

*The phonology and verbal system
of Awara, a Papuan language
of the Finisterre Range,
Papua New Guinea*

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The phonology and verbal system of Awara, a Papuan language of the Finisterre Range, Papua New Guinea

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Abbreviations

- affix and (in Part 1) clitic boundary
- = (in Part 2) clitic boundary
- + (in Part 1) other boundaries including classifiers, compounds, and reduplication

| | | | |
|-------|---------------------------------|---------|---|
| /.../ | phonemic representation | HYP | hypothetical |
| [...] | phonetic representation | IMM | immediate |
| <...> | orthographic representation | IMP | imperative |
| ±1DAY | yesterday, tomorrow | IPF | imperfective |
| ±2DAY | two days ago, two days from now | INDIV | individuator |
| 1 | first person | INDEF | indefinite |
| 2 | second person | LNK | linker |
| 23 | second or third person | LOC | locative |
| 3 | third person | N | nucleus |
| ABL | ablative | NEG | negative |
| APPR | apprehension | NOM | nominaliser |
| BEN | benefactive | NL | nonleniting |
| C | consonant | O | object |
| CL | classifier | PERSIST | persistent |
| COMP | complementiser | P | plural |
| COND | conditional | PF | perfective |
| CPD | element of compound | PNG | Papua New Guinea |
| DAT | dative | POA | point of articulation |
| DIMP | default imperative | PR | phonetic representation |
| DEF | definite | POSS | possessor |
| DIS | dislocation | PRES | present |
| D | dual | PRFOC | predicate focus |
| DUB | dubitative | PROB | probable |
| DUR | durative | PROHIB | prohibitive |
| DIM | diminutive | RED | reduplicant |
| DIPF | dynamic imperfective | REFL | reflexive |
| DS | different subject | RFS | root final segment |
| FUT | future | S | singular |
| GEN | genitive | SIL | SIL International (formerly Summer Institute of Linguistics) |

| | | | |
|---------|----------------------|-----|-----------------|
| SIL-PNG | SIL Papua New Guinea | TOP | topic |
| SIPF | static imperfective | UF | underlying form |
| sp. | species | V | vowel |
| SPEC | specific | | |
| SS | same subject | | |

Part I

Awara phonology

Edward C. Quigley

Acknowledgments

‘For the LORD gives wisdom; From His mouth come knowledge and understanding.’
Proverbs 2:6 (*Holy Bible: New American Standard Version*)

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I would like to acknowledge and express my appreciation to my wife, Susan R. Quigley for her assistance in collecting data for this description and for her many comments and suggestions in the presentation of the data. Most of the background research presented in the Introduction is the result of our work together in the Awara area since 1994. Since she has coauthored several of the papers referenced in that section, the pronouns ‘we’, ‘us’ or ‘our’ in those sections refer to the two of us.

I also wish to express my appreciation to all our Awara friends at Tawaya village who gave of their time and energy in assisting us in many practical ways. Also to the Evangelical Lutheran Church, Kurang Parish (formerly Awara Parish), for formally inviting us to work with them. I also wish to express appreciation to all our friends, families and churches that have supported us financially. It was through their generosity that we have been able to pursue this project.

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Edward C. Quigley

1 *Introduction*

Awara is a Papuan language of Papua New Guinea spoken in the southeastern end of the Finisterre mountain range. Though it has been mentioned in papers written about the Finisterre-Huon languages and about the Wantoat language (another language in the Wantoat family), the Awara sound system has not been described in depth. This work describes the Awara phonemic inventory, autosegmental features, morphophonemic processes, and implications for the Awara orthography. The analysis is presented within the framework of rules-based Generative Phonology.

Interesting aspects of the language shown here are (1) prenasalised voiced stops, (2) complex phonemes /k^w/, /ŋ^w/ and /g^w/, (3) nonuniversal morphophonemic processes such as devoicing of consonants intervocalically and voicing of consonants after voiceless stop consonants, and (4) counterfeeding and counterbleeding relationships between various morphophonemic processes.

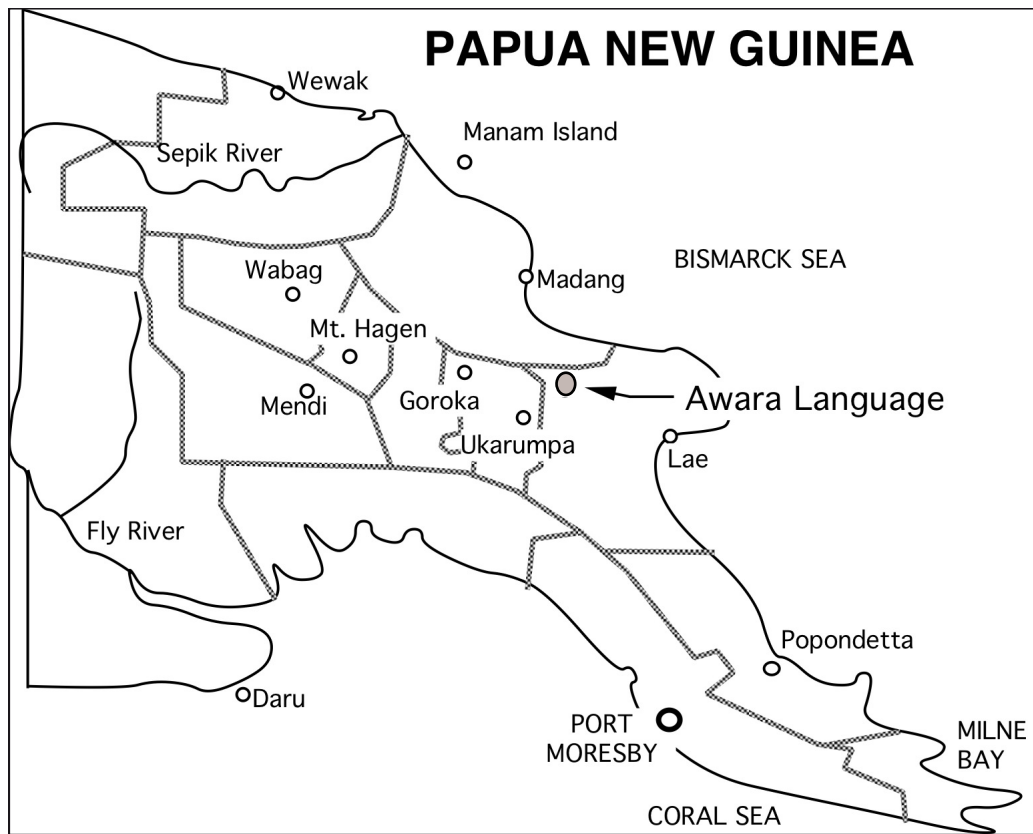
1.1 Demography, geography and culture

The Awara language is spoken in the Awara Census Division of Kaiapit District in the north-west corner of Morobe Province, Papua New Guinea (PNG) (see Map 1). The 1800 speakers of the Awara language live on the southern slopes of the Finisterre Mountain Range along the east and west sides of the Leron River basin. As shown in Map 2, the fourteen main villages and twelve plus hamlets¹ range in altitudes between 900 meters and 1700 meters above sea level, west of the mountains separating them from the Wantoat region.² The steep mountainous terrain is mostly tropical rain forest with large sections of elephant grass on the Western slopes. Weather conditions are moderate with morning sunshine and afternoon and evening showers. Daytime temperatures are from 25 to 28°C and nighttime temperatures are from 12 to 18°C.

The cultural mindset of the Awara people focuses on group harmony and group consensus. Conflicts are resolved at the village level by meeting together to discuss the problem and

¹ Awara people's perception of a village is generally as a group of ten or more houses, usually with a church building. A hamlet contains less than ten houses (usually two to five) and is inhabited by one to three families. People living in hamlets usually identify themselves with the closest main village and/or the local church present in the main village.

² Kongaim Mission and Wantoat plus the villages of Yapalengang, Arawak, and Matap, as labelled in Map 2, are all part of the Wantoat region.



Map 1 Location of Awara in mainland Papua New Guinea

agreeing on a mutually acceptable solution. Often, such discussions take place after evening devotions or after the Sunday morning church service.

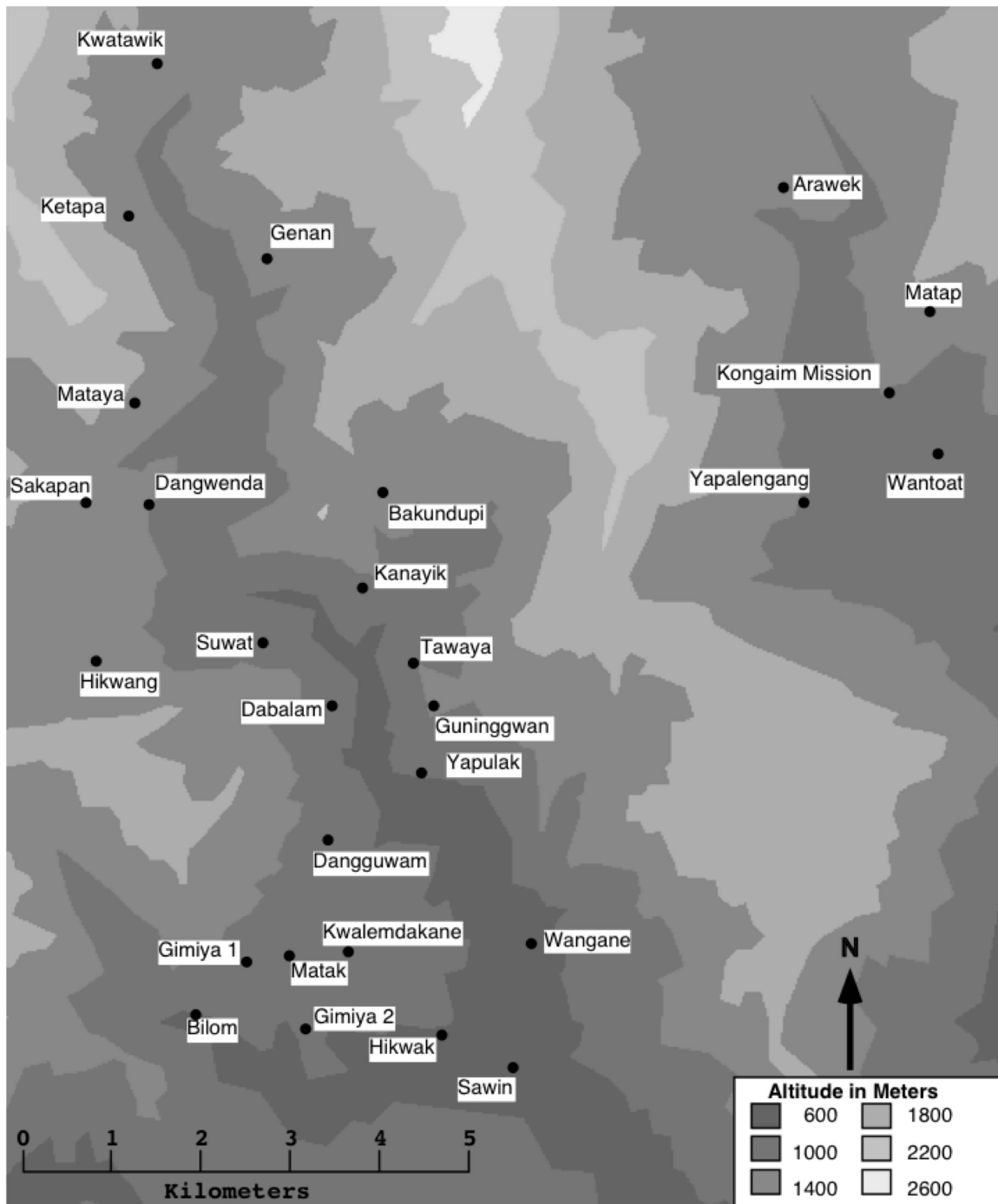
Though there are separate church and local government positions, there is little separation of church and government at the local level. All local government functions (meetings, community work projects, etc) are organised at the community church gatherings. Regional government issues are usually discussed at the regional church meetings as well. The local government community leaders often hold leadership positions in the local church (E. C. Quigley and S. R. Quigley 1999a).

1.2 Language and dialect

Awara is a Papuan language of the Trans-New Guinea phylum, Finisterre–Huon stock, Wantoat family (Wurm and Hattori 1981, Map 8). It is one of six languages in the Wantoat Family, the locations of which are shown in Map 3.

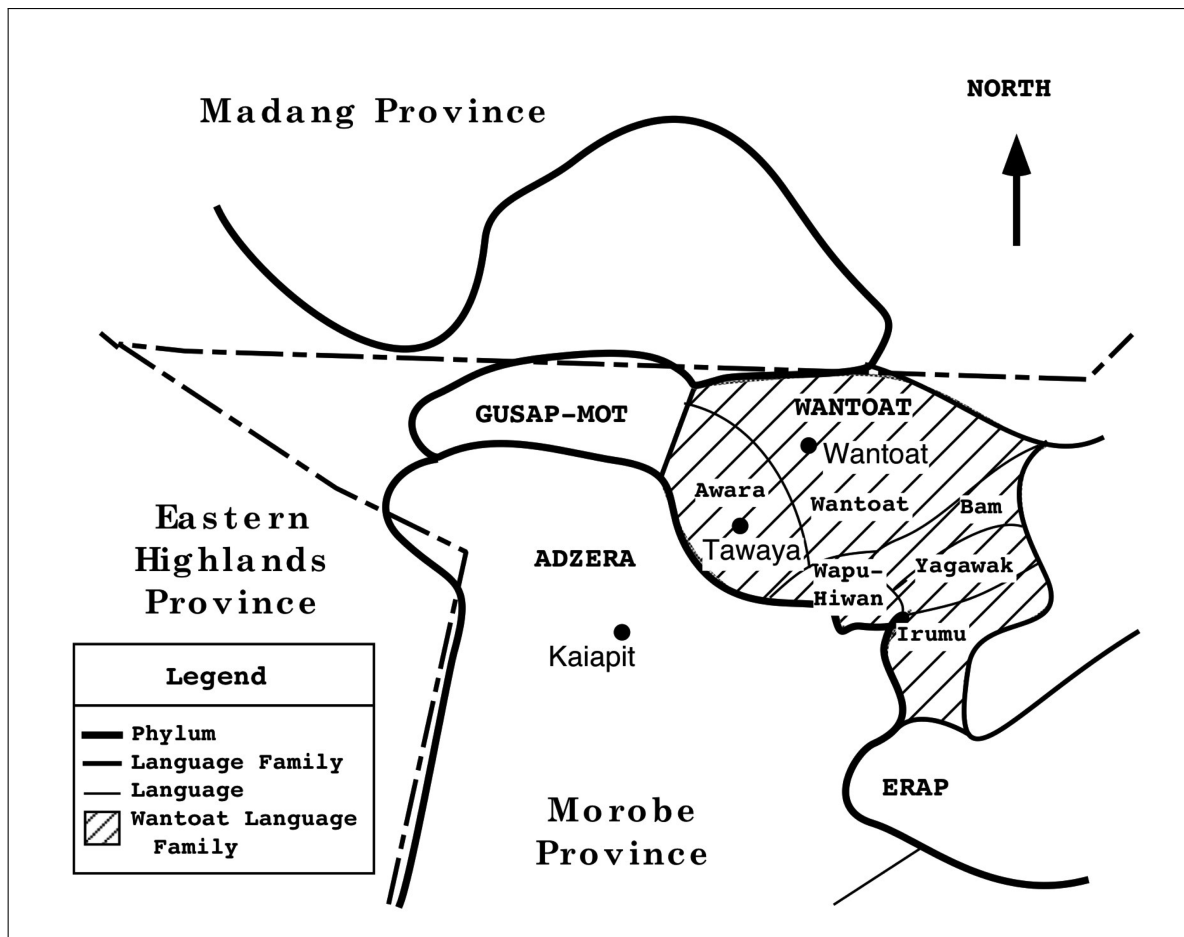
There have been differences of opinion concerning whether Awara is a related language or a dialect³ of Wantoat as well as what constitutes the Awara language. McElhanon and Claasen (1970) classified the northern and central Awara villages as one language related

³ See Loving (1977) for more information and the standards followed in SIL-PNG.



Map 2 Villages and terrain^a

^a Map 2 is based on the Australian Army Corp of Engineers Kaiapit District Map (1978) with modifications based on language surveys completed in the area (E. C. Quigley and S. R. Quigley 1999a).



Map 3 Regional language map^a

^a This map was based on Map 8 of Wurm and Hattori (1981) with modifications based on language surveys in the surrounding language groups (E. C. Quigley and S. R. Quigley 1999b).

to Wantoat with an apparent cognate count of 61%, as shown in Map 4. (Only the western villages of the Wantoat region are shown.) The southern Awara villages were classified as a separate language called Leron, which was related to Wantoat with an apparent cognate count of 70%. Hooley and McElhanon (1970) classified all of Awara as a single language related to Wantoat with an apparent cognate count of 65%. However, Davis (1969) classified Awara as a single dialect of Wantoat.

The differences between the analyses most likely lie in the sampling of data (that is, which villages in the language group were surveyed). The entire Wantoat language family, including Awara, is part of a major language chain spanning most of the Huon Peninsula to the east and extending west into the Finisterre Range in Madang Province. The Wantoat villages closer to the Awara border are more similar to Awara than those on the far side of the Wantoat language border. A parallel situation exists in the Awara villages. Tawaya and Yapulak have a shared apparent cognate count closer to 70% with the Wantoat village Yapalengang, while the villages on the west side of the Leron River are closer to 60%. Overall, Wantoat and Awara

are related with a shared apparent cognate count of 63% (E. C. Quigley and S. R. Quigley 1999a).

Awara was originally listed in the *Ethnologue* as a dialect of Wantoat with the three-letter designator [WNT] (Grimes 1992). However, starting with the 13th edition of *Ethnologue*, Awara was reclassified as a separate language from Wantoat with the three-letter designator [AWX] (Grimes 1996). Related languages in the Wantoat family that border Awara are Wantoat to the east and Wapu-Hiwan to the southeast. Gusap-Mot to the west and Adzera to the southwest are outside of the Wantoat language family (see Map 3).

Other languages in the Wantoat family are Wantoat, Irumu, Yagawak, Bam, and Leron⁴ (McElhanon 1977). However, application of the Cluster Analysis Average Link Method (E. Quigley 1995) to McElhanon and Claassen's (1970) cognate chart data indicates that Irumu and Yagawak should not be in the Wantoat language family but in the Erap language family located to the east. This reflects our own independent research regarding the Wantoat family (E. C. Quigley and S. R. Quigley 1999b). It is unclear why they were included in the Wantoat language family.

As noted in Map 5, we have grouped Awara into three dialects, which are artificially named Southern, Central, and Northern Awara with the Central and Northern dialects forming a tighter group (E. C. Quigley and S. R. Quigley 1999a). The main differences between the Central and Northern dialects are lexical in nature. However, there are greater lexical, phonological, and morphological differences between the Southern dialect and the rest of the language group.

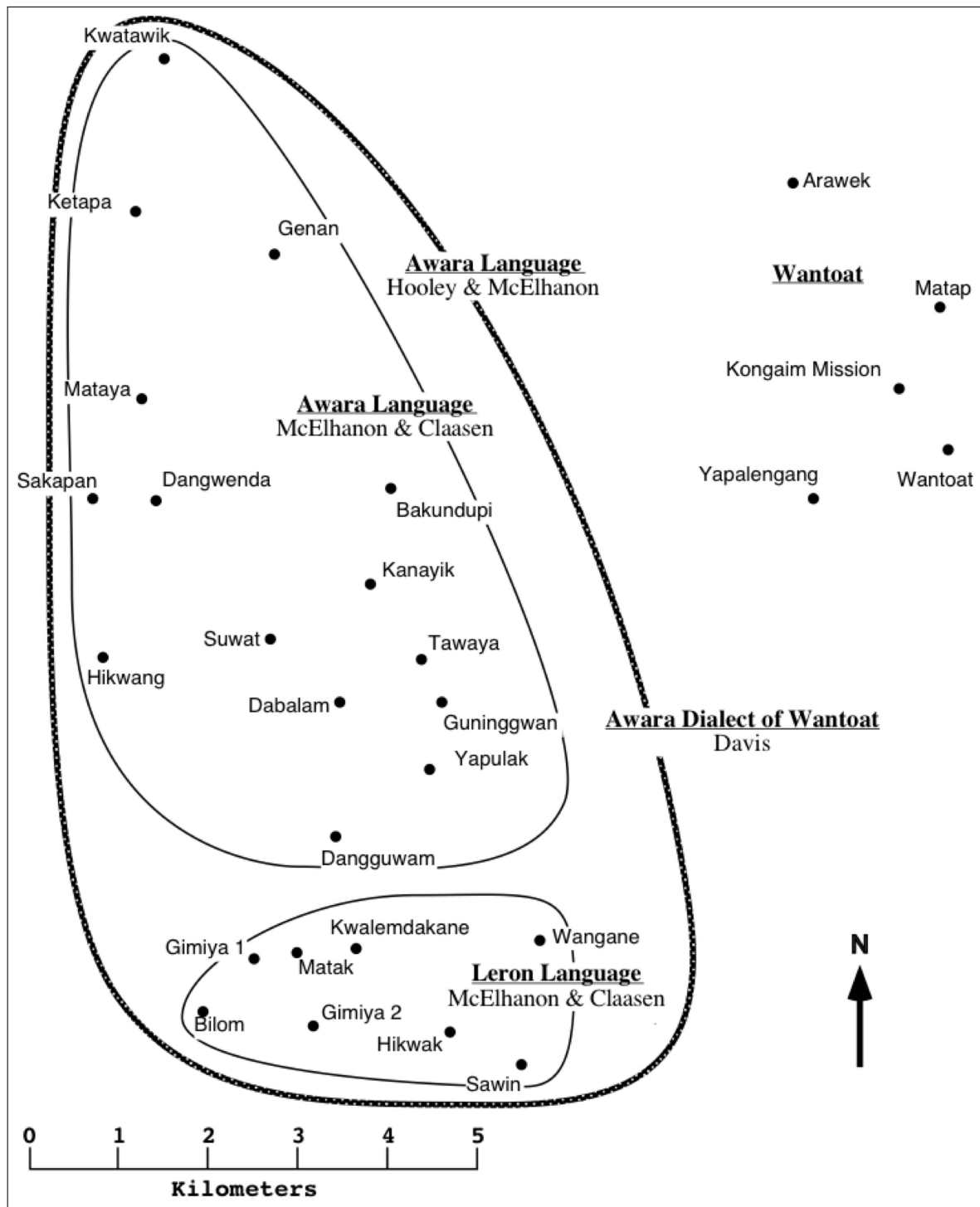
The Awara people view Awara and Wantoat as one language in relationship to other PNG languages. However, in discussing the related languages in the Wantoat family, they view Awara as a separate language from Wantoat. When discussing strictly Awara, they view the northern villages as speaking one variant of Awara, the central villages as speaking a second, and the southern villages as speaking a third. Finally, as we discussed variations within these regions, people viewed their language as based on which village they are from. They can tell which village individuals are from by the way they speak.

This report focuses on the Awara dialect spoken in the Central region and more specifically, the Tawaya village variant.

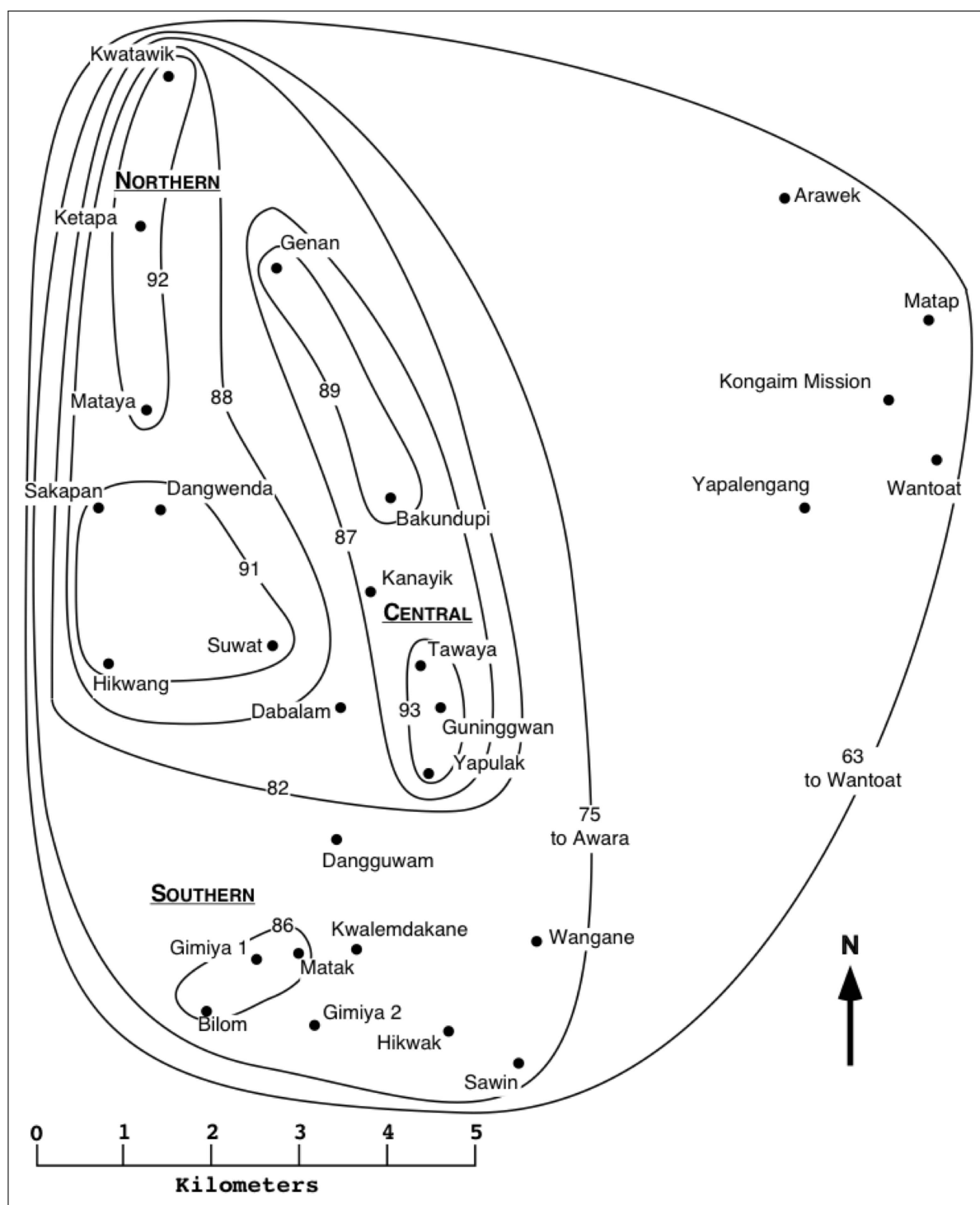
1.3 Methodology

All fieldwork for this work was performed by Susan Quigley and myself under the auspices of SIL Papua New Guinea (SIL-PNG). Data was gathered by means of informal and formal interviews (e.g. eliciting wordlists and attitudes about the language). Fieldwork began in May 1994 after the Evangelical Lutheran Church, Awara Parish, sent a formal invitation requesting SIL-PNG to begin language development work for them. After completing a sociolinguistic survey of the language group (E. C. Quigley and S. R. Quigley 1994) we moved to the hamlet of Gunningwan (see Map 2) in July 1994. This paper is based on the data we collected at Gunningwan up to April 2003.

⁴ Leron mentioned here by McElhanon (1977:538) is the Southern dialect of Awara. Our own research (E. C. Quigley and S. R. Quigley 1999b) has shown that those languages that make up the Wantoat language family are Wantoat, Bam to the east, Awara to the west and Wapu-Hiwan to the south.



Map 4 Awara dialect and language classifications



Map 5 Dialects of Awara and Wantoat^a

^a See E. C. Quigley and S. R. Quigley (1999a) for how this chart was created.

Guninggwan is a small hamlet with an aid post⁵ and three households centrally located in the language group. People from Tawaya, Yapulak, Bakundupi, and Kanayik come regularly to the aid post for medicine. Most of our daily contact was with Tawaya people (a 10-minute walk away) and some with Yapulak people (a 45-minute walk down the mountain). We had periodic (weekly to monthly) contact with people from most other Awara villages travelling to the Wantoat Government Station⁶ (labelled as Wantoat in Map 2).

The corpus of data for this paper comes from texts recorded by eight men varying in age from 25-50 from Tawaya and Yapulak from 1994-1998. The texts included narrative, expository, procedural, and hortatory types. Specific wordlists, paradigms, and recordings of these paradigms were collected mostly from Yakiting Bana (age 30, male) and Silas Wango (age 45). Dialectal data from each Awara village was collected over the span of time from 1994 to 1999 (E. C. Quigley and S. R. Quigley 1999a).

All Awara data has been archived at SIL-PNG in paper and electronic form as per contractual agreements with the government of Papua New Guinea.

1.4 Related language work

There has been extensive work by SIL-PNG in the related languages of the Finisterre-Huon Stock including published and unpublished manuscripts on file at the SIL-PNG Linguistic Library at Ukarumpa, EHP, Papua New Guinea. The following tables list the more relevant works relating to Awara phonology and morphophonemics. Table 1.1 lists works on the Finisterre–Huon Stock. Table 1.2 lists papers on the Wantoat language family and Table 1.3 lists works written about the Awara language.

S. Quigley (2002*b*) contains some preliminary morphophonemic descriptions. These were included to assist the reader in understanding the alternate surface forms as presented in the data and to assign a preliminary underlying form (UF) for the sake of discussing morphology and syntax. S. Quigley (1997) and the revised and updated version E. Quigley (2005) contain the phonemic and orthographic inventory of the Awara language. This paper takes a detailed look at the Awara sound system for the purpose of justifying both the phonemic inventory and the morphophonemic processes. Morpheme glosses, abbreviations, and definitions used in this work follow those used in S. Quigley (2002*a*, 2002*b*).

⁵ Aid post is the common term used in PNG for a small village clinic. It is staffed by an Aid Post Orderly (APO) who has received basic medical training somewhat equivalent to a paramedic. The main duty of the APO is first aid care (treating cuts and sores, broken bones, etc) and treatment of illnesses with medications. They also have training in delivering babies.

⁶ The Wantoat Government Station is the service centre in the greater Wantoat sub-district. Awara people go there to sell coffee and buy store goods (food, clothes, machetes, spades, and other household goods). Wantoat also has road access to the main urban centres—Lae and Madang. No road access exists in the Awara area.

Table 1.1 Works on the Finisterre-Huon stock

| Language | Author | Title |
|----------|----------------------------|---|
| Burum | Gasaway 1997 | Burum morphophonemics |
| Nabak | McElhanon 1979 | A fresh look at Nabak morphophonemics |
| Nahu | Minter 1998 | Phonology essentials of the Nahu language |
| Nankina | Spaulding 1993 | Nankina phonology essentials |
| Selepet | McElhanon 1970a | <i>Selepet phonology</i> |
| | McElhanon 1970b | Selepet verb morphology |
| | McElhanon 1973b | Stops and fricatives: Non-unique solution in Selepet |
| | McElhanon 1973a | <i>Towards a typology of the Finisterre-Huon languages, New Guinea</i> |
| Survey | Hooley 1964 | The Morobe District, New Guinea |
| | Hooley and McElhanon 1970 | Languages of the Morobe District – New Guinea |
| | McElhanon 1977 | The north-eastern Trans-New Guinea Phylum languages, in S.A. Wurm (ed.), <i>New Guinea area languages and language study</i> , vol. 1, <i>Papuan languages...</i> |
| | McElhanon 1978 | <i>A classification of the languages of the Morobe Province Papua New Guinea ...</i> |
| | McElhanon 1984 | <i>A linguistic field guide to the Morobe Province, Papua New Guinea</i> |
| | McElhanon and Claasen 1970 | Languages of the Finisterre Range, New Guinea |
| | Wurm and Dutton 1981 | Morobe Province, in Wurm and Hattori, <i>Language atlas of the Pacific area</i> , Part 1, Map 8 |
| Yopno | Reed 1993 | Yopno phonology essentials |

Table 1.2 Papers on the Wantoat language family

| Language | Author | Title |
|------------|---------------------------------------|---|
| Wantoat | Davis 1961b | Wantoat phonemes and orthography |
| | Davis 1964 | Wantoat verb stem classes and affixation |
| | Davis 1969 | The distinctive features of Wantoat phonemes |
| Survey | E. C. Quigley and S. R. Quigley 1999a | Sociolinguistic survey of the Wapu-Hiwan language group |
| Tuma-Irumu | R. Webb and L. Webb 1992a | Tuma-Irumu orthography paper |
| | R. Webb and L. Webb 1992b | Tuma-Irumu phonology essentials |

Table 1.3 Works on the Awara language

| Author | Title |
|---------------------------------------|---|
| E. C. Quigley and S. R. Quigley 1994 | Sociolinguistic survey of the Awara language group |
| E. C. Quigley and S. R. Quigley 1997 | Social organization paper of the Awara people |
| E. C. Quigley and S. R. Quigley 1999a | Sociolinguistic and literacy report of the Awara people |
| S. Quigley 1997 | Organized phonology data of the Awara language |
| S. Quigley 2002 | Awara grammar essentials |
| S. Quigley 2002 | The Awara verbal system |
| E. Quigley 2003 | Awara phonology |
| E. Quigley 2005 | Organized phonology data of the Awara language, revised and updated |

2 *Phonemic inventory*

The phonetic transcriptions in the following examples are in a broad phonetic transcription following the American tradition. In particular, the Chomsky/Halle vowel system as defined in Pulleyblank (1986) was used in the transcription of the central unrounded mid and low vowels and the mid rounded back vowel.

Table 2 lists those symbols used that differ from the International Phonetic Alphabet (IPA).

Table 2.1 American Tradition (AT) to IPA equivalence chart

| AT | name | IPA | name | description |
|----|--------------|-----|--------------|---|
| ɢ | barred g | ɣ | gamma | voiced velar fricative |
| ɾ | r wedge | ɾ | fish hook r | voiced alveolar flap |
| ɸ | barred b | β | beta | voiced bilabial fricative |
| r | lower case r | ɹ | turned r | frictionless continuant |
| ʃ | s wedge | ʃ | esh | voiceless palato-alveolar central laminal fricative |
| y | lower case y | j | lower case j | voiced palatal central approximant |
| ɪ | iota | ɪ | small cap i | semi-high front unrounded vowel |
| ʌ | inverted v | ə | schwa | mid central unrounded vowel |
| ʊ | small cap u | ʊ | upsilon | semi-high back rounded vowel |

Though this work does not focus on an acoustic analysis of Awara, there were instances where acoustic analysis proved helpful. All acoustic analyses were done using PRAAT Version 4.0 (Boersma and Weenink 2002) on Macintosh PowerBook G3 and PowerBook G4 computers (Apple Computer, Inc.).

Please note that in Chapters 6–11, as well as the appendices, the Awara examples are in semiphonetic form. Specifically, aspiration, devoicing of voiced stops, and vowel allophones are not shown. However, prenasalisation is explicitly indicated when it fills the coda of the preceding open syllable preceding a voiced stop.

Table 2.2 Consonant phoneme chart with allophonic alternates

| | Labial | Alveolar | Palatal | Labialised velar | Velar | Glottal |
|----------------------|--|--|---------|---------------------|--|---------|
| | b | d | | g ^w | g | |
| Voiced stops | [^m b] [^m p] [b] [p] | [ⁿ d] [ⁿ t] [d] [t] | | | [^ŋ g] [^ŋ k] [g] [k] | |
| | p | t | | k ^w | k | |
| Voiceless stops | [p ^h] [p] [pʼ] | [t ^h] [t] [tʼ] | | | [k ^h] [k] [kʼ] | [ʔ] |
| | ɸ | | | | ɣ | |
| Voiced fricatives | [w] [ɸ] [v] | | | | | |
| | | s | | | | h |
| Voiceless fricatives | | [s] [ʃ] | | | | |
| Nasals | m | n | | ŋ ^w | ŋ | |
| | | l | | | | |
| Voiced laterals | | [l] [ɭ] [r] | | | | |
| Glides | | | y | | | |

2.1 Consonants

Table 2.2 lists all the consonants in the Awara phonemic inventory with their phonetic alternates indicated within brackets.

Awara consonants make up natural groups of phonemes, each consisting of a labial, a coronal and a dorsal. These groups are of voiced stops (/b/, /d/, and /g/),¹ voiceless stops (/p/, /t/, and /k/), nasals (/m/, /n/, and /ŋ/), and voiced spirants (/ɸ/, /l/, and /ɣ/). Awara consonants also make a distinction between labial (/b/, /p/, /m/, and /ɸ/) and linguals (all others), in which labials behave differently than linguals in certain environments (described below). Awara also has labialised velar stops (/g^w/, /k^w/, and /ŋ^w/).²

Tables 2.3–2.12 list examples of each consonant phoneme in word-initial, word-final, and intervocalic positions. Consonant clusters will be discussed in §2.1.8. Each table lists the phonemic form and the alternate phonetic forms for that phoneme. For clarity purposes, alternate forms are listed only for the phoneme in focus. The underlying forms (UFs) in these tables are to a certain extent arbitrary. Certain aspects of the UFs will be justified later in Chapter 6. The ‘-’ symbol is used to indicate affix boundaries in the UF, and the ‘+’ symbol

¹ Where the IPA uses the term ‘plosive’, the American tradition uses the term ‘stop’. They are not completely interchangeable. The term ‘stop’ used in the generic sense (without the modifiers voiced or voiceless) generally includes nasals whereas ‘plosive’ by definition excludes them.

² It is common among many of the Huon and Finisterre languages (McElhanon and Claassen 1970) to have either labio-velar or labialised velar stops, but not both. McElhanon and Claassen (1970) used the term labio-velar for both labio-velars (e.g. /gb/ and /kp/) and labialised velars (e.g. /k^w/).

Table 2.3 The phonemes /b/, /d/ and /g/

| | /b/ | [b] [ᵐb] [mb] [ᵐp] [p] | |
|--------------|-----------|--|-----------------|
| Word-initial | /bam/ | [bam] [ᵐbam] [m.bam] [pam] | ‘log’ |
| | /bʌbʌm/ | [bʌm.bʌm] [ᵐbʌm.bʌm] [m.bʌm.bʌm] [pʌm.bʌm] | ‘bamboo leaf’ |
| Intervocalic | /tebana/ | [tɛm.ba.na] [tɛm.pa.na] | ‘morning’ |
| | /dabʌ/ | [dam.bʌ] [dam.pʌ] | ‘tree fern’ |
| | /d/ | [d] [ᵐd] [nd] [nt] [t] | |
| Word-initial | /dʌki/ | [dʌ.kʰi] [ᵐdʌ.kʰi] [n.dʌ.kʰi] [tʌ.kʰi] | ‘wood’ |
| | /dayip-ŋ/ | [da.yip] [ᵐda.yip] [n.da.yip] [ta.yip] | ‘Look at them!’ |
| Intervocalic | /dʌdʌn/ | [dʌn.dʌn] [dʌn.tʌn] | ‘teeth’ |
| | /gadoŋ/ | [gan.doŋ] [gan.toŋ] | ‘grass shoot’ |
| | /g/ | [g] [ᵐg] [ŋg] [ᵐk] [k] | |
| Word-initial | /gʌnaŋ/ | [gʌ.naŋ] [ᵐgʌ.naŋ] [ŋ.gʌ.naŋ] [kʌ.naŋ] | ‘grove’ |
| | /gʌlʌŋ/ | [gʌ.lʌŋ] [ᵐgʌ.lʌŋ] [ŋ.gʌ.lʌŋ] [kʌ.lʌŋ] | ‘hook’ |
| Intervocalic | /yagʌ/ | [yaŋ.gʌ] [yaŋ.kʌ] | ‘water’ |
| | /dagʌm/ | [daŋ.gʌm] [daŋ.kʌm] | ‘hair’ |

is used to indicate other boundaries in the UF, such as classifier, compound, and reduplication boundaries.

2.1.1 Voiced stops

Awara has the three voiced stops /b/, /d/, and /g/, as shown in Table 2.3. Voiced stops /b/, /d/, and /g/ occur word-initially and syllable-initially between vowels, but not syllable-finally or word-finally. As in Nankina (Spaulding 1993) and Tuma-Irumu (R. Webb and L. Webb 1992b), voiced stops are generally prenasalised by the homorganic nasal.³ The prenasalisation generally syllabifies word-initially, especially in slow speech or when the word is spoken in isolation. When the voiced stop follows an open syllable, the prenasalisation always phonetically closes the preceding syllable.⁴ Voiced stops exhibit rare occurrences of voiceless unaspirated stop word-initially when prenasalisation is deleted instead of being syllabified.⁵ Voiced stops also exhibit rare occurrences of voiceless unaspirated stop intervocalically after the prenasalisation spreads to the preceding open syllable.⁶

³ Prenasalisation is common in many languages of the Finisterre Range (McElhanon and Claassen 1970). However, voiced stops are generally not prenasalised intervocalically in borrowed words where the source language does not have prenasalisation. See §10.2 on loan words that violate Awara phonology.

⁴ See §3.2 for justification of this analysis.

⁵ Similar to Selepet voiced stops (McElhanon 1970b).

⁶ The intervocalic voiceless unaspirated stop allophony is much more common in the Southern dialect; for example /sadun/ ‘axe’ is normally pronounced [santun].

Table 2.4 The phonemes /p/, /t/ and /k/

| | /p/ | [p] [p ^h] [pˀ] | |
|--------------|------------------------|--|-----------------|
| Word-initial | /payip/ | [p ^h a.yip] | ‘machete’ |
| | /pe -k/ | [p ^h ek] | ‘He slept.’ |
| Intervocalic | /kupan/ | [k ^h u.p ^h an] | ‘smoke’ |
| | /ap ^h ak/ | [a.p ^h ak] | ‘tongs’ |
| Word-final | /yak ^h ap/ | [ya.k ^h ap] [ya.k ^h apˀ] | ‘first’ |
| | /katahip/ | [k ^h a.ta.hip] [k ^h a.t ^h a.hipˀ] | ‘bracelet’ |
| | /t/ | [t] [t ^h] [tˀ] | |
| Word-initial | /tokɛɿ/ | [t ^h ok.ɛɿ] | ‘pain’ |
| | /tulik/ | [t ^h u.lik] | ‘He pulled it.’ |
| Intervocalic | /matekɛɿ/ | [ma.t ^h ek.ɛɿ] | ‘small’ |
| | /m ^h atɛp/ | [m ^h a.t ^h ɛp] | ‘story’ |
| Word-final | /yot/ | [yot] [yotˀ] | ‘house’ |
| | /bunibat/ | [bu.ni.ɓat] [bu.ni.ɓatˀ] | ‘cassowary’ |
| | /k/ | [k] [k ^h] [kˀ] | |
| Word-initial | /kupit/ | [k ^h u.p ^h it] | ‘silent’ |
| | /katak/ | [k ^h a.t ^h ak] | ‘exactly’ |
| Intervocalic | /yek ^h ap/ | [ye.k ^h ap] | ‘moon’ |
| | /akop/ | [a.k ^h op] | ‘Come up!’ |
| Word-final | /belakɛɿ/ | [be.lak.ɛɿ] | ‘long’ |
| | /y ^h ak/ | [y ^h ak] [y ^h akˀ] | ‘bag’ |
| | /yepm ^h ak/ | [yep.m ^h ak] [yep.m ^h akˀ] | ‘son-in-law’ |

Thus, the main contrast between voiced and voiceless stops word-initially is that voiceless stops are aspirated while voiced stops are not. The main contrast between voiced and voiceless stops intervocalically is that voiced stops always follow a homorganic nasal while voiceless stops do not.

2.1.2 Voiceless stops

The phonemes /p/, /t/, and /k/ are mildly aspirated word-initially and syllable-initially between vowels, as shown in Table 2.4. They are unreleased syllable-finally. When they occur word-finally they are unreleased utterance-medially and are released utterance-finally and when the word is spoken in isolation.

The glottal stop is noncontrastive word-initially and does not occur word-finally. It exists word-medially in a small closed set of interjections, as shown in Table 2.5. Since [ʔ] occurs noncontrastively in lexical items and occurs word-medially only in two nonlexical interjections, it is not considered a phoneme of the language.

Table 2.5 The phone [ʔ]

| | | [ʔ] | |
|--------------|----------------------|--|-----------------|
| Word-initial | /u/ | [ʔu] [u] | ‘no!’ |
| | /i/ | [ʔi] [i] | ‘here’ |
| | /a.lak/ | [a.lak] [ʔa.lak] | ‘bamboo sliver’ |
| | /iŋ ^w Λm/ | [i.ŋ ^w Λm] [ʔi.ŋ ^w Λm] | ‘whistle’ |
| Intervocalic | /hiʔi/ | [hi.ʔi] | ‘yes’ |
| | /eʔu/ | [ʔe.ʔu] [e.ʔu] | ‘Thank you.’ |

2.1.3 Nasals

Awara has the three nasals /m/, /n/, and /ŋ/. As in Irumu (R. Webb and L. Webb 1992b), intervocalic nasals tend to be ambisyllabic (bleed to the preceding open syllable). This is more common in slow speech and with words spoken in isolation.⁷ There are no restrictions on the distribution of /m/ and /n/, as shown in Table 2.6.

Table 2.6 The phonemes /m/ and /n/

| | /m/ | [m] | |
|--------------|-----------------------|--|---------------|
| Word-initial | /miŋΛ/ | [mi.ŋΛ] | ‘thumb’ |
| | /meyΛ/ | [me.yΛ] | ‘heavy’ |
| Intervocalic | /daman/ | [da.man] [dam.man] | ‘fence’ |
| | /mimiŋ/ | [mi.miŋ] [mim.miŋ] | ‘aunt’ |
| Word-final | /palΛm/ | [pa.lΛm] | ‘boil’ |
| | /gom/ | [gom] | ‘knee’ |
| | /n/ | [n] | |
| Word-initial | /nak/ | [nak] | ‘food’ |
| | /nΛθΛn/ | [nΛ.θΛn] | ‘grass skirt’ |
| Intervocalic | /ina/ | [i.na] [in.na] | ‘what’ |
| | /k ^w ΛnΛm/ | [k ^w Λ.nΛm] [k ^w Λn.nΛm] | ‘tears’ |
| Word-final | /kutan/ | [k ^h u.tan] | ‘nut species’ |
| | /yeθΛn/ | [ye.θΛn] | ‘±2 days’ |

⁷ Ambisyllabicity accounts for words such as /miŋΛ/ ‘thumb’ being pronounced as [miŋ.ŋΛ] or [miŋ:Λ] in slow speech, since there is a general prohibition against geminates.

Table 2.7 The phoneme /ŋ/

| | /ŋ/ | [ŋ] | |
|--------------|-------------|-----------------------|-----------------|
| Word-initial | /ŋʌ/ | [ŋʌ] | ‘and’ |
| | /ŋʌkge/ | [ŋʌk.ge] | ‘much’ |
| Intervocalic | /batʌŋʌ/ | [ba.tʌ.ŋʌ] [batʌŋ.ŋʌ] | ‘pepper tree’ |
| | /tʌŋʌ/ | [tʌ.ŋʌ] [tʌŋ.ŋʌ] | ‘body’ |
| Word-final | /miŋ/ | [miŋ] | ‘mother’ |
| | /akop -yiŋ/ | [a.kʰo.yiŋ] | ‘They came up.’ |

There are just two cases of /ŋ/ occurring word-initially in native words; both are shown in Table 2.7. All other occurrences of /ŋ/ word-initially are in borrowed Yabim names (see Chapter 10 for some examples).⁸

2.1.4 Voiced spirants

Awara has the voiced spirants /b/, /l/, and /g/.⁹ None of these voiced spirants occur word-finally, and the phoneme /b/ is the only one that occurs word-initially in underlying forms. That is, the phones [l] and [g] occur word-initially when word-initial phonemes /t/ and /k/ lenite, but do not occur as phonemes word-initially. All three voiced spirants occur between vowels.¹⁰

Table 2.8 The phoneme /b/

| | /b/ | [b] [w] [v] | |
|--------------|--------------|---------------------------|----------------|
| Word-initial | /bʌbi/ | [bʌm.bi] [wʌm.bi] | ‘spider’ |
| | /besak/ | [be.sak] [we.sak] | ‘tree species’ |
| Intervocalic | /babak/ | [ba.bak] [wa.wak] | ‘son’ |
| | /yiʔit -kum/ | [yi.bi.kʰum] [yi.vi.kʰum] | ‘I stayed.’ |

⁸ Yabim is a language spoken near Finschhafen which was used by the early church workers who first brought Christianity to the Awara community. When Awara people are baptised they are given a ‘Christian name’, often one from the Yabim language.

⁹ The term ‘spirant’ was used by McElhanon (1979), Gasaway (1997), and others to describe the natural class of /b/, /l/, and /g/ that contrasts with the stop series in many Papuan languages. Technically, of course, /l/ is not a fricative.

¹⁰ One interesting comparative note is that many Wantoat words that have sequences of two vowels (CVVC) have cognate forms in Awara where the vowels are separated by fricatives (CVCVC). It appears that the intervocalic consonant is more often /b/ or /y/ and less commonly /l/ and /g/.

Table 2.9 The phonemes /l/ and /ɣ/

| | /l/ | [l] [r] [ɾ] | |
|--------------|----------|----------------------------------|----------------|
| Intervocalic | /malak/ | [ma.lak] [ma.ɾak] [marak] | ‘ear’ |
| | /ala -k/ | [a.lak] [a.ɾak] [a.rak] | ‘It sprouted.’ |
| | /alalup/ | [a.la.lup] [a.ɾa.ɾup] [a.ra.rup] | ‘dust’ |
| | /ɣ/ | [ɣ] | |
| Intervocalic | /nagal/ | [na.ɣa.la] | ‘much’ |
| | /bɣum/ | [bɣ.ɣum] | ‘soft dirt’ |

The phoneme /b/ is pronounced as [b] with mild friction and as [w] with mild rounding.¹¹ It is also optionally pronounced as [v] after [i], as shown in Table 2.8.¹²

The symbol /b/ was chosen to represent the phoneme (though [w] is also common) for symmetry with /ɣ/ in the phonemic chart.

The alternation of [v] with [b] and [w] in Awara provides further evidence supporting Kenstowicz’s (1994) argument for grouping phonemes into labial, coronal, and dorsal with [f] and [v] being categorised as labial, not coronal or the hybrid labiodental. He argues that [f] and [v] are labial, citing the fact that [f] typically alternates with [p].¹³ Similarly, in Awara, [v] alternating with [b] and [w] would be considered normal and acceptable.

It is also common for /pu/-initial words to be pronounced as [bu] or [wu] by many speakers (idiolectally determined). This alternation is limited to the /p/ phoneme. More common examples are listed in (1).

- (1) /puya/ [p^hu.ya] [b^hu.ya] [wu.ya] ‘garden’
 /puku-t/ [p^hu.k^hut] [b^hu.k^hut] [wu.k^hut] ‘I went down.’

Some words alternate between /b/ and null between vowels (e.g. /subat/ ‘Suwat (place name)’ is pronounced as [su.bat] or [su.at]). The null form generally occurs after rounded vowels /u/ and /o/. However, not all words that have /b/ after rounded vowels intervocalically have the alternate null form.

The phoneme /l/ only occurs between vowels, as shown in Table 2.9. The alternation of [r] and [ɾ] with /l/ is individual; some speakers prefer [l] where others prefer [ɾ]. The use of [r] is less common. See §11.4 regarding speaker preferences of [l] and [ɾ]. The phoneme /l/ does occur word-initially and word-finally in borrowed words (see Chapter 10).

Like /l/, the phoneme /ɣ/ occurs intervocalically with varying degrees of mild friction and does not occur in the word-initial or word-final position, as shown in Table 2.9.

Unlike /b/ and /l/, the frication of /ɣ/ (and /k/ lenited) can be so mild that it is phonetically unrealised. This tends to be more common with /k/ undergoing lenition in verbs (e.g. /a-ku -ga -lak/ ‘PRFOC- to go -S.DIPF -3S.PRES’ is often pronounced as [au^hgalak] ‘Are you going?’).

¹¹ This alternation appears to be idiolectal.

¹² Spaulding (1993) reported a similar situation with alternation of the phones [p], [b], and [w] among Nankina speakers.

¹³ One interesting side note is that Tok Pisin also has variation between [p] and [f] (e.g. [pai.a] [fai.a] ‘fire’).

2.1.5 Voiceless fricatives

The phoneme /s/ can occur word-initially and word-medially, as shown in Table 2.10.

There are only two cases of word-final /s/, one of which is a nonlexical interjection and the other is in a reduplicated form.¹⁴ All other occurrences of word-final /s/ are in borrowed words. As such, /s/ will be analysed as not occurring word-finally.

There is one occurrence of the phone [ʃ], which is in the classifier suffix [-sim] [-šim] SPECIFIC, as shown in (2). This suffix is contrasted with the suffix [-him] [-sim] DIMINUTIVE.

| (2) | Classifier | gloss | DIMINUTIVE | SPECIFIC |
|-----|------------|---------------|---------------|----------------|
| | /tʌpʌ/ | ‘CL.stick’ | [tʰʌ.pʰʌ.him] | [tʰʌ.pʰʌ.sim] |
| | /kʷʌᵐbʌt/ | ‘CL.extended’ | [kʷʌm.bʌ.sim] | [kʷʌm.bʌt.šim] |
| | /gʷʌk/ | ‘CL.opening’ | [gʷʌk.sim] | [gʷʌk.šim] |
| | /gutoŋ/ | ‘CL.thin’ | [gu.tʰoŋ.sim] | [gu.tʰoŋ.šim] |

The SPECIFIC suffix is [-sim] after vowel-final classifiers and is [-šim] after consonant-final classifiers. The phone [ʃ] is analysed as a phonetic realization of the phoneme /s/. See §7.3 for a discussion of [ʃ].

The phoneme /h/ occurs word-initially and between vowels, but not word-finally, as shown in Table 2.10.

2.1.6 Glide (semivowel)

Awara has the glide /y/. The phoneme /y/ occurs syllable-initially, word-initially, and between vowels, but not word-finally, as shown in Table 2.11.

Table 2.10 The phonemes /s/ and /h/

| | /s/ | [s] | |
|--------------|----------|-----------|------------------|
| Word-initial | /sahip/ | [sa.hip] | ‘when’ |
| | /sagum/ | [saŋ.gum] | ‘corn’ |
| Intervocalic | /asʌ/ | [a.sa] | ‘like this’ |
| | /gusit/ | [gu.sit] | ‘sun’ |
| Word-final | /es/ | [ɛs] | ‘sorry’ |
| | /musmus/ | [mus.mus] | ‘flea’ |
| | /h/ | [h] | |
| Word-initial | /halu/ | [ha.lu] | ‘sand’ |
| | /hamʌk/ | [ha.mʌk] | ‘elephant grass’ |
| Intervocalic | /mʌhe/ | [mʌ.he] | ‘dislike’ |
| | /amuha/ | [a.mu.ha] | ‘down below’ |

¹⁴ Personal intuition suggests that /musmus/ ‘flea’ is a borrowed word, though the source language is currently unknown.

Table 2.11 The phoneme /y/

| | /y/ | [y] | |
|--------------|-----------|------------------------|----------------|
| Word-initial | /yot/ | [yot] | ‘house’ |
| | /yekΛp/ | [ye.k ^h Λp] | ‘moon’ |
| Intervocalic | /ayi/ | [a.yi] | ‘up’ |
| | /yayi -ŋ/ | [yayiŋ] | ‘Stand on it!’ |

Some words alternate between /y/ and null between vowels (e.g. /payip/ ‘knife’ is pronounced as [pa.yip] or [pa.ip]). The null form generally occurs before /i/. However, not all words that have /y/ before /i/ intervocalically have the null form.

2.1.7 Complex consonants (labialisation)

Labialisation occurs with the velar stops /k/, /g/, and, in a few instances, /ŋ/. The phoneme /k^w/ occurs word-initially and syllable-initially but not word-finally, as shown in Table 2.12.

There is phonological evidence that /k^w/ is a single, complex phoneme. Like other voiceless stops, /k^w/ lenites to [g^w] intervocalically at morpheme boundaries. For example, /do-k^walamuk/ ‘He did not clean it.’ is [do.g^wa.la.muk].

Table 2.12 The phoneme /k^w/

| | /k ^w / | [k ^w] | |
|-----------------|---------------------------------------|---|--------------------|
| Word-initial | /k ^w Λman/ | [k ^w Λ.man] | ‘cold’ |
| | /k ^w anam/ | [k ^w a.nam] | ‘beg’ |
| Intervocalic | /tak ^w Λn/ | [ta.k ^w Λn] | ‘holy’ |
| | /dΛk ^w Λ/ | [dΛ.k ^w Λ] | ‘locust’ |
| | /k ^w ak ^w akŋΛ/ | [k ^w a.k ^w ak.ŋΛ] | ‘uninteresting’ |
| | /g ^w / | [g ^w] [ŋg ^w] | |
| Word-initial | /g ^w ak/ | [g ^w ak] [ŋg ^w ak] [ŋ.g ^w ak] | ‘sprout’ |
| | /g ^w Λlam/ | [g ^w Λ.lam] [ŋg ^w Λ.lam] [ŋ.g ^w Λ.lam] | ‘shoulder’ |
| Intervocalic | /sug ^w Λk/ | [suŋ.g ^w Λk] | ‘brain’ |
| | /pΛg ^w at/ | [paŋ.g ^w at] | ‘tuber species’ |
| | /ŋ ^w / | [ŋ ^w] | |
| Word-initial | /RED+ŋ ^w Λk/ | [ŋ ^w Λk.ŋ ^w Λk] | ‘boiling’ |
| Intervocalic | /iŋ ^w Λm/ | [iŋ ^w Λm] | ‘whistle’ |
| | /saŋ ^w am/ | [sa.ŋ ^w am] | ‘pandanus species’ |
| Nonintervocalic | /hikŋ ^w Λm/ | [hik.ŋ ^w Λm] | ‘vein’ |

Though lenition is applied to /k^w/, there are no other occurrences of lenition taking place across other consonant clusters. Since there are no other occurrences of [g^w] apart from /k^w/ leniting, this suggests that /k^w/ is a single phoneme.

The phoneme /g^w/ occurs syllable-initially and word-initially, but not word-finally, as shown in Table 2.12. Prenasalisation of /g^w/ is identical to that of the simple voiced stop /g/.

The phoneme /ŋ^w/ occurs word-initially in one onomatopoeic word,¹⁵ and it occurs word-medially in a few other words. It does not occur word-finally, as shown in Table 2.12.

Since [ŋ^w] is ambisyllabic intervocalically, there is no phonetic distinction between monomorphemic [ŋ^w] phones and those that occur from /ŋb/ at morpheme boundaries, as shown in (3).

- (3) /pʌ-ŋ+baŋalu -k/ [pʌ.ŋ^wa.ŋa.luk] ‘It dried.’
 /pe-ŋ+baŋha -k/ [pe.ŋ^wʌ.hak] ‘He crawled.’

There are many words that are pronounced with [k], [g], or [ŋ], and others that are pronounced with [k^w], [g^w], or [ŋ^w]. However, as with Yopno (Reed 1993), there are some words that can be pronounced with either, as shown in (4).

- | (4) Underlying form (UF) | Phonetic representation (PR) | Gloss |
|--------------------------|---|------------------|
| /tukade/ | [tu.k ^h an.de] [tu.k ^w an.de] | ‘good afternoon’ |
| /a-ku -ga -k/ | [aŋu ^ŋ gak] [aŋu ^ŋ g ^w ak] | ‘He is going.’ |
| /a-kuŋʌ -k/ | [aŋuŋʌk] [aŋuŋ ^w ʌk] | ‘He died.’ |

The velar is optionally labialised after the vowel /u/. The labialised alternate is more common among villages other than Tawaya (the village dialect under investigation).

There are other Finisterre Stock languages that have labialised velars. McElhanon and Claasen (1970) and McElhanon (1970c) reported that the Wantoat and Uri language families have them as well as other Huon Peninsula languages. Davis (1969) and R. Webb and L. Webb (1992b) analysed labialised velars as single phonemes in the related languages Wantoat and Irumu.

2.1.8 Consonant co-occurrence

Awara consonant co-occurrence is limited in scope. The maximal syllable template is [CVC] (see Chapter 3), limiting consonant sequences to syllable boundaries. Many consonants have phonotactic constraints preventing them from occurring in the coda position of the syllable. The consonants that can occur syllable-finally are nasals and voiceless stops, as shown in Table 2.13. Phonemes that are not part of any consonant cluster have been omitted from the table.¹⁶

The main co-occurrence constraints are on geminates, spirants following any consonant,¹⁷ nasals following nasals, and voiceless stops following nasals. However, there are additional

¹⁵ All cases of onomatopoeic words in Awara are reduplicated in which the base form is either one or two syllables. See Table 59.

¹⁶ There were only two cases of phoneme /s/ occurring syllable-finally (see §2.1.5). These were questionable and have been excluded from this chart.

¹⁷ Except as noted before with [ŋb] clusters at morpheme boundaries in which it is re-syllabified as [ŋ^w] (/peŋ + baŋha -k/ -> [pe.ŋ^wʌ.hak] ‘It crawled.’).

Table 2.13 Awara consonant sequences

| | p | t | k | b | d | g | m | n | ŋ | y | s | h | k ^w | g ^w | ŋ ^w |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|----------------|----------------|----------------|
| p__ | — | — | x | x | x | x | x | x | — | x | x | — | x | x | — |
| t__ | x | — | x | x | x | — | — | x | — | — | x | — | — | — | — |
| k__ | — | — | — | x | x | x | x | — | x | x | x | — | — | x | x |
| m__ | — | — | — | x | x | x | — | x | — | x | x | x | x | x | — |
| n__ | — | — | — | x | x | — | — | — | — | x | x | — | — | — | — |
| ŋ__ | — | — | — | — | x | x | — | x | — | x | x | x | x | — | — |

‘x’ = ‘exists’, see (5)–(10). ‘—’ = no reported cases.

consonant sequences that occur in loan words, as shown in Table 2.14. Some of these clusters, such as /bl/ and /sk/, occur syllable-initially because, unlike Awara, both Tok Pisin¹⁸ and English have onset consonant clusters ([CCVC] syllables). Phonemes that are not part of any consonant cluster have been omitted from the table.

In all Awara clusters of voiceless-voiced stops (including /g^w/), the prenasalisation of the voiced stop is either syllabified or deleted (e.g. /ŋʌkge/ ‘much’ is [ŋʌk.ŋ.ge] or [ŋʌk.ge]). Syllabification is more common in slow speech or when words are spoken in isolation. Deletion is more common in continuous or fast speech and utterance-medially.

Table 2.14 Consonant sequences in loan words

| | p | t | k | b | d | m | n | ɸ | l | s | h |
|-----|---|---|---|---|---|---|---|---|---|---|---|
| p__ | — | * | — | — | — | — | — | — | * | — | — |
| t__ | — | — | — | — | — | * | — | * | * | — | — |
| k__ | * | * | — | — | — | — | — | — | * | — | * |
| b__ | — | — | — | — | — | — | — | — | * | — | — |
| d__ | — | * | — | — | — | — | — | — | * | — | — |
| g__ | — | — | — | — | — | — | — | — | * | — | — |
| m__ | * | — | — | — | — | — | — | — | — | — | — |
| n__ | — | * | * | — | — | — | — | — | — | — | — |
| ŋ__ | — | — | * | — | — | — | — | — | — | — | — |
| l__ | — | * | — | * | * | — | * | — | — | * | — |
| s__ | * | * | * | * | — | — | — | — | * | — | — |

‘*’ = occurs in loan words. ‘—’ = no reported cases.

¹⁸ Tok Pisin, a language of wider communication use in many parts of Papua New Guinea, was formally referred to as Melanesian Pidgin English.

The following tables show the consonant clusters that occur in Awara. If there is only one example given of a particular cluster, it is because only one example was found in the data.

The consonants that follow phoneme /p/ are listed with example words in (5). Voiced spirants cannot follow /p/.

| (5) | p__ | UF | PR | Gloss |
|-----|-----------------|---|---|---------------------------------------|
| | pk | /k ^h lap+kupit/ /hup+kupit/ | [k ^h Λ.lap.k ^h u.pit] [hup.k ^h u.pit] | ‘smoked meat’ ‘black stone’ |
| | pb | /gepbi/ /hapbΛ/ | [gep.bi] [hap.bΛ] | ‘chin’ ‘calf’ (body-part) |
| | pd | /bulip+da -kut/ /hipdu/ | [bu.lip.da.k ^h ut] [hip.du] | ‘It became a forest.’ ‘once’ |
| | pg | /hup+g ^h apbat/ /nep+g ^h amΛn/ | [hup.g ^h ap.bat] [nep.g ^h Λ.mΛn] | ‘stone ledge’ ‘sweat’ |
| | pm | /apmagalΛ/ /yepmΛk/ | [ap.ma.ɡa.lΛ] [yep.mΛk] | ‘later’ ‘son-in-law’ |
| | pn | /y ^h ΛpnΛ/ /hipnΛ/ | [y ^h Λp.nΛ] [hip.nΛ] | ‘moist’ ‘dull’ |
| | py | /kep+yamun/ | [k ^h ep.ya.mun] | ‘earthquake’ |
| | ps | /gupsΛŋ/ /yupsΛŋ/ | [gup.sΛŋ] [yup.sΛŋ] | ‘settled’ ‘quickly’ |
| | pk ^w | /hup+k ^w ak/ /kep+k ^w ayik/ | [hup.k ^w ak] [kep.k ^w a.yik] | ‘white stone’ ‘bandicoot’ (animal) |
| | pg ^w | /banip+g ^w alaŋ/ | [ba.nip.g ^w a.laŋ] | ‘kindness’ |

The consonants that follow phoneme /t/ are listed with example words in (6). No voiced spirants follow /t/. The only occurrences of voiceless stops following /t/ where the /t/ does not delete are with compounding in slow speech (see §8). There is also a restriction on nasals such that only /n/ can follow /t/. The only occurrences of [ts] are at morpheme boundaries.

| (6) | t__ | UF | PR | Gloss |
|-----|-----|---|---|---|
| | tp | /yot+pupuk/ | [yot.p ^h u.p ^h uk] | ‘old place’ |
| | tk | /gusit+kayi/ /RED+kaput/ | [gu.sit.k ^h a.yi] [k ^h a.p ^h ut.k ^h a.p ^h ut] | ‘sun’ ‘ditch’ |
| | tb | /kahat -bam/ /yot -bam/ | [k ^h a.hat.bam] [yot.bam] | ‘large betel nut’ ‘lots of houses’ |
| | td | /bitdom/ /mΛŋΛt+dΛkΛ/ | [bit.dom] [mΛ.ŋΛt.dΛ.k ^h Λ] | ‘finger’ ‘cane species’ (Tok Pisin <i>pitpit</i>) |
| | tn | /hatnΛyΛ/ /RED+nagat/ | [hat.nΛ.yΛ] [na.ɡat.na.ɡat] | ‘capable’ ‘fearful’ |
| | ts | /sibut -hΛ/ /k ^w Λbat -him/ | [sim.but.sΛ] [k ^w Λm.bat.sim] | ‘your (plural) cake’ ‘small extended thing’ |

The consonants that follow phoneme /k/ are listed with example words in (7). No voiced spirants follow /k/. There is also a restriction on nasals such that /n/ cannot follow /k/. The only occurrences of /m/ following /k/ are in reduplication and compounds.

| (7) | k__ | UF | PR | Gloss |
|-----|-----|---|--|--|
| | kb | /gomok -bam/ /nak -bΛ/ /kokdek/ /θabak+dΛkΛ/ /hakguθan/ /ηΛkge/ /matek+matek -ηΛ/ /katΛtek+mΛmΛn/ /kitokηΛ/ /kekηΛ/ /RED+yak/ /halut -yΛmi -ke/ /gulΛk+salin/ /tabik+sipmΛk/ /RED+g ^w ak/ /RED+g ^w it/ /hikη ^w Λm/ | [go.mok.bam] [nak.bΛ] [k ^h ok.dek] [θa.θak.dΛ.k ^h Λ] [hak.gu.θan] [ηΛk.ge] [ma.t ^h ek.ma.t ^h ek.ηΛ] [k ^h at.htΛ.t ^h ek.mΛ.mΛn] [k ^h i.tok.ηΛ] [k ^h ek.ηΛ] [yak.yak] [ha.luk.yΛ.mi.ke] [gu.lΛk.sa.lin] [ta.θik.sip.mΛk] [g ^w ak.g ^w ak] [g ^w ik.g ^w it] [hik.η ^w Λm] | ‘large snake species’ ‘maybe (it’s) food’ ‘toilet’ ‘youth’ ‘± 4 days’ ‘much’ ‘small things’ ‘small frog species’ ‘strong’ ‘bamboo’ ‘bird species’ ‘poured it for them and’ ‘Adam’s apple’ ‘tree species’ ‘small animal’ ‘shell’ ‘vein’ |

The consonants that follow phoneme /m/ are listed with example words in (8). Voiceless stops and voiced spirants do not follow nasals.

| (8) | m__ | UF | PR | Gloss |
|-----|-----|---|---|---|
| | mb | /tΛm -bam/ /mom -bΛ/ /tΛm+dΛkΛ/ /yΛmdΛ/ /nom+gΛnan/ /θam+gΛmΛn/ /bulΛmnΛ/ /kaham -na/ /θam+yayak/ /θΛmsΛk/ /θom -him/ /θΛnΛm+hakΛt/ /nom+han/ /θam+RED+k ^w ik/ /tΛm -bam+g ^w ak/ /θam+g ^w Λlan/ | [t ^h Λm.bam] [mom.bΛ] [t ^h Λm.dΛ.k ^h Λ] [yΛm.dΛ] [nom.gΛ.nan] [θam.gΛ.mΛn] [bu.lΛm.nΛ] [k ^h a.ham.na] [θam.ya.yak] [θΛm.sΛk] [θom.sim] [θΛ.nΛm.ha.k ^h Λt] [nom.han] [θam.k ^w i.k ^w ik] [t ^h Λm.bam.g ^w ak] [θam.g ^w Λ.lan] | ‘grass species’ ‘maybe the aunt’ ‘banana species’ ‘tree kangaroo’ ‘highlander’ ‘scolding’ ‘ignorant’ ‘my ginger’ ‘speaker’ ‘gecko’ ‘small place’ ‘cassowary species’ ‘flat nose’ ‘gentle speech’ ‘insect species’ ‘blessing’ |

The consonants that follow phoneme /n/ are listed with example words in (9). Like /m/, voiceless stops and voiced spirants do not follow /n/. Unlike /m/, nasals do not follow /n/.

| (9) | n__ | UF | PR | Gloss |
|-----|-----|---|-------------------------------------|--|
| | nb | /Λmin -bΛ/ /sΛ ⁿ dun -bΛ/ | [Λ.min.bΛ] [sΛn.dun.bΛ] | ‘maybe a person’ ‘maybe an axe’ |
| | nd | /Λmin -de/ /sΛdun -de/ | [Λ.min.de] [sΛn.dun.de] | ‘for the person’ ‘for the axe’ |
| | ny | /ya -pΛn+ya -k/ /yΛkΛn+ya -yik/ | [ya.θΛn.yak] [yΛ.kΛn.ya.yik] | ‘question’ ‘traditional stone file’ |
| | ns | /g ^w en -sim/ /unsΛn/ | [g ^w en.sim] [un.sΛn] | ‘that lump’ ‘small shell’ |

The consonants that follow phoneme /ŋ/ are listed with example words in (10).

| (10) | ŋ__ | UF | PR | Gloss |
|------|-----------------|--|--|---|
| | ŋd | /ya -ŋ+dΛkŋa -k/ /dayi -ŋ+dΛkŋa -ŋ/ | [yaŋ.dΛk.ŋak] [da.yiŋ.dΛk.ŋaŋ] | ‘It split.’ ‘Clean your eyes!’ |
| | ŋg | /RED+giniŋ/ /θa ⁿ ga/ | [gi.niŋ.gi.niŋ] [θaŋ.ga] | ‘naughty’ ‘spacious’ |
| | ŋn | /pΛ -ŋ -nimi -pΛ/ /ta -ŋ -nimi -pΛn/ | [pΛŋ.ni.mΛ] [taŋ.ni.mΛn] | ‘They take for us.’ ‘It rained on us.’ |
| | ŋb | /pe -ŋ+θΛha -k/ /k ^w ayin+θasit/ | [pe.ŋ ^w Λ.hak] [k ^w a.yiŋ.θa.sit] | ‘It crawled.’ ‘stir’ |
| | ŋy | /ya -ŋ+yΛθΛ -yo/ /tΛha -ŋ+ya -k/ | [yaŋ.yΛ.θΛ.yo] [t ^h Λ.haŋ.yak] | ‘Call to them.’ ‘He played.’ |
| | ŋs | /gutoŋ -him/ /guloŋ -him/ | [gu.t ^h oŋ.sim] [gu.loŋ.sim] | ‘small long thing’ ‘small tube’ |
| | ŋh | /daduŋ+ha -kut/ /temΛŋhΛk/ | [dan.duŋ.ha.kut] [te.mΛŋ.hΛk] | ‘He wanted you.’ ‘bamboo pipe’ |
| | ŋk ^w | /RED+kWΛŋ/ | [kWΛŋ.gWΛŋ] | ‘camouflage’ |

The phoneme /ŋ/ is similar to /n/ in that the voiceless stops and voiced spirants do not follow /ŋ/. There are no examples of monomorphemic words that have a consonant sequence beginning with /ŋ/. Furthermore, the [ŋn] sequence is questionable. It is unclear if the benefactive /-nimi/ is a clitic or if it should have status as a full word. Awara speakers view the benefactive to be bound to the preceding word. This is the only occurrence of a sequence of lingual nasals. In all other instances of sequences of lingual nasals at the morpheme boundary, the first nasal deletes.

The one occurrence of [sm] is in an apparent reduplication with the example /musmus/ ‘louse’ pronounced as [mus.mus]. It is unclear if musmus is a native Awara word since there are no other occurrences of /s/ occurring syllable-finally and [mus] does not exist independently.

2.2 Vowel inventory

Table 2.15 lists all the vowels in the Awara phonemic inventory with the alternate forms indicated within phonetic brackets.

Table 2.15 Vowel inventory

| | Front | Mid | Back |
|------|--------------|-----|--------------|
| High | i [i] [ɪ] | | u [u] [ʊ] |
| Mid | e [e] [ɛ] | ʌ | o |
| Low | | a | |

Generally, the lax vowels [ɪ], [ɛ], and [ʊ] occur before the sonorants [m] and [l] and, to a lesser degree after [m] and [l]. They are more clearly pronounced as lax before prenasalised voiced stops like /^mb/ (e.g. /sibut/ ‘cake’ is pronounced as [sɪ^mbut] and /sugum/ ‘sweet potato’ is pronounced as [su^ŋgum]).

In the following discussion, the optional initial glottal stop is ignored in examples with word-initial vowels.

2.2.1 Front vowels

Awara has two front vowel phonemes /i/ and /e/. Both phonemes have allophonic tense and lax alternates.

Table 2.16 The phonemes /i/ and /e/

| | /i/ | [i] [ɪ] | |
|------------------|------------|--------------------------|-----------------------|
| Word-initial | /iha -bam/ | [i.ham.bam] | ‘large cricket’ |
| | /imin/ | [ɪ.min] | ‘who’ |
| Interconsonantal | /sibut/ | [sɪm.but] | ‘cake’ |
| | /bʌnip/ | [bʌ.nip] | ‘inside of something’ |
| Word-final | /yʌpuli/ | [yʌ.p ^h u.li] | ‘trunk’ |
| | /yayi/ | [ya.yi] | ‘yam’ |
| | /e/ | [e] [ɛ] | |
| Word-initial | /epuhit/ | [e.p ^h u.hit] | ‘ground trap’ |
| | /enat -ŋ/ | [e.nat] | ‘Get up!’ |
| | /eŋaŋ/ | [e.ŋaŋ] | ‘child’ |
| Interconsonantal | /yeθʌn/ | [ye.θʌn] | ±2DAY |
| | /kem/ | [kɛm] | ‘a lie’ |
| Word-final | /take/ | [ta.k ^h e] | ‘goodness’ |
| | /amʌle/ | [a.mʌ.le] | ‘betel nut species’ |

Table 2.17 The phonemes /ʌ/ and /a/

| | /ʌ/ | [ʌ] | |
|------------------|----------|-------------|--------------|
| Word-initial | /ʌ/ | [ʌ] | ‘ah’ |
| | /ʌmin/ | [ʌmin] | ‘person’ |
| Interconsonantal | /mʌte/ | [mʌ.te] | ‘all of you’ |
| | /kʌtak/ | [kʰʌ.tʰak] | ‘exactly’ |
| Word-final | /asʌ/ | [a.sʌ] | ‘like this’ |
| | /yubilʌ/ | [yum.bi.lʌ] | ‘shrunk’ |
| | /a/ | [a] | |
| Word-initial | /adan/ | [an.dan] | ‘here’ |
| | /alʌk/ | [a.lʌk] | ‘blade’ |
| Interconsonantal | /dasiŋ/ | [da.siŋ] | ‘how’ |
| | /halak/ | [ha.lak] | ‘bridge’ |
| Word-final | /kuka/ | [kʰu.kʰa] | ‘theft’ |
| | /siba/ | [si.ba] | ‘haze’ |

The phoneme /i/ has allophones [i] and [ɪ], as shown in Table 2.16. There are no restrictions on its distribution. The allophone [ɪ] generally occurs before [l] and [m]. One argument that the tense/lax distinction is not phonemic is from a syllable game that children play in which two syllable words are reversed, as shown in (11).

- (11) UF Gloss PR Reversed
 /sibut/ ‘cake’ [sɪm.but] [but.si]

The phoneme /i/ is pronounced as [ɪ] in normal order but is pronounced as [i] when the syllables are reversed.

The phoneme /e/ has allophones [e] and [ɛ], as shown in Table 2.16. There are no restrictions in its distribution. The [ɛ] allophone generally occurs before [l] and [m].

2.2.2 Central vowels

Awara’s central vowels /ʌ/ and /a/ are like Irumu central vowels (R. Webb and L. Webb 1992b) in that the mid, unrounded vowel /ʌ/ is characteristically shorter in duration than the other five vowels. Also, like Irumu, central vowels are fronted following /y/ and, to a lesser degree, following alveolars. They are backed following /ɣ/ and, to a lesser degree, following other velars.

The phonemes /ʌ/ and /a/ have no limitations on their distribution, as shown in Table 2.17.

2.2.3 Back vowels

The back vowel phonemes /u/ and /o/ have no restrictions on their distribution, as shown in Table 2.18. The [u] allophone of /u/ generally occurs before [l] and [m].

Table 2.18 The phonemes /u/ and /o/

| | /u/ | [u] [u] | |
|--------------|-----------------|---------------------------------------|--------------|
| Word-initial | /udan/ | [un.dan] | ‘there’ |
| | /uli/ | [u.li] | ‘sharp’ |
| Word-medial | /tut/ | [t ^h ut] | ‘fingernail’ |
| | /tuθΛŋ/ | [t ^h u.θΛŋ] | ‘sign’ |
| | /bulΛkΛn/ | [bulΛk ^h Λn] | ‘same’ |
| Word-final | /homu/ | [ho.mu] | ‘dog’ |
| | /sab <u>u</u> / | [sa.bu] | ‘chewing’ |
| | /o/ | [o] | |
| Word-initial | /ok/ | [ok] | ‘uncle’ |
| | /okupi/ | [o.k ^h u.p ^h i] | ‘inside’ |
| Word-medial | /nom/ | [nom] | ‘face’ |
| | /hopΛ/ | [ho.p ^h Λ] | ‘rain’ |
| Word-final | /moyo/ | [mo.yo] | ‘lacking’ |
| | /sako/ | [sa.k ^h o] | ‘choko leaf’ |

2.2.4 Vowel co-occurrence

Awara syllable structure allows vowel sequences at syllable boundaries (CV.V, V.V, and CV.VC), but only in words with more than one morpheme. Awara vowel sequences exist only in reduplication, when /y/ or /θ/ alternates with null intervocalically, and in verbs with the clitics /a-/ PREDICATE FOCUS, /do-/ NEGATIVE, or /ma-/ PROHIBITIVE. Thus, Awara has a general constraint prohibiting vowel sequences within morphemes.

Table 2.19 shows the distribution of vowel sequences occurring in reduplication. Examples of such vowel sequences are listed in (12).

Table 2.19 Vowel sequences resulting from reduplication

| | i | o | u |
|---|---|---|---|
| i | x | — | x |
| Λ | x | x | — |
| a | x | — | — |

| | | | |
|------|-------------|--|----------------|
| (12) | UF | PR | Gloss |
| ii | /RED+imin/ | [i.mi.i.mim.] | ‘who’ |
| iu | /RED+uli/ | [u.li.u.li] | ‘burr’ |
| Λi | /RED+inΛ/ | [i.nΛ.i.nΛ] | ‘individually’ |
| | /RED+ipmΛk/ | [ip.mΛ.ip.mΛk] | ‘drizzle’ |
| Λo | /RED+opΛk/ | [o.p ^h Λ.o.p ^h Λk] | ‘wrong’ |
| ai | /RED+ina/ | [i.na.i.na] | ‘what’ |

Table 2.20 shows vowel sequences that occur when the intermediary consonant phoneme /y/ or /b/ alternates with null. Examples of such sequences are listed in (13).

| | | | |
|------|-----------|--------------------------|-------------------|
| (13) | UF | PR | Gloss |
| ia | /dubiyam/ | [dum.bi.yam] [dum.bi.am] | ‘mole’ |
| io | /piyot/ | [pi.yot] [pi.ot] | ‘bladder’ |
| ai | /payip/ | [pa.yip] [pa.ip][paip] | ‘machete’ |
| | /kanayik/ | [ka.na.yik] [ka.na.ik] | ‘Kanayik village’ |
| ao | /yΛtaboŋ/ | [yΛ.ta.ʔoŋ] [yΛ.ta.oŋ] | ‘cricket species’ |
| ua | /subat/ | [su.ʔat][su.at] | ‘Suwat village’ |

The Predicate Focus marker /a-/ can occur with all vowel-initial verbs, as shown in (14).

| | | | | |
|------|-----|----------------|---|-----------------------|
| (14) | a__ | UF | PR | Gloss |
| | aa | /a- akop -kut/ | [a.a.k ^h op.but] [a.k ^h op.but] | ‘He came up.’ |
| | | /a- ap -kut/ | [a.ap.but] [ap.but] | ‘He came.’ |
| | ae | /a- epu -kut/ | [a.ep.but] [a ^e p.but] | ‘He came down.’ |
| | | /a- ena -kut/ | [a.e.na.k ^h ut] [a ^e .na.k ^h ut] | ‘He got up.’ |
| | ai | /a- ihap -kut/ | [a.i.hap.but] [ai.hap.but] | ‘He ran.’ |
| | | /a- ip -kut/ | [a.ip.but] [aip.but] | ‘He cut it.’ |
| | ao | /a- omi -kut/ | [a.o.mi.k ^h ut] [a ^o .mi.k ^h ut] | ‘He covered himself.’ |
| | au | /a- upu -kut/ | [a.u.pu.k ^h ut] [a ^u .pu.k ^h ut] | ‘He broke it.’ |
| | | /a- usi -kut/ | [a.u.si.k ^h ut] [a ^u .si.k ^h ut] | ‘He uprooted it.’ |

It is not clear if [aa] sequences are two syllables, a long vowel, or if they coalesce.¹⁹ This vowel sequence in words like /a- akop -but/ ‘PRFOC-come up-1S.PAST’ can sound like a

Table 2.20 Vowel sequences resulting from deletion of [y] or [b] intervocalically

| | i | a | o |
|---|---|---|---|
| i | — | x | x |
| a | x | — | x |
| u | — | x | — |

¹⁹ Irumu (R. Webb and L. Webb 1992a) and Selepet (McElhanon 1970a) have vowel coalescence with mid-central and mid-low vowels.

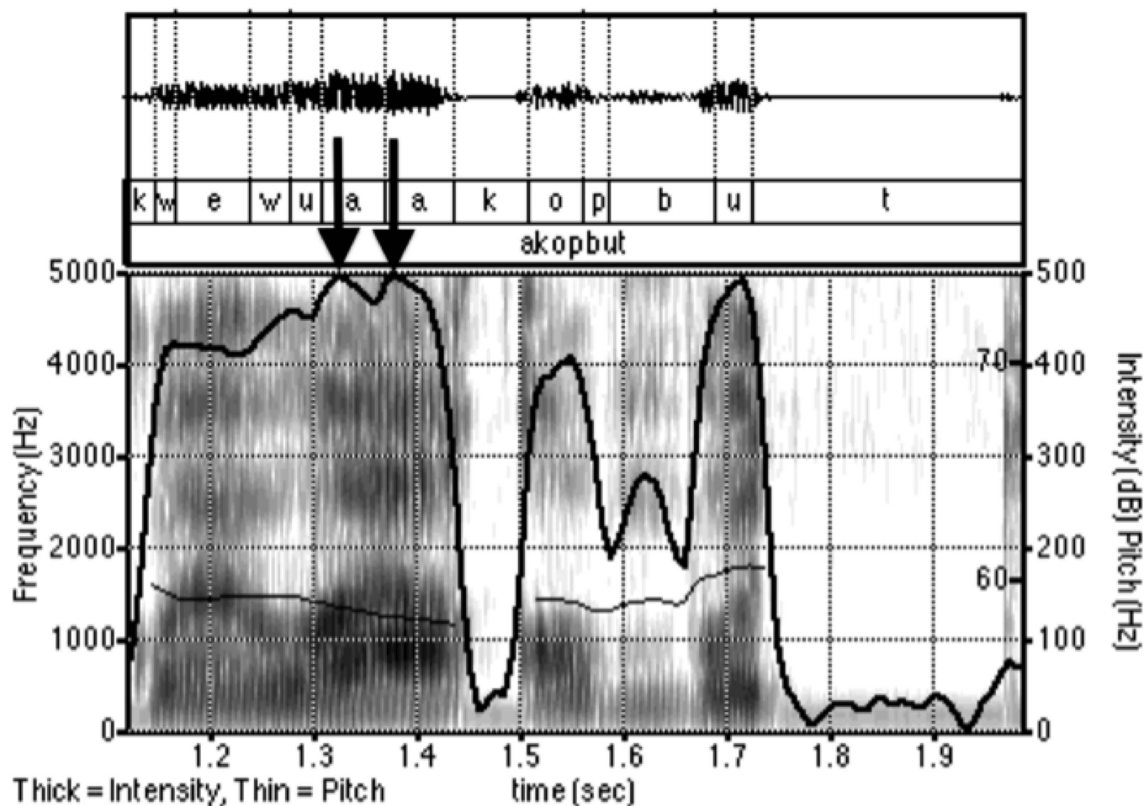


Figure 2.1 Graph of *Kwewu a-akopbut* 'I came up yesterday.'

long single syllable [a:.kop.but] with the vowel length being about twice as long as without the predicate focus marker or even as [a.kop.but] in fast speech. In looking at one recorded instance of [a:.kop.but] in Figure 2.1, the long [a] has two intensity peaks (see arrows). With careful listening one can hear the distinction suggesting that these long vowels are actually geminates (two vowels), not one long vowel, at least for this speaker in careful speech.

2.2.5 Diphthongs

There are no phonemic diphthongs. All phonetic diphthong candidates either have vowel sequences at a morpheme boundary in the UF, such as verbs with the prefixes /a-/ PREDICATE FOCUS, /do-/ NEGATIVE, or /ma-/ PROHIBITIVE (see Table 2.16), or as vowel sequences that have an intervocalic /y/ or /ə/ in the UF (see 8).

2.3 Summary of phonemic constraints

2.3.1 Consonants

1. Only voiceless stops (/p/, /t/, and /k/) and nasals (/m/, /n/, and /ŋ/) are permitted syllable-finally and word-finally. All other consonant phonemes are prohibited syllable-finally and word-finally.

2. Lingual voiced spirant phonemes /l/ and /ɭ/ are prohibited word-initially in native words. (Borrowed words have no such constraint.)
3. The spirants /b/, /l/, and /ɭ/ are never part of consonant sequences in either position.

2.3.2 Vowels

1. Vowel sequences are prohibited in monomorphemic words but are permitted across morpheme boundaries.
2. Generally lax allophones [ɪ], [ɛ], and [ʊ] occur before sonorants [m] and [l]. They are more clearly pronounced as lax before a prenasalised voiced stop like [ᵐb] (e.g. /sibut/ ‘cake’ is pronounced as [sɪᵐbut] and /sugum/ ‘sweet potato’ is pronounced as [suᵑgum]).

3 *Syllable structure*

Kager (1999) states, ‘The syllable is a major ingredient of phonological generalizations’. The syllable plays an important part in Awara phonology. As discussed in Chapter 2, many phonemic constraints are phonotactic, based on syllable structure rather than on co-occurrence constraints. This chapter investigates the syllable structure for Awara.

3.1 Syllable

The Awara Syllable template is [CVC], with four possible syllable patterns, V, CVC, CV, and VC, shown in Table 3.1. V syllables occur word-initially and word-medially across boundaries.¹ There are no examples of word-final V syllables in polysyllabic words.

CVC and CV syllables are not limited in their distribution. They can occur word-initially, medially, and finally.

VC syllables occur word-initially. Word-medial VC syllables occur only at morpheme or reduplicant boundaries. There are no clear examples of word-final VC syllables in polysyllabic words; the only examples are with the phonemes /b/ and /y/ in free variation with null (see Table 3.1).

Both VC and V syllables may have an epenthetic glottal stop word-initially. The [ʔ] is noncontrastive word-initially. That is, /ep/ can be pronounced as [ep] or [ʔep]. However, there is no indication of a glottal stop between the Predicate Focus marker and the verb root: see (2.14).

3.1.1 Syllable formalisms

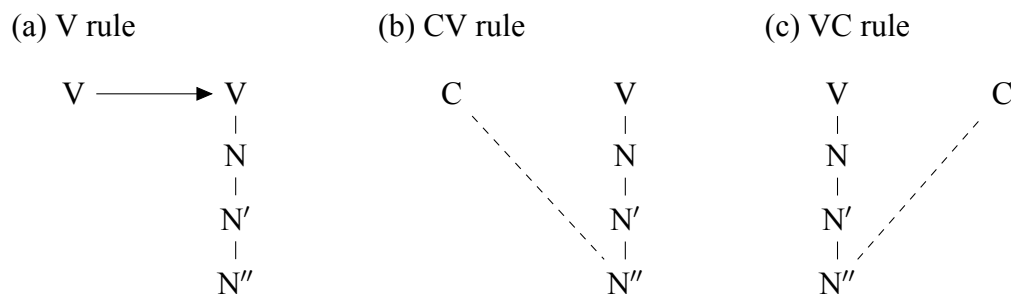
Awara syllables are constructed by three syllable building rules, as described by Kenstowicz (1994). These rules, shown as Figure 3.1, are crucially ordered such that V (a) is before CV (b), which is before VC (c) (Kenstowicz 1994:253–254) so that intervocalic consonants syllabify with the following vowel.

An example derivation in Awara of CV (b) being crucially ordered before VC (c) is shown in (15).

¹ Awara distinguishes between various kinds of boundaries, such as morpheme, classifier, reduplicant, and compound.

Table 3.1 Syllable patterns

| | | | |
|---------------|-----------------------------|---|------------------------|
| V syllables | | | |
| Word-initial | /iha -bam/ | [i.ham.bam] | ‘large cricket’ |
| | /i- ni -yo/ | [i.ni.yo] | ‘Tell him.’ |
| Word-medial | /RED+uli/ | [u.li.u.li] | ‘burr’ |
| | /do- akop -k/ | [do.a.kok] | ‘He did not come up.’ |
| Word-final | /u/ | [u] | ‘that’ |
| | /a/ | [a] | ‘this’ |
| CVC syllables | | | |
| Word-initial | /gakɲat/ | [gak.ɲat] | ‘heaven’ |
| | /hipnʌ/ | [hip.nʌ] | ‘dull’ |
| Word-medial | /asipba/ | [a.sip.ba] | ‘sneeze’ |
| | /banip+g ^w alaŋ/ | [ba.nip.g ^w a.laŋ] | ‘kindness’ |
| Word-final | /hiput/ | [hi.p ^h ut] | ‘stick’ |
| | /apek/ | [a.p ^h ek] | ‘grandmother’ |
| CV syllables | | | |
| Word-initial | /sasak/ | [sa.sak] | ‘fat’ |
| | /kaluk/ | [k ^h a.luk] | ‘new’ |
| Word-medial | /pulʌkʌt/ | [p ^h u.lʌ.k ^h ʌt] | ‘root’ |
| | /mʌŋʌlʌ/ | [mʌ.ŋʌ.lʌ] | ‘female’ |
| Word-final | /butayʌ/ | [bu.t ^h a.yʌ] | ‘pity’ |
| | /ata/ | [a.t ^h a] | ‘there’ |
| VC syllables | | | |
| Word-initial | /ipmʌ -ŋ/ | [ip.mʌŋ] [ʔip.mʌŋ] | ‘Cut it!’ |
| | /ep -ŋ/ | [ep] [ʔep] | ‘Come down!’ |
| Word-medial | /do- ep -gut/ | [do.ep.but] | ‘He did not come out.’ |
| | /RED + ipmʌk/ | [ip.mʌ.ip.mʌk] [ʔip.mʌ.ʔip.mʌk] | ‘drizzle’ |
| Word-final | /ap -ŋ/ | [ap] [ʔap] | ‘Come!’ |
| | /yʌtaʔoŋ/ | [yʌ.ta.ʔoŋ] [yʌ.ta.oŋ] | ‘cricket species’ |
| | /dubiyam/ | [dum.bi.yam] [dum.bi.am] | ‘mole’ |

Figure 3.1 Syllable-building formalisms (Kenstowicz 1994:253–254)

(15) Sample Derivation of V.CVC

| | | | | |
|----|---------|----|-----------|---------|
| UF | /ibak/ | UF | /ibak/ | 'leech' |
| V | VbVk | V | VbVk | |
| CV | V.CVk | VC | VC.VC | |
| VC | V.CVC | CV | — | |
| PR | [i.bak] | PR | *[i.b.ak] | |

3.2 Prenasalisation and the Sonority Sequencing Principle (SSP)

The Sonority Sequencing Principle (SSP) '...requires onsets to rise in sonority towards the nucleus and codas to fall in sonority from the nucleus.' (Kenstowicz 1994). Though the SSP is violable (not all languages of the world follow it), it is helpful in explaining why the prenasalisation of voiced stops is syllabified with an adjacent open syllable, tends to be de-emphasised or deleted word-initially, and is either deleted or syllabified interconsonantly.

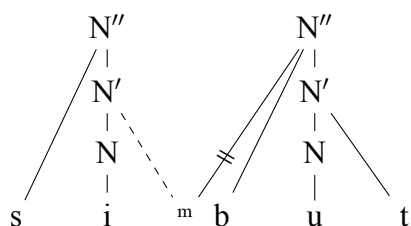
Consider the examples in (16). Nasals do not occur before the word-medial voiced stops in the UF.

(16) Prenasalisation

| UF | PR | Gloss |
|-----------------------|-------------------------|-------------|
| /sibut/ | [sim.but] | 'cake' |
| /sadun/ | [san.dun] | 'axe' |
| /sagum/ | [saŋ.gum] | 'corn' |
| /bʌg ^w at/ | [bʌŋ.g ^w at] | 'bald head' |
| /gʌpbat/ | [gʌp.bat] [gʌp.m.bat] | 'ledge' |

According to the SSP, nasalisation of an oral stop in the onset is nonpreferred. There are several ways to create a sequence that is preferred by the SSP. Example (17) shows that when the voiced stop is in the onset position and follows an open syllable, the nasal links to the previous syllable.

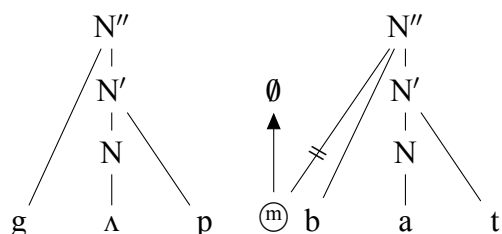
(17) [sim.but] 'cake'



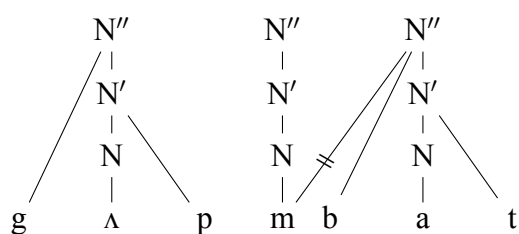
When the coda of the preceding syllable is occupied as in (18) the nasal is deleted, as shown in (4a) or is syllabified, as shown in (4b).

(18)

a. [gʌp.bat] 'ledge'



b. [gʌp.m.bat] 'ledge'



Deletion is more common in continuous speech and after nasal-final syllables. Syllabification is more common in slow speech and single word utterances, for word-initial voiced stops, and at word boundaries with the postpositional clitics.

Further evidence that these nasals are not separate phonemes in UFs but are realisations of prenasalisation is seen in a syllable game children play. The first syllable of the word is moved to the end of the word and then the word is pronounced, as shown in (19) under the column labelled 'reversed'.

(19) Syllable game

| UF | PR | reversed | gloss |
|---------|-----------|----------|--------|
| /sibut/ | [sim.but] | [but.si] | 'cake' |
| /sadun/ | [san.dun] | [dun.sa] | 'axe' |
| /sagum/ | [saŋ.gum] | [gum.sʌ] | 'corn' |

The result is that the [m], [n], and [ŋ] in (19) are not present when the first syllable is moved to the end. If they were separate phonemes in the UFs, then the second syllable in the reversed forms would end in a nasal. Since they do not and there is no prohibition on nasals occurring syllable-finally or word-finally (see Tables 2.6 and 2.7), the preferred analysis is to treat them as realizations of prenasalisation on voiced stops.

3.3 Word

Most Awara monomorphemic words have one to three syllables.² Though words with four or more syllables are rare, there is no prohibition against them. Reduplicated and compounded words are mostly four to five syllables.

V.V sequences do not occur in monomorphemic words.³ They are only found in reduplication and across morpheme boundaries with verbal prefixes. There are no examples of V.V sequences occurring in compounds.

See Appendix B for example tables containing lists of all the syllable patterns observed in unaffixed words.

² Nankina and Irumu unaffixed words also have up to three syllables.

³ Except, as noted in §2.1.4 and §2.1.6, where /b/ and /y/ alternate freely with null intervocalically in some words.

4 *Stress*

Awara stress, as in many Papuan languages (Foley 1986:63–64), is a pitch accent system. Acoustic correlates to Awara stress generally are falling pitch and high intensity. The following stress analysis uses metrical grid notation as presented by Kenstowicz (1994).

4.1 Basic stress

Awara has one main stress pattern with two alternate patterns. The main stress pattern has stress on the first and third (alternating) syllables, with primary stress falling on the last stressed syllable, as shown in Table 4.1.

Awara’s stress pattern, as analysed using metrical grid notation, is shown in Table 4.2 with the words /banipΛmin/ ‘believer’ and /gΛpmayi/ ‘hole’.

The stress-bearing unit is the syllable. Each syllable receives a stress mark on Line 0. All syllables are parsed into binary units called metrical feet starting from left to right (Left to Right Parsing). Since parsing is exhaustive,¹ the leftover (orphan) right syllable in words with an odd number of syllables also forms a foot, albeit a degenerate foot. The metrical foot is left-headed (trochaic) and projects a stress mark corresponding to the left syllable on Line 1. Line 1 is unbounded (forms one upper foot) and is right-headed (iambic). The upper

Table 4.1 Basic stress in isolation

| UF | PR | gloss |
|-------------|----------------|---------------------|
| /ayi/ | [á.yi] | ‘grandmother’ |
| /bela/ | [bé.la] | ‘female’ |
| /dΛkiθom/ | [dλ.ki.θóm] | ‘smouldering stick’ |
| /gΛpmayi/ | [gλp.ma.yí] | ‘hole’ |
| /banipΛmin/ | [bà.nip.á.min] | ‘believer’ |
| /gusikayi/ | [gù.si.ká.yi] | ‘sun’ |

¹ The Exhaustivity Condition states that every stress-bearing unit must be included in some constituent except those that are licensed by extrametricality.

Table 4.2 Stress Grid for words /banipΛmin/ ‘believer’ and /gΛpmayi/ ‘hole’

| | | | |
|----------------------|-------|--------|------------------------|
| | * | Line 2 | * |
| (* *) | | Line 1 | (* *) |
| (* *)(* *) | | Line 0 | (* *)(* *) |
| b a n i p Λ m i n | UF | | g Λ p m a y i |
| [bà.nip.Á.min] | PR | | [gàp.ma.yí] |
| ‘believer’ | gloss | | ‘hole’ |

right-headed foot projects a stress mark on Line 2 that indicates primary stress. Line 1 is not conflated (removed), so the stress on the left remains as secondary stress. Since stress can occur on both the first and the last syllables of a three-syllable word, extrametricality is assumed to be off.²

Stress is affected across word boundaries, as shown in (20). Primary stress in these three-syllable words is not present before this one-syllable verb example.

(20) Basic stress with verb /kΛ-t/ ‘see.3S.O-1S.PRESENT’

| UF | PR | gloss |
|------------------|-------------------|--------------------------------|
| /ayi kΛ -t/ | [à.yi ǵát] | ‘I saw grandmother.’ |
| /bela kΛ -t/ | [bè.la ǵát] | ‘I saw the female.’ |
| /dΛkiβom kΛ -t/ | [dà.ki.βom kát] | ‘I saw the smouldering stick.’ |
| /gΛpmayi kΛ -t/ | [gàp.ma.yi ǵát] | ‘I saw the hole.’ |
| /gusikayi kΛ -t/ | [gù.si.kà.yi ǵát] | ‘I saw the sun.’ |

Stress deletion on these three-syllable words is accounted for in terms of metrical grid parameter stress clash. Stress clash occurs when two adjacent stress marks on Line 0 are projected on Line 1. Awara resolves stress clash by deleting the left adjacent stress mark, as shown in Table 4.3 with the example /gΛpmayi kΛ -t/ ‘hole see.3S.O-1S.PRES’.

Each stress-bearing unit (syllable) is assigned Line 0 stress, as before. Each word is individually parsed into binary feet, left to right, and each left-headed foot projects a stress mark to Line 1. However, stress clash now exists on Line 1. Stress clash removal is applied from right to left on Line 1 and the left adjacent stress mark is deleted. The right stress mark on Line 1 is then projected on Line 2.

Since stress is affected across word boundaries, this suggests that the phonological word is broader in scope than the syntactic word. Further research is required to determine the scope of which syntactic word boundary or phrase is affected by stress clash (Subject + Verb, Subject + Direct Object, Adjective + Noun, etc.).

² Extrametricality in the metrical grid licenses either the first or last syllable (but not both) to always be skipped in parsing Line 0 stress into feet. Since stress in Awara can be on the first or last syllable, all syllables are parsed (extrametricality is off).

Table 4.3 Stress grid for /gʌpmayi kʌ -t/ ‘hole see.3S.O-1S.PRES’

| Before: | | After: |
|---------|--|--------|
| | <div style="display: flex; justify-content: space-between;"> <div> \emptyset (* (* *) (*) g ʌ p m a y i k ʌ t [gʌp.ma.yi ɡʌt] ‘I see the hole.’ </div> <div> Line 2 Line 1 Line 0 </div> <div> * * *) (*) g ʌ p m a y i k ʌ t </div> </div> | |

4.2 Lexically marked stress

A second stress pattern is observed with some two-and three-syllable words in which stress occurs on the second syllable, as shown in (21).

(21) Second stress pattern in isolation

| UF | PR | gloss |
|----------|------------|-----------|
| /damé/ | [da.mé] | ‘cliff’ |
| /butáyʌ/ | [bu.tá.yʌ] | ‘sorry’ |
| /gutoŋʌ/ | [gu.tó.ŋʌ] | ‘crooked’ |

This pattern can be accounted for by at least two options. One option has these words lexically marked for extrametricality on the left syllable. Thus, the first syllable is ignored in the parsing of binary feet. This option claims that the first syllables of words that are lexically marked for extrametricality are never stressed.

An alternative analysis has the second syllable being lexically marked for stress, as shown in Table 4.4.

Lexically marked syllables head left-headed metrical feet (e.g. Line 0 metrical feet are built around lexically marked syllables before Left to Right parsing is applied). Thus, lexically marked syllables always get Line 1 stress. Continuing the assumption previously made that extrametricality is off (see §4.1), the first syllable forms a degenerate foot that projects

Table 4.4 Stress grid for /gutoŋʌ/ ‘crooked’

| Before: | | After: |
|--|----------------------------------|--|
| \emptyset \otimes * (*) (* *) g u t o ŋ ʌ [gu.tó.ŋʌ] ‘crooked’ | Line 2 Line 1 Line 0 UF | * (*) (*) (* *) g u t o ŋ ʌ |

Table 4.5 Stress grid for /damé kΛ -t/ ‘cliff see.3S.O-1S.PRES’

| Before: | | After: |
|------------------------------|--------|-------------------|
| ∅ | Line 2 | * |
| (*) (*) | Line 1 | (*) (*) |
| (*) (*) (*) | Line 0 | (*) (*) (*) |
| d a m e ɣ ʌ t | | d a m e ɣ ʌ t |
| [dàme ɣʌt] ‘I saw the cliff’ | | |

stress to Line 1. Stress clash removal is applied on Line 1 and the right stress unit on Line 1 is projected on Line 2.

As shown in (22), when words that are lexically marked for extrametricality or for stress have one-syllable verbs after them, the stress changes to the first syllable. Stress does not change with these three-syllable words followed by one-syllable verbs.

(22) Stress shift with verb /kΛ-t/ ‘see.3S.O-1S.PRES’

| | PR | gloss |
|----------------|----------------|-----------------------|
| /damé kΛ -t/ | [dà.me ɣʌt] | ‘I saw the cliff.’ |
| /gutónΛ kΛ -t/ | [gu.tò.ηΛ ɣʌt] | ‘I saw it’s crooked.’ |

If these two-syllable words were lexically marked for extrametricality rather than lexical stress, then stress would never be applied to the first syllable. However, since stress is applied to the first syllable of these words when they are followed by one-syllable verbs, they cannot be lexically marked for extrametricality. Therefore this hypothesis is dismissed.

The change in stress shown in 22 can be accounted for by lexical stress. Stress clash removal deletes the left stress mark on two-syllable words that have one-syllable verbs after them, as shown in Table 4.5.

In Table 4.5, as stated before, all syllables get Line 0 stress marks, and lexically marked syllables head left-headed metrical feet. These metrical feet always get Line 1 stress. The remaining syllables are parsed and Line 0 feet project stress to Line 1. Here, all three syllables project Line 1 stress and these Line 1 stress marks are in a state of stress clash. By applying stress clash removal from right to left and deleting the left adjacent stress mark, the correct surface form is derived.³

4.3 Stress-neutral words

The third stress pattern is neutral stress, which only occurs with some two-syllable words in isolation. On these words there is no dominant stress. About 22% of the data analysed for

³ If stress clash removal was applied from left to right, deleting the right stress mark, an incorrect surface form would result in the examples shown in Tables 4.1 and 4.1.

stress does not exhibit prominent stress in isolation.⁴ Some examples of neutral stress are shown in (23).

(23) Stress-neutral words in isolation

| UF | PR | gloss |
|----------|-----------|---------------|
| /gokɲot/ | [gok.ɲot] | ‘mushroom’ |
| /bʌbʌm/ | [bʌm.bʌm] | ‘bamboo leaf’ |
| /apʌk/ | [a.pʌk] | ‘tongs’ |

When stress-neutral words are part of a simple clause, the stress pattern changes. Secondary stress is on the first syllable and primary stress is on the last syllable of the utterance, as shown in (24).

(24) Stress-neutral words with verbs

| UF | PR | gloss |
|----------------|----------------|--------------------------|
| /bʌbʌm kʌ -t/ | [bʌm.bʌm kʌ́t] | ‘I saw the bamboo leaf.’ |
| /gokɲot kʌ -t/ | [gòk.ɲot kʌ́t] | ‘I saw the mushroom.’ |

It is unclear why these two-syllable words do not have dominant stress in isolation and yet have dominant stress in the derived environment of the phrase. Preliminary acoustic analysis of pitch on these stress-neutral words show that two-syllable words with heavy syllables (CVC) have falling pitch on both heavy syllables. This pattern is the same as the falling pitch pattern found on the stressed syllable in noncontroversial words. However, there are other stress-neutral two-syllable words that show no distinctive falling pitch on either syllable.

One hypothesis considered states that heavy syllables head metrical feet (receive Line 1 stress) and stress clash removal is restricted from being applied to heavy syllables. This hypothesis accounts for about 50% of the words that do not have prominent stress. However, this hypothesis also incorrectly predicts the stress pattern for noncontroversial words, as shown in (25).

(25) Neutral stress problems

| UF | gloss | Incorrect | Actual |
|---------------|------------|----------------|---------------|
| /gamut/ | ‘wedge’ | *[gamút] | [gámut] |
| /bʌnɪpgʷalɛŋ/ | ‘kindness’ | *[bʌnɪpgʷalán] | [bʌnɪpgʷálɛŋ] |

4.4 Parameters for grid construction

1. Stress-bearing element: syllable.
2. Foot constituency: bounded (binary), upper foot is unbound.
3. Direction of parsing: left to right.
4. Headedness: left-headed (trochaic), upper foot is right-headed (iambic).


⁴ Stress-neutral words also exist in Nankina (Spaulding 1993) and Irumu (R. Webb and L. Webb 1992b).

5. Relevance of weight: quantity sensitive (lexical and heavy stress scheme).
6. Extrametricality: off.
7. Clash removal: on, stress clash removal is applied right to left, delete left.
8. Line Conflation: off (secondary stress).

5 *Intonation*


Four basic intonation patterns have been observed in various types of Awara sentences. The example sentences are written in the Awara orthography (see Chapter 11).

The first pattern has flat pitch with falling pitch on last word, as shown in (26).

- (26)  Iwikge pekgaläk ‘You are always sleeping.’

This is the most common pattern used in positive statements.¹ This is also the most common pattern for Irumu (R. Webb and L. Webb 1992b), Nahu (Minter 1998), and Nankina (Spaulding 1993).

The second pattern has flat pitch throughout and rising pitch on the last word or syllable, as shown in (27).

- (27)  Mataxu axopiläk ‘Will you go up to Matak?’

This pattern is common with yes-no, content, and rhetorical questions. It is also common in Irumu (R. Webb and L. Webb 1992b), Nankina (Spaulding 1993), and Nahu (Minter 1998).

The third pattern has pitch rising throughout and falling on the last word, as shown in (28).

- (28)  Using tahayo ‘Do it like this.’

This is more common with commands, invitations, greetings, leave takings, and negation.

The fourth pattern occurs in shouted messages, as shown in (29).

- (29)  Mattias, akopso ‘Matthias, come!’

The pitch throughout the utterance is constant until the final word or syllable. The final word or syllable is drawn out and has falling pitch. The entire message up to the final word or syllable is spoken very rapidly and is staccato. This pattern has also been observed in Irumu (R. Webb and L. Webb 1992b) and Nankina (Spaulding 1993).

¹ For very long sentences, Awara intonation patterns like Nankina (Spaulding 1993), stepping downwards over the course of the clause. Spaulding classified this as a separate pattern but R. Webb and L. Webb (1992b) did not. I have followed Webb and Webb in treating this as an example of pattern 1.

6 *Noun morphophonemics*

‘...when you have eliminated the impossible, whatever remains, however improbable, must be the truth.’ Sir Arthur Conan Doyle (1890)¹

Awara morphophonemic processes are fairly complex. Though there are some morphemes that have only one form, there are many that exhibit multiple forms. Chapters 6–9 on morphophonemics are organised according to the alternation sets found among the morphemes, and their underlying forms are presented in the discussion. It is assumed that all morphophonemic rules are generally applied to both nouns and verbs unless otherwise specified.

6.1 Noun suffix morphophonemics

There are no cases of infixing in Awara. All morphophonemic alternations take place at morpheme breaks. Morphophonemic processes also take place at clitic boundaries.² Awara clitics are one or two syllables. There are no three-syllable clitics. In this work those morphemes (clitics and other affixes) that a native speaker cannot pronounce separately from the base morpheme are treated and referred to as bound affixes and are included in this chapter. Reduplication and compounds are discussed separately in Chapter 8.

The Awara examples are shown in semiphonetic form but will still be represented in square brackets. Specifically, aspiration, devoicing of voiced stops morpheme-medially and vowel allophones are not shown. However, prenasalisation when it fills the coda of a preceding open syllable, and all consonant variants as they result from the morphophonemic processes being discussed, are explicitly written.

The isolation form of nouns may end in a vowel, voiceless stop, or nasal based on phonotactic constraints discussed in Chapter 2. Examples of vowel-final nouns in isolation are shown in Table 6.1.

All vowel-final nouns behave identically morphophonemically. (See Table C.1 in Appendix C, for a list of these paradigms.) Apart from the nouns which take the alternate form of the 3.GEN suffix (see §6.3), nouns that end in vowels maintain a consistent form in all contexts.

¹ *The Sign of Four*, The original illustrated *Strand* Sherlock Holmes, complete facsimile edition. Ware (Hertfordshire): Wordsworth Editions, 1996.

² Though clitics are quite well recognised, there is no clear consensus about how to define or analyse them. See Everett 1996 and Spencer and Zwicky 1998.

Table 6.1 Vowel-final nouns

| RFS | SP | gloss |
|-----|----------|------------------------------|
| i | [dΛki] | ‘wood’ |
| e | [pΛye] | ‘same sex sibling’ |
| Λ | [kekηΛ] | ‘bamboo’ |
| a | [bΛnika] | ‘potato’ |
| u | [homu] | ‘dog’ |
| o | [sako] | ‘choko, a green edible leaf’ |

RFS = root final segment;
 SP= semiphonetic transcription.

Table 6.2 lists example nouns that end in a consonant. All nouns that end with a given consonant in isolation pattern alike. For example, all nouns that end in [p] in isolation pattern identically when suffixes are attached. The six roots listed in Table 6.2, plus a root ending in a vowel in the isolation form, will be used to show suffixal morphophonemics in the following paradigms.

6.1.1 The dubitative (nonalternating suffix)

As shown in (30), the dubitative suffix is realised as [-bΛ]. Root-final voiceless stops and nasal segments do not delete before [-bΛ]. This is the only nonalternating noun suffix in the language. Since there is no justification for positing an alternative abstract UF, the UF is /-bΛ/ ‘dubitative’.

Table 6.2 Consonant-final nouns

| RFS | SP | gloss |
|-----|----------|-------------------|
| p | [nap] | ‘rope’ |
| t | [teŋat] | ‘niece’s husband’ |
| k | [musuk] | ‘knife’ |
| m | [mom] | ‘aunt’ |
| n | [sandun] | ‘axe’ |
| ŋ | [eŋaŋ] | ‘baby’ |

RFS = root final segment,
 SP= semiphonetic transcription.

(30) Dubitative suffix [-bΛ]

| Noun | gloss | DUBITATIVE |
|----------|-------------------|------------|
| [kekɿΛ] | ‘bamboo’ | [kekɿΛmbΛ] |
| [nap] | ‘rope’ | [napbΛ] |
| [teɲat] | ‘niece’s husband’ | [teɲatbΛ] |
| [musuk] | ‘knife’ | [musukbΛ] |
| [mom] | ‘aunt’ | [mombΛ] |
| [sandun] | ‘axe’ | [sandunbΛ] |
| [eɲaɲ] | ‘baby’ | [eɲaɲbΛ] |

6.1.2 [n]~[ɲ] alternation

As shown in (31), the 1S.GEN suffix is realised as [-ɲa] after dorsals and [-na] in all other environments.

(31) 1S.GEN [-na]~[-ɲa]

| Noun | gloss | 1S.GEN |
|----------|-------------------|-----------|
| [kekɿΛ] | ‘bamboo’ | [kekɿΛna] |
| [nap] | ‘rope’ | [napna] |
| [teɲat] | ‘niece’s husband’ | [teɲatna] |
| [musuk] | ‘knife’ | [musukɲa] |
| [mom] | ‘aunt’ | [momna] |
| [sandun] | ‘axe’ | [sanduna] |
| [eɲaɲ] | ‘baby’ | [eɲaɲa] |

The expected geminate nasals in [sanduna] (*[sandunna]) and [eɲaɲa] (*[eɲaɲɲa]) simplify. However, the labial-lingual nasal cluster [mn] does not.³ Nor do voiceless stops delete before nasals. From these examples it is unclear which nasal deletes. Evidence will be presented later in connection with the ‘also’ suffix (§6.1.5) that it is the first nasal that deletes here.

Two rules are needed to account for the alternations shown in (31): an assimilation rule to account for the alternation between [n] and [ɲ], and a degemination rule to account for the simplification of the geminate nasals. If the UF was /-ɲa/, it would be difficult to explain /ɲ/ becoming [n] after vowel-final nouns. Therefore the UF for the 1S.GEN is posited as /-na/ with /n/ becoming [ɲ] after dorsals. The assimilation rule can be formalised as follows.⁴

Rule 1 Dorsal assimilation

$$\begin{array}{c} \text{C} \\ \left[\begin{array}{c} \text{-labial} \\ \text{-cont} \end{array} \right] \end{array} \rightarrow \begin{array}{c} [+dorsal] \\ / \\ \text{C} \\ [+dorsal] \end{array} \text{ —}$$

³ To confirm that the nasal consonant was deleted, I compared the duration of the nasal utterance of each of these words using PRAAT (Boersma and Weenink 2002). All nasals including those arising from /n-n/ in UF, were about 70 ms (millisecond) but the [mn] sequence in /mom-na/ was about 140 ms (i.e. double the duration).

⁴ See Appendix A for a summary of all the morphophonemic rules and their ordering.

Table 6.3 Dorsal assimilation (Rule 1) feeds degemination (Rule 2)

| UF | /eŋaŋ -na/ | UF | /eŋaŋ -na/ |
|---------------------|------------|---------------------|------------|
| Dorsal assimilation | eŋaŋŋa | Degemination | — |
| Degemination | eŋaŋa | Dorsal assimilation | eŋaŋŋa |
| PR | [eŋaŋa] | PR | *[eŋaŋŋa] |
| gloss | ‘my baby’ | | |

Dorsal assimilation (Rule 1) states that nonlabial stops (to exclude the dubitative suffix) and nasals become dorsal after dorsal consonants. The rule as stated applies to more than just nasals; this will prove helpful in discussions of the ablative suffix (§6.1.4).

The second rule needed is given as Rule 2.

Rule 2 Degemination⁵

$$\begin{array}{c} \text{C} \\ [\alpha \text{ Feature}] \end{array} \rightarrow \emptyset / \text{ — } \begin{array}{c} \text{C} \\ [\alpha \text{ Feature}] \end{array}$$

Degemination states that a consonant is deleted when it is followed by an identical consonant. Dorsal assimilation feeds degemination, as shown in Table 6.3 with the example /eŋaŋ -na/ ‘baby -1S.GEN’.

Other suffixes that pattern like the 1S.GEN are:

- (32) 3.GEN /-nΛ/
 1D.GEN /-nit/
 1P.GEN /-nin/

6.1.3 [y]~[n]~[ŋ] alternation

As shown in (33), the suffix ‘after’ is realised as [-nΛ] after labials and coronals, [-ŋΛ] after dorsals, and [-yΛ] after vowels.

- (33) Suffix [-yΛ] ~ [-nΛ] ~ [-ŋΛ] ‘after’
- | Place name | gloss | ‘after’ |
|-----------------------|-----------|------------------------|
| [matayΛ] | ‘Mataya’ | [matayΛyΛ] |
| [bukΛp] | ‘Bukap’ | [bukΛpnΛ] |
| [hapit] | ‘Hapit’ | [hapitnΛ] |
| [yΛpulΛk] | ‘Yapulak’ | [yΛpulΛkŋΛ] |
| [bilom] | ‘Bilom’ | [bilomnΛ] |
| [sakΛpΛn] | ‘Sakapan’ | [sakΛpΛnΛ] |
| [hik ^w Λŋ] | ‘Hikwang’ | [hik ^w ΛŋΛ] |

⁵ [α Feature] is used as a shorthand notation for the full specific feature set.

Table 6.4 Nasalisation (Rule 3) feeds dorsal assimilation (Rule 1)

| | | | |
|---------------------|-----------------|---------------------|---------------|
| UF | /yΛpulΛk -yΛ/ | UF | /yΛpulΛk -yΛ/ |
| UF | /yΛpulΛk -yΛ/ | UF | /yΛpulΛk -yΛ/ |
| Nasalisation | yΛpulΛknΛ | Dorsal assimilation | — |
| Dorsal assimilation | yΛpulΛkŋΛ | Nasalisation | yΛpulΛknΛ |
| PR | [yΛpulΛkŋΛ] | PR | *[yΛpulΛknΛ] |
| gloss | ‘after Yapulak’ | | |

This alternation pattern is similar to that of the 1S.GEN, exemplified in (31). Dorsal assimilation accounts for the [n]~[ŋ] alternation if it is assumed that /ŋ/ is derived from /n/. Degemination accounts for lingual nasals [nn] and [ŋŋ] simplifying and for the labial-lingual nasal cluster [mn] not simplifying.

However, there is no strong functional motivation for the nasal~[y] alternation, especially given that [n] occurs after vowels and [y] occurs after consonants in monomorphemic forms. It is problematic if the UF is assumed to be a nasal since suffixes like the 1S.GEN (31) which demonstrate that the [n]~[ŋ] alternations after consonants have [n], not [y], after vowels. Therefore, the UF is /-yΛ/ and /y/ becomes a nasal after consonants. This alternation can be accounted for by the following rule.

Rule 3 Nasalisation y → n / C ____

Since no other phonemes apart from /y/ have a nasal alternate form, Nasalisation is restricted to just /y/. Nasalisation feeds dorsal assimilation, as shown in Table 6.4 with the example /yΛpulΛk -yΛ/ ‘Yapulak -after’. It also feeds degemination, as shown in Table 6.5 with the example /sakΛpΛn -yΛ/ ‘Sakapan -after’.

Other suffixes that pattern identically to the ‘after’ suffix include the classifier suffixes listed in (34). These are also discussed in Chapter 7.

- (34) ‘two.INDEFINITE’ /-yaΛ/
 ‘two.DEFINITE’ /-yΛt/

Table 6.5 Nasalisation (Rule 3) feeds degemination (Rule 2)

| | | | |
|--------------|-----------------|--------------|---------------|
| UF | /sakΛpΛn -yΛ/ | UF | /sakΛpΛn -yΛ/ |
| Nasalisation | sakΛpΛnnΛ | Degemination | — |
| Degemination | sakΛpΛnΛ | Nasalisation | sakΛpΛnnΛ |
| PR | [sakΛpΛnΛ] | PR | *[sakΛpΛnnΛ] |
| gloss | ‘after Sakapan’ | | |

6.1.4 ['X']~[d]~[g] alternation

As shown in (35), there are three suffixes which, like the nasal-initial 1S.GEN, show an alternation between coronal and dorsal initial segments after consonant-final nouns. The alternation these suffixes exhibit after vowel-final nouns will be discussed subsequently.

(35) d ~ g

| Noun | gloss | DATIVE [-de] ~ [-ge] | ABLATIVE [-dΛ] ~ [-gΛ] | 2S.GEN [-da] ~ [-ga] |
|----------|-------------------|-------------------------|---------------------------|-------------------------|
| [kekɲΛ] | 'bamboo' | [kekɲΛle] | [kekɲΛtΛ] | [kekɲΛka] |
| [nap] | 'rope' | [napde] | [napdΛ] | [napda] |
| [teɲat] | 'niece's husband' | [teɲatde] | [teɲatdΛ] | [teɲatda] |
| [musuk] | 'knife' | [musukge] | [musukgΛ] | [musukga] |
| [mom] | 'aunt' | [momde] | [momdΛ] | [momda] |
| [sandun] | 'axe' | [sandunde] | [sandundΛ] | [sandunda] |
| [eɲaɲ] | 'baby' | [eɲaɲge] | [eɲaɲgΛ] | [eɲaɲga] |

The initial segment in all three suffixes is coronal [d] after labials and coronals, and dorsal [g] after dorsals. This alternation is identical to that seen between [n] and [ɲ] in the 1S.GEN (§6.1.2). Dorsal assimilation (1) was written so it applies to all coronal stops (not just nasals), so no modifications to the rule are required to account for the [d]~[g] alternation with the 2S.GEN, ABLATIVE, and DATIVE suffixes if [g] is derived from [d].

Suffixes with this pattern have a variety of initial consonants after vowels, as shown again in (36).

(36) 'X' ~ d ~ g

| Noun | gloss | DATIVE [-le] ~ [-de] ~ [ge] | ABLATIVE [-tΛ] ~ [-dΛ] ~ [gΛ] | 2S.GEN [-ka] ~ [-da] ~ [ga] |
|---------|----------|--------------------------------|----------------------------------|--------------------------------|
| [kekɲΛ] | 'bamboo' | [kekɲΛle] | [kekɲΛtΛ] | [kekɲΛka] |
| [nap] | 'rope' | [napde] | [napdΛ] | [napda] |
| [musuk] | 'knife' | [musukge] | [musukgΛ] | [musukga] |

Their UFs and the processes that account for the allomorphs of each of the suffixes will be discussed in turn: [-le] DATIVE, [-tΛ] ABLATIVE, and [-ka] 2S.GEN.

The dative is [-le] after vowels and [-de] ~ [-ge] after consonants (36). The two most likely UF candidates are /-de/ whose initial consonant softens (lenition) after vowels or /-le/ whose initial consonant hardens (fortition) after consonants. Either process is reasonably natural. Evidence will be presented later in connection with the 'also' suffix (§6.1.5) that /-le/ is the UF and that the process is one of fortition as expressed in Rule 4.⁶

Rule 4 Fortition

$$\begin{array}{c}
 C \\
 \left[\begin{array}{l} +\text{cons} \\ +\text{voice} \end{array} \right]
 \end{array}
 \rightarrow [-\text{cont}] \quad / \quad C ___$$

⁶ McElhanon (1973b) also considered the allophone that occurs after vowels as showing the UF consonants in Selepet phonology.

Table 6.6 Fortition (Rule 4) logically ordered before dorsal assimilation (Rule 1)

| UF | /eŋaŋ -le/ | UF | /eŋaŋ -le/ |
|---------------------|---------------|---------------------|------------|
| Fortition | eŋaŋde | Dorsal assimilation | eŋaŋge |
| Dorsal assimilation | eŋaŋge | Fortition | eŋaŋge |
| PR | [eŋaŋge] | PR | [eŋaŋge] |
| gloss | ‘baby-DATIVE’ | | |

Fortition states that voiced continuants (the Awara spirants /b/, /l/, and /ǵ/) become [-continuant] ([b], [d], and [g]) following consonants. Fortition is limited to segments having the features [+consonantal] to exclude [y] and [+voice] to exclude [s], both of which can occur after consonants at morpheme boundaries. Though fortition so far only explains the dative suffix /-le/ becoming [-de] after consonants, it will be shown that it can also partially account for [ǵ]~[b] alternations exhibited by the 23p.IMM verb suffix (see §9.1.4).

Though dorsal assimilation and fortition are not crucially ordered, fortition is logically ordered before dorsal assimilation, as shown in Table 6.6 with the example /eŋaŋ -le/ ‘baby - DATIVE’. If dorsal assimilation is applied first, it makes a nonexistent velar lateral (represented by ‘ǵ’ in this chart) that has to be cleaned up by fortition.

The ablative suffix is [-tʌ] after vowels and [-dʌ] ~ [-gʌ] after consonants (35). The most likely UF candidate is either /-tʌ/ whose initial consonant is voiced after consonants, or /-dʌ/ whose initial consonant is devoiced after vowels. Evidence is presented in §6.1.5 that the UF is /-dʌ/. The following rule is needed to account for devoicing.

Rule 5 Devoicing

$$C \rightarrow [-voice] / V \begin{bmatrix} \text{-cont} \\ \text{-voice} \\ \text{-labial} \end{bmatrix} ___$$

The feature [-labial] is required to constrain the rule from applying to the /b/ in the dubitative suffix /-bʌ/ (§6.1.1) since it does not devoice. It does apply to coronals and dorsals (e.g. the 2S.GEN, discussed next). The feature [-continuant] excludes fricatives and [-sonorant] excludes nasals.⁷ Devoicing is not crucially ordered.

The 2S.GEN is [-ka] after vowels and [-da] ~ [-ga] after consonants (35).⁸ If the UF for the 2S.GEN is /-ga/, devoicing (5) will account for the correct form after vowels. A rule for coronal assimilation is needed to account for [g] becoming [d].

⁷ The feature [-nasal] would also exclude nasals, but [-sonorant] is more general.

⁸ Wantoat has a similar variation (Davis 1961a) such as with the limitative that alternates as [kän~bän~gän], the subject marker [tä~gä~dä] and ‘dative or directional’ marker [de~ge].

Rule 6 Coronal assimilation⁹

$$\begin{array}{ccc} \text{C} & \rightarrow [+coronal] & / \\ [-labial] & & \text{C} \\ & & [-dorsal] \end{array} \quad \text{---}$$

The feature [-labial] is used in order to exclude labials such as the dubitative suffix /-bΛ/. Coronal assimilation is not crucially ordered.

There are no other suffixes that pattern like the dative. Other suffixes that pattern identically to the ablative and to the 2S.GEN are listed in (37) and (38) respectively.

(37) [t]~[d]~[g] suffixes

possessor /-dΛne/

‘one’ /-du/

‘some’ /-duyi/

(38) [k]~[d]~[g] suffixes

‘only’ /-gΛn/

‘ever’ /-ga/

6.1.5 [ɟ]~[p]~[t]~[k] alternation

As shown in Table 6.7, the suffix ‘also’ is realised as [-ɟΛyΛ] after vowels, [-pΛyΛ] after labials, [-tΛyΛ] after coronals, and [-kΛyΛ] after dorsals.

The two most likely UF candidates for this suffix are /-ɟΛyΛ/ whose initial consonant hardens (fortition) after consonants or /-kΛyΛ/ whose initial consonant softens (lenition) after vowels. If it is /-ɟΛyΛ/ and the /ɟ/ hardens after consonants, there is potential conflict with the fortition rule (Rule 4 on p.51), which accounts for /l/ becoming [d] (a voiced stop) after consonants. If both processes are cases of fortition, this would require two fortition rules more restrictive in their scope, one resulting in a voiced stop [d], and the other resulting in

Table 6.7 Suffix ‘also’ [-ɟΛyΛ] ~ [-pΛyΛ] ~ [-tΛyΛ] ~ [-kΛyΛ]

| Noun | gloss | ‘also’ |
|----------|-------------------|-------------|
| [kekɿΛ] | ‘bamboo’ | [kekɿΛɟΛyΛ] |
| [nap] | ‘rope’ | [napΛyΛ] |
| [teɲat] | ‘niece’s husband’ | [teɲatΛyΛ] |
| [musuk] | ‘knife’ | [musukΛyΛ] |
| [mom] | ‘aunt’ | [mopΛyΛ] |
| [sandun] | ‘axe’ | [sandutΛyΛ] |
| [eɲaɲ] | ‘baby’ | [eɲakΛyΛ] |

⁹ Though the alternation between coronal and dorsal is a natural process in Awara, it is impossible to specify a single rule that defines a voiced consonant as coronal after labials and coronals and dorsal after dorsals. This is problematic for both Distinctive Feature theory and Feature Geometry.

Table 6.8 Degemination (Rule 2) counterfeeds lenition (Rule 7)

| UF | /musuk -kɒyɒ/ | UF | /musuk -kɒyɒ/ |
|--------------|------------------|--------------|---------------|
| Lenition | — | Degemination | musukɒyɒ |
| Degemination | musukɒyɒ | Lenition | musuθɒyɒ |
| PR | [musukɒyɒ] | PR | *[musuθɒyɒ] |
| gloss | ‘also the knife’ | | |

Table 6.9 Devoicing (Rule 5) counterfeeds lenition (Rule 7)

| UF | /kekɨɒ -ga/ | UF | /kekɨɒ -ga/ |
|-----------|---------------|-----------|-------------|
| Lenition | — | Devoicing | kekɨɒka |
| Devoicing | kekɨɒka | Lenition | kekɨɒθa |
| PR | [kekɨɒka] | PR | *[kekɨɒθa] |
| gloss | ‘your bamboo’ | | |

a voiceless stop [k]. Since having two very restrictive fortition rules is undesirable, it seems better to posit /-kɒyɒ/ as the UF for ‘also’ and to apply a lenition rule to account for /k/ becoming [θ] after vowel-final nouns.

Rule 7 Lenition

$$\begin{array}{c} C \\ \left[\begin{array}{c} -\text{cont} \\ -\text{voice} \end{array} \right] \end{array} \rightarrow \left[\begin{array}{c} +\text{cont} \\ +\text{voice} \end{array} \right] / \text{ V } ___ \text{ V }$$

Assuming that all morphophonemic rules apply only in derived environments, lenition does not apply to intervocalic morpheme-medial voiceless stops (e.g. [gatɒp] ‘stick it’).

Degemination (Rule 2 on p.49) counterfeeds lenition, as shown in Table 6.8 with the example /musuk -kɒyɒ/ ‘knife -also’.

Devoicing (Rule 5 on p.52) also counterfeeds lenition (Rule 7), as shown in Table 6.9 with the example /kekɨɒ -ga/ ‘bamboo -2S.GEN’.

There are two kinds of deletion occurring at morpheme boundaries. The first reduces [pp], [tt], and [kk] clusters to [p], [t], and [k]. This is accounted for by degemination (Rule 2 on p.49). The second deletes root-final nasals before voiceless stops. An additional deletion rule is required to account for it.

Rule 8 Deletion

$$C \rightarrow \emptyset / ___ \begin{array}{c} C \\ \left[\begin{array}{c} -\text{cont} \\ -\text{voice} \end{array} \right] \end{array}$$

Table 6.10 Deletion (Rule 8) counterfeeds lenition (Rule 7)

| UF | /eɲaɲ -kɬyɬ/ | UF | /eɲaɲ -kɬyɬ/ |
|----------|-----------------|----------|--------------|
| Lenition | — | Deletion | eɲakɬyɬ |
| Deletion | eɲakɬyɬ | Lenition | eɲaθɬyɬ |
| PR | [eɲakɬyɬ] | PR | *[eɲaθɬyɬ] |
| gloss | ‘also the baby’ | | |

Table 6.11 Deletion (Rule 8) counterbleeds voiceless stop assimilation (Rule 9)

| UF | /mom -kɬyɬ/ | UF | /mom -kɬyɬ/ |
|-----------------------------|-------------|-----------------------------|-------------|
| Voiceless stop assimilation | mompɬyɬ | Deletion | mokɬyɬ |
| Deletion | mopɬyɬ | Voiceless stop assimilation | — |
| PR | [mopɬyɬ] | PR | *[mokɬyɬ] |
| gloss | ‘also aunt’ | | |

Since other types of nasal-consonant clusters exist, the environment in deletion (Rule 8) is restricted to voiceless stops.

Deletion counterfeeds lenition (Rule 7), as shown in Table 6.10 with the example /eɲaɲ -kɬyɬ/ ‘baby -also’.

The alternation in point of articulation of the initial consonant for the ‘also’ suffix can be accounted for by the following rule.

Rule 9 Voiceless stop assimilation

$$\begin{array}{c} \text{C} \\ \left[\begin{array}{l} \text{-cont} \\ \text{-voice} \end{array} \right] \end{array} \rightarrow [\alpha \text{ POA}] / \begin{array}{c} \text{C} \\ [\alpha \text{ POA}] \end{array} \text{ —}$$

Voiceless stop assimilation (Rule 9) states that a voiceless stop assimilates to the point of articulation (POA) of the preceding consonant. Voiceless stop assimilation must be restricted to [-voice]. Since voiced stops do not become labial after labials, voiceless stop assimilation cannot be combined with the other assimilation rules: coronal assimilation (Rule 6 on p.52) and dorsal assimilation (Rule 1 on p.48). Also, since there are other voiceless consonants (/h/ and /s/) that do not assimilate, voiceless stop assimilation must be restricted to [-continuant].

Deletion (Rule 8) counterbleeds voiceless stop assimilation (Rule 9), as shown in Table 6.11 with the example /mom -kɬyɬ/ ‘aunt -also’.

Voiceless stop assimilation (Rule 9) feeds degemination (Rule 2 on p.49), as shown in Table 6.12 with the example /nap -kɬyɬ/ ‘rope -also’. Though voiceless stop assimilation bleeds coronal assimilation (Rule 6 on p.52), it is not crucially ordered since reversing the

Table 6.12 Voiceless stop assimilation (Rule 9) feeds degemination(Rule 2)

| UF | /nap -kʌyʌ/ | UF | /nap -kʌyʌ/ |
|-----------------------------|-----------------|-----------------------------|-------------|
| Voiceless stop assimilation | nappʌyʌ | Degemination | — |
| Degemination | napʌyʌ | Voiceless stop assimilation | nappʌyʌ |
| PR | [napʌyʌ] | PR | *[nappʌyʌ] |
| gloss | ‘also the rope’ | | |

Table 6.13 Voiceless stop assimilation (Rule 9) bleeds coronal assimilation (Rule 6)

| UF | /nap -kʌyʌ/ | UF | /nap -kʌyʌ/ |
|-----------------------------|-----------------|-----------------------------|-------------|
| Voiceless stop assimilation | nappʌyʌ | Coronal assimilation | naptʌyʌ |
| Coronal assimilation | — | Voiceless stop assimilation | nappʌyʌ |
| Degemination | napʌyʌ | Degemination | napʌyʌ |
| PR | [napʌyʌ] | PR | [napʌyʌ] |
| gloss | ‘also the rope’ | | |

order still produces the correct results, as shown in Table 6.13, again with the example /nap -kʌyʌ/ ‘rope -also’.

Other suffixes that pattern identically to ‘also’ are listed in (39).

- (39) ɣ~p~t~k:
 ‘with’ /-kʌt/
 ‘at’ /-kʌtan/

There are alternative UFs to consider for the dative, ablative, 2S.GEN and ‘also’ suffixes, as shown in (40).

- (40) Alternative UFs
- | gloss | Original UF | Alternative UF | Original Rule |
|----------|-------------|----------------|---------------|
| DATIVE | /-le/ | /-de/ | fortition |
| ABLATIVE | /-dʌ/ | /-tʌ/ | devoicing |
| 2S.GEN | /-ga/ | /-ka/ | devoicing |
| ‘also’ | /-kʌyʌ/ | /-ɣʌyʌ/ | lenition |

If the alternative UFs are assumed, the following rules must be substituted for fortition (Rule 4 on p.51), devoicing (Rule 5 on p.52), and lenition (Rule 7 on p.54) respectively.

Rule 10 Lenition (for fortition, Rule 4 on p.51)

$$\begin{array}{c} C \\ \left[\begin{array}{c} +\text{voice} \\ -\text{cont} \\ -\text{nasal} \end{array} \right] \end{array} \rightarrow [+cont \ / \ V \ ___$$

Rule 11 Voicing (for devoicing, Rule 5 on p.52)

$$\begin{array}{c} C \\ [-\text{cont}] \end{array} \rightarrow [+voice] \ / \ C \ ___$$

Rule 12 Fortition (for lenition, Rule 7 on p.54)

$$\begin{array}{c} C \\ \left[\begin{array}{c} +\text{cont} \\ +\text{voice} \\ +\text{cons} \end{array} \right] \end{array} \rightarrow \left[\begin{array}{c} -\text{cont} \\ -\text{voice} \end{array} \right] \ / \ C \ ___$$

There is evidence of voiceless stop lenition (Rule 7 on p.54) occurring elsewhere, such as on noun-final voiceless stops with the negative suffix discussed next (§6.1.6) and with voiceless-stop initial classifiers (see §7.2.2) supporting the original analysis. Also, lenition of voiceless stops occurs at the reduplicant boundary and compound boundary (see Chapter 8).

Since there is independent justification for lenition (Rule 7 on p.54), but not for fortition (Rule 12), and since it would be impossible otherwise to predict the correct surface forms of /-kʌyʌ/ ‘also’ becoming [-ḡʌyʌ] and /-ka/ 2S.GEN becoming [-ga] after vowel-final nouns, the UF for ‘also’ is /-kʌyʌ/. Devoicing (Rule 5 on p.52) is applied instead of voicing (Rule 11) and /-ga/ is posited as the UF for 2S.GEN. Also, since it would be impossible to otherwise predict the correct surface forms of /-de/ DATIVE becoming [-le] and /-dʌ/ ABLATIVE becoming [-tʌ] after vowels, fortition (Rule 4 on p.51) is applied instead of lenition (Rule 10) and /-le/ is posited as the UF for DATIVE.

6.1.6 [Ø]~[u] alternation

The negative suffix is realised as [-ndo] after vowels and [-undo] after consonants, as shown in (41).

(41) Negative suffix

| Noun | gloss | negative |
|----------|-------------------|--------------|
| [kekɲʌ] | ‘bamboo’ | [kekɲʌndo] |
| [nap] | ‘rope’ | [naʔundo] |
| [teɲat] | ‘niece’s husband’ | [teɲalundo] |
| [musuk] | ‘knife’ | [musuḡundo] |
| [mom] | ‘aunt’ | [momundo] |
| [sandun] | ‘axe’ | [sandunundo] |
| [eɲaɲ] | ‘baby’ | [eɲaɲundo] |

All root-final voiceless stops lenite (become voiced spirants) when immediately followed by this suffix. There are no changes to root-final nasals followed by this suffix.

It would be difficult to account for the alternation between the vowel /u/ and null in terms of insertion in light of the fact that vowels are not inserted before /-bΛ/ DUBITATIVE (/mom -bΛ/ ‘aunt -DUBITATIVE’ is [mombΛ] not *[momumbΛ]) or before /na/ 1S.GEN (/mom -na/ ‘aunt -1S.GEN is [momna] not *[momuna]). In addition, the same alternation is seen in the topic marker /-u/ (among others), as shown in (42).

(42) Topic marker [-u]~[-∅]

| Noun | gloss | TOPIC |
|----------|-------------------|-----------|
| [kekɲΛ] | ‘bamboo’ | [kekɲΛ] |
| [nap] | ‘rope’ | [naβu] |
| [teɲat] | ‘niece’s husband’ | [teɲalu] |
| [musuk] | ‘knife’ | [musuɣu] |
| [mom] | ‘aunt’ | [momu] |
| [sandun] | ‘axe’ | [sandunu] |
| [eɲaɲ] | ‘baby’ | [eɲaɲu] |

There is no justification for inserting a vowel in word-final position in these forms. Therefore, it is best to posit that the vowel [u] is part of the suffix UF and /u/ deletes after vowels. The UF for the negative suffix is then /-udo/.

The alternation between the voiceless stops and voiced spirants of the final segment of the noun root (/teɲat -udo/ ‘niece’s husband -NEGATIVE’ is [teɲalundo]) can be accounted for by lenition (Rule 7 on p.54).

To account for the alternation between the initial vowel of a suffix and null, a vowel deletion rule is applied. Vowel deletion (Rule 13) is not crucially ordered.

Rule 13 Vowel deletion

$V \rightarrow \emptyset / V ___$

Other suffixes that pattern identically to the negative are listed in (43).

(43) $\emptyset \sim u^{10}$

| | |
|----------------------------|---------|
| TOPIC, LINKER, CONDITIONAL | /-u/ |
| DISLOCATION | /-un/ |
| LOCATIVE | /-une/ |
| INDIVIDUATOR | /-unin/ |

6.1.7 [h]~[s] alternation

As shown in (44), the 2P.GEN is realised as [-hΛ] after vowels and [-sΛ] after consonants. The root-final segment does not delete when followed by a voiceless fricative.

¹⁰ It is unclear if the topic, linker, and conditional are one suffix with multiple roles or are homonyms. They all pattern identically morphophonemically.

(44) 2P.GEN [-hΛ] ~ [-sΛ]

| Noun | gloss | 2P.GEN |
|----------|-------------------|------------|
| [kekɲΛ] | ‘bamboo’ | [kekɲΛhΛ] |
| [nap] | ‘rope’ | [napsΛ] |
| [teɲat] | ‘niece’s husband’ | [teɲatsΛ] |
| [musuk] | ‘knife’ | [musuksΛ] |
| [mom] | ‘aunt’ | [momsΛ] |
| [sandun] | ‘axe’ | [sandunsΛ] |
| [eɲaɲ] | ‘baby’ | [eɲaɲsΛ] |

The UF can be determined on the basis of other alternations, some of which have not yet been discussed. The suffix ‘after’ /-yΛ/ (§6.1.3) was argued to have /y/ as the initial consonant of its UF. There is also the 2S.IMP ([-yo] ~ [-so] alternation) found in the verb suffixes (§9.1.3). Since /y/ was chosen as the UF for the [y]~[n]~[ɲ] alternations, then it follows that /s/ is the most logical choice for the [y]~[s] alternation.¹¹ This results in /-hΛ/ being the most logical UF for 2S.GEN.¹²

The following rule accounts for the [-hΛ] ~ [-sΛ] alternation.

Rule 14 h-fortition

$h \rightarrow s / C ___$

Rule 14, h-fortition, is not crucially ordered. The only other suffix that shows [h]~[s] alternation is the diminutive /-him/ (see §7.1 and §7.2.1).

6.2 Noun roots

Root-initial segments in nouns do not alternate.¹³ The only observed morphophonemic processes applying to the root-final segment in nouns are accounted for by deletion (Rule 8 on p.54), degemination (Rule 2 on p.49), and lenition (Rule 7 on p.54). Since these rules account for the surface forms, there is no need to posit an abstract underlying form or a form that is different from the surface forms in isolation.

6.3 Irregular morphophonemics**6.3.1 Alternate 3.GEN suffix [-i]~[-e]~[-Λ]**

The suffix /-nΛ/ 3.GEN has an alternate form made up of three allomorphs [-i], [-e], and [-Λ]. These occur more often with body-part nouns such as those shown in (45). However, it is unpredictable when to use the alternate form instead of [-nΛ].

¹¹ To select /y/ for both 2S.IMP and ‘after’ suffixes complicates the rules in that /y/ becomes [s] after consonants with 2S.IMP and [n] after consonants with ‘after’.

¹² To select /s/ for both 2S.IMP and 2S.GEN complicates the rules in that /s/ becomes [y] after vowels with 2S.IMP and [h] after vowels with 2S.GEN.

¹³ There was one case in the recorded text data where a word-initial voiceless stop on a noun lenited after a vowel-final verb. However, further testing showed that lenition of initial-segment voiceless stops does not occur on nouns. The recorded text may have been a speaker preference or more likely a speech error.

(45) Alternate 3.GEN forms

| Noun | gloss | With alt. 3.GEN | gloss |
|-----------|------------------|-----------------|----------------------|
| [baka] | ‘thigh’ | [baki] | ‘its thigh’ |
| [hapbΛ] | ‘calf’ | [hapi] | ‘its calf’ |
| [kayi] | ‘eye’ | [kayi] | ‘its eye’ |
| [kukΛ] | ‘belly’ | [kuke] | ‘its belly’ |
| [maha] | ‘back’ | [mahe] | ‘its back’ |
| [nΛŋΛ] | ‘spleen’ | [nΛŋe] | ‘its spleen’ |
| [sopΛ] | ‘knee cap’ | [sopi] | ‘its knee cap’ |
| [yembi] | ‘tongue’ | [yembi] | ‘its tongue’ |
| [yepmΛ] | ‘son in law’ | [yepme] | ‘his son-in-law’ |
| [banip] | ‘insides’ | [baniyΛ] | ‘its insides’ |
| [map] | ‘mouth’ | [mayΛ] | ‘its mouth’ |
| [hapΛt] | ‘shoulder blade’ | [hapΛlΛ] | ‘its shoulder blade’ |
| [kakΛt] | ‘molar’ | [kakΛlΛ] | ‘its molar’ |
| [dΛndΛn] | ‘teeth’ | [dΛndΛlΛ] | ‘its teeth’ |
| [takΛpun] | ‘rib’ | [takΛpulΛ] | ‘its rib’ |

When an alternate form is used, the allomorph [-Λ] is consistently used after nouns ending in consonants, and allomorphs [-i] and [-e] are used with nouns ending in vowels, replacing the final vowel. However, the application of [-i] and [-e] is not predictable. All /i/-final nouns and some /a/- and /Λ/-final nouns use allomorph [-i], whereas other /a/- and [Λ]-final nouns use allomorph [-e].

Since it is impossible to predict which nouns use the alternate 3.GEN form, and since the choice of the alternate 3.GEN allomorphs is not fully predictable, the alternate 3.GEN form is posited in the lexicon for those nouns that use the alternate form.

6.3.2 Irregular root morphophonemics

When noun roots take the alternate 3.GEN form, the root-final segment does not follow normal lenition processes, as shown in (46).

(46) Noun roots with alternate 3.GEN

| Noun | gloss | With suffix | gloss |
|----------|------------------|-------------|----------------------|
| [banip] | ‘insides’ | [baniyΛ] | ‘its insides’ |
| [hapΛt] | ‘shoulder blade’ | [hapΛlΛ] | ‘its shoulder blade’ |
| [dΛndΛn] | ‘teeth’ | [dΛndΛlΛ] | ‘its teeth’ |

The final segment /n/ on nouns becomes [l], and the final segment /p/ on nouns becomes [y] before the alternate 3.GEN suffix. There are no occurrences of final segments /k/, /m/, or /ŋ/ on nouns taking the alternate 3.GEN suffix in the data. Lenition (Rule 7 on p.54) accounts for the final /t/ becoming [l]. A minor rule needs to be posited to account for /p/ becoming /y/ before this suffix (not formalised).

When this suffix follows vowel-final nouns (see 45), the noun-final vowel deletes. Normally, the suffix-initial vowel deletes after vowel-final nouns (/sako -une/ ‘choko leaf - LOCATIVE’ is [sakone]) whereas reduplicated vowels at morpheme boundaries (/RED + uli/ is

[uliuli], ‘nettles’) are not deleted. A minor deletion rule needs to be posited to account for this deletion (not formalised).

As outlined in the preceding section, an alternative analysis is to posit in the lexicon the 3.GEN form of these nouns that use the alternative 3.GEN, since it cannot be predicted which nouns use this form. Also, the alternate 3.GEN is not predictable after non-high vowels and two minor rules must be applied to consonant-final nouns that use the alternate 3.GEN form.

A second irregularity in noun roots occurs when /m/-final nouns are bound to /t/-initial classifiers. The /m/ becomes [p], as shown in (47).

(47) Classifiers bound to nouns

| UF | gloss | PR | gloss |
|------------------|--------------|----------------|----------|
| /wam + tʌkɲa/ | ‘word+rope’ | [waptʌkɲa] | ‘speech’ |
| /dubiyam + tʌpʌ/ | ‘mole+stick’ | [dumbiyaptʌpʌ] | ‘mole’ |

This only occurs with /m/-final nouns and /t/-initial classifiers. Classifiers are discussed in more detail in Chapter 7.

7 Classifier morphophonemics

Awara classifiers are words that indicate the shape or arrangement of an object or group of objects.¹ For example, Awara has a generic noun /dʌki/ which can mean ‘wood’, ‘tree’, or ‘fire’. When a classifier is attached, it determines the meaning of the noun, as shown in (48).²

| (48) | UF | gloss | PR | gloss |
|------|-------------|-------------------|-------------|--------------|
| | /dʌki+dʌkʌ/ | ‘wood + CL.stick’ | [dakindʌka] | ‘thick tree’ |
| | /dʌki+han/ | ‘wood + CL.sheet’ | [dakihan] | ‘plank’ |
| | /dʌki+bom/ | ‘wood + CL.place’ | [dʌkiɓom] | ‘fire’ |

Classifiers never occur alone, but are always right- or left-bound. They are right-bound to noun phrases or demonstratives, as shown in (49).

(49) Right-bound classifiers: examples

| UF | gloss | PR |
|----------------|----------------------|---------------|
| /yagʌ+tʌkɲa/ | ‘water + CL.rope’ | [yagʌtʌkɲa] |
| /dʌki+kʷʌbʌt/ | ‘wood + CL.extended’ | [dʌkiɡʷʌmbʌt] |
| /gʌnaŋʌ+gʷʌk/ | ‘hole + CL.opening’ | [gʌnaŋʌŋgʷʌk] |
| /dʌki+gʷʌkʌm/ | ‘wood + CL.chunk’ | [dʌkiŋgʷʌkʌm] |
| /dʌki+gʷen/ | ‘wood + CL.lump’ | [dʌkiŋgʷen] |
| /kʷʌlem+guton/ | ‘bow + CL.thin’ | [kʷʌlemguton] |

Classifiers are left-bound to quantifier suffixes, as shown in (50).

(50) Left-bound classifiers: examples

| UF | gloss | PR |
|---------------|---------------------|---------------|
| /tʌkɲa-duyi/ | ‘CL.rope -some’ | [tʌkɲatuyi] |
| /kʷʌbʌt-duyi/ | ‘CL.extended -some’ | [kʷʌmbʌtduyi] |
| /gʷʌk-duyi/ | ‘CL.opening -some’ | [gʷʌkguyi] |
| /gʷʌkʌm-duyi/ | ‘CL.chunk -some’ | [gʷʌkʌmduyi] |
| /gʷen-duyi/ | ‘CL.lump -some’ | [gʷenduyi] |
| /guton-duyi/ | ‘CL.thin -some’ | [gutonɡuyi] |

¹ See S. Quigley (2002) for a syntactic description of Awara classifiers.

² Though I have yet to justify the UF for classifiers, the posited forms are included in the following tables to help clarify the facts for the reader. Note that in UF examples, ‘-’ is used to mark simple morpheme boundaries and ‘+’ is used to mark other types of boundaries such as classifier, reduplication and compound boundaries.

Classifiers cannot be concurrently right-bound to a noun phrase or demonstrative and left-bound to a quantifier suffix. However, they can be concurrently right-bound to a noun phrase and left-bound to a postpositional suffix, as shown in (51).

(51) Classifiers bound to nouns and postpositional suffixes: examples

| UF | gloss | PR |
|------------------------------|--------------------------------------|----------------------------|
| /yΛt+dupi -bΛ/ | ‘sugar cane + CL.finger -DUBITATIVE’ | [yΛtdupimbΛ] |
| /homu+g ^w en -le/ | ‘dog + CL.lump -DATIVE’ | [homuŋg ^w ende] |

All noun suffixes except /-yΛ/ ‘after’ also attach to classifiers. The alternation pattern for these noun suffixes following classifiers is the same pattern found following nouns as previously described in §6.1. The suffix /-yΛ/ ‘after’ cannot be immediately attached to classifiers due to semantic, not phonological, constraints.

7.1 Classifier suffix morphophonemics

There are suffixes that attach only to classifiers, as shown in (52). There are no examples of classifiers whose final segment is [p].

| | | | | |
|---------|-----------------------|---------------|---|-----------------------------|
| (52) a. | Classifier | gloss | ‘two.DEFINITE’ [-yat]~[-nat]~[-ŋat] | ‘one’ [-tu]~[-du]~[-gu] |
| | /tΛkŋa/ | ‘CL.rope’ | [tΛkŋayat] | [tΛkŋatu] |
| | /k ^w Λbat/ | ‘CL.extended’ | [k ^w ΛmbΛtnat] | [k ^w ΛmbΛtdu] |
| | /g ^w Λk/ | ‘CL.opening’ | [g ^w Λkŋat] | [g ^w Λkgu] |
| | /g ^w ΛkΛm/ | ‘CL.chunk’ | [g ^w ΛkΛmnat] | [g ^w ΛkΛmdu] |
| | /g ^w en/ | ‘CL.lump’ | [g ^w enat] | [g ^w endu] |
| | /gutoŋ/ | ‘CL.thin’ | [gutoŋat] | [gutoŋgu] |
| b. | Classifier | gloss | INDIVIDUATOR ^a [-unin]~[-nin] | DIMINUTIVE [-him]~[-sim] |
| | /tΛkŋa/ | ‘CL.rope’ | [alΛkŋanin] | [tΛkŋahim] |
| | /k ^w Λbat/ | ‘CL.extended’ | [aɣ ^w ΛmbΛlunin] | [k ^w ΛmbΛsim] |
| | /g ^w Λk/ | ‘CL.opening’ | [aŋg ^w Λɣunin] | [g ^w Λksim] |
| | /g ^w ΛkΛm/ | ‘CL.chunk’ | [aŋg ^w ΛkΛmunin] | [g ^w ΛkΛsim] |
| | /g ^w en/ | ‘CL.lump’ | [aŋg ^w enunin] | [g ^w esim] |
| | /gutoŋ/ | ‘CL.thin’ | [aŋgutoŋunin] | [gutoŋsim] |

^a The demonstrative, such as /a/ ‘that’, is required with the individuating suffix.

The classifier suffixes in (52) pattern identically to noun suffixes. The ‘two.DEFINITE’ patterns identically to /-yΛ/ ‘after’ (see §6.1.3), such it is [-yat] after vowels, [-nat] after labials and coronals, and [-ŋat] after dorsals. The UF for ‘two.DEFINITE’ is /-yat/. Dorsal assimilation (Rule 1 on p.48) accounts for the [n]~[ŋ] alternation, and nasalisation (Rule 3 on p.50) accounts for the [y]~[n] alternation.

Classifier-final stop deletion counterbleeds h-fortition (Rule 14 on p.59), as shown in Table 7.1 with the example /g^wΛkΛm-him/ ‘CL.chunk -DIMINUTIVE’. There is one dialectal variation in this rule. Some speakers delete just coronals while others delete both labials and coronals.

Table 7.1 Classifier-final stop deletion (Rule 15) counterbleeds h-fortition (Rule 14)

| UF | /g ^w ΛkΛm -him/ | UF | /g ^w ΛkΛm -him/ |
|--------------|----------------------------|--------------|----------------------------|
| h-fortition | g ^w ΛkΛmsim | CFS Deletion | g ^w ΛkΛhim |
| CFS Deletion | g ^w ΛkΛsim | H-Fortition | — |
| PR | [g ^w ΛkΛsim] | PR | *[g ^w ΛkΛhim] |
| gloss | ‘small chunk’ | | |

Since the final segment alternation of classifiers can be accounted for by h-fortition (Rule 14 on p.59) and by classifier-final stop deletion, there is no need to posit an UF that is different from the unbound surface form.

7.2.2 No alternation of classifier-initial segment

Classifiers that begin with consonants other than voiceless stops do not have alternate initial-segment forms when bound to nouns or demonstratives, as shown in (54).

- (54) a. UF gloss V-final Nouns
- /dΛki+dΛkΛ/ ‘wood+CL.thick’ [dΛkindΛkΛ]
- /dΛki+g^wen/ ‘wood+CL.lump’ [dΛking^wen]
- /bata+muha/ ‘moss+CL.wad’ [batamuhΛ]
- /meyΛ+ɸom/ ‘heavy+CL.place’ [meyΛɸom]
- /titi+yΛg^wΛt/ ‘Titi+CL.family’ [titiyΛŋg^wΛt]
- /dΛki+han/ ‘wood+CL.sheet’ [dΛkihan]
- b. UF gloss t-final Nouns
- /gayΛt+dΛkΛ/ ‘adze+CL.thick’ [gayΛtdΛkΛ]
- /gayΛt+g^wen/ ‘adze+CL.lump’ [gayΛtg^wen]
- /sibut+muha/ ‘cake+CL.wad’ [simbutmuhΛ]
- /yot+ɸom/ ‘house+CL.place’ [yotɸom]
- /siɸΛt+yΛg^wΛt/ ‘Siwät+ CL.family’ [siɸΛtyΛŋg^wΛt]
- /g^wikg^wit+han/ ‘shell+CL.sheet’ [g^wikg^withan]

However, voiceless stop-initial classifiers do exhibit initial-segment alternate forms when bound to nouns or demonstratives, as will be discussed next.

7.2.3 [g]~[k] initial segment alternation

The classifiers ‘CL.part’ and ‘CL.extended’ are realised as [gΛɸut] and [g^wΛmbΛt] after vowel-final nouns and as [kΛɸut] and [k^wΛmbΛt] after consonant-final nouns, as shown in (55).

(55) [k]- and [k^w]-initial classifiers

| | | | |
|----|------------|-------------|------------------------|
| a. | Noun | gloss | /kaʔut/ ‘CL.part’ |
| | /dʌki/ | ‘wood’ | [dʌkigaʔut] |
| | /hup/ | ‘stone’ | [hupkaʔut] |
| | /yot/ | ‘house’ | [yotkaʔut] |
| | /halak/ | ‘bridge’ | [halakʌʔut] |
| | /balem/ | ‘wall’ | [balemkaʔut] |
| | /taʔan/ | ‘mountain’ | [taʔankaʔut] |
| | /kʷaʎaloŋ/ | ‘whirlpool’ | [kʷaʎalokaʔut] |
| b. | Noun | gloss | /kʷʌbaʔ/ ‘CL.extended’ |
| | /dʌki/ | ‘wood’ | [dʌkiɣʌmbaʔ] |
| | /nap/ | ‘rope’ | [napkʷʌmbaʔ] |
| | /ʔʌmat/ | ‘gourd’ | [ʔʌmatkʷʌmbaʔ] |
| | /tawik/ | ‘clothes’ | [tawikʷʌmbaʔ] |
| | /balem/ | ‘wall’ | [balemkʷʌmbaʔ] |
| | /nomʌn/ | ‘good’ | [nomʌnkʷʌmbaʔ] |
| | /inuluŋ/ | ‘big’ | [inulukʷʌmbaʔ] |

The boundary between nouns and classifiers is different from that between nouns and suffixes or classifiers and suffixes. Voiceless stop assimilation (Rule 9 on p.55) and deletion (Rule 8 on p.54) do not apply, as shown in examples such as /hup+kaʔut/ being pronounced as [hupkaʔut], not *[hupaʔut]. This can be accounted for by claiming that classifier boundaries are different from other morpheme boundaries.

The [k]~[g] alternation can be accounted for by assuming that the UFs are /kabut/ ‘CL.part’ and /k^wAbat/ ‘CL.extended’, and extending lenition (Rule 7 on p.54) to apply intervocalically across classifier boundaries.

Rule 7 (a) Lenition

$$\begin{bmatrix} \text{C} \\ \text{-cont} \\ \text{-voice} \end{bmatrix} \rightarrow \begin{bmatrix} +\text{cont} \\ +\text{voice} \end{bmatrix} / \text{V } [\text{CL}] \text{ — V}$$

Since there is no clear evidence of noun-initial consonants leniting, lenition is not applied across noun boundaries.

If a noun-final segment is a velar, it deletes before /k/-initial classifiers. This is accounted for by extending Deletion (Rule 8 on p.54) to apply across classifier boundaries.

Rule 8 (a) Deletion

$$C \rightarrow \emptyset / __ ([_{CL}) \begin{bmatrix} C \\ -cont \\ -voice \end{bmatrix}$$

7.2.4 [l]~[t]~[k]-initial segment alternation

The classifier ‘CL.rope’ is realised as [lɤkɲa] after vowel-final nouns, [kɤkɲa] after dorsal-final nouns, and [tɤkɲa] elsewhere, as shown in (56).

(56) [l]~[t]~[k]-initial classifiers

| Noun | gloss | /tʌkɲa/ ‘CL.ropes’ |
|----------|---------|--------------------|
| /yagʌ/ | ‘water’ | [yagɲʌtʌkɲa] |
| /nap/ | ‘rope’ | [naptʌkɲa] |
| /tutut/ | ‘fence’ | [tututʌkɲa] |
| /gomok/ | ‘snake’ | [gomokʌkɲa] |
| /θam/ | ‘word’ | [θaptʌkɲa] |
| /nomʌn/ | ‘good’ | [nomʌtʌkɲa] |
| /inuluŋ/ | ‘big’ | [inulukʌkɲa] |

If the final segment of a word is a nonlabial consonant, it deletes before voiceless stop-initial classifiers. This has been previously accounted for with the classifier /kaθut/ ‘CL.part’ by extending deletion (Rule 8) to classifier boundaries.

However, deletion does not apply to labial-final nouns that are bound to /t/-initial classifiers (/nap+tʌkɲa/ ‘rope+CL.ropes’ is [naptʌkɲa]). Also, /m/-final nouns become /p/-final before /t/-initial classifiers (/θam+tʌkɲa/ ‘word+CL.ropes’ is [θaptʌkɲa]). A minor rule is posited to account for this alternation (not formalised).

As with /kaθut/ ‘CL.part’, the UF for ‘CL.ropes’ can be /tʌkɲa/, and Lenition as modified above to extend to classifier boundaries (Rule 7) accounts for [tʌkɲa] after vowels.

To account for the [tʌkɲa]~[kʌkɲa] alternation, a classifier dorsal assimilation rule is applied to classifier boundaries.

Rule 16 Classifier dorsal assimilation

$$\begin{array}{c} \text{C} \\ \left[\begin{array}{l} \text{-voice} \\ \text{-cont} \end{array} \right] \end{array} \rightarrow \left[\begin{array}{l} \text{+dorsal} \\ \text{+dorsal} \end{array} \right] / \begin{array}{c} \text{C} \\ \left[\begin{array}{l} \text{+dorsal} \end{array} \right] \end{array} \left[\text{CL} \right] \text{ —}$$

Since there are no classifiers that are /p/-initial to indicate otherwise, classifier dorsal assimilation can be assumed to apply to all voiceless stops. Classifiers with initial voiced stops such as /dʌkʌ/ ‘CL.thick’ (54) do not have a velar allomorph; this justifies limiting classifier dorsal assimilation to voiceless stops.

Classifier dorsal assimilation feeds deletion (Rule 8), as shown in Table 7.2 with the example /inuluŋ+tʌkɲa/ ‘big + CL.ropes’.

Table 7.2 Classifier dorsal assimilation (Rule 16) feeds deletion (Rule 8)

| UF | /inuluŋ+tʌkɲa/ | UF | /inuluŋ+tʌkɲa/ |
|-------------------|--------------------|-------------------|----------------|
| CL. Dorsal Assim. | inuluŋkʌkɲa | Deletion | — |
| Deletion | inulukʌkɲa | CL. Dorsal Assim. | inuluŋkʌkɲa |
| PR | [inulukʌkɲa] | PR | *[inuluŋkʌkɲa] |
| gloss | ‘the big long one’ | | |

Classifier dorsal assimilation feeds degemination (Rule 2 on p.49). However, since deletion (Rule 8 on p.54) subsumes all cases of classifier degemination, degemination is not relevant for classifiers.

7.3 Irregular classifier morphophonemics

7.3.1 Specific suffix

The specific suffix is [-sim] after vowel-final and nonvelar nasal-final classifiers (/V/, /m/, /n/). It is [-šim] after voiceless stop-final and velar nasal-final classifiers (/t/, /k/, /ŋ/), as shown in (57).

(57) Diminutive and specific suffixes

| Classifier | gloss | DIMINUTIVE | SPECIFIC |
|------------|--------------|-------------|---------------|
| /tʌkɲa/ | ‘CL.rope’ | [tʌkɲahim] | [tʌkɲasim] |
| /kʷʌbat/ | ‘CL.exended’ | [kʷʌmbʌsim] | [kʷʌmbʌtʃsim] |
| /gʷʌk/ | ‘CL.opening’ | [gʷʌksim] | [gʷʌkšim] |
| /gʷʌkʌm/ | ‘CL.chunk’ | [gʷʌkʌsim] | [gʷʌkʌmsim] |
| /gʷen/ | ‘CL.lump’ | [gʷesim] | [gʷensim] |
| /gutoŋ/ | ‘CL.thin’ | [gutoŋsim] | [gutoŋšim] |

The specific suffix is similar to the diminutive suffix /-him/ in that both occur only after classifiers and both have an allomorph [-sim] (which for the diminutive suffix occurs after all consonant final classifiers). Whereas non-velar consonants delete before the Diminutive suffix, they do not delete before the specific suffix.

There is some confusion regarding the diminutive and the specific suffix. Though people understand the difference between [gʷesim] CL.DIMINUTIVE and [gʷensim] CL.SPECIFIC, they do not distinctly conjugate most of the other classifiers with these two suffixes. Since they acknowledge that there is contrast between the two words [gʷesim] and [gʷensim], it is assumed that the two words have separate suffixes.

Over the course of working through the specific suffix, my language consultant went from using [-sim] to [-šim] after all consonants.³ This was the only time we heard the phone [š] in Awara. The allomorph [-šim] does not exist in any of the recorded texts and was never heard in normal conversation.

It is assumed that the UF is /-sim/ for the specific suffix and a palatalisation rule is applied. However, due to inconsistencies in the data, I have been unable to formalise a palatalisation rule. It is unclear why classifier deletion (Rule 8) is applied to [gʷesim] (/gʷen -him/ ‘CL.lump -DIMINUTIVE’) but not to [gʷensim] (/gʷen -sim/ ‘CL.lump -SPECIFIC’).

³ See Appendix C for a complete list.

8 *Reduplication and compounds*

8.1 Reduplication

Awara has full reduplication of base forms, as shown in (58).

(58) Reduplication examples

| UF | Gloss base | Reduplicated | Gloss reduplicated |
|---------|------------|--------------|--------------------|
| [don] | ‘bush’ | [dondon] | ‘almost bush’ |
| [gunat] | ‘bird’ | [gunatgunat] | ‘butterfly’ |
| [halu] | ‘beach’ | [haluhalu] | ‘sand’ |
| [kʌtak] | ‘hand’ | [kʌtakʌtak] | ‘yam’ |
| [uli] | ‘sharp’ | [uliuli] | ‘nettles’ |

All base forms are one or two syllable words. The only case involving a three syllable word is [matekmatekɲʌ] ‘little things’, which has the derivational suffix /-ɲʌ/. It is unclear if reduplication is limited to two syllables or if it is applied before the derivational affix is attached. The result is the same.

There are two kinds of reduplication.¹ In the first kind, the base form exists independently. Words are reduplicated in full and the meaning is usually diminutive or lowering in semantic category, as shown in (58). In classifiers, reduplication usually indicates plurality.

In the second kind of reduplication, the base form does not exist independently, as shown in (59).

(59) Reduplication with no base form

| UF | Reduplicated | Gloss |
|-------------|--------------|-----------------|
| /RED+datʌ/ | [datʌndatʌ] | ‘bird species’ |
| /RED+gak/ | [gakgak] | ‘tree species’ |
| /RED+giniŋ/ | [giniŋginiŋ] | ‘naughty’ |
| /RED+kʌlʌk/ | [kʌlʌkʌlʌk] | ‘noise’ |
| /RED+nagat/ | [nagatnagat] | ‘fearful’ |
| /RED+oŋ/ | [oŋoŋ] | ‘housefly’ |
| /RED+tiŋgi/ | [tiŋgitiŋgi] | ‘bird species’ |
| /RED+ʈʌlu/ | [ʈʌluʈʌlu] | ‘winter squash’ |

¹ See S. Quigley (2002) for further discussion of reduplication.

These words include some cases of onomatopoeia, such as the name of a particular species of bird.² For example, [tiŋgilingi] is the perceived sound which that particular bird makes.

8.1.1 Reduplication morphophonemics

The initial /t/ in /tʌpʌ/ ‘CL.stick’ and /tʌbi/ ‘mucus’ and the initial /kʷ/ in /kʷʌlu/ ‘bamboo’ become [l] and [ɣw] after the reduplicant, as shown in (60).

(60) Reduplication with lenition

| UF | Gloss base | Reduplicated | Gloss reduplicated |
|-------------|---------------------|--------------|--------------------|
| /RED+tʌpʌ/ | ‘CL.stick singular’ | [tʌpʌlʌpʌ] | ‘CL.stick plural’ |
| /RED+tʌbi/ | ‘thick mucus’ | [tʌmbilʌmbi] | ‘thin mucus’ |
| /RED+kʷʌlu/ | ‘bamboo’ | [kʷʌluɣwʌlu] | ‘bamboo species’ |

When reduplication causes /t/ and /kʷ/ to occur between vowels, these consonants are lenited. This is accounted for by extending the lenition rule (Rule 7 on p.54) to reduplicant boundaries.

Rule 7 (b) Lenition

$$\begin{array}{c} C \\ \left[\begin{array}{c} -\text{cont} \\ -\text{voice} \end{array} \right] \end{array} \rightarrow \left[\begin{array}{c} +\text{cont} \\ +\text{voice} \end{array} \right] / \quad V \quad (_)_{\text{CL, RED}} \quad _ \quad V$$

There are no examples in the data of reduplication causing /p/ or /k/ to occur between vowels to determine whether or not they are included in this lenition process. For now, it is assumed that they would lenite.

Geminate clusters delete at reduplicant boundaries, as shown in (61).

(61) Reduplication with degemination

| UF | Gloss base | PR | Gloss reduplicated |
|-------------|--------------|-------------|--------------------|
| /RED+tut/ | ‘fingernail’ | [tutut] | ‘fence’ |
| /RED+kʌtak/ | ‘hand’ | [kʌtakʌtak] | ‘yam’ |
| /RED+kok/ | ‘intestines’ | [kokok] | ‘diarrhea’ |
| /RED+kʷak/ | ‘light’ | [kʷakʷak] | ‘bean’ |

This can be accounted for by extending degemination rule (2 on p.49) to reduplicant boundaries.

Rule 2 (a) Degemination

$$\begin{array}{c} C \\ [\alpha \text{ Feature}] \end{array} \rightarrow \emptyset / \quad _ \quad (_)_{\text{RED}} \quad _ \quad \begin{array}{c} C \\ [\alpha \text{ Feature}] \end{array}$$

The boundary condition for degemination (Rule 2 (a)) states that degemination is optionally extended to apply to reduplicant boundaries (but not other boundaries, such as classifiers).

² Dixon (1977) reports a similar situation in the Yidj language in Australia.

Unlike at other morpheme boundaries involving nouns, when consonant clusters are formed as a result of reduplication, deletion (Rule 8 on p.54) optionally occurs before voiceless stops in fast speech, as shown in (62).

(62) Reduplication with voiceless stops

| UF | Gloss base | PR (fast speech) | Gloss reduplicated |
|-------------|--------------|------------------|--------------------|
| /RED+kʌtum/ | ‘dumb’ | [kʌtukʌtum] | ‘retarded’ |
| /RED+kekem/ | ‘wrong’ | [kekekekem] | ‘wrong’ |
| /RED+kep/ | ‘ground’ | [kekep] | ‘field’ |
| /RED+kupit/ | ‘dry’ | [kupikupit] | ‘dried’ |
| /RED+palʌm/ | ‘boil’ | [palʌpalʌm] | ‘boil’ |
| /RED+put/ | ‘bend’ | [puput] | ‘knuckle’ |
| /RED+tobik/ | ‘care taker’ | [tobitobik] | ‘orphan’ |

In fast or continuous speech, the final stop on the left root deletes at the reduplicant boundary before voiceless stops. In slow speech, only geminates delete. So, in fast speech, deletion takes the form shown as Rule 8.

Rule 8 (b) Deletion

$$C \rightarrow \emptyset \quad / \quad ___ \quad (_]_{CL, RED}) \quad C$$

$$\left[\begin{array}{l} \text{-cont} \\ \text{-voice} \end{array} \right]$$

The boundary condition for deletion in Rule 8 (b) states that deletion is optionally extended to apply to classifier and reduplicant boundaries.

When reduplication is applied to nouns, deletion does not occur before voiced stops, as shown in (63).

(63) Reduplication with voiced consonants

| UF | Gloss base | Reduplicated | Gloss reduplicated |
|-----------------|------------------|----------------|-----------------------|
| /RED+bʌlʌŋ/ | ‘leg’ | [bʌlʌmbʌlʌŋ] | ‘legs’ |
| /RED+dasiŋ/ | ‘how’ | [dasiŋdasiŋ] | ‘how many’ |
| /RED+don/ | ‘property’ | [dondon] | ‘bush, property’ |
| /RED+gataʔk/ | ‘to stick’ | [gataʔkgataʔk] | ‘sticky, sticky seed’ |
| /RED+gʌtam/ | ‘large nut’ | [gʌtamgʌtam] | ‘nut species’ |
| /RED+guŋat/ | ‘bird’ | [guŋakguŋat] | ‘butterfly’ |
| /RED+gʷak/ | ‘sprout’ | [gʷakgʷak] | ‘traditional bean’ |
| /RED+matek -ŋʌ/ | ‘small singular’ | [matekmatekŋʌ] | ‘small plural’ |
| /RED+mulup/ | ‘dust’ | [mulupmulup] | ‘dust’ |
| /RED+yibik/ | ‘live’ | [yibikyibik] | ‘life style’ |

As shown in (63) with [dasiŋdasiŋ] ‘how many’, dorsal assimilation (Rule 1 on p.48) does not occur with voiced stops. By claiming that reduplicant boundaries are different from other morpheme boundaries, dorsal assimilation is not applied here.

Some possible examples of irregular deletion are shown in (64). However, it is unclear if all these words are examples of reduplication.

(64) Other cases of deletion

| UF | Gloss base | Reduplicated | Gloss reduplicated |
|------------------|----------------|--------------|--------------------|
| 1. /RED+imin/ | ‘who singular’ | [imiimin] | ‘who.PLURAL’ |
| 2. /RED+miŋ/ | ‘mother’ | [mimiŋ] | ‘aunt’ |
| 3. /RED+ipmΛ -k/ | ‘cut -3S.PRES’ | [ipmΛipmΛk] | ‘drizzle’ |

Example 1 in (64) has the nasal /n/ deleting before the vowel /i/ at the reduplicant boundary. Nasals do not normally delete intervocalically. So, this is an irregular form that must be listed in the lexicon.

Example 2 has a lingual nasal deleting before a labial nasal at the reduplicant boundary. This is the only example of nasal clusters across the reduplicant boundary. Until there is more evidence for modifying a deletion rule to account for nasal deletion, this word is listed in the lexicon as /mimiŋ/ ‘aunt’.

It is unclear if the UF for Example 3 should be /RED+ipmΛ -k/ ‘RED+cut -3S.PRES’. There are no other cases of verbs reduplicating. The base form and reduplicant form have very different meanings. It is also unclear why /k/ or [g] is missing at the reduplicant boundary. This word is listed in the lexicon as /ipmΛipmΛk/ ‘drizzle’.

There are two suspicious forms of reduplication in the data, as shown in (65).

(65) Suspicious Reduplication

| PR | Gloss |
|--------------|---------|
| 1. [mΛpmaʔk] | ‘mud’ |
| 2. [mupmut] | ‘chest’ |

In Example 1 of (65), /k/ becomes [p] before /m/ at the posited reduplicant boundary. Since there are counter examples, such as [matekmatekŋΛ] ‘little’ that do not have /k/ becoming [p] before /m/, [mΛpmaʔk] is posited in the lexicon as /mΛpmaʔk/. Example 2 is also listed in the lexicon as /mupmut/ ‘chest’.

8.2 Compounds

Compounding is fairly common in Awara and is not limited to fixed syntactic or semantic categories. Compounds can be nouns, verbs, or classifiers.³ There are two kinds of compounding. The first is where both roots are separate words, as shown in (66).

(66) Compounds

| UF | Gloss | Compound | Compound gloss |
|---------------|-----------------|--------------|---------------------|
| /alak+katΛp/ | ‘bamboo+fire’ | [alakatΛp] | ‘torch’ |
| /bΛlΛŋ+tok/ | ‘leg+pain’ | [bΛlΛtok] | ‘uselessly’ |
| /dΛki+ʔom/ | ‘wood+CL.place’ | [dΛkiʔom] | ‘smouldering stick’ |
| /gulΛk+salin/ | ‘neck+seed’ | [gulΛksalin] | ‘Adam’s apple’ |

³ When nouns are compounded to classifiers the distinction is blurred between the words being an actual compound or whether it is just the classifier being bound to the noun.

| | | | |
|---|-------------------|--|-------------------|
| /g ^w ame+ b abak/ | 'pitpit+son' | [g ^w ame b abak] | 'insect species' |
| /hak ^Λ +min ^Λ / | 'bird+mother' | [hak ^Λ min ^Λ] | 'bush fowl' |
| /ibat ^Λ +amin/ | 'illness+man' | [ibat ^Λ amin] | 'sick person' |
| /kep+yamun/ | 'ground+quake' | [kepyamun] | 'earthquake' |
| /puy ^Λ +don/ | 'garden+property' | [puy ^Λ ndon] | 'old garden' |
| /tak ^w an+salin/ | 'holy+seed' | [tak ^w an ^Λ salin] | 'black palm seed' |
| / b am+g ^Λ am ^Λ n/ | 'talk+red' | [b amg ^Λ am ^Λ n] | 'scolding' |
| /yag ^Λ +sanut/ | 'water+lid' | [yag ^Λ sanut] | 'fern' |

The second kind of compound, shown in (67), is where one of the roots is not known as a separate word.

(67) Cranberry compound examples

| UF | Gloss | Compound | Compound gloss |
|-----------------|----------------|----------------|------------------|
| /gulʌk+bikat/ | ‘neck+?’ | [gulʌkbikat] | ‘plant species’ |
| /katak+pʌpʌk/ | ‘hand+?’ | [katapʌpʌk] | ‘handle’ |
| /katʌtek+mʌmʌn/ | ‘elbow+?’ | [katʌtekmʌmʌn] | ‘frog species’ |
| /kok+dek/ | ‘intestines+?’ | [kokdek] | ‘toilet’ |
| /nan+gamin/ | ‘father+?’ | [nangamin] | ‘insect species’ |

There are CC, CV, and VC sequences but no recorded VV sequences across morpheme boundaries in compounds.

8.2.1 Compound morphophonemics

There is one compound [alʌkʌtʌp] ‘torch’ that has a geminate cluster whose first consonant deletes, as shown in (68).

(68) Compounds with degemination

| UF | Gloss | PR | Compound gloss |
|--------------|---------------|------------|----------------|
| /aɭak+katɒp/ | 'bamboo+fire' | [aɭakɒtɒp] | 'torch' |

Degemination can be accounted for by extending degemination (Rule 2) to compound boundaries.

Rule 2 (b) Degemination

$$\begin{array}{ccc} \mathbf{C} & \rightarrow \emptyset / \text{---} & (\text{RED, CPD}) \\ [\alpha \text{ Feature}] & & \mathbf{C} \\ & & [\alpha \text{ Feature}] \end{array}$$

In compounds like [ʌmitʌpa] ‘sorcerer’, where the word on the right begins with a voiceless stop (/tʌpa/ ‘CL.stick’), the final consonant of the word on the left (/ʌmin/ ‘person’) deletes before the voiceless stop, as shown in (69).

(69) Compounds with deletion

| UF | Gloss | Compound | Compound gloss |
|-------------|-------------------|-----------|----------------|
| /Λmin+tΛpΛ/ | ‘person+CL.stick’ | [ΛmitΛpa] | ‘sorcerer’ |

| | | | |
|----------------|--------------------|--------------|------------------|
| /bʌlʌŋ+tok/ | ‘leg+pain’ | [bʌlʌtok] | ‘uselessly’ |
| /kuhit+palan/ | ‘head+thorn’ | [kuhipalan] | ‘insect species’ |
| /mekŋʌn+kubit/ | ‘forest+I will go’ | [mekŋʌkubit] | ‘bird species’ |
| /yayin+kuhit/ | ‘step+head’ | [yayikuhit] | ‘fence’ |

These examples are accounted for by extending deletion (Rule 8 on p.54) to compound boundaries.

Rule 8 (c) Deletion

$$C \rightarrow \emptyset / \text{---} ([_{CL, RED, CPD}) \quad C \begin{bmatrix} -cont \\ -voice \end{bmatrix}$$

Since there are [ŋt] clusters that do not assimilate (e.g. /bʌlʌŋ+tok/ is [bʌlʌtok] not *[bʌlʌkok], as shown in (69), classifier dorsal assimilation (Rule 16 on p.67) is apparently not applied to compounds.

There are other compounds not subject to deletion, as shown in (70).

(70) Compounds with no deletion

| UF | Gloss | Compound | Compound gloss |
|---------------|------------------------------|--------------|---------------------|
| /kep+yamun/ | ‘ground+quake’ | [kepyamun] | ‘earthquake’ |
| /mʌŋʌt+dʌkʌ/ | ‘girl+CL.thick’ | [mʌŋʌtdʌkʌ] | ‘pitpit species’ |
| /nop+dak/ | ‘ripe+blood’ | [nopdak] | ‘ripe’ |
| /bʌm+gʌmʌn/ | ‘talk+red’ | [bʌmgʌmʌn] | ‘scolding’ |
| /bʌm+yayak/ | ‘speech+loose’ | [bʌmyayak] | ‘speaker’ |
| /bʌnʌm+hakʌt/ | ‘cassowary+yellow’ | [bʌnʌmhakʌt] | ‘cassowary species’ |
| /bʌbak+dʌkʌ/ | ‘son+CL.thick’ | [bʌbakdʌkʌ] | ‘child’ |
| /ya-pʌn+ya-k/ | ‘talk -3S.-DS+talk -3S.PAST’ | [yabʌnyak] | ‘question’ |

As with noun and reduplication morphophonemics, the final segment of the left compound element does not delete before voiced consonants.

Deletion of voiceless stops at compound boundaries with voiceless stop sequences is not applied consistently in compounds, as shown in (71).

(71) Inconsistent deletion examples

| UF | Gloss | Compound | Gloss whole |
|---------------|---------------|--------------|---------------|
| /kutap+kupit/ | ‘yam+black’ | [kutapkupit] | ‘yam species’ |
| /gusit+kayi/ | ‘day/sun+eye’ | [gusitkayi] | ‘sun’ |

It is unclear if these are examples of slow speech (not deleted) rather than fast speech (deleted). Further testing is required to clarify the facts. Either way, only in cases of geminate clusters is deletion applied consistently in both slow and fast speech.

There are two compounds where the right word is /s/-initial, shown in (72).

(72) Deletion before /s/-initial right noun

| UF | Gloss | Compound | Compound gloss |
|-------------------|--------------|--------------|-------------------|
| 1. /takʷʌn+salin/ | ‘holy+seed’ | [takʷʌsalin] | ‘black palm seed’ |
| 2. /hup+salin/ | ‘stone+seed’ | [hupsalin] | ‘coin’ |

These are problematic. In example 1, /n/ deletes before /s/ but in example 2 /p/ does not delete before /s/.

There are examples of lenition not applying to compounds, as shown in (73). These are cases of final consonants on left elements not leniting before initial vowels on right elements.

(73) Compounds without lenition

| UF | Gloss | Compound | Compound gloss |
|--------------|-----------------|-------------|----------------|
| /banip+Λmin/ | ‘inside+person’ | [bΛnipΛmin] | ‘believer’ |
| /ibat+Λmin/ | ‘illness+man’ | [ibatΛmin] | ‘sick person’ |

There are also examples of lenition applying to compounds, as shown in (74). These are cases of vowel-final left compounds and consonant-initial right compounds.

(74) Possible lenition in compounds

| UF | Gloss | Compound | Compound gloss |
|-----------------------------|-----------------|---------------------------|--------------------|
| /apu + ku/ | ‘come+go’ | [apuɡu] | ‘go by’ |
| /buta+kupit/ | ‘pandanus+dark’ | [butaɡuwik] | ‘pandanus species’ |
| ?/k ^w ata+kalen/ | ?+? | [k ^w ataɡalen] | ‘fern’ |

Lenition (Rule 7 on p.54) can be extended to account for /k/ becoming [ɡ] at compound boundaries.

Rule 7 (c) Lenition

$$\begin{bmatrix} C \\ -cont \\ -voice \end{bmatrix} \rightarrow \begin{bmatrix} +cont \\ +voice \end{bmatrix} / V \quad (]_{CL, RED, CPD}) \quad \text{---} \quad V$$

Lenition (Rule 7 (c)) states that initial voiceless stops on right compounds lenite after left compound-final vowels. As stated, lenition does not apply to the final consonant of the left-compound word when it occurs before a right compound-initial vowel, as shown in (73).

8.3 Compounding with possible reduplication

There is one possible case of compounding occurring with reduplication in the word ‘wisdom’ [natΛndetdet]; there are two possible analyses, as shown in (75).

(75) Compounding and reduplication combined

| UF | Gloss | Compound |
|----------------------|-------------------|---------------|
| 1. /natΛp + RED+det/ | ‘perceive+detach’ | [natΛndetdet] |
| 2. /natΛpdet+det/ | ‘learn+detach’ | [natΛndetdet] |

option 1 involves reduplication with compounding and option 2 only compounding. With regards to option 1, /natΛp/ ‘perceive’ exists independently, but no other examples of /RED+det/ occur elsewhere. However, in support of option 2, both /natΛpdet/ ‘learn’ and /det/ ‘detach’ occur independently. The preferred analysis for [natΛndetdet] ‘wisdom’ is therefore option 2.

9 *Verb morphophonemics*

Awara uses affixes on the verb to mark both subject and object agreement as well as aspect and modality. Verb prefixes mark object agreement and are discussed in §9.6. Awara's subject agreement suffixes indicate a combination of tense, modality and person and number, and are to a certain extent suppletive.¹ For this description, they are analysed as a single paradigm suffix as has been done for the nearby languages—Wantoat, Irumu, Nankina, and Nahu (see Table F.3 in Appendix F for further discussion on this topic). The structure of the verb suffix morphology is shown in Table 9.1 on p.77.

Most of the combined subject agreement suffixes have alternate initial-segment forms. These suffixes are called Set 1 suffixes. For example, the 3S.PAST tense has the forms [-kut] and [-but], and the 3S.FUT tense has the forms [-pik], [-bik], and [-ɸik]. Verb suffixes that do not have alternate initial-segment forms are called Set 2 suffixes. One example is the 2S.PRES tense suffix, which only has the form [-lak]. These three agreement suffixes are shown with several verb roots in (76). A summary of the two verb suffix sets is shown in Table 9.2 on p.78.

(76) Example paradigms of Set 1 and Set 2 verb suffixes

| | Set 1 examples | | Set 2 example |
|-----------|--------------------------|--------------------------------|-------------------|
| Gloss | 3S.PAST [-kut]~[-but] | 3S.FUT [-pik]~[-bik]~[-ɸik] | 2S.PRES [-lak] |
| 'sew' | [bupbut] | [bupik] | [bupmɔlak] |
| 'cut' | [matɔkut] | [matɔɸik] | [matɔlak] |
| 'eat' | [nakut] | [nɔpik] | [nɔlak] |
| 'drink' | [taŋopbut] | [taŋopik] | [taŋolɔlak] |
| 'come up' | [akopbut] | [akopik] | [akolɔlak] |
| 'wash' | [halukut] | [haluɸik] | [halulɔlak] |
| 'throw' | [mukut] | [mumbik] | [mulɔlak] |

Morphologically based justification for positing two suffix sets is presented in detail in §9.1 and §9.2. There are two distinctions between the two sets. The first is that Set 1 suffixes combine subject agreement with tense or mood whereas Set 2 does not. The second distinction

¹ Suppletive marking for these categories is common in many Papuan languages including Wantoat (Davis 1964), Nankina (Spaulding 1993), Irumu (R. Webb and L. Webb 1992b), Umbu-Ungu (Head 1993) and Kewapi (Yarapea 1993).

Table 9.1 Chart of verbal suffix morphology

| | Temporal | Aspect | Subject agreement | Enclitics |
|------|--------------------------------|-----------------------------------|--|----------------------|
| ROOT | PERSISTENT DURATIVE SOON | IMPERFECTIVE DYNAMIC STATIC | Final Verbs <i>Tense</i> PAST PRESENT FUTURE <i>Imperative</i> IMMEDIATE IMPERATIVE <i>Irrealis</i> APPREHENSION PROBABLE HYPOTHETICAL Medial Verbs <i>Same-subject</i> PERFECTIVE DURATIVE IMPERFECTIVE <i>Different-subject</i> | CONDITIONAL after |

is that the combined subject agreement suffixes (i.e. Set 1) exhibit alternate surface forms whereas the other suffixes do not.²

Awara verb roots do not exist in isolation. Since it was impossible for my language consultant to say a verb root without a subject agreement suffix attached, verb roots and subject agreement suffixes are coanalysed.

Verb roots pattern into five main groups based on the final part of the root. They are [mʌ]-final, [vowel]-final, [p]-final, [t]-final and [V]~[t]-final. The main contrast is seen with the 2S.IMM, 1D.IMM, and 3S.PRES forms, as shown in (77).³

(77) Verb groups

| Group | Gloss | 2S.IMM | 1D.IMM | 3S.PRES |
|-----------|--------------|-------------------|----------------------|----------|
| mā-final | ‘sew’ | [bupmʌŋ] | [bupda] | [bupmʌk] |
| V-final | ‘cut’ | [matʌŋ] | [matʌta] | [matʌk] |
| p-final | ‘drink’ | [taŋop] | [taŋopda] | [taŋok] |
| t-final | ‘wash’ | [halut] | [halutda] | [haluk] |
| V~t-final | ‘pick it up’ | [butuŋ] ~ [butut] | [bututa] ~ [bututda] | [butuk] |

² If the present tense suffix set and the 2S.IMM suffix are analysed as the unmarked case, then they are not combined and are morphologically similar to the other suffixes in Set 2.

³ The orthographic form for the phoneme /ʌ/ is *ä*, used here in the label for [mʌ]-final verbs.

Table 9.2 Suffix sets

| Set 1: Alternate form | Set 2: No alternate form |
|--------------------------|--------------------------|
| <i>Tense</i> | <i>Tense</i> |
| PAST | PRESENT |
| FUTURE | <i>Aspect</i> |
| <i>Imperative</i> | DYNAMIC IMPERFECTIVE |
| IMMEDIATE | STATIC IMPERFECTIVE |
| IMPERATIVE | <i>Temporal</i> |
| <i>Irrealis</i> | PERSISTENT |
| APPREHENSION | DURATIVE |
| HYPOTHETICAL | SOON |
| PROBABLE | <i>Modal Nouns</i> |
| <i>Different-Subject</i> | DEONTIC |
| | PURPOSE |
| | <i>Same-Subject</i> |
| | <i>Benefactive</i> |

The 1D.IMM forms of the verb consistently end in [-ta]~[-da] and the 3S.PRES forms of the verb consistently end in [k]. So it is assumed that [-ta]~[-da] is 1D.IMM and /-k/ is 3S.PRES. The verb ‘cut’ (V-final) is consistently [matΛ], so /matΛ/ can be posited as the UF, and that means [-ŋ] is 2S.IMM.

All V-final verbs end in a vowel before the three suffixes. Most mā-final verbs have a short form ending in [p] before 1D.IMM and a long form consisting of the short form + [mΛ] before 2S.IMM and 3S.PRES. The few mā-final verbs that do not have a short form ending in [p] will be discussed in §9.4.1. All p-final verbs have allomorphs ending in [p] before 2S.IMM (with no [ŋ]) and 1D.IMM, and [V] before 3S.PRES. All t-final verbs are like p-final verbs except that they have [t] instead of [p]. Finally, all V~t-final verbs have two alternate surface forms, one that patterns like V-final verbs and one that patterns like t-final verbs.⁴

It is assumed that the UF for mā-final verbs ends in /-p(mΛ)/, the UF for V-final verbs end in a vowel, the UF for p-final verbs ends in /p/, and the UF for t-final verbs ends in /t/. The alternation in mā-final roots is determined by the suffix. Set 1 suffixes take the short form, and Set 2 suffixes take the long form.

There are at least three options for analysing V~t-final verbs. One option lists both alternate forms in the lexicon. A second option lists the V-final form in the lexicon specified for an optional minor insertion to rule apply to insert a final [t] before all other morphophonemic rules are applied. A third option lists the t-final form in the lexicon specified for an optional minor deletion rule to remove the final /t/ before all other morphophonemic rules are applied. Option one is not preferred since it posits two forms in the lexicon. For now, option three is assumed and justification will be presented later in §9.4.5.

⁴ This is very common in the Tawaya village dialect. However, it is unknown to what extent other villages do the same.

All verbs pattern in one of these five verb groups. Each verb group has a minor variant that will be discussed later in §9.4.

9.1 Set 1 verb suffix morphophonemics

9.1.1 [ŋ]~[∅] alternation: the 2S.IMM suffix

The second singular immediate forms of verbs have the following final segments: mā-final and V-final verbs end in [ŋ], p-final verbs end in [p], and t-final verbs end in [t], as shown in Table 78.

(78) 2S.IMMEDIATE [ŋ]~Null

| UF | Gloss | 2S.IMM |
|-----------|---------|----------|
| /bup(mΛ)/ | ‘sew’ | [bupmΛŋ] |
| /matΛ/ | ‘cut’ | [matΛŋ] |
| /taŋop/ | ‘drink’ | [taŋop] |
| /halut/ | ‘wash’ | [halut] |

Several analyses are possible to account for these verb forms ending in [ŋ], [p], or [t]. One possibility follows Wantoat (Davis 1964) where 2S.IMM is [-ŋ] after vowels (mā-final long form and V-final verbs), [-p] after p-final verbs and [-t] after t-final verbs with geminate consonants deleting.

A second option is that 2S.IMM is null. This assumes that mā-final verbs are /mΛŋ/-final, V-final verbs are /Vŋ/-final, p-final are /p/-final, and t-final are /t/-final.

A third option assumes 2S.IMM is /-ŋ/ and the phoneme /ŋ/ deletes after consonants.

The first option does not give any significant insight and puts all allomorphs in the lexicon. The second option requires an analysis of the alternation of [ŋ] and null at the end of mā-final and V-final verbs. There are at least two ways of analysing it. The first assumes two lexical forms (/matΛŋ/ and /matΛ/ for ‘cut’). The /ŋ/-final form is used when the root is word-final, and the vowel-final form is used when the root is followed by a suffix (see V-final examples in (77 on p.77)). This analysis is not preferred because it posits two lexical forms. The second way assumes that V-final verbs and the long form of mā-final verbs are /ŋ/-final and a verb specific nasal deletion rule is applied before all other verb suffix morphophonemic processes. For example, /matΛŋ-da/ ‘cut -1D.IMM’ would require the final /ŋ/ to delete first to produce the form [matΛta] not *[matΛnda] (as discussed in §9.1.2). However, this is still less desirable since nasals do not always delete. For example, the noun /sadun-dΛ/ ‘axe -ABLATIVE’ is [sandundΛ] not *[sandutΛ] (see (35) on p.51).

The preferred option is the third where it is assumed that the UF for the 2S.IMM is /-ŋ/ and the phoneme /ŋ/ deletes after consonants (as in /taŋop-ŋ/ is [taŋop] ‘Drink it!’ and /halut-ŋ/ is [halut] ‘Wash it!’). This option supports the assumptions made regarding V-final verbs and the long form of mā-final verbs as vowel-final.

A deletion rule can be formulated to account for the nasal deleting after consonants.

Rule 17 Nasal deletion

$$\begin{array}{c} \text{C} \\ [+nasal] \end{array} \rightarrow \emptyset / \text{C} ______]_{\sigma}$$

Nasal deletion states that a nasal-final segment on a syllable deletes if it immediately follows another consonant. Since [CN] clusters exist at morpheme boundaries, nasal deletion is limited to syllable boundaries. Nasal deletion is not crucially ordered.

There are no other verb suffixes that pattern like the 2S.IMM suffix.

9.1.2 [t]~[d] alternation

As shown in (79), the 1D.IMM is realised as [-ta] after V-final verbs, and [-da] after p-final verbs, t-final verbs, and the short form of mā-final verbs.

(79) 1D.IMMEDIATE t~d alternation: [-ta]~[-da]

| UF | Gloss | 1D.IMM |
|-----------|---------|-----------|
| /bup(mΛ)/ | ‘sew’ | [bupda] |
| /matΛ/ | ‘cut’ | [matata] |
| /taŋop/ | ‘drink’ | [taŋopda] |
| /halut/ | ‘wash’ | [halutda] |

Since 1D.IMM patterns like the ablative suffix (6.1.4), it can be assumed that its UF is /-da/ and that devoicing (Rule 5 on p.52) accounts for /-da/ becoming [-ta] after vowels.

The 1D.IMM does not have a [-ga] alternate. Since 1D.IMM otherwise patterns identically to the ablative suffix and there is no indication that dorsal assimilation (Rule 1 on p.48) does not apply to verbs, this implies that there are no velar-final verb roots.

Other verb suffixes that pattern like the 1D.IMM are listed in (80).

(80) t~d verb suffixes

| | |
|-----------------|--------|
| 1D.IMMEDIATE | /-da/ |
| 1D.HYPOTHETICAL | /-dam/ |
| 1D.DS | /-da/ |

9.1.3 [h]~[s] alternation

As shown in (81), the 23D.IMPERATIVE is realised as [-hon] after V-final verbs and [-son] elsewhere.

(81) 23D.IMPERATIVE: h~s alternation [-hon] ~ [-son]

| UF | Gloss | 23D.IMP |
|-----------|---------|------------|
| /bup(mΛ)/ | ‘sew’ | [bupson] |
| /matΛ/ | ‘cut’ | [matΛhon] |
| /taŋop/ | ‘drink’ | [taŋopson] |
| /halut/ | ‘wash’ | [haluson] |

Since 23D.IMP patterns identically to the 2S.GEN /-hΛ/ (see Table 44 on p.59), the UF for 23D.IMP is posited as /-hon/ and the h-fortition rule (Rule 14 on p.59) accounts for 23D.IMP becoming [-son] after consonants.

To account for the final /t/ in t-final verbs deleting, but not the final /p/ in p-final verbs, the following deletion rule is applied.

Though several analyses are possible, the least problematic and most economical⁵ posits /-gut/ for the 3S.PAST UF (though [g] is not an alternate surface form⁶) and /-gʊt/ for the 23P.IMM UF. Devoicing (Rule 5 on p.52) accounts for /g/ becoming [k] after vowels. Fortition (Rule 4 on p.51) accounts for /g/ becoming a voiced stop ([g]) after consonants.

Two verb-specific rules need to be posited; one to account for labial assimilation after mā-final and p-final verbs, and another for the final /t/ in t-final verbs deleting before Devoicing (Rule 5) and Fortition (Rule 4) are applied.

A labial assimilation rule is posited for verbs to account for /g/ becoming [b] after consonants.

Rule 19 Labial assimilation (restricted to verbs)

$$\begin{array}{ccc} \text{C} & \rightarrow & [+labial] \\ [+dorsal] & & \end{array} \quad / \quad \begin{array}{ccc} \text{C} & &]_{[S1]} \\ [+labial] & & \end{array} \quad \text{—}$$

Labial assimilation states that a dorsal consonant becomes labial after a verb-final labial consonant at morpheme boundaries with Set 1 verb suffixes (S1). Labial assimilation must be restricted to dorsals since coronals do not assimilate (e.g. /taŋop -da/ ‘drink -1D.IMM’ is [taŋopda] ‘Let us drink!’ not *[taŋopba]). Labial assimilation is in a mutual bleeding (bleeding and counterbleeding) relationship with coronal assimilation (Rule 6), as shown in Table 9.4 with the example /taŋop -gut/ ‘drink -3S.PAST’.

Since there is justification for the UF of t-final verbs being /t/-final, a coronal deletion rule for verbs must be applied to account for /t/ deleting before Fortition (4) is applied in order to get the form [halukut] ‘he washed it’ from /halut -gut/ ‘wash -3S.PAST’. However it is impossible to modify coronal deletion (18) so that coronals are deleted before voiced labials, voiced dorsals, and voiceless coronals, but not voiced coronals such as in [halutda] ‘let us wash’ from /halut -da/ ‘wash-1D.IMM’. Thus, a second coronal deletion rule is posited for verbs.

Table 9.4 Labial assimilation (Rule 19) mutually bleeds coronal assimilation (Rule 6)

| UF | /taŋop -gut/ | UF | /taŋop -gut/ |
|----------------------|--------------|----------------------|--------------|
| Labial assimilation | taŋopbut | Coronal assimilation | taŋopdut |
| Coronal assimilation | — | Labial assimilation | — |
| PR | [taŋopgut] | PR | *[taŋopdut] |
| Gloss | ‘He drank.’ | | |

⁵ Other analyses considered required the addition of more verb specific rules to be applied thus adding to the complexity of the overall system.

⁶ One supporting argument for the UF being /g/-initial is that in most Awara dialects, the allomorphs are [-kut] ~ [-gʊt], not [-but]. The Central dialect, described in this book, has an additional process to labialise verb suffix dorsals after labials.

Table 9.5 Coronal deletion 2 (Rule 20) feeds devoicing (Rule 5)

| UF | /halut -gut/ | UF | /halut -gut/ |
|--------------------|--------------|--------------------|--------------|
| coronal deletion 2 | halugut | Devoicing | — |
| Devoicing | halukut | coronal deletion 2 | halugut |
| PR | [halukut] | PR | *[halugut] |
| Gloss | ‘He washed.’ | | |

Table 9.6 Coronal deletion 2 (Rule 20) bleeds fortition (Rule 4)

| UF | /halut -gut/ | UF | /halut -gut/ |
|--------------------|--------------|--------------------|--------------|
| coronal deletion 2 | halugut | Fortition | halutkut |
| Fortition | — | coronal deletion 2 | halukut |
| PR | [halugut] | PR | *[halukut] |
| Gloss | ‘You wash!’ | | |

Table 9.7 Coronal deletion 2 (Rule 20) bleeds h-fortition (Rule 14)

| UF | /halut -hon/ | UF | /halut -hon/ |
|--------------------|--------------|--------------------|--------------|
| h-fortition | halutson | coronal deletion 2 | haluhon |
| coronal deletion 2 | — | h-fortition | — |
| Coronal deletion | haluson | Coronal deletion | — |
| PR | [haluson] | PR | *[haluhon] |
| Gloss | ‘You wash!’ | | |

Rule 20 Coronal deletion 2 (restricted to verbs)

$$\begin{array}{ccc} \text{C} & \rightarrow & \emptyset / \text{ — }]_{\text{S1}} \text{C} \\ [+coronal] & & [-coronal] \end{array}$$

Coronal deletion 2 states that verb-final coronal consonants are deleted before [-coronal] consonants in Set 1 verb suffixes. Coronal deletion 2 feeds devoicing (Rule 5 on p.52) as shown in Table 9.5 with the example /halut -gut/ ‘wash -3S.PAST’.

Coronal deletion 2 (Rule 20) bleeds fortition (Rule 4 on p.51), as shown in Table 9.6 with the example /halut -gut/ ‘wash -23D.IMM’. It is in a mutual bleeding relationship (bleeding and counterbleeding) with h-fortition (Rule 14 on p.59), as shown in Table 9.7 with the example /halut -hon/ ‘wash -23D.IMP’.

Other suffixes that pattern like the 3S.PAST are listed in (84).

(84) *k~b* verb suffixes

| | |
|----------|-----------|
| 1S.PAST | /-gum/ |
| 2S.PAST | /-gulΛk/ |
| 3S.PAST | /-gut/ |
| 1D.PAST | /-gumΛk/ |
| 23D.PAST | /-gumΛΛk/ |
| 1P.PAST | /-gumΛŋ/ |
| 23P.PAST | /-gin/ |

The only suffix that patterns like the 23P.IMM is the 23D.IMM /-gum/.

9.1.5 [y]~[s] alternation

As shown in (85), the 2S.IMP is realised as [-yo] after V-final and t-final verbs and [-so] after p-final verbs and the short form of mǎ-final verbs.

| (85) | UF | Gloss | 2S.IMP |
|------|-----------|---------|-----------|
| | /bup(mΛ)/ | ‘sew’ | [bupso] |
| | /matΛ/ | ‘cut’ | [matΛyo] |
| | /taŋop/ | ‘drink’ | [taŋopso] |
| | /halut/ | ‘wash’ | [haluyo] |

As with the 3S.PAST and 23P.IMM suffixes, the final /t/ in t-final verbs deletes before other morphophonemic processes apply, causing t-final verbs to act like vowel-final verbs (V-final verbs).

To assume that the UF for the 2S.IMP is /-so/ and an s-lenition rule generates [-yo] after vowels is problematic because of suffixes like /-hon/ 23D.IMP. This is because the s-lenition rule would also apply to these suffixes, as shown in Table 9.8 with the examples /halut -hon/ ‘wash -23D.IMP’ and /halut -so/ ‘wash -2S.IMP’.

H-fortition (Rule 14 on p.59) is applied before coronal deletion (Rule 18 on p.81). S-lenition would be applied after coronal deletion so that /halut -so/ ‘wash -2S.IMP’ would become [haluyo]. Yet, the resulting derivation of /halut -hon/ ‘wash -23D.IMP’ to [haluson] would feed s-lenition resulting in an incorrect surface form *[haluyon].

Table 9.8 Derivation under an analysis involving s-lenition

| UF | /halut -hon/ | /halut -so/ |
|------------------|-----------------|------------------------|
| h-fortition | halutson | — |
| Coronal deletion | haluson | haluso |
| s-lenition | haluyon | haluyo |
| PR | *[haluyon] | [haluyo] |
| Gloss | ‘You two wash!’ | ‘You (singular) wash!’ |

Table 9.9 Coronal deletion 2 (Rule 20) bleeds y-fortition (Rule 21)

| UF | /halut -yo/ | UF | /halut -yo/ |
|--------------------|-------------|--------------------|-------------|
| Coronal deletion 2 | haluyo | y-fortition | halutso |
| y-fortition | — | Coronal deletion 2 | — |
| Coronal deletion | — | Coronal deletion | haluso |
| PR | [haluyo] | PR | *[haluso] |
| Gloss | ‘You wash!’ | | |

Table 9.10 Y-fortition (Rule 21) bleeds nasalisation (Rule 3)

| | | | |
|--------------|--------------|--------------|-------------|
| UF | /taŋop -yo/ | UF | /taŋop -yo/ |
| Y-fortition | taŋopso | Nasalisation | taŋopno |
| Nasalisation | — | Y-fortition | — |
| PR | [taŋopso] | PR | *[taŋopno] |
| Gloss | ‘You drank!’ | | |

Thus, the UF for the 2S.IMP must be /-yo/, which becomes [-so] after consonants.⁷ A fortition rule is posited to account for /y/ becoming [s] after consonants.

Rule 21 y-fortition (restricted to verbs)

$$y \rightarrow s / C] [s_1 \text{ ---}$$

Y-fortition states that a /y/-initial Set 1 verb suffix is realised as [s]-initial after a consonant. coronal deletion 2 (Rule 20 on p.83) is in a mutual bleeding relationship (bleeding and counterbleeding) with y-fortition, as shown in Table 9.9 with the example /halut -yo/ ‘wash -2S.IMP’.

Y-fortition (Rule 21) must be restricted to verbs because the /y/ in /-yΛ/ ‘after’ becomes a nasal rather than /s/ after consonants (§6.1.3). Y-fortition mutually bleeds nasalisation (Rule 3 on p.50), as shown in Table 9.10 with the example /tanop -yo/ ‘drink -2S.IMP’.

Other verb suffixes that pattern like the 2S.IMP are shown in (86).

(86) $y \sim s$ verb suffixes

- | | |
|-----------------|--------|
| 1S.IMPERATIVE | /-yot/ |
| 2S.IMPERATIVE | /-yo/ |
| 3S.IMPERATIVE | /-yok/ |
| 1S.APPREHENSION | /-yΛt/ |
| 2S.APPREHENSION | /-yΛ/ |
| 3S.APPREHENSION | /-yΛk/ |

⁷ The Southern dialect uses just the [-yo] form for 2S.IMP.

Table 9.11 Coronal deletion 2 (Rule 20) feeds lenition (Rule 7)

| UF | /halut -pik/ | UF | /halut -pik/ |
|--------------------|--------------------|--------------------|--------------|
| Coronal deletion 2 | halupik | Lenition | — |
| Lenition | halubik | Coronal deletion 2 | halupik |
| PR | [halubik] | PR | *[halupik] |
| Gloss | ‘He will wash it.’ | | |

9.1.6 [p]~[b]~[b̥] alternation

As shown in (87), the 3S.FUT suffix is realised as [-pik] after p-final verbs and the short form of mā-final verbs and [-b̥ik] after V-final and t-final verbs.

(87)

| UF | 3S.FUT | gloss |
|-----------|------------|---------------------|
| /bup(mΛ)/ | [bupik] | ‘He will sew it.’ |
| /matΛ/ | [matΛb̥ik] | ‘He will cut it.’ |
| /taŋop/ | [taŋopik] | ‘He will drink it.’ |
| /halut/ | [halub̥ik] | ‘He will wash it.’ |

The 3S.FUT suffix is similar to the ‘also’ suffix /-kayΛ/ in that both have initial spirants after vowels and voiceless stops after consonants. The UF for the 3S.FUT is /-pik/, which becomes [-b̥ik] after vowels. Lenition (Rule 7 on p.54) accounts for /p/ becoming /b̥/ after vowels and degemination rule (Rule 2 on p.49) or deletion (Rule 8 on p.54) accounts for [pp] simplifying. Coronal deletion 2 (Rule 20 on p.83) accounts for the final /t/ in t-final verbs deleting before lenition is applied.

Coronal deletion 2 feeds lenition, as shown in Table 9.11 with the example /halut -pik/ ‘wash -3S.FUT’.

Though /-pik/ is realised as [-b̥ik] after most V-final and t-final verbs, it is realised as [-pik] after some V-final verbs and [-bik] after some t-final verbs, as shown in (88).⁸

(88) p~b~b̥ alternation on V-final and t-final verbs

| UF | Gloss | | 3S.FUT | Gloss |
|---------|---------|---------------|------------|---------------------|
| /matΛ/ | ‘cut’ | | [matΛb̥ik] | ‘He will cut it.’ |
| /na/ | ‘eat’ | (Nonleniting) | [napik] | ‘He will eat it.’ |
| /halut/ | ‘wash’ | | [halub̥ik] | ‘He will wash it.’ |
| /mut/ | ‘throw’ | (Voicing) | [mumbik] | ‘He will throw it.’ |

V-final verbs that use [-pik] are lexically marked for suspending lenition (Rule 7 on p.54), i.e. lenition does not apply). Furthermore, t-final verbs that use [-bik] are lexically marked to have a minor voicing rule applied to account for /p/-initial Set 1 suffixes becoming [b] before other rules are applied, specifically, before lenition.

Other verbs suffixes that pattern like the 3S.FUT suffix are shown in (89).

⁸ Apart from /p/-initial suffixes, nonleniting V-final verbs pattern identically to V-final verbs, and voicing t-final verbs pattern identically to t-final verbs. See §9.4.

(89) $p \sim b \sim \text{b}$ verb suffixes

| FUTURE | | PROBABLE | |
|--------------|-------------------|-------------------|--------------------|
| 1s | /-pit/ | 3s | /-p Δ nak/ |
| 2s | /-pil Δ k/ | 3d | /-p Δ tnak/ |
| 3s | /-pik/ | 3d | /-p Δ lak/ |
| IMMEDIATE | | 3p | /-p Δ yak/ |
| 1s | /-pa/ | DIFFERENT SUBJECT | |
| 3s | /-p Δ n/ | 1s | /-pa/ |
| HYPOTHETICAL | | 2s | /-pi/ |
| 1s | /-pam/ | 3s | /-p Δ n/ |
| 2s | /-pim/ | 23d | /-p Δ t/ |
| 3s | /-p Δ n/ | 23p | /-p Δ / |
| 23d | /-p Δ t/ | | |
| 23p | /-p Δ m/ | | |

To summarise, some V-final verbs are lexically marked for not having lenition (Rule 7 on p.54) applied to Set 1 /p/-initial suffixes and some t-final verbs are lexically marked to have a minor voicing rule applied to Set 1 /p/-initial suffixes. All other verbs roots take the expected form; m \ddot{a} -final and p-final verbs take the /p/-initial form, and V-final and t-final verbs take the [b]-initial forms.

9.2 Set 2 verb suffix morphophonemics

9.2.1 /n/-initial verb suffixes (set 1 or set 2)

As shown in (90), the 23P.IMP suffix [-noŋ] has no alternate form. It is [-noŋ] after all verb roots. The final segment on p-final verbs and t-final verbs does not delete before these suffixes, and m \ddot{a} -final verbs use the short form.

| (90) | UF | 23P.IMP | gloss |
|------|--------------------|--------------------|-----------------|
| | /bup(m Δ)/ | [bupnoŋ] | 'You sew it.' |
| | /mat Δ / | [mat Δ noŋ] | 'You cut it.' |
| | /taŋop/ | [taŋopnoŋ] | 'You drink it.' |
| | /halut/ | [halutnoŋ] | 'You wash it.' |

Since [n]-initial verb suffixes have no alternate form and there is no justification for supporting an abstract UF different from the surface form, the UF for the 23P.IMP is /-noŋ/. No further modifications are required to the morphophonemic rules previously defined to account for /n/-initial verb suffixes.

There is evidence, however, to group /n/-initial suffixes with Set 1 suffixes rather than Set 2. The m \ddot{a} -final verbs use the short form before these /n/-initial suffixes as with all other Set 1 suffixes, whereas it will be shown in §9.2.2 and §9.2.3, that m \ddot{a} -final verbs use the long form with Set 2 suffixes. Final segments on p-final and t-final verbs delete before Set 2 verb suffixes, but not before /n/-initial suffixes. Thus, even though they do not alternate, /n/-initial suffixes do otherwise follow the pattern for Set 1 morphophonemic processes. Therefore /n/-initial suffixes are grouped with Set 1 verb suffixes, not with Set 2.

Other final verb subject agreement markers that begin with /n/ are listed in (91).

(91) /n/-initial subject agreement

| | | |
|-------------------|-----|--------|
| FUTURE | 1p | /-nim/ |
| | 23p | /-niŋ/ |
| IMMEDIATE | 1p | /-na/ |
| | 1p | /-nom/ |
| IMPERATIVE | 23p | /-noŋ/ |
| | 1p | /-nΛm/ |
| APPREHENSION | 23p | /-nΛŋ/ |
| | 1p | /-nam/ |
| HYPOTHETICAL | 1p | /-na/ |
| DIFFERENT SUBJECT | 1p | /-na/ |

All the /n/-initial suffixes listed in (91) are marked for subject agreement in combination with tense or mood.

9.2.2 Singular dynamic imperfective

The singular dynamic imperfective suffix [-ga] does not exhibit alternations, as shown in (92) with the subject agreement suffix /-k/ 3S.PRES.

(92) Singular dynamic imperfective [-ga]

| UF | gloss | | ‘ROOT -S.DIPF -3S.PRES’ |
|-----------|-----------|-----------------------|-------------------------|
| /bup(mΛ)/ | ‘sew’ | | [bupmΛŋgak] |
| /matΛ/ | ‘cut’ | | [matΛŋgak] |
| /taŋop/ | ‘drink’ | final /p/ assimilates | [taŋokgak] |
| /akop/ | ‘come up’ | final /p/ deletes | [akonggak] |
| /halut/ | ‘wash’ | final /t/ assimilates | [halukgak] |

When followed by the s.DIPF, mā-final verbs use the long form and the final consonant of t-final verbs and most p-final verbs assimilates to [k]. There is, however, a small group of p-final verbs whose final consonant does not assimilate, but deletes before this suffix.⁹

Since there is no justification for positing an abstract UF that is different from the surface form, the UF for the s.DIPF is /-ga/. Devoicing (Rule 5 on p.52) does not apply to Set 2 verb suffixes (e.g. /matΛ -ga -k/ ‘cut -S.DIPF -3S.PRES’ is [matΛŋgak] not *[matΛkak]). As with the /n/-initial suffixes shown in (90), root final /p/ and /t/ do not delete before [-ga]. Rather, they assimilate to [k] before /-ga/ by a dorsal assimilation rule.

Rule 22 Root dorsal assimilation (restricted to verbs)

$$C \rightarrow [+dorsal] \quad / \quad ______] [S_2 \quad g$$

Root dorsal assimilation states that a consonant becomes dorsal before a Set 2 verb suffix (S2) that is /g/-initial. It is limited to /g/ because, as is shown in §9.2.3, the final verb segments /p/ and /t/ delete before /g/, /h/, and /k/-initial Set 2 suffixes. Root dorsal assimilation is in a mutual bleeding relationship with coronal assimilation (Rule 6 on p.52), as shown in Table 9.12 with the example /halut -ga -k/ ‘wash -S.DIPF -3S.PRES’.

⁹ The [ŋ] before the suffix /-ga/ ‘s.DIPF’ for these verbs can be accounted for by prenasalisation.

Table 9.12 Root dorsal assimilation (Rule 22) mutually bleeds coronal assimilation (Rule 6)

| | | | |
|----------------------|---------------------|----------------------|----------------|
| UF | /halut -ga -k/ | UF | /halut -ga -k/ |
| Root dorsal assim. | halukgak | Coronal assimilation | halutdak |
| Coronal assimilation | — | Root dorsal assim. | — |
| PR | [halukgak] | PR | *[halutdak] |
| Gloss | ‘He is washing it.’ | | |

Table 9.13 Root dorsal assimilation (Rule 22) mutually bleeds labial assimilation (Rule 19)

| | | | |
|---------------------|----------------------|---------------------|----------------|
| UF | /taŋop -ga -k/ | UF | /taŋop -ga -k/ |
| Root dorsal assim. | taŋokgak | Labial assimilation | taŋopbak |
| Labial assimilation | — | Root dorsal assim. | — |
| PR | [taŋokgak] | PR | *[taŋopbak] |
| Gloss | ‘He is drinking it.’ | | |

Table 9.14 Root dorsal assimilation (Rule 22) bleeds coronal deletion 2 (Rule 20)

| | | | |
|--------------------|---------------------|--------------------|----------------|
| UF | /halut -ga -k/ | UF | /halut -ga -k/ |
| Root dorsal assim. | halukgak | coronal deletion 2 | halugak |
| coronal deletion 2 | — | Root dorsal assim. | — |
| PR | [halukgak] | PR | *[halugak] |
| Gloss | ‘He is washing it.’ | | |

Root dorsal assimilation is in a mutual bleeding relationship with labial assimilation (Rule 19 on p.82), as shown in Table 9.13 with the example /taŋop -ga -k/ ‘drink -S.DIPF -3S.PRES’. It is in a mutual bleeding relationship with coronal deletion 2 (Rule 20 on p.83), as shown in Table 9.14 with the example /halut -ga -k/ ‘wash -S.DIPF -3S.PRES’.

As shown in (92), the final /p/ in most p-final verbs assimilates to [k] before these /g/-initial suffixes. However, there are a few p-final verbs whose final /p/ deletes. This variant will be discussed in §9.4.3.

The only other /g/-initial suffix that patterns like /-ga/ S.DIPF is the PERSISTENT suffix /-gaʔata/.

9.2.3 Present tense subject agreement suffixes

The present tense subject agreement suffixes do not exhibit alternations, as shown in (93).

(93) Present tense paradigm

| | mā-final | V-final | p-final | t-final |
|----------|-----------------|--------------|-----------------|----------------|
| Gloss: | /bup(mΛ)/ ‘sew’ | /matΛ/ ‘cut’ | /taŋop/ ‘drink’ | /halut/ ‘wash’ |
| 1S.PRES | [bupmΛt] | [matΛt] | [taŋot] | [halut] |
| 2S.PRES | [bupmΛlΛk] | [matΛlΛk] | [taŋolΛk] | [halulΛk] |
| 3S.PRES | [bupmΛk] | [matΛk] | [taŋok] | [haluk] |
| 1D.PRES | [bupmΛmΛk] | [matΛmΛk] | [taŋomΛk] | [halumΛk] |
| 23D.PRES | [bupmΛmΛlΛk] | [matΛmΛlΛk] | [taŋomΛlΛk] | [halumΛlΛk] |
| 1P.PRES | [bupmΛmΛŋ] | [matΛmΛŋ] | [taŋomΛŋ] | [halumΛŋ] |
| 23P.PRES | [bupmΛyiŋ] | [matΛyiŋ] | [taŋoyiŋ] | [haluyiŋ] |

When followed by present-tense subject agreement suffixes, mā-final verbs use the long form, and the final consonant of p-final and t-final verbs is deleted.¹⁰ Since there is no justification for positing abstract UFs, the UFs for these suffixes are the surface forms, as listed in (94).

(94) Subject agreement suffixes

| | |
|----------|----------|
| 1S.PRES | /-t/ |
| 2S.PRES | /-lΛk/ |
| 3S.PRES | /-k/ |
| 1D.PRES | /-mΛk/ |
| 23D.PRES | /-mΛlΛk/ |
| 1P.PRES | /-mΛŋ/ |
| 23P.PRES | /-yiŋ/ |

Other verb suffixes that do not exhibit alternations in the initial segment are listed in (95).

(95) Other verbal suffixes

| | |
|--------------------------------------|----------|
| SAME-SUBJECT PERFECTIVE | /-keŋ/ |
| SAME-SUBJECT DURATIVE PERFECTIVE | /-hikaŋ/ |
| SAME-SUBJECT IMPERFECTIVE | /-gəbik/ |
| DYNAMIC IMPERFECTIVE, plural subject | /-ka/ |
| STATIC IMPERFECTIVE | /-ga/ |
| DURATIVE | /-hi/ |

Accounting for verb final segments /p/ and /t/ deleting before /t/, /k/, /h/, /m/, /l/, /g/, and /y/ is problematic since this set of sequences is not a natural class. One option is to define a brute force deletion rule (or even to rewrite it as three separate natural rules). However, the real issue is that verb final segments /p/ and /t/ delete before Set 2 verb suffixes. This is morphological, not phonological. Since deletion is morphological, the preferred option is to specify a morphologically conditioned deletion rule.

¹⁰ The deletion rule will be formalised after further data is presented.

Table 9.15 Consonant deletion (Rule 23) counterbleeds root dorsal assimilation (Rule 22)

| UF | /halut -ga -k/ | UF | /halut -ga -k/ |
|--------------------|---------------------|--------------------|----------------|
| Root dorsal assim. | halukgak | Consonant deletion | halugak |
| Consonant deletion | — | Root dorsal assim. | — |
| PR | [halukgak] | PR | *[halugak] |
| Gloss | ‘He is washing it.’ | | |

Table 9.16 Bleeding relationship rule list for consonant deletion (Rule 23)

| | |
|-----------------|-----------------------------|
| Rule 3 on p.50 | nasalisation |
| Rule 4 on p.51 | fortition |
| Rule 6 on p.52 | coronal assimilation |
| Rule 9 on p.55 | voiceless stop assimilation |
| Rule 14 on p.59 | h-fortition |
| Rule 19 on p.82 | labial assimilation |
| Rule 21 on p.85 | y-fortition |

Rule 23 Consonant deletion (restricted to verbs)

$$C \rightarrow \emptyset / \text{ — } \text{ROOT}] [S_2 \text{ } [-\text{dorsal}]$$

Consonant deletion states that verb root final consonants delete before Set 2 verb suffixes (S2). Consonant deletion is limited to [-dorsal] since the final segments of t-final verbs and p-final verbs do not delete before /-ga/ s.DIPF (e.g. /halut -ga -k/ ‘wash -s.DIPF -3S.PRES’ is [halukgak]) as shown in §9.2.2.

Consonant deletion counterbleeds root dorsal assimilation (Rule 22 on p.88), as shown in Table 9.15 with the example /halut -ga -k/ ‘wash -s.DIPF -3S.PRES’.

Consonant deletion (Rule 23) is also in a bleeding relationship with the rules listed in Table 9.16.

A cyclical rule-order chain exists with lenition (Rule 7 on p.54) being ordered before consonant deletion (Rule 23), which is ordered before h-fortition (Rule 14 on p.59), which is ordered before coronal deletion 2 (Rule 20 on p.83), which is ordered before lenition (Rule 7 on p.54). There is also independent evidence with p-final verbs that lenition does not apply to Set 2 verb suffixes (e.g. /taŋop -keŋ/ ‘drink -ss.PRES’ [taŋoke]). Therefore lenition is modified to not apply to Set 2 verb suffix initial segments.

Rule 7 (d) Lenition

$$\begin{bmatrix} C \\ -\text{cont} \\ -\text{voice} \end{bmatrix} \rightarrow \begin{bmatrix} +\text{cont} \\ +\text{voice} \end{bmatrix} / V \left([]_{\{CL, RED, CPD\}} \right) [\sim S_2 \text{ — } V$$

Lenition (Rule 7 (d)) states that lenition does not apply to the initial consonant of Set 2 verb suffixes (\sim S2) at morpheme boundaries.

9.2.4 Modal nouns

Awara has three modal nouns¹¹ that are suffixed to the verb root. Modal nouns do not take subject agreement markers, as shown in (96).

| (96) | gloss | DEONTIC | DEONTIC | PURPOSE |
|-----------|---------|--------------|---------------|--------------|
| UF | | [naŋʌn] | [naŋʌsʌ] | [naŋge] |
| /bup(mʌ)/ | ‘sew’ | [bupnaŋʌn] | [bupnaŋʌsʌ] | [bupnaŋge] |
| /matʌ/ | ‘cut’ | [matʌnaŋʌn] | [matʌnaŋʌsʌ] | [matʌnaŋge] |
| /taŋop/ | ‘drink’ | [taŋopnaŋʌn] | [taŋopnaŋʌsʌ] | [taŋopnaŋge] |
| /halut/ | ‘wash’ | [halutnaŋʌn] | [halutnaŋʌsʌ] | [halutnaŋge] |

Modal suffixes behave identically to the other /n/-initial suffixes. Since there is no justification for positing abstract forms, the UFs are the surface forms /-naŋʌn/ DEONTIC, /-naŋʌsʌ/ DEONTIC, and /-nage/ PURPOSE.

9.3 Irregular verb suffix morphophonemics

9.3.1 2S.IMM suffix with the dynamic imperfective

The 2S.IMM suffix is /-ŋ/ and the phoneme /ŋ/ deletes after root-final consonants (see (77) on p.77). However, when 2S.IMM occurs after the singular dynamic imperfective /-ga/, it is null, as shown in (97) with the V-final verb /paha/ ‘do’. Also, the final vowel /a/ in /-ga/ S.DIPF is [ʌ].

(97) The immediate suffix paradigm with the dynamic imperfective

| | | /-ga/ S.DIPF | /-ka/ P.DIPF |
|--------|-----------|--------------|--------------|
| /-pa/ | ‘1S.IMM’ | [pahangʌbʌ] | * |
| /-ŋ/ | ‘2S.IMM’ | [pahangʌ] | * |
| /-pʌn/ | ‘3S.IMM’ | [pahangʌbʌn] | * |
| /-da/ | ‘1D.IMM’ | * | [pahakata] |
| /-gun/ | ‘23D.IMM’ | * | [pahakakun] |
| /-na/ | ‘1P.IMM’ | * | [pahakana] |
| /-gut/ | ‘23P.IMM’ | * | [pahakakut] |

All of the other immediate suffixes occur after the dynamic imperfective as expected. It is unclear why /-ga/ S.DIPF is [-gʌ] and the 2S.IMM suffix /-ŋ/ is missing on [pahangʌ] (/paha -ga -ŋ/ ‘do -S.DIPF -2S.IMM’). The alternative analysis of 2S.IMM as null (see §9.1.1), would account for [pahangʌ] not being [ŋ]-final (/paha -ga -Ø/ ‘do -S.DIPF -2S.IMM’). However, this alternative analysis does not account for why /-ga/ S.DIPF is pronounced as [-gʌ]. Therefore it is analysed as suppletion (/ -ga -ŋ/ -S.DIPF -2S.IMM is [-gʌ]).

¹¹ Modal nouns are nouns that express concepts related to possibility and obligation that take nonfinite clauses as their complements. They are clitics phonologically bound to nonfinite verbs (see Chapter 16).

9.3.2 23P.IMM with the imperfective suffixes

The 23P.IMM /-ɣut/ is normally [-ɣut] after V-final and t-final verbs and [-but] after p-final verbs and the short form of mǎ-final verbs, as shown in (98).¹²

| (98) | UF | Gloss | 23P.IMM | 23D.IMM |
|------|-----------|---------|------------|------------|
| | /bup(mʌ)/ | ‘sew’ | [bupbut] | [bupbun] |
| | /matʌ/ | ‘cut’ | [matʌɣut] | [matʌɣun] |
| | /taŋop/ | ‘drink’ | [taŋopbut] | [taŋopbun] |
| | /halut/ | ‘wash’ | [haluɣut] | [haluɣun] |

However, it is [-kut], not *[-ɣut] after the vowel-final imperfective suffixes /-ɣa/ S.DIPF and /-ka/ P.DIPF, as shown in (99).

| | | | |
|------|------------------|-------------------------|-------------|
| (99) | /paha -ka -ɣut/ | ‘do.p -P.DIPF -23P.IMM’ | [pahakakut] |
| | /natʌp -ɣa -ɣut/ | ‘know -SIPF -23P.IMM’ | [natʌɣakut] |

The norm is for suffixes following /-ɣa/ and /-ka/ to use the form which they normally use after vowels. For example, /paha -da/ ‘do.p -1D.IMM’ is [pahata] and /paha -ka -da/ ‘do.p -P.DIPF -1D.IMM’ is [pahakata]. It is unclear why /-ɣut/ ‘23P.IMM’ is [-ɣut] after vowel-final verb roots (e.g. /matʌ -ɣut/ ‘cut -23P.IMM’ is [matʌɣut]) but is [-kut] after these vowel-final suffixes.

9.3.3 Static imperfective [-ɣʌt]~[-ɣa]

The static imperfective has two forms as shown in (100): [-ɣʌt] and [-ɣa]. The /t/-final [-ɣʌt] is used before coronal-initial Set 1 suffixes and [-ɣa] is used with all other suffixes.

| (100) | UF | Gloss | PR |
|-------|-------------------|-------------------------------|--------------|
| | /natʌp -ɣa -k/ | ‘know -SIPF -3S.PRES’ (Set 2) | [natʌɣak] |
| | /natʌp -ɣa -pit/ | ‘know -SIPF -1S.FUT’ (Set 1) | [natʌɣabit] |
| | /natʌp -ɣʌt -nim/ | ‘know -SIPF -3S.FUT’ (Set 1) | [nataɣʌtnim] |

Since the two forms of the S.IPF are suppletive, the UF is both forms /-ɣʌt/ and /-ɣa/: /-ɣʌt/ is marked for coronal-initial Set 1 suffixes and /-ɣa/ is used elsewhere.

9.3.4 Same-subject /-keɣ/ and /-hikaɣ/

The same-subject perfective (SS.PF) and same-subject durative perfective (SS.DUR.PF) markers have two forms. The first forms are [-ke] and [-hika] respectively, which occur when they are not followed by other suffixes, as shown in (101).

| (101) | UF | Verb | Gloss | SS.PF [-ke] | SS.DUR.PF [-hika] |
|-------|-----------|---------|---------|-------------|-------------------|
| | /bup(mʌ)/ | /bupmʌ/ | ‘sew’ | [bupmʌke] | [bupmʌhika] |
| | /matʌ/ | /matʌ/ | ‘cut’ | [matʌke] | [matʰahika] |
| | /taŋop/ | /taŋop/ | ‘drink’ | [taŋoke] | [tʰaŋohika] |
| | /halut/ | /halut/ | ‘wash’ | [haluke] | [haluhika] |

¹² The 23P.IMM and 23D.IMM suffixes are the only two suffixes that exhibit the [ɣ]~[b] initial segment alternation pattern (see §9.1.4).

The second forms are [-keŋ] and [-hikaŋ], which occur when they are followed by other suffixes, as shown in (102) with the verb /ku/ ‘go’.

(102) Same-subject word-medial

| | | SS.PF [-keŋ] | SS.DUR.PF [-hikaŋ] |
|-------------|-------|--------------|--------------------|
| CONDITIONAL | /-u/ | [kukeŋu] | [kuhikaŋu] |
| AFTER | /-yΛ/ | [kukeŋΛ] | [kuhikaŋΛ] |
| DISLOCATION | /-un/ | [kukeŋun] | [kuhikaŋun] |

If these suffixes were always vowel-final, /-ke/ SS.PF [-keŋ] followed by /-yΛ/ ‘after’ should result in *[kukeya]; followed by /-un/ DISLOCATION in *[kuken]; and followed by /-u/ CONDITIONAL, in *[kuke]. Since they do not, either (1) the final segment [ŋ] of SS.PF and SS.DUR.PF deletes when not followed by other suffixes, or (2) it is inserted when followed by other suffixes, or (3) SS.PF and SS.DUR.PF have two lexical forms: one form used word-medially and one form used word-finally. Insertion is not preferred since no other vowel-final suffix requires nasal insertion. A deletion rule is also not preferred since it must be limited to just these two suffixes since nasals exist word-finally elsewhere. The preferred analysis is to have two lexical forms.

9.3.5 Benefactives

The morphophonemic processes between the final segment on verb roots and the initial segment of the benefactive suffixes are not fully consistent with those seen previously. The examples in (103) are shown with the 3S.PRES tense suffix /-k/.

(103) Benefactives

| | mā-final ‘sew’ /bupmΛ -BEN -k/ | V-final ‘cut’ /matΛ -BEN -k/ | p-final ‘drink’ /taŋop -BEN -k/ |
|--------|---|--------------------------------------|---------------------------------------|
| 1S.BEN | [bupmΛŋamik] | [matΛŋamik] | [taŋokŋamik] |
| 2S.BEN | [bupmΛŋgamik] | [matΛŋgamik] | [taŋokgamik] |
| 3S.BEN | [bupmΛŋΛmik] | [matΛŋΛmik] | [taŋokŋΛmik] |
| 1P.BEN | [bupmΛŋnimik] | [matΛŋnimik] | [taŋoknimik] |
| 2p.BEN | [bupmΛŋdamik] | [matΛŋdamik] | [taŋokdamik] |
| 3p.BEN | [bupmΛŋyΛmik] | [matΛŋyΛmik] | [taŋokyΛmik] |
| | p-final deleting ‘come up’ /akop -BEN -k/ | t-final ‘wash’ /halut -BEN -k/ | |
| 1S.BEN | [akoŋamik] | [halukŋamik] | |
| 2S.BEN | [akoŋgamik] | [halukgamik] | |
| 3S.BEN | [akoŋΛmik] | [halukŋΛmik] | |
| 1P.BEN | [akoŋnimik] | [haluknimik] | |
| 2p.BEN | [akoŋdamik] | [halukdamik] | |
| 3p.BEN | [akoŋyΛmik] | [halukyΛmik] | |

The long form of *mä*-final verbs, V-final verbs, and the p-final deleting subset (see §9.2.2) are consistently [ŋ]-final before the benefactive suffixes, and p-final and t-final verbs are consistently [k]-final. The benefactive surface forms do not exhibit alternations, as listed in (104).

(104) Benefactive suffixes

| | |
|--------|---------|
| 1S.BEN | [-ŋami] |
| 2S.BEN | [-gami] |
| 3S.BEN | [-ŋami] |
| 1P.BEN | [-nimi] |
| 2p.BEN | [-dami] |
| 3p.BEN | [-yami] |

For now, it is assumed that the UFs for the benefactive suffixes are the surface forms listed in (104).

It is unclear why *mä*-final, V-final, and some p-final verbs are [ŋ]-final and p-final and t-final verbs are [k]-final before the benefactive. The only occurrences of [ŋn] clusters in Awara are with the 1P.BEN affixed to *mä*-final, V-final, and the p-final subset verbs.

9.4 Verb roots

This section recapitulates the behaviour of the main groups of verbs; *mä*-final, V-final, p-final, t-final and V~t-final verbs. The following verb charts list one example verb from the group under investigation and one example verb suffix from each of the different verb suffix alternation sets.

The analysis of these verb groups is based on the collection of 117 verb paradigms selected from 355 verb entries in the Awara data lexicon.

9.4.1 *mä*-final verbs

The *mä*-final verb roots have a short form and a long form, which contains the short form plus /mΛ/ as shown in (105).¹³ The short form is used before the combined subject agreement forms (Set 1), and the long form is used with nonalternating suffixes (Set 2).

¹³ The Southern dialect of Awara only has the long form. Spaulding (1993) reports that Nankina also has /-mΛŋ/-final verbs but notes that it is unclear if the UF is /mΛŋ/ or /mΛ/.

| (105) | Variant | example suffix | [bup] ‘sew’ | Gloss |
|-------|-----------|----------------|-------------|--------------------|
| Set 1 | t~d | 1D.IMM | [bupda] | ‘Let us sew it!’ |
| | h~s | 23D.IMP | [bupson] | ‘You sew it.’ |
| | k~b | 3S.PAST | [bupbut] | ‘He sewed it.’ |
| | g~b | 23P.IMM | [bupbut] | ‘You sew it!’ |
| | y~s | 2S.IMP | [bupso] | ‘You sew it.’ |
| | p~b~b | 3S.FUT | [bupik] | ‘He will sew it.’ |
| | n | 23P.IMP | [bupnoŋ] | ‘You sew it.’ |
| Set 2 | ŋ~ø | 2S.IMM | [bupmΛŋ] | ‘You sew it!’ |
| | no change | 3S.PRES | [bupmΛk] | ‘He sewed it.’ |
| | /-ga/ | S.DIPF | [bupmΛŋgak] | ‘He is sewing it.’ |

There is no phonological distinction of the short form of *mä*-final verbs from other *p*-final verbs with Set 1 suffixes, and there is no phonological distinction between the long form of *mä*-final verbs and *V*-final verbs with Set 2 suffixes.

Besides the short form of *mä*-final verbs ending in [p], there are some [m]-final short forms, as shown in (106) with the example [tem] ‘shoot/write’.¹⁴ These [m]-final short forms pattern identically to the other *mä*-final verbs.

| (106) | Variant | example suffix | [tem] ‘shoot/write’ |
|-------|-----------|----------------|---------------------|
| Set 1 | t~d | 1D.IMM | [temda] |
| | h~s | 23D.IMP | [temson] |
| | k~b | 3S.PAST | [tembut] |
| | g~b | 23P.IMM | [tembut] |
| | y~s | 2S.IMP | [temso] |
| | p~b~b | 3S.FUT | [tepik] |
| | n | 23P.IMP | [temnoŋ] |
| Set 2 | ŋ~ø | 2S.IMM | [temΛŋ] |
| | no change | 3S.PRES | [temΛk] |
| | /-ga/ | S.DIPF | [temΛŋgak] |

It is dispreferred to analyse [mΛ] on *mä*-final verbs as a morpheme on syntactic grounds since no meaning is associated to it. However, it is also not preferred on phonological grounds to posit two lexical forms for all the verbs that exhibit the [mΛ] alternation,¹⁵ the short form used with Set 1 verb suffixes and the long form used with Set 2 verb suffixes. Since *mä*-final verbs are a common verb group in Awara, [mΛ] is posited as a formative with the UF /-mΛ/.¹⁶ The UF for *mä*-final verbs is the short form (e.g. the UF for ‘sew’ is /bup/ and the UF for ‘write’ is /tem/). Since there is no phonological process to distinguish *p*-final verbs from the

¹⁴ There are seven *mä*-final verbs that have [p]-final short forms, and two that have [m]-final short forms in the data.

¹⁵ As S. Quigley’s (2002) analysis of [mΛ] does.

¹⁶ Formatives are defined as morphemes (or phonological material) with no apparent meaning attached.

/p/-final short form of *mä*-final verbs, all *mä*-final verbs are marked in the lexicon to take the formative /-mΛ/ with Set 2 verb suffixes.

The verb /kuŋΛ/ ‘die’ patterns similarly to *mä*-final verbs in that it has both a long and short form, as shown in (107). It differs in that the short form is [m]-final rather than [p]-final and the long form is [ŋΛ]-final rather than [mΛ]-final.

| (107) | Suffix | Subject agreement | /kuŋΛ/ ~ /kum/ ‘die’ | gloss |
|-------|-----------|-------------------|----------------------|----------------|
| Set 1 | t~d | 1D.IMM | [kumda] | ‘Let us die.’ |
| | h~s | 23D.IMP | [kumson] | ‘You die.’ |
| | k~b | 3S.PAST | [kumbut] | ‘He died.’ |
| | ʁ~b | 23P.IMM | [kumbut] | ‘You die!’ |
| | y~s | 2S.IMP | [kumso] | ‘You die.’ |
| | p~b~b | 3S.FUT | [kupik] | ‘He will die.’ |
| | n | 23P.IMP | [kumnoŋ] | ‘You die.’ |
| Set 2 | ŋ~ø | 2S.IMM | [kuŋΛŋ] | ‘You die!’ |
| | no change | 3S.PRES | [kuŋΛk] | ‘He died.’ |
| | /-ga/ | S.DIPF | [kuŋΛŋgak] | ‘He is dying.’ |

This verb /kuŋΛ/ ‘die’ is analysed as having both forms /kuŋΛ/ and /kum/ in the lexicon, with /kuŋΛ/ marked to take Set 2 suffixes and /kum/ marked to take Set 1 suffixes.

9.4.2 V-final verbs

V-final verbs are exemplified in (108).

| (108) | Suffix | Subject agreement | /matΛ/ ‘cut’ | gloss |
|-------|-----------|-------------------|--------------|---------------------|
| Set 1 | t~d | 1D.IMM | [matΛta] | ‘Let us cut it!’ |
| | h~s | 23D.IMP | [matΛhon] | ‘You cut it.’ |
| | k~b | 3S.PAST | [matΛkut] | ‘He cut it.’ |
| | ʁ~b | 23P.IMM | [matΛʁut] | ‘You cut it!’ |
| | y~s | 2S.IMP | [matΛyo] | ‘You cut it.’ |
| | p~b~b | 3S.FUT | [matΛbit] | ‘He will cut it.’ |
| | n | 23P.IMP | [matΛnoŋ] | ‘You cut it.’ |
| Set 2 | ŋ~ø | 2S.IMM | [matΛŋ] | ‘You cut it!’ |
| | no change | 3S.PRES | [matΛk] | ‘He cut it.’ |
| | /-ga/ | S.DIPF | [matΛŋgak] | ‘He is cutting it.’ |

With some V-final verbs, the /p/ in /p/-initial suffixes does not lenite, as shown in (109).¹⁷ These V-final verbs otherwise pattern identically to V-final verbs shown in (108).

| (109) | Suffix | Subject agreement | /na/ ‘eat’ | gloss |
|-------|--------|-------------------|------------|-------------------|
| | p~b~b | 3S.FUT | [napik] | ‘He will eat it.’ |

¹⁷ There are 24 standard V-final verbs and three non-leniting V-final verbs in the data.

There is no phonological criterion for separating these nonleniting V-final verbs that use the [p]-initial verb suffix form from the other V-final verbs. As previously mentioned in §9.1.6, V-final verbs that use [-pik] are lexically marked for suspending lenition (Rule 7 on p.54).

9.4.3 p-final verbs

An example of a p-final verb is shown in (110). These differ from mā-final verbs in that the /-mΛ/ formative is not applied to these roots.

| (110) | Suffix | Subj. agr. | /taŋop/ ‘drink’ | gloss |
|-------|-----------|------------|-----------------|----------------------|
| Set 1 | t~d | 1D.IMM | [taŋopda] | ‘Let us drink it!’ |
| | h~s | 23D.IMP | [taŋopson] | ‘You drink it.’ |
| | k~b | 3S.PAST | [taŋopbut] | ‘He drank it.’ |
| | g~b | 23P.IMM | [taŋopbut] | ‘You drink it!’ |
| | y~s | 2S.IMP | [taŋopso] | ‘You drink it.’ |
| | p~b~b | 3S.FUT | [taŋopik] | ‘He will drink it.’ |
| | n | 23P.IMP | [taŋopnoŋ] | ‘You drink it.’ |
| Set 2 | ŋ~ø | 2S.IMM | [taŋop] | ‘You drink it!’ |
| | no change | 3S.PRES | [taŋok] | ‘He drank it.’ |
| | /-ga/ | S.DIPF | [taŋokgak] | ‘He is drinking it.’ |

There are a few action verbs that are p-final verbs and have the final segment /p/ deleting before /-ga/ S.DIPF, as shown in (111).¹⁸ These deleting p-final verbs otherwise pattern identically to the p-final verb shown in (111).

| (111) | Suffix | Subj. agr. | /akop/ ‘come up’ | gloss |
|-------|--------|------------|------------------|--------------------|
| Set 2 | /-ga/ | S.DIPF | [akoŋgak] | ‘He is coming up.’ |

There is no phonological distinction separating these deleting p-final verbs from the other p-final verbs (see §9.2.2). Since there are only four verbs that exhibit this pattern, these deleting p-final verbs are marked in the lexicon for root dorsal assimilation (Rule 22 on p.88) not applying.

9.4.4 t-final verbs

Patterns shown by t-final verbs are exemplified in (112).

¹⁸ There are five p-final verbs and four deleting p-final verbs in the database used for this study. However, there are many p-final examples in our lexicon that do not delete.

| | | | | |
|-------|-----------|------------|----------------|---------------------|
| (112) | Suffix | Subj. agr. | /halut/ ‘wash’ | gloss |
| Set 1 | t~d | 1D.IMM | [halutda] | ‘Let us wash it!’ |
| | h~s | 23D.IMP | [haluson] | ‘You wash it.’ |
| | k~b | 3S.PAST | [halukut] | ‘He washed it.’ |
| | g~b | 23P.IMM | [haluɣut] | ‘You wash it!’ |
| | y~s | 2S.IMP | [haluyo] | ‘You wash it.’ |
| | p~b~b | 3S.FUT | [halubik] | ‘He will wash it.’ |
| | n | 23P.IMP | [halutnoŋ] | ‘You wash it.’ |
| Set 2 | ŋ~ø | 2S.IMM | [halut] | ‘You wash it!’ |
| | no change | 3S.PRES | [haluk] | ‘He washed it.’ |
| | /-ga/ | S.DIPF | [halukgak] | ‘He is cutting it.’ |

There are some t-final verbs that have /p/-initial suffixes becoming voiced, as shown in (113).¹⁹ These t-final verbs otherwise pattern identically to t-final verbs, exemplified in (112).

| | | | | |
|-------|--------|------------|---------------|---------------------|
| (113) | Suffix | Subj. agr. | /mut/ ‘throw’ | gloss |
| Set 1 | p~b~b | 3S.FUT | [mumbik] | ‘He will throw it.’ |

There is no phonological distinction separating these voicing t-final verbs from the other t-final verbs. As described in §9.1.6, t-final verbs which use [-bik] are lexically marked to have a minor voicing rule applied to account for /p/-initial consonants on Set 1 suffixes becoming [b] before other rules are applied, specifically, before lenition (Rule 7 on p.54).

9.4.5 Dual V-final and t-final verbs

There is a set of verb roots that have two optional surface forms. These verbs are V-final and t-final, as shown in (114). The same Awara speaker can say these words either way.

(114) V~t-final verb example: /butut/ ‘pick up’

| | Suffix | Subject agreement | V-final | t-final | gloss |
|-------|-----------|-------------------|------------|--------------|------------------------|
| Set 1 | t~d | 1D.IMM | [bututa] | ~ [bututda] | ‘Let us pick up it!’ |
| | h~s | 23D.IMP | [butuhon] | ~ [butuson] | ‘You pick up it.’ |
| | k~b | 3S.PAST | | [butukut] | ‘He picked up it.’ |
| | g~b | 23P.IMM | | [butuɣut] | ‘You pick up it!’ |
| | y~s | 2S.IMP | | [butuyo] | ‘You pick up it.’ |
| | p~b~b | 3S.FUT | | [butubik] | ‘He will pick up it.’ |
| | n | 23P.IMP | [butunon] | ~ [bututnoŋ] | ‘You pick up it.’ |
| Set 2 | ŋ~ø | 2S.IMM | [butuŋ] | ~ [butut] | ‘You pick up it!’ |
| | no change | 3S.PRES | | [butuk] | ‘He picked up it.’ |
| | /-ga/ | S.DIPF | [butungak] | ~ [butukgak] | ‘He is picking up it.’ |

¹⁹ There are 49 t-final and ten voicing t-final forms in the data.

As it has been previously shown, deletion of the final /t/ in t-final verbs is common in Awara verb morphophonemics. This is observed with coronal deletion (Rule 18 on p.81) and coronal deletion 2 (Rule 20 on p.83). Since there is no justification for listing the V-final form in the lexicon and having these forms marked for an optional minor [t] insertion rule, but there is a precedence for applying an optional minor coronal deletion rule, the t-final form is chosen as the UF for these verbs. These forms are marked in the lexicon to have an optional minor deletion rule apply to delete the final /t/ before all other morphophonemic rules are applied (not formalised).

9.4.6 Verb root lenition

Voiceless stop-initial segments /p/, /t/, and /k/ on verb roots become /b/, /l/, and /g/ after vowel-final words, as shown in (115).

(115) Verb root lenition across words

| Surface Form | Underlying Form | gloss |
|--------------------|-----------------------|---------------------------|
| [hikɨʌ bahaŋgalʌk] | /hikɨʌ paha -ga -lʌk/ | ‘real do.P.O -S.DIPF -2S’ |
| [hikɨʌ likin] | /hikɨʌ ti -gin/ | ‘real be -23P.PAST |
| [bau ɣopbum] | /bau kop -gum/ | ‘Wau go up -1S.PAST’ |

Voiceless stops leniting can be accounted for by applying lenition (Rule 7 on p.54) to word boundaries of verbs.

Rule 7 (e) Lenition

$$\begin{array}{c} C \\ \left[\begin{array}{c} -\text{cont} \\ -\text{voice} \end{array} \right] \end{array} \rightarrow \left[\begin{array}{c} +\text{cont} \\ +\text{voice} \end{array} \right] / V \left(\right)_{\{CL, RED, CPD, VERB\}} \left[\sim S2 \right] \text{ — } V$$

9.5 Irregular verb roots

9.5.1 Motion verbs

There are two motion verbs ‘come’ and ‘come down’ that, like mā-final verbs, have a long and short form, as shown in (116).

(116) Motion verbs [apu]~[ap] and [epu]~[ep]

| | Suffix | Subj. agr | ‘come’ | ‘come down’ |
|-------|-----------|-----------|-----------|-------------|
| Set 1 | t~d | 1D.IMM | [apda] | [epda] |
| | h~s | 23D.IMP | [apson] | [epson] |
| | k~b | 3S.PAST | [apbut] | [epbut] |
| | ɣ~b | 23P.IMM | [apbut] | [epbut] |
| | y~s | 2S.IMP | [apso] | [epso] |
| | p~b~b | 3S.FUT | [apik] | [epik] |
| | n | 23P.IMP | [apnoŋ] | [epnoŋ] |
| Set 2 | ŋ~ø | 2S.IMM | [ap] | [ep] |
| | no change | 3S.PRES | [apuk] | [epuk] |
| | /-ga/ | S.DIPF | [apungak] | [epungak] |

Like *mä*-final verbs, these verbs use the short forms [ap] and [ep] with Set 1 suffixes and the long forms [apu] and [epu] with Set 2 suffixes. Unlike *mä*-final verbs, these verbs use the short form with the 2S.IMM.

Since there are no other verbs that exhibit a [u] for the long form, the preferred option is to posit in the lexicon the two forms /ap/ and /apu/ for ‘come’ and /ep/ and /epu/ for ‘come down’.²⁰ The short form is marked for Set 1 suffixes and the long form is marked for Set 2 suffixes. The irregular 2S.IMM form is also listed in the lexicon.

9.5.2 The verb ‘give’

The verb /mi/ ‘give’ takes object prefixes (§9.6.3). When it occurs with the third singular object agreement prefix, the 2S.IMM form of ‘give’ is the expected form [imiŋ], as shown in (117).

| (117) | Suffix | Sub. agr | UF | /i- mi/ ‘3S.O- give’ | /na- mi/ ‘1S.O- give’ |
|-------|-----------|----------|--------|----------------------|-----------------------|
| Set 1 | t~d | 1D.IMM | /-da/ | [imita] | * |
| | h~s | 23D.IMM | /-hΛn/ | [imihon] | [namihon] |
| | k~b | 3S.PAST | /-gut/ | [imikut] | [namikut] |
| | g~b | 23P.IMM | /-gʊt/ | [imigun] | [namigun] |
| | y~s | 3S.IMM | /-yok/ | [imiyok] | [namiyok] |
| | p~b~b | 3S.FUT | /-pik/ | [imik] | [namik] |
| | | 3S.IMM | /-pΛn/ | [imΛn] | [namΛn] |
| | n | 23P.FUT | /-niŋ/ | [iminiŋ] | [naminiŋ] |
| Set 2 | ŋ~ø | 2S.IMM | /-ŋ/ | [imiŋ] | [nam] |
| | no change | 3S.PRES | /-k/ | [imik] | [namik] |
| | g | S.DIPF | /-ga/ | [imiŋgak] | [namiŋgak] |

However, when /mi/ ‘give’ occurs with the 1S.O prefix /na-/, the 2S.IMM form of ‘1S.O- give’ is [nam] ‘Give it to me!’. This is the only case of the 2S.IMM form of a verb being [m]-final. The 2S.IMM form of /mi/ ‘give’ occurring with the other object agreement prefixes is the expected [ŋ]-final form. The 2S.IMM form of /mi/ ‘give’ with the 1S.O prefix /na-/ is posited in the lexicon as /nam/.

Furthermore, the final /i/ in ‘give’ deletes before /p/-initial suffixes; relevant forms are repeated in (118).

| (118) | UF | Gloss | PR |
|-------|---------------|----------------------|---------|
| | /i- mi -pik/ | ‘3S.O- give -3S.FUT’ | [imik] |
| | /na- mi -pik/ | ‘1S.O- give -3S.FUT’ | [namik] |
| | /na- mi -pΛn/ | ‘1S.O- give -3S.IMM’ | [namΛn] |

It is unclear why these sequences reduce on this verb. No other /i/-final verbs reduce when followed by /p/-initial suffixes. These forms are also posited in the lexicon.

²⁰ Other options include positing /-u/ as a separate formative suffix (as was done with /-mΛ/) and applying minor rules to these two suffixes. Since [u] only exists on these two verbs, the preferred analysis is to posit them in the lexicon.

Table 9.17 Verb prefix morphology chart

| Proclitics | Object Agreement | ROOT |
|-----------------|-------------------|------|
| PREDICATE FOCUS | NUMBER | |
| NEGATIVE | PERSON and NUMBER | |
| PROHIBITIVE | | |

9.6 Verb prefix morphophonemics

Verbs can have proclitics and object agreement prefixes (§18.2.1) before the verb root, as shown in Table 9.17. Just as Awara enclitics were analysed as suffixes for the purposes of phonological analysis (see Chapter 6), Awara proclitics will be treated and referred to as prefixes.

9.6.1 Predicate focus, negative, and prohibitive prefixes

The predicate focus, negative, and prohibitive prefixes are shown in (119) attached to some Awara verbs. The column labelled ‘3S.PRES /-k/’ shows these verbs as they occur without a prefix. The predicate focus and negative forms are shown with /-k/ 3S.PRES. The prohibitive is shown with /-ŋ/ 2S.IMM.

(119) Verb proclitic examples

| | 3S.PRES /-k/ | PRFOC [a-] | NEGATIVE [do-] | PROHIBITIVE [ma-] |
|-----------|-----------------|---------------|-------------------|----------------------|
| ‘come up’ | [akok] | [aakok] | [doakok] | [maakop] |
| ‘do’ | [pʌhak] | [aʌhak] | [doʌhak] | [maʌhan] |
| ‘drink’ | [taŋok] | [alaŋok] | [dolaŋok] | [malaŋop] |
| ‘go up’ | [kok] | [aəok] | [dogok] | [maəop] |
| ‘detach’ | [dek] | [andek] | [dondek] | [mandet] |
| ‘shoot’ | [masik] | [amasik] | [domasik] | [mamasit] |
| ‘wash’ | [haluk] | [ahaluk] | [dohaluk] | [mahalut] |

There is a fourth prefix [ma-] ‘almost’ that is homonymous with [ma-] PROHIBITIVE. However, not all people use this form. My consultant did not use this form but used another adverbial construction. As such it is not included in the present study.

The predicate focus, negative and prohibitive prefixes are vowel-final. Root-initial voiceless stops lenite, and prenasalisation on voiced stops is realised as part of the preceding open syllable. Lenition (Rule 7 on p.54) accounts for voiceless stops leniting after these prefixes.

The UF for these prefixes can be the same as the surface form: /a-/ PREDICATE FOCUS, /do-/ NEGATIVE and /ma-/ PROHIBITIVE.

9.6.2 Singular~plural object prefix distinction

Object agreement on the root falls into two separate categories. The first distinguishes only between singular object [t-] and plural object [p-], as shown in (120) with the prohibitive prefix /ma-/.

| (120) | UF | gloss | PR |
|----------|---------------|------------------------------|--------|
| Singular | /t- ʌ -ŋ/ | ‘S.O- take -2S.IMM’ | [tʌŋ] |
| | /ma- t- ʌ -ŋ/ | ‘PROHIB- S.O- take -2S.IMM’ | [maʌŋ] |
| | /t- e -ŋ/ | ‘S.O- leave -2S.IMM’ | [teŋ] |
| | /ma- t- e -ŋ/ | ‘PROHIB- S.O- leave -2S.IMM’ | [maʌŋ] |
| Plural | /p- ʌ -ŋ/ | ‘P.O- take -2S.IMM’ | [pʌŋ] |
| | /ma- pʌ -ŋ/ | ‘PROHIB- P.O- take -2S.IMM’ | [maʌŋ] |
| | /p- e -ŋ/ | ‘P.O- leave -2S.IMM’ | [peŋ] |
| | /ma- p- e -ŋ/ | ‘PROHIB- P.O- leave -2S.IMM’ | [maʌŋ] |

The forms with the prohibitive prefix /ma-/ show that [p] and [t] lenite after vowel-final prefixes; they also lenite after vowel-final words (not shown). The UFs for these number agreement prefixes are /p-/ PLURAL.OBJECT and /t-/ SINGULAR.OBJECT and lenition (Rule 7 on p.54) accounts for their leniting.

There are several points to suggest that [t] and [p] could be analysed as part of the verb root rather than as separate morphemes. There is no evidence to support that they attach to consonant-initial verbs (e.g. *[dopbumʌŋ]/do- p- bupmʌ -ŋ/ ‘do not sew them’). Only vowel-initial transitive verb roots take /p/ or /t/, and there are other vowel-initial transitive verbs that do not take these prefixes. However, since the evidence for analysing [p] and [t] as part of the verb root is inconclusive, the preferred option is to posit the prefixes /p-/ PLURAL.OBJECT and /t-/ SINGULAR.OBJECT in the lexicon separately with one lexical verb root entry rather than positing multiple /p/-initial and /t/-initial verb-root pairs.

9.6.3 Person and number object agreement prefixes

The second type of object agreement prefixes attaches to a small class of verbs²¹ that require direct objects and are marked for both person and number as listed in (121).

(121) Object agreement prefixes

| | ‘laugh at’ | ‘give’ | ‘leave’ | ‘burn’ | ‘slice’ |
|------|--------------|--------------|--------------|--------------|----------------|
| | /-k/ 3S.PRES | /-k/ 3S.PRES | /-k/ 3S.PRES | /-k/ 3S.PRES | /-yʌk/ 3S.APPR |
| 1S.O | [nanimik] | [namik] | [napmak] | [nahak] | [natʌŋiyʌk] |
| 2S.O | [ganimik] | [gamik] | [gapmak] | [gahak] | [gatʌŋiyʌk] |
| 3S.O | [inimik] | [imik] | [ipmak] | [ihik] | [itʌŋiyʌk] |
| 1P.O | [ninimik] | [nimik] | [nipmak] | [nihik] | [nitʌŋiyʌk] |
| 2P.O | [danimik] | [damik] | [dapmak] | [dahak] | [datʌŋiyʌk] |
| 3P.O | [yʌnimik] | [yʌmik] | [yʌpmak] | [yʌhak] | [yʌtʌŋiyʌk] |

²¹ There are eight clear cases of this type of verb in the data.

The verb ‘give’ is consistently [mi],²² the verb ‘leave’ is [pma], the verb ‘burn’ is [hi] and [ha],²³ and the verb ‘slice’ is [tɛɲi]. The object prefixes can be analysed either as [n]-final or [V]-final, as listed in (122).

(122) Possible UFs of object prefixes

| | Option 1 | Option 2 |
|------|----------|----------|
| 1S.O | nan- | na- |
| 2S.O | gan- | ga- |
| 3S.O | in- | i- |
| 1P.O | nin- | ni- |
| 2P.O | dan- | da- |
| 3P.O | yɛn- | yɛ- |

The first option for analysis claims that these prefixes are /n/-final and the verb ‘laugh’ is [imi]. Deletion (Rule 8 on p.54) accounts for the nasal deleting before voiceless stops as in /nan- pma -k/ ‘he is leaving me’, [napmak]. Deletion would also need to be modified to account for /n/ deleting before /mi/ ‘give’ and /ha/ ‘cook’. Since [nm] clusters do not exist in Awara, this is not problematic for [nm] on the verb ‘to give’. However, the fact that the UF /nh/ sequence on the verb ‘cook’ surfaces as [h] is problematic. Other UF /nh/ sequences surface as [ns] sequences (e.g. /sadun -hɛ/ ‘axe -2P.GEN’ is [sandunsɛ], as shown in §6.1.7) or as [s]. For example, /g^wen -him/ ‘CL.lump -DIM’ is [g^wesim], as shown in §7.1.²⁴

Option 2 claims that these object prefixes are vowel-final and the verb ‘laugh’ is [nimi]. This option is problematic with the verb [tɛɲi] ‘slice’. This verb root does not lenite. Lenition has been shown to apply with other verb prefixes and voiceless stop initial verbs (see verb examples in (119)). This option requires that the verb /tɛɲi/ ‘slice’ be marked in the lexicon as being an exception to lenition (Rule 7 on p.54).²⁵

Since neither option is ideal and there is no clear justification for preferring option 1 to option 2, option 2 is selected.

There are five verbs that are irregular in the use of the person and number object agreement prefixes, as shown in (123). The examples are inflected with the 3S.PRES subject agreement suffix /-k/.

(123) Irregular object prefixes

²² The exceptions to ‘give’ having the form [mi] are discussed in §9.5.2.

²³ There is no phonological process that will account for the alternations [ha] and [hi] on the verb ‘burn’. Both forms are posited in the lexicon and are specified for which object agreement prefixes each can take.

²⁴ Also, as noted in Table 2.13 on p.24 [mh] and [ɲh] sequences do occur, which suggests that there are no phonotactic constraints against [nh] sequences.

²⁵ One alternative to marking the verb /tɛɲi/ ‘slice’ as an exception to lenition is to state that lenition is not applied after object agreement prefixes. So far, /tɛɲi/ is the only case found in the data of an initial voiceless stop verb that takes the object agreement prefixes.

| | ‘see’ | ‘want’ | ‘hit’ | ‘follow’ | ‘call’ |
|------|----------|-------------|------------|----------|-------------|
| 1S.O | [nanduk] | [nandunhak] | [nuk] | [nʌbak] | [yanʌbak] |
| 2S.O | [ganduk] | [gandunhak] | [guk] | [gʌbak] | [yanɡʌbak] |
| 3S.O | [kak] | [kanhak] | [taɲuk] | [tʌbak] | [yatʌbak] |
| 1P.O | [ninduk] | [nindunhak] | [nihipmʌk] | [niʌbak] | [yanibak] |
| 2P.O | [danduk] | [dandunhak] | [dahipmʌk] | [dʌbak] | [yandʌbak] |
| 3P.O | [dayik] | [dayinhak] | [sipmʌk] | [yʌbak] | [yanɣyʌbak] |

Since the prefix morphophonemic patterns for these verbs are not consistent, all five verbs with their object agreement forms are listed in the lexicon (e.g. [ka] is entered as /ka/ ‘see.3S.O’).

10 *Loan words*

The main source of loan words in Awara is Tok Pisin (Melanesian Pidgin English), although some come directly from English. Names and religious terms are often taken from Yabim.¹ It is unclear to what extent words are borrowed from the related language Wantoat.² Most of the words listed in this chapter have been gleaned from our corpus of texts (see §1.3) and from works of literature translated into Awara.

10.1 Loan words that conform to Awara phonology

Word-final voiced stops in the source language become unreleased voiceless stops in Awara, as shown in (124).

| (124) | Loan | | Source | Gloss | PR (Awara) | Orthographic |
|-------|--------------|----------|-----------|---------|------------|--------------|
| | <i>Jekob</i> | [džekob] | Tok Pisin | ‘Jacob’ | [džekop] | <i>Jekop</i> |
| | <i>Ed</i> | [ɛd] | English | ‘Ed’ | [ɛt] | <i>Et</i> |
| | <i>kod</i> | [kod] | Tok Pisin | ‘chord’ | [kot] | <i>kot</i> |

Many Awara people have Yabim names that begin with [ɲ], as shown in (125).

| | | |
|-------|-----------|--------------|
| (125) | [ɲabiŋom] | man’s name |
| | [ɲayamo] | woman’s name |

10.2 Loan words that violate Awara phonology

Word-medial voiced stops in the source language are not prenasalised in Awara, as shown in (126).³

¹ Yabim and Kâte, historically, were the two languages used by the Evangelical Lutheran Church until Tok Pisin replaced them. Awara people generally give their children Yabim names when the children are baptised.

² Regarding Wantoat loan words, each Awara village has its own set of shared vocabulary with Wantoat that speakers regard as being Awara. (This is expected since Awara is a language related to Wantoat.) Where these shared sets of lexemes do not overlap from one Awara village to another, there are accusations between the two villages that the other village is speaking the Wantoat word. Villages on the western side of the Leron River and especially the northern villages on the western side tend to be the most vocal. This is a sociolinguistic issue dealing with language attitudes rather than an issue of what are considered loan words linguistically. As such it is left to a later date to determine which Wantoat words are actually ‘borrowed’.

³ See §2.1.1 regarding prenasalised voiced stops.

| (126) | Loan | PR | Source | Gloss | PR (Awara) | Orthographic |
|-------|-----------------|------------|-----------|--------------|------------|-----------------|
| | <i>Elisebet</i> | [ɛlɪzʌbɛt] | Tok Pisin | ‘Elisabeth’ | [ɛlɪsʌpɛt] | <i>Elisabet</i> |
| | <i>Dabung</i> | [dabuŋ] | Yabim | woman’s name | [dapuŋ] | <i>Dabung</i> |
| | <i>kalabus</i> | [kalabus] | Tok Pisin | ‘jail’ | [kalapus] | <i>kalabus</i> |

Since voiced stops in the source languages are not prenasalised word-medially, they are not perceived as voiced by Awara speakers, who therefore devoice them. These however, are not the same as ordinary voiceless stops word-medially. Voiceless stops normally have some aspiration, whereas these have none.

The most common phonotactic violation is with loan words that begin with [l] or [r]. Awara does not have /l/-initial words. Examples of borrowed [l]-initial words are given in (127).

| (127) | Loan | PR | Source | Gloss | PR (Awara) | Orthographic |
|-------|-------------|--------|-----------|-----------|------------|--------------|
| | <i>rais</i> | [rais] | Tok Pisin | ‘rice’ | [lais] | <i>lais</i> |
| | <i>lamp</i> | [lamp] | English | ‘lamp’ | [lɛm] | <i>lem</i> |
| | <i>lotu</i> | [lotu] | Tok Pisin | ‘worship’ | [lotu] | <i>lotu</i> |

Loan words can end in [s], as shown in (128).

| (128) | Loan | PR | Source | Gloss | PR (Awara) | Orthographic |
|-------|--------------|---------|-----------|--------------|------------|--------------|
| | <i>rais</i> | [rais] | Tok Pisin | ‘rice’ | [lais] | <i>lais</i> |
| | <i>bos</i> | [bos] | Tok Pisin | ‘supervisor’ | [bos] | <i>bos</i> |
| | <i>masis</i> | [masis] | Tok Pisin | ‘matches’ | [masis] | <i>masis</i> |
| | <i>polis</i> | [polis] | Tok Pisin | ‘police’ | [polis] | <i>polis</i> |

10.3 Loan words that add to the Awara phonemic inventory

There are several segments that are found only in loan words. The diphthong [ai] occurs frequently in loan words, as shown in (129).

| (129) | Loan | PR | Source | Gloss | PR (Awara) | Orthographic |
|-------|--------------|----------|-----------|---------|------------|---------------|
| | <i>ais</i> | [ais] | Tok Pisin | ‘snow’ | [ais] | <i>ais</i> |
| | <i>aian</i> | [aiʌn] | Tok Pisin | ‘iron’ | [aiʌn] | <i>aiän</i> |
| | <i>pilot</i> | [pailot] | Tok Pisin | ‘pilot’ | [pailot] | <i>pailot</i> |

Another loan phoneme is [dž]. This mainly occurs with borrowed Tok Pisin or English names, as shown in (130).

| (130) | Loan | PR | Source | Gloss | PR (Awara) | Orthographic |
|-------|-------------|---------|-----------|---------|------------|--------------|
| | <i>Jems</i> | [džems] | Tok Pisin | ‘James’ | [džems] | <i>Jems</i> |
| | <i>Jon</i> | [džon] | Tok Pisin | ‘John’ | [džon] | <i>Jon</i> |

The last observed phoneme is [f], which occurs with borrowed Tok Pisin words, as shown in (131).

| (131) | Loan | PR | Source | Gloss | PR (Awara) | Orthographic |
|-------|------------|-------|-----------|--------|------------|--------------|
| | <i>fok</i> | [fok] | Tok Pisin | ‘fork’ | [fok] | <i>fok</i> |
| | <i>fis</i> | [fis] | Tok Pisin | ‘fish’ | [fis] | <i>fis</i> |

11 *Orthography*

The following sections document an initial orthography and some issues that need to be addressed in helping the Awara people read and write their language.

11.1 Basic orthographic presentation and spelling

The orthography that has been adopted for Awara is based on the phonemic inventory, as shown in Table 11.1.

The normal spelling convention is for words to be spelled as they would be pronounced in isolation. All affixes are written in their surface representation, not their lexical form. For example, /ok -na/ ‘uncle -1S.GEN’ is pronounced [okɲa] and is spelled *oknga*, and /a- ku -ga -lak/ ‘PRFOC- go -S.DIPF -3S.PRES’, pronounced [aɣuŋgalak], is spelled *axunggaläk*.

The glottal stop, which is not considered a phoneme (see §2.1.2), is not written in the Awara orthography. The two words that use it are underspecified, e.g. [hiʔi] ‘yes’ is written *hii*.

Where [bu] is in free variation with [pu] word-initially, it is written as *pu*. Where [bu] is not in free variation with [pu] word-initially it is written as *wu*.

The loan diphthong [ai] is written as *ai* (e.g. [rais] ‘rice’ is written as *lais*).

Additional letters included to account for words borrowed from languages of wider communication are listed in Table 11.2.

The choice of letters has been dictated by the use of the Tok Pisin alphabet and the English alphabet, which are the dominant alphabets in use in Papua New Guinea. Before PNG Independence (1975), it was more common to represent the velar nasal /ŋ/ by the letter *ŋ* in many of the Finisterre-Huon languages, following the Yabim and Kâte orthographies. Wantoat also used the letter *ŋ*. However, with Tok Pisin becoming more popular since PNG Independence and English being taught in the elementary schools, most people now prefer *ng*.

11.2 Writing /ʌ/

Originally, both /ʌ/ and /a/ were written as *a*. However, there were too many minimal pairs where context was not sufficient to distinguish between them and this often led to confusion, as shown in (132).

Table 11.1 Orthography

| phoneme | variants | orthographic | | example | gloss |
|-------------------|----------|-----------------------|-----------------------|---------------------------|----------------------------|
| /a/ | | <i>A</i> | <i>a</i> | <i>akop</i> | ‘You come up.’ |
| /ʌ/ | | <i>Ä</i> | <i>ä</i> | <i>k^wäman</i> | ‘cold’ |
| /b/ | | <i>B</i> | <i>b</i> | <i>bulip</i> | ‘bush’ |
| /d/ | | <i>D</i> | <i>d</i> | <i>dandambun</i> | ‘physical strength’ |
| /e/ | [ɛ] | <i>E</i> | <i>e</i> | <i>bukge</i> | ‘unseasoned’ |
| /g/ | | <i>G</i> | <i>g</i> | <i>danggäm</i> | ‘hair’ |
| /g ^w / | | <i>G^w</i> | <i>g^w</i> | <i>g^wäme</i> | ‘pitpit’ (wild sugar cane) |
| /h/ | | <i>H</i> | <i>h</i> | <i>hik^wak</i> | ‘drum’ |
| /i/ | [ɪ] | <i>I</i> | <i>i</i> | <i>pilä</i> | ‘its wing’ |
| /k/ | | <i>K</i> | <i>k</i> | <i>täkäpsäläk</i> | ‘grass skirt’ |
| /k ^w / | | <i>K^w</i> | <i>k^w</i> | <i>tek^we</i> | ‘tree species’ |
| /l/ | [r][ř] | <i>L</i> | <i>l</i> | <i>dulinä</i> | ‘silk’ |
| /m/ | | <i>M</i> | <i>m</i> | <i>nämäk</i> | ‘cousin’ |
| /n/ | | <i>N</i> | <i>n</i> | <i>nasik</i> | ‘uncle’ |
| /ŋ/ | | <i>Ng</i> | <i>ng</i> | <i>teng</i> | ‘Drop it!’ |
| /ŋ ^w / | | <i>Ng^w</i> | <i>ng^w</i> | <i>sang^wam</i> | ‘pandanus species’ |
| /o/ | | <i>O</i> | <i>o</i> | <i>yokomo</i> | ‘short spirit’ |
| /p/ | | <i>P</i> | <i>p</i> | <i>täkäpun</i> | ‘rib’ |
| /s/ | | <i>S</i> | <i>s</i> | <i>sakge</i> | ‘still’ |
| /t/ | | <i>T</i> | <i>t</i> | <i>wätä</i> | ‘sore’ |
| /u/ | | <i>U</i> | <i>u</i> | <i>dum</i> | ‘ridge pole’ |
| /ʊ/ | [w][v] | <i>W</i> | <i>w</i> | <i>wäpu</i> | ‘belt’ |
| /ɣ/ | | <i>X</i> | <i>x</i> | <i>naxalä</i> | ‘much’ or ‘many’ |
| /y/ | | <i>Y</i> | <i>y</i> | <i>yokä</i> | ‘mango’ |

Table 11.2 Additional letters

| phoneme | orthographic | | example | gloss |
|---------|--------------|----------|-------------|---------|
| /f/ | <i>F</i> | <i>f</i> | <i>fok</i> | ‘fork’ |
| /d/ | <i>J</i> | <i>j</i> | <i>Jems</i> | ‘James’ |

(132) Writing /ʌ/: minimal pair contrasts

| orthographic | UF | gloss | UF | gloss |
|--------------|-----------|----------------|-----------|---------------|
| <i>minga</i> | /miŋ -na/ | ‘my mother’ | /miŋ -nʌ/ | ‘his mother’ |
| <i>ina</i> | /ina/ | ‘what’ | /inʌ/ | ‘himself’ |
| <i>inale</i> | /inale/ | ‘why, because’ | /inʌle/ | ‘for himself’ |

Because this phoneme needed to be written as a separate letter, the umlaut ¨ was chosen to combine with *a* resulting in *ä*. It was important to stay with *a* because people often write

both sounds with the letter *a*. As they become more aware of this phoneme they are then able to add the umlaut to their writing without making additional corrections.

11.3 Writing prenasalisation

Originally, prenasalisation was not written intervocalically since it could be accounted for phonologically. However, problems consistently arose at writers' workshops with people who have been educated in Tok Pisin or English.¹ They preferred to write prenasalisation intervocalically (e.g. preferring *simbut* to *sibut*). To test people's preferences about writing prenasalisation, a word list was created with 30 pairs of words (10 *b* vs. *mb*, 10 *d* vs. *nd*, and 10 *g* vs. *ngg*), as shown in (133).

(133) Prenasalisation test

| | | | | | |
|---------------|---------------|----------------|----------------|-----------------|-----------------|
| <i>babam</i> | <i>bambam</i> | <i>kendet</i> | <i>kedet</i> | <i>dagam</i> | <i>danggam</i> |
| <i>hamba</i> | <i>haba</i> | <i>dadam</i> | <i>dandan</i> | <i>dunggum</i> | <i>dugum</i> |
| <i>kumbum</i> | <i>kubum</i> | <i>dadam</i> | <i>dandam</i> | <i>pagwat</i> | <i>panggwat</i> |
| <i>lobo</i> | <i>lombo</i> | <i>dondon</i> | <i>dodon</i> | <i>sanggum</i> | <i>sagum</i> |
| <i>simbut</i> | <i>sibut</i> | <i>gadong</i> | <i>gandong</i> | <i>sugwak</i> | <i>sunggwak</i> |
| <i>tambak</i> | <i>tabak</i> | <i>kandeng</i> | <i>kadeng</i> | <i>sugum</i> | <i>sunggum</i> |
| <i>tabi</i> | <i>tambi</i> | <i>pandap</i> | <i>padap</i> | <i>pinggu</i> | <i>pigu</i> |
| <i>wambi</i> | <i>wabi</i> | <i>sadun</i> | <i>sandun</i> | <i>waga</i> | <i>wangga</i> |
| <i>yebi</i> | <i>yembi</i> | <i>undan</i> | <i>udan</i> | <i>yangga</i> | <i>yaga</i> |
| <i>gobik</i> | <i>gombik</i> | <i>adan</i> | <i>andan</i> | <i>banggwat</i> | <i>bagwat</i> |

These words were randomly listed and given to the participants at a writers' workshop, asking them to circle which words they felt were spelled correctly. Out of all who were tested, everyone had a preference for prenasalisation being written intervocalically. People who had higher education showed a stronger preference for prenasalisation to be written than those with less education. It was decided to write prenasalisation intervocalically. Since it will be the literate people who will encourage or discourage the less literate people in learning to read Awara, it is important that they feel comfortable with using the orthography.²

Another factor that supports writing prenasalisation comes from borrowed words that have word-medial voiced stops that are not prenasalised. Writing prenasalisation helps Awara readers distinguish the nonprenasalised voiced stops in borrowed words such as the name [dabun] written as *Dabung* from the prenasalised voiced stops in Awara words such as /sibut/ 'cake' written as *simbut*.

Because of the support from the literate community for writing prenasalisation and the linguistic rationale for representing it, it was decided to represent prenasalisation intervocalically, as shown in (134).

¹ All education in the Awara area starts with Tok Pisin being taught in one of several local kindergartens called Tokples Schools sponsored by the local communities. Children then advance to the national government sponsored community school located at Matak. See Quigley and Quigley (1999) for a detailed discussion on the literacy rate and education system of the Awara people.

² Via personal communication, most other SIL colleagues working in Morobe Province reported similar situations in which they originally did not represent prenasalisation. However, the literate community preferred writing prenasalisation intervocalically, so they also switched to writing it.

(134) Writing prenasalisation

| UF | PR | Original | Current | Gloss |
|---------|----------|--------------|----------------|----------------|
| /sibut/ | [simbut] | <i>sibut</i> | <i>simbut</i> | ‘cake’ |
| /sadun/ | [sandun] | <i>sadun</i> | <i>sandun</i> | ‘axe’ |
| /sugum/ | [sugum] | <i>sugum</i> | <i>sunggum</i> | ‘sweet potato’ |

11.4 Writing *l* versus *r*

Another issue with spelling occurred early on with the free variation between [ɾ] and [l] intervocalically. Some people felt that some words should be spelled with *r* and others spelled with *l*. To clarify this issue, a word list was created of 155 Awara words that had [l] or [ɾ] occurring intervocalically. The two most vocal people were asked which of these words should be spelled with *l* versus *r*. The total count of words for which each speaker clearly chose either *l* or *r* is shown in (135).

(135) Sample totals

| | Speaker 1 | Speaker 2 |
|----------|-----------|-----------|
| <i>l</i> | 52 | 108 |
| <i>r</i> | 88 | 47 |
| Totals | 140 | 155 |

As shown in (135), Speaker 1 preferred spelling more Awara words with *r* whereas Speaker 2 had a stronger preference for *l*.

The comparison of their choices is listed in (136)

(136) Distribution of choices

| Speaker 1 | Speaker 2 | Number of matches | |
|-----------|-----------|-------------------|-----|
| <i>l</i> | <i>l</i> | 36 | 26% |
| <i>r</i> | <i>r</i> | 29 | 20% |
| <i>r</i> | <i>l</i> | 59 | 54% |
| <i>l</i> | <i>r</i> | 16 | |

The first row shows that there were 36 words (26%) that both agreed should be spelled with *l*. The second row shows that there were 29 words (20%) that both agreed should be spelled with *r*. The last two rows show that the speakers did not agree on 54% of the words considered. Speaker 1 preferred *r* and Speaker 2 *l* on 59 words and Speaker 1 preferred *l* and Speaker 2 preferred *r* on 16 words.

After tabulating the results, it was obvious that there was no consensus between the two men regarding the use of *l* and *r*. Over 50% of the time they disagreed on which way an individual Awara word should be spelled. Since they agreed 26% of the time on the use of *l* and only 20% on the use of *r*, they agreed (came to a consensus) with us to use the letter *l* all the time for writing the [l] and [ɾ] sound.³

³ Since that decision was made, there has been little to no resistance to spelling everything with *l*, including people attending writers' workshops from neighbouring villages.

Figure 11.1 Story layout

| Test Sheet A | Test Sheet B |
|----------------------------|----------------------------|
| Story A Lenited initial | Story A Stop initial |
| Story B Stop initial | Story B Lenited initial |

11.5 Writing lenition

There was concern over the writing of voiceless stops that are lenited word-initially due to a word-final vowel in the preceding word, as shown in (137).

- (137) UF PR orthographic gloss
 /gusit -u tokŋʌ/ [gusilu lokŋʌ] *gusilu tokngä* or *gusilu lokngä* ‘The sun is hot.’

In writing, people generally wrote words using the voiceless stop word-initially regardless of the final segment in the preceding word. However, in reading, some people commented that the initial voiceless stops of these words should be spelled in their lenited form when they were lenited because of a preceding vowel.

To clarify which way word-initial lenition should be written, an informal test containing two stories was devised, as shown in Figure 11.1.

Four people were each given one sheet containing two stories. They were asked to read each story and make spelling corrections where they thought words were spelled incorrectly. When two people took the test at the same time, one was given Sheet A and the other Sheet B.

All of those tested consistently corrected those words which were written in the lenited form to the voiceless stop form (e.g. *Wadotde xahit täpä xopbumäk* ‘We went up along the Wantoat path’ was corrected to *Wadotde kahit täpä kopbumäk*). Because of this, it was decided not to write the lenited form word-initially.

11.6 Writing [š]

The sound [š] only occurs in the classifier suffix /-sim/ SPECIFIC when it follows a consonant. Because of the similarity in form and distribution of this suffix with the classifier suffix /-him/ DIMINUTIVE, which has the allomorph [-sim] following consonants, most Awara people had difficulty distinguishing the two suffixes when asked about them. In fact, because of a correspondence between /h/ in Awara and /s/ in Wantoat, several people said that that the forms with [-sim] were Wantoat words. At this point /-sim/ SPECIFIC is always written with *s*.

11.7 Unresolved issues

Further testing should be done with both the Prenasalisation test and the Lenition test in other villages to determine if these preferences are the same for the entire language community. These tests were recently developed and due to time constraints only initial trial testing was made with people living at or visiting Guninggwan. The Lenition test also needs further work in quantifying the kinds of corrections people make.

Another orthographic issue still unresolved pertains to the writing of clitics. Should they be written separately or bound to the word they are phonetically attached to? Common practice in PNG has been to write monosyllabic clitics as joined and polysyllabic clitics as separate words. However, in the Finisterre-Huon languages, this has not been the norm. R. Webb and L. Webb (1992a), Reed (2000), and others reported that all monosyllabic postpositional clitics, as well as many of the polysyllabic clitics, had to be written attached to the previous word. Their people got confused trying to read the clitics as separate words. For now it has been decided to write these clitics as part of the word. As people become more fluent in reading Awara, this decision will need to be reassessed with the potential of changing the spelling conventions.

Part II

The Awara verbal system

Susan R. Quigley

Acknowledgments

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I want to thank the Awara people for inviting my husband and me to be part of their community. They have shared their language and their lives with us. Some have also recorded stories on tape, and some have even set aside time to teach us their language.

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Susan R. Quigley

12 *Introduction*

The Awara people live in the Awara Census Division of Kaiapit District in the northwest corner of Morobe Province in Papua New Guinea (see E. Quigley, this volume). For local government administration, the Awara villages are divided into northern, central, and southern regions. The fieldwork upon which this description is based was conducted in Guningwan (written *Guninggwän* in the Awara orthography), a hamlet of Tawaya (*Tāwayā*) village, which is in the central region, east of the Leron River. This paper reflects the variety of Awara spoken in that region.

Awara is a Papuan language of the Trans New Guinea phylum, Finisterre-Huon stock, Wantoat family (Wurm and Dutton 1981). It was previously classified as a dialect of the Wantoat language, with the *Ethnologue* designator WNC (Grimes 1988), but is now classified as a related language, with the designator AWX (Grimes 1996). The Wantoat family consists of six languages. Of these, only the Wantoat and Wapu-Hiwan languages are linguistically close enough to Awara to allow any communication.

There are several published descriptions of different aspects of the Wantoat language. Davis (1969) describes Wantoat phonemes and notes examples of how Awara differs from Wantoat. Davis (1964) discusses Wantoat verb affixes: their allomorphs, their co-occurrence restrictions, and their functions. Davis (1972) describes the morphophonemics, phrase structure, and clause structure of Wantoat. Davis (1973) tells how medial verbs, tail-head linkage, and serial verbs are used to connect clauses and sentences within the paragraph.

This work is based on data gathered during visits to Tawaya village from July 1994 to 2002. Most of the data consist of individual sentences and approximately 2.5 hours of tape-recorded texts, including narrative, procedural, hortatory, and expository texts. Our main language consultants were Titi Silingwaka (male, age \approx 50),¹ Ngawingom Giwisa (male, age \approx 35) and Yakiting Bana (male, age \approx 25) from Tawaya village, and Yangumalu Yakumtung (male, age \approx 45) and Ngasingom Lingatu (male, age \approx 35) from Yapulak (*Yäpüläk*) village.

This work presents a description of the verbal system of the Awara language. The major grammatical structures described are the verbal morphology, serial-verb constructions, clause chaining, and subordination.

Interesting aspects of the language shown here are the variety of clause types based on the type of subject-indexing suffix, if any, used on the clause and the variety of structures and functions of serial-verb constructions.

¹ These were their approximate ages in 2000.

Awara also shows the need to make distinctions between certain categories of clauses. The switch-reference system in Awara shows a distinction between the ‘reference’ clause (Haiman and Munro 1983), with respect to which switch-reference subject-indexing is marked, and the finite clause, on which the marked clause depends for tense or modality. Awara also shows the need to distinguish the concepts of subordination and dependency. Awara has two kinds of dependent clauses: (1) subordinate clauses, which are ignored by the switch-reference marking of the clauses around them, and (2) cosubordinate clauses, which participate in the switch-reference system and also have a distinct morphological pattern from subordinate clauses and from independent clauses.

Chapters 13 and 14 are overviews of the morphophonemic processes and syntax of Awara. Chapter 15 distinguishes active clauses from stative clauses and independent clauses from dependent clauses. In the discussion on dependent clauses, it distinguishes cosubordinate clauses, which are involved in clause chains, from subordinate clauses, which are used as complements and adverbial clauses. Chapter 16 presents modal nouns, which take nonfinite clausal complements. Chapter 17 presents verb subcategories based on morphological pattern, valence, and inherent aspect. Chapter 18 presents derivational and inflectional verbal morphology, making reference to clause types and verb subcategories presented in the previous two chapters. Chapter 19 presents the uses of complement and adverbial clauses. Chapter 20 shows how cosubordinate clauses followed by postpositions differ from subordinate clauses. Chapter 21 discusses negation in relation to clause breaks and modal nouns. Chapter 22 distinguishes serial-verb constructions from clause chains and describes the different types of serial-verb constructions.

This work differs from S. Quigley (2002*b*) in that it has been updated to reflect the current orthography, which shows prenasalisation, and to reflect the phonological analysis in E. Quigley (2003) and Part I of this volume. In addition, some material has been deleted because the information is available in Part I of this volume.

13 *Phonemes and allomorphy*

The following tables show the Awara phonemes using their orthographic representation, with phonetic symbols in parentheses next to them when different. The voiced stops /b/, /d/, /g/, and /gw/ are prenasalised, particularly after vowels.

Table 13.1 Vowel phonemes

| | Front | Central | Back |
|------|-------|---------|------|
| High | i | | u |
| Mid | e | ä (ə) | o |
| Low | | a | |

Table 13.2 Consonant phonemes

| | Bilabial | Alveolar | Palatal | Labialised velar | Velar | Glottal |
|---------------------|----------|----------|---------|----------------------------|--------|---------|
| Voiceless stops | p | t | | kw (k ^w) | k | |
| Voiced stops | b, mb | d, nd | | gw, nggw (g ^w) | g, ngg | |
| Nasals | m | n | | ngw (ŋ ^w) | ng (ŋ) | |
| Voiceless fricative | | s | | | | h |
| Voiced fricative | w (β) | | | | x (ɣ) | |
| Lateral | | l | | | | |
| Glide | | | y (j) | | | |

The letters *f* and *j* (dʒ) are included in the orthography but are not part of the native Awara phonemic inventory. They are used in words borrowed from Tok Pisin and English (e.g. *Fonde* ‘Thursday’ and *Jems* ‘James’).

Awara has several morphophonemic processes, including, among others, voicing and changes in point of articulation, which affect the initial segment of a closed set of morphemes; lenition, which affects the initial and final segments of many morphemes; and deletion, which affects the final segment of many morphemes. The allomorphs involving the initial segments

of verb suffixes are shown in Chapter 18. Allomorphs involving the initial segment of other affixes and clitics are listed in a footnote the first time the morpheme is in focus. For an analysis of the phonology and morphophonemic processes, see Part I of this volume.

14 *Overview of syntax and morphology*

This chapter presents a brief overview of some of the grammatical structures in Awara. Items presented here that will be discussed later in Part 2 are verb morphology and the distinction between medial-verb and final-verb suffixes, serial verb constructions, and the use of postpositions in subordinating clauses.

In addition, I mention basic constituent order, anaphoric pro-verbs based on *tī* ‘be’, noun classifiers, and the use of postpositions for marking arguments of the verb. These are not discussed elsewhere in the paper, but this information is helpful for understanding the examples given throughout this description.

14.1 Clauses

The basic order of constituents in the Awara clause is SOV.

- (138) Subject Object Verb
 Silas=dä Yälämbing=ge wätä wamä-ngä-mi-k.
 Silas=ABL Yälämbing=DAT sore tie-3S.O-give-3S.PRES
 ‘Silas bandaged Yälämbing’s sore.’

Arguments and other constituents may be marked with postpositions, which are phonologically bound to the preceding word as clitics. Examples are the subject of the transitive verb in (138) marked with *=dä* ABLATIVE, the possessor marked with *=ge*, an allomorph of *=le* DATIVE, and the location in (139) below marked with *=ne*, an allomorph of *=une* LOCATIVE.¹

- (139) *Nä wuyä=ne ku-ngga-t.*
 1S garden=LOC go-S.DIPF-1S.PRES
 ‘I’m going to the garden.’

There is no postposition marking direct objects and usually none marking subjects of intransitive clauses, as can be seen in (139).

¹ The allomorphs of *=dä* ABLATIVE are *=dä*, *=gä*, and *=tä*; the allomorphs of *=le* DATIVE are *=le*, *=de*, and *=ge*; and the allomorphs of *=une* LOCATIVE are *=une* and *=ne*.

Awara clauses can be categorised according to what kind of predicate they have (active versus stative), and whether or not they can stand alone as a complete sentence (independent versus dependent). Dependent clauses can be further subcategorised according to their relationship to the clause on which they depend (cosubordinate versus subordinate). Sentences (138) and (139) above are examples of independent clauses. Subordinate clauses are introduced in §14.4. All clause types are further explained in Chapter 15.

14.2 Verbs

Verb morphology is described in detail in Chapter 18. The following are a few major aspects of the inflectional morphology.

Awara uses verb suffixes to show aspect, mood, tense, and subject-indexing. For example, *-ga* indicates dynamic imperfective aspect (140), *-yo* (with its allomorph *-so*) indicates second person singular subject default imperative (141), and *-gut* (with its allomorphs *-kut* and *-but*) indicates third person singular subject past tense (142).

- (140) *Säne ku-ngga-läk?*
 where GO-S.DIPF-2S.PRES
 ‘Where are you going?’
- (141) *A=sing hikngä wam-so.*
 this=like really tie-2S.DIMP
 ‘Tie it just like this.’
- (142) *Bakundupi ku-kut.*
 Bakundupi GO-3S.PAST
 ‘He went to Bakundupi.’

Awara has two major types of subject-indexing suffixes. Final-verb suffixes are used on independent clauses, which are normally the final clause in the sentence (143). These suffixes also indicate mood or tense.

- (143) *Wätä ti-wi=n kasot=da akop-ning.*
 sore be-2S.DS=DIS leg.lymph=2S.GEN come.up-23P.FUT
 ‘If you have a sore (on your leg), the lymph nodes in your groin will swell (lit. come up).’

Medial-verb suffixes are used on certain dependent clauses, typically nonfinal, and indicate whether the clause in which they occur has the same subject or a different subject as a following clause. In (144) the suffix *-ke* SAME-SUBJECT PERFECTIVE (SS.PF) is used on a medial clause and indicates that it has the same subject as the following clause. In (145) the suffix *-pän* 3S DIFFERENT SUBJECT (3S.DS) is used on a medial clause and indicates that its subject is third person singular, and that the following clause has a different subject.

- (144) *Ku-ke ap-so.*
 go-SS.PF come-2S.DIMP
 ‘You go and come back.’

- (145) *Ako-pä²=nä ku-him.*
 come.up-3S.DS=after go-1D.FUT
 ‘After he comes up, he and I will go.’

Though the independent or main clause is normally the final clause in the sentence, dependent clauses can be dislocated to the right of the main clause (146). Nevertheless, I call the type of subject-indexing suffix used on the main clause a final-verb suffix.

- (146) *Hälu-ke p-e-na yä-ha-ka-ying, gusit ti-wän=un.*
 wash-SS.PF P.O-leave-1P.DS 3P.O-burn-P.DIPF-23P.PRES SUN be-3S.DS=DIS
 ‘We wash them and put them out and they dry, if it’s sunny.’

Final-verb suffixes are also used on subordinate clauses. These clauses normally precede the main verb. For example, the first clause in (147) has a final-verb suffix, and it is subordinated to the following verb by the postpositional clitic *=le* DATIVE.

- (147) ... [*wuyä i-pit*]=de ku-kum.
 garden cut-1S.FUT=DAT go-1S.PAST
 ‘... and I went to cut a (new) garden.’

The distinction between medial verbs and subordinated final verbs is discussed in §15.4.2.

Awara uses prefixes on certain transitive verbs to indicate the number and sometimes the person of the object.³

- (148) *Ingut=dä na-ha-ngga-k.*
 fly=ABL 1S.O-bite-S.DIPF-3S.PRES
 ‘A mosquito bit me (just now).’
- (149) *Iwak=gä ga-ha-k?*
 leech=ABL 2S.O-bite-3S.PRES
 ‘Did a leech bite you?’

These prefixes are obligatory for these verbs and are used in addition to a coreferential noun phrase, which is optional. Some verbs, such as *ni* ‘tell’ (150) and *nindämut* ‘teach’ (151), require an accusative object with no postposition, while others such as *mi* ‘give’ require a dative object with *=le* DATIVE (152).

- (150) ... *milibiyang i-ni-kum.*
 deaconess 3S.O-tell-1S.PAST
 ‘... and I told the deaconess.’
- (151) ... *mi-ngin yä-nindämum-bä ...*
 mother=1P.GEN 3P.O-teach-23P.DS
 ‘... and they taught our mothers and ...’

² The /n/ in *-pän* is deleted preceding the /n/-initial allomorph of *=yä* ‘after’. The plural form is *-pä=yä* 23P.DS=after.

³ Only a few verbs take these prefixes. Most verbs that subcategorise for an optional object noun phrase do not take object prefixes.

- (152) *Puyä gä=le ga-mi-ka-mäng.*
 work 2S=DAT 2S.O-give-P.DIPF-1P.PRES
 ‘We are giving you work.’

Awara uses a special form of verb compounding for indexing the person and number of the benefactive argument on the verb. In these benefactive compounds, the verb *mi* ‘give’ is compounded to the right of the main verb stem and requires an object-indexing prefix immediately preceding it. This object prefix immediately follows the main verb root and indicates the person and number of the beneficiary. In examples (153) and (154), *mi* and its object prefix are compounded to *gatäp* ‘help’.

- (153) *Täkeläpä, gä=tä gatä-nga-mi-yo.*
 Lord 2S=ABL help-1S.O-give-2S.DIMP
 ‘Lord, help me.’
- (154) *Imin gatäng-yä-mi-t?*
 who help-3P.O-give-1S.PRES
 ‘Who shall I help?’

Other analyses of this benefactive construction are discussed in §18.1.2.

14.3 Serial verb constructions

Awara has serial verb constructions, which use two or more verbs to describe complex events. Some have a verb stem followed by another verb (155), while others have a verb with a different-subject suffix followed by another verb (156). The construction *daying yiwit* ‘see.3P.O stay’ means ‘look after them’ (155), and the construction *ut kungwä* ‘hit die’ has a different-subject suffix on the first verb and means ‘kill’.

- (155) *Ämin=dä ap-ä kätak daying yiwi-ke towi-yo.*
 person=ABL come-23P.DS exactly see.3P.O stay-SS.PF care-2S.DIMP
 ‘When people come, look after them well and care for them.’
- (156) *Däki a=mbä täng-ut-na ku-pik.*
 fire PRFOC=DUB 3S.O-hit-1P.DS die-3S.FUT
 ‘Maybe we’ll kill the fire.’

The various types of serial verb constructions are described in Chapter 22.

14.4 Subordinate-dependent clauses

Awara has two kinds of subordinate-dependent clauses: (1) nonfinite clauses which function as the complement of a modal noun such as *=nangge* PURPOSE (157) and (2) finite clauses with final-verb subject-indexing suffixes that are subordinated by a postposition such as *=le* DATIVE (158), *=u* CONDITIONAL (159),⁴ or the quotative complementiser *yang*.

⁴ Finite clauses also function as relative clauses—a topic not considered in this work, but see §14.7 for examples.

- (157) *Le=tä [Wändot akop]=nangge Giyamalu=xät akop-bumäk.*
 Lae=ABL Wantoat come.up=PURPOSE Giyamalu=with come.up-1D.PAST
 ‘From Lae, I came up with Giyamalu to come up to Wantoat.’
- (158) *[Mätekngä hikngä p-ä-ka-kut]=de mätekngä nä-na täke*
 small real P.O-take-P.DIPF-3S.PAST=DAT small eat-1P.DS good
do=li-kut.
 NEG=be-3S.PAST
 ‘Since he used to bring very little, we ate little and it was not enough (lit. good).’
- (159) *Ti-ke [u=sing t-aha-wiläx]=u ga-ndu-pä täke do=li-wik.*
 be-SS.PF that=like S.O-do-2S.FUT=COND 2S.O-see-23P.DS good NEG=be-3S.FUT
 ‘But if you do that, they will see you as not good.’ (lit. they will see you and it will not be good.)

The structure of subordinate clauses is described in §15.4.1, and the functions of subordinate clauses are described in Chapter 19.

14.5 Anaphoric pro-verbs based on *ti* ‘be’

Awara uses the verb *ti* ‘be’ with various aspect and medial-verb suffixes to introduce sentences and to indicate how the sentence is related to previous material. The use of medial-verb suffixes on *ti* differs from that for medial clauses shown in §14.2 in that the subject of *ti* does not directly reflect that of the preceding verb. Rather, the subject-indexing on *ti* is either same-subject or third person singular different-subject, depending on whether the clause preceding it and the clause following it have the same subject or different subjects.

For example, in (160) *ti-ke* has a same-subject suffix because the subject of the verb preceding it and the subject of the verb following it are the same (we). In (161) *ti-wän* has the third person singular different-subject suffix, because the subject of the verb preceding it (I) and the subject of the verb following it (Gilingdeng) are different.

- (160) *Gwen=duyi=ne nomän t-aha-ka-mäng. Ti-ke gwen=duyi=ne*
 CL.lump=some=LOC good S.O-do-P.DIPF-1P.PRES be-SS.PF CL.lump=some=LOC
nomän=u do=l-aha-ka-mäng.
 good=TOP NEG=S.O-do-P.DIPF-1P.PRES
 ‘Sometimes we do what is right. And sometimes we don’t do what is right.’
- (161) *Ti-wän nä do=xa-kum Gilingdeng=un. Ti-wän Gilingdeng=u äma*
 be-3S.DS 1S NEG=see.3S.O-1S.PAST Gilingdeng=DIS be-3S.DS Gilingdeng=TOP down
kep däkä=ne apu-xa-wün...
 ground CL.thick=LOC come-SIPF-3S.DS
 ‘Well, I didn’t see him, Gilingdeng. And Gilingdeng was coming along on the ground below, ...’

These pro-verbs function on a discourse level to show the temporal and logical relationships between clauses. But because their analysis is beyond the scope of this work, they are simply glossed in the free translations with English conjunctions such as ‘and’, ‘but’, ‘well’, ‘so’, and ‘then’.

Table 14.1 Classifiers

| Awara | gloss | meaning |
|---------------------|-----------------|---------|
| <i>däki täpä</i> | ‘wood CL.stick’ | ‘pole’ |
| <i>wäwi täpä</i> | ‘man CL.stick’ | ‘man’ |
| <i>yot gwen</i> | ‘house CL.lump’ | ‘house’ |
| <i>towiyä gwen</i> | ‘pig CL.lump’ | ‘pig’ |
| <i>homu gwen</i> | ‘dog CL.lump’ | ‘dog’ |
| <i>nap täknga</i> | ‘vine CL.rope’ | ‘vine’ |
| <i>gomok käknga</i> | ‘snake CL.rope’ | ‘snake’ |

14.6 Classifiers

Awara has a noun classification system with almost thirty classifiers. Most classifiers give some indication of the physical shape or arrangement of the item named by the noun. For example, *täpä* ‘CL.stick’ refers to things that are basically long and rigid like a stick; *gwen* ‘CL.lump’ refers to things that have roughly the same size in all dimensions; and *täknga* ‘CL.rope’ refers to things that are long and flexible.⁵ Table 14.1 gives examples of a few nouns used with these three classifiers.

Nouns may be used with various classifiers to clarify their usage. For example, *yanggä* ‘water’ can be used with *täpä* ‘CL.stick’ to refer to a river, with *gwen* ‘CL.lump’ to refer to a pond, or with *CL.täknga* ‘rope’ to refer to a drink.

Classifiers are also used with certain nouns to produce abstract concepts, as shown in Table 14.2.

Table 14.2 Classifiers with abstract nouns

| Awara | gloss | meaning |
|------------------------|---------------------|------------------|
| <i>klismas täpä</i> | ‘year CL.stick’ | ‘year’ |
| <i>klismas gwen</i> | ‘year CL.lump’ | ‘year’ |
| <i>gusit gwen</i> | ‘sun CL.lump’ | ‘day (also sun)’ |
| <i>wam täknga</i> | ‘word CL.rope’ | ‘speech’ |
| <i>meyä täknga</i> | ‘heavy CL.rope’ | ‘problem’ |
| <i>tukwatde täknga</i> | ‘afternoon CL.rope’ | ‘afternoon’ |

⁵ In this paper, classifiers are written as though they were separate words, but they are often phonologically bound to the classifier phrase constituent immediately preceding them. Evidence for this is the point of articulation assimilation process which applies to classifiers beginning with /t/, yielding the forms *täknga* and *käknga* for ‘CL.rope’ and *täpä* and *käpä* for ‘CL.stick’.

14.7 Classifier and noun phrases

Both classifier phrases and noun phrases may function as arguments, as objects of postpositions, and as predicate complements.

Classifier phrases contain a classifier and require at least one of the following: a noun phrase which functions as the complement to the classifier (162), a demonstrative (163), or a quantifier (164). Noun phrases precede the classifier. Demonstratives are phonologically bound to the left of the classifier, and quantifiers are phonologically bound to the right of the classifier.

- (162) *Kwäwit gwen=dä=mbä yä-ngga-k.*
 bird CL.lump=ABL=DUB say-S.DIPF-3S.PRES
 ‘Maybe a bird is calling.’
- (163) ... *u=nggwen=u ep-but.*
 that=CL.lump=TOP come.down-3S.PAST
 ‘... and that one (stone) came down.’
- (164) ... *gwen=du a=nde-kut=nä ka-ke...*
 CL.lump=one PRFOC=detach-3S.PAST=after see.3S.O-SS.PF
 ‘... and I saw that one (trap) had fallen and ...’

When the classifier phrase includes a demonstrative (165) or a numeral (166) in addition to the noun phrase, the noun phrase is marked with =*u* LINKER. The /u/ is deleted after vowels, so it does not show up on the noun phrase *däki* (167).

- (165) *yol=u a=nggwen*
 house=LNK this=CL.lump
 ‘this house’
- (166) *yol=u kalux=u gwen=du*
 house=LNK new=LNK CL.lump=one
 ‘one new house’
- (167) *däki=Ø u=ha=nal=u*
 wood=LNK that=CL.sheet=two.DEF=TOP
 ‘those two planks’

Noun phrases may have a possessor preceding the noun which is a postpositional phrase using the same dative postpositional clitic that is used to mark indirect objects (168).⁶ Modifiers such as attributive nouns, postpositional phrases, and relative clauses follow the noun (169).

- (168) *engang=ge nak*
 child=DAT food
 ‘the children’s food’

⁶ There is another postposition that less commonly is used to mark possessors: =*däne* POSSESSOR which is also used as a complementiser with certain verbs (see §19.1). For lack of a better gloss I have labelled it ‘possessor’, even though, in fact, it is not the most common way of marking possessors.

- (169) *sunggum=u mǎngǎlä=tä p-ä-kin=u*
 sweet.potato=LNK woman=ABL P.O-take-23P.PAST=TOP
 ‘the sweet potatoes which the women took’

When the noun is followed by a modifier, it is marked with *=u* LINKER as shown in examples (166) and (169) above and (170) below.

- (170) *Wam=u nomǎn ya-ke yiwi-son.*
 word=LNK good say-SS.PF stay-23D.DIMP
 ‘Say good words and live together.’

The noun phrase may lack a head noun and consist only of a modifier such as a postpositional phrase (171)⁷ or a relative clause (172).

- (171) *Sǎne nanǎ=tä apu g-u-kin?*
 where from=ABL come 2S.O-hit-23P.PAST
 ‘(People) from where came and killed (lit. hit) you?’
- (172) ... *yol=une yiwi-kin=dä duksǎng yango-ke ...*
 village=LOC stay-23P.PAST=ABL much yell-SS.PF
 ‘... those who were in the village yelled out strongly, and ...’

In addition, longer modifiers such as relative clauses may precede the noun (173). The preceding modifier is not followed by *=u*.

- (173) *Yabim natä-xa-ying ämin=u käyä gǎmu, ...*
 Yabim understand-SIPF-23P.PRES person=TOP exist if
 ‘If there were people who understand Yabim, ...’

The linker *=u* is homophonous with a related clitic *=u* TOPIC. The difference is that *=u* LINKER occurs within the noun or classifier phrase and is used to indicate the syntactic relationship of constituents within the phrase, while *=u* TOPIC follows the noun or classifier phrase and is used to show the pragmatic status of clausal constituents. Examples of *=u* TOPIC at the end of the noun phrase or classifier phrase are found in (163), (167), (169), and (173) above.

Genitive clitics indicating the person and number of the possessor may follow the head noun in the noun phrase (174) or the whole classifier phrase (175).

- (174) *Kakǎluk=ga mǎngǎlä gwen tǎng-u-kin?*
 chicken=2S.GEN female CL.lump 3S.O-hit-23P.PAST
 ‘Did they kill a hen of yours?’
- (175) *Kakǎlux=u mǎngǎlä gwen=da tǎng-u-kin?*
 chicken=LNK female CL.lump=2S.GEN 3S.O-hit-23P.PAST
 ‘Did they kill your hen?’

⁷ Although Awara uses a construction for ‘kill’ involving the verbs *ut* ‘hit’ and *kungwä* ‘die’, the verb *ut* ‘hit’ is often used to refer to killing. Example (171) is taken from a text about divination in which a dead person is asked who killed him. The morpheme gloss reflects the literal meaning ‘hit’, while the free translation reflects the contextual meaning ‘kill’.

14.8 Postpositions

Awara uses postpositional clitics to show several kinds of relationships: the relationship of nominals to the verb, of nominals to other nominals, and of subordinate clauses to the main clause. Here I briefly describe the uses of three postpositional clitics following nominals: =*dä* ABLATIVE, =*le* DATIVE, and =*une* LOCATIVE.

The ablative =*dä* is used to mark the subject of a transitive verb (176),⁸ the instrument (177), and origin of movement ('from') (178).

- (176) ... *guyä=na=tü* *gäpma bungep kwayi-kut.*
 father=1S.GEN=ABL hole trap dig-3S.PAST
 '... and my father dug a hole trap.'

- (177) ... *gayät=dü matä-ka-kin.*
 adze=ABL cut-P.DIPF-23P.PAST
 '... and they would cut with an adze.'

- (178) *Nä Bakudupi=tü* *apu-ngga-t.*
 1S Bakundupi=ABL come-S.DIPF-1S.PRES
 'I am coming from Bakundupi.'

The dative =*le* is used to show the following relationships to the verb: the recipient (179), beneficiary (180), purpose (181), and direction of movement ('towards') (182).

- (179) ... *kawut=du nä=le na-mi-kut.*
 CL.part=one 1S=DAT 1S.O-give-3S.PAST
 '... and he gave part of it to me.'

- (180) *Pinggu p-aha-ngä-mi-ke* *awä nä=le do=w-aha-nga-mi-kut*
 top P.O-do-3S.O-give-SS.PF and 1S=DAT NEG=P.O-do-1S.O-give-3S.PAST
gwen=du=n.
 CL.lump=one=DIS
 'He made a top for him, but he didn't make one for me.'

- (181) *Ti-keng=u* *kälap=de ku-ka-kut.*
 be-SS.PF=COND animal=DAT go-P.DIPF-3S.PAST
 'And he would go up for meat.'

- (182) *Ayi Kendi=le* *ko-ke* ...
 up Kaindi=DAT go.up-SS.PF
 'We went up towards Kaindi Mountain and ...'

The dative clitic also signals certain relations between two nominals that belong to the same noun phrase. In (183) it marks the possessor noun phrase, and in (184) the precise relationship it marks is undetermined.

⁸ Thus Awara could be analysed as having an ergative case marking system, although =*dä* does sometimes occur on intransitive subjects.

- (183) *Ti-wän do=yä-ka-ying, ayä=le uman=un.*
 be-3S.DS NEG=say-P.DIPF-23P.PRES husband.3.GEN=DAT name=DIS
 ‘So they don’t say their husband’s name.’

- (184) *Wandot=de kahit täpä kop-bumäk.*
 Wantoat=DAT road CL.stick go.up-1D.PAST
 ‘We went up the Wantoat road.’

The locative =*une* is used for locations (185), goals (186), and times (187).

- (185) *Lutelen=de yol=une pe-kumäng.*
 Lutheran=DAT house=LOC sleep-1P.PAST
 ‘... and we slept at the Lutheran (guest-)house.’

- (186) *Hipdu yol=une ap-bumäng.*
 again village=LOC come-1P.PAST
 ‘We came back to the village.’

- (187) *[Tunde gwen=du]=ne Dakupi ku-kum.*
 Tuesday CL.lump=one=LOC Dakupi go-1S.PAST
 ‘One Tuesday I went to Dakupi.’

15 *Clause types*

As mentioned in Chapter 12, Awara clauses can be categorised according to what kind of predicate they have (active versus stative), and whether or not they can stand alone as a complete sentence (independent versus dependent). Dependent clauses can be further subcategorised according to their relationship to the clause on which they depend (cosubordinate versus subordinate).¹

15.1 Active clauses

Active clauses are headed by noncopular verbs that typically carry subject-indexing suffixes. Some examples of such noncopular verbs are transitive verbs (188), motion verbs (189), involuntary process verbs (190, 191), and weather verbs (192).

- (188) *Simbul=u muha=tu=kän na-yo.*
cake=LNK CL.wad=one=only eat-2S.DIMP
'Eat only one cake.'
- (189) *Apu-ngga-läk?*
come-S.DIPF-2S.PRES
'Are you coming?'
- (190) *Payiw=u dākā=yalä=tä pu-mäläk.*
machete=LNK CL.thick=two=ABL break-23D.PRES
'Two machetes broke.'
- (191) *Yiwi-hika yiwi-hika äpme hikngä=yä täka-kum.*
stay-SS.DUR.PF stay-SS.DUR.PF later real=after improve-1S.PAST
'I stayed and stayed and much later I got better.'
- (192) *Hopä a=la-ngga-k.*
rain PRFOC=rain-S.DIPF-3S.PRES
'It's raining.' (lit. The rain is raining.)

¹ The distinctions between dependent/independent and subordinate/cosubordinate are based on Van Valin and LaPolla (1997:454). Foley's (1986:175–177) explanation of clause chaining is similar except that he calls Van Valin and LaPolla's cosubordinate clauses 'coordinate dependent'.

15.2 Stative clauses

There are three kinds of stative clauses: (1) those headed by a nonverbal predicate, (2) those headed by a noninflecting existential verb, and (3) those headed by a copular verb.

15.2.1 Stative clauses with nonverbal predicates

The stative clauses shown in (193) to (201) have only a subject and a nonverbal predicate. There are two types of nonverbal predicates: noun or classifier phrases and postpositional phrases. Noun or classifier phrases are used for equation (193), proper inclusion (194), attribution (195), and quantification (196),

- (193) *Yesu u=läpä nin=däne yakap ämin.*
 Jesus that=CL.stick 1P=POSS before person
 ‘Jesus is our leader (lit. first man).’
- (194) *Pilox=u däki dākä=tu.*
 tree.sp.=TOP wood CL.thick=one
 ‘A ‘pilok’ is a (type of) tree.’
- (195) *Stoli u=sing belakngä hikngä=ndo. Däpi.*
 story that=like long real=NEG short
 ‘The story is not very long. It’s short.’
- (196) *Huw=u bulämbam=u take=yalä.*
 stone=LNK big=TOP CL.big=two
 ‘There are two big stones.’ (lit. The big stones are two.)

Noun phrases headed by modal nouns such as =*nangge* PURPOSE are used for modal expressions. The modal noun functions as the predicate and takes a nonfinite clausal complement. In (197) *däki hä* ‘fire cook’ is the clausal complement of =*nangge*.

- (197) *Däki hä=nangge.*
 fire cook=PURPOSE
 ‘It’s for lighting a fire.’

Postpositional phrases are used as stative predicates for possession (198), origin (199), location (200), or purpose (201).

- (198) *Sändun=u [gup=nä kwak]=güne.*
 axe=TOP skin=3.GEN light=POSS
 ‘Axes belong to the white skins.’ (lit. Axes are the white skins’.)
- (199) *Yot=da [säne] nanü?*
 home=2S.GEN where from
 ‘What village are you from?’ (lit. Your village is from where?)

- (200) *Ti-xawix=u tämbäk bungew=u u p-aha-kumäng=u u=sing [sunggum be-ss.IPF=COND rat trap=LNK that P.O-do=1P.PAST=TOP that=like sweet.potato puyä tängä]=ne=ndo.*
 garden CL.place=LOC=NEG
 ‘Well, the rat traps that we made, it was not at the sweet potato garden.’
- (201) *Sow=u [yanggä hälut-nim]=de.*
 soap=TOP water wash-1P.FUT=DAT
 ‘Soap is for washing with.’ (lit. Soap is for us to wash.)

15.2.2 Stative clauses with non-inflecting existential verbs

Another type of stative predicate consists of either of the two noninflecting existential verbs, *käyä* ‘exist’ (202) and *wenä* ‘not exist’ (203). These are discussed further in §17.1.

- (202) *Yanggä käyä.*
 water exist
 ‘There is water.’
- (203) *Yanggä wenä.*
 Water not.exist
 ‘There is no water.’

15.2.3 Stative clauses with inflecting verbs

It is possible for the stative predicates described above—those headed by nonverbal predicates (204) and those headed by existential verbs (205) to function as complements of verbs like *ti* ‘be’, *natäp* ‘feel’, and *yiwit* ‘stay’.

When *ti* ‘be’ has a suffix indicating some sort of imperfective aspect such as *-ga* SINGULAR DYNAMIC IMPERFECTIVE (S.DIPF) (204–206), *-ka* PLURAL DYNAMIC IMPERFECTIVE (P.DIPF) (207), or *-xawik* SAME-SUBJECT IMPERFECTIVE (SS.IPF) (208), it is a stative copular verb.

- (204) *Ti-wän deyä kawut=du täke=ndo. [Wäyi ti-ngga-k].*
 be-3S.DS but CL.part=one good=NEG bad be-S.DIPF-3S.PRES
 ‘But some of it (what I said) is not good. It is bad.’
- (205) *Ti-wän ya-wä bulä [wenä ti-ngga-k].*
 be-3S.DS say-23P.DS fruit not.exist be-S.DIPF-3S.PRES
 ‘They talk and there are no results (from the discussion).’ (lit. They talk and there is no fruit.)
- (206) *Iwat ti-ke [ku=nangäsä do=li-ngga-k].*
 sick be-ss.PF go=DEONTIC NEG=be-S.DIPF-3S.PRES
 ‘I am sick, so it is not possible (for me) to go.’
- (207) *Bungep=nä ku paha-wän=u [täke ti-ka-kut].*
 trap=3.GEN go P.O-do-3S.DS=COND good be-P.DIPF-3S.PAST
 ‘When he would go make a trap, it would be good.’

- (208) ... *yämä dākā=ne* [*ku yayi=nangge ti-xawix=u*] 'Täkeläpä, gä=tä
 door CL.thick=LOC go step=PURPOSE be-SS.IPF=COND Lord 2S=ABL
gätä-nga-mi-yo, ' *yang ya-ke kop-bum.*
 help-1S.O-give-2S.DIMP COMP say-SS.PF go.up-1S.PAST
 '... and as I was about to step over the threshold, I said "Lord, help me" and I went inside.'

Without a suffix indicating some type of imperfective aspect, *ti* has the more dynamic sense of 'become' (72, 73).

- (209) *Apu-xu-wā=nā tāke u=ne ti-kut.*
 come-go-3S.DS=after good that=LOC be-3S.PAST
 'After it (the water) came out, it (the bump) got well then.'
- (210) *Moyo yiwit-na nax=u wenā ti-wik.*
 without stay-1P.DS food=TOP not.exist be-3S.FUT
 'If we do nothing, there won't be any food (lit. the food will become nonexistent).'

Other verbs that can function as copular verbs are *natäp* 'feel', which is used with emotions (211); and *yiwit* 'stay', which is used with locations (212) and conditions (213).

- (211) *Sip-na ti-wā tokngä hikngä natä-xa-mäng.*
 hit.3P.O-1P.DS cry-23P.DS hot real feel-SIPF-1P.PRES
 'We hit them and they cry, and we feel very angry.'
- (212) *Temä-xa-wa mätekngä täpä undan yiwi-kut.*
 shoot-SIPF-1S.DS small CL.stick there stay-3S.PAST
 'While I shot it, the little one stayed there.'
- (213) *Ti-wän kitokngä hikngä yiwi-kut=de ...*
 be-3S.DS strong real stay-3S.PAST=DAT
 'Well, because it (the sun) stayed very strong, ...'

15.3 Independent clauses

An 'independent clause is one that is fully inflected and capable of being integrated into discourse on its own' (Payne 1997:306). It is typically the main clause of the sentence it belongs to, and it does not depend on another verb for the specification of operators like tense, aspect, and mode.

Most independent clauses in Awara are finite clauses. That is, they have the type of inflectional morphology indicating subject identity, tense, and mode that occurs on the end of final verbs. The suffixes that mark these operators are called final-verb suffixes because the main or independent clause of a sentence is normally the final one. (These are described in §18.2.)

Below are some examples illustrating some of the suffixes that occur on final verbs. The final-verb suffixes that indicate tense are present (214), past (215), and future (216).

- (214) *Ina=le tik-ga-läk?*
 what=DAT cry-S.DIPF-2S.PRES
 ‘What are you crying for?’

- (215) *A=sing yiwi-kum.*
 this=like stay-1S.PAST
 ‘I stayed like this.’

- (216) *Bapu=täne yä-wit.*
 grandfather=POSS say-1S.FUT
 ‘I will speak about the ancestors.’

The final-verb suffixes indicating imperative mood are the default imperative (DIMP) (217) and the immediate imperative mood suffixes (IMM) (218).

- (217) *Täkeläpä, gä=tä gatä-nga-mi-yo.*
 Lord 2S=ABL help-1S.O-give-2S.DIMP
 ‘Lord, help me.’

- (218) *T-e-wi ku-ka-kut.*
 S.O-leave-2S.DS go-P.DIPF-23P.IMM
 ‘Let them go.’

The final-verb suffixes that indicate epistemic modality are probability (219), apprehension (220), and hypothetical (221).²

- (219) *O wäyi ti-wän woksaw=une yi-wänak.*
 oh bad be-3S.DS workshop=LOC stay-3S.PROB
 ‘Oh, it’s probably damaged and in the workshop.’

- (220) *Tik-ga-wa Giyamgisi=xät Giatulu=xät=dä na-ni-hän.*
 cry-S.DIPF-1S.DS Giyamgisi=with Giatulu=with=ABL 1S.O-tell-3D.APPR
 ‘I (might) cry and Giyamgisi and Giatru might rebuke me.’

- (221) *A-natä-xa-t gämu, a=layi-xä-wa ya-pim.*
 PRFOC=know-SIPF-1S.PRES if PRFOC=sing-SIPF-1S.DS write-2S.HYP
 ‘If I knew it, I’d sing it and you would write it.’

In addition to clauses containing verbs with the above kinds of suffixes, stative clauses headed by a nonverbal predicate or by a noninflecting existential verb may also function as independent clauses (see §15.2.1). Except for clauses headed by modal nouns, their modality is understood to be either declarative (222) or interrogative (223).

- (222) *Kuhit=na tokngä.*
 head=1S.GEN pain
 ‘My head hurts.’

- (223) *Däki dākä uma=nä ina?*
 tree CL.thick name=3.GEN what
 ‘What is the tree called?’ (lit. The tree, its name is what?)

² With regard to (221), the verbs *tem* ‘shoot.s.o’ and *yam* ‘shoot.p.o’ are both used for ‘write’.

15.4 Dependent clauses

A dependent clause is one that depends on some other clause for its temporal, modal, or aspectual interpretation, or for the specification of the identity of a core argument. Awara has two kinds of dependent clauses: subordinate-dependent clauses and cosubordinate-dependent clauses. These are described below. Different types of subordinate-dependent clauses and cosubordinate-dependent clauses are also shown in Chapters 19 and 20.

15.4.1 Subordinate-dependent clauses

Awara has two kinds of subordinate-dependent clauses: (1) clauses that are subordinated by a postposition or the quotative complementiser *yang*,³ and (2) nonfinite clauses which function as the complement of a modal noun.

Clauses with final-verb subject-indexing suffixes indicating tense can be subordinated by postpositions such as *=le* DATIVE (224), *=une* LOCATIVE (225), and *=yä* ‘after’ (226).⁴ Though these clauses are inflected for tense, their tense is relative to that of the final or main clause.

- (224) *U=sing [tembanä ako-pit]=de ya-kum deyä ...*
 that=like morning come.up-1S.FUT=DAT say-1S.PAST but
 ‘I said I would come up in the morning, but ...’

- (225) *Tupä [nä wawakdäkä yiwi-kum]=une nä=tä u=sing t-aha-kum.*
 before 1S child stay-1S.PAST=LOC 1S=ABL that=like S.O-do-1S.PAST
 ‘Before, when I was a boy, I did this.’

- (226) *Ko ko-keng=u [a=w-äk-epu yiwi-kut]=nä*
 go.up go.up-SS.PF=COND PRFOC=P.O-take-come.down stay-3S.PAST=after
ka-kut yämä=nä=ne.
 see.3S.O-3S.PAST door=3.GEN=LOC
 ‘When he (Matai) went up, he saw that it had come down and stayed at its door.’

Any kind of clause can be subordinated by the quotative complementiser *yang*. In (227) the subordinated clause is headed by the noninflecting verb *wenä* ‘not exist’.

- (227) *‘Kupän=u wenä’ yang i-ni-kum.*
 tobacco=TOP not.exist COMP 3S.O-tell-1S.PAST
 ‘I told him “I don’t have any tobacco (lit. tobacco doesn’t exist)”.’

The second type of subordinate-dependent clause is the nonfinite clauses which function as the complement to modal nouns such as *=nangge* PURPOSE (228) and *=nangän* DEONTIC (229). These nonfinite clauses lack subject agreement suffixes. Modal nouns are discussed further in Chapter 16.

³ The complementiser *yang* is used following quotes and is apparently derived from the verb *ya* ‘say’. It is also used following lists. This word could be analysed as a postposition, but unlike postpositions it is optional when it marks the complement of certain quotative verbs. Another analysis is that it is a proform used as an appositive phrase following lists and quotes. Because of its use following quotes, it is presented here as a complementiser.

⁴ The allomorphs of *=yä* ‘after’ are *=yä*, *=nä*, and *=ngä*.

- (228) *Undanä. Towiyä=le yä-mi=nangge.*
 forget.it pig=DAT 3P.O-give=PURPOSE
 ‘Forget it. Give it to the pigs. (lit. It’s for giving to the pigs.)’
- (229) *Ma=i-ni=nangan.*
 prohib=3S.O-tell=DEONTIC
 ‘You shouldn’t tell him. (lit. It is obligatory not to tell him.)’

15.4.2 Cosubordinate-dependent clauses

Van Valin and LaPolla (1997:453ff) use the term ‘cosubordinate’ to describe clauses that, like coordinate clauses, are neither modifiers nor arguments of the clause, but are ‘added together in sequence’. However, like subordinate clauses, they exhibit operator dependence—that is, they depend on another clause for tense and illocutionary force.

Awara has such clauses and uses them in clause chains to describe multiple events in a sentence. The initial clauses in the chain have medial-verb subject-indexing suffixes, while the final clause in the chain has a final-verb subject-indexing suffix. These medial-verb suffixes indicate whether the subject of the current clause is the same as or different from the subject of the following clause in the chain. Haiman and Munro (1983) call this other clause the ‘reference clause’.⁵ Medial-verb suffixes in Awara do not indicate tense or modality, so clauses with these suffixes depend on the main clause for their temporal and modal specification.

SAME-SUBJECT (SS) suffixes indicate that the subject of the current clause is the same as that of the reference clause. In (230) the suffix *-ke* SS.PF on *e* ‘leave’ indicates that its subject is the same as that of *apu* ‘come’, which is first person singular. The medial clause containing *-ke* is dependent on the main clause which contains *-gum* 1S.PAST.

- (230) *Ti-wä=nä t-e-ke hipdu yol=une ap-bum.*
 be-3S.DS=after S.O-leave-SS.PF again village=LOC come-1S.PAST
 ‘Then I left and came home again.’

DIFFERENT-SUBJECT (DS) suffixes indicate the identity of the subject of the current clause directly, as well as signaling that the subject of the reference clause is different. In (231) the verb *ya* ‘say’ has the third singular different-subject suffix, and the subject of its reference clause, which is headed by *ni* ‘tell’, is first singular.

- (231) *T-ä-ko ‘Uman=da imin?’ ya-wän, ‘Uma=na Ngawingom,’ yang*
 s.o-take-go.up name=2S.GEN who say-3S.DS name=1S.GEN Ngawingom COMP
i-ni-kum.
 3S.O-tell-1S.PAST
 ‘Going inside he said “What’s your name?”, and I told him “My name is Ngawingom”.’

⁵ ‘Following Munro 1980a, we identify the clause in which switch-reference is marked as the marking clause, and the clause with reference to which it is marked as the reference clause’ (Haiman and Munro 1983:xii).

Though the medial clause is operator dependent on the main clause for its temporal and modal specification, its reference clause is not necessarily the main clause. In (232) below, the first verb *yänike* ‘tell’ is marked same-subject, but it does not have the same subject as *päkaying* ‘take’, the final verb in the main clause. Rather *yänike* is marked in reference to the following medial verb, *pena* ‘leave’.

- (232) ‘...’ *yang yä-ni-ke u=sing p-e-na yiwi-ke natändetdel=u*
 ... COMP 3P.O-tell-SS.PF that=like P.O-leave-1P.DS stay-SS.PF knowledge=TOP
u=ne p-ä-ka-ying.
 that=LOC P.O-take-P.DIPF-23P.PRES
 ‘We tell them, “ ... ,” and leave them like that and they stay and learn their lesson there (lit. get knowledge there).’

The reference clause is normally the following clause in the clause chain. This does not mean that it is the immediately following clause. This is because clauses which are subordinated to the following clause in the chain may intervene. In (233), *epuxuke* ‘come out’ is marked for same-subject. Its reference verb is not the immediately following one, *yiwikumängune*, but *apbut*. The following clause *ämindä yiwikumängune* ‘where we people were’ is an adverbial clause, subordinated to *apbut*, and is therefore ignored by the switch-reference system, which only monitors clauses in the chain.

- (233) *Epuxu-ke ämin=dä yiwi-kumäng=une ap-but.*
 come.out-SS.PF person=ABL stay-1P.PAST=LOC come-3S.PAST
 ‘It came out and came to where we people were ...’

Another reason that the reference clause may be something other than the following clause is that a medial clause can be dislocated to the right of its reference clause. In (234), the clause *bikhet däkngawä* is followed by the clitic =*un* DISLOCATION⁶ and is marked different-subject in reference to the clause preceding it, *tokngä hikngä natäke*. Throughout the rest of the sentence, switch-reference marking conforms to the pattern described above, with the immediately following clause in the chain, *sipmäkengä* ‘hit’, serving as the reference clause for *natäke* ‘feel’.

- (234) *Tokngä hikngä natä-ke, [bikhet däknga-wä=n], sipmä-ke=ngä äpme=yä*
 angry real feel-SS.PF brat become-23P.DS=DIS hit.3P.O-SS.PF=after later=after
yä-na bita-ka-ying.
 say-1P.DS stop.crying-P.DIPF-23P.PRES
 ‘We feel very angry, when they misbehave, and after we hit them, later we talk to them and they stop crying.’

Example (235) does not fit the pattern described above. The subject of the first verb, *wamäkengä* ‘tie’, is the son. The subject of the following verb, *iniwän* ‘tie/tell’ (ignoring the quoted material), is the father. The first verb is marked for same-subject, even though it does not have the same subject as the second, *iniwän*. This indicates that *iniwän* is not its reference verb. Instead, both *wamäkengä* and *iniwän* are marked in reference to the final verb *pexakut*.

⁶ The allomorphs of =*un* DISLOCATION are =*un* and =*n*.

- (235) *Wamä-ke=ngä 'Hii kwätahi=käyä p-e-yo,' yang i-ni-wän*
 tie-ss.PF=after yes trap.base=also P.O-leave-2S.DIMP COMP 3S.O-tell-3S.DS
kwätahi=käyä p-e-xa-kut.
 trap.base=also P.O-leave-SIPF-3S.PAST
 'After he (the son) would tie it, he (the father) would tell him, "Yes, also put the base
 of the trap," and he (the son) would put it.'

The syntactic relationships of Awara medial clauses to reference clauses and to the final clause is an issue for further investigation.

Van Valin and LaPolla (1997:450–453) use the term cosubordinate for medial clauses in Amele and other Papuan languages, because neither the terms coordinate nor subordinate apply. In Amele, medial clauses are not coordinate because 'unlike coordinate constructions, tense, mood (illocutionary force) and negation can be shared across conjuncts in the switch-reference constructions' (p. 450). They are not subordinate because syntactic tests, such as ability to be postposed and the possibility of a pronoun being coreferential with a full NP in the superordinate clause, show them to be more like coordinate rather than subordinate clauses.

Strong evidence for treating Awara medial clauses as cosubordinate rather than as subordinate has not been found. However, because the forms and functions of the medial clauses and the subordinate-dependent clauses in Awara are similar to those described by Van Valin and LaPolla (1997) for other Papuan languages, I have used their term 'cosubordinate' for the medial clauses.

16 *Modal nouns*

Awara has three modal nouns: *=nangäsä* DEONTIC and *=nangän* DEONTIC, both of which express concepts related to possibility and obligation, and *=nangge* PURPOSE. These nouns may function as arguments of the clause, as predicates, and as adverbial modifiers. In (236) the noun phrase headed by *=nangäsä* functions as the subject of *wenä* ‘not exist’. In (237) the noun phrase headed by *=nangge* functions as the complement of *natäp* ‘want’. In (238) the noun phrase headed by *=nangäsä* functions as the predicate. And in (239) the noun phrase headed by *=nangge* functions as an adverbial modifier. (In (236) to (239) the noun phrase is in brackets, and the modal noun is in bold.)

- (236) *Dasing=ga t-aha-nim täknga, [Anätu=le kayi=ne ko hopi=**nangäsä**] wenä.*
how=INDEF S.O-do-1P.FUT CL.rope God=DAT eye=LOC go.up hide=DEONTIC not.exist
‘Whatever we do, there is no possibility of hiding it from God’s eyes (lit. the possibility of hiding it in God’s eyes does not exist).’
- (237) *[Akop=**nangge**] natä-ke-ngä ako-pit.*
come.up=PURPOSE want-SS.PF=after come.up-1S.FUT
‘When I want to come up, I will.’
- (238) *[Do=w-aha=**nangäsä**].*
NEG=P.O-do=DEONTIC
‘You don’t have to do it.’ (lit. It is permissible not to do it.)
- (239) *Ge [skul=de Kwandam kop=**nangge**] ta-wäm-ba mali-wän ...*
so school=DAT Kwandam go.up=PURPOSE 3S.O-follow-1S.DS fail-3S.DS
‘So in order to go up to Kwandam for school I looked for it (my bag) with no success (lit. it failed) ...’

Modal nouns take nonfinite clauses as their complements. They never occur without a nonfinite clausal complement.¹ The nouns are enclitics, phonologically bound to the nonfinite verb in the complement. The nonfinite verb is simply the verb stem (240) with its object

¹ An alternative analysis is that the clause preceding the modal is a relative clause. However, modals would be the only nouns to require relative clauses. In addition, relative clauses with other nouns require final-verb subject-indexing. Relative clauses with modals would be different in that they cannot have subject-indexing suffixes.

prefixes (241), or the verb stem followed by the aspect suffix *-ka* ‘plural dynamic imperfective’ (242). The suffix *-ka* is the only one found on a nonfinite verb preceding a modal noun. (In the examples below the noun phrase is in brackets and the nonfinite verb stem is in bold.)

- (240) [*Ep=nangäsä*] *do=li-kut*.
come.down=DEONTIC NEG=be-3S.PAST
‘He/I/we couldn’t come down.’ (lit. It was not possible to come down.)
- (241) [*A=yä-mi=nangäsä*].
PRFOC=3P.O-give=DEONTIC
‘You should have given it to them.’ (lit. It was obligatory to give it to them.)
- (242) [*Pet=sä pe-ka=nangäsä*].
sleep=2P.GEN sleep-P.DIPF=DEONTIC
‘You should sleep.’ (lit. It is obligatory to sleep your sleep.)

The complement is not necessarily just one clause. It may also be a clause chain ending in a nonfinite verb, as in (243). (The complement of the modal noun is in brackets.)

- (243) [*A=ha-ke yä-mi=nangäsä ti-kuläk*].
PRFOC=COOK-SS.PF 3P.O-give=DEONTIC be-2S.PAST
‘You should have cooked and given it to them.’ (lit. You were obligated to cook and give it to them.)

Like other nonverbal predicates, modal nouns can be followed by *=undo* NEGATIVE.²

- (244) *Siwa=tä a=uhi-k. Kä=nangäsä=ndo*.
smog=ABL PRFOC=fill-3S.PRES see.3S.O=DEONTIC=NEG
‘The smog fills (the sky). It’s not possible to see it.’
- (245) *A=w-aha=nangge=ndo*.
PRFOC=P.O-do=PURPOSE=NEG
‘It is not to be planted.’ (lit. It is not for planting.)

Like other noun phrases, modal noun phrases can be the complement of *ti* ‘be’.

- (246) ... [*wep=nangäsä*] *ti-ngga-k*.
fly=DEONTIC be-S.DIPF-3S.PRES
‘(My body feels so light today), I could fly (lit. it is possible to fly).’
- (247) [*Do=läng-ut=nangän*] *ti-läk*.
NEG=3S.O-hit=DEONTIC be-2S.PRES
‘You should not have hit him.’ (lit. You were obligated not to hit him.)
- (248) ... [*yämä dākā=ne ku yayi=nangge*] *ti-xawix=u* ...
door CL.thick=LOC go step=PURPOSE be-SS.IPF=COND
‘... and being about to step over the threshold, ...’

² The allomorphs of *=undo* NEGATIVE are *=undo* and *=ndo*.

There are at least two other possible analyses of these modals. One is that these modals are complementisers that are used with nonfinite clauses. Nonfinite clauses with these complementisers would be able to function as independent clauses as in (242) and (245).

There are two arguments against this. One is that the modals function differently than the complementiser *yang*. The complementiser follows fully inflected clauses while modals follow nonfinite clauses, it is never negated by *=undo* while modals can be, and clauses with *yang* do not function as the complement of *ti* ‘be’ while modals can.

The other argument is that it would be typologically strange for nonfinite clauses to function as independent clauses, whereas if a modal is a noun or a noninflecting verb, then it is the head of the independent clause and the nonfinite clause is subordinate to it.

The other possible analysis is that these modals are not nouns, but noninflecting auxiliary verbs that take nonfinite clausal complements. Both nouns and noninflecting verbs can function as the predicate or as the complement of *ti* ‘be’. And both nouns and noninflecting verbs, unlike inflecting verbs, are never negated by *do=* NEGATIVE or *ma=* PROHIBITIVE or preceded by *a=* PREDICATE FOCUS.³ However, modals with their complements, like noun phrases, can function as arguments of the clause, whereas the noninflecting verbs, *käyä* ‘exist’ and *wenä* ‘not exist’, cannot (see §17.1). In this way modals are more like nouns than noninflecting verbs.

16.1 *=nangäsä* DEONTIC

The first modal noun glossed DEONTIC, *=nangäsä*, has several senses involving possibility: potential situation (249), ability (250), or permission (251). (In the examples below the modal noun is in bold and its clausal complement is in brackets.)

- (249) ... [*amuha dāmā=xātan t-ä-pu* *n-ut*]=***nangäsä*** ...
 below CL.cliff=at S.O-take-go.down 1S.O-hit=DEONTIC
 ‘... and I could have fallen down the cliff ...’ (lit. there was the potential of falling down the cliff)
- (250) *Täke*. [*A=xu*]=***nangäsä***.
 good PRFOC=GO=DEONTIC
 ‘It (the road) is good. You can go.’ (lit. It is possible to go.)
- (251) *Äpman=u* [*wawakdäkä=tä miti* *kaluk täknga-läknga* *p-äk-apu*
 now=TOP child=ABL gospel new CL.rope-CL.rope P.O-take-come
 yä-nindämut]=***nangäsä***=*ndo*.
 3P.O-teach=DEONTIC=NEG
 ‘Now the young people may not bring new denominations and teach them (to the people).’ (lit. Now it is not permissible for the young people to bring ...)

³ The clausal complement of a modal can be preceded by *do=* NEGATIVE, *ma=* PROHIBITIVE or *a=* PREDICATE FOCUS, but these clitics never immediately precede the modal. Rather the modal, like a noun, can be negated by *=undo* following it.

Expectations or obligations can be pragmatically implied by uttering the statement that something is possible (252).

- (252) [Asä apu-ka]=**nangäsä**. Ti-wän puku-ka=**nangäsä**.
 like.this come-P.DIPF=DEONTIC be-3S.DS go.down-P.DIPF=DEONTIC
 ‘They could have come now. Then we could be going down.’ (lit. It is possible to come like this. Then it would be possible to go down.)

A noun phrase headed by=**nangäsä** can function as the desiderative complement of the verb *natäp* ‘want’.

- (253) [Kāham nā]=**nangäsä** natä-xa-t.
 ginger eat=DEONTIC want-SIPF-1S.PRES
 ‘I want to eat ginger.’ (lit. I feel the possibility of eating ginger).
 (254) Kwätä=na tulukngä ti-wä [pe-kä]=**nangäsä**=kän natä-xa-t.
 bone=1S.GEN tired be-23P.DS sleep-P.DIPF=DEONTIC=only want-SIPF-1S.PRES
 ‘My body is tired and I just want to sleep (lit. I feel only the possibility of sleeping).’

When =**nangäsä** is used with *ti* ‘be’, the subject marking on *ti* indicates whether =**nangäsä** has an obligative or abilitative sense. When the subject suffix on *ti* is coreferential with the subject of the subordinate clause (the complement of =**nangäsä**) =**nangäsä** has the sense of obligation (255). However, sometimes the subject suffix on *ti* is third person singular regardless of the person of the actor in the subordinate clause, and in that case =**nangäsä** has the sense of ability (256).

- (255) [A=yä-mi]=**nangäsä** ti-läk.
 PRFOC=3P.O-give=DEONTIC be-2S.PRES
 ‘You should have given it to them.’ (lit. You were obligated to give it to them.)
 (256) [Ep]=**nangäsä** do=li-ngga-k. Mepdayi.
 come.down=DEONTIC NEG=be-S.DIPF-3S.PRES nervous
 ‘I cannot come down. (lit. It is not possible to come down.) I am nervous (about falling).’

This modal is also used in a construction involving *ti* ‘be’ with a third person plural subject suffix to indicate physical need (257) or urge (258).

- (257) Gup=na täpä tulukngä ti-wä [pe-kä]=**nangäsä**=kän
 skin=1S.GEN CL.stick soft be-23P.DS sleep-P.DIPF=DEONTIC=only
 ti-ka-ying.
 be-P.DIPF-23P.PRES
 ‘My body is tired and I just want to sleep (lit. it is just necessary to sleep).’
 (258) ... [watut]=**nangäsä** u=ne ti-xa-wä, dandambu=na u=ne ku-kin.
 vomit=DEONTIC that=LOC be-SIPF-23P.DS strength=1S.GEN that=LOC go-23P.PAST
 ‘... and while I could have vomited there (lit. while it was possible to vomit), I felt faint (lit. and my strength went there).’

16.2 =*nangän* DEONTIC

The second modal noun glossed DEONTIC, =*nangän*, is largely synonymous with =*nangäsä*, expressing concepts related to possibility and obligation. It is used primarily in prohibitions, with the nonfinite verb in the complement preceded by the clitic *ma*= PROHIBITIVE (259). The examples from texts all involve scolding someone for doing something he should not have done.

- (259) [*U=sing ma=l-aha*]=*nangän*.
 that=like PROHIB=S.O-do=DEONTIC
 ‘You should not do that.’ (lit. It is obligatory not to do that.)

Only a few examples have been observed of =*nangän* being used without *ma*= PROHIBITIVE. These express ability (260), censure (261), or unmet expectations (262). Attempts to elicit other examples have not been successful.

- (260) [*A=w-aha*]=*nangän* *gämu a=w-aha-wam*.
 PRFOC=P.O-do=DEONTIC if PRFOC=P.O-do-1S.HYP
 ‘If I could do it I would.’ (lit. If it were possible to do it ...)
- (261) [*Do=läng-ut*]=*nangän ti-läk*.
 NEG=3S.O-hit=DEONTIC be-2S.PRES
 ‘You should not have hit him.’ (lit. You were obligated not to hit him.)
- (262) [*Täke hikngä towik*]=*nangän*, *wäyi täpä towi-ka-mäk*.
 good real care=DEONTIC bad CL.stick care-P.DIPF-1D.PRES
 ‘We should take care of a healthy child (lit. a very good one), but we are taking care of an unhealthy (lit. bad) one (lit. It is possible to care for a good one ...)’

Though speakers from Tawaya occasionally use =*nangän*, when asked about it, they often attribute it to other varieties of Awara or to the Wantoat language, saying that they normally use the imperative mood suffixes (see §18.2.4) or =*nangäsä* instead.

16.3 =*nangge* PURPOSE

The modal noun =*nangge* occurs in several constructions expressing purpose or intent. When it is the head of the main clause, it indicates what the purpose of something is. (It is glossed simply with ‘to’ or ‘for’ in the free translation.)

- (263) *Gita* [*a=sipmä-nde-ke lotu kä*]=*nangge* *awä* [*pati gwen=du*
 guitar PRFOC=hit.P.O-loosen-SS.PF worship see.3S.O=PURPOSE and party CL.lump=one
t-äha-wä t-ä-ku u=ne sipmä-nde-ke tayi]=*nangge*.
 so-do-23P.DS S.O-take-go that=LOC hit.P.O-loosen-SS.PF sing=PURPOSE
 ‘Guitars are for strumming and worshipping (lit. seeing worship), and for when they do a party, going and strumming and singing there.’

Using =*nangge* can also indicate that something ought to be done (264) or that one intends to do something (265).

- (264) [A=xu]=**nangge**.
 PRFOC=GO=PURPOSE
 ‘They ought to go (to the meeting).’ (lit. They are to go.)

- (265) [Äpme i-ni]=**nangge**.
 later 3S.O-tell=PURPOSE
 ‘I will tell him later.’ (lit. I am to tell him later.)

A noun phrase headed by =*nangge* may also function as an adverbial modifier that indicates the purpose for the action in the main clause. The subject of the nonfinite complement of =*nangge* may be the same as that in the main clause or different. In (266) the subject of both clauses is first person plural. In (267) the subject of the main clause is the groom, and the subject of the nonfinite clause is his in-laws.

- (266) *Ge kwep=dätä=yä hipdu sip t-ä-ke ku-kumäng, [Mädeng ku]=nangge*
 SO ±1DAY=next=after again ship S.O-take-SS.PF go-1P.PAST Madang go=PURPOSE
 So the next day we took a ship and went, to go to Madang.
- (267) *Ti-wä=nä [moning p-ä]=nangge yang yä-wäm-bän ...*
 be-3S.DS=after money P.O-take=PURPOSE say 3P.O-chase-3S.DS
 ‘Then he (the groom) calls them to get (lit. take) the money and ...’

The modal noun phrase functioning as an adverbial modifier may be postposed to the right of the clause (268).

- (268) *Däki dākä ku matä-wa ep-ning, [katak kayämut täläng*
 wood CL.thick go cut-1S.DS come.down-23P.FUT branch cucumber pole
p-aha]=nangge.
 P.O-do=PURPOSE
 ‘I’ll go cut down trees, to make poles for cucumber vines.’

Noun phrases headed by =*nangge* may function as the complement of a verb such as *aha* ‘do’ (269), *ya* ‘say’ (270), or *natäp* ‘want’ (271).

- (269) [*Yakap=de mängälä täpä a=xu]=nangge t-aha-wän=u*
 before=DAT female CL.stick PRFOC=GO=PURPOSE S.O-do-3S.DS=COND
 ‘When the woman prepares (lit. does) to go for the first time ...’
- (270) [*Sande P.en.C miting=ge kop]=nangge ya-kin.*
 Sunday P.and.C meeting=DAT go.up=PURPOSE say-23P.PAST
 ‘They said to go up for the P and C meeting on Sunday.’
- (271) [*A=läng-ut]=nangge natä-ke teyä t-e-t.*
 PRFOC=3S.O-hit=PURPOSE want-SS.PF but S.O-leave-1S.PRES
 ‘I wanted to hit him, but I left (hitting) him.’

When =*nangge* is used to indicate purpose or intent, it is almost never followed by *ti* ‘be’. However, in (272), it is followed by *ti*, and though the topic is first person, the subject-indexing on *ti* is third singular. It appears that *ti* serves here only as a bearer of tense marking in the main clause.

- (272) ... *hipdu nä natdetdet=na t-e-wa [atu giyamsao skul*
 again 1S knowledge=1S.GEN S.O-leave-1S.DS level.far deaconess school
t-aha-ka-ying=kätan ku]=nangge undan ti-kut.
 S.O-do-P.DIPF-23P.PRES=at GO=PURPOSE there be-3S.PAST
 ‘... and again I set my mind to going to where they do the deaconess school.’ (lit. I put my thought and it was to go to where they do the deaconess school).

A noun phrase headed by *=nangge* may be followed by *ti* ‘be’ to indicate imminence or the state of being about to do something. The subject marking on *ti* indicates the one who is about to do something. In (273) the subject marking on *ti* is first person singular.

- (273) [*Wam ya*]=*nangge ti-ngga-l=u...*
 word say=PURPOSE be-S.DIPF-1S.PRES=TOP
 ‘The words I am about to say ...’

The modal noun *=nangge* differs from the modal nouns *=nangän* and *=nangäsä* in that it can be followed by the postpositional clitic *=u* CONDITIONAL (274). In this respect *=nangge* also differs from other nouns. The conditional clitic *=u* only follows *=nangge* and verbs that can be inflected.

- (274) *Ku ku p-ä-ku [Mätak pet]=nanggeng=u u=sing u=ne pe-wiläk.*
 go go P.O-take-go Matak sleep=PURPOSE=COND that=like that=LOC sleep-2S.FUT
 ‘You will go and go, and if (you want) to sleep at Matak, you will sleep there.’

16.4 Types of meaning in modal nouns

In some languages, like English, the same modals are used for both epistemic and deontic, or root, modality. Coates (1995:55) gives the following explanation of these two kinds of modalities:

Epistemic modality is concerned with the speaker’s assumptions or assessment of possibilities, and in most cases it indicates the speaker’s confidence or lack of confidence in the truth of the proposition expressed. Root modality encompasses meanings such as permission and obligation, and also possibility and necessity.

The modal nouns *=nangän* DEONTIC, *=nangäsä* DEONTIC, and *=nangge* PURPOSE appear to be used exclusively for deontic modality expressing concepts such as obligation, possibility, permission, need, and desire. Epistemic modality, on the other hand, is expressed with adverbs such as *=bä* ‘maybe’ and *hikngä* ‘real’ following the clitics *a=* PREDICATE FOCUS and *do=* NEGATIVE, and with the following sets of subject-indexing suffixes: apprehension, probability, and hypothetical (described in §18.2.4.3).

17 *Verb subcategories*

Awara verbs can be classified according to several criteria: their morphological pattern (inflecting vs. noninflecting), their valence (intransitive, transitive, etc.), and their intrinsic aspect (stative vs. dynamic).

17.1 Morphological pattern

There are two verb subcategories based on morphological patterns: those that take inflectional affixes and those that do not. Most verbs take inflectional affixes. These are described in Chapter 18. Existential verbs do not take inflections. These are described below.

There are two existential verbs: *käyä* ‘exist’ and *wenä* ‘not exist’.

- (275) *Wa Sande miting=u käyä.*
this Sunday meeting=TOP exist
‘This Sunday there is a meeting.’

- (276) *Kupän=u wenä.*
smoke=TOP not.exist.
‘I don’t have tobacco.’ (lit. Tobacco does not exist.)

Normally existential verbs stand alone as the predicate, but *ti* ‘be’ can be used with them to support tense or switch-reference.

- (277) *Moyo yiwit-na, nax=u wenä ti-wik.*
without stay-1P.DS food=TOP not.exist be-3S.FUT
‘If we do nothing (lit. if we stay without doing anything), there will not be food.’
- (278) *Ti-ke wäwi täpä yot=nä käyä ti-wän=u ...*
be-SS.PF male CL.stick home=3.GEN exist be-3S.DS=COND
‘But if the man has a house, ...’ (lit. But the man, if his house exists ...)

I classify existentials as verbs rather than as nouns because they function only as predicates, never as arguments or as modifiers in the noun phrase.

17.2 Valence

Awara verbs can be subdivided according to their valence into the following categories: (1) intransitive, (2) transitive, (3) semitransitive, (4) ditransitive, and (5) benefactive. Intransitive verbs subcategorise for one core argument, the subject. Transitive verbs subcategorise for one argument in addition to the subject. Semitransitive verbs have both transitive and intransitive subcategorisation frames. Ditransitive verbs subcategorise for two arguments in addition to the subject. Finally, benefactive verbs are formed by compounding with *mi* ‘give’ and require an argument with the benefactive role in addition to the arguments subcategorised for by the first verb root.

The subject is indexed on the verb by a subject suffix. The other core arguments of most verbs are not indexed on the verb. However, there are thirteen Awara verbs that require an object-indexing prefix. In addition, benefactive verbs require an object prefix immediately preceding *mi* ‘give’.

In Awara, referents of core arguments need not be represented by an overt noun phrase or prepositional phrase when they are given, specific, and definite. Instead, they may be elided. For example, in the following sentence, neither the subject nor object referent of *ut* ‘hit’ is represented by a phrasal argument. However, both are indexed on the verb, and the context indicates that the object of *ut* is the rat referred to earlier in the text.

- (279) *‘Ku a=läng-u-sim’ ya-ke ku-kumäk.*
 go PRFOC=3S.O-hit-1D.FUT say-SS.PF go-1D.PAST
 ‘We said, “We’ll go kill it,” and we went.’

It is not only referents that are indexed on the verb that may be elided. Example (280) shows that *ya* ‘say’ has a transitive frame, which subcategorises for an object (i.e. their husbands’ names). Example (281) comes from the same text, and the context indicates that, even though there is no overt phrasal object, and the object is not indexed on the verb, this use of *ya* is also transitive, meaning, not that the women won’t speak, but that that they won’t say their husbands’ names.

- (280) *Ayä=le uman=u do=yä-ka-ying=gäne*
 husband.3.GEN=DAT name=TOP NEG=say-P.DIPF-23P.PRES=POSS
*yä-nangge-ngga-t.*¹
 say-soon-S.DIPF-1S.PRES
 ‘I am about to speak about (why) they don’t say their husbands’ names.’
- (281) *Ti-ke tokngä do=natä-keng=u do=yä-ka-ying.*
 be-SS.PF angry NEG=feel-SS.PF=COND NEG=say-P.DIPF-23P.PRES
 ‘But if they don’t feel angry, they don’t say (their husbands’ names).’

In the following sections I describe each of the verb subcategories and give examples.

¹ Some verb stems such as *ya* ‘say’, *na* ‘eat’, and *naxälat* ‘fear’ have a syllable whose vowel alternates between *a* and *ä* depending on the material immediately following the stem.

17.2.1 Intransitive verbs

Intransitive verbs subcategorise for only one argument, which is indexed on the verb by a subject-indexing suffix. The referent of this argument is optionally encoded as a noun phrase or classifier phrase. For example, in (282) it is encoded as a classifier phrase and in (283-285 below) there is no overt phrasal subject.

- (282) ... *ämin=u u=läpä u=ne kum-but.*
 person=LNK that=CL.stick that=LOC die-3S.PAST
 ‘... and the man died there.’

Because intransitive verbs subcategorise for only this argument, they co-occur with neither an object noun phrase nor an object-indexing prefix. Examples of intransitive verbs are *kungwä* ‘die’ (282), *enat* ‘rise’ (283), *ku* ‘go’ (283), *mit* ‘laugh’ (284), and *tit* ‘cry’ (285).

- (283) *U=ne=tä ena-ke ku-kumäk.*
 that=LOC=ABL rise-SS.PF go-1D.PAST
 ‘From there we got up and went.’

- (284) *Yä-wa duksäng hikngä mi-kumäk.*
 say-1S.DS strong real laugh-1D.PAST
 ‘I said (that) and we laughed a lot.’

- (285) *mängät=nä=le natänatäli-ke kwänä=pät ti-kut.*²
 wife=3.GEN=DAT worry-SS.PF tear=with cry-3S.PAST
 ‘and he was worried about his wife and cried with tears.’

17.2.2 Transitive verbs

Transitive verbs in Awara subcategorise for one argument in addition to the subject. The referent of this argument is optionally encoded as a noun phrase or classifier phrase. Some of these verbs require an object-indexing prefix, while others do not.

Awara has two sets of object-indexing prefixes. One set only indicates the number of the object, but the other indicates both the person and the number of the object. Their forms are shown in Tables 18.1 and 18.2 on p.164.

So far, seven verb roots have been identified that take object prefixes distinguishing only singular versus plural object. These are *ä* ‘take’, *aha* ‘do’, *ämap* ‘fling’, *ayamusit* ‘shake’, *ämut* ‘lay’, *em* ‘shoot/write’, and *e* ‘leave’. For example, *e* ‘leave’ requires a prefix indicating whether the object is singular (286) or plural (287). In (286) the singular object is *yanggä undupihimu* ‘that river’, and in (287) the referent of the plural object prefix is understood from the context to be children who misbehave.

- (286) *T-ä-ko yanggä u=ndupi=him=u t-e-ke*
 s.o-take-go.up water that=CL.finger=DIM=TOP s.o-leave-SS.PF
 ‘You’ll go up and leave that river and ...’

² The verbs *ti* ‘be’ and *tit* ‘cry’ are distinct as evidenced by their forms with the singular dynamic imperfective suffix *-ga*: *tinggak* versus *tikgak*.

- (287) ‘...’ *yang* *yä-ni-ke* *u=sing* ***p-e-na*** *yiwi-ke* *natändetdel=u*
 COMP 3P.O-tell-SS.PF that=like P.O-leave-1P.DS stay-SS.PF knowledge=TOP
u=ne *p-ä-ka-ying*.
 that=LOC P.O-take-P.DIPF-23P.PRES
 ‘We tell them ‘...’ and we leave them alone and there they learn their lesson (lit. and they get knowledge there).’

Thirteen verbs have been observed so far that take object prefixes indicating both person and number. Examples of such verbs are *apmit* ‘pass’, *mi* ‘give’, *ni* ‘tell’, *nindamut* ‘teach’, *nindatap* ‘thank’, *nimit* ‘laugh at’, *pmam* ‘leave’, *tängi* ‘slice’, and *wäm* ‘follow’. What distinguishes these verbs from others that do not have prefixes indicating the person and number of the object is that most of them require an animate object. For example, the verb *mi* ‘give’ requires an animate object with the role of recipient, and *ni* ‘tell’ requires an animate object with the role of addressee.

- (288) *Ti-wän* *pas=u* *a=l-emä-ke* ***ni-mi-kin***.
 be-3S.DS letter=TOP PRFOC=S.O-write-SS.PF 1P.O-give-23P.PAST
 ‘So they wrote and gave us a letter.’
- (289) ‘*Nin=u* *do=ndayip-bumäng*’ *yang* ***na-ni-kin***.
 1P=TOP NEG=see.3P.O-1P.PAST COMP 1S.O-tell-23P.PAST
 ‘They told me “We did not see them”.’

An interesting restriction on the object prefix is that it cannot normally be coreferential with the subject (290, 291).³ Instead, in a situation when one might expect coreference between the agent and patient, the clause contains a reflexive pronoun and the verb has third person object-indexing. In (292, 293), though the subject is first person, the object-indexing prefix is third person, and the first person reflexive pronoun is used.⁴

- (290) **A=na-ndu-xa-t*.
 PRFOC=1S.O-see-SIPF-1S.PRES
 I see me.
- (291) **A=n-uk-ga-t*.
 PRFOC=1S.O-hit-S.DIPF-1S.PRES
 I hit me.
- (292) *Nina* *a=xa-xa-t*.
 1S.REFL PRFOC=see.3S.O-SIPF-1S.PRES
 I see it (a reflection of myself in the mirror).

³ The exception is the semitransitive verb *ha* ‘burn’, which has an intransitive frame for which the subject-indexing and object-indexing both refer to the patient (see §17.2.3).

⁴ The difference in person of the reflexive pronoun and the object-indexing prefix in (292) and (293) seems to indicate that the reflexive pronoun does not function as the object. The reflexive pronouns have several functions including reflexive, contrastive emphasis, and separateness. When they are used reflexively the coreference is between the subject and an oblique argument, such as a dative or the possessor of the object. Because of this, it is unclear from the examples what relation the pronoun has to the verb.

- (293) *Nina täng-uk-ga-t.*
 1S.REFL 3S.O-hit-S.DIPF-1S.PRES
 I am hitting it (part of my own body).

The remaining transitive verbs do not exhibit object-indexing morphology. Examples of such verbs are *wam*⁵ ‘tie’ and *uput* ‘break’. Sentences (294) and (295) show these verbs with overt phrasal objects.

- (294) *Wäpu=nä wamä-ka-kin.*
 loincloth=3.GEN tie-P.DIPF-23P.PAST
 ‘They used to tie (wear) their loincloths.’
- (295) *Masis=u gwe=nalä upu-läk.*
 lighter=LNK CL.lump=two break-2S.PRES
 ‘You broke two lighters.’

Since contextually given referents are typically elided in connected discourse, it is common for these transitive verbs to occur without an overt phrasal object. In conjunction with the lack of object-indexing morphology, this means that there is no formal indication whatsoever of the presence of the object. This does not, however, mean that in such instances these verbs should be treated as intransitive. If native-speakers are asked who or what is being affected in such examples, they are able to identify a specific referent. So the referent is present, albeit not overtly.

In (296) below, for example, *wam* ‘tie’ occurs in the quote without an overt phrasal object, but in the clause preceding the quote *wam* has the overt object *takwäp* ‘banana’. Thus in the quote, *wam* also has an understood object, the bananas.

- (296) *Wäwi=le mehe=ne yiwi-ke ku-ke-ngä, takwäp=bä wam=nanggeng=u,*
 male=DAT behind=LOC stay-SS.PF go-SS.PF=after banana=DUB tie=PURPOSE=COND
 ‘Gwäx=u a=sing ma-ke wam-so,’ yang yä=nindämu-ka-kin.
 fork=TOP this=like shoot-SS.PF tie-2S.DIMP COMP 3P.O-teach-P.DIPF-23P.PAST
 ‘After they would stay behind the boys and go, (and) in order for them to tie bananas, they would teach them, “Shoot a forked stick like this (into the ground to climb up it) and tie them”.’

Similarly in (297), *uput* ‘break’ does not have an overt phrasal object, but the context indicated that the speaker was referring to a certain kind of nut, not just to food in general.

- (297) *Endä wäha=ne p-e-na däki=tä yä-ha-ke koxohäk ti-wä=yä*
 up rack=LOC P.O-leave-1P.DS fire=ABL 3P.O-burn-SS.PF dried be-23P.DS=after
upu-ke na-ka-mäng.
 break-SS.PF eat-P.DIPF-1P.PRES
 ‘We put them (the nuts) up on the smoking rack, and after they dry by the fire and become dry, we break them and eat them.’

⁵ Some verbs such as *wam* ‘tie’, *tem* ‘write.S.O’, *yam* ‘write.P.O’, *sip* ‘hit.3P.O’ and *buhap* ‘knot’ have long forms ending in *mä* before certain suffixes. See §9.4.1 for an analysis of these verbs.

Figure 17.1 Subcategorisation frames for agent-oriented semitransitive verbs

| | |
|---|-----------------------------|
| Transitive | Intransitive |
| [NP _{Agent} NP _{Patient} ____] | [NP _{Agent} ____] |

17.2.3 Semitransitive verbs

Semitransitive verbs are verbs that have at least two subcategorisation frames: a transitive one and an intransitive one. For some verbs, the subject of both frames has the semantic role of agent or actor, as shown schematically in Figure 17.1. For example, *ya* ‘say/talk/speak’ has a transitive frame with an agent subject and a patient object as in the first clause of (298), and an intransitive frame with an agent subject and no object as in (299).

- (298) *Wam=u u=läknga yä-wa, ämin=u täpä=tu=tä*
 word=LNK that=CL.ROPE say-1S.DS person=LNK CL.stick=one=ABL
a=yä=nangge natä-keng=u, täke yä-wik
 PRFOC=speak=PURPOSE want=SS.PF=COND good speak-3S.FUT
 ‘I have said this speech, and if someone wants to speak, he may speak.’

- (299) *Hiyäkände hikngä do=yä-ngga-x=unin*
 truly real NEG=speak-S.DIPF-3S.PRES=INDIV
 ‘He does not really speak.’ (Either he has not completely learned the language or he has not learned to talk.)

These semitransitive verbs are to be distinguished from the transitive verbs discussed in §17.2.2, which also sometimes occur without an overt object. Intransitive instances of semitransitive verbs lack an object. Transitive verbs and transitive instances of semitransitive verbs may lack an overt phrasal object when the object is contextually given. The difference is that a native-speaker would not be able to identify a specific referent for the object of an intransitive instance of a semitransitive verb.

Thus, objects are absent from the clause for two very different pragmatic reasons: (1) high contextual givenness/activation, and (2) the identity of the referent is not considered important or relevant by the speaker. Clauses with objects falling into the first class are here analysed as transitive, whereas those falling into the second class are analysed as intransitive.

Awara also has semitransitive cognate object verbs. These verbs can occur in transitive clauses with an object whose meaning is very similar to that of the verb itself. For example, ‘eat food’ (300), and ‘sleep sleep’ (301) have objects that are similar in form and meaning to the verb.

- (300) *Wam=bä ya-wäyak bä nak=bä na-päyak.*
 word=DUB say-3P.PROB OR food=DUB eat-3P.PROB
 ‘Maybe they are talking (lit. saying words) or maybe they are eating food.’
- (301) *Kwew=u pet=nin=u hauspasendiä=ne pe-kumäng.*
 ±1DAY=TOP sleep=1P.GEN=TOP guest.house=LOC sleep-1S.PAST
 ‘Yesterday we slept our sleep at the guesthouse.’

Figure 17.2 Subcategorisation frames for patient-oriented semitransitive verbs

| Transitive | Intransitive |
|--|------------------------------|
| [NP _{Agent} NP _{Patient} ____] | [NP _{Patient} ____] |

These verbs can also occur in intransitive clauses without any overt object noun phrase and no previous reference in the context to a potential elided object.

- (302) *A-na-hi-nggä-wa=yä* *ako-ngga-läk.*
 PRFOC=eat-dur-S.DIPF-1S.DS=after come.up-S.DIPF-2S.PRES
 ‘After I have already eaten you come up.’
- (303) *P-ä-ko* *pek-ga-yo.*
 P.O-take-go.up sleep-S.DIPF-2S.DIMP
 ‘Go inside (lit. go up) and sleep. (Used as a leave-taking at night.)’

For a few semitransitive verbs, the subject of the transitive frame has the semantic role of agent, while the subject of the intransitive frame has the role of patient, as shown schematically in Figure 17.2. For example, the verbs *det* ‘detach’ and *buhap* ‘knot’ have a transitive frame with an agent subject and a patient object (304, 305), and an intransitive frame with a patient subject (306, 307). As usual, subject-indexing is marked by a suffix on the verb. (In the examples, the subject-indexing suffix is in bold, and the argument with the role of patient is in brackets.)

- (304) [*Kopi*] *äpme de-wit.*
 coffee later detach-1S.FUT
 ‘I’ll pick coffee later.’
- (305) [*Nap*] *buhapmä-ng.*
 rope knot-2S.IMM
 ‘Knot the rope.’
- (306) [*Kwalem salin*] *äpme de-ke* *ep-ning,* *gämänä ti-ke.*
 tree.sp. seed later detach-SS.PF come.down-23P.FUT red be-SS.PF
 ‘The *kwalem* seeds will detach and come down when they turn red.’
- (307) [*Naw=u tāknga=yäl*]=*u* *a=mbuhapmä-mäläk.*
 rope=LNK CL.rope=two.DEF=TOP PRFOC=knot-23D.PRES
 ‘The two ropes knotted.’

Most semitransitive verbs do not take object-indexing prefixes. However, there are a few that optionally occur with them, and a few that require them. I now consider each of these kinds in turn.

17.2.3.1 Semitransitive verbs with no object-indexing prefix

Most semitransitive verbs do not take object-indexing prefixes. For example, *natäp* ‘hear/learn’ does not take prefixes whether it occurs in a transitive clause (308) or an intransitive clause (309).

- (308) ... *engang=u u=läknga=läknga=nin natä-ke, i=xät täka-ka-ying.*
 child=TOP that=CL.rop=CL.rop=indiv hear-SS.PF 3=with grow-P.DIPF-23P.PRES
 ‘... the children learn those (customs) and grow up with them.’
- (309) *Kätum=u maläk=ngä=tä do=natä-xa-ying.*
 deaf=TOP ear=3.GEN=ABL NEG=hear-SIPF-23P.PRES
 ‘Deaf people don’t hear with their ears.’

17.2.3.2 Semitransitive verbs with optional object-indexing prefix

The semitransitive verb *ha* ‘cook/burn/dry’ has three subcategorisation frames: one frame that does not take an object-indexing prefix, and two frames that require one. The related words *ha-guhi* ‘cook-soften’ and *haku* ‘burn’ share some of these frames.

Without the object-indexing prefix, *ha* and *ha-guhi* have transitive subcategorisation frames. The subject is an agent (normally human) and is marked by a suffix on the verb (in bold). The object is the patient (in brackets).

- (310) [*Ti lais yang*] *ha-wät na-ka-mäng.*
 tea rice COMP cook-23D.DS eat-P.DIPF-1P.PRES
 ‘You two cooked tea and rice and we ate it.’
- (311) [*Buta*] *moyo ha-ngguhi-ke p-e-k.*
 pandanus without cook-soften-SS.PF P.O-leave-3S.PRES
 ‘He just pre-cooked the pandanus seeds and left them.’

With the object-indexing prefix, the verb has both transitive and intransitive frames. The transitive frame has a nonhuman subject (such as *gusit* ‘sun’ or *däki* ‘fire’) which is the cause of the burning, and which is indexed as a suffix on the verb. The object is the patient, and is marked by a prefix on the verb. An overt object noun phrase is optional.

- (312) *Gusit=dä tokngä hikngä na-ha-ngga-k.*
 sun=ABL hot very 1S.O-burn-S.DIPF-3S.PRES
 ‘The sun is burning me very much.’
- (313) *E amu=sing=gä puku-ke ako däki=tä ni-hi-yäk.*
 Hey down.far=like=ABL go.down-SS.PF come.up fire=ABL 1P.O-burn-3S.APPR
 ‘Hey, the fire might go down and come up from below and burn us.’

When the prefixed verb occurs in a transitive clause, the subject marking and the object marking on the verb cannot be coreferential (314). To express self-affectedness, *ha* is used without the object-indexing prefix and the subject marking is coreferential with a reflexive pronoun.

- (314) **Na-ha-t*
 1S.O-COOK-1S.PRES
 I burned myself.
- (315) *Nina ha-t.*
 1S.REFL COOK-1S.PRES
 I burned it (part of my body).

The intransitive frame has only one argument, which has the role of patient. Both the object prefix and the subject suffix agree with it. In this case the verb is an inchoative, and *ha* means ‘catch fire’ or ‘burn’ (316), ‘become dry’ (317), or ‘light up’ (318); *ha-ngguhi* means ‘become soft by cooking’ (319); and *haku* means ‘become burnt’ (320).

- (316) *Yot=na a=i-hi-k.*
 home=1S.GEN PRFOC=3S.O-COOK-3S.PRES
 ‘My house caught fire.’
- (317) *Hälu-ke p-e-na yä-ha-ka-ying ...*
 wash-SS.PF P.O-leave-1P.DS 3P.O-COOK-P.DIPF-23P.PRES
 ‘We wash and leave them (our clothes) and they dry, ...’
- (318) ... *tos=u t-ä-pa i-hi-wän ...*
 torch=TOP S.O-take-1S.DS 3S.O-cook-3S.DS
 ‘... and I turned on the torch’ (lit. I took the torch and it burned...)
- (319) *A=ha-wän i-hi-ngguhi-wän t-e-k.*
 PRFOC=COOK-3S.DS 3S.O-cook-soften-3S.DS S.O-leave-3S.PRES
 ‘He cooked it and it became soft and he left it.’
- (320) *Nax=u a=yä-haku-ying.*
 food=TOP PRFOC=3P.O-burn-3P.PRES
 ‘The food burned.’

17.2.3.3 Semitransitive verbs with obligatory object-indexing prefix

There are a few semitransitive verbs that require an object prefix. These are the compounds formed by *ä* ‘take’ and a motion verb such as *ku* ‘go’ or *apu* ‘come’. Both their transitive and intransitive frames require an object-indexing prefix.

With the transitive frame, they mean ‘take (to)’ or ‘bring’ and they may have an overt object noun phrase. The prefix indicates whether the object is singular (321) or plural (322). In the examples below, the overt object noun phrase is in brackets.

- (321) ... [*mängälä täpä*] *u=ne t-ä-ku t-e-ning, mi-ngä-le*
 female CL.stick that=LOC S.O-take-go S.O-leave-23P.FUT mother=3.GEN=DAT
yol=une
 house=LOC
 ‘... they will take the woman and leave her there at his (her fiancé’s) mother’s house.’

- (322) ... [kako p-ä-kumäng]=u gwäلامي-ke **p-ä-ku** kawut=du p-e-ke
 cargo P.O-take-1P.PAST=TOP carry-SS.PF P.O-take-go CL.part=one P.O-leave-SS.PF
 ... the things (lit. cargo) we had taken we carried on our shoulders and put them on
 the side (of the road), ...

The intransitive frames for these verbs mean simply ‘go’ or ‘come’. Though they have only one argument, which has the role of agent, they formally require an object-indexing prefix.

- (323) T-ä-ko a=ne yiwä-xa-yo.
 s.O-take-go.up this=LOC stay-SIPF-2S.DIMP
 ‘Go in and stay here.’

- (324) P-ä-ku pe-kumä=ngä ...
 P.O-take-go sleep-1P.PAST=after
 ‘After we went and slept ...’

There seems to be some correlation between the object prefix and the subject-indexing of the next verb. There is a tendency for the object prefix to be singular when the subject of the next verb is singular, and for the object prefix to be plural when the subject of the next verb is plural, as in the examples above. This may indicate that these verbs are similar to the intransitive frame of *ha* ‘cook’ whose object prefix and subject suffix refer to the same argument. However, this is only a tendency, and the object prefix may be plural when the subject of the next verb is singular (325), and it may be singular when the subject of the next verb is plural (326).

- (325) Gwen=du=ne a=ne=tä ena-ke p-ä-ku Wändot pe-**kum**=nä, ...
 CL.lump=one=LOC this=LOC=ABL rise-SS.PF P.O-take-go Wantoat sleep-1S.PAST=after
 ‘One day after I got up from here and went to Wantoat and slept, ...’

- (326) T-ä-ko mängälä kop-bumäng=u yä-na ...
 s.O-take-go.up female go.up-1P.PAST=TOP say-1P.DS
 ‘We went up and told the women (with whom) we went up, and ...’

The use of these forms when they mean simply ‘go’ or ‘come’ looks very similar to something R. Webb and L. Webb (1995:16) described for Irumu, another language in the Wantoat family. ‘Motion-direction verbs’ in Irumu have a motion verb preceded by what appears to be the generic same-subject medial suffix *-päng*. They wrote:

There is no clear-cut reason for this behaviour, however it does seem that when this form is used there is little focus on the motion itself, rather, the motion verb constitutes a necessary ‘vehicle’ for getting the agent into position for the following verb action.

17.2.4 Ditransitive verbs

Ditransitive verbs subcategorise for two arguments in addition to the subject. One of these is a recipient or an addressee and the other a patient. The recipient or addressee is typically

animate, and is indexed by an object prefix on the verb. The patient is typically inanimate and is not marked on the verb. This subclass includes the verbs *mi* ‘give’ (327), *ni* ‘tell’ (328), and compounds apparently based on *ni* such as *nindämut* ‘teach’ (329). Object prefixes in these examples are in bold.

- (327) Patient Recipient
*Ti-wä=nä wehe-ke na-ke kawut=du nā=le **na**-mi-kut.*
 be-3S.DS=after split-SS.PF eat-SS.PF CL.part=one 1S=DAT 1S.O-give-3S.PAST
 Then he broke it and ate and gave me part of it.
- (328) Addressee Patient
*Natā-keng=u wāwi tāpā wam=u do=**yā**-ni-ka-ying.*
 feel-SS.PF=COND male CL.stick word=TOP NEG=3P.O-tell-P.DIPF-23P.PRES
 If they feel this way, they don’t talk (lit. tell words) to the men.
- (329) Patient
*Anātu=le wam=u āpme **yā**-nindämut-ning?*
 God=DAT word=TOP later 3P.O-teach-23P.FUT
 Will you teach them God’s word?

17.2.5 Benefactive verbs

Benefactive verbs are formed by compounding the verb *mi* ‘give’ with its object prefix to another verb.⁶ The object prefix on *mi* indexes the person and number of the argument with the benefactive or malefactive role. This verb can be compounded with intransitive verb roots (330), with transitive or semitransitive verb roots (331), and with the ditransitive verb root *ni* ‘tell’ (332). However, it cannot be compounded with *mi* ‘give’ (333).

- (330) *Tukwang-yā-mi-yāk.*
 afternoon-3P.O-give-3S.APPR
 ‘It might get dark on them.’
- (331) *Ti-wä=nä nā=le yāx=u bos=na=tä p-ä-nga-mi-kut.*
 be-3S.DS=after 1S=DAT bag=TOP boss=1S.GEN=ABL P.O-take-1S.O-give-3S.PAST
 ‘Then my boss took my bags for me.’
- (332) *Ge gä=tä tāke i-ni-nga-m-iläk?*
 so 2S=ABL good 3S.O-tell-1S.O-give-2S.FUT
 ‘So could you tell him for me?’⁷
- (333) **Bux=u a=nggwäkäm=u tāke Yaki=le i-mi-nga-m-iläk?*
 book=LNK this=CL.chunk=TOP good Yake=DAT 3S.O-give-1S.O-give-2S.FUT
 ‘Could you give this book to Yaki for me?’

⁶ See §7.1.2 for why I treat this as a compound.

⁷ In (332) and (333) the word *tāke* ‘good’ functions as an adverb that refers to a person’s willingness or ability to do something.

17.3 Inherent aspect

Awara verbs distinguish two inherent aspects. The class of dynamic verbs is the larger one and includes typically dynamic words such as *ku* ‘go’, *ut* ‘hit’ and *na* ‘eat’, and not-so-dynamic words such as *pet* ‘sleep’ and *ti* ‘be’. The class of static verbs is smaller: *yiwit* ‘stay’, *natäp* ‘hear’,⁸ *dup* ‘see’, *e* ‘leave’, and *wäm* ‘follow’.

The distinction between dynamic and static verbs shows up with medial-verb suffixes: dynamic verbs can be followed by *-ka* PLURAL SUBJECT DYNAMIC IMPERFECTIVE (P.DIPF), *-ga* SINGULAR SUBJECT DYNAMIC IMPERFECTIVE (S.DIPF) (334), or *-xät/xa* STATIC IMPERFECTIVE⁹ (335), while static verbs can only be followed by the static imperfective (*-xät/xa*) (336). (See §18.2.6 for a discussion of these suffixes.)

- (334) *Nä-ngga-wa kutäyi ti-ka-ying.*
eat-S.DIPF-1S.DS tired be-P.DIPF-23P.PRES
‘My mouth is tired from eating.’ (lit. I ate until my mouth is tired.)
- (335) ... *t-ä-ko wälik-yä-m-a na-xa-wät epu-ngga-t.*
s.O-take-go.up pour-3P.O-give-1S.DS eat-SIPF-23D.DS come.down-S.DIPF-1S.PRES
‘... and I took it up and poured it for them (the two pigs) and while they ate I came down.’
- (336) *Petus=dä t-ä-ku t-e-xa/*ngga-wän Susen=dä t-ä-k.*
Petrus=ABL s.O-take-go s.O-leave-SIPF-3S.DS Susan=ABL s.O-take-3S.PRES
‘While Petrus took it and left it, Susan took it.’

Further, with final-verb suffixes, dynamic verbs only co-occur with the dynamic imperfective suffixes (*-ga*, *-ka*), not with the static one (*-xät/xa*).

- (337) *Puyä p-aha-nggä-wa.*
work P.O-do-S.DIPF-1S.IMM
‘I’ll do work now.’
- (338) ... *kawut=du undä do=nä-ka-kin.*
CL.part=one all NEG=eat-P.DIPF-23P.PAST
‘(When the boys would eat it) they would not eat the whole thing.’

Static verbs co-occur with the static imperfective suffix *-xät/xa* (339-342); they do not co-occur with the dynamic imperfective suffixes.¹⁰

- (339) *Tä-wä-xa/*ngga-yo.*
3S.O-follow-SIPF-2S.DIMP
‘Look for it.’

⁸ The verb *natäp* has several senses: ‘hear’, ‘know’, ‘understand’, ‘think’, ‘feel’, and ‘want’. It is glossed according to its sense in the examples.

⁹ The static imperfective (SIPF) has two allomorphs: *-xät* before /d/ and /n/ and *-xa* elsewhere

¹⁰ The only exception is with the suffix *-nangge* ‘soon’ which is obligatorily followed by *-ga* or *-ka*. It is never followed by *-xät*, even with static verbs. *Ane päkapu yiwit-nangge-ga-k.* ‘He’s about to come sit here.’ **Ane päkapu yiwit-nangge-xa-k.*

- (340) *Ti-wän nin=u a=ne yiwä-xa-mäng, Giyame=xät.*
 be-3S.DS 1P=TOP this=LOC stay-SIPF-1P.PRES Giyame=with
 ‘So we are staying here, with Giyame.’
- (341) *Ge u=sing moyo u=sing yä-wa natä-xa-läk.*
 so that=like without that=like say-1S.DS hear-SIPF-2S.PRES
 ‘I am telling you this for no reason, and you are hearing it.’
- (342) *Na-ndu-xa-läk ti-wän ga-ndu-xa-t.*
 1S.O-see-SIPF-2S.PRES be-3S.DS 2S.O-see-SIPF-1S.PRES
 ‘You see me and I see you.’
- (343) *P-äk-apu wäwi täpä=le yol=une u=ne p-e-xa-ying.*
 P.O-take-come male CL.stick=DAT home=LOC that=LOC P.O-leave-SIPF-23P.PRES
 ‘They bring them and leave them there at the man’s house.’

18 *Verbal morphology*

This chapter describes derivational verb stem morphology (§18.1) and inflectional morphology (§18.2). Derivational verb stem morphology deals with lexical compounding, benefactive compounding with the verb *mi* ‘give’, and the derivational suffix *-la* ‘become’. Inflectional morphology includes object-indexing prefixes, subject-indexing suffixes, aspect suffixes, and temporal suffixes.

18.1 Derivational verb stem morphology

Awara has three means for deriving verb stems: lexical compounding, benefactive compounding, and forming verbs from nouns via the addition of the derivational suffix *-la* ‘become’. In this section, the morpheme breaks within the stem are shown and glossed. In the rest of the paper, however, where the focus is not on derivational morphology, these morpheme breaks are generally not shown. The exception is that they are shown with benefactive compounds and compounds derived from motion verbs.

18.1.1 Lexical compounding

Awara has two major types of compound verbs: noun-verb and verb-verb compounds.

Noun-verb compounds have a noun followed by a verb root. In (344), *tut-det* ‘nail-detach’ is a noun-verb compound which indicates the type of instrument used. In (345), *gup-det* ‘skin-detach’ is a noun-verb compound which indicates the type of object affected. Evidence that these are compounds is that *a=* PREDICATE FOCUS, which immediately precedes the verb,¹ comes before *tut* ‘nail’ rather than after it (344), showing that *tut* is part of the verb.

- (344) *A=lut-de-ke* *nä-ka-ying=unin*.
PRFOC=nail-detach-SS.PF eat-P.DIPF-23P.PRES=INDIV
‘They pick them with the fingernails and eat them (breadfruit).’

- (345) *Wänäm=u* *gwen=du* *u=ne* *täng-u-ke* *gup-de-ke...*
cassowary=LNK CL.lump=one that=LOC 3S.O-hit-SS.PF skin-detach-SS.PF
‘We killed a cassowary there and skinned it and ...’

¹ Only the words *hikngä* ‘real’, *=bä* DUBITATIVE, and *bimä* ‘like’ and the object prefixes come between *a=* PREDICATE FOCUS and the verb stem.

Verb-verb compounds consist of two verb roots. The clearest cases of verb-verb compounds are those that involve *ä* ‘take’ followed by a motion verb such as *apu* ‘come’ or *ku* ‘go’. Compounds with a verb for ‘come’ mean ‘bring’ (346), while those with a verb for ‘go’ mean ‘take (to)’ (347).

- (346) *Yanggä kalux=u t-äk-apu na-m-Ø.*
 water new=TOP S.O-take-come 1S.O-give-2S.IMM
 ‘Bring some cold (fresh) water and give it to me.’
- (347) ... *apek=ngä=le yol=une t-ä-ku t-e-na* ...
 mother.in.law=3.GEN=DAT house=LOC S.O-take-go S.O-leave-1P.DS
 ‘... we take her² and leave her at her mother-in-law’s house and ...’

Awara has six compounds made up of *ä* ‘take’ and a motion verb. All six have senses which do not literally mean ‘bring’ or ‘take something’. Rather, they can also be used for simply ‘coming’ or ‘going’. Though the morpheme *ä* ‘take’ is part of the compound, its meaning is not always part of it.

- (348) *T-ä-ku yol=u gäpang=gu Kontlon yang i-ni-ka-ying*
 S.O-take-go village=LNK CL.village=one Kontron COMP 3S.O-tell-P.DIPF-23P.PRES
p-ä-ku u=ne pe-kumäk=ngä
 P.O-take-go that=LOC sleep-1D.PAST=after
 ‘We went and we went to a village they call Kontron, and after we slept there, ...’

Following are more examples of compound verbs whose meanings are not compositionally derived from those of the component verb roots. The verb *ä-nggänggänut* ‘take-set’ means ‘care for’ (349) and *ni-mit* ‘tell-laugh’ means ‘laugh at’ (350).

- (349) *Ti-wän Yesu u=läpä=tä yanggä ämin=ä nomän*
 be-3S.DS Jesus that=CL.stick=ABL water person=3.GEN good
p-ä-nggänggänuk-ga-x=unin,
 P.O-take-set-S.DIPF-3S.PRES=INDIV
 ‘This Jesus cares for his baptised people well.’
- (350) *Ti=wän pilot=dä ka-ke a=i-ni-mi-kut.*
 be-3S.DS pilot=ABL see.3S.O-SS.PF PRFOC=3S.O-tell-laugh-3S.PAST
 ‘The pilot saw and laughed at her.’

Awara also has serial verb constructions consisting of two adjacent verb stems used to describe complex events. The reasons for positing that Awara has both verb-verb compounds and serial verb constructions are discussed in §22.2.

² English feminine pronouns are used when examples come from text and the referent is feminine.

18.1.2 Benefactive compounds

Benefactive notions are expressed by compounds containing the verb *mi* ‘give’. McElhanon (1973a:49) notes this to be a common feature of Papuan languages spoken on the Huon Peninsula.

The semantically main verb stem is immediately followed by *mi* with *mi*’s object-indexing prefix. Example (351) shows *mi* with its object prefix functioning as a main verb in the clause. Example (352) shows the same form compounded to the verb root *gatäp* ‘help’, functioning as the benefactive.

- (351) *hiyäkän Anätu=tä hangä naxälä ni-mi-kut.*

truth God=ABL thing much 1P.O-give-3S.PAST

‘... true, God gave us many things.’

- (352) ... *hangä ngäkke=kän gatä-ni-mi-ngga-k.*

thing much=only help-1P.O-give-S.DIPF-3S.PRES

‘... he helps us with many things.’

The object prefix of *mi* indicates the person and number of the benefactee or malefactee. The benefactee is one who is positively impacted by the action, while the malefactee is one who is negatively impacted by the action or event. In example (353), the benefactee is first person singular. In example (354) the malefactee is first person plural.

- (353) *Bolom=u u=nggwen=u häluk-nga-mi-kut.*

lump=LNK that=CL.lump=TOP wash-1S.O-give-3S.PAST

‘he washed that bump for me.’

- (354) ... *hopä inälung bä bulämbam hikngä apu ta-ni-mi-kut.*

rain big or big real come rain-1P.O-give-3S.PAST

‘... and a very big rain came and rained on us.’

A verb compounded with *mi* can have more than one object prefix: a prefix preceding the first verb indicating its object, and a prefix preceding *mi* indicating the benefactive. In the next example, *aha* ‘do’ has the prefix *t-* which agrees with the singular object *kahit=nä* ‘his road’, while the benefactive formed with *mi* indicates the one for whom the passage was paid.

- (355) ... *gup=nä kwak=gä kahit=nä t-aha-ngäm-än* ...

skin=3.GEN light=ABL road=3.GEN S.O-do-3S.O-give-3S.DS

‘... and the white man paid his way (lit. made his road for him) ...’

An indication that some kind of grammatical reanalysis has taken place and that this is not simply a serial verb construction is that the forms of two of the object prefixes differ in the benefactive construction. For example, in the serial verb construction (as when alone) the form of the first person singular object prefix is *na-* (356), while in the benefactive construction, its form is *nga-* (357).

- (356) *P-äk-apu na-mi-yo.*

P.O-take-come 1S.O-give-2S.DIMP

‘Bring them to me.’ (lit. Bring them and give them to me.)

- (357) *P-äk-apu-nga-mi-yo.*
 P.O-take-come-1S.O-give-2S.DIMP
 ‘Bring them for me.’

In addition, the third person singular object prefix is normally *i-* (358), but in the central region, the third person singular object prefix in the benefactive is *ngä-* (359). (The variety of Awara spoken at Hikwang village in the northern region uses *i-*, however, for both the noncompounded form and the benefactive compound.)

- (358) *T-ä-ku i-mi-yo.*
 S.O-take-go 3S.O-give-2S.DIMP
 ‘Take it to him. (lit. Take and give it to him.)’

- (359) *T-ä-ke ku-ngä-mi-yo.*
 S.O-take-SS.PF go-3S.O-give-2S.DIMP
 ‘Take it for him. (lit. Take it and go for him.)’

The form of the third person singular object prefix in the benefactive construction, *ngä-* (360), is the same as one of the allomorphs of the third person genitive clitic *=nä*, which is bound to the end of nouns and classifier phrases. The allomorph *=ngä* is used following velars (361). The use of the form *ngä-* in the benefactive construction rather than the form *i-* which is used on independent verbs may indicate that the benefactive construction, which started out as a serial verb construction, is being reanalysed as a string of verb suffixes: a benefactive-indexing suffix followed by the benefactive derivational suffix *-mi*.

- (360) *Dokta=tä mayä sik-ngä-mi-ngga-k.*
 doctor=ABL tooth.3.GEN loosen-3S.O-give-S.DIPF-3S.PRES
 ‘The doctor is pulling out his tooth for him.’

- (361) *nasik=ngä*
 uncle=3.GEN
 ‘his uncle’

When the clause has an overt, phrasal benefactive constituent, the constituent consists of a postpositional phrase headed by *le* DATIVE. In (362) the benefactive in the second clause is coreferential with *nä=le* 1S=DAT. The same postposition follows the object recipients of *mi* ‘give’ when it functions as the main verb of the clause (363).

- (362) *Pinggu p-aha-ngä-mi-ke awä nä=le do=w-aha-nga-mi-kut*
 top P.O-do-3S0-give-SS.PF and 1S=DAT NEG=P.O-do-1S.O-give-3S.PAST
gwen=du=n.
 CL.lump=one=DIS
 ‘He made a top for him, but he didn’t make one for me.’

- (363) *Ti-wä=nä wehe-ke na-ke kawut=du nä=le na-mi-kut.*
 be-3S.DS=after split-SS.PF eat-SS.PF CL.part=one 1S=DAT 1S.O-give-3S.PAST
 ‘Then he broke it and ate (some) and gave some to me.’

There are at least three major possibilities for analysing the structure of benefactive verbs. One possibility was alluded to above—that there are really two suffixes: the suffix indicating the person and number of the benefactee/malefactee which is bound to the verb stem, and a suffix *-mi* (historically derived from *mi* ‘give’) indicating that the first suffix is benefactive. A co-occurrence constraint would be needed to prevent either of the suffixes from occurring without the other. Evidence for this is that the form used for third person singular, *-ngä*, is similar to the third person genitive, *=nä/=ngä*, which is bound to noun stems or classifier phrases. A variation on this analysis would recognise just one suffix which was historically two morphemes but which has now become fused. What would make this analysis somewhat strange is that languages that use inflectional morphology for benefactive-indexing also normally have inflectional morphology for indirect object-indexing. Awara, however, does not have indirect object indexing on the verb.

Another possibility is that benefactive constructions are verb phrases consisting of two nuclei: the main verb and *mi* ‘give’. The syntactic relationship between the two verbs is different from the relationship held between verbs in serial verb constructions; in benefactive constructions *mi* functions as an auxiliary verb. The difference in shape of the object prefixes preceding *mi* is due to that fact that in benefactive constructions they are phonologically bound to the main verb stem, whereas in serial verb constructions they are not.

The third possibility is that *mi* ‘give’ receives its object-indexing prefix and then is compounded to the preceding verb stem. Supporting evidence for this is the fact that benefactive arguments in the clause are followed by *-le* DATIVE just as the recipients of *-mi* are. The theoretical problem with this analysis, though, is that it involves an inflectional affix coming between two roots in a compound. Normally derivation is understood to precede inflection. Nevertheless, this is the analysis used in this paper.

18.1.3 Verbs formed with *-la* ‘become’

Some nouns can combine with the suffix *-la* ‘become’ to form verbs. This suffix has four allomorphs: *-la* after vowels (364), *-ka* after underlying velars (365), *-ta* after an underlying /t/ or /n/ (366), and *-da* after other consonants (367). (The underlying forms of the nouns in (365) and (366) are *kitok* ‘strong’ and *kupit* ‘angry’.)

- (364) ... *kupän=u* *a=wuyä-pa* *i-hi* *däpi-la-kul=u* ...
 tobacco=LNK PRFOC=blow-1S.DS 3S.O-cook short-become-3S.PAST=TOP
 ‘the tobacco that I smoked and it burned and became short’
- (365) ... *i=tä* *ya-x=une* *t-ä-pa* *kito-ka-ngga-k*.
 3=ABL say-3S.PRES=LOC S.O-take-1S.DS strong-become-S.DIPF-3S.PRES
 ‘From where she spoke I’m strengthening it.’ (Used to mean ‘I’m adding to what she said’.)
- (366) *A-xupi-ta-ngga-k*.
 PRFOC=angry-become-S.DIPF-3S.PRES
 ‘He is angry.’
- (367) *bulip-da-kut* *täpä=xatän*
 bush-become-3S.PAST CL.stick=in
 ‘where it became forest’

Some noun roots, when not compounded with another noun, require the nominaliser suffix *-ngä* to form a noun stem. It is only the root without *-ngä* that combines with *-la* ‘become’ to form a verb stem. For example, *-la* is suffixed to the forms *hakät* ‘yellow’ (368) and *buläm* ‘ignorant’ (369), rather than to *hakäl-ä* ‘yellow-NOM’ and *buläm-nä* ‘ignorant-NOM’.

- (368) *Gles a=xum-ning=ge hakä-ta-ying.*
 grass PRFOC=die-23P.FUT=DAT yellow-become-23P.PRES
 ‘The grass turned yellow because it is about to die.’
- (369) *A=mbuläm-da-kum.*
 PRFOC=ignorant-become-1S.PAST
 ‘I forgot.’

18.2 Verbal inflection

The overall order of inflectional affixes occurring on verbs is summarised below:

(object) verb stem (temporal) (aspect) (subject and tense/mood).

18.2.1 Object-indexing prefixes

Some transitive verbs (as well as the three ditransitive verbs and a few semitransitive verbs) require prefixes that indicate the identity of the object. As noted in §17.2.2, there are two sets of object-indexing prefixes. Seven verbs take a set that distinguishes only the number of the object, while thirteen take a fuller set that distinguishes both person and number. See §17.2.2 for the lists of these roots.

The two sets of object-indexing prefixes are shown in Tables 18.1 and 18.2. The number object prefixes are used whatever the person of the object. Examples (370) and (371) illustrate singular object prefixes used with first person and third person objects, and (372) and (373) show plural object prefixes used with first and third person objects.

Table 18.1 Number object prefixes

| Singular | Plural |
|----------|---------|
| t- | p-, ya- |

Table 18.2 Person/number object prefixes

| | Singular | Plural |
|---|----------|--------|
| 1 | na- | ni- |
| 2 | ga- | da- |
| 3 | i-/ tä- | yä- |

- (370) *Ko t-ä-ke t-ä-epu Wanuma nä-pmä-bän ...*
 go.up s.o-take-ss.pf s.o-take-come.down Wanuma 1s.o-leave-3s.ds
 ‘It (a plane) went up and took me and brought me down and left me at Wanuma, ...’
- (371) *U=sing ninane mǎngät=na t-ä-kum=däne engang=u täpä=tu*
 that=like 1s.refl.gen wife=1s.gen s.o-take-1s.past=poss child=lnk cl.stick=one
kum-gut.
 die-3s.past
 My own wife’s (lit. my wife I took) child died.
- (372) *Täke=mbä nin=u p-ä-ke ku-wiläk?*
 good=DUB 1p=top p.o-take-ss.pf go-2s.fut
 ‘Maybe you could (lit. maybe good) take us and go? (This is a request for a pilot to take them somewhere.)’
- (373) *Mǎngäl=u kaluk p-ä-ka-ying=gäne yä-nangge-ngga-t.*
 wife=lnk new p.o-take-p.dipf-23p.pres=poss say-soon-s.dipf-1s.pres
 ‘I will speak about (how) they take new wives.’

The form of the plural object used with six of the verbs that take number object prefixes is *p-*. However, the form of the plural object used with the verb *em* ‘shoot, write’, shown with a singular object in (374), is *ya-*; not *p-* (375).

- (374) *Ti-wän pas=u a=l-emä-ke ni-mi-kin.*
 be-3s.ds letter=top prfoc=s.o-write-ss.pf 1p.o-give-23p.past
 ‘So they wrote a letter and gave it to us.’
- (375) *Uma=nin=u a=ya-mä-k.*
 name=1p.gen=top prfoc=p.o-write-3s.pres
 ‘He already signed us up (lit. wrote our names).’

The following sentence illustrates *nindämut* ‘teach’, one of the thirteen verbs that take an object prefix that indicates both person and number.

- (376) ... *mi=ngin=dä ni-nindämum-bä ni=täyā u=sing=gän*
 mother=1p.gen=abl 1p.o-teach-23p.ds 1p=also that=like=only
payi-ka-mäng.
 crochet-p.dipf-1p.pres
 ‘... our mothers taught us, and we also crochet just like that.’

Most of the verbs that take person/number object prefixes use the prefix *i-* for third person singular.

- (377) *Ku ka-ke=ngä i-ni-kum.*
 go see.3s.o-ss.pf=after 3s.o-tell-1s.past
 ‘After I went and saw him, I spoke to him.’

An exception is *wäm* ‘follow’, which uses *tä-* for third person singular.

Table 18.3 *dup* ‘see’

| | Singular | Plural |
|---|----------|---------|
| 1 | na-ndup | ni-ndup |
| 2 | ga-ndup | da-ndup |
| 3 | ka | dayip |

- (378) *Ti-wän deyä äpma=sim u=läknga do=lä-wä-xa-mäng.*
 be-3S.DS but now=DIM that=CL.rope NEG=3S.O-follow-SIPF-1P.PRES
 ‘But now we don’t follow that (custom).’

Some verbs use a combination of object prefixes and suppletive verb stem morphology to indicate the person and number of the object.³ These verbs include, among others, *dup* ‘see’, *ut* ‘hit’, *ha* ‘burn/dry’, and *ha* ‘bite’.

As shown in Table 18.3, the verb *dup* ‘see’ has three allomorphs: *dup* for first and second person objects (379), *ka* for third singular object (380), and *dayip* for third plural object (381). The first and second person forms take object prefixes, but the third person forms do not.

- (379) *Na-ndu-xa-läk ti-wän ga-ndu-xa-t.*
 1S.O-see-SIPF-2S.PRES be-3S.DS 2S.O-see-SIPF-1S.PRES
 ‘You see me and I see you. (lit. You see me. Being so, I see you.)’
- (380) *Ti-wän nä do=xa-kum Gilingdeng=un.*
 be-3S.DS 1S NEG=see.3S.O-1S.PAST Gilingdeng=DIS
 ‘Well, I didn’t see Gilingdeng.’
- (381) *Nin=u do=ndayip-bumäng.*
 1P=TOP NEG=see.3P.O-1P.PAST
 ‘We did not see them.’

The verb *ut* ‘hit’ has two suppletive allomorphs, shown in Table 18.4: *ut* for singular objects (382, 383), and *sip/hip* for plural objects (384). All the forms take an object prefix except for third person plural (385). The allomorph *sip* is used in third person plural where the stem is word initial, and the allomorph *hip* is used following the plural object prefixes, both of which end in vowels.

- (382) *Ina=le n-uk-ga-läk?*
 what=DAT 1S.O-hit-S.DIPF-2S.PRES
 ‘Why did you hit me just now?’

³ Verbs with suppletive forms indicating the object that do not take object prefixes are glossed with the person and number of the object following the name of the verb. For example, the third person singular and plural forms of *dup* ‘see’ are glossed respectively ‘see.3S.O’ and ‘see.3P.O’.

Table 18.4 *ut* ‘hit’

| | Singular | Plural |
|---|----------|--------|
| 1 | n-ut | ni-hip |
| 2 | g-ut | da-hip |
| 3 | täng-ut | sip |

- (383) ... **täng-u-ke** *i-ni-nggämätä-ngga-t*.
 3S.O-hit-SS.PF 3S.O-tell-persist-S.DIPF-1S.PRES
 ‘... I hit him and scolded him.’
- (384) *Hamäk i-pit=de t-äha-ke da-hip-sät, gil=un.*
 grass cut-1S.FUT=DAT S.O-do-SS.PF 2P.O-hit-1S.APPR 2D=DIS
 ‘I might try (lit. do) to cut the grass and hit you two.’
- (385) **Sipmä-ke sip-na ti-ka-ying.**
 hit.3P.O-SS.PF hit.3P.O-1P.DS cry-P.DIPF-23P.PRES
 ‘We hit them and we hit them and they cry.’

The verbs *ha* ‘bite’ and *ha* ‘burn/dry’ are homophonous and have two allomorphs: *ha* with most object prefixes (386, 387), and *hi* with the third person singular object prefix *i-* (388, 389) and the first person plural prefix *ni-*.

- (386) ... *a=yiwi-⁴tätan a-pän apu na-ha-yäk.*
 PRFOC=stay-1S.PRES=at come-3S.DS come 1S.O-bite-3S.APPR
 ‘... it might come to where I am and **bite me**.’
- (387) *Hälu-ke p-e-na yä-ha-ka-ying.*
 wash-SS.PF P.O-leave-1P.DS 3P.O-cook-P.DIPF-23P.PRES
 ‘We wash them (coffee beans) and put them out and **they dry**.’

Table 18.5 *ha* ‘bite, burn/dry’

| | Singular | Plural |
|---|----------|--------|
| 1 | na-ha | ni-hi |
| 2 | ga-ha | da-ha |
| 3 | i-hi | yä-ha |

⁴ The first singular present tense suffix is *-t*. The /t/ is deleted preceding the /t/-initial allomorph of *=kätan*.

- (388) ... *kälap=dä epu katak=ngä=ne i-hi-kut, Matai=n.*
 animal=ABL come.down hand=3.GEN=LOC 3S.O-bite-3S.PAST Matai=DIS
 ‘... the animal came down and **bit Matai** on the hand.’
- (389) *Yot t-aha-wän i-hi-k käpä andan?*
 home S.O-do-3S.DS 3S.O-cook-3S.PRES CL.stick here
 ‘Is the person who made (lit. did) **the house burn** here?’

18.2.2 Verb suffix classes

Awara verbs have three suffix order classes, shown in Table 18.6. A verb may have only one suffix from each class. Class 1 suffixes mark temporals,⁵ class 2 suffixes mark aspect, and class 3 suffixes mark subject-indexing along with either tense or modality.⁶

Table 18.6 Verb suffixes

| | 1 Temporal | | 2 Aspect | | 3 Subject-indexing | |
|------|------------|---------|----------|--------|---------------------|------------------------|
| STEM | -gämätä | PERSIST | -ga | S.DIPF | Final verbs | |
| | -hi | DUR | -ka | P.DIPF | -t | 1S.PRES |
| | -nangge | ‘soon’ | -xät | SIPF | -kum | 1S.PAST |
| | | | | | -pit | 1S.FUT |
| | | | | | -yot | 1S.DIMP |
| | | | | | -pa | 1S.IMM |
| | | | | | -pam | 1S.HYP |
| | | | | | -yät | 1S.APPR |
| | | | | | -pänak | 3S.PROB |
| | | | | | Medial verbs | |
| | | | | | -pa | 1S.DS |
| | | | | | -ke | SS.PF |
| | | | | | -hika | SS.DUR.PF ⁷ |
| | | | | | -xawik | SS.IPF |
| | | | | | ... | |

⁵ Unlike aspect in Awara, which is a grammatical category dealing with the distinction between perfective and imperfective, the temporal suffixes are less systematic and might better be treated as derivational suffixes.

⁶ Clauses may be governed by postpositions such as =*le* DATIVE or =*u* CONDITIONAL or by =*unin* INDIVIDUATOR. =*Unin* and some of the postpositions are phonologically bound to the verb, but as they are syntactically separate, they are not included in Table 18.6.

⁷ The suffix -*hika* SS.DUR.PF is not the same as -*hi-ka* DUR-P.DIPF. The suffix -*hika* is used only in same-subject medial clauses and is never followed by another class 3 suffix. It is used whether the subject is singular or plural. The sequence -*hi-ka* is only used in different-subject medial clauses and is followed by a plural different-subject suffix. It alternates with -*hi-ngga* DUR-S.DIPF, used with singular subjects.

Co-occurrence restrictions are as follows. Of the temporal suffixes, *-gämäta* PERSISTENT apparently can be followed by any class 2 or 3 suffix. The suffix *-hi* DURATIVE can be followed by the dynamic imperfective, different-subject, and present tense suffixes.⁸ The suffix *-nangge* ‘soon’ is obligatorily followed by a dynamic imperfective suffix and a present tense suffix. The aspect suffixes can be followed by all but the same-subject medial-verb suffixes, or the apprehension or probable irrealis suffixes.

Understanding classes 1 and 2 depends on understanding the subject-indexing suffixes, so the subject-indexing suffixes are discussed first.

18.2.3 Subject-indexing suffixes

Class 3 consists of the subject-indexing suffixes listed in Table 18.7 in addition to the same-subject suffixes, which do not directly indicate the person and number of the subject. A verb can have only one of these suffixes.

There are two kinds of subject-indexing suffixes: those that occur on verbs in independent clauses and certain dependent clauses, and those that occur on verbs in cosubordinate clauses and in certain serial verb constructions.

Since independent clauses normally occur at the end of the sentence, their verbs are termed ‘final verbs’, and their suffixes are ‘final-verb suffixes’. Final-verb suffixes indicate the person and number of the subject along with either tense or modality. In addition to independent clauses, they can also be used on clauses that are followed by a postposition. The final-verb suffixes are described in detail in §18.2.4.

Since cosubordinate clauses normally precede the independent clause, their verbs are termed ‘medial verbs’, and their subject-indexing suffixes are termed ‘medial-verb suffixes’. Medial-verb suffixes do not indicate tense or modality. Rather, they indicate whether the subject of the clause in which they occur is the same as or different from the subject of a

Table 18.7 Subject-indexing suffixes occurring on verbs

| | 1S | 2S | 3S | 1D | 23D | 1P | 23P |
|-----------------------|------|--------|--------|--------|----------|---------|--------|
| PRESENT | -t | -läk | -k | -mäk | -mäläk | -mäng | -ying |
| PAST | -gum | -guläk | -gut | -gumäk | -gumäläk | -gumäng | -gin |
| FUTURE | -pit | -piläk | -pik | -him | -himäläk | -nim | -ning |
| APPREHENSION | -yät | -yä | -yäk | -häm | -hän | -näm | -näng |
| DEFAULT IMPERATIVE | -yot | -yo | -yok | -hom | -hon | -nom | -nong |
| IMMEDIATE | -pa | -ng | -pän | -da | -xun | -na | -xut |
| HYPOTHETICAL | -pam | -pim | -pän | -dam | -pät | -nam | -päm |
| PROBABLE ⁹ | — | — | -pänak | — | -pälak | — | -päyak |
| DIFFERENT SUBJECT | -pa | -pi | -pän | -da | -pät | -na | -pä |

⁸ More on the combinations of suffixes that follow *-hi* DURATIVE is given in §18.2.7.

⁹ The PROBABLE subject suffixes apparently have only third person forms.

Table 18.8 Tense, modality and different-subject suffixes followed by subject-indexing suffixes

| | 1S | 2S | 3S | 1D | 23D | 1P | 23P |
|--------------------|-------|---------|---------|---------|-----------|----------|---------|
| PRESENT | -Ø-t | -Ø-läk | -Ø-k | -Ø-mäk | -Ø-mäläk | -Ø-mäng | -Ø-ying |
| PAST | -gu-m | -gu-läk | -gu-t | -gu-mäk | -gu-mäläk | -gu-mäng | -g-in |
| FUTURE | -pi-t | -pi-läk | -pi-k | -hi-m | -hi-mäläk | -ni-m | -ni-ng |
| APPREHENSION | -yä-t | -yä-Ø | -yä-k | -hä-m | -hä-n | -nä-m | -nä-ng |
| DEFAULT IMPERATIVE | -yo-t | -yo-Ø | -yo-k | -ho-m | -ho-n | -no-m | -no-ng |
| IMMEDIATE | -pa-Ø | -ng-Ø | -pä-n | -da-Ø | -xu-n | -na-Ø | -xu-t |
| HYPOTHETICAL | -pa-m | -pi-m | -pä-n | -da-m | -pä-t | -na-m | -pä-m |
| PROBABLE | - | - | -pä-nak | - | -pä-lak | - | -pä-yak |
| DIFFERENT SUBJECT | -pa-Ø | -pi-Ø | -pä-n | -da-Ø | -pä-t | -na-Ø | -pä-Ø |

subsequent clause. Those that mark different-subject indicate the person and number of the subject of the clause in which they occur directly, as well as indicating that that subject is different from that of a following clause. Those that mark same-subject indicate only that their subject is the same as that of a following clause. These medial-verb suffixes are described in detail in §18.2.5.¹⁰

First I present the suffixes that directly indicate the person and number of the subject. Then I discuss each set of subject-indexing suffixes.

Table 18.7 shows all the verb suffixes that directly indicate the person and number of the subject.

A comparison of the forms in Table 18.7 shows similarities that suggest that they could be analysed as being composed of two suffixes; the first indicating tense, modality or different-subject, and the second indicating the person and number of the subject. Table 18.8 shows what these suffixes would be. For example, *-gu* would be PAST, *-pi*, *-hi* and *-ni* FUTURE, *-t* 1S, *-läk* 2S, and *-k* 3S.

However, many of these posited suffixes would have multiple forms and, though there are some patterns, it is difficult to state a generality about when different allomorphs are used. For example, first person singular would be marked by *-t* with the present, future, default imperative and apprehension, *-m* with past and hypothetical, and apparently null (or unmarked) with immediate imperative mood. But none of the other persons have a similar arrangement of their allomorphs.

It may well be possible to develop an analysis that treats these suffixes as combinations of two (or more) morphemes. However, a satisfactory analysis of this sort has not yet been completed, and for simplicity in presenting the facts in this work, I treat them as unitary morphemes.

¹⁰ Because medial-verb suffixes indicate whether there is a switch or continuity in the reference of the subject, they are also referred to in the literature as ‘switch-reference suffixes’.

18.2.4 Final-verb subject-indexing suffixes

There are three sets of final-verb subject-indexing suffixes: those indicating tense, those indicating imperative and hortative modality, and those indicating various other types of irrealis modalities.

18.2.4.1 Tense suffixes

Awara has three sets of subject-indexing suffixes that indicate tense: past, present, and future. These three sets of suffixes are used for both declarative and interrogative sentences.

In subordinate clauses tense can be marked relative to the time of the superordinate clause rather than to the time of speaking. This is shown with the present and future tenses.¹¹

The present tense suffixes in Table 18.9 are used for events that take place in the present or that have present relevance. When there is no aspect suffix preceding it, present tense indicates that the event happened today (390) or at some earlier time but is still in effect (391, 392). That time can be several years earlier as in (392) where the speaker tells about when he and his wife got married.

- (390) *Engang=ge nak p-ä-ko ku-k.*
 child=DAT food P.O-take-go.up go-3S.PRES
 ‘She took up the child’s food and went.’

- (391) *Towiyä bulämbam=u gwe=nal=u a=li-mäläk.*
 pig big=LNK CL.lump=two=TOP PRFOC=be-23D.PRES
 ‘The two pigs have become big.’ (lit. The pigs have become two big ones.)

- (392) *Ti-ke awä nil=u banip=nil=u buläkän gwen ti-wän yiwi-mäk.*
 be-SS.PF and 1D=TOP inside=1D.GEN=TOP unit CL.lump be-3S.DS stay-1D.PRES
 ‘Well, we two, our hearts were united, and we lived together (lit. stayed).’

Present tense suffixes can be used in subordinate clauses to express tense relative to that of the superordinate clause. In (393) the final verb, *ha-kut*, is marked past tense. Yet *apu-ying=ge* is subordinated to *ya-ke=ngä* and is marked present tense to refer to an event that happened earlier that day.

Table 18.9 Present tense suffixes

| | Singular | Dual | Plural |
|---|----------|-----------|--------|
| 1 | -t | -mäk | -mäng |
| 2 | -läk | 23 -mäläk | -ying |
| 3 | -k | | |

¹¹ The past tense suffixes have not been found to indicate relative tense.

- (393) *Ha-ke p-e-kumäng=ge kwep=dätä ena-keng=u [miting=ge*
 cook-SS.PF P.O-leave-1P.PAST=DAT \pm 1DAY=next rise-SS.PF=COND meeting=DAT
apu-ying=ge] ya-ke=ngä papa=tä matä-ke ha-kut.
 come-23P.PRES=DAT talk-SS.PF=after father=ABL cut-SS.PF cook-3S.PAST
 ‘Because we cooked (the hair) and left them, the next day when he got up, Papa
 thought of those who came for the meeting, and cut them (the animals) and cooked
 them.’

When a present tense suffix is preceded by the aspect suffixes *-ga* SINGULAR DYNAMIC IMPERFECTIVE, *-ka* PLURAL DYNAMIC IMPERFECTIVE, or *-xät* STATIC IMPERFECTIVE, the event is understood to occur over a period of time that includes the time of speech or to have occurred immediately before the time of speech (see §18.2.6).

- (394) *Wuyä=ne ku-ngga-t.*
 garden=LOC go-S.DIPF-1S.PRES
 ‘I’m going to the garden.’

The past tense suffixes in Table 18.10 are used for events that occurred before today. In (395) *-kumäk* 1D.PAST is used with an event that takes place over a relatively short period of time, and in (396) *-kum* 1S.PAST is used with an event that occurred over a longer period of time.

- (395) *Kwew=u Titi=xät nä=xät puyä-na=ne ku-kumäk.*
 \pm 1DAY=TOP Titi=with 1S=with garden-1S.GEN=LOC go-1D.PAST
 ‘Yesterday Titi and I went to my garden.’
- (396) *Tupä nä wawakdäkä yiwi-kum=une nä=tä u=sing t-aha-kum.*
 before 1S child stay-1S.PAST=LOC 1S=ABL that=like S.O-do-1S.PAST
 Before, when I was a boy, I did this.

In the variety of Awara spoken at Tawaya and Yapulak, the past tense suffixes have allomorphs beginning with /b/ after bilabials and /k/ elsewhere. The other central villages and the northern villages use allomorphs beginning with /g/ and /k/ (see §9.1.4).

Table 18.10 Past tense suffixes

| | Singular | Dual | Plural |
|---|----------------------------|-------------------------------------|-------------------------------|
| 1 | -gum -kum -bum | -gumäk -kumäk -bumäk | -gumäng -kumäng -bumäng |
| 2 | -guläk -kuläk -buläk | 23 -gumäläk -kumäläk -bumäläk | -gin -kin -bin |
| 3 | -gut -kut -but | | |

- (397) *Ti-wä=nä kupiläne=yä ap-bumäk yol=une=n.*
 be-3S.DS=after night=after come-1D.PAST village=LOC=DIS
 ‘Then at night we came home.’

The future tense suffixes in Table 18.11 are used for events in both the immediate (398) and distant future (399).

- (398) *Ge stoli däpi wäm=sim yä-wit.*
 so story short CL.place=DIM say-1S.FUT
 ‘So I will tell a short story.’
- (399) *Äpme mahan=de täpdux=u wasekngä gwe=ne=yä kep wäsi-wik.*
 later behind=DAT time=LNK last CL.lump=LOC=after ground loosen-3S.FUT
 ‘Later, at the last day, the earth will end.’

The future tense suffixes can be used in subordinate clauses referring to events that are not future at the time of speech, but are future in relation to the superordinate clause. In (400) *ako-pit=de* is marked future tense relative to *ya-kum*. The event is not necessarily realised, as indicated by the conjunction *deyä* ‘but’.

- (400) *U=sing tembanä ako-pit=de ya-kum deyä ...*
 that=like morning come.up-1S.FUT=DAT say-1S.PAST but
 ‘I said I would come up in the morning, but ...’

The future tense suffixes can also be used in subordinate clauses which set up a hypothetical situation as an example in order to explain a customary or habitual action. Example (401) comes from a text about marriage customs. The discussion about the customs uses present tense suffixes preceded by a suffix that indicates imperfective aspect such as *-ka* PLURAL DYNAMIC IMPERFECTIVE or *-xät* STATIC IMPERFECTIVE. The hypothetical situation in the example below is marked with *-pik* 3S.FUT.

Table 18.11 Future tense suffixes

| | Singular | Dual | Plural |
|---|----------------------------|-------------------------|--------|
| 1 | -pit -wit -bit | -him -sim | -nim |
| 2 | -piläk -wiläk -biläk | 23 -himäläk -simäläk | -ning |
| 3 | -pik -wik -bik | | |

- (401) *Mängälä andan nanä=tä p-ä-ka-ying=u u=sing*
 female here from=ABL P.O-take-P.DIPF-23P.PRES=COND that=like
t-aha-ka-ying. Ämin=u täpä=tu inä baniyä gwe=nä
 S.O-do-P.DIPF-23P.PRES person=LNK CL.stick=one 3.EMPH inside.3.GEN CL.lump=3.GEN
ti-wän mängälä täpä=tu t-ä-pik. T-ä-pän=u mängälä
 be-3S.DS female CL.stick=one S.O-take-3S.FUT S.O-take-3S.DS=COND sfemale
u=läpä=le nanämingä tokngä hikngä natä-xa-ying=unin.
 that=CL.stick=DAT parent angry real feel-SIPF-23P.PRES=INDIV
 ‘When people from here get wives, they do it like this. A man will take a woman of
 his own choosing. If he takes her, the woman’s parents feel very angry.’

18.2.4.2 Imperative mood suffixes

Awara has two sets of subject-indexing suffixes that indicate imperative mood. Though the second set is made up of both imperatives and hortatives, all of the suffixes in these two sets are referred to in this paper as imperative mood suffixes. Clauses with these suffixes are distinct from clauses with any of the other sets of subject-indexing suffixes in that they can be negated with *ma=* PROHIBITIVE rather than with *do=* NEGATIVE. These two sets of suffixes are termed default imperative mood (DIMP) and immediate imperative mood (IMM). I consider them in turn.

The default imperative set of suffixes in Table 18.12 has forms for all three persons, and is used for commands and obligations. The first and third persons are treated as imperatives rather than as hortatives because their forms are so much like the second person forms. Suffixes beginning with /y/ or /h/ have allomorphs beginning with /s/. I first illustrate second and third person imperatives, as the first person examples are interpreted by analogy with the others.

Second person forms are used in leavetakings (402), exhortations (403), pleas (404), instructions (405), and commands or prohibitions (406, 407).

Table 18.12 Default imperative mood suffixes

| | Singular | Dual | Plural |
|---|--------------|-----------------|--------|
| 1 | -yot -sot | -hom -som | -nom |
| 2 | -yo -so | 23 -hon -son | -nong |
| 3 | -yok -sok | | |

- (402) *Ku-ka-nong.*
 go-P.DIPF-23P.DIMP
 'You all go.'
- (403) 'Wam=u wäyi yä-wa na-ni-näng' yang=u ma=natäp-son.
 language=TOP bad say-1S.DS 1S.O-tell-23P.APPR COMP=TOP PROHIB=think-23D.DIMP
 'Don't think, "If I speak poorly they'll yell at me".'
- (404) *Täkeläpä, gä=tä gatä-nga-mi-yo.*
 Lord 2S=ABL help-1S.O-give-2S.DIMP
 'Lord, help me.'
- (405) 'Yäx=u a=sing payi-yo ...' yang yä-nindämu-ka-kin.
 bag=TOP this=like crochet-2S.DIMP COMP 3P.O-teach-P.DIPF-23P.PAST
 'They used to teach them "Crochet string bags like this ...".'
- (406) *T-ä-ko a=ne yiwä-xa-yo.*
 s.O-take-go.up this=LOC stay-SIPF-2S.DIMP
 'Go in and stay here.' (This was said by a policeman taking someone to jail.)
- (407) *Ma=xu-yo.*
 PROHIB=go-2S.DIMP
 'Don't go.'

Third person forms are used for third person obligations (408) and PROHIBITIONS (409).

- (408) *A-na-yok.*
 PRFOC=eat-3S.DIMP
 'He must eat it.'
- (409) *Ma=hikngä epuxu-yok.*
 PROHIB=real come.out-3S.DIMP
 'It (the money) really must not be taken out (lit. come out) (of the tin).'

The third person forms are also used in serial verb constructions and clause chains when telling someone to do something that will have a desired affect on a third person referent. Second person is marked on a medial verb and third person default imperative is marked on the final verb. The imperative force marked on the final verb applies not to the final verb but to the medial clause with the second person different-subject suffix. These forms are used in instructions (410) and commands or prohibitions (411).

- (410) *A=w-e-wi puku-nong.*
 PRFOC=P.O-leave-2S.DS go.down-23P.DIMP
 'Swallow them.' (lit. Let them go down.)
- (411) *Ma=w-äk-e-pät det-nong.*
 PROHIB=P.O-take-come.down-23P.DS loose-23P.DIMP
 'Don't loosen them.' (lit. Don't take them down so that they come loose.)

First person default imperative suffixes are used in the final clause of a chain in commands or requests involving a first person subject. The medial clause preceding it has a second person different-subject suffix. Again, as with the third person imperative suffixes described above, the imperative force marked on the final verb applies to the medial verb.

- (412) *A-xa-ke=ngä ya-wi ka-yot.*
 PRFOC=see.3S.O-SS.PF=after say-2S.DS see.3S.O-1S.DIMP
 ‘When you see one, say so, so I can see.’

- (413) *Äpme=yä ya-wi natäp-som.*
 later=after say-2S.DS hear-1D.DIMP
 ‘Later say so that the two of us might hear.’

- (414) *Äpme=yä ya-wi natäp-nom.*
 later=after say-2S.DS hear-1P.DIMP
 ‘Later say so that we all might hear.’

The immediate imperative mood suffixes in Table 18.13 are used in commands when an immediate response is desired and in hortative expressions when immediate action is intended.

Second person forms are used in commands (415, 416), requests (417), and invitations (418). (In examples (417) and (418) the second singular immediate imperative has the \emptyset form which occurs following consonants.)

- (415) *I-mi-ng*
 3S.O-give-2S.IMM
 ‘Give it to him.’

- (416) *Ep-bun.*
 come.down-23D.IMM
 ‘You two come down here.’

Table 18.13 Immediate imperative mood suffixes

| | Singular | Dual | Plural |
|---|----------------------|-------------------------|----------------------|
| 1 | -pa -wa -ba | -da -ta | -na |
| 2 | -ng \emptyset | 23 -xun -kun -bun | -xut -kut -but |
| 3 | -pän -wän -bän | | |

- (417) *Masis=u na-m¹²-Ø.*
 lighter=TOP 1S.O-give-2S.IMM
 ‘Give me a lighter.’
- (418) *Yanggä=ka hälut-Ø.*
 water=2S.GEN wash-2S.IMM
 ‘Wash yourself (lit. Wash your water).’

First person and third person forms are used in hortative sentences when expressing what one intends to do (first person) and what one wants another to do (third person). Most of these forms are the same as the different-subject suffixes used in medial clauses (see §18.2.5) and are similar in form to the hypothetical and probable suffixes. The exceptions are the third person dual and plural forms, *-xun* and *-xut*, (which, as in the other subject-indexing suffix paradigms, are the same as the second person forms).

The first person forms are used for expressing what one intends to do alone (419) or in cohortatives (420).

- (419) *Apu-ke=ngä t-emäng gänggänu-wa.*
 come-SS.PF=after S.O-shoot set-1S.IMM
 ‘After I come back, I’ll set it (the trap).’
- (420) *Ti-ke undan p-ä-ku p-e-na.*
 be-SS.PF there P.O-take-go P.O-leave-1P.IMM
 ‘But let’s take them and put them there (in school).’

First person forms are also used in clause chains when telling someone to do something that will be followed by an action performed by the speaker and perhaps others. Second person is marked on a medial verb and first person immediate is marked on the final verb.

- (421) *Mäte gin=u wuyä t-e-ke a-pä nax=u nä-na.*
 all 2P=TOP work S.O-leave-SS.PF come-23P.DS food=TOP eat-1P.IMM
 ‘You all leave the work and come so we can eat the food.’

The immediate suffixes are not used for true interrogative statements, but just as the tense suffixes used in declarative statements can be combined with the adverb *bä* ‘maybe’ and the rising intonation which is typically used for true questions in order to express uncertainty, first person immediate suffixes can also be used with *bä* ‘maybe’ and rising intonation in expressions of indecision (422).

- (422) *A=mbä täng-u-wa bä a=mbä t-e-ke ku-ngga-wa?*
 PRFOC=DUB 3S.O-hit-1S.IMM OR PRFOC=DUB S.O-leave-SS.PF go-S.DIPF-1S.IMM
 ‘Should I kill it or should I leave it and go?’ (He said this to himself.)

The first person immediate suffixes differ from the first person future tense in that the immediate suffixes indicate that the speaker intends to do something immediately.

¹² The verb *mi* ‘give’ is irregular, its stem alternating between *mi* and *m*.

- (423) *Puyä p-aha-wit.*
work P.O-do-1S.FUT
'I will do work.'

- (424) *Puyä p-aha-wa.*
work P.O-do-1S.IMM
'I will do work now.'

The third person immediate suffixes are used when expressing a desire for another person or a thing to do something.

- (425) *Yupsäng yä-ha-xut, tawik=nga=n.*
quickly 3P.O-cook-23P.IMM clothing=1S.GEN=DIS
'My clothes must dry quickly.'

These third person forms are more frequently used in serial verb constructions and clause chains when telling someone to do something that will have a desired affect on a third person referent. Second person is marked on a medial verb and third person immediate is marked on the final.

- (426) *T-e-wi ku-wän.*
s.o-leave-2S.DS go-3S.IMM
'Let him go (right now).'

- (427) *Yanggä hälu-ke p-aha-wi ku-xut.*
water wash-SS.PF P.O-do-2S.DS go-23P.IMM
'Wash and dry yourself.' (lit. Wash water and do them so that the waters go.)

The third person immediate suffixes are also used in serial verb constructions and clause chains when telling what one intends to do that will have a desired affect on a third person referent. First person is marked on a medial verb and third person immediate is marked on the final.

- (428) *Mut-na ku-wä t-ä-na täka-wän, yot=nin=un.*
throw-1P.DS go-23P.DS s.o-take-1P.DS improve-3S.IMM home=1P.GEN=DIS
Let's throw them away and fix up our village. (lit. Let's throw them so they go, and let's take our village so it will improve.)
- (429) *Ge t-ä-xa-wi yi-wa täka-xut.*
so s.o-take-SIPF-2S.DS stay-1S.DS improve-23P.IMM
'(My hands are tired.) So you hold him and I'll rest (lit. I stay and they improve).'

18.2.4.3 Irrealis suffixes

There are three other sets of subject-indexing suffixes that indicate various types of irrealis modalities: apprehension, hypothetical, and probable. These are distinct from the tense suffixes in that they are not strongly asserted, and they are different from the imperative mood

Table 18.14 Apprehension suffixes

| | Singular | Dual | Plural |
|---|--------------|-----------------|--------|
| 1 | -yät -sät | -häm -säm | -näm |
| 2 | -yă -sä | 23 -hăn -săn | -năng |
| 3 | -yäk -säk | | |

suffixes (see table 23) in that they are negated with *do*= NEGATIVE rather than with *ma*= PROHIBITIVE.

The APPREHENSION series of final-verb suffixes in Table 18.14 is used for apprehensional epistemic modality—that is, for undesired or feared events.¹³ It has forms for first (430), second (431, 432), and third person (433, 434). As in the default imperative, the singular suffixes have allomorphs beginning with /y/ and /s/, and the dual suffixes have allomorphs beginning with /h/ and /s/.

- (430) *U t-aha-ke si-pi meyä p-ä-näm.*
 that S.O-do-SS.PF hit.3P.O-2S.DS burden P.O-take-1P.APPR
 ‘If you do that and hit them we might get into trouble (lit. get burdens).’
- (431) *Mu-ke täng-u-yă.*
 throw-SS.PF 3S.O-hit-2S.APPR
 ‘If you throw it you might hit him.’
- (432) *T-aha t-ä-ku t-e-nga-mi-năng.*
 s.o-do s.o-take-go s.o-leave-1S.O-give-23P.APPR
 ‘You all might take it and lose it on me.’
- (433) *Yot i-hi-yäk.*
 house 3S.O-cook-3S.APPR
 ‘The house might burn down.’
- (434) *T-aha-wi apu yot=nin gwen=u do=akop-năng.*
 s.o-do-2S.DS come home=1P.GEN CL.lump=TOP NEG=come.up-23P.APPR
 ‘If you do that and they come, they might not come into our house.’

The HYPOTHETICAL series of final-verb suffixes in Table 18.15 is used in the ‘then’ clause of hypothetical or contrafactual conditionals. It has forms for first (435), second (436), and third person (437).

¹³ Davis (1964:166) glossed the Wantoat suffixes that indicate apprehension as ‘phobic’.

Table 18.15 Hypothetical suffixes

| | Singular | Dual | Plural |
|---|----------------------|-------------------------|----------------------|
| 1 | -pam -wäm -bäm | -dam -tam | -nam |
| 2 | -pim -wim -bim | 23 -pät -wät -bät | -päm -wäm -bäm |
| 3 | -pän -wän -bän | | |

- (435) *Mängälä=tä a=ya-kin* *gämu=n a=l-äk-ako-pam.*
female=ABL PRFOC=say-23P.PAST if=DIS PRFOC=S.O-take-come.up-1S.HYP
‘If the girls had said (to bring it up), (then) I would have brought it up.’
- (436) *A-natä-xä-t* *gämu a=layi-xä-wa* *ya-pim*
PRFOC=know-SIPF-1S.PRES if PRFOC=sing-SIPF-1S.DS write-2S.HYP
‘If I knew it, (then) I’d sing it and you would write it.’
- (437) *Ti-ke do=wäsi t-e-kut* *gämu nayi täknga=n,*
be-SS.PF NEG=loosen S.O-leave-3S.PAST if leash CL.rope=DIS
do=l-ä-pu täng-u-wän ku-pän.
NEG=S.O-take-go.down 3S.O-hit-3S.DS die-3S.HYP
‘But if he had not loosened and removed its leash, (then) it would not have fallen and died.’

The protasis is followed by the conjunction *gämu* ‘if’. When *gämu* follows a final-verb suffix, the sentence is contrafactual. In other words, it expresses that, because the protasis is not true, the following clause is also not true (438).

- (438) *Sawin=u do=wuku-ning* *gämu Ukalämpä a=xu-wäm.*
Sawin=TOP NEG=go.down-23P.FUT if Ukarumpa PRFOC=go-23P.HYP
‘If you were not going down to Sawin, you would go to Ukarumpa.’

When *gämu* follows a medial-verb suffix, the sentence has a hypothetical, rather than contrafactual, interpretation (439).

- (439) *A-na-ni-wi* *gämu a=xu-wam.*
PRFOC=1S.O-tell-2S.DS if PRFOC=go-1S.HYP
‘If you were to tell me now, I could go.’

The PROBABLE series of final-verb suffixes in Table 18.16 is used when reporting events that are expected to be true. It only has forms for third person referents.

Table 18.16 Probable suffixes

| | Singular | Dual | Plural |
|---|----------|--------|--------|
| 3 | -pānak | -pālak | -pāyak |
| | -wānak | -wālak | -wāyak |
| | -bānak | -bālak | -bāyak |

- (440) *O wāyi ti-wān woksaw=une yi-wānak.*
 oh bad be-3S.DS workshop=LOC stay-3S.PROB
 ‘Oh, it’s probably damaged and in the workshop.’
- (441) *Ako-pālak.*
 come.up-3D.PROB
 ‘The two of them are probably coming up now.’

18.2.5 Medial-verb subject-indexing suffixes

Medial-verb subject-indexing suffixes are used primarily in cosubordinate clauses in clause chains. These suffixes indicate whether the clause in which they occur has the same subject or a different subject from that of a following clause in the sentence. This following clause is called the ‘reference clause’ (see §15.2.2). In (442) *alemāke* ‘write’ has the same subject as the reference verb *nimikin* ‘gave’. In (443) *epuxawa* ‘come down’ has a different subject from the reference verb *yiwāxamäng* ‘stay’.

- (442) *Ti-wān pas=u a=l-emā-ke ni-mi-kin.*
 be-3S.DS letter=TOP PRFOC=S.O-WRITE-SS.PF 1P.O-give-23P.PAST
 ‘So they wrote a letter and gave it to us.’
- (443) *Hopä mätekngä epu-xa-wä yiwā-xa-mäng.*
 rain small come.down-SIPF-23P.DS stay-SIPF-1P.PRES
 ‘While it’s drizzling (lit. While little rains are coming down), we are here.’

Medial verbs are not marked for absolute tense or modality. Rather, they depend on the final verb for their tense and modality interpretation. In (442) and (443) above, the medial verbs depend respectively on *nimikin* and *yiwāxamäng* for their past and present tense and their declarative mood interpretation.

18.2.5.1 Same-subject suffixes

There are three medial-verb suffixes which signify that the following clause has the same subject, and indicate some sort of aspect: *-ke* SAME-SUBJECT PERFECTIVE (SS.PF), *-hika* SAME-SUBJECT DURATIVE PERFECTIVE (SS.DUR.PF), and *-xawik* SAME-SUBJECT IMPERFECTIVE (SS.IPF).

The most common of the these suffixes, *-ke* SS.PF, indicates that the event is viewed as a whole. Consequently, it is normally used when describing events in a sequence (444).¹⁴

¹⁴ The allomorphs of *-ke* SS.PF are *-ke* and *-keng*.

- (444) *Kwalem=na p-ä-ke songä=xätan ku-kum.*
 bow=1S.GEN P.O-take-SS.PF forest=in go-1S.PAST
 ‘I took my bows and I went to the bush.’

The suffix *-hika* SS.DUR.PF portrays the action as going on for an extended period of time before the next action (445).¹⁵

- (445) ... *u=ne yiwi-hika t-e-ke atu maha ku-kum.*
 that=LOC stay-SS.DUR.PF S.O-leave-SS.PF level.far back go-1S.PAST
 ‘... and I stayed there for a while, and then I left him and went to the other side.’

Finally, *-xawik* SS.IPF portrays an event as incomplete at the time of the action of the reference verb (446, 447).

- (446) ... *nä yiwä-xawik guyä=na=le tokngä hikngä natäp-bum.*
 1S stay-SS.IPF father=1S.GEN=DAT angry real feel-1S.PAST
 ‘... and while I was waiting, I felt very angry with my father.’
- (447) *Ku gomox=u gwäwayä do=xa-xawik ku-kum inälängän hikngä.*
 go snake=LNK snake NEG=see.3S.O-SS.IPF go-1S.PAST nearby real
 ‘I went, and not seeing a gwäwayä snake, I went very close to it.’

Examples (448)–(450) illustrate the contrastive temporal relationships marked by the same-subject suffixes.

- (448) *Ku wuyä ipmä-ke kupä=na=le ti-kin.*
 go garden cut-SS.PF tobacco=1S.GEN=DAT be-23P.PAST
 ‘I went and cut the garden and I needed a cigarette.’
- (449) *Ku wuyä ipmä-hika kupä=na=le ti-kin.*
 go garden cut-SS.DUR.PF tobacco=1S.GEN=DAT be-23P.PAST
 ‘I went and cut the garden for a while, and I needed a cigarette.’
- (450) *Ku wuyä ipmä-xawik kupä=na=le ti-kin.*
 go garden cut-SS.IPF tobacco=1S.GEN=DAT be-23P.PAST
 ‘I went and while I was cutting the garden, I needed a cigarette.’

As exemplified in (448-450), the same-subject suffixes are also used when the subject of the medial clause is the same as the topic of the reference clause, but the reference clause is a construction requiring third person subject-indexing (*ti-kin* ‘be-23P.PAST’). In these examples the subject of the medial clause and the topic of the reference clause are first person singular as evidenced by the first person genitive marking following *kupän* ‘tobacco’, but the construction expressing need in the reference clause requires third person subject-indexing.

Table 18.17 Different-subject suffixes

| | Singular | Dual | Plural |
|---|----------------------|-------------------------|-------------------|
| 1 | -pa -wa -ba | -da -ta | -na |
| 2 | -pi -wi -bi | 23 -pät -wät -bät | -pä -wä -bä |
| 3 | -pän -wän -bän | | |

18.2.5.2 Different-subject suffixes

The different-subject (DS) medial-verb suffixes specify the person and number of the subject of the current clause, as well as indicate that the clause containing the reference verb has a different subject.

When a verb is inflected with a different-subject suffix and has no temporal or aspect suffix (see §§18.2.6–7), it has perfective aspect. The usual interpretation regarding the order of events is the iconic order—the first mentioned precedes the latter.

- (451) *Te-pa ep-but.*
 shoot-1S.DS come.down-3S.PAST
 ‘I shot it and it fell.’

- (452) *T-ä-ko ‘Uman=da imin?’ ya-wän, ‘Uma=na Ngawingom,’ yang*
 s.o-take-go.up name=2S.GEN who say-3S.DS name=1S.GEN Ngawingom COMP
i-ni-kum.
 3S.O-tell-1S.PAST
 ‘Going inside he said, “What’s your name?” and I told him, “My name is Ngawingom”.’

Unlike the same-subject suffixes, the different-subject suffixes do not exhibit different forms for different aspects. Rather, additional suffixes indicating aspect may precede the different-subject suffixes. These are described in the next section.

18.2.6 Aspect suffixes

Verb suffix class 2 consists of three suffixes that express imperfective aspect. They are *-ga* SINGULAR-SUBJECT DYNAMIC IMPERFECTIVE (S.DIPF), *-ka* PLURAL-SUBJECT DYNAMIC IMPERFECTIVE (P.DIPF), and *-xät* STATIC IMPERFECTIVE (SIPF).

¹⁵ The allmorphs of *-hika* SS.DUR.PF are *-hika* and *-hikang*.

These aspect suffixes are normally followed by a subject-indexing suffix. However, they do not co-occur with the same-subject medial-verb suffixes (§18.2.5), which already indicate aspect. Neither do they co-occur with the apprehension or probable irrealis suffixes (§18.2.4.3).

As noted in §17.3, in final clauses *-ga* and *-ka* are used only with dynamic verbs, while *-xät* is used only with static verbs. In medial clauses, however, any of them can be used with dynamic verbs. In the following sections I discuss how *-ga* and *-ka* are used with dynamic verbs (§18.2.6.1), then how *-xät* is used with static verbs (§18.2.6.2), and finally how the meanings of *-ga* and *-ka* differ from *-xät* when used in medial clauses (§18.2.6.3).

18.2.6.1 *-ga* and *-ka* DYNAMIC IMPERFECTIVE

The suffixes *-ga* S.DIPF and *-ka* P.DIPF indicate imperfective aspect. These suffixes only occur on dynamic verbs such as *ku* ‘go’ and *na* ‘eat’, which make up the majority of Awara verbs. They do not occur on static verbs (see §17.3). Clauses in which these suffixes appear may refer to a habitual situation, an ongoing situation, or a situation which has just been completed or which is just about to occur (depending on the tense and modality of the following suffix or modal noun).

The distinction between these two suffixes is one of number: *-ga* S.DIPF is used with singular subjects (453), and *-ka* P.DIPF is used with dual and plural subjects (454).

- (453) *Apu-ngga-t.*
 come-S.DIPF-1S.PRES
 ‘I am coming. / I have just now come.’
- (454) *Apu-ka-mäk.*
 come-P.DIPF-1D.PRES
 ‘We two are coming. / We have just now come.’

There are three exceptions to this number distinction.

1. The past tense suffixes co-occur with *-ka* regardless of whether the subject is singular or plural (455).

- (455) ... *nax=u bulämbam=u do=w-ä-ka-kut.*
 food=LNK big=TOP NEG=P.O-take-P.DIPF-3S.PAST
 ‘... he (habitually) did not bring much food.’

2. Only *-ka* P.DIPF is used in nonfinite clauses (clauses lacking subject indexing suffixes) functioning as the complement of a modal noun. In the following examples *-ka* is used on the nonfinite verb preceding the modal nouns *=nangäsä* DEONTIC and *=nangge* PURPOSE.

- (456) [*A=w-aha-ka*]=*nangäsä* *nä=tä a-pa yiwä-xa-läk.*
 PRFOC=P.O-do-P.DIPF=DEONTIC 1S=ABL come-1S.DS stay-SIPF-2S.PRES
 ‘You could be working, but I came and you’re (just) staying (there).’

- (457) [Puyä *p-aha-ka*]=*nangge* *ya-k*.
 work P.O-do-P.DIPF=PURPOSE say-3S.PRES
 ‘He said (for me) to keep on working.’

3. The different-subject and hypothetical second and third person dual and plural forms co-occur with *-ga*, not *-ka*.

- (458) *Ti-wä=nä* *a=yä-ngga-wä* *kwaka-kut*.
 be-3S.DS=after PRFOC=say-S.DIPF-23P.DS light-3S.PAST
 ‘They were talking until morning.’

- (459) *Yäk=sä* *p-äk-epu-mäläk* *gämu a-yiwä-xawik*
 bag=2P.GEN P.O-take-come.down-23D.PRES if PRFOC=stay-SS.IPF
payi-ngga-wät.
 crochet-S.DIPF-23D.HYP
 ‘If you two had brought your bags down, you could be here working on them.’

Because the tense and modality of the subject suffix affects the interpretation of the aspects shown by *-ga* and *-ka*, their interpretations when they co-occur with the various subject suffixes will now be outlined.

The dynamic imperfective suffixes, *-ga* and *-ka*, are used with the present tense suffixes for events that have just been happening (460), for action that is happening now at this particular moment (461), and for current habitual actions (462).

- (460) *Ti, lais, yang ha-wät* *na-ka-mäng*.
 tea rice COMP cook-23D.DS eat-P.DIPF-1P.PRES
 ‘The two of you have cooked tea and rice and we have just eaten it.’
- (461) *Ti-wän deyä yiwä-xät-na* *hopä mätek mätek epu-ka-ying*.
 be-3S.DS but stay-SIPF-1P.DS rain small small come.down-P.DIPF-23P.PRES
 ‘But we are here and it’s drizzling.’
- (462) *Täpdux=u gwen=duyi=ne* *täke=kän p-aha-ka-mäng*.
 time=LNK CL.lump=some=LOC good=only P.O-do-P.DIPF-1P.PRES
 ‘Sometimes we work well.’

The plural dynamic imperfective suffix *-ka* is used with the past tense suffixes for past habitual actions.

- (463) *Tupä bapu=tä* *yanggä däknga-ka-kin=u* *u=sing*
 before grandfather=ABL water stop-P.DIPF-23P.PAST=COND that=like
p-aha-ka-kin.
 P.O-do-P.DIPF-23P.PAST
 ‘Before, when the ancestors would dam water, they used to do it like this.’

Both dynamic imperfective suffixes are used with future tense, the immediate imperative mood, and the default imperative suffixes to portray the start of the action.

- (464) *Wasekngä nä=tä ku-ke a-pa ko-ka-nim.*
 last 1S=ABL go-SS.PF come-1S.DS go.up-P.DIPF-1P.FUT
 ‘I’ll go back and forth just once more and then we’ll get going (back home).’
- (465) *Ku-nggä-Ø.*
 go-S.DIPF-2S.IMM
 ‘Get going now.’
- (466) *Nä-ka-kun.*
 eat-P.DIPF-23D.IMM
 ‘Start eating.’ (i.e. ‘Go ahead and eat.’)
- (467) *P-ä-ke yo-sä ku-ke wuyä u=sing p-aha-ka-nong.*
 P.O-take-SS.PF village-2P.GEN go-SS.PF work that=like P.O-do-P.DIPF-23P.DIMP
 Go to your villages, and start working like this.

The following examples illustrate the dynamic imperfective used with motion verbs and the default imperative. The final verb in (468), which lacks the imperfective suffix, portrays the action as a whole and may imply that the addressee will return soon. The imperfective suffix in (469) normally implies that the addressee is going home or away for an extended period.

- (468) *Dabu=kät Kipusi=xät ako-pät=nä ku-yo.*
 Dabung=with Kipusi=with come.up-23D.DS=after go-2S.DIMP
 ‘After Dabung and Kipusi come up, you may go.’
- (469) *Ku-ngga-yo.*
 go-S.DIPF-2S.DIMP
 ‘Go.’¹⁶

With the hypothetical irrealis suffixes, *-ga* and *-ka* indicate immediacy. The motion verb in (470), which does not contain the imperfective suffix, refers to what would have been done previously if there had been no work. The motion verb in (471) refers to what would be done at the time of speaking if there were no work.

- (470) *Manggämu a=xop-dam, puyä wenä gämu=n.*
 otherwise PRFOC=go.up-1D.HYP work not.exist if=DIS
 ‘Otherwise, we would have gone up, if I hadn’t had work.’
- (471) *Puyä käyä. Manggämu a=xo-ka-tam.*
 work exist otherwise PRFOC=go.up-P.DIPF-1D.HYP
 ‘I have work. Otherwise, we two would go up.’

¹⁶ This is used as a polite leave-taking addressed to someone who intends to go somewhere. Such leave-takings addressed to people who intend to go somewhere take into consideration their intended direction (up, down, level, or any combination of these), whether the person intends to go immediately or later, when he intends to return, and whether or not the speaker intends to see the addressee later again that day.

When *-ka* is used on a nonfinite verb, it can imply immediacy (472) or continuous aspect (473). These examples show nonfinite clauses with *-ka* preceding the modal noun *=nangäsä* DEONTIC.

- (472) *Asä apu-ka=nangäsä. Ti-wän puku-ka=nangäsä.*
 like.this come-P.DIPF=DEONTIC be-3S.DS go.down-P.DIPF=DEONTIC
 ‘They should have come by now. Then we could go down now.’ (This was a complaint about people coming late for a trip.)
- (473) *Kupän wuyä-pa gwalam ti-wän wuyä-kä=nangäsä=kän*
 smoke blow-1S.DS nice be-3S.DS blow-P.DIPF=DEONTIC=only
ti-ka-ying.
 be-P.DIPF-23P.PRES
 ‘I smoked tobacco and it was nice, and I just want to keep on smoking.’

18.2.6.2 *-xät* STATIC IMPERFECTIVE

Imperfective aspect is also shown with *-xät*, which is followed by a final-verb suffix only with static verbs. The static verbs are *yiwit* ‘stay’, *dup* ‘see’, *natäp* ‘hear’, *wäm* ‘follow’, and *e* ‘leave’ (see §17.3). This suffix has the allomorph *-xät* before /d/ and /n/ (474), and *-xa* elsewhere (475).

- (474) *Yiwä-xät-nong.*
 stay-SIPF-23P.DIMP
 ‘You all stay.’
- (475) *Täpä=tuyi u=sing natä-xa-ying.*
 CL.stick=some that=like think-SIPF-23P.PRES
 ‘Some think this.’

Like the dynamic imperfectives, *-ga* and *-ka*, *-xät* is used with a present tense suffix for events that have just now been happening (476), or are now occurring (477), and for current habitual events (478).

- (476) *Ge u=sing moyo u=sing yä-wa natä-xa-läk.*
 so that=like without that=like say-1S.DS hear-SIPF-2S.PRES
 ‘I have been telling you this for no reason, and you have been hearing it.’ (This was said at the end of a story).
- (477) *Ti-xa-wän nin=u a=ne yiwä-xa-mäng Giyame=xät.*
 be-SIPF-3S.DS 1P=TOP this=LOC stay-SIPF-1P.PRES Giyame=with
 ‘So we are here, with Giyame.’
- (478) *Ko not=na täpä=tu u=ne yiwä-xa-k.*
 go.up friend=1S.GEN CL.stick=one that=LOC stay-SIPF-3S.PRES
 ‘I went up, and a relative of mine lives there.’

Similar to *-ga* and *-ka*, *-xät* is also used with a past tense suffix for past events that happened over a period of time (479) and past habitual events (480).

- (479) *Ge Fonde yiwä-xa-kum.*
 so Thursday stay-SIPF-1S.PAST
 ‘So I continued to stay there Thursday.’
- (480) ... *yang i-ni-wän kwätahi=käyä p-e-xa-kut.*
 COMP 3S.O-tell-3S.DS trap.base=also P.O-leave-SIPF-3S.PAST
 ‘and father would tell him ‘...’ and the son would put the bases of the traps.’

The static imperfective suffix is also used with the future (481), default imperative (482), and immediate imperative mood (483) suffixes to indicate that the action is to occur over a period of time.

- (481) ... *nä=xät a=ne yiwi-xa-sim=de* ...
 1S=with this=LOC stay-SIPF-1D.FUT=DAT
 ‘... to stay here with me for a while, ...’
- (482) *Ka-xa-yo. Ti-xa-wän ha-na ka-wiläk.*
 see.3S.O-SIPF-2S.DIMP be-SIPF-3S.DS cook-1P.DS see.3S.O-2S.FUT
 ‘Keep watching. As you do, we’ll cook and you’ll see.’
- (483) ... *p-ä-ku yol=u atu=nggwen=sim=une yiwä-xät-da.*
 P.O-take-go house=LNK level.far=CL.lump=spec=LOC stay-SIPF-1D.IMM
 ‘... we will go stay for a while at that house.’

18.2.6.3 Distinction between the dynamic and static imperfectives

Dynamic verbs can be followed by either *-ga/ka* DIPF or *-xät* SIPF in medial clauses. For example, in the following sentences with the verb *ku* ‘go’, the suffixes *-ga* and *-ka* indicate that the action continued on until its endpoint (484, 485), while *-xät* only indicates that the event continued over a period of time (486).

- (484) *El=u Wändot ku-xa-wän, p-aha t-ä-ke ku-ngga-wa, kupilä*
 Ed=TOP Wantoat go-SIPF-3S.DS P.O-do S.O-take-SS.PF go-S.DIPF-1S.DS dark
ti-kut.
 be-3S.PAST
 ‘While Ed was going to Wantoat, I went on working until it got dark.’
- (485) *El=u Wändot ku-xa-wän, p-aha t-ä-ke ku-ngga-wa,*
 Ed=TOP Wantoat go-SIPF-3S.DS P.O-do S.O-take-SS.PF go-S.DIPF-1S.DS
pulu-kut.
 finish-3S.PAST
 ‘While Ed was going to Wantoat, I went on working until it (the work) finished.’

- (486) *El=u Wändot ku-xa-wän, p-aha t-ä-ke ku-xa-wa, kupilä*
 Ed=TOP Wantoat go-SIPF-3S.DS P.O-do S.O-take-SS.PF go-SIPF-1S.DS dark
ti-kut.
 be-3S.PAST
 ‘While Ed was going to Wantoat and I was going on working, it got dark. (And I continued working.)’

There also seems to be a difference between *-ga/ka* DIPF and *-xät* SIPF in the relationship between the two verbs in a clause chain. The dynamic imperfective suffixes can be used when the first event happened for a period of time, and then subsequently the next event happened (487 and 488).

- (487) *Ti-wän yä-wa yä-wa mali-ngga-wän, ‘Undanä’ ya-ke*
 be-3S.DS say-1S.DS say-1S.DS fail-S.DIPF-3S.DS forget.it say-SS.PF
t-e-kum.
 S.O-leave-1S.PAST
 ‘Well, I talked and talked and nothing was happening, until I thought, “Forget it,” and left it.’
- (488) *Apu-ka-na nak=ngin=de hikngä ti-kin.*
 come-P.DIPF-1P.DS food=1P.GEN=DAT real be-23P.PAST
 ‘We came until we got very hungry.’

The static imperfective suffix, *-xät*, on the other hand, can be used when a situation persists for a period of time and the action or situation of the following clause takes place while the first situation is still true. In (489), while the father was digging, the narrator and his father were there. The relationship between those two clauses is overlapping because both verbs are imperfective. The final clause is perfective, so is viewed as a whole; the raining is portrayed as occurring sometime while the father was digging and the narrator was there with him.

- (489) *Kwayi-xa-wän yiwi-xät-da hopä inälung bä bulämbam hikngä apu*
 dig-SIPF-3S.DS stay-SIPF-1D.DS rain big or big real come
ta-ni-mi-kut.
 rain-1P.O-give-3S.PAST
 ‘While he was digging (a trap) and we were there, a rainstorm came and rained on us.’

18.2.7 Temporal suffixes

Verb suffix class 1 consists of three suffixes that express temporal notions: *-gämäta* PERSISTENT, *-hi* DURATIVE, and *-nangge* ‘soon’. It appears that *-gämäta* can co-occur quite freely with various aspect and subject-indexing suffixes, while *-hi* and *-nangge* are limited in their co-occurrence possibilities.

18.2.7.1 *-gämäta* PERSISTENT

The suffix *-gämäta* is used for persistent actions. Of the three temporal suffixes, it has the fewest co-occurrence restrictions with other suffixes. It has been found with most subject-indexing suffixes, but is infrequent in texts. When one speaker of the language was asked whether it could be used with suffixes other than the ones shown here, he was unsure. The following are examples of it with the present (490), past (491), and future (492) tense subject-indexing suffixes.

- (490) *Na-ha-nggämäta-ying.*
1S.O-cook/bite-persist-23P.PRES
'It (my back) keeps on hurting (me).'
- (491) *Matak ku-kumäng=u nax=u iwik=ge ha-xa-wä*
Matak go-1P.PAST=COND food=TOP always=DAT cook-SIPF-23P.DS
na-nggämäta-kumäng.
eat-persist-1P.PAST
'When we went to Matak, they kept on cooking and we kept eating.'
- (492) *A-i-ni-nggämätä-wik=ge ku-ngga-k.*
PRFOC=3S.O-tell-persist-3S.FUT=DAT go-S.DIPF-3S.PRES
'She is going in order to scold him (persistently tell him).'

The persistent suffix has also been found with the default imperative (493) and apprehension (494) final-verb suffixes.

- (493) *Ma=wayi-nggämäta-yo.*
PROHIB=crochet-persist-2S.DIMP
'Don't keep making string bags.'
- (494) *Yäx=u iwik=ge payi-nggämäta-yäk.*
bag=TOP always=DAT crochet-persist-3S.APPR
'(Don't give her string.) She might keep making string bags all the time.'

The suffix *-gämäta* is used with the different-subject suffixes (495) and, unlike the other temporal suffixes, it is also used with same-subject suffixes (496, 497).

- (495) *A=yä-ni-nggämäta-wän engang=gä natä-pä mähe ti-ning.*
PRFOC-3P.O-tell-persist-3S.DS child=ABL feel-23P.DS dislike be-23P.FUT
'He'll scold them and the children will feel annoyed.'
- (496) *Kopi=nä=le ya-nggämäta-ke puku-kin.*
coffee=3.GEN=DAT say-persist-SS.PF go.down-23P.PAST
'They kept thinking about their coffee and went down.'
- (497) *Kopi=nä=le ya-nggämätä-hika puku-kin.*
coffee=3.GEN=DAT say-persist-SS.DUR.PF go.down-23P.PAST
'They kept thinking about their coffee for a while and went down.'

Finally, *-gāmāta* may be followed by any of the class 2 aspect suffixes (§18.2.6). The choice of aspect suffix following *-gāmāta* is determined by the type of verb (dynamic or static), the number of the subject, and the type of subject suffix, as described in §18.2.6. The sentences below illustrate *-gāmāta* with each aspect suffix: *-ga* (498), *-ka* (499), and *-xāt* (500).

- (498) *Yāx=u iwik=ge iwik=ge payi-nggāmātā-ngga-k.*
 bag=TOP always=DAT always=DAT crochet-persist-S.DIPF-3S.PRES
 ‘She has kept on making string bags all day (today).’
- (499) *Tupā yāx=u iwik=ge payi-nggāmāta-ka-kut.*
 before bag=TOP always=DAT crochet-persist-P.DIPF-3S.PAST
 ‘She used to always keep on making string bags.’
- (500) *A-pā bung=u ya-ke t-aha-ke ya-nggāmātā-xa-wä nā*
 come-23P.DS group=TOP say-SS.PF S.O-do-SS.PF say-persist-SIPF-23P.DS 1S
u=ne yiwi-kum.
 that=LOC stay-1S.PAST
 They came, and they were talking in groups, and while they kept on talking, I was there.

18.2.7.2 *-hi* DURATIVE

The suffix *-hi* indicates that the situation happens (or is sustained) over an appreciable length of time. It has been found in four different constructions: (1) with either of the dynamic imperfective suffixes, *-ga* or *-ka*, and a different-subject suffix in clause chains, (2) in same-subject serial verb constructions, (3) in evidential different-subject serial verb constructions, and (4) as an evidential marker in a final clause. Examples are given below.

The following sentences show *-hi* followed by a dynamic imperfective suffix along with a different-subject suffix. The interpretation of sentences with this construction is that the following clause refers to something that happened unexpectedly. In example (501), the person going up the hill did not expect his bag to break, and in (502) and (503), the people who had been eating did not expect anyone to come.

- (501) *Pākāp=de ko-hi-ngga-wa dāknga-kut.*
 steep=DAT go.up-DUR-S.DIPF-1S.DS break-3S.PAST
 ‘As I was going up steeply, it (my bag) broke.’
- (502) *A-na-hi-ngga-wa=yä ako-ngga-läk.*
 PRFOC=eat-DUR-S.DIPF-1S.DS=after come.up-S.DIPF-2S.PRES
 ‘Just as I finished eating, you have come up.’
- (503) *O, a=na-hi-ka-na=yä apu-ngga-läk.*
 Oh PRFOC=eat-DUR-P.DIPF-1P.DS=after come-S.DIPF-2S.PRES
 ‘Oh, just as we have finished eating, you have come up.’

It has also been found on an otherwise uninflected verb in a same-subject serial verb construction. So far only three instances of this have been observed, and in all of them the second verb is *ku* ‘go’. It appears that marking the action of the first verb as durative makes explicit that the two actions make up one complex event, in which the action marked with *-hi* was taking place over the period when the journey was taking place. This is the only temporal suffix found to occur in serial constructions.

- (504) *Ku matä-ke t-aha-hi ku-ka-ta, pu-ke epu nä=le*
 go cut-SS.PF S.O-do-DUR go-P.DIPF-1D.DS break-SS.PF come.down 1S=DAT
bäläng=u yamätap-but.
 foot=TOP pierce-3S.PAST
 ‘We went and cut and **were going along working**, and it broke and came down and pierced my leg.’
- (505) *Kwep ku-kut=nä kahit=de bulämda-hi ku-hika, äpme=yä*
 ±1DAY go-3S.PAST=after road=DAT not.know-DUR go-SS.DUR.PF later=after
kahil=u ka-ke ku-kut.
 road=TOP see.3S.O-SS.PF go-3S.PAST
 ‘After he left yesterday, **he went along awhile not knowing the road**, and later he saw the road and went on it.’

This use of *-hi* in same-subject serial verb constructions differs from *-hika* SS.DUR.PF, which is used in clause chains to indicate that the first of two separate events occurred over an appreciable length of time and the second occurs after it. It also differs from *-xawik* SS.IPF, which is used in clause chains to indicate that the first of two separate events is incomplete at the time of the action of the second (see §18.2.5).

The suffix *-hi* is also used preceding a different-subject suffix and the verb *kang* ‘see.3s.o’ in an evidential serial verb construction which indicates that the event mentioned is one that the speaker knows of because he heard it.

- (506) *A-ya-hi-wä ka-t.*
 PRFOC=say-DUR-23P.DS see.3S.O-1S.PRES
 ‘I heard them talking. (lit. They were talking and I saw.)’
- (507) *T-ä-pu täng-u-wän yango-hi-wän ka-ke ...*
 s.o-take-go.down 3S.O-hit-3S.DS yell-DUR-3S.DS see.3S.O-SS.PF
 ‘He fell (lit. It took him down and hit him), and I heard him yelling ...’

This whole evidential construction can be shortened so that *-hi* is followed only by a present tense suffix (508). Though the expression lacks the verb *kang* ‘see.3s.o’ to mean ‘hear’, this construction is only used when the speaker heard the action taking place but did not see it.

- (508) *Ämin=u epu-hi-k.*
 person=TOP come.down-DUR-3S.PRES
 ‘(I heard) someone coming down.’

The only times that *-hi* is immediately followed by a subject-indexing suffix is in these two evidential constructions; the one involving a different-subject suffix, and the other involving a present tense suffix. When *-hi* is used to describe duration, either it is followed by an imperfective suffix along with a different-subject suffix, or it is on a verb lacking subject-indexing in a serial verb construction.

18.2.7.3 *-nangge* ‘soon’

In the variety of Awara spoken in the central region, *-nangge* ‘soon’ is a temporal suffix that must be followed by a dynamic imperfective suffix (*-ga* or *-ka*) and a present tense suffix to mark imminent future tense. It is not used with any other final-verb suffixes or with medial-verb suffixes.

- (509) *Yayi p-aha-ka-mäng=gäne yä-nangge-ngga-t.*
yam P.O-do-P.DIPF-1P.PRES=POSS say-SOON-S.DIPF-1S.PRES
‘I am about to talk about (how) we plant (lit. do) yams.’

- (510) *O a=mbä kum-nangge-ngga-läk?*
oh PRFOC=DUB die-SOON-S.DIPF-2S.PRES
‘Oh, maybe you’re about to die?’

A verb with *-nangge* even has *-ga* or *-ka* when used on static verbs such as *natäp* ‘hear’. Normally, static verbs cannot take a dynamic imperfective suffix but take *-xät* ‘static imperfective’ instead (see §18.2.6). However, when a native speaker was asked about the acceptability of this verb with *-nangge* and *-xät*, he said that it was wrong.

- (511) *Letio natäp-nangge-ngga/*xa-t.*
radio hear-soon-S.DIPF-1S.PRES
‘I’m about to listen to the radio.’

Speakers from the central region say that the structure exemplified in (511) has the same meaning as clauses with the modal noun=*nangge* PURPOSE followed by *ting* ‘be’, which is used by speakers of other regions. This modal construction is described in §16.3.

19 Subordinate-dependent clauses

Subordinate-dependent clauses function as complements of verbs and modal nouns (§19.1) or as adverbial adjuncts (§19.2).

19.1 Complement clauses

Awara has two kinds of clausal complements. Nonfinite clauses function as the complement of modal nouns. For example, in (512) the clause headed by *aha* ‘do’ lacks a subject-indexing suffix and functions as the complement of the modal noun *=nangän* DEONTIC.

- (512) [*Ap=da* *u=sing=u* *ma=l-aha*]=*nangän*.
husband=2S.GEN that=like=TOP PROHIB=S.O-do=DEONTIC
‘Don’t do that to your husband.’ (lit. It is obligatory not to do like that to your husband.)

Finite clauses marked for tense may be followed by a postposition and function as the complement of inflecting verbs. For example, in (513) the clause headed by *n-ut-ning* ‘1S.O-hit-23P.FUT’ is followed by the postposition *=le* DATIVE and functions as the complement of *natäp* ‘want’. In example (514) the clause chain ending in *ku-kut* ‘go-3S.PAST’ is followed by the postposition *=le* DATIVE and functions as the complement of *ti* ‘be’.

- (513) ... [*a=n-ut-ning=ge* *hikngä*] *natäp-bin* *deyä* ...
 PRFOC=1S.O-hit-23P.FUT=DAT real want-23P.PAST but
 ‘... and they wanted to really hit me but ...’
- (514) *Ti-wän* *deyä* [*ama halak käpä* *yanggä=tä a-l-ä-ke*
 be-3S.DS but down bridge CL.stick water=ABL PRFOC-S.O-take-SS.PF
 ku-kut=de] *ti-wän=u* *dasing=ga t-aha-nim?*
 go-3S.PAST=DAT be-3S.DS=COND how=INDEF S.O-do-1P.FUT
 ‘But since the water carried the bridge away, what will we do?’

Finite complement clauses come between the subject and the main verb. That is, the structure of a clause with a complement clause is comparable to that of a simple transitive clause—SOV. In (515) *nanämingä* ‘his parent’ is the subject of the main clause, and the clause in brackets is the complement of the verb *yawän*.

- (515) ... *nanämingä=tä* [*puyä p-aha-himäläk=ge*] *ya-wän* ...
 parent.3.GEN=ABL work P.O-do-23D.FUT=DAT say-3S.DS
 ‘... when his parent said to do work (for the child to work with him) ...’

Other postpositions that follow finite complement clauses are =*däne* POSSESSOR (516) and =*yä* ‘after’ (517).

- (516) [*Puyä p-aha-ka-mäng=gäne*] *yä-wit*.
 garden P.O-do-P.DIPF-1P.PRES=POSS say-1S.FUT
 ‘I will talk about how we do gardens.’
- (517) *Ge* [*yupsäng täng-u-wik=ngä*] *ka-wiläk*.
 so quickly 3S.O-hit-3S.FUT=after see.3S.O-2S.FUT
 ‘So you will see that it will kill it fast.’

Any kind of utterance (clause or phrase) may function as a direct quote complement of quotative verbs, either with the *yang* COMPLEMENTISER, which is apparently derived from the verb *ya* ‘say’, or without it. Sentence (518) shows a quote consisting of a clause, (519) shows a quote consisting of a clause chain, and (520) shows quotes consisting simply of phrases.

- (518) *Ti-ke* ‘*Tupäkände=kän ku-wit,*’ *yang natä-keng=u* ...
 be-SS.PF completely=only go-1S.FUT COMP think-SS.PF=COND
 ‘But if you think, “I’ll just go all the way” ...’
- (519) ‘*I=tä u=ne=mbä yiwi-sim=de ya-wän ku-ka-mäk?*’ *natä-pa* ...
 3=ABL that=LOC=DUB stay-1D.FUT=DAT say-3S.DS go-P.DIPF-1D.PRES think-1S.DS
 ‘We went, and I thought, “Is that where he said for us to stay and we are going there?”’ (lit. Did he say for us to stay there and we are going?)
- (520) *Ti-wän* ‘*Säne hikngä?*’ *ya-wän=u,* ‘*Wändot,*’ *yang i-ni-kum*.
 be-3S.DS where real say-3S.DS=COND Wantoat COMP 3S.O-tell-1S.PAST
 ‘And he said, “Where really?” and I told him, “Wantoat”.’

Verbs that take clausal complements are *natäp* ‘think’, *ya* ‘say’, *ni* ‘tell’, *naxälat* ‘fear’, *ka* ‘see 3S.O’, *aha* ‘do’, and *ti* ‘be’. The rest of this section discusses in more detail the different types of clausal complements used with these verbs.

The verbs *ya* ‘say’ and *natäp* ‘think’ co-occur with clauses marked for tense followed by =*le* DATIVE (521), quotes followed by *yang* COMPLEMENTISER (522), and unmarked quotes (523). In addition, =*däne* POSSESSOR can be used to subordinate a clause marked for tense and indicate what is spoken about (524).

- (521) [*U=sing yä-wit=de*] *yä-ngga-k*.
 that=like say-1S.FUT=DAT say-S.DIPF-3S.PRES
 ‘He’s saying for me to say it like that.’
- (522) ‘*Kep wäsi-wik gwe=ne=yä da-ndu-pit,*’ *yang u=sing*
 ground loosen-3S.FUT CL.lump=LOC=after 2P.O-see-1S.FUT COMP that=like
ya-kut.
 say-3S.PAST
 ‘“At the end of the world, I will see you,” she said.’

- (523) *‘Yot t-aha-wän i-hi-k käpä andan?’ ya-wän ...*
 home s.o-do-3s.ds 3s.o-cook-3s.pres cl.stick here say-3s.ds
 ‘He said, “Is the one who burned the house here?” and ...’

- (524) *[Puyä p-aha-ka-mäng=gäne] yä-wit.*
 garden p.o-do-p.dipf-1p.pres=poss say-1s.fut
 ‘I will talk about how we make gardens.’

The verb *ni* ‘tell’ can have a direct quote complement. The quote is always subordinated by *yang* COMPLEMENTISER.

- (525) *T-ä-ko ‘Uman=da imin?’ ya-wän, ‘Uma=na Ngawingom,’ yang*
 s.o-take-go.up name=2s.gen who say-3s.ds name=1s.gen Ngawingom comp
i-ni-kum.
 3s.o-tell-1s.past
 ‘Going inside he said, “What’s your name?”, and I told him, “My name is Ngawingom”.’

The verb *naxälat* ‘fear’ can have a complement clause with a tense suffix followed by =*le* DATIVE indicating what happened (526) or what might happen (527) that someone is afraid of.

- (526) *[Inä ha-kin=de] naxäla-ke, baim=u do=l-aha-kin.*
 3REFL cook-23p.past=dat fear-ss.pf buy=top neg-s.o-do-23p.past
 ‘Because they themselves burned it, they were afraid, and they didn’t pay him.’
- (527) *[Engang=u a=xu-pik=ge] a=naxäläk-ga-k.*
 child=top prfoc=die-3s.fut=dat prfoc=fear-s.dipf-3s.pres
 ‘He is afraid that the child will die.’

The verb *ka* ‘see.3s.o’ can have a complement clause with a tense suffix followed by =*yä* ‘after’¹ indicating what is observed to have happened.

- (528) *... ämin=u täpä=tu bulip tängä=xätan tuku-hika [wänäm=u*
 person=lnk cl.stick=one bush cl.place=at wander-ss.dur.pf cassowary=lnk
gwen=du kuke p-e-kut=nä] ka-kut.
 cl.lump=one egg p.o-leave-3s.past=after see.3s.o-3s.past
 ‘... a man (lit. a person) wandered in the forest and saw that a cassowary had laid eggs.’
- (529) *Ti-ke [wäyi p-aha-wiläk=ngä] ka-ke, not=da täpä=tä*
 be-ss.pf bad p.o-do-2p.fut=after see.3s.o-ss.pf friend=2s.gen cl.stick=abl
apu ka-ke hapduk-ga-mi-yäk.
 come see.3s.o-ss.pf criticise-2s.o-give-3s.appr
 ‘But, if your friend sees that you have done it poorly, he might come see and criticise you.’

¹ The reason I treat this as a complement clause and not as an adverbial clause is that in this construction, only *kang* ‘see.3s.o’ is used. The other forms of this verb, which indicate other objects, are not used.

The verb *aha* ‘do’ can have as its complement a clause with a future tense suffix followed by *=le* DATIVE to indicate what is attempted (530). The object prefix on *aha* is for a singular object.

- (530) *Ti-wän [a=läng-u-wa ku-pik=ge] t-aha-wa däki=tä*
 be-3S.DS PRFOC=3S.O-hit-1S.DS die-3S.FUT=DAT S.O-do-1S.DS fire=ABL
na-pmi-kut.
 1S.O-pass-3S.PAST
 ‘I was trying (lit. doing) to kill it, and the fire went past me.’

Finally, *ti* ‘be’ can have as its complement a clause followed by *=le* DATIVE to indicate what is the case (531) or is intended to be the case (532), or *=yä* ‘after’ to indicate what can be inferred to be the case (533).

- (531) *[Ya-kin=de] ti-wän=u, wa undä a=natä-pulu-wäyak*
 say-23P.PAST=DAT be-3S.DS=COND this all PRFOC=hear-finish-3P.PROB
 ‘Since it’s the case that they have said it, everyone must have heard it already (lit. must have finished hearing this).’
- (532) *Ti-ke [nomän yiwit-nim=de] ti-wän=u, nihä gup=nin täpä*
 be-SS.PF good stay-1P.FUT=DAT be-3S.DS=COND 1P.REFL body=1P.POSS CL.stick
t-ä-na täka-wix=u, yanggä halut-nim.
 S.O-take-1P.DS improve-3S.FUT=COND water wash-1P.FUT
 ‘And if we are to live well, if we will take care of our own bodies, we will wash (with) water.’
- (533) *O [a=wom=une täng-u-ki=nä] ti-ngga-k.*
 oh this=CL.place2=LOC 3S.O-hit-23P.PAST=after be-S.DIPF-3S.PRES
 ‘Oh, they must have killed (lit. hit) him in this place.’ (lit. It’s that they killed him in this place.)

19.2 Adverbial clauses

Adverbial clauses, like complement clauses, are subordinate-dependent clauses. These clauses have a final-verb subject-indexing suffix and are subordinated by a postposition such as *=le* DATIVE (534) or *=u* CONDITIONAL (535).

- (534) *O [belakngä t-aha-kum=de] täng-u-k.*
 oh long S.O-do-1S.PAST=DAT 3S.O-hit-3S.PRES
 ‘Oh, **because I made it long**, it hit it.’
- (535) *Ti-ke awä [nanämingä=tä paha-ka-ying=u] u=sing=u*
 be-SS.PF and parent.3.GEN=ABL P.O-do-P.DIPF-23P.PRES=COND that=like=TOP
do=l-aha-ka-ying.
 NEG=S.O-do-P.DIPF-23P.PRES
 ‘But **if the parents do it** (arrange the marriage), they don’t do that.’

Postpositions that follow adverbial clauses are =*une* LOCATIVE, =*kātan* ‘at’, =*dä* ABLATIVE (only after =*une*), =*le* DATIVE, =*using* ‘like’, =*yä* ‘after’, and =*u* CONDITIONAL. Examples of each of these are given in the subsections below, which show different types of adverbial clauses (temporal, locative, manner, reason and purpose, and conditional clauses).

Adverbial clauses may come first in the sentence, be embedded in the clause they modify, or be dislocated to the right of the clause. In (536) the adverbial clause comes first in the sentence and precedes the subject of the following clause; in (537) it follows the subject of the clause it modifies, and in (538) it is right dislocated. (The adverbial clauses are bracketed, and in (536) and (537) the overt subjects are in bold.)

- (536) ... [*homu=nä u=nggutong=u kong tä-wa t-ä-ke*
 dog=3.GEN that=CL.thin=TOP evil.spirit 3S.O-follow S.O-take-SS.PF
ku-kut=de], ***kong=gü*** *undan t-ä-ke ku-kin.*
 go-3S.PAST=DAT evil.spirit=ABL there S.O-take-SS.PF go-23P.PAST
 ‘... because that dog of his was chasing a spirit, the spirits took it there.’

- (537) ... ***Gayä u=läpä*** [*mängät=nä moyo=kän yä-xa-wä ku-kut=de*]
 Gayä that=CL.stick wife=3.GEN without=only talk-SIPF-23P.DS go-3S.PAST=DAT
mängät=nä-le natänatäli-ke, kwänä=pät ti-kut.
 wife=3.GEN=DAT worry-SS.PF tear=with cry-3S.PAST
 ‘... that Gaya was worried about his wife and cried with tears because they sent his wife alone (lit. they said and his wife went without).’

- (538) *Ti-wä=nä nap täknga do=xa-kumäk, [wayä täknga=ne*
 be-3S.DS=after rope CL.rope NEG=see.3S.O-1D.PAST wire CL.rope=LOC
wäha-kut=de=n].
 grab-3S.PAST=DAT=DIS
 ‘We did not see a rope, because he had hanged himself on a wire.’

19.2.1 Temporal clauses

Temporal clauses are followed by the postpositions =*une* LOCATIVE, =*kātan* ‘at’, or =*yä* ‘after’.

The postpositions =*une* and =*kātan*² indicate that the event following the adverbial clause happens during the period referred to in the adverbial clause.

- (539) *Tupä [nä wawakdäkä yiwi-kum=**une**] nä=tä u=sing t-aha-kum.*
 before 1S child stay-1S.PAST=LOC 1S=ABL that=like S.O-do-1S.PAST
 ‘Before, when I was a child, I did this.’
- (540) *Ge [yayi p-aha-ka-mä=**kātan**=u] yayi p-aha-ke p-e-ke tälang*
 SO yam P.O-do-P.DIPF-1P.PRES=at=COND yam P.O-do-SS.PF P.O-leave-SS.PF pole
p-äk-apu ma-ka-mäng.
 P.O-take-come shoot-P.DIPF-1P.PRES
 ‘So when we plant (lit. do) yams, we plant yams and leave them and get poles and shoot them into the ground.’

² The allomorphs of =*kātan* are =*kātan*, =*tātan*, =*pātan*, and =*xātan*.

When =yä³ ‘after’ follows adverbial clauses, it indicates that the event following =yä takes place after the events referred to in the adverbial clause (541) or adverbial clause chain (542).

- (541) [U=sing ku-kut=nä] do=apu-ngga-k.
that=like go-3S.PAST=after NEG=come-S.DIPF-3S.PRES
‘After he went like that, he has not come back (lit. is not coming back).’
- (542) [T-e-ke ap-but=nä] ‘Yewä=nä tayi-nim,’ ya-wä=yä
S.O-leave-SS.PF come-3S.PAST=after ±2DAY=after sing-1P.FUT say-23P.DS=after
a=yiwä-xa-wän ku yewän u=nggwen=une kwaka-wä=nä
PRFOC=stay-SIPF-3S.DS go ±2DAY that=CL.lump=LOC light-3S.DS=after
a=xu-kut.
PRFOC=go-3S.PAST
‘After he left it and came, they said, “The day after tomorrow we will dance,” and he stayed there until that “day after tomorrow” dawned, and he went.’

19.2.2 Locative clauses

Locative adverbial clauses are followed by =une LOCATIVE (543) or =kätan ‘at’ (544).

- (543) Ti-wän p-ä-ke p-ä-ku [a=yiwi-xa-ying=une]
be-3S.DS P.O-take-SS.PF P.O-take-go PRFOC=stay-SIPF-23P.PRES=LOC
p-e-kumäng hängä täpā=n.
P.O-leave-1P.PAST thing CL.stick=DIS
‘We took the things and went and put them **where they belong** (lit. where they stay).’
- (544) ‘Āmin=u ama=sing t-aha-ka-ying’ ya-ke [a=yiwi-Ø⁴=tütan]
person=TOP down=like S.O-do-P.DIPF-23P.PRES say-SS.PF PRFOC=stay-1S.PRES=at
apu na-ha-yäk.
come 1S.O-bite-3S.APPR
‘It might think, “People down below are doing it,” and come **to where I am** and bite me.’

Locative adverbial clauses followed by =une can in turn be followed by the =tä allomorph of =dä ABLATIVE to mean ‘from’.

- (545) Gwen=du=ne [Wau Ikoloji Institut p-aha-kum=une=tä]
CL.lump=one=LOC Wau Ecology Institute P.O-do-1S.PAST=LOC=ABL
bos=na=xät Kapum ku-him=de kal t-ä-ke ep-bumäk.
boss=1S.GEN=with Kabum go-1D.FUT=DAT car S.O-take-SS.PF come.down-1D.PAST
‘One day **from where I worked at Wau Ecology Institute**, my boss and I took a car and came down to go to Kabum.’

³ The allomorphs of =yä ‘after’ are =yä, =nä, and =ngä.

⁴ See footnote 4 on p.167.

19.2.3 Manner clauses

Manner clauses are followed by the postposition =*using* ‘like’.

- (546) [*A=ya-l=using*] *temä-ngga-läk*.
 PRFOC=say-1S.PRES=like write-S.DIPF-2S.PRES
 ‘You’re writing it **the way I said it**.’
- (547) [*Wa=läpä t-aha-ngga-x=using*] *t-aha-yo*.
 that=CL.stick S.O-do-S.DIPF-3S.PRES=like S.O-do-2S.DIMP
 ‘Do it **the way that one (near you) is doing it**.’

19.2.4 Reason and purpose clauses

Reason and purpose clauses express motive and are marked with =*le* DATIVE. The motive may be realis and marked by past tense (548) or present tense (549), in which case it expresses a reason. Or the motive may be irrealis and marked with the future tense, in which case it expresses a purpose (550).

- (548) *O [belakngä t-aha-kum=de] täng-u-k*.
 oh long S.O-do-1S.PAST=DAT 3S.O-hit-3S.PRES
 ‘Oh, because I made it long, it hit it.’
- (549) ... *yä-na a=mbulämda-kin, [do=natä-xa-ying=ge=n]*.
 say-1P.DS PRFOC=not.know-23P.PAST NEG=hear-SIPF-23P.PRES=DAT=DIS
 ‘... we said, and they did not understand, because they had not heard of it.’
- (550) ... *not=na=xät [tämbäk bungep p-aha-nim=de] ku-kumäng*.
 friend=1S.GEN=with rat trap P.O-do-1P.FUT=DAT go-1P.PAST
 ‘... my friends and I went to make rat traps.’

19.2.5 Conditional clauses

Awara uses the postposition =*u* CONDITIONAL to mark certain kinds of conditional clauses. When the clause is marked for past or present tense, it describes either an actual condition about a specific time (551) or a condition about a habitual practice (552 and 553).

- (551) ... [*okupi yiwi-kumäng=u*], *naxälä yangok-gämäta-kut*.
 inside stay-1P.PAST=COND much yell-persist-3S.PAST
 ‘... and while we were inside, she kept screaming.’
- (552) *Tupä bapu=tä [däki dākä yot t-aha=nangge*
 before grandfather=ABL tree CL.thick house S.O-do=PURPOSE
matä-ka-kin=u] gayät=dä matä-ka-kin.
 cut-P.DIPF-23P.PAST=COND adze=ABL cut-P.DIPF-23P.PAST
 ‘Before, when the ancestors would cut wood in order to build a house, they would cut it with an adze.’

- (553) *Ti-ke awä äpma=sim=u [nin=dä matä-ka-mäng=**u**] sändun=dä*
 be-SS.PF and now=DIM=TOP 1P=ABL cut-P.DIPF-1P.PRES=COND axe=ABL
matä-ka-mäng.
 cut-P.DIPF-1P.PRES
 ‘But now when we cut, we cut with an axe.’

When the clause is marked for future tense, it describes either a potential or expected future condition (554) or a hypothetical situation (555).

- (554) *A=l-ä-nggänggänu-ke yiwä-xa-wä [kep wäsi-wix=**u**],*
 PRFOC=S.O-hold.firm-SS.PF stay-SIPF-23P.DS ground remove-3S.FUT=COND
wäsi-wän wenä u=ne ti-wik.
 remove-3S.DS not.exist that=LOC be-3S.FUT
 ‘They will hold onto them (our ancestors’ traditions) and live, and when he (God) destroys the earth (lit. removes the ground), he will remove it and then it will not exist.’
- (555) *Ti-wän [wäwi u=läpä mi=ngä=xät pe-simäläx=**u**], mängälä*
 be-3S.DS man that=CL.stick mother=3.GEN=with sleep-23D.FUT=COND woman
täpä u=ne t-ä-ku t-e-ning mi=ngä=le yol=une.
 CL.stick that=LOC S.O-take-go S.O-leave-23P.FUT mother=3.GEN=DAT house=LOC
 ‘But if the man sleeps at his mother’s house (lit. with his mother), they will take the woman (his fiancée) and leave her there at his mother’s house.’

20 *Cosubordinate clauses followed by postpositions*

Unlike clauses with final-verb subject-indexing suffixes, clauses with medial-verb suffixes cannot be followed by most postpositions. However, they can be followed by =yǎ ‘after’ and =u CONDITIONAL. The postposition =yǎ indicates that the time of the event marked with =yǎ precedes that of the event in the reference clause (556).

- (556) [I-ni-wa=yǎ] guyä-na=tä na-ni-kut.
3S.O-tell-1S.DS=after father-1S.GEN=ABL 1S.O-tell-3S.PAST
‘After I told him, my father told me.’

The postposition =u indicates that the clause is conditional. The final-verb subject-indexing on the independent clause affects the interpretation of the conditional clause. For example, when the final clause is marked for past tense, the conditional clause describes an actual condition.

- (557) Ge [gwen=du=ne ya-wän=u] ‘Nä mähe,’ yang i-ni-kum.
so CL.lump=one=LOC say-3S.DS=COND 1S dislike COMP 3S.O-tell-1S.PAST
‘So one day when he spoke, I told him, “I don’t want to”.’ (lit. to me it is unpleasant)

When the final clause has an imperfective suffix, such as -ka PLURAL SUBJECT DYNAMIC IMPERFECTIVE, and is marked as present tense, the conditional clause sets the condition for a habitual action and describes a condition that sometimes occurs (558) or that has the potential to occur (559).

- (558) [Ämin kungwä-keng=u] u=sing t-aha-ka-mäng.
person die-SS.PF=COND that=like S.O-do-P.DIPF-1P.PRES
‘When people die, this is what we do.’
- (559) Ti-ke [tokngä do=natä-keng=u] do=yä-ka-ying.
be-SS.PF angry NEG=feel-SS.PF=COND NEG=say-P.DIPF-23P.PRES
‘But if they don’t feel angry, they don’t say it.’

This difference in interpretation of the conditional based on tense is similar to that found with conditional subordinate-dependent clauses (see §19.2.5).

When clauses with final-verb subject-indexing are followed by a postposition such as =*le* DATIVE or =*une* LOCATIVE, they are subordinated to the following clause, and are not part of the switch-reference system that their superordinate clause is a part of. In both sentences below, the clause preceding the subordinate clause has a same subject suffix, and its referent is not the subordinate clause, but the following clause. (Example (15.233) is repeated here as (560).)

- (560) *Epuxu-ke* [ämin=dä yiwi-kumäng=une] ap-but.
 come.out-SS.PF person=ABL stay-1P.PAST=LOC come-3S.PAST
 ‘It came out and came to where we people were.’

- (561) *T-ä-pän* täkwäm-bän mängälä u-läpä ‘Wäyi=mbä ti-ngga-k’
 s.o-take-3S.DS turn-3S.DS female that=CL.stick bad=DUB be-S.DIPF-3S.PRES
ya-ke [okupi yiwi-kumäng=u], naxälä yangok-gämäta-kut.
 say-SS.PF inside stay-1P.PAST=COND much yell-persist-3S.PAST
 ‘It (the airplane) was turning and the woman thought, “Maybe it’s damaged,” and we were inside, and she kept screaming.’

Clauses with medial-verb suffixes followed by postpositions, on the other hand, are included in the switch-reference system. In (562), for example, *kwaka-wän* ‘light-3S.DS’ is followed by the postposition =*yä* ‘after’. The clause preceding it, *ayiwäxawa* has the same subject as the final clause headed by *akot*. Though *kwakawän* is followed by a postposition, *ayiwäxawa* is not marked same-subject in reference to *akot*, but is marked different-subject in reference to *kwakawän*. The switch-reference marking on *ayiwäxawa* does not skip over the medial clause followed by =*yä* ‘after’.

- (562) *Tiwän* deyä a=yiwä-xa-wa kwaka-wä=nä kepmä hikngä
 be-3S.DS but PRFOC=stay-SIPF-1S.DS light-3S.DS=after noon real
ako-t a=ne=n.
 come.up-1S.PRES this=LOC=DIS
 ‘But while I was there, it got light (and after that), I came here right at noon.’

This seems to indicate that, though they are morphologically dependent on the following clause in the chain, cosubordinate clauses followed by postpositions are not syntactically subordinated to it, at least not in the sense that subordinate-dependent clauses are.

21 *Negation*

Negation may be indicated by the clitics *do=*/*=undo* NEGATIVE or *ma=* PROHIBITIVE. The first, *do=* and *=undo*, are used with most sentence types while *ma=* is used with imperatives, third person hortatives and the nonfinite clausal complement of the modal noun *=nangän* DEONTIC. The proclitics *do=* and *ma=* precede inflecting verbs, and the enclitic *=undo* follows nonverbal predicates, including modal nouns.

21.1 Scope of negation

The proclitics *do=* and *ma=* are similar in that neither negates preceding clauses, whether the preceding clause is subordinated by a postposition (563) or is a medial clause (564, 565).

- (563) *U=sing ku-kut=nä do=apu-ngga-k.*
that=like go-3S.PAST=after NEG=come-S.DIPF-3S.PRES
'He went like that, and since then he has not come back.' (lit. After he went like that, he is not coming back.)
- (564) ... *epuxu-wa do=n-u-kin.*
come.out-1S.DS NEG=1S.O-hit-23P.PAST
'... I went out and they didn't hit me.'
- (565) *A-pän=u wäyi ma=l-aha=nangän.*
come-3S.DS=COND bad PROHIB=S.O-do=DEONTIC
'If he comes, don't do wrong.'

In addition, *do=* and *ma=* do not negate preceding motion verb stems (566–567).

- (566) *U=ne=tä ihap-bumäx=u p-äk-apu do=yiwit-da*
that=LOC=ABL run-1D.PAST=COND P.O-take-come NEG=stay-1D.DS
täka-kin.
improve-23P.PAST
'When we ran from there, we came and did not rest.'
- (567) *Kung=u belakngä ma=w-ä-yo.*
go=COND long PROHIB=P.O-take-2S.DIMP
'When you go, don't get long ones.'

However, *do=* and *ma=* differ in that *ma=* negates all the clauses in the sentence following it, while *do=* normally negates only the clause in which it appears. Though negation is not marked on each verb, all the clauses between *ma=* and the imperative mood subject-indexing suffix are understood to be negated. Clauses preceding the final verb may have a suffix indicating same-subject (568), different-subject (569), or tense (570).

- (568) *Ma=i-ni-ke tāng-u-yo.*
 PROHIB=3S.O-tell-SS.PF 3S.O-hit-2S.DIMP
 ‘Don’t scold and (don’t) hit him.’
- (569) *Kem ämin=u ma=ya-wi ye=yok.*
 lie person=TOP PROHIB=say-2S.DS say-3S.DIMP
 ‘Don’t ask a liar.’
- (570) *Ma=w-ä-ko pe-wiläk=ngä ap-so.*
 PROHIB=P.O-take-go.up sleep-2S.FUT=after come-2S.DIMP
 ‘Don’t go up and sleep and then come back (tomorrow).’

In contrast, *do=* does not normally negate clauses to the right of a clause break. Clause breaks can occur after a suffix indicating same-subject (571), different-subject (572), or tense (573).

- (571) *Ku [gomox=u gwäwayä do=xa-xawik] ku-kum inälängän hikngä.*
 Go snake=LNK snake NEG=see.3S.O-SS.IPF go-1S.PAST next real
 ‘I went and, not seeing a gwäwayä snake, I went very close to it.’
- (572) ... *tukwat=de [hopä do=la-wän] a-pän ka-ke=ngä*
 afternoon=DAT rain NEG=rain-3S.DS come-3S.DS see.3S.O-SS.PF=after
puku-nim.
 go.down-1P.FUT
 ‘... after it doesn’t rain in the afternoon and we see her come, we will go down.’
- (573) ... *ku [do=läng-u-kut=nä] ka-ke ...*
 go NEG=3S.O-hit-3S.PAST=after see.3S.O-SS.PF
 ‘... I went and saw that it had not killed anything, ...’

In order for a clause following a clause break to be negated, it also has *do=* NEGATIVE, as in (574).

- (574) *Ene-tängä ko-keng=u [yumde=kän=u do=yaying yiwi-ke]*
 above=CL.place go.up-SS.PF=COND freely=only=TOP NEG=step stay-SS.PF
[hongähongä do=li-ke] matä-ka-kin.
 fruitless NEG=be-SS.PF cut-P.DIPF-23P.PAST
 ‘When they went up they did not just stand anywhere and cut wildly. (But they taught them how to stand and cut.)’

In the following example *do=* does appear to have scope over the clause following *-ke* SAME-SUBJECT PERFECTIVE. This is as yet unexplained.

- (575) *Buk=nga hopi-kul=u do=xa-ke t-ä-t.*
 book=1S.GEN hide-3S.PAST=TOP NEG=see.3S.O-SS.PF S.O-take-1S.PRES
 ‘I have not found (lit. seen) and taken my book that was lost.’

Do= does negate more than one verb when those verbs are part of a serial-verb construction and belong to the same clause. When the first verb in a serial-verb construction is preceded by *do=*, the rest of the verbs in that construction are negated even though they are not individually marked. In (576), *do=* precedes the verb stem *yang* ‘say’, and negates the whole phrase.

- (576) *Wam yä-xa-wäl=u [do=yang umum-bit].*
 word say-SIPF-23D.DS=COND NEG=say block-1S.FUT
 ‘Since you two are talking (lit. saying words), I won’t talk and disturb you.’

This is also true of serial-verb constructions that involve switch-reference marking. When *do=* precedes a different-subject serial-verb construction (577), all the verbs in the serial construction are understood to be negated even though only the first verb is preceded by *do=*.

- (577) [*Do=wayi-wa pulu-kut*]. *A=yiwä-xa-k.*
 NEG=crochet-1S.DS finish-3S.PAST PRFOC=stay-SIPF-3S.PRES
 ‘I did not finish making the string bag. It’s still there.’

21.2 Negation with modal nouns

There are two kinds of negation involving clauses headed by modal nouns. In one, the clause headed by the modal noun is negated by *=undo* following the noun (578). In the other, the nonfinite clause functioning as a complement to the modal noun is negated by *do=* or *ma=* preceding the verb stem (579).

- (578) [*Gä=tä t-ä=nangäsä*]=*ndo*; *hangä bulämbam.*
 2S=ABL S.O-take=DEONTIC=NEG thing big
 ‘You can’t hold it; it’s a big thing. (lit. It’s not possible for you to hold it.)’
- (579) [*Do=w-aha-ka*]=*nangäsä p-aha-ngga-läk.*
 NEG=P.O-do-P.DIPF=DEONTIC P.O-do-S.DIPF-2S.PRES
 ‘You don’t have to do it (lit. It is possible/permissible not to do it), but you are doing it.’

The negators and the implications of negation with the modal nouns *=nangäsä* DEONTIC, *=nangän* DEONTIC, and *=nangge* PURPOSE are shown below.

Both *=nangäsä* DEONTIC and its clausal complement may be negated by *do=*/*=undo* NEGATIVE. When *=undo* negates *=nangäsä*, it indicates that the action is not possible. This is shown in (578) above. When *do=* negates the clausal complement of *=nangäsä*, it indicates that something is unnecessary (that is, that it was possible not to be done) (579), and may imply that it should not have been done (580).

- (580) [*Uma=na do=yä*]=*nangäsä teyä yä-ngga-k*.
 name=1S.GEN NEG=say=DEONTIC but say-S.DIPF-3S.PRES
 ‘She doesn’t have to say my name, yet she does.’

The clausal complement of =*nangän* DEONTIC is negated by *ma*= PROHIBITIVE preceding the verb stem.

- (581) [*Mängät=da u=sing ma=läng-ut*]=*nangän*.
 wife=2S.GEN that=like PROHIB=3S.O-hit=DEONTIC
 ‘You shouldn’t hit your wife like that.’

Both =*nangge* PURPOSE and its clausal complement may be negated by *do*=/=undo. When =*undo* negates =*nangge*, it indicates that something is not intended for the purpose stated.

- (582) [*A=hä=nangge*]=*ndo*.
 PRFOC=cook=PURPOSE=NEG
 ‘It is not for cooking.’
- (583) [*A=l-ä=nangge*]=*ndo*. *A=yi-wik=ge*.
 PRFOC=S.O-take=PURPOSE=NEG PRFOC=stay-3S.FUT=DAT
 ‘It is not for taking. It’s to stay there.’

When *do*= negates the clausal complement of =*nangge*, it indicates that something ought not to be done (584, 585). The pragmatic distinction between the negation of =*nangge* and the negation of its complement is not well understood.

- (584) [*Do=hikngä p-ä*]=*nangge*.
 NEG=really P.O-take=PURPOSE
 ‘They really must not be taken.’
- (585) [*Do=l-ä*]=*nangge*, *u=läpä=n*. *U=ne u=sing t-e-ng*.
 NEG=S.O-take=PURPOSE that=CL.stick=DIS that=LOC that=like S.O-leave-2S.IMM
 ‘It’s not to be taken. Leave it there like that.’

22 *Serial verb constructions*

Awara serial verb constructions consist of tight juxtapositions of two or more verbs, or two or more verb phrases, that make up a single clause. When the verbs share a subject, only the last verb in the construction is normally inflected for the subject (586). When the verbs exhibit differing subjects, different-subject medial-verb suffixes are used on the initial verbs in the construction and the last verb in the construction is also inflected for subject (587).

- (586) *Ti-wän u=ne kang naxäla-ke=ngä ...*
be-3S.DS that=LOC see.3S.O fear-SS.PF=after
‘And after we saw it there and were afraid ...’

- (587) *A=l-ä-pän täka-k.*
PRFOC=S.O-take-3S.DS improve-3S.PRES
‘He fixed it.’ (lit. He took it and it improved.)

Crowley (1987:38–40, 49) describes four types of serial constructions based on the relationship between the arguments of each verb: (1) same-subject serialisation ‘in which there is identity between the two subjects of the serialised verbs’, (2) switch-subject serial verbs or serial causative verbs ‘in which there is identity ... between the object of the first verb and the subject of the following verb’, (3) multiple object serialisation in which each of the serialised verbs is transitive and has its own object, and (4) ambient serialisation ‘in which there is no specific referent associated with the subject of the serialised verb, and the verb simply describes a general predication’.

In Awara there are same-subject, switch-subject, and ambient serializations. Multiple object serialisation has not been found in Awara.

Serial verb constructions have diverse functions. In Awara there are constructions describing multiple phases of complex events, constructions indicating direction, constructions indicating aspect, ambient serializations, and constructions involving a preceding motion verb. After two subsections comparing serial verb constructions with clause chains and compound verbs, the rest of this chapter is organised according to these functions.

22.1 Distinguishing serial verb constructions from clause chains

Awara serial verb constructions differ from clause chains (multiple medial clauses conjoined in a sentence that terminates with a final clause; see §15.4.2) in that (1) they refer to a sin-

gle event; (2) there are tight restrictions on their arguments and on where the phrasal constituents may occur; and (3) they obligatorily share mood and usually also polarity.¹ These differences are exemplified below, contrasting different-subject serial verb constructions with clause chains involving different subjects.

Different-subject serial verb constructions differ from clause chains in that serial constructions refer to a single event which indicates a causal relationship (588), while clause chains refer to multiple events and indicate purely aspectual or temporal relationships (589). In addition, serial verb constructions are typically pronounced under a single intonational contour with no pauses between the verbs, while clause chains often have a phonological pause between the clauses.

- (588) *Däki a=mbä-läng-ut-na ku-pik.*

wood PRFOC=DUB=3S.O-hit-1P.DS die-3S.FUT

‘Maybe we’ll kill the fire.’ (lit. Maybe we’ll hit the fire and it will die.)

- (589) *Yä-wa t-e-wän,² ‘Yot-da säne nanä?’ ya-wän, ‘Täwayä nanä,’*

say-1S.DS S.O-leave-3S.DS village=2S.GEN where from say-3S.DS Tawayä
yang i-ni-kum.

from COMP 3S.O-tell-1S.PAST

‘I said (my name) and he wrote it (lit. left or put it), and he said, “What village are you from?” and I told him “Tawayä”.’

Different-subject serial verb constructions also differ from clause chains in which there is a change of subject in that serial verb constructions share an argument (590) while verbs in clause chains can each have their own arguments (592). In the serial verb construction in (590), *Yäkutung* is the object of *iniwän* ‘tell’ and the subject of *apuk* ‘come’. In the clause chain in (592), *Yäkutung* is only the subject of *apuk*; the object of *iniwän* is marked on the verb but has no overt NP. In addition, in a serial verb construction, the shared argument (if an overt NP) precedes the serial construction; it cannot come between serialised verbs (591). If an argument comes between the two verbs, it is understood not to be shared (592), and thus this is not a serial verb construction.

- (590) *Koni=tä Yäkutung i-ni-wän apu-k.*

Koni=ABL Yäkutung 3S.O-tell-3S.DS come-3S.PRES

‘Koni told Yäkutung and he (Yäkutung) came.’

- (591) **Koni-tä iniwän Yäkutunggä apuk.*

Koni told Yäkutung and he (Yäkutung) came.

- (592) *Koni=tä i-ni-xa-wän Yäkutung=gä apu-k.*

Koni=ABL 3S.O-tell-SIPF-3S.DS Yäkutung=ABL come-3S.PRES

‘Koni was speaking to him (someone) and Yäkutung came.’

¹ There is an exception to the restriction on polarity. In constructions involving a motion verb stem followed by a verb phrase, the verb phrase can be negated. This negation does not affect the motion verb. This is described in §22.7.2.

² The use of a different-subject suffix rather than a same-subject suffix in *tewän* is as yet unexplained.

Different-subject serial verb constructions also differ from clause chains in that they obligatorily share polarity. As noted in §21.1, negation affects all the verbs in the serial construction, whereas it is blocked at clause breaks. That is, if one verb in a serial verb construction is negated, all the verbs in that construction have negative polarity. In (593) *do* =NEGATIVE on the first verb negates the whole clause, so all three verbs in the serial verb construction have negative polarity. However, in the clause chain in (594), when the clause headed by ‘open’ is negated by *do*=, it does not cause the verb *yiwixätna* ‘stay’ in the following clause to have negative polarity.

- (593) ... *yot=nin do=xwalamut t-ä-na täka-wix=u* ...
 village=1P.GEN NEG=clean S.O-take-1P.DS improve-3S.FUT=COND
 ... if we don’t clean up our village ...³

- (594) *Kwaka-wän toilet epuxu-nim=de yämä do=sik-ni-m-ä*
 dawn-3S.DS toilet go.Out-1P.FUT=DAT door NEG=open-1P.O-give-23P.DS
yiwä-xät-na ...
 stay-SIPF-1P.DS
 ‘It got light, and they did not open the door for us to go out to the toilet, and while we waited (lit. stayed) ...’

Furthermore, only the first verb in a serial verb construction can be preceded by a clitic such as *a* =PREDICATE FOCUS, *do* =NEGATIVE, or *ma* =PROHIBITIVE. These clitics do not precede noninitial verbs in a serial verb construction.

- (595) *Et=dä yol=u do=l-ä-pän täka-k.*
 Ed=ABL house=TOP NEG=S.O-take-3S.DS improve-3S.PRES
 ‘Ed did not fix the house.’
- (596) **Etdä yolu täpän do=läka-k.*

Serial verb constructions obligatorily share mood while clause chains do not necessarily do so. For example, imperative mood is shared by both verbs in the same-subject serial verb construction in (597), and by both verbs in the different-subject serial verb construction in (598).

- (597) *Ti-ke ma=na-pma ku-hon.*
 be-SS.PF PROHIB=1S.O-leave go-23D.DIMP
 ‘And don’t leave me and go.’
- (598) *Ku ya-wät ap-sok.*
 go say-23D.DS come-3S.DIMP
 ‘Go tell him to come.’

³ The serial verb construction *kwalamut täna täka* includes three verbs. *Täna täka* is a different-subject serial causative construction commonly used for ‘fix’. The verb *kwalamut* ‘clean’ has the same subject as *ä* ‘take’, so it lacks a subject-indexing suffix. *Kwalamut* indicates the manner in which the village is fixed up. Different-subject and same-subject serial verb constructions are described in §22.3.

However, in the clause chain in (599), the medial clauses in the first line have conditional mood and the final one in that line is marked with =*u* CONDITIONAL, the medial clauses in the second and third lines have indicative mood, and the final clause has interrogative mood.

- (599) *O a=yiwi-hika a=xu-pän ka-keng=u*
 oh PRFOC=stay-SS.DUR.PF PRFOC=die-3S.DS see.3S.O-SS.PF=COND
 ‘If we stay and see him die,
kekngä täpä=ne wamä-ke gwäلامي-ke
 bamboo CL.stick=LOC tie-SS.PF carry-SS.PF
 we’ll tie him on a bamboo pole and carry him on our shoulder
t-ä-ko yol=une t-e-ke
 s.o-take-go.up village=LOC s.o-leave-SS.PF
 and take him up and leave him in the village
nil=u sa=längä=ka data-ku-him?
 1D=TOP which=CL.place=INDEF flee-go-1D.FUT
 and which way will we flee?’

22.2 Serial verb constructions and compound verbs

In addition to serial verb constructions consisting of a sequence of verb stems, Awara also has verb-verb compounds. These are discussed in §18.1.1. The purpose of this section is simply to establish that Awara has both serial verb constructions and compound verbs. Though most verb-verb sequences could be analysed as either,⁴ there are a few verbs that show a clear distinction in their morphology depending on whether they are part of a compound or serial construction. These are described below.

The motion verbs *ku* ‘go’ and *puku* ‘go down’ are two such verbs. For example, *ku* has the form *ku* in serial verb constructions (600, 601) and *kung* when it is the first root in the compound *kung-apu* ‘go-come’ (602). This is not a phonological alternation, since the form *ku* can precede both consonants (600) and vowels (601).

- (600) *Ti-wä=nä ku p-ä-ke p-äk-apu hänga-ka-mäng.*
 be-3S.DS=after go P.O-take-SS.PF P.O-take-come cook-P.DIPF-1P.PRES
 ‘Then we go get them and bring them and cook them.’
- (601) *Bulip tängä ku-hika ku amu yanggä täpä=ne ku*
 bush CL.place go-SS.DUR.PF go down.far water CL.stick=LOC go
do-ke=ngä...
 arrive-SS.PF=after
 ‘We walked in the forest until we went, and down below we went and arrived at a river ...’

⁴ Further research on the morphophonemic processes involved is needed to determine whether or not there is a word break between verb stems in verb-verb sequences.

- (602) *Kayi=ka a=xung-a-pä t-ä-pu g-u-wik kep*
 eye=2S.GEN PRFOC=go-come-23P.DS S.O-take-go.down 2S.O-hit-3S.FUT ground
gwäkäm=une=n.
 CL.chunk=LOC=DIS
 ‘Your eyes will go round in circles (lit. go and come), and you will fall down (lit. it will take you down and hit you) on the ground.’

The compound word *kung-apu* also illustrates the occasional semantic opaqueness of compounds described in Chapter 18: it does not simply mean ‘go and [then] come back’, but ‘go back and forth’ or ‘go round in circles’.

Second, *puku* ‘go down’ has the form *puku* when it is the only verb root in the stem (603, 604) and *pu* when it is the second root in a compound verb stem (605). These forms otherwise occur in the same context, in that they are both followed by another verb in a serial verb construction (604, 605).

- (603) *Puku-ngga-yo.*
 go.down-S.DIPF-2S.DIMP
 ‘Go down.’
- (604) *Puku ko-ngga-yo.*
 go.down go.up-S.DIPF-2S.DIMP
 ‘Go down and go up.’
- (605) *T-ä-pu na-pma-bän u=ne pe-wit.*
 S.O-take-go.down 1S.O-leave-3S.DS that=LOC sleep-1S.FUT
 ‘It would take me down and leave me and I would sleep there.’

Evidence that *puku* and *ä-pu* ‘take-go down’ are not necessarily compounded to the next verb is that the verb stem can be immediately followed by a noun phrase or postpositional phrase (606, 607).

- (606) ... *puku Bilom=u y-apmi-ke* ...
 go.down Bilom=TOP 3S.O-pass-SS.PF
 ‘... and you’ll go down and pass Bilom ...’
- (607) *Asä pipiä p-ä-pu dämä=ne wäyi-ka-ying.*
 like.this dirt P.O-take-go.down CL.cliff=LOC pour-P.DIPF-23P.PRES
 ‘Trash like this they take and pour down the cliff.’

The compound *ä-pu* ‘take-go down’ also illustrates the semantic opaqueness in that, though it contains the verb *ä* ‘take’, it does not always literally mean ‘take’ (see §17.2.3.3).

- (608) ... *p-ä-pu yanggä hälu-ke yol=une kop-bumäng.*
 P.O-take-go.down water wash-SS.PF village=LOC go.up-1P.PAST
 ‘... and **we went down** and bathed (lit. washed water) and went up to the village.’

22.3 Serial verbs encoding complex events

One use of serial verb constructions is to describe complex events consisting of two or more closely related actions. In same-subject constructions, the first verb may tell how the action expressed by the second verb is carried out (609, 610), the combined actions/states may exhibit a cause and effect relationship (611, 612), or the second verb may indicate that the action expressed by the first verb was not successful (613). (Since both verbs have the same subject, the verb is only inflected on the final verb of the construction.)

- (609) ... *gwälami p-äk-apu yotdäkä=ne p-e-kumäng.*
 carry P.O-take-come hut=LOC P.O-leave-1P.PAST
 ‘... we **carried them back on our shoulders**, and put them in the garden hut.’
- (610) *Puku yiwi-ke=ngä, tumuk wam=u ya-kut.*
 go.down stay-ss.PF=after prayer word=TOP say-3S.PAST
 ‘After **sitting down**, he said a prayer.’
- (611) ... *kupän=u a=wuyä-pa i-hi döpila-kul=u* ...
 tobacco=LNK PRFOC=blow-1S.DS 3S.O-cook shorten-3S.PAST=TOP
 ‘...the tobacco that I smoked and it **burned short**, ...’
- (612) *Täng-ut natä-pa.*
 3S.O-hit know-1S.IMM
 ‘I will learn to strum (lit. hit) (the guitar).’ (lit. I will hit and know.)
- (613) *Engang=u Bapuluwe bimä täpä-läpä=him=dä wam=u kekem ya*
 child=LNK Bapuluwe like CL.stick=CL.stick=DIM=ABL word=TOP wrong say
mali-wä ...
 fail-23P.DS
 ‘When little children like Bapuluwe speak wrong ...’

Verbs in a same-subject serial verb construction share aspect, which may be marked only on the final verb of the construction. There is one temporal suffix that can follow the first verb in a serial verb construction. This is *-hi* DURATIVE (see §18.2.7).

Different-subject serial verb constructions encode complex events in which the referent of the object of the first verb functions as the subject of the second verb. They exhibit a cause and effect relationship in which the first verb expresses an action and the second expresses the state/action that results from the first action. In the free translations of (614–617) the noun phrase in bold is the object of the first verb and the subject of the second.

- (614) *A=l-ä-pän täka-k.*
 PRFOC=S.O-take-3S.DS improve-3S.PRES
 ‘He fixed **it**.’ (lit. He took **it** and **it** improved.)
- (615) *Däki a=l-aha-wa i-hi-k.*
 fire PRFOC=S.O-do=1S.DS 3S.O-cook-3S.PAST
 ‘I lit **a fire**.’ (lit. I made a **fire** and **it** burned.)

- (616) *Ya-wi e-pän.*
 say-2S.DS come.down-3S.IMM
 ‘Tell **him** to come down.’ (lit. Tell **him** so **he** will come down.)
- (617) ... *p-ä-ku hipdu glas tängä=ne p-aha-wän ku-wä ...*
 P.O-take-go again grass CL.place=LOC P.O-do=3S.DS go-23P.DS
 ‘... and went and wiped **them** off in the grass...’ (lit. and he did **them** and **they** went...)

22.4 Serial verbs encoding direction

Serial verb constructions are also used to indicate that an action occurs over a spatial distance, and to encode the direction in which it occurs. Such constructions involve a verb stem followed by a compound formed with *ä* ‘take’ and a motion verb such as *apu* ‘come’, indicating movement toward the speaker (618), or *ku* ‘go’, indicating movement away from the speaker (619).

- (618) *U=ne=tä i-hi t-äk-apu-ke yot i-hi-yäk.*
 that=LOC=ABL 3S.O-cook S.O-take-come-SS.PF home 3S.O-cook-3S.APPR
 ‘From there it might **come burning along** and burn the house.’
- (619) *Ti-wän tuli t-ä-ku-xa-wän ...*
 be-3S.DS pull S.O-take-go-SIPF-3S.DS
 ‘As it was **pulling him along**, ...’

Motion verbs indicating direction up or down, such as *akop* ‘come up’ (620), and *epu* ‘come down’ (621) may also be used in these constructions.

- (620) ... *bälä=ngä=ne=tä p-ä-ke tuli t-äk-akop-bum.*
 foot=3.GEN=LOC=ABL P.O-take-SS.PF pull S.O-take-come.up-1S.PAST
 ‘... I took him by his legs and **pulled him up**.’
- (621) *Wamä t-äk-e-pä pulu-wä=nä yemi wamä-ka-kin.*
 tie S.O-take-come.down-23.DS finish-3S.DS=after base tie-P.DIPF-23P.PAST
 ‘After they finished **tying it down** they would tie the base.’

A similar construction involves the verb *ä* ‘take’ with the suffix *-ke* SAME-SUBJECT PERFECTIVE following the main verb stem and followed by *ku* ‘go’ (622, 623) or *apu* ‘come’ (624). This construction indicates that the action of the first verb in the construction is realised while the motion is performed.

- (622) *Ti-ke kep dupi pengwäha t-ä-ke ku-kum.*
 be-SS.PF ground CL.finger crawl S.O-take-SS.PF go-1S.PAST
 ‘Rather, I **went crawling** on the ground.’
- (623) ... *hipdu tuli t-ä-ke ku-kut.*
 again pull S.O-take-SS.PF go-3S.PAST
 ‘... and again it **went pulling him along**.’

- (624) *Wesan tängä=ne yäyi t-ä-ke apu-xa-wa ...*
 sand CL.place=LOC step S.O-take-SS.PF come-SIPF-1S.DS
 ‘I was **coming walking along** the beach ...’

Motion verbs indicating direction up or down such as *kop* ‘go up’ (625), and *puku* ‘go down’ (626) can also be used.

- (625) *Dayi t-ä-ke kop-bum.*
 see.3P.O S.O-take-SS.PF go.up-1S.PAST
 ‘I went up checking them (the other traps).’
- (626) ... *u=ne-tä ena-ke puyä yanggä u=ndupi p-aha t-ä-ke*
 that=LOC=ABL rise-SS.PF work water that=CL.finger P.O-do S.O-take-SS.PF
puku-kumäng.
 go.down-1P.PAST
 ‘... and from there we got up and **went down doing work** along the river.’

22.5 Serial verbs encoding specific aspects

Awara has two means of encoding specific aspects with serial verb constructions. One is an extension of the constructions using *ä* ‘take’ and a motion verb used to encode direction as described in §22.4. The other is the use of the verb *pulut* ‘finish’. First the constructions involving *ä* and a motion verb are shown, and then the one using *pulut*.

The constructions here involving *ä* ‘take’ and a motion verb differ from those described in §22.4 in that they do not involve motion. They simply indicate aspect.

In one serial verb construction the verb stem is followed by a compound verb formed with *t-ä* ‘s.o-take’ and a verb meaning ‘come’ to show customary action that is continued into the present (627) or into some past time (628). The verbs *akop* ‘come up’ (627) or *apu* ‘come’ (628) may be used in these constructions.

- (627) ... *u=läknga=läknga mämä u=sing yä-ning t-äk-ako-ka-mäng.*
 that=CL.rope=CL.rope law that=like 3P.O-tell S.O-take-come.up-P.DIPF-1P.PRES
 ‘... and we **keep telling** them those things, rules, like that.’
- (628) ... *mahan=de enat täka-ki-täyä u=läknga=ning=gän däknga*
 behind=DAT rise grow-23P.PAST=also that=CL.rope=indiv=only break
t-äk-ap-bin.
 S.O-take-come-23P.PAST
 ‘... and the ones who rose and grew up later, they also **kept damming** (water) that way.’

In another serial verb construction that encodes a specific aspect, the verb stem is followed by the verb *t-ä-ke* ‘s.o-take-ss.pf’ and *ku* ‘go’. This construction indicates that the action in the main verb goes on for a period of time. This construction can be used with both dynamic verbs like *aha* ‘do’ (629) and stative verbs like *yiwit* ‘stay’ (630).

- (629) *P-aha t-ä-ke ku-ngga-wä nax=u bulä ala-ka-ying.*
 P.O-do S.O-take-SS.PF go-S.DIPF-23P.DS food=TOP fruit born-P.DIPF-23P.PRES
 ‘They **go on working** until the food bears fruit.’
- (630) *Yiwi t-ä-ke ku-ke=ngä ämin=u u=läpä moning=u*
 stay S.O-take-SS.PF go-SS.PF=after person=LNK that=CL.stick money=TOP
tändäknga=wik
 prepare-3S.FUT
 ‘After they **go on living** together, that person (the husband) will get the money ready.’

Completive aspect is indicated by the verb *pulut* ‘finish’. Example (631) illustrates *pulut* used in a same-subject serial verb construction. The first verb lacks subject-indexing, and the subject-indexing on *pulut* indicates the subject of both verbs in the construction.

- (631) *A=ipmä pulu-kumäng.*
 PRFOC=cut finish-1P.PAST
 ‘We finished cutting it.’

In his discussion on serial verbs Payne (1997:310) wrote, ‘Semantically, serial verb constructions often mean something slightly different from what the same series of verbs would mean if they were cast in separate clauses. However, if the semantics have changed very much, it is possible that one of the verbs in the series has been reanalysed as an auxiliary. In fact, serial verbs are one major diachronic source for auxiliaries.’ It may be that when *ä* ‘take’ with a motion verb or *pulut* ‘finish’ follows a verb stem in order to encode aspect, it is an auxiliary.

The following sentences illustrate *pulut* ‘finish’ used in different-subject serial verb constructions to show completive aspect. The first verb in the construction has a different-subject suffix, and the subject-indexing on *pulut* ‘finish’ can be singular (632) or plural (633).

- (632) *Hamäk uhi-wä puluk-ga-k.*
 grass fill-23P.DS finish-S.DIPF-3S.PRES
 ‘They finished putting the grass on (the roof).’ (lit. They put it on and it finished.)
- (633) ... *wa undä a=natä-pä pulu-wäyak.*
 this all PRFOC=hear-23P.DS finish-3P.PROB
 ‘... everyone must have heard it.’ (lit. probably all have heard it and they are finished).

Awara also uses *pulut* ‘finish’ in clause chains. One distinction between the different-subject serial verb construction with *pulut* and the clause chain with *pulut* is the location of the negative clitic *do=*. In the serial construction, *do=* precedes and negates the whole construction (634). In the clause chain, *=u* CONDITIONAL follows the first clause and *do=* precedes and negates only *pulut* (635).

- (634) *Do=w-aha-wän pulu-kut.*
 NEG=P.O-do-3S.DS finish-3S.PAST
 ‘He did not finish working.’

- (635) *P-aha-wän=u do=wulu-kut.*
 P.O-do-3S.DS=COND NEG=finish-3S.PAST
 ‘He worked and (it) did not finish.’
- (636) * *Pahawän dowulukut.*

22.6 Ambient serial verb constructions

Ambient serial verb constructions do not have a specific referent as the subject of the second verb. Rather, they make a general statement about the action expressed in the preceding verb. Such constructions have the different-subject suffix on the first verb to indicate its subject, while the second verb is marked for third person singular subject.

The verb *ti* ‘be’ is used to indicate that the action of the first verb is tested or tried. The first verb can be either intransitive (637) or transitive (638).

- (637) ... *tupäkände naxäla-kum, siw=une do=xu-wa ti-kut-de* ...
 completely fear-1S.PAST ship=LOC NEG=go-1S.DS be-3S.PAST=DAT
 ‘...I was totally frightened, because I had not tried going on a ship, ...’
- (638) *Nä=tä nä-pa ti-wän.*
 1S=ABL eat-1S.DS be-3S.IMM
 ‘Let me try eating it.’

The verb *malit* ‘fail’ indicates that the action referred to by the preceding verb was done without success.

- (639) *Ti-wän yä-wa yä-wa mali-ngga-wän, ...*
 be-3S.DS say-1S.DS say-1S.DS fail-S.DIPF-3S.DS
 ‘Well, I talked and talked with no success ...’
- (640) *Ti-wän ta-wä-na mali-wän t-e-kumäng.*
 be-3S.DS 3S.O-follow-1P.DS fail-3S.DS S.O-leave-1P.PAST
 ‘We looked for it with no success, and we quit (lit. we left it).’
- (641) *P-ä-ko yiwit-na mali-ngga-wän, hipdu ep-bumäng.*
 P.O-take-go.up stay-1P.DS fail-S.DIPF-3S.DS again come.down-1P.PAST
 ‘We went up and waited with no success (he did not come up) and we came down again.’

22.7 Preceding motion verb constructions

Awara has three constructions involving a preceding motion verb stem. These may be used when the subject of the motion verb is the same as that of the following verb in the construction. One of these is a serial verb construction; the other two appear to be something between a serial verb construction and a clause chain—perhaps a ‘serial verb-phrase’ construction. In addition, the motion verb stem, unlike other stems in serial verb constructions, may be reduplicated.

22.7.1 Motion serial verb constructions

The motion serial verb construction involves a motion verb stem followed by another verb. An indication that this is a serial verb construction in which the two verbs combine to form a single complex predicate rather than a sequence of juxtaposed clauses is that the object of the second verb precedes the motion verb. Note that *kahat* ‘betel nut’ (642) and *däki dākä* ‘wood’ (643) precede the whole construction even though they are the object of the second verbs *na* ‘eat’ and *matä* ‘cut’.

- (642) *Kahat puku na-ke awä ‘...’ yä-wa ...*
 betelnut go.down eat-SS.PF and say-1S.DS
 ‘I went down chewing betel nut, and I said, “...,” and’
- (643) *Däki dākä ku matä-wa ep-ning, katak kayämut tälang*
 wood CL.thick go cut-1S.DS come.down-23P.FUT hand cucumber pole
p-aha=nangge.
 P.O-do=PURPOSE
 ‘I will go cut down trees, to make poles for the cucumber vines.’

Another indication that such sequences are serial verb constructions is that, unlike in clause chains, negation has scope over the whole construction. In (644) *do=* NEGATIVE precedes the motion verb and negates all of the verbs in the construction.

- (644) *Däki dākä do=xu matä-wa ep-ning.*
 tree CL.thick NEG=go cut-1S.DS come.down-23P.FUT
 ‘I will not go cut down trees.’

22.7.2 Motion serial verb phrase constructions

The motion serial verb phrase construction involves a motion verb stem followed by a verb phrase. These constructions differ from ordinary serial verb constructions in several ways. The first is that each of the verbs may have its own complements or adverbial phrases. In (645) the adverbial phrase *näle puyäne* ‘my garden’ precedes *ku* ‘go’, and the adverbial phrase *kukale* ‘by theft’ and the complement *näle yayi* ‘my yams’ precede *kwayi* ‘dig’.

- (645) *Imin=dä [nä=le puyä=ne ku,] [kuka=le nä=le yayi kwayi-kut]=nä*
 who=ABL 1S=DAT garden=LOC go theft=DAT 1S=DAT yam dig-3S.PAST=after
ka-t?
 see.3S.O-1S.PRES
 ‘Who went to my garden and dug my yams by theft and I saw it?’

In (646) *ku* ‘go’ has its source and goal locatives preceding it, and *ka* ‘see 3S.O’ has its object and locative preceding it.

- (646) *Kwew=u [a=ne=tä ata=ne ku,] [Giwisa u=ne ka-wa] ...*
 ±1DAY=TOP this=LOC=ABL level=LOC go Giwisa that=LOC see.3S.O-1S.DS
 ‘Yesterday I went from here to over there and saw Giwisa there and ...’

The second way these differ from other serial verb constructions is that they have a pause after the motion verb, similar to the pause after clauses in a clause chain.

The third way is that the motion verb in serial verb phrase constructions can be followed by =*u* CONDITIONAL (647) or =*yä* ‘after’ (648). In this way they resemble clause chains in which medial clauses can be followed by =*u* or =*yä* (see Chapter 20).

- (647) *Kong=u Kupahanggämän=une kälaw=u täpä=tu ka-kum.*
 go.up=COND Kupahanggämän=LOC animal=LNK CL.stick=one see.3S.O-1S.PAST
 ‘When I went up, I saw an animal at Kupahanggämän.’

- (648) *Yol=une ako=ngü na=nä kem i-ni-kut.*
 village=LOC come.up=after father=3.GEN lie 3S.O-tell-3S.PAST
 ‘After coming up home, he told his father a lie.’

The fourth way they differ from other serial verb constructions is that the second verb phrase can be negated. When it is negated, the motion verb is followed by =*u* (649, 650).

- (649) *Kung=u däki dākä do=matä-wa ep-ning.*
 go=COND tree CL.thick NEG=cut-1S.DS come.down-23P.FUT
 ‘When I go, I won’t cut down trees.’

- (650) *Kung=u do=wuku-kut*
 go=COND NEG=go.down-3S.PAST
 ‘When he went, he didn’t go down.’

- (651) **Ku dowukukut.*

A fifth difference is that, unlike serial verb constructions in which *do* =NEGATIVE precedes the first verb and negates the whole serial verb construction (644 repeated) negation cannot precede a motion verb stem that is followed by a verb phrase (652).

- (644) *Däki dākä do=xu matä-wa ep-ning.*
 tree CL.thick NEG=go cut-1S.DS come.down-23P.FUT
 ‘I will not go cut down trees.’

- (652) **Do=xu däki dākä matä-wa ep-ning.*
 NEG=go tree CL.thick cut-1S.DS come.down-23P.FUT
 I will not go cut down trees.

This restriction on negation also shows that these constructions are not quite like clause chains, either. In clause chains, any clause can be negated (see §21.1). For example, in the clause chain in (653), *do*=precedes the first clause and does not have scope over the following clauses. But in serial verb phrase constructions, the first verb cannot be negated (652).

- (653) *Yupsäng=u do=ako-xa-wa a=yiw-a-wi, kepmä hikngä*
 quickly=TOP NEG=come.up-SIPF-1S.DS PRFOC=stay-SIPF-2S.DS noon real
a=ne ako-t.
 this=LOC come.up-1S.PRES
 ‘I did not come up quickly, you were here, and at noon I came up.’

22.7.3 Take-motion serial verb phrase constructions

The take-motion serial verb phrase constructions involve a compound word formed with *ä* ‘take’ and a motion word followed by a verb phrase. In (654) *p-ä-ku* ‘P.O-take-go’ has no complement, but the second verb has the complement *yanggä* ‘water’ immediately preceding it. These resemble the motion serial verb phrase constructions (§22.7.2) in that an argument of the following verb can come between the motion verb and that verb. However, they resemble ordinary serial verb constructions in that there is no pause after the motion verb.

- (654) *Ge Tunde tembanä ena-ke p-ä-ku yanggä hälu-ke ...*
 so Tuesday morning rise-SS.PF P.O-take-go water wash-SS.PF
 ‘And Tuesday morning I got up and went and washed, ...’

22.7.4 Reduplication of motion verb stems

Finally, reduplication of the motion verb stem can be used to show protracted action. This may be combined with *-hika* SAME-SUBJECT DURATIVE PERFECTIVE either after the reduplicated stems (655) or before them (656). This has only been found with the motion verb *ku* ‘go’.

- (655) *Ku ku ku-hika ku-hika ku yol=u gäpang=gu Säpät yang*
 go go go-SS.DUR.PF go-SS.DUR.PF go home=LNK CL.village=one Sapat COMP
i-ni-ka-ying p-ä-ku u=nggäpang=u y-apmi-ke
 3S.O-tell-P.DIPF-23P.PRES P.O-take-go that=CL.village=TOP 3S.O-pass-SS.PF
a=xu-wiläk.
 PRFOC=go-2S.FUT
 ‘You’ll go and go, and you’ll go to a village they call Sapat, and you’ll pass that place and go on.’
- (656) *Ku-hika ku ku Mängyäng dupi=ne puku do-ke ...*
 go-SS.DUR.PF go go Mangyang CL.finger=LOC go.down arrive-SS.PF
 ‘You’ll go and go, and you’ll go all the way down to Mangyang River, ...’

Appendices

Appendix A: Morphophonemic rules

A.1 Crucial ordering chart

Table A.1 lists all the morphophonemic rules in their crucial ordering.

The ‘Order’ column states the ordering relationship of that rule with the following rules listed below it. For example, h-fortition (Rule 14) has ‘CB15’. That means h-fortition is in a counterbleeding relationship with classifier-final stop deletion (Rule 15). The ‘*’ column indicates that this rule is crucially ordered after a previously listed rule. The ‘No.’ column lists the reference number used in the text for that rule.

Table A.1 Crucial ordering summary chart

| No. | Rule | * | Order |
|--|--------------------------------|---|------------------------------|
| 22 | Root dorsal assimilation | | MB6, MB19, MB20, CB23 |
| 23 | Consonant deletion | | B3, B4 B6, B9, B14, B19, B21 |
| 14 | H-fortition | * | CB15, CB18, MB20, MB21 |
| 20 | Coronal deletion 2 | * | B4, F5, F7, MB21 |
| 21 | Y-fortition | * | MB3 |
| 3 | Nasalisation | * | F1, F2 |
| 4 | Fortition | | L1 |
| 1 | Dorsal assimilation | * | F2 |
| 9 | Voiceless stop assimilation | | F2, CB8 |
| 7 | Lenition | * | CF2, CF5, CF8 |
| 2 | Degemination | * | |
| 5 | Devoicing | * | |
| 16 | Classifier dorsal assimilation | | F8 |
| 8 | Deletion | * | |
| 15 | Classifier-final stop deletion | * | |
| 18 | Coronal deletion | * | |
| 19 | Labial assimilation | | MB6 |
| 6 | Coronal assimilation | * | |
| 13 | Vowel deletion | | |
| 17 | Nasal deletion | | |
| B = Bleeding, C = Counter-, F = Feeding, L = Logical, M = Mutual | | | |

A.2 Rule summary list

Rule 1 Dorsal assimilation

$$\begin{array}{c} \text{C} \\ \left[\begin{array}{l} \text{-labial} \\ \text{-cont} \end{array} \right] \end{array} \rightarrow [+dorsal] / \begin{array}{c} \text{C} \\ [+dorsal] \end{array} \text{---}$$

Accounts for /n/, /d/, and /t/ becoming [ŋ], [g], and [k] respectively after /ŋ/, /g/, and /k/ at morpheme boundaries.

Rule 2 Degemination

$$\begin{array}{c} \text{C} \\ [\alpha \text{ Feature}] \end{array} \rightarrow \emptyset / \text{---} ([_{\text{RED, CPD}}) \begin{array}{c} \text{C} \\ [\alpha \text{ Feature}] \end{array}$$

Accounts for /nn/, /ŋŋ/, /pp/, /tt/, and /kk/ clusters becoming [n], [ŋ], [p], [t], and [k] respectively at morpheme boundaries.

$$\text{---} ([_{\text{RED}}) \begin{array}{c} \text{C} \\ [\alpha \text{ Feature}] \end{array}$$

accounts for [tt] clusters degeminating at the reduplicant boundary.

$$\text{---} ([_{\text{CPD}}) \begin{array}{c} \text{C} \\ [\alpha \text{ Feature}] \end{array}$$

accounts for [kk] clusters degeminating at the compound boundary.

Rule 3 Nasalisation

$$y \rightarrow n / \text{C ---}$$

Accounts for /y/ becoming [n] after consonants at morpheme boundaries.

Rule 4 Fortition

$$\begin{array}{c} \text{C} \\ \left[\begin{array}{l} \text{+cons} \\ \text{+voice} \end{array} \right] \end{array} \rightarrow [-cont] / \text{C ---}$$

Accounts for /l/ and /ǵ/ becoming [d] and [g] respectively after consonants at morpheme boundaries.

Rule 5 Devoicing

$$\begin{array}{c} \text{C} \\ \left[\begin{array}{l} \text{-cont} \\ \text{-voice} \\ \text{-labial} \end{array} \right] \end{array} \rightarrow [-voice] / \text{V ---}$$

Accounts for /d/ and /g/ becoming [t] and [k] respectively after vowels at morpheme boundaries. Does not apply to verbs.

Rule 6 Coronal assimilation

$$\begin{array}{c} \text{C} \\ [-\text{labial}] \end{array} \rightarrow [+ \text{coronal}] / \begin{array}{c} \text{C} \\ [-\text{dorsal}] \end{array} \text{ ______}$$

Accounts for /g/ becoming [d] after coronal and labial consonants at morpheme boundaries.

Rule 7 Lenition

$$\begin{array}{c} \text{C} \\ [-\text{cont}] \\ [-\text{voice}] \end{array} \rightarrow \begin{array}{c} [+ \text{cont}] \\ [+ \text{voice}] \end{array} / \text{V } (\text{]}_{\text{CL, RED, CPD, VERB}}) [\sim \text{S2} \text{ ______ V}$$

Accounts for suffix-initial /k/ initial becoming [ɣ] after vowels at morpheme boundaries. It also accounts for noun-final /p/, /t/, and /k/ becoming [b], [l], and [ɣ] respectively before vowels at morpheme boundaries.

- V]_{CL} ______ V accounts for classifier-initial /t/ and /k/ becoming [l] and [ɣ] respectively after V-final nouns.
- V]_{RED} ______ V accounts for /t/ becoming [l] at reduplicant boundaries.
- V]_{CPD} ______ V accounts for /k/ becoming [ɣ] at compound boundaries.
- V]_{VERB} ______ V accounts for verb-initial voiceless stops leniting, such as /k/ becoming [ɣ] at the verb root boundary after vowel-final words.
- V [\sim \text{S2} \text{ ______ V accounts for lenition not being applied to Set 2 verb suffixes.

Rule 8 Deletion

$$\text{C} \rightarrow \emptyset / \text{ ______ } (\text{]}_{\text{CL, RED, CPD}}) \begin{array}{c} \text{C} \\ [-\text{cont}] \\ [-\text{voice}] \end{array}$$

Accounts for /mp/, /nt/, and /ŋk/ becoming [p], [t], and [k] respectively at morpheme boundaries. Deletion overlaps with degemination in that deletion also reduces /pp/, /tt/, and /kk/ to [p], [t], and [k] respectively at morpheme boundaries.

$$\text{ ______ }]_{\text{CL}} \begin{array}{c} \text{C} \\ [-\text{cont}] \\ [-\text{voice}] \end{array}$$

accounts for noun-final /t/, /k/, /n/, and /ŋ/ deleting before /t/- and k/-initial classifiers. This does not apply to labial-final nouns, which do not delete before /t/-initial classifiers.

$$\text{ ______ }]_{\text{RED}} \begin{array}{c} \text{C} \\ [-\text{cont}] \\ [-\text{voice}] \end{array}$$

accounts for /t/, /k/, /n/, and /ŋ/ deleting before /p/, /t/, and /k/ at reduplicant boundaries in fast speech.

$$\text{ ______ }]_{\text{CPD}} \begin{array}{c} \text{C} \\ [-\text{cont}] \\ [-\text{voice}] \end{array}$$

accounts for noun-final /t/, /k/, /n/, and /ŋ/ deleting before /t/- and /k/-initial nouns at compound boundaries.

Rule 9 Voiceless stop assimilation

$$\begin{array}{c} C \\ \left[\begin{array}{c} -\text{cont} \\ -\text{voice} \end{array} \right] \end{array} \rightarrow [\alpha \text{ POA}] / \begin{array}{c} C \\ [\alpha \text{ POA}] \end{array} ___$$

Accounts for /k/ becoming [p], [t], or [k] after /m/ or /p/, /n/ or /t/, and /ŋ/ or /k/ at morpheme boundaries.

Rules 10-12 were alternative hypotheses that were dismissed.

Rule 13 Vowel deletion

$$V \rightarrow \emptyset / V ___$$

Accounts for /u/ deleting after vowels at morpheme boundaries.

Rule 14 h-fortition

$$h \rightarrow s / C ___$$

Accounts for /h/ becoming [s] after consonants at morpheme boundaries.

Rule 15 Classifier-final stop deletion

$$\begin{array}{c} C \\ [-\text{dorsal}] \end{array} \rightarrow \emptyset / ___]_{\text{CL}} \begin{array}{c} C \\ \left[\begin{array}{c} +\text{cons} \\ -\text{voice} \end{array} \right] \end{array}$$

Accounts for /m/, /n/, and /t/ deleting before /s/ at the classifier morpheme boundary. Does not apply to the noun, verb, compound, or reduplicant morpheme boundary.

Rule 16 Classifier dorsal assimilation

$$\begin{array}{c} C \\ \left[\begin{array}{c} -\text{voice} \\ -\text{cont} \end{array} \right] \end{array} \rightarrow [+dorsal] / \begin{array}{c} C \\ [+dorsal] \end{array} [_{\text{CL}} ___$$

Accounts for classifier-initial /t/ becoming /k/ after dorsals at word boundaries.

Rule 17 Nasal deletion

$$\begin{array}{c} C \\ [+nasal] \end{array} \rightarrow \emptyset / C ___]_{\sigma}$$

Accounts for /ŋ/ (2S.IMM) deleting word-finally after /t/-final and /p/-final verb roots.

Rule 18 Coronal deletion (restricted to verbs)

$$\begin{array}{c} C \\ [+coronal] \end{array} \rightarrow \emptyset / ___]_{[\text{S1}} \begin{array}{c} C \\ \left[\begin{array}{c} +\text{cont} \\ -\text{voice} \end{array} \right] \end{array}$$

Accounts for the final segment /t/ in verbs deleting before /h/-initial Set 1 verb suffixes.

Rule 19 Labial assimilation (restricted to verbs)

$$\begin{array}{c} C \\ [+dorsal] \end{array} \rightarrow [+labial] / \begin{array}{c} C \\ [+labial] \end{array}]_{[S1]} \text{ ---}$$

Accounts for the /g/ in Set 1 verb suffixes becoming [b] after labial-final verbs.

Rule 20 Coronal deletion 2 (restricted to verbs)

$$\begin{array}{c} C \\ [+coronal] \end{array} \rightarrow \emptyset / \text{ --- }]_{[S1]} \begin{array}{c} C \\ [-coronal] \end{array}$$

Accounts for /t/-final segments on t-final verbs deleting before noncoronal Set 1 verb suffixes.

Rule 21 y-fortition (restricted to verbs)

$$y \rightarrow s / C]_{[S1]} \text{ ---}$$

Accounts for /y/-initial segments on Set 1 verb suffixes becoming /s/ after consonants.

Rule 22 Root dorsal assimilation (restricted to verbs)

$$C \rightarrow [+dorsal] / \text{ --- }]_{[S2]} g$$

Accounts for /p/ and /t/ becoming [k] before /g/ at Set 2 verb suffix morpheme boundaries.

Rule 23 Consonant deletion (restricted to verbs)

$$\begin{array}{c} C \\ [-dorsal] \end{array} \rightarrow \emptyset / \text{ --- } \text{ROOT}]_{[S2]}$$

Accounts for the final /p/ and /t/ segments in verb roots deleting before Set 2 verb suffixes.

A.3 Sample derivations

Some sample derivations of the rules are shown in Table A.2.

Table A.2 Sample derivations

| No. | Rule | ‘Hikwang -after’ /hik ^w ʌŋ -yʌ/ | ‘knife -2S.GEN’ /nap -ga/ | ‘aunt -also’ /mom -kʌyʌ/ | ‘wood -LOC’ /daki -une/ | ‘CL.lump -DIM’ /g ^w en -him/ | ‘big + CL.rope’ /inulug + takŋa/ |
|-----|--------------------------------|---|------------------------------|-----------------------------|----------------------------|--|-------------------------------------|
| 22 | Root dorsal assimilation | | | | | | |
| 23 | Consonant deletion | | | | | | |
| 14 | H-fortition | | | | | | |
| 20 | Coronal deletion 2 | | | | | | |
| 21 | Y-fortition | | | | | | |
| 3 | Nasalisation | hik ^w ʌŋna | | | | | |
| 4 | Fortition | | | | | | |
| 1 | Dorsal assimilation | hik ^w ʌŋna | | | | | |
| 9 | Voiceless stop assimilation | | | | | | |
| 7 | Lentition | | | | | | |
| 2 | Degemination | hik ^w ʌŋna | | | | | |
| 5 | Devoicing | | | | | | |
| 16 | Classifier dorsal assimilation | | | | | | |
| 8 | Deletion | | | | | | |
| 15 | Classifier-final stop deletion | | | | | | |
| 18 | Coronal deletion | | | | | | |
| 19 | Labial assimilation | | | | | | |
| 6 | Coronal assimilation | | napda | | | | |
| 13 | Vowel deletion | | | | | | |
| 17 | Nasal deletion | | | | | | |
| PR: | | [hik ^w ʌŋna] | [napda] | [mopʌyʌ] | [dakiŋe] | [g ^w esim] | [inulukʌkŋa] |

Table A.2 (continued)

| No. | Rule | 'bamboo -also' /kekŋʌ -kʌyʌ/ | 'drink -23P.IMM' /taŋop -gʊt/ | 'wash -23D.IMP' /halut -hon/ | 'drink -2S.IMP' /taŋop -yo/ | 'drink -S.DIPF -3S.PRES' /taŋop -ga -k/ |
|-----|--------------------------------|---------------------------------|----------------------------------|---------------------------------|--------------------------------|--|
| 22 | Root dorsal assimilation | | | | | taŋokgak |
| 23 | Consonant deletion | | | | | |
| 14 | H-fortition | | | halutson | | |
| 20 | Coronal deletion 2 | | | | | |
| 21 | Y-fortition | | | | taŋopso | |
| 3 | Nasalisation | | | | | |
| 4 | Fortition | | taŋopgut | | | |
| 1 | Dorsal assimilation | | | | | |
| 9 | Voiceless stop assimilation | | | | | |
| 7 | Lenition | kekŋʌgʌyʌ | | | | |
| 2 | Degemination | | | | | |
| 5 | Devoicing | | | | | |
| 16 | Classifier dorsal assimilation | | | | | |
| 8 | Deletion | | | | | |
| 15 | Classifier-final stop deletion | | | | | |
| 18 | Coronal deletion | | | haluson | | |
| 19 | Labial assimilation | | taŋopbut | | | |
| 6 | Coronal assimilation | | | | | |
| 13 | Vowel deletion | | | | | |
| 17 | Nasal deletion | | | | | |
| PR: | | [kekŋʌgʌyʌ] | [taŋopbut] | [haluson] | [taŋopso] | [taŋokgak] |

Table A.2 (continued)

| No. | Rule | ‘drink -3s.Pres’ /tanop -k/ | ‘wash -2s.Imp’ /halut -yo/ | ‘cut -3s.Past’ /matʌ -gut/ |
|-----|--------------------------------|--------------------------------|-------------------------------|-------------------------------|
| 22 | Root dorsal assimilation | | | |
| 23 | Consonant deletion | tanok | | |
| 14 | H-fortition | | | |
| 20 | Coronal deletion 2 | | haluyo | |
| 21 | Y-fortition | | | |
| 3 | Nasalisation | | | |
| 4 | Fortition | | | |
| 1 | Dorsal assimilation | | | |
| 9 | Voiceless stop assimilation | | | |
| 7 | Lenition | | | |
| 2 | Degemination | | | |
| 5 | Devoicing | | | matkut |
| 16 | Classifier dorsal assimilation | | | |
| 8 | Deletion | | | |
| 15 | Classifier-final stop deletion | | | |
| 18 | Coronal deletion | | | |
| 19 | Labial assimilation | | | |
| 6 | Coronal assimilation | | | |
| 13 | Vowel deletion | | | |
| 17 | Nasal deletion | | | |
| PR: | | [tanok] | [haluyo] | [matkut] |

Appendix B: Word Structure

Tables B.1 to B.5 list all known syllable combinations used in Awara words. They are grouped based on the number of syllables and by the syllable being either open or closed. Two examples are listed if two or more examples exist in the data.

Table B.1 Monosyllabic words

| Syllable Open | UF | PR | gloss | Syllable Closed | UF | PR | gloss |
|-------------------------|------|------|---------|---------------------------|---------|-------|--------------|
| V | /a/ | [a] | ‘this’ | VC | /ok/ | [ok] | ‘uncle’ |
| | /u/ | [u] | ‘that’ | | /ap -ŋ/ | [ap] | ‘Come!’ |
| CV | /ge/ | [ge] | ‘so’ | CVC | /tut/ | [tut] | ‘fingernail’ |
| | /nʌ/ | [nʌ] | ‘I, me’ | | /pit/ | [pit] | ‘wing’ |

Table B.2 Disyllabic words

| Syllable | UF | PR | gloss |
|--------------------|------------|-------------------|--------------|
| Open–Open | | | |
| V.CV | /amu/ | [a.mu] | ‘down far’ |
| | /ane/ | [a.ne] | ‘here’ |
| CV.CV | /buta/ | [bu.ta] | ‘pandanus’ |
| | /baka/ | [ba.ka] | ‘wall beam’ |
| Open–Closed | | | |
| V.VC | /a- ep -ŋ/ | [a.ep] [aep] [ep] | ‘Come down!’ |
| V.CVC | /akop -ŋ/ | [a.kop] | ‘Come up!’ |
| | /alam/ | [a.lam] | ‘cheek’ |
| CV.CVC | /yeθʌn/ | [ye.θʌn] | ‘±2 days’ |
| | /yekʌp/ | [ye.kʌp] | ‘moon’ |
| Closed–Open | | | |
| VC.CV | /ap -so/ | [ap.so] | ‘Come!’ |
| | /apme/ | [ap.me] | ‘later’ |
| CVC.CV | /tokŋʌ/ | [tok.ŋʌ] | ‘pain’ |
| | /θepdʌ/ | [θep.dʌ] | ‘slowly’ |

| | | | |
|----------------------|----------|-----------|----------------|
| Closed–Closed | | | |
| VC.CVC | /apman/ | [ap.man] | ‘today’ |
| | /utdop/ | [ut.dop] | ‘Take it off!’ |
| CVC.CVC | /bamsak/ | [bam.sak] | ‘gecko’ |
| | /gokɲot/ | [gok.ɲot] | ‘mushroom’ |

Table B.3 Trisyllabic words

| Syllable | UF | PR | gloss |
|-----------------------------|-------------|---------------|---------------------|
| Open–Open–Open | | | |
| V.CV.CV | /amale/ | [a.mə.le] | ‘betel nut species’ |
| | /atepa/ | [a.te.pa] | ‘string’ |
| CV.CV.CV | /mɲɛlɛ/ | [mɛ.ɲɛ.lɛ] | ‘woman’ |
| | /butayɛ/ | [bu.ta.yɛ] | ‘pity’ |
| Open–Open–Closed | | | |
| V.CV.CVC | /inɛɲok/ | [i.nɛ.ɲok] | ‘honey’ |
| | /epuhit/ | [e.pu.hit] | ‘trap’ |
| CV.CV.CVC | /yɛpɛhik/ | [yɛ.pɛ.hik] | ‘lightning’ |
| | /bɛkɛlɛm/ | [bɛ.kɛ.lɛm] | ‘animal species’ |
| Open–Closed–Open | | | |
| V.CVC.CV | /inukɛɛ/ | [i.nuk.ɛɛ] | ‘sap’ |
| | /ilakɛɛ/ | [i.lak.ɛɛ] | ‘greens’ |
| CV.CVC.CV | /tulukɛɛ/ | [tu.luk.ɛɛ] | ‘soft’ |
| | /tɛmakɛɛ/ | [tɛ.mak.ɛɛ] | ‘rotten’ |
| Open–Closed–Closed | | | |
| V.CVC.CVC | /amin -bam/ | [a.mim.bam] | ‘everyone’ |
| | /usipmak/ | [u.sip.mak] | ‘louse killer’ |
| CV.CVC.CVC | /yamadan/ | [ya.man.dan] | ‘insect species’ |
| Closed–Open–Open | | | |
| VC.CV.CV | /apmɛyi/ | [ap.me.yi] | ‘unripe’ |
| CVC.CV.CV | /gɛpmɛyi/ | [gɛp.ma.yi] | ‘deep’ |
| | /gokɲolɛ/ | [gok.ɲo.lɛ] | ‘cold’ |
| Closed–Open–Closed | | | |
| CVC.CV.CVC | /kepyamun/ | [kep.ya.mun] | ‘earthquake’ |
| | /tapbulɛm/ | [tap.bu.lɛm] | ‘pandanus species’ |
| Closed–Closed–Open | | | |
| CVC.CVC.CV | /gobikɛɛ/ | [gom.bik.ɛɛ] | ‘middle beam’ |
| Closed–Closed–Closed | | | |
| CVC.CVC.CVC | /hupgɛpbat/ | [hup.gɛp.bat] | ‘stone ledge’ |

Table B.4 Tetrasyllabic words

| Syllable | UF | PR | gloss |
|----------------------------------|-----------------|------------------|---------------------|
| Open-Open-Open-Open | | | |
| V.CV.CV.CV | /alʌpisʌ/ | [a.lʌ.pi.sʌ] | ‘tree species’ |
| | /ʌmin+tʌpʌ/ | [ʌ.mi.tʌ.pʌ] | ‘sorcerer’ |
| V.CV.V.CV | /RED+ina/ | [i.na.i.na] | ‘what.P’ |
| | /RED+uli/ | [u.li.u.li] | ‘burr’ |
| CV.CV.CV.CV | /hakʌ+miŋʌ/ | [ha.kʌ.mi.ŋʌ] | ‘fowl’ |
| Open-Open-Open-Closed | | | |
| V.CV.V.CVC | /RED+imin/ | [i.mi.i.min] | ‘who.P’ |
| V.CV.CV.CVC | /RED+epʌn/ | [e.pʌ.ne.pʌn] | ‘have same parents’ |
| | /iʔʌ+ʔamʌk/ | [i.ʔʌ.ʔa.mʌk] | ‘bandage’ |
| CV.CV.CV.CVC | /kuhit+palʌŋ/ | [ku.hi.pa.lʌŋ] | ‘insect species’ |
| Open-Open-Closed-Open | | | |
| CV.CV.CVC.CV | /haʔulekŋʌ/ | [ha.ʔu.lek.ŋʌ] | ‘slippery’ |
| Open-Closed-Open-Open | | | |
| CV.CVC.CV.CV | /gusit+kayi/ | [gu.sit.ka.yi] | ‘sun’ |
| | /ʔabʌk+dʌkʌ/ | [ʔa.ʔak.dʌ.kʌ] | ‘child’ |
| Open-Closed-Open-Closed | | | |
| V.CVC.CV.CVC | /alʌgʌmʌn/ | [a.lʌŋ.gʌ.mʌn] | ‘clear’ |
| V.CVC.V.CVC | /RED+usiŋ/ | [u.siŋ.u.siŋ] | ‘so many’ |
| CV.CVC.CV.CVC | /banip+gʷa.lʌŋ/ | [ba.nip.gʷa.lʌŋ] | ‘kindness’ |
| | /gulʌk+salin/ | [gu.lʌk.sa.lin] | ‘Adam’s apple’ |
| Open-Closed-Closed-Closed | | | |
| CV.CVC.CVC.CVC | /natʌdetdet/ | [na.tʌn.det.det] | ‘knowledge’ |
| | /taʔik+sipmʌk/ | [ta.ʔik.sip.mʌk] | ‘tree species’ |
| Closed-Open-Open-Closed | | | |
| CVC.CV.CV.CVC | /yagʌ+saŋut/ | [yaŋ.gʌ.sa.ŋut] | ‘fern’ |
| Closed-Open-Open-Closed | | | |
| CVC.CV.CVC.CV | /tʌbi+tʌbi/ | [tʌm.bi.lʌm.bi] | ‘mucous’ |
| | /ʔʌbi+ʔʌbi/ | [ʔʌm.bi.ʔʌm.bi] | ‘spider species’ |
| Closed-Open-Closed-Closed | | | |
| VC.CV.VC.CVC | /RED+ipmʌk/ | [ip.mʌ.ip.mʌk] | ‘drizzle’ |
| Closed-Closed-Open-Closed | | | |
| CVC.CVC.CV.CVC | /mekŋʌnkubit/ | [mek.ŋʌn.ku.ʔit] | ‘bird species’ |

Table B.5 Pentasyllabic words

| Syllable | UF | PR | gloss |
|-------------------------------------|-----------------|--------------------|----------------|
| Open-Open-Open-Open-Open | | | |
| V.CV.CV.CV.CV | /ΛminΛlake/ | [Λ.mi.nΛ.la.ke] | ‘old person’ |
| CV.CV.CV.CV.CV | /mΛηΛlΛ+θΛθi/ | [mΛ.ηΛ.lΛ.θΛ.θi] | ‘people’ |
| Open-Open-Open-Open-Closed | | | |
| V.CV.CV.CV.CVC | /Λmin+tΛpΛ+him/ | [Λ.mi.tΛ.pΛ.him] | ‘pupil’ |
| Open-Open-Open-Closed-Open | | | |
| CV.CV.CV.CVC.CV | /pΛpΛyΛ+hakηΛ/ | [pΛ.pΛ.yΛ.hak.ηΛ] | ‘dry’ |
| Open-Open-Closed-Open-Closed | | | |
| CV.CV.CVC.CV.CVC | /toθiyΛ+gΛmΛn/ | [to.θi.yΛη.gΛ.mΛn] | ‘cow’ |
| CV.CV.CVC.CV.CVC | /katΛtek+mΛmΛn/ | [ka.tΛ.tek.mΛ.mΛn] | ‘frog species’ |
| Open-Closed-Open-Open-Open | | | |
| CV.CVC.CV.CV.CV | /gatΛk+gatΛyi/ | [ga.tΛk.ga.tΛ.yi] | ‘sticky’ |
| Open-Closed-Open-Closed-Open | | | |
| CV.CVC.CV.CVC.CV | /matek+matekηΛ/ | [ma.tek.ma.tek.ηΛ] | ‘small’ |
| V.CVC.CV.CVC.CV | /aɡotna+aɡotna/ | [a.ɡot.na.ɡot.na] | ‘stingy’ |

Appendix C: Noun morphology paradigms

C.1 Noun paradigms

Suffixes have one surface form following vowel-final nouns, as shown in Table C.1. Suffixes other than /-bΛ/ DUBITATIVE have multiple surface forms following consonant-final nouns, as shown in Table C.2.

Table C.1 Vowel-final nouns

| Gloss | UF | /daki/ ‘wood’ | /kekɿΛ/ ‘bamboo’ | /sita/ ‘sweet potato’ |
|------------|---------|------------------|---------------------|--------------------------|
| 1S.GEN | /-na/ | [dakina] | [kekɿΛna] | [sitana] |
| 2S.GEN | /-ga/ | [dakika] | [kekɿΛka] | [sitaka] |
| 2P.GEN | /-hΛ/ | [dakihΛ] | [kekɿΛhΛ] | [sitahΛ] |
| ABLATIVE | /-dΛ/ | [dakitΛ] | [kekɿΛtΛ] | [sitatΛ] |
| ‘only’ | /-gΛn/ | [dakikΛn] | [kekɿΛkΛn] | [sitakΛn] |
| DATIVE | /-le/ | [dakile] | [kekɿΛle] | [sitale] |
| ‘also’ | /-kΛyΛ/ | [dakiɡΛyΛ] | [kekɿΛɡΛyΛ] | [sitəɡΛyΛ] |
| NEGATIVE | /-udo/ | [dakindo] | [kekɿΛndo] | [sitando] |
| DUBITATIVE | /-bΛ/ | [dakimbΛ] | [kekɿΛmbΛ] | [sitambΛ] |

| Gloss | UF | /giyame/ man’s name | /homu/ ‘dog’ | /sako/ ‘choko’ |
|------------|---------|------------------------|-----------------|-------------------|
| 1S.GEN | /-na/ | [giyamena] | [homuna] | [sakona] |
| 2S.GEN | /-ga/ | [giyameka] | [homuka] | [sakoka] |
| 2P.GEN | /-hΛ/ | [giyamehΛ] | [homuhΛ] | [sakohΛ] |
| ABLATIVE | /-dΛ/ | [giyametΛ] | [homutΛ] | [sakotΛ] |
| ‘only’ | /-gΛn/ | [giyamekΛn] | [homukΛn] | [sakokΛn] |
| DATIVE | /-le/ | [giyamele] | [homule] | [sakole] |
| ‘also’ | /-kΛyΛ/ | [giyameɡΛyΛ] | [homuɡΛyΛ] | [sakoɡΛyΛ] |
| NEGATIVE | /-udo/ | [giyamendo] | [homundo] | [sakondo] |
| DUBITATIVE | /-bΛ/ | [giyamembΛ] | [homumbΛ] | [sakombΛ] |

Table C.2 Consonant-final nouns

| Gloss | UF | /nap/ ‘rope’ | /teŋat/ ‘niece’s husband’ | /musuk/ ‘knife’ |
|------------|---------|-----------------|------------------------------|--------------------|
| 1S.GEN | /-na/ | [napna] | [teŋatna] | [musukŋa] |
| 2S.GEN | /-ga/ | [napda] | [teŋatda] | [musukga] |
| 2P.GEN | /-hΛ/ | [napsΛ] | [teŋatsΛ] | [musuksΛ] |
| ABLATIVE | /-dΛ/ | [napdΛ] | [teŋatdΛ] | [musukgΛ] |
| ‘only’ | /-gΛn/ | [napdΛn] | [teŋatdΛn] | [musukgΛn] |
| DATIVE | /-le/ | [napde] | [teŋatde] | [musukge] |
| ‘also’ | /-kΛyΛ/ | [napΛyΛ] | [teŋatΛyΛ] | [musukΛyΛ] |
| NEGATIVE | /-udo/ | [naβundo] | [teŋalundo] | [musuβundo] |
| DUBITATIVE | /-bΛ/ | [napmbΛ] | [teŋatmbΛ] | [musukmbΛ] |

| Gloss | UF | /mom/ ‘aunt’ | /sadun/ ‘axe’ | /eŋaŋ/ ‘baby’ |
|------------|---------|-----------------|------------------|------------------|
| 1S.GEN | /-na/ | [momna] | [sanduna] | [eŋaŋa] |
| 2S.GEN | /-ga/ | [momda] | [sandunda] | [eŋaŋga] |
| 2P.GEN | /-ha/ | [momsΛ] | [sandunsΛ] | [eŋaŋsΛ] |
| ABLATIVE | /-da/ | [momdΛ] | [sandundΛ] | [eŋaŋgΛ] |
| ‘only’ | /-gΛn/ | [momdΛn] | [sandundΛn] | [eŋaŋgΛn] |
| DATIVE | /-le/ | [momde] | [sandunde] | [eŋaŋge] |
| ‘also’ | /-kΛyΛ/ | [mopΛyΛ] | [sandutΛyΛ] | [eŋakΛyΛ] |
| NEGATIVE | /-udo/ | [momundo] | [sandunundo] | [eŋaŋundo] |
| DUBITATIVE | /-bΛ/ | [mombΛ] | [sandunbΛ] | [eŋaŋbΛ] |

C.2 Genitive paradigm

Table C.3 contains examples of all possible noun-final segments with the Genitive suffix set. Table C.4 contains a comprehensive list of nouns taking the alternate form of the 3.GENITIVE suffix.

Table C.3 Genitive chart

| Noun | gloss | /-na/ 1S | /-ga/ 2S | /-nΛ/ 3 |
|---------|----------------|------------|------------|------------|
| /sita/ | ‘sweet potato’ | [sitana] | [sitaka] | [sitana] |
| /kekŋΛ/ | ‘bamboo’ | [kekŋΛna] | [kekŋΛka] | [kekŋΛna] |
| /pΛye/ | ‘brother’ | [pΛyena] | [pΛyeka] | [pΛyenΛ] |
| /daki/ | ‘wood’ | [dakina] | [dakika] | [dakinΛ] |
| /sako/ | ‘choko’ | [sakona] | [sakoka] | [sakonΛ] |
| /homu/ | ‘dog’ | [homuna] | [homuka] | [homunΛ] |
| /nap/ | ‘rope’ | [napna] | [napda] | [napna] |
| /sibut/ | ‘cake’ | [simbutna] | [simbutda] | [simbutna] |

| /musuk/ | ‘knife’ | [musukŋa] | [musukga] | [musukŋa] |
|---------|----------------|------------|------------|-------------|
| /kaham/ | ‘ginger’ | [kahamna] | [kahamda] | [kahamna] |
| /sadun/ | ‘axe’ | [sanduna] | [sandunda] | [sanduna] |
| /balaŋ/ | ‘leg’ | [balaŋa] | [balaŋga] | [balaŋa] |
| /pis/ | ‘fish’ | [pisna] | [pisda] | [pisna] |
| /sel/ | ‘tarp’ | [selna] | [selda] | [selna] |
| Noun | gloss | /-nit/ 1D | /-hΛ/ 2P | /-nin/ 1P |
| /sita/ | ‘sweet potato’ | [sitani] | [sitahΛ] | [sitani] |
| /kekŋΛ/ | ‘bamboo’ | [kekŋΛnit] | [kekŋΛhΛ] | [kekŋΛnin] |
| /pΛye/ | ‘brother’ | [pΛyeni] | [pΛyehΛ] | [pΛyeni] |
| /daki/ | ‘wood’ | [dakini] | [dakihΛ] | [dakinin] |
| /sako/ | ‘choko’ | [sakoni] | [sakohΛ] | [sakoni] |
| /homu/ | ‘dog’ | [homuni] | [homuhΛ] | [homunin] |
| /nap/ | ‘rope’ | [napni] | [napsΛ] | [napnin] |
| /sibut/ | ‘cake’ | [simbutni] | [simbutsΛ] | [simbutnin] |
| /musuk/ | ‘knife’ | [musukŋi] | [musuksΛ] | [musukŋin] |
| /kaham/ | ‘ginger’ | [kahamni] | [kahamsΛ] | [kahamnin] |
| /sadun/ | ‘axe’ | [sanduni] | [sandunsΛ] | [sandunin] |
| /balaŋ/ | ‘leg’ | [balaŋi] | [balaŋsΛ] | [balaŋin] |
| /pis/ | ‘fish’ | [pisni] | [pisΛ] | [pisnin] |
| /sel/ | ‘tarp’ | [selni] | [selsΛ] | [selnin] |

Table C.4 Alternate 3.GENITIVE chart

| gloss | root | [i], [e], [Λ] | gloss |
|------------------|------------|---------------|----------------------|
| ‘thigh’ | /baka/ | [baki] | ‘its thigh’ |
| ‘calf’ | /hapbΛ/ | [hapbi] | ‘its calf’ |
| ‘eye’ | /kayi/ | [kayi] | ‘its eye’ |
| ‘belly’ | /kukΛ/ | [kuke] | ‘its belly’ |
| ‘back’ | /maha/ | [mahe] | ‘its back’ |
| ‘spleen’ | /nΛŋΛ/ | [nΛŋe] | ‘its spleen’ |
| ‘knee’ | /sopΛ/ | [sopi] | ‘its knee cap’ |
| ‘body’ | /tΛŋΛ/ | [tΛŋe] | ‘its body’ |
| ‘tongue’ | /yebi/ | [yembi] | ‘its tongue’ |
| ‘bile’ | /kakŋayi/ | [kakŋayi] | ‘its bile’ |
| ‘son-in-law’ | /yepmΛ/ | [yepme] | ‘his son-in-law’ |
| ‘namesake’ | /tΛŋΛ/ | [tΛŋe] | ‘his namesake’ |
| ‘insides’ | /banip/ | [baniyΛ] | ‘its insides’ |
| ‘mouth’ | /map/ | [mayΛ] | ‘its mouth’ |
| ‘husband’ | /ap/ | [ayΛ] | ‘her husband’ |
| ‘shoulder blade’ | /hapΛt/ | [hapΛΛ] | ‘its shoulder blade’ |
| ‘molar’ | /kakΛt/ | [kakΛΛ] | ‘its molar’ |
| ‘organ variety’ | /kʷakaput/ | [kʷakapulΛ] | ‘its organ variety’ |

| | | | |
|--------------|-----------|------------|------------------|
| ‘chest’ | /mupmut/ | [mupmulΛ] | ‘its chest’ |
| ‘fingernail’ | /tut/ | [tulΛ] | ‘its fingernail’ |
| ‘teeth’ | /dΛdΛn/ | [dΛndΛlΛ] | ‘its teeth’ |
| ‘ankle’ | /ketapun/ | [ketapulΛ] | ‘its ankle’ |
| ‘rib’ | /tΛkΛpun/ | [tΛkΛpulΛ] | ‘its rib’ |

C.3 Classifier affix paradigms

The suffixes listed in Table C.5 only occur on classifiers. Table C.6 contains all known classifiers that occur with the Diminutive and the Specific suffix.¹

Table C.5 Classifier suffix chart

| root | gloss | /-du/ ‘one’ | /-yat/ two.DEF | /-yalΛ/ two.INDEF |
|-----------------------|-------------|---------------------------|-----------------------------------|---------------------------|
| /tΛkɲa/ | CL.ropes | [tΛkɲatu] | [tΛkɲayat] | [tΛkɲayalΛ] |
| /tΛpΛ/ | CL.stick | [tΛpΛtu] | [tΛpΛyat] | [tΛpΛyalΛ] |
| /take/ | CL.big | [taketu] | [takeyat] | [takeyalΛ] |
| /dupi/ | CL.finger | [dupitu] | [dupiyat] | [dupiyalΛ] |
| /k ^w Λbat/ | CL.extended | [k ^w Λbatdu] | [k ^w Λbatnat] | [k ^w ΛbatnalΛ] |
| /g ^w Λk/ | CL.opening | [g ^w Λkgu] | [g ^w Λkɲat] | [g ^w ΛkɲalΛ] |
| /g ^w ΛkΛm/ | CL.chunk | [g ^w ΛkΛmdu] | [g ^w ΛkΛmnat] | [g ^w ΛkΛmnalΛ] |
| /g ^w en/ | CL.lump | [g ^w endu] | [g ^w enat] | [g ^w enalΛ] |
| /gutoŋ/ | CL.thin | [gutoŋgu] | [gutoŋat] | [gutoŋalΛ] |
| root | gloss | /-duyi/ ‘some’ | /-unin/ INDIVIDUATOR ^a | |
| /tΛkɲa/ | CL.ropes | [tΛkɲatuyi] | [alΛkɲanin] | |
| /tΛpΛ/ | CL.stick | [tΛpΛtuyi] | [alΛpΛnin] | |
| /take/ | CL.big | [taketuyi] | [alakenin] | |
| /dupi/ | CL.finger | [dupituyi] | [andupinin] | |
| /k ^w Λbat/ | CL.extended | [k ^w Λbatduyi] | [aɣ ^w ΛmbΛlunin] | |
| /g ^w Λk/ | CL.opening | [g ^w Λkguyi] | [aŋg ^w Λɣunin] | |
| /g ^w ΛkΛm/ | CL.chunk | [g ^w ΛkΛmduyi] | [aŋg ^w ΛkΛmunin] | |
| /g ^w en/ | CL.lump | [g ^w enduyi] | [aŋg ^w enunin] | |
| /gutoŋ/ | CL.thin | [gutoŋguyi] | [aŋgutoŋunin] | |

^aThis paradigm includes the demonstrative /a-/ ‘this’, to which is added the individuator suffix.

¹ It is unclear if all these classifiers can be conjugated with both of these suffixes. One of our language consultants said that some of these words conjugated with the SPECIFIC suffix are not real Awara words but just play words.

Table C.6 Classifier list with DIMINUTIVE and SPECIFIC suffixes

| gloss | classifier | /-him/ DIM | /-sim/ SPEC |
|-------------|------------|-------------|--------------|
| CL.thick | /dʌkʌ/ | [dʌkʌhim] | [dʌkʌsim] |
| CL.cliff | /dʌmʌ/ | [dʌmʌhim] | [dʌmʌsim] |
| CL.old/big | /damʌn/ | [damʌsim] | [damʌnšim] |
| CL.finger | /dupi/ | [dupihim] | [dupisim] |
| CL.village | /gʌpaŋ/ | [gʌpaŋsim] | [gʌpaŋšim] |
| CL.tube | /gulʌŋ/ | [gulʌŋsim] | [gulʌŋšim] |
| CL.thin | /gutoŋ/ | [gutoŋsim] | [gutoŋšim] |
| CL.opening | /gʷʌk/ | [gʷʌksim] | [gʷʌkšim] |
| CL.chunk | /gʷʌkʌm/ | [gʷʌkʌsim] | [gʷʌkʌmšim] |
| CL.lump | /gʷen/ | [gʷesim] | [gʷenšim] |
| CL.limb | /hamʌn/ | [hamʌnsim] | [hamʌnšim] |
| CL.sheet | /han/ | [hasim] | [hanšim] |
| CL.boy | /ʔabak/ | [ʔabaksim] | [ʔabakšim] |
| CL.place | /ʔʌm/ | [ʔʌsim] | [ʔʌmsim] |
| CL.place | /ʔom/ | [ʔomsim] | [ʔomšim] |
| CL.extended | /kʷʌbʌt/ | [kʷʌmbʌsim] | [kʷʌmbʌtšim] |
| CL.girl | /mʌŋʌt/ | [mʌŋʌsim] | [mʌŋʌtšim] |
| CL.wad | /muha/ | [muhahim] | [muhasim] |
| CL.place | /tʌŋʌ/ | [tʌŋʌhim] | [tʌŋʌsim] |
| CL.rope | /tʌkŋa/ | [tʌkŋahim] | [tʌkŋasim] |
| CL.big | /take/ | [takehim] | [takesim] |
| CL.group | /tʌkʷʌk/ | [tʌkʷʌksim] | [tʌkʷʌkšim] |
| CL.stick | /tʌpʌ/ | [tʌpʌhim] | [tʌpʌsim] |
| CL.bundle | /tupʌ/ | [tupʌhim] | [tupʌsim] |
| CL.family | /yʌŋgʷʌt/ | [yʌŋgʷʌsim] | [yʌŋgʷʌtšim] |
| CL.cluster | /yʌpun/ | [yʌpusim] | [yʌpunšim] |

C.4 Enclitics

The following charts list all the enclitics following all the possible word-final segments. They are bound to the right side of the noun phrase or classifier phrase.

Table C.7 Enclitics

| root ² | gloss | /-bΛ/ DUBITATIVE | /-dΛ/ ABLATIVE | /-le/ DATIVE |
|-------------------|-------------------|------------------|----------------|----------------|
| /həbΛ/ | ‘grandma’ | [həbambΛ] | [həbatΛ] | [həbale] |
| /mΛŋΛΛ/ | ‘female’ | [mΛŋΛΛmbΛ] | [mΛŋΛΛtΛ] | [mΛŋΛΛle] |
| /giyame/ | ‘Giyame’ | [giyamembΛ] | [giyametΛ] | [giyamele] |
| /bΛbi/ | ‘male’ | [bΛbimbΛ] | [bΛbitΛ] | [bΛbile] |
| /ŋayamo/ | ‘Ngaymo’ | [ŋayamombΛ] | [ŋayamotΛ] | [ŋayamole] |
| /homu/ | ‘dog’ | [homumbΛ] | [homutΛ] | [homule] |
| /kisip/ | ‘Kisip’ | [kisipbΛ] | [kisipdΛ] | [kisipde] |
| /teŋat/ | ‘niece’s husband’ | [teŋatbΛ] | [teŋatdΛ] | [teŋatde] |
| /ok/ | ‘uncle’ | [okbΛ] | [okgΛ] | [okge] |
| /mom/ | ‘aunt’ | [mombΛ] | [momdΛ] | [momde] |
| /Λmin/ | ‘person’ | [ΛminbΛ] | [ΛmindΛ] | [Λminde] |
| /eŋaŋ/ | ‘child’ | [eŋaŋbΛ] | [eŋaŋgΛ] | [eŋaŋge] |
| /sailas/ | ‘Silas’ | [sailasbΛ] | [sailasdΛ] | [sailasde] |
| /dɛnyel/ | ‘Daniel’ | [dɛnyelbΛ] | [dɛnyeldΛ] | [dɛnyelde] |
| root | gloss | /gΛn/ ‘only’ | /-kΛt/ ‘with’ | /-kΛyΛ/ ‘also’ |
| /həbΛ/ | ‘grandma’ | [həbəkΛn] | [həbəkΛt] | [həbəkΛyΛ] |
| /mΛŋΛΛ/ | ‘female’ | [mΛŋΛΛkΛn] | [mΛŋΛΛkΛt] | [mΛŋΛΛkΛyΛ] |
| /giyame/ | ‘Giyame’ | [giyamekΛn] | [giyamekΛt] | [giyamekΛyΛ] |
| /bΛbi/ | ‘male’ | [bΛbikΛn] | [bΛbikΛt] | [bΛbikΛyΛ] |
| /ŋayamo/ | ‘Ngaymo’ | [ŋayamokΛn] | [ŋayamokΛt] | [ŋayamokΛyΛ] |
| /homu/ | ‘dog’ | [homukΛn] | [homukΛt] | [homukΛyΛ] |
| /kisip/ | ‘Kisip’ | [kisipdΛn] | [kisipΛt] | [kisipΛyΛ] |
| /teŋat/ | ‘niece’s husband’ | [teŋatdΛn] | [teŋatΛt] | [teŋatΛyΛ] |
| /ok/ | ‘uncle’ | [okgΛn] | [okΛt] | [okΛyΛ] |
| /mom/ | ‘aunt’ | [momdΛn] | [mopΛt] | [mopΛyΛ] |
| /Λmin/ | ‘person’ | [ΛmindΛn] | [ΛmitΛt] | [ΛmitΛyΛ] |
| /eŋaŋ/ | ‘child’ | [eŋaŋgΛn] | [eŋakΛt] | [eŋakΛyΛ] |
| /sailas/ | ‘Silas’ | [sailasdΛn] | [sailastΛt] | [sailastΛyΛ] |
| /dɛnyel/ | ‘Daniel’ | [dɛnyeldΛn] | [dɛnyeltΛt] | [dɛnyeltΛyΛ] |

² Names are used where there is no other known word with the same ending that could be used with many of these postpositions. Borrowed names with /s/ and /l/ final segments are also included in this chart for reference.

Table C.7 (continued)

| root | gloss | /-dane/ POSS | /-u/ TOPIC | /-udo/ NEG | /-un/ DIS |
|----------|-------------------|--------------|------------|--------------|------------|
| /haba/ | ‘grandma’ | [habatane] | [haba] | [habando] | [haban] |
| /maŋaɬa/ | ‘female’ | [maŋaɬatane] | [maŋaɬa] | [maŋaɬando] | [maŋaɬan] |
| /giyame/ | ‘Giyame’ | [giyametane] | [giyame] | [giyamendo] | [giyamen] |
| /babi/ | ‘male’ | [babitane] | [babi] | [babindo] | [babin] |
| /ŋayamo/ | ‘Ngaymo’ | [ŋayamotane] | [ŋayamo] | [ŋayamondo] | [ŋayamon] |
| /homu/ | ‘dog’ | [homutane] | [homu] | [homundo] | [homun] |
| /kisip/ | ‘Kisip’ | [kisipdane] | [kisibu] | [kisibundo] | [kisibun] |
| /teŋat/ | ‘niece’s husband’ | [teŋatdane] | [teŋalu] | [teŋalundo] | [teŋalun] |
| /ok/ | ‘uncle’ | [okgane] | [ogu] | [ogundo] | [ogun] |
| /mom/ | ‘aunt’ | [momdane] | [momu] | [momundo] | [momun] |
| /amin/ | ‘person’ | [amindane] | [aminu] | [aminundo] | [aminun] |
| /eŋaŋ/ | ‘child’ | [eŋaŋgane] | [eŋaŋu] | [eŋaŋundo] | [eŋaŋun] |
| /sailas/ | ‘Silas’ | [sailasdane] | [sailasu] | [sailasundo] | [sailasun] |
| /denyel/ | ‘Daniel’ | [denyeldane] | [denyelu] | [denyelundo] | [denyelun] |

Table C.7 (continued)

| root | gloss | /-katan/ ‘at’ | /-une/ LOCATIVE |
|------------|-------------|----------------|-----------------|
| /gɔpma/ | ‘hole’ | [gɔpmaɣatan] | [gɔpmane] |
| /yaŋga/ | ‘water’ | [yaŋgaɣatan] | [yaŋgane] |
| /dame/ | ‘landslide’ | [dameɣatan] | [damene] |
| /dɔki/ | ‘wood’ | [dɔkiɣatan] | [dɔkine] |
| /sako/ | ‘choko’ | [sakogatan] | [sakone] |
| /baku/ | ‘hill’ | [bakuɣatan] | [bakune] |
| /bulip/ | ‘forest’ | [bulipatan] | [bulibune] |
| /yot/ | ‘house’ | [yotatan] | [yolune] |
| /dɔkigok/ | ‘fireplace’ | [dɔkigokatan] | [dɔkigoɣune] |
| /kʷayim/ | ‘side’ | [kʷayipatan] | [kʷayimune] |
| /tɔban/ | ‘mountain’ | [tɔbatatan] | [tɔbanune] |
| /kʷaŋaɬoŋ/ | ‘whirlpool’ | [kʷaŋaɬokatan] | [kʷaŋaɬoŋune] |
| /balus/ | ‘plane’ | [balustatan] | [balusune] |
| /skul/ | ‘school’ | [skultatan] | [skulune] |

Table C.7 (continued)

| | root | gloss | /-ga/ ‘ever’ |
|------|-----------|---------------|--------------|
| a+__ | /ina/ | ‘what’ | [inaka] |
| Λ+__ | /sahipnΛ/ | ‘when.FUTURE’ | [sahipnΛka] |
| e+__ | /sΛne/ | ‘where’ | [sΛneka] |
| p+__ | /sahip/ | ‘when’ | [sahipda] |
| n+__ | /imin/ | ‘who’ | [iminda] |
| ŋ+__ | /dasiŋ/ | ‘how’ | [dasiŋga] |

C.5 Clausal postpositions

Table C.8 Clausal postpositions

| | Following a final verb | | | |
|------|------------------------|--------------|------------------|---------------|
| | verb | gloss | /-u/ CONDITIONAL | /-yΛ/ ‘after’ |
| a+__ | | | * | * |
| Λ+__ | | | * | * |
| e+__ | | | * | * |
| i+__ | | | * | * |
| o+__ | | | * | * |
| u+__ | | | * | * |
| p+__ | | | * | * |
| t+__ | /ku -gut/ | go -3S.PAST | [kukulu] | [kukutnΛ] |
| k+__ | /ku -gumΛk/ | go -1D.PAST | [kukumΛgu] | [kukumΛkŋΛ] |
| m+__ | /ku -gum/ | go -1S.PAST | [kukumu] | [kukumnΛ] |
| n+__ | /ku -gin/ | go -23P.PAST | [kukinu] | [kukinΛ] |
| ŋ+__ | /ku -gumΛŋ/ | go -1P.PAST | [kukumΛŋu] | [kukumΛŋΛ] |

* = no examples found in the data

Table C.8 (continued)

| | Following time words | | | Following place names | |
|------|-------------------------|----------------|---------------------------|-----------------------|------------------------|
| | Time word | gloss | /-yΛ/ 'after' | Place name | /-yΛ/ 'after' |
| a+__ | | | * | /goloka/ | [golokayΛ] |
| Λ+__ | /tembΛnΛ/ | morning | [tembΛnΛyΛ] | /matayΛ/ | [matayΛyΛ] |
| e+__ | /tuk ^w atde/ | afternoon | [tuk ^w atdeyΛ] | /bΛnjane / | [bΛnjaneyΛ] |
| i+__ | | | * | /bakundupi/ | [bakundupiyΛ] |
| o+__ | | | * | /ampo/ | [ampoyΛ] |
| u+__ | | | * | /yotbΛku/ | [yotbΛkuyΛ] |
| p+__ | /k ^w ep/ | ±1DAY | [k ^w epnΛ] | /bukΛp/ | [bukΛpnΛ] |
| t+__ | | | * | /hapit/ | [hapitnΛ] |
| k+__ | | | * | /yΛpulΛk/ | [yΛpulΛkɛΛ] |
| m+__ | /kepma -bom/ | noon -CL.place | [kepmaθomnΛ] | /bilom/ | [bilomnΛ] |
| n+__ | /yeθΛn/ | ±2DAY | [yeθΛnΛ] | /sakΛpΛn/ | [sakΛpΛnΛ] |
| ŋ+__ | | | * | /hik ^w Λŋ/ | [hik ^w ΛŋΛ] |

* = no examples found in the data.

Table C.9 Clausal postpositions with medial verb suffixes

| | | /-u/ CONDITIONAL | /-yΛ/ 'after' | /-un/ DISLOCATION |
|-------------------|----------|------------------|---------------|-------------------|
| SAME SUBJECT | | | | |
| SS.PF | /-keŋ/ | [kukeŋu] | [kukeŋΛ] | [kukeŋun] |
| SS.DUR.PF | /-hikaŋ/ | [kuhikaŋu] | [kuhikaŋΛ] | [kuhikaŋun] |
| SS.IPF | /-gabiŋ/ | [kuḡabiḡu] | [kuḡabiŋΛ] | [kuḡabiḡun] |
| DIFFERENT SUBJECT | | | | |
| 1s | /-pa/ | * | [kuḡayΛ] | [kuḡan] |
| 2s | /-pi/ | * | [kuḡiyΛ] | [kuḡin] |
| 3s | /-pΛn/ | [kuḡaḡΛnu] | [kuḡΛnΛ] | [kuḡΛnun] |
| 1d | /-da/ | * | [kutayΛ] | [kutan] |
| 23d | /-pΛt/ | [kuḡaḡΛlu] | [kuḡΛtnΛ] | [kuḡΛlun] |
| 1p | /-na/ | * | [kunayΛ] | [kunan] |
| 23p | /-pΛ/ | * | [kuḡaḡΛyΛ] | [kuḡΛn] |

The medial verb is /ku/ 'go'.

Appendix D: Reduplication

Table D.1 lists examples of reduplication where the base form exists independently.

Table D.1 Reduplication with base

| UF | base gloss | PR | reduplicated gloss |
|-----------------|---------------------|----------------|-----------------------|
| /RED+bʌlʌŋ/ | ‘leg’ | [bʌlʌmbʌlʌŋ] | ‘legs’ |
| /RED+dasiŋ/ | ‘how’ | [dasiŋdasiŋ] | ‘how many’ |
| /RED+don/ | ‘property’ | [dondon] | ‘bush, property’ |
| /RED+epʌn/ | ‘he came down’ | [epʌnepʌn] | ‘same parents’ |
| /RED+gataʔk/ | ‘to stick’ | [gataʔkgataʔk] | ‘sticky, sticky seed’ |
| /RED+gʌtam/ | ‘large nut’ | [gʌtamgʌtam] | ‘nut species’ |
| /RED+guŋat/ | ‘bird species’ | [guŋakguŋat] | ‘butterfly’ |
| /RED+gʷak/ | ‘sprout’ | [gʷakgʷak] | ‘traditional bean’ |
| /RED+haŋa/ | ‘thing’ | [haŋahaŋa] | ‘things’ |
| /RED+halu/ | ‘sand, beach’ | [haluhalu] | ‘sand, grain’ |
| /RED+hoŋʌ/ | ‘fruitless’ | [hoŋʌhoŋʌ] | ‘fruitlessly’ |
| /RED+imin/ | ‘who singular’ | [imiimin] | ‘who plural’ |
| /RED+ina/ | ‘what singular’ | [inaina] | ‘what plural’ |
| /RED+inʌ/ | ‘3.emphatic’ | [inʌinʌ] | ‘alone’ |
| /RED+ipmʌ/ | ‘cut’ | [ipmʌipmʌk] | ‘drizzle’ |
| /RED+kʌtak/ | ‘hand’ | [kʌtakʌtak] | ‘yam’ |
| /RED+kʌtum/ | ‘dumb’ | [kʌtukʌtum] | ‘retarded’ |
| /RED+kekem/ | ‘wrong’ | [kekekekem] | ‘wrong’ |
| /RED+kep/ | ‘ground’ | [kekep] | ‘field’ |
| /RED+kok/ | ‘intestines’ | [kokok] | ‘diarrhoea’ |
| /RED+kupit/ | ‘dry’ | [kupikupit] | ‘dried’ |
| /RED+kʷak/ | ‘light’ | [kʷakʷak] | ‘bean’ |
| /RED+kʷalu/ | ‘bamboo’ | [kʷaluŋwalu] | ‘bamboo species’ |
| /RED+matek -ŋʌ/ | ‘small singular’ | [matekmatekŋʌ] | ‘small plural’ |
| /RED+miŋ/ | ‘mother’ | [mimiŋ] | ‘aunt’ |
| /RED+mulup/ | ‘dust’ | [mulupmulup] | ‘dust’ |
| /RED+palʌm/ | ‘boil’ | [palʌpalʌm] | ‘boil’ |
| /RED+put/ | ‘break’ | [puput] | ‘knuckle’ |
| /RED+tʌbi/ | ‘thick mucous’ | [tʌmbilʌmbi] | ‘thin mucous’ |
| /RED+tʌpʌ/ | ‘Cl.Stick singular’ | [tʌpʌlʌpʌ] | ‘Cl.Stick plural’ |
| /RED+tobik/ | ‘care taker’ | [tobitobik] | ‘orphan’ |
| /RED+tut/ | ‘fingernail’ | [tutut] | ‘fence’ |

| | | | |
|---------------|------------|------------------|-------------------|
| /RED+uli/ | ‘sharp’ | [uliuli] | ‘burr’ |
| /RED+usiŋ/ | ‘that way’ | [usiŋusiŋ] | ‘so many’ |
| /RED+ʔabi/ | ‘spider’ | [ʔambiʔambi] | ‘spider, small’ |
| /RED+ʔabu/ | ‘spirit’ | [ʔabuʔabu] | ‘sweat, perspire’ |
| /RED+ʔepdʌ/ | ‘gently’ | [ʔepdʌʔepdʌ] | ‘slowly’ |
| /RED+yaŋgʌ/ | ‘water’ | [yaŋgʌyaŋgʌ] | ‘watery’ |
| /RED+yibiʔik/ | ‘reside’ | [yibiʔikyibiʔik] | ‘lifestyle’ |

Table D.2 lists examples of reduplication where the base form does not exist independently.

Table D.2 Reduplication with no base form

| UF | PR | Gloss |
|-----------------------------|--|--------------------------|
| /RED+dʌn/ | [dʌndʌn] | ‘teeth’ |
| /RED+dʌpʌ/ | [dʌpʌndʌpʌ] | ‘fire pit dirt’ |
| /RED+dati/ | [datʌndati] | ‘bird species’ |
| /RED+gak/ | [gakgak] | ‘tree species’ |
| /RED+giniŋ/ | [giniŋginiŋ] | ‘naughty’ |
| /RED+g ^w ak/ | [g ^w aŋg ^w ak] | ‘banana fibre’ |
| /RED+g ^w ilʌ/ | [g ^w ikg ^w ilʌ] | ‘shell’ |
| /RED+kʌlʌk/ | [kʌlʌkʌlʌk] | ‘noise’ |
| /RED+kulʌn/ | [kulʌkulʌn] | ‘branches’ |
| /RED+k ^w ik-ŋʌ/ | [k ^w ik ^w ikŋʌ] | ‘cool’, ‘gentle’, ‘mild’ |
| /RED+mʌk/ | [mʌpmʌk] | ‘mud’ |
| /RED+mut/ | [mupmut] | ‘chest’ |
| /RED+mus/ | [musmus] | ‘louse species’ |
| /RED+nʌgʌt/ | [nʌgʌtnʌgʌt] | ‘fearful’ |
| /RED+oŋ/ | [oŋoŋ] | ‘housefly’ |
| /RED+opʌ-k/ | [opʌopʌk] | ‘wrong’ |
| /RED+pun/ | [pumbun] | ‘roof pole’ |
| /RED+taŋ/ | [tataŋ] | ‘quartz’ |
| /RED+tiŋgi/ | [tiŋgitiŋgi] | ‘bird species’ |
| /RED+tolok/ | [tolotolok] | ‘spotted’ |
| /RED+ʔʌlu/ | [ʔʌluʔʌlu] | ‘winter squash’ |
| /ʔam+RED+k ^w ik/ | [ʔamk ^w ik ^w ik] | ‘blessing’ |

Appendix E: Compounds

Table E.1 lists compounds where both roots exist independently.

Table E.1 Compounds

| UF | gloss | PR | compound gloss |
|-------------------------------|-------------------------|----------------------------|---------------------|
| /alak + katap/ | ‘bamboo + wood’ | [alakatap] | ‘torch’ |
| /amin + tap/ | ‘person + CL.stick’ | [amitapa] | ‘sorcerer’ |
| /balan + tok/ | ‘leg + pain’ | [balatok] | ‘uselessly’ |
| /banip + amin/ | ‘inside + person’ | [banipamin] | ‘believer’ |
| /banip + g ^w alan/ | ‘inside + nice’ | [banipg ^w alan] | ‘kindness’ |
| /daki + bom/ | ‘wood + CL.place’ | [daki ^b om] | ‘smouldering stick’ |
| /dam + dak/ | ‘rope + CL.thick’ | [damdak] | ‘banana species’ |
| /gulak + salin/ | ‘neck + seed’ | [gulaksalin] | ‘Adam’s apple’ |
| /gusit + kayi/ | ‘time + eye’ | [gusitkayi] | ‘sun’ |
| /g ^w ame + babak/ | ‘pitpit + son’ | [g ^w amebabak] | ‘insect species’ |
| /hak + miŋa/ | ‘bird.species + mother’ | [hakamiŋa] | ‘bush fowl’ |
| /hup + salin/ | ‘stone + seed’ | [hupsalin] | ‘coin’ |
| /ibat + amin/ | ‘illness + person’ | [ibatamin] | ‘sick person’ |
| /kep + yamun/ | ‘ground + quake’ | [kepyamun] | ‘earthquake’ |
| /kuhit + palan/ | ‘head + thorn’ | [kuhipalan] | ‘insect species’ |
| /kutap + kupit/ | ‘yam + black’ | [kutapkupit] | ‘yam species’ |
| /maŋat + dak/ | ‘girl + CL.thick’ | [maŋatdak] | ‘pitpit species’ |
| /mekŋan + kubit/ | ‘forest + I will go’ | [mekŋakubit] | ‘bird species’ |
| /puy + don/ | ‘garden + property’ | [puyandon] | ‘old garden’ |
| /tak ^w an + salin/ | ‘holy + seed’ | [tak ^w asalin] | ‘limbum seed’ |
| /bam + gaman/ | ‘speech + red’ | [bamgaman] | ‘scolding’ |
| /bam + yayak/ | ‘speech + loose’ | [bamyayak] | ‘speaker’ |
| /banam + hakat/ | ‘cassowary + yellow’ | [banamhakat] | ‘cassowary species’ |
| /bat + g ^w alik/ | ‘sore + scar’ | [batang ^w alik] | ‘scar’ |
| /bat + bamak/ | ‘sore + he tied it’ | [batbamak] | ‘doctor’ |
| /babak + dak/ | ‘son + CL.thick’ | [babakndak] | ‘child’ |
| /yang + saŋut/ | ‘water + lid’ | [yangsaŋut] | ‘fern’ |
| /yayin + kuhit/ | ‘step + head’ | [yayikuhit] | ‘fence’ |

Table E.2 lists compounds in which one element does not exist independently.

Table E.2 Cranberry compounds

| UF | gloss | PR | compound gloss |
|-------------------------------|------------------|---------------------------|------------------|
| /gulʌk + k ^w ikat/ | ‘neck + ?’ | [gulʌk ^w ikat] | ‘plant’ |
| /katak + pʌpʌk/ | ‘hand + ?’ | [katapʌpʌk] | ‘handle’ |
| /katʌtek + mʌmʌn/ | ‘elbow + ?’ | [katʌtekmʌmʌn] | ‘frog species’ |
| /kok + dek/ | ‘intestines + ?’ | [kokdek] | ‘toilet’ |
| /naŋ + gamin/ | ‘father + ?’ | [naŋgamin] | ‘insect species’ |
| /napʌt + taŋuk/ | ‘? + He hits it’ | [napʌtaŋuk] | ‘flower species’ |
| /nep + gʌmʌn/ | ‘? + red’ | [nepgʌmʌn] | ‘sweat’ |
| /yot + pupuk/ | ‘house + ?’ | [yopupuk] | ‘old place’ |

Appendix F: Verb morphology paradigms

F.1 Verb object prefix

Verb forms in Tables F.1 and F.2 are marked with object agreement prefixes and the subject agreement suffix /-k/ 3S.PRESENT.

Table F.1 Verb object prefixes

| | /pmit/ ‘pass’ | /ha/ ‘bite’ | /mi/ ‘give’ | /nidatap/ ‘thank’ | /nidΛmut/ ‘teach’ | |
|------|------------------|----------------|----------------|----------------------|----------------------|--------------|
| 1S.O | /na-/ | [napmik] | [nahak] | [namik] | [nanindatak] | [nanindΛmuk] |
| 2S.O | /ga-/ | [gapmik] | [gahak] | [gamik] | [ganindatak] | [ganindΛmuk] |
| 3S.O | /i-/ | [yapmik] | [ihik] | [imik] | [inindatak] | [inindΛmuk] |
| 1P.O | /ni-/ | [nipmik] | [nihik] | [nimik] | [ninindatak] | [ninindΛmuk] |
| 2P.O | /da-/ | [dapmik] | [dahak] | [damik] | [danindatak] | [danindΛmuk] |
| 3P.O | /yΛ-/ | [yΛpmik] | [yΛhak] | [yΛmik] | [yΛnindatak] | [yΛnindΛmuk] |

Table F.1 Verb object prefixes (continued)

| | /nimit/ ‘laugh at’ | /ni/ ‘tell’ | /pman/ ‘take hand’ | /tʌŋi/ ‘slice’ | |
|------|-----------------------|----------------|-----------------------|-------------------|-----------|
| 1S.O | /na-/ | [nanimik] | [nanik] | [nʌpmak] | [natʌŋik] |
| 2S.O | /ga-/ | [ganimik] | [ganik] | [gʌpmak] | [gatʌŋik] |
| 3S.O | /i-/ | [inimik] | [inik] | [ipmak] | [itʌŋik] |
| 1P.O | /ni-/ | [ninimik] | [ninik] | [nipmak] | [nitʌŋik] |
| 2P.O | /da-/ | [danimik] | [danik] | [dapmak] | [datʌŋik] |
| 3P.O | /yʌ-/ | [yʌnimik] | [yʌnik] | [yʌpmak] | [yʌtʌŋik] |

Table F.2 Irregular verb object prefixes

| | /dup/ 'see' | /duŋha/ 'want' | /hipma/ 'hit' | /θam/ 'follow' | /ya-θam/ 'call' |
|------|----------------|-------------------|------------------|-------------------|--------------------|
| 1S.O | [nanduk] | [nandunhak] | [nuk] | [nʌθak] | [yanʌθak] |
| 2S.O | [ganduk] | [gandunhak] | [guk] | [gʌθak] | [yanɡʌθak] |
| 3S.O | [kak] | [kaŋhak] | [taŋuk] | [tʌθak] | [yatʌθak] |
| 1P.O | [ninduk] | [nindunhak] | [nihipmaʔk] | [niθak] | [yanibak] |
| 2P.O | [danduk] | [dandunhak] | [dahipmaʔk] | [dʌθak] | [yandʌθak] |
| 3P.O | [dayik] | [dayinhak] | [sipmaʔk] | [yʌθak] | [yanɣʌθak] |

F.2 Verb proclitics

Table F.3 Verb proclitics

| gloss | /a-/ PREDICATE FOCUS | /do-/ NEGATIVE | /ma-/ PROHIBITIVE |
|---------------|-------------------------|-------------------|----------------------|
| 'come up' | [akok] | [aakok] | [doakok] |
| 'come down' | [epuk] | [aepuk] | [doepuk] |
| 'attach' | [itʌk] | [aitʌk] | [doitʌk] |
| 'cover' | [omik] | [aomik] | [doomik] |
| 'remove' | [utdok] | [autdok] | [doutdok] |
| 'do' | [pʌhak] | [aθʌhak] | [doθʌhak] |
| 'drink' | [taŋok] | [alaŋok] | [dolaŋok] |
| 'go up' | [kok] | [aɣok] | [doɣok] |
| 'dig' | [kʷayik] | [aɣwayik] | [doɣwayik] |
| 'sew' | [bupmaʔk] | [ambupmaʔk] | [dombupmaʔk] |
| 'detach' | [dek] | [andek] | [dondek] |
| 'stick' | [gataʔk] | [aŋgataʔk] | [doŋgataʔk] |
| 'carry' | [gʷʌlamik] | [aŋgʷʌlamik] | [doŋgʷʌlamik] |
| 'shoot' | [masik] | [amasik] | [domasik] |
| 'eat' | [nak] | [anak] | [donak] |
| 'tie' | [θamaʔk] | [aθamaʔk] | [doθamaʔk] |
| 'shoot/write' | [yamaʔk] | [ayamaʔk] | [doyamaʔk] |
| 'wash' | [haluk] | [ahaluk] | [dohaluk] |
| 'loosen' | [sik] | [asik] | [dosik] |

The PREDICATE FOCUS and NEGATIVE are shown with 3S.PRESENT subject agreement. The PROHIBITIVE is shown with 2S.IMMEDIATE subject agreement.

F.3 Verb subject agreement suffixes**Table F.4** PRESENT with all the verb root types

| | | mä-final /bupmΛ/ ‘sew’ | V-final /matΛ/ ‘cut’ | V-final NL ^a /na/ ‘eat’ | p-final /taŋop/ ‘drink’ |
|-----|----------|---------------------------|-------------------------|---------------------------------------|----------------------------|
| 1S | /-t/ | [bupmΛt] | [matΛt] | [nat] | [taŋot] |
| 2S | /-lΛk/ | [bupmΛlΛk] | [matΛlΛk] | [nalΛk] | [taŋolΛk] |
| 3S | /-k/ | [bupmΛk] | [matΛk] | [nak] | [taŋok] |
| 1D | /-mΛk/ | [bupmΛmΛk] | [matΛmΛk] | [namΛk] | [taŋomΛk] |
| 23D | /-mΛlΛk/ | [bupmΛmΛlΛk] | [matΛmΛlΛk] | [namΛlΛk] | [taŋomΛlΛk] |
| 1P | /-mΛŋ/ | [bupmΛmΛŋ] | [matΛmΛŋ] | [namΛŋ] | [taŋomΛŋ] |
| 23P | /-yiŋ/ | [bupmΛyiŋ] | [matΛyiŋ] | [nayiŋ] | [taŋoyiŋ] |

^aNL = nonleniting.

Table F.4 PRESENT with all the verb root types (continued)

| | | p-final deleting /akop/ ‘come up’ | t-final /halut/ ‘wash’ | t-final voicing /mut/ ‘throw’ |
|-----|----------|--------------------------------------|---------------------------|----------------------------------|
| 1S | /-t/ | [akot] | [halut] | [mut] |
| 2S | /-lΛk/ | [akolΛk] | [halulΛk] | [mulΛk] |
| 3S | /-k/ | [akok] | [haluk] | [muk] |
| 1D | /-mΛk/ | [akomΛk] | [halumΛk] | [mumΛk] |
| 23D | /-mΛlΛk/ | [akomΛlΛk] | [halumΛlΛk] | [mumΛlΛk] |
| 1P | /-mΛŋ/ | [akomΛŋ] | [halumΛŋ] | [mumΛŋ] |
| 23P | /-yiŋ/ | [akoyiŋ] | [haluyiŋ] | [muyiŋ] |

Table F.5 PAST with all the verb root types

| | | mä-final /bupmΛ/ ‘sew’ | V-final /matΛ/ ‘cut’ | V-final NL ^a /na/ ‘eat’ | p-final /taŋop/ ‘drink’ |
|-----|------------|---------------------------|-------------------------|---------------------------------------|----------------------------|
| 1S | /-gum/ | [bupbum] | [matΛkum] | [nakum] | [taŋopbum] |
| 2S | /-gulΛk/ | [bupbulΛk] | [matΛkulΛk] | [nakulΛk] | [taŋopbulΛk] |
| 3S | /-gut/ | [bupbut] | [matΛkut] | [nakut] | [taŋopbut] |
| 1D | /-gumΛk/ | [bupbumΛk] | [matΛkumΛk] | [nakumΛk] | [taŋopbumΛk] |
| 23D | /-gumΛlΛk/ | [bupbumΛlΛk] | [matΛkumΛlΛk] | [nakumΛlΛk] | [taŋopbumΛlΛk] |
| 1P | /-gumΛŋ/ | [bupbumΛŋ] | [matΛkumΛŋ] | [nakumΛŋ] | [taŋopbumΛŋ] |
| 23P | /-gin/ | [bupbin] | [matΛkin] | [nakin] | [taŋopbin] |

^aNL = nonleniting.

Table F.5 PAST with all the verb root types (continued)

| | | p-final deleting /akop/ 'come up' | t-final /halut/ 'wash' | t-final voicing /mut/ 'throw' |
|-----|------------|--------------------------------------|---------------------------|----------------------------------|
| 1S | /-gum/ | [akopbum] | [halukum] | [mukum] |
| 2S | /-gulak/ | [akopbulak] | [halukulak] | [mukulak] |
| 3S | /-gut/ | [akopbut] | [halukut] | [mukut] |
| 1D | /-gumak/ | [akopbumak] | [halukumak] | [mukumak] |
| 23D | /-gumalak/ | [akopbumalak] | [halukumalak] | [mukumalak] |
| 1P | /-gumə/ | [akopbumə] | [halukumə] | [mukumə] |
| 23P | /-gin/ | [akopbin] | [halukin] | [mukin] |

Table F.6 FUTURE with all the verb root types

| | | mā-final /bupm/ 'sew' | V-final /mat/ 'cut' | V-final NL ^a /na/ 'eat' | p-final /taŋop/ 'drink' |
|-----|------------|--------------------------|------------------------|---------------------------------------|----------------------------|
| 1S | /-pit/ | [bupit] | [matəbit] | [nəpit] | [taŋopit] |
| 2S | /-pilak/ | [bupilak] | [matəbilak] | [nəpilak] | [taŋopilak] |
| 3S | /-pik/ | [bupik] | [matəbik] | [nəpik] | [taŋopik] |
| 1D | /-him/ | [bupsim] | [matəhim] | [nəhim] | [taŋopsim] |
| 23D | /-himalak/ | [bupsimalak] | [matəhimalak] | [nəhimalak] | [taŋopsimalak] |
| 1P | /-nim/ | [bupnim] | [matənim] | [nənim] | [taŋopnim] |
| 23P | /-niŋ/ | [bupniŋ] | [matəniŋ] | [nəniŋ] | [taŋopniŋ] |

^aNL = nonleniting.

Table F.6 FUTURE with all the verb root types (continued)

| | | p-final deleting /akop/ 'come up' | t-final /halut/ 'wash' | t-final voicing /mut/ 'throw' |
|-----|------------|--------------------------------------|---------------------------|----------------------------------|
| 1S | /-pit/ | [akopit] | [halubit] | [mumbit] |
| 2S | /-pilak/ | [akopilak] | [halubilak] | [mumbilak] |
| 3S | /-pik/ | [akopik] | [halubik] | [mumbik] |
| 1D | /-him/ | [akopsim] | [halusim] | [musim] |
| 23D | /-himalak/ | [akopsimalak] | [halusimalak] | [musimalak] |
| 1P | /-nim/ | [akopnim] | [halutnim] | [mutnim] |
| 23P | /-niŋ/ | [akopniŋ] | [halutniŋ] | [mutniŋ] |

Table F.7 IMMEDIATE with all the verb root types

| | | mä-final /bupmΛ/ ‘sew’ | V-final /matΛ/ ‘cut’ | V-final NL ^a /na/ ‘eat’ | p-final /taŋop/ ‘drink’ |
|-----|--------|---------------------------|-------------------------|---------------------------------------|----------------------------|
| 1S | /-pa/ | [bupa] | [mataβa] | [nΛpa] | [taŋopa] |
| 2S | /-ŋ/ | [bupmΛŋ] | [matΛŋ] | [naŋ] | [taŋop] |
| 3S | /-pΛn/ | [bupΛn] | [mataβΛn] | [napΛn] | [taŋopΛn] |
| 1D | /-da/ | [bupda] | [matata] | [nΛta] | [taŋopda] |
| 23D | /-gʊn/ | [bupbun] | [matagʊn] | [naɡʊn] | [taŋopbun] |
| 1P | /-na/ | [bupna] | [matana] | [nΛna] | [taŋopna] |
| 23P | /-gʊt/ | [bupbut] | [matagʊt] | [naɡʊt] | [taŋopbut] |

^aNL = nonleniting.

Table F.7 IMMEDIATE with all the verb root types (continued)

| | | p-final deleting /akop/ ‘come up’ | t-final /halut/ ‘wash’ | t-final voicing /mut/ ‘throw’ |
|-----|--------|--------------------------------------|---------------------------|----------------------------------|
| 1S | /-pa/ | [akopa] | [haluβa] | [mumba] |
| 2S | /-ŋ/ | [akop] | [halut] | [mut] |
| 3S | /-pΛn/ | [akopΛn] | [haluβΛn] | [mumbΛn] |
| 1D | /-da/ | [akopdΛ] | [halutda] | [mutda] |
| 23D | /-gʊn/ | [akopbun] | [halugʊn] | [muɡʊn] |
| 1P | /-na/ | [akopna] | [halutna] | [mutna] |
| 23P | /-gʊt/ | [akopbut] | [halugʊt] | [muɡʊt] |

Table F.8 IMPERATIVE with all the verb root types

| | | mä-final /bupmΛ/ ‘sew’ | V-final /matΛ/ ‘cut’ | V-final NL ^a /na/ ‘eat’ | p-final /taŋop/ ‘drink’ |
|-----|--------|---------------------------|-------------------------|---------------------------------------|----------------------------|
| 1S | /-yot/ | [bupsot] | [matΛyot] | [nΛyot] | [taŋopsot] |
| 2S | /-yo/ | [bupso] | [matΛyo] | [nΛyo] | [taŋopso] |
| 3S | /-yok/ | [bupsok] | [matΛyok] | [nΛyok] | [taŋopsok] |
| 1D | /-hom/ | [bupsom] | [matΛhom] | [nΛhom] | [taŋopsom] |
| 23D | /-hon/ | [bupson] | [matΛhon] | [nΛhon] | [taŋopson] |
| 1P | /-nom/ | [bupnom] | [matΛnom] | [nΛnom] | [taŋopnom] |
| 23P | /-noŋ/ | [bupnoŋ] | [matΛnoŋ] | [nΛnoŋ] | [taŋopnoŋ] |

^aNL = nonleniting.

Table F.8 IMPERATIVE with all the verb root types (continued)

| | | p-final deleting /akop/ 'come up' | t-final /halut/ 'wash' | t-final voicing /mut/ 'throw' |
|-----|--------|--------------------------------------|---------------------------|----------------------------------|
| 1S | /-yot/ | [akopsot] | [haluyot] | [muyot] |
| 2S | /-yo/ | [akopso] | [haluyo] | [muyo] |
| 3S | /-yok/ | [akopsok] | [haluyok] | [muyok] |
| 1D | /-hom/ | [akopsom] | [halusom] | [musom] |
| 23D | /-hon/ | [akopson] | [haluson] | [musion] |
| 1P | /-nom/ | [akopnom] | [halutnom] | [mutnom] |
| 23P | /-noŋ/ | [akopnoŋ] | [halutnoŋ] | [mutnoŋ] |

Table F.9 APPREHENSION with all the verb root types

| | | mā-final /bupmΛ/ 'sew' | V-final /matΛ/ 'cut' | V-final NL ^a /na/ 'eat' | p-final /taŋop/ 'drink' |
|-----|--------|---------------------------|-------------------------|---------------------------------------|----------------------------|
| 1S | /-yΛt/ | [bupsΛt] | [matayΛt] | [nΛyΛt] | [taŋopsΛt] |
| 2S | /-yΛ/ | [bupsΛ] | [matayΛ] | [nΛyΛ] | [taŋopsΛ] |
| 3S | /-yΛk/ | [bupsΛk] | [matayΛk] | [nΛyΛk] | [taŋopsΛk] |
| 1D | /-hΛm/ | [bupsΛm] | [matΛhΛm] | [nΛhΛm] | [taŋopsΛm] |
| 23D | /-hΛn/ | [bupsΛn] | [matΛhΛn] | [nΛhΛn] | [taŋopsΛn] |
| 1P | /-nΛm/ | [bupnΛm] | [matΛnΛm] | [nΛnΛm] | [taŋopnΛm] |
| 23P | /-nΛŋ/ | [bupnΛŋ] | [matΛnΛŋ] | [nΛnΛŋ] | [taŋopnΛŋ] |

^aNL = nonleniting.

Table F.9 APPREHENSION with all the verb root types (continued)

| | | p-final deleting /akop/ 'come up' | t-final /halut/ 'wash' | t-final voicing /mut/ 'throw' |
|-----|--------|--------------------------------------|---------------------------|----------------------------------|
| 1S | /-yΛt/ | [akopsΛt] | [haluyΛt] | [muyΛt] |
| 2S | /-yΛ/ | [akopsΛ] | [haluyΛ] | [muyΛ] |
| 3S | /-yΛk/ | [akopsΛk] | [haluyΛk] | [muyΛk] |
| 1D | /-hΛm/ | [akopsΛm] | [halusΛm] | [musΛm] |
| 23D | /-hΛn/ | [akopsΛn] | [halusΛn] | [musΛn] |
| 1P | /-nΛm/ | [akopnΛm] | [halutnΛm] | [mutnΛm] |
| 23P | /-nΛŋ/ | [akopnΛŋ] | [halutnΛŋ] | [mutnΛŋ] |

Table F.10 HYPOTHETICAL with all the verb root types

| | mā-final /bupmΛ/ ‘sew’ | V-final /matΛ/ ‘cut’ | V-final NL ^a /na/ ‘eat’ | p-final /taŋop/ ‘drink’ |
|------------|---------------------------|-------------------------|---------------------------------------|----------------------------|
| 1S /-pam/ | [bupam] | [matΛbām] | [nΛpam] | [taŋopam] |
| 2S /-pim/ | [bupim] | [matΛbīm] | [napim] | [taŋopim] |
| 3S /-pΛn/ | [bupΛn] | [matΛbΛn] | [napΛn] | [taŋopΛn] |
| 1D /-dam/ | [bupdam] | [matΛtam] | [natam] | [taŋopdam] |
| 23D /-pΛt/ | [bupΛt] | [matΛbΛt] | [napΛt] | [taŋopΛt] |
| 1P /-nam/ | [bupnam] | [matΛnam] | [nΛnam] | [taŋopnam] |
| 23P /-pΛm/ | [bupΛm] | [matΛbΛm] | [napΛm] | [taŋopΛm] |

^aNL = nonleniting.

Table F.10 HYPOTHETICAL with all the verb root types (continued)

| | p-final deleting /akop/ ‘come up’ | t-final /halut/ ‘wash’ | t-final voicing /mut/ ‘throw’ |
|------------|--------------------------------------|---------------------------|----------------------------------|
| 1S /-pam/ | [akopam] | [halubām] | [mumbam] |
| 2S /-pim/ | [akopim] | [halubīm] | [mumbim] |
| 3S /-pΛn/ | [akopΛn] | [halubΛn] | [mumbΛn] |
| 1D /-dam/ | [akopdam] | [halutdam] | [mutdam] |
| 23D /-pΛt/ | [akopΛt] | [halubΛt] | [mumbΛt] |
| 1P /-nam/ | [akopnam] | [halutnam] | [mutnam] |
| 23P /-pΛm/ | [akopΛm] | [halubΛm] | [mumbΛm] |

Table F.11 PROBABLE with all the verb root types

| | mā-final /bupmΛ/ ‘sew’ | V-final /matΛ/ ‘cut’ | V-final NL ^a /na/ ‘eat’ | p-final /taŋop/ ‘drink’ |
|---------------------------|---------------------------|-------------------------|---------------------------------------|----------------------------|
| 3S /-pΛnak/ | [bupΛnak] | [matabΛnak] | [napΛnak] | [taŋopΛnak] |
| 3D ^b /-pΛtnak/ | [bupΛtnak] | [matabΛtnak] | [napΛtnak] | [taŋopΛtnak] |
| 3D ^b /-pΛlak/ | [bupΛlak] | [matabΛlak] | [napΛlak] | [taŋopΛlak] |
| 3P /-pΛyak/ | [bupΛyak] | [matabΛyak] | [napΛyak] | [taŋopΛyak] |

^a NL = nonleniting.^b There are two forms for 3D.PROBABLE.

Table F.11 PROBABLE with all the verb root types (continued)

| | | p-final deleting /akop/ 'come up' | t-final /halut/ 'wash' | t-final voicing /mut/ 'throw' |
|----|-----------|--------------------------------------|---------------------------|----------------------------------|
| 3S | /-pʌnak/ | [akopʌnak] | [haluḅʌnak] | [mumbʌnak] |
| 3D | /-pʌtnak/ | [akopʌtnak] | [haluḅʌtnak] | [mumbʌtnak] |
| 3D | /-pʌlak/ | [akopʌlak] | [haluḅʌlak] | [mumbʌlak] |
| 3P | /-pʌyak/ | [akopayak] | [haluḅayak] | [mumbayak] |

Table F.12 lists the combined subject agreement suffixes together. It is impossible to consistently separate tense or mood from person and number for the suffixes shown in Table F.12. There are multiple forms for the combined person and number as well as multiple forms for tense and mood. The choice of which forms to use does not appear to be morphophonemically based. Since it is impossible to predict which tense or mood form is used with which person and number form, they are analysed as a single combined suffix.

Table F.12 Subject agreement summary chart

| Suffix | 1S | 2S | 3S | 1D | 23D | 1P | 23P |
|--------|--------|----------|--------|----------|------------|----------|--------|
| PRES | /-t/ | /-lʌk/ | /-k/ | /-mʌk/ | /-mʌlʌk/ | /-mʌŋ/ | /-yiŋ/ |
| PAST | /-gum/ | /-gulʌk/ | /-gut/ | /-gumʌk/ | /-gumʌlʌk/ | /-gumʌŋ/ | /-gin/ |
| FUT | /-pit/ | /-pilʌk/ | /-pik/ | /-him/ | /-himʌlʌk/ | /-nim/ | /-niŋ/ |
| IMM | /-pa/ | /-ŋ/ | /-pʌn/ | /-da/ | /-ḡun/ | /-na/ | /-ḡut/ |
| IMP | /-yot/ | /-yo/ | /-yok/ | /-hom/ | /-hon/ | /-nom/ | /-noŋ/ |
| APPR | /-yʌt/ | /-yʌ/ | /-yʌk/ | /-hʌm/ | /-hʌn/ | /-nʌm/ | /-nʌŋ/ |
| HYP | /-pam/ | /-pim/ | /-pʌn/ | /-dam/ | /-pʌt/ | /-nam/ | /-pʌm/ |
| DS | /-pa/ | /-pi/ | /-pʌn/ | /-da/ | /-pʌt/ | /-na/ | /-pʌ/ |

F.4 Verb aspectual markers

Table F.13 Aspect suffixes with all the verb root types and appropriate subject agreement suffixes

| | | mā-final /bupmΛ/ ‘sew’ | V-final /matΛ/ ‘cut’ | V-final NL ^a /na/ ‘eat’ |
|------------|-----------|---------------------------|-------------------------|---------------------------------------|
| S.DIPF | /-ga/ | [bupmΛŋgak] | [matΛŋgak] | [nΛŋgak] |
| P.DIPF | /-ka/ | [bumΛkayin] | [matΛkayin] | [nΛkayin] |
| S.IPF | /-ga/ | [bupmΛgəbΛn] | [matΛgəbΛn] | [nəgəbΛn] |
| PERSISTENT | /-gΛmata/ | [bupmΛŋgΛmatΛk] | * | [nəŋgΛmatΛŋgak] |
| DURATIVE | /-hi/ | [bupmΛhik] | [matΛhik] | [nahik] |

^aNL = nonleniting.

Table F.13 Aspect suffixes with all the verb root types and appropriate subject agreement suffixes (continued)

| | | p-final /taŋop/ ‘drink’ | p-final deleting /akop/ ‘come up’ |
|------------|-----------|----------------------------|--------------------------------------|
| S.DIPF | /-ga/ | [taŋokgak] | [akŋgak] |
| P.DIPF | /-ka/ | [taŋokayin] | [akokayin] |
| S.IPF | /-ga/ | [taŋogəbΛn] | [akogəbΛn] |
| PERSISTENT | /-gΛmata/ | [taŋokgΛmatΛk] | * |
| DURATIVE | /-hi/ | [taŋohik] | [akohik] |

Table F.13 Aspect suffixes with all the verb root types and appropriate subject agreement suffixes (continued)

| | | t-final /halut/ ‘wash’ | t-final voicing /mut/ ‘throw’ |
|------------|-----------|---------------------------|----------------------------------|
| S.DIPF | /-ga/ | [halukgak] | [mukgak] |
| P.DIPF | /-ka/ | [halukayin] | [mukayin] |
| S.IPF | /-ga/ | [halugəbΛn] | [mugəbΛn] |
| PERSISTENT | /-gΛmata/ | [halukgΛmatΛk] | [mukgΛmatΛk] |
| DURATIVE | /-hi/ | [haluhik] | [muhik] |

Subject agreement suffixes are /-k/ 3S, /-yin/ 3P, and /-pΛn/ 3S.DS.

Table F.14 Modal nouns with all the verb root types

| | | mā-final /bupmΛ/ ‘sew’ | V-final /matΛ/ ‘cut’ | V-final NL /na/ ‘eat’ | p-final /taɲop/ ‘drink’ |
|---------|-----------|---------------------------|-------------------------|--------------------------|----------------------------|
| DEONTIC | /-naɲΛn/ | [bupnaɲΛn] | [matΛnaɲΛn] | [nΛnaɲΛn] | [taɲopnaɲΛn] |
| DEONTIC | /-naɲΛsa/ | [bupnaɲΛsa] | [matΛnaɲΛsa] | [nΛnaɲΛsa] | [taɲopnaɲΛsa] |
| PURPOSE | /-naɲge/ | [bupnaɲge] | [matΛnaɲge] | [nΛnaɲge] | [taɲopnaɲge] |

Table F.14 Modal nouns with all the verb root types

| | | p-final deleting /akop/ ‘come up’ | t-final /halut/ ‘wash’ | t-final voicing /mut/ ‘throw’ |
|---------|-----------|--------------------------------------|---------------------------|----------------------------------|
| DEONTIC | /-naɲΛn/ | [akopnaɲΛn] | [halutnaɲΛn] | [mutnaɲΛn] |
| DEONTIC | /-naɲΛsa/ | [akopnaɲΛsa] | [halutnaɲΛsa] | [mutnaɲΛsa] |
| PURPOSE | /-naɲge/ | [akopnaɲge] | [halutnaɲge] | [mutnaɲge] |

Table F.15 Benefactive suffixes with all the verb root types and 3S.PRESENT

| | | mā-final /bupmΛ/ ‘sew’ | V-final /matΛ/ ‘cut’ | V-final NL /na/ ‘eat’ | p-final /taɲop/ ‘drink’ |
|----|---------|---------------------------|-------------------------|--------------------------|----------------------------|
| 1S | /-ɲami/ | [bupmΛɲamik] | [matΛɲamik] | [nΛɲamik] | [taɲokɲamik] |
| 2S | /-gami/ | [bupmΛɲgamik] | [matΛɲgamik] | [nΛɲgamik] | [taɲokɲgamik] |
| 3S | /-ɲΛmi/ | [bupmΛɲΛmik] | [matΛɲΛmik] | [nΛɲΛmik] | [taɲokɲΛmik] |
| 1P | /-nimi/ | [bupmΛɲnimik] | [matΛɲnimik] | [nΛɲnimik] | [taɲokɲnimik] |
| 2P | /-dami/ | [bupmΛɲdamik] | [matΛɲdamik] | [nΛɲdamik] | [taɲokɲdamik] |
| 3P | /-yΛmi/ | [bupmΛɲyΛmik] | [matΛɲyΛmik] | [nΛɲyΛmik] | [taɲokyΛmik] |

Table F.15 Benefactive suffixes with all the verb root types and 3S.PRESENT

| | | p-final deleting /akop/ ‘come up’ | t-final /halut/ ‘wash’ | t-final voicing /mut/ ‘throw’ |
|----|---------|--------------------------------------|---------------------------|----------------------------------|
| 1S | /-ɲami/ | [akoɲamik] | [halukɲamik] | [mukɲamik] |
| 2S | /-gami/ | [akoɲgamik] | [halukɲgamik] | [mukɲgamik] |
| 3S | /-ɲΛmi/ | [akoɲΛmik] | [halukɲΛmik] | [mukɲΛmik] |
| 1P | /-nimi/ | [akoɲnimik] | [halukɲnimik] | [mukɲnimik] |
| 2P | /-dami/ | [akoɲdamik] | [halukɲdamik] | [mukɲdamik] |
| 3P | /-yΛmi/ | [akoɲyΛmik] | [halukyΛmik] | [mukyΛmik] |

F.5 Medial verb suffixes**Table F.16** Same-subject suffixes word-finally with all the verb root types

| | | mä-final /bupmΛ/ ‘sew’ | V-final /matΛ/ ‘cut’ | V-final NL /na/ ‘eat’ | p-final /taŋop/ ‘drink’ |
|-----------|----------|---------------------------|-------------------------|--------------------------|----------------------------|
| SS.PF | /-keŋ/ | [bupmΛke] | [matΛke] | [nake] | [taŋoke] |
| SS.DUR.PF | /-hikaŋ/ | [bupmΛhika] | [matahika] | [nahika] | [taŋohika] |
| SS.IPF | /-gəbik/ | [bupmΛgəbik] | [matagəbik] | [nagəbik] | [taŋogəbik] |

Table F.16 Same-subject suffixes word-finally with all the verb root types

| | | p-final deleting /akop/ ‘come up’ | t-final /halut/ ‘wash’ | t-final voicing /mut/ ‘throw’ |
|-----------|----------|--------------------------------------|---------------------------|----------------------------------|
| SS.PF | /-keŋ/ | [akoke] | [haluke] | [muke] |
| SS.DUR.PF | /-hikaŋ/ | [akohika] | [haluhika] | [muhika] |
| SS.IPF | /-gəbik/ | [akogəbik] | [halugəbik] | [mugəbik] |

Table F.17 Same-subject suffixes followed by other suffixes

| | | CONDITIONAL ‘after’ | DISLOCATION |
|-----------|----------|------------------------|-------------|
| SS.PF | /-keŋ/ | [kukeŋu] | [kukeŋΛ] |
| SS.DUR.PF | /-hikaŋ/ | [kuhikaŋu] | [kuhikaŋΛ] |
| SS.IPF | /-gəbik/ | [kugəbiɡu] | [kugəbikΛ] |

Table F.18 Different-subject suffixes with all the verb root types

| | | mā-final /bupmΛ/ ‘sew’ | V-final /mataΛ/ ‘cut’ | V-final NL /na/ ‘eat’ | p-final /taŋop/ ‘drink’ |
|-----|--------|---------------------------|--------------------------|--------------------------|----------------------------|
| 1S | /-pa/ | [bupa] | [mataba] | [napa] | [taŋopa] |
| 2S | /-pi/ | [bupi] | [matabi] | [napi] | [taŋopi] |
| 3S | /-pΛn/ | [bupΛn] | [matabΛn] | [napΛn] | [taŋopΛn] |
| 1D | /-da/ | [bupda] | [matata] | [nΛta] | [taŋopda] |
| 23D | /-pΛt/ | [bupΛt] | [matabΛt] | [napΛt] | [taŋopΛt] |
| 1P | /-na/ | [bupna] | [matana] | [nΛna] | [taŋopna] |
| 23P | /-pΛ/ | [bupΛ] | [matabΛ] | [napΛ] | [taŋopΛ] |

Table F.18 Different-subject suffixes with all the verb root types (continued)

| | | p-final deleting /akop/ ‘come up’ | t-final /halut/ ‘wash’ | t-final voicing /mut/ ‘throw’ |
|-----|--------|--------------------------------------|---------------------------|----------------------------------|
| 1S | /-pa/ | [akopΛyΛ] | [haluḁayΛ] | [mumbayΛ] |
| 2S | /-pi/ | [akopiyΛ] | [haluḁiyΛ] | [mumbiyΛ] |
| 3S | /-pΛn/ | [akopΛnΛ] | [haluḁΛnΛ] | [mumbΛnΛ] |
| 1D | /-da/ | [akopdΛyΛ] | [halutdaya] | [mutdayΛ] |
| 23D | /-pΛt/ | [akopΛtnΛ] | [haluḁΛtnΛ] | [mumbΛtnΛ] |
| 1P | /-na/ | [akopnΛyΛ] | [halutnaya] | [mutnayΛ] |
| 23P | /-pΛ/ | [akopΛyΛ] | [haluḁΛyΛ] | [mumbΛyΛ] |

Some of these verbs have /-yΛ/ ‘after’ suffix following the DS suffix. My language consultant was not able to say these words with just the DS suffix attached.

Table F.19 Different-subject suffixes followed by clausal clitics

| | | /-u/ CONDITIONAL | /-yΛ/ ‘after’ | /-un/ DISLOCATION |
|-----|--------|------------------|---------------|-------------------|
| 1S | /-pa/ | * | [kuḁayΛ] | [kuḁan] |
| 2S | /-pi/ | * | [kuḁiyΛ] | [kuḁin] |
| 3S | /-pΛn/ | [kugabΛnu] | [kuḁΛnΛ] | [kuḁΛnun] |
| 1D | /-da/ | * | [kutayΛ] | [kutan] |
| 23D | /-pΛt/ | [kugabΛlu] | [kuḁΛtnΛ] | [kuḁΛlun] |
| 1P | /-na/ | * | [kunayΛ] | [kunan] |
| 23P | /-pΛ/ | * | [kuḁΛyΛ] | [kuḁΛn] |

Appendix G: Awara orthographic text

‘Matai’s hunting trip’ by Matai Giatlu, Tawaya (1995)

(Oral personal story, archived at SIL Papua New Guinea)

Gwendune yekāp kukumāk, Yākutungkāt. Wandotde kahit tāpā kopbumāk. Tāko Yākutungu Mātān dupine teke nā kupilāne nātā gāmāk kopbum. Kongu Kupahanggāmānune kālawu tāpātu kakum. Nomgāmān kake, tosu tāpā ihiwān, kuhitnane mapa pukukut. Tiwān kālawu ulāpā kake, kwalemu tulike, kasima dākātu hong tahakum. Tikengu dākātu kāyān, tikengu dākātu tulikum pāyān, tikengu dākātu tulikumu, wasekngā dākā amumba puluwānu, kwalem gutongu ayayi puke, amuhaxātan mumba kukin. Tiwān yiwāxawa Yākutungu axopbut. Tiwānu unetā hipdu Makdākāne kopbumāk. Kokengu kālapde yāwā tākopda maliwānu, hipdu unetā tāta tākwāmbān, yolune epbumāk. Uninggān.

Phonetic transcription

g^wendune | yekap kukumak | yakutukat || bāndotde hi tapā opbumak || tako yakutunū | matan dupine
ŕeke na kupilāne | natā ŋgamak kopbum || konu | kupahangamune | kaŕabu ŕlapu kakum || nomgamān
| kake | tosu tapā ihiwān | kuhitnane mapā bukukut || tiwān kaŕabu uŕlap ake | k^wāŕemu uŕike | kasima
ndakatu hon tahlakum || tikenū ndakatu ayen | tikenū ndakatu ŕuŕiku payen | tikenū | dakatu ŕikumu |
bāsekŕa ndakā amumba puŕubānu | k^wālem gutonū yaŕi puke | amuhā ta mumbā ukin || tiwān yiwāxai
yakutun axopbut || ti unetā hipdu makdakana opbumak || kokenū | kaŕapde yaŕa rakopda maribānu |
hipdu unetā tata ŕakumbān | yone epbumān || uningān ||

Free translation

One day Yakutung and I went out by moonlight. We went up the Wantoat road. I went up and left Yakutung at the Matan river, and I went up first at night. I went up and saw an animal at Kupahanggamān. I saw a cuscus, turned on the flashlight and put it on my head. I saw the animal, pulled the bow, shot the arrow, and missed. Then another one, and I shot another, then I shot another and then I shot another, and when I shot the last, I stepped on the bow and broke it and threw (the pieces) down below. I was there and Yakutung went up. Then we went up from there to Makdakane. We went up to find an animal, but we didn’t find anything, so again from there we turned around and came down to home. That’s all.

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