oatridge. There are two possible analyses: a) the length of stops is phonemic. However, I have no minimal pairs for any lengthened stop, including nasals. b) Short stops are lengthened under certain conditions. But in my corpus, I could not find conditions for lengthening, like influence from tone or heavy syllables.

To conclude, Binumarien preglottalised stops and long consonants require more research. Perhaps a larger Binumarien dataset combined with knowledge from affiliated languages could provide minimal pairs or conditions for Binumarien complex consonants.

2.2 Vowel inventory

There are eight phonemic vowels in Binumarien, as shown in Table 5.

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close</td>
<td>i</td>
<td>u</td>
<td></td>
</tr>
<tr>
<td></td>
<td>iː ⟨ii⟩</td>
<td>u: ⟨uu⟩</td>
<td></td>
</tr>
<tr>
<td>Mid</td>
<td>e: ⟨ee⟩</td>
<td>o: ⟨oo⟩</td>
<td></td>
</tr>
<tr>
<td>Open</td>
<td></td>
<td>a: ⟨aa⟩</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Binumarien vowel segments.

Table 6 provides (near) minimal pairs for vowel segments.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>/i/ vs /a/</td>
<td>áiká ‘stick’</td>
</tr>
<tr>
<td>/i/ vs /u/</td>
<td>áikí ‘nose’</td>
</tr>
</tbody>
</table>

(Table continues on the next page.)

---

7 Length of plosives is not represented in Binumarien orthography, as they were considered allophones of the short variants by Oatridge & Oatridge (1973a). Long nasals are represented with double graphemes: ⟨mm⟩ and ⟨nn⟩.

8 Foley (1986) discusses the phonology of Fore, Usarufa and Gadsup, three languages related to Binumarien. These languages have a complex morphophonemic system containing complex consonants, including preglottalised stops. The Fore language has words with a final glottal stop that is not realised in isolation, because words must end in vowels. In context, the glottal stop is realised on the initial segment of the next word. Foley gives the example of teitē ma-we ‘it is red soil’ and kasā: ʔma-we ‘it is new soil’. The glottal stop in ʔma-we is the final segment of kasā:. Binumarien may have a similar system, c.f. aaki arirafa ‘yellow-coloured’ and dundu qarirafa ‘black-coloured’. The /q/ in qarirafa might be the final segment of dundu.
2.2.1 Vowel length

The vowels /i/, /a/ and /u/ have long phonemic counterparts. The vowels /eː/ and /oː/ are always long.

With some speakers, I had difficulty hearing the difference between /iː/ versus /eː/ and /uː/ versus /oː/. Furthermore, the distribution of long /eː/ and /uː/ is almost complementary with the distribution of short /i/ and /u/ respectively. The only root with long /iː/ in my data is akiiqa 'head'; the only root with /uː/ is duu 'type of yam'. Long /iː/ also occurs across morpheme boundaries, for example when durative suffix -i is attached to the verb mari 'to be'. However, there are two reasons to assume a phonetic distinction between /iː/ versus /eː/ and /uː/ versus /oː/: a) some speakers make a clear distinction, and b) I have near minimal pairs for both, as provided in Table 6.

In some instances, a long vowel is shortened in my corpus. For example, ufaana 'trap' becomes ufana when it serves as the semantic head of a compound (e.g. fuseenufana 'cassowary trap'; kuarufana 'pig trap'). More research is needed in order to find out if the shortening of long vowels occurs more often, in compounds or elsewhere.

2.2.2 Diphthongs

Four diphthongs occur within morpheme boundaries: /ai/, /ia/, /au/ and /ua/. Table 7 provides (near) minimal pairs.

| /a/ vs /u/ | táká     | 'type of frog' | tüká    | 'jar for lime powder' |
| /a/ vs /aa/ | akú      | 'dessert banana' | aakú    | 'rain' |
| /i/ vs /ii/ | akiiqa   | 'head' | ákiiqátá | 'pith' |
| /u/ vs /uu/ | duú      | 'type of yam' | dúquí    | 'my name' |
| /ii/ vs /ee/ | máríqa⁹  | 'I was' | máréeqa  | 'I took' |
| /aa/ vs /ee/ | ájáaka   | 'fireplace' | ájéeka  | 'nit' |
| /aa/ vs /oo/ | úqáná    | 'type of bird' | úqóoná  | 'moon' |
| /ee/ vs /oo/ | ookráá   | 'type of plant' | eekrárá | 'white' |
| /uu/ vs /oo/ | dóó      | 'COMP' | duú     | 'type of yam' |

Table 6: (Near) minimal pairs for Binumarien vowels.

⁹ Oatridge and Oatridge state the tone of mariiqa per mora is H-H-L-L, but it is rather realised as H-H-M-L. The mid tone is presumably a downstepped high tone. Note however that both tone in verbs and downstep are unstudied topics in Binumarien grammar.
Table 7: (Near) minimal pairs for Binumarien diphthongs.

<table>
<thead>
<tr>
<th>/ee/ vs /ai/</th>
<th>éékárá</th>
<th>‘white’</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ee/ vs /ía/</td>
<td>oosoaséena</td>
<td>‘type of tree’</td>
</tr>
<tr>
<td>/oo/ vs /au/</td>
<td>ufísóóná</td>
<td>‘type of plant’</td>
</tr>
<tr>
<td>/oo/ vs /ua/</td>
<td>ákóóná</td>
<td>‘father’</td>
</tr>
<tr>
<td></td>
<td>kúárá</td>
<td>‘pig’</td>
</tr>
</tbody>
</table>

The difference between a diphthong versus two separate vowels divided over two syllables is observable when speakers are asked to whistle the tone pattern of a word. If two vowels are whistled with two separate tones, they belong to two separate syllables. If two vowels are whistled as one tone, they form a diphthong. This is demonstrated in (5).

/uuá/ in loanword /winduwáqá/ ‘window’ is whistled as a short low tone followed by a separate short high tone (5a). /úá/ in /ruádí/ ‘type of frog’ is whistled as a single rising tone (5b).

(5) a. winduwáqá  >  L-L-H-H  
   ‘window’

   b. ruándí  >  R-H  
   ‘type of frog’

Correspondingly, the diphthongs in Table 7 are whistled in a single, uninterrupted tone. Sianu ‘type of egg’ is whistled with a long low tone for /sia/. Faiqi ‘man’ is whistled with a rising tone for /fai/. Kuará ‘pig’ is whistled with a long high tone for /kúá/. Asausi is whistled with a long low tone for /sau/.

There are rare instances in my corpus where a short and a long vowel or diphthong follow each other directly, like fioosa ‘wallaby’ and auqaauqaana ‘type of water strider’. A larger dataset and more information about possible morpheme boundaries within these words could offer additional insights on Binumarien diphthongs.

2.3 Syllable structure

A Binumarien syllable contains one mora in case of a short vowel (light syllable), or two moras in case of a long vowel or diphthong (heavy syllable). Consonants only appear in the onset; in addition, complex consonants only occur intervocally. In this analysis, both long vowels and diphthongs are represented by a VV structure, because I found no difference in their occurrence. Complex consonants are represented by one C (cf. oondanda ‘rainbow’ is regarded as VVCVCV). Although the status of preglottalised and

\[10 \text{In the rest of this thesis, I will render } /\text{winduwáqá}/ \text{ as } \text{uinduaqá}, \text{ in accordance with Binumarien orthography.} \]
long consonants is unclear, they seem to behave in the same way as single consonants in syllable structures.

Nouns may be overrepresented in my corpus, since my description of tone in the NP required a dataset with many nouns. The verbs in my corpus tend to have a different structure. Most noun roots are trisyllabic; verb roots more often consist of two syllables. Furthermore, noun roots more frequently contain at least one long vowel, whereas many verb roots have only short vowels: CV, VCV and CVVCV are structures that regularly occur among frequent verbs. Examples are qi-‘say’, iri-‘hear’ and qafa-‘see’. Other structures are possible as well, like VVCV or VCVCVC in naana-‘laugh’ and ateeka-‘cut’.

Words with three or more subsequent V’s, like fioosa ‘wallaby’ and iuaoona ‘type of bird’ were not considered, because there are too few of these words to make an analysis.

2.3.1.1 Monosyllabic words

I have no examples of a one-moraic word, i.e. consisting of a V or a CV syllable. Oo ‘mouth’ is the only word that has a VV structure. My dataset contains three words with a CVV structure: duu ‘type of yam’, doo ‘COMPLETIVE’ and the exclamatory interjection boo.

<table>
<thead>
<tr>
<th>Structure</th>
<th>Occurrence</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>VV</td>
<td>one</td>
<td>oo ‘mouth’</td>
</tr>
<tr>
<td>CV</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>CVV</td>
<td>infrequent</td>
<td>duu ‘type of yam’</td>
</tr>
</tbody>
</table>

Table 8: Monosyllabic structures in Binumarien.

2.3.1.2 Disyllabic words

Few words in my dataset have a VCV structure, like aku ‘dessert banana’ and adi ‘peel’. I have one example of a VCVV word: ufai ‘wind’. VVCVV, CVCVV and CVVCVV words are a bit more common, like aino ‘fat’ and aanai ‘horn’; kamaa ‘sweet potato’ and fasau ‘star; qoomaa ‘torch’ and taafee ‘type of taro’. Disyllabic structures that frequently occur are VVCV, CVCV, CVVCV, as in aaku ‘rain’ and ooni ‘stone’; duru ‘bow’ and maqa ‘ground’; kooqi ‘door’ and feefa ‘arrow’.

Two general patterns are observable here in the syllable structure. First, words consisting of heavy syllables only (VVCVV and CVVCVV) are rare. Secondly, the last syllable tends to be light: VCVV and CVVCV occur less often than VCV and CVVCV structures (although CVVCV is not uncommon).

---

11 Note that verb stems do not occur independently and always end in a short vowel.
Table 9: Disyllabic structures.

<table>
<thead>
<tr>
<th>Structure</th>
<th>Occurrence</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCV</td>
<td>infrequent</td>
<td>adi ‘peel’</td>
</tr>
<tr>
<td>VVCV</td>
<td>frequent</td>
<td>ooni ‘stone’</td>
</tr>
<tr>
<td>VCVV</td>
<td>one</td>
<td>ufai ‘wind’</td>
</tr>
<tr>
<td>VVCVV</td>
<td>infrequent</td>
<td>aanai ‘horn’</td>
</tr>
<tr>
<td>CVCV</td>
<td>frequent</td>
<td>duru ‘bow’</td>
</tr>
<tr>
<td>CVCCV</td>
<td>frequent</td>
<td>feefa ‘arrow’</td>
</tr>
<tr>
<td>CVCVV</td>
<td>frequent</td>
<td>fasau ‘star’</td>
</tr>
<tr>
<td>CVCCVV</td>
<td>infrequent</td>
<td>qoomaa ‘torch’</td>
</tr>
</tbody>
</table>

2.3.1.3 Trisyllabic words

Most of the underived nouns in my corpus are trisyllabic. There are many possibilities: words can have only short vowels, like CVCVCV nunuka ‘sand’. Combinations of long and short vowels also occur often, like VCVCVV amanee ‘leaf’ and VCVVCVV anaasee ‘woman’.

Three patterns can be observed. As we saw in disyllabic words, words with only heavy syllables are rare. There is one trisyllabic word with only long vowels CVVCVCV: naareepaa ‘type of casuarina tree’. Secondly, although words with a final heavy syllable are not uncommon, they occur less often than words with a light final syllable. Thirdly, if a word has multiple heavy syllables, they tend to occur together. Taatuqe ‘red’ is the only word in which a short syllable separates two heavy syllables.

Table 10: Trisyllabic structures.

<table>
<thead>
<tr>
<th>Structure</th>
<th>Occurrence</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCVCV</td>
<td>frequent</td>
<td>asumu ‘seedling’</td>
</tr>
<tr>
<td>VVCCVCV</td>
<td>frequent</td>
<td>aakuka ‘mosquito’</td>
</tr>
<tr>
<td>VCVCNV</td>
<td>frequent</td>
<td>isaafa ‘ginger’</td>
</tr>
<tr>
<td>VVCVV</td>
<td>frequent</td>
<td>amane ‘leaf’</td>
</tr>
<tr>
<td>VCVVCV</td>
<td>frequent</td>
<td>ooqoosa ‘cockroach’</td>
</tr>
<tr>
<td>VCVVCVV</td>
<td>frequent</td>
<td>anaasee ‘woman’</td>
</tr>
<tr>
<td>VCVVCV</td>
<td>none</td>
<td>-</td>
</tr>
<tr>
<td>VCVVCVV</td>
<td>none</td>
<td>-</td>
</tr>
<tr>
<td>CVCVCV</td>
<td>frequent</td>
<td>qumura ‘rat’</td>
</tr>
<tr>
<td>CVVCVCV</td>
<td>frequent</td>
<td>fairaka ‘type of tree’</td>
</tr>
<tr>
<td>CVCVCNV</td>
<td>frequent</td>
<td>manaaqa ‘girl’</td>
</tr>
<tr>
<td>CVCVVCV</td>
<td>none</td>
<td>-</td>
</tr>
<tr>
<td>CVVCVCVV</td>
<td>frequent</td>
<td>kaakaana ‘flying fox’</td>
</tr>
<tr>
<td>CVVCVVCV</td>
<td>none</td>
<td>-</td>
</tr>
<tr>
<td>CVVCVCVV</td>
<td>one</td>
<td>taatuqe ‘red’</td>
</tr>
<tr>
<td>CVVCVVCVV</td>
<td>one</td>
<td>naareepaa ‘type of tree’</td>
</tr>
</tbody>
</table>
2.3.1.4 Words with more than three syllables

Words with more than three syllables are not uncommon, but there are too many possible combinations to make an analysis based on my corpus. Moreover, many of these words are names for plants and animals or proper names. The length of the words suggests some may be morphologically complex. Furthermore, there are onomatopoeia among the (animal) names, like kookooraana ‘chicken’ and feetutareena ‘type of bird’ (the sound that a rooster makes is kookooraaqoo; the sound of the feetutareena is described as feetutaree).

2.4 Whistled language

Though beyond the scope of this project, it is interesting to mention that Binumarien speakers use whistled language, which they call fooka. Cowan (1976) reports that Binumarien whistled language exists, but it remains unstudied. I found that only men and small children are socially accepted to whistle. Whistled speech is mainly used to communicate short commands over a medium distance. For example, someone can whistle ‘fetch the water’ to another person outside the house. The whistling pitch is based on the pitch in spoken language.

2.5 Conclusion

Binumarien has fifteen consonantal segments. Voiceless plosives are /p/, /t/, /k/, /ʔ/. The first two have voiced phonetic counterparts /b/ and /d/, probably realised as implosives. There are two voiceless fricatives /ɸ/ and /s/, two nasals /n/ and /m/, two approximants /w/ and /j/ and a liquid /ɾ/. Complex consonants include prenasalised /ᵐb/ and /ⁿd/. In addition, some stops may be preglottalised /ʷp/, /ʷt/, /ʷm/, /ʷn/ and all stops may be long in certain words or contexts; more research may show whether these features are phonemic.

As vowel length is phonemic in Binumarien, there are eight vowel segments: /i/, /iː/, /eː/, /a/, /aː/, /oː/, /u/, /uː/. Diphthongs are /ai/, /ia/, /au/ and /ua/.

Syllables can be light (with a short vowel) or heavy (with a long vowel or diphthong). Consonants only occur in the onset; in addition, complex consonants only occur intervocally. Words with only heavy syllables are rare, heavy syllables tend to be juxtaposed and the last syllable is light in most cases. Most Binumarien noun roots are trisyllabic, whereas verb stems often have one or two syllables; heavy syllables occur more often in nouns than in verbs.
3 Tone in the Binumarien NP

Binumarien uses pitch to make lexical distinctions. In this chapter, I aim to describe tone in the Binumarien NP. Due to the limited scope of this project, I only discuss tonal patterns in the NP. The complex verb morphology of Binumarien requires more research in order to start a thorough analysis of tonal patterns in verbs.

In accordance with the property-driven approach to tonal typology proposed by Hyman (2006, 2009), I describe the Binumarien tone system in terms of four parameters: obligatoriness, culminativity, metricality and privativity. The mora is the tone bearing unit in Binumarien. High tone moras contrast with low tone moras. Every lexical item has at least and at most one high tone, so the system is obligatory and culminative. The Binumarien system lacks metricality: to my knowledge, there is no hierarchy of strong and weak syllables. The rendering of the tonal patterns in this chapter implies a binary system, as H contrasts with L. However, I would argue that Binumarien distinguishes between high tone moras and toneless moras, which means the system is not binary, but privative. Arguments in favour of an analysis with toneless moras in Binumarien are a) the tone of nominal affixes cannot be determined, since they always receive tone from the root pattern; b) high tone is more prominent than low tone, because it is obligatory on both word and utterance level. For reasons of readability, toneless moras are rendered as they are realised: L.

3.1 Nominal roots

Each mora carries level tone in Binumarien. A short vowel represents one mora, a long vowel or a diphthong represents two moras. Consonants, including nasals, glides and liquids, are non-moraic. In this thesis, diacritics indicate phonemic tone on the level of the mora. Non-marked vowels are low, vowels with an acute accent /´/ are high. Minimal pairs are provided in (6) to demonstrate that tone is phonemic in Binumarien.

---

12 I suggest that the mora is the tone bearing unit, because level tone is realised on the mora. However, the word can also be considered a tone bearing unit, because it carries the word-level tonal pattern.
13 Note however that the high tone in the word-level pattern can be realised on multiple moras.
14 There may be an exception: one speaker stated adaka ‘middle’ has a rising contour on the second mora: adákó. However, on a second check the speaker reported a low level tone: adakú.
15 A long vowel or diphthong that carries a LH sequence is realised as a rising tone. A long vowel or diphthong that carries a HL sequence is realised as a falling contour.
16 Binumarien orthography differs from the phonetic system in the rendering of tone. Members of the Binumarien community reported that tone used to be indicated with diacritics on all words in the first edition of the Binumarien Bible, but in the latest edition tone is marked only on minimal pairs.
Each Binumarien word has a tonal pattern which assigns level tone to the moras. The pattern is rendered in capital letters. ’H’ indicates high tone and ‘L’ indicates no tone, which is realised as low tone by default. There are four tonal patterns in Binumarien: H, LH, HL, and LHL. An example of each pattern is provided in (7). The capital letters show the pitch in the pattern on a word level, which is connected to the mora ‘μ’. The acute accents on the words indicate the realisation of high tone.

Most Binumarien words have more moras than level tone sequences. For example, a word with a LH pattern does not necessarily have one low and one high mora. Example (8) illustrates how tonal patterns can be realised. (8a) shows two words with tonal pattern LH. In the bimoraic word pakí ‘gum’, the first mora is low, the second mora is high. Peepeennaana ‘butterfly’ has seven moras, of which the first two are low, and the last five are high.

The assignment of tone from the pattern to the moras is not predictable in Binumarien. For example, eeqá, with two low moras followed by a high mora, means ‘banana’. In contrast, eéqá, with one low mora followed by two high moras, is the first person reflexive pronoun ‘I myself’. This minimal pair shows that the realisation of tone from the tonal pattern to the mora is lexical. The point where the pitch changes from one level to another is unpredictable.

For the rest of this section, it is helpful to mark the point where the pitch changes with a ‘diacritic accent’, in correspondence with Hyman (2009). In order to avoid ambiguity with the acute accent on high moras, this accent is rendered as an interpunct ‘·’. Donohue (1997) uses the term ‘accent’ for the point where the pitch changes in the Usarufa tone system. Hyman further defines Donohue’s ‘accent’ as ‘diacritic accent’, in order to avoid
ambiguity with the term ‘stress-accent’. This is also the term I prefer. In Hyman’s analysis, the term ‘accent’ only refers to a diacritic mark that indicates the mapping of tone; it does not mark prominence of a mora or syllable, as stress-accent does (Hyman 2006). Binumarien moras do not have a hierarchy of prominence either. The diacritic accent only marks a switch in tonal level. As I will demonstrate, the diacritic accent can occur two times, once, or not at all; in contrast to accent in stress-accent languages, where words have one and only one accented (metrically most prominent) syllable.

Example (9) illustrates the diacritic accent in the word *kooqi* ‘door’, directly after the second mora.

(9)

```
L   H
\   
\μμ- μ
koo·qi
‘door’
```

Words with tonal contour H have no change in tone level, so there is no diacritic accent, as illustrated with *amanee* ‘leaf’ in (10a). Words with contour LH or HL, like *fuseena* ‘cassowary’ (10b) and *aneesa* ‘hornbill’ (10c), have one change in tonal level, so there is one diacritic accent. Words like *noodaana* ‘fish’ (10d) with contour LHL have two diacritic accents: one for the change from low to high and one for the change from high to low.

(10)

```
a. H
\μ \μ \μ
\μ\μ\μ
\ámánéé
‘leaf’

b. L   H
\μ\μ\μ\μ
\fu·sééná
‘cassowary’

c. H   L
\μ \μ\μ \μ\μ
\áné-esa
‘hornbill’

d. L   H   L
\μ\μ\μ\μ\μ
\noo·dáá·na
‘fish’
```

Words with tonal pattern H have only one possible realisation: all moras are high. For the other tonal patterns, there are multiple possibilities. Table 11 presents all possibilities for words with two, three, four and five moras. Only the realisations in bold occur in my corpus.\(^\text{17}\) For words with up to four moras, almost every possible realisation occurs in my corpus, except for LHHL. For words with five moras, many realisations are lacking in my corpus, especially realisations of the HL and LHL patterns. Presumably, this is not due to a restriction on certain realisations, but rather because a) my corpus contains fewer words with five moras and b) HL and LHL patterns occur less frequent in all words.

\(^{17}\) I looked at the realisation of words in isolation for this table.
In many Binumarien words, the diacritic accent follows the last mora, which means that the last tonal level is not realised. For example, the tonal pattern of *saruna* ‘type of pandanus’ (11a) is different from that of *saasuna* ‘axe’ (11b). In isolation, the pattern of both seems LH: both start with low-toned moras and end with high-toned moras. However, if the word carries a suffix, the underlying tonal pattern is exposed. Binumarien affixes receive tone from the root. With the locative suffix -ki attached to the root, the underlying pattern of *saruna* appears to be LH indeed, whereas *saasuna* has a LHL pattern. The root *saasuna* carries the first low and the high tone of the pattern and the suffix -ki carries the second low tone. The same applies when another suffix is added, like -faqa ‘and’.

---

18 LH words with the attachment point after the last mora sometimes display a different pattern with plural suffix -uqa. Expected would be *ufini-‘bird’ becomes *ufiniúqá, but the high tone is realised only on the last mora: *ufiniuqá ‘birds’. My data suggest that there is a restriction on diphthongs ending in /u/ regarding a rising pattern: /au/ and /uí/ do not occur.
In isolation | With suffix -ki | With suffix -faqa
---|---|---
(11)  a. | | |
| L H | L H | L H |
| \[ \mu \cdot \mu \cdot \mu \] | \[ \mu \cdot \mu \cdot \mu \] | \[ \mu \cdot \mu \cdot \mu \cdot \mu \] |
| sa-rūnā | sa-rūnā-ki | sa-rūnā-faqa |
| 'type.of.pandanus' | 'type.of.pandanus-LOC' | 'type.of.pandanus-and' |

(11)  b. | | |
| L H L | L H L | L H L |
| \[ \mu \mu \cdot \mu \cdot \mu \] | \[ \mu \mu \cdot \mu \cdot \mu \] | \[ \mu \mu \cdot \mu \cdot \mu \cdot \mu \] |
| saa-sūnā | saa-sūnā-ki | saa-sūnā-faqa |
| 'axe' | 'axe-LOC' | 'axe-and' |

The phenomenon that the underlying tonal pattern is only exposed when suffixes are attached to the root, occurs in all tonal patterns with a change in pitch level. This means that in many LH pattern words, the H is only realised on suffixes; in many HL and LHL words, the L is only realised on suffixes.

Prefixes of possession, the only nominal prefixes in Binumarien aside from demonstrative prefixes, also receive tone from the root. The tonal pattern of the root is mapped onto the prefix. The inalienable noun akiqa 'head' is obligatory marked with the non-subject prefix which marks the possessor, like a- '2/3SG.NSBJ'. Akiqa has a HL pattern, with the diacritic accent after the second mora of the root. This means all prefixes carry high tone, according to the HL pattern, whether the prefix is qi- '1SG/PL.NSBJ' (12a), a- '2/3SG.NSBJ' (12b), or ni- '2/3PL.NSBJ' (12c).

(12)  a. | b. | c. |
| H L | H L | H L |
| \[ \mu \cdot \mu \cdot \mu \] | \[ \mu \cdot \mu \cdot \mu \] | \[ \mu \cdot \mu \cdot \mu \] |
| qi-ki-iqa | á-ki-iqa | ni-ki-iqa |
| '1SG/PL.NSBJ-head' | '2/3SG.NSBJ-head' | '2/3PL.NSBJ-head' |

It is impossible to say whether Binumarien affixes have lexical high or low tone, because they always receive tone from the pattern of the root and never occur in isolation. This is an argument in favour of a privative analysis of the Binumarien tone system, rather than a binary analysis. Affixes have no tone, realised as low tone, unless they receive high tone from the root.

In summary, every nominal root has a tonal pattern with at least and at most one high tone. High tone contrasts with no tone, which is realised as low tone by default. The pattern is realised with level tones on the moras. The pattern is not always fully realised within the root; affixes reveal the underlying pattern of that root.

---

19 Possibly, there is one exception: question marker -fee always has a falling contour, regardless of the stem it is attached to. For a discussion, see section 4.3.1.3.
3.2 Compounds

A compound is a word consisting of multiple roots. For the scope of this thesis, I only discuss compounds consisting of two roots. In Binumarien, as in English, the second root is the semantic head of a compound. However, the first root serves as the prosodic head. This means the compound receives tone from the pattern of the first root. In Binumarien, the last vowel of the first root is elided if the second root starts with a vowel.

(13) illustrates the occurrence of all four tonal patterns in compounds.²⁰ Note that the first root loses the last mora if its last vowel is elided. If the diacritic accent would normally follow the last mora, it now follows the penultimate mora. This means that when the last vowel of kuara ‘pig’ is elided, the diacritic accent follows /kua/ (13c).

<table>
<thead>
<tr>
<th>Underlying patterns</th>
<th>Realisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. H H</td>
<td>fúsééná ufaana &gt; H fúséénúfáná</td>
</tr>
<tr>
<td>'cassowary'</td>
<td>‘trap’</td>
</tr>
<tr>
<td>b. LH LH</td>
<td>i-róósá ufaana &gt; LH i-róósúfáná</td>
</tr>
<tr>
<td>'type of bandicoot’</td>
<td>‘trap’</td>
</tr>
<tr>
<td>c. HL HL</td>
<td>kúárá ufaana &gt; HL kúárufana</td>
</tr>
<tr>
<td>'pig’</td>
<td>‘trap’</td>
</tr>
<tr>
<td>d. LHL LHL</td>
<td>aa·ndá·u ufaana &gt; LHL aa·ndá·ufana</td>
</tr>
<tr>
<td>‘animal’</td>
<td>‘trap’</td>
</tr>
</tbody>
</table>

In short, the prosodic head of a compound is left. The pattern of the first root is mapped onto the entire compound.

3.3 Adjective-noun combinations

If a noun is modified by an adjective, the pattern of both roots is maintained. For example, the adjective kaqikaa ‘small’ modifies the noun saqari ‘tree’ in (14a). In (14b), the adjective firaa ‘big’ modifies saqari. In both sentences, the pattern of both the adjective and the noun is maintained. Note that the high tone in the pattern of firaa is not realised here; it would be realised if firaa carried a suffix.

²⁰ The long /aa/ in ufaana ‘trap’ is shortened in compounds. The conditions for shortening vowels are unclear to me. As stated in chapter 2, Binumarien vowel length requires more research.
Underlying patterns | Realisation
---|---
(14) a. HL LH | HL LH
kaqi·kaa sa·qárí > káqi·kaa sa·qárí
‘small’ ‘tree’ ‘small tree’
b. LH LH LH LH | LH LH
fira· sa·qárí > fira· sa·qárí
‘big’ ‘tree’ ‘big tree’

In contrast to affixes and compounds, adjective-noun combinations maintain the pattern of both parts. This suggests that the Binumarian word can be defined in terms of the pattern, which means every word has at least and at most one /H/ in its pattern. Roots with affixes and compounds have one pattern and can be considered one word; a combination of a noun and an adjective has two melodies for two words. An analysis of the tone of other word classes is needed to prove that a sequence of high-toned moras is definitional of Binumarian wordhood.

3.4 Tone on utterance level

3.4.1 Obligatory high tone

Binumarian utterances require to have at least one high-toned mora. If all moras in an utterance are realised with low tone, high tone is assigned to the last mora of the utterance. This rule applies to utterances containing only LH words with a diacritic accent after the last mora.

Example (15a) shows that aaku is such a word. The root of the word carries low tone because the diacritic accent follows the last mora; the high tone of the pattern is assigned to the locative suffix -ki. Example (15b) shows aaku in combination with the imperative form of qafa ‘see’. The high tone in the pattern of aaku is not realised, because there is no mora following the diacritic accent. When we look at the level of the utterance, the rule of obligatory high tone is met in both sentences, because either -ki ‘LOC’ or qafa ‘see’ carries high tone.

Underlying patterns | Realisation
---|---
(15) a. LH | aaku·kí
aaku--ki > aaku·kí
rain-LOC ‘in the rain’
b. LH HL | aaku· qáfá·a
aaku· qafa--a > aaku· qáfá·a
rain see-IMP ‘look at the rain’
Since the pattern of aaku does not assign high tone to the root, there is a potential conflict with the rule of obligatory high tone if aaku is in isolation. This problem is solved, because high tone is assigned to the last mora of the utterance (16).

<table>
<thead>
<tr>
<th>Underlying pattern</th>
<th>Realisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(16)</td>
<td></td>
</tr>
<tr>
<td>LH</td>
<td></td>
</tr>
<tr>
<td>aaku·</td>
<td>&gt; aakú</td>
</tr>
<tr>
<td>rain</td>
<td>‘rain’</td>
</tr>
</tbody>
</table>

(17) demonstrates that the rule of obligatory tone also applies to longer utterances. In (17a), kupee ‘ant’ has no high tone, because there is no mora after the diacritic accent. Furthermore, kaqikaa ‘small’ has high tone, so the rule of obligatory high tone is met. In (17b) however, the high tone in the pattern of both firaa ‘big’ and kupee is not realised, which causes a conflict with the rule of obligatory high tone. Therefore, high tone is assigned to the last mora of the utterance, the second /e/ of kupee.

<table>
<thead>
<tr>
<th>Underlying patterns</th>
<th>Realisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(17)</td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td></td>
</tr>
<tr>
<td>HL</td>
<td>LH</td>
</tr>
<tr>
<td>kaqi·kaa</td>
<td>kupee·</td>
</tr>
<tr>
<td>‘small’</td>
<td>‘ant’</td>
</tr>
<tr>
<td>&gt; káqíkaa kupee</td>
<td>‘small ant’</td>
</tr>
<tr>
<td>b.</td>
<td></td>
</tr>
<tr>
<td>LH</td>
<td>LH</td>
</tr>
<tr>
<td>firaa·</td>
<td>kupee·</td>
</tr>
<tr>
<td>‘big’</td>
<td>‘ant’</td>
</tr>
<tr>
<td>&gt; firaa kupeeé</td>
<td>‘big ant’</td>
</tr>
</tbody>
</table>

In short, all utterances have at least one high toned mora in Binumarien. If no mora receives high tone from the root pattern, the final mora of the utterance will be high.

### 3.4.2 Downstep

As in many tone languages (Snider and Leben 2018), the pitch gradually falls on an utterance level in Binumarien. I do not aim to give a complete description of the Binumarien downstep system here, as my dataset only contains information about the prosody of short nominal phrases. But even in these short phrases, the falling contour is evident. High tones have a lower pitch at the end of an utterance, but still higher than low tones in my data. In (18), the diacritics indicate phonemic tone on the moras; the dashes represent the realisation of tone on an utterance level. Examples (18a) and (18b) demonstrate that high tone can be phonetically mid at the end of the phrase. The falling intonation is not due to the lexical pattern: the last two moras are mid, regardless of the order of the roots taqu ‘bamboo’ and tuka ‘box’. Example (18c) illustrates that high tone can also be realised as mid when it follows a low tone.

---

In short, all utterances have at least one high toned mora in Binumarien. If no mora receives high tone from the root pattern, the final mora of the utterance will be high.

### 3.4.2 Downstep

As in many tone languages (Snider and Leben 2018), the pitch gradually falls on an utterance level in Binumarien. I do not aim to give a complete description of the Binumarien downstep system here, as my dataset only contains information about the prosody of short nominal phrases. But even in these short phrases, the falling contour is evident. High tones have a lower pitch at the end of an utterance, but still higher than low tones in my data. In (18), the diacritics indicate phonemic tone on the moras; the dashes represent the realisation of tone on an utterance level. Examples (18a) and (18b) demonstrate that high tone can be phonetically mid at the end of the phrase. The falling intonation is not due to the lexical pattern: the last two moras are mid, regardless of the order of the roots taqu ‘bamboo’ and tuka ‘box’. Example (18c) illustrates that high tone can also be realised as mid when it follows a low tone.
In summary, two mechanisms are at work on the level of the utterance in Binumarien. First, an utterance requires to have at least one high toned mora. If the melodies of the words do not assign high tone to a mora, the last mora of the utterance must be high. Downstep is another mechanism on utterance level. Based on the prosody of short NPs, I conclude that phonemic high tones can be higher at the beginning than at the end of an utterance. More research is needed in order to point out in what contexts the falling contour appears and at what point in the utterance it starts.

3.5 Conclusion

Binumarien has a privative system: high tone /H/ contrasts with no tone /L/. No tone is realised as low tone by default. Every noun in Binumarien has one of four tonal patterns: H, LH, HL and LHL. This means that high tone in Binumarien is obligatory and culminative: there is at least and at most one /H/ in every pattern. Binumarien does not feature metricality.

The tonal pattern is realised with level tones on the moras. The beginning or end of a high tone sequence can be marked with diacritic accents. When the diacritic accent precedes the initial mora or follows the final mora, the pattern is not fully realised within the root. In that case, affixes can help to discover the full pattern, because they receive tone from the pattern of the root.

The tonal pattern is definitional of Binumarien wordhood. A compound or a root with affixes forms one word, with one pattern. A noun-adjective combination involves (at least) two words, each having their own pattern. For compounds, the semantic head is right, but the prosodic head is left. This means the pattern of the first root is mapped onto the entire compound.

There are two mechanisms on the level of the utterance. The first is that there must be at least one high tone in every utterance. If the melodies of words do not assign high tone to a mora, the last mora of the utterance is high. The second mechanism involves downstep. Phonemic high tones are phonetically higher at the beginning of an utterance than at the end of an utterance.

Downstep is a feature of Binumarien that requires more research. Furthermore, this analysis is based on the NP; a study into tone in other domains of the Binumarien language, especially the morphologically complex class of verbs, may provide new insights.
4 Concise overview of Binumarien clause structure

This chapter provides a brief description of Binumarien clause structure, with a focus on the noun phrase. Chapter 5 provides a more detailed description of the Binumarien verb. I will start this chapter with a concise overview of the Binumarien parts of speech, followed by a brief section on the verb phrase. This is followed by an overview of the noun phrase, its nominal morphology and adjectives. Possessive constructions form the last topic of this chapter.

4.1 Parts of speech

There is no comprehensive study of Binumarien speech parts; I briefly discuss the basic classes and their features.

Verbs constitute the most morphologically complex word class of Binumarien. Verbs constitute the head of a verb phrase. Verbs can be modified by a great variety of TAM and person markers. Chapter 5 includes a more detailed description of verbal morphology.

Binumarien free personal pronouns have various forms based on person, number, syntactic role and other aspects. Their role in the verb phrase is discussed in section 5.1.2.

The class of nouns in Binumarien consists of words that function as the head of a nominal phrase. Nouns have a distinct morphology, which includes demonstrative markers, case markers, number markers, possessive markers and locative markers.

Binumarien has a small class of adjectives. They occur before the noun as nominal modifiers and are nominalised in predicate position.

4.2 The verb phrase

Binumarien is a SOV-language. Every Binumarien verb phrase ends in a verb. For example, the subject faini ‘dog’ precedes the verb finoo ‘he went’ in (19).

(19) Faini finoo.
faini fu-i-noo
dog go-IND-3SG
‘The dog went away.’

The object follows the subject and precedes the verb, as in (20). The utterance starts with faiqi ‘man’, followed by nandi ‘yam’ and naidanoo ‘he is eating’.

(20) Faiqi nandi naidanoo.
faiqi nandi na-i-da-noo
man yam eat-IND-PROG-3SG
‘The man is eating yam.’
A clause may start with an object in order to emphasise it, like *safaa* 'eel trap' in (21).

(21)  
\[
\text{Safaa sia aiqama-usa iridaqa.}
\]
\[
safaa sia aiqama-usa iri-i-da-qa
\]
\[
eel.trap NEG every-PL know-IND-PROG-2/3PL
\]
\[
'Not everyone knows (how to make) an eel trap.'  
\]

If a clause has multiple verbs, the dependent verbs precede the independent verb. This is illustrated in (22): *qafarara*, the telic form of *qafa* ‘see’ precedes *fiqa* ‘I went’.

(22)  
\[
\ldots eendaki eeqa qinauna maaqai mina
\]
\[
eendaki eeqa qi-nau-na maaq-i mi-na
\]
\[
night 1SG/PL.REFL 1SG/PL.NSBJ-uncle-NSBJ  house-ALLA  DEM-NSBJ
\]
\[
qafarara ooqu fiqa.
\]
\[
qafa-irara ooqu fu-i-qa
\]
\[
see-TEL go.upwards go-IND-1 SG/PL
\]
\[
'... at night, I went up to the house of my uncle to see him'  
\]

Chapter 5 further discusses verbal morphology and the distinction between dependent and independent verbs.

### 4.3 The noun phrase

The head of a Binumarien nominal phrase (NP) is a noun, which can be modified by several elements. The modifiers in the NP, like adjectives or possessive pronouns, precede the noun. In addition, a number of affixes can be attached to the noun. I will start this section with a brief discussion of the affixes, followed by a short section on adjectives. Possessive constructions with pronouns and nouns are discussed in section 4.4.

#### 4.3.1 Nominal morphology

Binumarien nouns can be distinguished by a typical set of affixes, including case markers, number markers, possessive markers and various locative markers. I will first describe case marking, then discuss number markers, followed by an overview of nominal suffixes that occur in my corpus. Many of these suffixes have been briefly described by Oatridge & Oatridge (1973). The prefixes on inalienable nouns are discussed elsewhere in this chapter, see section 4.4.2.

##### 4.3.1.1 Case marking

Case marking is obligatory for specific nouns and impossible for non-specific nouns. Specific nouns are proper names and some kinship terms, like *a-noo-fa* ‘2/3SG.NSBJ-mother-SBJ’ and *a-koo-fa* ‘2/3SG.NSBJ-father-SBJ’. In addition, nouns modified by demonstrative prefixes like *mi* 'DEM' and *maa* 'DEM.PROX' are specific. For singular nouns, there are two case markers: -fa for nouns that function as the subject of a clause; -na for non-subjects. Non-singular nouns are not marked for case (see section 4.3.1.2 for the marking of number).
Example (23) demonstrates that non-specific nouns are not marked for case, like *kuara* 'pig' as a subject in (23a), as a patient (23b), and as a recipient (23c).

(23) a. *Kuara nidanoo.*
   kuara nu-i-da-noo
   pig go.around-IND-PROG-3SG
   'A pig walks around.'  
   Fieldwork notes

b. *Faiqi kuara qafaidanoo.*
   faiqi kuara qafa-i-da-noo
   man pig see-IND-PROG-3SG:S
   'A man sees a pig.'  
   Fieldwork notes

c. *Paqoofa Afaakoona kuara aminoo.*
   paqoo fa afaakoo-na kuara a-mi-i-noo
   Paqoo-NSBJ Afaakoo-NSBJ pig 2/3SG.NSBJ-give-IND-3SG
   'Paqoo gave a pig to Afaakoo.'  
   Fieldwork notes

When *kuara* is specific, carrying the demonstrative prefix *mi-*, it is marked with subject marker -fa if it has the role of subject (24a) or the non-subject marker -na if it has the role of object, both patient (24b) and recipient (24c). -na is glossed as 'non-subject', because it can also mark the possessor (see section 4.4.2).

   mi-kuara-fa nu-i-da-noo
   DEM-pig-SBJ go.around-IND-PROG-3SG
   'This pig walks around.'  
   Fieldwork notes

d. *Faiqi mikuarana qafaidanoo.*
   faiqi mi-kuara-na qafa-i-da-noo
   man DEM-pig-NSBJ see-IND-PROG-3SG:S
   'A man sees this pig'  
   Fieldwork notes

c. *Paqoofa Afaakoona mikuarana aminoo.*
   paqoo-fa afaakoo-na mi-kuara-na a-mi-i-noo
   Paqoo-SBJ Afaakoo-NSBJ DEM-pig-NSBJ 2/3SG.NSBJ-give-IND-3SG
   'Paqoo gave this pig to Afaakoo.'  
   Fieldwork notes

If a speaker wants to explicitly express the subject role of a non-specific noun, the focus particle *fannoo* is used. *Fannoo* only modifies non-specific nouns that function as the subject of a clause. *Fannoo* usually marks a new subject. This is shown in (25), where the speaker first speaks of one ‘man’ (*faiqi*, referring to the wasp) and then of ‘another man’ (*faiqi moo*, any creature that may encounter the wasp). The second man is marked with *fannoo*, in order to indicate that this is the subject of the new clause.
(25) Kookapuna maafa kasau faiqi; faiqi moo fannoo
kookapuna maa-fa kasau faiqi faiqi moo fannoo
wasp DEM.DIST-SBJ wild man man other FOC

sia mina aqoondikidanoo.
sia mi-na a-qoon-di-ki-i-da-noo
NEG DEM-NSBJ 2/3SG.NSBJ-friend-VBZ?-IND-PROG-3SG
‘The wasp is a wild man; another man will not make friends with him.’ SEA1

In addition to subject marker -fa and non-subject marker -na, Oatridge and Oatridge (1973b) describe a vocative suffix -oo, which does not occur in my corpus.

4.3.1.2 Number marking

Like case markers, number markers have different forms based on specificity. Marking number is obligatory for specific nouns and optional for non-specific nouns. There are four types of number: singular, dual, group and plural. Table 14 provides all suffixes. Note that for the singular specific forms, the role is also marked: subject (-fa) and non-subject (-na). The non-specific markers seem to attach nouns regardless of their role.

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Dual</th>
<th>Group</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific</td>
<td>-fa, -na</td>
<td>-qanda</td>
<td>-(u)sa21</td>
<td>-sa22</td>
</tr>
<tr>
<td>Non-specific</td>
<td>∅</td>
<td>-qara</td>
<td>-uqaindi</td>
<td>-uqa</td>
</tr>
</tbody>
</table>

Table 12: Binumarien number suffixes on nouns.

Example (26) illustrates the use of the dual marker for a specific noun, fainiqara 'two dogs' (26a) and for a non-specific noun mifainiqanda 'these two dogs' (26b).

(26) a. Fainiqara faaqaridaqa.
fai-ni-qara faaqaru-i-da-qa
dog-DU.NSPC shout-IND-PROG-2/3PL
‘Two dogs are barking.’ Fieldwork notes

(27) b. Mifainiqanda faaqaridaqa.
mi-fai-ni-qanda faaqaru-i-da-qa
DEM-dog-DU.NSPC shout-IND-PROG-2/3PL
‘These two dogs are barking.’ Fieldwork notes

The group suffix marks nouns that refer to a non-singular entity which is considered one group. Examples are kaakaanauqaindi ‘(a swarm of) flying foxes or kookapunauqaindi ‘(a swarm of) bees’, faiqiuqaindi ‘a group of children’ and misauqaindi ‘they together’.

21 My corpus does not contain many examples, but the distribution seems to be as follows: -usa attaches to nouns ending in /a/; -sa attaches to all other nouns.
22 From my corpus, the exact from of meaning or function of -sa is not clear. It occurs on plural nouns, but also on constructions with a (zero) copula and a first person subject, like qini duqu Dasi-sa ‘my name is Dasi’.
### Various suffixes

Nouns can be modified by a variety of suffixes. This section contains two tables with suffixes that occur on nouns, apart from the case and number suffixes in the previous sections. Table 13 lists suffixes that occur on nouns, but also on words from other classes like verbs. The left-most column shows the suffix form, followed by its notion, an example and a short note if necessary.

The analysis of the listed forms as suffixes can be debated. Not only because they are found in combination with words from various classes, but also because they convey a notion that may apply to a whole clause or sentence (like negation and interrogative). A study into the prosody of these forms could show whether they are actual suffixes or should rather be analysed as particles. I have not examined the prosody of all suffixes, but my data suggest that interrogative -fee has its own tonal pattern (HL), whereas -fee ‘or’ receives tone from the root it attaches to. This suggests interrogative -fee should be analysed as a particle, whereas -fee ‘or’ is a suffix.

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Notion</th>
<th>Example</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>-fau</td>
<td>NEGATION</td>
<td>maana sia saaka-fau</td>
<td>Usually combined with negative particle sia.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>this NEG sugarcane-NEG</td>
<td></td>
</tr>
<tr>
<td>-fee</td>
<td>INTERROGATIVE</td>
<td>kooqi-fee?</td>
<td>Attaches to the constituent that is questioned.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>door-Q</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘(is it) a door?’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>either, or</td>
<td>aakauqa-fee duru-fee</td>
<td>Attaches to every linked constituent (either ... or ...).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>string.bag-or bow-or</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘a string bag or a bow’</td>
<td></td>
</tr>
<tr>
<td>-foora</td>
<td>EQUATIVE</td>
<td>nukuda-ra-foora</td>
<td>Always preceded by -ara ‘about’ (see the table on the next page).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>sand-about-EQ</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘like sand’</td>
<td></td>
</tr>
<tr>
<td>-kai</td>
<td>only</td>
<td>maqa-mau-kai</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ground-over-only</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘only on the ground’</td>
<td></td>
</tr>
</tbody>
</table>

Table 13: Various Binumarien suffixes that occur on nouns, but also on words from other classes.

Table 14 lists suffixes that only occur on nouns. The fact that these forms only occur directly after nouns (unless another suffix stands in between), suggests that these are actual suffixes. Moreover, I the prosody of -faqa ‘and’ and ki ‘loc’, indicates both are suffixes, because they do not have their own tonal pattern. Instead, they receive tone from the root they attach to, as discussed in section 3.1.
<table>
<thead>
<tr>
<th>Suffix</th>
<th>Notion</th>
<th>Example</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ara</td>
<td>about</td>
<td>fuseena-ra qirara cassowary-about talk:TEL 'I am going to talk about the cassowary'</td>
<td>Used in combination with qi- 'speak (about)' or ri- 'be happy (about)'. The first /a/ of the suffix is elided if the root ends in /a/.</td>
</tr>
<tr>
<td>-faqa</td>
<td>and</td>
<td>oori-faqa ameesa-faqa nose-and tail-and 'nose and tail'</td>
<td>Attaches to every linked constituent (both ... and ...).</td>
</tr>
<tr>
<td>-ki</td>
<td>LOCATIVE</td>
<td>nammari-ki water-LOC 'in the water'</td>
<td>General locative. Not only the meaning of 'inside', e.g. akiiqa-ki 'on your head'.</td>
</tr>
<tr>
<td>-kina</td>
<td>inside</td>
<td>nammari-kina water-inside 'under water'</td>
<td></td>
</tr>
<tr>
<td>-mau</td>
<td>over</td>
<td>asaana-mau branch-over 'on/over a branch'</td>
<td>Expresses movement on top of something (e.g. walk on ground, over branch, etc.).</td>
</tr>
<tr>
<td>-nai</td>
<td>throughout</td>
<td>nanda-ki-nai forest-LOC-throughout ‘throughout the forest’</td>
<td>Expresses that something is inside something on various locations. Usually preceded by locative -ki.</td>
</tr>
<tr>
<td>-namu</td>
<td>COMITATIVE123</td>
<td>ameesa-namu-faqa tail-COM1-and ‘with a tail’</td>
<td>Often followed by -faqa ‘and’.</td>
</tr>
<tr>
<td>-ndiri</td>
<td>COMITATIVE2</td>
<td>faini-ndiri dog-COM2 ‘with the dog’</td>
<td></td>
</tr>
<tr>
<td>-nnai</td>
<td>INSTRUMENTAL</td>
<td>qamaqa-nnai hammer-INSTR ‘with a hammer’</td>
<td></td>
</tr>
<tr>
<td>-nni / -i</td>
<td>ALLATIVE</td>
<td>Kainantu-nni; Goroka-i Kainantu-ALLA; Goroka-ALLA ‘to Kainantu; to Goroka’</td>
<td>-i occurs after /a/; -nni is used in all other cases.</td>
</tr>
<tr>
<td>-qari</td>
<td>ELATIVE</td>
<td>uinduaqa-ki-qari window-LOC-ELA ‘out of the window’</td>
<td>Always preceded by locative -ki.</td>
</tr>
<tr>
<td>-saa</td>
<td>on</td>
<td>ooni-saa stone-on ‘on a rock’</td>
<td>Also used in combination with qusa to indicate time: qusa-saa ‘in a short time’.</td>
</tr>
</tbody>
</table>

Table 14: Various Binumarien nominal suffixes.

---

23 The difference between -namu and -ndiri needs more research. Possibly, -namu is used for things that you can take with you (carry a bag, go with 'a heavy heart', bring a child), whereas -ndiri is used for companions (travel with someone).
In short, Binumarien has a variety of suffixes that attach to nouns. Apart from case and number markers, these include several locative markers and markers that link two NPs, like -faqa ‘and’ and -fee ‘or’. Some of the forms presented as suffixes here, might actually be particles, because they function on the level of the clause or sentence. A study into their prosody could show which forms are true suffixes.

4.3.2 Adjectives

The Binumarien class of adjectives is small. When an adjective functions as a nominal modifier, it precedes the noun. In predicate position, adjectives are nominalised and marked for case.

Example (28) illustrates the attributive use of an adjective, which precedes the noun in modifies: kaqikaa ‘small’ is followed by aiki ‘nose’.

    small nose see-IND-PROG-3SG
    ‘He sees a small nose.’

In predicate position, adjectives carry a case marker. For example, kaqikaafa ‘small’ carries subject marker -fa and precedes maridanoo ‘he is’ (29).

(29) Fafaiqa kaqikaafa maridanoo.
    fafaiqa kaqikaafa-fa mari-i-da-noo
    papaya small-SBJ be-IND-PROG-3SG
    ‘The papaya is small.’ (Lit. ‘The papaya is a small one.’) SES5

The fact that adjectives in predicate position carry a case marker, suggests that they are nominalised. In other contexts, adjectives marked for case are the head of a noun phrase. This is illustrated in (30). Firaaf ‘big’ carries the subject marker -fa to form firaafa ‘big one’. Firaafa is a noun, modified by the possessive pronoun mina ‘DEM.NSBJ’, translated with ‘his’.

(30) Eefari mifa rufeeka mina firaafa maridanoo.
    eefari mi-fa rufeeka mi-na firaafa-fa mari-i-da-noo
    lizard DEM-SBJ gecko DEM-NSBJ big-SBJ be-IND-PROG-3SG
    ‘A lizard is like a large gecko.’
    (Lit. ‘The lizard, he is the gecko his big one.’) WLB2

Some words that often translate to an adjective in English, have a different morphology than the forms described above. These words do not occur as a modifier of the NP, but only function as predicates. In predicate position, they do not carry case markers. Kisaaqa ‘long’ and qusa ‘short’ belong to this group. An example of kisaaqa is given in (31).

(31) Saaka kisaaqa maridanoo.
    saaka kisaaqa mari-i-da-noo
    sugarcane long be-IND-PROG-3SG
    ‘The sugarcane is long.’ (Lit. ‘The sugarcane is a long one.’) SES5
The fact that these words do not occur in attributive position and do not need to be nominalised with case markers suggests that they are nouns already. This means that kisaqa ‘long’ and qusa ‘short’ could more literally be translated as ‘long one’ and ‘short one’ respectively. More research into the morphology of adjective-like words could show which Binumarien words belong to the class of adjectives and what affixes are used to modify and possibly derive adjectives.

### 4.3.3 Summary

Specific nouns, i.e. nouns modified by demonstrative prefix mi-, proper names and some kinship terms, are marked with case suffixes. Number suffixes are optional. Binumarien has a variety of suffixes to mark other relations on nouns, like location, accompaniment and negation. Adjectives precede nouns in attributive position; they are nominalised in predicate position.

### 4.4 Possession

Three types of possessive constructions are discussed in this section: constructions with a pronominal possessor, with a nominal possessor and possessive constructions with a predicate.

#### 4.4.1 Pronominal possessor

When the possessor is expressed by a pronoun, the non-subject pronoun or the reflexive pronoun directly precedes the possessed. Table 15 presents the non-subject pronouns and Table 16 shows the reflexive pronouns.

<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 qini</td>
<td>maasá</td>
</tr>
<tr>
<td>2 aní</td>
<td>ínni</td>
</tr>
<tr>
<td>3 miná</td>
<td>misá</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 eeqá</td>
<td>eeqá</td>
</tr>
<tr>
<td>2 anenéná</td>
<td>ínneeqa</td>
</tr>
<tr>
<td>3 narí</td>
<td>nári(qa)</td>
</tr>
</tbody>
</table>

Table 15: Non-subject pronouns.  Table 16: Reflexive pronouns

Non-subject and reflexive pronouns seem to be freely interchangeable in possessive constructions. For example, qini qinauna (32a), with the non-subject pronoun, and eeqa qinauna (32b), with the reflexive pronoun, both translate as ‘my uncle’. The function of non-subject and reflexive pronouns in the VP is discussed in section 5.1.2.1.

(32) a. qini qi-nau-na kuara
     1SG.NSBJ 1SG.NSBJ-uncle-NSBJ pig
     ‘the pig of my uncle’

Fieldwork notes

Inalienable nouns are obligatorily marked with prefixes that express the possessor, which correspond to the non-subject person markers for verbs (see section 5.1.2). In contrast, alienable nouns cannot be marked with non-subject prefixes. Inalienability is a feature that is lexically determined, but mostly predictable. All kinship terms (e.g. a-fasaa-fa ‘2/3SG.SBJ-big.brother-SBJ’, a-noo-fa ‘2/3SG.SBJ-mother-SBJ’) and body parts (e.g. a-sauku ‘2/3SG.SBJ-hand-SBJ’, a-iku ‘2/3SG.SBJ-leg-SBJ’) in my corpus are inalienable. A-uqu ‘2/3SG.SBJ-name’ is the only inalienable noun that does not refer to kinship or a body part. Table 17 presents the non-subject prefixes; each prefix has two forms for different environments.

<table>
<thead>
<tr>
<th>Variants of non-subject prefixes and their context</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1SG/PL</strong></td>
</tr>
<tr>
<td><strong>2/3SG</strong></td>
</tr>
<tr>
<td><strong>2/3PL</strong></td>
</tr>
</tbody>
</table>

Table 17: Binumarien non-subject prefixes.

Table 18 demonstrates the use of the non-subject markers on the inalienable nouns akiiqa ‘head’ and aiki ‘nose’.

<table>
<thead>
<tr>
<th>Akiiqa ‘head’</th>
<th>Aiki ‘nose’</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1SG/PL</strong></td>
<td>qi-akiiqa ‘my/our head’</td>
</tr>
<tr>
<td><strong>2/3SG</strong></td>
<td>a-akiiqa ‘your/her/his head’</td>
</tr>
<tr>
<td><strong>2/3PL</strong></td>
<td>ni-akiiqa ‘your/their head’</td>
</tr>
</tbody>
</table>

Table 18: Examples of non-subject prefixes on inalienable nouns.

Usually, inalienable nouns occur in combination with non-subject pronouns. This is demonstrated in (33), where the non-subject pronoun qini modifies d-auna ‘little sister’, even though the relation to the first person is already expressed by the non-subject suffix d- in d-auna.

(33) qini dauna
qini d-auna
1SG.SBJ 1SG.SBJ-little.sister
‘my sister’

Fieldwork notes

25 Maaqa ‘house’ is an exception because it sometimes acts as an alienable noun (e.g. qinee Ø-maaqaq fidaqa ‘I go home’, without non-subject prefix) and sometimes as an inalienable noun (e.g. qi-maaqa ‘my house’, with non-subject prefix).
In short, both non-subject and reflexive pronouns are used to refer to the possessor. Inalienable nouns require a non-subject prefix which indicates the possessor; alienable nouns never carry this prefix.

### 4.4.2 Nominal possessor

A possessive relation between two NPs is expressed by juxtaposition, with the possessor preceding the possessed (34a). If the possessor is specific, which means it needs a case marker, the non-subject suffix attaches. For example, *faini* ‘dog’ carries the non-subject marker *-na* (34b).

\[(34)\]  
\[\begin{array}{ll}
\text{a. } & \text{eeqamoosa stoor\textit{a}} \\
& \text{frog story} \\
& \text{‘the story of the frog’} \\
\text{SFS}
\end{array}\]

\[\begin{array}{ll}
\text{b. } & \text{mi-faini-na stoor\textit{a}} \\
& \text{DEM-dog-NSBJ story} \\
& \text{‘the story of this dog’} \\
\text{SFS}
\end{array}\]

Like the above possessive construction, compounds are also formed by juxtaposition, as discussed in 3.2. Research into the tonal pattern of the possessive constructions could show if there is a prosodic difference between a compound (which is one word with one tonal pattern) and juxtaposed nouns expressing possession (which could be multiple words with multiple tonal patterns).

### 4.4.3 Predicative possessive constructions

The word *faqaa*\(^\text{26}\) expresses possession. Its syntactic and morphological properties are like those of adjectives (section 4.3.2). As a nominal modifier, it precedes the noun, like *(nimuaquqa)* *faqaa* ‘(belly-)having’ in (35a). In predicate position, *faqaa* is nominalised by a case marker, like *faqaaafa* in (35b).

\[(35)\]  
\[\begin{array}{ll}
\text{a. } & \text{Nimuaquqa faqaa anaasee } \\
& \text{ni-muaqu-uqa faqaa anaasee} \\
& 2/3\text{PL.NSBJ-belly-PL.NSPC have woman} \\
& \text{‘Pregnant women ...’ (Lit. ‘Belly-having women ...’) WLB2}
\end{array}\]

\[\begin{array}{ll}
\text{b. } & \text{... moo qiri firaafa aundura faqaaafa ...} \\
& \text{moo qiri fira-\textit{a} aundura faqaa-fa} \\
& \text{one \textit{log} big-SBJ inside have-SBJ} \\
& \text{‘... a big hollow tree ...’ (Lit. ‘... a log, a big one, an inside-having one ...’)} \text{ SFS}
\end{array}\]

\(^{26}\)Note the formal similarity with suffix *-faqa* ‘and, with’.
Faqaa has a negative counterpart siai ‘not having’, which occurs in identical constructions. (36) illustrates the use of siai, modified by subject marker -fa in predicate position.

(36) Mifa asausi siaifa maridanoo.
mi-fa a-sausi siai-fa mari-i-da-noo
DEM-SBJ 2/3SG.NSBJ-hair not.have-SBJ be-IND-PROG-3SG
‘He does not have hair.’ (Lit. ‘He is a not a hair having one.’)

In short, this section described three constructions that Binumarien employs to express possession. Possessive constructions with pronouns are formed with a non-subject pronoun preceding the possessed noun. Nominal possession is expressed through juxtaposition, with the possessor directly preceding the possessed; inalienable nouns are marked with non-subject prefixes. Possessive predicate constructions are formed with faqaa, which can be in attributive or predicate position.

4.5 Conclusion

Verb phrases have a SOV order in Binumarien. Nouns have a distinct morphology, which includes markers for case, number, location, accompaniment and negation. Specific nouns (i.e. nouns modified by the demonstrative prefix mi-, proper names and some kinship terms) have different case and number markers than non-specific nouns. Marking case and number is obligatory for specific nouns and optional for non-specific nouns. Case comprises subject (indicating the subject function) and non-subject (used to mark both the patient and recipient role, and the possessor). Number markers distinguish for singular, dual, group and plural. Inalienable nouns are marked with a non-subject prefix that refers to the possessor. Binumarien has a small class of adjectives, which precede the noun in attributive position and are nominalised when they function as predicates. Possession can be expressed with non-subject pronouns, juxtaposition of nouns, and faqaa ‘having’.

27 Note the similarity with the negation particle sia.
5 Binumarien switch reference marking

In line with Foley (1984) and Roberts (1997), I define switch reference as verbal inflection which indicates whether the subject of the marked verb is the same as that of the following verb or different. Roberts also calls this SS/DS: same subject following or different subject following.

I will start this chapter with a discussion on the basics of Binumarien verbal morphology, including the distinction between dependent and independent verbs, personal pronouns and affixes, the verb stem and the marking of tense, aspect and mood. I will focus on person and tense markers and certain aspectual constructions that occur in combination with Binumarien DS verbs. Then I will describe switch reference in Binumarien, which comprises the marking of SS/DS and ways to express sequentiality and simultaneousness.

5.1 Binumarien verbal morphology

Verbs constitute the most morphologically complex word class in Binumarien. Verbal affixes include markers for tense, aspect, mood (TAM), core arguments and the relation with the subject of the following verb. The notions of TAM and person are often combined into one portmanteau suffix. Vowels of adjacent morphemes are often merged or elided.28

This section by no means constitutes a comprehensive overview of Binumarien verb morphology, but focuses on features that are relevant in the switch reference system, namely the three tenses. Verb forms inflected for switch reference may also carry aspectual and modal markers, but the Binumarien morphology of mood and aspect lacks a thorough analysis. Therefore, I will not discuss modal and aspectual markers in detail, except for progressive and habitual constructions that have a clear relation to simultaneousness marked on SS/DS verbs.

I will start with a description of dependent and independent verb forms, followed by a discussion of pronouns and person affixes, verb stems, vowel changes and TAM marking.

5.1.1 Dependent and independent forms

Like many Papuan languages, Binumarien distinguishes between dependent and independent verbs, also known as medial and final verbs, according to their position in the sentence (Oatridge and Oatridge 1965; Foley 1986). Pawley and Hammarström (2018) describe independent verbs as ‘conventional main verbs’. Independent verbs head a sentence that consists of one clause, or they head the final clause in a chain of clauses. Dependent verbs head a non-final clause. This means that a sentence with only a dependent verb is unfinished; an independent verb makes a sentence complete.

In Binumarien, the distinction between dependent and independent verbs is not only syntactic, but also morphological. For example, the person and tense markers which I will

---

28 Note that tone in Binumarien verbs remains unstudied. This means that some morphemes described in this chapter seem identical but might be different in tone.
describe in section 5.1.4.1 attach only to independent verbs, and switch-reference markers attach only to dependent verbs. Some verbs even have suppletive stems: one for the dependent position, and another for the independent position. Examples are *fua* (independent) and *fifi* (dependent) ‘go’; *nua* (independent) and *nini* (dependent) ‘go around’.

The distinction between dependent and independent verbs is illustrated in (37). The first sentence has one verb, in independent position: *aridanoo* ‘he hits/kills’ (37a). This means the clause is complete. The fact that *aridanoo* is independent, can be determined based on two features, one syntactic and the other morphological: a) it is in final position; b) it lacks specific dependent verb markers. The second sentence (37b) contains a verb with the same stem: *aruseenoo* ‘he hits/kills’. In this case, the verb is dependent. This is evident from its sentence-medial position, and from the sequential marker -*sa*, which only attaches to dependent verbs. The sentence in (37b) would not be complete with *aruseenoo* as the only verb; it needs the independent form *naidanoo*.

There are also affixes that occur on both dependent and independent verbs, like certain person markers. This is illustrated in (37b), where third person subject marker -*noo* occurs in both the dependent and independent verb form.

(37)  

<table>
<thead>
<tr>
<th>a.</th>
<th>Mifa kuara aridanoo.</th>
<th>Fieldwork notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>mi-fa kuara aru-i-da-noo</td>
<td>DEM-SBJ pig hit-IND-PROG-3SG</td>
<td></td>
</tr>
<tr>
<td>‘He kills a pig.’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b.</th>
<th>Mifa kuara aruseenoo naidanoo.</th>
<th>Fieldwork notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>mi-fa kuara aru-sa-i-noo na-i-da-noo</td>
<td>DEM-SBJ pig hit-SEQ-SS-3SG eat-IND-PROG-3SG</td>
<td></td>
</tr>
<tr>
<td>‘He kills a pig and eats it.’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In short, an independent verb is the head of a final clause; a dependent verb is the head of a non-final clause. Every sentence ends with an independent verb. The difference between the two types is not only syntactic, but also morphological: some affixes, like certain person and tense markers, attach to independent verbs only; other affixes, like switch-reference markers, attach to dependent verbs only.

5.1.2 Personal pronouns and person affixes

Binumarien has an elaborate system of personal pronouns and person markers. Forms differ according to person (first, second and third), clusivity (inclusive or exclusive for the first person plural) number (singular, dual, group, plural), location and distance (nearby or far away, above or below), role (subject, non-subject) and emphasis (unmarked, emphasised). There is also a group of reflexive pronouns. Not all forms occur in my corpus, so I cannot present complete paradigms. Table 19 provides an illustration of pronouns marked for location, distance, clusivity and number.
In the rest of this section, I will only address person, number and role, because these are the factors that influence verbal morphology. As for number, I only discuss singular and plural; plural verb forms can be considered non-singular, which means dual and group pronouns correspond to plural verb forms.

### 5.1.2.1 Free personal pronouns

Most verb phrases in my corpus contain a pronoun or other explicit subject. However, this is not obligatory; the person roles are usually unambiguous, because person is also marked on the verb.

Binumarien free subject pronouns are presented in Table 20. These are neutral pronouns, i.e. location, distance and clusivity are not specified.

<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>qinéé maasá</td>
</tr>
<tr>
<td>2</td>
<td>anéé ínnee</td>
</tr>
<tr>
<td>3</td>
<td>mifá misá</td>
</tr>
</tbody>
</table>

Table 20: Subject pronouns.

Sentence (38) provides an example with the first person pronoun *qinee*, which corresponds to the first person marker -*qa* in *maridaqa* ‘I am’.

(38)  
Doo, qinee maaqai fidaqa.  
doo qinee maaqa-i fu-i-da-qa  
COMPL 1SG.SBJ house-ALLA be-IND-PROG-1SG  
‘Well, I am going home.’  

---

29 In Binumarien, marking clusivity is optional. Thus, *maasá* can indicate inclusive and exclusive referents, depending on the context. *Innesaimbaqa* is used to explicitly convey the notion of inclusivity.

30 Tone is marked in Table 20, in order to show that the difference in pronunciation between the 1SG and 2PL forms is not just the word-initial /q/ and the length of /n/. The same applies to Table 21.

Furthermore, note that some pronouns, e.g. *mifá*, *maasa* and *misa* are combinations of a demonstrative *mi-* ‘DEM’ or *maa-* ‘DEM.PROX’ and a case/number suffix *-fa* ‘SBJ’ and *-sa* ‘PL’.
Non-subject pronouns are presented in Table 21. They can take the role of patient, like *ani* in (39a), and the role of recipient, like *ani* in (39b). Table 22 shows the reflexive pronouns, as demonstrated in (39c) with *aneenna* ‘yourself’. Both non-subject and reflexive pronouns are also used as possessive pronouns, as discussed in section 4.4.1.

<table>
<thead>
<tr>
<th></th>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>qiní</td>
<td>maasá</td>
</tr>
<tr>
<td>2</td>
<td>aní</td>
<td>ínni</td>
</tr>
<tr>
<td>3</td>
<td>miná</td>
<td>misá</td>
</tr>
</tbody>
</table>

Table 21: Non-subject pronouns.

<table>
<thead>
<tr>
<th></th>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>eégá</td>
<td>eégá</td>
</tr>
<tr>
<td>2</td>
<td>aneenná</td>
<td>ínneeqa</td>
</tr>
<tr>
<td>3</td>
<td>narí</td>
<td>nári</td>
</tr>
</tbody>
</table>

Table 22: Reflexive pronouns

(39)  

a. *Aii, sia ani qafeeqa.*  
aii sia ani qafa-i-qa  
	EXCL NEG 2SG.NSBJ see-IND-1SG  
‘O sorry, I did not see you.’  

b. *... qinee narana ani amianaura.*  
qinee narana ani a-mi-anaura  
1SG.SBJ food 2SG.NSBJ 2/3SG.NSBJ-give-1SG.FUT  
‘... I will give you food.’  

(Excerpted from *Binumarien Bible* 31)  

Fieldwork notes

In short, Binumarien has many free pronominal forms, which differ based on location, distance, clusivity, number and emphasis. The neutral subject, non-subject and reflexive forms were presented in this section. The non-subject forms are used in patient and recipient roles.

5.1.2.2 Person affixes

Independent verbs and most dependent verbs are marked for person. Verbs have one marker for all first persons, singular and plural. The verb form for the second and third person plural is also the same.

In many cases subject person is marked with portmanteau affixes, in which the marking of person and TAM is combined. But there are also subject suffixes that do not specify time. These subject suffixes are presented in Table 23. They are used in progressive forms (section 5.1.4.2) and mark anticipatory subject on dependent verbs (section 5.2).

---

<table>
<thead>
<tr>
<th>Subject suffix</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG/PL</td>
<td>-qa</td>
</tr>
<tr>
<td>2SG</td>
<td>-nana</td>
</tr>
<tr>
<td>3SG</td>
<td>-noo</td>
</tr>
<tr>
<td>2/3PL</td>
<td>-qa</td>
</tr>
</tbody>
</table>

Table 23: Subject person suffixes.

Example (40) demonstrates the use of -noo as a third person subject marker, both on the dependent form usakaseenoo ‘he builds’ and the independent form maqaidanoo ‘it lays’.

(40) Mifa anaamu usakaseenoo, minaki auru maqaidanoo. maqa-i-da-noo give.birth-IND-PROG-3SG

‘It builds a nest, and in that it lays its eggs.’ WLB 1

If a verb has an object, it is marked with the non-subject prefix. The prefixes are analysed as non-subject, because they can also attach to inalienable nouns in order to mark the possessor, as discussed in section 4.4.1. The non-subject prefix marks the patient on transitive verbs and the recipient on ditransitive verbs. Each prefix has two different forms, as presented in Table 24.

<table>
<thead>
<tr>
<th>Variants of non-subject prefixes and their context</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG/PL qi- consonant-initial stems d- vowel-initial stems</td>
</tr>
<tr>
<td>2/3SG a- stems not beginning with /a/ Ø- stems beginning with /a/</td>
</tr>
<tr>
<td>2/3PL ni- consonant-initial stems n- vowel-initial stems</td>
</tr>
</tbody>
</table>

Table 24: Binumarien non-subject prefixes.

Table 25 provides an illustration of verbs with object prefixes. Arua ‘hit’ is a transitive verb, so the prefix refers to the patient: darinoo ‘he hit me’. Mia ‘give’ is a ditransitive verb, so the prefix refers to the recipient: (nammari) qiminoo ‘he gave (water) to me’.

<table>
<thead>
<tr>
<th>Aaraa ‘hit’</th>
<th>Mia ‘give’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG/PL qi-minoo ‘he gave to me’ d-arinoo ‘he hit me’</td>
<td></td>
</tr>
<tr>
<td>2/3SG a-minoo ‘he gave to you/her/him’ Ø-arinoo ‘he hit you/her/him’</td>
<td></td>
</tr>
<tr>
<td>2/3PL ni-minoo ‘he gave to you all/Them’ n-arinoo ‘he hit you all/Them’</td>
<td></td>
</tr>
</tbody>
</table>

Table 25: Examples of non-subject prefixes on verbs.

32 The example of aaraa ‘hit’ with non-subject prefixes is from my own data, but was also previously described by Oatridge and Oatridge (1965).
In short, suffixes mark the subject in Binumarien verbs. Object can be marked with non-subject prefixes. In transitive verbs, non-subject prefixes mark the patient; in ditransitive verbs they refer to the recipient.

5.1.3 Verb stems and vowel changes

Binumarien verb stems are divided into three categories according to their final vowel: /i/, /a/ or /u/. This final vowel is modified or elided in certain contexts, as Table 26 illustrates. Suffixes that start with /a/, like the imperative marker -a, do not induce vowel changes. Therefore, the second row of the table presents the full stem of each type. The third row presents first person near past forms, in which the final vowel of each stem is either modified (like /a/ in na-‘eat’ with neeqa) or elided (like /u/ in aru-‘hit’ with ariqa).

<table>
<thead>
<tr>
<th>Vowel change</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>/a/ + /i/ &gt; /ee/</td>
<td>forms marked for IND (forms marked for PROG excluded) independent FUT forms SS forms</td>
</tr>
<tr>
<td>/a/ + /i/ &gt; /ai/</td>
<td>DS forms forms marked for PROG</td>
</tr>
<tr>
<td>/a/ + /i/ &gt; /a/</td>
<td>independent FPST forms</td>
</tr>
<tr>
<td>/a/ + /a/ &gt; /aa/</td>
<td>always</td>
</tr>
<tr>
<td>/a/ + /u/ &gt; /oo/</td>
<td>DS FPST forms</td>
</tr>
<tr>
<td>/a/ + /u/ &gt; /au/</td>
<td>DS NPST forms</td>
</tr>
<tr>
<td>/u/ + /i/ &gt; /i/</td>
<td>always</td>
</tr>
<tr>
<td>/u/ + /a/ &gt; /ua/</td>
<td>always</td>
</tr>
<tr>
<td>/u/ + /u/ &gt; /u/</td>
<td>always</td>
</tr>
<tr>
<td>/i/ + /i/ &gt; /i/</td>
<td>always33</td>
</tr>
<tr>
<td>/i/ + /a/ &gt; /ia/</td>
<td>always</td>
</tr>
<tr>
<td>/i/ + /u/ &gt; /u/</td>
<td>always</td>
</tr>
</tbody>
</table>

Table 27: Vowel changes and their context in Binumarien verbs.

33 With durative marker -i, the /i/ can be lengthened.
In sum, Binumarien verb stems can be divided into three categories according to their final vowels: /i/, /a/ or /u/. The final vowels are not always realised as such, because certain affixes induce the modification or elision of vowels. The specific changes and contexts were listed in this section.

5.1.4 Tense, aspect and mood

Binumarien verbs have an elaborate morphological system to mark tense, aspect and mood. Oatridge & Oatridge (1965) describe most of the morphology discussed in this section; I checked their findings during fieldwork and collected example sentences. I will focus on tense in this section, because tense is obligatorily marked in DS verb forms.

5.1.4.1 Tense

Binumarien has three tenses: far past, near past and future tense. The far past tense is used for events that occurred more than two days ago; the near past tense is used for events that occurred today, yesterday or the day before yesterday. Future tense denotes events that will occur from the moment of speaking onwards. Binumarien lacks specific present tense markers. The progressive marker -da, which will be discussed in section 5.1.4.2, is used to denote actions that are ongoing at the moment of speaking.

Table 28 shows the far past suffixes on independent verbs, for each type of verb stem. The first person suffix -qia(fana) can be reduced to -qia in fast speech. The second and third person singular forms are identical.

<table>
<thead>
<tr>
<th>Pers.</th>
<th>/i/-stem</th>
<th>/a/-stem</th>
<th>/u/-stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG/PL</td>
<td>qiqia(fana)</td>
<td>naqia(fana)</td>
<td>ariqia(fana)</td>
</tr>
<tr>
<td></td>
<td>qi-i-qia(fana)</td>
<td>na-i-qia(fana)</td>
<td>aru-i-qia(fana)</td>
</tr>
<tr>
<td></td>
<td>'speak-IND-1SG.FPST'</td>
<td>'eat-IND-1SG.FPST'</td>
<td>'hit-IND-1SG.FPST'</td>
</tr>
<tr>
<td>2SG</td>
<td>-nau</td>
<td>-nau</td>
<td>-nau</td>
</tr>
<tr>
<td></td>
<td>qinau</td>
<td>nanau</td>
<td>arinau</td>
</tr>
<tr>
<td></td>
<td>qi-i-nau</td>
<td>na-i-nau</td>
<td>aru-i-nau</td>
</tr>
<tr>
<td></td>
<td>'speak-IND-2SG.FPST'</td>
<td>'eat-IND-2SG.FPST'</td>
<td>'hit-IND-2SG.FPST'</td>
</tr>
<tr>
<td>3SG</td>
<td>-nau</td>
<td>-nau</td>
<td>-nau</td>
</tr>
<tr>
<td></td>
<td>qinau</td>
<td>nanau</td>
<td>arinau</td>
</tr>
<tr>
<td></td>
<td>qi-i-nau</td>
<td>na-i-nau</td>
<td>aru-i-nau</td>
</tr>
<tr>
<td></td>
<td>'speak-IND-3SG.FPST'</td>
<td>'eat-IND-3SG.FPST'</td>
<td>'hit-IND-3SG.FPST'</td>
</tr>
<tr>
<td>2/3PL</td>
<td>-qau</td>
<td>-qau</td>
<td>-qau</td>
</tr>
<tr>
<td></td>
<td>qiqau</td>
<td>naqau</td>
<td>ariqau</td>
</tr>
<tr>
<td></td>
<td>qi-i-qau</td>
<td>na-i-qau</td>
<td>aru-i-qau</td>
</tr>
<tr>
<td></td>
<td>'speak-IND-2/3PL.FPST'</td>
<td>'eat-IND-2/3PL.FPST'</td>
<td>'hit-IND-2/3PL.FPST'</td>
</tr>
</tbody>
</table>

Table 28: Independent far past indicative verb forms; ‘pers.’ is ‘person marker’.

Example (41) illustrates the use of the second/third person plural marker -qau in rakiqau ‘they fought’. Note that plural verb forms can be considered non-singular, which means that nouns marked with a dual or group affix, like fasiqara ‘two men’, correspond to a plural verb form.

34 Many of the aspectual and modal markers Oatridge & Oatridge (1965) describe do not occur in my corpus, but when I asked speakers about the forms, they confirmed these forms exist and were able to create sentences with them.
(41) qaara  fasiqaqara  rakiqau
    qaara  fasiqa-qara  raki-i-qau
two men-DU  fight-IND-2/3PL.FPST
‘two men fought’  SFS

Table 29 presents the near past suffixes for independent verbs of each stem type.

<table>
<thead>
<tr>
<th>Pers.</th>
<th>/i/-stem</th>
<th>/a/-stem</th>
<th>/u/-stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG/PL</td>
<td>-qa</td>
<td>neeqa</td>
<td>ariqa</td>
</tr>
</tbody>
</table>
<pre><code>| qi-i-qa | na-i-qa  | aru-i-qa |
| ‘speak-IND-1SG.NPST’ | ‘eat-IND-1SG.NPST’ | ‘hit-IND-1SG.NPST’ |
</code></pre>
<p>| 2SG | -nana    | neenana  | arinana  |
| qi-i-nana | na-i-nana | aru-i-nana |
| ‘speak-IND-2SG.NPST’ | ‘eat-IND-2SG.NPST’ | ‘hit-IND-2SG.NPST’ |
| 3SG | -noo     | neenoo   | arinoo   |
| qi-i-noo | na-i-noo  | aru-i-noo |
| ‘speak-IND-3SG.NPST’ | ‘eat-IND-3SG.NPST’ | ‘hit-IND-3SG.NPST’ |
| 2/3PL | -q       | neea     | aria     |
| qi-i-a   | na-i-a    | aru-i-a  |</p>

Table 29: Independent near past indicative verb forms; ‘pers.’ is ‘person marker’.

Example (42) illustrates the use of third person singular marker -noot in finoo ‘he went’.

(42) Eenda  Yammaesafa  sugurai  finoo.
    eenda  yammaes-a-fa  sugura-i  fu-i-noo
    yesterday  james-SBJ  school-ALLA  go-IND-3SG
‘Yesterday, James went to school.’  SES6

The independent verb forms inflected for future tense are presented in Table 30.

<table>
<thead>
<tr>
<th>Pers.</th>
<th>/i/-stem</th>
<th>/a/-stem</th>
<th>/u/-stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG/PL</td>
<td>-anaura</td>
<td>naanaura</td>
<td>aruanaura</td>
</tr>
</tbody>
</table>
<pre><code>| qi-anaura | na-anaura | aru-anaura |
| ‘speak-1SG.FUT’ | ‘eat-1SG.FUT’ | ‘hit-1SG.FUT’ |
</code></pre>
<p>| 2SG | -innara  | neennara  | arinnara  |
| qi-innara | na-innara  | aru-innara |
| ‘speak-2SG.FUT’ | ‘eat-2SG.FUT’ | ‘hit-2SG.FUT’ |
| 3SG | -annoo   | naanoo    | aruanoo   |
| qi-annoo  | na-anoo    | aru-i-da-noo |
| ‘speak-3SG.FUT’ | ‘eat-3SG.FUT’ | ‘hit-3SG.FUT’ |
| 2/3PL | -ifara   | neefara   | arifara   |
| qi-ifara  | na-ifara   | aru-ifara  |
| ‘speak-2/3PL.FUT’ | ‘eat-2/3PL.FUT’ | ‘hit-2/3PL.FUT’ |</p>

Table 30: Independent future verb forms; ‘pers.’ is ‘person marker’.

A future tense form like mifa aruanoo can be translated with ‘he will kill’, but also with ‘he wants to kill’. Sentence (43) provides an example of third person singular marker -annoo in ‘taikaannoo’.
In short, Binumarien independent verbs inflect for far past tense (more than two days ago), near past tense (up to two days ago) and future tense.

5.1.4.2 Aspect

Binumarien has several constructions to express how the action described by a verb extends over time. For example, repetition of the verb stem denotes repeated action (e.g. *fifi fifi fifi fifiufanoo* 'they went there again and again'). I only studied two features that are relevant for the discussion of *ss/ds* verbs. First, I will discuss the suffixes in the form of *-i*. Then I will describe progressive or habitual constructions with the progressive marker *-da* and with the verb *maria* 'be'.

There are three suffixes in the form of *-i*, each with a different meaning, of which one has an aspectual notion. I would like to differentiate between them here. First, the durative aspect marker *-i*, indicates that an action takes place over a longer period of time (e.g. *diriique* 'they are hanging'). It can be lengthened in order to stress the long duration. Second, the indicative marker *-i* marks all verbs that describe a situation or fact. It was present in all forms that were described in the previous section. Third, there is the same subject marker *-i*, the use of which is further explained in section 5.2.1.

Actions that have a long duration can be described by constructions with the progressive suffix *-da* and with the verb *maria* 'be'. I will first discuss *-da*. As seen in section 5.1.4.1, Binumarien has no specific suffix to denote present tense. The progressive suffix *-da* can be used to denote actions that is ongoing at the moment of speaking. Table 31 lists progressive forms for all stem types. The progressive marker follows the indicative marker *-i* and precedes the person markers. Unlike many other Binumarien person markers, the person markers following *-da* do not include a notion of tense. They correspond to neutral subject person markers, as discussed in section 5.1.2.2.

<table>
<thead>
<tr>
<th>Pers.</th>
<th>/i/-stem</th>
<th>/a/-stem</th>
<th>/u/-stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg/pl</td>
<td><em>qidaqa</em></td>
<td><em>naidaqa</em></td>
<td><em>aridaqa</em></td>
</tr>
<tr>
<td>-qa</td>
<td>qi-da-qa</td>
<td>na-i-da-qa</td>
<td>aru-i-da-qa</td>
</tr>
<tr>
<td></td>
<td>'speak-IND-PROG-1SG.NPST'</td>
<td>'eat-IND-PROG-1SG.NPST'</td>
<td>'hit-IND-PROG-1SG.NPST'</td>
</tr>
<tr>
<td>2sg</td>
<td><em>qidana</em></td>
<td><em>naidana</em></td>
<td><em>aridana</em></td>
</tr>
<tr>
<td>-na</td>
<td>qi-i-da-na</td>
<td>na-i-da-na</td>
<td>aru-i-da-na</td>
</tr>
<tr>
<td></td>
<td>'speak-IND-PROG-2SG.NPST'</td>
<td>'eat-IND-PROG-2SG.NPST'</td>
<td>'hit-IND-PROG-2SG.NPST'</td>
</tr>
<tr>
<td>3sg</td>
<td><em>qidanoo</em></td>
<td><em>nidanoo</em></td>
<td><em>aridanoo</em></td>
</tr>
<tr>
<td>-noo</td>
<td>qi-i-da-noo</td>
<td>na-i-da-noo</td>
<td>aru-i-da-noo</td>
</tr>
<tr>
<td></td>
<td>'speak-IND-PROG-3SG.NPST'</td>
<td>'eat-IND-PROG-3SG.NPST'</td>
<td>'hit-IND-PROG-3SG.NPST'</td>
</tr>
<tr>
<td>2/3pl</td>
<td><em>qidaqa</em></td>
<td><em>nidaqa</em></td>
<td><em>aridaqa</em></td>
</tr>
<tr>
<td>-qa</td>
<td>qi-i-da-qa</td>
<td>na-i-da-qa</td>
<td>aru-i-da-qa</td>
</tr>
<tr>
<td></td>
<td>'speak-IND-PROG-2/3PL.NPST'</td>
<td>'eat-IND-PROG-2/3PL.NPST'</td>
<td>'hit-IND-PROG-2/3PL.NPST'</td>
</tr>
</tbody>
</table>

Table 31: Independent verb forms with progressive marker *-da*; 'pers.' is 'person marker'.
Sentence (44) provides an example of the progressive marker -da in *nidanoo* ‘they go around’, in which the speaker talks about an event that happens at the moment of speaking.

(44)  
*Sia* kasoo kaakaana uqanna nukudarafoora  
sia kasoo kaakaana uqanna nukuda-ara-foora  
NEG stop flying.fox really sand-about-EQ  
nidaga. 
ni-i-da-qa  
go.around-IND-PROG-2/3PL  
‘A huge lot of flying foxes, like grains of sand, are flying around.’  

The suffix -da does not only denote actions that occur at the moment of speaking; it is also used as a habitual marker. Example (45) describes the behaviour of a certain bird in three sentences. The actions described in these sentences do not occur at the moment of speaking, but they take place regularly.

(45)  
*Mifa* nammandunna *nidanoo*.  
mifa nammandunna nu-i-da-noo saqari qaqamma  
DEM-SBJ along.the.river go.around-IND-PROG-3SG tree fruit  
naidanoo.  
ovaaka-arai auru maqaidanoo  
a-ni-da-noo ooni-aaka-rai-i auru maq-a-i-da-noo  
eat-IND-PROG-3SG stone-side-ALLA egg give.birth-IND-PROG-3SG  
‘It goes around along the river. It eats tree fruit. It lays its eggs between rocks.’  

The verb *maria* ‘be’ can be used in the same contexts as -da. For example, the progressive aspect of *fua* ‘go’ can be expressed with two constructions that describe the same situation: with the progressive marker -da or with the verb maria (46).

(46)  
*Nammariiki* fidanoo / fimarino.  
nammarik-i fu-i-da-noo / fu-i-mari-i-noo  
water-LOC go-IND-PROG-3SG go-IND-be-IND-PROG-3SG  
‘He is walking at the river.’  

*Maria* is also used to describe habitual actions. In sentence (47), the dependent verb *naida* ‘it eats’ is followed by the independent verb *maridanoo* ‘it is’. The form of maria indicates that the action of eating is habitual. Interestingly, both verbs also carry the progressive suffix -da. More research could show whether there is a subtle difference in notion when either -da or maria or both are used.
When it is hungry, it eats its leaves only.

In short, the indicative suffix, the durative suffix and the same subject suffix all have the form of -i. Constructions with progressive marker -da or the verb maria ‘be’ describe actions that extend over a longer period of time. They have a progressive or habitual notion.

5.1.4.3 Mood

Binumarien has a variety of verbal suffixes that mark counterfactuality, likelihood and obligatoriness of an event. For example, the suffix -aqaana marks an action that should have happened, but did not (e.g. aruaqaana ‘he should have killed’). These notions of modality are often combined with person, number and tense into one portmanteau suffix. Binumarien may also have optional evidential markers (Oatridge and Oatridge 1965; Bee 1966).

5.1.5 Summary

The Binumarien verb system is morphologically complex. Dependent or sentence-medial verb forms are morphologically different from independent or sentence-final verb forms; each type is distinguished by a certain set of affixes. Binumarien has free personal pronouns, non-subject prefixes and subject suffixes. The combination of certain affixes results in the merging or elision of several vowels, as listed in 5.1.3. There is a great variety of tense, aspect and mood markers, which I briefly touched upon in this section. For the discussion of switch reference, it is important to know that Binumarien has three tenses: far past, near past and future. Constructions with the progressive marker -da or the verb maria ‘be’ are used to describe actions that extend over a longer period.

5.2 Switch reference marking

In this section, I describe ss/ds marking and ways to express simultaneousness and sequentiality in Binumarien dependent verbs. Languages with ss/ds inflection minimally provide a binary choice: the subject of the next verb is either the same as that of the marked verb, or it is not. For either option, there is one suffix: a ss marker or a ds marker (Pawley and Hammarström 2018). The Binumarien system is more complex. As I will explain in this section, ss forms have a ss marker, but ds verb forms are marked with a specific subject person marker, which inflects for tense. Both ss and ds forms can be marked with an anticipatory subject suffix, which marks the subject of the following verb. Marking sequentiality or simultaneousness is possible both in ss and ds forms. There is a special marker for sequentiality: -sa. Simultaneousness is expressed through stative constructions with progressive marker -da in ss forms, or with maria ‘be’ in ds forms. If a
sentence has multiple dependent verbs, all are marked for switch reference in Binumarien. In sum, the SS/DS marking on dependent verbs can be represented as follows, with optional markers between brackets.

SS: verb stem (+SEQ) +SS (+PROG) (+anticipatory subject)
DS: verb stem (+SEQ / +SS +be) +DS subject +anticipatory subject

5.2.1 Same subject

If a dependent verb has the same subject as the next verb, it is marked with the SS suffix -i plus an anticipatory subject marker. Sentence (48) presents an example in which a dog bites a bird, and then the dog runs away; faini ‘dog’ is the subject of both amiseenoo ‘he gave’ and sandanau ‘he ran’.35 Amiseenoo is a dependent verb form, and sandanau is the independent verb form which makes the sentence complete. Amiseenoo carries the SS marker -i to mark that both verbs have the same subject. The neutral person marker -noo anticipates the third person of sandanau.

(48) Faini fannoo ufini ukaqa amiseenoo,
faini fannoo ufini ukaqa a-mi-sa-i-noo
dog FOC bird bite 2/3.SG.NSBJ-give-SEQ-SS-3SG
sandanau.
sanda-i-nau
run-IND-3SG.FPST
‘A dog bit a bird and ran away.’

Fieldwork notes

Note that tense in (48) is only marked on the independent verb form: sandanau carries the third person far past tense marker -nau. When we change the tense of this sentence to the near past (49a) or future (49b), the dependent verb form amiseenoo remains the same; only the independent verb sandaa ‘run’ inflects for tense.36

(49) a. Faini fannoo ufini ukaqa amiseenoo,
faini fannoo ufini ukaqa a-mi-sa-i-noo
dog FOC bird bite 2/3.SG.NSBJ-give-SEQ-SS-3SG
sandeenoo.
sanda-i-noo
run-IND-3SG
‘The dog bit the bird and ran away.’

Fieldwork notes

35 The transitive form of ‘bite’ is expressed by ukaqa amia in Binumarien, more literally ‘bite-give’.
36 It is possible however to indicate tense on mia ‘give’ by combining two independent verb forms: ukaqa ami-nau sanda-nau ‘he bit and he ran away.’
b. *Faini fannoo ufini ukaqa amiseenoo,*
   
   faini fannoo ufini ukaqa a-mi-sa-i-noo
   
   dog FOC bird bite 2/3.SG.NSBJ-give-SEQ-SS-3SG
   
   sandaannoo.
   
   sanda-annoo run-IND-3SG.FUT
   
   ‘A dog will bite a bird and run away.’

Fieldwork notes

Although the anticipatory subject is marked in most SS verbs in my corpus, it is left out sometimes, especially in chains with multiple dependent verbs. Semantically this is not problematic, since the role of the referents is already clear from subject suffixes on the next verb. For example, *qumarasee* ‘grab’ and *narusee* ‘kill them’ have no anticipatory subject marker, but the subject of the verbs is clear from the third person marker -noo on the independent verb *naidanoo* (50).

```
(50)   ... akaqausa qumarasee, narusee, naidanoo.
akaqa-usa qumara-sa-i n-aru-sa-i na-i-da-noo
some-PL grab-SEQ-SS 2/3PL.NSBJ-kill-SEQ-SS eat-IND-PROG-3SG
‘... they grab some of them, kill them and eat them.’
```

In short, same subject verbs carry a same subject marker -i and an optional anticipatory subject marker. The anticipatory subject marker is often left out in chains of multiple dependent verbs.

5.2.2 Different subject

If a dependent verb has a different subject than the following verb, it carries a suffix to mark its own subject, followed by a suffix to mark the subject of the next verb. The subject markers for the DS verb itself are different from the subject markers on independent verbs. Example sentence (51) contains the verb forms *amufanoo* ‘he gave him’ and *sandanau* ‘he ran’. *Faini* ‘dog’ is the subject of *amufanoo*; *sandanau* has a different subject (in this case, the subject of *sandanau* is taken to be the only other referent in the sentence, namely *ufini* ‘bird’). Both referents are represented in the markers on *amufanoo*: the third person near past marker -ufa refers to the dog as the subject of the verb itself; the anticipatory third person marker -noo refers to the bird, as the bird is the subject of the following verb *sandanau*.

---

37 Some stative verb forms described by Oatridge and Oatridge (1965) have subject person markers that correspond exactly to the subject person markers in DS forms. More research is needed to show the relation between both subject markers.
The subject marker for DS verbs -ufa denotes far past tense, as the gloss in (51) indicates. If the tense of this sentence is changed to the near past (52a) or future (52b), not only the independent verb form inflects, but the dependent verb form changes as well.

Table 33, Table 34 and Table 35 on the next pages provide DS verb forms for the far past, near past and future tense respectively. For each stem type, an example is provided with an anticipatory subject marker, the third person suffix -noo. All DS verb forms in my corpus are marked with an anticipatory subject marker, so this is obligatory. Note that each form can be combined with one of the four anticipatory subject markers, depending on the subject of the next verb. Table 32 illustrates the anticipatory subject markers on the third person dependent form aruafa 'he killed'.

<table>
<thead>
<tr>
<th>Example</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mifa aruafa-qa, qinee sandeeka</td>
<td>He killed and I ran.</td>
</tr>
<tr>
<td>Mifa aruafa-na, anee sandaananoo</td>
<td>He killed and you ran.</td>
</tr>
<tr>
<td>Mifa aruafa-noo, mifa sandaanoo</td>
<td>He killed and he(DS) ran.</td>
</tr>
<tr>
<td>Mifa aruafa-qa, misa sandeeaa</td>
<td>He killed and they ran.</td>
</tr>
</tbody>
</table>

Table 32: Examples of Binumarien anticipatory subject marking for all persons.

In short, SS constructions are formed with a SS marker; DS forms are constructed with a subject person suffix that is used for DS specifically. This suffix also indicates tense. Marking the anticipatory subject is optional in SS constructions and obligatory on DS verbs.
<table>
<thead>
<tr>
<th></th>
<th>/i/-stem</th>
<th>/a/-stem</th>
<th>/u/-stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG/PL</td>
<td>qiafananoo</td>
<td>naafanano</td>
<td>arufanano</td>
</tr>
<tr>
<td></td>
<td>qi-afana-noo</td>
<td>na-afana-noo</td>
<td>aru-afa-noo</td>
</tr>
<tr>
<td></td>
<td>'speak-1SG/PL.FPST.DS-3SG'</td>
<td>'eat-1SG/PL.FPST.DS-3SG'</td>
<td>'hit-1SG/PL.FPST.DS-3SG'</td>
</tr>
<tr>
<td>2SG</td>
<td>qunanoo</td>
<td>noonanoo</td>
<td>arunanoo</td>
</tr>
<tr>
<td></td>
<td>qi-una-noo</td>
<td>na-una-noo</td>
<td>aru-una-noo</td>
</tr>
<tr>
<td></td>
<td>'speak-2SG.FPST.DS-3SG'</td>
<td>'eat-2SG.FPST.DS-3SG'</td>
<td>'hit-2SG.FPST.DS-3SG'</td>
</tr>
<tr>
<td>3SG</td>
<td>qufanoo</td>
<td>noofanoo</td>
<td>arufanano</td>
</tr>
<tr>
<td></td>
<td>qi-ufa-noo</td>
<td>na-ufa-noo</td>
<td>aru-ufa-noo</td>
</tr>
<tr>
<td></td>
<td>'speak-3SG.FPST.DS-3SG'</td>
<td>'eat-3SG.FPST.DS-3SG'</td>
<td>'hit-3SG.FPST.DS-3SG'</td>
</tr>
<tr>
<td>2/3PL</td>
<td>qufanoo</td>
<td>noofanoo</td>
<td>arufanano</td>
</tr>
<tr>
<td></td>
<td>qi-ufa-noo</td>
<td>na-ufa-noo</td>
<td>aru-ufa-noo</td>
</tr>
<tr>
<td></td>
<td>'speak-2/3PL.FPST.DS-3SG'</td>
<td>'eat-2/3PL.FPST.DS-3SG'</td>
<td>'hit-2/3PL.FPST.DS-3SG'</td>
</tr>
</tbody>
</table>

Table 33: Far past different subject verb forms.

<table>
<thead>
<tr>
<th></th>
<th>/i/-stem</th>
<th>/a/-stem</th>
<th>/u/-stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG/PL</td>
<td>qunanoo</td>
<td>naanano</td>
<td>arunanano</td>
</tr>
<tr>
<td></td>
<td>qi-una-noo</td>
<td>na-una-noo</td>
<td>aru-una-noo</td>
</tr>
<tr>
<td></td>
<td>'speak-1SG/PL.NPST.DS-3SG'</td>
<td>'eat-1SG/PL.NPST.DS-3SG'</td>
<td>'hit-1SG/PL.NPST.DS-3SG'</td>
</tr>
<tr>
<td>2SG</td>
<td>qiananoo</td>
<td>naanano</td>
<td>aruananano</td>
</tr>
<tr>
<td></td>
<td>qi-ana-noo</td>
<td>na-ana-noo</td>
<td>aru-ana-noo</td>
</tr>
<tr>
<td></td>
<td>'speak-2SG.NPST.DS-3SG'</td>
<td>'eat-2SG.NPST.DS-3SG'</td>
<td>'hit-2SG.NPST.DS-3SG'</td>
</tr>
<tr>
<td>3SG</td>
<td>qifanoo</td>
<td>naifanoo</td>
<td>arifanano</td>
</tr>
<tr>
<td></td>
<td>qi-ifanoo</td>
<td>na-ifanoo</td>
<td>aru-ifanoo</td>
</tr>
<tr>
<td></td>
<td>'speak-3SG.NPST.DS-3SG'</td>
<td>'eat-3SG.NPST.DS-3SG'</td>
<td>'hit-3SG.NPST.DS-3SG'</td>
</tr>
<tr>
<td>2/3PL</td>
<td>qiafanoo</td>
<td>naafanano</td>
<td>arufanano</td>
</tr>
<tr>
<td></td>
<td>qi-afa-noo</td>
<td>na-afa-noo</td>
<td>aru-afa-noo</td>
</tr>
<tr>
<td></td>
<td>'speak-2/3PL.NPST.DS-3SG'</td>
<td>'eat-2/3PL.NPST.DS-3SG'</td>
<td>'hit-2/3PL.NPST.DS-3SG'</td>
</tr>
</tbody>
</table>

Table 34: Near past different subject verb forms.
<table>
<thead>
<tr>
<th></th>
<th>DS</th>
<th>/i/-stem</th>
<th>/a/-stem</th>
<th>/u/-stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG/PL</td>
<td>-ana</td>
<td><strong>qiananoo</strong>&lt;br&gt;qi-ana-noo&lt;br&gt;‘speak-1SG/PL.FUT.DS-3SG’</td>
<td><strong>naananoo</strong>&lt;br&gt;na-ana-noo&lt;br&gt;‘eat-1SG/PL.FUT.DS-3SG’</td>
<td><strong>aruananoo</strong>&lt;br&gt;aru-ana-noo&lt;br&gt;‘hit-1SG/PL.FUT.DS-3SG’</td>
</tr>
<tr>
<td>2SG</td>
<td>-ina</td>
<td><strong>qinanoo</strong>&lt;br&gt;qi-ina-noo&lt;br&gt;‘speak-2SG.FUT.DS-3SG’</td>
<td><strong>nainanoo</strong>&lt;br&gt;na-ina-noo&lt;br&gt;‘eat-2SG.FUT.DS-3SG’</td>
<td><strong>arinoo</strong>&lt;br&gt;aru-ina-noo&lt;br&gt;‘hit-2SG.FUT.DS-3SG’</td>
</tr>
<tr>
<td>3SG</td>
<td>-ina</td>
<td><strong>qinanoo</strong>&lt;br&gt;qi-ina-noo&lt;br&gt;‘speak-3SG.FUT.DS-3SG’</td>
<td><strong>nainanoo</strong>&lt;br&gt;na-ina-noo&lt;br&gt;‘eat-3SG.FUT.DS-3SG’</td>
<td><strong>arinanoo</strong>&lt;br&gt;aru-ina-noo&lt;br&gt;‘hit-3SG.FUT.DS-3SG’</td>
</tr>
<tr>
<td>2/3PL</td>
<td>-ifa</td>
<td><strong>qifanoo</strong>&lt;br&gt;qi-ifanoo&lt;br&gt;‘speak-2/3PL.FUT.DS-3SG’</td>
<td><strong>naifanoo</strong>&lt;br&gt;na-ifanoo&lt;br&gt;‘eat-2/3PL.FUT.DS-3SG’</td>
<td><strong>arifanoo</strong>&lt;br&gt;aru-ifanoo&lt;br&gt;‘hit-2/3PL.FUT.DS-3SG’</td>
</tr>
</tbody>
</table>

Table 35: Future different subject verb forms.
5.2.3 Sequentiality and simultaneousness

Many Papuan languages that mark switch-reference have ways to indicate whether the actions indicated by subsequent verbs occur sequentially or simultaneously (Roberts 1997). In Binumarien, sequentiality is expressed with the suffix -sa. There is no specific marker for simultaneousness, but stative forms with the verb maria 'be' or the progressive marker -da are often used when multiple actions take place at the same time.

5.2.3.1 Sequentiality

Sequential suffix -sa indicates that the action described by the marked verb is prior in time to the event described by the following verb. Marking sequentiality is obligatory on same subject verbs. It immediately follows the stem and only attaches to dependent verbs.

Example sentence (53) contains three verbs marked with -sa that refer to sequential events: arusee 'we kill', asukusee 'we skin' and nifaaqauqusee 'we make decorations of them'.

\[(53) \quad \text{Maasa} \quad \text{mina} \quad \text{arusee, asukusee, minanai} \]
\[
\text{maa-sa} \quad \text{mi-na} \quad \text{aru-sa-i} \quad \text{asuku-sa-i} \quad \text{mi-na-nai} \\
\text{DEM.PROX.PL} \quad \text{DEM-NSBJ} \quad \text{hit-SEQ-SS} \quad \text{skin-SEQ-SS} \quad \text{DEM-NSBJ-INST} \\
\text{nifaaqauqusee, \quad \text{idi} \quad \text{raidaqa.}} \\
\text{ni-faaqa-auqu-sa-i \quad \text{idi} \quad \text{ra-i-da-qa}} \\
\text{2/3PL.NSBJ-body-work-SEQ-SS \quad \text{song} \quad \text{sing-IND-PROG-1PLS}}
\]
\`We kill them, skin them, make decorations with them and perform dances.' WLB1

Example (54) demonstrates that -sa also occurs on dependent verbs that are followed by a verb with a different subject. Again, -sa follows the verb stem immediately.

\[(54) \quad \text{Ukaqa} \quad \text{nimisaifaqa,} \quad \text{eendaki} \quad \text{sia} \]
\[
\text{ukaqa} \quad \text{ni-mi-sa-if-qaa} \quad \text{eendaki} \quad \text{sia} \\
\text{bite} \quad 2/3PL.NSBJ-give-SEQ-2/3PL.FUT.DS-2/3PL \quad \text{night} \quad \text{NEG} \\
\text{uqanna} \quad \text{faiqaidaqaa.} \\
\text{uqanna} \quad \text{faiqa-i-da-qaa} \\
\text{truly} \quad \text{sleep-IND-PROG-2/3PLS} \\
\}`When they bite, you really will not sleep at night.' WLB3

Marking sequentiality seems to be obligatory for SS verbs and optional for DS verbs. The sequential suffix -sa in the SS form amiseenoo is obligatory (55a); the verb form would be ungrammatical if the suffix were omitted. (55b) provides a comparable sentence containing a DS verb without -sa. This is grammatical, even though SS marking is possible on DS verbs, as (54) illustrated.

---

38 The 2/3PL can be used as a generic form in Binumarien, like English 'you'.

53
A certain group of verbs in my corpus does not have -sa as a sequential marker, but -ra. Interestingly, these are all verbs of movement. The verbs are listed in Table 36.

<table>
<thead>
<tr>
<th>Verb stem</th>
<th>Verb stem with -ra</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ani-</td>
<td>anira-</td>
<td>‘come (towards speaker)’</td>
</tr>
<tr>
<td>aqa-</td>
<td>aqara-</td>
<td>‘go (away from speaker)’</td>
</tr>
<tr>
<td>fiqa-</td>
<td>fiqara-</td>
<td>‘overtake’</td>
</tr>
<tr>
<td>mama-</td>
<td>mamara-</td>
<td>‘carry’</td>
</tr>
<tr>
<td>oonu-</td>
<td>oonira-</td>
<td>‘go upward’</td>
</tr>
<tr>
<td>ooru-</td>
<td>oorura-</td>
<td>‘go downward’</td>
</tr>
<tr>
<td>uru-</td>
<td>urura-</td>
<td>‘come upward’</td>
</tr>
<tr>
<td>umu-</td>
<td>umura-</td>
<td>‘come downward’</td>
</tr>
</tbody>
</table>

Table 36: List of verbs with -ra in dependent forms.

Sentence (56) provides an example of the verb urureeqa ‘I came upward’, which carries the sequential marker -ra because the following verb maraidaqa ‘I am taking/learning’ refers to an action later in time.

There is also a group of verbs that requires the completive suffix -ma before a sequential marker can be attached to it. These verbs share a semantic feature: they are atelic, i.e. they refer to actions without an endpoint. Sequential marker -sa refers to an action that happens before another action, which means the first action has an endpoint.
Therefore, -\textit{ma} must attach to atelic verbs in order to complete the action, before -\textit{sa} can attach.

<table>
<thead>
<tr>
<th>Verb stem</th>
<th>Verb stem with -\textit{ma}</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>na-qafa-</td>
<td>nama-qafama-</td>
<td>'see'</td>
</tr>
<tr>
<td>qi-saika-</td>
<td>saikama-</td>
<td>'say'</td>
</tr>
</tbody>
</table>

Table 37: List of verbs in my data taking -\textit{ma} before sequential marker -\textit{sa}.

Example (57) illustrates the use of completive suffix -\textit{ma} preceding sequential suffix -\textit{sa} in the atelic verb \textit{nna} 'eat'.

\begin{verbatim}
(57)  Kuara aminanoo, namaseenoo,
kura  a-mi-ina-noo na-ma-sa-i-noo
pig    2/3.SG.NSBj.-give-2SG.FUT.DS-3SG eat-COMP-SEQ-IND-3SG

innooaqanno.  innooaq-annoo
swell-3SG.FUT

'When you give it to a pig, it eats (it) and it will become fat.'  WLB2
\end{verbatim}

In short, sequentiality is marked with suffix -\textit{sa}, or -\textit{ra} on verbs of motion, on both SS and DS verbs. Sequential markers are obligatory for SS verbs and optional for DS verbs. They follow the stem immediately, except in certain verb stems that are atelic in meaning; those stems need completive suffix -\textit{ma} in order to carry a sequential suffix.

5.2.3.2 Simultaneousness

Simultaneousness is expressed through progressive marker -\textit{da} on SS verbs and through a construction with the verb \textit{maria} 'be' for DS verbs. -\textit{da} and \textit{maria} cannot be considered simultaneous markers as such, because they also occur in combination with the sequential marker -\textit{sa}. Instead, attaching -\textit{da} or \textit{maria} to a verb stem gives the event a stative notion, which can be used when events occur simultaneously.

Example (60) contains two simultaneous actions with one subject: a dog barks and climbs at the same time. \textit{Faaqaridanoo} 'he is barking' carries the progressive marker -\textit{da} in order to express that the dog is in a state of barking, during which the climbing takes place.

\begin{verbatim}
(58)  ... faaqaridanoo, saqarimau akareemarinau.
faaqaru-i-\textit{da}-noo saqari-mau akara-i-mari-i-nau
shout-SS-\textit{PROG}-3SG  tree-over  climb-IND-be-IND-3SG,FPST.S

'... while he was barking, he climbed in a tree.'  SFS
\end{verbatim}

\footnote{This list only contains verbs with -\textit{ma} that occur more than once in my data.}
In (59), \textit{maria} ‘be’ attaches to \textit{raki} – ‘fight’ in order to express a situation in which people were in a state of fighting. This is followed by the verb form with a different subject, \textit{nindafeeqa} ‘I watched them’. The second action takes place at the same time as the fighting.

\begin{verbatim}
(59)   Rakimariafaqa                     nindafeeqa.
       raki-i-mari-afa qa         ni-qafa-i qa
       fight-IND-be-2/3PL.NPST.DS-1SG  2/3PL.NSBJ-see-IND-1SG

   ‘As they were fighting, I watched them.’
\end{verbatim}

The fact that \textit{maria} and -\textit{da} do not mark simultaneousness in itself, is demonstrated by the fact that they can occur together with -\textit{sa}. Example (60) describes flying foxes that come to the river, see crocodiles in the water and turn around. \textit{Qafamasaidaqa} ‘having seen’ is marked with sequential marker -\textit{sa} because seeing the crocodiles happens before the flying foxes turn around. It is also marked as a stative verb with -\textit{da}, to indicate that the flying foxes are in a state of having seen the crocodiles.

\begin{verbatim}
(60)    ... akaqausa        qafamasaidaqa,   qeerairirdaq.
       akaqa-usa       qafa-ma-sa-ia-da-qa  qeeraira-i-da-qa
       some-PL         see-COMP-SEQ-SS-PROG-2/3PL avoid-IND-PROG-2/3PL

   ‘... having seen (them), some turn around.’
\end{verbatim}

Sentence (61) provides an example of a construction in which sequential marker -\textit{sa} and \textit{maria} ‘be’ are combined. It is a description of a bird that chases people to protect its eggs. The verb \textit{maqasee} ‘it gives birth’ is marked with the sequential marker -\textit{sa}, and also part of a stative construction with \textit{maria} ‘be’. Then follows the verb form \textit{oonuraafanoo} ‘they go upward’, which describes an event that happens after the first verb. The function of \textit{maria} is not to denote simultaneousness, but to indicate that there is the state of having laid the eggs. After laying the eggs, the next event takes place.

\begin{verbatim}
(61)   Aurau       maqasee               marifaqa,          faiqi
       auru       maqa-sa-i         mari-ifa-qa       faiqi
       egg       give.birth-SEQ-SS  be-3SG.NPST.DS-2/3PL man

       oonuraafanoo,  nifaqeemarifa.
       oonu-ra-afa-noo  ni-qafa-i-mari-ifa
       go.upward-SEQ-2/3PL.NPST.DS-3S.GS  2/3.NSBJ-chase-IND-be-3SG.NPST.STAT

   ‘When it (the bird) has laid its eggs and people go upward, it
   (the bird) chases them (the people).’
\end{verbatim}

In short, sequentiality is expressed with the suffix -\textit{sa} in Binumarien. There is no specific marker for simultaneousness, but stative forms with the verb \textit{maria} ‘be’ or the progressive marker -\textit{da} are used to indicate that the action described by the marked verb is simultaneous to the action described by the following verb.

5.2.4 Summary

Same subject is expressed with \textit{SS} marker -\textit{i}. Different subject is expressed with subject person markers that only occur on \textit{DS} verb forms. \textit{DS} subject markers inflect for tense. It is
possible to leave out the marking of the anticipatory subject in SS constructions; this is common in chains of multiple SS verbs. For DS verbs, marking the anticipatory subject is obligatory. Sequentiality is expressed through -sa, or -ra in motion verbs; it is obligatorily marked on SS verbs, and optionally on DS verbs. The sequential suffix follows the verb stem immediately, except in atelic verbs, which need the completive suffix -ma before the sequential suffix can attach. Simultaneousness is expressed with stative constructions. The progressive marker -da is used to mark stativity in SS verbs; DS verbs stative constructions are formed with maria 'be'.

5.3 Conclusion

This chapter described the switch-reference system in Binumarien verbs. It started with a basic description of Binumarien dependent and independent verbs, pronouns, morphophonological features and TAM marking. In a chain of clauses, independent verbs head a final clause; dependent verbs head a non-final clause.

Dependent verbs carry switch reference markers: markers that indicate whether the subject of the following verb is the same or different. If a verb is followed by a verb that has the same subject, the first verb carries a same-subject marker which follows the verb stem immediately. If a verb is followed by a verb that has a different subject, the first verb is marked with a person subject suffix that is different from the subject markers on final verbs. The DS person subject suffix inflects for tense. The subject of the second verb can be marked on the first verb with an anticipatory marker. The anticipatory subject marker is optional on SS verbs and obligatory on DS verbs.

The last part of this chapter described constructions that indicate whether the action described by the dependent verb occurs in sequence or simultaneously with the next verb. The sequential marker -sa (or -ra for motion verbs) indicates that the action described by the marked verb occurs before the action described by the following verb. Marking sequentiality is obligatory on SS verbs and optional on DS verbs. Some atelic verbs require the completive suffix -ma before the sequential marker can attach. Simultaneousness is expressed through stative constructions. A stative construction is formed with the progressive marker -da in SS forms, or the verb maria 'be' in DS forms.
6 Conclusions

In this last chapter, I discuss the final conclusions of this study and topics that require further research.

Chapter 1 provided an introduction to the Binumarien community and language, my fieldwork and the resulting corpus.

Binumarien phonology was described in chapter 2. The phoneme inventory consists of fifteen consonant segments and eight vowel segments. Complex consonants include at least prenasalised stops; the phonemic status of long consonants and preglottalised stops requires further research. Length is phonemic in vowels. Consonants only occur in the onset. Syllables do not need an onset. Short vowels represent one mora; long vowels and diphthongs represent two moras. One mora constitutes a light syllable; two moras constitute a heavy syllable. The shortest Binumarien word has two moras. Words with only heavy syllables are rare. Within roots, heavy syllables are often juxtaposed, and the last syllable tends to be light. Most Binumarien nouns consist of three syllables, whereas verbs often have one or two syllables.

Chapter 3 describes tone in the Binumarien NP. The Binumarien tone system is privative: high tone contrasts with no tone; the latter is realised as low tone by default. This means the system has two tonal levels: H and L. There are four patterns for noun roots: H, LH, HL and LHL. The pattern is realised on the mora. Both the pattern and the assignment of tone from the pattern to the mora are lexical. Each root has at least and at most one high tone, which means the Binumarien system is both obligatory and culminative. However, culminativity can be debated: the high tone in the word pattern can result in a sequence of multiple high moras. The Binumarien system does not exhibit metricality. Affixes receive tone from the pattern of the root. In many cases, the full pattern of the root is only realised when affixes are attached. The root pattern defines a Binumarien word: a compound or a root with affixes forms one word, with one pattern; a noun-adjective combination involves (at least) two words, each having their own pattern. For compounds, the semantic head is on the right, but the prosodic head is on the left. This means that the pattern of the first root is mapped onto the entire compound. On the level of the utterance, two mechanisms are at work. The first is that every utterance requires at least one high toned mora. If the underlying patterns of roots do not assign high tone to a mora, the last mora of the utterance is high. The second mechanism involves downstep. Due to the small phrases in my dataset, it is impossible to provide a comprehensive analysis of Binumarien downstep, but my data suggest that phonemic high tones are phonetically higher at the beginning of an utterance than at the end of an utterance. Research into the tone of other word classes (most notably the morphologically complex class of verbs) and utterance level prosody is required to make a comprehensive analysis of the Binumarien tone system.

Chapter 4 provides an overview of Binumarien clause structure, focusing on the NP. Verb phrases have a SOV order in Binumarien. Binumarien nominal morphology includes markers for case, number, location, accompaniment and negation. Case suffixes mark subject and non-subject and attach to specific nouns, which are nouns modified by the
demonstrative prefix *mi*-, proper names and some kinship terms. The marking of number (dual, group or plural) is obligatory on specific nouns and optional on non-specific nouns. Inalienable nouns are obligatorily marked with a non-subject prefix that refers to the possessor, alienable nouns are not marked for possession by prefixes. Binumarien has a small class of adjectives, which precede the noun in attributive position and are nominalised in predicate position. Possession can be expressed with non-subject pronouns, with the juxtaposition of nouns and with the adjective *faqaa* ‘having’.

Chapter 5 describes verbal switch reference marking in Binumarien. The morphology of Binumarien verbs is complex. Person, tense, aspect and mood are expressed through (portmanteau) affixes. Sentence-medial or dependent verbs are morphologically distinct from sentence-final or independent verbs. The morphology of dependent verbs indicates whether the subject of the marked verb is the same as the subject of the following verb. Same-subject is expressed with suffix *-i*, which follows the verb stem immediately. Different subject is marked with subject suffixes that are formally different from subject suffixes on final verbs. The *DS* subject suffixes inflect for tense. Anticipatory subject markers refer to the subject of the following verb; they occur word-finally on both *SS* and *DS* forms and are obligatory only for *DS* forms. Binumarien has a sequential marker *-sa* (or *-ra* for a number of motion verbs), which indicates that the action described by the marked verb occurs before the action described by the following verb. Marking sequentiality is obligatory for *SS* forms and optional for *DS* forms. Simultaneity is expressed through stative forms. Stativity is indicated by the progressive suffix *-da* in *SS* forms, and by constructions with the verb *maria* ‘be’ in *DS* forms.

In conclusion, this study provides a basic analysis of Binumarien phonology and nominal morphology. Moreover, it contributes to the understudied topic of tone in Papuan languages with a description of tone in the Binumarien NP according to the latest developments in tonal typology. In addition, the switch reference marking system of Binumarien is described and placed in typology. Further research could shed light on the Binumarien tone system outside the NP and its relation to surrounding and affiliated languages. Binumarien verbal morphology deserves a thorough analysis in order to understand the language itself and to gain insight in the complex verb systems that occur in many Papuan languages.
7 References


Appendix 1: Book of birds

Ufiniuqa akara ‘Book of Birds’ is a booklet with information on various birds that live in and around Binumarien. It was written by Adoo, a speaker of Binumarien, edited by Des and Jenny Oatridge and published by the SIL Printing Department in Ukarumpa, Papua New Guinea, in 1973. As for the numbering of glossing lines, every topic (i.e. every bird) starts with a new number. Spelling and interpunction are represented as in the original booklet.

(1) a. Quapunara qirara.
   quapuna-ara qi-irara
type.of.owl-about speak-TEL
‘I am going to talk about the quapuna owl.’

b. Quapuna asooqa ufini maridanoo.
   quapuna asooqa ufini mari-i-da-noo
type.of.owl elder bird be-IND-PROG-3SG
‘The quapuna is a bird of the elder.’

c. Sia kumaara fasiqa anaasee neemariafa.
   sia kumaaraa fasiqa anaasee na-i-mari-afa
NEG youngster man.PL woman eat-IND-be-2/3PL.NPST STAT
‘Young men and women do not eat it.’

d. Mifa nanauraki faiqaidanoo.
   mi-fa nanaura-ki faiqa-i-da-noo
DEM-SBJ type.of.tree-LOC sleep-IND-PROG-3SG
‘It sleeps in the nanaura tree.’

e. Faasaana eendaki aana nidanoo ...
   faasaana eendaki aana nu-i-da-noo
day night road go.around-IND-PROG-3SG
‘Day and night, it goes around, …’

f. ... mina oori qusa afu firaafa ...
   mi-na oori qusa a-fu firaa-fa
DEM.ACC beak short 2/3SG.NSBJ-eye big-SBJ
‘…its beak is short, its eyes are big, …’
Colours are often expressed with the verb *arua* ‘hit’ in Binumarien, like _aadara arirafa maridanoo_ ‘it is brown-hit’. For a study, see Hage, Per and Hawkes, Kristen. 1975. ‘Binumarien Color Categories’. _Ethnology_ 14 (3): 287-300.

It is unclear why the non-subject marker - _na_ is used, because _miufana_ seems to be the subject of this sentence. My corpus also contains examples with a subject marker: _doo, miufa-fa taikeenoo_.

---

g. ... _asausi aadara arirafa maridanoo_.

*a-sausi aadara aru-ira-fa*\(^{40}\) _mari-i-da-noo_

2/3SG.NSBJ-hair brown be-IND-PROG-3SG

‘...and its feathers are coloured brown.’

h. _Doo miufana taikeenoo._

*doo mi-ufa-na*\(^{41}\) _taika-i-noo_

COMP DEM-talk-NSBJ end-IND-3SG

‘Okay, this talk is finished.’

(2) a. _Noonafeesoonara qirara._

*noonafeesoona-ara qi-irara_

type.of.bird-about speak-TEL

‘I am going to talk about the noonaafeesoona bird.’

b. _Noonafeesoona ufini mina anukafaqa ..._

*noonafeesoona ufini mi-na a-nuka-faqa_

type.of.bird bird DEM-NSBJ 2/3SG.NSBJ-neck-and

‘The noonaafeesoona bird its neck and ...’

c. ... _aikufaqa kisaaqa maridanoo_.

*a-iku-faqa kisaaqa mari-i-da-noo_

2/3.NSBJ-leg-and long be-IND-PROG-3SG

‘...legs are long.’

d. _Mifa nammandunna nidanoo._

*mi-fa nammandunna nu-i-da-noo_

DEM-SBJ along.the.river go.around-IND-PROG-3SG

‘It goes around along the river.’

e. _Saqari qaqamma naidanoo._

*saqari qaqamma na-i-da-noo_

tree fruit eat-IND-PROG-3SG

‘It eats fruit from trees.’

f. _Oonaakaarai auru maqaidanoo._

*ooni-aakara-i auru maqa-i-da-noo_

stone-side-ALLA egg give.birth-IND-PROG-3SG

‘It lays its eggs next to stones.’

---

\(^{40}\) Colours are often expressed with the verb *arua* ‘hit’ in Binumarien, like _aadara arirafa maridanoo_ ‘it is brown-hit’. For a study, see Hage, Per and Hawkes, Kristen. 1975. ‘Binumarien Color Categories’. _Ethnology_ 14 (3): 287-300.

\(^{41}\) It is unclear why the non-subject marker - _na_ is used, because _miufana_ seems to be the subject of this sentence. My corpus also contains examples with a subject marker: _doo, miufa-fa taikeenoo._
g. *Doo miufafa qusa maridanoo.*

COMP DEM-talk-SBJ short be-IND-PROG-3SG

'Well, this talk is short.'

(3) a. *Karoondara qirara.*

kaaroonda-ara qi-irara
type.of.owl-about speak-TEL

'I am going to talk about the karoondara owl.'

b. *Karoonda ufini maridanoo.*

kaaroonda ufini mari-i-da-noo
type.of.owl bird be-IND-PROG-3SG

'The karoonda is a bird.'

c. *Mifa eendaki nimarifa.*

mi-fa eendaki nu-i-mari-ifa
DEM-SBJ night go.around-IND-be-3SG.NPST.STAT

'Day and night, it goes around.'

d. *Fasaana mifa saqari aundurai keeqafinoo faiqaidanoo.*

fasaana mi-fa saqari aundura-i keeqa-fu-i-noo faiqai-da-noo
day DEM-SBJ tree inside-ALLA go.into-go-IND-3SG sleep-IND-PROG-3SG

'During the day, it goes into the inside of a tree and it sleeps.'

e. *Mifa faiqi kuqirariafanoo, kai ufa qidanoo.*

mi-fa faiqi kuqi-irara-i-afa-noo kai ufa qi-i-da-noo
DEM-SBJ man die-TEL-?2/3PL.NPST.DS-3SG only talk speak-IND-PROG-3SG

'Only when a person is going to die, it makes a sound.'

f. *Sia kumaara fasiqa anaasee neemariafa.*

sia kumaaraa fasiga anaasee na-i-mari-afa
NEG young man.PL woman eat-IND-be-2/3PL.NPST.STAT

'Young men and women do not eat it.'

g. *Ufinifa asooqa fasiqa anaasee kai ...*

ufini-fa asooqa fasiqa anaasee kai
bird-SBJ elder man.PL woman only

'It is a bird that only elderly men and women ...'
h. ... neemaria ufinifa maridanoo.
na-i-mari-a ufini-fa mari-i-da-noo
eat-IND-be-2/3PL bird-SBJ be-IND-PROG-3SG
‘... eat.’

i. Manda ufini auka ufina maridanoo.
manda ufini auka ufini mari-i-da-noo
bad bird poison bird be-IND-PROG-3SG
‘It is a bad bird, a poison bird.’

j. Doo mina oosana miqimminoo maridanoo.
doo mi-na oosana miqi-mmi-noo mari-i-da-noo
COMP DEM-NSBJ nature be.like.that-INT-3SG be-IND-PROG-3SG
‘Well, its nature is like that.’

(4) a. Nukunara qirara.
nukuna-ara qi-irara
type.of.bird-about speak-TEL
‘I am going to talk about the nukuna bird.’

b. Nukuna mifa kaasau patuqa maridanoo.
nukuna mi-fa kaasau patuqa mari-i-da-noo
bird-SBJ DEM-SBJ wild duck be-IND-PROG-3SG
‘The nukuna bird is a wild duck.’

c. Mifa nammandunna nidanoo ...
mifa nammandunna nu-i-da-noo
DEM-SBJ along.the.river go.around-IND-PROG-3SG
‘It swims around along the river and ...’

d. ... nammarikinaa andanda naidanoo.
nammari-kina andanda na-i-da-noo
water-inside grass eat-IND-PROG-3SG
‘... eats aquatic plants.’

e. Mifa maani mararanaki auru maqaidanoo.
mifa maani mara-ira-na-ki auru maqa-i-da-noo
DEM-SBJ uneven.ground take?-AZR-NSBJ-LOC egg give.birth-IND-PROG-3SG
‘It lays its eggs on ground that it has made uneven.’

---

42 This construction, which seems a relative clause, only occurs once in my corpus. Ufini ‘bird’ is marked with subject suffix -fa; ufinifa precedes and follows the relative clause.

43 Oatridge and Oatridge (1965) state that -mmi is an ‘intensifier’, which younger speakers do not use. My corpus hardly contains -mmi apart from combinations with the verb miqi.
f. *Maqaseenoo rukamuseenoo nifiqeenoo ...*  
maqasa-i-noo rukamu-sa-i-noo ni-fiqa-i-noo  
give.birth-SEQ-SS-3SG break-SEQ-SS-3SG 2/3PL-gather-SS-3SG  
'It gives birth and breaks open and gathers them (the chicks) ...' 

h. *Mina afaaqafaqa asausifaqa ...*  
mi-na a-faaqa-faqa a-sausi-faqa  
DEM-NSBJ 2/3SG.NSBJ-body-and 2/3SG.NSBJ-hair-and  
'Its body and feathers ...' 

j. *Doo mina oosana miqimminoo maridanoo.*  
doo mi-na oosana miqi-mmi-noo mari-i-da-noo  
COMPL DEM-NSBJ nature be.like.that-INT-3SG be-IND-PROG-3SG  
'Well, its nature is like that.'

(5) a. *Qafuanara qirara.*  
qafuana-ara qi-irara  
bird.of.paradise-about speak-TEL  
'I am going to talk about the bird of paradise.'

b. *Qafuana mifa asfaaqauqira ufini maridanoo.*  
qafuana mi-fa a-faaqa-auqu-ira ufini mari-i-da-noo  
bird.of.paradise DEM-SBJ 2/3SG.NSBJ-body-work-AZR bird be-IND-PROG-3SG  
The bird of paradise is a decorated bird.'

c. *Kaqikaaafa mina aratiri ...*  
kaqikaa-fa mi-na aratiri  
small-SBJ DEM-NSBJ bird.tail  
'It is small and its tail ...'
d. ... idauruarafoorairafo maridanoo’
   ida-auro-ara-foora-ira-fa mari-i-da-noo
   fire-flame-about-LIKE-AZR-SBJ be-IND-PROG-3SG
   ‘... is like flames of fire.’

e. Mifa saqari qaammamaqa saunafaqa naidanoo.
   mi-fa saqari qaamma-faqa saun-faqa na-i-da-noo
   DEM-SBJ tree fruit-and pandanus-and eat-IND-PROG-3SG
   ‘It eats the fruit of trees and pandanus.’

f. Mifa saqariki faiqaidanoo.
   mi-fa saqari-ki faiqa-i-da-noo
   DEM-SBJ tree-LOC sleep-IND-PROG-3SG
   ‘It sleeps in a tree.’

g. Minaki kai aura maqaidanoo.
   mi-na-ki kai aura maqa-i-da-noo
   DEM-NSBJ-LOC only egg give.birth-IND-PROG-3SG
   ‘In just that (same tree), it lays its eggs.’

h. Maasa mina arusee asukusee ...
   maasa mi-na aru-sa-i asuku-sa-i
   1PLS DEM-NSBJ hit-SEQ-SS skin-SEQ-SS
   ‘We kill it, skin it, ...’

i. ... minanai nifaaquauqusee idi raidaqa.
   mi-na-nai ni-faqa-auqu-sa-i idi ri-da-qa
   DEM-NSBJ-INST 2/3PLNSBJ-body-work-SEQ-SS song sing-IND-PROG-1SG/PL
   ‘... decorate ourselves with it and perform a dance.’

j. Doo mina oosana miqimminoo maridanoo.
   doo mi-na oosana miq-mmi-noo mari-i-da-noo
   COMP DEM-NSBJ nature be.like.that-INT-3SG be-IND-PROG-3SG
   ‘Well, its nature is like that.’

(6) a. Feetutareenara qirara.
   feetutareena-ara qi-irara
   type.of.bird-about speak-TEL
   ‘I am going to talk about the feetutareena bird.’
b. **Feetutareena mifa kaqikaa ufini maridanoo.**  
feetutareena mi-fa kaqikaa ufini mari-i-da-noo  
type.of.bird DEM-SBJ small bird be-IND-PROG-3SG  
'The feetutareena bird is a small bird.'

c. **Mifa aukuana ufini maridanoo.**  
mi-fa aukuana ufini mari-i-da-noo  
DEM-SBJ Christmas bird be-IND-PROG-3SG  
'It is a Christmas bird.'

d. **Saikamasee qumaquafanoo mifa ...**  
saika-ma-sa-i qumaqu-afa-noo mi-fa  
clean.garden-MA-SEQ-SS plant-2/3PL.NPST.DS-3SG DEM-SBJ  
'When we clean the gardens and plant (crops), it ...'

e. **... aiqama qafuqakiaqa nidanoo.**  
aiqama qafuqa-ki-aqa nu-i-da-noo  
every garden-LOC-all go.around-IND-PROG-3SG  
'... flies around in every garden.'

f. **Satisaa quqanoonidanoo ...**  
sati-saa uqa-noo nu-i-da-noo  
tree.trunk-on go.downward-3SG go.around-IND-PROG-3SG  
'It sits down on a tree trunk ...'

g. **... mifa anaamu usakaseenoo minaki auru maqaidanoo.**  
mi-fa anaamu usaka-sa-i-noo mi-na-ki auru maqa-i-da-noo  
DEM-SBJ nest build-SEQ-SS DEM-NSBJ-LOC egg give.birth-IND-PROG-3SG  
'...and builds his nest and lays its eggs in it.'

h. **Saqari qaqamma naidanoo.**  
saqari qaqamma na-i-da-noo  
tree fruit eat-IND-PROG-3SG  
'It eats tree fruit.'

i. **Mifa iarqarooka ufa qidanoo.**  
mi-fa iarqarooka qi-i-da-noo  
DEM-SBJ dawn speak-IND-PROG-3SG  
'It makes sound at dawn.'
j. “Feetutaree feetutoo piririri” qidanoo.
   feetutaree feetutoo piririri qi-i-da-noo
   feetutaree feetutoo piririri speak-IND-PROG-3SG
   “Feetutaree feetutoo piririri” it says.’

k. Nari auqu raidanoo.
   nari a-uqu ra-i-da-noo
   3SG.REFL 2/3.NSBJ-name sing-IND-PROG-3SG
   ‘It sings its own name.’

l. Doo mina oosana miqimminoo maridanoo.
   doo mi-na oosana miqi-mmi-noo mari-i-da-noo
   COMP DEM-NSBJ nature be.like.that-INT-3SG be-IND-PROG-3SG
   ‘Well, its nature is like that.’

(7) a. Koofanara qirara.
   koofana-ara qi-irara
   type.of.bird-about speak-TEL
   ‘I am going to talk about the koofana bird.’

b. Koofana oorifaqa ameesafaqa kisaaqa …
   koofana oori-faqa ameesa-faqa kisaaqa
   type.of.bird snout-and tail-and long
   ‘The beak and tail of the koofana bird are long, …’

c. … mifa dundu qarira ufini …
   mi-fa dundu aru-ira \(^{44}\) urini
   DEM-SBJ black hit-AZR bird
   ‘… it is a black coloured bird, …’

d. … mifa Sausasinai firaa safasasaa maridanoo.
   mi-fa Sausasina-i firaa safasa-saa mari-i-da-noo
   DEM-SBJ Sausasina-ALLA big mountain-on be-IND-PROG-3SG
   ‘… and it lives on the big mountain Sausasina.’

e. Saqari qaqamma naidanoo.
   saqari qaqamma na-i-da-noo
   tree fruit eat-IND-PROG-3SG
   ‘It eats tree fruit.’

\(^{44}\) The origin of the /q/ in qarira is unknown. See 2.1.2.2 for a discussion.
f. Kasaana amaneeki faiqaidanoo.
kaṣaana\(^{45}\) amānē-ki faiqa-i-da-noo
\text{type.of.wild.pandanus} \text{leaf-LOC} \text{sleep-IND-PROG-3SG}
'It sleeps in the leaf of a wild pandanus.'

g. Minaki anaamu auquseenoo auru maqaidanoo.
mī-na-ki anaamu auqu-sa-i-noo auru maqa-i-da-noo
\text{DEM-NSBJ-LOC} \text{nest} \text{work-SEQ-SS-3SG} \text{egg give.birth-IND-PROG-3SG}
'It that, makes its nest and lays eggs.'

h. Doo miufana taikeenoo.
dū mi-ufa-na taika-i-noo
\text{COMP} \text{DEM-talk-NSBJ} \text{finish-IND-3SG}
'Well, this talk is finished.'

(8) a. Fasaara qirara.
fasaara qi-irara
\text{type.of.bird-about} \text{speak-TEL}
'I am going to talk about the fasaa bird.'

b. Fasaa afaaqauqira ufini ...
fasa a-faaqa-auqu-ira ufini
\text{type.of.bird} 2/3\text{SG,NSBJ-body-work-AZR} \text{bird}
The fasaa bird is a decorated bird ...'

c. ... mifa numasana qaqammafaqa umeerana anoonafaqa naidanoo ...
mī-fa numasana qaqamma-faqa umeera anoona-faqa na-i-da-noo
\text{DEM-SBJ} \text{type.of.liane fruit-and} \text{type.of.tree juice-and} \text{eat-IND-PROG-3SG}
'... it eats fruit of the numasana liane and drinks juice of the umeera tree ...'

d. ... mina ameesa kaqikaafa kisaaqa mina asausi ...
mī-na ameesa kaqikaa-fa kisaaqa mi-na a-sausi
\text{DEM-NSBJ} \text{tail small-NSBJ} \text{long} \text{DEM-NSBJ} 2/3\text{,NSBJ-hair}
'... its tail is small and long, its feathers ...'

e. ... aaki arirafa qumisa arirafa ...
aaki aru-ira-fa qumisa aru-ira-fa
\text{yellow hit-AZR-SBJ} \text{red hit-AZR-SBJ}
'... are yellow, red ...'

\(^{45}\) Perhaps related to kaṣa ‘wild'.

69
f. ... saqaramanee arirafa maridanoo.
saqari-amanee aru-ira-fa mari-i-da-noo
tree-leaf hit-AZR-SBJ be-IND-PROG-3SG
‘... and green.’

g. Miifa titiraki faiqaidanoo.
mi-fa titira-ki faqa-i-da-noo
DEM-SBJ type.of.branch-LOC sleep-IND-PROG-3SG
‘It sleeps on a titira branch.’

h. Minaki auru maqaidanoo.
mi-na-ki auru maqa-i-da-noo
DEM-NSBJ-LOC egg give.birth-IND-PROG-3SG
‘It lays its eggs in it.’

i. Doo miufana taikeenoo.
doo mi-ufa-na taika-i-noo
COMP DEM-talk-NSBJ finish-IND-3SG
‘Well, this talk is finished.’

(9) a. Rireetanara qirara.
rireetana-ara qi-irara
type.of.bird-about speak-TEL
‘I am going to talk about the rireetana bird’

b. Rireetana kaqikaa ufini ...
rireetana kaqikaa ufini
type.of.bird small bird
‘the rireetana is a small bird; ...’

c. ... afeedana kaqikaaafa uqanna maridanoo.
a-feedana kaqikaa-fa uqanna mari-i-da-noo
2/3SG-NSBJ-tibia small-SBJ truly be-IND-PROG-3SG
‘... its legs are really small.’

d. Miifa saqari qaqammafafa doodaanifaqa naidanoo.
mi-fa saqari qaqamma-faqua doodaani-faqa na-i-da-noo
DEM-SBJ tree fruit-and insect-and eat-IND-PROG-3SG
‘It eats tree fruit and insects.’
e. *Mifa maqa rakeiiranaki anaamu auquseenoo*
   mi-fa maqa rakee-ira-na-ki anaamu auqu-sa-i-noo
   DEM-SBJ ground break-ARZ-NSBJ-LOC nest work-SEQ-SS-3SG
   'It makes a nest on prepared ground ...'

f. ... *aiqama ufiniuqa nisausi tatiimareenoo ...*
   aiqama ufini-uqa ni-sausi tatu-i-i-mara-i-noo
   all bird-PL 2/3PL-NSBJ-hair pull.out-DUR-DUR-take-IND-3SG
   '... pulls out the feathers of all birds ...'

g. ... *mini ufiqiseenoo minasaa auru maqaidanoo.*
   mini ufiqi-sa-i-noo mi-na-saa auru maqa-i-da-noo
   bring make.bed-SEQ-SS-3SG DEM-SBJ-on egg give.birth-IND-PROG-3SG
   '... brings them to make a bed and lays eggs on it.'

h. *Mifa aiqama ufiniuqa ufa iridanoo ...*
   mi-fa aiqama ufini-uqa ufa iri-i-da-noo
   DEM-SBJ every bird-PL.NSPC talk know-IND-PROG-3SG
   'It knows the language of all birds ...'

i. ... *ufa akoofasa maridanoo.*
   ufa a-koo-fa-sa mari-i-da-noo
   talk 2/3SG.NSBJ-father-SBJ-? be-IND-PROG-3SG
   '... he is a clever language man.'

j. *Doo mina oosana miqimminoo maridanoo.*
   doo mi-na oosana miq-im-mi-noo mari-i-da-noo
   COMP DEM-NSBJ nature be.like.that-INT-3SG be-IND-PROG-3SG
   'Well, its nature is like that.'

(10) a. *Kukumara qirara.*
   kukuma-ara qi-irara
   type.of.bird-about speak-TEL
   'I am going to speak about the kukuma bird.'

b. *Kukuma kaqikaaqoo firaa ufini maridanoo.*
   kukuma kaqikaa-qoo firaa ufini mari-i-da-noo
   type.of.bird small-? big bird be-IND-PROG-3SG
   'The kukuma bird is a medium-sized bird.'

---

46 *Akoofa* can be translated as 'father' but also as 'owner'. The meaning of -*sa* is unclear.
c. *Mina oorifa qa aratirafa*\(^{47}\) *qusa maridanoo.*  
mi-na oori-faqa aratiri-faqa qusa mari-i-da-noo  
DEM-NSBJ snout-and bird.tail-and short be-IND-PROG-3SG  
'Itts beak and tail are short.'

d. *Nandaki moomoo maridanoo.*  
nanda-ki moo-moo mari-i-da-noo  
forest-LOC one-one be-IND-PROG-3SG  
'There are many of them in the forest.'

e. *Anaamu auqirara idaara raqamareenoo munuseenoo.*  
anama auqu-irara idaara raqa-mara-i-noo munu-sa-i-noo  
nest work-TEL stick break.down-take-SS-3SG carry.away-SEQ-SS-3SG  
'In order to make a nest, it breaks off sticks, takes them and carries them away, ...'

f. ... *rusiiseenoo minasaa auru maqaidanoo.*  
rusi-i-sa-i-noo mi-na-saa auru maqa-i-da-noo  
put.together-SEQ-SS-3SG put.in.together DEM-NSBJ-ON egg give.birth-IND-PROG-3SG  
'... puts twigs together and on them it lays eggs.'

g. *Mina oosana doo taikeenoo.*  
mi-na oosana doo taika-i-noo  
DEM-NSBJ nature COMP finish-IND-3SG  
'Well, (the information about) its nature is finished.'

(11) a. *Qaarooasaana ufa.*  
qaaroosaana ufa  
type.of.bird talk  
'Talk about the qaaroosaana bird.'

b. *Qaarooasaana fanno mifa afai afeeka ...*  
qaaroosaana fanno mi-fa a-fai afeeka  
type.of.bird FOC DEM-SBJ 2/3SG NSBJ-tooth strong  
'The qaaroosaana bird, it has strong teeth, ...'

c. ... *kaaqa ooni akuqu neemarifa maridanoo.*  
kaaq ooni akuqu na-i-mari-ifaa mari-i-da-noo  
very.much stone crack eat-IND-be-3SG.NPST-STAT be-IND-PROG-3SG  
'... it even cracks and eats stones.'

---

\(^{47}\) *Aratira* is a spelling mistake according to Keke; it should be *aratiri* 'bird's tail'.
d. *Mifa nandaki nidanoo.*

mi-fa nanda-ki nu-i-da-noo

DEM-SBJ forest-LOC go.around-IND-PROG-3SG

‘It flies around in the forest.’

e. *Akaqa saqari qaqamma nanoo nida qafaifanoo …*

akaqa saqari qaqamma na-noo48 nu-i-da qafa-ifa-noo

some tree fruit eat-3SG go.around-SS-PROG see-3SG.NPST.DS-3SG

‘As it eats some tree fruit, it flies around and looks (around), …’

f. *… sia amuaqu qumbiqaifanoo …*

sia a-muaqu qumbiqa-ifa-noo

NEG 2/3SG.NSBj-belly fill-3SG.NPST.DS-3SG

‘… its belly is never filled, …’

g. *… doo nammarinni fidanoo nammariki ooni naidanoo.*

doo nammar-i-ni fu-i-da-noo nammar-ki ooni na-i-da-noo

COMP water-ALLA go-IND-PROG-3SG water-LOC stone eat-IND-PROG-3SG

‘… well, it goes to the water and eats stones in the water.

h. *Oondaaniuqa suqusaidanoo akuqu naidanoo.*

oondaani-uqa suqu-sa-i-da-nooakuqu na-i-da-noo

gravel-PL.NSPC pick-SEQ-SS-PROG-3SG crack eat-IND-PROG-3SG

‘It picks up gravel and cracks and eats.’

i. *Neemarifanoo amuaqufanoo …*

na-i-mari-ifa-noo a-muaqu-ifa-noo

eat-IND-be-3SG.NPST.DS-3SG 2/3SG.NSBj-belly-3SG.NPST.DS-3SG.

‘Having eaten its belly round, …’49

j. *… doo quiqasee qaqamaree fidanoo.*

dooint-sa-i aqama-ra-i fu-i-da-noo

COMP leave-SEQ-SS fly-SEQ-SS go-IND-PROG-3SG

‘… it leaves and flies away.’

k. *Doo mifa aiqama eendirana iaqarana…*

dooint-mi-fa aiqama eendi-ira-na iaqa-ira-na

COMP DEM-SBJ every dusk-AZR-NSBJ? dawn-AZR-NSBJ?

‘Well, every day and night, it…’

---

48 When the stem of *naa* ‘eat’ is immediately followed by a person marker, it functions as a dependent verb that refers to an event simultaneous with the event described by the next verb. This construction, without the SS marker -i, does not occur often in my corpus, and speakers stated it was not acceptable for most verbs.

49 It seems that the noun *amuaqu* ‘belly’ is used as a verb here. This rarely occurs in my corpus.
l. miqikaimminoo nidanoo.
   miqi-kai-mmi-noo nu-i-da-noo
   be.like.that-only-INT-3SG go.around-IND-PROG-3SG
   ‘... does just like that and goes around.’

m. Oonifaqa namasaidanookai nidanoo.
   ooni-faqa na-ma-sa-i-da-noo-kai nu-i-da-noo
   stone-and eat-SEQ-SS-3SG-only go.around-IND-PROG-3SG
   ‘It just eats stones and goes around.’

n. Doo qaaroosaana ufa taikeenoo.
   doo qaaroosaana ufa taika-i-noo
   COMP type.of.bird talk finish-IND-3SG
   ‘Well, the talk about the qaroosaana bird is finished.’

(12) a. Fuseenara qirara.
   fuseena-ara qi-irara
   cassowary-about speak-TEL
   ‘I am going to speak about the cassowary.’

b. Fuseenara firaa ufini maqamau kai nidanoo.
   fuseena-ara firaa ufini maqa-mau kai nu-i-da-noo
   cassowary-about big bird ground-over only go.around-IND-PROG-3SG
   ‘The cassowary is a big bird that only lives on the ground.’

c. Aiqama saqari qaqamma nambiqaidanoo.
   aiqama saqari qaqamma na-fiqa-i-da-noo
   every tree fruit eat-collect-IND-PROG-3SG
   ‘It collects and eats the fruit of every tree.’

d. Sia unusee naidanoo.
   sia unu-sa-i na-i-da-noo
   NEG chew-SEQ-SS eat-IND-PROG-3SG
   ‘It does not chew when it eats.’

e. Anukaki akara rirafa aiku kisaaqa ...
   a-nuka-ki akara ri-ira-fa a-iku kisaaqa
   2/3SG.NSBJ-neck-LOC paint paint-AZR-SBJ 2/3SG.NSBJ-leg long
   ‘In its neck are colours, its legs are long, ...’

50 More literally: ‘it does not chew and then eat’. 
f. ... arakooma asausi kisaaqa araana aukuka aukuka irafa ...
a-rakooma asausi kisaaqa araana aukuka-ka-aukuka-ka-ira-fa
2/3SG.NSBJ-buttocks hair long feces cut-NZR-cut-NZR-AZR-SBJ
‘... its tail feathers are long and striped with feces ...’

g. ... afeedana kisaaqa mifa saqari firaana aumooku ...
a-feedana kisaaqa mi-fa saqari firaa-na aumooku
2/3SG.NSBJ-tibia long DEM-SBJ tree big-NSBJ tree.trunk
‘... its legs are long and on a large tree trunk ...’

h. ... auru maqaidanoo.
auru maqa-i-da-noo
egg give.birth-IND-PROG-3SG
‘... it lays eggs.’

i. Doo miufana taikeenoo.
doo mi-ufa-na taika-i-noo
COMP DEM-talk-NSBJ finish-IND-3SG
‘Well, this talk is finished.’

(13) a. Nakipurunara qirara.
nakipuruna-ara qi-irara
type.of.bird-about speak-TEL
‘I am going to speak about the nakipuruna bird.’

b. Nakipuruna amiqira ufini afaaqa qumbiqarafa ...
nakipuruna amiqi-ira ufini a-afaqa qumbiqa-ira-fa
type.of.bird good-AZR bird 2/3SG.NSBJ-body fill-AZR-SBJ
‘The nakipuruna bird is a good bird, full of meat; ...’

c. ... mifa anusaa maridanoo.
mi-fa anu-saa mari-i-da-noo
DEM-SBJ mountain.range-on be-IND-PROG-3SG
‘... it lives on the mountain range.’

d. Nupuki qaqamma naidanoo saqariki faiqaidanoo.
nupuki qaqamma na-i-da-noo saqari-ki faiqa-i-da-noo
type.of.tree fruit eat-IND-PROG-3SG tree-LOC sleep-IND-PROG-3SG
‘It eats the fruit of the nupuki tree.’
e. *Saqariki faiqaidanoo minaki auru maqaidanoo.*
   saqariki-ki faiqa-i-da-noo mi-na-ki auru maqa-i-da-noo
tree-LOC sleep-IND-PROG-3SG DEM-NSBJ-LOC egg give.birth-IND-PROG-3SG
   ‘It sleeps in a tree; in that, it lays its eggs.’

f. *Doo miufana taikeenoo.*
doo mi-ufa-na taika-i-noo
   COMP DEM-talk-NSBJ finish-IND-3SG
   ‘Well, this talk is finished.’

(14) a. *Deena ufa qirara.*
deeena ufa qi-irara
   hummingbird talk speak-TEL
   ‘I am going to tell something about the hummingbird.’

b. *Deena fannoo mifa kaaqa nanda amasasa qimarifa.*
deeena fannoo mi-fa kaaqa nanda amasasa qi-i-mari-ifaa
   hummingbird FOC DEM-SBJ very.much forest enjoy speak-IND-be-STAT
   ‘The hummingbird, it really enjoys the forest.’

c. *Kaaqa nandara rimarifa.*
    kaaqa nanda-ara ru-i-mari-ifaa
    very.much forest-about be.happy-IND-be-STAT
   ‘It is really happy about the forest.’

d. *Miqinoo niniifanoo eendifanoo …*
miqi-i-noo nini-ifaa-noo eendi-ifaa-noo
   bi.like.that-IND-3SG go.around.DEP-3SG.NPST.DS-3SG dusk-3SG.NPST.DS-3SG
   ‘It is like that, goes around, and when dusk falls, …’

e. *… kaqi miqoo saqari asaidasaafee …*
    kaqi miqoo saqari asaida-saa-fee
    nothing there tree twig-on-or
   ‘… just there on the twig of a tree or …’

f. *… sanda amuqusaaflee quqamafi faiqeenoo …*
sanda amuqu-saa-fee quqa-mafi faiqa-i-noo
   rope bud-on-or sit.down-spend.the.night sleep-SS-3SG
   ‘… on a liane bud it sits down for the night and sleeps, …’
g. ... iqaamqaifanoo findimaeqeenoo ...
iqa-maqa-if-a-noo  findi-maqa-i-noo
dawn-BEN51-3SG,NPST.DS-3SG  get.up-BEN-IND-3SG
‘... when it dawns, it gets up, ...

h. ... nandarunna kaqi fifau oonuree anireeino ...
nanda-runna  kaqi fifau52  oonu-ra-i  ani-ra-i-i-noo
forest-through53  nothing  go.upward-SEQ-SS  come-SEQ-SS-DUR-3SG
‘... inside the forest it just goes and comes, ...

i. ... nidanoo nanda fusakinoo ...
nu-i-da-noo  nanda  fusaki-i-noo
go.around-SS-PROG-3SG  forest  rejoice-SS-3SG
‘... it goes around and rejoices in the forest, ...

j. ... maafa maana miqimarifa ...
maa-fa  maan-na  miqi-i-mari-if-a
DEM.PROX-SBJ  DEM.PROX-NSBJ  do.like.that-IND-be-STAT
‘... it does like this and that, ...

k. ... kaaqa nanda fusakirara rimarifa.
kaaqa  nanda  fusaki-irara  ru-i-mari-if-a
very.much  forest  rejoice-TEL  be.happy-IND-be-STAT
‘... it really wants to rejoice in the forest and is happy.’

l. Doo deena ufa t'aikeenoo.
doo deena  ufa  taika-i-noo
COMP  hummingbird  talk  finish-IND-3SG
‘Well, the talk about the hummingbird is finished.’

(15) a. Difusa ufa qirara.
difusa  ufa  qi-irara
type.of.bird  talk  speak-TEL
‘I am going to tell something about the difusa bird.’

b. Difusa oosana maaqiminoo maridanoo.
difusa  oosana  maaqim-mni-noo  mari-i-da-noo
type.of.bird  nature  be.like.this-INT-3S.GS  be-IND-PROG-3S.GS
‘The nature of the difusa bird is as follows.’

51 In my corpus, words with -maqa were translated as ‘for him/her/them’, so I tentatively glossed them as BENEFACTIVE.
52 Kaqi fifau was translated with ‘only’ or ‘just’. I cannot give a complete analysis, but it seems to contain the elements kaqi ‘small/nothing’ and -fau NEGATION.
53 This suffix only occurs once in my corpus. I have no information about its use in respect to other locative markers.
c. *Mifa nandaki nidanoo ...*
   mi-fa nanda-ki nu-i-da-noo  
   DEM-SBJ forest-LOC go.around-IND-PROG-3SG
   'It goes around in the forest ...'

d. *... keera qaqamma nidanoo.*
   keera qaqamma na-i-da-noo  
   type.of.tree fruit eat-IND-PROG-3SG
   '... eating the fruit of the keera tree.'

e. *Minafaqa akaqa saqari qaqammafaqa nidanoo.*
   mi-na-faqi akaqa saqari qaqamma-faqi na-i-da-noo  
   DEM-NSBJ and some tree fruit-and eat-IND-PROG-3SG
   'This and the fruit of some other tree it eats.'

f. *Neemarifanoo, misaqarina qaqamma qumiqaraifanoo ...*⁵⁴
   na-i-mari-ifan-na qaqamma qumiqara-ifan-noo  
   eat-IND-be-3SG.NPST.DS-3SG DEM-tree-NSBJ fruit devour-3SG.NPST.DS-3SG
   'While it eats, it devours the tree fruit and ...'

g. *... mifa anaadoonni anidanoo.*
   mi-fa anaadoon-nni an-i-da-noo  
   DEM-SBJ old.garden-ALLA come-IND-PROG-3SG
   '... it comes to an old garden.'

h. *Animaridanoo ...*
   an-i-mari-i-da-noo
   come-IND-be-IND-PROG-3SG
   'Having arrived, ...'

i. *... faiqi eeqa qaqaasana qumuaramasaidanoo ...*
   faiqi eeqa qaqaas-na qumuara-ma-sa-i-da-noo
   man banana unwrapped-NSBJ STEAL-COMP-SEQ-SS-PROG-3SG
   '... it steals unwrapped bananas of people and ...'

j. *... nanoo nidanoo.*
   na-noo nu-i-da-noo
   eat-3SG go.around-IND-PROG-3SG
   '... eating, it flies around.'

---

⁵⁴ Note that the subject of the next verb is the same, contrary to what the DS subject marker suggests. Perhaps the clause *misaqarina qaqamma qumiqaraifanoo* should be seen as a side note that does not influence the SS/DS marking on *neemarifanoo*. A translation could be: 'when it has eaten (that is, when it has devoured the fruit of this tree), it comes to an old garden.'
k. *Doo maana miqimarifa maridanoo.*
   doo  maa-na  miqi-i-mari-if-a  mari-i-da-noo
   COMP  DEM.PROX-NSBJ  be.like(that)-IND-be-3SG.NPSTSTAT  be-IND-PROG-3SG
   'Well, it is like this.'

l. *Kaaqa qumuarimarifa afai sani tiafa.*
   kaaqa  qumuara-i-mari-if-a  a-fai  sani  tia-fa
   very.much  steal-IND-be-3SG.NPSTSTAT  2/3SG.NSBJ-tooth  stone.axe  huge-SBJ
   'It actually steals, the snaggletooth.'

---

55 *Afai sani tiafa* 'huge stone axe tooth' is slang for someone with ugly teeth.
Appendix 2: Frog Story

This Binumarien sample text was elicited with the picture book ‘Frog, where are you?’ by Mercer Meyer. The story was recorded, translated and transcribed with Noko, a native speaker of Binumarien. The recording has a duration of 7:55 minutes.

Throughout the story, now and then a DS verb is used when the next verb has the same subject, and the other way around. I will indicate this in the gloss line in superscript: ‘DS>SS’ means that a DS form is used where I expect an SS form. I assume the ‘incorrect’ use of SS/DS is due to the fact that the speaker improvised while telling the story. Often, the mistake is repaired by adding a new phrase with another referent or by repeating the same verb, with correct SS/DS marking the second time.

This story contains many words which convey notions of location, distance and directionality. Binumarien has an elaborated system with many forms that combine these notions. An example is maramiri which combines with verbs of perception (qafaa ‘see’, iria ‘hear’) in my corpus, with the perceived object being above the subject. As no descriptive analysis on these words in Binumarien has been done yet, I will suffice with a general gloss, like ‘sense.above’.

(1)  Moo kari maafaiqifa …
     moo  kari  maa-faiqi-fa
     one  time   DEM.PROX-boy-SBJ
     ‘Once, this boy …’

(2) … nari maaqaki fainifaq maridanoo, …
     nari  maaqa-ki  faini-faqa  mari-i-da-noo
     3SG.REFL  house-LOC  dog-and  be-IND-PROG-3SG
     ‘… was in his house with his dog; …’

(3) … eeqamoosa maraseenoo rakisimarinau.
     eeqamoosa  mara-sa-i-noo  rakisi-i-mari-i-nau
     frog  take-SEQ-SS-3SG  look.after-IND-be-IND-3SG.FPST
     ‘… he took a frog and looked after him.’

(4)  Buturaki eeqamoosa uaqeedanoo, …
     butura-ki  eeqamoosa  uqa-i-da-noo
     bottle-LOC  frog  watch.over-IND-PROG-3SG
     ‘He watched over the frog in a bottle and …’
... nari fainifaqa minaki rakisida, ...
nari faini-faqa mi-na-ki rakisi-i-da
3SG.REFL dog-and DEM-NSBJ-LOC look.after-SS-PROG
‘... while he was watching over him with his dog, ...’

... eendakina mariufanoo, faiqararinoo, ...
eendaki-na mari-i-ufa-noo faiqa-irara-i-noo
night-LOC be-DUR-3SG,FPST-DS-3SG sleep-TEL-IND-3SG
‘... at night, he wanted to sleep and ...’

... ooru nari beetasa sandaaqi nari faini sakaseenoo, ...
ooru nari beetsa sandaqi nari faini saka-sa-i-noo
go.upward 3SG,REFL bed upside 3SG,REFL dog carry-SEQ-SS-3SG
‘... he carried his dog onto the bed and ...’

... faiqaqeeufanoo, eeqamoosa fannoo ...
faiza-qee-ufa-noo eeqamoosa fano
sleep?-3SG,FPST-DS-3SGS frog FOC
‘... he slept and the frog ...’

... buturakiqari afu atuqaseenoo, uriqareenoo, ...
butura-ki-qari a-fu atuqa-sa-i-noo uri-qara-i-noo
bottle-LOC-ELA 2/3SG,NSBJ-eye open-SEQ-SS-3SG upwards-move-SS-3SG
‘... opened the lid and moved it off the bottle and ...’

... nammarinni sandanaau.
nammar-nni sanda-i-nau
water-ALLA run-IND-3SG,FPST
‘... ran to the water.’

Eendaki miqanda faiqaqeeufanoo, nammarinni sandoofanoo, ...
eendaki mi-qanda faiqa-que-ufa-noo nammar-nni sanda-ufa-noo
night DEM-DU.SPC sleep?-3SG,FPST,DS-3SG water-ALLA run-3SG,FPST,DS-3SG
‘The two slept at night and he (the frog) ran to the water and...’

... iaqoofanoo, kananaana findifi ...
iaqo-ufa-noo kananaana findi-fu-i
dawn-3SG,FPST,DS-3SG morning get.up-go-SS
‘...dawn came, and in the morning they get up and ...’
... qafaafanoo, sia eeqamoosa fanno buturaki marinau.
qafa-ufa-noo sia eeqamoosa fanno butura-ki mari-i-nau
see-3SG.FPST.DS-3SG NEG frog FOC bottle-LOC be-IND-3SG.FPST
‘...look and there is no frog in the bottle.’

Aiqaree fufanoo, nari fainifaqa qafeenoo, ...
aiq-ra-i fu-ufa-noo nari faini-faqa qafa-i-noo
go.away-SEQ-SS go-3SG.FPST.DS-3SG 3SG.REFL dog-and see-IND-3SG
‘he (the boy) went away and looked with his dog ...’

... “yaifee fiifoo” qimasee, tautufindifufanoo, ...
yaifee fu-ii-foo qi-ma-sa-i tautu-findi-ufa-noo
where go-?/QUOT say-COMP-SEQ-SS be.startled-get.up-go-3SG.NPST.DS-3SG
‘... “where did he go?” they asked and startled they got up and went ...’

... qafaafanoo, sia buturaki marinau.
qafa-ufa-noo sia butura-ki mari-i-nau
see-3SG.FPST.DS-SG NEG bottle-LOC be-IND-3SG.FPST
‘... and looked and he (the frog) was not in the bottle.’

Umureenoo, mina faini fanno ...
umu-ra-i-noo mi-na faini fanno
come.down-SEQ-SS-3SG DEM-NSBJ dog FOC
‘When he (the dog) had come down, the dog ...’

... buturaki akiiqa aususeenoo, ...
butura-ki a-kiiqa a-usu-sa-i-noo
bottle-LOC 2/3SG.NSBJ-head 2/3SG.NSBJ-put.inside-SEQ-SS-3SG
‘... put his head in the bottle ...’

... udiraifanoo, sia minaki marifanoo, ...
udira-ifa-noo sia mi-na-ki mari-ifa-noo
sniff-3SG.NPST.DS-3SG NEG DEM-NSBJ-LOC be-3SG.NPST.DS-3SG
‘... sniffed and he (the frog) was not in there, ...’

... qafaifanoo, mifa nari sooqakina qafaifanoo, ...
qafa-ifa-noo mifa sooqa-kina qafaifanoo
see-3SG.NPST.DS-3SG DEM-SBJ shoe-inside see-3SG.NPST.DS-3SG
‘... he saw; and he (the boy) looked inside his shoe and ...’
(21) ... sia eeqamoosa fannoo minaki keeqanoo, marinau.
    sia eeqamoosa fannoo mi-na-ki keeqa-noo mari-i-nau
    NEG frog FOC DEM-NSBJ-LOC go.inside-3SG be-IND-3SG.FPST
    '... the frog had not gone inside it.'

(22) Nariqa maaqakiqari kananaana raudamakufaqa, ...
    nariqa maaqa-ki-qari kananaana rauda-maki-ufa-qa
    3PL.REFL house-LOC-ELA morning come.out-?-3SG.FPST.DS-2/3PL
    'In the morning, they came out of their house, ...'

(23) ... umureeqa, mifainifa ...
    umu-ra-i-qa mi-faini-fa
    come.down-SEQ-SS-2/3PL DEM-dog-SBJ
    '... they came down and this dog ...'

(24) ... mibuturanaki akiqa ususeenoo, ...
    mi-butura-na-ki a-kiqa usu-sa-i-noo
    DEM-bottle-NSBJ-LOC 2/3SG.NSBJ-head put.inside-SEQ-SS-3SG
    '... put his head inside this bottle and ...'

(25) ... eeqamoosara qafai, siaifanoo, ...
    eeqamoosa-ara qafa-ISP-D S siai-ifa-noo
    frog-about see-SS NEG-3SG.NPST.DS-3SG
    '... looked for the frog and saw he did not have it...'

(26) ... aaree, marifanoo, uinduaqakiqari ...
    aara-i mari-ifa-noo uinduaqa-ki-qari
call-SS be-3SG.NPST.DS-3SG window-LOC-ELA
    '... he called; out the window ...'

(27) ... nari eeqamoosa aaraifanoo, siaufanoo, ...
    nari eeqamoosa aara-ifa-noo sia-ufa-noo
    3SG.REFL frog call-3SG.NPST.DS-3SG NEG-3SG.FPST.DS-3SG
    '... he called his frog and he (the frog) was not there and ...'

(28) ... miqanda “yaifee fiifoo” qimasee, ...
    mi-qanda yaifee fu-ii-foo qi-ma-sa-i
    DEM-DU.SPC where go-?-QUOT speak-COMP-SEQ-SS
    '... the two said “where did he go” and ...'
(29) ... randee marufanoo ...
randa-i mario-ufanoo
search be-2/3PL.PFST-PRS-3SG
‘... as they were searching ...

(30) ... kananaana umumarida, randee marufanoo, ...
kananaana umu-mari-i-da randa-i mario-ufanoo
morning come.down be-2/3PL.PFST-PRS-3SG
‘... in the morning they came down, and as they were searching ...

(31) ... faini fanoo unduaqakiqari
qua fanoo unduaq-kiiqari
dog FOC window-LOC-ELA
‘... out the window, the dog ...

(32) ... mi-buturanaki akiiqa ususeenoo, ...
mi-butura-na-ki a-kiqqa usu-sa-i-noo
DEM-bottle-NSBJ-LOC 2/3SG.NSBJ-head put.inside-SEQ-SS-3SG
‘... had his head inside this bottle and ...

(33) ... raudamakufanoo, aquufanoo, ...
rauda-mak-ufanoo aqu-u-ufanoo
break-3SG.PFST.DS-3sg go.downward-go-3SG.PFST.DS-3sg
‘... came out and fell and ...

(34) ... maqasa butura fanoo andaana rufanoo, ...
maq-saa butura fanoo andaana ru-ufa-noo
ground-on bottle foc shatter fall-3SG.PFST.DS-3SG
‘... the bottle fell to pieces on the ground; ...

(35) ... nari fainiara qamuquisufanoo, ...
nari faini-arara qamuquusa-ufanoo
3SG.REFL dog-about heart-3SG.PFST.DS-3SG
‘... he (the boy) felt sorry for his dog and ...

(36) ... umu nari faini rafuseenoo, ...
unu nari faini rafusu-sa-i-noo
come.down 3SG.REFL dog lift-SEQ-SS-3SG
‘... (having come) down, he picked up his dog and ...’
... amooqanaidanoo, miqanda ...

amooqana-i-da-noo mi-qanda
kiss-IND-PROG-3SG DEM-DU.SPC
‘... kissed him and the two ...’

... nari eeqamoosara randarara, doo fiqau.
nari eeqamoosa-ara randa-irara doo fu-i-qau
3PL.REFL frog-about search-TEL COMP go-IND-2/3.PL.FPST
‘... went out to search their frog.’

Nandakina “yaifee fiifoo” qimaseeqa, ...
nanda-kina yaifee fu-ii-foo qi-ma-sa-i-qa
forest-inside where go?-QUOT speak-COMP-SEQ-SS-2/3.PL
‘In the forest, they said “where did he go” and ...’

... mina aqaaraqa fimariqau.
mi-na aqaara-qa fu-i-mari-i-qau
‘... they followed the footprints and went away.’

Nandaki aqaaraqa fifiiufaqa, ...
nanda-ki aqaara-qa fifii-ufa-noo
forest-LOC follow.footprints-2/3.PL go-2/3.PL.FPST.DS-3SG
‘Following the footprints, they went in the forest and ...’

... oonu qafoofanoo, kookapunaqaindi marufanoo,...
oonu qafo-ufa-noo kookapuna-uqaindi mari-ufa-noo
go upward see-2/3.PL.FPST.DS-3SG bee-GROUP.NSPC 2/3.PL.FPST.DS-3SG
‘... looked up and there was a swarm of bees and ...’

... mina faini fannoo ...
mi-na faini fannoo
DEM-NSBJ dog TOP
‘... his dog ...’

... kookapunaqaindi marufanoo qafamaseenoo, ...
kookapuna-uqaindi mari-ufa-noo qafa-ma-sa-i-noo
bee-GROUP.NSPC be-2/3.PL.FPST.DS-3SG see-COMP-SEQ-SS-3SG
‘... saw that there was a swarm of bees and ...’
(45) ... kookapuna afairida marufanoo, ...
kookapuna afairi-i-da mari-ufa-noo
bee bark-IND-PROG be-3SG.FPST.DS-3SG
‘while he barked at the bees, …’

(46) ... mina akoofa fiqaree fufanoo, ...
mi-na a-koo-fa fiqa-ra-i fu-ufa-noo
DEM-NSBJ 2/3SG.NSBJ-father-SBJ pass-SEQ-SS go-3SG.FPST.DS-3SG
‘... his master overtook him and went away and …’

(47) ... mifainifa oonumara kookapuna afairi marufanoo, ...
i-faini-fa oonu mara kookapuna afairi mari-ufa-noo
DEM-dog-SBJ go.upward-? bee bark be-3SG.FPST.DS-3SG
‘... while this dog looked upward and was barking at the bees, …’

(48) ... mifaiqifa oonu qumara aamara qafamaseenoo, ...
i-faiqi-fa oonu qumara aamara qafa-ma-sa-i-noo
DEM-child-SBJ go.upward rat hole see-COMP-SEQ-SS-3SG
‘...this child saw a rat hole up there and …’

(49) ... minakina marameema eeqamoosara aaraidanoo, ...
i-na-kina marameema eeqamoosa-ara aara-i-da-noo
DEM-NSBJ-inside downward frog-about call-IND-PROG-3SG
‘... inside that (hole) he called down to the frog, …’

(50) ... mina aamara mifoora qimaseenoo, ...
i-na aamara mi-foora qim-as-sa-i-noo
DEM-NSBJ hole DEM-EQ speak-COMP-SEQ-SS-3SG
‘... as if he thought it would be his hole, and …’

(51) ... akiqa minaki aususeenoo, ...
i-kiqa mi-na-ki a-usu-sa-i-noo
2/3SG.NSBJ-head DEM-NSBJ-LOC 2/3SG.NSBJ-put.inside-SEQ-SS-3SG
‘... he put his head inside and …’

(52) ... marameema eeqamoosara aareemarufanoo, ...
marameema eeqamoosa aara-i-maru-ufa-noo
downward frog call-IND-be-3SG.FPST.DS-3SG
‘... while he was calling down to the frog, …’
(53) ... faini fannoo mirinni kookapuna afairidanoo maridanoo, ...
faini fannoo mirinni kookapuna a-fair-i-da-noo mari-i-da-noo
dog FOC above? bee 2/3SG.NSBJ-bark-IND-PROG-3SG be-IND-PROG-3SG
‘... the dog looked up and was barking at the bees; ...’

(54) ... anaamu usakasee marufanoo,
anaamu usaka-sa-i maru-ufa-noo
nest build-SEQ-SS be-2/3PL.FPST.DS-3SG
‘... they built a hive and lived there and...’

(55) ... mifaiqifa oonu maridanoo, ...
mifaiqi-fa oonu mari-i-da-noo
DEM-child-SBJ go.upward be-IND-PROG-3SG
‘... while this child was up there, ...’

(56) ... miaamarakina marameema oori upeekaseenoo, ...
miaamara-kina marameema oori upeeka-sa-i-noo
DEM-hole-inside downward snout put.inside-SEQ-SS-3SG
‘... he put his face down inside this hole and ...’

(57) ... eeqamoosa aareemarufanoo, ...
eeqamoosa aara-i-mari-ufa-noo
frog call-IND-be-3SG.FPST.DS-3SG
‘... called the frog and ...’

(58) ... qumura fannoo minakiqari urureenoo, ...
qumura fannoo mi-na-ki-qari uru-ra-i-noo
rat FOC DEM-NSBJ-LOC-ELA come.upward-SEQ-SS-3SG
‘... a rat came out of it and ...’

(59) ... mifaiqanaaqina ooraiki ukaqamufanoo, ...
miafaiq-anaiq-na oori-aiki ukaqa-a-mi-ufa-noo
DEM-child-baby-NSBJ snout-nose bite-2/3SG.NSBJ-give-3SG.FPST.DS-3SG
‘... bit the little child’s nose and ...’

(60) ... minakiqari findifi taumatafi faaqarufanoo, ...
mi-na-ki-qari findi-fi tautu-ma-fi faqaru-ufa-noo
DEM-NSBJ-LOC-ELA get-up? be.startled-COMP? shout-3SG.FPST.DS-3SG
‘... he (the boy) got up from it, startled, and shouted and...’
The dog over there wanted to attack the bees; …

... he shouted and climbed in the tree.

The beehive broke and …

fell on the ground.

While he ran …

... his master saw from there …
... *saqari akaqa marufanoo,* ...  
*saqari akaqa mari-ufa-noo*  
'tree hole be-3SG.FPST.DS-3SG  
'... there was a tree hole and ...'

... *minaki eeqamoosa saqarimau makaranau.*  
*mi-na-ki eeqamoosa*\(^{56}\) *saqari-mau m-akara-i-nau*\(^{57}\)  
'DEM-NSBJ-LOC frog tree-over ?-climb-IND-3SG.FPST  
'... from there the frog climbed in the tree.'

*Akaramafinoo, qafoonanoo,* ...  
*akara-ma-fu-i-noo qafa-ufa-noo*  
'climb-COMP-GO-IND-3SG see-3SG.FPST.DS-3SG  
'He climbed and saw ...'

... *saqari akaqa marinau.*  
*saqari akaqa mari-i-nau*  
'tree hole be-IND-3SG.FPST  
'... there was a tree hole.'

*Minaki oonumarida,* ...  
*mi-na-ki oonu-mari-i-da*  
'DEM-NSBJ-LOC go.upward-be-IND-PROG  
'While he was in it up there, ...'

... *eeqamoosara nameera qidanoo, aareemarufanoo,* ...  
*eeqamoosa-ara nameera qi-i-da-noo aara-i-mari-ufa-noo*  
'frog-about call speak-IND-PROG-3SG call-IND-be-3SG.FPST.DS-3SG  
'... calling the frog, while he called, ...'

... *saqari akaqaki minakiqari karoonda firaafa* ...  
*saqari akaqa-ki mi-na-ki-qari karoonda firaa-fa*  
'tree hole-LOC DEM-NSBJ-LOC-ELA type.of.owl big-SBJ  
'... in a hollow tree, out of it, a big owl, ...'

... *saqaraundurai mariufa, raudamaki,* ...  
*saqari-aundura-i mari-i-ufa rauda-maki*  
'tree-inside-ALLA be-DUR-3SG.FPST.STAT come.out-?  
'... that lived inside the tree, came out and ...'

---

\(^{56}\) *Eeqamoosa* 'frog' should be *faiqi* 'child' here, since the child climbs the tree. I did not have the chance to ask the storyteller, but another speaker agreed on the correction.  
\(^{57}\) The "filler m" does not seem to convey meaning. It occurs in fast speech, mostly on final verbs.
(77)  ... miqoo akaqasaa uqamafufanoo, ...
    miqoo akaqa-saa uqama-fi-ufa-noo
    there hole-on sit-down-3SG.FPST.DS-3SG
    '... sat down there in the opening and...'

(78)  ... mifaiqifa maramiri mina qafeenoo, tautumakufanoo, ...
    mi-faiqi-fa maramiri mi-na qafa-i-noo tautu-maki-ufa-noo58
    DEM-child-SBJ sense.above DEM-NSBJ see-ss-3SG be.startled?-3SG.FPST.DS-3SG
    '... this child looked up, saw it and was scared and ...'

(79)  ... rafusakinoo, maqasaa aqufinau.
    rafusaki-i-noo maqa-saa aqu-fu-i-nau
    climb.down-ss-3SG ground-on go.downward-go-IND-3SG.FPST
    '... climbed down on the ground.'

(80)  Anaaqiangannaidari aqufufanoo, ...
    a-naaqianna-indari aqu-fu-ufa-noo
    2/3SG.NSBJ-back-on? go.downward-go-3SG.FPST.DS-3SG
    'He fell on his back and ...'

(81)  ... faini fanno aiqaraofanoo, ...
    faini fanno aiga-ra-ufa-noo
    dog FOC go.away-SEQ-3SG.FPST.DS-3SG
    '... the dog went away and ...'

(82)  ... kookapunauqaindi afaqee, ukaqa amufanoo, ...
    kookapuna-uqaindi afaqa-i ukaqa a-mi-ufa-noo
    bee-GROUP.NSPC chase-ss bite 2/3SG.NSBJ-give-3SG.FPST.DS-3SG
    '... the swarm of bees chased and stung him and ...'

(83)  ... aiqaree sandanau.
    aiga-ra-i  sanda-i-nau
    go.away-SEQ-SS run-IND-3SG.FPST
    '... he ran away.'

(84)  Mifaiqifa saqarikiqari rafusaki aqufinoo, ...
    mi-faiqi-fa saqari-ki-qari rafusaki aqu-fu-i-noo
    DEM-child-SBJ tree-LOC-ELA climb.down go.downward-go-ss-3SG
    'This child climbed down from the tree and ...'

58 The meaning of the suffix -maki is unclear to me, but it seems to occur on verbs that denote involuntary action: raudaa 'come out, break', rukaa 'break' and tautua 'be startled'.
(85) ... mifaiqifa ...
  mi-faiqi-fa
  DEM-child-SBJ
  '... this child, ...'

(86) ... saqarikiqari rafusaki aqufinoo marufanoo, ...
  saqari-k-qi-qari raf-a-fu-i-noo mari-ufa-noo
  tree-LOC-ELA climb.down go.downward-go-SS-3SG be-3SG.FPST.DS-3SG
  '... as he climbed down from the tree, ...'

(87) ... ufini fannoo minakiqari anireenoo, qafoofanoo, ...
  ufini fannoo mi-na-ki-qari ani-ra-i-noo qafa-ufa-noo
  bird FOC DEM-NSBJ-LOC-ELA come-SEQ-SS-3SG see-3SG.FPST.DS-3SG
  '... a bird came out of it and looked and ...'

(88) ... tautumakufanoo maqufinau.
  tautu-ma-k-i-ufa-noo m-aqu-fu-i-nau
  be.startled?-3SG.FPST.DS-3SG ?-go.downward-go-IND-3SG.FPST
  '... he (the boy) was scared and went down.'

(89) Mifaiqifa sandee ufiniara rufiamaree, ...
  mi-faiqi-fa sanda-i ufini-ara rufia-ma-ra-i
  DEM-child-SBJ run-SS bird-about be.afraid-COMP-SEQ-SS
  'This child ran, being afraid of the bird, ...'

(90) ... aiqaree oonimau makaranau.
  a-iqa-ra-i ooni-mau m-akara-i-nau
  go.away-SEQ-SS stone-over ?-climb-IND-3SG.FPST
  'He went away and climbed on a stone.'

(91) Oonimau akareenoo ...
  ooni-mau akara-i-noo stone-over climb-SS-3SG
  'He climbed on the stone and ...'

(92) ... meerai oonakiqai orureenoo, ...
  meerai ooni-a-kiqa-i ooru-ra-i-nooSS-DS
  on.top stone-2/3SG.NBJ-head-ALLA go.upward-SEQ-SS-3SG.S
  '... went up to the very top of the rock and ...'
(93) ... maaqinni mataaqausa maaqai moo aandau ...
maaqinni mataaqa-usa maaqa-i moo aandau
over here Westerner-GROUP.SPC house-ALLA one animal
‘... over here was an animal from the land of Westerners ...’

(94) ... diaafee qimariana. Aanai fannoo ...
diaa-fee qi-i-mari-ana aanai fannoo
deer-Q speak-IND-be-2SG.STAT horn FOC
‘... that you call deer; its antlers ...’

(95) ... maaqinni oonu anaqqiannai marufanoo, ...
maaqinni oonu a-anaqqianna-i mari-ufa-noo
over here go.upward 2/3SG.NSBJ-back-ALLA be-3SG.FPST.DS-3SG
‘... were over here towards his back and ...’

(96) ... oonu mifa saqari amara mifoo qimasee, ...
onu mi-fa saqari amara mi-foo qi-ma-sa-i
go.upward DEM-SBJ tree forked.stick DEM-QUOT speak-COMP-SEQ-SS
‘... he (the boy) went up and thought that it was a tree branch; ...’

(97) ... oonisaa kikiqamafifanoo, ...
oni-saa kikiq-amafi-ifa-noo
stone-on stand.up-3SG.NPST.DS
‘... he stood on the stone and ...’

(98) ... mina aanaindauru uaqee marinau.
mi-na aanai-ndauru uqa-i mari-i-nau
DEM-NSBJ horn.around look.out-SS be-IND-3SG.FPST
‘... holding its antlers, he was looking out.’

(99) Faini fannoo narakoona udiramammaree, ...
faini fannoo nari-a-koo-na udira-ma-mma-ra-i
dog FOC 3SG.REFL-2/3SG.SBJ-father-NSBJ sniff-COMP-SEQ-SS
‘The dog smelled his master ...’

(100) ... miqoo aniree qafoofanoo, ...
miqoo ani-ra-i qafa-ufa-noo
there come-SEQ-SS see-3SG.FPST.DS-3SG
‘... and came there and saw and ...’
(101)  ... mina akoofa oonisaa akaranoo, ...
    mi-na a-koo-fa ooni-saa akara-noo
    DEM-NSBJ 2/3SG.NSBJ-father-SBJ stone-on climb-3SG.S
    ‘... his master, while climbing the stone, ...’

(102)  ... miaanaina uquseenoo, kikiqino marufanoo, ...
    mi-an-a-na uqu-sa-i-noo kikiq-i-noo mar-u-noo
    DEM-horn-NSBJ work-SEQ-SS-3SG stand.up-SS-3SG be-3SG.FPST.DS-3SG
    ‘... held this antlers and was standing; ...’

(103)  ... mifaqifa saqari asaana mifoora mina aanai uquseenoo, ...
    mi-faiq-i-na saqari asaana mi-foora aanai uqu-sa-i-noo
    DEM-child-SBJ tree branch DEM-EQ horn work-SEQ-SS-3SG
    ‘... this child held its antlers like a tree branch and ...’

(104)  ... kikiqino marinau.
    kikiq-i-noo mari-i-nau
    stand.up-SS-3SG be-IND-3SG.FPST
    ‘... was standing.’

(105)  Diaa fannoo maramiri irifanoo, faiqi fannoo ...
    diaa fannoo maramiri iri-ifa-noo faiq-i fannoo
    deer FOC sense.above hear-3SG.NPST.DS-3SG child FOC
    ‘The deer sensed something above and the child ...’

(106)  ... mina aanaisaa oonu akaramafufanoo, ...
    mi-na aanai-saa oonu akara-ma-fu-ufo-noo
    dem-nsbj horn-on go.upward climb-COMP-go-3SG.FPST.DS-3SG
    ‘... climbed up his antlers ...’

(107)  ... uqaseenoo, rufiamareenoo, sandee, ...
    uqa-sa-i-noo ruqia-ma-ra-i-noo sand-i
    leave-SEQ-SS-3SG be.afraid-COMP-SEQ-SS-3SG run-SS
    ‘... and he (the deer) went away and was afraid and ran and ...’

(108)  ... mifaiqina maramaari aanaisaa kookoombaara mamareenoo, ...
    mi-faiq-i-na maramaari aanai-saa kookoombaara mama-ra-i-noo
    DEM-child-NSBJ go.upward horn-on take.on.shoulders carry-SEQ-SS-3SG
    ‘... carried this child on his antlers to ride ...’
(109) ... sandanau.
sanda-i-nau
run-IND-3SG.FPST
'... and ran away.'

(110) Sandee fifiufanoo, qaaqanasaa oonureenoo, ...
sanda-i fifi-ufa-noo qaaqana-saa oonu-ra-i-noo
run-SS go-3SG.FPST.DS-3SG mountain-on go.upward-SEQ-SS-3SG
'He ran and went up a mountain, ...'

(111) ... maanisaa nammari maaminni mumimarufanoo, ...
maani-saa nammari maaminni m-umu-i mari-ufa-noo
landslide-on water down.below ?-come.downward-SS-BE-3SG.FPST.DS-3SG
'... on a slope, and there was water down below and ...'

(112) ... qaaqana qafaissa oonureenoo, ...
qaaqana qafai-saa oonu-ra-i-noo
mountain side-on go.upward-SEQ-SS-3SG
'... he went up on the side of the mountain, ...'

(113) ... mifainisandiri midiaafa oonureenoo, ...
mi-fai-di-sa ndiri mi-diaa-fa oonu-ra-i-noo
DEM-dog?-COM2 DEM-deer-SBJ go.upward-SEQ-SS-3SG
'... together with this dog this deer went up and then ...'

(114) ... mifaqiina aanaisaa kookoombaariranakai afaimamufanoo, ...
mi-faiqi-na aanai-saa kookoombaari-ira-na-kai afaimamu-ufa-noo
DEM-child-NSBJ horn-on take.on.shoulders-AZR?-NSBJ?-only drop.off-3SG.FPST.DS-3SG
'... dropped off the child that just rode on his antlers, ...'

(115) ... meemai nammarikina maqufinau.
meemai nammar-i-kina m-aqu-fu-i-nau
down.there water-INSIDE ?-go.downward-go-IND-3SG.FPST
'... and he (the child) fell down there in the water.'

(116) Nari fainindiri anaqqiannaindari ooqurama ...
nari faini-ndiri a-naqqianna-indari ooqu-rama
3SG.REFL dog-COM2 2/3SG.SBJ-back-on? go.downward-?
'With his dog he went down on his back and ...'
(117) ... nammarikina aqufufanoo, nari fainindiriqara ... 
nammar-i-kina aqu-fu-ufa-noo nari faini-ndiri-qara
water-inside go.downward-go-3SG.FPST.DS-3SG 3SG.REFL dog-COM2-DU.NSPC
‘... he fell into the water, with his dog, ...’

(118) ... doo nammari maqufinau.
doo nammari m-aqu-fu-i-nau
COMP water -? go.downward-go-IND-3SG.FPST
‘... well, he fell in the water.’

(119) Aqufufanoo, ...
aqu-fu-ufa-noo
go.downward-go-3SG.FPST.DS-3SG
‘He fell, ...’

(120) ... mifa nammariki aqufufanoo, ...
m-i-fa nammar-i-ki aqu-fu-ufa-noo
DEM-SBJ water-LOC go.downward-go-3SG.FPST.DS-3SG
‘... he fell in the water and ...’

(121) ... nari fainikai kookoombaara mamareenoo, ...
nari faini-kai kookoombaara mama-ra-i-noo
3SG.REFL dog-only take.on.shoulders carry-SEQ-SS-3SG
‘... he just took his dog on his shoulders, ...’

(122) ... nari faini kookoombaara mamaree nammariki fidanoo, ...
nari faini kookoombaara mama-ra-i-noo nammar-i-ki fu-i-da-noo
3SG.REFL dog take.on.shoulders carry-SEQ-SS-3SG water-LOC go-IND-PROG-3SG
‘... he carried his dog on his shoulders and as he walked in the water ...’

(123) ... aaqoo uqasee irufanoo, mina eeqamoosa fannoo ...
aaqoo uqa-sa-i iri-ufa-noo mi-na eeqamoosa fannoo
ear put-SEQ-SS hear-3SG.FPST.DS-3SG DEM-NSBJ frog FOC
‘... he strained his ear and listened and his frog, ...’

(124) ... nammarikiqari ufa qiufanoo, iriseenoo, ...
nammar-i-ki-qari ufa qi-ufa-noo iri-sa-i-noo
water-LOC-ELA talk speak-3SG.FPST.DS-3SG hear-SEQ-SS-3SG
‘... out of the water, made a sound; and he (the boy) heared it and ...’
(125) ... nari faini qimaminoo, “ireedakai kasoo iannee, ...
nari faini qi-ma-a-mi-noo ireedakai kasoo iannee
3SG.REFL dog speak-COMP-2/3SG,NSBJ,give-SS-3SG silently stop do.IMP QUOT?
‘... told his dog “just be silent, stop, ...’

(126) ... eeqamoosa ufa miridaqa ...
eeqamoosa ufa m-iri-i-da-qa
good talk ??-hear-IND-PROG-3SG
‘... I hear the sound of the frog, ...’

(127) ... eeqamoosa mufa qidaqfoo “qimasee, ...
eeqamoosa m-ufa qi-i-da-qi-i-foo qimasee
frog ??-talk speak-IND-PROG-AUD-? QUOT speak-COMP-SEQ-SS
‘... I hear the frog make a sound” he said and ...’

(128) ... ireedakai nari faini qimamufanoo, ...
ireedakai nari faini qi-ma-a-mi-ufa-noo
silently 3SG.REFL dog speak-2/3SG,NSBJ,give-3SG,FPST,DS-3SG
‘... he told his dog to be silent and ...’

(129) ... “eeoo” qimasee, ireedakai qaaraqi-qara; ...
eeoo qi-ma-sa-i ireedakai qaaraqi-qara
yes speak-COMP-SEQ-SS silently two,PERSONS-DU:NSPC
‘... “yes”, he said, as both of them (are) silent; ...’

(130) ... miqoo moo qiri firaaaf aundura faqaaafa ...
miqoo moo qiri firaa-fa aundura faqaa-fa
there one log big-SBJ inside having-SBJ
‘... over there a big hollow tree ...’

(131) ... nammari qafainni marufanoo, ...
nammari qafai-nni mari-ufa-noo
water side-ALLA be-3SG,FPST,DS-3SG
‘... was on the riverbank and ...’

(132) ... minakiqari ufa qufanoo, iriseenoo, ...
m-i-na-ki-qari ufa qi-ufa-noo iri-sa-i-noo
DEM-NSBJ-LOC-ELA talk speak-3SG,FPST,DS-3SG hear-SEQ-SS-3SG
‘... out of it, he (the frog) made a sound, they hear, and ...’
(133) ... nari fainifaqa sandeefanoo, oonureenoo, ...
  nari  faini-faqa  sanda-i-ufa-noo  oonu-ra-i-noo
 3SG.REFL  dog-and  run?-3SG.FPST.DS-3SG  go.upward-SEQ-SS-3SG
  ‘... with his dog, he ran, he went up, ...’

(134) ... nammariki ireedakai oonuree, qafoofanoo, ...
  nammari-ki  ireedakai  oonu-ra-i  qafa-ufa-noo
  water-LOC  silently  go.upward-SEQ-SS  see-2/3PL.FPST.DS-3SG
  ‘... in the water they silently went up and saw ...’

(135) ... eeqamoosa qisafaaqiqaafaqa nariqa faiqinamuafaqa
  eeqamoosa  qisafaqiqi-qara-faqa  nariqa  faiq-namu-faqa
  frog  couple-DU.NSPC-and  3PL.REFL  child-COM1-and
  ‘... a frog couple and their children, ...’

(136) ... mina eeqamoosa fannoo misafaqa oonumarifanoo, ...
  mi-na  eeqamoosa  fannoo  mi-sa-faqa  oonu-mari-ifa-noo
  DEM-NSBJ  frog  FOC  DEM-PL-and  go.upward-be-3SG.NPST.DS-3SG
  ‘... and his frog was there with them; ...’

(137) ... ireedakai miqirinasa ... 
  ireedakai  mi-qiri-na-saa
  silently  DEM-log-NSBJ-on
  ‘... silently, on this log ...’

(138) ... maramaaqi anuka raraunuquseenoo, ...
  maramaaqi  anuka  raraunuqu-sa-i-noo
  stretch.neck.upward  neck  stretch.neck-SEQ-SS-3SG
  ‘... he (the boy) stretched his neck and ...’

(139) ... niqafooafaqa, ...
  ni-qafa-ufa-qa
  2/3PL.NSBJ-see-3SG.FPST.DS-2/3PL
  ‘... saw them ...’

(140) ... misauqaindi maaqinni marufanoo, ...
  mi-sa-uqaindi  maaqinni  mari-ufa-noo
  DEM-PL-GROUP.NSPC  over.here  be-3SG.FPST.DS-3SG
  ‘... as they were here, ...’
... nindafamaseenoo, qafoofanoo, ...
i-qafa-ma-sa-i-noo qafa-ufa-noo
2/3PL.NSBJ-see-COMP-SEQ-SS-3SG see-3SG.FPST.DS-3SG
‘... he saw them, he saw and ...’

... mina eeqamoosa fannoo misa qambaanai marufanoo, ...
mi-na eeqamoosa fannoo mi-sa qambaana-i mari-ufa-noo
DEM-NSBJ frog foc DEM-PL middle-ALLA be-3SG.FPST.DS-3SG
‘... his frog was among them; ...’

... “oo mai animaridanoofee” qimaseenoo, ...
oo mai ani-i-mari-i-da-noo-fee59 qi-ma-sa-i-noo
EXCL here come-IND-be-IND-PROG-3SG-Q speak-COMP-SEQ-SS-3SG
‘... “oh, you came to this place” he said and ...’

... nari eeqamoosa qafoofanoo, ...
nari eeqamoosa qafoo-noo
3SG.REFL frog see-3SG.FPST.DS-3SG
‘... he saw his frog and ...’

... mina eeqamoosa fannoo maramiri nari qafoo-noo, ...
mi-na eeqamoosa fannoo maramiri nari qafoo-i-noo
DEM-NSBJ frog FOC sense.above 3SG.REFL see-SS-3SG
‘... his frog looked up, saw him and ...’

... naanaidaraufanoo, afaqamareenoo, ...
aanaidara-ufa-noo afaqamara-i-noo
laugh-3SG.FPST.DS-3SG collect-take-SS-3SG
‘... the frog) laughed and he (the child) picked him up and...’

... doo mina maaqai fidanoo, ...
doo mi-na maaqa-i fu-i-da-noo
COMP DEM-NSBJ house-ALLA go-IND-PROG-3SG
‘... well, while he (the child) went to his home ...’

... misara doo mariaqee qimasee, ...
mi-sa-ara doo mariaqee-a ea60 qi-ma-sa-i
DEM-PL-about COMP be-IMP.PL-Q speak-COMP-SEQ-SS
‘... he said to them well, goodbye, ...’

59 The interrogative suffix -fee is sometimes used to mark direct speech, in the same way as the quotative suffix -foo. -fee has -ee as an allomorph in certain contexts (Oatridge and Oatridge 1965).

60 Doo, mariaq ‘well, you stay’ is a phrase commonly used to say goodbye in Binumarien.
(149) ... asauku uqerasee, “eeqa eeqamoosa afiqeqee” ...
a-sauku uqa-ira-sa-i eeqa eeqamoosa afiq-a-qa-ee
2/3SG.NSBJ-hand put?-SEQ-SS 1SG.REFL frog collect-IND-1SG-Q
‘... he waved his hand, “I pick up my frog;” ...’

(150) ... misauqaindi murunni miqirinasaa ooqufaaqee idaqa, ...
mis-sa-uqaindi murunni mi-qi-ri-na-saa ooqu-faaqa-i i-da-qa
DEM-PL-GROUP.NSPC up.there DEM-log-NSBJ-on go.downward-sit-SS ?-PROG-2/3PL
‘... as they sat together up there on the log, ...’

(151) ... marameeqa misa niqafaida, ...
mara-meeqa mi-sa ni-java-qa-da
look.in.the.distance DEM-PL 2/3PL.NSBJ-see-SS-PROG
‘... they looked in the distance and ...’

(152) ... misa ni-manda-i-qa ainufaqa ...
mis-sa ni-manda-i-qa ainu-ufa-qa
DEM-PL 2/3PL.NSBJ-say.goodbye-SS-2/3PL say.farewell-2/3PL.FPST.DS-3SG
‘... said goodbye and farewell and...’

(153) ... doo uqaseeqa, nimaqa fiqau.
doo uqa-sa-i-qa ni-maaqa61 fu-i-qa
COMP leave-SEQ-SS-2/3PL 2/3PL.NSBJ-house go-IND-2/3PL.FPST
‘... well, they (the child, dog and frog) left and went home.’

(154) Nari eeqamoosa afiqamaree, ...
nari eeqamoosa afiqa-mara-i
3SG.REFL frog collect-take-SS
‘He picked up his frog and ...’

(155) ... nari fainifaqa fifiufanoo, ...
nari fa-ni-faqa fifi-ufa-noo
3SG.REFL dog-and go-3SG.FPST.DS-3SG
‘... he went away with his dog, ...’

(156) ... nari maaqai oonureenoo, ...
nari maaqa-i oonu-ra-i-noo
3SG.REFL house-ALLA go.upward-SEQ-SS-3SG
‘... he went to his home, ...’

61 It is unclear why maaqa ‘house’ carries no allative marker, like maaqai in (156).
... kaifaa mibuturanaki mareeqee uqaseenoo, ...
kaifaa mi-butura-na-ki mara-i-kee uqa-sa-i-noo
again DEM-bottle-NSBJ-LOC take-ss-? put-SEQ-ss-3SG
‘... put (him) in the bottle again and ...’

... rakisimarinau.
rakisi-i-mari-i-nau
watch.over-IND-be-IND-3SG.FPAST
‘... watched over him.’

Doo eeqomoosa stooraafaqa mifaiqinafaqa mifainina stoora ...
doo eeqamoosa stoora-faqa mi-faiqi-na-faqa mi-faini-na stoora
COMP frog story-and DEM-child-NSBJ-and DEM-dog-NSBJ story
‘Well, the frog story, and the story of this child and this dog ...’

... maaqoo mini taikeenoo. Doo.
maaqoo mini taika-i-noo doo
here toward.here finish-IND-3SG COMP
‘... ends here. That was it.’
Appendix 3: Binumarien dictionary

This Binumarien dictionary was created with the software tool Fieldworks Language Explorer (FLEx). It contains around 900 Binumarien entries and is the result of the fieldwork I conducted for this thesis. The dictionary starts with a list of Binumarien entries, which provides grammatical information, an English translation and an example sentence if available. The example sentences are from my corpus; I shortened them sometimes for reasons of clarity. The wordlist is followed by a list of Binumarien affixes with an English translation or gloss. The appendix concludes with a list of English entries and a short Binumarien translation; this list does not contain inflectional affixes.

Tone patterns are given whenever available: the level tones are indicated with capital letters that follow the entry; the point of pitch change is indicated in the entry with an interpunct ‘·’. Entries of nouns that have an obligatory case suffix are presented with the subject suffix -fa. Inalienable nouns are listed with the second/third person singular non-subject prefix a-. They carry the label ‘INAL’, followed by the first person form. Entries of verbs are in the imperative form. Nouns, pronouns and verbs are labelled with n, npro or v respectively. Words that are not labelled for their word class require further research.

Note that this dictionary is by no means comprehensive, and that many entries require further information. For example, afauru ‘lip’ might be an inalienable noun, marked with the non-subject suffix a-, as most body parts. And unu ‘chew’ may be a verb, as its meaning suggests. But my corpus does not provide information on the alienability of afauru, or on the word class of unu, so this information is not registered in this dictionary.
Binumarien - English

A a

aa-da LH n fuzz (on plant).
aa-dana LH dry saqari aadanaki in a dry tree qimaraa aadana usidanoo "my mouth is dry" I am thirsty.
aaadara brown mina asausi aadara maridanoo its feathers are brown.
aakaara n side oonaakaarai auru maqidanoo it lays its eggs between stones maa-aakarana marifa he lives on this side.
aaka-qa LH n bush.
aakauqa n small string bag (bilum).
aaki yellow mina asausi aaki arirafa maridanoo its feathers are yellow.
aaku· LH n rain aaku firoafa heavy rain aaku dunoono drizzle see also: rua.
aakua v carry on shoulders daakua! carry me!
aakuka· LH n mosquito.
a-arma HL n hole aranaamara anus ooamara mouth.
aa-na LH n road.
aan-a-i LH [INAL daanai] n horn, claw (of a crab).
aa-nda-u LH n white hair.
aaanoo angry qinnee anoono midaqa l am angry.
Aaooe-eooqa HL nprop 1. Aaoeeooqoqo (Binumarien village) 2. Aooeeooqoqo (Binumarien family clan).
aaq qa nearby.
aaqaa v miss, shoot wrong qapooki qumura sia aaqeenara you won't miss a rat in a trap.
aaqoo HL [INAL daaqoo] n ear aaqoo siafa "he has no ears" he knows nothing, he is crazy aqoo aumira "his ears are closed" he is deaf, he is crazy.
aaraa v call eeqamoosara aaraaidanoo he calls the frog.
aaraaraa v be hungry daararaaidanoo I am hungry.
aateena n river mouth.
abee maybe abee mifa qimariannoo...? maybe he is talking...?
adaaqia v help qini dadoaqia! help me!
adaka LH n middle, tree stem.
adasa· LH n greens.

adeedi nearby.
adi LH n skin, peel.
adiafaa v taste good adiafaa midanoo it tastes good.
adusa n empty peel, empty skin oo, adusa uqanna maridanoo "oh, he is skin only" oh, he is really small.
afa n dead leaf.
afaafusina n type of bird.
afaafaqa [INAL qifaaqa] n body afaaqa qumbiqara faf, full of meat.
afa'i HL [INAL qifa] n tooth afai sani tiafa "large stone axe tooth" snaffletooth.
afaimaqua v drop off.
afairia v shout, bark mifainifa kookapuna afairirarumono... as this dog is barking at the bees...
afaqqaa v chase faiqi oonuaraafanoo nifaqeemarifa it chases people that come by.
Afai-qinnaa LHHL nprop Binumarien Afaqinna ufa Binumarien language Afaqinnaasa Binumarien place.
afaqqara n married couple.
afaqua v remove, take out.
afaqumaraa v catch (in trap) compound of afaqua, maraa.
afasa-afa HL [INAL qifasaafa] n older brother.
afauru n lip.
afeddana n tibia.
afe-eka HL strong mina afai afeeka maridanoo its teeth are strong.
afeeka· LH n nit.
afeenana n kangaroo.
afeeqaa v push.
afianaa v urinate.
afiri [INAL qifiri] n forehead.
afoodu plough.
afu H [INAL qifu] n 1. eye sia afukai qofaanee you cannot see it just with your eyes 2. lid (of jar) afu atuqaa! open the lid!
afuma n island.
afundana H n thigh.
afundi stink kaaqa afundimarifa maridanoo he really stinks.

afuru night.

aii interj exclamation of regret, sorry aii, sia ani qafeeqa oh sorry, I didn’t see you.

aiaqee n exclamation of regret, sorry 'aiaqee’ qimama qaidaqqa, sia maridanoo "I say sorry to you, it is not there" I apologise, there is nothing left.

aika H n stick ruakairira aika peddle.

aiki H [INAL daiki] n nose.

ai-ku HL [INAL qiku] n leg, foot.

ainaina n 1. thing maafa nana ainainee? what kind of thing is this? anee ufa kai qidana, ainaina sia aqeeqamaridanoo you are only talking, you don’t do anything mandainaina bad thing, evil 2. family qini qikoonoo ainaina my father’s family.

ai-no-o LHL n fat.

aiqaa v 1. go away faini aiqaree sanandaaw the dog ran away 2. send mina akoofa aiqeenoo his father sent him.

aiqa-ma LHL every, each aqama saqari every tree aiqamausa everyone.

aireeqa n trap in a tree.

aka-naana HL n emergency back door.

akaqa1 LH some jakoofa saqari qaqamma some tree fruit aqakafoo makaqiq maridanoo some of them live in the ground aqakausa several, few of them.

akaqa2 n hole saqari aqaka tree hole.

akaqa3 H [INAL qikaaqqa] n younger brother.

akara paint, write see also: ria.

akaraa v climb saqari akaramafinoo he climbed in a tree.

akararumaa v write down compound of akara, rumaa.

aki-iqa HL [INAL qikiquqqa] n head.

akoofa H [INAL qikokoo] n 1. father qini qikoono anoofa the mother of my father 2. boss, owner mifainina akoofa the owner of this dog 3. male mifaiinifa aqoonafee anaaseefee? is this dog a male or a female?

akoona-iqii LH [INAL qikoonaiqii] n boy.

akoo-nnana LH n thumb, big toe qisauku akoonnana my thumb.

akooqakaa boring.

aku- LH ripe eeqaku aku qarafa maridanoo the banana is ripe.

akumu H n shoulder.

akuqu crack oondaaniiqqa suqsaidanoo, akuqu naidanoo picking up stones, it cracks and eats them.

amaa v hinder.

amaakir-i HL n tongue.

amaana H n religion amaana maqaa house of worship, church.

amaana moona n stomach.

amaaqini H n chin.

amaana 1. can, be able to amaneey mifaa sarairannoofee? will she be able to play? 2. enough, alright amaana, sia minara iria it’s alright, don’t worry about it 3. try kaqikaaqoo amanaamasee qaaqaa! try a bit and see!

amanee H n leaf.

amanna weak.

amaqi- LHL n meat.

amara n forked stick, forked branch.

amasasa see: asasa.

ameema n hill, slope.

ameemaanai n aside, next to kamukamuna fannoo saaka ameiimaanai maridanoo the passion fruit is next to the sugarcane.

ameesa HL n tail ani akiiqaki ameesa maridanoo you have a tail on your head.

ami-qi HL good, beautiful yeroofanoo amiqira maridanoo the yellow one is nice.

ammuqu n bud.

amoonduna n top of head.

amooni H n type of fern.

amuuaqa upside ani amuuqa aqfinoo "it climbs your upside" it climbs on you.

amuqu [INAL qimuuqu] n belly amuuqu foqaa pregnant.

amudaani H n bone akiqaa amudaani skull aqasana amudaani rib cage.

amunna H n cloth, clothes.

anaadoo n old garden.

anaaku [INAL qinaaku] n grandfather qineeqa ninaakuna amiaqa let’s give it to our grandfather.

anaakumaaka n daughter-in-law.

ana-ama HL n breast.

ana-amu HL n nest, hive, web, casing kookapuna anaamu beehive soofa anaamuki upeekaai! put the soap in the box!
God himself knows

lives on the mountain range

the liane

akoofa

ago slowly

Anutufa n God Anutufa narikai iridanoo only
God himself knows.

apata- LH n skin saqarapata bark (tree).

api-pe-e LH n peel.

aqa v fly.

aqaara v follow footsteps aiku aqaaraa! follow
the footsteps!

aqama· LH n seed, fruit.

aqamana n string aqamanannai maaqa
usakaseenoo maridanoo it (the spider) builds
its house with strings.

aqamaraa v fly, take off doo, quiqasee, aqamaree,
fidanoo wel, it left, took off and went away
compound of aqaa, maraa.

aqini H n forehead.

aquma not ripe fofiaaqa aquma maridanoo
the popaya is not ripe.

aqoondi n friend anee aqoondi maridanoo you
are her friend sia mina aqondikidanoo you
will not become friends with him.

aqoori n knee.

aqoosa H n wing.

aqu 1. go downward, fall nammarikina maqufinau
he fell into the water 2. throw nammarikii
aqusaanoo... they threw it into the water...

aqumara throw down compound of aqu, maraa.

aqumia v close, seal.

araana n feces see also: qaa.

ara-da LH [old-fashioned] n tadpole see also:
kapaqioona.

araisaqa n garden waste dump.

arananda n belly.

ara-pee-poona LHL n spider (that makes webs).

araqandaaraqa n type of pandanus.

araqemu n buttocks.

aratir-i HL n bird's tail.

arikinaa n type of tree.

aroosaana n type of bird.

arua v hit, kill mifa kuara arinoo he killed a pig
miqanda para aridaga "they two kick ball" they
play ball ginee gitaar arirara iridaa I know
how to play the guitar.

arumu n river source.

asaana· HL n branch.

asaaqai left (direction).

asa-ata HL n elbow.

asaida n twig.

asakadi n nail, claw narasakadiki narasakadiki
idaaga they (animals) hold each other's claws.

asasa enjoy, be happy ginee asasa midaa I am
happy.
asa·uku HL [INAL qisauku] n hand, arm asaku qaumia! "give me your hand!" shake hands with me!

asau·si· LHL [INAL qisausi] n hair akiqosausi head hair afu asauasi eyebrow ufini asauasi feather

asoosa LA n elder.

Asoosa Amudaani nprop Asoosa Amudaani, place near a cave where ancestors were buried compound of asoosa, amudaani.

asuku v skin maasa mina arusee apata asukusee minannai dukaanaa fufidaqa we kill it, skin it and make a drum of its skin.

asukuna dark.

asumu· LHL n seedling, baby faini asumu puppy.

asuru· LHL n small, high cloud.

ata·aka HL n fireplace.

ataatoo [INAL qitaatoo] n grandmother.

ataufaka H n 1. backbone 2. frame of an oblong roof.

ateekaa v cut (across the width) sisisa fannoo akiiqasausi ateekaidanoo the scissors cut the hair.

ati n 1. piece 2. (family) member qini atiqa Gorokai maridanoo my family lives in Goroka.

atiqara sideways.

atuka· LH n 1. root, base 2. Atuka, Gadsup village near Binumarien.

atuna n old nest.

atuqaa v open mifa buturakiqari afu atuqanaa he opened the lid off the bottle.

auka poison see also: auku2.

auku1 cut mina akiqasausi aukinoo he cut his hair.

auku2 poison see also: auka.

aukuana n 1. year mifa sikisa aukuana faqafa maridanoo she is six years old 2. Christmas.

aukuunu n tear qini daukuunu umidanoo "my tears come down" I am crying.

aumooku n tree trunk.

amu·ru HL n heap.

auna [INAL dauna] n younger sister ani auna maridanoo, sia arua! it is your little sister, don’t hit her!

au·ndai HL n lung.

a·undura HL n inside qini daundura fannoo amiqi midanoo "my inside is good" I am happy.

aupuraa v hurt.

auqaa v 1. do, make mifa nanainaina auqaidanoofee? what is he making? 2. wash see: nanmarauqaa.

auqaaauqaa n type of waterstrider.

auqu [INAL duqu] n name qini duqu Paqoosa my name is Paqoo.

auqua v make, work mifa anaamu auquseenoo, auru maqaidanoo it makes a nest and lays eggs.

auru1 H n egg minaki auru maqaidanoo in that, it lays its eggs.

auru2 n flame ida auru flame of fire.

auru· H n upper arm.

ausu put inside.

aututu n dry leaf.

B b

ba·rainna· LHL (Tok Pisin) n (bamboo) blind.

ba·taqa· LHL (Tok Pisin) n avocado.

beeta (Tok Pisin) n bed.

D d

daferi n type of flower.

damuna n broom.

daparana n type of bird.

dapu n shrubs qinee dapu aamaraki keeqaanaura I will go inside the hole in the shrubs.

dauni soon, fast dauni uqanna maana paqurinaranoo you will meet this person very soon.

deeda ready qinee kuara arirara deeda qidaqa I am ready to kill a pig.

deena n hummingbird.
deepi n blessing moo deepi maridanoo it is a blessing.
didinna n type of grasshopper.
difusa n type of bird.
dimaa v urinate.
dinni other side dinni dinni both sides.
diri hang kaakaanauqindi saqari asaanai diriique maridaqa the flying foxes are hanging on tree branches.
do-o HL COMP doo, maria! "you stay!" goodbye!
doodaani H n small insect mifa doodaani it eats insects.
doo·na LH n mud.
dudeeqi n bright star.
dufi dufi thanks.
dukaa-na-a LHL n drum (kundu).
du-na HL tomorrow duna kananaana maniannoo he will come tomorrow morning.
du-nda LH n ashes.
dundu black mifa dundu qarira ufini it is a black bird.
dundu qaridafa n type of black fern.
du·u LH n type of yam.
eddi dimaa v urinate.
deeda dufi dufi thanks.
du·na LH n mud.
dudeeqi LH n bright star.
dukaa-na-a LHL n drum (kundu).
du-na HL tomorrow duna kananaana maniannoo he will come tomorrow morning.
du-nda LH n ashes.
dundu black mifa dundu qarira ufini it is a black bird.
dundu qaridafa n type of black fern.
du·u LH n type of yam.
fara-fuari LH n type of bird.
faramaqtana· LH n type of frog.
fasa period saika fasa the period of preparing new gardens.
fasaa· LH n type of bird.
fa·sa·u LH n star.
fasiqa see: faiqi.
fataa v scrape.
fatika slide.
fau·faari LH n fly (insect).
feefa· LH n arrow duro feefa bow and arrow.
feemu n type of dish (like bread).
feqaa 1 v gather nari eeqamoosa afiqamareenoo he picked up his frog.
feqaa 2 v overtake, pass mina akoofa fiquaree finau his owner passed him.
fiqu fiqu round mifa fiqu fiqu qirafa it is round.
fira· LH big, large fira saqari big tree kaqikaqoo fira medium-sized Paqoofa minara firaqoo naanaidara qidanoo Paqoo laughs hard at him.
firimbiri LH n pumpkin.
fooka· LH n whistled speech.
foonimbooniri oscillate.
fooqaa be similar, the same mina asausi patuqa fooqaafa maridanoo its feathers are like a duck's.
foo·rina LH n type of pandanus
fua [DEP fifi] v go sia kaqikaqo fidanoo he does not go fast.
fufua v manufacture Kirisimasasaa faqi aiqeeqafu fufidaqa at Christmas, men make a tree trap.
fua·a LH n tobacco manda fuka marihuana.
fusakia v rejoice nanda fusakinoo nidanoo it flies around and it rejoices in the forest.
fu-seena LH n cassowary.
futura see: butura.

G g

gitaqa (Tok Pisin) n guitar qinee gitaqa arirara iridaqa I know how to play the guitar see also: arua, piripunna.

I i

iqa v dawn aiqama eendirana iaqarana all day and night.
i·da LH n fire see also: qaa, qaania.
idaaqira something good idaaqira ufana maridanoo it is a good trap.
idaara n supporting stick.
idi song, dance maasa idi raqaa we perform a dance see also: raa.
i·du LH n type of betelnut (kawiwi).
idunaura n lime powder.

ikiraqaa v cry, weep Paqoofa ikiraqaidanoo faqaaridoono Paqoo cries and shouts iki manda iki uqanna raqeenoo he cried badly, he cried really hard.
iki H n seed.
imaa·aku LH n calf of leg.
indaku n shovel.
indinda shiver mifa indindimarifa he shivers.
indufu dig.
indumu n type of reed.
inna-aruna LH n sky innaaruna qidanoo "the sky speaks" it is thundering.
innee HL pron 2PL.SBJ.
inneeqa HL pron 2PL.REFL.
in-ni HL pron 2PL.NSBJ.
inniqara pron 2DU.NSBJ.
innisaimbaqa pron 1PL.INCL.
innooqaa 1. swell uaka na nimisaifanoo minifaaqafa innooqaidanoo the body they have bitten swells. 2. grow up.
ira v ask iraa miria! ask and you know!
irae aree n very slowly irae aree uqasee finoo very slowly he leaves and goes away.
ireeda slowly mifa ireedakai findifinoo he got up and went away slowly.
iria v hear, know, give thought mifa qiniara iridaqifaqa he hears me mifa qiniara iridanoo he knows me amana, sia minara iria it's allright, don't worry about it.
irirasu [literary] n ladder see also: rataqa.
iroosa n type of bandicoot.
isaqa· LH n ginger.
iuaoona n type of bird.
K k
kaakaana n flying fox.
kaaqa afaia tiaka kaaka ukaqemarifa its giant teeth bite hard.
kaaasau wild.
kaatu n type of plant.
kadiaru n burned piece of land.
kafaafs littma qiniara kafaa amfato eeqa andau firaafa the cuscus is a big brown animal.
kai only fuseena maqamau kai nidanoo the cassowary only goes around on the ground.
kaaifa see: kaafa.
kama become, grow doo, eeqamoosa anaaji kamaqfai qaaqanoo well, the frog baby grows up and goes around.
kaama-a LH n sweet potato.
kambiqaa v grow (crops).
kamuqkamuna n passion fruit.
kana-nanaa LH n morning kananaana! good morning!
kapaqiona n tadpole see also: arada.
kapusa n type of bamboo.
kaqi small, nothing kaqi fifau maridanoo nothing happens.
kaqi-kaa HL small kaqikkaa ufini a small bird kaqikaaqo fires a medium-sized.
kaqi kaqi hurry kaqi kaqi ia! hurry up!
kara (Tok Pisin) n car.
karakoosa (Tok Pisin) n grass.
kari time aqama kari forever moo kari once mooqoo moo kari many times.
karoonda n type of owl.
kasaana n type of wild pandanus.
kasaapaa n oblong wings (insect).
kasaasa H n type of tree.
kasikasi make noise.
kasoo stop sia kasoo a huge lot.
kasooqia v smoke (cooking) idasaa kasooqamaseeqa naidua we smoke it above a fire and eat it.
kauauqa n type of plant.
keefaadi n mango.
keendi· LH n store.
keeqa go inside onaamarai keeqafinoo faiqaidanoo it goes inside a cave and sleeps.
keera n type of tree.
Kena n Ken, place in Binumarien where the school is located.
ki·saaqa LH n type of frog.
Kirisimasa (Tok Pisin) n Christmas.
Kirisinanamu n Southern Cross (constellation).
k·saaqa LH long afaia kisaqqa maridanoo its teeth are long kisaqqa qaaqana a high mountain.
koodide·ena LH n type of frog.
koofana n type of bird.
koofi (Tok Pisin) n coffee.
kookapuna n bee, wasp.
kookooma· LH n dust.
kookoombaaraa carry on shoulders.
kookoorana n chicken kookoorana fannoo 'kookooraqoo' qinau the rooster said 'cock-a-doodle-doo'.
koomaana n pouch mina anaaqi akoomaanaki maridanoo its young is in a pouch.
kuara· HL n pig.
ku·fisa· LHL n bean.
kuqua v die anee arunafa munu kuqinoo you shot it and it died there.
kuqaa true kuqaa?! really?!
kuqoo v die
kupee· n ant.
kuquiraa n type of plant.
kuquirusa kurusana n stone axe.
kuquiru v chop, cut (wood).
ku·kuma· LH n large hole, pond
kuuqanda pron 1SG.DU.
kuuqoo here.
kuquirusa n type of plant.
kuquiru v chop, cut (wood).
kuquirusaa here.
kuquirusa here.
madaapee n rubbish heap.
madika· LH n large hole, pond noodaana madika fish pond.
mafisaa v pull back, shudder.
mamaika· HL n girl manaqaa anaaqi baby girl.
manda1 bad mandainaina bad thing, evil.
manda2 v take minamusa maraseeqa... he told them goodbye and farewell...
mantirana n rainwater pond.
manta v give
maparona n type of plant.
mapa· LH n ground
mapa· maqa LH n country, world see also: maqa.
maqa· maqa LH n country, world see also: maqa.
maaqanda pron 1SG.DU.
maaqoo here.
maarana landslide.
maraa v take minamusa maraseeqa... they took a tomato and ate it qaara uqoona maraseeqa... "two months taken" two months ago... 2. learn.Afraqinnaa ufa maraiddaqa I am learning the Binumarien language.
Maraqua nprop Holy Spirit.
manta v give birth, lay (eggs) minasaa aurumaaqaidanoo on that, it lays its eggs.
Maqanoona Maqaanoona (Binumarien family clan).
maqanaa nprop Maqanaa country see also: maqa.
maqee· LH today.
maqoo here.
maqannaa country see also: maqa.
maqee· LH today.
maqoo here.
maqua n 1. ground around the house 2. place.
maraa v take minamusa maraseeqa... they took a tomato and ate it qaara uqoona maraseeqa... "two months taken" two months ago... 2. learn.Afraqinnaa ufa maraiddaqa I am learning the Binumarien language.
Maraqua nprop Holy Spirit.
maraa v take minamusa maraseeqa... they took a tomato and ate it qaara uqoona maraseeqa... "two months taken" two months ago... 2. learn.Afraqinnaa ufa maraiddaqa I am learning the Binumarien language.
maraa v take minamusa maraseeqa... they took a tomato and ate it qaara uqoona maraseeqa... "two months taken" two months ago... 2. learn.Afraqinnaa ufa maraiddaqa I am learning the Binumarien language.
maraa v take minamusa maraseeqa... they took a tomato and ate it qaara uqoona maraseeqa... "two months taken" two months ago... 2. learn.Afraqinnaa ufa maraiddaqa I am learning the Binumarien language.
maraa v take minamusa maraseeqa... they took a tomato and ate it qaara uqoona maraseeqa... "two months taken" two months ago... 2. learn.Afraqinnaa ufa maraiddaqa I am learning the Binumarien language.
maraa v take minamusa maraseeqa... they took a tomato and ate it qaara uqoona maraseeqa... "two months taken" two months ago... 2. learn.Afraqinnaa ufa maraiddaqa I am learning the Binumarien language.
maraa v take minamusa maraseeqa... they took a tomato and ate it qaara uqoona maraseeqa... "two months taken" two months ago... 2. learn.Afraqinnaa ufa maraiddaqa I am learning the Binumarien language.
maraa v take minamusa maraseeqa... they took a tomato and ate it qaara uqoona maraseeqa... "two months taken" two months ago... 2. learn.Afraqinnaa ufa maraiddaqa I am learning the Binumarien language.
maraa v take minamusa maraseeqa... they took a tomato and ate it qaara uqoona maraseeqa... "two months taken" two months ago... 2. learn.Afraqinnaa ufa maraiddaqa I am learning the Binumarien language.
minamusa 1 GROUP.

mindari this place.

mini bring here.

miqanda 3DU.SPEC.

miqi v be like that, do like that mifi qifanoo, mifa miiqimminoo he speaks like that, and the other does like that.

miiqoo there.

mirinni above.

miriqqo above.

misa LH pron 1.3SG.NSBJ.

moo 1. [precedes noun] one 2. [follows noun] other nana moo? what else? moo naa amia! give it to somebody else!

moodaa moodaa some, several.

mooka weird, crazy anee mooqka mimariananoo you’re being weird

moomoo many see also moo.

moo naa LH n day after tomorrow see also moo.

Mooseena Saunu [lit. “Moses’ stick”] nprop Orion’s belt (constellation).

muna- HL n smoke ida muna smoke of fire.

muna-na HL n type of plant.

munana n smoke of a new garden.

muru bring away.

muqu there.

muree LH n type of bandicoot (entirely black).

muri H n wart.

mu-ri LH n lemon, orange.

muru carry.

musuka- LHL n kitchen knife.

N n

naa v eat, drink, smoke ginee sanguma naidaaqa I am eating maize anoona naidanoo he is drinking juice.

naakunda n rope to make fire.

naanaa v laugh misa naanaidara qidaqa they are laughing mifa qumeed naanaidara qidanoo he laughs stealthily.

naanaana n type of grasshopper.

naaqnaa-toona HL n type of waterstrider.

naaree-paa HL n type of casuarina tree.

naaru forever naaru naaru forever and ever.

naaruqaa old.

nafaasa n cheek.

nafisa- LH n coconut.

nakpuruna n type of bird.

nameera call mifa eeqamosara nameera qidanoo he calls the frog.

nammandunna n along the river.

nammarauqaa v wash nammarauqarara anoona oooqfinaaq 1 I went down to the river in order to wash (myself) compound of nammari, auqaa.

na-mmari LH n water.

nammarifa n female (women are traditionally given river names) Saraqa nammarifa (the woman) Sarah see also nammari.

mooka weird, crazy anee mooqka mimariananoo you’re being weird

moomoo many see also moo.

moo naa LH n day after tomorrow see also moo.

Mooseena Saunu [lit. “Moses’ stick”] nprop Orion’s belt (constellation).

muna- HL n smoke ida muna smoke of fire.

muna-na HL n type of plant.

munana n smoke of a new garden.

muru bring away.

muqu there.

muree LH n type of bandicoot (entirely black).

muri H n wart.

mu-ri LH n lemon, orange.

muru carry.

musuka- LHL n kitchen knife.

N n

naa v eat, drink, smoke ginee sanguma naidaaqa I am eating maize anoona naidanoo he is drinking juice.

naakunda n rope to make fire.

naanaa v laugh misa naanaidara qidaqa they are laughing mifa qumeed naanaidara qidanoo he laughs stealthily.

naanaana n type of grasshopper.

naaqnaa-toona HL n type of waterstrider.

naaree-paa HL n type of casuarina tree.

naaru forever naaru naaru forever and ever.

naaruqaa old.

nafaasa n cheek.

nafisa- LH n coconut.

nakpuruna n type of bird.

nameera call mifa eeqamosara nameera qidanoo he calls the frog.

nammandunna n along the river.

nammarauqaa v wash nammarauqarara anoona oooqfinaaq 1 I went down to the river in order to wash (myself) compound of nammari, auqaa.

na-mmari LH n water.

nammarifa n female (women are traditionally given river names) Saraqa nammarifa (the woman) Sarah see also nammari.

muqu there.

muree LH n type of bandicoot (entirely black).

muri H n wart.

mu-ri LH n lemon, orange.

muru carry.

musuka- LHL n kitchen knife.
nooda-ana LHL n fish.
noonafeesoonu n type of bird
nua [DEF nini] v go around mifia aigama qafugukiaqqa nidanoo it flies around in all the gardens.
nukuda- HL n sand nukudarafoora "like grains of sand" countless.
nukuna n type of wild duck.
umasa n type of liane.
numma- HL n louse.
nunaka- HL n type of mosquito.
nupuki n type of tree.

O o

oo exclamation of surprise.
o-o HL n mouth see also: aamara.
oo-kara LH n type of plant.
oombura n deep forest.
onafai nprop Oonafai mountain compound of ooni, afai.
oonamu LH n cloud.
oondaani- HL n gravel.
oondanda- HL n rainbow.
oon HD n stone, rock.
ooni-da HL n stone oven compound of ooni, ida.
onikuradana nprop Oonikuradana, Binumarien village compound of ooni, kuraa.
oonu go upward.
ooqa first qinee ooqa faiqi maridaqa I am the firstborn child.
ooqai before ooqai maaqoo marunnana, sia maraaqinnaranoo I was here first, you cannot throw me out ooqai mifia marunaki he was here before see also: ooqa.
ooqoosa LH n cockroach.
ooqoosaa nprop Ooorooqoosaa I went down to the river.
ooraiki n snout, face compound of oori, aiki.
ooreeqa n type of cuscus.
oori n snout, mouth, face mina oori qusa its beak is short (of a bird) narooriki narooriki idaqa they (animals) touch noses oori runusee uqasee finoo his face fell and he went away see also: runua.
ooru upwards qimaaqa oorufiqa I went up to my house.
oorufana LH n type of pandanus.
osoosa nprop Oosasa LHL n type of tree.
osoosafarana LH n type of cook banana.
oosana HL n 1. nature mina oosana miqimminoo maridanoo its nature is like that 2. base 3. reason nana oosanaaree anianoofee? for what reason did he come? 4. beginning 5. Genesis (first book of the Bible).
ootoo-ma LH n type of tree.

P p

paadura n type of wild banana.
padaku stuck upeekaseenoo, minaki padaku inoo maridanoo he went inside and got stuck in it.
padi padi everything and anything, whatever.
pai-pana- LHL n knife, machete.
pakaasina H n flying squirrel.
paki- LH n gum.
pandaakaqa H n grasshopper.
Papua Niu Gini nprop Papua New Guinea Papua Niu Gini nprop Oorooqoosaa I came to Papua New Guinea.
apaqura v meet, come across sia maana paqurinaranoo you will not find him here.
qaa v shine, spray suani qaidanoo the sun shines maaqa ida geenoo the house burns down kaaqa araana qaidanoo it poos a lot.
qaania heat, give warmth mifa suani qaanirara it wants to sunbathe ida qaanidanoo the fire gives warmth.
q'a-poona LHL n type of pandanus.
qaqa-na HL n mountain kisaqa qaqaana "long mountain" high mountain qusa qaqaana "short mountain" low mountain.
qaara two qaara afu two eyes qaaraqanda them two.
qaaramoo three qaaramoo fasiqa three men qaaraqanda them two compound of qaara, moo.
qaroosaana n type of bird.
qaaru n broken tree.
qassoosaana LH n type of dragonfly.
qafa v see, look mifa aamaraki qafaidanoo he looks into the hole amanamasee qafa! try out and see!
qafai n side, river bank nammari qafainni towards the river bank.
qafuana n bird of paradise.
qafuqa H n garden.
qa-inda LH n table, stretcher, closet.
qa-ira LH n wild pandanus.
qakeesa n type of lizard.
qamaqa n mark.
qamaq (Tok Pisin) n hammer.
qambaana n mid, middle mifa misa qambaananai marufanoo he is among them suani ambaanai at the mid of day.
qamoomna type of cuscus.
qamuka n finger, toe aiku qamuka toe nikuqamukasaa ireedakai ania "on their toes silently they came" silently they tiptoed in.

poosa H (Tok Pisin) n pole, post.
pundikaa v jump pundikeeqa I jumped.
pu-pusamu LH n hail (precipitation).
puta rotten qiriputaaa rotten log.
putee n rat trap.
qamuqusa H n heart qinee qimuqusa umaara maraidaqa I am sad ("I am carrying a heavy heart") qini qimuqusa famno amiqi midanoo I am happy ("my heart is good") eendamuqusai at midnight
qamuqusaa feel sorry fainiara qamuqusaidanoo he feels sorry for his dog see qamuqusa.
qapoo n screen of a rat trap.
qaqaasa not wrapped.
qaraa move.
qarana n fence.
qareena n crocodile.
qearerairaa v be afraid of, avoid qinee qeeariridaqa I avoid it.
qia v say, speak, talk, tell, think Paqoo minara qidanoo Paqoo speaks about him 'qinee Eepirinaki eeqa sugura taikaanauree' qidaqa I think I will finish school in April mina afasaafa qimaminoo:... his brother said to him:... saaraku ufa qirara I want to tell about the cuscus.
qifi n drop.
qiffaramu LH n raindrop, dew.
qima n type of tree.
qimapia v swim qinee qimapianaura I will swim.
qi-nee LH pron 1SG.SBJ.
qi-ni LH pron 1SG.NSBJ.
qi-ri LH n log.
qisafaapi n married couple.
qo-odaa HL little, few goodaa goodaa very few.
qoofi LH n millipede.
qooma H n 1. type of cane grass 2. torch, lamp qooma kaqaidanoo the lamp gives light.
qoosaaseena n type of tree.
qosu H n border mark.
quapuna n type of owl.
qumaqua v plant.
qumaraa v grab, get hold of doo mooafa qumareenoo well, he got hold of one.

qumbiqaa v fill sia amauqa qumbiqiifanoo... when his stomach isn’t filled...

qumisa red mina asausi qumisa arirafa maridanoo its feathers are red.

qumuaraa v steal kaaqa qumuarimarifa he actually steals.

R r

raa v sing maaso idi raidaqa we perform a dance.

radukua v pull.

rafaaqafa v close in kaqi ani rafaaqfusee ukaqa amianoo he will just close you in and bite you.

rafusaki climb down rafusaki aqufua! climb down!

rafusua v lift umu nari faini rafususeenoo... he lifted his dog...

ra-me-enaa LHL n type of pandanus.

raipaqua v take off (clothes).

raqamaraa v break open compound of raqaa, maraa.

ra·taqa· LHL (T ok Pisin) n ladder see also: irirasu.

rafa v be afraid ikiraqaidanoo rufiaidanoo he cries and he is afraid.

rafaqua v be stuck mifa rutaqinoo maridanoo he got stuck.

S s

qu-qusa LH n fence.

qu-ro-ona LHL n type of parrot.

qusa short mina oorifaqa aratirafaqa qusa maridanoo its beak and tail are short miufafa qusa maridanoo this talk is short qusa qaoqana a low mountain.

qusasaa shortly, a little while aiqama ainaina qusasaa talkaannoo shortly, everything will end see also: qusa.

qusua v hook, pierce.
saa no saa, unna qimariana no, you tell lies.
saaka· LH n sugarcane.
saamurua v fall down anira saamuruannoofee qunana sia saamuruwanoo I thought you would fall down, but you did not fall down.
saara· H n centipede.
saara2 H n type of plant.
saaraku n type of cuscus.
saarisa H n cricket (insect).
saa·suna· LHL n axe.
sa·beena LH n type of tree.
sa·ma·ada LHL n cuscus.
sa·na LH n round taro.
sanda H n rope.
sandaa v run mifa nammarinni sandanau he ran to the water.
sandaaqi upside.
sanguma· LH (Tok Pisin) n maize.
sa·ni LH n stone axe.
sa'oora· LHL (Tok Pisin) n shovel, spade.
sa'qaramanee LH green compound of saqari, amanee.
saqari LH n tree.
sarara play miqanda sarara midaqa they two are playing.
sasamini n type of tree.
sati n tree trunk.
sauna n pandanus.
sa·unu HL n stick.
Sausasina nprop Sausasina mountain.
sia neg sia qinee asasidaqa I don't like it.
siai be without, have not qinee dauna siaiqa maridaqa I don't have a little sister.
sianu· LH n 1. type of bird 2. egg of this bird.
siara n grass skirt.
si·mbu·numuru LHL n type of plant.
sisisa (Tok Pisin) n scissors.
soofa (Tok Pisin) n soap.
sooqa (Tok Pisin) n shoe.
stoora (Tok Pisin) n story.
stu·aqa· LHL (Tok Pisin) n shop.
su·ani HL n sun see also: qaa, qaania.
suanisaa n noon suanisaa! Good afternoon! (around noon) see also: suani.
suara LH cold.
su·gura· LHL (Tok Pisin) n school.
suka sour.
su·mba HL n type of sweet potato (extinct).
sundana n type of wild pandanus.
sundia (Tok Pisin) n soldier.
suqaa v cook.
suqanaa v cook and eat akaqana idaki suqanaidaqa they cook some on fire and eat them compound of: suqaa, naa.
suqua v pick (bird).
su·runa LH n type of pandanus.

T t

taa·fee HL n stick taro.
ta·aka LH n type of tree.
taatapaureena n type of spider.
taatuquee red taatuquee tamatoo a red tomato.
taatu·qeena LH n red flowering plant see also: taatuquee.
tafa n hook.
taikaa v end, finish doo, miufafa taikeenoo well, this talk is finished nammari taikeenoo the water is gone.
taka H n type of frog.
takasu· LH n type of parrot.
takoosa dot, spot.
tamatoo (Tok Pisin) n tomato.
taqu H n bamboo.
tarika· LH n ant.
ta-rooka LH n type of plant, like stinging nettle.
tattooeesa n type of grasshopper.
tatua v pull out.
tauna (Tok Pisin) n town.
taura (Tok Pisin) n towel.
tautia v scare.
tautu be startled

tiaa gian er arraa tiaa nammariki maridanoo there is a giant big crocodile in the water.
timusa· LH n young animal (puppy, piglet).
tinna (Tok Pisin) n can.
toofira titeemaridaqa, misa maaqaki marifaqa heavy rain closed them in and they stayed in the house.
trausasisa titi qidanoo the trousers are tight.
titira n type of branch.
titaua n type of green.
titira v pull out.
tiina (Tok Pisin) n town.
tiuna (Tok Pisin) n towel.
tiuta v scare.
teniki make a bed.
tenina (Tok Pisin) v come down, devour compound of umi, qaraa.
uqaana· LH n type of fowl.
uqamafi sit down (bird) saqari asaanai uqamafidaqa they sit down on a tree branch.
uqanna really oo, kaqikaafa uqanna maridanoo oh, it is really small.
uqaurua v make a hole.
uqina n cold place.
uqiqana n forest house.
uqoono· LH n 1. moon 2. month.
uqua v 1. fold, manufacture eeqa uqusee! wrap the bananas!
uraaqara see: uriqara.
uri n ancestor story.

uriqara be big, surpass mina afeekakaimma uriqaranoo maridanoo his strength is great saaka fannoo kisuaqa eeaku uraaqaranoo the sugarcane is longer than the banana.
uru come upward mifa suani qaanirara kai afainni uridanoo it only comes up to the river bank in order to sunbathe.
usakaa v build mifa maaqa usakaidanoo he is building a house.
usau n type of long grass.
usua v put inside mifainifa mibuturanaki akiiaq usinau this dog put his head inside this bottle.
uteeti mock Paqoofa minara uteeti qidanoo Paqoo makes fun of him.

Y y

yafe·e who ani auqu yafee? "who is your name?" what is your name?
yaiifee where mifa yaifee maridanoofee? where is she?
yai·ree HL when yaireefee Paqoofa anianoofee? when will Paqoo come?
yana whom, whose yana maaqafee usakaidanoofee? for whom are you building a house?
ya·qoo HL where mifa yaqoofee maaqa usakeenoofee? where did he build his house?
yeroo (Tok Pisin) yellow taatuqee tamatoofaqa yeroo tamatoofaqa maridanoo there are red tomatoes and yellow tomatoes.
Binumarien affixes

- a- [Ø- before /a/] 2/3.SG.NSBJ.
- a 1. v IMP.SG. 2. v 2/3PL.NPST.
- af a v 2/3PL.NPST.DS.
- afana v 1SG/PL.FPST.DS.
- ana 1. v 2SG.NPST.DS. 2. v 1SG/PL.FUT.DS.
- anaaru v 1SG.FUT.
- annoo v 3SG.FUT.
- aqa v IMP.PL.
- ara n about fuseenara qirara I am going to speak about the cassowary.
- au see: -fau.
- d- see: qi-.
- da v PROG.
- ee v see: -fee.
- fa n SBJ.
- faqa and, with anee qinifaqo you and 1 faqifaqo anaaseefaqo faqifaqo manaafaqo men and woman and boys and girls.
- fau [-au in certain contexts] NEG maana sia saakafaau this is no sugarcane.
- fee [-ee in certain contexts] Q nanee mifa meeqai qafaidanoofee? what does he see over there? aakaufaafu durufee a string bag or a bow.
- foo QUOT 'yafee fiifoo', qinau 'where did he go', he said.
- foora EQ mina aiku faqi anaaqi nikuraarofoora maridanoo his legs are like a baby's legs.
- i 1. v IND. 2. v DUR. 3. v SS 4. n see -nii.
- ifa 1. v 3SG.NPST.DS. 2. v 2/3PL.FUT.DS.
- ifara v 2/3PL.FUT.
- ina 1. v 2SG.FUT.DS. 2. v 3SG.FUT.DS.
- innara v 2SG.FUT.
- irara v TEL qinee ane qafarara asasa midaqa 1 am happy to see you deena ufa qirara I am going to say something about the hummingbird.
- kai see in headword list: kai.
- ki n LOC maqaqaki in the house nammarikiki in the water.
- kina n inside soogakina in the shoe nammarikina under water.
- m- v meaning unknown, attaches to independent verbs in fast speech.
- ma v COMP.
- maa- n DEM.PROX maafaqifa this boy.
- maqa v BEN 'aiqaqee' qimamaqaidaq 1 apologize to you.
- mau n on, over mifa oonimaau makaranaau he climbs on a stone.
- mi- n DEM mifainifa this dog.
- mia v 2/3PL.S.
- mmi v INT mifa mifamimino maridanoo it is exactly like that.
- n see: ni-.
- na 1. n NSBJ 2. 2SG.
- vai n inside, throughout nandakinaa throughout the forest.
- namu n COM1 faiginamu nifiquamaareeqa... I picked up the children...
- nana v 2SG.NPST.
- nau 1. v 2SG.FPST. 2. v 3SG.FPST.
- ndauru n around mina aanaaidaaru uoqee marinau "around its antlers, he was looking out" holding its antlers, he was looking out
- ndiri n COM2 nari fainindiri with his dog.
- ni- [n- before vowel] 2/3PL.NSBJ.
- nnaai n INTR mifa qamaqanna maaqa usakeenoo he built a house with a hammer.
- nni [-i after /a/] n ALLA qafainni to the river bank.
- noo 1. v 3SG. 2. v IMP.
- qa 1. v 1SG/PL 2. v 2/3PL.
- qanda n DU.NPC mifainiqanda these two dogs.
- qara n DU.NSJC fainiqara two dogs.
- qari n ELA maaqaakiqari out of the house.
- qau v 2/3PL.FPST.
- qi- [d- before vowel] 1SG/PL.NSBJ.
- qiafana [-qia in fast speech] v 1SG.FPST.
- ra see: -sa.
- runna n through, along nanda runna oonuree aniree inoo... through the forest it comes and goes...
- sa 1. [ra- on motion verbs] v SEQ 2. n PL.SPC, GROUP.SPC mifainisa these dogs see also: -usa.
- saa n on oonisau on a rock.
- ufa 1. v 2/3PL.FPST.DS. 2. v 3SG.FPST.DS.
- uma 1. v 2SG.FPST. 2. v 1SG/PL.NPST.DS.
- uqa n PL.NSJC fainiuqa dogs.
- uqindi n GROUP.NSPC fainiuqindi (a pack of) dogs.
- usa [-sa following /a/] n GROUP aiqamausa everyone.
English - Binumarien

A a

able, can amana.
about -ara.
above mirinni; miriqoo.
afraid qeeariia; rufia.
afternoon (late) eendimari.
again kafa; kaifaa.
along, through -runna.
along the river nammandunna.
and -faqa.
angry aanoo.
animal aandau.
ant tarika.
ant (type of) kupee.
arm asauku.
arm (upper) aururu.
anon, later fafa.
around -ndauru.
arrow feefa.
ashes dunda.
aside, next to ameemaanai.
ask iraa.
avocado bataqa.
avoid qeeariiaa.
axe saasuna.
axe (stone) kurusa kurusana; sana.

B b

baby anaaqi; asumu.
back (body part) anaaqianna.
backbone ataufaka.
back door akanaana.
bad manda.
balcony parandaa.
ball para.
bamboo taqu.
bamboo (type of) kapusa.
banana eeqa.
banana (type of) paadura; oosafarana; roondana.
bandicoot (type of) iroosa; muree.
bank (river) qafai.
bark afairia.
bark (tree) saqari apata.
base oosana; adaka.
be maria.
bean kufisa.
beautiful, good amiqi.
become, grow kama.
bed beeta.
bee, wasp kookapuna.
bee (large type) narusootupi.
before manika; ooqai.
beginning oosana.
belly amuaq; arananda.
betelnut (kawiwi) idu.
big firaa.
big, surpass uriqara.
big toe, thumb acoonana.
Binumarien Afaqinnaa.
bird ufini.
bird of paradise qafuana.
bird (type of) afaafusina; aroosaana; daparana; difusa; farafuari; fasaq; feetutareena; liuaaona; koofana; kukuma; nakipuruna; noonaafesoonaa; nukuna; qaaroosana; rireetana; sianu.
bite ukaqa.
black dundu.
black fern dundu qaridafa.
blessing deepi.
blood fidika.
body afaaqa.
bone amudaani.
border mark qoosu.
boring akooqakaa.
bottle butura.
bow duru.
box for lime powder tuka.
boy akooqaagi.
branch asaana.
branch (type of) titira.
break rufari; rukamu.
break open raqamaraa.
break raudaa.
brake, tear rakee.
brake along the length qundaqia.
bray anaama.

bring away munu.
bring here mini.
broken tree qaaru.
broom damuna.
brother (older) afaasaafa.
brother (younger) akaqa.
brown aadara; kafeedara.
bud ammuqa.
built usakaa.
burrow (rat) andaana.
bush akaqa.
butterfly peepenanaana.
buttocks araqaemu; rakooma.

calf of leg imaaku.
call aaraa; nameera.
can tinna.
can, be able to amana.
car kara.
carry muru; sakaa.
carry on shoulders aakua; kookoombaarooa.
casing, web, hive, nest anaamu.
cassowary fuseena.
catch (in trap) afaqumarooa.
centipede saara.
charcoal kadida.
chase afaqaa.
cheek nafaasa.
chew unu.
chicken kookooroana.
child faiqi.
chin amaaqini.
chop, cut (wood) kurusaa.
Christmas Akuana; Kirisimasa.
chug out fidi.
claw, nail asakadi.
claw (of a crab), horn aanaai.
climb akaraa.

c C
climb down raqamaraa.
close titaa.
close in raqamaraa.
close, seal aqumia.
closet, stretcher, table qainda.
cloth, clothes amunna.
cloud oonamu.
cloud (small, high) asuru.
cloud (face) runua.
cockatoo eekara.
cockroach ooqoosa.
coconut nafisa.
coffee koofi.
cold suara.
cold place uqina.
come ania.
come across, meet paquria.
come down umiqara.
come downward umuiqaraa.
come upward uru.
cook suqaa.
country maqannaa; maqa maaqa.
crab ummauru.
crack akuqu.
crazy mooka.
cricket (insect) saarisa.
crocodile qareena.
cry, weep ikiraqaa.
cucumber naqeera.
cuscus (type of) mataqooma; ooreeqa; saaraku; samaada; qamoonna.
cut auki; kurusaa.
cut (across the width) ateekaa.
dark asukuna.
daughter manaajo faiqi.
daughter-in-law anaakumaaka.
dawn iaoqa.
day faasaana.
day after tomorrow moona.
deal leaf afa.
dessert banana eeqaku.
devour umiqaaraa.
dew qififaramu.
die kuqua.
dig indufu; unaki.
dislike kooqaa.
dish (type of) fee.
do, make auqaa.
dog faini.
door kooqi.
down below maami.
downwards ooqu; umi.
dragonfly (type of) qaasoosaana.
drop qifi.
drop off afaimaqua.
drum (kundu) dukaanaa.
dry aadana.
dry leaf aututu.
duck patu.
dusk eendi.
dust kookooma.

ear aaqoo.
early afternoon eeneemari.
earwig eerimoana.
eat, drink, smoke naa.
echidna umoaarumu.
eel faandi.
eel trap safaa.
egg auru.
elbow asaata.

E e

elder asooqa.
elder man nauraiqi.
end taikaa.
enjoy, be happy asasa.
enough amana.
every, each aiqama.
everything and anything, whatever padi.
eye afu.

F f

face ooraiki
fall aqi; saamuruua.
fall down (rain) rua.
flower, type of dafari; roofakana; fakeendanda amuna.
fowl (type of) uqaana.
fold ugra.
follow footprints aquara.
food narana.
foot, leg aiku.
forehead aqiri; aqini.
forest nanda.
forest (deep) oomura.
forest house uqiganaa.

forever naaru.
forked stick amara.
frame of an oblong roof ataufaka.
friend aqoondi.
frog eegamoosa.
frog (type of) fiqaura; faramaqtana;
    koodideena; poopooqana; ruand; taka.
from, out of -qari.
fuzz (on plant) aada.

G g

grandfather anaaku.
grandmother ataatoo.
grass andando; karasa.
grass skirt siara.
grass (type of) eefeeda; qooma; unnaareena;
    usau.
grass, weed nimmuru
grasshopper pandaaqa.
grasshopper (type of) didinna; naanaana;
    tatooleesa.
gravel oondaani.
green saqaramane.
greens adasa.
greens (type of) tumu; umooqu; anaaqnaa;
    fafisa.
ground maqa.
ground around the house maqusa.
grow, become kama.
grow (crops) kambiqaa.
grow up innooqa.
grub (type of) ummeena.
guitar gitaqa; piripunna.
gum paki.

H h

hail (precipitation) pupusamu
hair asausi.
hammer qamaqa.
hand asauku.
handle anaanu.

hang diri.
happy, enjoy asasa.
have, be with faqaa.
head akipa.
heap aumuru.
hear, know *iria.*
heart *qamuqusa.*
heat, give warmth *qaania.*
heavy *ummaara.*
help *adaaqia.*
here *maatina; maqoo.*
hide *kukee.*
hill, slope *ameema.*
hinder *amaa.*
hit, kill *arua.*
hive, nest, casing *anaamu.*
hole *aamara; akaqa.*
hole (large, in ground) *madika.*

Holy Spirit *Maraqufa.*
hook *tafa.*
hook, pierce *qusua.*
horn *aanai.*
hornbill *aneesa.*
hot *tootooqa.*
house *maaqa.*
how much, how many *nauma.*
hummingbird *deena.*
hungry *aararaa.*
hunt *uaqaa.*
hurry *kaqi kaqi.*
hurt *aupuraa.*

I i

in *-ki.*
inside *aundura; -kina.*
insect (small) *doodaani.*
island *afuma.*

J j

jump *pundikaa.*
juice, milk *anoona.*

K k

kangaroo *afeenana.*
kill, hit *arua.*
knee *aqoori.*
knife, machete *paipana.*

knife (kitchen) *musuka.*
know, hear *iria.*
kunai grass *eefeeda.*

L l

ladder *irirasu; rataqa.*
landslide *mararana; maani.*
large type of nymphe (insect) *ukasi.*
later, anon *fafa.*
laugh *naanaa.*
lay (eggs), give birth *maqaa.*
leaf *amanee.*
learn *maraa.*
leave, let go *uqaa.*
left *asaaqai.*

leg, foot *aiku.*
lemon, orange *muri.*
liane (type of) *numasa.*
id (of jar) *afu.*
lie *unna.*
lift *rafusua.*
like *rua.*
like that *miqi.*
lime powder *idunaura.*
lip *afauru.*
little, few goodaa.
live maria.
live (dwell) faiqa.
liver annaama.
lizard eefari.
lizard (type of) qakeesa.

log qiri.
long kisaaqa.
look qafaa.
look out, watch out uaqaa; rakisia.
louse numma.
lung aunda.

machete, knife paipana.
maize sanguma.
make, do auqaa.
make a bed ufiqi.
make a hole uqaurua.
make noise kasikasi.
make, work auqua.
man faiqi.
mango keefaadi.
mantis ramaqooqosina.
manufacture fufua, uqua.
many moomoo.
mark qamaaqa.
marrried couple afaqiqara; qisafaaqi.
maybe abee; mee.
meat aandau; amaqi.
meet, come across paquria.
mid, middle qambaana.

middle, tree stem adaka.
milk, juice anoona.
millipede qoofi.
miss niaqa.
miss, shoot wrong aaqaa.
mock uteeti.
month uqoona.
moon uqoona.
morning kananaana.
mosquito akukka.
mosquito (type of) nunuka.
mother anoofa.
mountain qaaqana; safasa.
mountain range anu.
mouth oo.
move qaraa.
much, very kaoqa.
mud doona.

nail, claw asakadi.
name auqu.
nature oosana.
nearby aaqa; adeedi.
neck anuka.
nest, hive, web, casing anaamu.

night afuru; eendaki.
nit afeeka.
no saa.
oon suanisaa.
nose aiki.
not sia; -fau.
nothing fifau; kaqi.
nymph (insect) anunnu.

next to ameemaanai.

N n

O o
old naaruqaa.
on -saa.
on top of meerai.
on, over -mau.
one moo.
one moodaa.
onion, scallion anniamma.
only kai.
open atuqaa; raqaa.
orange, lemon muri.

Orion’s belt (constellation) Mooseena Saunu.
oscillate foonimbooniri.
other moo.
other side dinni; maaqitina.
out of, from -qari.
outside madaana.
over, on -mau.
overtake, pass fiqaa.
owl (type of) karooda; quapuna.
owner akoofa.

P p

paint, write akara; ria.
pandanus sauna.
pandanus (type of) araqandaaraq; foorina;
oorufana; qaapoona; raimeena; tumana;
saruna; qaira; kasaana; sundana.
parrot (type of) quroona; takasu; undana.
Papua New Guinea Papua Niu Gini.
parent anaukoo.
party ufoona.
pass, overtake fiqaa.
passion fruit kamuqkamuna.
peel adi; apipee.
peel (empty) adusa.
period fasa.
person faiqi.
pick (bird) suqua.
piece ati.
pig kuara.
place maqusa.
plant qumaqua; rakiqaa.
plant (type of) eemboona; kaatu; kauuaqa;
kootana; maparoona; munana; ookara;
saara; simbunumuru; tisaanu; ufisoono;
tarooka.
play sarara.
plough afoodu.
poison auka; auku.
pole, post poosa.
pond madika.
pond (rainwater) mandirana.
popaya fafaiqa.
post, pole poosa.
pouch koomaana.
pull radukua; rarisa.
pull back, shudder mofisa.
pumpkin firimbiri.
push afeeqaa.
put uqaa.
put down rakiqaa.
put inside ausu; rumaa; upeeka; usua, rua.

Q q

queen kuinna.

R r

rain aaku.
rainbow oondanda.

raindrop, dew qififaramu.
raise, erect kuraa.
rat qumura.
rat trap putee.
rat (type of) fadi.
ready deeda.
really uqanna.
reason oosana.
red qumisa; taatuqe.
red flowering plant taatuqeena.
reed (type of) indumu; unaareena.
rejoice fusakia.
religion amaana.
remove rakee; rapee; afaqua.
return randaa.
right (direction) annai.

sand nukuda.
say, speak, talk qia.
say goodbye manda.
scallion, onion anniama.
scare tautia.
school sugura.
scissors sisisa.
scrape fataa.
screen of a rat trap qapoo.
search randaa.
search for food unaku.
see, look qafa.
seed ikoo.
seed, fruit aqama.
seedling, baby asumu.
send aqiia.
shine, spray qaa.
shiver indinda.
shoe sooqa.
shop stuaqa.
short qusaa; toopira.
shortly qusasaa.
shoulder akumu.
shout afaeria; faqarua.
shovel indaku.

right, good andeeqaa.
ripe aku.
river anoona; nammari.
river mouth aateena.
river source arumu.
road aana.
rock, stone ooni.
root, base atuka.
rope sanda.
rope to make fire naakunda.
rotten putaa.
round fiq fiqu.
rubbish heap madaapee.
run sandaa.

S s

shovel, spade saoora.
shrubs dapu.
shudder, pull back mafisaa.
side oakaara.
sideways atiqa.
similar, the same fooqaa.
sing raa.
sister (older) anasaafa.
sister (younger) auna.
sit down faaqee; uqamafi.
skin adi; apata; asukua.
skin disease (type of) fakara.
sky innaaruna.
sleep, live faiqa.
slide fatika.
slope, hill ameema.
slowly ireeda; iree aree.
small kaqikaa.
small, nothing kaqi.
smell, sniff udiraa.
smoke muna.
smoke (cooking) kasooqia.
smoke of a new garden munana.
snake sakani.
sniff, smell udiraa.
snore undaanai.
snout, face ooraiki.
soap soofa.
soldier sundia.
some aakaqa.
something good idaaqira.
son, face ooraiki.
soap soofa.
soldier sundia.
some aakaqa.
something good idaaqira.
son, face ooraiki.
soap soofa.
soldier sundia.
some aakaqa.
something good idaaqira.
son, face ooraiki.
soap soofa.
soldier sundia.
some aakaqa.
something good idaaqira.
son, face ooraiki.
soap soofa.
soldier sundia.
some aakaqa.
something good idaaqira.
son, face ooraiki.
soap soofa.
soldier sundia.
some aakaqa.
something good idaaqira.
son, face ooraiki.
soap soofa.
soldier sundia.
some aakaqa.
something good idaaqira.
son, face ooraiki.
soap soofa.
soldier sundia.
some aakaqa.
something good idaaqira.
son, face ooraiki.
soap soofa.
soldier sundia.
some aakaqa.
something good idaaqira.
son, face ooraiki.
soap soofa.
soldier sundia.
some aakaqa.
something good idaaqira.
son, face ooraiki.
soap soofa.
soldier sundia.
some aakaqa.
something good idaaqira.
son, face ooraiki.
soap soofa.
soldier sundia.
some aakaqa.
something good idaaqira.
son, face ooraiki.
soap soofa.
soldier sundia.
some aakaqa.
something good idaaqira.
son, face ooraiki.
soap soofa.
soldier sundia.
some aakaqa.
something good idaaqira.
son, face ooraiki.
soap soofa.
wing (oblong, insect) kasaapaa.
with -namu; -ndiri; -nnai.
without, have not siai.
woman anaasee.

work auqaa, saikaa.
world maqa maaqa.
write, paint akara; ria.
write down akararumaa.

Y y

yam nandi.
yam (type of) duu.
year aukuana.
yellow aaki; yeroo.
young kum aaraa.
young animal timusa.

yes eeeoo.
yesterday eenda.
young, younger kumaaraa.