

The Wala language of Malaita

Solomon Islands

Jesse Lovegren
Alice Mitchell
Natsuko Nakagawa



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The Wala language of Malaita, Solomon Islands

Jesse Lovegren, Alice Mitchell, Natsuko Nakagawa

Wala (known as Langalanga in some sources) is an underdocumented Oceanic language spoken in west central Malaita, Solomon Islands, by approximately 7,000 speakers. The present book is a sketch grammar based on a 2007 New Testament translation published by Wycliffe Bible Translators. This work illustrates the extent to which basic grammatical patterns of a language can be inferred through the use of a computerized bilingual corpus, with access neither to native speaker consultants nor to the locale the language is used. Such an approach can be deployed either in preparation for fieldwork, or to generate documentation in cases where fieldwork is not feasible.

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The Wala language of Malaita, Solomon Islands

Jesse Lovegren, Alice Mitchell, and Natsuko Nakagawa

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Table of Abbreviations

1	first person	INDEF	indefinite
2	second person	INS	instrumental
3	third person	IRR	irrealis
ABL	ablative	LOC	locative
ALL	allative	MIR	mirative
BEN	benefactive	NEG	negative
CAUS	causative	NEG2	negative
CLF	classifier	NMLZ	nominalizing suffix
COM	comitative	NMLZ2	nominalizing suffix
COMP	complementizer	NSBJ	non-subject form
COMPL	completive aspect	NSPEC	non-specific
CONTR	contrastive (focus)	OBJ	object suffix
DAT	dative	PC	paucal
DEF	definite	PERS	personal suffix
DEM	demonstrative	PL	plural
DEM3	demonstrative	PREP	preposition
DEM4	demonstrative	PROFORE	pronominal foregrounder
DIST	distal	PROX	proximal (demonstrative)
DISTRIB	distributive	PROXT	proximate tense
DU	dual	RECIP	reciprocal
EXCL	exclusive	RED	reduplicant
EXHST	exhaustive	SELFD	self-directed
FAI	valence-decreasing prefix <i>fai-</i>	SEQ	sequential
FOC	focus	SG	singular
HABIT	habitual	SPEC	specific
HORT	hortative	TR	transitivizing suffix
INCL	inclusive	VET	vetitive

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1 Introduction^{*}

We present a grammatical sketch of Wala (ISO 639-2 [lgl]), an Oceanic language spoken in west central Malaita Island, Solomon Islands. Ethnologue lists the speaker population of Wala as 7,000 (Lewis et al., 2013). Wala is also referred to as “Langalanga” in some sources. Given the source of the data (see § 1.1 below), information on dialectal variation is not available, so it is not known whether there exists more than one dialect of the language.¹

1.1 Source of the data

The process by which we have gathered data for this grammatical sketch of Wala is unconventional, and perhaps controversial. Source data consists almost entirely of a translation of the New Testament into Wala (Wycliffe Bible Translators, 2007). While there are good reasons for doubting the reliability of data from bible translations, we believe that bible translations are a good source for determining basic grammatical properties of a language. To the extent that they are of high quality, they may even be useful in determining some non-basic grammatical properties of that language.² In this section we outline the drawbacks and the advantages of our approach.

Bible translations are unlikely to serve as a useful model of how a language is used on a day-to-day basis in the community where it is spoken. They are also unlikely to reveal much detailed information about the environment where the language is spoken. We cannot expect, for example, that a bible translation will reveal clear information about any grammaticalized system of spatial orientation based on a particular geographic locale.³ Use of a bible translation as source data also prevents all but the broadest inquiries into a language’s semantics. Some of the pitfalls of using a bible translation, however, are also found in grammars based primarily on data gathered from fieldwork. A bible translation is likely to contain sentences which involve calques

^{*} This grammar began life as a class project for a seminar on Austronesian Languages given by Matthew Dryer in Spring 2011. We would like to thank Matthew Dryer for encouraging us to continue working on the project, and for reading various drafts of the manuscript. We would also like to thank Frank Lichtenberk for his comments on an earlier draft, as well as two anonymous reviewers.

¹ The Ethnologue (Lewis et al., 2013) entry does not indicate whether more than one dialect exists.

² See Bradshaw (2001) for an example of a work using only a bible translation of Iwal to outline the basic structure of the grammar of that language. See also Dryer (2013), which resulted from the same seminar as the present work.

³ There is a suggestion from related languages that such a system is likely to be typologically interesting (e.g., Hill, 1997).

from the source language, and may fail to represent certain constructions and constructional possibilities. The same is true of linguistic data obtained through elicitation by means of a contact language, and the second part is also true (though to a lesser extent) for naturalistic data collected by a linguist when the corpus size is small.

There are certain aspects of bible translations that put them on favorable footing with respect to data collected from fieldwork. First, people who write bible translations are likely to be more fluent in the relevant language than would be the average linguist doing fieldwork. In the case of the Wala bible, it was prepared by a team which included native speakers of Wala trained in the orthographic system.⁴ The sheer size of a New Testament translation provides a very large number of examples for grammatical analysis, reducing the chance of accidental errors. Our corpus exceeds 270,000 words. Two facts can help to put this number in perspective. First, Nichols (2005) recommends that basic documentation of a language be based on a corpus of “[a]bout 100,000 running words, which appears to be the threshold figure adequate for capturing the typical good speaker’s overall active vocabulary.” Second, our corpus is comparable in size to corpora used by field linguists to write full-length grammars: it just barely surpasses the 250,000 word corpus for Goemai gathered over the course of 14 months of field work by Hellwig, on which her grammar was based (2011:7-8). Our corpus exceeds by almost an order of magnitude the 40,000 word corpus for Mungbam used in the first author’s dissertation project (Lovegren, 2013).

The point here is not to characterize with any exactness the evidential base of grammars recently completed by field linguists, but rather to draw attention to the fact that, though we have not had the convenience of relying on exploratory elicitation in drawing our conclusions, our corpus is of comparable size, and often larger than, the body of texts on which most descriptive grammars rest.

Nevertheless, the conclusions of this work must be considered tentative, given the nature of the data. We put forward this work as a way of providing useful data for language scholars where none was before, with hopes that it will be useful for fieldworkers or native linguists interested in making a more complete description of the language. We also hope that our work might be of interest within the community where Wala is spoken.

1.2 Previous research on Wala

The amount of available linguistic information about Wala is limited. In fact, its extent can be more or less exhaustively summarized in this short section. The PARADISEC archive contains recordings of three short Wala narratives (Capell (recorder), 1960), though these are untranslated and not accompanied by any notes. We comment briefly on these recordings in §2. Tryon and Hackman (1983) give transcriptions for basic vocabulary items of the language. Tryon and Hackman’s data are considered by Lichtenberk (1988) in classifying Wala among other Malaita-Cristobal languages. Damutalau (2000) is a short paper written by a native speaker of Wala which deals with the lexical semantics of Wala verbs referring to cutting and breaking events. The authors of the present work have produced a sketch grammar as part of a class project in early 2011, though that work is completely superceded by the present one.

⁴ Cynthia Rollins p.c.

There are two published sources of Wala data that we know of which have apparently been created not for an audience of linguists, but for the purpose of making information about Christianity available to Wala speakers. The first is a set of recordings of bible stories and Christian sermons, almost thirty minutes in total, accompanied by English translations (n.a., 1978). We have not had the opportunity to consult these recordings in any detail since they came to our attention relatively late in the process of preparing this manuscript. The second is a written translation of the New Testament into a Wala orthography (Wycliffe Bible Translators, 2007), on which we base the present description.

1.3 Methods

The complete text of the Wala New Testament was copied into a computer database, with each verse constituting a record. Similarly formatted databases were prepared for the authorized King James version (KJV), the Japanese Colloquial (Koogoyaku) version, and the Latin Vulgate version. A set of command-line programs were written in Perl and used to facilitate access to the corpus. One group of programs was used to build, maintain and search a wordlist with part of speech information and relevant notes on individual lexical items. A second group of programs was used to implement a regular-expression enabled search of the Wala text. These programs interfaced with the lexical database to allow for the use of part-of-speech variables in search strings. A final set of programs was used to print search results in context, with or without parallel text from the KJV, Japanese or Vulgate versions. The ability to tokenize and count matches was also built in.

While most grammatical patterns could be drawn out from the Wala text and the parallel L2 text alone, we would like to point out that our analysis likely would not have proceeded to the point that it did without the heuristic guidance we received from many published descriptions of other, better-described Malaita-Cristobal languages, including comprehensive grammars (Capell, 1971; Hill, 2011; Keesing, 1985; Lichtenberk, 2008b), dictionaries (Fox, 1974; Keesing, 1975; Lichtenberk, 2008a), and shorter articles on individual topics (Ivens, 1929; Lichtenberk, 2006, 2007, 2011). We also benefitted from various comparative studies set in a broader Oceanic perspective (Clark, 1973; Durie, 1988; François, 2005; Lichtenberk, 1985, 1988, 1991, 2000a,b, 2002, 2005, 2007, 2009, 2010, 2011; Moysé-Faurie and Lynch, 2004; Moysé-Faurie, 2007). While typological comparisons do not at any point substitute for argumentation based on Wala data, we have often found it opportune to use descriptions of related languages in formulating initial guesses while exploring possible analyses for our Wala data.

The theoretical framework within which this study is made is that of Basic Linguistic Theory (Dixon, 2010), although concepts and terminology from Role and Reference Grammar (Van Valin, 2005) are sometimes resorted to when they prove useful in making a clear and simple description. Tree diagrams are used occasionally to aid in presenting constituent structure.

The English translations we give in the examples are based on the text of the King James Bible, but we have altered most of these to provide clearer and more direct equivalents of the Wala sentences. Following the English translation is a reference to the book, chapter, and verse in the Wala New Testament from which the example was drawn. Bible books are abbreviated in accordance with the recommendations of the Chicago Manual of Style.

2 Phonology

Since our data is comprised almost entirely of text in an orthographic representation, our understanding of most aspects of the language’s phonology is very limited. In this chapter we summarize findings based on the analysis of two short sound clips we have obtained of narratives told by a Wala native speaker (§2.1). We also present results from two frequency-based investigations considering written forms found in our corpus as primary data (§§2.2 - 2.3).

2.1 Wala audio data

2.1.1 Description of source materials

The first of the two audio samples is a two minute sound clip of a Wala speaker named Pio, a church leader from Guaidalo village and a member of the bible translation team, reading several verses from the book of John, recorded in 2011.¹ An IPA transcription of the full recording is given in appendix A.1. The second recording is an approximately five minute long recording made by Arthur Capell (1960), and housed in the PARADISEC archives. It contains three short untranslated narratives told by one speaker whose name is not known. The titles are spoken in English by Dr. Capell immediately before each text begins. The texts are a version of the Lord’s Prayer and of the Apostle’s Creed, as well as a folk tale called *‘The boys and the coconuts’*.

Though the two recordings were collected about 50 years apart from each other by different researchers, they seem to be representative of speech of the “same” community: we were able to analyze most of Capell’s untranslated texts based only on our experience analyzing the more recent bible translation. We detect only two phonetic differences between the two recordings. First, in the earlier recording, the sound corresponding to the grapheme <kw> sounds more like a labialized velar than it does a labial velar. Second, the 1960 recording has trisyllabic words consisting of three light syllables, where the second syllable is stressed. Our analysis based on the 2011 recording (§2.1.3) would predict stress on the first syllable instead.

Two excerpts from the 1960 texts are given in (2-1) – (2-2), together with a passage from the Lord’s Prayer of the current bible translation in (2-3), to illustrate the difference in wording.

- (2-1) 'E too a-la me 'au, ka tofu-a fe liu gi. Wela gi ka gou-fi-a
3SG have at-3.PERS CLF machete SEQ cut.down-3.OBJ CLF coconut PL child PL SEQ drink-TR-3.OBJ
kwai li.
water DEF
'He had a machete, and cut down the coconuts. The boys drank the water.'
(Capell (recorder), 1960:The boys and the coconuts)

¹ We are thankful to Cynthia Rollins of SIL Solomon Islands for making this data available to us.

- (2-2) ko kwate 'amami fana 'ami tara'ela, ?? ko bulono-si-a me 'are
 2SG.SEQ give 1EXCL.PL.BEN food 1EXCL.PL day ?? 2SG.SEQ forget-TR-3.OBJ CLF thing
 ta'a 'ami tau-a ?? gi
 be.bad 1EXCL.PL do-3.OBJ ?? PL
 '...give us our food [each] day, and forget the bad things that we have done...'
 (Capell (recorder), 1960:The Lord's prayer)

- (2-3) 'O kwate-a mae fa-mami fana 'e totolia fe atoa 'e li. 'O
 2SG give-3.OBJ hither DAT-1EXCL.PL.PERS food DEM.PROX be.able CLF day DEM.PROX DEF 2SG
 kwailufa 'ali-a ta'a-na 'amami gi
 forgive INS-3.OBJ be.bad-NMLZ 1EXCL.PL.NSBJ PL
 'Give to us food that is sufficient for this day. Forgive our wickednesses...' (Mt 6:11-12)

2.1.2 Sound correspondences of graphemes

In this section we give the approximate sound values of the graphemes, based on the 2011 recording. A complete transcription in IPA is included in appendix A.1.

Table 2.1: Correspondences between graphemes and approximate phonetic values. When the grapheme differs from the IPA symbol, the grapheme is enclosed in angle brackets.

Consonants				
p(?)	t	k	\overline{kp} <kw>	ʔ <'>
b	d	g	\overline{gb} (?) <gw>	
ϕ <f>	s			
m	n			
	l	w		
	r			

Vowels	
i~ɪ <i>	u <u>
ɛ <e>	o <o>
e~ə~a <a>	

In §§2.1.2.1 - 2.1.2.2 we give some impressionistic notes on the pronunciation of each of the graphemes, where we have information. These descriptions are offered with the understanding that they are of a preliminary nature, limited in accuracy by our level of access to the data.

2.1.2.1 Consonants

The pronunciation of the consonant graphemes seem to be in line with what is found for Toqabaqita (Lichtenberk, 2008b:ch. 2). The grapheme <kw> is a labial-velar stop. <r> is a trilled apical rhotic, though it is simply tapped when word-final. <f> is a voiceless bilabial fricative, / ϕ /. There are no examples of <gw> available to us, so we can only speculate that this is a labial-velar voiced stop. Likewise, we stipulate that <p>, for which examples are lacking, is a voiceless labial stop, without knowing the extent to which it is aspirated when pronounced.

is a fully voiced labial stop, and the velar stop <g> is also fully voiced. <k> is usually realized as a velar stop, but it may be realized as a glottal stop in the sequential subject pronoun **ka**. It is not aspirated, and is unreleased when it appears word-finally (though this never occurs in the written representation, word-final vowels are frequently unpronounced in our recordings). <d> is also fully voiced, and sounds like it is apico-alveolar. It is laterally released when followed by a lateral: **soilidi lou** ‘ask again’ is pronounced [‘sɔi.li.dlɔʊ]. <t> is not noticeably aspirated, and sounds lamino-dental, at least in unstressed syllables, where it sounds something like [ʈ]. In stressed syllables, it is not clear whether it is dental or apical.

2.1.2.2 Vowels

As for the vowel graphemes, the single vowels are similar to what is reported for Toqabaqita, except that <i> is pronounced as tense [i], except in word-final unstressed syllables, where it is pronounced [ɪ]. Otherwise, we have <e> = [ɛ], <o> = [ɔ], <u> = [ʊ], and <a> = [a]. This last sound, however, has a variable pronunciation in unstressed open syllables, usually something between [ɐ] and [ə].

Sequences of two vowel graphemes are sometimes pronounced as nuclei of different syllables,² and are sometimes pronounced like a diphthong. The sequence <iu> in **fasiuabu** ‘baptize’ is always pronounced as a diphthong, i.e. [‘ʔa.siu.‘ab]. The sequence <ei> appears once, in the word **rerei** ‘be ready’, where it sound like a diphthong [ei]. The sequence <io>, as in **ioli** ‘people’, is always pronounced as one syllable, [jɔ]. The sequence <ai> occurs in different syllables of **kwairanai** ‘help’, and also twice in **kwai** ‘water’. It is pronounced as a diphthong [ei] or [ɛi] or [ai]. Once, in **fafu-‘isi-na-i** ‘be.last-NMLZ-INDEF.PERS’, it is two heterosyllabic monophthongs (perhaps because of the morpheme boundary), but also in one case of **kwai** ‘water’ the word is pronounced as [‘kpa.i]. The sequence <oi>, in **soilidi** ‘ask’, is stressed in all examples we have for it, and is pronounced as a highish back monophthong, perhaps around [ɔ] ~ [ɔ̄]. The sequence <au>, as in **lau** ‘1SG’, usually comes out [‘lɛʊ]. <eu> as in **‘ameulu** ‘1EXCL.PC.NSBJ’ is pronounced [‘a.mɛl]. Then <ae> as in **kae** ‘SEQ-IRR’ or **mae** ‘hither’ may be two monophthongs or a diphthong, [a.ɛ], or [ai] ~ [ae].

2.1.3 Word prosody

This section contains some initial hypotheses about Wala word prosody based on analysis of the 2011 recording which is transcribed in appendix A.1. The 1960 Lord’s Prayer recording (transcribed in appendix A.2) seems to correspond with the 2011 recording as to the broad phonetic cues associated with stress, but is not wholly consistent with the analysis developed here as concerns the placement of stress.

We assume that Wala has stress accent (Hyman, 2006:231), and that each lexical word should have one syllable which is stressed. We also assume that stress is not lexically assigned. That is, it should in principle be predictable given the written form of a word. Syllables transcribed as bearing primary stress in appendix A.1 tend to be longer and louder, with high level or high falling pitch. Syllables marked as bearing secondary stress are longer and may be louder, and are associated with a low level pitch. The transcription of stress in § A.1 is of course impressionistic,

² The usual caveats about inferring syllable structure from phonetic content apply here.

and the distinction between primary and secondary stress in the transcription should not be viewed as a very neat one: a word position which might “really” have primary stress could have been judged to have secondary stress by the transcriber simply because the speaker in the recording was nearing the end of a breath.

Examples in this section are set up according to the following template:

(2-4) WRITTEN → BRACKETED → PHONETIC TRANSCRIPTION

The written form of a word is taken as the basis for parsing into feet. The bracketed form shows the foot boundaries. It is understood that the first syllable in each foot is stressed.³ Any pronunciation rules (reflected in the phonetic transcription) do not alter the assignment of stress. A concise description of stress assignment is possible if syllables are treated as being either heavy (shape (C)VV) or light (shape (C)V). We also refer to closed syllables in the spoken language as heavy.

If the written word consists of two light syllables, then stress falls on the first syllable.

(2-5) *tala* ‘path’ → (*tala*) → [ˈtələ]

(2-6) *fa-la* ‘DAT-3SG.PERS’ → (*fala*) → [ˈfələ]

As noted above, the vowel may be dropped from a non-stressed syllable. This type of change reduces two syllables to one, but it does not affect the placement of stress or the number of morae in a foot.

(2-7) *wale* ‘person’ → (*wale*) → [ˈwal]

(2-8) *keri* ‘send’ → (*keri*) → [ˈkɛr]

In words consisting of three light syllables, stress also falls on the first syllable, with optional reduction of non-stressed syllables.

(2-9) *olisi* ‘answer’ → (*oli*)*si* → [ˈolisi]

(2-10) *madakwa* ‘be.clear’ → (*mada*)*kwa* → [ˈmadakp̄]

Words of this type suggest that stress assignment rules in Wala are “opaque” (Baković, 2011). Stress is assigned to all heavy syllables, but processes subsequent to stress assignment may produce surface forms containing heavy (viz. CVC), unstressed syllables.

In two- and three-syllable words where the first syllable is heavy, that syllable bears stress.

(2-11) *daulu* ‘3PC’ → (*dau*)*lu* → [ˈdaʊlʊ]

(2-12) *soilidi* ‘ask’ → (*soi*)(*lidi*) → [ˈsulid]

³ As noted above, we are not confident in our ability to hear the difference between primary and secondary stress. The current working hypothesis, however, is that the leftmost foot in a word is the most prominent foot.

In words with written form CVCVV..., stress placement either depends on the word, or is variable (we are not sure which).⁴ Examples (2-13) - (2-14) show stress on the first syllable:

(2-13) **rerei** 'be.ready' → **(rere)i** → ['rɛrɛi]

(2-14) **falua** 'town' → **(falu)a** → ['ʔalʊa]

Three other words in the recording show stress on second syllables that are heavy. Note that in all three examples the first syllable could (at least historically) be treated as a separate morph. Though we have not analyzed it as such, the sequence '**a-**' appears on six independent non-subject pronouns (cf. § 6.4), and could on the basis of the commutation test be treated as a morpheme separate from **-miu**, ((2-15)). The second and third forms have as their first syllable the dative prefix and a reduplicant, respectively.

(2-15) **'amiu** '2PL.IND' → **'a(miu)** → [ʔa'miu]

(2-16) **fa-meulu** 'DAT-1EXCL.PC' → **fa(meu)lu** → [ʔa'mɛʊl]

(2-17) **ta-tae-na-la** 'rising' → **ta(tae)(nala)** → [ta'tai,nal]

(2-18) **'adaoro** 'kneel' → **'a(dao)ro** → [ʔa'daɔrɔ]

The general procedure for assigning stress can be characterized as follows. Starting from the left edge of the word, form bimoraic feet. If construction of a foot would cause a CVV sequence to be split across the foot boundary, then either: (i) treat the sequence as a single heavy syllable ($\sigma_H = CVV$), leaving the light syllable to its right unparsed; or (ii) go ahead and split the sequence: treat it as two light syllables ($\sigma_L = CV.V$).⁵ Assign primary stress to the leftmost foot.

The process can be illustrated for the handful of long words present in the 2011 recording.

(2-19) **fasiu abu** 'baptize' → **(fasi)u#(abu)** → ['ʔasiʊ'abʊ]

(2-20) **kwairanai** 'helping' → **(kwai)ra(nai)** → ['kpi:ra,nei]

(2-21) **soilidia** 'ask him/her' → **(soi)(lidi)a** → ['su:li,dʒɪ]

(2-22) **fasakwadola** 'liberate' → **(fasa)kwa(dola)** → ['ʔasakʔɛ,dɔl]

(2-23) **olisida** 'answer them' → **(oli)(sida)** → ['ɔli,sid]

(2-24) **fafu'isinai** 'at last' → **(fafu)('isi)(nai)** → ['ʔaʔ,ʔis,nai]

(2-25) **safitamiu** 'amongst ye' → **(safi)ta(miu)** → ['saʔta,mio]

We suppose as an initial hypothesis that some grammatical particles are tonic, some are atonic, and some may be tonic or atonic, so as to improve the overall parsing of the word they

⁴ See Palmer (1999:§3.1) for discussion of a similar type of variability in stress assignment in Kokota (ISO 639-3 [kkk]), another Oceanic language of the Solomon Islands (Santa Isabel island).

⁵ As noted above, we do not know whether the choice is one that is dictated by the common grammar or by the speaker.

attach to. The locative particle **'i** seems to always be atonic, as it does not alter the parsing of the word it precedes.

(2-26) **'i talamu** → **'i (tala)mu** → [?'i'talam]

The plural word **gi** bears stress in all of the transcribed examples. If it is followed by the definite article **li**, then **gi li** forms a foot. If it is at the end of a noun phrase, it is stressed and its vowel is lengthened so that it constitutes a foot by itself.

The definite article **li** is found both stressed and unstressed.

(2-27) **'urila li** → **(uri)la#(li)** → '?urla'li:

(2-28) **lifi kwasi li** → **(lifi)#(kwasi)li** → 'liϕ'kpasli

2.2 Statistical data on phonotactics

In order to gather statistics on phonotactic patterns, we prepared a list of the 272 089 word-length tokens present in the text corpus.⁶ By examining those tokens with infrequent graphemes and infrequent two-grapheme sequences (henceforth bigrams), we were able to identify a list of 496 foreign words likely to be limited in use to the bible translation. These were mostly names of people or places from the bible,⁷ but included some other words such as **flaoo** 'flour', **grop** 'grape', **ist** 'yeast'. These words were removed from the list of tokens for the purpose of the calculations, leaving a total of 259 934 tokens. Words which appear to originate in Solomons Pijin, such as **sipsip** 'sheep', **nanigot** 'goat', **aeana** 'iron', **buluka** 'cow', were retained, since we lack sufficient knowledge of the language as used outside of the New Testament translation to judge whether these words are part of the core vocabulary.

⁶ While preparing a final set of corrections for this work, it came to our attention that Mt 16:21-8 (totaling 326 Wala words) were mistakenly omitted from the corpus when it was typed in. It is not impossible that similar such mistakes of omission may have occurred. Also, prefatory notes and captions to illustrations (such as that illustrating how a sickle looks) were omitted.



'Au 'e too rasua, Jiu gera galo raku 'alia

- (i) 'Au 'e too rasua, Jiu gera galo raku 'ali-a
 sword 3SG be.sharp very Jew 3PL work farm INS-3SG.OBJ
 'A sharp tool that the Jews work their fields with' (Wycliffe Bible Translators, 2007:641)

⁷ A full list is: matthew, tomas, james, alfeas, simon, jiu, rom, israel, judas, jesus, god, andrew, filip, batolomiu, ishmael, abraham, hega, karfus, patmos, haemeneas, hermes, hermogenes, herapolis,

When words of foreign origin are ignored, the following general phonotactic patterns are observed for written words:

- (i) The majority of words are consonant-initial, though vowel-initial words are found.
- (ii) Words never end in a consonant.
- (iii) Consonant-consonant sequences are not found.
- (iv) Vowel-vowel sequences are frequent.

hisop, john, rahab, herod, betlehem, hebru, haran, hamor, david, harp, herodias, hour, aburaham, hosi, hosea, harodion, hermas, hesron, neho, mahelalel, rihoboam, jehosafat, joseph, hilae, nehama, ehas, hesikaea, provins, silva, eve, jerusalem, janes, jambres, josef, justus, ejipt, joel, jakob, elaeja, jeremaea, elaeja, jodan, jeriko, benjamin, julia, nereus, trifaena, trifosa, persis, krit, profet, demetrius, prisila, kenkrae, juda, jesi, abaeja, joram, jotam, josaea, jekonaea, jona, jessu, jesabel, jasper, junias, jason, janae, josek, joda, joanan, josua, jorim, jonam, jered, joana, jaeras, joses, jopa, barjesus, jesu, julius, jefta, job, brasi, gabriel, brons, blastas, publius, admin, aleksandria, drusila, adramitium, aleksandria, kidron, dragon, andronikus, flaoa, flegon, gafmane, gafmae, frigia, epafras, ifrem, epafroditus, lufretes, iufretes, dongki, agripa, grik, gris, grep, kilogram, kloe, klodia, klodius, klopas, kleopas, klement, krist, asinkritus, kristolo, kristin, aleksanda, feliks, finiks, afaksad, oniks, sabaktani, naftali, magdala, magdalan, polaks, krispus, kresens, akeldama, kalde, alfa, filadelfia, salfa, golgota, melkisadek, melkae, kalkedoni, dalmatia, salmone, elmadam, dalmanuta, selni, malta, sialtiel, pamfilia, amfipolis, nimfa, ampilatus, olimpas, samson, sekundus, king, donki, atens, pudens, iubulus, linus, profins, antiok, korint, pontus, pentekos, antipatris, pontias, antipas, sintike, saepurus, prokorus, profeti, salmon, partia, tertulus, karts, tertius, kuartus, karnelian, beril, topas, kalkedoni, turkois, ametist, erastus, sardis, sergius, perga, pergamum, mark, dorkas, arkipus, derbe, urbanus, parmenas, armagedon, kornelius, bernis, smirna, barsabas, tarsus, porsius, narsisus, damaskas, skefa, iskariot, eslae, snow, spein, stafanas, ist, listra, stefen, stoik, aristakus, festus, kasto, ogastas, aristobulus, stakis, iist, mastad, betfeis, troas, trofimus, diotrefes, samotres, trakonaetis, patrobas, betsaeda, getsemani, wool, witi, peter, paul, pafos, paulus, pisidia, paelat, patara, pauli, puteoli, pileg, peres, pel, sirag, apeles, pirus, sofata, tesalonika, gaeas, tikikus, trofimus, timoti, aminadab, nad, abaeud, serababel, elaeakim, aso, eliud, gad, lepad, olif, 'olif, gog, magog, aesak, enok, lamek, lak, molok, barak, balak, barakaea, obed, sadok, abel, samuel, gamaliel, saul, ebol, nataniel, maekol, faniuel, kamel, emanuel, rakel, daniel, emarol, mabol, baal, adam, sodom, balaam, ikonium, sam, elam, sekem, regium, salem, kapaneam, salim, saelom, kosam, siem, sem, kom, ram, akim, ilirikum, etiopia, epikurean, apius, apira, saetan, waen, kein, sion, babilon, solomon, timon, saeren, kenan, aaron, refan, saron, simion, manaen, nason, saedon, gideon, lion, aenon, abilin, semein, netan, keinan, neman, nein, koresin, sitian, selenin, emon, matan, sebulum, dekapolis, tarapapa, apolonia, neapolis, kapadosia, apolos, apolion, abandon, ruben, filemon, magadan, sebulun, beor, nikanor, kaesar, isakar, sosipater, lot, sabat, elisabet, matat, set, serefat, genesaret, rut, beret, aget, matata, mesopotemia, fotunatus, titus, filetus, miletus, asotus, iturea, metusala, epaenetus, bitinia, tiofilas, nasareti, mitilene, berea, iutikus, sabati, geti, titike, batimeas, timeas, titius, wiki, luke, idumea, selusia, efesus, eliesa, sosetenes, banabas, moyses, akaikus, silas, aretas, lois, iunis, figelus, onesiforus, demas, mataeas, 'anas, yirinas, alos, miles, kaeafas, banabas, ananias, tedas, nikolaus, aeneas, lusus, agabus, elaeamas, kis, stakis, sus, areopagus, dionisius, lasaros, taebirias, damaris, taeranus, sosetenes, atemis, asos, kios, samos, kos, rodes, tolemais, kinidus, sirakus, onesius, sifas, nikodimas, barabas, emeas, boneges, tadeas, rufus, boas, akilas, onesimus, sisigus, filologus, salamis, lisias, malakas, lisianas, matataeas, emos, bulus, sakias, emeas, enos, nasaret, mediterenea.

(v) Assuming that Wala is not typologically aberrant in its parsing of words into syllables,⁸ the basic syllable structure suggested by (i)-(iv) is (C)V, or (C)V(V), depending on whether VV sequences are treated as diphthongs or not (see §§ 2.1.2.2, 2.3 on this question).

In the following subsections we present more detailed statistical generalizations about the language's phonotactics. We tabulate overall frequencies for individual segments (§ 2.2.1) and for four types of bigram frequencies: frequencies for consecutive segments (§ 2.2.2), frequencies for sequences of two vowels separated by any consonant (§ 2.2.3), frequencies for sequences of two consonants separated by any vowel (§ 2.2.4), and frequencies for sequences of two homorganic or near-homorganic consonants separated by any vowel (§ 2.2.5).

For bigrams, in addition to raw frequencies, we report $\log_2 \left(\frac{O}{E} \right)$, which is a measure of the difference between the observed frequency of a bigram and the expected frequency of that bigram.⁹ This type of measurement has been used in Archangeli et al. (2012) to study patterns of vowel harmony in several Bantu languages, and is a useful way of spotting distributional asymmetries which controls for overall frequency of occurrence. $\log_2 \left(\frac{O}{E} \right)$ for any bigram (i, j) is calculated as follows, where P is the overall proportion of first and second position segments which are i and j , respectively, and N is the total number of bigrams considered.

$$\log_2 \left(\frac{O}{E} \right) = \log_2 \left(\frac{\text{Observed freq. of } (i, j)}{P(i \text{ in position 1}) \times P(j \text{ in position 2}) \times N} \right)$$

A $\log_2 \left(\frac{O}{E} \right)$ value of 0 indicates that a sequence is observed as many times as would be expected, given the frequencies of its first and second elements. A value of 1 indicates that the sequence is observed twice as many times as expected, a value of 2 that it is observed four times as many times as expected, a value of 3 that it is observed eight times as many times as expected, and so on. Negative values of $\log_2 \left(\frac{O}{E} \right)$ indicate that a sequence is observed less often than expected, with a value of -1 indicating that the sequence is observed half as many times as expected, -2 indicating $\frac{1}{4}$ as many times as expected, -3 indicating $\frac{1}{8}$ as many times as expected, and so on. If a sequence is not observed at all, then $\log_2 \left(\frac{O}{E} \right)$ will be undefined for that sequence. Thus the sequence <ue> is expected to occur $\frac{9477}{104933} \times \frac{13577}{104933} \times 104933 \approx 1226$ times (we consider 104933 VV bigrams, of which 9477 have <u> as the first segment, and 13577 have <e> as the second segment). According to the figures in table 2.6, its $\log_2 \left(\frac{O}{E} \right)$ value (reported in table 2.7) is undefined, since this sequence does not occur at all in native words.

2.2.1 Single-segment frequencies

Word tokens were further tokenized into single graphemes (digraphs <kw> and <gw> were treated as one segment), to produce a list of 996456 graphemes, and 519868 word-boundary

⁸ This is to say that it is significantly more common for languages to parse VCV sequences as V.CV than as VC.V.

⁹ This measure is very similar to the likelihood-ratio residuals for contingency tables, which are used in statistics for independence testing (Agresti, 2007:36-40). The only difference is that the likelihood-ratio residuals are multiplied by a factor of 2, and use e rather than 2 as the base of the logarithm. We employ the present measure since we think it may be more intuitive for readers without prior training in statistics.

markers (two for each word token). Total counts are given for vowels and for consonants in tables 2.2 - 2.3. Segments which are especially frequent in token terms are <a> and <l>. A partial explanation for this fact is the high frequency of the third person personal suffix **-la**. Segments with especially low frequencies are <p>, <gw>, <kw> and <w>. We count only 6 items in our glossary with <p>,¹⁰ and only 11 with <gw>.¹¹

Table 2.2: Individual vowel frequencies

a	e	i	o	u	Total
270 111	60 550	117 342	63 925	53 882	565 810

Table 2.3: Individual consonant frequencies

p	b	f	m	w	
266	8 045	35 232	39 114	7 070	
t	d	s	l	r	n
26 190	8 574	25 941	110 290	30 838	20 208
k	g	kw	gw	ʔ	Total
27 117	27 988	7 066	660	56 047	430 646

2.2.2 Bigrams, consecutive segments

In this section we give data on bigram frequencies for consecutive segments. We consider separately four types of bigrams: bigrams containing a word boundary, VV, VC, and CV. There are no CC bigrams in our tokenized list of words save for 116 instances of the bigram <ps>, all from the word **sipsip** ‘sheep’.

Table 2.4: Relative frequencies of V# and #V sequences

V= ...	a	e	i	o	u	Total
V#	121863	36346	55095	23904	22599	259807
#V	15087	647	11820	2318	602	30474
$\log_2 \left[\frac{O(V\#)}{O(\#V)} \right] - \log_2 \left[\frac{\Sigma(V\#)}{\Sigma(\#V)} \right]$	-0.08	2.72	-0.87	0.28	2.14	0

Table 2.4 gives frequencies for all possible #V and V# sequences. First, we can note that vowel-initial words are relatively rare, with only $\frac{30474}{259934} \approx 11.7\%$ of words beginning with a vowel. Equivalently, word-final vowels are about 8.5 times as frequent as word-initial vowels. Aside from the 127 consonant-final words (all instances of **sipsip** and **nanigot**), all orthographic words end in a vowel. The third row of table 2.4 compares the disparity between a vowel’s word-initial and word-final frequencies to the overall disparity. <a> has a score of

$$\log_2 \left[\frac{121863}{15087} \right] - \log_2 \left[\frac{259807}{30474} \right] \approx -0.08$$

which means that the disparity between its frequencies in word-initial vs. word-final positions are not much different from the average for all vowels. The only vowel with an appreciably lower

¹⁰ **sipsip** ‘sheep’, **tarapapa** ‘table’, **suapata** ‘table’, **pera** ‘basket’, **peko** ‘do wrong’, **paku** ‘be preserved’.

¹¹ **gwauru** ‘sit’, **gwau-** ‘head’, **agwa** ‘be hidden’, **gwelusi-** ‘roll’, **gwafe** ‘comfort’, **gwaugwau** ‘freely, in vain’, **gwano** ‘reed’, **gwari** ‘be cold’, **gwela** ‘throne’, **bogwau** ‘pillow’, **gwagwaea** ‘bride(?)’.

discrepancy than the average is <i>. This difference between <i> and other vowels is explained to a large extent by the presence of four high-frequency words beginning with <i>: two negative morphemes *iko*, *ikoso*; *io* ‘people’, and *io* ‘live/stay’.

Table 2.5: Relative frequencies of #C sequences

#p	#f	#b	#m	#w	
20	25407	4843	26254	6717	
#t	#s	#d	#l	#n	#r
14470	13343	3210	30044	3071	5526
#k	#g	#gw	#kw	#?	Total
16604	23582	460	4812	51098	229461

Relative frequencies of word-initial consonants are given in table 2.5. Here we see that certain consonants more frequently appear word-initially than word-internally, while others predominantly appear word-internally. Consonants which appear predominantly word-initially are <w> and <?>, with $\frac{6717}{7070} \approx 95\%$ and $\frac{51098}{56047} \approx 91\%$, respectively, of their total occurrences being in word-initial position. Consonants which appear predominantly word-internally are <n> and <l>, with only $\frac{3071}{20208} \approx 15\%$ and $\frac{30044}{110290} \approx 27\%$, respectively, of their occurrences being in word-initial position. Tables 2.6 - 2.7 give raw frequencies and $\log_2\left(\frac{O}{E}\right)$ values for the 25 possible VV

Table 2.6: Observed frequencies for VV sequences

V ₁ \ V ₂	a	e	i	o	u	Total
a	6467	12607	11197	3914	10141	44326
e	2334	86	256	161	1188	4025
i	24473	0	418	7952	3836	36679
o	2952	884	965	1604	4021	10426
u	5779	0	2939	83	676	9477
Total	42005	13577	15775	13714	19862	104933

Table 2.7: $\log_2\left(\frac{O}{E}\right)$ values for VV sequences

V ₁ \ V ₂	a	e	i	o	u
a	-1.456	1.136	0.749	-0.566	0.273
e	0.535	-2.598	-1.241	-1.708	0.641
i	0.737	undef.	-3.722	0.730	-0.856
o	-0.500	-0.610	-0.700	0.235	1.027
u	0.607	undef.	1.045	-3.899	-1.408

bigrams. In table 2.7 and subsequent tables giving $\log_2\left(\frac{O}{E}\right)$ values, cells shaded in gray indicate that $\left|\log_2\left(\frac{O}{E}\right)\right| \geq 2.5$, or that the sequence is observed more than 5.7 as many times as expected, or less than $\frac{1}{5.7}$ as many times as expected. From table 2.7 it can be seen that there are restrictions on which vowels can immediately follow <i> and <u>. Following <i>, <e> is not observed at all, and <i> is observed significantly less frequently than expected. Following <u>, <e> is again not observed at all, and <o> is observed less frequently than expected. Interestingly, an absolute or relative lack of <ie> and <ue> sequences is what is found in Bantu languages having asymmetric vowel height harmony, where an applicative suffix may have allomorphs /-le/ and /-li/, where /-li/ is attached to verb stems with a high vowel (cf. Hyman (1999) for a detailed

treatment). Although no widespread alternations clearly indicative of vowel harmony are found in Wala, there is some suggestive evidence. The personal suffix for indefinite possessors, which attaches to inalienably possessed nouns, has two variants, **-e** and **-i**, where the latter form is found only on nouns ending in <u>. ¹² Unfortunately, we have not been able to observe any inalienable noun ending in <i> taking this suffix. We document another minor vowel harmony process of the same type in § 5.2.1.1.

Next, we consider frequencies for VC bigrams (tables D.1 (appendix); 2.8). Table 2.8 reflects the irregular distribution in VC bigrams of the low-frequency consonants <p> and <w>. Some irregularities are observed for , <m>, and <r>, though it is not immediately obvious how these could be explained, or whether there is an interesting explanation.

Table 2.8: $\log_2 \left(\frac{O}{E} \right)$ values for VC sequences

	p	f	b	m	w	t	s	d
a	-5.990	-0.302	0.782	0.437	0.788	0.187	0.362	0.162
e	undef.	-1.821	-1.713	-2.586	undef.	-0.549	-0.411	-0.969
i	2.958	1.233	-2.520	0.664	-0.279	0.558	-0.530	1.091
o	-5.178	0.169	-1.751	-2.799	undef.	-0.737	-0.015	-1.843
u	undef.	-0.301	-2.855	-0.837	-5.259	-0.684	-2.032	-0.885
	l	n	r	k	g	gw	kw	ʔ
a	0.159	-0.768	-0.773	-0.831	-0.147	-0.168	0.446	0.404
e	-0.974	0.297	2.002	-1.454	0.063	-0.005	-0.330	-1.945
i	-0.580	0.377	-2.695	1.404	-2.247	-2.084	0.452	0.224
o	0.143	1.057	-2.604	1.130	1.163	-4.880	-1.804	-0.173
u	0.195	-0.091	1.214	-2.946	-0.592	1.901	undef.	-3.287

Next, we consider CV sequences. Raw frequencies and $\log_2 \left(\frac{O}{E} \right)$ values are given in tables D.2 (appendix) and 2.9. Several interesting patterns are apparent. First, we note that the most infrequent consonants, <p>, <w>, <gw> and <kw>, are not observed at all before the vowels <i>, <o> and <u>. Most striking of all is the unusual distribution of <t>, which is not observed at all before <i>, and observed very infrequently ($\sim \frac{1}{73}$ times as often as expected) before <u>. ¹³

The distribution of <t> turns out to provide support for Lichtenberk’s (1988:53) hypothesized chronology for the set of innovations defining the Cristobal-Malaitan group as a genetic unit. Lichtenberk proposes that Proto-Oceanic (POC) ***t** was lost in Proto-Cristobal-Malaitan (PCM), and that POC ***s** and ***ns** merged to PCM ***s** before high vowels, and to ***t** elsewhere. Lichtenberk also argues that the loss of POC ***t** preceded the merger of ***ns** and ***s**. If this hypothesis were true, then (barring further changes) it would mean that the only present-day instances of <t> in Wala should be reflexes of POC ***ns**, ***s**, and therefore <t> should be found only before non-high vowels. Though <tu> sequences are not wholly absent from our corpus, they are infrequent

¹² Some examples are:

fufua-e 'ai	fruit-INDEF.PERS tree	'(tree) fruit'
rata-e 'are ta'a	name-INDEF.PERS thing be.bad	'the beast's name'
gula-e 'are	side-INDEF.PERS thing	'portion'
malu-i boni	underside-INDEF.PERS night	'late at night'
lulu-i 'are	shadow-INDEF.PERS thing	'graven image'

¹³ The words containing the sequence tu are **botu** 'shoe' (likely ultimately a loan), and **tura-** and the reduplicated form of the same **tu-tura** 'give alms'.

enough that the Wala data may be considered consistent with Lichtenberk's hypothesis. An additional question, which cannot be entertained here, concerns the distribution of Wala <s>. While <s> has higher than expected occurrence before high-vowels (as indicated by positive $\log_2\left(\frac{O}{E}\right)$ values), as expected, one wonders from which PCM phoneme the instances of Wala <s> before non-high vowels descended. A possible source is Lichtenberk's proposed PCM prothetic consonant * θ , whose normal reflex is <r> in Wala. For example, PCM * θ ai ((Lichtenberk, 1988: 56)) > *sae* 'know'.

Table 2.9: $\log_2\left(\frac{O}{E}\right)$ values for CV sequences

	a	e	i	o	u
p	0.175	2.035	undef.	undef.	undef.
f	0.134	-1.325	-0.623	0.781	0.167
b	-0.018	-0.136	-2.290	-0.711	1.963
m	0.377	-1.025	-1.282	0.195	0.232
w	0.863	-0.108	undef.	undef.	undef.
t	0.399	0.285	undef.	0.951	-6.182
s	-1.327	-2.516	0.680	-0.363	2.226
d	0.705	-1.955	-2.200	-0.590	-0.749
l	-0.236	-1.199	0.822	-0.096	-0.370
n	0.710	-3.999	-1.420	-0.209	-3.016
r	-0.101	0.773	-0.055	-0.017	-0.822
k	0.428	-1.113	-1.386	0.819	-3.213
g	-1.710	1.671	1.014	-1.684	-0.627
gw	0.913	-0.659	undef.	undef.	undef.
kw	0.986	-2.473	undef.	undef.	undef.
ʔ	-0.301	1.312	-0.245	-0.639	0.107

As for Wala <w>, <kw> and <gw>, which are attested only before <a> and <e>, Lichtenberk (1988:43) proposes that these sounds developed in the Central and North Malaitan (CNM) subbranch of Cristobal-Malaita as reflexes of PCM **mw*, **w*, and **pw*, respectively. We have not made any investigations as to whether the uneven distribution of these witness sounds in Wala should be due to the distribution of the original PCM sounds, or due to a conditioning factor in the sound change. Since all of the examples Lichtenberk (1988:43-5) gives of PCM **mw*, **w* and **pw* have only a following **a* or **e*, and since Lichtenberk does not indicate that the change was conditioned, the former hypothesis seems the stronger one at the moment.

Finally, we consider <n>, which appears rather infrequently in the context of a following <u> or <e>. In the case of this segment, the etymological history appears at first glance to be complicated. Firstly, Wala <n> is not a reflex of PCM **n*. PCM **n* is instead witnessed by <l> in Wala, and by /n/ in other CNM languages, viz. Kwaio and Toqabaqita. Compare, for example, Toqabaqita *notofi-a* 'suck', Wala *lotofi-a* 'suck, kiss'; Toqabaqita *nuu* 'shadow', Wala *lulu* 'shadow, image'. Wala <n> instead appears to be a reflex of PCM * η ; most of Lichtenberk's PCM reconstructions containing * η regularly correspond to <n> in Wala (e.g., PCM **quu* > Wala *nuu* 'sing', PCM **roŋo* > Wala *rono* 'hear'). Since / η / is not found in Wala, it is expected that the change of PCM * η > Wala <n> was unconditioned, and so the distribution of Wala <n> should be largely explainable in terms of the distribution of PCM * η .

2.2.3 Bigrams, V...V sequences

Now we turn to bigrams of two vowels separated by a consonant, with raw frequencies and $\log_2\left(\frac{O}{E}\right)$ values given in tables D.3 (appendix), and 2.10. We find that <uCe> sequences are particularly disfavored, although not completely unattested, as are <eCu> sequences.

Table 2.10: $\log_2\left(\frac{O}{E}\right)$ values for V...V sequences with intervening consonant

$V_1 \backslash V_2$	a	e	i	o	u
a	0.118	0.570	-0.333	-0.791	0.339
e	0.704	0.443	-1.165	-1.562	-3.390
i	-0.682	-1.166	0.332	1.485	-1.559
o	-0.189	-1.974	0.345	0.950	-1.544
u	-0.695	-6.112	0.870	-1.893	1.160

2.2.4 Bigrams, C...C sequences

Now we consider bigrams of two consonants separated by a vowel. Raw frequencies are given in the appendix (D.4), and $\log_2\left(\frac{O}{E}\right)$ values are given in table 2.11. Many of the shaded cells in table 2.11 can be explained by the relative rarity of the consonants involved. A <gw>...<gw> sequence, for example, is expected to not occur at all in a sample of 148394 C...C sequences due to the very low frequency of <gw> itself. That it appears once leads to a very high $\log_2\left(\frac{O}{E}\right)$ score for that cell. Data from infrequent consonants, then, is not very useful for the C...C measure, given the size of our corpus. That being said, we can remark on the rarity of the following sequences involving two consonants each of which is not infrequent overall: <s>...<t>, <d>...<t>, <l>...<r>, and <n>...<?>.

2.2.5 Bigrams, POA...POA sequences

Finally, we consider bigrams of two consonants separated by a vowel, but collapse all consonants having a similar place of articulation into a single category. In tables D.5 (appendix), and 2.12, P refers to a labial consonant (including <w>), T refers to a coronal consonant, K refers to a velar consonant, KP refers to a labial velar consonant, and Q refers to the glottal stop. These tables show that there are no POA...POA combinations which are either strongly preferred or strongly dispreferred.

2.3 Word-prosodic properties

Audio data we have access to suggests that various segmental processes are in play which lead to divergence between citation forms¹⁴ and word forms in running speech. Source materials available to us do not permit more than superficial analysis on such syntagmatic phonological properties. However, we are able to infer some generalizations over static lexical patterns. These include segmental coöccurrence frequencies, described above, and generalizations about word prosodic properties, which are covered in the present section. We discuss in turn word

¹⁴ Assuming here that the written forms of words correspond to citation forms.

Table 2.11: $\log_2 \left(\frac{O}{E} \right)$ values for C...C sequences with intervening vowel

$C_1 \backslash C_2$	p	f	b	m	w	t	s	d
p	undef.	undef.	undef.	undef.	undef.	0.402	undef.	undef.
f	undef.	0.653	-0.902	-0.041	-0.198	0.642	-1.793	0.453
b	undef.	-4.435	3.244	-2.989	undef.	0.564	-2.016	-1.432
m	undef.	-5.121	-4.358	0.781	undef.	-0.064	-2.364	-0.107
w	undef.	undef.	undef.	undef.	3.881	-1.239	1.567	0.710
t	undef.	0.443	-1.334	-2.403	undef.	0.139	-2.413	-1.089
s	4.296	-0.211	-1.706	-4.149	undef.	-8.903	-2.042	-0.016
d	undef.	-0.823	undef.	-0.945	undef.	-7.193	-1.447	0.682
l	-2.000	1.654	-0.488	-0.008	0.609	0.718	1.696	0.720
n	undef.	-3.982	-5.218	-0.584	-3.915	0.439	0.612	0.531
r	undef.	1.255	2.372	-3.828	undef.	-0.868	0.865	1.038
k	-2.129	-3.038	-0.690	-0.364	-2.474	0.834	2.558	-0.618
g	undef.	-3.862	-5.099	-6.313	undef.	-2.927	-2.851	-3.552
gw	undef.	1.164	undef.	undef.	undef.	undef.	undef.	undef.
kw	undef.	undef.	undef.	undef.	undef.	2.417	-1.382	-1.440
q	undef.	-1.826	-0.746	1.455	undef.	-1.577	-3.009	-0.787
$C_1 \backslash C_2$	l	n	r	k	g	gw	kw	?
p	undef.	undef.	1.758	3.056	undef.	undef.	undef.	undef.
f	0.324	-0.531	-1.175	-4.194	0.531	0.669	2.207	-0.241
b	-0.192	-1.344	0.118	-1.754	-0.885	0.263	-5.767	2.819
m	0.566	-1.253	-1.688	1.699	-3.124	undef.	undef.	-1.143
w	0.933	-4.922	-3.883	undef.	undef.	undef.	undef.	-4.633
t	0.373	0.017	-2.312	0.700	-1.175	undef.	0.034	2.097
s	0.761	-0.178	-3.943	0.979	0.571	undef.	-0.417	0.618
d	-2.365	1.585	1.392	-0.580	undef.	undef.	2.821	-0.171
l	-1.879	0.600	-10.552	0.840	1.466	0.287	-1.099	-0.948
n	0.381	1.299	-4.449	-3.885	0.864	undef.	-5.313	-5.063
r	-2.778	2.056	-0.865	0.086	0.895	3.098	-2.492	-0.497
k	-2.643	0.300	-0.267	0.508	-4.746	undef.	1.728	-1.038
g	-0.615	-1.974	2.213	undef.	-2.452	undef.	-7.193	-4.503
gw	0.778	-0.508	0.375	undef.	undef.	6.126	undef.	undef.
kw	0.571	-1.386	-4.269	-7.644	-0.313	undef.	0.383	-1.551
q	0.143	-1.907	0.819	-0.053	-1.489	undef.	-3.187	-1.887

Table 2.12: $\log_2 \left(\frac{O}{E} \right)$ values for POA...POA sequences with intervening vowel

$POA_1 \backslash POA_2$	P	T	K	KP	Q
P	-0.051	0.001	-0.079	0.325	0.137
T	0.052	-0.037	0.177	-0.106	0.149
K	-0.954	0.104	-0.671	-0.260	-0.928
KP	-1.759	0.102	-0.619	0.107	-0.476
Q	0.182	-0.012	-0.107	-0.966	-0.568

minimality (§ 2.3.1), reduplication (§ 2.3.2), and meaning preserving alternations we characterize as “prosodic adjustments” (§ 2.3.3). Along with the phonetic observations noted in § 2.1.3, these generalizations allow us to formulate a reasonably coherent starting hypothesis about the prosodic properties of the phonological word. Namely, we propose that the phonological word is parsed into bimoraic trochees, and that morphophonological alternations are preferred to the extent that they improve word parsing.

2.3.1 Minimal word

Following the hypothesis made in §2.1.3, the phonological word is parsed into moraic trochees. A minimal phonological word will consist of a single foot (whether two light syllables or one heavy syllable).

Grammatical words such as subject markers (§6.3), definite and indefinite determiners (§§7.2-7.3), the plural word (§7.5), numeral classifiers (§7.7) and demonstratives (§7.8) have written shape CV, and may be monomoraic.¹⁵ Lexical words (nouns, verbs and prepositions) are with very few exceptions¹⁶ at least bimoraic. Sufficient audio data is not available to know which monomoraic grammatical particles may be extrametrical, and which may be parsed with adjacent phonological material.

2.3.2 Reduplication

The present section details phonological properties of reduplicants. Information on the morphology of reduplicated words is given in §5.4.

Reduplicated words were screened and verified as follows. A screening list of 481 words was prepared by searching our corpus for all unique written words containing sequences of two or more segments¹⁷ appearing twice. Though the screening procedure used would in principle fail to detect reduplication of the type where the reduplicant undergoes a consonant or vowel mutation,¹⁸ our familiarity with the corpus indicates that “unfaithful” reduplication involving consonant or vowel mutations does not occur in the language (that is, in the written form used to publish the bible translation). A final list of 119 (table D.15) was arrived at through a manual inspection wherein words were lemmatized, and two types of unverified exemplars were discarded: those which appeared to have duplicated strings of segments by chance,¹⁹ and those for which the putative base morph was unattested elsewhere (table D.16). When chance reduplications are discarded, two generalizations about the placement of the reduplicant with respect to the base are apparent:²⁰ First, the reduplicant is word-initial; and second, the reduplicant immediately precedes the base morph.

As for its phonological shape, the reduplicant may consist either of one light syllable, one heavy syllable, or two light syllables. Relative frequencies of the three shapes are tabulated in table 2.13.

¹⁵ As noted in §2.1.3, the written forms **gi** and **li** are pronounced with a lengthened vowel if they happen to be stressed in pronunciation.

¹⁶ Recorded exceptions are **wa** ‘snake’; **bo** ‘pig’; and **la** ‘go’. All three have attested bimoraic homologues (**waa**, **boo**, and **laa**, respectively).

¹⁷ Digraphs **kw** and **gw** were treated as a single segment.

¹⁸ Examples are well-documented in the phonological literature. For an influential theoretically-oriented paper on the topic, see McCarthy and Prince (1995). See also Faraclas and Williamson (1984); McLaughlin (2006) for collected examples from African languages.

¹⁹ E.g., **fafa’alu-** ‘make new’ (< **fa-** ‘CAUS’ + **fa’alu** ‘be new’); **olola** ‘sixth’ (< **olo** ‘six’ + **-la** ‘NMLZ’).

²⁰ These apply to the “unverified” reduplicated forms in table D.16 as well.

Table 2.13: Phonological shape of reduplicant

Shape	Count	Shape	Count
CV	34	σ_L	34
V	0		
CVV	29	σ_H	30
VV	1		
CVCV	41	$\sigma_L\sigma_L$	58
VCV	17		
Total			122 ²¹

On a raw count basis, the $\sigma_L\sigma_L$ reduplicant shape is significantly²² more frequent than any other.

In order to learn more about the relative frequencies of reduplicant shapes, we tally reduplicant shapes according to the shape of the base in table 2.14. The total number of pairs is 128 rather than 122, because there are seven examples where the base is attested two different ways,²⁴ and one word (*kakaraikua* ‘rooster’) is removed because it is likely imitative.

Table 2.14: Cross-tabulation of reduplicant shape (rows) and base shape (columns). All (C)V sequences counted as σ_H and not $\sigma_L\sigma_L$. Dashed cells indicate categories judged impossible.

	σ_L	σ_H	$\sigma_L\sigma_L$	$\sigma_L\sigma_H$	$\sigma_H\sigma_L$	$\sigma_H\sigma_H$	$\sigma_L\sigma_L\sigma_L$	Total
σ_L	2	11	14	4	0	0	4	35
σ_H	—	24	—	—	6	2	—	32
$\sigma_L\sigma_L$	—	—	44	12	0	0	5	61
TOTAL	2	35	58	16	6	2	9	128

Though it was remarked above in §2.3.1 that a minimal lexical word should be at least one heavy syllable, table 2.14 lists two bases consisting of a single light syllable. In one of the cases, the base is itself the causative prefix *fa-* in *farono-* ‘tell (cause to hear)’.²⁵ In the other case the reduplicated form is *ku-ku* ‘wither’, apparently derived from *kuu* ‘leprosy’. Had the count

²¹ Though there are 119 words on the list, three have alternate forms of the reduplicant: *go-golafa* ~ *gola-golafa* ‘be dark’; *li-liu* ~ *liu-liu* ‘walk’; and *lo-logo* ~ *logo-logo* ‘gather’. The latter pair, however, is only attested in the derived forms *lologosi-* ‘store’; and *logologona* ‘crowd of people’.

²² Determined to be “significant” as follows: Consider repeated trials with three equiprobable outcomes. If 122 trials are made, the probability of any particular outcome occurring 58 or more times is 0.2%.²³ Put another way, if the three shapes of reduplicant are equally probable, then only 2 out of 1000 samples drawn would show a distribution as unevenly weighted as that observed.

²³ Since the calculation is a bit more complicated than that for the binomial (i.e., 2 categories) case (cf. Dryer (1992:85) for an example), and requires a computer, the method is outlined here for non-statisticians in case it may be of interest. All 1302 restricted (3-way) integer partitions of 122 were generated in reverse lexical order using the R package *partitions* (Hankin, 2006). Of these, there are 225 partitions where the largest part is 57 or less, and 1077 where the largest part is 58 or greater. The probability of each individual partition occurring was determined using *dmultinom* function in the R package *MFSAS* (Childs and Chen, 2011). The sum of probabilities for the 225 more balanced (i.e., no part greater than 57) partitions is 0.998, and the sum of probabilities for the 1077 less balanced partitions is 0.002.

²⁴ *boeta(a)*, *bora(a)*, *fau(a)*, *golafa(e)*, *iro(a)*, *ramo(a)*, *talo(fa)*

²⁵ Though we suspect *fa-* may be frozen in this particular word.

been made based on the shape of the base morphs as they are attested in non-reduplicated forms (rather than as they are attested in the reduplicated forms), this example would have been tallied under σ_L/σ_H .

Counts in table 2.14 suggest that the shape of the reduplicant is influenced by the shape of the base. When the numbers are adjusted so that the shape of only the first syllable of the base is considered (table 2.15), some more or less firm generalizations emerge: First, A σ_H reduplicant is only permitted when the first syllable of the base is heavy; second, $\sigma_L\sigma_L$ reduplicants are not permitted before heavy base-initial syllables; and third, when the base consists only of light syllables, $\sigma_L\sigma_L$ reduplicants are slightly preferred.

Table 2.15: Cross-tabulation of reduplicant shape (rows) and shape of base initial syllable (columns): raw counts (left) and $\log_2\left(\frac{O}{E}\right)$ values (right).

	σ_L	σ_H	TOTALS		σ_L	σ_H	TOTALS
σ_L	24	11	35	σ_L	0.046	-0.096	
σ_H	0	32	32	σ_H	<i>undef.</i>	1.574	
$\sigma_L\sigma_L$	61	0	61	$\sigma_L\sigma_L$	0.591	<i>undef.</i>	
TOTALS	85	43	128	TOTALS			

We note generally that reduplicants are limited to one bimoraic foot (whether a heavy syllable or two light syllables), though they may also consist of a single light syllable. The reduplicant does not have to be faithful to the base, even when to do so would not cause it to run afoul of the generic conditions on reduplicant shape.²⁶ When the reduplicant is not faithful to the base, there are two possible departures in faithfulness: dropping of one or more syllables, and shortening of a heavy syllable to a light one.

2.3.3 Prosodically oriented adjustments

A handful of variations are observed that involve lenition of a glottal stop. Others still show variation between a single and a double vowel. Some examples are given in table 2.16. If our general idea about the metrical structure of phonological words is correct, then these alternations could be associated with the shifting of stress under certain phonological conditions.

Table 2.16: Alternations involving lenition of a glottal stop or lengthening of a vowel.

fa-ba'ela-	'CAUS-be.big-'	fa-baela-	'CAUS-be.big-'
mo'osu	'sleep'	mo~mosula	'be.sleepy'
da'afi	'be.bright'	daafi-a	'shine.on-3.OBJ'
faasi lau	'ABL 1SG'	fa'asi 'o	'ABL 2SG'
so'e-la	'unto-3.PERS'	soe-gu	'unto-1SG.PERS'
ote	'valley'	fa-oote-a	'CAUS-be.valley-3.OBJ'
ta	'art'	taa	'art (headless NP)'
siofa	'be.poor'	siofaa	'be.poor'
ura	'stand'	uura	'stand'
rufi-	'enter'	ruufi-	'enter'

²⁶ Considering the second and third columns of table 2.14, there are 93 cases where it was possible for the reduplicant to be faithful. Faithfulness actually did occur in 68 cases (73%) with 25 “gratuitously unfaithful” cases (27%).

Alternations in vowel length are also observed in the causative prefix *fa-*. Though the prefix appears to be fully productive (i.e., it can be affixed to any verb), a handful of high frequency causative verbs show variation between *fa-* and its allomorph *faa-*. Table 2.17 gives tallies of the relative frequencies of the ten most frequently occurring verbs with prefix *fa-*.

Table 2.17: Frequent causative verbs tallied according to short or long form of the causative prefix: raw counts (left) and $\log_2\left(\frac{O}{E}\right)$ values (right).

	<i>fa-</i>	<i>faa-</i>	TOTAL		<i>fa-</i>	<i>faa-</i>	TOTAL
<i>-kwalaimoki</i>	796	0	796	<i>-kwalaimoki</i>	0.455	<i>undef.</i>	
<i>-lalau</i>	299	214	513	<i>-lalau</i>	-0.324	0.626	
<i>-rono</i>	318	142	464	<i>-rono</i>	-0.078	0.192	
<i>-talo</i>	114	57	171	<i>-talo</i>	-0.130	0.302	
<i>-mauri</i>	27	129	156	<i>-mauri</i>	-2.076	1.613	
<i>-muri</i>	5	19	24	<i>-muri</i>	-1.808	1.550	
			180				
<i>-malifii</i>	118	5	123	<i>-malifii</i>	0.395	-2.733	
<i>-malifi</i>	2	0	2	<i>-malifi</i>	0.455	<i>undef.</i>	
			125				
<i>-sui</i>	14	43	58	<i>-sui</i>	-1.571	1.481	
<i>-ba'ela</i>	18	9	27	<i>-ba'ela</i>	-0.130	0.302	
<i>-baela</i>	15	0	15	<i>-baela</i>	0.455	<i>undef.</i>	
			42				
<i>-futa</i>	8	20	28	<i>-futa</i>	-1.353	1.402	
<i>-madakwa</i>	10	8	18	<i>-madakwa</i>	-0.393	0.717	

We suppose that the causative prefix may appear in a bimoraic form when this would improve the prosodic well-formedness of the word for which it is a prefix. Of course, this assumes that the causative prefix is part of the phonological word. The transcriptions in appendix A.1 suggest that sometimes it is, and sometimes it isn't. As a starting hypothesis, we suppose that *fa-* is extrametrical when it is used productively, and part of the word when it is not analyzed by the speaker as a separate morpheme.²⁷

To see whether the prosodic shape of the verb stem tilts the scales towards *faa-* or *fa-* in verbs that show the alternation (*fakwalaimoki* excluded), total frequencies for the ten verbs are tallied according to the first syllable, the first two syllables, and the first three syllables.

Table 2.18: First syllable: raw counts (left) and $\log_2\left(\frac{O}{E}\right)$ values (right).

	<i>faa-</i>	<i>fa-</i>	TOTAL		<i>faa-</i>	<i>fa-</i>	TOTAL
σ_H	173	56	229	σ_H	0.897	-1.281	
σ_L	474	892	1366	σ_L	-0.225	0.136	
TOTAL	647	948	1595	TOTAL			

Table 2.18 suggests a slight preference for the heavy allomorph, *faa-*, when the first syllable of the verb stem is heavy (and a corresponding dispreference for the light allomorph, *fa-*). This is consistent with tendencies in reduplicant shape reported above in §2.3. Useful information added by the two and three syllable cases (tables 2.19 - 2.20) is a breakdown of the cases where the first syllable of the verb stem is light: the very slight preference for the light allomorph reflected in table 2.18 seems to be due to a more pronounced preference for the light allomorph

²⁷ A potentially relevant point is that a space is sometimes written between *faa* and the verb it modifies (47 out of 583 attestations), though this is not observed with *fa-*.

Table 2.19: First two syllables: raw counts (left) and $\log_2\left(\frac{O}{E}\right)$ values (right).

	<i>faa-</i>	<i>fa-</i>	TOTAL		<i>faa-</i>	<i>fa-</i>	TOTAL
$\sigma_H\emptyset$	2	1	3	$\sigma_H\emptyset$	0.717	-0.834	
$\sigma_L\sigma_L$	246	591	837	$\sigma_L\sigma_L$	-0.465	0.249	
$\sigma_L\sigma_H$	228	301	529	$\sigma_L\sigma_H$	0.087	-0.063	
$\sigma_H\sigma_L$	170	43	213	$\sigma_H\sigma_L$	0.976	-1.558	
$\sigma_H\sigma_H$	1	12	13	$\sigma_H\sigma_H$	-2.399	0.635	
TOTAL	647	948	1595	TOTAL			

Table 2.20: First three syllables: raw counts (left) and $\log_2\left(\frac{O}{E}\right)$ values (right).

	<i>faa-</i>	<i>fa-</i>	TOTAL		<i>faa-</i>	<i>fa-</i>	TOTAL
$\sigma_H\emptyset\emptyset$	2	1	3	$\sigma_H\emptyset\emptyset$	0.717	-0.834	
$\sigma_L\sigma_L\emptyset$	193	86	279	$\sigma_L\sigma_L\emptyset$	0.770	-0.947	
$\sigma_L\sigma_H\emptyset$	142	149	291	$\sigma_L\sigma_H\emptyset$	0.267	-0.215	
$\sigma_H\sigma_L\emptyset$	112	16	128	$\sigma_H\sigma_L\emptyset$	1.109	-2.249	
$\sigma_H\sigma_H\emptyset$	1	12	13	$\sigma_H\sigma_H\emptyset$	-2.399	0.635	
$\sigma_L\sigma_L\sigma_L$	46	386	432	$\sigma_L\sigma_L\sigma_L$	-1.930	0.588	
$\sigma_L\sigma_L\sigma_H$	7	119	126	$\sigma_L\sigma_L\sigma_H$	-2.868	0.668	
$\sigma_L\sigma_H\sigma_L$	86	152	238	$\sigma_L\sigma_H\sigma_L$	-0.167	0.104	
$\sigma_H\sigma_L\sigma_L$	58	27	85	$\sigma_H\sigma_L\sigma_L$	0.750	-0.904	
TOTAL	647	948	1595	TOTAL			

when the first *two* syllables are light, and an approximate indifference between the two allomorphs when the second syllable is heavy.

2.4 Conclusion

While this chapter has been necessarily limited in coverage, we have been able to establish sound values for the orthographic symbols, and have isolated several interesting patterns in the language's phonotactics using statistical methods, including:

1. A ban on <ie> and <ue> sequences.
2. A strong dispreference for <eCu> and <uCe> sequences.
3. A strong dispreference for high or back vowels following labial consonants.
4. A strong dispreference for high vowels following <t>.

Having access to a decent-sized digitized corpus of data, we have been able to generate detailed information about the frequencies of individual segments as well as their frequencies of cooccurrence. We have also offered some preliminary generalizations about stress placement in Wala, we have shown that the shape of reduplicants is linked to the shape of the base, and in the final section we discussed possible evidence for stress-related lenition and vowel lengthening. These topics are ripe for future work.

3 Word classes

We begin our treatment of word classes in Wala by explaining our understanding of the term ‘word class’. The methods we use to distinguish word classes and the status we give them will depend considerably on this understanding, so we prefer to make it explicit rather than leaving it for the reader to infer. We adopt, for the present work, the view from Radical Construction Grammar, namely:

Noun, verb, and adjective are not categories of particular languages[.] But noun, verb, and adjective are language universals—that is, there are typological prototypes...which should be called noun, verb, and adjective[.] (Croft, 2001:63)

We will seek to establish formal criteria for positing word classes only to the extent that these classes can assist us in stating generalizations about the grammar, and that the classes correspond to typological prototypes, or comparative categories.¹ Consequently, our categories may not be as neatly defined as possible, given the patterns the language provides for making distinctions, and some words may be left with no clear word class membership. We will make note of such cases at times, but we do not consider them to be problematic for our description.

Of the three major typological prototypes, several Wala constructions can be identified which serve to differentiate categories corresponding to prototypical nouns and verbs. These two major categories are treated in §§3.1 and 3.2, respectively. A third category, prepositions, is discussed in §3.3. There are no constructions in Wala which provide evidence for a category of adjective.

3.1 Nouns

A noun or pronoun is the only obligatory element of a noun phrase. Noun phrases in Wala have the following of properties:

- (i) They may be the possessor in a possessive construction.
- (ii) They may be the subject in a predicating construction.
- (iii) They may control agreement with possessor and object suffixes.

¹ The latter term is due to Haspelmath (2010), and is more or less equivalent to Croft’s “typological prototypes”. A useful proposal for avoiding the ambiguity between language-specific categories and typological prototypes, traceable to Comrie (1976:10), and specifically advocated for by Haspelmath (2010:674), is to designate comparative concepts with initial capital letters, and language-specific categories with lower case letters (e.g., “Noun” to refer to a comparative concept, and “noun” to refer to a word class in a particular language). Though we agree with the spirit of the convention, we do not follow it in the present work, simply because there are very few instances where we use word class labels to refer to typological prototypes, so any gain in clarity would not be significant enough to justify imposing an unfamiliar typographic convention on the reader.

Most of these properties are exemplified by (3-1), as explained below. In the example, noun phrases are enclosed in square brackets and agreement markings controlled by noun phrases are underlined.

- (3-1) ma [God] ka ala'ali-a fa-la [kwalaa-na] fai-li-a [ioli God gi li], ma
 and G. SEQ permit-3SG.OBJ DAT-3.PERS quarrel-NMLZ COM-TR-3.OBJ people G. PL DEF and
 fa-la [liu-fi-na-da]
 DAT-3.PERS pass-TR-NMLZ-3PL.PERS
 'And God allowed it [the beast] to fight with God's people, and to defeat them...' (Rv 13:7)

The noun phrase **God** is a subject of the verb **ala'ali-** 'permit', and may therefore appear immediately before the subject marker **ka** (see §6.3.2 for a description of subject markers). A noun phrase introduced earlier in the story, '**are mauri kwasi fo** 'the beast'', triggers 3SG agreement of the anaphoric object suffix **-a**, which attaches to the verb **ala'ali-** 'permit'. The noun phrase **ioli God gi li** 'the people of God' also triggers the *in situ* agreement marker **-a** on the preceding comitative verb-like preposition, **fai-li-a**. **Ioli God gi li** is formed via a possessive construction, with the possessor noun phrase being **God**. The same noun phrase also triggers agreement with the anaphoric personal suffix **-da** on the deverbal noun **liufina-** 'overcoming'. The deverbal noun itself, which patterns as a noun, controls agreement on the preceding noun-like dative preposition **fa-**.

The concept of subject as it applies to Wala is presented in §4.3. The distinction between anaphoric and *in situ* agreement suffixes is discussed in §4.4.1, §6.6, and §9. Possession, and the distinction between alienable and inalienable possession, is discussed in §8. Deverbal nouns are discussed in §5.3, and the purposive nominalization construction, of which **fala liufnada** 'to overcome them' is an example, is discussed in §5.3.2.

As noted at the start of this section, the noun is defined as the only obligatory element within a noun phrase. This means that the simplest type of noun phrase will contain only a noun. More complex noun phrases can be formed by embedding a noun phrase within another noun phrase, as in a possessive construction, or modifying the head noun with grammatical particles such as demonstratives, classifiers, determiners, numerals, and the plural word **gi**. These particles only modify nouns and do not modify words of other categories. The noun phrase **ioli God gi li** 'the people of God' in example (3-1) contains two such particles, the plural word **gi** and the definite determiner **li**. Two further examples of more complex types of noun phrases are given in (3-2) - (3-4), with the head noun underlined. The structure of the noun phrase is discussed in more detail in §7.

- (3-2) te tofu-i ia
 INDEF.SPEC cut-NMLZ2 fish
 'A piece of fish' (Lk 24:42)
- (3-3) rua fe nali gi
 two CLF year PL
 'Two years' (Acts 19:10)

- (3-4) madakwa-na-la da'afi
 be.bright-NMLZ-3.PERS sun
 'The light of the sun' (Rv 22:5)

Predicating constructions are less than ideal for distinguishing a difference in morphosyntactic behavior between nouns and verbs. Like verbs, nouns may predicate, as seen in the following example with a predicate noun phrase:

- (3-5) 'I lau [wale ta'a rasua]!
 PROFORE 1SG man be.bad very
 'I am a very bad man!' (Lk 5:8)

Furthermore, nouns can be "tamophoric" (Tournadre, 2004; François, 2005), i.e., they can be modified by the same types of aspectual markings as verbs.² Some examples of predicating noun phrases modified by tense and aspect markers are given in (3-6) - (3-8) (underlined elements are tense/aspect markers; predicate nominals are enclosed in square brackets).

- (3-6) Laka-e [mama] 'ala, ma 'i lia ka-e [wela] aa-gu.
 1SG.SEQ-IRR father 3SG.BEN and PROFORE 3SG SEQ-IRR child at-1SG.PERS
 'I will be a father to him, and he will be a son to me.' (Heb 1:5)

- (3-7) Lau bi [arai] mola, ma ka 'ato rasua fa-gu fa-la laa na
 1SG PROXT husband CONTR.FOC and SEQ be.difficult very DAT-1SG.PERS DAT-3.PERS go NMLZ
 ko.
 thither
 'I have just become a married man, and it is very difficult for me to go.' (Lk 14:20)

- (3-8) walelitalona ba'ela 'e alu-a wale fo ka [walelitalona] lo fa-da
 king be.big 3SG put-3.OBJ person DEM.DIST SEQ king FOC DAT-3PL.PERS
 'The big king made the man king over them.' (Lk 19:15)

² We note two possible alternatives to the tamophoric analysis. First, as a reviewer has pointed out, a multicategorial analysis is possible where roots can belong to more than one lexical category. Under this analysis, *walelitalona* in (3-8) could be analyzed as a verb meaning 'be.king', which is zero-derived from a noun of the same form. This would have the advantage of restricting verbal particles such as tense and aspect markers to modifying verbs, and would also account for the rare examples in our corpus in which nominal stems combine with verbal affixes, e.g., *fa-oote-a* 'flatten/make a valley' from noun *ote* 'valley', where the causative prefix *fa-* combines with a zero-derived verb *ote* 'be.valley', rather than a noun of the same form.³ The second alternative analysis is that there exist a handful of verbs which are historically derived from nouns, and that the tamophoric use of nouns (or \emptyset -derivation of verbs therefrom) is not productive in the syntactic grammar. Support for this hypothesis can be found by noting the apparent semantic distance between pairs of words which alternately refer or predicate: *fana* 'food (as referent); eat (as predicate)'; *arai* 'husband (as referent); be.married (man) (as predicate)'.

³ The significance of the additional <o> in the causative verb is not fully clear, but see §2.3.3 for similar examples.

In (3-6), the noun *mama* ‘father’ acts as a predicate, and is preceded by the first person sequential subject marker *laka-*, which bears the irrealis suffix *-e* (see § 6.3.2.1). Examples (3-7) and (3-8) have predicating nouns, *arai* ‘husband’ and *walelitalona* ‘king’, respectively, which are modified by pre- and post-verbal core tense/aspect markers, discussed in § 4.2. All of these nouns (*mama*, *arai*, and *walelitalona*) have the properties stated above for prototypical nouns: they may be the possessor in a possessive construction, they may act as subject of a verb, and they can control agreement with possessive or object suffixes.

The possessive construction (see § 8) provides means for distinguishing two subclasses of nouns, alienably and inalienably possessed nouns. Nouns which are alienably possessed are morphologically invariant, while inalienably possessed nouns receive a personal possessive suffix when they act as the possessum in a possessive construction. Examples of an alienably possessed noun and an inalienably possessed noun are given in table 3.1.

Table 3.1: Alienable and inalienable possessive constructions

<i>iolī</i>	‘people’	<i>rata-</i>	‘name’
<i>iolī lau</i>	‘my people’	<i>rata-gu</i>	‘my name’
<i>iolī God</i>	‘God’s people’	<i>rata-la God</i>	‘God’s name’

As will be noted in § 8.1, there are several nouns which are attested in both alienable and inalienable possessive constructions. The possessive construction, then, cannot be used to neatly divide all nouns into two non-overlapping classes. For the large majority of nouns, however, a clear tendency can be observed as to which type of possessive construction, alienable or inalienable, they usually participate in.

3.2 Verbs

We have identified six main properties of verbs, which are listed below. These properties are illustrated in examples (3-9) - (3-12), in which the verbs are underlined.

- (i) They may receive the nominalizing suffix *-na*.
- (ii) They may receive valence-increasing transitive suffixes.
- (iii) They may index object arguments by receiving an object suffix.
- (iv) Two or more verbs may form a complex predicate by nuclear serialization.
- (v) With an adjacent noun phrase,⁴ they may form a derived intransitive predicate via noun incorporation.
- (vi) They may directly modify nouns, functioning somewhat like prototypical adjectives.

Nominalizing suffixes are found in (3-9) and (3-10).

(3-9) lau faalalau ‘amiu, wasua ‘i lao-la ‘ato-na gi ma ani-na gi.
 1SG teach 2PL.NSBJ but LOC inside-3.PERS be.difficult-NMLZ PL and cry-NMLZ PL
 ‘I taught you, but with difficulties and tears.’ (Acts 20:31)

⁴ See § 4.2.4.1 on whether incorporation should be analyzed as involving nouns or noun phrases.

- (3-10) A-la talasi 'amu logo fa-la fana abu na li, iko lou fana abu
 at-3.PERS time 2PL gather DAT-3.PERS eat be.holy NMLZ DEF NEG again food be.holy
kwalaimoki 'amu 'ani-a.
 be.true 2PL eat-3SG.OBJ
 'When you gather for the holy meal, it is not actual holy food that you eat.' (1 Cor 11:20)

In the first case, the nominalizing suffix attaches to the verbs '*ato* 'be difficult' and *ani* 'cry' to form the nouns '*atona* 'difficulty' and *anina* 'crying'. In (3-10), the compound verb *fana abu* 'eat in a sacred way' is nominalized as part of a purposive nominalization construction. Nominalization is discussed in § 5.3.

In example (3-11), the derived transitive verb *goufi-* 'drink' is formed by the addition of one of the valence-increasing transitivity suffixes to the intransitive verb *gou* 'drink'. The formation of transitive verbs from intransitive verbs is discussed in more detail in § 5.2.1.

- (3-11) ma 'amu ka 'ani-a, ma 'amu ka gou-fi-a 'are gera kwate-da fa-miu gi.
 and 2PL SEQ eat-3.OBJ and 2PL SEQ drink-TR-3.OBJ thing 3PL give-3PL.OBJ DAT-2PL.PERS PL
 '...and you will eat and drink the things that they give to you.' (Lk 10:7)

The use of object suffixes is exemplified in (3-10)–(3-11). In (3-11) there are three different transitive verbs which receive an object suffix, '*ani-* 'eat (tr.)', *goufi-* 'drink', and *kwate-* 'give'. In the first two cases, the object suffix *-a*, which indexes *in situ* non-pronominal objects, is found; in this case it indexes '*are gera kwateda famiu gi* 'the things which they give to you'. The anaphoric 3PL object suffix *-da* appears on *kwate-* since it indexes a plural noun phrase '*are gera ...gi* 'things they gave you' which is *ex situ*, as occurs in relative clause formations. In example (3-10), the 3SG anaphoric object suffix is found attached to the transitive verb '*ani-* 'eat'. The noun phrase which it indexes (*fana abu kwalaimoki*) is fronted as part of a clefting construction. The usage of anaphoric versus *in situ* agreement suffixes is discussed in § 9. It should be noted that the *in situ* object suffix, which is unspecified for number, is homophonous with the anaphoric 3SG suffix.

Example (3-10) contains an example of a compound verb, *fana abu* 'eat in a holy way', composed of the intransitive verb *fana* 'eat' and the verb *abu* 'be holy/taboo'. In a verb-verb compound, the initial verb must be in its intransitive (i.e., combining) form, and the transitivity of the compound as a whole depends on the transitivity of the second verb. Verb compounding is discussed in more detail in § 4.2.4. The related phenomenon of noun incorporation is illustrated in (3-12).

- (3-12) Ma 'i-'o ta fita 'are 'o sake lana a-li?
 and PROFORE-2SG what how.many thing 2SG take loan at-INDEF.PERS
 'And how much have you borrowed?' (Lk 16:7)

Here the noun *lana* 'loan' (presumably a loan word) combines with the preceding verb *sake* 'take', to form the intransitive noun-incorporated complex verb *sake lana* 'take out a loan'. As with verb-compounding, noun incorporation requires that the (initial) verb be in its intransitive form. In (3-12), the verb *sake* 'take', which is usually transitive, must appear in its combining form (see § 5.2), as can be verified by its lack of object suffix (cf. for example, the phrase *sake-a bata* 'take

money', which does not instantiate noun incorporation). Noun incorporation is discussed further in § 4.2.4.1.

3.3 Prepositions

Prepositions generally correspond to English prepositions, and their main function is to introduce additional non-core (i.e., not subject or object) arguments to a clause. We divide Wala prepositions into two formal classes, termed verb-like and noun-like, according to their morphological properties. This terminology is borrowed from Lichtenberk (2008b). The verb-like prepositions (§ 3.3.2) index their complements with object suffixes, which are otherwise used to index objects on verbs. The noun-like prepositions (§ 3.3.3) index their complements with personal suffixes, which are otherwise used to index possessors on inalienably possessed nouns. Before discussing the verb- and noun-like prepositions, we address two particles with meanings corresponding to English prepositions, but which do not index their complements (§ 3.3.1).

3.3.1 Locative *'i* and comitative *fae*

There are two grammatical particles, *'i* 'LOC' and *fae* 'COM', which have meanings that correspond with English prepositions, and which add non-core arguments, but because they are always invariant we do not classify them as prepositions.

'I 'LOC' is a general purpose locative particle that can usually be translated as 'at' or 'in'. Canonical use is preceding a noun phrase referring to a location. We refer to a sequence *'i* + NP as a 'locative phrase' in this work (locative phrases are enclosed in square brackets in (3-13) - (3-14)).

(3-13) A-la talasi lau io ['i Damaskas]
 AT-3.PERS time 1SG stay LOC D.
 'When I was in Damascus...' (2 Cor 11:32)

(3-14) 'O oli 'amua ['i falua 'o]
 2SG return 2SG.BEN LOC land 2SG
 'Return to thine own house.' (Lk 8:39)

The locative particle may also precede a noun phrase headed by an inalienably possessed noun (see § 6.5.1 for a partial list). When the inalienably possessed noun refers to a body part, the locative phrase has a literal meaning of 'at/on X'. Two examples are given in (3-15) - (3-16).

(3-15) Ma ka alu-a lo 'eregwau afula gi ['i gwau-la].
 and SEQ put-3.OBJ FOC crown be.many PL LOC head-3SG.PERS
 'And he had many crowns on his head.' (Rv 19:12)

(3-16) 'e niki-a wai-wai si'ina 'oka 'e ['i 'ae-gu].
 3SG pour-3.OBJ RED-oil spice be.good DEM.PROX LOC foot-1SG.PERS
 '...she poured this good fragrant oil on my feet.' (Lk 7:46)

The locative particle also forms locative phrases with inalienably possessed nouns having more abstract meanings. These locative phrases (two examples in (3-17) - (3-18)) have meaning which is not strictly locational.

(3-17) Gia ka kwaima aa-ga [i matana-ga]
 1INCL.PL SEQ be.friend at-1INCL.PL.PERS LOC between-1INCL.PL.PERS
 'Let us love one another...' (1 Jn 4:7)

(3-18) Ma [i osia-la 'are fo gi], ioli God gi gera ka fafu
 and LOC sake-3.PERS thing DEM.DIST PL people G. PL 3PL SEQ suffer
 'Because of those things, the saints abide...' (Rv 14:12)

One of the most frequent 'abstract' locative phrases is headed by *tala* 'self', and it is used to create a reflexive meaning. Examples (3-19) - (3-20) are illustrative.

(3-19) 'o faa-mauri 'o [i tala-mu]!
 2SG CAUS-live 2SG PROFORE self-2SG.PERS
 '...save yourself!' (Lk 23:37)

(3-20) gia faa-kwaga gia [i tala-ga] faasi-a ta'a-na
 1INCL.PL CAUS-be.clean 1INCL.PL PROFORE self-1INCL.PL.PERS ABL-3.OBJ be.bad-NMLZ
 'We cleanse ourselves from sin...' (2 Cor 7:1)

A homophonous form to locative *'i* is the pronominal foregrounder *'i* (see §6.4.3.1), which combines with pronouns but which does not add a non-core argument.

The comitative *fae* combines only with independent non-subject pronouns (§6.4),⁵ and contributes an additional argument to the clause. An example is given in (3-21) (additional examples are given in §6.4.3.2).

(3-21) 'O io ga mae 'amua [fae 'ameroa]
 2SG stay HORT hither 2SG.BEN COM 2EXCL.DU.NSBJ
 'Abide with us...' (Lk 24:29)

There is an obvious relationship between *fae* and verb-like preposition *fai-li-*: *-li* is a transitivizing suffix, and both forms have a comitative function. Notwithstanding, we leave *fae* unclassified in the present analysis, since it patterns with neither verbs nor nouns morphologically.

3.3.2 Verb-like prepositions

There is a set of verb-like prepositions which use object morphology in all of the same ways that verbs do: (a) the suffixes can be used anaphorically, in which case they agree in number with their antecedent; (b) the suffixes can be used non-anaphorically, for *in situ* complements, in which case the default suffix *-a* is used; (c) for a non-third person object, no suffix is present (see §4.4.1). For the reasons presented in §3.3.2.1, however, verb-like prepositions are treated as belonging

⁵ One exception to this has been identified: *fae kalokalo-mu* 'with/by your root' (Lk 17:6), where the particle combines with a noun. We would expect to find *faili-a* in this case.

to a word class separate from verbs. A set of the most common verb-like prepositions is given in table 3.2.

Table 3.2: Some verb-like prepositions

fai-li-	'comitative, and'
talifili-	'alone'
'afi-	'allative'
'ali-	'instrumental'
fafi-	'against'
faasi-/fa'asi-	'ablative'
suli-	'concerning, about'

3.3.2.1 Distinctness of verb-like prepositions and true verbs

There are three properties of verbs which verb-like prepositions lack. We consider the following properties as sufficient evidence for recognizing a word class 'verb-like preposition' as distinct from verbs, and consider these contrasting properties in more detail in §§3.3.2.1.1 - 3.3.2.1.3.

1. Verb-like prepositions are not used by themselves to form deverbal nouns (cf. § 5.3).
2. Verb-like prepositions generally do not appear as the sole predicating element in a clause.
3. When verb-like prepositions appear in constructions superficially resembling serial verb constructions, they may be adjacent to, but not part of the verbal complex (cf. § 4.2.4).

3.3.2.1.1 Formation of deverbal nouns

Nominalization, discussed in more detail in § 5.3, appears to be a fully productive process for deriving deverbal nouns. Typical uses of deverbal nouns are the expression of abstract concepts (shown in (3-22)), and the formation of non-finite purposive clauses (shown in (3-23)).

(3-22) God 'e tae-a Aofia gia Jesus faasi-a mae-na.
 G. 3SG raise-3.OBJ lord 1INCL.PL J. ABL-3.OBJ die-NMLZ
 'God raised our Lord Jesus from the dead' (Heb 13:20)

(3-23) Ma Aofia 'e faa-mauri lau faasi-a ioli gi fa-la rauni-na-gu.
 and lord 3SG CAUS-live 1SG ABL-3.OBJ people PL DAT-3.PERS kill-NMLZ-1SG.PERS
 '...and God saved me from the people [planning] to kill me' (2 Tm 4:17)

The verb-like prepositions listed in table 3.2 are not attested in nominalized forms by themselves in our corpus, whence we conclude that verb-like prepositions may not form deverbal nouns.

3.3.2.1.2 Role as sole-predicating unit

Although verbs are not the only lexical category which can predicate, it is a necessary property of verbs that they be able to do so. It is not clear that verb-like prepositions are able to serve as the sole predicating element in a clause. We have a few examples where the predicating element appears to be a lexical verb which is diachronically related to a verb-like preposition. Since we

suspect that most verb-like prepositions at some point were grammaticalized from true verbs (see Durie (1988)), this is not surprising. Examples (3-24)–(3-25) show lexical verbs possibly related to the ablative and ‘against’ verb-like prepositions (*fa(')asi-* and *fafi-*, respectively).

(3-24) 'I 'o 'o io lou fai-li-a Jesus, te wale 'e faasi-a 'i Galili.
 PROFORE 2SG 2SG stay again COM-TR-3.OBJ Jesus INDEF.SPEC person 3SG be.from-3.OBJ LOC G.
 ‘You were also with Jesus, a man from Galilee.’ (Mt 26:69)

(3-25) Kukui-da 'e malaa wa gi lia too a-la gwau 'are gi, ma gera ka
 tail-3PL.PERS 3SG resemble snake PL 3SG have at-3.PERS head thing PL and 3PL SEQ
fafi-a ioli gi 'ali-a kukui-da.
 be.against-3.OBJ people PL INS-3.OBJ tail-3PL.PERS
 ‘... their tails were like snakes that they had heads, and they would hurt people with their tails.’ (Rv 9:19)

One final example, (3-26), although possibly spurious, should be mentioned here as well.

(3-26) 'O oga meulu ka la ma meulu ka *fai-li-a* fasifasi ta'a fo gi?
 2SG want 1EXCL.PC SEQ go and 1EXCL.PC SEQ gather-TR-3.OBJ planting.seed be.bad DEM.DIST PL
 ‘Do you want us to go and gather those bad seeds up?’ (Mt 13:28)

Toqabaqita has a word *fai* ‘scrape the ground’, with transitive form *failia* ‘clean, clear a place with one’s hands’ (Lichtenberk, 2008a:62). Likewise, Kwaio has a word *failia* ‘weed (vt)’ (Keesing, 1975:44). Example (3-26) may very well contain a cognate of these words, separate from the transitive form of comitative *fae / fai-li-*. There is, however, no word in Toqabaqita or in Kwaio used to coordinate noun phrases which is obviously cognate with Wala *fae* or *fai-li-*. Both of these languages have a form *ma* which is used to coordinate NPs, so there is no cognate evidence for a relationship between *fai-li-*, as seen in (3-26), and the common verb-like preposition *fai-li-*, although it is not difficult to imagine a verb meaning ‘gather’ acquiring comitative semantics.

3.3.2.1.3 Formation of serial verb constructions

Example (3-27) contains an example of a serial verb construction. The verbal core (cf. §4.2), enclosed in square brackets, contains two verbs which are normally transitive. The first of these verbs is in its affixless combining form (cf. §5.2). In general, only the final verb of a complex verbal core may contain an object affix.

(3-27) Ma 'o [alu goli]-a 'amua waen 'oka rasua 'e la la ka dao lo
 and 2SG [put collect]-3.OBJ 2SG.BEN wine be.good very DEM.PROX until SEQ arrive FOC
 a-la talasi 'e!
 at-3.PERS time DEM.PROX
 ‘...but you have put away the good wine for yourself up until now.’ (Jn 2:10)

Examples (3-28)–(3-29) do not contain true serial verb constructions under our analysis because both the verb and the following verb-like preposition contain object suffixes. When two

true verbs are adjacent to each other, and the first one is normally transitive, the second verb can “block” the first verb from bearing its object suffix (cf. §§ 4.4.1, 4.2.4). Verb-like prepositions generally do not have this blocking property, as can be seen in the examples where the verb-like preposition (underlined) follows a verb (in square brackets) which hosts an object suffix.⁶

(3-28) gera ['ago-fi]-a fai-li-a 'abu-la 'are too 'a'ae gi fa-la
 3PL burn-TR-3SG.OBJ COM-TR-3.OBJ blood-3.PERS thing have foot PL DAT-3.PERS
 lufaa-na-la ta'a-na gi.
 release-NMLZ-3.PERS be.bad-NMLZ PL
 ‘they burn it with the blood of footed things to excise wickedness (Heb 10:6)

(3-29) Ma tali ta gia ka-e [sake]-a faasi-a molagali 'e? Iko
 and INDEF.NSPEC.PL what 1INCL.PL SEQ-IRR take-3SG.OBJ ABL-3.OBJ world DEM.PROX NEG
 mola!
 CONTR.FOC
 ‘And what will we take away from this world? Nothing!’ (1 Tm 6:7)

As one reviewer has pointed out, the data we present are not inconsistent with an analysis⁷ where verb-like prepositions *do* participate in serial verb constructions (albeit of a different type). What we refer to as “serial verb constructions” in this work could be analyzed as instances of nuclear layer serialization, while constructions where a verb-like preposition is employed to introduce additional core arguments could be analyzed as instances of core layer serialization. Given that the close functional relationship between verb-like prepositions and serializing constructions in Oceanic languages is well-known to scholars (Durie, 1988), we suspect that exploration of an analysis along such lines would prove fruitful in a work more theoretically-oriented than the present one.

3.3.2.2 Functional properties of verb-like prepositions

The main function of verb-like prepositions is to introduce additional arguments to a clause, particularly non-subject arguments to clauses with an intransitive predicate, and a third argument to clauses with a transitive predicate.

The use of a verb-like preposition for introducing a non-subject argument to a clause with an intransitive predicate is illustrated with the intransitive verb *toro* ‘be clothed’, which may appear as the only verb in a clause, in (3-30). *Toro* is more frequently found with the instrumental verb-like preposition '*ali-*', which introduces an additional non-subject argument, following it, as in (3-31).

⁶ Note that we consider absence of the mentioned blocking property to be evidence for placing verb-like prepositions in a word class separate from verbs. As one reviewer has pointed out, serial verb constructions are defined below (§ 4.2.4.2) to exclude verb-like prepositions. At this point in the exposition, however, we present the data *as if* it were not certain that verbs differed formally from verb-like prepositions.

⁷ Specifically, an analysis within the Role and Reference Grammar framework.

- (3-30) 'e gwauru lo 'ala 'i lifi-fo, ma ka toro lo, ma ka malata
 3SG sit FOC 3SG.BEN LOC place-DEM.DIST and SEQ be.clothed FOC and SEQ think
 rada lo.
 be.correct FOC
 ‘...[he was] sitting in that place, and clothed, and in his right mind...’ (Mk 5:15)

- (3-31) ma gera ka toro 'ali-a to'omi kaka'a gi
 and 3PL SEQ be.clothed INS-3.OBJ cloth be.white PL
 ‘...and they wore white clothing...’ (Rv 4:4)

The preposition '**ali-** *INS*' may also introduce an additional argument for a transitive verb, as it does in (3-32). It can be remarked for this example that the terms indexed by the object suffix on the verb, and the object suffix on the verb-like preposition, are not coreferential. The object suffix on the verb is anaphoric and refers back to the whore of Babylon, while the object suffix on the verb-like preposition '**ali-** indexes the presence of the in-situ complement, **dunaa**.

- (3-32) ma gera ka-e 'ago-fi-a 'ali-a dunaa.
 and 3PL SEQ-IRR burn-TR-3SG.OBJ INS-3.OBJ fire
 ‘...and they shall burn her with fire.’ (Rv 17:16)

Example (3-33) shows a similar construction, where a verb-like preposition introduces an additional argument to a transitive clause. In this case, the object of the main verb is *in situ*, and it separates the verb-like preposition from the main verb.

- (3-33) sui ka sake-a 'abu faasi-a buluka gi fai-li-a nanigot gi
 then SEQ take-3.OBJ blood ABL-3.OBJ cow PL COM-TR-3.OBJ goat PL
 ‘...then he took blood from cows and goats...’ (Heb 9:19)

The verb-like preposition **fai-li-** may also coordinate noun phrases.

- (3-34) 'I lau James wale li galo-na [God] fai-li-a [Jesus Christ Aofia].
 PROFORE 1SG J. person HABIT work-NMLZ G. COM-TR-3.OBJ J. C. lord
 ‘I am James who is a servant of God and of Lord Jesus Christ.’ (Jas 1:1)

Example (3-34), which contains a predicating nominal instead of a verb, has as a predicate **wale li galona God failia Jesus Christ Aofia** ‘a servant of God and of Lord Jesus Christ’. The coordinated NPs are enclosed in square brackets.

Another example of coordination of two NPs within a locative phrase is given in (3-35).

- (3-35) Ma ioli gera io 'i lao-la [wado] fai-li-a [falua a-la mae-na li],
 and people 3PL stay LOC inside-3.PERS ground COM-TR-3.OBJ town at-3.PERS die-NMLZ DEF
 gera ka mauri lou.
 3PL SEQ live again
 ‘And the people who were staying under ground and in the land of death, they were revived.’
 (Rv 20:13) [KJV: ‘and death and hell delivered up the dead which were in them...’]

3.3.2.3 Ambiguous cases

The three criteria we laid out at the outset of this section (cf. § 3.3.2.1) can be used to distinguish verbs from verb-like prepositions in almost all cases. There are, however, some sentences in our corpus involving ambiguous behavior of a word which most often behaves as a verb-like preposition. For example, we have cases of the verb-like preposition **suli-** ‘concerning, about’ blocking object suffixing on a previous verb, and receiving the nominalizing suffix **-na**.

In example (3-36) both types of anomalous behavior are observed. **Suli-** ‘concerning’ not only appears with the nominalizing suffix **-na**, but it forms, with **rono-** ‘hear’, a complex verbal core. **Ronosulina** is written without spaces in the original text, and the whole form **ronosulina** must be the head of a noun phrase, since it agrees with the personal suffix **-la** on the previous word (see § 3.3.3 on this point).

- (3-36) Iko ta ioli 'ali rada 'i maa-la God, 'i osia-la
 NEG INDEF.NSPEC.SG people COMP be.straight LOC eye-3.PERS G. LOC sake-3.PERS
rono-suli-na ma tau-na suli-a taki li
 hear-concerning-NMLZ and do-NMLZ concerning-3.OBJ law DEF
 ‘There is no person that is correct in God’s eyes [just] because of his heeding, and acting according to, the law.’ (Rom 3:20)

If the observations from (3-36) are taken by themselves, it must be acknowledged that **suli-** behaves as a verb. But **suli-** is not used productively as a verb. All of the cases where **suli-** appears with a nominalizing suffix are actually nominalizations of the compound verb **ronosuli-** ‘obey (a command)’. There is one other case where **suli-** behaves similarly. The compound **tau suli-** ‘obey’ contains **suli-** functioning as a true verb. Interestingly, the sequence **tau(a) suli-** ‘do/make (it) concerning’, where **suli-** functions as a verb-like preposition and not as a true verb, is also attested. The two forms are compared in (3-37)–(3-38).

- (3-37) ikoso tau suli-a 'are 'e ta'a gi
 NEG2 do concerning-3.OBJ thing 3SG be.bad PL
 ‘...do not act following bad things...’ (3 Jn 1:11)
- (3-38) Me sae-na God 'e tau-a suli-a eniselo gi li
 CLF say-NMLZ G. 3SG do-3SG.OBJ concerning-3.OBJ angel PL DEF
 ‘The speech God made about the angels...’ (Heb 1:7)

Given the restricted nature of this kind of unusual behavior associated with **suli-**, it does not seem warranted to heavily revise our definition of verb-like prepositions. Instead we prefer to treat **ronosuli-** ‘obey’ and **tausuli-** ‘obey’ as indivisible lexical items.

3.3.3 Noun-like prepositions

Two words, **a-** ‘at’ and **fa-** ‘DAT’, are similar in behavior to verb-like prepositions, except they take the set of suffixes normally reserved for inalienably possessed nouns. One of these, **fa-**, is a reflex of POC ***pa(nñ)i** ‘give’, which is reconstructed as a verb. Lichtenberk (1985), who first proposed the reconstruction ***pa(nñ)i** ‘give’, argues that Malaita-Cristobal languages share an

innovation where the Proto-Malaita-Cristobal verbal preposition **fani* was reanalyzed as a noun-like preposition after losing its final *i*. That is, **fan-a* ‘DAT-3SG.OBJ’ was reanalyzed as **fa-na* ‘DAT-3SG.POSSESSUM’.

An example of the noun-like preposition *fa-* is given in (3-39), where it takes the first person personal suffix *-gu*.

- (3-39) mama lau 'e kwate-a lo 'are gi sui fa-gu
 father 1SG 3SG give-3.OBJ FOC thing PL EXHST DAT-1SG.PERS
 ‘My father has given all things to me.’ (Mt 11:27)

3.3.3.1 Distinction between noun-like prepositions and inalienably possessed nouns

It should be pointed out that while in Toqabaqita a prepositional phrase headed by cognate *fa-* is usually preceded by the general purpose locative *qi* (Lichtenberk, 2008b:494), neither of the two Wala noun-like prepositions are preceded by *'i* anywhere in our corpus.

There are, however, several inalienably possessed nouns in Wala which are routinely part of locative phrases headed by *'i*, and whose English translation equivalents are prepositional.⁸ There does not seem to be any language-internal syntactic evidence for distinguishing these from inalienably possessed nouns. Note, for example, the structural parallels between (3-40)–(3-42), which have locative phrases containing inalienably possessed nouns with preposition-like meanings, and (3-43)–(3-44), which contain locative phrases (underlined) containing body part terms.

- (3-40) ma 'amu ka famalifii 'i duna-gu
 and 2PL SEQ suffer LOC sake-1SG.PERS
 ‘...you have suffered for my sake ...’ (Rv 2:3)
- (3-41) sulii-a malakwaita-na afula gi 'amu liu 'i lao-li
 concerning-3.OBJ persecute-NMLZ be.many PL 2PL pass LOC inside-INDEF.PERS
 ‘...of manifold temptations which you pass inside of.’ (1 Pet 1:6)
- (3-42) Ma abulo-na-miu ka 'oka fa-miu 'i matana-miu
 and turn-NMLZ-2PL.PERS SEQ be.good DAT-2PL.PERS LOC between-2PL.PERS
 ‘And your behavior one to another should be good...’ (Eph 4:32)
- (3-43) ma gera ka loto 'i babali-la
 and 3PL SEQ kiss LOC face-3SG.PERS
 ‘...and they kissed his face.’ (Acts 20:37)
- (3-44) 'e 'oka fa-la 'ali gera firi-a ta fau ba'ela 'i lua-la,
 3SG be.good DAT-3SG.PERS COMP 3PL fasten-3.OBJ INDEF.NSPEC.SG stone be.big LOC neck-3SG.PERS
 ma gera-ka 'ui 'ali-a 'i lao-la asi matakwa.
 and 3PL-SEQ cast INS-3SG.OBJ LOC inside-3.PERS sea coastal.waters

⁸ These include *lao-* ‘inside’, *safita-* ‘amongst’, *huri-* ‘behind’, *matana-* ‘between’, *afuta-* ‘throughout’, *osia-* ‘because of’, *duna-* ‘for the sake of’, *totola-* ‘against’, *gege-* ‘close to’.

‘...it would be better for him that they tied a large stone around his neck, and cast him into the sea.’ (Mt 18:6)

Since the two noun-like prepositions do not form part of a locative phrase headed by *'i*, we can formally distinguish them from true inalienably possessed nouns. We can also distinguish between them in terms of their behavior when they occur in post-verbal position. When an inalienably possessed noun occurs in the object field, it must be an object argument of the verbal core, and it must agree with the verb’s object suffix (i.e., the suffix on the verbal core will be *-a*; see §4.4.1). This is the case in (3-45).

(3-45) Iko 'ali 'amu tofe-a rata-gu fai-li-a fitoo-na 'amiu a-gu.
 NEG COMP 2PL deny-3.OBJ name-1SG.PERS COM-TR-3.OBJ have.faith-NMLZ 2PL.NSBJ at-1SG.PERS
 ‘You have not denied my name nor your faith in me’ (Rv 3:8)

But when either of the noun-like prepositions *a-* or *fa-* appear post-verbally, they are not an object argument of the verb; instead, they introduce an oblique argument. Since agreement marking on verbs is only for objects, a post-verbal noun-like preposition does not agree with the object suffix on the verb. Disagreement between the person and number of a verb’s object and of an oblique argument is therefore to be expected, as in (3-46) – (3-47).

(3-46) Lau faa-sui-a lo galo-na God 'e kwate-da fa-gu gi
 1SG CAUS-finish-3.OBJ FOC work-NMLZ G. 3SG give-3PL.OBJ DAT-1SG.PERS PL
 ‘I have finished the work God has given me.’ (2 Tm 4:7)

(3-47) Ma 'o kwate-a fa-mami fana 'e totoli 'amami sulia atoa
 and 2SG give-3.OBJ DAT-1EXCL.PL.PERS food 3SG be.sufficient 1EXCL.PL.NSBJ concerning-3.OBJ day
 gi li.
 PL DEF
 ‘And give us food that is enough for us [all] the days.’ (Lk 11:3)

3.4 Other word classes

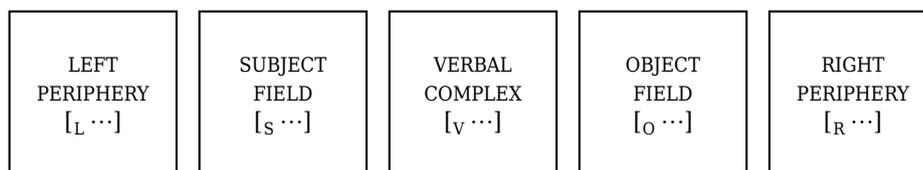
Other word classes which could be distinguished include the set of tense, aspectual, spatial and focus operators which delimit the verbal core (see §4.2), negation (§11) and interrogative operators (§12), as well as pronouns (§6). These grammatical words are sufficiently distinctive that no arguments will be needed here for establishing their status. In any case, whatever word classes that might be established for them would have very few members. They will be introduced in their respective sections.

4 Clause structure

The present chapter describes the structure of the basic clause, and lays some terminological groundwork for future chapters. The bulk of the chapter is dedicated to the structure of basic declarative clauses (§§ 4.1 – 4.5). We develop two systems of nomenclature for describing constituents of the basic declarative clause. The first is based on a template which refers to important recurring linear positions within the clause (§ 4.1). The second system identifies constituents according to their argument structure properties (§§ 4.2 – 4.5). The verbal complex, which houses the predicate of the clause, is discussed in the most detail (§ 4.2). Frequently attested special clause types are discussed in § 4.6, including emphatic clauses (§ 4.6.1), jussive and imperative clauses (§ 4.6.2), and clauses with non-verbal predicates (§ 4.6.3).

4.1 The clausal template

Figure 4.1: The clausal template



The template given in figure 4.1 provides a framework for describing the positions of the different constituents of a basic declarative clause. The clause is divided up into five fields. Below the label for each field is indicated the bracketing notation that will be used in example sentences in this section to show boundaries between fields. With the exception of clauses with non-verbal predicates, each clause contains minimally a subject field and a verbal complex. The verbal complex contains one or more verbs, an object suffix or pronoun in the case of transitive verbs, and optionally one or more delimiting particles. The makeup of the verbal complex is discussed in some detail in § 4.2.

When the subject has inanimate reference, or third person singular animate reference, the only mandatory element in the subject field is the subject marker, which has non-sequential ('*e*') and sequential (*ka*) forms (cf. § 6.3). An optional third person singular pronoun or lexical noun phrase (with inanimate or singular animate reference) may precede the subject marker. This possibility is schematized in (4-1). When the subject has non-third person singular animate reference, the only overt mandatory element is a subject pronoun (cf. § 6.2). A lexical noun phrase optionally precedes the subject pronoun, and the sequential subject marker *ka* may follow

the subject pronoun, its absence (represented as \emptyset in (4-2)) indicating non-sequentiality.¹ This possibility is schematized in (4-2).

$$(4-1) \quad S_{3SG} \rightarrow \left(\left(\begin{array}{c} PRO_{SBJ} \\ NP_{lex} \end{array} \right) \right) + \left(\begin{array}{c} 'e \\ ka \end{array} \right)$$

$$(4-2) \quad S_{N3SG} \rightarrow (NP_{lex}) + PRO_{SBJ} + \left(\left(\begin{array}{c} \emptyset \\ ka \end{array} \right) \right)$$

Example (4-3) illustrates a subject field consisting of an inanimate lexical NP (*'are 'oka gi 'good things'*) and a subject marker (*'e*). Example (4-6) (p. 41) illustrates a subject field containing a maximal subject field, with a lexical NP, a subject pronoun, and the sequential subject marker.

- (4-3) sulia [s 'are 'oka gi 'e] [v la mae] [o faasia ioli 'oka]
 because thing be.good PL 3SG go hither ABL-3.OBJ person be.good
 'Because good things come from good people...' (Mt 12:33)

Two exceptions are noted to the general make-up of the subject field. First, an emphatic construction in which a non-subject pronoun follows the pronominal foregrounder *'i* can also occur at the beginning of the subject field, often followed by a coreferential subject pronoun; see (4-19) at the end of the next subsection for an example, and § 6.4.3 for more details. Second, examples are found of subordinate clauses where the subject field contains only a third person singular subject pronoun, or only a lexical NP with animate singular or inanimate reference, with no following sequential marker. Two examples are shown in (4-4) – (4-5).

- (4-4) 'ato rasua 'ali [s God] [v kwailufa] [o a-la ioli la].
 be.difficult very COMP G. forgive at-3.PERS people DEM4
 '...[it is] very difficult for God to forgive those people.' (Lk 12:10)

- (4-5) ma 'ali [s lia] [v raefale] [o 'amiu] lou.
 and COMP 3SG comfort 2PL.NSBJ also
 '...and that he may also comfort you.' (Eph 6:22)

The object field contains lexical object arguments, benefactive pronouns, and oblique arguments of the verb introduced by noun-like or verb-like prepositions.² The distinction between object and oblique arguments is discussed in more detail in § 4.4.

In a clause with canonical constituent order, the left periphery is empty. The presence of a constituent in the left periphery appears to correspond to the focalization of that constituent. Verbs and prepositions are specially marked when their objects are dislocated to the left peri-

¹ There are irregular forms for combinations of the first or second person singular subject pronoun and the sequential marker *ka*. See § 6.3.2.

² By this definition of "object field", an intransitive clause can, somewhat counterintuitively, still contain an object field. However, we find this term more straightforward than the possible alternatives, and will simply remind readers of its broad sense in cases of potential confusion.

phery. This phenomenon is discussed in §9. The right periphery contains temporal and spatial adjuncts (cf. §4.5).

4.1.1 Examples

We now provide examples of some clauses with their elements in canonical position. Example (4-6) shows a basic intransitive clause with no non-subject arguments. There is a noun phrase in the subject field, *ioli gi* ‘people’, along with a co-indexed subject pronoun *gera* and the sequential subject marker *ka*. The verbal complex contains the intransitive verb *rii* ‘shout’. Example (4-7) contains a simple intransitive clause where the subject field only contains a subject marker, and where the verbal complex contains an intransitive verb and a modifying particle.

(4-6) ma [s ioli gi gera ka] [v rii]
 and people PL 3PL SEQ shout
 ‘And the people shouted.’ (Jn 19:15)

(4-7) [s 'e] [v mae lo]
 3SG die FOC
 ‘...he died.’ (Acts 20:9)

Another basic clause type is the extended intransitive clause (cf. Dixon, 2010: 99–100), which differs from an intransitive clause only by the presence of an oblique argument following the intransitive verb. Example (4-8) shows an extended intransitive clause, with a subject pronoun *gera* and sequential subject marker *ka* in the subject field, an intransitive verb *loto* ‘kiss’ in the verb field, and a locative phrase serving as an oblique argument, ‘*i babalila* ‘on his face’. The verb *loto* is morphologically intransitive, as it contrasts with transitive *lotofi-* ‘kiss (someone)’, which requires an object argument.

(4-8) [s Gera ka] [v loto] [o 'i babali-la]
 3PL SEQ kiss LOC face-3SG.PERS
 ‘They kissed him on the face.’ (Acts 20:37)

A basic transitive clause has a bare NP object argument immediately following the verbal complex (example (4-9)). When the object is lexical (i.e., non-pronominal), the verb must bear a suffix *-a*, glossed ‘3.OBJ’, which indicates that a lexical object is present and *in situ*. Object arguments differ from obliques in that they are accompanied by transitive morphology on the verb.³ In this case, transitive *fonuli-* contrasts with the intransitive form *fonu* ‘be full’.

(4-9) [s ka] [v fonu-li-a lo] [o luma fo gera io a-i].
 SEQ fill-TR-3.OBJ FOC house DEM.DIST 3PL stay at-INDEF.PERS
 ‘...it filled the house where they were sitting.’ (Acts 2:2)

Pronominal objects appear not in the object field but within the verbal complex; unlike lexical objects, they precede verbal delimiting particles such as *lo*, as (4-10) shows.⁴

³ That is, when the verb has different transitive and combining forms. See §5.2.

⁴ On the general concept of delimiting particles, see §4.2.1.

- (4-10) [S God 'e] [V soi 'amiu lo]
 God 3SG call 2PL.NSBJ FOC
 'God has called you...' (1 Pt 5:10)

Oblique arguments may appear in a transitive clause, in which case they follow any *in situ* lexical object. The oblique argument *fagu* 'to me' in (4-11) follows the object argument. We have found an exception to this word order pattern in (4-12); the reversed order is perhaps due to the fact that the object argument is a particularly "heavy" constituent (i.e., the noun is modified by a prepositional phrase and a relative clause).

- (4-11) 'ali [S ka] [V kwate-a] [O buka wawade fo fa-gu].
 COMP SEQ give-3.OBJ book be.small DEM.DIST DAT-1SG.PERS
 '[That he should] give the little book to me.' (Rv 10:9)
- (4-12) [S Eniselo fo ka] [V fataili-a lou] [O fa-gu kwai fulafula a-la mauri-na li
 angel DEM.DIST SEQ show-3.OBJ also DAT-1SG.PERS water fountain at-3.PERS live-NMLZ DEF
 lia 'e madakwa ka malaa na galasi].
 3SG 3SG be.clear SEQ resemble INDEF.SPEC glass
 'That angel also showed me a water fountain of life which is as clear as glass.' (Rv 22:1)

Obliques must be introduced by a noun-like (as in (4-11)) or verb-like preposition (as in (4-13)), or a locative particle (as in (4-8)). Obliques are not indexed within the verbal complex, but they are indexed on the preposition which introduces them.⁵ When an oblique or object argument is *ex situ*, the marking on the verb or preposition changes to indicate a non-local dependency (see §9 for details).

- (4-13) ma [S ka] [V faalalau gora] [O 'ali-a Gere~gere-na Abu li]
 and SEQ teach 1INCL.DU INS-3.OBJ RED~write-NMLZ be.holy DEF
 '...and he taught us about the holy scriptures' (Lk 24:32)

In examples (4-14)–(4-16), the right periphery is occupied by an adjunct, which generally indicates a temporal or spatial setting. Adjuncts are very often introduced by the general-purpose noun-like preposition *a-* 'at', which bears the personal suffix *-la* indexing the following noun phrase (4-14)–(4-15), or the locative particle *i* (4-16).

- (4-14) [S God ka] [V babalafe] [R a-la talasi gera soi-a 'ali-a God gera li]
 G. SEQ be.happy at-3.PERS time 3PL call-3SG.OBJ INS-3.OBJ G. 3PL DEF
 'God is pleased when they call him their God.' (Heb 11:16)
- (4-15) sulia [S 'are fo gi ka-e] [V dao mae] [O fafi-a ioli gi sui], [R a-la lifi
 because thing DEM.DIST PL SEQ-IRR arrive hither against-3.OBJ people PL EXHST at-3.PERS place
 gi sui 'i lao-la molagali 'e].
 PL EXHST LOC inside-3.PERS world DEM.PROX
 'Because those things will befall all people, in every place on earth.' (Lk 21:35)

⁵ Obliques are also introduced by the invariant locative particle *i* (§3.3).

- (4-16) Ma [_Ska] [_Vsake-a mae] [_R'i falua].
 and SEQ take-3SG.OBJ hither LOC town
 '...and he brings it to the village.' (Lk 15:6)

The left periphery contains constituents which have been dislocated from their original position. As indicated above, elements in this position appear to be in focus, and they are often modified by the focus-marking particle *lo*. Two examples are given in (4-17) – (4-18).

- (4-17) Ma lau rari-a [_L'i fe lo] [_Sgera] [_Valu-a] [_Ra-i].
 and 1SG not.know-3.OBJ LOC where FOC 3PL bury-3SG.OBJ at-INDEF.PERS
 'And I don't know where they have laid him.' (Jn 20:13)

- (4-18) [_LGod lo] [_S'e] [_Vkeri lau mae].
 G. FOC 3SG send 1SG hither
 '[It is] God [who] sent me.' (Jn 8:42)

A more complete description of the structure of the Wala clause will likely distinguish elements in what we are here calling the left periphery from elements which are separated from the main part of the clause by a pause (a comma in written texts). The bracketed constituent *ioli taunada ta'a gi* 'people whose deeds are wicked' in (4-19), for example, is separated from the main clause by a comma, and appears to represent a topic rather than a focused element.

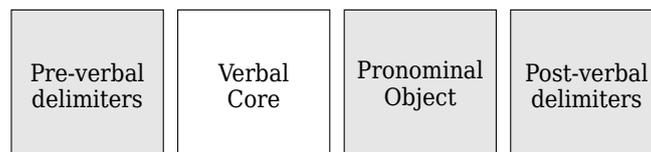
- (4-19) Wasua ma [ioli tau-na-da ta'a gi], [_S'i lia ka-e] [_Vtatae bolosi-da.]
 but people do-NMLZ-3PL.PERS be.bad PL PROFORE 3SG SEQ-IRR rise cover-3PL.OBJ
 'But people whose deeds are wicked, He [God] is opposed to them.' (1 Pt 3:12)

Having established a layout for describing the major linear positions available in basic declarative clauses, we now examine in §§4.2 – 4.5 the main types of constituents which can occupy these positions. These include the verbal complex, arguments of the verb (subject, object and oblique), and adjuncts.

4.2 The verbal complex

The verbal complex is a collection of elements, centered around the main verb(s) in a clause, which occur in a fixed linear order. In the present section we detail the internal structure of the verbal complex, which is schematized in figure 4.2 (optional elements are shaded).

Figure 4.2: Template for the verbal core



The verbal core is the head of the verbal complex, and contains all verbs and any incorporated nouns. The most basic type of verbal core contains a single verb. Chapter 5 is dedicated to the morphology of individual verbs. Complex verbal cores (i.e., those with multiple verbs or incorporated nouns) are discussed in §4.2.4. Pre-verbal and post-verbal delimiters are so called

because their position at the left or right edge, respectively, of the verbal complex allows their use in diagnosing the beginning and end of a verbal complex in clauses where they are present. Since the concept of a delimiter will be appealed to when we argue that incorporated nouns cannot be treated as objects (in §4.2.4.1), we discuss the pre-verbal and post-verbal delimiters in §§4.2.1 - 4.2.3 before discussing complex verbal cores.

4.2.1 *Pre- and post-verbal delimiting particles*

Certain particles occur between elements of the subject field and the verb and between the verb and any lexical object/oblique argument(s). These particles generally have temporal, aspectual, directional, and/or pragmatic meanings. Their position is fixed with respect to the verb. As they occur on either side of the verb, they make useful reference points for identifying the beginning and end of a verbal complex. They are termed here pre-verbal and post-verbal particles, or left and right delimiters of the verbal complex, respectively. These particles are presented at this stage since they provide a principled basis for establishing a boundary between the verbal complex and the subject and object fields.

4.2.2 *Pre-verbal particles*

We identify two pre-verbal particles: the proximate tense marker **bi**, and the marker of self-directed action, **talae**.

4.2.2.1 *Proximate bi*

The particle **bi** 'PROXT' (proximate tense) immediately precedes the verb, and situates an event as directly preceding or following a particular reference time in the discourse. As it has the function of situating an event with respect to a reference time, we treat it as a tense marker. Examples (4-20) - (4-21) show cases of **bi** occurring where the verbal complex refers to an event directly following the reference time of the previous clause. In example (4-21), **bi** might be translated as 'thereupon', indicating that an event happens immediately after the event described by the preceding clause.

(4-20) sulia iko 'ali gera sau-a mola lima-da 'i lao gera ka bi fana
 because NEG COMP 3PL wash-3.OBJ CONTR.FOC hand-3PL.PERS before 3PL SEQ PROXT eat
 '...because they don't wash their hands before they eat.' (Mt 15:2)

(4-21) 'I buri-la malimae gera gi gera sake-a ioli 'i Israel gi fa-la 'i
 LOC after-3.PERS enemy 3PL PL 3PL take-3.OBJ people LOC I. PL DAT-3.PERS LOC
 Babilon, Jekonaea ka bi alu-a Sialtiel.
 B. J. SEQ PROXT put-3.OBJ S.
 'And after their enemies brought the people of Israel to Babylon, Jechonias begat Salathiel...'
 (Mt 1:12)

An example of **bi** situating an event as preceding, rather than following, a given reference time, is found in (4-22). Here, the reference time to which **bi** orients is the same as utterance time, meaning that the event depicted in the clause took place just before this utterance.

- (4-22) Ulao lau 'e bi mae mola
 daughter 1SG 3SG PROXT die CONTR.FOC
 'My daughter has just died.' (Mt 9:18)

The particle **bi** commonly occurs in clauses introduced by **tauma** 'lest', as in (4-23), where **bi** seems to point up the contiguity of the two events (giving pearls to pigs, and the pigs then trampling them).

- (4-23) Ma ikoso 'ali 'amu kwate-a launi 'amiu gi fa-la boo gi, tau ma gera bi
 and NEG2 COMP 2PL give-3.OBJ pearl 2PL.NSBJ PL DAT-3.PERS pig PL lest 3PL PROXT
 uri-a mola 'ada.
 tread-3.OBJ CONTR.FOC 3PL.BEN
 '...don't give your pearls to pigs, lest they trample them under their feet...' (Mt 7:6)

4.2.2.2 Self-directed **talae**

A particle **talae** occurs in the same structural position as **bi**. A likely cognate in Toqabaqita, **tala**, occurring pre-verbally in that language as well, is said by Lichtenberk (2008b:170) to "...signal that the state of affairs encoded in the clause is self-generated or self-directed, or to emphasize the entity to which the state of affairs applies, normally in contrast to other entities." This analysis seems to apply well to Wala **talae** too, and we have borrowed the Lichtenberk's term 'self-directed' to classify this particle. Some typical uses are given in (4-24) - (4-26).

- (4-24) La mae ko talae lesi-a 'amua.
 go hither 2SG.SEQ SELFD see-3SG.OBJ 2SG.BEN
 'Come and see it for yourself.' (Jn 1:46)
- (4-25) ma ka too a-la nanata-na fa-la sake-na-la aroaro-na faasi-a
 and SEQ have at-3.PERS be.strong-NMLZ DAT-3.PERS take-NMLZ-3.PERS be.peaceful-NMLZ ABL-3.OBJ
 ioli 'i lao-la molagali gi li, 'ali ioli gi gera talae rauni gera kwailiu.
 people LOC inside-3.PERS world PL DEF COMP people PL 3PL SELFD kill 3PL go.around
 '...and he had power to take peace away from people on earth, that they would kill one another.' (Rv 6:4)
- (4-26) ma ka talae kwari-a 'ala rabe-la 'ali-a fau ladi gi.
 and SEQ SELFD lacerate-3.OBJ 3SG.BEN body-3SG.PERS INS-3.OBJ stone be.sharp PL
 '...and he cut himself with sharp stones.' (Mk 5:5)

In (4-24), there seems to be emphasis on the addressed individual coming to look for himself, rather than relying on another's testimony. In (4-25), although God has power over the people, it is the people themselves who would commit the murders. In (4-26), the action is clearly self-directed. **Talae** is historically related to the inalienably possessed noun **tala-** '(one)self', two examples of which are given in (4-27) - (4-28) (cf. also § 3.3.1). The final **-e** in **talae** is consistent with grammaticalization from an inalienably possessed noun, as it coincides in form with the indefinite personal suffix (see § 6.5.3). We do not have any hypothesis about how **talae** came to occupy the preverbal position, though.

(4-27) 'O lio 'oka sulia abulo-na 'o 'i tala-mu
 2SG look good about-3.OBJ turn-NMLZ 2SG LOC self-2SG.PERS
 'Consider your own deeds...' (1 Tm 4:16)

(4-28) lau gere-a ko fa-miu 'ali-a lima-gu 'i tala-gu.
 1SG write-3SG.OBJ thither DAT-2PL.PERS INS-3.OBJ hand-1SG.PERS LOC self-1SG.PERS
 '...[which] I have written to you with mine own hand.' (Gal 6:11)

4.2.3 Post-verbal particles

We identify five post-verbal particles: the directional particles *mae* and *ko, lou* 'again, also', the particle *lo* which we analyze as a focus marker, but has among its functions the marking of perfect aspect, and finally the completive marker *'ua*.

4.2.3.1 Directional particles *mae, ko*

A pair of directional particles, *mae* and *ko*, are used to refer to motion towards, and away from, the deictic center, respectively. The glosses 'hither' and 'thither' are employed for simplicity's sake. The particle *mae* most typically encodes real or fictive motion towards the speaker, as in (4-29), but in (4-30) the direction is towards the topical entity introduced in the previous clause, *te eniselo* 'an angel'.

(4-29) Ma alae walefae gera la mae faasi-a 'i Masedonia lo
 and beloved brother 3PL go hither ABL-3.OBJ LOC Macedonia FOC
 'The brethren who came from Macedonia' (2 Cor 11:9)

(4-30) ma ka sake-a mae totofo a-la God mauri.
 and SEQ take-3.OBJ hither symbol at-3.PERS G. live
 '...and he took the seal of the living God.' (Rv 7:2)

The particle *ko* typically encodes direction towards the addressee, as in (4-31) - (4-32), but may also simply encode motion away from the speaker, as in (4-33).

(4-31) Ma 'i lau Paul 'e, lau talae gere-a ko 'are fafu'isi 'e gi.
 and PROFORE 1SG P. DEM.PROX 1SG SELFD write-3.OBJ thither thing be.last DEM.PROX PL
 'And I, Paul, I have myself written these last things.' (2 Thes 3:17)

(4-32) Lau kwate-a ko eniselo lau 'ali ka faa-rono 'ali-a 'are 'e gi
 1SG give-3.OBJ thither angel 1SG COMP SEQ CAUS-hear INS-3.OBJ thing DEM.PROX PL
 fa-miu ioli fakwalaimoki gi
 DAT-2PL.PERS people believe PL
 'I have sent my angel to tell you these things, believers.' (Rv 22:16)

(4-33) gera ka keria-a ko nali wale lio folo gera ka folo gali-a
 3PL SEQ send-3.OBJ thither INDEF.SPEC.PL people look be.firm 3PL SEQ be.firm surround-3.OBJ
 luma abu God
 house be.holy G.
 '...they sent watchmen who guarded the church.' (Jn 7:32)

4.2.3.2 *lou* ‘again, also’

A particle *lou* has the meaning ‘again’, as in (4-34), or ‘also’, as in (4-35). It precedes the directional particles, as can be seen in (4-35).

(4-34) sui Jesus ka soilidi gera lou 'uri 'e
 then Jesus SEQ ask 3PL again thusly
 ‘Then Jesus asked them again...’ (Jn 18:7)

(4-35) 'ali lau wasua laka-e la lou ko fa-la faa aofia na-la.
 COMP 1SG but 1SG.SEQ-IRR go also thither DAT-3.PERS CAUS lord NMLZ-3.PERS
 ‘...that I might come too and worship him.’ (Mt 2:8)

Lou also appears following an NP when that NP acts as the predicate in a predicate nominal construction (cf. § 3.1), as in (4-36).

(4-36) Timoti walefae gia, ma wale li galo-na God lou fae 'ameroa fa-la
 T brother 1INCL.PL and person HABIT work-NMLZ G. also COM 1EXCL.DU.NSBJ DAT-3.PERS
 fatalo-na 'ali-a Fa-rono-na 'Oka suli-a Jesus Christ li.
 promote-NMLZ INS-3.OBJ CAUS-hear-NMLZ good concerning-3.OBJ J. C. DEF
 ‘Timothy is our brother, and also God’s servant with us in the spreading of the Good News concerning Jesus Christ.’ (1 Thes 3:2)

Finally, *lou* modifies non-predicating NPs (in which case it does not act as a verbal complex delimiter), and in such a case it is usually translatable as ‘another’, as in (4-37).

(4-37) Ma te eniselo lou 'e latafa mae faasi-a luma abu God
 and INDEF.SPEC angel again 3SG exit hither ABL-3.OBJ house holy G.
 ‘And another angel came out of the temple.’ (Rv 14:15)

4.2.3.3 *Focus-marking lo*

We identify four related functions for the grammatical particle *lo* ‘FOC’ (table 4.1), in three of the which *lo* serves as a right-delimiting postverbal particle.

Table 4.1: Functions of *lo* ‘FOC’

Function	Scope of modification	Linear position
Argument focus	Arguments	Argument-final
Predicate focus	Verbal complex	Right-delimiting
Perfect	Verbal complex	Right-delimiting
Stative	Verbal complex	Right-delimiting

Examples (4-38) – (4-39) show the use of *lo* as a focus⁶ marker for arguments of a clause.

⁶ We consider a constituent which is ‘in focus’ to be one which represents new information, or information thought to be new to the listener, as opposed to presupposed information (Hyman and Waters, 1984:237). To take another formulation which we consider equivalent, focus is the “...element in a pragmatically structured proposition whereby the assertion differs from the presupposition and which makes the utterance of a sentence informative...” (Lambrecht, 1994:xiv).

(4-38) Taki gi lo 'e fa-sakwadola⁷ ioli gi faasi-a ta'a-na
 law PL FOC 3SG CAUS-be.free people PL ABL-3.OBJ be.bad-NMLZ
 'Laws free people from sin...' (Jas 2:12)

(4-39) Melkisadek 'e tau 'urifo, wasua 'ala Abraham lo God 'e sae alafuu fa-la.
 M. 3SG do thus but 3SG.BEN A. FOC G. 3SG say promise DAT-3SG.PERS
 'Melchizedek did so [blessed Abraham], but it was Abraham that God made a promise to.'
 (Heb 7:6)

When **lo** functions to mark predicate focus, or to mark perfect or stative aspect, it is right-delimiting. Example (4-40) shows the use of **lo** to mark predicate focus (argument focus is encoded with the second occurrence of **lo**).

(4-40) Golu rono-a sui lo lia fafuradani lia lo fai-li-a God.
 1INCL.PC hear-3SG.OBJ EXHST FOC 3SG compare 3SG FOC COM-TR-3.OBJ G.
 'We have heard now how he has compared himself with God.' (Mt 26:65)

Other functions of **lo** have considerable overlap with the types of perfect⁸ identified by Comrie (1976:§3.1) in his influential work on aspect, including past events with present relevance and stative. Usage of the perfect to indicate a past event with present relevance is seen in examples (4-41) - (4-42). We note also that in (4-42) the particle **lo** precedes the directional particle **mae**. In examples (4-41) - (4-42) the perfect marker appears to be associated with a stative meaning.

(4-41) ma ioli afula a-la ioli God gera mae lo gi, gera mauri lou.
 and people be.many at-3.PERS people G. 3PL die FOC PL 3PL live again
 '...and many of the saints [lit. people of God] who had died were revived.' (Mt 27:52)

(4-42) 'E 'oka 'ali gia rono suli-a 'are kwalaimoki gia rono lo mae
 3SG be.good COMP 1INCL.PL hear concerning-3.OBJ thing be.true 1INCL.PL hear FOC hither
 suli-da 'i lao gi
 concerning-3PL.OBJ LOC before PL
 'It is good that we adhere to those true things which we have adhered to before.' (Phil 3:16)

(4-43) Ma talasi fo, Mary 'e dodolanaa lo.
 and time DEM.DIST M. 3SG be.pregnant FOC
 'At that time, Mary was pregnant.' (Lk 2:5)

⁷ Sic in source. The form *fa-sakwadola-a*, with a third-person object suffix, would be expected.

⁸ Comrie provides a general characterization of the perfect as marking "the continuing relevance of a previous situation" (Comrie, 1976:54), and identifies four specific uses of the perfect in a number of (mostly European) languages: Perfect of result, Experiential Perfect, Perfect of persistent situation, and Perfect of recent past. Use of the Perfect to mark stative meaning is subsumed under Comrie's "Perfect of result."

- (4-44) Mora ili-a 'uri maa-la 'e koro lo a-la talasi 'e futa mae
 2DU say-3.OBJ thusly eye-3SG.PERS 3SG be.blind FOC at-3.PERS time 3SG be.born hither
 a-i.
 at-INDEF.PERS
 'You say that he was blind (lit. his eyes were blind) when he was born.' (Jn 9:19)

A likely cognate particle **no'o** in Kwaio is described by Keesing (1985:120) as follows:

The perfect-marking particle **no'o**, following the verb, is used with both active and stative verbs. The perfect marker serves to articulate a state at a reference time (the time of the speech event) to an earlier state or event, to indicate that the two are essentially and inseparably connected, and to focus attention on the present state...

4.2.3.4 Completive 'ua

A particle **'ua** 'COMPL' (completive aspect) modifies verbs, and is used to emphasize the completed or past status of an action, as it does in (4-45):

- (4-45) lau sai-a-i 'amu idumi-a lia ba God 'e ili-a 'ua lo mae 'i
 1SG know-at-INDEF.PERS 2PL read-3.OBJ 3SG DEM3 G. 3SG say-3SG.OBJ COMPL FOC hither LOC
 lao ka sae 'uri 'e,
 before SEQ say thus DEM.PROX
 '...I know that you have read what God has spoken forth from the beginning, which says thus...' (Mt 22:31)

This particle is frequently used in negated clauses, where it may be translated as 'not yet', as in (4-45) – (4-46).

- (4-46) 'i buri-la 'e 'ole wale ka sui lo, 'o ma a-la talasi 'e iko 'ali 'ole wale
 LOC back-3.PERS 3SG cut man SEQ finish FOC or and at-3.PERS time 3SG NEG INS cut man
'ua?
 COMPL

'...After he had been circumcised, or when he had not yet been circumcised? (Rom 4:10)

- (4-47) ma na teke wale iko 'ali dao 'ua mae.
 and INDEF.SPEC.SG one person NEG COMP arrive COMPL hither
 '...and the other is not yet come;' (Rv 17:10)

A particle with the same spelling may modify nouns, where it functions as an intransitive verb translatable as 'old, previous'.

- (4-48) sul-i-a 'are 'ua-lo fo gi gera sui lo.
 concerning-3.OBJ thing old-FOC DEM.DIST PL 3PL finish FOC
 '...because the old things are finished with.' (Rv 21:4)

4.2.4 Complex verbal cores: verb serialization and noun incorporation

A verbal complex frequently contains more than one lexical item in its verbal core: either it has two or more verbs, or it contains an incorporated noun.

In §§ 4.2.1 – 4.2.3 we have discussed a variety of particles which appear on the left and right edges of the verbal complex, effectively separating it from the subject and object fields. These particles are optional, and so are only useful as delimiters when they are present. There are, however, ways of determining the right-edge of the verbal complex in clauses where the post-verbal delimiting particles are not present.

We noted in § 3.3.2.1.3 that verb-like prepositions differ from verbs in that they do not “block” a preceding transitive verb from bearing an object suffix, while true verbs do. We consider the relevant generalization to be that basic argument structure properties are not licensed by individual verbs, but by whole cores, and transitive verbal cores can only index objects on their right edge. This means that an object suffix on a verb can effectively serve as a right-edge delimiter of a verbal complex when no right-delimiting particles are present. Thus, we consider everything to the right of *tau-a* ‘do [it]’ in example (4-49) to be part of the object field, since the verb has an object affix.

- (4-49) 'are 'amu [tau]-a 'ali-a rabe-miu gi sui
 thing 2PL do-3SG.OBJ INS-3.OBJ body-2PL.PERS PL EXHST
 ‘...everything that you do with your bodies...’ (1 Cor 6:20)

When two verbs appear consecutively, the first must be in its suffixless or combining form (cf. § 5.2), regardless of whether its logical object appears in the clause. In (4-50), there are two verbs in the bracketed verbal core, the first of which is *nuu* ‘sing’. Since an intransitive interpretation of *nuu* is plausible, and the indexed object appears to be associated with the second verb, *batafe-* ‘bless, thank’, the blocking we have referred to is not apparent.

- (4-50) ma ala ta ioli ka babalafe rasua, lia ka [nuu batafe]-a God.
 and if INDEFNSPEC people SEQ be.happy very 3SG SEQ sing bless-3.OBJ G.
 ‘And if anyone is very happy, let him sing praises to God.’ (James 5:13)

The restriction is made apparent in (4-51) – (4-52). In both cases, the first verb in a bipartite verbal core is a verb which is normally transitive, and in both cases the object of the clause is logically an object of the first verb. However, only the second verb has an object suffix indexing the object.

- (4-51) 'Amu ka logo-si-a mola bata 'e totolia bata taki 'e alu-a. Ikoso
 2PL SEQ gather-TR-3.OBJ CONTR.FOC money 3SG be.able money law 3SG put-3SG.OBJ NEG2
 'ali 'amu [suga liu-fi]-a totofo-e bata fo.
 COMP 2PL ask pass-TR-3.OBJ amount-INDEF.PERS money DEM.DIST
 ‘You will collect only the money which is the correct money that the law has appointed. Do not request beyond that amount of money.’ (Lk 3:13)

- (4-52) Ma gera ka [firi bolosi]-a maa-la
 and 3PL SEQ tie cover-3.OBJ eye-3SG.PERS
 ‘And they blindfolded him.’ (Lk 22:64)

Even more interesting are cases where the first verb is normally transitive, and the second verb is intransitive. In these cases, any non-subject argument of the clause must be realized as

an oblique, because the second verb, being intransitive, cannot index an object argument. This is the case in (4-53) – (4-54), where the normally transitive verbs **batafe-** ‘bless, thank’ and **sake-** ‘take’ are in their combining forms. The logical objects of these verbs (underlined) are demoted to obliques.

- (4-53) gia ka [batafe firi] a-la!
 1INCL.PL SEQ bless last.long at-3SG.PERS
 ‘...let us praise Him forever!’ (Rom 9:5)
- (4-54) 'ali 'amu ka [sake 'afu] a-la kwaiara 'amiu.
 COMP 2PL SEQ take be.full at-3.PERS reward 2PL.BEN
 ‘...that you should receive your full reward.’ (2 Jn 1:8)

We will use the fact that non-final verbs of a complex verbal core must be in their combining forms as a way of identifying serial verb and noun incorporation constructions.

4.2.4.1 Noun incorporation

There are some cases where a noun or noun phrase can be analyzed as being part of the verbal complex rather than belonging to either the subject or object field. We term these cases noun incorporation. Noun incorporation in most cases involves the incorporation of objects into the verbal core, and the bulk of this section will be dedicated to this process (§ 4.2.4.1.1). There are also a few cases where subjects are incorporated, though with subject incorporation, for want of sufficient data to go further, we limit ourselves to drawing attention to the phenomenon and giving some examples (§ 4.2.4.1.2).

4.2.4.1.1 Object incorporation

We have noted in § 4.4.2 that lexical object arguments are indexed on the verbs with an object suffix, as in (4-55), where an *in situ* object is indexed by the third-person object suffix **-a**.

- (4-55) Ma ite 'e rada ma ka [tau]-a 'are 'oka gi
 and who 3SG be.straight and SEQ do-3.OBJ thing be.good PL
 ‘...and whoever is righteous, let him do good things.’ (Rv 22:11)

However, there are cases where a logical object of a transitive verb is not so indexed, as in (4-56). The verb is instead in its combining form (cf. § 5.2): comparison with (4-57) shows that **raunae** ‘build’ is morphologically intransitive, since it lacks the transitivizing suffix **-li**, observed in (4-57).

- (4-56) ma gera ka [raunae luma]
 and 3PL SEQ build house
 ‘...[and] they built houses.’ (Lk 17:28)
- (4-57) Wasua ma Solomon 'ala 'e ka-e [raunai-li]-a luma fa-la.
 but and S. 3SG.BEN 3SG SEQ-IRR build-TR-3.OBJ house DAT-3SG.PERS
 ‘But Solomon built him a house.’ (Acts 7:47)

An examination of examples such as (4-56), where a notionally transitive verb fails to index its logical object, turn up a somewhat restricted set of objects, all of which can be interpreted as having a non-specific referent. Some examples are given in (4-58) - (4-60). We will term such non-specific notional arguments which are not indexed as objects incorporated nouns.

- (4-58) ta ioli abulo-na-la 'e midia 'o ma ka [tau geli]
 any people turn-NMLZ-3SG.PERS 3SG be.base or SEQ do woman
 '...anyone whose deeds are turpid, or who commit adultery...' (Eph 5:5)
- (4-59) 'i 'amiu ba 'amu [kwate bata] fa-gu a-la rua talasi gi.
 PROFORE 2PL.NSBJ DEM3 2PL give money DAT-1SG.PERS at-3.PERS two time PL
 '...you, who have given me money two times.' (Phil 4:16)
- (4-60) geli fo gi fo gera [foli 'are] 'ali-a bata gera gi fa-la
 woman DEM.DIST PL DEM.DIST 3PL trade thing INS-3.OBJ money 3PL PL DAT-3.PERS
 rana-na-la Jesus fai-li-a wale li galo-na lia gi.
 help-NMLZ-3.PERS J. COM-TR-3.OBJ person HABIT work-NMLZ 3SG.NSBJ PL
 '...those women who sold things for money to help Jesus and his disciples.' (Lk 8:3)

A verb and a following incorporated noun function in the grammar as a single unit, with the distributional properties of an intransitive verb. Noun-incorporated verbs may be nominalized, as in (4-61), where the nominalizing suffix *-na* follows the incorporated noun phrase, and not the combining verb.

- (4-61) ma ka sai-a-la tara-na-la ioli fa-la [tau 'are rero]-na
 and SEQ know-at-3.PERS draw-NMLZ-3.PERS people DAT-3.PERS do thing be.wrong-NMLZ
 'And he knows how to entice people to do wrong.' (Jas 1:14)

Noun-incorporated verbs may also undergo the causative derivation, as in (4-62). The object suffix *-a* again follows the incorporated noun, rather than the combining verb.

- (4-62) Ma galo-na Demitrius ka fa-[too-'are]-a rasua ioli gera galo 'ala gi.
 and work-NMLZ D. SEQ CAUS-have-thing-3.OBJ very people 3PL work 3SG.BEN PL
 'And the work of Demetrius benefited the craftsmen.' (Acts 19:24)

Example (4-62) is one of only two examples in our corpus (the other is with the same verb) showing a transitive verb which is derived from an intransitive noun-incorporated verb via the causative derivation. In addition, we have one example (4-63) which shows that delimiting particles, in this case *lo*, appear to the right of an incorporated object. (Prototypical lexical objects always follow these particles.)

- (4-63) ma ikoso gera ka-e sake bata lo 'ali-a
 and NEG2 3PL SEQ-IRR take money FOC INS-3SG.OBJ
 'and they wouldn't earn any money from it [from spirits telling fortunes]' (Acts 16:19)

Examples such as (4-61) suggest that what is incorporated is not a noun, but a full NP, since in that example the incorporated entity is '*are rero* 'wrong thing(s)'. A more extreme example, where the incorporated object is a rather lengthy NP is (4-64).

- (4-64) ma rua-la 'are mauri kwasi ka [tau 'are mama'ala ba'ela fa-la 'afero-na
 and two-ORD thing live be.wild SEQ do thing be.wondrous be.big DAT-3.PERS marvel-NMLZ
 'ali-da gi]
 INS-3PL.OBJ PL
 'And the second beast did wondrous things to astound them.' (Rv 13:13)

Of the examples that we have encountered, most cases of incorporated nouns where the incorporated element appears to be a full NP involve the noun-incorporated verb *tau 'are...* However, a few examples exist involving verbs other than *tau*, such as (4-65) – (4-66).

- (4-65) Ma ulao fo ka [sake bata afula] 'ali-a me galo-na fo 'ala
 and daughter DEM.DIST SEQ take money be.much INS-3.OBJ CLF work-NMLZ DEM.DIST 3SG.BEN
 wale fo gera lio sulia gi.
 person DEM.DIST 3PL look about-3SG.OBJ PL
 'And the girl brought much money, through her industry, to the people who looked after
 her.' (Acts 16:16)

- (4-66) ma gera ka [rufi toro midia gi]
 and 3PL SEQ wear clothes be.dirty PL
 '...and they wore dirty clothes...' (Mt 11:21)

For most types of object incorporation constructions, we also encounter similar sentences which lack object incorporation, instead behaving as regular transitive clauses. The semantic difference between (4-66) and (4-67), for example, seems quite subtle.

- (4-67) daro [rufi]-a toro kaka'a gi.
 3DU wear-3.OBJ clothes be.white PL
 '...they wore white clothes.' (Jn 20:12)

4.2.4.1.2 Subject incorporation

The process of subject incorporation is documented in Toqabaqita by Lichtenberk (2010). In that language, a limited number of nouns, generally body part terms, can participate in the construction (Lichtenberk, 2010:378). A similar construction with mostly the same properties is found in Wala. As in Toqabaqita, clauses which are nearly synonymous, but only differ with respect to whether they contain a subject incorporation construction, can be found (for a similar pair of examples in Toqabaqita, see (Lichtenberk, 2010:377)):

- (4-68) gera ka soi-a lou mae wale ba maa-la 'e koro 'i lao
 3PL SEQ call-3.OBJ again hither person DEM3 eye-3SG.PERS 3SG be.blind LOC front
 '...they called forth the blind man [i.e., that man whose eyes were blind] ...' (Jn 9:24) (no
 subject incorporation)

- (4-69) ma wale [maa koro] fo ka sae 'uri 'e
 and person eye be.blind DEM.DIST SEQ talk thusly
 '...and the blind man [i.e., the eye-blind man] said...' (Lk 18:41) (subject incorporation)

In (4-68), the subject argument of the verb *koro* ‘be blind’ is *maa-la* ‘his eyes’, while in (4-69) the notional possessor of *maa* ‘eyes’, which is lacking its usual personal suffix, is instead the subject of the compound intransitive verb *maa koro* ‘eye-be blind’.

Other examples of compound subject-incorporated verbs include *oga-ta'a* bowels-be.bad ‘be angry’, *rabe-'e'ela* body-hate ‘be disinclined’, *rabe-fi* body-hurt ‘be in pain’, *mano-tafa* breath-open ‘emerge’. We also encounter one example of a noun which appears to originate in a subject incorporation construction, *lio-too* thought-have ‘wisdom’.

- (4-70) God 'e kwate-a lio-too fa-la Paul 'ali lia ka gere-gere 'urifo.
 G. 3SG give-3.OBJ thought-have DAT-3.PERS P. COMP 3SG SEQ RED-write thusly
 ‘God gave wisdom to Paul that he should write [to you].’ (2 Pt 3:15)

4.2.4.2 Nuclear serialization

When a complex verbal core consists of two consecutive verbs, the first of which is in its combining form, we consider the verbs to form a nuclear serialization construction. A typical example is (4-71), where the first verb, *gwafe* ‘comfort’, is in its combining form.

- (4-71) Sulia God 'e kwaima aa-ga, ma ka [gwafe firi] aa-ga
 because G. 3SG be.friend at-1INCL.PL.PERS and SEQ comfort last.long at-1INCL.PL.PERS
 ‘For God is a friend to us, and will always comfort us.’ (2 Thes 2:17)

4.2.4.2.1 Transitivity properties of constituent verbs

When a complex verbal core is formed from two transitive verbs, the first verb will be in its combining form, and the second will bear an object suffix when there is a lexical or anaphoric object. In (4-72), *alu-* ‘put’ is in its combining form, while *goli-* ‘collect’ bears the object suffix.

- (4-72) Ma 'o [alu goli]-a 'amua waen 'oka rasua
 and 2SG put collect-3.OBJ 2PL.BEN wine be.good very
 ‘...but you have kept the good wine...’ (Jn 2:10)

There is no morphological evidence for distinguishing a combining form from an intransitive verb (although see §5.2.1.6), so no special marking accompanies an intransitive verb which is the first verb in a complex verbal core (cf. (4-73)).

- (4-73) ma gera ka [tatae bolosi]-a ioli gi sui
 and 3PL SEQ get.up cover-3.OBJ people PL EXHST
 ‘...and [they] are contrary to all men.’ (1 Thes 2:15)

When the verbal core consists of a transitive verb followed by an intransitive verb, the transitive verb must appear in its combining form, and the following intransitive verb (by definition) will not index the notional object of the transitive verb. Since there is no possibility of signaling a direct object via an object suffix when the second verb is intransitive, an argument which would normally be expressed as an object will be demoted to an oblique. This fact may be illustrated by comparing (4-74) and (4-75). In (4-74), there is a simple verbal core consisting of a single transitive verb. The verb indexes as its object the content of the speech act referred

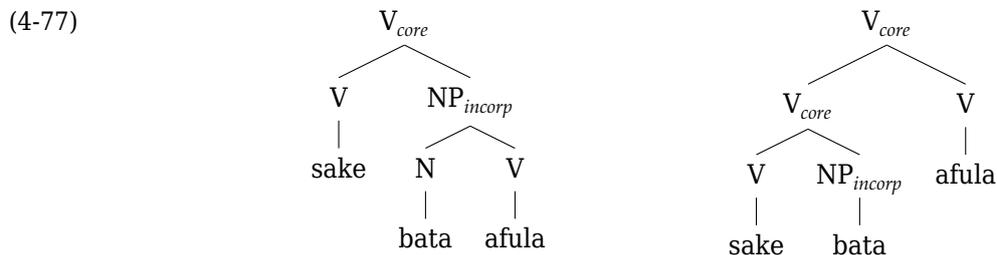
to with the 3SG object suffix **-a**. In (4-75), the simple verbal core is replaced by a complex one, **ili rada** ‘say plainly’. The speech act content is still indexed, but as an oblique introduced by the preposition **a-** ‘at’ taking the anaphoric indefinite personal suffix **-i**. A verbal core consisting of two intransitive verbs is, as mentioned above, also intransitive (4-76).

(4-74) laka-e [ili]-a fa-miu
 1SG.SEQ-IRR say-3SG.OBJ DAT-2PL.PERS
 ‘But I will say [it] to you...’ (Gal 1:11)

(4-75) Ma laka-e [ili rada] a-i fa-miu
 and 1SG.SEQ-IRR say be.straight at-INDEF.PERS DAT-2PL.PERS
 ‘For I will say [it] plainly to you...’ (Mt 3:9)

(4-76) 'e totolia 'amu ka [ani ba'ela], ma 'amu ka lagu lo a-la talasi 'e.
 3SG be.able 2PL SEQ cry be.big and 2PL SEQ mourn PFV at-3.PERS time DEM.PROX
 ‘...you can howl and mourn at this time...’ (Jas 5:1)

A complex verbal core then, has the argument structure properties of its rightmost member. If the rightmost member is intransitive, any non-subject argument associated with the first verb will be realized as an oblique. An interesting question which follows from this analysis is whether one of the members of a complex verbal core can itself be a complex verbal core. Examples such as (4-65) might be analyzed in one of two ways:



Unfortunately, we lack enough examples of this type to come to a well-founded conclusion about whether a noun-incorporated verb can act as a component of a nuclear serialization construction. However, we do have clear examples of nuclear serialization constructions with three verbs, which can be analyzed as involving nested constituency like that in (4-77). Example (4-78) contains such a construction.

(4-78) Gera ka [lio folo bolosi]-a maa-la labu a-la falua fo li 'ali gera
 3PL SEQ look be.secure cover-3.OBJ front-3.PERS gate at-3.PERS town DEM.DIST DEF COMP 3PL
 ka rau-ni-a.
 SEQ kill-TR-3SG.OBJ
 ‘They stood watch at the gate of the town so that they could kill him.’ (Acts 9:24)

4.2.4.2.2 Argument-sharing properties

In this section we discuss how the argument structure properties of the constituent verbs of a serialization construction contribute to the overall argument structure of a verbal complex. We have already discussed how possibilities for marking objects are restricted to the final verb. In

this section we discuss the types of logical arguments which are possible for component verbs. We find that subjects, whether of transitive or intransitive verbs, may be shared arguments in a serialization construction. Objects of transitive verbs may also be shared arguments. We find no examples of the shared argument being simultaneously the object of a transitive verb and the subject of the other verb, transitive or intransitive. In the majority of cases in our corpus where the second verb of a serialization construction is intransitive, the second verb does not contribute any arguments, but may be said to have an “event argument” (Aikhenvald, 2006:18–9), referring to the manner in which an event happened.

4.2.4.2.2.1 Subject-sharing

The subject argument of a clause may be the subject argument of both verbs in a complex verbal core. In examples (4-79)–(4-80), the second verb in the verbal core is transitive. Its subject argument is the same as the subject argument of intransitive *lio* ‘look’ in (4-79), and the same as the subject argument of transitive *tofu* ‘cut’ in (4-80).

(4-79) gera [lio rae]-a 'are 'e fuli gi
 3PL look recognize-3.OBJ thing 3SG happen PL
 ‘...they understood the things that had happened...’ (1 Cor 12:10) $S_1 = A_2$ ⁹

(4-80) ma ka [tofu mousi]-a anina-la wale-li galo-na fata abu 'ilitoa li.
 and SEQ cut sever-3.OBJ ear-3.PERS person-HABIT work-NMLZ priest be.holy govern DEF
 ‘...and he cut off the ear of the servant of the high priest.’ (Mk 14:47) $A_1 = A_2$

In most serialization constructions where the second verb is intransitive, the second verb has an event argument (cf. § 4.2.4.2.2.3). We do not have any examples where the shared argument is the subject of the first (transitive) verb, and also of the second (intransitive) verb. In both (4-81)–(4-82), the shared argument is the subject of two intransitive verbs.

(4-81) ma ikoso 'ali gia [malata fitala] talasi gia foa-si-a God.
 and NEG2 COMP 1INCL.PL think worry time 1INCL.PL pray-TR-3.OBJ G.
 ‘Let us not feel worried when we pray to God.’ (1 Jn 3:19) $S_1 = S_2$

(4-82) Lia fo, 'e 'oka fa-miu 'ali 'amu ka [ura nasi] fa-la
 3SG DEM.DIST 3SG be.good DAT-2PL.PERS COMP 2PL SEQ stand remain DAT-3.PERS
 fa-sui-na-la me galo-na fo.
 CAUS-finish-NMLZ-3.PERS CLF work-NMLZ DEM.DIST
 ‘Therefore, it is good for you to stay and complete the work.’ (2 Cor 8:11) $S_1 = S_2$

4.2.4.2.2.2 Object-sharing

When both verbs in a complex verbal core are transitive, both the subject and object arguments of the two verbs are shared. Two examples are given in (4-83)–(4-84).

⁹ Here *A* = transitive subject, *S* = intransitive subject, *O* = object.

- (4-83) ka [sau goli]-a malaa 'i rabe-la gi 'ali-a waiwai fai-li-a waen
 SEQ wash hold-3.OBJ wound LOC body-3SG.OBJ PL INS-3.OBJ oil COM-TR-3.OBJ wine
 'And she washed and bound the wounds on his body with oil and wine.' (Lk 10:34) $A_1 = A_2$,
 $O_1 = O_2$
- (4-84) ma gera ka [firi fanasi]-a lou faga taufasia 'e bi akari.
 and 3PL SEQ tie secure-3.OBJ again ship lest 3SG PROXT break.up
 'And they secured the ship lest it sink.' (Acts 27:17) $A_1 = A_2$, $O_1 = O_2$

4.2.4.2.2.3 Event serialization

The most commonly attested type of serialization construction in our corpus is one where there are no arguments shared between the two verbs. Instead, one of the two verbs (usually the second one) predicates on the event depicted by the first verb, and takes the event itself as one of its arguments. This type of construction is often referred to as an "event argument" serialization construction (Aikhenvald, 2006:18-9). Three examples of this kind of construction are given in (4-85) - (4-87).

- (4-85) Ma gia ka [dau nanata] a-la fitoo-na fa-la 'are ba God 'e sae
 and 1INCL.PL SEQ hold be.strong at-3.PERS have.faith-NMLZ DAT-3.PERS thing DEM3 G. 3SG talk
 alafuu 'ali-da fa-ga gi
 promise INS-3PL.OBJ DAT-1INCL.PL.PERS PL
 'And we will hold fast in our faith in the things which God has promised to us.' (Heb 10:23)
- (4-86) Wasua ma kwate-na 'e God 'e [kwate gwaugwau] a-i lia lo
 but give-NMLZ DEM.PROX G. 3SG give do.freely at-INDEF.PERS 3SG FOC
 mauri-na firi 'ali-a Jesus Christ Aofia gia.
 live-NMLZ last.long INS-3.OBJ J. C. lord 1INCL.PL
 'But the gift that God has given freely to us is eternal life through our Lord Jesus Christ.'
 (Rom 6:23)
- (4-87) ioli siofa 'e [toro gaga] mola 'ali-a lafu-i toro.
 people be.poor DEM.PROX be.clothed be.torn CONTR.FOC INS-3.OBJ take.away-NMLZ2 garment
 '...these poor people wearing torn clothes.' [i.e., poor people who are torn-clothed with
 shreds of clothes] (Jas 2:2)

In the majority of examples of event serialization constructions in our corpus, it is the second verb of a complex verbal core which does not contribute arguments but instead takes an "event argument." In example (4-88), however, the verb with an event argument is the first verb.

- (4-88) Gia kwaima sulia God lo 'e [etae kwaima] aa-ga.
 1INCL.PL be.friend because G. FOC 3SG be.first be.friend at-1INCL.PL.PERS
 'We love [him], because God first loved us.' (1 Jn 4:19)

Verbs taking an event argument are almost always intransitive, which means that their only argument is an event argument. The verb *garani-* 'be near', however, is a transitive verb which can take an event argument as its object, and still contribute a subject argument to the

clausal argument structure. Interestingly, *garani* is always the first verb when it appears in a construction where it takes an event argument, and so it is not able to index the event argument morphologically. An example is given in (4-89).

- (4-89) Sulia 'e marabe fa-la mae-na ma ka [garani mae] a-la talasi 'e galo
 because 3SG be.willing DAT-3.PERS die-NMLZ and SEQ be.near die at-3.PERS time 3SG work
 fa-la Jesus Christ.
 DAT-3.PERS J. C.
 'For he was willing to die, and he nearly did die when he was serving Jesus Christ.'
 (Phil 2:30)

Having completed our discussion of the properties of the verbal complex, we now move on to discuss other components of the clause, arguments and adjuncts, in the following sections (§§ 4.3 – 4.5).

4.3 Subject arguments

Subject arguments must be indexed by a subject pronoun and/or subject marker (cf. §§ 6.2 – 6.3) at the beginning of the verbal complex. In addition, it is possible to have a full lexical noun phrase in subject position which is usually¹⁰ coreferent with the subject marker.

- (4-90) A-la talasi fo, [wale li galo-na gi] daulu ka bubu kwailiu lo
 at-3.PERS time DEM.DIST person HABIT work-NMLZ PL 3PC SEQ look go.around FOC
 fa-daulu
 DAT-3PC.PERS
 'Then, the disciples looked at each other...' (Jn 13:22)
- (4-91) [wai asila gia gi] gera ka liufi-a Saetan 'ali-a 'abu-la kale sipsip
 brother 1INCL.PL PL 3PL SEQ pass-3.OBJ S. INS-3.OBJ blood-3.PERS CLF sheep
 'Our brothers overcame Satan by the blood of the lamb...' (Rv 12:11)

4.4 Objects and obliques

Two types of non-subject arguments which we distinguish are objects and obliques. Objects are bare noun phrases which follow the verbal core, and when lexical, they trigger object agreement marking on the verb. Obliques are phrases headed by a verb-like preposition, a noun-like preposition, or a locative particle, and do not trigger object agreement marking on the verb. Agreement, however, may obtain *within* obliques: Noun-like and verb-like prepositions index their nominal objects with personal and object suffixes, respectively. An introduction to the personal and object agreement systems (§ 4.4.1) is therefore necessary before further discussion on object and oblique arguments can be undertaken (§§ 4.4.2, 4.4.3, respectively).

¹⁰The qualification 'usually' applies to inclusory pronominal constructions (cf. § 6.8), where the nominal subject only refers to a subset of the total number of participants indexed by the subject marker.

4.4.1 Agreement

There are two paradigms of bound agreement morphology in Wala. Personal agreement prototypically involves the indexing of a possessor on an inalienably possessed noun, as in (4-92) – (4-93), while object agreement prototypically involves the indexing of an object argument on a verb, as in (4-94) – (4-95).

- (4-92) Ma gera ka rono rae-a [line-gu].
 and 3PL SEQ hear recognize-3.OBJ voice-1SG.PERS
 ‘...and they shall recognize my voice.’ (Jn 10:16)¹¹
- (4-93) Ma meulu ka rono-a [line-la God]
 and 1EXCL.PC SEQ hear-3.OBJ voice-3.PERS G.
 ‘And we hear the voice of God.’ (2 Pt 1:17)
- (4-94) Sui laka [lesi-a 'are kwasi ba]
 then 1SG.SEQ see-3.OBJ thing be.wild DEM3
 ‘Then I saw the beast.’ (Rv 19:19)
- (4-95) Ma gera ka sae [lafu-da] 'i tala-da
 and 3PL SEQ know remove-3PL.OBJ LOC self-3PL.PERS
 ‘They compare themselves to themselves.’ (2 Cor 10:12)

Personal suffixes may index possessors of all possible person and number combinations, but object suffixes may only index third person objects (see §§ 6.5, 6.6 for full paradigms). When a verb has a first or second person object, it will have no suffix. The main verb in (4-96), for example, is morphologically transitive, bearing a valence-increasing suffix (q.v. § 5.2.1), but has no object suffix, since its object is first person.

- (4-96) 'O oga ko [rau-ni-∅ lau] lou
 2SG want 2SG.SEQ kill-TR 1SG also
 ‘You want to kill *me* too?’ (Acts 7:28)¹²

Personal and object agreement are both sensitive to whether the NP that they index is *in situ* or not. When a lexical noun phrase immediately follows the agreeing head, the third person singular form of the suffix is used, regardless of the number of the NP. Example (4-97), where an object NP with plural number immediately follows the verb, may be contrasted with (4-98), which contains a relative clause construction, where the object of the verb does not appear in its canonical position. In both cases the object NP has plural number, but only in the latter case does the object suffix agree with it in number. A similar generalization holds for personal agreement. When a personal or object suffix indicates the presence of an *in situ* lexical object,

¹¹ In the present section (§ 4.4.1) square brackets will be placed around a verb and any immediately following object argument, or around an inalienably possessed noun and any immediately following possessor, to facilitate reading of the examples.

¹² The -∅ in the interlinear gloss is meant here to indicate where an object suffix *would have* appeared, and does not necessarily mean that we endorse a zero-morpheme analysis.

without showing number agreement, we gloss it as 3.PERS or 3.OBJ, respectively. This asymmetry in agreement is discussed in more detail in § 9.

- (4-97) 'ali ikoso gera [rau-ni-a ioli gi sui].
 COMP NEG2 3PL kill-TR-3.OBJ people PL EXHST
 '...so that they should not kill all the people.' [i.e., so that not all should be killed] (Jn 11:50)

- (4-98) laka lesi-a mano-la ioli gera [rau-ni-da]
 1SG.SEQ see-3.OBJ soul-3.PERS people 3PL kill-TR-3PL.OBJ
 '...[then] I saw the souls of the people who were killed...' (Rv 6:9)

Noun-like and verb-like prepositions are so called because they index their complements with personal and object suffixes, respectively. They are termed prepositions because their most typical function is to introduce additional arguments to a clause, because their meanings coincide with those of prepositions in other languages, and because the term appears to be employed frequently in descriptions of other Oceanic languages.¹³

Agreement on prepositions follows all of the same principles as agreement on verbs and inalienably possessed nouns. Personal suffixes index all person-number combinations, while object suffixes only index third person nominals. Example (4-99) shows a noun-like preposition taking a first person personal suffix. Example (4-100) shows two verb-like prepositions. The first, *faasida* 'from them', agrees with an *ex situ* plural noun phrase, while the second, *'alia* 'with', takes the default third-person singular agreement which is observed when the indexed nominal is *in situ*.

- (4-99) Ma wale ba'ela gi faasi-a 'i Rom, gera ka-e oga-ta'a [fa-gaulu].
 and person be.big PL ABL-3.OBJ LOC Rome 3PL SEQ-IRR bowels-be.bad DAT-1INCL.PC.PERS
 'And the big people from Rome, they will hate us.' (Jn 11:48)
- (4-100) Ma Jesus ka bali-a alo-e 'are ta'a fo gi [faasi-da] ['ali-a
 and J. SEQ cast.out-3.OBJ spirit-NSPEC.PERS thing be.bad DEM.DIST PL ABL-3PL.OBJ INS-3.OBJ
 sae-na-la] mola.
 talk-NMLZ-3SG.PERS CONTR.FOC
 'And Jesus cast out the evil spirits from them with his word.' (Mt 8:16)

A list of common prepositions has been given in § 3.3. Criteria for distinguishing verbs from verb-like prepositions have been given in § 3.3.2.1.

¹³ See Durie (1988) for a proposal on the grammaticalization of verb-like prepositions in Oceanic languages, and Lichtenberk (1985) on the grammaticalization of prepositions cognate with *fa-* 'DAT' in Oceanic languages.

4.4.2 Objects

We call objects those arguments which are indexed by an object suffix on the verb, or which are non-subject pronouns following the verb.¹⁴ Therefore, we consider **bata** ‘money’ in (4-101) to be an object, because the preceding transitive verb indexes it with an object suffix, but we do not consider **bata** in (4-102) to be an object, since it is not indexed on the verb. Example (4-102) is instead analyzed as instantiating noun incorporation (cf. § 4.2.4).

(4-101) ka sake-a bata fo, ka kwate-a fa-la wale li lifurono gi.
 SEQ take-3.OBJ money DEM.DIST SEQ give-3SG.OBJ DAT-3.PERS person HABIT prophesy PL
 ‘...he took the money, and gave it to the apostles.’ (Acts 4:37)

(4-102) gera fa-talo 'ali-a sae-na-la God 'ali gera ka sake bata 'ali-a.
 3PL CAUS-spread INS-3.OBJ talk-NMLZ-3.PERS G. COMP 3PL SEQ take money INS-3SG.OBJ
 ‘...they promote the word of God that they may profit by it.’ (2 Cor 2:17)

As discussed in § 4.2, a lexical object argument immediately follows the verbal complex. This means that if there is an *in situ* object, then it usually cannot be separated from the verb by anything other than right-delimiting post-verbal particles of the type discussed in § 4.2.3. Post-verbal oblique arguments and adjuncts, in particular, do not precede the object argument. Examples (4-103) – (4-104) are typical in this regard: the oblique arguments in both cases follow the object arguments, which are underlined. In (4-104), a directional particle **ko**, expressing motion away from the deictic center, appears between the verb and the object.

(4-103) daro ka alu-a rabe-la Jesus 'i lao-la bao fo
 3DU SEQ put-3.OBJ body-3.PERS J. LOC inside-3.PERS tomb DEM.DIST
 ‘...they buried Jesus’ body in the tomb...’ (Jn 19:42)

(4-104) Ma gera ka talai-a ko Jesus fa-la te lifi gera soi-a 'ali-a
 and 3PL SEQ lead-3.OBJ thither J. DAT-3.PERS INDEF.NSPEC.SG place 3PL call-3.OBJ INS-3.OBJ
 'i Golgota.
 LOC G.
 ‘And they led Jesus to a place called Golgotha.’ (Mk 15:22)

4.4.3 Obliques

Oblique arguments are non-subject arguments of the verb which are not indexed by an object suffix. They take the form of a prepositional or locative phrase rather than a bare NP. The phrase '**alia bata ba'ela** ‘with a great sum of money’ in (4-105) is thus an oblique argument, since it is not indexed on the verb, and because it is headed by instrumental verb-like preposition '**ali-**. While **bata** ‘money’ in (4-106) (= (4-102)) is not indexed on the verb, it is not part of a prepositional phrase, and cannot be considered an oblique argument by our definition.

¹⁴ Non-third person pronominal objects are not indexed by an object suffix, but any non-subject pronoun which directly follows the verbal core is an object.

- (4-105) 'I lau wale 'i Rom lou, sulia lau foli-a 'ali-a bata ba'ela.
 PROFORE 1SG person LOC Rome also because 1SG buy-3SG.OBJ INS-3.OBJ money be.big
 'I am a Roman, for I bought [my citizenship] with a great sum.' (Acts 22:28)
- (4-106) gera fa-talo 'ali-a sae-na-la God 'ali gera ka sake bata 'ali-a.
 3PL CAUS-spread INS-3.OBJ talk-NMLZ-3.PERS G. COMP 3PL SEQ take money INS-3SG.OBJ
 '...they promote the word of God that they may profit by it.' (2 Cor 2:17)

Note that the agreement suffix on the verb in (4-105) is ambiguous between a marker of an *in situ* lexical object argument, and a marker of an *ex situ* third-person singular object argument, so it might appear that the oblique argument could potentially be indexed by the agreement suffix, in contradiction of the definition given in the previous paragraph. The following example (4-107) is unambiguous in this regard, since the plural number-marking on the verb (*galofi-da* 'produced them') indicates that the indexed argument must be *ex situ*, and therefore cannot be the oblique argument, '*alia goulu* 'with gold'.

- (4-107) Laka lesi-a fiu fe 'ai li ulu gi gera galo-fi-da 'ali-a goulu.
 1SG.SEQ see-3.OBJ seven CLF tree HABIT candle PL 3PL work-TR-3PL.OBJ INS-3.OBJ gold
 'And I saw seven candlesticks that were made of gold.' (Rv 1:12)

An example of an oblique argument which is a locative phrase rather than a prepositional phrase is found in (4-108). The verb *loto* 'kiss' appears in its intransitive form (cf. *lotofi-* 'kiss (someone)'). Only the transitive form is capable of bearing an agreement suffix.

- (4-108) Wale laka-e loto 'i babali-la, 'i lia lo wale la moulu oga.
 person 1SG.SEQ-IRR kiss LOC face-3SG.PERS PROFORE 3SG FOC person DEM4 2PC want
 'Whomsoever; I kiss [on his, face], that is the man that you want.' (Mt 26:48)¹⁵

4.5 Adjuncts

While it has been possible to give clear form-based definitions for subject, object and oblique arguments, the major defining characteristics of adjuncts are to a large extent meaning-based. There are, however, a few criteria which can be used to distinguish them from these argument types in most cases. Adjuncts resemble obliques in that they are prepositional or locative phrases. Only noun-like prepositions, and not verb-like prepositions, introduce adjuncts, however. Their canonical position is in the rightmost field of the clause: an adjunct must follow the verbal complex, and must also follow any object or oblique arguments when it is *in situ*. When it is *ex situ* it appears in the left periphery. Semantically, an adjunct establishes a temporal or spatial setting in which the event described by the clause takes place.

In example (4-109), both an oblique argument and an adjunct are to be found, with the adjunct following the oblique in linear order. The adjunct establishes a time frame during which the event depicted occurs. A second example, where an adjunct follows an intransitive clause, is given in (4-110).

¹⁵ Subscript labeling is given here since the most direct translation is an English sentence of questionable acceptability.

- (4-109) Sulia Jesus Christ 'e malaa te kale sipsip gera foasina¹⁶ lo ['ali-a]_{Obl}
 because J. C. 3SG resemble INDEF.NSPEC.SG CLF sheep 3PL pray FOC INS-3SG.OBJ
 [a-la fana-na Jiu gera soi-a 'ali-a "daofae liu na li."]_{Adj}
 at-3.PERS eat-NMLZ Jew 3PL call-3.OBJ INS-3.OBJ passover
 'Because Jesus is like the sheep they are praying with on the feast the Jews call 'passover'.
 (1 Cor 5:7)

- (4-110) Talasi 'ato gi [ka-e dao mae]_V ['i lao a-la Jesus ka-e dao mae]_{Adj}
 time be.difficult PL SEQ-IRR arrive hither LOC before at-3.PERS J. SEQ-IRR arrive hither
 'Perilous times shall come before Jesus returns.' (2 Tm 3:1)

When an adjunct which is normally introduced by a noun-like preposition is dislocated to the left periphery of the clause, as in (4-111), the full prepositional phrase may be dislocated, or the preposition may be “stranded,” as in (4-112). In the latter case the preposition indexes its *ex situ* complement with the indefinite personal suffix **-i** (See §9.2.4.1).

- (4-111) [A-la falua gi sui 'i lao-la molagali]_{Adj} gera ka-e faa-talo 'ali-a
 at-3.PERS village PL EXHST LOC inside-3.PERS world 3PL SEQ-IRR CAUS-spread INS-3.OBJ
 fa-rono-na 'oka
 CAUS-hear-NMLZ be.good
 'In all the villages of the world where this gospel is spread...' (Mt 26:13)

In example (4-111), which contains a relative clause construction, the entire adjunct, including the leading preposition, is fronted. Example (4-112), which contains another relative clause construction, leaves the preposition which normally introduces the adjunct *in situ*, but the remainder of the adjunct fronted.

- (4-112) [Lifi]_{Adj} Jesus Christ 'e 'ilitoa [a-i]_{Adj} 'i gula aolo a-la God.
 place J. C. 3SG govern at-INDEF.PERS LOC side be.right at-3.PERS G.
 '...the place where Christ rules, on the right hand side of God.' (Col 3:1)

When an oblique argument is fronted, only the “stranding”¹⁷ type of dislocation is attested (see, e.g., *te kale sipsip* in (4-109)). An examination of examples (4-111) – (4-112) suggests that the difference in the two types of dislocation attested for adjuncts has something to do with the specificity of the times and places they refer to. We delay discussion on this point until §9.

¹⁶This is one of eight examples we have found where *foasina*, which has the morphological form of a deverbal noun (q.v. §5.3) translatable as ‘prayer’, behaves as a simple intransitive verb. The form *foasina* otherwise (72 other attestations) behaves as a noun. We have not observed such behavior with other verbs and as of now have no principled explanation for this apparently unusual behavior.

¹⁷As opposed to the “pied-piping” type (Ross, 1967:263, note 23).

4.6 Special clause types

Thusfar in the present chapter, we have attempted to lay out a basic descriptive framework that we will rely on in future chapters for referring to different elements and structural positions within the clause. In the remainder of this chapter we focus on special clause types, including non-declarative clauses and clauses with non-verbal predicates.

In this section we treat clause types other than the simple declarative clause with a verbal predicate. Interjections and emphatic sentences are dealt with in §4.6.1. Imperative and jussive constructions are treated in §4.6.2, and clauses with non-verbal (i.e., nominal or prepositional) predicates are discussed in §4.6.3. Interrogative sentences are not treated here, but have a separate chapter dedicated to them (§12).

4.6.1 Interjections and emphatic sentences

Our understanding of emphatic sentences is somewhat limited as compared to other phenomena in the language. This is partly due to having a written text for source materials; many apparently emphatic sentences differ from simple declaratives only by the presence of an exclamation mark in the orthography, as in (4-113). Having only written materials to work with, we cannot know whether or how sentences marked with an exclamation point differ intonationally from simple declarative sentences. We are aware of two types of constructions which might be interpreted as emphatic: answers to polar questions, and sentences containing a sentence-final emphatic particle *wani*, which we tentatively gloss as ‘mirative’ (MIR). These are briefly described in the remainder of this section.

- (4-113) 'I 'amiu ioli 'i Galesia gi, 'amu kwekwe'ela!
 PROFORE 2PL.NSBJ people LOC Galatia PL 2PL be.foolish
 ‘O people of Galatia, you are fools!’ (Gal 3:1)

4.6.1.1 Answers to polar questions

An affirmative answer to a polar question generally consists of only the word '*eo*', as in (4-114) - (4-115). The word '*amen*' in the bible is usually rendered in Wala as '*Eo ka 'urifo* 'indeed it is so' (cf. (4-116)).

- (4-114) 'Eo, Aofia. Lau fa-kwalaimoki-a 'i-'o lo Christ, Wela God
 yes lord 1SG CAUS-be.true-3.OBJ PROFORE-2SG FOC Christ child God
 ‘(Do you believe this?) Yes, Lord: I believe that you are Christ, the Son of God’ (Jn 11:27)

- (4-115) 'Eo, lau rono-a.
 yes 1SG hear-3SG.OBJ
 ‘(Do you hear what I say?) Yes, I hear it’ (Mt 21:16)

- (4-116) Lau foa 'ali God 'e 'e kwate-a aroaro-na fa-ga, ka-e io
 1SG pray COMP G. DEM.PROX 3SG give-3.OBJ be.peaceful-NMLZ DAT-1INCL.PL.PERS SEQ-IRR stay
 fae 'amiu sui. 'Eo ka 'urifo.
 COM 2PL.NSBJ EXHST yes SEQ be.thus
 ‘I pray that God will give peace to you, and will stay with you all. Amen.’ (Rom 15:33)

Negative answers to polar questions may consist simply of the negative word *iko*, as in (4-117). Also frequent are negative answers such as (4-118), where *iko* is preceded by a subject agreement marker, and can be analyzed as a verb meaning ‘to not be’. Further discussion of *iko*, and its likely grammaticalization as a negative morpheme from a verb, is taken up in § 11.1.1.

- (4-117) *Iko*, taufasia talasi 'amu ka-e fai-li-a fasifasi lobaa gi li, 'amu bi fafuta'a
 NEG lest time 2PL SEQ-IRR gather-TR-3.OBJ plant village PL DEF 2PL PROXT corrupt
 lou tali 'ai 'oka fai-li-da.
 also INDEF.NSPEC.SG tree be.good COM-TR-3PL.OBJ
 ‘(Do you want us to gather up the tares?) No; lest when you pull up the weeds, you also
 spoil the good plants with them.’ (Mt 13:29)

- (4-118) ma ala wela 'o 'e suga-a ta eke-la karai, ko kwate-a 'amua
 and if child 2SG 3SG ask-3.OBJ INDEF.NSPEC.SG egg-3.PERS chicken 2SG.SEQ give-3.OBJ 2SG.BEN
 ta farifari fa-la? 'E *iko*!
 INDEF.NSPEC.SG scorpion DAT-3SG.PERS 3SG NEG
 ‘And if your child asks you for an egg, will you give him a scorpion? No!’ (Lk 11:12)

It is uncertain how polar questions formed from negated clauses are answered. Several examples of negative polar questions, such as (4-119), are found, but these are all rhetorical questions for which no yes/no answer appears in the text.

- (4-119) Iko 'ali 'amu idu-mi-a mola alaa-na ba 'i lao-la Geregerena Abu
 NEG COMP 2PL read-TR-3.OBJ CONTR.FOC say-NMLZ DEM3 LOC inside-3.PERS book holy
 li?
 DEF
 ‘Have you not read what is said in the holy book?’ (Mt 21:16)

4.6.1.2 Sentence final emphatic particle *wani*

We have identified an emphatic particle, *wani*, which always appears sentence finally (it appears 18 times in our corpus), most frequently in questions of surprise or disbelief. In content questions it could be translated with English ‘*Wh- on earth*’ or ‘*Wh- the hell*’, or with German ‘*denn*’. We tentatively gloss it as MIR ‘*mirative*’. Two examples of questions with *wani* are given in (4-120) – (4-121). In (4-122) is given an example of an affirmative sentence ending with *wani*. *Wani* also appears in conjunction with a type of exclamatory particle ‘*ae*’, which is attested only once in our corpus. The context is given in (4-123).

- (4-120) Lima akwala fe nali gi iko 'ali sui 'ua fafi-a futa na-mu, ma
 five ten CLF year PL NEG COMP finish COMPL against-3.OBJ be.born NMLZ-2SG.PERS and
 ko ili-a 'o lesi-a lo Abraham *wani*?
 2SG.SEQ say-3.OBJ 2SG see-3.OBJ FOC A. MIR
 ‘Fifty years have not passed since your birth, and you say you have seen Abraham?!’
 (Jn 8:57)

- (4-121) Ma 'i lia lo 'i fe wani?
and PROFORE 3SG FOC LOC where MIR
'Where [on earth] is he?' (Jn 9:12)
- (4-122) Ma daro ka alaa kwailiu fa-daroa, daro ka sae 'uri 'e, "'Eo wani!"
and 3DU SEQ speak go.around DAT:3DU.PERS 3DU SEQ speak thusly yes MIR
'And they said one to another, they said, yes!' (Lk 24:32)
- (4-123) Ioli gera rono-a me kwai-gura-i-na fo li, gera ka 'afero rasua ma
people 3PL listen-3.OBJ CLF DISTRIB-heal-?-NMLZ DEM.DIST DEF 3PL SEQ marvel very and
gera ka sae 'uri 'e, "'Ae wani! 'I lia 'e tau-a 'oka rasua a-la
3PL SEQ talk thusly EXCLAM MIR PROFORE 3SG 3SG do-3SG.OBJ be.good very at-3.PERS
'are gi sui!"
thing PL EXHST
'People who heard of those healings, they were astonished, saying 'Hey! He has done all things well!'" (Mk 7:37)

4.6.2 Imperative and jussive sentences

Most of the imperative and jussive sentences in our corpus do not show any apparent structural differences when compared to basic declarative clauses. In examples (4-124) - (4-126), there is no special marking (other than the exclamation mark in (4-124)) to indicate that these are non-declarative sentences, which fact is only inferrable from context.

- (4-124) "Lasaros, 'o latafa mae!"
Lazarus 2SG go.out hither
'Lazarus, come forth!' (Jn 11:43)
- (4-125) Mora la 'i Jerusalem
2DU go LOC jerusalem
'Go into the city!' (Mk 14:13)
- (4-126) Golu oli lou fa-la 'i Judea.
1INCL.PC return again DAT:3.PERS LOC J.
'Let us go into Judea again.' (Jn 11:7)

Some sentences, however, contain a hortative particle *ga*, which is only found in sentences expressing commands or suggestions. This particle is a right delimiter of the verbal complex (cf. § 4.2.3), since it must always immediately follow all verbs, and precede any lexical object or oblique arguments. Three examples are given in (4-127) - (4-129).

- (4-127) Ala lau ili-a ta 'are 'e rero, ko ili-a ga 'are la
if 1SG say-3.OBJ INDEFNSPEC.SG thing DEM.PROX be.wrong 2SG.SEQ say-3.OBJ HORT thing DEM4
lau rero a-i.
1SG be.wrong at-INDEF.PERS
'If I have said any wrong thing, then say what I have done wrong.' (Jn 18:23)

(4-128) 'are-la 'e laka suga 'o, 'ali 'o fafurono-si lau ga fai-li-a
 thing-DEM4 DEM.PROX 1SG.SEQ ask 2SG COMP 2SG listen-TR 1SG HORT COM-TR-3.OBJ
 mamaea-na.

be.humble-NMLZ

'...wherefore I beseech you to hear me patiently.' (Acts 26:3)

(4-129) 'O kwate-a mae ta me kwai 'ali lau gou ga.
 2SG give-3.OBJ hither INDEFNSPEC.SG CLF water COMP 1SG drink HORT

'Give me water, that I may drink' (Jn 4:7)

4.6.3 Non-verbal predicates

It is possible for some constituent other than a verbal complex to act as the predicate in a clause, either a noun phrase or a prepositional phrase. This non-verbal predicate may take a subject argument (§ 4.6.3.1), but in the presentative construction (§ 4.6.3.2) it does not.

4.6.3.1 Non-verbal predicates taking subject arguments

Non-verbal predicates have one argument, which is indexed by the usual set of subject markers (cf. § 6.3). Non-verbal predicates may also be flanked by the usual array of verbal complex-delimiting particles (cf. § 4.2). With two exceptions, they are not attested as being nominalized or receiving valence-changing affixes.¹⁸ In example (4-130), the noun *arai* 'husband' acts as a predicate, and is preceded by the aspectual particle *bi*. In example (4-131), the predicator is the prepositional phrase headed by verb-like preposition *faasi-* 'ABL'.

(4-130) Lau bi arai mola, ma ka 'ato rasua fa-gu fa-la laa na
 1SG PROXT husband CONTR.FOC and SEQ be.difficult very DAT-1SG.PERS DAT-3.PERS go NMLZ
 ko.

thither

'I have just married, and it would be very difficult for me to go.' (Lk 14:20)

(4-131) Aroaro-na 'e malaa fufua-e 'ai. Ioli gera fa-mano-a ioli faasi-a
 be.peaceful-NMLZ 3SG resemble seed-INDEF.PERS tree people 3PL CAUS-stop-3.OBJ people ABL-3.OBJ
 kwalaa-na li, 'i gera lo ioli gera faasi-a fufua-e 'ai fo li.
 quarrel-NMLZ DEF PROFORE 3PL FOC people 3PL ABL-3.OBJ seed-INDEF.PERS tree DEM.DIST DEF

'Peace is like the seed of a tree. People who prevent [other] people from fighting are those who come from the seed of that tree.' (Jas 3:18)

¹⁸A likely exception is the verb *faa aofia* 'worship', appearing 10 times in our corpus, is analyzed as 'CAUS lord'. In one of the attestations, the purposive collocation *fala faa aofia nala* 'to worship him', with the nominalizing suffix *-na*, is found. The second exception is an attestation (reproduced in (i)) of a causative verb related to the noun *ote* 'valley, plain', previously noted at p. 27 (fn. 2).

(i) Ma 'amu ka fa-oote-a sifosifona gi fai-li-a fe uo gi.
 and 2PL SEQ CAUS-valley-3.OBJ hill PL COM-TR-3.OBJ CLF mountain PL
 'And we will bring low every hill and mountain.' (Lk 3:5)

If the pronominal subject of a clause with a nominal predicate is foregrounded with the locative particle *'i*, then an additional subject pronoun is not needed, as it is in a clause with a verbal predicate. Compare, for example (4-132)-(4-133), which have nominal predicates, with (4-134), which has a verbal predicate. When a clause with a nominal predicate is negated, it is usually only the predicate, rather than the whole clause, which is negated (cf. § 11.2.2), as in (4-135)-(4-136).

- (4-132) 'I-'o lo Wela kwalaimoki God!
 PROFORE-2SG FOC child be.true G.
 'You are the true Son of God.' (Mk 3:11)
- (4-133) 'I-'o fata abu ko-e io firi lo 'amua malaa Melkisadek.
 PROFORE-2SG priest 2SG.SEQ-IRR stay remain FOC 2SG.BEN resemble M.
 'You are a priest for ever like Melchisedec.' (Heb 7:17)
- (4-134) 'I-'o 'o io lou fai-li-a Jesus
 PROFORE-2SG 2SG stay also COM-TR-3.OBJ J.
 'You were also with Jesus...' (Mt 26:69)
- (4-135) ala 'i-'o iko lou Christ, 'o ma Elaeja, 'o ma profet ba?
 if PROFORE-2SG NEG again C. or E. or prophet DEM3
 '...if you are not that Christ, nor Elias, neither that prophet?' (Jn 1:25)
- (4-136) 'i lia iko 'ali ioli Jesus Christ.
 PROFORE 3SG NEG COMP person J. C.
 '...he is not a person of Jesus Christ.' (Rom 8:9)

4.6.3.2 *Presentative construction*

Presentative constructions consist of a noun phrase which by itself functions as a clause. Examples are given in (4-137)-(4-139). Such constructions contain a noun most often modified by a focus particle and a demonstrative, as in (4-137) and (4-139), but these are not obligatory; (4-138) does not contain either of these modifiers.

- (4-137) Rabe-gu lo 'e.
 body-1SG.PERS FOC DEM.PROX
 'This is my body.' (Mk 14:22)
- (4-138) Ma dau lu ka rii 'uri 'e, "Te alo-e 'are!"
 and 3PC SEQ shout thusly one spirit-INDEF.PERS thing
 'And they shouted, saying, It is a spirit.' (Mt 14:26)
- (4-139) "Aofia lo fo!"
 lord FOC DEM.DIST
 'It is the Lord!' (Jn 21:7)

5 Verbal morphology

In this chapter we describe the morphological properties of lexical verbs in Wala. There are three relatively productive functions realized through affixation:

1. Object marking, where an object suffix indexes an object argument on a verb (§ 5.1);
2. Valence changing operations (§ 5.2), including transitivization and causativization; and
3. Nominalization (§ 5.3).

Several minor functions are realized through reduplication (see § 2.3.2). These, along with some general comments about the morphological properties of reduplication, are treated in § 5.4.

5.1 Object marking

Object marking has been introduced in § 4.4.1, and different aspects of the process are also covered in § 6.6 and § 9. In the present section we limit ourselves to giving examples of the types of object suffixes which are found on verbs. Table 5.1 summarizes the object-indexing options available for verbs.

Table 5.1: Summary of object-indexing suffixes

<i>Ex situ</i> objects	
3SG	-a
3DU	-daroa
3PC	-daulu
3PL	-da
<i>In situ</i> objects	
3rd person	-a
Non-3rd person	∅

In main clauses where a lexical object is *in situ*, a form of the object suffix identical to the 3SG *ex situ* form is used, regardless of the number of the object NP. Examples (5-1) – (5-4) show that the same object suffix is used, regardless of whether the referent of the object NP is one, two, a few, or many animates, respectively. Verb stems are underlined and objects are enclosed in square brackets.

(5-1) Gera ka lesi-a [Peter], ma gera ka kwele rasua.
 3PL SEQ see-3.OBJ P. and 3PL SEQ be.surprised very
 ‘They saw Peter, and they were astonished.’ (Acts 12:16)

(5-2) ka keri-a [rua wale li galo-na lia gi] 'i lao, ka sae 'uri 'e
 SEQ send-3.OBJ two person HABIT work-NMLZ 3SG PL LOC front SEQ say thusly

'...and he sent two of his disciples ahead, and said...' (Lk 19:29)

- (5-3) te geli ba Jesus 'e bali-a [fiu alo-e 'are ta'a gi]
 INDEF.NSPEC.SG woman DEM3 J. 3SG cast.out-3.OBJ seven spirit-INDEF.PERS thing be.bad PL
 faasi-a
 ABL-3SG.OBJ

'...a woman whom Jesus cast out seven evil spirits from...' (Mk 16:9)

- (5-4) Wasua ma 'e 'ato fa-la ioli 'urifo gi gera ka fa-rero-a [ioli
 but 3SG be.difficult DAT-3.PERS people thus PL 3PL SEQ CAUS-be.wrong-3.OBJ people
 afula gi]
 be.many PL

'But it is difficult for people like that to deceive many...' (2 Tm 3:9)

The full set of agreement possibilities is realized in relative clauses ((5-5) – (5-6)), in questions where the interrogative word is fronted ((5-7)), and in clauses in which a topicalised noun phrase has been fronted ((5-8)). Relative clauses are described in § 7.10.

- (5-5) gera ka-e sake-a ['are gera sugaa-da gi].
 3PL SEQ-IRR take-3.OBJ thing 3PL ask-3PL.OBJ PL

'...they shall receive the things they ask for.' (Lk 11:10)

- (5-6) God ka alu gera 'i lao-la rara rodo. Ma ka firi fafi-da 'ali-a
 G. SEQ put 3PL LOC inside-3.PERS prison be.dark and SEQ tie against-3PL.OBJ INS-3.OBJ
 [kwalo seni io firi 'e 'ato gera ka mousi-da gi].
 strand chain stay be.strong 3SG be.difficult 3PL SEQ sever-3PL.OBJ PL

'God will put them in a dark prison. And He will tie them with chains that last forever which are impossible for them to break.' (Jude 1:6)

- (5-7) [Tali ta 'e] laka-e suga-da?
 INDEF.NSPEC.PL what DEM.PROX 1SG.SEQ-IRR ask-3PL.OBJ

'What shall I ask for?' (Mk 6:24)

- (5-8) Wasua ma [ioli tau-na-da ta'a gi], 'i lia ka-e tatae bolosi-da.
 but people do-NMLZ-3PL.PERS be.bad PL PROFORE 3SG SEQ-IRR rise cover-3PL.OBJ

'But people whose deeds are wicked, He [God] is opposed to them.' (1 Pt 3:12)

Full agreement also occurs when a verb indexes an ellipsed object which has been introduced in a previous clause, as in (5-9).

- (5-9) Gera gaga-si-a toro [Paul fai-li-a Silas] gi, ma gera-ka rabusi daroa.
 3PL tear-TR-3.OBJ cloth P. COM-TR-3.OBJ S. PL and 3PL-SEQ beat 3DU.NSBJ

'They tore the robes of Paul and Silas, and they beat them.' (Acts 16:22)

Example (5-9) illustrates a difficulty in the analysis of dual and paucal object suffixes. These suffixes are, first of all, generally used only to index nominals whose referents are higher animates (cf. § 6.1), and so they are not attested nearly as frequently as the plural object suffix. This has made it difficult to arrive at secure generalizations about their distribution. Secondly,

the forms of the object dual and paucal suffixes coincide with the forms of the third person dual and paucal independent non-subject pronouns (used to encode possessors as well as objects). This makes it difficult to be certain whether there truly are object dual and paucal suffixes, or whether dual and paucal pronouns are treated like first and second person objects (with no object indexing on the verb). There are no syntactic clues which could help distinguish suffixes from independent objects; postverbal particles, for instance, follow pronominal objects. The orthographic evidence is not entirely consistent, since dual and paucal objects are sometimes written with a space between the verb and the object (as in (5-9)), and sometimes with no space (as in (5-10)). Appearances with an intervening space appear to be slightly more frequent (**daroa** 42 w/ space, 23 w/o space; **daulu** 57 w/ space, 34 w/o space). Of the first and second person objects occurring in our corpus, only the second person form 'o ever appears after a verb without it being separated by a space (17 instances w/o space, 520 w/ space).¹

- (5-10) ma logo-na-e ioli fakwalaimoki fo ka keri-daulu lo.
 and gather-NMLZ-INDEF.PERS people believe DEM.DIST SEQ send-3PC.OBJ FOC
 'And the crowd of believers sent them_{paucal}...' (Acts 15:3)

Examples of first and second person objects, which do not trigger object affixation on the verb, are given in (5-12) – (5-11).

- (5-11) ma 'e 'ilitoa ka liu-fi [lau]
 and 3SG govern SEQ surpass-TR 1SG
 'He is mightier than me.' (Mt 3:11)

- (5-12) Lau batafe 'o
 1SG thank 2SG
 'I thank you...' (Mt 11:25)

5.2 Valence alternations

We start the discussion of valence alternations by illustrating the difference between a transitive verb stem and an intransitive, or invariant, verb stem. A transitive verb stem bears an object suffix indexing its object argument, provided that its object is third person. In (5-13), the main verb of the clause **ranaa** 'help', has the object suffix **-a**, and is followed immediately by its logical object, **geli fo** 'that woman'. Since the object is *in situ*, the object suffix need not agree with it in number, and is therefore glossed 3.OBJ rather than 3SG.OBJ.

- (5-13) ma wado ka rana-a geli fo
 and ground SEQ help-3.OBJ woman DEM.DIST
 '...and the earth helped that woman...' (Rv 12:16)

¹ As one reviewer points out, orthographic evidence should not be relied upon too heavily: the decision whether to write **daulu** separately might just depend on the length of the verb or some other aesthetic criteria.

Since the only inflectional affixes on verbs are those indexing objects, basic intransitive verbs lack any affixal morphology. Example (5-14) contains the intransitive verb *lio* 'look', which has only a subject argument, *maagu* 'my eyes'.

- (5-14) Sui laka sau-a maa-gu, ma maa-gu ka lio lo.
 then 1SG.SEQ wash-3.OBJ eye-1SG.PERS and eye-1SG.PERS SEQ look FOC
 '...after I washed my eyes, my eyes saw.' (Jn 9:15)

As has been noted in §3.3.2.1.3, some verbs which normally license an object argument may be prevented from doing so when appearing in a serial verb construction. Example (5-15) contains a serial verb construction whose predicating element is the complex verbal core *rana 'oka* 'comfort [help be.good]'. The verb *rana* lacks an object suffix indexing its logical object. The non-subject argument is now an oblique, introduced by the noun-like preposition *a-*, which takes a personal suffix indexing first person singular. The verb is said to be in its *combining form*, since it is used when a verb must combine with a following verb in a serial verb construction (see §4.2.4), or when it combines with an incorporated nominal object (§4.2.4.1).

- (5-15) Olu wale 'e gi mola dau lu rana 'oka a-gu.
 three man DEM.PROX PL CONTR.FOC 3PC help be.good at- 1SG.PERS
 'These three people have greatly helped me.' (Col 4:11)

When a verb stem has related transitive and intransitive variants, its combining form is almost always identical to its intransitive form.² For the sake of convenience, we will refer to the form of a verb stem which may function either as an intransitive or as a combining form as an invariant form. In some cases, the invariant form of a verb may differ from the transitive form only by the presence or absence of an object suffix, as has been seen with the pair *rana ~ rana-*, while in other cases the transitive form is indicated by a suffix of the form *-(C)i*.

The argument introduced by a *-(C)i* suffix is typically an object, and the logical subject usually does not differ between related transitive-intransitive pairs. However, there are a few cases where the argument introduced by a transitivizing suffix becomes the subject, demoting the subject of the intransitive form to object. This lexical difference in argument alignment appears to be related to the distinction between what Ross (2004:§3.1) terms A-verbs and U-verbs in other Oceanic languages. A-verbs are verbs which, when intransitive, have an Actor as their sole argument, and any new argument introduced by transitivization will be an Undergoer, and hence be realized as an object. U-verbs are verbs which, when intransitive, have an Undergoer as their sole argument, and a new argument introduced by transitivization will be an Actor, realized as a subject. Examples of both types appear in table 5.3 (p. 75, below).

A large number of transitive verb stems may be derived by appending a prefix *fa-* to an intransitive verb, with an accompanying causative meaning. We will refer to such derived transitive verbs as causatives. As with causative constructions in other languages, the newly introduced argument is realized as a subject, and the argument of the intransitive verb may be seen as demoted to object position. These cases are discussed in §5.2.2.

² See §5.2.1.6 for discussion of a potential exception.

5.2.1 Transitivity (valence-increasing)

We count 181 (out of a total 618) verbs in our corpus for which both a transitive and an intransitive form are attested. Of these 181 pairs, one is a suppletive alternation. The suppletive pair *fana* ‘eat (intr.)’, and *‘ani-* ‘eat (tr.)’, cognates of which alternate in the same way in Toqabaqita (Lichtenberk, 2006:266), is illustrated in (5-16) – (5-17).

(5-16) Ma Jesus ka sae 'uri 'e fa-daulu, “Moulu la mae, moulu ka fana 'amoulu.”
and J. SEQ say thusly DAT-3PC.PERS 2PC go hither 2PC SEQ eat 2PC.BEN
‘Jesus said to them, come and eat.’ (Jn 21:12)

(5-17) ma gera ka fisu-a funu-i 'are gi, ma gera ka 'ani-da.
and 3PL SEQ harvest-3.OBJ bear.fruit-NMLZ2 thing PL and 3PL SEQ eat-3PL.OBJ
‘And they began to pluck the fruits, and eat them.’ (Mt 12:1)

One reason for treating the two verbs as related, despite their having no phonological relation, is that there is no combining form of *‘ani-* which can be used in serial verb constructions. It is invariant *fana* which serves as a combining form in such cases. The first clause of (5-18) contains a serial verb construction, whose verbal core is *fana ruru* ‘eat together’. Since the final verb, *ruru* ‘be together’ is intransitive and cannot index objects, the notional object of *fana ruru* (*berete lau li* ‘my bread’) must appear as an oblique argument, introduced by the noun-like preposition *a-*.

(5-18) Te wale mera fana ruru a-la berete lau li, 'i lia lou malimae
any person 1EXCL.DU eat be.together at-3.PERS bread 1SG DEF PROFORE 3SG also enemy
lau.
1SG
‘He that eats my bread with me is also my enemy.’ (Jn 13:18)

Four additional pairs differ by the presence of the prefix *kwai-* (cf. § 5.2.3). Of the remaining 174 pairs, 85 are indistinct except for the presence of object marking. The pair *rono* ‘hear’, and *rono-* ‘listen to’ are one such pair, shown in (5-19) – (5-20). A similar pattern of zero-alternation for this particular verb is seen in other Malaita languages; the Proto-Eastern Oceanic root **rongo* ‘hear’ has been reconstructed as having indistinct transitive and intransitive forms. (Clark, 1973:565)

(5-19) lau rono a-la talasi 'amu logo gi, 'amu io 'afa-'afa 'i safita-miu
1SG hear at-3.PERS time 2PL gather PL 2PL stay RED-be.bitter LOC among-2PL.PERS
‘...I hear that when you come together, there are divisions among you’ (1 Cor 11:18)

(5-20) 'i buri-la gera rono-a ka sui, gera ka batafe-a God.
LOC behind-3.PERS 3PL hear-3SG.OBJ SEQ finish 3PL SEQ thank-3.OBJ G.
‘And after they had heard it, they glorified the Lord...’ (Acts 21:20)

In the remaining 89 pairs the transitive form of the verb is distinguished from the intransitive form by the presence of an affix of the form *-(C)i*, where C stands for one of the consonants l, f, s, n or m. The consonant C is referred to as a “thematic consonant” in comparative literature, and

it “...often reflects a [Proto-Austronesian] stem-final consonant” (Clark, 1973:564). Transitive suffixes with a variety of thematic consonants are attested in other Malaita-Cristobal languages, including Longgu (Hill, 2011:53) and Toqabaqita (Lichtenberk, 2008b:85-7). Type frequencies and examples of each type of pair are summarized in table 5.2 for 125 verb lexemes showing transitive-intransitive alternations. In §§ 5.2.1.1 - 5.2.1.6 transitive-invariant pairs of verbs are exemplified for each of the non- \emptyset transitive suffixes.^{3,4}

5.2.1.1 Transitive suffix **-li**

Related verb stems differing only in the presence of the suffix **-li** are presented in (5-21) - (5-22). The combining form **taba** in (5-22), corresponding to transitive form **tabali-** in (5-21), is the only

³ A notational variant of the current analysis suggested by one reviewer, which has the virtue of eschewing the use of a \emptyset morpheme, is one where there are three classes of verbs rather than two, as schematized below. The \emptyset morpheme analysis, of course, has the virtue of reducing the number of morphological categories under analysis.

Type of verb	Current analysis	Alternate analysis
Intransitive verb with no transitive counterpart	Intransitive	Intransitive
Transitive verb without an overt transitivity suffix	Transitive	Ambitransitive
Transitive verb with an overt transitivity suffix	Transitive	Transitive

⁴ One reviewer has noted that a more parsimonious synchronic analysis of the (non- \emptyset) transitivity morpheme could be made by considering it to simply have form **-i/**, and then assuming that the thematic consonant is part of the underlying form of the verb stem. Thus, intransitive **/gouf/** ‘drink’ would be realized as **[gou]** due to a global ban on **C#** sequences.⁵ Such would be the result of a traditional generative phonology analysis, and we find no data which is inconsistent with it. Our reason for not adopting the traditional generative analysis is that we are in general not persuaded of the usefulness of generative analyses on the synchronic plane. Instead, we see traditional generative analysis as a tool for diachronic study (Halle, 1961:92-4): the generative analysis more or less traces an internal reconstruction of the form of the verb root, and it leads to a result consistent with results in Austronesian historical linguistics mentioned above. We think that the synchronic analysis should reflect an efficient computational process for forming words during language use. It does not need to redundantly affirm diachronic facts. The synchronic analysis as we present it assumes that there is a single transitive suffix at the morpheme level, and that lexical information from the verb root to which it attaches specifies its form (**- \emptyset** , **-li**, **-fi**, etc.). Such a process could be automated efficiently through hashing (Knuth, 1973:§6.4), and there would be no need to devote computational resources to deleting word-final consonants.

⁵ As noted in § 2, native words always end in a vowel in their orthographic representation, and we have surmised that (C)V(V) is the only possible syllable structure. The limited amount of audio data that we have, however, suggests that there is no ban on codas in the spoken language. On the contrary, consonant-final words are very frequent in the spoken language (cf. appendix A.1). The word **oli-si** ‘return-TR; answer’, for example, may be pronounced [‘olis]. If there were a rule globally deleting word-final consonants, it would be rendered largely opaque by a later rule deleting unstressed vowels. If the general consensus that opaque rules are more difficult to learn (Baković, 2011) be taken as a consideration for developing a synchronic analysis, we suggest that the analysis we propose here (which does not recapitulate the language’s history) is more likely to be the one arrived at by the language learner.

Table 5.2: List of suffixes distinguishing transitive and invariant verb stems

Transitive suffix	# attested	Example			
-ø	85	rono	'listen'	rono-	'hear'
-li	30	'uga	'be envious'	'ugali-	'envy'
-fi	23	gou	'drink'	goufi-	'drink (tr.)'
-si	22	ani	'cry'	anisi-	'cry for'
-ni	6	tora	'spurt'	torani-	'gush against'
-i	5	tala	'shine'	talai-	'guide'
-mi	3	idu	'read'	idumi-	'read (tr.)'

example of an invariant form of this verb stem in our corpus. This does not seem surprising, given that the verb refers to an action normally involving an agent and a theme.

(5-21) ma gera ka tatae, ma gera ka taba-li-a Jesus faasi-a falua fo.
 and 3PL SEQ rise and 3PL SEQ cast.out-TR-3.OBJ J. ABL-3.OBJ town DEM.DIST
 'And they rose up, and threw Jesus out of the city...' (Lk 4:29)

(5-22) 'Urifo mola gera ka taba sul-i-a wale fo 'i maluma faasi-a
 thus CONTR.FOC 3PL SEQ cast.out concerning-3.OBJ person DEM.DIST LOC underneath ABL-3.OBJ
 'i lao-la raku ba
 LOC inside-3.PERS field DEM3
 'So they cast that successor [to the plantation's lord] out of the vineyard...' (Lk 20:15)

Counted among the pairs of verbs which differ in the presence or absence of transitivity **li** are a handful of verbs whose invariant form ends in **...ae**, but whose transitive form ends in **...ai-li-**. It seems reasonable to suggest that a form of vowel-height harmony obtains in these cases, with underlying /e/ raising to [i] when the vowel of a following affix is /i/. Vowel height harmony of this type is discussed in § 2.2.2. Interestingly, the case of vowel harmony involving transitivity **-li** is of the cross-linguistically less common type where the trigger is an affix and the target a stem (cf. Archangeli and Pulleyblank (2007:§15.6)). Pairs of verbs displaying such an alternation are given in table 5.3.

Table 5.3: Pairs of verbs analyzable as displaying vowel height harmony

tafae	'open (combining form)'	tafanai-li-	'reveal'
usulae	'push (intr.)'	usulai-li-	'push'
tagalae	'be scattered'	tagalai-li-	'scatter, destroy'
sigirae	'be dispersed'	sigirai-li-	'sprinkle on'
suunae	'force (w/ pronominal obj.)'	suunai-li-	'force'
lugatae	'divorce (combining form)'	lugatai-li-	'divorce'
rafae	'sail, ride'	rafai-li-	'sail/ride on'
'oilakitae	'bless (w/ pronominal obj.)'	'oilakitai-li-	'bless'
fatae	'appear'	fatai-li-	'appear to'
olifae	'release (combining form)'	olifai-li-	'release'
raunae	'build (combining form)'	raunai-li-	'build'

Two pairings with irregular alternations are included in this group. The pair **'itoe** and **'itoli** are both glossed as *'do.habitually'* and are only attested preceding another verb within a serial verb construction.

Table 5.4: All attestations of *'itoe/'itoli*

Contest	Gloss
<i>'itoe io</i>	'...habitually stay...'
<i>'itoli sae</i>	'...habitually say...'
<i>'itoli suga</i>	'...habitually request...'
<i>'itoli kwai'ofe</i>	'...habitually be gracious...'
<i>'itoli tau(a)</i> (×2)	'...habitually do...'
<i>'itoli foa</i>	'...habitually pray...'

This pair is unusual on two counts: first, there is no clear difference in transitivity between the two forms.⁶ Second, the alternation is not strictly an alternation between *-ø* and *-li*, but between *-e* and *-li*. The available examples suggest that the alternation is phonologically conditioned, and may not have anything to do with the verb's valence. *'itoe* appears when the following word begins with a vowel, and *'itoli* when the following word begins with a consonant.

A second irregular pair is *akwa* 'shout' and *akwataili-* 'shout at'. The transitive form is a hapax legomenon, and it is formed from a putative (but unattested) intransitive form **akwatae*. The form **akwali-* is unattested.

5.2.1.2 Transitive suffix *-fi*

Examples (5-23) – (5-25) illustrate an alternation between invariant *'ago* and transitive *'agofi-* 'burn'. The invariant form *'ago* may be either an intransitive verb stem (as in example (5-24)) or a combining form in the noun-incorporated derived intransitive verb *'ago fana* 'cook food' (in example (5-25)).

(5-23) Ma God ka ala'ali-a 'ali ka 'ago-fi-a ioli gi 'ali-a 'ago~'ago na ba'ela
 and G. SEQ allow-3SG.OBJ COMP SEQ burn-TR-3.OBJ people PL INS-3.OBJ RED-burn NMLZ be.big
 lia.
 3SG
 '...and God allowed him to scorch men with fire.' (Rv 16:8)

(5-24) Ma fiu ulu gi ka 'ago 'i lifi-fo 'i ma-laa gwela a-la 'ilitoana li.
 and seven candle PL SEQ burn LOC place-DEM.DIST LOC eye-3.PERS throne at-3.PERS kingdom DEF
 '...and seven lamps burned before the palace throne...' (Rv 4:5)

(5-25) Ma geli fo ka 'akwaa lo, ma ka tatae ka 'ago fana, ma ka ranoli dau lu
 and woman DEM.DIST SEQ recover FOC and SEQ rise SEQ burn food and SEQ serve 3PC
 lo.
 FOC
 '...and the woman recovered, arose, cooked, and served them.' (Lk 4:39)

5.2.1.3 Transitive suffix *-si*

Alternations between the intransitive stem *mae* 'die' and transitive counterpart *maesi-* 'die for' are shown in examples (5-26) – (5-27).

⁶ Since the verb is never attested by itself, it is not possible to say on morphological grounds which transitivity type is attested.

- (5-26) 'amu ka 'ui-a la la ka mae.
 2PL SEQ shoot-3SG.OBJ until SEQ die
 '...You will throw [stones] at it until it dies' (Heb 12:20)
- (5-27) ma ala 'o lesi-a ta walefae 'o 'e tau-a ta 'are ta'a ikoso 'ali mae-si-a
 and if 2SG see-3.OBJ any brother 2SG 3SG do-3.OBJ any thing be.bad NEG2 COMP die-TR-3SG.OBJ
 'And if you see any brother of yours who does something bad that he should not die for...'
 (1 Jn 5:16)

Interestingly, there is a second attested transitive form corresponding to intransitive *mae*: *maeli-* (cf. (5-28)). If there exists a meaning difference between *maeli-* and *maesi-*, our data do not permit us to discern it.⁷

- (5-28) Wale 'e iko 'ali tau-a mola ta 'are 'e totolia ka mae-li-a 'o ma
 person DEM.PROX NEG COMP do-3.OBJ CONTR.FOC any thing 3SG be.able SEQ die-TR-3SG.OBJ or and
 gera ka alu-a 'i lao-la raraan.
 3PL SEQ put-3SG.OBJ LOC inside-3.PERS prison
 'This man does nothing that he can die for or be put in prison for.' (Acts 26:31)

5.2.1.4 Transitive suffix *-i*

The suffixes *-i*, *-mi* and *-ni* are relatively rare, jointly representing only nine pairs of verbs. Suffix *-i*, which lacks a thematic consonant, is shown in (5-29) – (5-30).

- (5-29) 'ali 'ae-mu wasua 'ato 'ali 'e foto a-la ta me fau.
 COMP foot-2SG.PERS but cannot COMP 3SG strike at-3.PERS any CLF stone
 '...that your foot should never dash against any stone.' (Lk 4:11)
- (5-30) 'e 'ato gera ka foto-i-a Aofia 'ilitoa a-la 'ai rara folo.
 3SG cannot 3PL SEQ strike-TR-3.OBJ lord rule at-3.PERS tree branch be.firm
 '...they would not have crucified [lit. nailed to a thick tree branch] the Lord of glory.'
 (1 Cor 2:8)

One pair of verbs differentiated by the suffix *-i* is perhaps problematic. Although *la* 'go' has no attested transitive form, it seems to have two possible combining forms (*la* and *lai*). The patterns of occurrence suggest that the form which is equivalent to the intransitive form, *la*, is employed in serial verb constructions with a following verb signifying a secondary aspect of the motion event (e.g., path, manner, direction, as in (5-31)). The suffixed form *lai* is instead employed in serial verb constructions (cf. § 4.2.4.2), where it may be translated as 'go and'.

- (5-31) 'i 'amiu ioli ta'a gi, 'amu la tatau ko faasi lau.
 PROFORE 2PL.NSBJ people be.bad PL 2PL go be.far thither ABL 1sg
 '...you bad people, depart from me.' (Lk 13:27)

⁷ One other intransitive verb, *nuu* 'sing', has been found to have two different transitive forms corresponding to it (*nuu-ø-* and *nuu-li-*). There is furthermore, one transitive verb, *idumi-* 'read', which has two corresponding combining forms (*idu* and *idumi*).

- (5-32) God 'e oga meulu ka la-i faa-rono 'ali-a fa-rono-na 'oka lou fa-la
 G. 3SG want 1INCL.PC SEQ go-TR CAUS-hear INS-3.OBJ CAUS-hear-FNMLZ be.good again DAT-3.PERS
 ioli 'i lifi-fo gi li.
 people LOC place-DEM.DIST PL DEF
 'God wanted us to go and preach the good news in those places.' (Acts 16:10)

While the present gloss of *la-i* as 'go-TR' is consistent with the 29 instances in our corpus, the absence of a clear transitive form **lai-* in our corpus makes it difficult to say with certainty that the two forms are in fact morphologically related.

5.2.1.5 Transitive suffix *-ni*

To examples (5-13) and (5-15) above, we can add (5-33) – (5-34) to exemplify verb pairs differentiated by the transitive suffix *-ni*. The transitive form *raunia* in (5-33) appears with an *in situ* object argument, while the combining form *rau* in (5-34) appears with an incorporated object. An incorporated object is to be interpreted as non-specific (cf. § 4.2.4.1 on noun incorporation).

- (5-33) Ma God ka kwate-a lo kwaikwaina fa-la, sulia 'e rau-ni-a ioli
 and G. SEQ give-3.OBJ FOC punishment DAT-3SG.PERS because 3SG kill-TR-3.OBJ people
 galo-na God gi.
 work-NMLZ G. PL
 '...and God gave punishment to her because she had killed God's servants' (Rv 19:2)
- (5-34) lia ka tau-a 'are ta'a gi, ka tau ulao, ma ka beli, ma ka rau ioli
 3SG SEQ do-3.OBJ thing be.bad PL SEQ do young.woman and SEQ steal and SEQ kill people
 'He will do bad things, he will fornicate, and steal, and kill people.' (Mk 7:21)

5.2.1.6 Transitive suffix *-mi*

We illustrate the suffix *-mi* with examples of verbs related to the transitive verb *idumi-* 'read', shown in example (5-35). This is a rather curious set of examples, because, as noted in § 5.2.1.3, we find two different intransitive forms: *idu* in the intransitive clause in (5-36) (the form we would expect), and *idumi* as combining form in the serial verb construction in (5-37). According to our description, combining forms are equivalent to intransitive forms, so either *idu* constitutes an exception, or there are simply two combining forms—we favor the latter possibility.

- (5-35) talasi gera idu-mi-a taki Moses gi li
 time 3PL read-TR-3.OBJ law M. PL DEF
 'Once they read the laws of Moses...' (2 Cor 3:15)
- (5-36) Lau sai-a-i moulu idu sulia 'i lao-la buka abu me 'are
 1SG know-at-INDEF.PERS 2PC read concerning-3.OBJ LOC inside-3.PERS book be.holy CLF thing
 ba David Walelitalona 'e tau-a 'i lao.
 DEM3 D. king 3SG do-3SG.OBJ LOC before
 'I know you have read about it in the Bible, the things that King David did before.' (Mt 12:5)

- (5-37) Ma ala 'amu ka idu-mi 'oka a-la geregerena 'e
 and if 2PL SEQ read-TR be.good at-3.PERS book DEM.PROX
 'And if you read this book well...' (Eph 3:5)

5.2.2 Causative (valence-increasing)

The causative alternation may be considered more regular or productive than the transitivity alternation in two ways. First, there is only one form of the causative affix (a prefix **fa(a)-**), rather than a set of affixes with differing thematic consonants. Second, there are no irregularities with respect to argument alignment: that is, the additional argument introduced in the causative form is always a subject, and the subject of the corresponding non-causative verb is always demoted to object.

The causative prefix is attested in two forms, **fa-** and **faa-**. The second presumably reflects the more conservative variant, given cognate prefixes **fa'a-** in related languages. While it is not possible to predict with certainty which variant will appear in a given context, the choice may be influenced by prosodic factors—see discussion in § 2.3.3.

5.2.2.1 Transitivity properties of causative verbs

Examples (5-38) – (5-44) show sets of verbs related by the causative alternation. The verb from which a causative is formed is usually intransitive, but transitives are also attested. A causative formed from a transitive verb, however, will not have two object arguments. The object argument of the underlying verb will instead be either realized as an oblique or omitted altogether. There seems, then, to be a strict limit on object-doubling. While the derived transitive verb **fawawaloo** in (5-39) is formed from intransitive **wawalo** 'sink', the derived transitive verb **fawawaloo** in (5-40) instead appears to be formed from an unattested transitive form ***wawalosi-** 'soak up'. Although both (5-39) and (5-40) have both an object and an oblique argument, only the oblique argument of (5-40) may be seen as a demoted object.

- (5-38) Ma baru fo ka garani wawalo lo
 and boat DEM.DIST SEQ be.near sink FOC
 'And the boat was already close to sinking.' (Mt 8:24)
- (5-39) Ma John ka fa-wawalo-a 'i lao-la kwai 'i Jodan
 and John SEQ CAUS-sink-3SG.OBJ LOC inside-3.PERS water LOC jordan
 'And John baptized him in the river Jordan.' (Mk 1:9)
- (5-40) ma ka fa-wawalo-si-a te anina 'i lao-la waen 'afaa
 and SEQ CAUS-sink-TR-3.OBJ one sponge LOC inside-3.PERS wine be.sour
 'And he drenched a sponge in vinegar.' (Mark 15:36)

Another apparent example of a causative formed from a transitive verb is given in (5-41)–(5-42). In (5-41), the logical object of **rono-** 'hear' is realized as an object. When the valence is increased via causativization, the logical object of **rono-** is realized as an oblique, introduced by the instrumental verb-like preposition **'ali-**. While causatives formed from transitive verbs and from derived transitive verbs are found, so far we have not found any verb where it can be shown

that a transitive suffix **-(C)i** has been added to a causative form. A likely explanation, at least for A-verbs (see § 5.2 for definition), is that since arguments introduced by a transitive suffix cannot cause demotion of any existing argument, any argument introduced in such a case would have to be realized as an oblique. But obliques do not have to be licensed by any morphology on the verb. In the case of U-verbs, it may be possible for a transitive suffix to demote an argument of a causative form, since transitive suffixes can demote subjects of counterpart intransitive U-verbs, but we have not identified any such examples.

- (5-41) Laka-e rono 'o a-la talasi wale 'e gera suu-a fafi 'o gi
 1SG.SEQ-IRR hear 2SG at-3.PERS time person DEM.PROX 3PL accuse-3SG.OBJ against 2SG PL
 geraka-e dao mae a-i
 3PL.SEQ-IRR come hither at-INDEF.PERS
 'I will hear you when the people who accuse you have also come.' (Acts 23:35)

- (5-42) Ma ko
 and 2SG.SEQ
fa-rono-a ioli gi 'ali-a 'are 'e 'o lesi-da a-gu gi 'i tara'ela
 CAUS-hear-3.OBJ people PL INS-3.OBJ thing DEM.PROX 2SG see-3PL.OBJ at-1SG.PERS PL LOC day
 'And you will tell the people about the things you have seen from me today.' (Acts 26:16)

The vast majority of causatives are formed from intransitive rather than transitive verbs. An example of a pair of the former type are given in (5-43) - (5-44).

- (5-43) Wasua ma Paul ka taasi 'ali-a waa fo 'e nasi 'i lima-la
 but and Paul SEQ throw INS-3.OBJ snake DEM.DIST 3SG remain LOC hand-3SG.PERS
 fa-la 'i lao-la dunaa
 DAT-3SG.PERS LOC inside-3.PERS fire
 'And Paul threw from him the snake that was hanging on his hand into the fire.' (Acts 28:5)

- (5-44) Ma gera ka firi fa-nasi-a lou faga taufasi-a 'e bi akari
 and 3PL SEQ tie CAUS-remain-3.PERS again ship lest-3.OBJ 3SG PROXT sink
 'They secured the ship lest it sink.' (Acts 27:17)

A large number of intransitive verbs with stative meanings have related causative forms. Compare, for example, the stative intransitive **kwalaimoki** 'be true' with causative **fakwalaimoki** 'believe' in examples (5-45) - (5-46). In these cases, the relationship between the causative and non-causative variants is not always fully semantically transparent.

- (5-45) 'Are kwalaimoki laka-e ili-a fa-miu
 thing be.true 1SG.SEQ-IRR say-3SG.OBJ DAT-2PL.PERS
 'What I will say to you is true.' (Mt 26:64)
- (5-46) ikoso 'ali 'amu fa-kwalaimoki-a
 NEG2 COMP 2PL CAUS-be.true-3SG.OBJ
 '...don't believe it.' (Mt 24:4)

5.2.3 *kwai-* (valence-decreasing)

While the causative and derived transitive alternations involve a valence-increasing operation, Wala also has a valence-decreasing operation involving the prefix *kwai-*. This prefix can be attached to the combining form of some transitive verb stems to derive intransitive verbs, which often express a property or more permanent state in relation to the transitive equivalent. The *kwai-*-prefixed form *kwailiu* occurs frequently in our corpus and constructions with this verb often involve distributive meanings. We currently gloss *kwai-* as DISTRIB, but note that a semantic analysis based on a more expansive data set may identify different or more precise functions.⁸

5.2.3.1 *kwai-* affixed to transitive stems

Examples (5-47) – (5-48) illustrate the valence decreasing properties of *kwai-*. The transitive form *amasi-* ‘have mercy on’ in (5-47) takes an object suffix indexing its object. In (5-48), the form *kwai-amasi* ‘be merciful’ is intransitive, and its non-subject argument must be an oblique.

- (5-47) 'oilakinaa fa-la ioli malata-da amasi-a ioli mamata gi li,
 blessing DAT.3.PERS people heart-3PL.PERS have.mercy.on-3.OBJ people be.different PL DEF
 sulia god ka-e amasi-da lou.
 because G. SEQ-IRR have.mercy.on-3PL.OBJ also
 ‘Blessed are the people whose hearts are merciful to others, because God will have mercy
 on them.’ (Mt 5:7)

- (5-48) God ikoso lokomalata rero a-ga, sulia 'e kwai-amasi
 G. NEG2 decide be.wrong at-1INCL.PL.PERS because 3SG DISTRIB-have.mercy
 aa-ga.
 at-1INCL.PL.PERS
 ‘God does not decide against our favor, because he is merciful towards us.’ (Ti 3:7)

Affixation of *kwai-* does not appear to be a productive process: only 19 pairs of verbs with this valence-decreasing alternation are attested in our corpus, all of which are listed in table 5.5.

5.2.3.2 Constructions with *kwailiu* ‘go around’

Though the affixation of valency decreasing *kwai-* is not a productive alternation for most verbs, there is a word *kwailiu* which can be associated with a distributive semantic function, itself derived with *kwai-*. By itself, as the main predicating element of a clause, *kwailiu* may be translated as ‘go around’, as in (5-49). It is morphologically related to intransitive *liu* ‘walk, travel’, and to transitive *liufi-* ‘walk past’.

⁸ For a similar phenomenon in Toqabaqita, Lichtenberk has chosen the label LIP (Low individuality of participants ((Lichtenberk, 2008b:861-2)).

Table 5.5: List of 19 attested verbs with *kwai-* prefix

<i>kwai-</i>	'catch'	<i>kwai-kwai-na</i>	'penalty, plague'
<i>liufi-</i>	'go past'	<i>kwai-liu</i>	'go around'
<i>oga</i>	'want'	<i>kwai-oga-li-na</i>	'will'
<i>rana-</i>	'help'	<i>kwai-rana-i</i>	'be helpful'
<i>malatai-</i>	'comfort'	<i>kwai-malatai</i>	'grieve'
<i>lufa-</i>	'release'	<i>kwai-lufa</i>	'forgive'
<i>amasi-</i>	'have mercy on'	<i>kwai-amasi</i>	'be merciful'
<i>talai-</i>	'lead'	<i>kwai-talai</i>	'be a leader'
<i>fii-</i>	'hurt'	<i>kwai-fii</i>	'be envious'
<i>gura-</i>	'heal'	<i>kwai-gura-i</i>	'be a healer'
<i>mano</i>	'breathe'	<i>kwai-mano-si</i>	'be tired'
<i>kwaiasi-</i>	'fish'	<i>kwai-kwaiasi</i>	'be a fisherman'
<i>kwalo-</i>	'invite'	<i>kwai-kwalo-i</i>	'??'
<i>gumuli-</i>	'beat'	<i>kwai-gumuli-na</i>	'fighting'
<i>tatali-</i>	'loosen'	<i>kwai-tatali</i>	'be shriveled/decayed'
<i>suusuu</i>	'argue'	<i>kwai-susua-i-na</i>	'complaint'
<i>lugatae</i>	'divorce'	<i>kwai-lugatae-na</i>	'divorce (n.)'
<i>bebesi-</i>	'crowd against'	<i>kwai-bebesi</i>	'crowd around'
<i>gwafe-</i>	'comfort'	<i>kwai-gwafe-na</i>	'comfort (n.)'

- (5-49) Ma ioli fakwalaimoki gi gera ka fili-a 'ali ka la fae 'ameulu talasi
 and people believe PL 3PL SEQ choose-3SG.PERS COMP SEQ go COM 1INCL.PC.NSBJ time
 meulu ka kwailiu fa-la goli-na-la tu-tura-na fa-la ioli
 1INCL.PC SEQ go.around DAT-3.PERS collect-NMLZ-3.PERS RED-donate-NMLZ DAT-3.PERS people
 fakwalaimoki 'i Judea gi li.
 believe LOC J. PL DEF
 '...and the believers chose him to go with us when we go around to collect donations for
 the believers in Judea' (2 Cor 8:19)

Kwailiu often participates in serial verb constructions, as in (5-50).

- (5-50) Sui ka lio kwailiu ka lesi-a 'are gi sui.
 after SEQ look go.around SEQ see-3.PERS thing PL EXHST
 'After he had looked around about at all things...' (Mk 11:11)

In (5-50), *kwailiu* contributes a distributive meaning: Jesus did not look in one particular place, but in many places around him. This distributive meaning is also present in examples (5-51)–(5-52), where *kwailiu* also participates in serial verb constructions. In both of these examples, there is an oblique complement coreferential with the subject, which results in a reciprocal meaning, where the act of asking or saying is distributed across the whole group.

- (5-51) Ma wale li galo-na lia gi, dauu ka soilidi kwailiu 'uri 'e 'i safita-dauu
 and person HABIT work-NMLZ 3SG PL 3PC SEQ ask go.around thusly LOC among-3PC.PERS
 'His disciples asked amongst themselves...' (Jn 4:33)
- (5-52) Ma daro ka alaa kwailiu fa-daroa
 and 3DU SEQ say go.around DAT-3DU.PERS
 'And they said to one another...' (Lk 24:32)

Only rarely does *kwailiu* directly modify a common noun (thrice in our corpus); examples are given in (5-53) and (5-54). Here, the function of *kwailiu* is drawing attention to each individual member of the set expressed by the plural noun phrase.

(5-53) Ma ikoso 'ali 'amu lae mola 'amiu fa-la luma kwailiu gi.
and NEG2 COMP 2PL go CONTR.FOC 2PL.BEN DAT-3.PERS house go.around PL
'Do not go from house to house.' (Lk 10:7)

(5-54) Gera ka ili-a alaa-na afula mamata kwailiu gi
3PL SEQ say-3.OBJ talk-NMLZ be.many be.different go.around PL
'They said many things which differed [from one thing to another]...' (Acts 21:34)

5.2.3.2.1 Syntactic properties of *kwailiu*

Kwailiu behaves as an intransitive verb in most respects. It may be the main predicating element of a clause (as in (5-49)), it may modify nouns, and it may be part of a nominalized verbal core, as in (5-55) (see § 5.3 on nominalizations).

(5-55) ma dau lu ka fuli'ae fa-la soilidi kwailiu-na 'i safita-dau lu
and 3PC SEQ start DAT-3.PERS ask go.around-NMLZ LOC among-3PC.PERS
'And they began to inquire among themselves...' (Lk 22:23)

Yet *kwailiu* has formal properties which intransitive verbs generally lack. It may, for example, appear after a noun-like preposition, as in (5-56), and may appear in absolute sentence-final position, after all arguments, as in (5-57). In this respect, it behaves similarly to *sui*, which often functions as an intransitive verb, but has other non-verb-like properties associated with its function as a quantifier.

(5-56) lia fo 'amu ka sae raefale a-miu kwailiu 'ali-a 'are 'e lau ili-da
therefore 2PL SEQ say console at-2PL.PERS go.around INS-3.OBJ thing DEM.PROX 1SG say-3PL.OBJ
ko fa-miu gi.
thither DAT-2PL.PERS PL
'Therefore comfort one another with these words I say to you.' (1 Thes 4:18)

(5-57) Ikoso 'ali gia io 'ali-a naunau-na, 'o ma suradai-na, 'o ma
NEG2 COMP 1INCL.PL stay INS-3.OBJ be.haughty-NMLZ or and provoke-NMLZ or and
'uga-li-na-ga kwailiu.
be.envious-TR-NMLZ-1INCL.PL.PERS go.around
'Let us not dwell in haughtiness, or be provoking, or envying one another.' (Gal 5:26)

5.2.4 *fai-* (valence-decreasing)

A valence-decreasing prefix *fai-* is found on only three verbs in our corpus (table 5.6). Examples of the transitive/intransitive pair *maasi-/faimaasi* are given in (5-58) – (5-59).

- (5-58) a-la talasi 'amu logo fa-la Fana Abu na li, 'amu ka maasi-a ioli
 at-3.PERS time 2PL gather DAT-3.PERS eat be.holy NMLZ DEF 2PL SEQ wait-3.OBJ people
 sui.
 EXHST
 '...when you come together for holy supper, wait for everyone.' (1 Cor 11:33)
- (5-59) ma ka ili-a fa-da 'ali gera ka fai-maasi wawade ga
 and SEQ say-3SG.OBJ DAT-3PL.PERS COMP 3PL SEQ FAI-wait be.small HORT
 '...and he said to them that they should wait for a bit...' (Rv 6:11)

Table 5.6: Pairs of verbs containing valence-decreasing prefix *fai-*

<i>soi-</i>	'call'	<i>faisoi</i>	'call (intr.)'
<i>maasi-</i>	'wait for'	<i>faimaasi</i>	'wait'
<i>isi-</i>	'curse at'	<i>fai'isi</i>	'curse (intr.)'

While the prefix *fai-* clearly does not productively combine with transitive verb roots, and there are not enough attestations of it to make any reasonable hypothesis about its semantic function, it is nevertheless possible to argue that it is a valence-decreasing prefix, and not a prefix associated with a small set of irregular combining forms. First, *fai-* prefixed forms appear as the only verb in a clause, which combining forms may not do (cf. (5-60)), and second, the combining form for at least one of the transitive verbs,⁹ *soi-* 'call', is known, and it is not *faisoi* (cf. (5-61)).

- (5-60) ma gera ka fai-'isi ko fa-la Jesus
 and 3PL SEQ FAI-insult thither DAT-3.PERS J.
 '...and they reviled Jesus...' (Mt 27:39)
- (5-61) Ma ka fuli'ae-a lo [soi lofo-si] na-la God, ma rata-la God
 and SEQ start-3SG.OBJ FOC call jump-TR NMLZ-3.PERS G. and name-3.PERS G.
 'And he started to curse God, and his name.' (Rv 13:6)

5.3 Nominalization

Deverbal nouns may be formed by suffixing the nominalizing suffix *-na* to a verb stem. We find, for example, the intransitive verb *mae* 'die' as well as the deverbal noun *maena* 'death'. The process appears to be fully productive in that all verbs may undergo it. While it is possible to infer from their translational equivalents that they are nouns, there are four non-semantic arguments for considering words derived by suffixing *-na* to a verb to be of the word class noun. First, a deverbal noun may act as the subject of a clause, as in (5-62), where the derived noun '*ugana* 'jealousy' acts as the subject of the main clause.

⁹ A predicate *maa too* 'visit, greet' is attested, but it is not clear at this point whether this is a verb-verb compound involving a combining form of *maali-* 'wait', or whether it is a noun-verb subject-incorporation (cf. §4.2.4.1.2) compound, with incorporated subject *maa* 'eye', along the lines of *oga ta'a* 'be angry (bowels be.bad)'.

- (5-62) Ma 'uga-na ka tatae safita-la Jiu gera-sae 'ali-a sae-na Hebru li
 and be.jealous-NMLZ SEQ get.up among-3.PERS Jew 3PL-talk INS-3.OBJ talk-NMLZ Hebrew DEF
 fai-li-a Jiu gera sae 'ali-a sae-na Grik gi li.
 COM-TR-3.OBJ Jew 3PL talk INS-3.OBJ talk-NMLZ Greek PL DEF
 'And jealousy rose up between the Hebrew-speaking Jews and the Greek-speaking Jews.'
 (Acts 6:1)

Second, deverbal nouns may function as the object of a preposition. For example, in (5-62), the deverbal noun *saena* 'language' is the object of the instrumental verb-like preposition 'ali-. In (5-63), the deverbal noun *maurina* 'life' is the object of the noun-like preposition a-.

- (5-63) Ma ta ioli rata-la iko 'ali io 'i lao-la buka a-la mauri-na li
 and any people name-3SG.PERS NEG COMP stay LOC inside-3.PERS book at-3.PERS live-NMLZ DEF
 'And whoever's name was not written inside of the book of life...' (Rv 20:15)

Third, deverbal nouns may act as object arguments to transitive verbs, and are indexed by an object suffix in such cases. In example (5-64), the object of transitive *kwate-* 'give' is the deverbal noun *nanatana* 'power'.

- (5-64) Ma laka-e kwate-a nanata-na fa-mu lia 'e malaa kii a-la maluma
 and 1SG.SEQ-IRR give-3.OBJ be.strong-NMLZ DAT-2SG.PERS 3SG 3SG resemble key at-3.PERS outside
 a-la 'ilitoa-na God.
 at-3.PERS rule-NMLZ G.
 'And I will give you power like the keys to the entrance of the kingdom of heaven...'
 (Mt 16:19)

Fourth, they may take personal suffixes as inalienably possessed nouns do. While the personal suffix on an inalienably possessed noun indexes its possessor, the personal suffix on a deverbal noun indexes the absolutive (i.e., S/O) argument of the underlying verb. In example (5-65) the personal suffix *-ga* '1INCL.PL.PERS' indexes the subject argument of intransitive *foa* 'pray'. When a deverbal noun is formed from an underlyingly transitive verb, its personal suffix must index the object argument of the underlying verb. In example (5-66), the personal suffix on the deverbal noun *foasinada* 'praying to them' refers to the underlying object of transitive *foasi-* 'pray to'. Example (5-66) is also an example of a purposive nominalization, a construction which is discussed in § 5.3.2.

- (5-65) foa-na-ga fa-la fana 'e kwate-a
 pray-NMLZ-1INCL.PL.PERS DAT-3.PERS food 3SG give-3SG.OBJ
 'Our prayers for the food he has given' (1 Tm 4:5)
- (5-66) 'i daroa lului 'are 'amu raunai-li-da gi fa-la foa-si-na-da.
 PROFORE 3DU.NSBJ image thing 2PL build-TR-3PL.OBJ PL DAT-3.PERS pray-TR-NMLZ-3PL.PERS
 'They are images which you built to worship...' (Acts 7:43)

As with noun-like prepositions and inalienable nouns, there is a default personal suffix which is used to indicate an *in situ* lexical complement, no matter its number. The personal suffix *-la* on the deverbal noun *rananala* 'helping' in (5-67) indexes an *in situ* plural object, *ioli gera*

fakwalaimoki ala gi ‘people who believe in Him’. When **-la** is used anaphorically, however, it can only refer to an *ex situ* third person singular form. In example (5-68), the referent of the personal suffix **-da** on the deverbal noun **balufinada** ‘rebuking them’ must agree in number with its *ex situ* referent, **ioli lau kwaima ada gi** ‘people who I am a friend to’.

(5-67) Aofia 'e sai-a-la rana-na-la ioli gera fa-kwalaimoki a-la gi, 'ali
 lord 3SG know-at-3.PERS help-NMLZ-3.PERS people 3PL CAUS-be.true at-3SG.PERS PL COMP
 'ato-na gi ikoso fafuta'a-da.
 cannot-NMLZ PL NEG2 corrupt-3PL.OBJ
 ‘The Lord knows how to help the people who believe in him so that they cannot be corrupted...’ (2 Pt 2:9)

(5-68) ma ioli lau kwaima a-da gi, ala gera ka tau-a 'are ta'a gi, lau
 and people 1SG be.friend at-3PL.PERS PL if 3PL SEQ do-3.OBJ thing be.bad PL 1SG
 sai-a-la balu-fi-na-da
 know-AT-3.PERS be.angry-TR-NMLZ-3PL.PERS
 ‘The people I love, if they do bad things, I am usually angry with them...’ (Rv 3:19)

5.3.1 Deverbal nouns formed from complex verbal cores

Although deverbal nouns are most commonly formed from single verbs, it would not be accurate to characterize nominalization as a process which *verbs* are subject to. The more accurate generalization is that nominalization is undergone by *verbal cores*,¹⁰ since the nominalizing suffix **-na** can be attached to the end of a complex verbal core, just as the object suffix can. This fact implies that verbs in their combining form (which are not core-final) may not accept a nominalizing suffix. Noun-incorporated verbs (verb-noun compounds) as well as the complex verbal cores of serial verb constructions (verb-verb compounds) may be nominalized. Nominalizations of noun-incorporated verbs (**goli batana** ‘collecting money’ and **gou babalina** ‘get drunk’) are illustrated in (5-69) – (5-70).

(5-69) 'Amu ka-e too a-la 'ite ba'ela fa-la goli bata-na gi li
 2PL SEQ-IRR have at-3.PERS bag be.big DAT-3.PERS collect money-NMLZ PL DEF
 ‘...you have bags for collecting money ...’ (Lk 12:33)

(5-70) 'Amu ka io faasi-a gou babali-na a-la waen li
 2PL SEQ stay ABL-3.OBJ drink face-NMLZ at-3.PERS wine DEF
 ‘And abstain from getting drunk with wine...’ (Eph 5:18)

Examples (5-71) – (5-72) contain nominalizations formed from verb-verb compounds.¹¹

¹⁰ We use the term ‘*verbal core*’ (cf. § 4.2) to refer to all of a verbal complex except for the delimiting particles and any pronominal object.

¹¹ Cf. § 4.2.4 for more detailed discussion on verb compounds and noun incorporation.

- (5-71) wasua ma ioli gera io 'ali-a tau ta'a na gi gera fafuta'a lo rabe-da
 but and people 3PL stay INS-3.OBJ do be.bad NMLZ PL 3PL corrupt FOC body-3PL.PERS
 'i tala-da.

LOC amongst-3PL.PERS

'...but people who do bad things commit sins against their own bodies.' (1 Cor 6:18)

- (5-72) Ma dauu ka fuli'ae fa-la soilidi kwailiu-na 'i safita-dauu
 and 3PC SEQ start DAT-3.PERS ask go.around-NMLZ LOC amongst-3PC.PERS
 'And they began to inquire among themselves...' (Lk 22:23)

5.3.2 Purposive nominalizations

Nominalizations are especially well attested in purposive constructions. In a purposive construction, an adjunct headed by the dative noun-like preposition *fa-* is introduced into a clause. The object of the preposition is a noun phrase headed by a deverbal noun. An example is given in (5-73).

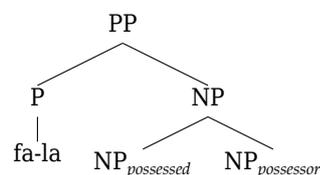
- (5-73) ma ikoso oga kwalaa-na. 'E kwaima 'oka fai-li-a ioli gi sui, ma ka
 and NEG2 want quarrel-NMLZ 3SG be.friend be.good COM-TR-3.OBJ people PL EXHST and SEQ
 marabe fa-la rono-na-la ioli gi
 be.willing DAT-3.PERS hear-NMLZ-3.PERS people PL
 '...don't be quarrelsome, be friends with all people and be willing to listen to people...'
 (Jas 3:17)

The phrase *fala rononala ioli gi* 'to hear people' has a syntactic structure nearly identical to that of the phrase *fala rabela Jesus* 'for the body of Jesus' in (5-74).

- (5-74) ma ka suga-a fa-la rabe-la Jesus.
 and SEQ request-3SG.OBJ DAT-3.PERS body-3.PERS J.
 '...and he begged for the body of Jesus.' (Lk 23:52)

In both cases, the dative preposition introduces a noun phrase headed by a personal suffix-taking noun modified by its syntactic possessor. The structure of both phrases may be represented as in figure 5.1.

Figure 5.1: Syntactic structure of a purposive nominalization



A similar construction is found in Toqabaqita, though (5-75) shows a different preposition (distinct from the dative) used to introduce the nominalization in that language.

- (5-75) Kamareqa meka lae ura riki-la-na iqa
 1DU(EXCL) 1DU(EXCL).SEQ go PURP see-NMLZ-3.PERS fish
 'We went to see fish (in an aquarium)' (Lichtenberk, 2008b:1164)

5.3.3 Additional nominalizing suffix *-e/-i*

A very limited set of examples suggests either that Wala has a second nominalizing suffix, *-i*. The suffix coincides (in both phonological form and semantics) with the indefinite personal suffix *-e/-i* (§ 6.5.3), which otherwise affixes to inalienably possessed nouns. The gloss NMLZ2 is employed to draw attention to the suffix's morphological properties, though a decision to use the gloss for the indefinite personal suffix (INDEF.PERS) would be equally justified.

In (5-76), the intransitive verb *tofu* 'cut' bears a suffix *-i* and is directly followed by a noun *berete* 'bread' in a possessive construction, to mean 'a cut/slice/piece of bread'. We have also found this suffix on the transitive verb *lafu-* 'take away', possessed by a noun *toro* 'clothing' to mean something like 'rags' (5-77). A third example is *funu-i* 'bear.fruit-NMLZ2', which appears twice in our corpus, possessed by either '*are* 'thing' or *witi* 'wheat', and refers to heads of grain (KJV 'ears of corn'). An example is given in (5-78).

- (5-76) dau lu ka lesi-a te duna-e leleo fai-li-a ia gi 'i lao-la
 3PC SEQ see-3.OBJ INDEF.SPEC fire-INDEF.PERS coal? COM-TR-3.OBJ fish PL LOC inside-3SG.PERS
 fai-li-a tofu-i berete gi lou.
 COM-TR-3.OBJ cut-NMLZ2 bread PL also
 'They saw a fire with fish in it and also with pieces of bread' (Jn 21:9)

- (5-77) Sui, ioli siofa 'e toro gaga mola 'ali-a lafu-i toro.
 then person be.poor 3SG clothe tear CONTR.FOC INS-3.OBJ take.away-NMLZ2 cloth
 'Then a poor man [came in] who was dressed badly with ragged clothing.' (Jas 2:2)

- (5-78) ma gera ka fisu-a funu-i 'are gi, ma gera ka 'ani-da.
 and 3PL SEQ harvest-3.OBJ bear.fruit-NMLZ2 thing PL and 3PL SEQ eat-3PL.OBJ
 '...and they plucked the fruits [of the wheat plant], and they ate them.' (Mt 12:1)

A final example involves a verb which does not end in *-u*. Vowel harmony (cf. § 2.2.2) is not triggered and the form of the suffix is *-e*. *Taga-e* 'fruit, blossom' is related to the verb *taga* 'bloom, open up'. Examples containing the derived noun and the base verb are given in (5-79) - (5-80).

- (5-79) Ma fata abu fa-la god Sus, 'e la ma ka sake-a mae buluka gi, fai-li-a
 and priest holy DAT-3.PERS god Zeus 3SG go and SEQ take-3.OBJ hither cow PL COM-TR-3.OBJ
taga-e 'ai gi
 bloom-NMLZ2 tree PL
 'And the priest of Jupiter went and brought oxen and garlands...' (Acts 14:13)

- (5-80) Moulu lesi-a ga taga-na-la 'ai 'e gera taga afo la gi.
 2PC see-3.OBJ HORT bloom-NMLZ-3.PERS tree DEM.PROX 3PL bloom be.broad PL
 'Let us consider the flowers how they grow.' (Lk 12:27)

5.4 Reduplication

The final morphological process witnessed for verbs (though it is not fully confined to verbs) is reduplication. Phonological properties of reduplication, including phonological shape of the

reduplicant and faithfulness to the base are addressed above in §2.1.3. The present section concerns morphological aspects of reduplication.

A list of all attested reduplicated words and corresponding non-reduplicated versions of the base are given in table D.15 with glosses. Any semantic regularities in the reduplication process are not understood at this point. There are two possible explanations. The first is that our source materials do not permit us to discern fine-grained meanings for many words, especially those of low frequency (and the majority of reduplicated words are attested only once, twice or thrice). So it is possible that limitations in the data prevent us from discerning regularities which are actually present. The second explanation is that the process is semantically idiosyncratic.¹²

5.4.1 Formation of reduplicated words

A reduplicated word is formed from a base (usually a verb), a reduplicant, and an optional *Überbleibsel* suffix ('leftover suffix').

(5-81) RED~BASE-(Sf)

The reduplicant is at least a syllable, and at most a foot. Phonological properties of the base are discussed in §2.3.2. When the base is a verb stem, it is usually the intransitive stem. There are two attested examples of a reduplicated verb containing a transitivity suffix. One example is illustrated in (5-82)–(5-83).¹³ We do not have sufficient data to say whether the base is always the intransitive stem (and then the reduplicated verb may take a transitivity suffix), or if the base may be either the transitive or intransitive stem. Put another way, we cannot say whether or not reduplication precedes transitivity. The lack of data is due to the small overlap between the class of verbs with distinct transitive and intransitive stems (cf. §5.2.1); and the class of verbs for which a reduplicated form is attested. Of the verbs on the list of reduplicated words (table D.15), 19 have distinct transitive and intransitive stems. In 17 of these cases, the reduplicated word lacks the transitivity suffix, while in the other two it contains the transitivity suffix.

(5-82) Rua geli gi daro logo-si fana
 two woman PL 3DU gather-TR food
 'Two women who are gardening...' (Lk 17:36)

(5-83) Laka-e osi-a babala 'e la ka-e lo~logo-si 'are 'i laola ka
 1SG.SEQ-IRR destroy-3.OBJ barn DEM.PROX DEM3 SEQ-IRR RED-gather-TR thing LOC inside SEQ
 sui
 EXHST
 'I shall tear down this barn inside of which I keep everything.' (Lk 12:18)

There are also cases where the reduplicated form appears to be derived from a base which is an intransitive verb stem, yet only the transitive stem is attested in non-reduplicated form. Two

¹² Cf. Palmer (1999:48) on Kokota: "Reduplication is functionally idiosyncratic with the derived meaning of each word being unpredictable."

¹³ The second case is *oli-oli-si* 'answer', formed from *olisi-* 'answer'.

examples are **udu-udu-i** ‘droplet’; and **lu-lumu-i** ‘be.drunk’. Putative words ***lumumu** ‘drink, soak up’ and ***udu** ‘drip’ are unattested.¹⁴

Following the base there is an optional *Überbleibsel* suffix, which we name so because: it is not traceable to the base verb stem; and we cannot say what conditions its appearance or whether it has any semantic content. The *Überbleibsel* suffix has the form **(C)a**. All examples of reduplicated words containing the *Überbleibsel* suffix are given in table 5.7.¹⁵

Table 5.7: Reduplicated words with extra phonological material following the base. Corresponding non-reduplicated forms may be found in table D.15.

boe-boe-ta(a)	‘be worried’	bora~bora-(a)	‘blue/purple’
fau~fau-(a)	‘be stony’	iro~iro-(a)	‘be precious(stone)’
balu~balu-a	‘be angry’	ta~talo-(fa)	‘rule’
nasi~nasi-a	‘be firm’	asi~asi-la	‘salty’
ni~nidu-a	‘honey’	go~gola-fa(e)	‘be dark’
raga~raga-a	‘be hot’	gola~gola-fa	‘be dark’
dani~dani-a	‘be brilliant’	ramo~ramo-(a)	‘be bold’
wela~wela-a	‘be young’	mo~mosu-la	‘sleep’

In one other case, the base is missing a final vowel which is present in the non-reduplicated stem. (**kuu** ‘leprosy’; **ku-ku** ‘wither’).

5.4.2 Reduplication and word classes

Our corpus contains examples of all major word classes undergoing reduplication, and reduplicated forms are also attested in all major word classes. Examples of reduplicated words in four different word classes are given in table 5.8.

Table 5.8: Examples of different word classes subject to reduplication.

Reduplicated form	Gloss	Attested base	Gloss
age~age	n. ‘foundation’	age	n. ‘foundation’
agwa~agwa	v.i. ‘do.secretly’	agwa	v.i. ‘hide’
rua~rua	num. ‘twice’	rua	num. ‘two’
ula~ula-	n.inal. ‘fish.scale’	ula	n. ‘blade’
ro~roa, kaka'asi-roa~roa	v.i. ‘bright.white(?)’	roa	CLF ¹⁶

Word classes of reduplicated forms and their attested base forms are organized by frequency of occurrence in table 5.9.

Data in table 5.9 suggest three generalizations about word class and reduplication:

1. Intransitive verbs are most frequently attested as undergoing reduplication.

¹⁴Toqabaqita has a word **qudu** ‘of liquid: drip in long intervals’ (Lichtenberk, 2008b:105).

¹⁵It will be noted that the two reduplicated words containing a transitivizing suffix do not appear in the table. Data from the *Überbleibsel* suffix is presently not sufficient to answer the question posed earlier in the section about the relative ordering of reduplication and transitivization.

¹⁶Cf. table 7.3.

¹⁷Excluded are two examples where either the attested base form or reduplicated form is a verb, and its valence is unknown.

Table 5.9: Morphological breakdown of reduplicated forms. Rows represent word class of the reduplicated word, and columns represent word class of the attested non-reduplicated word. Shaded cells indicate no change in word class.

	v.i.	v.t.	n.	other	total
v.i.	45	24	7	1	77
v.t.	1	5	0	0	6
n.	4	4	23	0	31
other	1	0	0	2	3
total	51	33	30	3	117 ¹⁷

2. Reduplication tends to preserve word class, though not always.
3. When reduplication is associated with a change in verb valence, it is most likely to create an intransitive verb from a transitive verb.¹⁸

¹⁸The five cases where both the reduplicated form and the attested non-reduplicated form are transitive are *ta-tali-* 'loosen'; *tau-tau-* 'do'; *tole-tole-* 'marry'; *le-lesi-* 'see'; *'ani-'ani-* 'eat'.

6 Pronominals

6.1 Overview

The pronominal system of Wala distinguishes four persons and four numbers. Person distinctions are first inclusive, first exclusive, second and third, and number distinctions are singular, dual, paucal and plural.

The full set of pronominal number distinctions is only available for ‘higher’ animates (e.g., humans, angels). Lower-level animates (e.g., animals) and inanimate objects are distinguished only for singular or plural. This contrast can be seen in (6-1) – (6-2).

(6-1) Sui laka lesi-a olu alo-e 'are ta'a gera lio malaa nali
then 1SG.SEQ see-3.OBJ three spirit-INDEF.PERS thing be.bad 3PL look resemble INDEF.SPEC.PL
kwere gi
frog gi
'And then I saw three evil spirits which looked like frogs.' (Rv 16:13)

(6-2) dau lu ka lesi-a wasinosino-na-la Jesus fai-li-a rua wale fo daru ura
3PC SEQ see-3.OBJ be.bright-NMLZ-3SG.PERS Jesus COM-TR-3.OBJ two man DEM.DIST 3DU stand
fai-li-a gi
COM-TR-3.OBJ PL
'They saw Jesus's glory [brightness], and the two men who stood with him.' (Lk 9:32)

In (6-1), *olu aloe 'are ta'a* ‘three bad spirits’ is the object of the first verb, and is modified by a relative clause in which the third person plural (as opposed to paucal) subject pronoun refers back to the three spirits. In (6-2), *rua wale fo* ‘those two men’ is also modified by a relative clause, but the coreferential subject pronoun here is dual. Paucal can refer to any number from three up to around a dozen people (it is often used to refer to all Jesus’ disciples, for instance). In Wala there is no grammatical gender distinction expressed in the pronominal system.¹

Like other Oceanic languages, Wala has a rich pronominal system. There are three sets of independent pronouns, a set of subject markers, and two sets of pronominal suffixes. The three sets of independent pronouns are subject (§ 6.2), nonsubject (§ 6.4), and benefactive (§ 6.7). Nonsubject pronouns are used to express objects and also occur in alienable possession constructions and following the particles *i* and *fae* (§§ 6.4.1 – 6.4.3). Benefactive pronouns encode the beneficiary or recipient of an action. Subject markers (§ 6.3) are portmanteau morphemes which encode sequentiality as well as person and number, and can be marked for irrealis mood. As for the pronominal suffixes (§§ 6.5 – 6.6), one set attaches to verbs and verb-like prepositions

¹ Nor is there a gender distinction in any other morphological component of the grammar.

to express third person objects; these are therefore termed object suffixes. The second set, personal suffixes, attach to inalienably possessed nouns and to noun-like prepositions. In addition to cataloguing the various pronominal paradigms, this chapter also describes inclusory pronominal constructions (§ 6.8).

6.2 Independent subject pronouns

Subject pronouns are independent words which precede the verb. They are separated from other words by spaces in the orthography, and may be separated from the verb by a subject marker, or a left-delimiting particle (cf. § 4.2.2), as in (6-4), where the (left-delimiting) proximate tense marker stands between the subject pronoun and the verbal core.

(6-3) Lau lesi-a ioli gi
 1SG see-3.OBJ people PL
 'I see people.' (Mk 8:24)

(6-4) tauma lau bi galo ulafu mola 'agua a-la galo-na 'e.
 lest 1SG PROXT work be.bonded CONTR.FOC 1SG.BEN at-3.PERS work-NMLZ DEM.PROX
 '...lest I work for myself in this task [i.e., lest I proselytize with no one being persuaded].'
 (Gal 2:2)

Table 6.1: Subject pronouns

	SG	DU	PC	PL
1INCL		gora	golu	gia
1EXCL	lau	mera	meulu	'ami
2	'o	mora	moulu	'amu
3	(lia)	daró	daulu	gera

The forms of the subject pronouns are given in table 6.1. The third person singular subject pronoun *lia* is enclosed in parentheses because it is optional (and is usually omitted). As has been noted above in § 4.1, conditions on the appearance of independent subject markers differ slightly between clauses with a third person singular subject and clauses with a subject of some other person-number combination. In clauses with a third person singular subject, the subject marker 'e occurs in all non-sequential clauses (cf. § 6.3.1), and therefore the independent pronoun is not the sole indicator of person and number, as it is in non-sequential clauses with a first, second, or third person plural pronominal subject. An example where *lia* cooccurs with 'e is given in (6-5). The much more common case, with no independent third person pronoun and only a subject marker, is illustrated in (6-6).

(6-5) Wasua ma lia 'e barasi
 but and 3SG 3SG reject
 'But he refused...' (Mt 18:30)

(6-6) Ma 'e babalafe rasua
 and 3SG be.happy very
 'And he will be overjoyed...' (Mt 13:44)

When the subject field of a clause contains a noun phrase, a subject pronoun will still be used (although *lia* may be dropped). In (6-7), the subject noun phrase (enclosed in square brackets) refers to two individuals and is directly followed by the third person dual subject pronoun:

- (6-7) Sui [Peter fai-li-a wale li galon-a fo] daro ka la lo fa-la bao
 then P. COM-TR-3.OBJ man HABIT work-NMLZ DEM.DIST 3DU SEQ go FOC DAT-3.PERS tomb
 fo.
 DEM.DIST
 'Then Peter and the [other] disciple went to the tomb. (Jn 20:3)

6.3 Subject markers

Subject markers are morphemes which belong to the subject field and precede the verb. They usually follow a co-indexed independent subject pronoun or a subject NP. Subject markers also express temporal and truth-conditional information. We distinguish a non-sequential subject marker from sequential markers; irrealis marking (cf. §6.3.2.1) can occur on the latter. The subject markers are presented in table 6.2.

Table 6.2: Subject markers. †Fused forms *laka* '1SG.SEQ' and *ko* '2SG.SEQ' are found where **lau ka* and **o ka* (respectively) would be expected.

	NSEQ	SEQ
3SG	'e	ka
N3SG	∅	ka [†]

6.3.1 Non-sequential subject marker

The single non-sequential subject marker 'e occurs in clauses with a third person singular pronoun or lexical NP as its subject. As discussed in §6.2, the third person singular pronoun *lia* is most often dropped, so the subject marker 'e often occurs on its own preceding a verb. For clauses with non-3sg subjects, no overt morpheme is available to mark non-sequentiality.

The non-sequential subject marker occurs in clauses which refer to a new point in time in the discourse. This is in contrast to sequential subject markers which are used in clauses which are temporally related to the previous clause. The sequential subject marker indicates that something takes place at the same time as or in temporal sequence with the previous clause. For instance, in (6-8), we find the non-sequential marker in the first clause of the second sentence which is introduced by *talasi* 'time'. This word establishes a new time point in the discourse, and then the clause which follows refers to the subsequent event in time (seeing the wife's mother) and we find a sequential subject marker *ka*. The final two clauses describe to us this woman's state, but since she has been lying down and suffering from a fever before Jesus's entry into the house, we find non-sequential subject markers. (If we found *ka* here, it would presumably mean that she laid down immediately after Jesus entered and then became feverish). The sequential

subject marker in the very first clause presumably functions to orient the event of the first clause as subsequent to the events depicted in the previous verses.²

- (6-8) Ma a-la na fe atoa, Jesus ka la mae 'i luma a-la Peter. Talasi
 and at-3.PERS INDEF.SPEC CLF day J. SEQ go hither LOC house at-3.PERS Peter when
 Jesus 'e ruu 'i luma, ka lesi-a funo geli Peter 'e teo mola 'ala, 'e
 J. 3SG enter LOC house SEQ see-3.OBJ in.law wife Peter 3SG lay CONTR.FOC 3SG.BEN 3SG
 matai 'ali-a 'ago'agona ba'ela.
 be.sick INS-3.OBJ fever be.big
 'And on a certain day, Jesus went to Peter's house. When Jesus entered the house, he saw
 Peter's wife's mother laying there and sick with a bad fever.' (Mt 8:14)

The subject marker 'e sometimes also occurs after inanimate plural nominal subjects, as in (6-9); the four-way number distinction is neutralized in this context.

- (6-9) sulia 'are 'oka gi 'e la mae faasi-a ioli 'oka
 because thing be.good PL 3SG go hither ABL-3.OBJ people be.good
 '...because good things come from good people.' (Mt 12:33)

In other cases, a third person plural inanimate subject is followed by a plural pronoun, as in (6-10). As (6-10) shows, when pronouns other than third person singular are used non-sequentially, no subject marker intervenes between the independent pronoun and the verb.

- (6-10) ma nali gigiluna gwau gera tafa
 and INDEF.SPEC.PL tomb head 3PL open
 'And the graves opened...' (Mt 27:52)

6.3.2 Sequential subject markers

The sequential subject marker may have one of three forms, depending on whether it is fused with a preceding independent subject pronoun. As described in §6.3.1, these markers occur when a clause is understood to be temporally concurrent with or sequential to the previous clause. The form **ka** occurs with all non-singular pronominal and lexical subjects, and with third person singular subjects. The following examples illustrate some of these uses.

- (6-11) ma dauu ka lesi-a wela fai-li-a teite lia Mary
 and 3PC SEQ see-3.OBJ child COM-TR-3.OBJ mother 3SG Mary
 '...and they saw the child with his mother Mary.' (Mt 2:11)
- (6-12) Talasi 'ami dao, 'ami ka boururu, ma 'ami ka foa.
 when 1EXCL.PL arrive 1EXCL.PL SEQ kneel.down and 1EXCL.PL SEQ pray
 'When we arrived, we knelt down and prayed.' (Acts 21:5)
- (6-13) A-la talasi 'e, olu 'are gi ka-e io firi
 at-3.PERS time DEM.PROX three thing PL SEQ-IRR be.at forever

² It will be recalled that verses 5–13 tell of Jesus' healing of a centurion's servant. Verse 14 begins the account of Jesus' subsequent healing miracle.

'And now three things will be forever...' (1 Cor 13:13)

The two other forms of the sequential subject marker are *laka* and *ko*. These are used for first person and second person singular subjects, respectively. These subject markers appear to be a fused form of *ka* and the co-indexed independent subject pronouns *lau* or *'o*, and therefore these subject markers occur on their own in a clause, as illustrated in (6-14) and (6-15). In each example, the clause containing the unfused independent subject pronoun is associated with a new context, and the following clause containing the sequential subject marker describes an event sequential to that described by the prior clause.

(6-14) ma talasi lau rono-a ma laka lesi-a 'are 'e gi li
and when 1SG hear-3.OBJ and 1SG.SEQ see-3.OBJ thing DEM.PROX PL DEF
'...and when I heard and saw these things...' (Rv 22:8)

(6-15) 'o laa, ko soi-a mae arai 'o
2SG go 2SG.SEQ call-3.OBJ hither husband 2SG
'Go, call your husband...' (Jn 4:16)

In the emphatic *'i* + non-subject pronoun construction, an independent 1sg or 2sg pronoun may appear adjacent to fused *laka* or *ko*, as in (6-16) (cf. § 6.4.3 on this construction).

(6-16) ma 'i lau laka io lou a-la Mama li.
and PROFORE 1SG 1SG.SEQ be.at also at-3.PERS father DEF
'...and I am also in the Father.' (Jn 10:38)

6.3.2.1 *Irrealis mood*

Irrealis mood can be indexed on the sequential subject marker, regardless of which form it takes, with the suffix *-e*. We label the category '*irrealis*' because it can serve to indicate future time, as in (6-17) and (6-18), or imperfective aspect, as in (6-19) and (6-20).

(6-17) Ma laka-e leesi 'amiu lou
and 1SG.SEQ-IRR see 2PL.NSBJ again
'I will see you again...' (Jn 16:22)

(6-18) ma 'i lia ka-e faa-futaa te wela wale, ma ko-e fafurata-a
and PROFORE 3SG SEQ-IRR CAUS-be.born INDEF.SPEC child man and 2SG.SEQ-IRR name-3.OBJ
'ali-a Jesus
INS-3.OBJ Jesus
'...and she will give birth to a son and you will call him Jesus.' (Mt 1:21)

(6-19) Rachel ka-e ani-si-a wela lia gi.
Rachel SEQ-IRR cry-TR-3.OBJ child 3SG PL
'Rachel was weeping [for] her children.' (Mt 2:18)

(6-20) ma dauu ka-e raumi-a fuo dauu gi. Ma Jesus ka soi daroa.
and 3PC SEQ-IRR mend-3.OBJ net 3PC PL and Jesus SEQ call 3PC.NSBJ
'...and they were mending their nets. Jesus called to them.' (Mt 4:21)

In Wala, irrealis marking does not occur in negative clauses, nor in counterfactual ones such as (6-21).

- (6-21) Aofia, ala ko io io mola 'amua 'i lifi-'e li, 'urilali a-i
 lord if 2SG.SEQ be.at be.at CONTR.FOC 2SG.BEN LOC place-DEM.PROX DEF ? at-INDEF.PERS
 walefae lau ikoso mae mola.
 brother 1SG NEG2 die CONTR.FOC
 'Lord, if you had been here, my brother would not have died.' (Jn 11:21)

6.4 Independent non-subject pronouns

A second set of independent pronouns, very similar in form to the independent subject pronouns, has several functions: encoding objects of verbs (§ 6.4.1), encoding alienable possessors (§ 6.4.2), and occurring in constructions with the particles '*i* 'PROFORE' and *fae* 'COM' (§ 6.4.3). The forms are given first (table 6.3) and then the functions are discussed. The forms in the shaded cells of table 6.3 are those forms which differ from their counterpart independent subject pronouns. These are glossed as NSBJ to indicate that they are formally distinct from the subject pronouns.

Table 6.3: Independent non-subject pronouns

	SG	DU	PC	PL
1INCL		gora	golu	gia
1EXCL	lau	'ameroa	'ameulu	'amami
2	'o	'amoroa	'amoulu	'amiu
3	lia	daroa	daulu	gera

6.4.1 Objects

Non-subject pronouns can follow a transitive verb to encode a pronominal object argument, as shown in (6-22) and (6-23):

- (6-22) Lau batafe 'o
 1SG thank 2SG
 'I thank you...' (Mt 11:25)
- (6-23) ma ala laka soilidi 'amoulu 'ali ta 'are
 and if 1SG.SEQ ask 2PC.NSBJ INS INDEF.NSPEC thing
 'And if I ask you something...' (Lk 22:68)

A third person pronominal object may be expressed by either a non-subject pronoun or an object suffix on the verb (see § 6.6 and the discussion in § 5.1). In (6-24), the object of the verb *olisi* 'answer' is expressed with the independent third person plural form, but in (6-25) we find the object suffix serving the same grammatical function with no obvious difference in meaning.

- (6-24) ma Festus ka olisi gera ka sae 'uri 'e
 and Festus SEQ answer 3PL SEQ say thus
 '...and Festus answered them and said...' (Acts 25:4)

- (6-25) sui Paelat ka olisi-da ka sae 'uri 'e
 then Pilate SEQ answer-3PL.OBJ SEQ say thus
 ‘...then Pilate answered them and said...’ (Jn 19:22)

6.4.2 *Alienable possession*

Non-subject pronouns are also used to encode the possessor of a noun in alienable possession constructions. The non-subject pronoun follows the noun and any semantic modifiers, but precedes the plural marker, as the following examples illustrate. As may be inferred from (6-26), kinship terms in Wala are usually alienably possessed.³ Alienable possession is discussed further in § 8.3.

- (6-26) Teite 'o fai-li-a walefae 'o gi
 mother 2SG COM-TR-3.OBJ brother 2SG PL
 ‘...your mother and your brothers...’ (Lk 8:20)
- (6-27) Aofia Jesus ka-e la mae faasi-a 'i nali fai-li-a eniselo kwalaimoki lia gi
 lord Jesus SEQ-IRR go hither ABL-3.OBJ LOC heaven COM-TR-3.OBJ angel be.true 3SG PL
 ‘Lord Jesus shall come from heaven with his mighty angels.’ (2 Thes 1:7)

In table 6.3, the first person exclusive plural non-subject pronoun is given as **'amami**, but a handful of times in our corpus we also find the subject form **'ami** used to indicate the same possessor in alienable possession. Both of the forms seen in (6-28) – (6-29) are possible, though **'amami** occurs more frequently.

- (6-28) Mama 'amami lo Abraham!
 father 1EXCL.PL.NSBJ FOC Abraham
 ‘Abraham is our father!’ (Jn 8:39)
- (6-29) Mama 'ami 'i nali
 father 1EXCL.PL LOC heaven
 ‘Our father in heaven...’ (Mt 6:9)

6.4.3 *Particle + non-subject pronoun constructions*

There are two particles in Wala which can precede and form a phrasal unit with a non-subject pronoun: **'i** ‘PROFORE’ and **fae** ‘COM’. We discuss each in §§ 6.4.3.1 – 6.4.3.2.

6.4.3.1 **'i** + non-subject pronoun

As remarked in § 3.3, there are two homophonous grammatical particles with form **'i**. The generic locative particle **'i** ‘LOC’ (§ 3.3.1) can usually be translated by English ‘at’ or ‘on’, as in (6-29). The other particle **'i** combines with non-subject pronouns, where its function is not locative, but ‘foregrounding’, to borrow Lichtenberk’s terminology for a comparable particle **ni** in Toqabaqita (Lichtenberk, 2008b:244). Lichtenberk glosses this word as a ‘pronominal

³ An exception is **asi-** ‘brother’, which requires a personal suffix.

foregrounder', abbreviated PROFORE, and we find this an appropriate gloss in the Wala case too.

We treat the '*i*' form described in this section as a homophonous but distinct morpheme to the locative particle '*i*' on the basis of their different functions and the word classes they combine with (pronoun, and noun or preposition, respectively). From a diachronic perspective, the form which combines with pronouns is likely to originate from a separate morpheme, cognate with pronominal articles in related languages, such as *i* in Longgu (Hill, 2011:96) or *ni* in Toqabaqita (Lichtenberk, 2008b:248). There is a locative particle homophonous with the pronominal article in Longgu (Hill, 2011:39), but not in Toqabaqita, where the locative particle has form *qi*.⁴ Some uses of the pronominal foregrounder are discussed below.

The pronominal foregrounder may precede pronouns in clauses with a nominal predicate to link pronominal referents with predicate noun phrases, as in (6-30) and (6-31). (See also §4.6.3).

(6-30) 'I lau lo 'e Christ!

PROFORE 1SG FOC 3SG Christ

'I am Christ!' (Mk 13:6)

(6-31) Ala 'i-'o Wela God

if PROFORE-2SG son God

'If you are the Son of God...' (Mt 4:3)

'*I*' may also combine with a non-subject pronoun to form a focused left-periphery constituent. Examples (6-32) - (6-34) illustrate the construction being used for an in focus subject. Note that this subject-focusing construction results in two consecutive pronominal forms with the same reference.

(6-32) 'i 'ameroa mera totolia mola 'ameroa fa-la tau-na-i

PROFORE 1EXCL.DU.NSBJ 1EXCL.DU be.able CONTR.FOC 1EXCL.DU.BEN DAT-3.PERS do-NMLZ-INDEF.PERS

'We are also able to do it.' (Mk 10:39)

(6-33) 'I-'o 'o io lou fai-li-a Jesus

PROFORE-2SG 2SG be.at also COM-TR-3.OBJ Jesus

'You were also with Jesus...' (Mt 26:69)

(6-34) Ma 'i 'amoulu moulu kwaga sui lo

and PROFORE 2PC.NSBJ 2PC be.clean EXHST FOC

'Now you all are clean.' (Jn 15:3)

The pronominal foregrounder may also be used to mark a non-subject argument as being in focus. In (6-35), the left-dislocated '*i lau*' is coreferential with the possessor of '*ae-*'feet'.

(6-35) 'I lau, ikoso 'ali ma ko-e sau-a 'ae-gu!

PROFORE 1SG NEG2 COMP and 2SG.SEQ-IRR wash-3.OBJ foot-1SG.PERS

'Me, you shall not wash my feet!' (Jn 13:8)

⁴ We thank an anonymous reviewer for suggesting this comparative data.

More rarely in our corpus, the **'i** + non-subject pronoun phrasal unit appears in the object field (rather than in the left periphery). In the following example, a third person singular object is marked on the verb **liufi**, and **'i lia** serves to emphasize the object referent.

- (6-36) *fiu alo-e 'are gera ta'a ka ba'ela liu-fi-a 'i lia*
 seven spirit-INDEF.PERS thing 3PL be.bad SEQ be.big pass-TR-3SG.OBJ PROFORE 3SG
 '...seven other spirits more wicked than him...' (Lk 11:26)

6.4.3.2 Comitative **fae** + non-subject pronoun

Fae is a comitative particle which only precedes independent non-subject pronouns.⁵ Historically, it is the combining form of the highly frequent verb-like preposition **fai-li-** (cf. § 3.3.2), although we have no evidence to suggest that **fae** functions as a verb in the current form of the language. Two examples are given in (6-37) - (6-38).

- (6-37) *God 'e io fae gia*
 God 3SG be.at COM 1INCL.PL
 'God is with us.' (Mt 1:23)
- (6-38) *Jesus ka oli lo fae daroa fa-la 'i Nasareti*
 Jesus SEQ return FOC COM 3DU.NSBJ DAT-3.PERS LOC Nazareth
 'Jesus came back with them to Nazareth.' (Lk 2:51)

6.5 Personal suffixes

Personal suffixes, given in table 6.4, attach to nouns and noun-like prepositions. Below we characterize their two main functions (indexing of possessor and of complement of noun-like preposition, §§ 6.5.1 - 6.5.2), and discuss the indefinite personal suffix (§ 6.5.3), which is not listed in table 6.4. The occurrence of personal suffixes on deverbal nouns is not discussed in the present chapter (but see § 5.3).

Table 6.4: Personal suffixes

	SG	DU	PC	PL
1INCL		-garoa	-gaulu	-ga
1EXCL	-gu	-meroa	-meulu	-mami
2	-mu	-moroa	-moulu	-miu
3	-la	-daroa	-daulu	-da

6.5.1 Inalienable possession

Personal suffixes are attached to nouns in inalienable possession constructions to indicate the possessor. Examples (6-39) and (6-40) show a first person singular and second person plural personal suffix attached to a body part noun, respectively. Inalienable possession is discussed more fully in § 8.2.

⁵ See p. 31 (fn. 5) for a counterexample.

(6-39) Jesus 'e alu-a mamako fafi-a maa-gu
 Jesus 3SG put-3.OBJ clay against-3.OBJ eye-1SG.PERS
 'Jesus put clay on my eyes...' (Jn 9:15)

(6-40) lau sau-a 'ae-miu
 1SG wash-3.OBJ foot-2PL.PERS
 'I washed your feet.' (Jn 13:14)

6.5.2 Noun-like prepositions

Personal suffixes also attach to the two noun-like prepositions to indicate the preposition's object (cf. § 3.3.3). These prepositions are **a-** 'at' and **fa-** 'DAT'. The use of the personal suffixes with these two prepositions is illustrated below. In (6-41), the personal suffix encodes an oblique beneficiary argument of the verb, and in (6-42), it encodes an oblique patient argument.

(6-41) 'I lia 'e tau-a galo-na 'oka rasua fa-gu
 PROFORE 3SG 3SG do-3.OBJ work-NMLZ be.good very DAT-1SG.PERS
 'She has done good work for me.' (Mk 14:6)

(6-42) ta 'e tau-a a-mu wani?
 what 3SG do-3SG.OBJ at-2SG.PERS MIR
 'What ever did he do to you?' (Jn 9:26)

6.5.3 Indefinite suffix **-e/-i**

We also include in the class of personal suffixes the nominal suffix **-e/-i**, which we call an indefinite suffix. This suffix attaches to nouns that are usually inalienably possessed to indicate an indefinite or unspecified possessor.

In (6-43), the noun **rata-** 'name' takes a second person singular personal suffix to indicate inalienable possession by the addressee. In (6-44), **rata-** has indefinite reference and bears the indefinite personal suffix, presumably because a name always has a possessor, but in this case the possessor is unknown. A fixed possessor '**are** thing' stands in in this case.

(6-43) Ite rata-mu?
 who name-2SG.PERS
 'What is your name?' (Lk 8:30)

(6-44) Te rata-e 'are gera gere-a a-la to'omi tekwa lia li
 INDEF.SPEC name-INDEF.PERS thing 3PL write-3.OBJ at-3.PERS clothes be.long 3SG DEF
 'A name was written on his clothes.' (Rv 19:16)

Examples (6-45)–(6-46) contain the noun **mano** 'soul', which is normally inalienably possessed, as in (6-45). In (6-46) there is no definite possessor and the suffix **-e** is found, followed by the fixed possessor '**are**'.

(6-45) wasua ma 'e gere-a 'i lao-la mano-ga.
 but and 3SG write-3SG.OBJ LOC inside-3.PERS 1INCL.PL.PERS
 '...but he wrote it in our souls.' (2 Cor 3:3)

- (6-46) wasua ma 'e 'ato 'ali 'e rau-ni-a mano-e 'are.
 but and 3SG be.difficult COMP 3SG kill-TR-3.OBJ soul-INDEF.PERS thing
 ‘...but he cannot kill the soul.’ (Mt 10:28)

An exception to the generalization stated above, that personal suffixes are attached to nouns which are most often inalienably possessed, involves the noun *alo* ‘spirit’.

When this noun has an overt possessor, it appears in an associative construction (see § 8.4), as in (6-47), and not in an alienable or inalienable possession construction.

- (6-47) Alo a-la God
 spirit at-3.PERS God
 ‘Holy Spirit’ (Lk 11:13)

Notwithstanding, it is well-attested with the indefinite personal suffix when used to refer to the Holy Ghost.

- (6-48) moulu sake-a alo-e 'are abu
 2PC take-3.OBJ spirit-INDEF.PERS thing be.holy
 ‘You receive the Holy Ghost...’ (Jn 20:22)

The indefinite personal suffix has two variant morphs, *-e* and *-i*. The form which appears is determined by the preceding vowel: the *-i* variant only appears after the high vowels *i* and *u*, and the *-e* variant appears elsewhere (cf. also § 2.2.3).

The affixation process appears to interact with a set of general restrictions on permissible vowel sequences in the language. We note in table 6.5 three examples of nouns which undergo deletion of the final vowel (in the written representation) when the indefinite personal suffix is appended. Lack of access to a more expansive data set prevents us from exactly characterizing the phonological processes at play.

Table 6.5: Attested nouns undergoing final vowel deletion with the indefinite personal suffix.

Stem	Affixed form	gloss
gwau	gwa-e	‘head’
dunaa	duna-e	‘fire’
rabe	rab-e	‘body’

6.6 Object suffixes

The forms of the object suffixes are given in table 6.6. Examples of their use on verbs and verb-like prepositions, respectively, are given in §§ 6.6.1 – 6.6.2.

Table 6.6: Object suffixes

	SG	DU	PC	PL
1INCL	—	—	—	—
1EXCL	—	—	—	—
2	—	—	—	—
3	-a	-daroa	-daulu	-da

The dual and paucal object suffixes take the same form as the third person dual and paucal independent non-subject pronouns, so we cannot be certain whether these are true affixes, or simply independent pronouns which are often written without a preceding space in the orthography (cf. discussion in §§ 5.1, 9.1.1). We have no syntactic evidence for distinguishing pronominal objects transcribed as suffixes from objects transcribed as independent words; both directly follow the verb and precede any delimiters of the verbal complex. However, the third person singular and the third person plural object suffixes (*-a* and *-da*) are formally distinct from the equivalent non-subject pronouns (*lia* and *gera*), so we posit two distinct pronominal paradigms for object marking, although the status of *-daroa* and *-daulu* is uncertain.

6.6.1 Verbs

Object marking has been described in some detail in § 5.1. Object suffixes attach to transitive verbs to encode a third person object which has already been mentioned in the discourse. The third person singular suffix *-a* also attaches to transitive verbs which are followed by an *in situ* nominal object or a complement clause, and although not strictly pronominal, these uses will also be briefly outlined here.

The anaphoric use of these suffixes is illustrated by the following examples (see also § 9.1.1); in (6-49) the third person dual suffix refers back to two disciples mentioned in the previous verse, while in (6-50) the plural suffix refers back to all of the disciples.⁶

(6-49) Sui Jesus ka bulusi ma ka balufi-daroa
 then Jesus SEQ turn and SEQ rebuke-3DU.OBJ
 ‘Then Jesus turned, and rebuked them.’ (Lk 9:55)

(6-50) lia ka kerida fa-la faa-talo-na 'ali-a 'ilitoana God
 3SG SEQ send-3PL.OBJ DAT-3.PERS CAUS-spread-NMLZ INS-3.OBJ kingdom God
 ‘And he sent them to preach the kingdom of God.’ (Lk 9:2)

6.6.1.1 Object suffix with lexical NP objects

The third person singular object suffix *-a* appears on verbal predicates when there is an *in situ* lexical NP object of any number, and so it is glossed in these cases as 3.OBJ. For example, we observe the singular suffix with both the singular nominal object in (6-51) and the plural object in (6-52):

(6-51) Ma ka soi-a wale ba'ela a-la wale-li ofona gi li
 and SEQ call-3.OBJ man be.big at-3.PERS man-HABIT war PL DEF
 ‘...and he called the centurion [lit. the big man of the soldiers].’ (Mk 15:44)

(6-52) Jesus 'e soi-a mae akwala wala rua wale li galo-na lia gi 'i so'e-la.
 Jesus 3SG call-3.OBJ hither ten ten two man HABIT work-NMLZ 3SG PL LOC unto-3SG.PERS
 ‘Jesus called his twelve disciples to him.’ (Lk 9:1)

⁶ As has been noted in § 6.1, the set of twelve disciples is associated with paucal number marking in other examples.

6.6.1.2 Object suffix with complement clauses

The third singular object suffix is also attached to verbs when they take a clause as their object argument (cf. § 10.2.1). The complement clause in (6-53) is enclosed in square brackets.

- (6-53) talasi Jesus 'e rono-a [gera alu-a lo John 'i lao-la raraa li]
 time Jesus 3SG hear-3.OBJ 3PL put-3.OBJ FOC John LOC inside-3.PERS prison DEF
 'When Jesus heard that John had been put in prison...' (Mt 4:12)

6.6.2 Verb-like prepositions

The class of verb-like prepositions is discussed in § 3.3.2. Along with verbs, object suffixes also attach to verb-like prepositions to encode anaphoric pronominal objects or to mark the presence of a nominal object. In (6-54), the verb-like preposition *faasi-* plus its pronominal object *-daulu* encode an oblique argument of the verb.

- (6-54) God 'e fa-agwa-a maluta-la alaa-na fo faasi-daulu
 God 3SG CAUS-hide-3.OBJ meaning-3.PERS speak-NMLZ DEM.DIST ABL-3PC.OBJ
 'God hid the meaning of those words from them.' (Lk 9:45)

Example (6-55) is an example of the singular object suffix used when the verb-like preposition has an *in situ* lexical NP as its object.

- (6-55) ma 'i lia ka-e fa-lana-a kwai a-la ani-na faasi-a maa-da
 and PROFORE 3SG SEQ-IRR CAUS-be.dry-3.OBJ water at-3.PERS cry-NMLZ ABL-3.OBJ eye-3PL.PERS
 'And he shall wipe away the tears from their eyes.' (Rv 21:4)

Object suffixes can also attach to verb-like prepositions whose object is a locative phrase headed by *'i*, as in (6-56). The same is observed for a true verb in (6-57).

- (6-56) gera ka-e luga-si-a Saetan faasi-a 'i lao-la raraa.
 3PL SEQ-IRR release-TR-3.OBJ Satan ABL-3.OBJ LOC inside-3.PERS prison
 'They will release Satan from his prison.' (Rv 20:7)

- (6-57) falua 'i Betani 'e io garani-a 'i Jerusalem
 city LOC Bethany 3SG be.at be.near-3.OBJ LOC Jerusalem
 'The city of Bethany was near Jerusalem.' (Jn 11:18)

6.7 Benefactive pronouns

Wala has a set of pronouns which occur in the object field of intransitive and transitive clauses.⁷ They are most often coreferent with the subject of the clause. The forms of this paradigm are distinct from the non-subject pronouns in the singular and in first inclusive and third person non-singular only (shaded cells in table 6.7), but their syntactic position is different; non-subject pronouns are part of the verbal complex and precede any right-delimiters (such as the focus

⁷ Recall that by our definition, the object field can contain object or oblique arguments (cf. § 4.1) and that by 'intransitive' clause we mean one which lacks an object (but which may have an oblique complement).

marker **lo** in (6-58)). The function of these pronominal forms was difficult to infer from corpus data, and our current understanding of their semantic content is heavily influenced by Lichtenberk's discussion of 'benefactive/recipient/possessor pronominal[s]' in Toqabaqita (Lichtenberk, 2002:448). The paradigm given in table 6.7 (p.106) is clearly cognate with the Toqabaqita benefactive pronouns, which take the form **qa- + person suffix**.

Table 6.7: Benefactive pronouns

	SG	DU	PC	PL
1INCL		'agaroa	'agaulu	'aga
1EXCL	'agua	'ameroa	'ameulu	'amami
2	'amua	'amoroa	'amoulu	'amiu
3	'ala	'adaroa	'adaulu	'ada

In Toqabaqita, **qa**-pers.suff can be indexed with the subject of the clause to encode self-benefactive pragmatics (Lichtenberk, 2002:451). This seems to be the case in Wala too; in (6-58) the speakers will clearly benefit in a material way. The verb **too** is intransitive in Wala, so the benefactive pronoun is analysed as an oblique argument (see §4.4 on the distinction between objects and obliques).

- (6-58) golu too lo 'agaulu a-la 'are lia gi sui
 1INCL.PC have FOC 1INCL.PC.BEN at-3.PERS thing 3SG PL EXHST
 '...we shall have for ourselves all his belongings.' (Mk 12:7)

In (6-59), a benefactive pronoun coreferent with the subject occurs in another intransitive clause. This usage presumably encodes the fact that the speaker benefits from this particular state of being.

- (6-59) Lau babalafe mola 'agua
 1SG be.happy CONTR.FOC 1SG.BEN
 'I am happy...' (Acts 26:2)

The meanings of different uses of the benefactive pronouns are subtle and difficult to interpret, especially as some uses are clearly idiomatic, as the following examples illustrate. In Toqabaqita the presence of the benefactive marker in clauses containing the verb 'sleep' indicates that 'the person is sleeping at a time when people do not usually sleep' (Lichtenberk, 2002: 45). In the Wala example in (6-60), the disciples were supposed to be praying, but couldn't help falling asleep, hence the benefactive pronoun '**adaulu**:

- (6-60) Daulu mo'osu 'adaulu
 3PC sleep 3PC.BEN
 'They were sleeping...' (Lk 22:45)

Lichtenberk also discusses an example in which the speaker was pretending to be dead (reproduced at (6-61)). A benefactive pronoun was coindexed with the subject to show that playing dead saved the speaker from being killed. We find a very similar example in our Wala corpus:⁸

⁸ As (6-62) suggests, benefactive pronouns precede lexical objects.

- (6-61) Nau ku lole-qe mae-a kwa mamaroto qa-kuqa.
 1SG 1SG:NONFUT pretend-TRANS die-NOMIN 1SG:SEQ lie.motionless BEN-1SG:PERS
 'I pretended to be dead (I faked death) (and) lay there without moving.'
 (Toqabaqita; Lichtenberk (2002:451))
- (6-62) ma gera ka malaa lo 'ada wale mae gi
 and 3PL SEQ resemble FOC 3PL.BEN man die PL
 '...and they became as dead men.' (Mt 28:4)

Lichtenberk discusses a second use of benefactive pronominals in Toqabaqita, which is to encode 'possessor-beneficiaries' (Lichtenberk, 2002:453), or participants who are "the intended, prospective possessors of another entity." When beneficiary pronouns are used in this way in Toqabaqita, they occur only in transitive sentences and are not necessarily coindexed with the subject. Lichtenberk (2002:454) also discusses an additional recipient function of the benefactive pronouns, which is clearly related to the possessor-beneficiary usage, but which is more suitable for describing the participant marked with a benefactive pronoun in a clause with the verb 'give'. In our corpus we find examples of the recipient use of the benefactive pronouns, as in (6-63) and (6-64). In these examples, the benefactive pronoun is not coindexed with the subject of the clause and it follows a nominal referring to food or water, as though in a possessive construction. In both, Jesus is the hypothetical recipient of the food or water, rather than a possessor. In order to draw a distinction between recipient and possessor-beneficiary function as Lichtenberk has done, however, we would need to find examples of these pronouns used in a construction without the verb *kwate* 'give'.

- (6-63) Moulu kwate-a ta fana 'agua
 2PC give-3.OBJ INDEFNSPEC food 1SG.BEN
 'Will you give me any food?' (Lk 24:41)
- (6-64) iko 'ali 'amu kwate-a mola ta kwai 'agua
 NEG COMP 2PL give-3.OBJ FOC INDEFNSPEC water 1SG.BEN
 '...and you gave me no water.' (Mt 25:42)

6.8 Inclusory pronominals

The term 'inclusory pronominal' is used in the same sense as in Lichtenberk (2000a). Lichtenberk uses this term to describe constructions involving a non-singular pronoun and a lexical noun phrase in apposition, where the pronoun identifies the total set of participants, and the noun phrase identifies a subset of those participants (Lichtenberk, 2000a:2). We have found a few examples of this kind of construction in our Wala corpus, which are given in (6-65) and in (6-66).

- (6-65) Te wale mera fana ruru a-la berete lau li, 'i lia lou
 INDEFNSPEC man 1EXCL.DU eat be.together at-3.PERS bread 1SG DEF PROFORE 3SG also
 malimae lau.
 enemy 1SG
 'Whichever man_i that we [i.e., he_i and I] eat my bread together, he_i will also be my enemy.'
 (Jn 13:18)

- (6-66) Mera mama 'o, mera lio mae 'afi 'o
1INCL.DU father 2SG 1EXCL.DU look hither ALL 2SG
'Your father and I have looked for you.' (Lk 2:48)

In (6-65), the NP **te wale** is juxtaposed with the first person dual exclusive pronoun to mean 'the man and I' as the subject of the clause. In (6-66), the NP **mama 'o** follows **mera** to mean 'your father and I'. Inclusive pronominals represent another phenomenon in Wala where data beyond what we currently have available in our corpus would improve understanding.

7 Noun phrase

In this chapter we present the basic structure of the noun phrase. After providing a template summarizing the positional possibilities for the noun and its modifiers (§ 7.1), we discuss the various modifiers of a noun: indefinite and definite determiners (§§ 7.2 - 7.3), quantifiers (§ 7.4), the plural word (§ 7.5), numerals (§ 7.6), numeral classifiers (§ 7.7) and demonstratives (§ 7.8). We also discuss modification of nouns by verbs (§ 7.9), and by clauses (§ 7.10). The chapter is concluded with a discussion on the structure of prepositional phrases (§ 7.11).

7.1 NP template

The structure of the Wala noun phrase varies according to whether its head noun behaves as alienable or inalienable. The templates depicted in figures 7.1 - 7.2 illustrate maximal structures for alienable and inalienable NP constructions (a key to the numbers is given beneath the figures). Items in bold are obligatory elements of the noun phrase. As discussed in § 8.2, we cannot make a strict division between inalienable and alienable nouns in Wala, since some nouns which are normally inalienably possessed may occasionally be used as alienable nouns.

Figure 7.1: Template for noun phrase headed by alienably possessed noun or pronoun

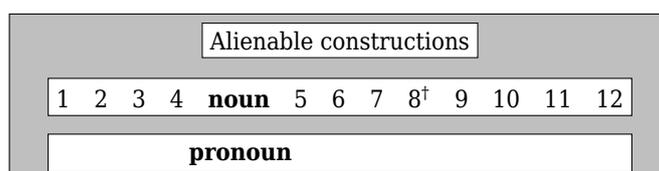
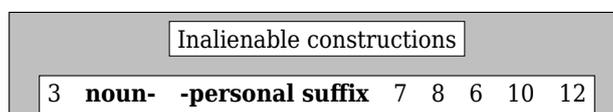


Figure 7.2: Template for noun phrase headed by inalienably possessed noun



1. Indefinite determiner (§ 7.2)
2. *barae* 'few' (§ 7.4.1)
3. Numeral (§ 7.6)
4. Classifier (§ 7.7)
5. Verb (§ 7.9)

6. Relative clause (§ 7.10)
7. Possessor NP
8. Demonstrative (§ 7.8) (†Demonstratives can also precede a relative clause; see § 7.10).
9. Prepositional phrase (§ 7.11)
10. Plural word (§ 7.5)
11. Definite marker (§ 7.3)
12. Exhaustive marker (§ 7.4.2)

The minimal NP in alienable constructions consists of a noun, as in (7-1), or a pronoun. Available data suggest that pronouns do not admit any of the modifiers that lexical nouns do.¹

- (7-1) Geli ka-e rana-a wale, ma wale ka rana-a geli.
 woman SEQ-IRR help-3.OBJ man and man SEQ help-3.OBJ woman
 ‘The woman will help the man, and the man helps the woman.’ (1 Cor 11:11)

The minimal NP in inalienable constructions is a noun and a personal suffix indexing its possessor.

- (7-2) ma rabe-la ka fii rasua.
 and body-3SG.PERS SEQ hurt very
 ‘...and his body hurt very much. (Mt 8:6)

All other elements are optional members of the noun phrase. The templates above are speculative to some extent as we have no examples in which every slot is filled.²

Deverbal nouns, formed by adding the nominalizing suffix **-na** to a verb (see § 5.3), can fit into either template depending on whether the derived noun is used alienably or inalienably. In (7-3), the deverbal nouns are underlined. The first is in an alienable construction, while the second is inalienably possessed.

- (7-3) Wasua ma ko dona-a falalau-na lau, fai-li-a abulo-na-gu
 but and 2SG.SEQ follow-3.OBJ teach-NMLZ 1SG COM-TR-3.OBJ turn-NMLZ-1SG
 ‘But you follow my teaching, and my way of life.’ (2 Tm 3:10)

7.2 Indefinite determiners

Five indefinite determiners are identified. In the current version of the analysis, these are distinguished according to specificity (specific and non-specific) and number (non-plural and plural). The paradigm is presented in table 7.1. We are unable to guess at the meaning difference between the two specific non-plural forms, **na** and **te**.

¹ This fact suggests that in Wala (as in English), pronouns replace NP’s and not nouns.

² And much less examples of all 4096 logically possible combinations (for an alienable construction with a lexical head).

Table 7.1: Indefinite determiners

	NPL	PL
NSPEC	ta	tali
SPEC	na, te	nali

7.2.1 **ta**

When modifying a noun, **ta** is a non-specific indefinite determiner. (**Ta** may also function as an interrogative particle—see § 12.4.2.) In (7-4), **ta** modifies **ioli** and refers to a single, unspecified individual, i.e., ‘any person’.

- (7-4) Ma ta ioli 'e barasi 'ali lau, 'i lia 'e barasi lou 'ali-a Mama lau
 and INDEF.NSPEC person 3SG hate INS 1SG PROFORE 3SG 3SG hate also INS-3.OBJ father 1SG
 ‘Someone who hates me hates my Father too.’ (Jn 15:23)

Ta generally has singular reference, as in (7-4), but it is also attested with indefinite NP’s containing numerals other than one, as in (7-5)–(7-6).

- (7-5) ala ta rua ioli daro dao mae a-la logo-na 'amiu
 if INDEF.NSPEC two person 3DU arrive hither at-3.PERS gather-NMLZ 2PL.NSBJ
 ‘If two people come to your assembly...’ (Jas 2:2)

- (7-6) lau oga laka ili-a mola ta lima mae sae-na lia gera madakwa
 1SG want 1SG.SEQ say-3.OBJ CONTR.FOC INDEF.NSPEC five CLF talk-NMLZ 3SG 3PL be.clear
 ma gera ka sai-a-i, faasi-a ili-na-la 10,000 me sae-na gi
 and 3PL SEQ know-at-INDEF.PERS ABL-3.OBJ say-NMLZ-3.PERS 10,000 CLF talk-NMLZ PL
 ‘I would rather that I say five words, which are clear and which they understand, than saying ten thousand words...’ (1 Cor 14:16)

Example (7-6) refers to a comparison between **ta lima mae saena** ‘five words [in a familiar language]’ and **10,000 me saena** ‘ten thousand words [in a foreign language]’. **Ta** is found in the NP referring to ‘five words’, but it (nor any other indefinite determiner) is not found in the NP referring to ‘10,000 words’.

The two noun phrases from (7-6) also illustrate an interesting incompatibility between the indefinite determiners and the plural word **gi**, which is absent from all noun phrases containing an indefinite determiner, regardless of their number.³

7.2.2 **na**

Na is a specific indefinite determiner, picking out a specific referent which is newly introduced into the discourse, for instance **line 'are** ‘a voice’ in (7-7):

- (7-7) sui laka rono-a lou na line 'are faasi-a 'i nali
 then 1SG.SEQ hear-3.OBJ again INDEF.SPEC voice thing ABL-3.OBJ LOC heaven
 ‘And I heard another voice from heaven...’ (Rv 18:4)

³ Plural markers do occur in NPs containing numerals (cf. § 7.6).

As with *ta*, when *na* directly modifies a noun and there is no number marking, the referent is singular. *Na* can also occur in noun phrases containing a numeral, as in (7-8).

- (7-8) 'i lia ka kwate-a na rua wale a-la wale-li galo-na lia gi
 PROFORE 3SG SEQ send-3.OBJ INDEF.SPEC two man at-3.PERS man-HABIT work-NMLZ 3SG PL
 'He sent two of his disciples...' (Mk 11:1)

7.2.3 *te*

Te is also a specific indefinite determiner, illustrated in (7-9):

- (7-9) Ma 'i lia ka-e faa-futa-a te wela wale
 and PROFORE 3SG SEQ-IRR CAUS-be.born-3.OBJ INDEF.SPEC child man
 'And she shall bear a son...' (Mt 1:21)

The difference between *te* and *na* is not yet entirely clear, but when the referent is human, *na* seems to pick this referent out from a limited or specified set, as in (7-8), where the set of disciples is explicitly stated. In (7-9), the referent is a very specific one, but there is no limited set to which it belongs. Like *ta* and *na*, *te* may occur both in singular noun phrases, and in noun phrases containing a numeral, as in (7-10).

- (7-10) ma te rua wale daro toro 'ali-a to'omi kaka'a gi li
 and INDEF.SPEC two man 3DU wear INS-3.OBJ clothes be.white PL DEF
 'Two men wore white clothing...' (Acts 1:10)

- (7-11) nali witi te talanae fua-e 'are ma nali witi olo
 INDEF.SPEC.PL wheat INDEF.SPEC hundred seed-INDEF.PERS thing and INDEF.SPEC.PL wheat six
 akwala fua-e 'are ma nali witi olu akwala fua-e 'are.
 ten seed-INDEF.PERS thing and INDEF.SPEC.PL wheat three ten seed-INDEF.PERS thing
 '[Good habits shall become like wheat which is planted and yields seeds:] some wheat a
 hundred seeds and some wheat sixty seeds and some wheat become thirty seeds.'
 (Mt 13:23)

7.2.4 *tali*

Tali is the plural equivalent of *ta*. It is an indefinite, non-specific plural determiner which does not occur with the plural marker *gi*. It can be translated into English as 'some'. In (7-12), *tali* modifies *profet* to indicate that the reference of this noun is indefinite, plural and non-specific.

- (7-12) laka-e keri-a tali profet fai-li-a tali ioli sai 'are
 1SG.SEQ-IRR send-3.OBJ INDEF.NSPEC.PL prophet COM-TR-3.OBJ INDEF.NSPEC.PL people know thing
 fai-li-a tali wale faalalau 'i soe-miu
 COM-TR-3.OBJ INDEF.NSPEC.PL man teach LOC GOAL-2PL.OBJ
 'I send to you prophets, and wise men, and teachers.' (Mt 23:34)

Tali may also be used with mass nouns. In (7-13), the bread does not yet exist, so the reference is indefinite and non-specific.

- (7-13) 'o sae fa-la me fau 'e gi 'ali gera rau 'ali tali berete
 2SG say DAT-3.PERS CLF stone DEM.PROX PL INS 3PL become INS INDEF.NSPEC bread
 'Command for these stones to become bread.' (Mt 4:3)

Our corpus does not contain any examples where *tali* combines with numerals, unlike its singular counterpart *ta*.

7.2.5 *nali*

Nali is the plural equivalent of *na*. It is a plural indefinite determiner which picks out specific referents. In (7-14), the boats referred to are specific, because they are present in the scene, but they have indefinite reference:

- (7-14) Ma nali baru lou 'i lifi-fo.
 and INDEF.SPEC.PL boat also LOC place-DEM.DIST
 'And there were also [other] ships there...' (Mk 4:36)

In (7-15), the wise men are specific individuals in the world, but since this is the first time they are introduced, they are as yet indefinite:

- (7-15) nali wale faasi-a 'i tatae-na-la da'afi
 INDEF.SPEC.PL man ABL-3.OBJ LOC rise-NMLZ-3.PERS sun
 '...men from the Orient...' (Mt 2:1)

Like *tali*, *nali* does not occur in the same noun phrase with the plural marker *gi*, or with numerals.

7.3 Definite marker

There is a single morpheme in Wala which indicates definite reference: *li*. It fills the penultimate spot in the NP template, occurring before the exhaustive marker if there is one, but is otherwise noun phrase-final. The former state of affairs is illustrated in (7-16), and the latter in (7-17).

- (7-16) ka fatai-li-a lo [tatalona 'i lao-la molagali gi li sui]
 SEQ show-TR-3SG.OBJ FOC kingdom LOC inside-3.PERS world PL DEF EXHST
 'He showed him all the kingdoms of the world...' (Lk 4:5)

- (7-17) Talasi daro lufa-a [dongki fo li]
 time 3DU release-3.OBJ donkey DEM.DIST DEF
 'As they were losing the donkey...' (Lk 19:33)

As (7-17) shows, the determiner can co-occur with demonstratives.

7.4 Quantifiers

Quantification can be expressed by means of verbal modification of a noun, as in the following example where 'many' is expressed by the verb *afula*:

- (7-18) Ma wale li galo-na afula lia gi
 and man HABIT work-NMLZ be.many 3SG PL
 'Many of his disciples...' (Jn 6:60)

That *afula* is a verb may be verified by considering (7-19), where it functions as the main verb in the clause, and (7-20), where it takes nominalizing morphology.

- (7-19) ioli 'i Israel gi gera ka afula malaa⁴ ole sulia asi li
 people LOC Israel PL 3PL SEQ be.many resemble sand about-3.OBJ sea DEF
 'The children of Israel are as many as the sand of the sea.' (Rom 9:27)
- (7-20) afula-na-da gera oga kwairanai-na lou
 be.many-NMLZ-3PL.PERS 3PL want help-NMLZ also
 '...many of them also wanted to help.' (2 Cor 9:2)

7.4.1 *barae*

A quantifier meaning 'few' takes the form *barae* and precedes a noun. As (7-21) shows, a noun modified by *barae* does not need to be modified by a plural marker. There are a few exceptions to this in our corpus, as in (7-22) and (7-23).⁵ In (7-23), *barae* precedes a classifier, possibly modifying this rather than the noun. In our corpus, *barae* precedes a classifier in 18 out of a total of 41 instances. *Barae* has its own slot in the NP template because it may be preceded by the indefinite determiner *ta*, and followed by a numeral, as in (7-24). (This is our only example of *barae* preceding a numeral.) In this case, *barae* may also be modifying the numeral rather than noun.

- (7-21) Ioli afula gi God 'e kwalo-da, wasua ma barae ioli mola 'e fili-da
 people be.many PL god 3SG invite-3PL.OBJ but and few people CONTR.FOC 3SG choose-3PL.OBJ
 'Many people are called by God, but few are chosen.' (Mt 22:14)
- (7-22) kwaimalatai-na ba'ela rasua fa-la barae geli gera dodolanaa gi
 grieve-NMLZ be.big very DAT-3.PERS few woman 3PL be.pregnant PL
 'Woe to pregnant women...' (Mt 24:19)
- (7-23) ma dau lu too lou a-la barae lode ia wawade gi
 and 3PC have also at-3.PERS few CLF fish be.small PL
 'And they had a few small fishes.' (Mk 8:7)
- (7-24) ta barae to'oli ioli gera logo mae fa-la rono-na-la Jesus
 INDEF.NSPEC few thousand people 3PL gather hither DAT-3.PERS hear-NMLZ-3.PERS Jesus
 'A few thousand people gathered there to listen to Jesus.' (Lk 12:1)

⁴ On the word class membership of *malaa* 'resemble', whose translation equivalent is a verb in English, see §10.2.2.3.

⁵ In (7-22), the meaning of 'few' is not obvious from the English translation; *barae* may have an additional sense which we have not been able to capture.

7.4.2 Exhaustive marker

The exhaustive marker **sui** corresponds to the English determiner ‘all’. It appears in the final slot of the noun phrase. We have borrowed this term from Lichtenberk (2008b:319), who gives the form **sui** in Toqabaqita the same label.

- (7-25) 'Are gi sui 'e talawarau fa-la God
 thing PL EXHST 3SG be.possible DAT-3.PERS God
 ‘All things are possible for God.’ (Mk 10:27)

7.5 Plural word

The plural marker is **gi**, used with non-singular noun phrases, except those containing indefinite determiners. It is often the final element of a noun phrase, as in (7-26), but it comes before the definite determiner and/or the exhaustive marker where these are present, as in (7-27).

- (7-26) foa-na 'o gi
 pray-NMLZ 2SG PL
 ‘...your prayers...’ (Acts 10:4)
- (7-27) ka fataili-a lo tatalona 'i lao-la molagali gi li sui
 SEQ show-3.OBJ FOC kingdom LOC inside-3.PERS world PL DEF EXHST
 ‘...showed him all the kingdoms of the world.’ (Lk 4:5)

7.6 Numerals

Wala distinguishes between cardinal and ordinal numerals, with the ordinal numerals transparently derivable from the cardinal numerals. The two types of numerals are discussed in turn.

7.6.1 Cardinal numerals

Numeral forms are given in table 7.2. Numerals precede the noun they modify. The plural marker also occurs in noun phrases with numerals, as in (7-28).

Table 7.2: Numerals

teke	‘one’
rua	‘two’
olu	‘three’
fai	‘four’
lima	‘five’
olo	‘six’
fiu	‘seven’
kwalu	‘eight’
sikwa	‘nine’
akwala	‘ten’
akwala wala teke	‘eleven’
akwala wala lima	‘fifteen’
rua akwala	‘twenty’
talanae	‘hundred’
to'oli	‘thousand’

- (7-28) Sui laka lesi-a fiu eniselo gi
 then 1SG.SEQ see-3.OBJ seven angel PL
 'And I saw seven angels...' (Rv 8:2)

A numeral classifier (§ 7.7) optionally intervenes between the numeral and the noun:

- (7-29) rua fe fao gi
 two CLF turtledove PL
 '...two turtledoves...' (Lk 2:24)

7.6.2 Ordinal numerals

Ordinal numerals also precede the noun. They are formed by adding the third person personal suffix **-la** to the cardinal numeral. A somewhat lengthy and serendipitous example from the book of Revelations, (7-30), gives the forms for the ordinal numbers from 1-12. This example shows that the ordinal numeral **tanafulula** 'tenth' has a different stem from cardinal **akwala** 'ten'.

- (7-30) Eta-la fau ageage, gera soi-a 'ali-a jasper. Rua-la fau gera soi-a
 one-3.PERS stone foundation 3PL call-3.OBJ INS-3.OBJ jasper two-3.PERS stone 3PL call-3.OBJ
 'ali-a safaea. Ma olu-la fau gera soi-a 'ali-a aget. Ma fai-la fau,
 INS-3.OBJ sapphire and three-3.PERS stone 3PL call-3.OBJ INS-3.OBJ agate and four-3.PERS stone
 gera soi-a 'ali-a emarol. Lima-la fau gera soi-a 'ali-a oniks. Olo-la
 3PL call-3.OBJ INS-3.OBJ emerald five-3.PERS stone 3PL call-3.OBJ INS-3.OBJ onyx six-3.PERS
 fau gera soi-a 'ali-a karnelian. Fiu-la fau gera soi-a 'ali-a karts,
 stone 3PL call-3.OBJ INS-3.OBJ carnelian seven-3.PERS stone 3PL call-3.OBJ INS-3.OBJ quartz
 lia 'e kelo. Kwalu-la fau, gera soi-a 'ali-a beril. Sikwa-la fau, gera
 3SG.NSBJ 3SG ?? eight-3.PERS stone 3PL call-3.OBJ INS-3.OBJ beryl nine-3.PERS stone 3PL
 soi-a 'ali-a topas. Ma tanafulu-la fau, gera soi-a 'ali-a kalkedoni.
 call-3.OBJ INS-3.OBJ topaz and tanafulu-3.PERS stone 3PL call-3.OBJ INS-3.OBJ chalcedony
Akwala wala eta-la fau, gera soi-a 'ali-a turkois. Ma akwala wala rua-la fau,
 ten tenth one-3.PERS stone 3PL call-3.OBJ INS-3.OBJ turquoise and ten tenth two-3.PERS stone
 gera ka soi-a 'ali-a ametist.
 3PL SEQ call-3.OBJ INS-3.OBJ amethyst

'The first foundation stone was called jasper. The second stone was called sapphire. And the third stone was called agate. And the fourth stone was called emerald. The fifth stone was called onyx. The sixth stone was called carnelian. The seventh stone was called quartz, which is [color term(?)]. The eighth stone was called beryl. The ninth stone was called topaz. And the tenth stone was called chalcedony. The eleventh stone was called turquoise. And the twelfth stone was called amethyst.' (Rv 21:19-20)

7.7 Numeral classifiers

We have identified a number of morphemes which seem to function as classifiers, occurring directly before a noun. These forms are given in table 7.3 below, but we will only discuss **me** and **fe** here because they are by far the most frequently occurring classifiers in our corpus. All

classifiers are given the same gloss, CLF, because we cannot distinguish them further with the data currently available to us.

Table 7.3: Numeral classifiers

CLASSIFIER	OCCURS BEFORE
<i>lode</i>	<i>ia</i> 'fish'
<i>wai</i>	<i>asi-</i> 'brother'
<i>abae</i>	<i>lifi</i> 'place', <i>fau</i> 'stone', ' <i>ai</i> 'tree', <i>toro</i> 'cloth'
<i>fili</i>	body part terms, e.g., <i>maa</i> 'eye', <i>lima</i> 'hand', ' <i>ae</i> 'foot'
<i>kale</i>	animals, e.g., <i>sipsip</i> 'sheep', <i>buluka</i> 'cow'
<i>roa</i>	jewels(?), e.g., <i>iroiroa</i> 'pearl'
<i>agiagi</i>	<i>saena</i> 'saying'
<i>ke</i>	<i>wela</i> 'child', <i>dongki</i> 'donkey'
<i>fe</i>	see table 7.4
<i>me</i>	see table 7.5

Numeral classifiers are found in Toqabaqita (Lichtenberk, 2008b:299) and Arosi (Capell, 1971:50), and we propose such a category in Wala because the words in question can follow numerals, as in (7-31) and (7-32), although this is not always the case.

(7-31) *olu fe nali gi*
 three CLF year PL
 '...three years...' (Lk 13:7)

(7-32) *rua fe fao gi*
 two CLF turtledove PL
 '...two turtledoves...' (Lk 2:24)

Both ***fe*** and ***me*** can also occur in NPs with ordinal numbers:

(7-33) *a-la rua-la fe atoa*
 at-3.PERS two-3.PERS CLF day
 'On the second day...' (Lk 10:35)

(7-34) *olu-la me talasi*
 three-3.PERS CLF time
 '...the third time...' (Jn 21:17)

It is possible for ***fe*** and ***me*** to precede another of the classifiers given in table 7.3. An example is given in (7-35).

(7-35) *ala wela 'o 'e suga 'afi-a ta me lode ia ko kwate-a 'amua*
 if child 2SG 3SG ask ALL-3.OBJ INDEF.NSPEC CLF CLF fish 2SG.SEQ give-3.OBJ 2SG.BEN
 ta fe wa fa-la?
 INDEF.NSPEC CLF snake DAT-3SG.PERS
 'If your child asks for a fish, will you give him a snake?' (Mt 7:10)

Tables 7.4 – 7.5 below show which nouns occur with each of the two classifiers ***fe*** and ***me***. Based only on corpus data, it is difficult to find semantic principles which can account for the use of each classifier. In addition, both ***fe*** and ***me*** occur with the noun ***berete*** 'bread' to refer

to a discrete number of loaves (although *me* occurs much more frequently). While it is difficult to gather much information about the semantics of classifiers from our corpus, we can at least note some parallels with the classifier system of Toqabaqita, which is well-documented. *Fa* in Toqabaqita is a classifier used to refer to small, round objects (Lichtenberk, 2008b:270), such as ‘star’, ‘bread’, and also ‘year’; all these nouns occur with *fe* in Wala. It is also used for periods of time such as ‘night’, ‘day’, and ‘year’, as in Wala. More data collection is necessary for a full analysis of numeral classifiers in Wala.

Table 7.4: Nouns occurring with *fe*

<i>kwalikwali</i>	‘star’
<i>boni</i>	‘night’
<i>nali</i>	‘year’
<i>bola</i>	‘dove’
<i>atoa</i>	‘day’
<i>uo</i>	‘mountain’
<i>ulu</i>	‘candle’
<i>nuu</i>	‘song’
<i>malu</i>	‘bird’
<i>berete</i>	‘loaf’
<i>‘ai</i>	‘tree’
<i>wa</i>	‘snake’
<i>fakwaru</i>	‘light’
<i>kuba</i>	‘staff’

Table 7.5: Nouns occurring with *me*

<i>‘are</i>	‘thing’
<i>fau</i>	‘stone’
<i>talasi</i>	‘time’
<i>ifu</i>	‘hair’
<i>gwano</i>	‘reed’
<i>berete</i>	‘loaf’
<i>lifi</i>	‘place’
<i>alaana</i>	‘language; message’
<i>saena</i>	‘word’
<i>geli</i>	‘woman’
<i>‘oru</i>	‘widow’
<i>seleni</i>	‘money’
<i>fufua-</i>	‘seed’

7.8 Demonstratives

We have identified four forms which have a demonstrative function: *fo*, *‘e*, *ba* and *la*. These forms follow the noun, as well as any possessive pronoun but precede relative clauses and the plural and definite marker. Although we have some idea about what differentiates these four demonstratives, the nature of our corpus — a written text — means that we cannot reliably describe spatial deixis in Wala. For this reason, only two of the forms (*‘e* and *fo*) are glossed with labels specific to their meaning, and the other two (*ba* and *la*) are simply glossed as demonstratives, with numerals added to the labels to distinguish them from each other.

The demonstrative *‘e* seems to indicate that a referent is near the speaker, or present in the scene, i.e., it is a proximal demonstrative.

- (7-36) 'i lao-la buka 'e li
 LOC inside-3.PERS book DEM.PROX DEF
 '...in this book...' (Rv 22:18)

fo is a distal demonstrative which, in the text, refers back to something already mentioned but no longer present. In (7-37), **fo** indicates that 'book' and 'angel' are known to the speaker but not in the proximity of the speaker (either spatially or in the discourse):

- (7-37) laka sake-a buka wawade fo faasi-a lima-la eniselo fo
 1SG.SEQ take-3.OBJ book be.small DEM.DIST ABL-3.OBJ hand-3.PERS angel DEM.DIST
 'I took the little book from the angel's hand.' (Rv 10:10)

The difference between **fo** and **'e** is nicely illustrated by the phrases **talasi fo** and **talasi 'e**, where **talasi** means 'time'. The first phrase means 'then' and the second means 'now', i.e., time distal vs. time proximal to the speaker, respectively.

The meanings of **ba** and **la** are less clear, and we gloss them simply as DEM3 and DEM4, respectively. The following examples simply serve to show that they occur in the same slot as the other two demonstratives. In (7-39) we see that **'are la** 'that(?) thing' is contrasted with **'are 'e** 'this thing'.

- (7-38) ka lesi-a toro kaka'a ba gi sui
 SEQ see-3.OBJ clothing be.white DEM3 PL EXHST
 'He saw those white clothes...' (Jn 20:5)
- (7-39) ko-e lesi-a 'are ba'ela la gi 'e liufi-a lou me 'are 'e
 2SG.SEQ-IRR see-3.OBJ thing be.big DEM4 PL DEM.PROX pass-3.OBJ also CLF thing DEM.PROX
 'You will see things surpass again these things.' (Jn 1:50)

7.9 Noun modification by verbs

Intransitive verbs may modify nouns. They appear immediately following the noun and preceding any demonstrative, possessive, plural, definite and/or exhaustive marker. The modifying intransitive verbs in examples (7-40) – (7-41) are underlined.

- (7-40) moulu lesi-a luma ba'ela 'e gi
 2PL see-3.OBJ house be.big DEM.PROX PL
 'Do you see these big buildings?' (Mt 24:2)
- (7-41) Ma fai 'are mauri fo gi gera ka olisi-da 'uri 'e
 and four thing live DEM.DIST PL 3PL SEQ answer-3PL.OBJ thusly
 'And the four beasts [living things] said to them...' (Rv 5:14)

A noun may be modified by more than one verb, as occurs in (7-42).

- (7-42) Wale kotokoto afula gi gera la sui lo 'i lao-la molagali.
 men be.false be.many PL 3PL go finish FOC LOC inside-3.PERS world
 'Many deceivers have already gone into the world...' (2 Jn 1:7)

Although very rare in our corpus, it is also possible for a noun to be directly modified by a transitive verb. The noun which is modified corresponds to the undergoer argument of the transitive verb, and the actor argument of this verb may then follow. In (7-43), the verb *fili-* ‘choose’ follows the noun ‘person’, and we assume that the post-verbal argument ‘God’ is the understood subject of the verb.⁶

(7-43) ma 'i 'amiu iko lou nali ioli a-la ioli fili-a God gi
 and PROFORE 2PL.NSBJ NEG also INDEF.SPEC.PL person at-3.PERS person choose-3.OBJ God PL
 ‘You were not one of the people chosen by God.’ (Eph 2:12)

Another example of this is given in (7-44), in which the transitive verb ‘feed’ is followed by a noun *geli* ‘woman’, which we can interpret as the subject of the modifying verb. In this case, the head noun is once again the object of the modifier verb, indexed on the verb by the object suffix.

(7-44) wela ranoli-a geli ulao Fero li
 child feed-3.OBJ woman daughter Pharaoh DEF
 ‘The son of Pharaoh’s daughter [the child nursed by Pharaoh’s daughter]...’ (Heb 11:24)

7.10 Relative clauses

Following terminology used in a recent survey of relative clause phenomena (Andrews, 2007), we refer to an NP whose reference is delimited by a relative clause as the matrix NP, and we refer to the head of the matrix NP as the head nominal. A pronoun appearing within the relative clause which is coreferent with the head nominal is referred to as the representative of the head nominal. Examples appearing in this section have square brackets enclosing the matrix NP, and underlining indicating the relative clause.

Relative clauses in Wala take the form of a regular SV(O) clause. There are no grammatical words whose main function is to mark a clause as being a relative clause. Relative clauses are a subconstituent of the matrix NP; they follow the head nominal as well as any demonstratives (but see below for some variation) or directly modifying verbs, but precede the plural, definite or exhaustive markers.

When the representative of the head nominal functions as the subject of the relative clause, we find a non-sequential, co-referential pronoun in subject position in the relative clause. This is illustrated in (7-45).

(7-45) [wale gera lio suli-a sipsip fo gi li] gera ka alaa
 [man 3PL watch concerning-3.OBJ sheep DEM.DIST PL DEF] 3PL SEQ speak
 ‘The shepherds (lit. the men who watch over sheep) said...’ (Lk 2:15)

⁶ It is unclear in (7-43) which NP the object suffix on *fili-* ‘choose’ is indexing. Its logical object, *ioli* ‘people’ is not *in situ* as we use the term in this work, and the choice of suffix is not appropriate for a 3pl object. The logical subject *God* is in the position normally occupied by the object, and the suffix *-a* is (normally) appropriate for an *in situ* object or an *ex situ* 3sg object.

The relativized noun **wale** is the understood subject of the relative clause, and the 3PL subject pronoun **gera** refers back to this noun from its subject position in the relative clause. Following the relative clause are the plural and definite markers which complete the noun phrase. The rest of the main clause continues thence. The status of demonstrative **fo** is unclear in this example. Since demonstratives typically precede relative clauses, as in (7-51) and (7-52) (p. 122 below), it is possible that **fo** is modifying **sipsip**, e.g., ‘those sheep’ (referred to earlier in Luke 2:8), but it is equally possible that it modifies **wale**, in which case the position of demonstratives with regard to relative clauses should be regarded as flexible.

Relative clauses can be distinguished from simple noun modification by verbs by the fact that they always contain a subject pronoun (which may be coreferent with the relativized noun). In (7-46), the noun **wale** is directly modified by the verb **mae** (‘die’), to mean something like ‘dead people’, whereas in (7-47), the noun is modified by a relative clause containing a subject pronoun coreferential with the head noun and the verb **mae**. When the representative of the head nominal functions as the object of the relative clause, object marking occurs on the verb which is coindexed with the relativized noun, as in (7-48).

(7-46) Sui laka lesi-a lou [ioli mae gi sui]
 then 1SG.SEQ see-3.OBJ also [people die PL EXHST]
 ‘Then I saw the dead...’ (Rv 20:12)

(7-47) [ioli gera mae lo gi], gera mauri-fa'alu lou
 [people 3PL die FOC PL] 3PL live-be.new again
 ‘The people who are dead come back to life.’ (Mt 11:5)

(7-48) [ioli God 'e fli-da gi]
 [people G. 3SG choose-3PL.OBJ PL]
 ‘...the people whom God has chosen...’ (Mk 13:22)

Example (7-49) shows that the four-way number distinction in object suffixes does not hold with relative clause object-marking since we find plural **-da** rather than dual **-daroa** to refer back to the two thieves (see §9.1 for further discussion). Example (7-49) also shows that it is possible to have a verb directly modifying a noun and a relative clause in the same noun phrase.

(7-49) Ma [rua wale ta'a gera foto-i-da fai-li-a gi]
 and [two man be.bad 3PL strike-TR-3PL COM-TR-3SG.OBJ PL]
 ‘And two criminals also who were crucified with him...’ (Mt 27:44)

Wala also allows relativizing on a possessor, as in (7-50) where the head noun **ioli** ‘people’ functions as the possessor of the relative clause subject noun **'ae** ‘feet’ and is coindexed with the personal possessor marking on this noun. Demonstratives precede relative clauses, as in (7-51) (although see discussion following (7-45)).

(7-50) ma [ioli 'ae-da mae gi], lia 'e gura-da sui
 and [person foot-3PL.PERS die PL] 3SG 3SG heal-3PL.OBJ EXHST
 ‘And the lame, he healed them.’ (lit: ‘the people whose feet had died’) (Acts 8:7)

- (7-51) Ma 'o gere-a ['are 'e 'o lesi-da gi]
 and 2SG write-3.OBJ [thing DEM.PROX 2SG see-3PL.OBJ PL]
 'Write these things which you have seen...' (Rv 1:19)

Possessor NPs also precede relative clauses, as in (7-52)

- (7-52) Sulia lau dari-a [seleni ba lau 'e iko].
 because 1SG find-3.OBJ [silver DEM3 1SG 3SG NEG]
 '...for I have found my silver piece which was lost.' (Lk 15:9)

"Free"⁷ relative clauses are found where the head nominal is a pronoun (the 3SG independent pronoun *lia*) whose reference is determined by the relative clause alone, as in (7-53). In such cases, *lia* is usually translatable by English *whoever*, or *the one*.

- (7-53) [Lia ba laka ili-a] alo-e 'are abu ka-e sake-a alaa-na lau gi
 3SG DEM3 1SG.SEQ say-3.OBJ spirit-INDEF.PERS thing be.holy SEQ-IRR take-3.OBJ talk-NMLZ 1SG PL
 ma ka faa-rono 'amiu 'ali-da.
 and SEQ CAUS-hear 2PL.NSBJ INS-3PL.OBJ
 'What I am saying is [that] the holy spirit shall take my message and tell it to you.' (Jn 16:15)

Frequently in our corpus, the matrix NP of a free relative clause stands in apposition to another NP which is coreferent with the expletive pronoun, as in examples (7-54) - (7-55). We suppose that a sentence employing an appositive NP with a free relative clause may be easier for the listener to parse than one where a heavy relative clause is embedded in an NP also containing final definite and/or plural markers.

- (7-54) Lau kwate kwaikaena fa-la ioli gi sui [lia gera rono-a sae-na-la
 1SG give commandment DAT3.PERS people PL EXHST 3SG.IND 3PL hear-3.OBJ say-NMLZ-3.PERS
 God 'i lao-la buka 'e li].
 G. LOC inside-3.PERS book DEM.PROX DEF
 'I testify to all men who hear the word of God in this book.' (Rv 22:18)
- (7-55) fai-li-a ole sulia asi li [lia iko 'ali totolia idumi-na-i].
 COM-TR-3.OBJ sand concerning-3.OBJ sea DEF 3SG NEG COMP be.able read-NMLZ-INDEF.PERS
 '...and the sand on the sea shore which is innumerable.' (Heb 11:12)

7.11 Prepositional phrases

A noun may be modified by a prepositional phrase or a locative phrase. Such phrases follow demonstratives and precede the plural marker. An example of the ablative preposition *faasi-* heading a PP which modifies the proper noun *Jesus* is given in (7-56).

- (7-56) Jesus faasi-a 'i Nasareti
 J. ABL-3.OBJ LOC Nazareth
 '...Jesus of Nazareth...' (Jn 19:19)

⁷ This term is borrowed from Andrews (2007:213).

An example of a locative phrase modifying a noun is given in (7-57). The locative phrase '***i laola molagali*** *'in the world'* (underlined) modifies the noun '***are*** *'thing'*'. It may be seen that this phrase follows a modifying verb and a demonstrative, and it precedes the plural and definite marker.

- (7-57) 'are ta'a 'e 'i lao-la molagali gi li
 thing be.bad DEM.PROX LOC inside-3.PERS world PL DEF
 '...bad things that are in the world...' (1 Jn 2:15)

8 Possessive constructions

8.1 Introduction

Wala has two kinds of possessive constructions: inalienable and alienable (detailed in §§ 8.2, 8.3, respectively). The type of construction used can largely be predicted by the semantics of the noun in question, but a number of the nouns in our corpus can be both alienably and inalienably possessed and therefore we do not strictly divide nouns in Wala into separate classes based on the possessive constructions they participate in. A third type of construction involving dependency between two nouns is the associative construction (§ 8.4). The associative has several functions, which are discussed in §§ 8.4.1 – 8.4.3.

8.2 Inalienable possession

The inalienable possession construction can be identified morphologically by the presence of a personal suffix on a noun. The forms of the personal suffixes and additional examples of their usage are found in § 6.5. The kinds of nouns which can be inalienably possessed are body parts and abstract components of an individual (i.e., soul, mind). Table 8.1 provides some examples of such nouns (cf. also § 3.3.3.1 for examples of some inalienably possessed nouns with preposition-like meanings). Kinship terms are not inalienably possessed in Wala, with the exceptions of **'oru-** 'widow' and **asi-** 'brother' (although the former does occasionally appear without an inalienable suffix in our corpus). Other inalienably possessed nouns refer to more abstract, spatial or quasi-spatial concepts. A partial list is given in table 8.2. These are typically used in locative phrases (§ 3.3.1) to encode more complex spatial concepts.

Table 8.1: Examples of nouns which are typically inalienably possessed.

mano-	'soul'	lima-	'hand'
rata-	'name'	maa-	'eye'
nidu-	'lips, mouth'	rabe-	'body, side'
gwau-	'head'	mea-	'tongue'
'oru-	'widow'	asi-	'brother'
'u'u-	'finger'	line-	'voice'
rara-	'branch'	ifu-	'hair'
lofo-	'womb'	oga-	'bowels'
malata-	'thought'	lio-	'will'

Example (8-1) shows several nouns in inalienable possession constructions with a first person pronominal possessor:

Table 8.2: Inalienably possessed nouns with spatial or abstract meaning.

gege-	'near to'	totola-	'approaching'
tala-	'oneself'	huri-	'after, behind'
duna-	'because of'	fofo-	'on top of'
matana-	'between'	'afuta-	'throughout'
osia-	'for the sake of'	so'e-	'unto'

- (8-1) ikoso sau-a mola 'ae-gu talifili-a. Ma 'o sau-a lou lima-gu,
 NEG2 wash-3.OBJ CONTR.FOC foot-1SG.PERS only-3SG.OBJ and 2SG wash-3.OBJ also hand-1SG.PERS
 fai-li-a gwau-gu
 COM-TR-3.OBJ head-1SG.PERS
 'Don't just wash my feet. Wash my hands and my head too.' (Jn 13:9)

When a proper name or lexical NP occurs with an inalienably possessed noun, the possessed noun is marked with the third person singular personal suffix and the nominal possessor follows.

- (8-2) ka suga-a rabe-la Jesus
 SEQ request-3.OBJ body-3.PERS Jesus
 '...and [he] begged for the body of Jesus.' (Mt 27:58)

- (8-3) lima-la wale ta'a gi
 hand-3.PERS man be.bad PL
 '...the hands of sinners...' (Mk 14:41)

As outlined above, what we refer to as inalienable nouns are not strictly grammatically inalienable and do sometimes occur without possessive marking. Examples (8-4) - (8-5) show that the noun '**abu** 'blood'', while almost always inalienably possessed, can occur without a personal suffix. Any semantic distinction between the two usages is unclear to us.

- (8-4) Lia 'e lo 'abu-gu
 3SG DEM.PROX FOC blood-1SG.PERS
 'This [cup] is my blood...' (Lk 22:20)
- (8-5) ma 'abu fo ka lana lo faasi-a
 and blood DEM.DIST SEQ be.dry FOC ABL-3SG.OBJ
 '...and the blood from her stanchd.' (Lk 8:44)

Another curious example of nouns which are normally inalienable occurring in alienable constructions is when they are modified by the words for 'right' or 'left' along with what seems to be a classifier, **fili**. Example (8-6) shows '**ae** 'foot' in an inalienable construction with a third person possessor. In (8-7), we find the same noun in an alienable construction, the only obvious difference being the presence of this uncommon form **fili** and a modifier **mauli** (which patterns as an intransitive verb).

- (8-6) ma ka toli 'i maa-la 'ae-la Peter
 and SEQ fall LOC eye-3.PERS foot-3.PERS Peter
 '...and [he] fell down in front of Peter's feet.' (Acts 10:25)

- (8-7) ma fili 'ae mauli lia ka ura 'ali-a 'i fofo-la wado
 and CLF foot be.left 3SG SEQ stand INS-3.OBJ LOC top-3.PERS earth
 '...and his left foot stood on the earth...' (Rv 10:2)

8.3 Alienable possession

In contrast to inalienable possession, alienable possession is not morphologically marked and is expressed by means of apposition. The alienable possession construction consists of the possessed noun followed by a possessor noun phrase or a non-subject pronoun (cf. § 6.4). Example (8-8) illustrates an NP possessed by another NP, and (8-9) illustrates the use of a pronominal possessor.

- (8-8) 'i lao-la luma te wale
 LOC inside-3.PERS house INDEF.SPEC man
 '...into a certain man's house.' (Acts 18:7)
- (8-9) daro ka tafi-si-a lo fuo daroa gi
 3DU SEQ leave-TR-3.OBJ FOC net 3DU.NSBJ PL
 'They abandoned their nets.' (Mk 1:18)

The plural marker which modifies the possessum follows the possessor, as can be seen in (8-9). Definite markers can occur in noun phrases modified by a possessive phrase, and these follow the plural marker as they do in other types of noun phrases (8-10). Example (8-10) also shows multiple embedding of possessor noun phrases (in square brackets).

- (8-10) kwaikaena [mama [lau]] gi li 'e kwate-a mauri-na firi fa-la ioli gi.
 commandment father 1SG PL DEF 3SG give-3.OBJ live-NMLZ last DAT-3.PERS people PL
 'My father's commandments give people everlasting life.' (Jn 12:50)

If a verb modifies the possessum, the modifying verb will precede the possessor, as in (8-7) (p. 127, above) and (8-11). In (8-11) the verbal modifier is underlined.

- (8-11) Aofia ka-e la mae fai-li-a mola a-la to'oli eniselo abu lia gi
 lord SEQ-IRR go hither COM-TR-3.OBJ CONTR.FOC at-3.PERS thousand angel be.holy 3SG PL
 'The Lord will come with thousands of his holy angels.' (Jude 1:14)

8.4 Associative

In the associative construction, a noun phrase is modified by a prepositional phrase introduced by the noun-like preposition *a-*. The modifying prepositional phrase generally contains a lexical noun phrase as its complement, as in (8-12)–(8-13), but may also simply have an anaphoric personal suffix (cf. § 9.2) on the preposition, as in (8-14).

- (8-12) Alo a-la God
 spirit at-3.PERS God
 'Holy Spirit' (Lk 11:13)

(8-13) Ma teke olu-la gula a-la asi ka olisi ka malaa lo 'abuu.
 and one three-3.PERS side at-3.PERS sea SEQ answer SEQ resemble FOC blood
 'And the third part of the sea became like blood.' (Rv 8:8)

(8-14) Ma na wale a-da rata-la Kaeafas
 and INDEF.SPEC person at-3PL.PERS name-3SG.PERS K.
 'And one of them, whose name was Caiaphas...' (Jn 11:49)

8.4.1 Possessive use

In some cases, as in (8-12), the associative construction seems to encode a kind of possession. The noun *alo* 'spirit' in its basic form appears very rarely in anything other than in the phrase *alo ala God* (26 out of 29 occurrences), but we have the following example in our corpus where this noun is in the associative construction with a first person personal suffix.

(8-15) alo a-gu 'e babalafe sulia God 'e faa-mauri lau
 spirit at-1SG.PERS 3SG happy because G. 3SG CAUS-live 1SG
 'My spirit rejoices because God has saved me.' (Lk 1:47)

We might expect to find a personal suffix affixed directly to the noun here, as in inalienable possession, but there are no such examples in our corpus. The only personal suffix we find affixed directly to *alo* is the indefinite suffix *-e* (cf. § 6.5.3).

Another example of the associative construction in which the relationship between the two nouns seems to be one of possession is given below in (8-16). An alienable possession construction would have been possible here, as it is in the similar sentence (8-17). The associative use is most likely semantically distinct from the alienable use, but any attempt at explaining the difference on the basis of our corpus data would be somewhat speculative.

(8-16) Jesus ka la mae 'i luma a-la Peter
 J. SEQ go hither LOC house at-3.PERS P.
 'Jesus came into Peter's house.' (Mt 8:14)

(8-17) dau lu ka io 'i lao-la luma Simon
 3PC SEQ stay LOC inside-3.PERS house S.
 'They were in Simon's house.' (Mt 26:6)

8.4.2 Qualifying use

Elsewhere, the associative construction is used to delimit the reference of an inanimate noun, where the prepositional phrase specifies what kind of X the head noun is. In (8-18), for instance, the prepositional phrase provides the substance from which the head noun's referent is made.

(8-18) te lamo a-la kwai li
 INDEF.SPEC pool at-3.PERS water DEF
 '...a pool of water...' (Jn 5:2)

In examples (8-19) - (8-20), the prepositional phrase specifies further information about the head noun, i.e., what kind of day it is, what kind of feast it is.

(8-19) atoa a-la mamalo-na
 day at-3.PERS rest-NMLZ
 '...day of rest...' (Jn 19:42)

(8-20) fana-na a-la araaraina
 eat-NMLZ at-3.PERS marriage
 '...wedding feast...' (Mt 22:12)

8.4.3 Partitive use

Lastly, the associative construction has a partitive use in which a portion of a whole is expressed. In (8-21), the prepositional phrase specifies the set of people from which the two are selected.

(8-21) na rua wale a-la wale li galo-na lia gi
 INDEF.SPEC two man at-3.PERS man DEF serve-NMLZ 3SG PL
 '...two of his disciples...' (Mt 21:1)

In (8-22), the third person paucal personal suffix is affixed to *a-* to refer to an antecedently established (smallish) set of people out of which 'one man' is selected (see also (8-14)).

(8-22) Ma na wale a-daulu ka lalao ko
 and INDEF.SPEC man at-3PC.PERS SEQ run thither
 'And one of them ran there.' (Mk 15:36)

In examples (8-23) - (8-24), partitives are used to indicate spatial and temporal relations, respectively.

(8-23) gula a-la 'osi
 side at-3.PERS lake
 '...side of the lake...' (Mt 14:22)

(8-24) sulia na gula a-la atoa 'e liu lo
 for INDEF.SPEC side at-3.PERS day 3SG pass FOC
 'For it is nearly evening...' [i.e., a side of the day has passed] (Lk 24:29)

9 Anaphoric agreement

In this chapter we discuss in more detail how the language specially indexes complement noun phrases which are *ex situ* with respect to their canonical positions. Here we use the term “complement” to refer to any noun phrase which is indexed by a personal or object suffix: objects indexed on transitive verbs, possessors indexed on inalienably possessed nouns, and the complements of noun-like and verb-like prepositions. Non-complements, which are not indexed morphologically, include subjects, possessors of alienably possessed nouns, and non-third person forms (in the case of object suffixes).

Wala exhibits a property commonly reported in head-marking languages (Norcliffe, 2009: §4) where arguments are indexed differently in basic declarative clauses than in other types of construction. Certain construction types, from which we will draw most of the examples in this chapter, require a marking asymmetry for complements which are indexed by suffixes: these are relative clauses where the head nominal functions as a complement, content questions where the questioned constituent functions as a complement and the interrogative word is fronted, and topicalization constructions, where the topicalized constituent appears in the left periphery of the clause and functions as a complement within the main clause. Anaphoric indexing is not restricted to these construction types, but is reliably present in them.

The basic generalization about the indexing asymmetry in Wala, introduced in §4.4.1, is that an *in situ* lexical complement is indexed by a morpheme which simply indicates its lexical (rather than pronominal) status, and does not agree with it for number. *Ex situ* lexical complements, on the other hand, are indicated by an object or personal suffix which agrees with them in person and number. Full paradigms for personal and object suffixes are given in §6.5 and §6.6. We will discuss separately anaphoric agreement via object suffixation, which applies to the objects of transitive verbs and verb-like prepositions (§9.1), and anaphoric agreement via personal suffixation (§9.2), which applies to possessors of inalienably possessed nouns and complements of noun-like prepositions. In examples given in this chapter, we enclose complement noun phrases in square brackets, and underline the suffixes and independent pronouns which refer back to them.

9.1 Object anaphora

Where an object suffix indexes a third person *in situ* lexical complement, the form **-a** is always used. This form is also used as an anaphoric object suffix indexing a singular complement. An anaphoric object suffix which indexes a higher animate referent show a four-way number distinction (but this is uncertain, cf. §5.1), while the ‘plural’ form **-da** is used for all non-singular non-higher animate referents. It can then be said that there are three different classes of morphs used to indicate objects which differ in the number of distinctions they make: independent pronouns

with higher animate referents encode a four-way number distinction (singular, dual, paucal, plural), anaphoric object suffixes encode (at least) a two-way number distinction (singular, non-singular), and *in situ* object suffixes encode no number distinction.

Example (9-1) shows a relative clause where the representative of the head nominal is an independent third person dual pronoun *daroo*. Example (9-2) shows another relative clause describing the same situation in which the representative of the head nominal is indicated by the non-singular object suffix *-da*. Finally, in (9-3) an object with dual reference is indexed by the *in situ* object suffix *-a*, which is unspecified for number.

(9-1) Sulia a-la talasi [rua wale Josua 'e keru daroo] daro la agwa mae fa-la
 because at-3.PERS time two person J. 3SG send 3DU.NSBJ 3DU go hide hither DAT-3.PERS
 lesi-na-la nanata-na-la falua fo li
 see-NMLZ-3.PERS be.strong-NMLZ-3.PERS town DEM.DIST DEF
 'Because when the two men whom Joshua sent went secretly to see the strength of that town [Jericho]...' (Heb 11:31)

(9-2) 'e kwalo-a [rua wale ba 'i Jiu gi lia Josua 'e keru-da ko].
 3SG invite-3.OBJ two person DEM3 LOC Jew DEF 3SG J. 3SG send-3PL.OBJ thither
 '...she welcomed the two Jews that Joshua sent.' (Jas 2:25)

(9-3) ka keru-a [rua wale li galo-na lia gi] 'i lao
 SEQ send-3.OBJ two person HABIT work-NMLZ 3SG PL LOC before
 'He sent two of his disciples ahead...' (Lk 19:29)

In the remainder of this section we illustrate the types of constructions where anaphoric object marking is observed when it is used to index the object of a transitive verb (§ 9.1.1) and when it is used to index the complement of a verb-like preposition (§ 9.1.2).

9.1.1 Objects of transitive verbs

In this section we give some examples of anaphoric marking on transitive verbs. Examples (9-4) - (9-5) contain relative clauses where the verb bears an anaphoric object suffix. Relative clauses necessarily contain anaphoric object marking when the head nominal functions as an object within the relative clause.

(9-4) 'amu rari-a [ite 'e 'amu foa-si-a].
 2PL not.know-3.OBJ who DEM.PROX 2PL pray-TR-3SG.OBJ
 'You don't know who you worship...' (Jn 4:22)¹

¹ Matthew Dryer has commented that examples such as (9-4) may contain an English calque, since the use of interrogative pronouns as indefinite pronouns is generally rare outside of European languages. Similar constructions, however, are apparently are found in Toqabaqita, e.g.:

(i) Ni tei n=e thathami-a nga ifi nono-m-a neqe
 PERSMKR who REL=3SG.NFUT want-3.OBJ IDENT bundle rub.with.healing.leaves-TR-DVN this
 'Whoever wants this bundle of healing leaves...' (Lichtenberk, 2008b:900)

(9-5) 'ali-a ore-na-la fana a-la [lima tofu-i berete ba gera 'ani-da
 INS-3.OBJ remain-NMLZ-3.PERS food at-3.PERS five cut-NMLZ² bread DEM3 3PL eat-3PL.OBJ
 gi].

PL

'...with the food remaining out of the five pieces of bread that they ate...' (Jn 6:13)

In subject relative clauses (see § 7.10), there is no asymmetry in subject marking between main clauses and relative clauses, since the verbal complex of a subject relative clause can mark all of the same person-number combinations as a main clause. In (9-6), a subject of dual number is marked in the relative clause:

(9-6) ka soi-a mae [rua wale daru ba'ela 'i malu-la gi]
 SEQ call-3.OBJ hither two person 3DU be.big LOC under-3SG.PERS PL

'He called to him two men who were big under [his command].' (Acts 23:23)

Example (9-7) shows a topicalized noun phrase (itself containing a relative clause), which is indexed anaphorically on the transitive verb of the main clause. As was noted in § 9.1, an alternative strategy to indexing an object with an anaphoric object suffix is to use an independent pronoun. The independent pronoun option is not nearly as common as the suffixing option for third person objects, but it is the only option for non-third person objects. Example (9-8) shows a case where an independent pronoun is used in the place of an anaphoric object suffix.

(9-7) ['are God 'e raunai-li-da gi sui], 'e raunai-li-da 'ali-a sae-na.
 thing G. 3SG build-TR-3PL.OBJ PL EXHST 3SG build-TR-3PL.OBJ INS-3.OBJ talk-NMLZ
 'Everything that God made, he made with words.' (Jn 1:3)

(9-8) [Ioli gera fiolo gi], 'e ranoli gera 'ali-a 'are 'oka gi,
 people 3PL be.hungry PL 3SG feed 3PL INS-3.OBJ thing be.good PL
 'People who are hungry, He will feed them with good things.' (Lk 1:53)

Examples (9-9) - (9-10) show anaphoric object marking which indexes a fronted interrogative word. As with relative clauses, anaphoric marking on the transitive verb will only be obligatory in questions where the questioned constituent functions as an object. These kinds of questions are not very frequent in our corpus, as most questions are polar questions, and most content questions have the subject as the questioned constituent.

(9-9) [Taa 'e golu ka-e ili-a]?
 what DEM.PROX 1INCL.PC SEQ-IRR say-3SG.OBJ
 'What should we say?' (Mt 21:25)

(9-10) [Tali ta 'e laka-e suga-da]?
 INDEFNSPEC.PL what DEM.PROX 1SG.SEQ-IRR ask-3PL.OBJ
 'What should I ask for?' (Mk 6:24)

² Cf. § 5.3.3 on this particle.

Although we have so far limited ourselves to examples containing constructions which require anaphoric marking, anaphoric marking is not only found in relative clauses, questions and topicalization constructions. It can be observed in the indexing of any complement which is not represented by an *in situ* lexical noun phrase, as in (9-11), where the referent of **-da** is introduced in a preceding clause.

- (9-11) Lau foli-a [akwala buluka] a-la talasi 'e, ma lau oga laka lai
 1SG buy-3.OBJ ten cow at-3.PERS time DEM.PROX and 1SG want 1SG.SEQ go.to
 maili-**da** ga
 oversee-3PL.OBJ HORT
 'I have bought ten cows, and I should go and prove them.' (Lk 14:19)

9.1.2 Complements of verb-like prepositions

Verb-like prepositions behave identically to verbs as far as anaphora marking is concerned. Two examples are given in (9-12) - (9-14). Examples (9-12) - (9-13) contain content questions where the questioned element is the complement of a verb-like preposition. Example (9-14) shows a relative clause where the head nominal is the complement of a verb-like preposition within the relative clause.

- (9-12) [Ite lo] walelitalona a-la molagali li sai-a-la sake-na-la bata
 who FOC king at-3.PERS earth DEF know-at-3.PERS take-NMLZ-3.PERS money
 faasi-**da**?
 ABL-3PL.OBJ
 'Whom do the kings of the earth take money from?' (Mt 17:25)
- (9-13) 'Utaa 'e ko ani? Ma [ite 'e ko-e lio 'afi-a]?
 how DEM.PROX 2SG.SEQ cry and who DEM.PROX 2SG.SEQ-IRR look ALL-3SG.OBJ
 'Why are you crying? And who are you looking for?' (Jn 20:15)
- (9-14) Malata agwa-agwa sulia [fiu fe kwalikwali 'e 'o lesi-a lau dau
 thought RED-hide concerning-3.OBJ seven CLF star DEM.PROX 2SG see-3.OBJ 1SG hold
 fafi-**da** 'ali-a fili lima aolo lau li]
 against-3PL.OBJ INS-3.OBJ CLF hand be.right 1SG DEF
 'The mystery of the seven stars which you saw me holding in my right hand...' (Rev 1:20)

9.2 Personal anaphora

Complements may also be indexed anaphorically by personal suffixes, which attach to inalienably possessed nouns and noun-like prepositions. Personal indexing differs from object indexing in that it does not collapse any number distinctions, and it is not limited to third-person referents. Anaphoric personal suffixes can make all of the same person-number distinctions that independent pronouns can. In (9-15), for example, there can be observed a first person inclusive dual personal suffix on the dative noun-like preposition **fa-**. The form **-garoa** cannot be analyzed as an independent pronoun which happens to be written without a space (as can be done for the third

person dual and paucal forms *daroa* and *daulu*), since there is a clearly different independent pronominal form *gora(a)*.

- (9-15) talasi ba 'e alaa mae fa-garoa sul-i-a tala li
 time DEM3 3SG talk hither DAT-1DU.INCL.PERS about-3.OBJ street DEF
 'When he spoke to us along the way...' (Lk 24:32)

Personal suffixes also permit more distinctions for *in situ* complements than object suffixes do. While there is only one object suffix (*-a*) corresponding to *in situ* complements, the choice of personal suffix for an *in situ* complement depends on the definiteness of the referent of the complement: *-la* is used for complements with definite reference, and *-e/-i* is used for complements with indefinite reference (cf. § 6.5.3), with the choice of morph for the latter determined by a rule of vowel height harmony (cf. § 2.2.2). In (9-16), the inalienably possessed noun *rata-* 'name' has no definite possessor, so it bears the *in situ* personal suffix *-e* and is followed by an idiomatic possessor 'are' 'thing'. In (9-17), the possessor is *in situ* and has a specific, definite referent, so the suffix attached to *rata-* is *-la*.

- (9-16) Te rata-e [are] gera gere-a a-la to'omi tekwa lia li ma
 INDEF.NSPEC name-INDEF.PERS thing 3PL write-3SG.OBJ at-3.PERS cloth be.long 3SG DEF and
 sul-i-a 'ae-la 'e 'uri 'e,
 about-3.OBJ foot-3SG.PERS DEM.PROX be.thus
 'A name was written on his robe and on his thigh, which said...' (Rev 19:16)

- (9-17) ma rata-la [wale 'e gwauru 'i fofo-la] mae-na
 and name-3.PERS person DEM.PROX sit LOC on.top-3SG.PERS die-NMLZ
 'And the name of the man who sat on him was Death.' (Rev 6:8)

9.2.1 Possessors

There are a variety of constructions involving an inalienably possessed noun whose possessor does not immediately follow it. Examples (9-18) - (9-19) show relative clauses where the head nominal serves as a possessor within the relative clause.

- (9-18) gera ka sake-a mae [te wale anina-la 'e bali ma foka-la ka
 3PL SEQ take-3.OBJ hither INDEF.NSPEC person ear-3SG.PERS 3SG be.deaf and mouth-3SG.PERS SEQ
 'ato] 'i so'e-la Jesus
 be.difficult LOC GOAL-3SG.PERS J.
 '...they brought to Jesus a man whose ears were deaf and whose mouth was dumb.'
 (Mk 7:32)

- (9-19) ma ko foa fai-li-a [nalife ioli lio-da 'e madakwa].
 and 2SG.SEQ pray COM-TR-3.OBJ INDEF.SPEC.PL people will-3PL.PERS 3SG be.clear
 '...and pray with people whose hearts are pure.' (2 Tm 2:22)

Example (9-20) shows a topicalization construction, where the topicalized noun phrase is the possessor of the inalienably possessed noun in the main clause.

- (9-20) ma [na rua wale daro galo fai-li-a Simon], rata-daroa James fai-li-a
 and INDEF.SPEC two person 3DU work COM-TR-3.OBJ S. name-3DU.PERS J. COM-TR-3.OBJ
 John, rua wela Sebedi gi
 J. two child S. PL
 ‘And the two men who worked with Simon, their names were James and John, [they were]
 sons of Zebedee.’ (Lk 5:10)

We find no examples of questions where the interrogative word is fronted and where the questioned element functions as the possessor of an inalienably possessed noun. We do find a small number of such examples with an *in situ* question word (e.g., (9-21)), and one example of a relative clause whose head nominal is an indefinite pronoun having the same form as the corresponding interrogative word (sc. (9-22)). We suppose that questions involving an anaphoric personal suffix which indexes the fronted questioned element are probably grammatical, but are perhaps rare enough within narratives to be excluded from our corpus by accident.

- (9-21) Ma lulu-la [ite] 'e a-la me seleni 'e? Ma rata-la [ite] 'e lou?
 and image-3.PERS who 3SG at-3.PERS CLF silver DEM.PROX and name-3.PERS who DEM.PROX again
 ‘Whose image is on this coin? And whose name is this?’ (Mt 22:20)
- (9-22) Sulia [ite 'o fa-wawade 'o tala-mu 'i safita-moulu], 'i-'o ko-e
 because who 2SG CAUS-be.small 2SG self-2SG.PERS LOC amongst-2PC.PERS PROFORE-2SG 2SG.SEQ-IRR
 wale ba'ela ko-e 'ilitoa fafi 'amoulu sui.
 person be.big 2SG.SEQ-IRR govern against 2PC.NSBJ EXHST
 ‘For whoever among you_{pc} who_{sg} humbles yourself_{sg}, you_{sg} will rule over all of you_{pc}.’
 (Lk 9:48)

9.2.2 Complements of noun-like prepositions

Anaphoric indexing on the two noun-like prepositions *a-* and *fa-* is quite frequent, with the usual case being that the referent of the personal suffix can be inferred from the discourse context, as in (9-23) - (9-24).

- (9-23) ioli 'e gi gera ka-e oga-ta'a fa-gaulu
 people DEM.PROX PL 3PL SEQ-IRR bowels-be.bad DAT-1INCL.PC.PERS
 ‘These people will be angry with us.’ (Mt 21:26)
- (9-24) Ma talasi gera lesi-a [geli gi li], gera ka oga tau ta'a-na a-da
 and time 3PL see-3.OBJ woman PL DEF 3PL SEQ want do be.bad-NMLZ at-3PL.PERS
 ‘When they saw the women, they wanted to commit adultery [do bad things to them]...’
 (2 Pt 2:14)

Anaphoric personal suffixes on noun-like prepositions in a relative clause construction and a question with a fronted interrogative word are shown in examples (9-25) - (9-26).

- (9-25) [Ite lo] [ioli-gu lia laka kwaima a-da]?
 who FOC people-1SG.PERS 3SG 1SG.SEQ be.friend at-3PL.PERS
 ‘Who is my neighbor [i.e., my people that I am a friend to them]?’ (Lk 10:29)

- (9-26) Ma [wale fo alo-e 'are ta'a fo 'e io a-la] ka lofo
 and person DEM.DIST spirit-INDEF.PERS thing be.bad DEM.DIST 3SG stay at-3SG.PERS SEQ jump
 fa-daulu, ma ka kwai-daulu.
 DAT-3PC.PERS and SEQ abuse-3PC.OBJ
 'And that man in whom the evil spirit was residing lept on them and overcame them.'
 (Acts 19:16)

Reflexive (§ 3.3.1) and reciprocal (§ 5.2.3) constructions, including (9-22) and (9-27) (respectively), often involve an anaphoric personal suffix.

- (9-27) ma [daro] ka alaa kwailiu fa-daroa
 and 3DU SEQ say go.around DAT-3DU.PERS
 'And they said to one another...' (Lk 24:32)

9.2.3 Complements of deverbal nouns

Deverbal nouns (see § 5.3) may appear with a personal suffix indicating the absolutive argument of the underlying verb. The personal suffix often indexes an anaphoric complement, especially when the deverbal noun is part of a purposive nominalization construction (cf. § 5.3.2), as it is in examples (9-28) - (9-29). In (9-28), the indexed anaphor is the head nominal in a relative clause construction, while in (9-29), the referent of the anaphoric suffix is simply a topical entity which has been mentioned in previous clauses.

- (9-28) teu gera galo-fi-a 'ali-a goulu li lia gera fonu 'ali-a ['ai si'ina
 drinking.cup 3PL work-TR-3SG.OBJ INS-3.OBJ gold DEF 3SG 3PL fill INS-3.OBJ tree spice
 fofo 'oka gi fa-la 'ago-fi-na-li].
 perfume be.good PL DAT-3.PERS burn-TR-NMLZ-INDEF.PERS
 '...drinking cups they made out of gold, which they fill with good perfumed sticks for
 burning...' (Rv 5:8)

- (9-29) tekwa lo mae God 'e lesi-a lo 'are [gera] tau-da gi, ma ka rerei
 be.long FOC hither god 3SG see-3.OBJ FOC thing 3PL do-3PL.OBJ PL and SEQ be.ready
 fa-la kwai-na-da
 DAT-3.PERS punish-NMLZ-3PL.OBJ
 'A long time ago God saw the bad things they did and prepared to punish them.' (2 Pt 2:3)

Example (9-30) shows another purposive nominalization construction. In (9-30) the anaphoric personal suffix indexes a fronted question word. Example (9-31) shows a relative clause construction where the head nominal is an indefinite pronoun which is indexed twice: once on the deverbal noun *maurina-* 'life', and once on the reflexive inalienably possessed noun *tala-*.

- (9-30) [Ite] 'amu la fa-la lesi-na-la 'i lifi-fo?
 who 2PL go DAT-3.PERS see-NMLZ-3SG.PERS LOC place-DEM.DIST
 'Whom are you going to see there?' (Mt 11:7)

- (9-31) [Ite 'e oga ka-e dau fafi-a mauri-na-la 'ala 'i tala-la],
 who DEM.PROX want SEQ-IRR hold against-3.OBJ live-NMLZ-3SG.PERS 3SG.BEN PROFORE self-3SG.PERS
 'i lia ka-e mae.
 PROFORE 3SG SEQ-IRR die
 'Whoever wants to save his own life, he is the one who will die.' (Lk 17:33)

9.2.4 Locative and indefinite anaphors

In this final section we devote special attention to anaphoric relations involving temporal, spatial, or indefinite referents which are indexed with a personal suffix on a noun or noun-like preposition. We have noted above in § 9.2 that there are special personal suffixal morphs which index complements with indefinite reference both for *in situ* and anaphoric contexts. Here we discuss a suffix which generally refers back to a singular, indefinite noun phrase, **-i**, and its plural counterpart, **-li**. On preliminary analysis, we treat the anaphoric indefinite suffix **-i/-li** as if it were a contextual variant of the *in situ* indefinite suffix **-e/-i**. A question that remains to be answered is why vowel harmony obtains on the *in situ* suffix, but not on the anaphoric suffix.

9.2.4.1 The use of indefinite **-i**

9.2.4.1.1 Locative reference

The indefinite anaphoric personal suffix often appears in clauses having a fronted or topical spatial or temporal adjunct, e.g., (9-32) - (9-33), or in questions where the questioned element is a location and the interrogative word is fronted, as in (9-34).

- (9-32) la la ka dao a-la [talasi la 'amu ka-e la a-i].
 until SEQ arrive at-3.PERS time DEM4 2PL SEQ-IRR go at-INDEF.PERS
 '...until it is time for you to go.' (Lk 9:4)
- (9-33) Ma gia ka lalao nanata, la la gia ka dao a-la [lifi gia ka-e
 and 1INCL.PL SEQ run be.strong until 1INCL.PL SEQ arrive at-3.PERS place 1INCL.PL SEQ-IRR
 faa-sui-a a-i].
 CAUS-finish-3SG.PERS at-INDEF.PERS
 '...and let us run with patience until we reach the finish line' (Heb 12:1)
- (9-34) [I fe] 'amu alu-a a-i?
 LOC where 2PL put-3SG.OBJ at-INDEF.PERS
 'Where have you laid him?' (Jn 11:34)

A particle **ei** in Toqabaqita, which may be cognate with Wala **a-i**, is analyzed as a locative pro-form by Lichtenberk, since it is used almost exclusively in that language to mark the gap site of an *ex situ* locative argument, as in (9-35). It is therefore reasonable to ask whether Wala **ai** might be better analysed as a monomorphemic locative pro-form, like Toqabaqita **ei**. While doing so is reasonable, it would interfere with other aspects of our analysis: temporal and locative referents are very frequently introduced with **a-la** 'at-3.PERS' (see, e.g., **ala talasi** in (9-32), **ala lifi** in (9-33)) and we analyse **a-i** as alternating with **a-la**, where the noun-like preposition **a-** remains constant.

- (9-35) Qi fei n=o uusi-a kofe naqi qi ei?
 LOC where FOC-2SG.NFUT buy-3.OBJ coffee this LOC LOCPRO
 'Where did you buy this coffee?' (Lichtenberk, 2008b:824)

The Wala suffix **-i** has a broader range of application than Toqabaqita **ei**, as it appears on a wide variety of roots accepting personal suffixes, including noun-like prepositions, inalienably possessed nouns, and deverbal nouns (§9.2), and its reference is not restricted to locations or periods of time.

9.2.4.1.2 Non-locative reference

The indefinite personal suffix **-i** appears on nouns and noun-like prepositions when their complement is an *ex situ* noun phrase with indefinite reference. Often, the anaphoric referent is also singular. This is the case in (9-36), where the indefinite article **te** explicitly indicates the indefinite reference, 'a branch':

- (9-36) ma gera ka kwate-a [te rareae 'ai] 'ali 'e dau a_i 'ali-a fili lima
 and 3PL SEQ give-3.OBJ INDEF.SPEC branch tree COMP 3SG hold at-INDEF.PERS INS-3.OBJ side hand
 aolo lia
 be.right 3SG
 '...and they gave him a branch so that he would hold it with his right hand...' (Mt 27:29)

The verb **dau** 'hold' takes an oblique object headed by the noun-like preposition **a-**; an example with an *in situ* referent is given in (9-37). In (9-36), we understand the suffix **-i** to refer back to **te rareae 'ali**, and therefore index an indefinite noun, not a locative referent.

- (9-37) ma ka dau a-la te seni ba'ela fai-li-a kii a-la gilulaliu.
 and SEQ hold at-3.PERS INDEF.SPEC chain be.big COM-TR-3.OBJ key at-3.PERS pit be.deep?
 '...and he held a chain with a key to the bottomless pit.' (Rev 20:1)

We also find the suffix **-i** referring back to a plural indefinite referent, but generally this referent is a set of indefinite objects or persons.³ This is illustrated in (9-38). The previous verse introduces a set of ten virgins, and since these ten virgins are indefinite, modified by the indefinite determiner **na**, we find the indefinite suffix on the noun-like preposition **a-** in the second clause referring back to that set. (The alternative would be to use the third person plural personal suffix **-da**, but this would presumably require that **geli ulao** 'virgins' had definite reference.)

- (9-38) Ma na lima [geli ulao] dau nonoe, ma na lima a_i daulu
 and INDEF.SPEC five woman daughter 3PC be.foolish and INDEF.SPEC five at-INDEF.PERS 3PC
 ka malata.
 SEQ be.wise

³ According to our analysis where **-i** has singular reference and **-li** has plural reference, example (9-38) (with **-i** rather than **-li**) is at first glance anomalous. It will be recalled, however (cf. §7.2.3), that singular indefinite determiners (rather than plural) often appear with noun phrases containing a numeral, as (9-36) does.

'And five maidens were foolish, and five of them were wise.' (Mt 25:2)

Another example of the indefinite anaphoric suffix used to refer to individuals in a set is given in (9-39). Here, the three tabernacles do not yet exist, and the anaphoric suffix to refer back to them therefore takes its indefinite singular, rather than third person singular form.

- (9-39) laka-e raunai-li-a [ta olu babala], ta a-i fa-mu,
 1SG.SEQ-IRR build-TR-3.OBJ INDEF.NSPEC three tabernacle INDEF.NSPEC at-INDEF.PERS DAT-2SG.PERS
 ta a-i fa-la Moses, ma ta a-i fa-la Elaeja.
 INDEF.NSPEC at-INDEF.PERS DAT-3.PERS M. and INDEF.NSPEC at-INDEF.PERS DAT-3.PERS E.
 'I will build three tabernacles: one of them for you, one of them for Moses, and one of them for Elijah. (Mt 17:4)

While we believe that treating *-i* as indexing singular indefinite anaphoric referents is on the right track, some examples exist which suggest that future refinements will be necessary. In (9-40), for instance, we would expect the suffix *-i* to affix to *fofo-* as the anaphoric reference is indefinite, *te hosi kaka'a* 'a white horse'. Instead, we find the much more common third person personal suffix.

- (9-40) laka lesi-a [te hosi kaka'a]. Ma wale fo 'e gwauru 'i
 1SG.SEQ see-3.OBJ INDEF.SPEC horse be.white and person DEM.DIST 3SG sit LOC
 fofo-la
 on.top-3SG.PERS
 '...I saw a white horse; a man was sitting on it...' (Rev 6:2)

9.2.4.2 The use of indefinite *-li*

We have not found any uses of the suffix *-li* as a locative anaphor. Otherwise, *-li* is similar in function to *-i*, except that it refers back to indefinite plural referents rather than indefinite singular referents. For instance, in (9-41), there is an indefinite plural article modifying *'are* 'thing', and the anaphoric suffix referring back to this noun phrase is *-li*:

- (9-41) [Tali 'are ioli gi iko 'ali gera sai sai a-li 'i lao], gera
 INDEF.NSPEC.PL thing people PL NEG COMP 3PL know know at-INDEF.PL.PERS LOC before 3PL
 ka-e sai lo a-li.
 SEQ-IRR know FOC at-INDEF.PL.PERS
 'Some things that people didn't know about before, they will know about them.' (Mk 4:22)

Another example of *-li* referring back to an indefinite nominal referent is (9-42), where it acts as a placeholder for *fu bunu* 'seven trumpets'.

- (9-42) Sui fiu eniselo fo gi gera ka rerei lo fa-la uufi-na-la [fiu
 then seven angel DEM.DIST PL 3PL SEQ prepare FOC DAT-3.PERS play-NMLZ-3.PERS seven
 bunu gera dau a-li gi].
 trumpet 3PL hold at-INDEF.PL.PERS PL
 'Then the seven angels prepared to play the seven trumpets which they were holding.'
 (Rev 8:6)

Some interplay between the indefinite determiners (§ 7.2) and the indefinite anaphoric suffix is suggested by examples (9-43) - (9-44). Example (9-43) depicts a very similar scene to the one given in (9-40) above. The noun phrase *hosi gi* 'horses' lacks a determiner, we find the third person plural personal suffix *-da* rather than the indefinite suffix *-li*. Conversely, in (9-44), we find the noun phrase *tali hosi...* 'some horses', which does contain a determiner, referred back to using the indefinite personal suffix *-li*. However, *-li* does not *necessarily* refer back to a noun phrase containing an indefinite determiner, as (9-42) illustrates.

(9-43) lau lesi-a [hosi gi], fai-li-a wale fo gera gwauru 'i fofo-da gi.
 1SG see-3.OBJ horse PL COM-TR-3.OBJ person DEM.DIST 3PL sit LOC on.top-3PL.PERS PL
 'I saw horses, and the people that sat on them...' (Rev 9:17)

(9-44) Moulu ka-e alu-a [tali hosi fa-la Paul] 'ali 'e tae 'i
 2PC SEQ-IRR put-3.OBJ INDEF.NSPEC.PL horse DAT-3.PERS P COMP 3SG ascend LOC
 fofo-li
 on.top-INDEF.PERS
 'Provide horses for Paul for him to climb on to...' (Acts 23:24)

10 Clause linkage

In this chapter we discuss constructions involving two clauses. We make a rough division between coordinating-type linkage (§10.1) and subordinating-type linkage (§10.2). We do not intend to make use of any theoretically sophisticated notion of *coordination* or *subordination*, but simply distinguish linkage between two independent clauses (where each one may function as a complete sentence), and linkage where one of the clauses does not function independently, and is typically “lower” than the main clause when the constructions are diagrammed according to their constituent structure.

10.1 Coordination

Here we term ‘*coordination*’ a linkage between two clauses, each of which can occur independently. Coordination does not involve any restrictions on the marking of tense-aspect-mood-polarity categories, or argument structure alignment, of either of the two clauses. In the orthography, coordinated clauses may be separated by a comma, a period, or simply a space. Frequently in our corpus two coordinated clauses are separated by a verse break. In this section we first describe coordination constructions where the two coordinated clauses are separated by an overt marker of coordination (§10.1.1). We then treat asyndetic coordination, or coordination with no overt marker of coordination (§10.1.2).

10.1.1 Overt coordination

Overt coordination is so termed because a particle analyzed as having coordinating function separates the two linked clauses. The particles listed in table 10.1 serve such a function.

Table 10.1: List of words which function as coordinating operators

<u><i>ma</i></u>	‘and’
<u><i>'o ma</i></u>	‘or’
<u><i>sui</i></u>	‘then’
<u><i>wasua ma</i></u>	‘but’

More specifically, we consider the coordinating particles to introduce the second of two linked clauses, rather than to mark the first clause as having a coordinate homologue. This is so because when two coordinated clauses are separated by an orthographic break of some kind (a comma, a period, or a verse boundary), the coordinating particle always appears after the break, at the start of the second clause, as in (10-1), which is separated from the preceding clause by a verse break. In this and subsequent examples in this section, coordinating particles are underlined, and linked elements are surrounded by square brackets.

- (10-1) Ma [ka dau fafi-a fiu fe kwalikwali gi 'ali gula lima aolo lia].
and SEQ hold against-3.OBJ seven CLF star PL INS side hand be.right 3SG
'And he held seven stars in his right hand.' (Rv 1:16)

10.1.1.1 *ma* 'and'

The particle *ma* coordinates two sentences, with a conjunctive function. As with other coordinating operators, it appears immediately before the beginning of the second of two coordinated clauses. Examples (10-2) - (10-3) show conjoined clauses with the same and different subjects. Example (10-4) shows two coordinated clauses which together form a relative clause.

- (10-2) [Wale fo ka tatae], ma [ka oli lo fa-la falua lia].
person DEM.DIST SEQ get.up and SEQ return FOC DAT3.PERS village 3SG
'The man stood up, and went back to his village.' (Mt 9:7)
- (10-3) [Alo-e 'are abu ka talai lau], ma [eniselo ka sake lau fa-la 'i
spirit-INDEF.PERS thing be.holy SEQ lead 1SG and angel SEQ take 1SG DAT3.PERS LOC
lao-la abae lifi kwasi].
inside-3.PERS CLF place be.wild
'The holy spirit led me, and the angel took me into the wilderness.' (Rv 17:3)
- (10-4) Ma [ioli ['e fakwalaimoki-a Fa-rono-na 'Oka li], ma [ka si-siu abu], 'i lia
and people 3SG believe-3.OBJ CAUS-hear-NMLZ be.good DEF and SEQ washed be.holy LOC 3SG
ka-e mauri firi fai-li-a God].
SEQ-IRR live be.firm COM-TR-3.OBJ G.
'And he who believes the Good News, and is baptized, he shall live eternally with God.'
(Mk 16:16)

10.1.1.1.1 *Ma* as a coordinator of NP constituents

Ma may also be used to coordinate two constituents within a noun phrase. However, it is the comitative verb-like preposition *fai-li-* (see § 3.3.2) which appears more frequently as a coordinating operator for nominals. The latter form must be an innovation in Wala, since *ma* is traceable to Proto-Oceanic (Moyse-Faurie and Lynch, 2004:449-50), and Kwaio and Toqabaqita lack a word cognate with *fai-li-* used for coordinating nominals. We are at present unable to discern any clear factor conditioning the appearance of either of the forms *fai-li-* and *ma*. Both are used for coordinating nominals with a variety of different grammatical roles.

Both may conjoin the subjects of intransitive verbs, as in (10-5) - (10-6):

- (10-5) [mama Jesus] ma [teite lia] daro la fa-la falua ba'ela 'i Jerusalem
father J. and mother 3SG 3DU go DAT3.PERS town be.big LOC J.
'...Jesus' father and his mother went to Jerusalem...' (Lk 2:41)

- (10-6) Talasi [Jesus] fai-li-a [wale li galo-na lia gi] dau lu la ko fa-la 'i
 time J. COM-TR-3.OBJ person HABIT work-NMLZ 3SG PL 3PC go thither DAT-3.PERS LOC
 Jerusalem
 J.
 'When Jesus and his disciples went out to Jerusalem...' (Mt 20:29)

Both may conjoin the objects of transitive verbs, as in (10-7) - (10-8):

- (10-7) 'amu tatali-a [buluka] ma [dongki] 'amiu gi li
 2PL loosen-3.OBJ cow and donkey 2PL.NSBJ PL DEF
 '...you loosen your cows and donkeys...' (Lk 13:15)
- (10-8) God ka-e fa-sui-a [fana] fai-li-a [oga-la ioli].
 G. SEQ-IRR CAUS-finish-3.OBJ food COM-TR-3.OBJ belly-3.PERS people
 'God shall destroy food and people's bellies.' (1 Cor 6:13)

Both may conjoin two nouns which are together the object of a noun-like preposition, as in (10-9) - (10-10).

- (10-9) Gera-ka-e malimae lo a-la [mama] ma [teite] gera gi
 3PL-SEQ-IRR enemy FOC at-3.PERS father and mother 3PL PL
 '...they will be enemies of their fathers and mothers.' (Mt 10:21)
- (10-10) 'Amu ka soi ba'ela a-la [mama] fai-li-a [teite] 'amiu gi
 2PL SEQ call be.big at-3.PERS father COM-TR-3.OBJ mother 2PL.NSBJ PL
 'Honour your mothers and fathers.' (Eph 6:2)

Both **ma** and **fai-li-** may coordinate locative adjuncts, as in (10-11) - (10-12).

- (10-11) Talasi afula 'e 'ui lo mae 'ali-a ['i lao-la dunaa] ma ['i lao-la
 time be.many 3SG cast FOC hither INS-3SG.OBJ LOC inside-3.OBJ fire and LOC inside-3.OBJ
 kwai]
 water
 'Many times it cast him into the fire, and into the water...' (Mk 9:22)
- (10-12) sulia 'e fatai-li-a fa-ga ['are 'e 'oka] ma ['are ka ta'a] ['i
 because 3SG reveal-TR-3.OBJ DAT-1INCL.PL thing 3SG be.good and thing SEQ be.bad LOC
 lao-la malata-ga] fai-li-a ['i lao-la kwaiogalina gia] gi li.
 inside-3.PERS heart-1INCL.PL COM-TR-3.OBJ LOC inside-3.PERS will 1INCL.PL PL DEF
 'For it shows to us the things which are good and the things which are bad inside our hearts
 and inside our wills.' (Heb 4:12)

The only case where we find **fai-li-** but not **ma** is when two nouns which are jointly the subject of a transitive verb are conjoined, as in (10-13). Constructions of this type are not common enough in our corpus for us to say with confidence whether this gap is accidental or not.

- (10-13) [Mary geli 'i Magdala], fai-li-a [Mary teite Joses], daro lesi-a lifi
 M. woman LOC M. COM-TR-3.OBJ M. mother J. 3DU see-3.OBJ place
 fo gera alu-a Jesus a-i.
 DEM.DIST 3PL put-3.OBJ J. at-INDEFPERS
 'Mary of Magdala, and Mary the mother of Joses saw the place where they buried Jesus.'
 (Mk 15:47)

10.1.1.2 'o ma 'or'

The expression '**o ma** functions as a disjunctive, translatable by English '*or, neither/nor*'. Though it is spelled the same as the string '**o ma 'and you...**', we consider its probable origin to be a combination of a borrowed particle '**o** (from Pijin **o 'or**'), and the indigenous coordinator **ma** (introduced in §10.1.1.1 above). As Haspelmath (2000:27) notes, disjunction tends to be less frequent in language use than conjunction, with the consequence that there are languages which lack indigenous disjunctive coordinating particles, and various documented cases of borrowing of disjunctive coordinators. Disjunctive coordinators in related languages Toqabaqita and Longgu, however, do not appear to be of borrowed origin.¹

In (10-14) - (10-16) the particle links two or more full clauses.

- (10-14) 'Uri 'e ma [i-'o lo 'e Christ, wale 'e ka-e dao mae] 'o ma [meulu ka
 whether and PROFORE-2SG FOC 3SG C. person 3SG SEQ-IRR arrive hither or 1EXCL.PC SEQ
 maasi-a lou 'ameulu ta wale mamata]?
 wait-3.OBJ also 1EXCL.PC.BEN INDEFNSPEC person be.different
 'Are you Christ, the man who is to come, or shall we wait for a different person?' (Lk 7:19)
- (10-15) ala [ta wale ka 'ole wale] 'o ma [iko 'ali 'ole wale], 'e iko 'ali mamata
 if any man SEQ cut man or NEG COMP cut man 3SG NEG COMP be.different
 mola.
 CONTR.FOC
 '...whether someone is circumcised or uncircumcised, there is no difference.' (Gal 5:6)
- (10-16) Ma 'e 'ato [gera ka fiolo] 'o ma [gera ka siligou], 'o ma [da'afi raga]
 and 3SG be.difficult 3PL SEQ be.hungry or 3PL SEQ be.thirsty or sun be.hot
 'o ma [ta 'are 'ago~'ago] 'ali 'ago-fi-da.
 or any thing RED-burn COMP burn-TR-3PL.OBJ
 'And they shall not hunger, nor thirst, nor shall the hot sun or any hot thing burn them.'
 (Rv 7:16)

It will be noted that in (10-16), '**o ma** not only links clauses, but also links the noun phrases **da'afi raga 'hot sun**' and **ta 'are 'ago'ago 'any hot thing**'. Another example of NP coordination is given in (10-17). Coordination of NPs with '**o ma** occurs frequently in negated clauses, especially negative commands, as in (10-18) - (10-19).

¹ Toqabaqita has **mada** (Lichtenberk, 2008b:545, 969) and Longgu has **bwala** (Hill, 2011:301), which in both languages serve to coordinate both noun phrases and clauses.

- (10-17) God 'e foli olifae 'amiu 'ali-a 'are 'e liu-fi-a [silva] 'o ma [goulu].
 G. 3SG buy release 2PL.NSBJ INS-3.OBJ thing 3SG pass-TR-3.OBJ silver or gold
 'God will redeem you with things greater than gold or silver.' (1 Pt 1:18)
- (10-18) Ma iko [ta 'are midia], 'o ma [ta ioli 'e tau-a ta 'are li
 and NEG any thing be.base or INDEF.NSPEC people 3SG do-3.OBJ INDEF.NSPEC thing HABIT
 mau-na 'ali-a], 'o ma [ta ioli koto-koto] 'ali ruu 'i lao-la falua ba'ela
 fear-NMLZ INS-3SG.OBJ or any people lie COMP enter LOC inside-3.PERS town be.big
 fo.
 DEM.DIST
 'And there shall be no base thing, nor any man who does terrible things, nor any liars who
 enter that great place.' (Rv 21:27)
- (10-19) ikoso 'ali gera fafuta'a [fasifasi gi], 'o ma [ta 'ai], 'o ma [ta 'are 'e
 NEG2 COMP 3PL corrupt seed PL or INDEF.NSPEC tree or INDEF.NSPEC thing 3SG
 mauri 'i fofo-la wado].
 live LOC top-3.PERS ground
 '...that they should not hurt any grass, or any tree, or any living thing on the earth.' (Rv 9:4)

'**O ma** can also be used to coordinate locative phrases, as in (10-20).

- (10-20) Ma iko 'ali lau lesi-a mola ta ioli ['i nali] 'o ma ['i lao-la
 and NEG COMP 1SG see-3.OBJ CONTR.FOC INDEF.NSPEC people LOC heaven or LOC inside-3.PERS
 molagali], 'o ma ['i malu-la molagali]
 earth or LOC underside-3.PERS earth
 'And I did not see any man in heaven, nor in earth, neither under the earth...' (Rv 5:3)

We noted in the previous section (§ 10.1.1.1) that **ma** typically conjoins sub-NP constituents rather than full NPs. '**O ma**, on the other hand, conjoins NPs. We have not yet found any examples where two constituents within an NP are conjoined by '**o ma**.

10.1.1.3 **wasua** 'even (though)'

Clause-initial **wasua** designates a concessive interpretation of the clause it attaches to. Unlike other coordinating particles treated so far, **wasua** does not intervene between two coordinated clauses, but instead appears at the beginning of the first clause, the two clauses being separated by a comma. It sometimes combines with coordinator **ma**, as in (10-21). Three examples of **wasua** are given in (10-21) - (10-23).

- (10-21) Ma **wasua** [foa-na 'amiu fa-la batafe-na-la God ka 'oka], [iko 'ali 'amu
 and even pray-NMLZ 2PL.NSBJ DAT-3.PERS thank-NMLZ-3.PERS G. SEQ be.good NEG COMP 2PL
 rana-a mola ta ioli].
 help-3.OBJ CONTR.FOC INDEF.NSPEC people
 'For although your prayers for thanking God are good, you aren't helping people' (1 Cor 14:17)

- (10-22) Wasua [faga ka ba'ela, ma oru ba'ela ka kwai-a], [me abae 'ai wawade
even ship SEQ be.big and wind be.big SEQ strike-3SG.OBJ CLF CLF tree be.small
fo 'e totolia mola 'ala fa-la 'ere-na-la faga fo 'ali ka
DEM.DIST 3SG be.able CONTR.FOC 3SG.BEN DAT-3.PERS steer-NMLZ-3.PERS ship DEM.DIST COMP SEQ
la sulia malata-la ioli 'e ba'ela a-la sake-na-la faga li]
go concerning-3.OBJ thought-3.PERS people 3SG be.big at-3.PERS take-NMLZ-3.PERS ship DEF
'Even though a ship is large, and fierce winds lash it, a small stick is able to steer the ship so
that it follows the will of the captain [i.e., the big man who controls the ship].' (Jas 3:4)
- (10-23) Wasua [wale-li lifurono gi gera ka sae 'urifo], [logo-na fo, gera oga
even person-HABIT prophet PL 3PL SEQ talk thus gather-NMLZ DEM.DIST 3PL want
gera-ka kwate-a lo 'ada foa-si-na gera gi fa-daroa].
3PL-SEQ give-3.OBJ FOC 3PL.BEN pray-TR-NMLZ 3PL PL DAT-3DU.PERS
'Though the prophets [Barnabas and Paul] so spoke [intending to dissuade them from
sacrifices], the crowd, they wanted to give their offerings to them_{du}.' (Acts 14:18)

10.1.1.3.1 Scope over NP

As with other coordinating particles, **wasua** has a use where it modifies a nominal. Rather than conjoining two nominals, however, it assigns scalar focus (or mirativity) to a single NP. That is, with use of $X_{(NP)}$ **wasua**, where $P(\dots)$ is predicated of X, a pragmatic scale of likelihoods is introduced. According to the likelihood scale, there is some other salient discourse entity Y for which $P(Y)$ is more likely than $P(X)$. Several examples of this use of **wasua** are given in (10-24) - (10-27).

- (10-24) Ioli 'e 'oka, [sae-na-la] wasua ka-e 'oka lou.
people DEM.PROX be.good talk-NMLZ-3SG.PERS even SEQ-IRR be.good again
'Someone who is good, even his word is good.' (Mt 12:35)
- (10-25) Ma [rua wale fo gera foto-i daroa a-la 'ai rara folo gi fai-li-a
and two person DEM.DIST 3PL strike-TR 3DU.NSBJ at-3.PERS tree branch be.firm PL COM-TR-3.OBJ
Jesus] wasua daro soi tefulailii-a lou Jesus.
J. even 3DU call despise-3.OBJ also J.
'And even the two men who were nailed to the cross with Jesus mocked him.' (Mk 15:32)
- (10-26) Ma rabe 'are gi lia gera foa-si-na 'ali-a, gera ka 'ago-fi-a 'i maluma
and body thing PL 3SG 3PL pray-TR-NMLZ INS-3SG.OBJ 3PL SEQ burn-TR-3.OBJ LOC outside
a-la falua... ma [Jesus] wasua ka mae lou 'i maluma a-la falua 'i
at-3.PERS town and J. even SEQ die also LOC outside at-3.PERS town LOC
Jerusalem
J.
'And the bodies of the beasts that are sacrificed, are burned outside the town...and even
Jesus died outside the town of Jerusalem...' (Heb 13:11-12)

- (10-27) ma gera-ka alu-da sulii-a-tala 'i fofo-la tafe gera gi, 'ali talasi Peter
and 3PL-SEQ put-3PL.OBJ around-3.OBJ-street LOC on.top-3.PERS bed 3PL PL COMP time P.
ka liu a-i, [lulu-la] wasua ka liu fafi-da, ma gera ka 'akwaa.
SEQ pass at-INDEF.PERS shadow-3SG.PERS even SEQ pass against-3PL.OBJ and 3PL SEQ recover
'And they put them out in the street in their beds, so that when Peter passed by, even his
shadow could pass over them, and make them recover.' (Acts 5:15)

10.1.1.4 *wasua ma* 'but'

Wasua ma appears clause initially, and is translatable as 'but'. It is always written with a space. The two words which constitute it, *ma* (§ 10.1.1.1) and *wasua* (§ 10.1.1.3), are themselves clause linking operators. However, its meaning is not transparently compositional. As with English 'but', the function appears to be to contrast some aspect of the meaning of the first clause with a parallel aspect of the meaning of the second clause. In examples (10-28) and (10-30), the opposed meanings are explicit, while in (10-29), it would seem that some extralinguistic knowledge is necessary to resolve the point of contrast.²

- (10-28) [Ka-e mamasia 'i foka-mu malaa ninidua]. Wasua ma [ka-e 'afaa 'i
SEQ-IRR be.sweet LOC mouth-2SG.PERS resemble honey but SEQ-IRR be.bitter LOC
lao-la lofo-mu].
inside-3.PERS belly-2SG.PERS
'It shall be sweet in your mouth like honey, but it shall be bitter in your belly.' (Rv 10:9)
- (10-29) [Iko 'ali lau lio 'afi-a ta ioli 'ali ka soi ba'ela a-gu]. Wasua ma
NEG COMP 1SG look ALL-3.OBJ INDEFNSPEC people COMP SEQ call be.big at-1SG.PERS but
[lau sai a-miu lia iko 'ali 'amu too mola a-la ta kwai maa-na
1SG know at-2PL 3SG NEG COMP 2PL have FOC.CONTR at-3.PERS INDEFNSPEC be.friend-NMLZ
fa-la God].
DAT-3.PERS G.
'I don't look at someone so that he may honor me. But I know you, that you have not the
love of God in you.' (Jn 5:41-2)

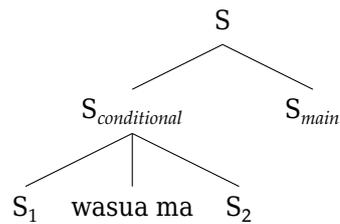
Example (10-30) illustrates the fact that *wasua ma* must appear clause-initially, but not necessarily sentence-initially. There *wasua ma* serves to conjoin two clauses which themselves form a conditional clause.

- (10-30) Ala [ta ioli 'e ili-a 'i lia 'e kwaima a-la God], wasua ma [ka lio ta'a
if any people 3SG say-3.OBJ LOC 3SG 3SG be.friend at-3.PERS G. but SEQ look be.bad
a-la walefae lia], 'i lia ioli koto-koto.
at-3.PERS brother 3SG LOC 3SG people RED-lie
'If any man say that he loves God, but he hates his brother, he is a liar.' (1 Jn 4:20)

We can schematize the organization of (10-30) roughly as follows:

² Example (10-29) might just involve a calque on English *but*.

(10-31)



10.1.1.5 *sui* 'then, after'

The word **sui** appears immediately before the second of two coordinated clauses, and is translatable as 'after', or 'and then'. It seems to be related to the intransitive verb **sui** 'be finished/depleted', and to the exhaustive particle **sui** 'all'. Examples are given in (10-32) - (10-33).

(10-32) Jesus ka sae 'uri 'e fa-daulu, "Moulu io 'amoulu 'i lifi-'e talasi
 J. SEQ say thusly DEM.PROX DAT-3PC.PERS 2PC stay 2PC.BEN LOC place-DEM.PROX time
 laka-e foa 'agua."Sui [ka talai-a Peter, James, ma John fai-li-a].
 1SG.SEQ-IRR pray 1SG.BEN then SEQ lead-3.OBJ P. J. and J. COM-TR-3SG.OBJ
 'Jesus said to them, "Wait here while I pray."And then he took Peter and James and John
 with him.' (Mk 14:32-3)

(10-33) Mola Jesus ka akwa ba'ela, sui [ka mae lo].
 CONTR.FOC J. SEQ shout be.big then SEQ die FOC
 'And Jesus cried with a loud voice, and died.' (Mk 15:37)

10.1.1.6 '*uri*+DEM 'therefore, thus'

Another type of coordination construction involves either '**urifo** or '**urila** appearing before the second of two clauses having a logical relationship, where the second clause may be viewed as a result or implication of the first.

(10-34) 'i lia 'e rono gia mola 'ala a-la talasi gia suga-a
 LOC 3SG 3SG hear 1INCL.PL CONTR.FOC 3SG.BEN at-3.PERS time 1INCL.PL ask-3SG.OBJ
 a-i gi sui. 'Urifo, [gia ka sai-a-i 'e kwate-a fa-ga
 at-INDEF.PERS PL EXHST therefore 1INCL.PL SEQ know-at-INDEF.PERS 3SG give-3.OBJ DAT-1INCL.PL.PERS
 taa gi gia suga-da faasi-a].
 whatever PL 1INCL.PL ask-3PL.OBJ ABL-3SG.OBJ
 'He hears us when we ask for something. Therefore, we know that he will give us whatever
 we ask of him.' (1 Jn 5:15)

(10-35) 'i osia-la 'i 'amiu ioli Christ gi lo, 'urifo ['i 'amiu lou wela a-la
 LOC sake-3.PERS LOC 2PL.NSBJ people C. PL FOC therefore LOC 2PL.NSBJ also child at-3.PERS
 kwalofa Abraham gi]
 tribe A. PL
 'Because you are people of Christ, you are also children of the tribe of Abraham.' (Gal 3:29)

- (10-36) ala sae alafuu-na 'ua-lo 'e galo 'oka mola 'ala, 'urila [iko 'ali
if talk promise-NMLZ COMPL-FOC 3SG work be.good CONTR-FOC 3SG.BEN therefore NEG COMP
gia booboo mola fa-la ta sae alafuu-na fa'alu 'i
1INCL.PL need CONTR-FOC DAT-3.PERS INDEF.NSPEC talk promise-NMLZ be.new LOC
buri-la].
behind-3SG.PERS
'If the old compact had worked well, then we would not have needed to make a new one
after it.' (Heb 8:7)

See §10.2.2.3 for further discussion on the form '*uri*'.

10.1.1.7 *lia fo* 'wherefore'

Lia fo is used in a construction very similar to that involving '*uri fo*' and '*uri la*' (§10.1.1.6). It may introduce a clause which expresses a logical result of a preceding clause. Two examples are given in (10-37) - (10-38). *Lia fo* usually precedes the second of two clauses separated by a period (78 times), rather than by a comma (5 times). The expression *lia fo* contains the independent 3SG pronoun *lia*, whose antecedent in this case we assume to be the preceding clause itself. An expression which is approximately synonymous is '*are (la) fo*', lit. 'that thing', where the semantically empty noun '*are*' is used rather than pronominal *lia*. An example is given in (10-39).

- (10-37) ma nali gula a-la rabe, gia ili-a 'uri iko 'ali gera 'ilitoa
and INDEF.SPEC.PL side at-3.PERS body 1INCL.PL say-3SG.OBJ thus NEG COMP 3PL govern
mola, lia fo [gia ka lio 'oka sulida].
CONTR-FOC wherefore 1INCL.PL SEQ look be.good concerning-3PL.OBJ
'And there are some parts of the body which we consider to be weak, for which reason we
look after them.' (1 Cor 12:23)
- (10-38) ma a-la talasi 'e, malimae afula lia gi gera dao lo. Lia fo, [gia
and at-3.PERS time DEM.PROX enemy be.many 3SG PL 3PL arrive FOC wherefore 1INCL.PL
ka sai-a-la lia sui-na-la molagali 'e garani ka dao lo].
SEQ know-at-3.PERS 3SG finish-NMLZ-3.PERS world 3SG be.near SEQ arrive FOC
'And now, many of his (=Jesus') enemies have arrived, whereby we know that the end of the
world is nearing.' (1 Jn 2:18)
- (10-39) 'Amu sai-a-la God 'e rada. 'Are la fo, ['amu sai lou a-i
2PL know-at-3.PERS G. 3SG be.correct thing DEM4 DEM.DIST 2PL know also at-INDEF.PERS
ioli gera tau-a 'are 'e rada gi li, 'i gera lo wela God gi].
people 3PL do-3.OBJ thing 3SG be.correct PL DEF LOC 3PL FOC child G. PL
'You know that God is righteous, for which reason you also know that people who do
righteous things are God's children.' (1 Jn 2:29)

10.1.2 *Asyndetic coordinating constructions*

In this section we consider a kind of coordination construction in which no overt coordinating operator is present. In some cases, two clauses which do not have any overt marker of coordina-

tion are separated by a comma in the orthography; we will refer to this type of construction as “comma-separated clauses.” Elsewhere, there is no comma to separate the clauses and the two are directly juxtaposed; we call these “directly juxtaposed clauses.” We distinguish these two types of clauses because we assume that the presence of a comma is meaningful—most likely used to represent a pause that occurs in this position in the spoken language—but we note the possibility that this is simply a stylistic choice on the part of the Bible translators.

Both comma-separated and directly juxtaposed clauses have a conjunctive relationship, as examples (10-40) and (10-41) show:

- (10-40) Ma [eta-la eniselo ka la], [ka niki-a dako-e 'are lia 'i fofo-la
and one-3.PERS angel SEQ go SEQ pour-3.OBJ basin-INDEF.PERS thing 3SG LOC top-3.PERS
wado].
ground
'And the first angel went and poured his vial on the ground.' (Rv 16:2)

- (10-41) ma [ka bulusi] [ka sae 'uri 'e fa-da]
and SEQ turn SEQ say thusly DAT-3PL.PERS
'...and he turned and said to them ...' (Lk 14:25)

With directly juxtaposed clauses, the second clause lacks an overt subject NP and requires a sequential subject marker (see § 6.3.2). One pair of arguments is shared between the two clauses, where the subject of the second clause can be interpreted as S, A, or O of the preceding clause. Comma-separated clauses can each have different subjects, but when there is no overt subject in the second clause, the same argument-sharing possibilities apply as with directly juxtaposed clauses.

When the second clause in an asyndetic construction is intransitive, the shared argument is typically the absolutive (i.e., S/O) argument of the first clause, and the subject argument of the second clause. An example of shared S_1 and S_2 arguments in directly juxtaposed clauses can be seen in (10-41). An example with comma-separated clauses is given in (10-42).

- (10-42) ['i lia ka tatae], [ka oli fai-li-da fa-la 'i falua.]
LOC 3SG SEQ rise SEQ return COM-TR-3PL.PERS DAT-3.PERS LOC city
'...and he rose and returned with them to the city.' (Acts 14:20)

The following examples illustrate shared O_1 and S_2 with both comma-separated and directly juxtaposed clauses.

- (10-43) Ma [laka lesi-a Aofia], [ka sae 'uri 'e fa-gu]
and 1SG.SEQ see-3.OBJ lord SEQ say thusly DAT-1SG.PERS
'And I saw the Lord, He said to me...' (Acts 22:18) $O_1 = S_2$

- (10-44) ma [ka ala'ali-a] [ka la fa-la lesi-na-la kwaima lia gi]
and SEQ permit-3SG.OBJ SEQ go DAT-3.PERS see-NMLZ-3.PERS friend 3SG PL
'...and he [Julius] allowed him [Paul] to go see his friends.' (Acts 27:3) $O_1 = S_2$

Although there seems to be a preference for an S/O pivot when the second clause is intransitive, we have found exceptions to this pattern, given in (10-45) and (10-46):

(10-45) [ma ka lii-a], [ka sae 'uri 'e]
and SEQ break-3SG.OBJ SEQ talk thusly
'...and he broke it, and he said...' (1 Cor 11:24) $A_1 = S_2$

(10-46) [Jesus ka olisi gera] [ka sae 'uri 'e]
Jesus SEQ answer 3PL SEQ speak thusly
'..Jesus answered them and said ...' (Jn 8:58) $A_1 = S_2$

We assume pragmatic cues help resolve any potential ambiguities in anaphoric reference.

When both clauses in comma-separated or directly juxtaposed clauses are transitive (and there is no overt subject in the second clause), the shared argument is the A argument of both clauses (the O arguments are also shared):

(10-47) ma [ka sake-a], [ka 'ani-a 'i maa-da]
and SEQ take-3SG.OBJ SEQ eat-3SG.OBJ loc eye-3PL.PERS
'...and he took it and ate it in front of them.' (Lk 24:23) $A_1 = A_2$

(10-48) [ka sake-a] [ka alu-a 'i lao-la raraa]
SEQ take-3SG.OBJ SEQ put-3SG.OBJ LOC inside-3SG.PERS prison
'...and he took him and put him in prison.' (Mt 18:30) $A_1 = A_2$

One point of interest to be noted concerning both types of asyndetic constructions is the lack of examples where the focus particle **lo** appears between the first and second clause. **Lo** is only attested after the *second* verb in asyndetic constructions, as in (10-49) and (10-50).

(10-49) Ma [Lifae ka tatae], [ka la lo 'ala fai-li-a].
and L. SEQ rise SEQ go FOC 3SG.BEN COM-TR-3SG.OBJ
'And Levi got up and followed him.' (Mk 2:14)

(10-50) Ma [gera ka tafi-si-a Jesus] [ka io lo talifili-a fai-li-a geli fo
and 3PL SEQ leave-TR-3.OBJ J. SEQ stay FOC be.alone-3.OBJ COM-TR-3.OBJ woman DEM.DIST
'e ura mola 'ala 'i lifi-fo].
3SG stand CONTR.FOC 3SG.BEN LOC place-DEM.DIST
'...and they left Jesus alone with the woman who was standing in that place.' (Jn 8:9)

Although this suggests that the two clauses may not be independently marked for aspect,³ and are therefore not co-ranking clauses, we do find examples of directly juxtaposed clauses in which one clause bears irrealis marking and the other does not, such as (10-51).

(10-51) ma [ka marabe] [ka-e mae osia-la 'e dona lau]
and SEQ be.willing SEQ-IRR die sake-3SG.PERS 3SG follow 1SG
'...and he is willing to die for the sake of following me ...' (Mt 10:39)

³ It will be recalled that **lo** marks focus as well as aspect.

The fact that the first verb in conjoined clauses may not contain **lo** might aid in parsing: The presence of **lo** at the end of a subject NP containing a relative clause disambiguates some sentences which might otherwise have the same surface word order as directly juxtaposed clauses. See, for example, (10-52) – (10-53), where relative clauses are enclosed in square brackets.

(10-52) Ma wale fo ['e mae lo] ka mauri lou
 and person DEM.DIST 3SG die FOC SEQ live again
 'And he that was dead came alive again...' (Jn 11:44)

(10-53) ['Amu si-siu abu sui lo] ka fataili-a 'amu 'ado lo fai-li-a Christ
 2PL RED-wash be.holy EXHST FOC SEQ show 2PL be.together FOC COM-TR-3.OBJ C.
 'You who have already been baptized have shown that you are in the company of Christ.'
 (Gal 3:27)

The distribution of **lo** might be explained partly on functional grounds: the pattern we have observed happens to have the functional advantage of making relative clause–main clause sequences and sequences of directly juxtaposed main clauses more distinct.⁴ The relationship between the two clauses in asyndetic constructions merits further study. One area for investigation would be that of argument sharing between the two clauses; we assume a pragmatic rather than grammatical pivot, although our methods do not allow us to test whether the shared argument can be ambiguous. It seems likely that clauses linked asyndetically have a closer semantic relationship than those linked with coordinating particles, but, again, our source of data prevents us from investigating in detail the semantics of clause linkage in the language.

10.2 Subordination

Structures where a clause is syntactically dependent are of three types: (i) structures where a full clause is the object of a verb (event argument constructions), (ii) structures where a clause is introduced by a subordinating particle which has grammaticalized from a verb-like preposition, and (iii) structures where a subordinate clause is introduced by a noun or noun-like preposition. These types of constructions are discussed in §§ 10.2.1 – 10.2.3, respectively.

10.2.1 Event argument constructions

Certain verbs which might be construed as taking an event as an argument, (*viz.* verbs of perception, volition, showing) appear in constructions which superficially resemble directly juxtaposed clauses, yet do not involve argument sharing. We will call these event argument constructions for ease of reference (*cf.* also § 4.2.4.2.2.3). Two examples are given in (10-54) – (10-55).

(10-54) [Gera lesi-a] [Jesus ka-e fana fai-li-a ioli ta'a gi]
 3PL see-3.OBJ J. SEQ-IRR eat COM-TR-3.OBJ people be.bad PL
 '[They] saw Jesus eat with sinners...' (Mk 2:16)

⁴ It will be recalled that relative clauses lack any relativizing morpheme which clearly distinguishes them from main clauses (*cf.* § 7.10).

- (10-55) [God 'e nai-a] ['are fo ka-e fuli lo 'urifo fa-da].
 G. 3SG intend-3.OBJ thing DEM.DIST SEQ-IRR happen FOC thus DAT-3PL.PERS
 'God intended for this to happen to them.' (1 Pt 2:8)

Aside from their non-intersecting semantic ranges, there are two reliable formal differences between event argument constructions and directly juxtaposed clauses. First, event argument constructions almost always require that the second clause bear irrealis aspect marking on its subject agreement marker, while second of two directly juxtaposed clauses is almost never found marked for irrealis aspect (but see (10-51) for an exception). Compare (10-56), an event argument construction, with (10-57), an example of directly juxtaposed clauses. The shared argument in (10-57) is the object of the first clause and subject of the second, i.e., what they heard is finished.

- (10-56) Ma talasi [daro rono-a] [Jesus ka-e liu mae sulia tala li]
 and time 3DU hear-3.OBJ J. SEQ-IRR pass hither about-3.OBJ street DEF
 '...when they heard that Jesus passed along the street...' (Mt 20:30)

- (10-57) 'I buri-la [gera rono-a] [ka sui], gera ka batafe-a God.
 LOC after-3SG.PERS 3PL hear-3SG.OBJ SEQ finish 3PL SEQ thank-3.OBJ G.
 'And after they had heard it, they glorified God.' (Acts 21:20)

Second, and perhaps more importantly, it can be shown that the object of the first clause in an event argument construction is not the subject of the second clause (this is very often the case for directly juxtaposed clauses). The object of the first clause is instead the entire second clause, and is always marked with the *in situ* object suffix *-a*. Therefore, there is no argument sharing in event argument constructions.

That there is no argument sharing in an event argument construction can be seen by considering (10-58). When the independent third person plural pronoun *gera* is an object argument, the preceding transitive verb must be in its combining form, without an object suffix, since *gera* is a pronominal object (cf. §4.4.1). *Gera* in example (10-58) cannot be the object of *lesi-a* 'see (it)', since this verb bears an object suffix. The object of *lesi-a* is in this case the entire clause that follows. Event argument constructions are therefore those where a transitive verb takes a clausal complement. Another example is given in (10-59).

- (10-58) [Lesi-a] [gera ka-e kwate lau lo, wela wale li, fa-la lima-la wale ta'a
 see-3.OBJ 3PL SEQ-IRR give 1SG FOC child person DEF DAT-3.PERS hand-3.PERS person be.bad
 gi].
 PL
 'Behold, they have given me, the Son of man, into the hands of sinners.' (Mk 14:41)

- (10-59) ma [ka lesi-a] [daulu mo'osu lo]
 and SEQ see-3.OBJ 3PC sleep FOC
 '...and he saw that they had fallen asleep...' (Mt 26:40)

10.2.2 Subordinating particles related to verb-like prepositions

Three types of subordinate clauses are introduced by verb-like prepositions, or particles related to verb-like prepositions: **sulia** 'because', **'ali** COMP, and **'uri 'e** 'thusly'.

10.2.2.1 **sulia** 'because'

Sulia 'because' is clearly related to the verb-like preposition **suli-** 'along, around, concerning'. Because it has under its scope a whole clause, **sulia** 'because' might be thought of as a verb-like preposition which has a clausal argument (cf. § 10.2.1 for a precedent), and the final vowel can be considered the object-indexing suffix. One problem with treating **sulia** 'because' as a verb-like preposition, though, is that the final vowel is occasionally missing, as in (10-60), but not in a consistent fashion.

- (10-60) Suli [daulu mau rasua lo a-la talasi daulu lesi-a 'e liu fofo-la asi li].
 because 3PC fear very FOC at-3.PERS time 3PC see-3.OBJ 3SG pass top-3.PERS sea DEF
 'For they were very afraid when they saw him walking on top of the sea.' (Mk 6:50)

The verb-like preposition **suli-** has no object suffix when an independent pronoun follows, and this is also true of the subordinating particle. However, unlike verb-like prepositions, **sulia** 'because' does not reliably appear in a combining form when an independent pronoun follows. In (10-61) the form which appears is **sulia**, even though the 3PC independent pronoun **daulu** follows.

- (10-61) Sulia [daulu sai mola 'adaulu a-i 'i lia Aofia].
 because 3PC know CONTR.FOC 3PC.BEN at-INDEFPERS PROFORE 3SG lord
 '...because they knew that it was the Lord.' (Jn 21:12)

Sulia 'because' would appear to have grammaticalized from the verb-like preposition **suli-**, but at this stage in our analysis, we cannot convincingly account for the two alternations we find (combining form vs. affixed form).

10.2.2.2 **'ali** COMP

A similar situation of alternation obtains with the complementizer **'ali**, which is related to the instrumental verb-like preposition **'ali-**. An example is given in (10-62).

- (10-62) 'ali [God ka-e kwailufa 'ali-a ta'a-na 'amiu gi].
 COMP G. SEQ-IRR forgive INS-3.OBJ be.bad-NMLZ 2PL.NSBJ PL
 '...so that God will forgive your sins.' (Lk 3:3)

Although this particle appears most often without the object-indexing suffix, there are cases where the complementizer **'ali** appears with a suffix, like its instrumental homologue **'ali-**. These include several cases where the complement clause is a negated copula clause, as well as cases where the complement clause begins with a lexical noun. Two examples are given in (10-63) - (10-64).

(10-63) Alo-e 'Are Abu ka talai-a lo Jesus fa-la abae lifi kwasi 'alia
spirit-INDEF.PERS thing be.holy SEQ lead-3.OBJ FOC J. DAT-3.PERS CLF place be.wild COMP
[Saetan ka maili-tona-la].

S. SEQ intend-touching-3SG.PERS

'The holy spirit led Jesus into the wilderness so that Satan would tempt him.' (Mt 4:1)

(10-64) A-la talasi sui lo mae, 'i 'amiu iko 'alia [ioli God gi].
at-3.PERS time finish FOC hither PROFORE 2PL.NSBJ NEG COMP people G. PL

'Formerly, we were not people of God.' (1 Pt 2:10)

The particle '**ali**' introduces complement clauses in a large variety of constructions. In §§ 10.2.2.2.1 - 10.2.2.2.4 we list the most common types of constructions where '**ali**' serves to introduce a complement clause.

10.2.2.2.1 Clausal negation

When a whole clause is negated, '**ali**' introduces the negated clause, as in (10-65). Here it seems possible that the best synchronic account would be one where **iko 'ali** as a whole was treated as a clause-level negator, and that the presence of '**ali**' is due to the grammaticalization of **iko** from a verb. Negative constructions are discussed in more detail in § 11.2.

(10-65) Ma dau lu ka ruu ko, wasua ma iko 'ali [dau lu lesi-a lo rabe-la Aofia
and 3SG SEQ enter thither but NEG COMP 3PC see-3.OBJ FOC body-3.PERS lord
Jesus].

J.

'And they entered, but they did not find the body of the Lord Jesus.' (Lk 24:3)

10.2.2.2.2 Clausal arguments

Some verbs⁵ frequently take a whole clause as an argument, with the complement clause introduced by the complementizer '**ali**'.⁶ Examples are given in (10-66) - (10-67).

(10-66) Ma meulu totolia 'ali [meulu ka ker i 'amiu fa-la tau-na-la 'are gi
and 1EXCL.PC be.able COMP 1EXCL.PC SEQ send 2PL.NSBJ DAT-3.PERS do-NMLZ-3.PERS thing PL
fa-meulu].

DAT-1EXCL.PC.PERS

'And we are able to send you to do something for us.' (1 Thes 2:7)

(10-67) Ma Jiu gi, gera oga 'ali [gera lesi-a 'are mama'ala gi sui]
and Jew PL 3PL want COMP 3PL see-3.OBJ thing sign PL EXHST

'And the Jews, they want to see all the proof...' (1 Cor 1:22)

⁵ These include **totolia** 'be able'; **oga** 'want'; **malata** 'decide'; **talawarau** 'be possible'; **marabe** 'be willing'; and **'e'ela** 'refuse'.

⁶ Recall that verbs participating in the event argument construction (§ 10.2.1) have been analyzed as taking a clausal complement without a complementizer.

Some verbs, such as *barasi* 'dislike', may take both clausal complements introduced by '*ali*' as well as oblique instrumental arguments introduced by the instrumental verb-like preposition '*ali-*', underscoring the grammaticalization pathway from preposition to complementizer. Examples with the verb *barasi* 'dislike' are given in (10-68) - (10-69).

(10-68) Ma malimae ba lau gera barasi 'ali [lau walelitalona fa-da gi]
and enemy DEM 1SG 3PL dislike COMP 1SG king DAT-3PL.PERS PL
'But my enemies don't want me to reign over them...' (Lk 19:27)

(10-69) Ma ta ioli 'e barasi 'ali [lau], 'i lia 'e barasi lou 'ali-a [mama lau].
and any people 3SG dislike INS 1SG PROFORE 3SG 3SG dislike also INS-3.OBJ father 1SG
'And he that hates me hates my father as well.' (Jn 15:23)

10.2.2.2.3 Purposive clauses

A clause introduced by '*ali*' may appear as a clausal adjunct which follows the verb and its arguments, in which case it expresses purpose, and may be translated as 'so that'. Examples are given in (10-70) - (10-72).

(10-70) ma meulu ka olisi-da 'ali [gera ronosuli-a sae-na-la Jesus Christ].
and 1EXCL.PC SEQ answer-3PL.OBJ COMP 3PL obey-3.OBJ talk-NMLZ-3.PERS J. C.
'...and we will answer them so that they may obey the word of Jesus Christ.' (2 Cor 10:5)

(10-71) laka-e rana-da 'ali [gera ka too lou a-la mauri-na fa'alu].
1SG.SEQ-IRR help-3PL.OBJ COMP 3PL SEQ have also at-3.PERS live-NMLZ be.new
'I shall help them so that they may have a new life.' (Rom 11:14)

(10-72) ma ka kwate-a fa-la wale li galo-na lia gi, 'ali [daulu tolini-a
and SEQ give-3.OBJ DAT-3.PERS person HABIT work-NMLZ 3SG.NSBJ PL COMP 3PC divide-3SG.OBJ
fa-la ioli fo gi].
DAT-3.PERS people DEM.DIST PL
'...and he gave [the loaves and fish] to his disciples, that they share them for the people.'
(Mt 15:36)

10.2.2.2.4 Jussive clauses

A clause introduced by '*ali*' is sometimes separated from the main clause by a comma. In such cases a jussive reading is most appropriate. Two examples are given in (10-73) - (10-74).

(10-73) 'oilakina fa-la ioli gera sau-a to'omi tekwa gera gi ka fa'alu, 'ali [gera
blessing DAT-3.PERS people 3PL wash-3.OBJ cloth be.long 3PL PL SEQ be.new COMP 3PL
totolia 'ani-na-la fufua-e 'ai a-la mauri-na]
be.able eat-NMLZ-3.PERS fruit-INDEF.PERS tree at-3.PERS live-NMLZ
'Blessed be the people who wash their robes until they are like new; may they eat of the
tree of life.' (Rv 22:14)

- (10-74) sui dau lu ka fairalo fa-la wale kwaima dau lu gi 'i lao-la na
 after 3PC SEQ beckon DAT-3.PERS person be.friend 3PC PL LOC inside-3.PERS INDEF.SPEC
 baru lou, 'ali [dau lu la mae]
 boat again COMP 3PC go hither
 'And then they beckoned to their friends in the other ship, that they should come.' (Lk 5:7)

10.2.2.3 'uri 'e 'thusly'

The form **'uri 'e** 'thusly' is used to introduce direct speech, and is preceded by a speech act verb. An example is given in (10-75).

- (10-75) sui laka rono-a lou na line 'are faasi-a 'i nali 'e sae 'uri 'e,
 then 1SG.SEQ hear-3.OBJ again INDEF.SPEC voice thing ABL-3.OBJ LOC heaven 3SG talk thusly
 "Ioli God gi, 'amu la mae faasi-a falua laa!"
 people G. PL 2PL go hither ABL-3.OBJ town DEM4
 'And then I heard another voice from heaven saying, "People of God, come out of that place!"' (Rv 18:4)

For 1539 of the verses containing direct quotations introduced by **'uri 'e** (indicated by quotation marks in the orthography), we counted the speech act verbs most commonly appearing with a direct quotation introduced by **'uri 'e**. Results are listed in table 10.2.

Table 10.2: Frequency of verbs introducing direct speech acts with complementizer **'uri 'e**

Count	Word	Gloss	Count	Word	Gloss
1209	sae	'talk, say'	158	olisi	'answer'
97	soilidi	'ask'	20	rii	'shout'
20	akwa	'shout'	17	malata	'think'
7	foa	'pray'	6	alafuu	'promise'
6	fia	'suppose'	6	faarono	'tell'
4	aniulu	'beseech'	2	tofe	'deny'
2	nuu	'sing'	2	dorakwala	'mock'
1	nurunuru	'whisper'	1	balufi	'rebuke'
1	faora	'mock'			

Although most direct quotations are introduced by **'uri 'e**, the particle is not required for all speech act verbs. The verb **ili-** 'say' is unusual in that it can introduce a quotation directly, as it does in (10-76). Cases of **'uri 'e** introducing a direct quotation without a preceding speech act verb are not attested.

- (10-76) Sulia 'i lao-la geregerena abu God 'e ili-a, "'amu ka abu, sulia
 because LOC inside-3.PERS book be.holy G. 3SG say-3.OBJ 2PL SEQ be.holy because
 'i lau lau abu."
 PROFORE 1SG 1SG be.holy
 'Because in the holy book God says "Be holy, because I, I am holy."' (1 Pt 1:16)

A related particle which is often used to introduce direct quotations in Toqabaqita, **quna qeri**, is termed a 'pseudo-verb' by (Lichtenberk, 2008b:137-8), because in that language **quna** 'manner' is normally a noun, but when followed by the demonstrative **qeri** 'this', it behaves as a verb, requiring a subject agreement particle before it, as in (10-77).

(10-77) Wela qeri ka quna qeri, “Nau ku lae buria-na thaina-ku bia maku
child that SEQ manner this 1SG 1SG.NFUT go behind-3.PERS mother-1SG.PERS and father
nau.”

1SG

‘The child said “I am following my mother and father.”’ (Lichtenberk, 2008b:138)

A similar analysis for Wala **'uri 'e** might be made, but with some modifications. The first issue is that **'uri 'e** almost always appears together with a speech act verb, rather than instead of it, which is the case in Toqabaqita. The only way that **'uri 'e** could be considered a verb would be by proposing that it forms a compound with the preceding speech act verb. This would explain why a normally transitive verb like **soilidi-** ‘ask’ would be in its combining form when immediately followed by **'uri 'e**. The problem, however, is that **'uri 'e** can be separated from the main verb by right-delimiters of the verbal complex (cf. §4.2), as in (10-78), where the aspectual particle **lo**, which normally follows all main verbs, intervenes between the speech act verb and **'uri 'e**.

(10-78) Sui Jesus ka sae lo 'uri 'e, “Ioli afula gi God 'e kwalo-da, wasua ma barae
then J. SEQ say FOC thusly people be.many PL G. 3SG invite-3PL.OBJ but few
ioli mola 'e fili-da.”

people CONTR.FOC 3SG choose-3PL.OBJ

‘Then Jesus said, “There are many people whom God calls, but few whom he chooses.”’
(Mt 22:14)

This means that **'uri 'e** may not be a main verb in our classification. Treating **'uri 'e** as a verb-like preposition would still be possible, since these have some verb-like properties, but appear outside of the verbal complex. **'Uri 'e**, however, does not bear an object suffix like other verb-like prepositions, and this is the main verb-like property of verb-like prepositions.

There are, however a very small number of cases where **'uri 'e** clearly acts as a verb. In (10-79), it is the main verb, and is used where normally a speech act verb is used. What is unusual about (10-79) is that the reported speech act is not a speech act *per se*, but a quotation from the Old Testament (sc. Habbakuk 1:5) attributed to the Old Testament prophets.

(10-79) Gera ka 'uri 'e, “amu fafurono, ioli 'e 'amu faaora 'ali-a sae-na-la
3PL SEQ thusly 2PL listen people DEM.PROX 2PL despise INS-3.OBJ talk-NMLZ-3.PERS
God gi...”

G. PL

‘They [the prophets] said, “Listen, you people who despise God’s word!”’ (Acts 13:41)

'Uri 'e acts as a verb in reporting the contents of a book, a song, an inscription, *etc.* Two examples of such usage are (10-80) – (10-81).

(10-80) ma gera ka nu-li-a te fe nuu fa'alu la 'e 'uri 'e, “o totolia
and 3PL SEQ sing-TR-3.OBJ INDEF.SPEC CLF song be.new DEM4 3SG thusly 2SG be.able
sake-na-la buka...”

take-NMLZ-3.PERS book

‘And they sung a new song, saying, “you can take the book ...”’ (Rv 5:9)

- (10-81) Te rata-e 'are gera gere-a a-la to'omi tekwa lia li ma
 INDEF.SPEC name-INDEF.PERS thing 3PL write-3SG.OBJ at-3.PERS cloth be.long 3SG DEF and
 suli-a 'ae-la 'e 'uri 'e, "Walelitalona fafi-a walelitalona gi, ma aofia
 about-3.OBJ foot-3SG.PERS 3SG thusly king against-3.OBJ king PL and lord
 fafi-a aofia gi."
 against-3.OBJ lord PL
 'The name written on his clothes and his thigh is "King of kings, and lord of lords."
 (Rv 19:16)

While **'uri 'e** has some *sui generis* properties, it will prove useful to treat it as a type of intransitive verb-like preposition. Although all verb-like prepositions mentioned so far have been considered transitive, there is one other word which could conceivably fit into the new category, viz. **malaa** 'like, resembling'. **Malaa** has an invariant form, not taking any personal or object morphology, and behaves in some cases like a verb, as in (10-82), where it is preceded by the subject agreement pronoun **ka**.⁷

- (10-82) 'e madakwa ka malaa na galasi
 3SG be.clear SEQ resemble INDEF.SPEC glass
 '...it was clear as crystal...' (Rv 22:1)

In (10-83), however, **malaa** appears outside of the verbal complex, being separated from the main verb by the aspectual marker **lo**. So **malaa** might also conceivably be called an intransitive verb-like preposition.

- (10-83) fai-li-a madama ka melamelaa lo malaa 'abuu.
 COM-TR-3.OBJ moon SEQ be.red FOC resemble blood
 '...and the moon was red as blood.' (Rv 6:12)

10.2.3 Subordinating particles resembling nouns and noun-like prepositions

Other elements with a subordinating function have noun-like formal properties, behaving either as nouns or as noun-like prepositions.

⁷ We do not analyse **malaa** as **mala-a**, i.e., bearing an object suffix, because its combining form is also **malaa** (example (i)) and because we never find any alternative object suffixes attached, i.e., there is no **mala-da** in our corpus. In addition, when **malaa** takes a pronominal object-like argument, that argument is realized as an adjunct preceded by pronominal foreground **'i**, as in (ii) below.

- (i) wasua ma 'e iko 'ali malaa rasua 'are kwalaimoki 'i nali gi
 but and 3SG NEG COMP resemble be.much thing be.true LOC heaven PL
 '...but it does not much resemble the true things of heaven [KJV: [it] is a copy and shadow of heaven].' (Heb 8:5)
- (ii) gia-ka-e malaa 'i lia
 1PL.INCL-SEQ-IRR resemble PROFORE 3SG
 '...we shall be like him' (1 Jn 3:2)

Talasi 'when, time' is an invariant noun which may be directly modified by a relative clause, as in (10-84). **Talasi** may also be modified by non-clausal modifiers, as in (10-85).

- (10-84) Ma 'i gia sui gia sai-a-i kwaikwaina God 'e rada
 and PROFORE 1INCL.PL EXHST 1INCL.PL know-at-INDEF.PERS judgment G. 3SG be.correct
a-la talasi ['e lokokwainaina fa-la ioli gera tau-a 'are 'urifo gi li].
 at-3.PERS time 3SG punishment DAT-3.PERS people 3PL do-3.OBJ thing be.thus PL DEF
 'We all know that the judgment of God is correct when there is punishment for the people
 who do such things.' (Rom 2:2)

- (10-85) Ma tafaa fo meulu dau a-i iko 'ali 'oka fa-la dau-na
 and coast DEM.DIST 1EXCL.PC arrive at-INDEF.PERS NEG COMP be.good DAT-3.PERS arrive-NMLZ
 a-i talasi [a-la boni-li-gwari li].
 at-INDEF.PERS time at-3.PERS night-HABIT-cold DEF
 'And the port we arrived at was not a good port to arrive at in the winter' (Acts 27:12)

Other noun-like subordinators must directly or indirectly index a modifying clause. The subordinator '**i buri(la)** 'after' forms an adjunct which has the structure of a spatial NP modified by a relative clause, as in (10-86). **Buri-** 'behind' is an inalienably possessed noun, and when functioning as a subordinator it usually has a personal suffix indexing⁸ the modifying clause.

- (10-86) 'urifo 'i buri-la [Christ 'e dao lo], gia ka-e rada 'i maa-la
 wherefore LOC behind-3.PERS C. 3SG arrive FOC 1INCL.PL SEQ-IRR be.correct LOC eye-3.PERS
 God 'i osia-la fitoo-na a-la.
 G. LOC sake-3.PERS have.faith-NMLZ at-3SG.PERS
 'Wherefore after Christ comes, we will be correct in the eyes of God for sake of [our] faith
 in Him.' (Gal 3:24)

'I lao 'before' is a noun-like subordinator which is indirectly modified by a clause. The modification is mediated by the general-purpose noun-like preposition **a-**, whose personal suffix **-la** indexes the modifying clause. An example is given in (10-87).

- (10-87) Talasi 'ato gi ka-e dao mae 'i lao a-la [Jesus ka-e dao mae].
 time be.difficult PL SEQ-IRR arrive hither LOC before at-3.PERS J. SEQ-IRR arrive hither
 'A time of difficulty will come before Jesus returns.' (2 Tm 3:1)

⁸ It is in fact indeterminate whether the suffix indexes the modifying clause, or the subject nominal of the modifying clause, and whether the suffixation is productive. See also § 10.2.2 for discussion of this aspect of subordinators related to subordinators related to verb-like prepositions.

11 Negation

The present chapter is divided into two sections. The first, § 11.1, introduces the morphemes which can have negative meanings and describes possible lexical sources for these morphemes. The second section, § 11.2, illustrates the most common types of negation constructions.

11.1 Negative morphemes

We identify three morphemes with negative meaning: *iko* 'NEG', *ikoso* 'NEG2', and *'ato* 'cannot, be.difficult'. Sections 11.1.1 - 11.1.3 treat them in turn.

11.1.1 *iko* 'NEG'

The word *iko* is the most frequently attested negative morpheme. It functions as a negative operator, as will be described in § 11.2. It also occasionally functions as a lexical verb which can be translated as 'be missing'. Its status as a verb is confirmed by the presence of a preceding subject marker. Examples (11-1) - (11-2) show *iko* behaving as a lexical verb. The negative morpheme *iko* is also used to respond negatively to polar questions, as in (11-3) (cf. also § 4.6.1.1).

(11-1) Sulia lau dari-a seleni ba lau 'e iko.
because 1SG find-3.OBJ silver DEM3 1SG 3SG NEG
'...for I have found my silver piece which was lost.' (Lk 15:9)

(11-2) ma teke olu-la gula a-la madakwana ka iko lo
and one three-3.PERS side at-3.PERS light SEQ NEG FOC
'...and a third part of them was darkened...' [i.e., and one third side of the light was missing]
(Rv 8:12)

(11-3) "'I-'o Elaeja?" Ma ka olisi-da lou 'uri 'e, "Iko."
LOC-2SG Elijah and SEQ answer-3PL.OBJ again thusly NEG
'"Are you Elijah?" And he answered, "No."' (Jn 1:21)

11.1.2 *ikoso* 'NEG2'

As will be illustrated in § 11.2, the negative morpheme *ikoso* participates in a range of constructions similar to *iko*, with two important differences. First, it is more pragmatically marked than *iko*, as it is used in contexts where a habitual or jussive reading is required. Second, it does not appear as a lexical verb in our corpus, nor do we find it in constructions where a

negative morpheme has a verb-like patterning without the following complementizer, such as topical ellipsis negation (cf. § 11.2.5, below). Examples of **ikoso** are given in (11-4) - (11-6).

- (11-4) 'i lia ikoso too a-la 'ilitoa-na
 PROFORE 3SG NEG2 have at-3.PERS rule-NMLZ
 '[Such a man] will not have a kingdom...' (2 Cor 10:18)
- (11-5) Ma gera ka malaa lou me dasa ba oru 'e oru-fi-a 'ali uta ikoso too.
 and 3PL SEQ resemble also CLF cloud DEM3 wind 3SG blow-TR-3SG.OBJ COMP rain NEG2 rain
 'They are like clouds which the wind blows, so that rain will not fall.' (2 Pt 2:17)
- (11-6) Ma ikoso ta uulu 'ali kwaru lou a-mu.
 and NEG2 INDEF.NSPEC candle COMP shine again at-2SG.PERS
 'And no candle will again shine in you.' (Rv 18:23)

11.1.3 '**ato** 'cannot'

The morpheme '**ato**' denotes impossibility or great difficulty. It is used as a lexical verb to denote difficulty, as in (11-7), and it may also take a nominalizing suffix to derive a noun meaning '*difficulty*', as in (11-8). Elsewhere, its use as a lexical verb denotes impossibility, as in (11-9).

- (11-7) sulia 'amu raunai-li-a taki 'ato afula gi fa-la ioli, ma ka 'ato
 because 2PL build-TR-3.OBJ law be.difficult be.much PL DAT-3.PERS people and SEQ be.difficult
 rasua fa-da fa-la rono-suli-na-li.
 very DAT-3PL.PERS DAT-3.PERS hear-about-NMLZ-INDEF.PERS
 '...for you create laws which are very troublesome for people, and which are very difficult
 for them to obey.' (Lk 11:46)
- (11-8) Lau sai-a-la 'ato-na 'amiu gi
 1SG know-at-3.PERS be.difficult-NMLZ 2PL.NSBJ PL
 'I know your tribulations...' (Rv 2:9)
- (11-9) ma ka tau rasua fa-la lesi-na-la Jesus ma ka 'ato
 and SEQ do much DAT-3.PERS see-NMLZ-3.PERS Jesus and SEQ cannot
 'And he tried to see Jesus but could not...' (Lk 19:3)

The semantic relationship between difficulty and impossibility is obviously a close one, and in (11-9) '**ato**' could perhaps be glossed as '*be difficult*'. However, where '**ato**' is used as a negative predicate followed by a subordinate clause, its meaning is always one of impossibility, and we gloss it as '*cannot*'. The use of '**ato**' as a negative operator is illustrated in (11-10).

- (11-10) Gia ka-e lio 'afi-a ma ikoso 'ali gia lesi-a, suli-a 'ato 'ali
 1INCL.PL SEQ-IRR look ALL-3SG.OBJ and NEG2 COMP 1INCL.PL see-3SG.OBJ because cannot COMP
 gia sai-a-la dao-na a-la lifi fo kae io a-i.
 1INCL.PL know-at-3.PERS arrive-NMLZ at-3.PERS place DEM.DIST SEQ-IRR stay at-INDEF.PERS
 'We shall look for him, and not see him, because we cannot know how to get to the place
 where he is.' (Jn 7:36)

11.2 Some negative constructions

In this section we illustrate some of the most common types of negative constructions. Although the constructions listed in this section are not exhaustive of the possible uses of negative morphemes in Wala, they may be considered representative of the most frequent negative constructions appearing in our corpus. We divide the constructions according to the constituent under the scope of negation: either a full clause (§ 11.2.1), a sub-clausal constituent (§ 11.2.2), a non-verbal predicate (§§ 11.2.3 - 11.2.4), or an overt or implied topic (§ 11.2.5). The vetitive construction is treated in § 11.2.6.

11.2.1 Clause negation

In this section we briefly discuss and give examples of four types of negative constructions with differing meanings where the negated element is a full clause.

11.2.1.1 Simple negation

A full clause may be negated according to the following formula: The negative morpheme *iko* precedes a clause which is introduced by the complementizer '*ali*'. This construction is a simple negation construction in the sense that there are no additional pragmatic effects which accompany the negation. Examples are given in (11-11) - (11-13).

(11-11) Iko 'ali gera rono-suli-a God.
NEG COMP 3PL hear-about-3.OBJ G.
'They did not obey God.' (1 Pt 3:20)

(11-12) Iko 'ali lau la mae fa-la faa-sui-na-li
NEG COMP 1SG go hither DAT-3.PERS CAUS-finish-NMLZ-INDEF.PERS
'I have not come to destroy.' (Mt 5:17)

(11-13) Talasi dau lu lio ko, iko 'ali dau lu lesi-a lo ta ioli, talifili-a Jesus
when 3PC look thither NEG COMP 3PC see-3.OBJ FOC INDEF.NSPEC person only-3.OBJ Jesus
mola
CONTR.FOC
'And when they looked up, they didn't see anybody, except for Jesus.' (Mt 17:8)

11.2.1.2 Contrastive negation

What we have termed the contrastive focus particle *mola* is often found within the negated clause if that clause is being emphasised in the context of, or as against, something else, i.e., "not X, with respect to Y". In (11-14), *mola* appears where the negated clause is a consequence of the next clause; the state of affairs of the negated clause is explained when contrasted with the meaning of the next clause (in square brackets).

(11-14) iko 'ali lau lesi-a mola luma abu God 'i lao-la falua ba'ela fo,
NEG COMP 1SG see-3.OBJ CONTR.FOC house be.holy G. LOC inside-3.PERS city be.big DEM.DIST
[sulia Luma Abu fo lo God nanata ka tasa fai-li-a kale Sipsip]
because house be.holy DEM.DIST FOC god be.strong SEQ be.much COM-TR-3.OBJ CLF sheep

'I saw no temple in that city, for the temple is Lord God who is exceedingly strong, and the Lamb.' [KJV: And I saw no temple therein: for the Lord God Almighty and the Lamb are the temple of it.] (Rv 21:22)

In (11-15), the negated clause refers to a state of affairs which runs counter to an understood expectation in that context (that wedding guests wear appropriate dress); here *mola* emphasizes a contrast not with an adjacent clause, but with an implied cultural norm.

(11-15) ka lesi-a te wale iko 'ali 'e toro mola 'ali-a toro a-la
 SEQ see-3.OBJ INDEF.SPEC man NEG COMP 3SG dress CONTR.FOC INS-3.OBJ cloth at-3.PERS
 araaraina li.
 wedding DEF
 '...he saw a man who was not dressed in wedding clothing...' (Mt 22:11)

The contrastive focus particle *mola* follows that which it emphasizes, which is in most cases the verb, as in the above examples. Examples (11-16) – (11-17) show *mola* directly following nouns, in the first case within a prepositional complement of the verb, and in the second, the subject argument.

(11-16) Iko 'ali 'e la mae fai-li-a kwai mola talifili-a, wasua ma 'e la mae
 NEG COMP 3SG go hither COM-TR-3.OBJ water CONTR.FOC alone-3SG.OBJ but and 3SG go hither
 fai-li-a rua 'are fo gi sui, kwai fai-li-a 'abu.
 COM-TR-3.OBJ two thing DEM.DIST PL EXHST water COM-TR-3.OBJ blood
 'He did not come with water only, but he came with two things, water and blood.' (1 Jn 5:6)

(11-17) Talifili-a God mola 'e fa-mauri gia.
 only-3.OBJ God CONTR.FOC 3SG CAUS-live 1INCL.PL
 'Only God can save us.' (Rv 19:1)

11.2.1.3 *ikoso*: Habitual reading

It is possible to use *ikoso* instead of *iko* as the negative operator in a clause-level negation construction. We distinguish two different interpretations for constructions involving *ikoso*. The first interpretation is that the event in question customarily does not happen. We call this the habitual reading. Examples of the habitual reading are given in (11-18) – (11-21).

(11-18) Ikoso 'ali gera 'ani-a fana gera foa-si 'ali-a fa-la God kotokoto gi li,
 NEG2 COMP 3PL eat-3.OBJ food 3PL pray-TR INS-3SG.OBJ DAT-3.PERS god lie PL DEF
 ma ikoso gera 'ani-a 'abu, ma ikoso gera 'ani-a ta 'are too 'a~'ae gera
 and NEG2 3PL eat-3.OBJ blood and NEG2 3PL eat-3.OBJ INDEF.NSPEC thing have RED-foot 3PL
 lio-a
 hang-3SG.OBJ
 '...they don't eat food offered to false gods, or blood, nor do they eat anything with feet
 which has been strangled...' (Acts 21:25)

(11-19) Tau-na 'urifo lo ka-e tau-a ikoso 'ali 'amu fotorae ma 'amu ka toli
do-NMLZ thus FOC SEQ-IRR do-3SG.OBJ NEG2 COMP 2PL stumble and 2PL SEQ fall
'...if you do these things, you shall never stumble and fall...' (2 Pt 1:10)

(11-20) 'Are ioli ka 'ani-a ikoso 'ali 'e fa-'uli'uli-a mola ioli 'i
thing people SEQ eat-3SG.OBJ NEG2 COMP 3SG CAUS-be.dirty-3.OBJ CONTR.FOC people LOC
maa-la God
eye-3.PERS G.
'What people eat cannot defile them in the eyes of the Lord.' (Mk 7:18)

(11-21) ikoso 'ali lau io tekwa fae 'amiu
NEG2 COMP 1SG stay be.long COM 2PL.NSBJ
'I will not always be with you.' (Jn 12:8)

11.2.1.4 *ikoso*: Jussive reading

The second interpretation is typically associated with a second person subject, and indicates a negative wish or command. Non-second-person subjects are infrequent but do occur with this reading, which we will term the jussive. Though our understanding of the semantics of clause-level negation with *ikoso* is limited, it does not seem difficult to see the relationship between things which are not customary and things which are discouraged. Examples of the jussive reading of this type of negation construction are given in (11-22) – (11-24).

(11-22) Ikoso 'ali 'amu mau 'ali-a malimae 'amiu gi.
NEG2 COMP 2PL fear INS-3.OBJ enemy 2PL.NSBJ PL
'You should not fear your enemies.' (Phil 1:28)

(11-23) Ma gera ka ili-a fa-la siisii fo gi ikoso 'ali gera fafuta'a fasifasi gi
and 3PL SEQ say-3.OBJ DAT-3.PERS locust DEM.DIST PL NEG2 COMP 3PL spoil grass PL
'And they commanded the locusts that they should not hurt the grasses...' (Rv 9:4)

(11-24) Ikoso 'ali golu dau-a a-la fe atoa a-la fana-na li, taufasia ioli gi
NEG2 COMP 1INCL.PC hold-3SG.OBJ at-3.PERS CLF day at-3.PERS eat-NMLZ DEF lest people PL
gera bi kwalaa fae golu.
3PL PROXT quarrel COM 1INCL.PC
'We shouldn't seize him on a feast day, lest people quarrel with us.' (Mt 26:5)

11.2.2 *Constituent negation*

Individual constituents may be negated according to the formula *iko lou XP*, where *XP* stands for a noun or prepositional phrase. In this construction, only the morpheme *iko*, and not *ikoso*, appears. Examples are given in (11-25) – (11-27). We are not aware of any examples where a verb or verbal core is negated according to the constituent negation formula.

(11-25) 'e faa-mauri gia, iko lou 'i duna-la galo-na 'oka gia tau-da gi.
3SG CAUS-live 1INCL.PL NEG again LOC sake-3.PERS work-NMLZ be.good 1INCL.PL do-3PL.OBJ PL
'He saved us, not for the sake of the good deeds we did.' (Ti 3:5)

(11-26) ma 'amu ka kwaima a-la Aofia, ma iko lou 'are fa-la lui-na-miu
 and 2PL SEQ love at-3.PERS Lord and NEG again thing DAT-3.PERS distract-NMLZ-2PL.PERS
 ‘...[that] you love the Lord, and not things of distraction.’ (1 Cor 7:35)

(11-27) 'uta 'e iko 'ali moulu sai-a-la taa 'e lau sae sulia-a? Iko
 how DEM.PROX NEG COMP 2PC know-at-3.PERS what DEM.PROX 1SG say about-3SG.OBJ NEG
lou berete 'e laka-e sae sulia-a.
 again bread DEM.PROX 1SG.SEQ-IRR say about-3SG.OBJ
 ‘How is it that you do not understand what I am speaking about? It is not bread that I’m
 speaking about.’ (Mt 16:11)

11.2.3 Negative existential construction

A negative existential construction refers to the non-existence of a referential entity. The construction starts with the negative morpheme *iko*, followed optionally by the focus marker *lo*, and then a noun phrase which is in all cases led by the quantifier *ta* ‘which’, ‘INDEFNSPEC’. This construction is followed by the complementizer *'ali* and then the clause which the negated constituent is subject of. Examples are given in (11-28) – (11-30).

(11-28) Ma iko lo ta lifi 'ali ore 'i lao-la luma fo.
 and NEG FOC INDEFNSPEC place COMP remain LOC inside-3.PERS house DEM.DIST
 ‘And there was no room in the house [for them]’ (Mk 2:2)

(11-29) ma iko ta ioli 'ali totolia fa-la ruu-na 'i lao-la babala
 and NEG INDEFNSPEC people COMP be.possible DAT-3.PERS enter-NMLZ LOC inside-3.PERS barn
 abu li
 be.holy DEF
 ‘...and there was no man able to enter the temple.’ (Rv 15:8)

(11-30) Iko ta wale a-da 'ali ore lo 'ali ka loko kwaikwai-na
 NEG INDEFNSPEC person at-3PL.PERS COMP remain FOC COMP SEQ judge punish-NMLZ
 fa-mu? ... Wale ba'ela, iko lo ta wale.
 DAT-2SG.PERS ... person be.big NEG FOC INDEFNSPEC person
 ‘Is there no man among them remaining that would condemn you? ...Lord, no man.’
 (Jn 8:10-11)

11.2.4 Negative equational construction

A negated equational construction can be formed according to the formula for constituent negation (§ 11.2.2), with the predicating nominal being the negated constituent. Examples are given in (11-31) – (11-33).

(11-31) 'I 'amiu iko lou ioli lau gi.
 PROFORE 2PL.NSBJ NEG again people 1SG PL
 ‘You are not my people.’ (Rom 9:26)

- (11-32) 'i lau iko lou na gula a-la rabe
 PROFORE 1SG NEG again INDEF.SPEC side at-3.PERS body
 'I am not a part of the body.' (1 Cor 12:16)
- (11-33) Wasua ma falalau-na fo iko lou fa-rono-na 'oka kwalaimoki sulia-a
 but teach-NMLZ DEM.DIST NEG again CAUS-hear-NMLZ be.good be.true about-3.OBJ
 Christ.
 C.
 'But those teachings are not the true gospel of Christ.' (Gal 1:7)

11.2.5 Topic ellipsis negation

The topical ellipsis negation construction is one which might be paraphrased as 'As for A, X. And as for B, not so.' The formula is approximately as follows: A full sentence is followed by the formula **ma X ka iko**. X may be a noun phrase, or may be null. In the former case, the meaning is that the state of affairs referred to in the full sentence is not true of X. The grammatical function of X is under pragmatic control, as it may be a subject (11-34), oblique (11-35)-(11-36), and presumably object (though we lack examples of this).

- (11-34) Nali ioli gera malata ba'ela a-meulu, ma nali ioli ka iko.
 INDEF.SPEC.PL people 3PL think be.big at-1INCL.PC.PERS and INDEF.SPEC.PL people SEQ NEG
 'Some people think highly of us, and others don't.' (2 Cor 6:8)
- (11-35) 'amu malata sulia 'are 'i nali gi, ma 'are 'i lao-la molagali gi li
 2PL think about-3.OBJ thing LOC heaven PL and thing LOC inside-3.PERS world PL DEF
 ka iko.
 SEQ NEG
 'You should think about things in heaven, not things of the earth.' (Col 3:2)
- (11-36) Ma gera ka-e babalafe 'ada fai-li-a kwaiogalina a-la rabe li ma God
 and 3PL SEQ-IRR be.happy 3PL.BEN COM-TR-3.OBJ will at-3.PERS body DEF and G.
 ka iko.
 SEQ NEG
 'And they are pleased with the will of the flesh, and not that of God.' (2 Tm 3:4)

Where X is null, a different situation (e.g., a different time) is referred to where the state of affairs referred to in the full sentence is not true. Two examples are shown in (11-37)-(11-38).

- (11-37) Iko mola ta me 'are a-i, ala ko arai 'o ma ka iko.
 NEG CONTR.FOC any CLF thing at-INDEF.PERS if 2SG.SEQ husband or SEQ NEG
 'There is no difference between whether you are married or not.' (1 Cor 7:29)
- (11-38) ma ala 'ai 'e ka funu 'ali-a fua-e 'are gi a-la fe nali lo
 and if tree DEM.PROX SEQ bear.fruit INS-3.OBJ seed-INDEF.PERS thing PL at-3.PERS CLF year FOC
 ba mae, 'e 'oka. ma ala ka iko, ko tofua lo 'amua.
 DEM3 hither 3SG be.good and if SEQ NEG 2SG.SEQ cut-3SG.OBJ FOC 2SG.BEN
 'And if this tree bears fruit in the coming year, all well. If not, cut it down.' (Lk 13:9)

The topic ellipsis negation construction is one case where the behavior of *iko* is verb-like, since it always immediately follows the subject marker *ka*. Its behavior is unlike a lexical verb, however, in that its meaning is essentially grammatical: it might be considered to function as a sort of negated anaphor referring to an elided topic.

11.2.6 Vetitive construction

The vetitive construction is used for direct commands, and permits only second persons subjects. It is not clear whether it contains any overt negative morpheme. It is formed according to the formula given in (11-39), where a second person subject pronoun or subject marker is followed by either *ala* ‘if/at(?)’ or *alua* ‘put’, then a verb, then the particle *na*, which is identical in form to the usual nominalizing suffix. We have no evidence for deciding whether *na* should be glossed as a nominalizing suffix in this construction. In instances of this construction, we will gloss *na* as ‘NMLZ.VET’, simply for convenience in identifying this particular construction. The construction is relatively infrequent in our corpus, occurring approximately 20 times, and only with the intransitive verbs *rau ioli* ‘commit murder’, *malata fitala* ‘worry’, *mau* ‘fear’, *‘abero* ‘worry’, *iili ioli* ‘accuse’, and *ani* ‘cry’. Some of the verbs occurring in the construction are derived intransitive verbs, formed from transitive verbs via noun incorporation (cf. § 4.2.4.1), suggesting that the construction might be limited to intransitive verbs. More data would be needed to test this hypothesis.

$$(11-39) \quad \left\{ \begin{array}{c} 'o \\ ko \\ mora \\ moulu \\ 'amu \end{array} \right\} \left\{ \begin{array}{c} ala \\ alua \end{array} \right\} V na$$

Two examples are given in (11-40)–(11-41).

(11-40) ko a-la rau ioli na
 2SG.SEQ at-3.PERS kill people NMLZ.VET
 ‘You shall not kill.’ (Mt 19:18)

(11-41) 'Amu alu-a iili ioli na, taufasia God 'e bi sua-fafi a-miu lou.
 2PL put-3.OBJ say people NMLZ.VET lest G. 3SG PROXT accuse-against at-2PL.PERS also
 ‘Do not judge people, lest God in turn judge you.’ (Lk 6:37)

12 Interrogatives

In this final chapter we cover the basic kinds of interrogative sentences present in our corpus, examining polar questions (§ 12.1), content questions where the questioned element is *in situ* (§ 12.2), and content questions where the questioned element is *ex situ* (§ 12.3). In § 12.4 we comment on each of the question words and give examples of their use. Table 12.1 summarizes the basic set of interrogative words.

Table 12.1: Question words

<i>'uri'e ma</i>	'whether'	<i>ta, taa</i>	'what'
<i>ite</i>	'who'	<i>fe</i>	'where'
<i>'uta, 'utaa</i>	'how'	<i>nanita</i>	'when'
<i>ta fita</i>	'how many'		

12.1 Polar questions

There are two possible ways of forming polar questions. In the first possibility, we find the clause-initial sequence *'uri'e ma*, which we gloss as 'whether', followed by the questioned clause. Two examples are given in (12-1) - (12-2).

(12-1) *'uri'e ma* mora fitoo a-gu laka-e gura-a maa moroa?
 whether 2DU have.faith at-1SG.PERS 1SG.SEQ-IRR cure-3.OBJ eye 2DU.PERS
 'Do you believe that I will cure your eyes?' (Mt 9:28)

(12-2) *'Uri'e ma* 'o sai-a-la sae-na 'i Grik?
 whether 2SG know-at-3.PERS talk-NMLZ LOC Greek
 'Can you speak Greek?' (Acts 21:37)

In the second type of polar question, there is no clause-initial *'uri'e ma*, but only a question mark at the end of the written sentence. We do not know whether polar questions of this type are intonationally distinguished from basic affirmative sentences.¹ Two examples of polar questions lacking the overt interrogative marking witnessed in (12-1) - (12-2) are given in (12-3) - (12-4).

¹ In the 2011 recording we have of John 1: 19-28, the polar question *'I'o Elaeja?* 'Art thou Elijah?' appears, with a high level pitch at the end of the phrase, while declarative sentences in the recording have a low phrase-final pitch, so it seems not improbable that this is the case. On the other hand, we cannot know what role if any English or Solomons Pidgin have had in influencing the speaker's intonation.

(12-3) ala wela 'o 'e suga 'afi-a ta me lode ia ko kwate-a 'amua ta
if child 2SG 3SG ask ALL-3.OBJ any CLF CLF fish 2SG.SEQ give-3.OBJ 2SG.BEN INDEFNSPEC.SG
fe wa fa-la?

CLF snake DAT-3SG.PERS

'...if your child asks for a fish, will you give him a snake?' (Mt 7:10)

(12-4) Iko 'ali moulu malinai-li-a 'ua maluta-la 'are 'e lau ili-a
NEG COMP 2PC understand-TR-3.OBJ COMPL meaning-3.PERS thing DEM.PROX 1SG say-3SG.OBJ
fa-moulu?

DAT-2PC.PERS

'Did you not understand the meaning of what I have said to you?' (Mt 16:9)

Polar questions are answered in the affirmative with **'eo**, and in the negative with **'iko** (cf. §4.6.1.1 for examples). Examples of negative polar questions are found, though not with initial **'uri 'e ma**. An example is given in (12-5). As noted in §4.6.1.1, these all appear to be rhetorical questions, for which a yes/no answer is not expected.

(12-5) Aofia golu ka-e garani mae lo! Iko 'ali 'o malata 'abero molaa 'e?
lord 1INCL.PC SEQ-IRR be.near die FOC NEG COMP 2SG think worry CONTR.FOC DEM.PROX
'Lord, we are about to die! Don't you care?' (Mk 4:38)

12.2 Content questions, *in situ*

In content questions, an interrogative word which targets a subject, or the complement of a preposition, may appear *in situ*; see (12-6) and (12-7), respectively. The structure of the clause is otherwise the same as the declarative equivalent. When an interrogative word fulfils a non-subject role, it tends to appear *ex situ*, in the left periphery (see §12.3), but we do find examples where it appears after the verb, such as (12-8) – (12-9).

(12-6) Ite ka-e gefusi-a te abae fau ba faasi-a maa-la gilū?
who SEQ-IRR roll-3.OBJ INDEFNSPEC CLF stone DEM3 ABL-3.OBJ eye-3.PERS grave
'Who shall roll away the stone from the door of the tomb?' (Mk 16:3)

(12-7) Christ, wale 'e God 'e fili-a fa-la faa-muri-na-la ioli gi li,
C. man DEM.PROX G. 3SG choose-3SG.OBJ DAT-3.PERS CAUS-live-NMLZ-3.PERS people PL DEF
moulu ili-a 'e futa mae a-la ite?
2PC say-3.OBJ 3SG be.born hither at-3.PERS who
'Christ, the man God chose to save people, to whom do you say he was born?' (Mt 22:42)

(12-8) 'amu malata 'utaa?
2PL think how
'What do you think?' (Mt 26:66)

(12-9) Ioli 'e mauri fa-la taa? Fa-gu, mauri-na Jesus Christ
people 3SG live DAT-3.PERS what DAT-1SG.PERS live-NMLZ J. C.
'What do people live for? For me, life is Jesus Christ...' (Phil 1:21)

The nominal slot in locative phrases headed by '*i*' may also be filled with a question word, as in (12-10). Interestingly, we have been unable to find an example of an *in situ* question word which is the object of a verb.

- (12-10) 'o io 'i fe?
 2SG be.at LOC where
 'Where do you live?' (Jn 1:38)

12.3 Content questions, *ex situ*

Interrogatives which function as the object of a transitive verb always appear *ex situ*, coming at the beginning of the clause. An object suffix still marks the presence of the object on the verb, as in (12-11) - (12-12):

- (12-11) Ta 'e tau-a a-mu wani?
 what 3SG do-3SG.OBJ at-2SG.PERS MIR
 'What did he do to you?' (Jn 9:26)
- (12-12) Ma ta God ka-e kwate-a fa-meulu?
 and what God SEQ-IRR give-3SG.OBJ DAT-1EXCL.PC.PERS
 'What will God give us?' (Mt 19:27)

The object of a lower clause may also be fronted to the beginning of a sentence in an interrogative, as in (12-13) and (12-14), where the main verb *oga* 'want' is followed by a subordinate clause, the object of which is marked by a third person object suffix co-indexed with the interrogative at the beginning of the sentence.

- (12-13) taa 'o oga ko-e tau-a a-meulu
 what 2SG want 2SG.SEQ-IRR do-3SG.OBJ at-1INCL.PC.PERS
 'What do you want to do to us?' (Mt 8:29)
- (12-14) Ite 'amu oga laka lugasi-a fa-miu
 who 2PL want 1SG.SEQ release-3SG.OBJ DAT-2PL.PERS
 'Who do you want me to release for you?' (Mt 27:17)

The object of a verb-like preposition may also appear *ex situ* and be placed at the beginning of a sentence. In (12-15), *ite lo* is indexed on the preposition *faasi-* with the plural object suffix *-da*, and forms part of the oblique argument of *sai* 'know'.

- (12-15) Ite lo walelitalona a-la molagali li sai-a-la sake-na-la bata
 who FOC king at-3.PERS world DEF know-at-3.PERS take-NMLZ-3.PERS money
 faasi-da?
 ABL-3PL.OBJ
 'From whom do the kings of the earth take money?' (Mt 17:25)

12.4 Question words

In this final section we give examples and short explanations of the usage of each of the question words.

12.4.1 'utaa' 'how'

When used on its own (i.e., not modifying a noun), the question word '**utaa** 'how, why' may appear at the beginning of a sentence, as the following example illustrates. (The demonstrative following the interrogative suggests that it has a nominal origin.)

- (12-16) Saul, 'utaa 'e ko malakwaita a-gu?
 Saul why DEM.PROX 2SG.SEQ persecute at-1SG.PERS
 'Saul, why are you persecuting me?' (Acts 22:7)

Less frequently, '**utaa** appears sentence-medially or -finally, as in (12-17) - (12-18)

- (12-17) 'o sai 'utaa a-gu?
 2SG know how at-1SG.PERS
 'How do you know me?' (Jn 1:48)
- (12-18) ioli 'e ba'ela lo, ka-e futa lou 'utaa?
 person 3SG be.big FOC SEQ-IRR be.born again how
 'How can an old man be born again?' (Jn 3:4)

'**Utaa** can also be used to modify a noun to mean 'which X?'. When it does, it follows the noun it modifies, as in (12-19) - (12-20).

- (12-19) Taki 'utaa lo 'e ba'ela ka eta a-la taki Moses gi sui?
 law which FOC 3SG be.big SEQ one at-3SG.PERS law Moses PL EXHST
 'Which commandment is the most important of all of Moses's commandments?' (Mk 12:28)
- (12-20) Wale 'utaa 'e?
 man which DEM.PROX
 'What man is this?' (Mk 4:41)

We also find this morpheme written as '**uta** in our corpus.

12.4.2 **ta(a)** 'what, which'

As shown in examples (12-12) and (12-13) above, when used on its own, **ta(a)** is a question word meaning 'what'. The morpheme **ta** is an indefinite determiner, see §7.2.1. We find that both **taa** and **ta** can be used in questions as modifiers of nouns, in which case they mean 'which' or 'what (kind of)'. **Taa** can precede or follow the nominal, whereas **ta** tends to follow it when used interrogatively. Two examples are given in (12-21) - (12-22).

- (12-21) taa wale fo ka-e tau-a?
 what man DEM.DIST SEQ-IRR do-3SG.PERS
 'What man would do this?' (Lk 15:4)

- (12-22) Wale ta 'e ili-a ko tau-a me 'are la?
 man what 3SG say-3.OBJ 2SG.SEQ do-3.OBJ CLF thing DEM4
 'Which man told you to do this thing?' (Jn 5:12)

12.4.3 *ite* 'who'

In interrogative sentences the word *ite* is usually translatable as 'who'.

- (12-23) Ite 'e fabasu 'amiu 'ali 'amu tafi faasi-a kwaikwaina God?
 who 3SG warn 2PL.NSBJ COMP 2PL leave ABL-3.OBJ condemnation God
 'Who warned you to flee the wrath of God?' (Mt 3:7)

We find *ite* in example (12-24) where 'who' is not a suitable translation, though this seems to raise an interesting minor point on the typology of interrogative words than suggest any inadequacy in our glossing.²

- (12-24) Ite rata-mu?
 who name-2SG.PERS
 'What is your name?' (Mk 5:9)

The interrogative word *ite* may follow a nominal, in possessor position, and in such a case it corresponds to English 'whose'. An example is given in (12-25).

- (12-25) Ma lulu-la ite 'e? Ma rata-la ite 'e lou?
 and image-3.PERS who DEM.PROX and name-3.PERS who DEM.PROX also
 'Whose image is this and whose name is this?' (Mk 12:16)

12.4.4 *fe* 'where'

The word *fe* corresponds to English 'where', and is often preceded by the locative marker 'i. It can appear at the beginning of the sentence or *in situ*, as a place adjunct following the verb. Two examples are given in (12-26) - (12-27).

- (12-26) 'I fe golu ka-e foli-a ta fana ka-e totolia 'ali golu
 LOC where 1INCL.PC SEQ-IRR buy-3.OBJ INDEF.NSPEC food SEQ-IRR be.possible COMP 1INCL.PC
 ranoli-a 'ali-a ioli 'e gi sui?
 serve-3SG.OBJ INS-3.OBJ people DEM.PROX PL EXHST
 'Where shall we buy bread so that we can feed all these people?' (Jn 6:5)

- (12-27) 'i-'o wale faasi-a 'i fe 'e?
 PROFORE-2SG man ABL-3.OBJ LOC where DEM.PROX
 'Where are you from?' (Jn 19:9)

² One reviewer notes that it is common for the area for personal names to be questioned with an interrogative morph translatable as 'who'.

12.4.5 *nanita* 'when'

The word *nanita* corresponds to English 'when'. It is very infrequent, appearing only three times in our corpus. One example is given in (12-28).

- (12-28) Wale li faalalau-na, nanita 'e 'are 'e gi ka-e dao mae a-i?
 man DEF teach-NMLZ when 3SG thing DEM.PROX PL SEQ-IRR come hither at-INDEF.PERS
 'Master, when will these things come to pass?' (Lk 21:7)

12.4.6 *talasi taa* 'which time'

The combination of *talasi* 'time' and *taa* 'which' can also express a meaning comparable to English 'when'. This is also rare, occurring only twice in our corpus.

- (12-29) talasi taa mola 'e 'o la lou mae 'i a-i?
 time which CONTR.FOC DEM.PROX 2SG go again hither LOC at-INDEF.PERS?
 'when did you come here?' (Jn 6:25)

12.4.7 *ta fita* 'how many'

The word *fita* preceded by *ta* 'what' forms a phrase which precedes the noun it modifies and corresponds to 'how many' or 'how much' in English. In both cases the questioned constituent is fronted. Two examples are given in (12-30) - (12-31).

- (12-30) Ma ta fita pera ba moulu goli-a lou ore-na-la fana ba 'i
 and what how.many basket DEM3 2PL gather-3SG.OBJ again remain-NMLZ-3.PERS food DEM3 LOC
 lao-la lala ka fonu?
 inside-3SG.PERS until SEQ be.full
 'How many baskets full of the remaining food did you collect?' (Mk 8:19)
- (12-31) Ma 'i-'o ta fita 'are 'o sake lana a-li?
 and PROFORE-2SG what how.many thing 2SG take loan at-INDEF.PERS
 'And how much do you owe?' (Lk 16:7)

In (12-32), we see *ta fita talasi*, translatable as 'how many times?'

- (12-32) Aofia, ta fita talasi 'e laka-e sai-a-la kwailufa-na a-la
 lord what how.many time DEM.PROX 1SG.SEQ-IRR know-at-3.PERS forgive-NMLZ at-3.PERS
 ioli-gu, talasi 'e tau-a 'are ta'a gi a-gu?
 people-1SG.PERS time 3SG do-3.OBJ thing be.bad PL at-1SG.PERS
 'Lord, how many times can I forgive my brother when he sins against me?' (Mt 18:21)

A Transcribed texts

A.1 John 1:19-28 (2011 recording)

- (1)¹ John fasiuabu 'e fabasu-a ioli gi 'ali gera rerei maasi-a Christ
'dʒɔn 'fasiu,abʊ ʔɛ 'fabas ,iol 'gi: ʔal ɣɛr 'rɛrei ,ma:sia ,kraɪs
J. baptize 3SG forewarn-3.OBJ people PL INS 3PL be.ready wait.for-3.OBJ C.
'John the baptist advises people to be ready for the Christ.'
- 1:19(1) Wale etaeta ioli [a-la] Jiu 'i Jerusalem gi li
'wal ɛ'tɛta 'ioli al 'dʒiu ʔi 'dʒɛru,selem ,gi li
person first people at-3.PERS Jew LOC J. PL DET
'The chiefs of the Jews in Jerusalem...'
- 1:19(2) gera keri-a fata abu gi, fai-li-a wale [li] kwairanai a-la fata abu gi li
ɣɛr 'kɛrie 'fatab 'gi: fɛile 'wali 'kpra,nei 'naʊ 'fatab ,gi li
3PL send-3.OBJ priest PL COM-TR-3.OBJ person HABIT help at-3.PERS priest PL DET
'...sent priests and assistants to the priests...'
- 1:19(3) 'ali gera ka soilidi-a John 'uri 'e
ʔa'l ɣɛr 'suli,dʒɪ 'dʒɔn ,ʔur ,ʔɛ:
INS 3PL SEQ ask-3.OBJ J. thusly
'...to ask John...'
- 1:19(4) 'Uri'e ma 'i-o ite 'e?
'ʔur 'ʔɛ: ma ʔi 'ʔɔ: 'itɛ 'ʔɛ:
whether and PROFORE-2SG who DEM.PROX
'...who are you?'
- 1:20(1) Ma John ka oli-si madakwa 'uri 'e a-da
ma 'dʒɔn ka 'olis: 'madakp 'ʔur ʔɛ 'ada
and J. SEQ return-TR be.clear thusly at-3PL.PERS
'And John answered them clearly...'

¹ This line appears as a section heading for Jn 1:19-28 in the Wala bible (Wycliffe Bible Translators, 2007:228-9).

1:20(2) 'I lau iko lou Christ, wale ba God 'e fili-a fa-la fa-sakwadolaa
 ?i 'leu ,iko lo 'kraist 'wal ba 'god ?e 'fɪlia 'ɸala 'ɸasakpɛ,dɔl
 PROFORE 1SG NEG again C. person DEM3 G. 3SG choose-3.OBJ DAT-3.PERS CAUS-be.free
 na-la ioli gi li
 ,nali iɔl 'gi li
 NMLZ-3.PERS people PL DET
 'I am not Christ, the one God chose to liberate the people.'

1:21(1) Ma gera ka soilidi lou 'uri 'e a-la, "'Urilali ma ite mola 'i-'o?"
 ma gɛr kɛ 'sulid ,ləu ,?ur ,?ɛ ,a.la 'ʔurla'li ma 'ite ,mɔl ?i'ʔɔ:
 and 3PL SEQ ask again thusly at-3SG.PERS how and who FOC.CONTR PROFORE-2SG
 'And they asked him, who are you?'

1:21(2) "'I-'o Elaeja?"
 ?i'ʔɔ ɛ'lai'dʒɛ
 PROFORE-2SG E.
 '...are you Elijah?'

1:21(3) Ma ka oli-si-da lou 'uri 'e, "'e iko."
 'mɛ kɛ 'ɔli,sid ,ləu 'ʔur 'ʔɛ: ?ɛ 'iko
 and SEQ return-TR-3PL.OBJ again thusly 3SG NEG
 'And he answered them, no.'

1:21(4) Ma gera ka soilidi-a lou 'uri 'e, "'Uri la[li] ma 'i-'o te profet
 ma gɛr kɛ 'sulid ,ləu ,?ur ,?ɛ 'ʔur la'li ma 'ʔɔ: tɛ 'profet
 and 3PL SEQ ask-3SG.OBJ again thusly Whether and PROFORE-2SG INDEF.SPEC prophet
 ba 'ami ka-e masi-a?"
 'ba: ?am 'ka ɛ 'masi,a:
 DEM3 2PL SEQ-IRR wait.for-3SG.OBJ
 'And they asked him, Are you the prophet that we are waiting for?'

1:21(5) Ma John ka oli-si lou 'uri 'e a-da, "'[e] iko."
 ma 'dʒɔ:n ka 'ɔlisi ,ləu ,?ur ,?ɛ ,ada ?ɛ 'iko
 and J. SEQ return-TR again thusly at-3PL.PERS 3SG NEG
 'And John answered again, no.'

1:22(1) Ma fafu'isinai, gera ka soilidi lou 'uri 'e a-la, "'Urilali ma ite mola
 ma 'ɸaɸ,ʔis,nai gɛr ka 'solid ,ləu ,?ur ,?ɛ ,ala 'ʔurla'li ma 'ite 'mɔli
 and at last 3PL SEQ ask again thusly at-3SG.PERS whether and who FOC.CONTR
 'i-'o?"
 'ʔɔ:
 PROFORE-2SG
 'And at last they asked him again, who are you?'

- 1:22(2) “O ili-a mae ta [me] 'are fa-meulu, 'ali meulu ka fa-rono-a
 ʔo 'il'e 'mae tam 'ʔar βa'meʊl ʔal meʊl ka 'ʔaro,no
 2SG say-3.OBJ hither INDEF.NSPEC CLF thing DAT-1EXCL.PC COMP 1EXCL.PC SEQ CAUS-hear-3.OBJ
 wale gera keru 'ameulu mae gi.”
 ,wal ,ger 'ker ʔa'meʊl ,mae 'gi:
 person 3PL send 1EXCL.PC.NSBJ hither PL
 ‘Say something to us, so that we can explain to those who sent us here.’
- 1:22(3) “Ta taa 'o too a-i fa-li ili-a suli ['i] 'o 'i
 ta 'ta: ʔo 'to: ,ai ,ʔalɪ 'ilia ,sʊl ʔi 'ʔo ʔi
 what INDEF.NSPEC 2SG have at-INDEF.PERS DAT-INDEF.PERS.PL say-3SG.PERS about PROFORE 2SG LOC
 tala-mu?”
 'talam
 self-2SG.PERS
 ‘What do you have to say about yourself?’
- 1:23(1) Ma John ka oli-si-daulu 'ali-a alaa-na ba profet Aesea 'e gere-a
 ma 'dʒɔn ka 'ɔlɪsɪ 'daʊlʊ ,ʔalɪ 'a:lan ba 'profet 'ai,saiɛ ʔɛ 'gere
 and J. SEQ return-TR-3PC.OBJ INS-3.OBJ speak-NMLZ DEM3 prophet I. 3SG write-3.OBJ
 'uri 'e,
 'ʔur 'ʔɛ:
 thusly
 ‘And John answered them with the message written by Isaiah, thusly:’
- 1:23(2) “I lau wale ka-e rii 'i laola abae lifi kwasi li 'uri 'e,”
 ʔi 'lɛʊ 'wale ka'ɛ 'ri: ʔi laʊ 'labae 'lɪʔ 'kpasɪ li 'ʔur 'ʔɛ:
 PROFORE 1SG person SEQ-IRR cry LOC inside CLF place be.wild DET thusly
 ‘I am the person crying in the rocks of the wild place, saying...’
- 1:23(3) “Aofia ka-e dao lo mae!”
 'aʊ,fiɑ kae 'daʊ lo 'ma:ɪ
 lord SEQ-IRR arrive FOC hither
 ‘The lord is coming.’
- 1:23(4) “'Amu fa-rada tala fa-la.”
 ʔam 'ʔarada 'tale 'ʔale
 2PL CAUS-BE.STRAIGHT path DAT-3SG.PERS
 ‘Prepare ye the path for him.’
- 1:24(1) Ma wale gera la mae faasi-a Farasi gi li, gera ka soilidi lou 'uri 'e
 ma 'wa:lɛ ger 'la: mae 'ʔa:sjɛ 'ʔarasi ,gi li ger ka 'solid ləu ,ʔur ,ʔɛ
 and person 3PL go hither ABL-3.OBJ pharisee PL DET 3PL SEQ ask again thusly
 a-la
 ,ala
 at-3SG.PERS

'And those who came forth from the Pharisees, they asked him again,'

- 1:25(1) “'Uta 'e ko fasiuabua ioli gi,”
 ?uta 'ʔɛ: kɔ 'ʔasiʊ,ab ɥɔl 'gi:
 how 2SG.SEQ baptise people PL
 ‘...why do you baptise people?’
- 1:25(2) “ala 'i-'o iko lou Christ, 'o ma Elaeja, 'o ma te profet?”
 al ʔi 'ʔɔ ,iko lɔʊ 'kraɪs 'ʔɔ ma ɛ'laidʒa 'ʔɔ: ma tɛ 'profɛt
 if PROFORE-2SG NEG again C. or E. or INDEF.SPEC prophet
 ‘...if thou art not the Christ, nor Elajah, nor a prophet.’
- 1:26(1) Ma John ka oli-si [lo] 'uri 'e a-daulu,
 mɛ 'dʒɔn ka 'ɔlisi lɔ ,ʔuri ,ʔɛ ,alɛ 'dɔʊ.lɔ
 and J. SEQ return-TR FOC thusly at-3PC.PERS
 ‘John answered them...’
- 1:26(2) "Lau fasiu abu [a-miu] mola 'ali-a kwai. Ma te wale
 laʊ 'fasiu 'ab a'miʊ 'mola ,ʔali 'kpai ma tɛ 'wale
 1SG wash holy at-2PL.PERS FOC.CONTR INS-3.OBJ water and INDEF.SPEC person
 ‘I baptise with water, but the man...’
- 1:26(3) 'amu ka raria
 ʔa'miu ʔa 'rar,ʔja
 2PL SEQ not.know
 ‘...[whom] you know not...’
- 1:26(4) 'e ura mola 'ala 'i safita-miu.
 ʔɛ 'ure mɔl 'ʔalɛ ʔi 'saʔta'miʊ
 3SG stand FOC.CONTR 3SG.BEN LOC among-2PL.PERS
 ‘...stands among you...’
- 1:27(1) 'I lia wale [la] 'e la mae 'i buri-gu,
 ʔi 'lia wal: 'la: ʔɛ 'la: mae 'buri,ɡʊ:
 PROFORE 3SG.NSBJ person DEM4 3SG go hither LOC behind-1SG.PERS
 ‘He is the one who comes after me.’
- 1:27(2) wasua ma iko 'ali lau totolia laka 'adaoro, ma laka tatali-a 'ae botu
 'wasʊɛ 'iko ʔal 'leʊ ,tʰɔtɔ'liɛ laʔ ʔa'daɔrɔ ma lak 'tatali ,ʔae ,bot
 but NEG COMP 1SG be.able 1SG.SEQ bend.down and 1SG.SEQ loosen-3.OBJ foot boot
 lia gi.
 ,liə 'gi:
 3SG.NSBJ PL
 ‘...but I am not able to stoop down and loosen his shoes.’

1:28(1) 'Are fo gi 'e fuli 'i Betani, falua [a-la abae]
 'ʔar fo ,gi ʔɛ 'ʔɔli ʔi ,beta'ni: 'ʔalɔv ,al 'abar
 thing DEM.DIST PL 3SG happen LOC B. town at-3.PERS CLF
 'Those things happened in Bethany...'

1:28(2) ta-tae-na-la da'afi
 ta'tai,nal 'da:ʔi
 RED-ascent-NMLZ-3.PER sun
 '...to the east...'

1:28(3) a-la kwai 'i Jodan
 al 'kɔai ʔi 'dʒɔdʒɛn
 at-3.PERS water LOC J.
 '...of the River Jordan...'

1:28(4) lifi John ka-e fasiuabu-a ioli gi sui a-i.
 'liʔ 'dʒɔn kai 'fasɯ,abɯ 'iol gi 'sɔi 'ai
 place J. SEQ-IRR baptise-3.OBJ people PL EXHST at-INDEF.PERS
 '...where John baptized all the people.'

A.2 The Lord's Prayer (1960 recording)

(1-1) a-la rata-la mama lia, ma gale-la ma alo-e 'are abu, amen
 'ala ra'tele 'meme 'lre ma ga'lele 'ma: 'loɛ ,ʔarɛ 'abɯ 'amen
 at-3.PERS name-3.PERS father 3SG.NSBJ and son-3SG.PERS and spirit-INDEF.PERS thing holy amen
 'In the name of the father and of the son and of the holy spirit, amen.'

(1-2) mama 'ami 'i nali, rata-mu 'ali abu
 'mame 'ʔami 'i 'nali, 'ratam 'ʔali 'abu
 father 1EXCL.PL LOC heaven name-2SG.PERS COMP holy
 'Our father who art in heaven, hallowed be thy name.'

(1-3) abu-na-mu 'ali 'ilitoa 'amami
 abu'nam ,ʔal i'toa ʔa'mami
 holy-NMLZ-2SG.PERS COMP govern 1EXCL.PL.NSBJ
 'May thy holiness reign over us.'

(1-4) mami ka tau sulia malata-mu (?) malaa wado malaa gera tau 'i
 'mami ke 'tɔv 'syle 'mala,tam in 'mala 'ɣad 'mala gɛr 'tɔv ʔi
 1EXCL.PL SEQ do following-3.OBJ will-2SG.PERS resemble earth resemble 3PL do LOC
 nali
 'nani
 heaven
 'We shall do your will on earth as it is done in heaven.'

- (1-5) ko kwate 'amami fana 'ami tara'ela
 ko 'kʷate 'mami 'ʔane 'ʔami 'tare,ʔele
 2SG.SEQ give 1EXCL.PL.NSBJ food 1EXCL.PL day
 'Give to us our dai(ly) food'
- (1-6) ^(?) ko bulono-si-a me 'are ta'a 'ami tau-a fa-mu gi
 'ʔe ko bʊ'lon,si me 'ʔare 'ta: 'ʔami 'təʊ 'ʔem 'gi:
 2SG.SEQ forget-TR-3.OBJ CLF thing be.bad 1EXC.PL do-3SG.OBJ DAT-2SG.PERS PL
 'Forgive the bad things we do to you.'
- (1-7) malaa 'i 'ami bulono-si-a me 'are ta'a gera tau-a fa-mami gi
 'male ʔi 'ami 'bʊlɔnɔ,si me 'ʔare 'taʔe 'gere 'təʊe 'χememɪ 'gi:
 resemble PROFORE 1EXCL.PL forget-TR-3.OBJ CLF thing be.bad 3PL do-3SG.OBJ DAT-1EXC.PL.PERS PL
 'As we forgive the bad things that are done to us.'
- (1-8) ma ko lugatai-li-a fa-la tau ta'a-na ma ko faa-mauri 'ami
 me ko ,lugə'tai'ljet 'fele 'təʊ 'taʔa,nə: ma ko 'fa:,mɔrɪ 'ʔami
 and 2SG.SEQ release-TR-3SG.OBJ DAT-3.PERS do be.bad-NMLZ and 2SG.SEQ CAUS-live 1EXCL.PL
 faasi-a ta'a-na, amen.
 'fa:ɕe 'taʔe,nə: 'a:,mɛn
 ABL-3.OBJ be.bad-NMLZ amen
 'Do not lead us to do bad things and save us from evil.'

B Sample texts

B.1 Revelations 13:1-18

- 13:1 Sui laka lesi-a te 'are mauri kwasi 'e rae mae faasi-a 'i
then 1SG.SEQ see-3.OBJ INDEF.SPEC.SG thing live be.wild DEM.PROX ascend hither ABL-3.OBJ LOC
lao-la asi. 'Are fo 'e too a-la fiu gwa-e 'are gi, ma teke
inside-3.PERS sea thing DEM.DIST 3SG have at-3.PERS seven head-INDEF.PERS thing PL and one
akwala kwato fai-li-a akwala 'eregwau wawade gi gera io a-la kwato
ten horn COM-TR-3.OBJ ten crown be.small PL 3PL stay at-3.PERS horn
fo gi. Rata-e 'are ta'a fa-la soi lofosi na-la God gi gera
DEM.DIST PL name-INDEF.PERS thing be.bad DAT-3.PERS call revile NMLZ-3.PERS G. PL 3PL
gere-da a-la fiu gwa-e 'are fo gi.
write-3PL.OBJ at-3.PERS seven head-INDEF.PERS thing DEM.DIST PL
'And I saw a beast rise up from the sea. That thing had seven heads and ten horns with
ten little crowns placed on the horns. Bad names for cursing God were written on the
seven heads.'
- 13:2 Ma 'are mauri kwasi fo lesinai 'e malaa na lepad, ma
and thing live be.wild DEM.DIST sight DEM.PROX resemble INDEF.SPEC.SG leopard and
'ae-la lesinai ka malaa 'ae-la bea, fai-li-a foka-la lesinai ka
foot-3.PERS sight SEQ resemble foot-3.PERS bear COM-TR-3.OBJ mouth-3.PERS sight SEQ
malaa foka-la lion. Ma dragon ba'ela ba ka kwate-a nanatana ba'ela lia
resemble mouth-3.PERS lion and dragon be.big DEM3 SEQ give-3.OBJ strength be.big 3SG
fa-la 'are mauri kwasi fo 'ali 'ilitoa fafi-a ioli gi.
DAT-3.PERS thing live be.wild DEM.DIST COMP govern against-3.OBJ people PL
'And the sight of the beast was like a leopard, and its feet were like bears' feet, and its
mouth was like the mouth of a lion. And the big dragon gave its great powers to the
beast so that it could rule over people.'
- 13:3 Ma a-la na gwau a-la gwa-e 'are fo gi, laka lesi-a
and at-3.PERS INDEF.SPEC.SG head at-3.PERS head-INDEF.PERS thing DEM.DIST PL 1SG.SEQ see-3.OBJ
te 'are 'e lio malaa mae malaa ba'ela a-la rauni-na-la, ma
INDEF.SPEC.SG thing DEM.PROX look resemble die wound be.big at-3.PERS kill-NMLZ-3SG.PERS and

mae malaa fo 'e mafo lo. Ma ioli gi sui 'i lao-la molagali gera
 die wound DEM.DIST 3SG recover FOC and people PL EXHST LOC inside-3.PERS world 3PL
 ka 'afero rasua, ma gera ka la sulia te 'are mauri kwasi fo.
 SEQ marvel be.much and 3PL SEQ go about-3.OBJ INDEF.SPEC.SG thing live be.wild DEM.DIST
 'And on one of the beast's heads I saw a thing that looked like a huge, mortal wound; and
 this deadly wound was healed: and all the people in the world marvelled and wondered
 about the beast.'

13:4 Ma ioli gi gera ka foa-si-a lo te dragon ba'ela fo, 'i
 and people PL 3PL SEQ pray-TR-3.OBJ FOC INDEF.SPEC.SG dragon be.big DEM.DIST LOC
 osia-la 'e kwate-a lalama-na lia fa-la 'are mauri kwasi fo. Ma gera
 sake-3.PERS 3SG give-3.OBJ power-NMLZ 3SG DAT-3.PERS thing live be.wild DEM.DIST and 3PL
 ka foa-si-a lou 'are mauri kwasi fo 'uri 'e, "Iko ta ioli 'ali
 SEQ pray-TR-3.OBJ also thing live be.wild DEM.DIST thus DEM.PROX NEG what people COMP
 malaa 'are mauri kwasi 'e, 'o ma ta ioli 'ali ka totoli-a kwalaa-na
 resemble thing live be.wild DEM.PROX or what people INS SEQ be.able-3.OBJ conflict-NMLZ
 fai-li-a."
 COM-TR-3SG.OBJ

'And the people worshipped the big dragon because he gave his powers to the beast: and
 they also worshipped the beast, saying, There is no one like the beast, or no one who
 is able to make war with him.'

13:5 Ma God ka ala'ali-a 'are mauri kwasi fo 'ali batafe-a 'i lia tala-la
 and God SEQ allow-3.OBJ thing live be.wild DEM.DIST COMP bless-3.OBJ LOC 3SG self-3SG.PERS
 ma ka soi lofosi-a God ma ka 'ilitoa sulia fai akwala wala rua madama gi.
 and SEQ call revile-3.PERS God and SEQ govern about-3.OBJ four ten ten two month PL
 'And God allowed this beast to speak highly of himself and blaspheme against God, and he
 governed for forty two months.'

13:6 Ma ka fuli'aea lo soi lofosi na-la God, ma rata-la God, fai-li-a 'i
 and SEQ start FOC call revile NMLZ-3.PERS G. and name-3.PERS God COM-TR-3.OBJ LOC
 nali lifi God 'e io a-i, ma ioli gera io 'i nali gi sui lou.
 heaven place God DEM.PROX stay at-INDEF.PERS and people 3PL stay LOC heaven PL EXHST also
 'And he began to blaspheme against God, and against his name, and his place in heaven,
 and them that dwell in heaven.'

13:7 Ma God ka ala'ali-a fa-la kwalaa-na fai-li-a ioli God gi li, ma
 and God SEQ allow-3SG.OBJ DAT-3.PERS conflict-NMLZ COM-TR-3.OBJ people God PL DEF and
 fa-la liu-fi-na-da, ma ka 'ilitoa fafi-a kwalofa gi sui, luulaa gi
 DAT-3.PERS pass-TR-NMLZ-3PL.PERS and SEQ govern against-3.OBJ clan PL EXHST nation PL
 sui ma falua gi sui, fai-li-a sae-na mamata gi sui.
 EXHST and land PL EXHST COM-TR-3.OBJ talk-NMLZ be.different PL EXHST
 'And God allowed him to make war with the saints, and to overcome them: and he governed
 against all clans, and nations, and lands with all different tongues.'

13:8 Ma ioli gera io 'i lao-la molagali gi sui, lia gera ka-e foa-si-a 'are
 and people 3PL stay LOC inside-3.PERS world PL EXHST 3SG 3PL SEQ-IRR pray-TR-3.OBJ thing
 mauri kwasi fo li, God iko 'ali gere-a rata-da 'i lao-la buka
 live be.wild DEM.DIST DEF God NEG COMP write-3.OBJ name-3PL.PERS LOC inside-3.PERS book
 a-la mauri-na firi li. Buka fo, lia buka kale Sipsip fo gera
 at-3.PERS live-NMLZ last.long DEF book DEM.DIST 3SG book young.animal sheep DEM.DIST 3PL
 rau-ni-a li. Ma God ka gere-a buka fo 'ua lo mae lao-la
 kill-TR-3SG.OBJ DEF and God SEQ write-3SG.OBJ book DEM.DIST COMPL FOC hither inside-3.PERS
 'ua raunai-li-na-la molagali.

COMPL build-TR-NMLZ-3.PERS world

'And all the people in the world who shall worship the beast, God will not write their names
 in the book of ever-lasting life. This book is the book of the lamb they killed. And God
 wrote this book long ago at the creation of the world.'

13:9 'I 'amiu ioli 'amu too a-la anina gi, 'amu ka fafuronono.
 LOC 2PL.NSBJ people 2PL have at-3.PERS ear PL 2PL SEQ listen
 'You people who have ears, listen.'

13:10 Nali ioli a-miu 'i lifi-la God 'e fli-da lo fa-la
 INDEFSPEC.PL people at-2PL.PERS LOC place-DEM4 God 3SG choose-3PL.OBJ FOC DAT-3.PERS
 dau-na-da, gera-ka-e dau-da lo. Ma nali a-i lou a-miu God 'e
 hold-NMLZ-3PL.PERS 3PL-SEQ-IRR hold-3PL.OBJ FOC and some a-INDEF.PERS also at-2PL.PERS God 3SG
 fli-da fa-la rauni-na-da 'ali-a 'au li ofona gi, gera-ka-e
 choose-3PL.OBJ DAT-3.PERS kill-NMLZ-3PL.PERS INS-3.OBJ sword HABIT war PL 3PL-SEQ-IRR
 rauni-da lo 'ali-a 'au a-la ofona gi li. 'I 'amiu ioli God gi ikoso
 kill-3PL.OBJ FOC INS-3SG.OBJ sword at-3.PERS war PL DEF LOC 2PL.NSBJ people God PL NEG2
 'ali 'amu malata waluwalufa, sulia lia lo talasi 'amiu lo fa-la nanatana
 INS 2PL think ? because 3SG FOC time 2PL.NSBJ FOC DAT-3.PERS strength
 'ali-a fitoo-na 'amiu gi li.
 INS-3.OBJ have.faith-NMLZ 2PL.NSBJ PL DEF

'Those among you in that place [that] God has chosen to capture, will be captured. And those of you who God chooses to die by the sword, will be killed with the sword. You, God's people, you will not be impatient (?) because it is time for strength and faith.'¹

13:11 Sui laka lesi-a na 'are mauri kwasi lou 'e manotafa mae faasi-a
 and 1SG.SEQ see-3.OBJ INDEFSPEC.SG thing live be.wild also 3SG emerge hither ABL-3.PERS
 'i lao-la molagali. Lia 'e too a-la rua kwato gi malaa na kale
 LOC inside-3.OBJ world 3SG 3SG have at-3.PERS two horn PL resemble INDEF.SPEC.SG CLF
 sipsip, fai-li-a line-la ka malaa na dragon ba'ela.
 sheep COM-TR-3.OBJ voice-3SG.PERS SEQ resemble INDEF.SPEC.SG dragon be.big

'And I saw another beast coming up out of the earth; and he had two horns like a lamb, and he spoke like a dragon.'

13:12 Lia 'e galo 'ali-a nanata-na-la eta-la 'are mauri kwasi talasi 'e
 3SG 3SG work INS-3.OBJ be.strong-NMLZ-3.PERS one-3.PERS thing live be.wild time DEM.PROX
 io fai-li-a. Ma ka suunai-li-a molagali fai-li-a ioli gi sui 'i
 stay COM-TR-3SG.OBJ and SEQ compel-TR-3.OBJ world COM-TR-3.OBJ people PL EXHST LOC
 lao-la molagali 'ali gera ka foa-si-a eta-la 'are mauri kwasi ba mae
 inside-3.PERS world COMP 3PL SEQ pray-TR-3.OBJ one-3.PERS thing live be.wild DEM3 die
 malaa ba'ela lia 'e mafo lo.
 wound be.big 3SG DEM.PROX recover FOC

'And he exercised all the power of the first beast before him, and caused the world and all the people in the world to worship the first beast, whose deadly wound was healed.'

¹ This passage is translated differently in KJV than in other modern English translations of the bible (e.g., NIV). The Wala translation is consistent with NIV rather than with KJV. KJV has '*He that leadeth into captivity shall go into captivity: he that killeth with the sword must be killed with the sword...*'; while NIV has '*If anyone is to go into captivity, into captivity they will go. If anyone is to be killed with the sword, with the sword they will be killed...*'

13:13 Ma rua-la 'are mauri kwasi ka tau 'are mama'ala ba'ela fa-la 'afero-na
 and two-3.PERS thing live be.wild SEQ do thing sign be.big DAT-3.PERS marvel-NMLZ
 'ali-da gi, ma ka fa-sifo-a mae dunaa faasi-a 'i nali fa-la 'i
 INS-3PL.OBJ PL and SEQ CAUS-descend-3.OBJ hither fire ABL-3.OBJ LOC heaven DAT-3SG.PERS LOC
 lao-la molagali 'i maa-la ioli gi sui.
 inside-3.PERS world LOC eye-3.PERS people PL EXHST
 'And the second beast performed a miracle, and made fire come down from heaven to the
 earth in the sight of men'

13:14 Ma ka kotofi-a ioli gera io 'i lao-la molagali gi li sui 'ali-a 'are
 and SEQ deceive-3.OBJ people 3PL stay LOC inside-3.PERS world PL DEF EXHST INS-3.OBJ thing
 li 'afero-na 'ali-da gi, a-la talasi 'e io fai-li-a 'are mauri kwasi
 DEF marvel-NMLZ INS-3PL.OBJ PL at-3.PERS time DEM.PROX stay COM-TR-3.OBJ thing live be.wild
 etaeta ba li. God 'e ala'ali-a ka tau-a 'are fo gi. Ma 'are mauri
 precede DEM3 DEF God 3 allow-3SG.OBJ SEQ do-3.OBJ thing DEM.DIST PL and thing live
 kwasi fo 'e tau-a ioli gi gera ka raunai-li-a lulu-la eta-la 'are
 be.wild DEM.DIST 3 do-3.OBJ people PL 3PL SEQ build-TR-3.OBJ image-3.PERS one-3.PERS thing
 mauri kwasi ba gera tofu malaa a-la 'ali-a 'au li ofona li, wasua
 live be.wild DEM3 3PL cut wound at-3SG.PERS INS-3SG.OBJ sword DEF war DEF but
 ma 'e mauri mola 'ala. Lulu-i 'are fo fa-la
 and 3 live CONTR.FOC 3SG.BEN image-INDEF.PERS thing DEM.DIST DAT-3.PERS
 fa-ba'ela-na-la.
 CAUS-be.big-NMLZ-3.PERS

'And he deceived all the people who dwell on the earth by the means of those miracles,
 like with the first beast. God allowed him to do these things. The beast made people
 build images of the first beast, which had the wound by a sword, and still lived. These
 images aggrandized the beast.'

13:15 Ma God ka ala'ali-a rua-la 'are mauri kwasi fo 'ali kwate-a mauri-na
 and God SEQ allow-3.OBJ two-3.PERS thing live be.wild DEM.DIST COMP give-3.OBJ live-NMLZ
 fa-la lulu-i 'are fo 'ali ka sae ma 'ali ka rauni-a ioli
 DAT-3SG.PERS image-INDEF.PERS thing DEM.DIST COMP SEQ speak and COMP SEQ kill-3.OBJ people
 iko 'ali gera foa-si-a gi sui.
 NEG COMP 3PL pray-TR-3SG.OBJ PL EXHST

'And God allowed the second beast to give life to the image of the beast, that the image of
 the beast should both speak, and kill people who would not worship the image of the
 beast.'

13:16 Ma ka suunaili-a ioli gi sui, ioli wawade gi fai-li-a ioli ba'ela gi, ioli
 and SEQ compel-3.OBJ people PL EXHST people be.small PL COM-TR-3.OBJ people be.big PL people
 too 'are gi ma ioli siofa gi, ioli galo ulafu gi ma ioli sakwadola gi, 'ali
 have thing PL and people be.poor PL people work servant PL and people be.free PL COMP
 gera gere-a totofo a-la fili lima aolo gera gi 'o ma 'i maa-la
 3PL write-3.OBJ sign at-3.PERS CLF hand right 3PL PL or and LOC eye-3.PERS
 dara-da.
 forehead-3PL.PERS
 'And he caused all, both small and great, rich and poor, free and bonded, to receive a mark
 in their right hand, or on their foreheads.'

13:17 Ikoso ta ioli 'ali foli 'are 'o ma ka foli'ali 'are ala iko 'ali 'e too
 NEG2 INDEFNSPEC.SG people COMP buy thing or and SEQ sell thing if NEG COMP 3SG have
 a-la totofo fo. Totofo fo rata-la 'are mauri kwasi fo, 'o ma
 at-3.PERS sign DEM.DIST sign DEM.DIST name-3.PERS thing live be.wild DEM.DIST or and
 totofo-na-la rata-la.
 sign-NMLZ-3.PERS name-3SG.PERS
 'And that no man might buy or sell, if he didn't have the mark, or the name of the beast, or
 the number of his name.'

13:18 'Amu ka too a-la liotoo fa-la malinaili-a totofo fo 'are mauri
 2PL SEQ have at-3.PERS wisdom DAT-3.PERS understand-3.OBJ sign DEM.DIST thing live
 kwasi li. Ma ala 'amu ka rae 'are, 'amu ka sai mola 'amiu a-i.
 be.wild DEF and if 2PL SEQ recognize thing 2PL SEQ know CONTR.FOC 2PL.NSBJ at-INDEF.PERS
 Totofo lia olo talanae olo akwala wala olo (666), ma 'e ura fa-la ioli.
 sign 3SG six hundred six ten ten six 666 and 3SG stand DAT-3.PERS people
 'You have to look to understand the sign of the beast. And if you understand it, you are very
 wise. Its sign is 666 and it is the number of a man.'

B.2 Luke 3:1-18

3:1 A-la talasi fo, 'e dao lo a-la akwala wala lima fe nali Taebirias 'e
 at-3.PERS time DEM.DIST 3SG arrive FOC at-3.PERS ten ten five CLF year Tiberius 3
 'ilitoa a-la falua ba'ela 'i Rom, ma Pontias Paelat ka 'ilitoa fafi-a 'i
 govern at-3.PERS land be.big LOC Rome and Pontius Pilate SEQ govern against-3.OBJ LOC
 Judea, ma Herod 'e 'ilitoa fafi-a 'i Galili, ma Filip walefae lia ka lio
 Judea and Herod 3 govern against-3.OBJ LOC Galilee and Philip brother 3SG SEQ watch
 suli-a 'i Iturea ma 'i Trakonaetis, ma Lisantias ka lio suli-a
 about-3.OBJ LOC Iturea and LOC Trachonitis and Lysanias SEQ watch about-3.OBJ
 gula-e tolo 'i Abilin.
 side-INDEF.PERS land LOC Abilene

'Now it came to be the fifteenth year of the reign of Tiberius Caesar over Rome, Pontius Pilate being governor of Judaea, and Herod being tetrarch of Galilee, and his brother Philip tetrarch of Ituraea and of the region of Trachonitis, and Lysanias the tetrarch of Abilene,'

3:2 Talasi fo lou, 'Anas fai-li-a Kaeafas daroa rua 'ilito'ola fata abu gi
time DEM.DIST also Annas COM-TR-3.OBJ Caiaphas 3DU.NSBJ two high priest be.holy PL
a-la falua 'i Jerusalem. Ma a-la talasi fo, sae-na-la God ka
at-3.PERS land LOC Jerusalem and at-3.PERS time DEM.DIST speak-NMLZ-3.PERS God SEQ
dao a-la John wela Sekaraea, talasi 'e io 'i lao-la abae lifi
arrive at-3.OBJ John child Zacharias time DEM.PROX be.at LOC inside-3.PERS CLF place
kwasi li.
be.wild DEF

'At that time, Annas and Caiaphas were the high priests in Jerusalem. It was then that the word of God came to John the son of Zacharias when he was in the wilderness.'

3:3 Ma John ka la a-la lifi gali-a kwai 'i Jodan gi. Ma ka sae 'uri
and John SEQ go at-3.PERS place surround-3.OBJ water LOC Jordan PL and SEQ speak thus
'e fa-la ioli, "'Amu bulusi faasi-a ta'ana 'amiu gi, ma 'amu ka
DEM.PROX DAT-3SG.PERS people 2PL turn ABL-3.OBJ sin 2PL.NSBJ PL and 2PL SEQ
sisiu abu, 'ali God ka-e kwailufa 'ali-a ta'ana 'amiu gi."
be.washed be.holy COMP God SEQ-IRR forgive INS-3.OBJ sin 2PL.NSBJ PL

'And he came into all the country around the Jordan river, and he said to people, you should turn away from your sins and be baptized so that God will forgive your sins.'

3:4 'E malaa lia ba profet Aesea 'e gere-a ka sae 'uri 'e, "Te wale
3SG resemble 3SG DEM3 prophet Esaias 3 write-3SG.OBJ SEQ speak thus DEM.PROX one man
ka-e rii 'i lao-la abae lifi kwasi ka-e sae 'uri 'e, Aofia ka-e
SEQ-IRR shout LOC inside-3.PERS CLF? place be.wild SEQ-IRR speak thus DEM.PROX lord SEQ-IRR
dao lo mae! 'Amu fa-rada tala fa-la!"
arrive FOC hither 2PL CAUS-be.straight way DAT-3SG.PERS

'As it is written in the book of the words of Esaias the prophet, saying, Someone is crying in the wilderness, The Lord is coming! Make the paths straight for him!'

3:5 Ma 'amu ka fa-fonu-a ote gi, ma 'amu ka fa-oote-a sifosifo-na gi
and 2PL SEQ CAUS-be.full-3.OBJ valley PL and 2PL SEQ CAUS-valley-3.OBJ descend-NMLZ PL
fai-li-a fe uo gi. Ma 'amu ka fa-rada tala koki gi, ma
COM-TR-3.OBJ CLF mountain PL and 2PL SEQ CAUS-be.straight-3PL.OBJ way be.crooked? PL and
'amu ka fa-dada tala gilugilu-a gi.
2PL SEQ CAUS-be.smooth(?) way be.rough? PL

'Fill every valley, and bring low every mountain and hill; and make straight the crooked, and make smooth the rough ways.'

- 3:6 Ma ioli sui ka-e lesi-a lia 'e God ka-e fa-mauri-da.
and people EXHST SEQ-IRR see-3.OBJ 3SG DEM.PROX God SEQ-IRR CAUS-live-3PL.OBJ
'And all people shall see that God will save them.'
- 3:7 Ma ioli afula gera laa mae 'i so'e-la John 'ali ka fasiuabu-da. Ma John
and people be.many 3PL go hither LOC GOAL-3.PERS John COMP SEQ baptize-3PL.OBJ and John
ka sae 'uri 'e fa-da, " 'Amu malaa mola 'amiu kale wa gi! Iko
SEQ speak thus DEM.PROX DAT-3PL.PERS 2PL resemble CONTR.FOC 2PL.BEN CLF snake PL NEG
'ali lau iili-a fa-miu fasiuabu-na ka-e lau 'ali 'amiu faasi-a
COMP 1sg tell-3SG.OBJ DAT-2PL.PERS baptize-NMLZ SEQ-IRR remove? COMP 2PL ABL-3.OBJ
kwaikwai-na God ala ikoso 'ali 'amu bulusi faasi-a ta'ana 'amiu gi li."
judge-NMLZ God if NEG2 COMP 2PL turn ABL-3.OBJ sin 2PL.NSBJ PL DEF
'Many people went to John to be baptized. John said to them, You are like snakes! I did not
tell you that baptism will protect you from God's wrath if you do not turn away from
your sins.'
- 3:8 'Amu tau-a 'are 'e fataili-a 'amu bulusi lo faasi-a ta'ana 'amiu gi li!
2PL do-3.OBJ thing DEM.PROX show-3SG.OBJ 2PL turn FOC ABL-3.OBJ sin 2PL.NSBJ PL DEF
Ma ikoso 'ali 'amu malata 'uri 'e 'i lao-la malata-miu, "I 'amami
and NEG2 COMP 2PL think thus DEM.PROX LOC inside-3.PERS mind-2PL.PERS LOC 1EXCL.PL.NSBJ
ioli 'ami futa mae a-la kwalofa Abraham gi li. 'Ato ta kwaikwaina
people 1EXCL.PL be.born hither at-3.PERS clan Abraham PL DEF cannot what plague
faasi-a God ka-e dao a-maami." Ma laka-e iili rada a-i
ABL-3.OBJ God SEQ-IRR arrive at-1EXCL.PL.PERS and 1SG.SEQ-IRR tell be.straight at-INDEF.PERS
fa-miu, 'e talawarau mola 'ala fa-la God 'ali sake-a ta me
DAT-2PL.PERS 3SG be.possible CONTR.FOC 3SG.BEN DAT-3SG.PERS God COMP take-3.OBJ what CLF
fau a-la fau 'e gi, ma ka raunai-li-a 'ali-a kwalofa Abraham gi!
stone at-3.PERS stone DEM.PROX PL and SEQ build-TR-3SG.OBJ INS-3.OBJ clan abraham PL
'Do things which show you have turned away from your sins! And do not think to yourselves,
We have been born into Abraham's clan, God's plague cannot touch us. For I say to
you, God is able to take a stone from these stones and build Abraham's clan.'
- 3:9 A-la talasi 'e, God 'e rerei lo 'ali-a kwaikwaina, malaa wale 'e dau
at-3.PERS time DEM.PROX God 3 be.ready FOC INS-3.OBJ plague resemble man 3 hold
a-la me kwaikwai li, ma ka rerei fa-la tofu-na-la 'ai gi li. Ma 'ai
at-3.PERS CLF axe DEF and SEQ be.ready DAT-3.PERS cut-NMLZ-3.PERS tree PL DEF and tree
iko 'ali gera funu 'ali-a tali fuae 'are 'oka gi li, ka-e tofu-da,
NEG COMP 3PL fruit INS-3.OBJ INDEF.NSPEC.PL fruit thing be.good PL DEF SEQ-IRR cut-3PL.OBJ
ma ka tasi-da 'i lao-la dunaa.
and SEQ throw-3PL.OBJ LOC inside-3.PERS fire
'Now God was ready with the plague, like a man with an axe who is ready to cut down trees.
And those trees which do not bring forth good fruit, he will cut them and throw them
into the fire.'

- 3:10 Sui, ioli gi gera ka soilidi 'uri 'e a-la John, "Ta taa 'e 'ami
 then people PL 3PL SEQ ask thus DEM.PROX at-3.PERS John what which DEM.PROX 1EXCL.PL
 ka tau-a ka fataili-a 'ami bulusi?"
 SEQ do-3SG.OBJ SEQ show-3.OBJ 1EXCL.PL turn
 'Then the people asked John, What shall we do to show we have changed?'
- 3:11 Ma John ka olisi 'uri 'e a-da, "Ala ta ioli 'e too a-la
 and John SEQ answer thus DEM.PROX at-3PL.PERS if INDEF.NSPEC.SG people 3 have at-3.PERS
 rua toro gi, ka kwate-a ruala toro fa-la ta ioli iko
 two garment PL SEQ give-3.OBJ two-3SG.PERS garment DAT-3.PERS INDEF.NSPEC.SG people NEG
 'ali too a-la ta me toro. Ma ala ta ioli 'e too
 COMP have at-3.PERS INDEF.NSPEC.SG CLF garment and if INDEF.NSPEC.SG people 3 have
 a-la fana gi, 'i lia ka tolini-a."
 at-3.PERS food PL LOC 3SG SEQ divide-3SG.OBJ
 'And John answered, saying, if someone has two coats, let him give the second coat to him
 that has none; and if someone has food, he should share it.'
- 3:12 Ma nali wale 'asa a-la sake-na-la bata a-la takisi li, gera
 and INDEF.SPEC.PL man hypocrite at-3.PERS take-NMLZ-3.PERS money at-3.PERS tax DEF 3PL
 dao lou mae fa-la sisiuabu-na, ma gera ka soilidi 'uri 'e, "Wale li
 arrive also hither DAT-3.PERS baptize-NMLZ and 3PL SEQ ask thus DEM.PROX man DEF
 faalalauna, ta taa lo 'ami ka tau-a ka fataili-a 'ami
 teacher INDEF.NSPEC.SG which FOC 1EXCL.PL SEQ do-3SG.OBJ SEQ show-3SG.OBJ 1EXCL.PL
 bulusi?"
 turn
 'Then some publicans also came to be baptized, and they asked him, Master, what shall we
 do to show we have repented?'
- 3:13 Ma John ka olisi 'uri 'e a-da, "'Amu ka logosi-a mola bata 'e
 and John SEQ answer thus DEM.PROX at-3PL.PERS 2PL SEQ gather-3.OBJ CONTR.FOC money 3
 totoli-a bata taki 'e alu-a. Ikoso 'ali 'amu suga liu-fi-a totofoe
 be.able-3.OBJ money law DEM.PROX put-3SG.OBJ NEG COMP 2PL request pass-TR-3.OBJ amount
 bata fo."
 money DEM.DIST
 'And John said to them, You take the money appointed for taxes. Ask for no more than this
 amount.'
- 3:14 Ma nali wale li ofona gera ka soilidi-a lou 'uri 'e, "Ma 'i
 and INDEF.SPEC.PL man DEF war 3PL SEQ ask-3SG.OBJ also thus DEM.PROX and LOC
 'ameulu, ta taa 'e meulu ka-e tau-a ka fataili-a 'ami
 1EXCL.PC.NSBJ INDEF.NSPEC.SG which DEM.PROX 1EXCL.PC SEQ-IRR do-3.OBJ SEQ show-3.OBJ 1EXCL.PL
 bulusi?" Ma 'i lia ka sae 'uri 'e fa-da, "'Amu a-la
 turn and LOC 3SG SEQ speak thus DEM.PROX DAT-3PL.PERS 2PL at-3.PERS

suunailia-na-la ta ioli fa-la kwate bata na 'amiu. Ma ikoso 'ali
 compel-NMLZ.VET-3.PERS what people DAT-3.PERS give money NMLZ 2PL.NSBJ and NEG2 COMP
 'amu beli ta ioli. Ma moulu ka babalafe fafi-a me bata gera
 2PL steal INDEFNSPEC.SG people and 2PC SEQ happy against-3.OBJ CLF money 3PL
 ka-e folifoli 'amiu lo 'ali-da gi."
 SEQ-IRR buy 2PL.NSBJ FOC INS-3PL.OBJ PL

'And the soldiers likewise demanded of him, saying, And us, what shall we do to show we
 have repented? And he said to them, Do not force people to give you money, do not
 steal; and be content with your wages.'

3:15 Ioli gera kwaimamali fa-la dao-na-la Christ, wale 'e God 'e
 people 3PL be.ready DAT-3.PERS arrive-NMLZ-3SG.PERS C. man DEM.PROX G. 3
 fili-a ka-e fa-mauri-a ioli lia gi li, gera malata 'uri 'e, "Mala
 choose-3SG.OBJ SEQ-IRR caus-live-3.OBJ people 3SG PL DEF 3PL think thus DEM.PROX whether
 John lo 'e Christ."
 J. FOC 3 C.

'The people who were ready for the arrival of Christ, who God chose to save people, they
 thought, Is John Christ?'

3:16 Ma John ka sae 'uri 'e fa-da, "Laka-e fasiuabu 'amiu mola
 and John SEQ speak thus DEM.PROX DAT-3PL.PERS 1SG.SEQ-IRR baptize 2PL.NSBJ CONTR.FOC
 'ali-a kwai, ma wale 'e ka-e dao mae 'i lia 'e 'ilitoa ka liu-fi lau.
 INS-3.OBJ water and man DEM.PROX SEQ-IRR arrive hither LOC 3SG 3 govern SEQ pass-TR 1SG
 Ma iko 'ali lau totolia 'ali lau tatali-a 'ae botu lia gi faasi-a 'ae-la. Ma
 and NEG COMP 1sg be.able COMP 1SG loosen-3.OBJ foot shoe 3SG PL ABL-3.OBJ foot-3SG.PERS and
 'i lia ka-e faasiu abu a-miu 'ali-a Alo a-la God fai-li-a dunaa."
 LOC 3SG SEQ-IRR baptize be.holy at-2PL.PERS INS-3.OBJ spirit at-3.PERS God COM-TR-3.OBJ fire
 'John answered, saying to them all, I indeed baptize you with water; but one mightier than I
 comes, whose shoes I am not worthy to untie: he shall baptize you with the Holy Ghost
 and with fire:'

3:17 Ma ka-e rerei lo fa-la loko-kwaikwai-na fa-la ioli sui, ka
 and SEQ-IRR make.ready FOC DAT-3.PERS ?-judge-NMLZ DAT-3.PERS people EXHST SEQ
 malaa na wale ka-e kefo-a bouboui 'are 'oka gi faasi-a
 resemble INDEF.SPEC.SG man SEQ-IRR ? wheat? thing be.good PL ABL-3SG.OBJ
 sunasuna-e 'are gi. Ma ka logosi-a bouboui 'are 'oka gi 'i lao-la
 skin-INDEF.PERS thing PL and SEQ gather-3.OBJ wheat? thing be.good PL LOC inside-3.PERS
 luma li goli 'are na, ma ka 'agofi-a lo sunasuna-e 'are gi 'i lao-la
 house DEF keep thing NMLZ? and SEQ burn-3.OBJ FOC skin-INDEF.PERS thing PL LOC inside-3.PERS
 dunaa la ikoso 'ali mae.
 fire DEM4 NEG2 COMP die

'And he is ready to judge people, like the man who takes the good wheat from the chaff.
 And he will gather the good wheat inside his house where he keeps it, and he will burn
 the chaff in the fire unquenchable.'

3:18 Ma John ka sae sulī-a Faronona 'Oka fa-da 'ali-a alaana afula
 and John SEQ speak about-3.OBJ gospel be.good DAT-3PL.PERS INS-3.OBJ language be.many
 'urifo gi, ma ka sae-fi-da 'ali gera olisi-a falafala gera gi.
 after PL and SEQ speak-TR-3PL.OBJ COMP 3PL answer-3.OBJ deed 3PL PL
 'And with many other words, John spoke about the Good News to them and encouraged
 them.'

C Glossary

- '**a'ae-** *n.inal.* foot
 '**aba'aba-** *n.inal.* wing
 '**aba'aba**² *n.inal.*
 '**aba-** *n.inal.* leaf
 '**abae** *n.* sheet
 '**abero-** *v.i.* worry
 '**aberosi-** *v.t.* worry
 '**abu** *n.inal.* blood
 '**ada** *pron.* 3pl.ben
 '**adaoro** *v.i.* stoop down
 '**adaulu** *pron.* 3pc
 '**ado** *v.i.* partake in; be together with
 '**ae** *other* exclamatory part.
 '**ae-** *n.inal.* foot
 '**aesi** *n.* ice
 '**afa'afa** *v.i.* be unpleasant
 '**afaa** *v.i.* bitter
 '**afero** *v.i.* marvel
 '**afi-** *prep.v.* goal/allative
 '**afu** *v.i.* be full
 '**afu-** *v.t.* wrap
 '**afu**² *v.i.* be widespread
 '**afui-** *v.t.* be dispersed around
 '**afuta-** *n.inal.* throughout
 '**agaulu** *pron.* 1in.pl
 '**ago** *v.i.* burn
 '**ago'ago** *v.i.* be hot
 '**ago'agonali** *n.* summer
 '**agofi-** *v.t.* burn
 '**ai** *n.* tree
 '**ailuga** *v.i.* despise
 '**akwaa** *v.i.* recover
 '**ala niriniri** *v.i.* bite wildly(?)
 '**alai-** *v.t.* bite
 '**amami** *pron.* 1ex.pl.nsbj
 '**amara** *v.i.* infertile
 '**ameroa** *pron.* 1ex.du.nsb
 '**ameulu** *pron.* 1pc.ex.nsbj
 '**amiu** *pron.* 2pl.nsbj
 '**amola** *pron.* 2du
 '**amoroa** *pron.* 2du.nsbj
 '**amoulu** *pron.* 2pc.nsbj
 '**amu** *pron.* 2pl
 '**ani-** *v.t.* eat
 '**are** *n.* thing
 '**asa** *n.* hypocrite
 '**asu'asu** *v.i.* relax(?)
 '**ato** *v.i.* cannot
 '**atona** *n.devbl.* difficulty
 '**au** *n.* sword
 '**aurae-** *v.t.* glorify
 '**aurafu** *v.i.* invest/risk?
 '**e** *other* 3sg.agr
 '**e'ela** *v.i.* be stubborn/insubordinate/inimical
 '**e**² *pron.* dem.prox
 '**e**²3 *pron.* 3.nseq
 '**efo-** *v.t.* slice
 '**eke** *v.i.* be ashamed
 '**ela** *v.i.* hate
 '**eli-** *v.t.* dig
 '**ere** *n.* wall
 '**ere-** *v.t.* steer
 '**erefau** *n.* altar
 '**eregwau** *n.* crown
 '**i** *other* LOC
 '**i'iu** *n.* twin
 '**ida'ida** *n.* sweat
 '**idu** *v.i.* budge
 '**idufae** *v.i.* always/continuously
 '**iguara** *n.* cave?

- '**ilitoa** v.i. govern
'**ilitoa ala ofona** n. captain
'**ilitoana** n.devbl. kingdom
'**ilu-** v.t. influence?
'**ini-** v.t. squeeze
'**iro-** v.t. pluck out
'**isi'isi** v.i. last
'**isi-** v.t. insult
'**isiburi-** n.inal. last
'**ite** n. bag
'**itoe** v.i. do habitually
'**itoli** v.i. do continuously
'**o** pron. 2sg.sbj
'**o ma** other or
'**o'o** v.i. alight
'**ofaedani** n. early/morning
'**ofi** v.i. lament
'**oi** v.i. be stamped(?)
'**oi'oi** n. unit of measurement
'**oi-** v.t. break
'**oilakina** n.devbl. blessing
'**oilakitae** v.i. bless
'**oilakitaili-** v.t. bless
'**oka** v.i. good
'**ole-** v.t. cut
'**olofolo** n. door
'**ora** n. ash/dust
'**oru-** n.inal. widow
'**osi** n. sea
'**oso** v.t. deceive/use person
'**oso'oso** v.i. be hypocrite
'**u'u-** n.inal. finger
'**u'ulu** n. story
'**ua** v.i. be of late
'**uasi-** v.t. curse
'**uasi**² v.t. curse
'**uga** v.i. be envious
'**ugali-** v.t. envy
'**ui** v.i. throw
'**ui'ui** v.i. strike at(?)
'**ui-** v.t. shoot
'**uli'uli** v.i. dirty
'**uria** other introduces indirect quotation
'**urila** other therefore
'**usu-** v.t. wipe
'**usufafulu-** v.t. erase
'**utaa** other how
'**Nikolaus** n. Nicolaitan
'**Olif** n. Olives
'**a-** prep.n. at
'**aani** v.i. cry
'**abae** n. clf
'**abali** n. afternoon
'**abalo-** n.inal. loins
'**abolo-** n.inal. loins
'**abu** v.i. holy
'**abulo-** v.i. turn
'**aburono-** v.t. disobey/be contemptuous
'**adaulu** pron. 3pc
'**aeana** n. iron
'**afaagali** v.i. cheer up
'**afe** v.i. rain/flow out
'**afola** v.i. broad
'**afula** v.i. be.many
'**afulana-** n.devbl. many/large.portion
'**agalo** n. mischief/rascality?
'**agau** v.i. appropriate/convenient
'**agaulu** pron. 1in.pc
'**age** n. foundation
'**ageage** n. foundation
'**agwa-** v.i. hide
'**agwaagwa** v.i. secretly
'**akari-** v.i. break up
'**akwa** v.i. shout
'**akwala wala rua** num. twelve
'**akwataili-** v.t. proclaim
'**ala'ali-** v.t. allow
'**alaa-** v.i. speak
'**alaala** v.i. look upwards(?)
'**alaana** n.devbl. language/message
'**alafafi-** v.t. accept
'**alafaitalili** v.i. dispute
'**alafuu** v.i. promise/swear
'**aliburi-** v.t. follow behind
'**alo** n. spirit
'**alo-** n.inal. spirit

- aloe 'are ta'a** *n.* devil
alomi- *v.t.* bury
alu- *v.t.* put/beget
alualu *v.i.* leave from/say goodbye
amasi- *v.t.* have mercy on
ami *pron.* 1pc.ex
ani *v.i.* cry
anina- *n.inal.* ear
anisi- *v.t.* weep for
aniulu *v.i.* beseech
anoano *v.i.* creeping
aofia *n.* lord
aolo *v.i.* right
araaraina *n.devbl.* wedding/marriage
arai *n.* husband
aroaro *v.i.* be peaceful
aroarona *n.devbl.* peace
asi *n.* salt
asi- *n.inal.* brother
asi² *n.* sea
asiasila *v.i.* be salty
asiasilanai *n.* saltness
asila *n.* brother
atale *v.i.* be apart
atoa *n.* day
atoali *n.* generation
awaili- *v.t.* carry
awale *other* mirative
ba *other* dem3
ba'ela *v.i.* large
baba *v.i.* flat
babae *n.* piece
babala *n.* tabernacle/barn
babalafe- *v.i.* happy
babali *v.i.* drink excessively(?)
babali- *n.inal.* mouth/face?
babatoo *v.i.* be peaceful
baibai *n.* palm tree
bakwala *v.i.* dissimulate
balabalaa *v.i.* pale
bali *v.i.* deaf/foolish
bali- *v.t.* cast out
balibali *n.* wall
balubalua *v.i.* be angry
balufi- *v.t.* rebuke
banisi *n.* sheepfold
bao *n.* tomb
barae *n.* few/certain
barasi *v.i.* reject
barasili- *v.t.* reject
baru *n.* boat
basi *n.* bow
bata *n.* money
batafe- *v.t.* bless/thank
bebesi- *v.t.* throng/impede
beli- *v.t.* steal
belibeli *v.i.* habitually steal
berete *n.* loaves
biibii *v.i.* hold/hug(?)
bo *n.* pig
boboe *n.* clump
boboo *v.i.* need
bobou *n.* clump
boeboeta *v.i.* be worried
boesi- *v.t.* worry/trouble
bogwau *n.* pillow
bokosi *n.* box
bola *n.* dove
bole- *v.i.* dream
bolosi- *v.t.* cover
bolubolunae *n.* group(?)
boni *n.* night
boo *n.* pig
booboo *v.i.* have need/be burdened
booburi- *v.t.* stir up
booburila *v.i.* follow
bora *v.i.* blue?
borabora *n.* blue/purple
bote *v.i.* be satisfied
botole *n.* bottle
botu *n.* shoe
bou *v.i.* be knotted
boubou- *n.inal.* kernel(?)
boururu *v.i.* kneel down
brasi *n.* brass
bubu *v.i.* look

- bubuni** v.i. look on
bubuu n. (*malu bubuu*) eagle
bui n.inal. after/behind
buka n. book
bulao v.i. grow
buli- v.t. smear/cover
bulibuli v.i. be unclean
bulina n.devbl. seal
bulono v.i. forget
bulonosi- v.t. forget
buluka n. cow
bulula walege n. ink
bulusi- v.t. change/turn around
bunu n. trumpet
huri- n.inal. after
buruburui v.i. burn(?)
busu- v.t. thrust?
da'afi n. sun
da'afi² v.i. shine(sun)
daafi- v.t. wither
dadala v.i. be naked
dadani n. bride
daisi n. share/part
dako n. basin
dalafa v.i. be useless
dalafi- v.t. anoint
dani n. morning
dao- v.i. arrive
daofi- v.t. come to
daoraili- v.t. distribute?
dara- n.inal. forehead
dari- v.t. find
daro pron. 3du.sbj
daroa pron. 3du.nsbj
dasa n. cloud
dau v.i. hold?
daulu pron. 3pc
dedefulida v.i. take someone's place/lodge in
dila v.i. sorrowful
dila- v.t. insert/introduce(?)
diunala n. brass?
dodo n. brook/stream
dodoko v.i. a.little
dodolana v.i. pregnant
doi- v.t. pick up
dola- v.t. mix
dole v.i. delay
dona v.t. follow
dongki n. donkey
dorakwala v.i. mock
dragon n. dragon
dudu v.i. go
duna- n.inal. because
dunaa n. fire
duu- v.t. pay
eke- n.inal. egg
eniselo n. angel
eta num. one
eta² v.i. be first
etae v.i. be first
etaeta v.i. precede/premier
etani- v.t. start?
fa'alu v.i. be.new/young
fa'asi- prep.v. from
fa'ilitoa- v.t. honor
fa'oka v.t. bless
fa'uli'uli- v.t. defile
fa- prep.n. CAUS
faa- v.t. call
faagwa- v.t. hide
faakobu- v.t. slaughter
faakweo v.t. weary
faalalau- v.t. teach
faalalauna n. master
faalana- v.t. clean
faamauri- v.t. save
faaora v.i. mock
faarono v.t. inform
faasi- prep.v. abl
faasui- v.t. complete
faatalo v.i. preach/report
fababatoo v.t. comfort
fabaela- v.t. honor
fabasu- v.t. forewarn
fada- v.t. explain
fadanai n.devbl. meaning

- fae* prep.v. com
faeburi v.i. reject
fafa'alu- v.t. make new
fafalu- v.t. make new
fafaronona n. testament
fafasui- v.t. end
fafi- prep.v. against
fafonu- v.t. fill
fafu'isi v.i. last
fafua'a- n.inal. against
fafua'ana- n.inal. against
fafulu- v.t. cause.vanish
fafuna n.devbl. patience
fafurata- v.t. name
fafurono- v.i. listen
fafuta'a- v.t. corrupt
fafuta- v.t. bear
fafutala v.t. offend
fafutala- v.t. offend
faga n. 1in.pl.dat/ship
fagu n. ship
fagwari- v.t. cool
fai num. four
fai'isi v.i. curse
faifaimaasi v.i. wait
faili- prep.v. com
*faili-*² v.t. weed
faimaasi v.i. wait
fainaonao n. chief
fairalo v.i. beckon
faisoi v.i. call
faitale- v.i. seek
fakaka'a v.t. bleach
fakwalaimoki- v.t. believe
fakwalaimokina n.devbl. faith
fakwaru- v.t. light
falafala n. custom/way
falalama- v.t. promise/empower
falalau- v.t. teach
falalauna n.devbl. teaching
faliodila- v.t. make sad
falisi n. year
falua n. land/city
famalifii v.i. suffer
famano- v.t. stop/prevent
fana v.i. eat
*fana*² n. food
fanalunalu- v.t. incite/uproar?
fanana n.devbl. feast
fananata- v.t. strengthen
fanasi- v.t. secure/swear
fao n. turtledove
farada- v.t. secure/prepare/correct
faradanai n.devbl. preparations
farae- v.t. vaunt
farafurafu- v.t. cover with?
farao- v.t. tame
farero- v.t. deceive
farifari n. scorpion
farono- v.t. recount
fasi- v.t. plant
fasifasi n. planting seed
fasifo- v.t. set down
fasiu abu v.t. baptize
fasusu- v.t. suckle
fata n. priest
fata abu n. priest
fatae v.i. be revealed
fataena n.devbl. vision
fataili- v.t. show
fatalo v.t. promote
fau n. stone
faua v.i. stony
faufau v.i. stony
fawasiu- v.t. wet
fawawade- v.t. make small
fawawalo- v.t. soak
fefeo v.i. be influenced(?)
feo v.t. influence/pervert
ferofero v.i. be ashamed(?)
fia- v.i. suppose
fidali- v.t. smite
fifi v.i. harshly/brightly(?)
figi n. fig
fii- v.i. be in pain
*fii-*² v.t. hurt

- fifii** v.i. sting
fiitala v.i. worry
fili- v.t. choose
filifili v.i. choose
filisi- n.inal. flesh
fiolo v.i. be hungry
firi v.i. last long
firi- v.t. tie
firifiri v.i. bind upon
fis- v.t. harvest
fitala v.i. be perplexed
fito- v.t. have faith
fitoo v.i. have faith
fiu num. seven
fo other dem.dist
foa- v.i. pray
fofo n. perfume
fofo- n.inal. top
fofoe n. bundle/letter
foga- v.t. burst
foka- n.inal. mouth
folafola v.i. be calm (waters)
foli- v.t. buy
folo v.i. firm/bound/securely
folosi- v.t. against
folotaili- v.t. drape
fonu v.i. be full
fonuli- v.t. fill
foo v.i. gird
foosi- v.t. gird
forae n. girdle
foto- v.i. strike/knock
fotofafi- v.t. nail
fotoi- v.t. blow/crucify
fotorae v.i. stumble
fua n. earth
fua² n.inal. seed/fruit
fufua- n.inal. seed/fruit
fulafula n. fountain
fulanaili- v.t. testify to
fuli'ae v.i. start
fuli- v.i. happen?
fuli-² n.inal. place
fulu n. pillar
funu v.i. bear fruit
funufunu v.i. bear fruit
fu n. net
furafura v.i. degrade
futa- v.i. be born
futa-² n.inal. offspring
futali- v.t. be born as
futana- n.devbl. birth
futofuto n. foam
futofutoa v.i. foam
fuufuu- n.inal. breast
fuui n. tribe
fuunaili- v.t. confess/account
ga other hort
gaga v.i. tear
gagasi- v.t. tear
gagau- n.inal. fingertips(?)
gale- n.inal. son
gali- v.t. surround
galo v.i. work/serve
galofi- v.t. produce/accomplish
galogalo v.i. work
gaogao v.i. rip off
garani v.t. be near
garani- v.t. be near
garu v.i. grasp
gasi- v.t. pierce
gefusi- v.t. roll
gege- n.inal. nearby?
gegelo v.i. hang
gegerena n.devbl. scriptures
gelema v.i. practice witchcraft
geli n. woman/wife
geli funao n. daughter in-law
gelifae n. sister
gera pron. 3pl
geraka pron. 3pl.agr
gerakae pron. 3pl.agr.irreals
geregere v.i. write
geregerena n. book
geresi- v.t. write
geti n. gate

- geusi-** v.t. overturn
gi other pl
gia pron. 1in.pl
giaka pron. 1in.pl.agr
gigiluna n.devbl. sepulchre
gilu n. grave/pit
gilugilua v.i. be rough
gimolo v.i. drown
giri- v.t. thrust/gnash
gogo- n.inal. tablet/stone(?)
gogolafa v.i. be dark
gola v.i. black
goli- v.t. keep
golu pron. 1in.pc
gora pron. 1du.in
goraa n. dust
gou v.i. drink
goulu n. gold
grep n. vine
guagua v.i. be receptive(?)
gula n. side
gulae n. coast
gulagula n. matter/concern
gulufau- v.t. weigh down
gulugulu v.i. heavy
gumuli- v.t. beat(hapax)
gura v.i. be healed
gura- v.t. heal
gwaegwae n. crowd/herd/flock
gwafe- v.t. comfort
gwagwaea n. bride?
gwano n. reed
gwari v.i. be cold
gwarii n. cold
gwau- n.inal. head
gwaugwau v.i. freely
gwaugwauru v.i. sit
gwauru v.i. sit
gwela n. throne
gwelusi- v.t. roll
hosi n. horse
ia n. fish
idu v.i. read
iduiduna n.devbl. reading
idumi- v.t. read
ifu- n.inal. hair
iigi v.i. thunder
ili- v.t. say/tell
ikoiko v.i. be lost
ikoso other neg
ili- v.t. say
ilitoo- v.t. tempt
io v.i. stay/be at
iofi- v.t. stay inside of
ioio v.i. sit/stay
ioi n. people/body
iolifuta n. kinsmen
iroiroa v.i. be precious(stone)
ist n. yeast
isufutana n. genealogy
isuisuna n.devbl. ancestry(?)
isuuna n. bloodline/generation?
itoito n. snare/trap
jiu n. jew
ka pron. seq
kabilato n. linen cloth
kae pron. agr.irrealis
kai n. millstone
kaka'a v.i. white
kakali- v.t. respect
kakaraikua n. cock
kalasu- v.t. remove
kale other clf for young animal
kalokalo- n.inal. root
kamel n. camel
karai n. chicken
karakaraa n. thorn
karao- n.inal. side
ke v.i. be more
kefo- v.i. sieve/winnow?
keme n. small amount
keri- v.t. send
keta- v.t. disperse
ketaketa v.i. be different
kete n. well
kidikidi v.i. knock on door

- kii** *n.* key
kiki- *v.t.* sprinkle/scatter
ko *pron.* agr.2sg
ko² *other* thither
koburu *n.* storm
koe *pron.* agr.2sg.irr
koki *v.i.* be crooked
koko *n.* father
kokomu *n.* island
kome *n.* ring
konakona *v.i.* be fierce(?)
korikori *v.i.* shave hair(?)
koro *v.i.* blind
korokoro *v.i.* be blind
koto *v.i.* howl
kotofi- *v.t.* slander/accuse
kotokoto *v.i.* be false
kuba *n.* staff
kuba² *n.* walking stick
kufi *v.t.* cover up/hide/overshadow
kui *n.* dog
kuku *v.i.* wither
kukufi *n.* container/jar
kukui- *n.inal.* tail
kukui-² *n.inal.* tail
kurukuru *n.* thunder
kuu *n.* leprosy
kwaga *v.i.* clean
kwai *n.* water
kwai'ofe *v.i.* be gracious
kwai- *v.t.* wound/abuse
kwai-² *v.t.* pluck(harp)
kwaiara *n.* reward
kwaiara- *v.t.* reward
kwaiasi- *v.t.* fish
kwaiasina *n.devbl.* fisherman
kwaibusu *n.* wave/flood
kwaiyii *v.i.* be envious
kwaikaena *n.* commandment
kwaikwai- *v.t.* judge
kwaikwaina *n.* condemnation/plague
kwailiu *v.i.* reciprocal
kwailufa *v.i.* forgive
kwaima *n.* friend
kwaima² *v.i.* be friend
kwaimaana *n.inal.* love
kwaimalatai *v.i.* grieve
kwaimamali *v.i.* be ready
kwaimasi *v.t.* be desirous
kwaiogalina *n.devbl.* will
kwairanai *v.i.* help
kwaisusuaina *n.devbl.* complaint?
kwaitalai *v.i.* lead
kwakwana *n.* hole?
kwakwatena *n.devbl.* gift
kwalaa *v.i.* quarrel
kwalaana *n.devbl.* conflict
kwalaimoki *v.i.* true
kwalaimoki- *v.i.* true
kwalikwali *n.* star
kwalo *n.* hook/thorn/switch
kwalo- *v.t.* summon/invite
kwalofa *n.* clan
kwalu *num.* eight
kwaluke *n.* any/whichever
kwana *v.i.* shine/flash
kwana² *n.* lightning
kwari- *v.t.* lacerate
kwaru *v.i.* shine
kwarufi- *v.t.* shine from
kwasi *v.i.* wild
kwate- *v.t.* give
kwate-² *v.t.* allow/cause
kwate-²³ *prep.v.* allow/cause
kwatekwate *v.i.* give.VVII
kwato *n.* horn
kwekwe'ela *v.i.* foolish/crazy
kwele *v.i.* be amazed
kweo *v.i.* be tired
la *v.i.* go
la la *other* until
la² *other* dem4
labata *n.* palace
labu *n.* gate
ladi *v.i.* sharp?
lado *v.i.* hang by string

- ladona** *n.devbl.* stitch
lafe *v.i.* proud
lafolafo *n.* waves
lafu- *v.t.* dislodge
lafu-² *n.inal.* shred/rag
lagu *v.i.* mourn
lai *v.i.* adulterous
laka *pron.* 1sg.agr
lakae *pron.* 1sg.agr.irrealis
lalama *v.i.* certain/powerful
lalana *n.devbl.* journey?
lalao *v.i.* run
lalaofi- *v.t.* rush at
lalifu *v.i.* grow/thrive?
lama *v.i.* be deep
lamo *n.* pool
lana *n.* loan
lana- *n.inal.* way
lana² *v.i.* be dry
lano bulu *n.* fly/gnat
laofi- *v.t.* go inside
latafa *v.i.* go out
lau *pron.* 1sg
laulau *v.i.* whole/entire
launi *n.* pearls
launi- *v.t.* decorate
lebelebe *v.i.* tremble
leesi- *v.t.* see
lelesi- *v.t.* see
lesi- *v.t.* see
lesinai *n.devbl.* vision
lia *pron.* 3sg
lifi *n.* place
lifo- *n.inal.* tooth
lifurono *n.* prophesy/prophet
lii- *v.t.* break
liisi- *v.t.* see lii-
lilimana- *n.devbl.* depth
liliu *v.i.* pass by/walk around
liluliu *v.i.* walk
lima *num.* five
lima- *n.inal.* hand/five
limalima- *n.inal.* hand
line- *n.inal.* voice
lio *v.i.* watch/look
lio ta'a *v.i.* hate
lio- *n.inal.* will/thought
lio-² *v.t.* hang
liodila *v.i.* be heavy
liodila² *v.i.* be sad
liolio *v.i.* look well
liotoo *n.* wisdom
liu *v.i.* walk/pass
liu² *n.* coconut
liufi- *v.t.* among
liuliu *v.i.* walk
lo *other* prf
lo² *other* foc
lobaa *n.* village/town
lobo- *v.t.* be silent
loda *other* clf?
lode *n.* fish
lofisinala *n.devbl.* accusation(?)
lofo *v.i.* leap
lofo² *n.inal.* womb/entrance
lofosi- *v.t.* revile/blaspheme
logo *v.i.* gather
logologona *n.devbl.* group of people
logona *n.devbl.* crowd
logosi- *v.t.* prepare food
logosi-² *v.t.* gather
lokokwaikwaina *v.i.* pass judgment
lokokwaikwaina² *n.* judgment
lokomalata *v.i.* decide
lokomalatana *n.devbl.* counsel
lokoo *n.* over there?
lolo *v.i.* press
lologosi- *v.t.* store/warehouse
loloi- *v.t.* hug?
lolonaili- *v.t.* despise
loto- *v.i.* kiss
lotofi- *v.t.* kiss
lua *n.inal.* neck
lufa- *v.t.* release
luga- *v.t.* release
lugatae *v.i.* divorce

- lugataili-** v.t. divorce
lui- v.t. forbid/distract
lulu n. superscription
lulu- v.t. cast out
lulufa- n.inal. cross over to(?)
lulufaili- v.t. carry away
lulufi v.i. be protected/sheltered?
lului n. image/shadow
lululu n. earthquake
lulumui v.i. be drunk
luma n. house
lumulumu n. sponge
luula- n.inal. nation
luulaa n. nation
ma other and
ma'ali- v.t. covet
maa- n.inal. eye
maafoo v.i. insult
maasi- v.t. until
maasi-² v.t. wait for
mada v.i. ripe
madafi- v.t. be wary
madakwa v.i. be clear
madakwana n.devbl. light
madama n. month/moon
mae other hither
mae- v.i. die
mae² n. far
maela- n.inal. price
maemae v.i. die
maena n.devbl. death
maerodo n. darkness
mafo v.i. recover from leprosy
magulu v.i. make sound?
maili- v.t. intend/oversee
mailitona- v.t. tempt
maimaili v.i. be watchful
mala n. door
malaa n. wound
malakwaita v.i. persecute
malamalata v.i. think
malata v.i. think
malata tonala v.i. remember
malata- n.inal. heart/thought
malatai v.t. comfort
malimae n. enemy
malina v.i. understand
malinaili- v.t. understand
malu n. fowl
malu- n.inal. underneath
maluma pron. outside
malumalu v.i. cast shadow
maluta- n.inal. meaning
mama n. father
mama'ala v.i. wondrous/sign/proof
mamaea v.i. be humble
mamako n. clay
mamalo- v.i. rest
mamaoa n. linen/gown(?)
mamasi v.i. be sweet
mamasia v.i. be sweet
mamata v.i. other/foreign
mami v.i. taste?
manisi v.i. scatter
mano v.i. stop
mano- n.inal. soul/breath
manofi v.t. breathe on
manotafa v.i. emerge
maola v.i. startle
maoma n. gathering(?)
mara'ebi'ebi v.i. be troubled
marabe v.i. be willing
marakwa v.i. green
matae v.i. be sick
matai v.i. be sick
mataina n.devbl. disease
matakwa n. shallow water
matamatafaana n. dispute
matamatai v.i. be sick
matana- n.inal. between/among
matou- n.inal. middle (of day/night)
mau v.i. fear
maua v.i. mature/ripe
mauli v.i. left
mauli- v.t. fear
maumaula v.i. be feeble

- maumauri** v.i. live
mauri v.i. live
maurina- n.devbl. life
mea n.inal. tongue
meamea n. flame
meili- v.t. lick
melamelaa v.i. red
meme v.i. be pulverized?
mera pron. 1du.ex
meulu pron. 1pc.ex
midia v.i. dirty/base
mira n. myrrh
mo'osu- v.i. sleep
moataili- v.t. spit out
mola other foc.contr
molagali n. world
molimolia v.i. be folded
momo'osu v.i. sleep
momosula v.i. be sleepily
moo'oi v.i. fracture
mora pron. 2du
moulu pron. 2pl
mousi- v.t. sever
moutae v.i. beloved
na other vetitive
na² other indef.spec
nainali other straightaway
nalafi n. yesterday
nali n. heaven/year/some/other
nana v.i. be costly/difficult
nanana n.devbl. cost/difficulty
nanata v.i. be strong
nanatana n.devbl. strength
nanita other when
nasi v.i. remain
nasinasia v.i. be firm
naunau v.i. be haughty
nekeneke- v.t. overflow
nene- v.t. opine/insult
nidu- n.inal. lips/mouth
niki- v.t. pour
ninidua n. honey
nisinisi n. fragment
nisu v.i. spit
nisu- n.inal. saliva
nisufi- v.t. spit
none v.i. compete
nonoe v.i. be foolish
nonora n. cape
nora v.i. roar?
nuli- v.t. sing
nuru v.i. say secretly
nurunuru v.i. whisper/murmur
nuu v.t. sing/praise
nuu² n. song
ode- v.t. infect
ofi- v.t. embrace/hold child
ofona n.devbl. war?
ofotae v.i. be few
ofotaili- v.t. confiscate/destroy
oga v.i. want
oga- n.inal. bowels
ogabolo v.i. suffer/sorrow
ogata'a v.i. be angry
ole n. sand
oli v.i. return
olifae v.i. release
olifaili- v.t. release
olioli v.i. distinguish
oliolisi v.t. change money
oliolita- n.inal. progeny
olisi- v.t. answer
olisusu- v.t. question(v)
olitala- n.inal. successor/heir
olo num. six
olo² v.i. move in water?
olomi- v.t. swallow
oloolo v.i. swim
olotatara v.i. dock(ship)?
olu num. three
oosi v.i. be lost/destroyed
ore v.i. be remaining
ore- v.t. be remaining
oro- v.t. control
oru n. wind
osi- v.t. destroy

- osia-** *n.inal.* reason/sake
ote *n.* valley/plain
paku *v.i.* be preserved
peko *v.i.* do wrong
pekopeko *v.i.* do wrong
pel *n.* pearl
pera *n.* basket
profet *n.* prophet
rabe- *n.inal.* body/side
rabefii *v.i.* be in pain
raberabe *n.* kinship term
rabu *v.i.* strike
rabusi- *v.t.* beat
rada *v.i.* straight/right
radana *n.devbl.* righteousness
rade *n.* reed
rae- *v.t.* recognize
rae-² *v.i.* ascend
raefuli *v.i.* be hidden
raerae *v.i.* be high
raeraena *n.devbl.* hill
rafae *v.i.* ride
rafali- *v.t.* ride on?
rafule *n.* morning
raga *v.i.* be hot
ragana *n.devbl.* fever
ragaragaa *v.i.* intensely
raku *n.* farm/field
ralada *v.i.* be proud(?)
raloo *n.* heaven
ramo *v.i.* be mighty(?)
ramoramo- *v.i.* boldly/openly
rana- *v.t.* help
ranoli- *v.t.* to serve; feed
rao *v.i.* be orderly
rara *v.i.* warm
rara- *n.inal.* branch
raraa *n.* prison
rarabalana- *n.devbl.* brightness
rarada *v.i.* equal
raradanidania *v.i.* brilliant like midday sun
rarae *v.i.* light/loose
rarafii- *v.t.* shine on
rarani- *v.t.* warm
raratai *v.i.* adhere
rari- *v.t.* not know
rasu *n.* smoke
rasua *v.i.* very
rau *v.i.* kill
rau² *v.i.* be made of/become
rauli *v.i.* argue?
raumi- *v.t.* mend
raunae *v.i.* build
raunaili- *v.t.* build
rauni- *v.t.* kill
raurafi *n.* evening
rauraunae *v.i.* build/craft
reirei *v.i.* arise
rerei *v.i.* be ready
rerei- *v.t.* make ready
rero *v.i.* wrong
rii *v.i.* shout
rodo *v.i.* dark
rono- *v.t.* hear
ronosuli- *v.t.* obey/submit
roroa *v.i.* bright white(?)
roronoa *v.i.* hear
rua *num.* two
ruarua *num.* twice/double
rufi- *v.t.* wear
ruru *v.i.* be together
ruu *v.i.* enter
ruufi- *v.t.* wear
ruufolo *v.i.* be nosy
sae *v.i.* talk
sae anina- *v.i.* persuade (talk ear-)
saefi- *v.t.* convince
saena- *n.devbl.* word/language
saesae *v.i.* talkative
safita- *n.inal.* among/together
sai *v.i.* know
saisai *v.i.* know
sake- *v.t.* take
sakesake *v.t.* collecting
sakwadola *v.i.* free
salfa *n.* sulfur

- sama gagalo** v.i. fumble around(?)
samusamua v.i. tassel
sara v.i. land/beach
sau- v.t. wash
seleni n. money/silver
selo n. sail
selo² v.i. sail
seni n. chain
si'ina n.devbl. spice
sifo v.i. descend
sifosifona n. hill
sigi- v.t. disencumber
sigirae v.i. be apart
sigiraili- v.t. sprinkle on
siisii n. locust
sikwa num. nine
sili- v.t. seek
siligou v.i. be thirsty
sinosino v.i. be glorious
siofa v.i. poor
sipsip n. sheep
sisinaranara v.i. stubborn/difficult(?)
sisiu v.i. be washed
sisiu abu v.i. be baptized
sitoe n. merchandise?
siufi- v.t. wash/rinse
so'e- n.inal. unto
soe- n.inal. goal/adjac
sofili- v.i. decide/prefer
soi- v.t. call
soilidi- v.t. ask
su v.i. accuse
suapata n. spear
subi n. stave
suga- v.t. request
sui v.i. and/but/all/pass/be finished
suisuina- n.devbl. edge
suli-² n.inal. bone
sulii n. bone
suna- n.inal. sunset
sunasuna- n.inal. skin/hide?
sura v.i. possess(spirit)
suradai- v.t. provoke
suri n. sparrow
susua n. corner
susukudi v.i. narrow
susuu n. milk
susuu² v.i. crowd
suu v.i. accuse
suufi- v.t. shave
suunae- v.t. force
suunaili- v.t. compel
suusuu v.i. constantly argue
ta'a v.i. bad
ta'ana n.devbl. sin
ta² other what(ever)
taa other which
taasi- v.t. throw
taba v.i. cast out
tabali- v.t. evict
tada- v.t. stretch forth
taefi- v.t. embark
taetae 'are n. container
tafa v.i. open
tafaa n. shore
tafali- v.t. open/break
tafana- v.t. measure
tafanae v.i. be revealed
tafe n. bed
tafe- v.t. praise
tafi v.i. leave/flee
tafisi- v.t. abandon
tafo- v.t. pull up
tafu n. dirt
tafula v.i. shake
tafutafu n. filth
taga v.i. be spread open
tagae n. flower
tagalae v.i. scatter
tagalaili- v.t. scatter
tagalo v.i. crumble
taganala n. flower
tai- v.t. weave
taitai v.i. sew
taki n. law/command
takisi n. tax

- tala** v.i. shine
tala- n.inal. oneself
tala⁻² n.inal. oneself
tala² n. street/way
talafi- v.t. lose
talai- v.t. lead
talasi n. time
talatala v.i. miss mark
talawarau- v.i. be possible
talifili- prep.v. only/alone
talo v.i. spread
talofi- v.t. spread
talulu v.i. sound?
tamitami- n.inal. garment border
tanafulu- n.inal. tithe/tenth
tara'ela n. day
tara- v.t. draw
tarapapa n. table
taratara- v.t. draw carriage
tarena v.i. add
tarifulaana n.devbl. parable
taritarifaa v.i. close-minded/unsympathetic
tarosi v.i. travel
tasa v.i. be much
tasi v.t. throw
tatae- v.i. get up
tatafe n. nest/station
tatali- v.t. loosen
tatalofa v.i. rule/have dominion
tatalona n.devbl. kingdom
tatau v.i. far
tatu v.i. run together
tau- v.t. do
taufasia other lest
tauma other lest
tautau- v.t. do
te other indef.spec
tefau v.i. completely?
tefulaili- v.t. contempt/despise
teifau v.i. completely?
teite n. mother
teke other one
tekwa v.i. long
tenetene n. any instant(?)
teo v.i. lay
teoteo v.i. lay
tete n. container(?)
teu n. drinking cup
titike v.i. be tiny
to'oli num. thousand
to'omi n. clothes
tobi² n. room
toetoela v.i. suffer/endure
tofe- v.t. deny
tofu- v.t. cut
tofui n. piece
tole- v.t. take/marry
toli v.i. fall
tolini- v.t. divide
tolinimalata n. judgement
tolo n. place/land
tona- n.inal. touch
too v.i. rain
too² v.i. have
too²³ v.i. sharp
tora v.i. flow?
torani- v.t. blow/gust against?
tori- v.i. imagine?
toritorina n. small provision(?)
toro n. garment
toro² v.i. wear
torotoro v.i. drape cloth
torousuusu n. girdle
totofo- v.i. make sign
totola- n.inal. approaching/against
totolia v.i. be able
ubu v.i. swell
udu v.i. drip(?)
uduudui n. droplet
ufi- v.t. sound/pipe
ula n. sharpened edge
ulafu v.i. be bonded/servant?
ulao n. daughter
ulaula- n.inal. scale(fish)
ulu n. candle
ulua v.i. sprout

- ulufa'alu** *n.* youth
uluulu *v.i.* sob(?)
uo *n.* mountain
ura *v.i.* stand
uri- *v.t.* tread on
usulae *v.i.* push
usulaili- *v.t.* push
uta *n.* rain
uufi- *v.t.* blow (horn)
uusi *v.t.* buy/sell
uusina *n.devbl.* marketplace
wa *n.* snake
waa *n.* snake
wado *n.* soil/ground/field
wae *v.i.* dance
waen *n.* wine
wai *n.* bottle
wai² *n.* brother
waiwai *n.* oil
waiwai- *v.t.* oil
wale *n.* man
wale li ofona *n.* soldier
wale ta'a *n.* sinner
walefae *n.* brother
walelitalona *n.* king
walo *n.* water body type?
waluwalufa *v.i.* be concerned(?)
wani *other* mirative
waro *v.i.* old
wasi *v.i.* laugh
wasinosino *v.i.* be bright
wasinosinona *n.devbl.* glory/brightness
wasua *other* but
wateu *n.* wife
watoutou *v.i.* weak
wawaa *n.* worm
wawade *v.i.* small
wawaelana *n.devbl.* consolation/reward
wawai *n.* nephew
wawalo *v.i.* submerge
wela *n.* child
welageli *n.* daughter
welawelaa *v.i.* young
wiki *n.* week
witi *n.* fruit/wheat

D Additional tables

Table D.1: Observed frequencies for VC sequences

	p	f	b	m	w	t	s	d	...
a	2	4118	2845	9001	315	6897	8293	3101	...
e	0	279	98	215	0	804	942	275	...
i	243	2937	71	2591	37	2194	1099	1453	...
o	1	1626	140	272	0	1035	1818	220	...
u	0	865	48	781	1	791	331	315	...
Totals	246	9825	3202	12860	353	11721	12483	5364	...
	l	n	r	k	g	gb	kp	?	Totals
a	46318	5201	7658	3055	2057	92	1587	3384	103924
e	4100	2113	10178	385	462	20	180	129	20180
i	6826	2831	497	3538	118	6	392	735	25568
o	13041	5248	613	3387	1452	1	95	646	29595
u	9961	1745	6367	148	317	81	0	55	21806
Totals	80246	17138	25313	10513	4406	200	2254	4949	201073

Table D.2: Observed frequencies for CV sequences

	a	e	i	o	u	Total
p	19	15	0	0	0	34
f	19139	1514	4770	6738	3071	35232
b	3931	788	343	547	2436	8045
m	25144	2069	3353	4982	3566	39114
w	6364	706	0	0	0	7070
t	17086	3433	0	5632	28	26179
s	5119	488	8667	2244	9424	25942
d	6917	238	389	634	396	8574
l	46358	5169	40652	11483	6628	110290
n	16359	136	1575	1945	194	20209
r	14233	5672	6189	3391	1354	30839
k	18054	1349	2163	5324	227	27117
g	4234	9592	11786	969	1407	27988
gb	615	45	0	0	0	660
kp	6929	137	0	0	0	7066
?	22520	14976	9860	4004	4687	56047
Total	213021	46327	89747	47893	33418	430406

Table D.3: Observed frequencies for V...V sequences with intervening consonant

1 \ 2	a	e	i	o	u	Total
a	49200	13701	22530	6751	11740	103922
e	14344	2437	2458	768	172	20179
i	6889	1003	8708	7968	768	25336
o	11324	669	10262	6423	906	29584
u	5878	28	10887	660	4353	21806
Total	87635	17838	54845	22570	17939	200827

Table D.4: Observed frequencies for C...C sequences with intervening vowel

	p	f	b	m	w	t	s	d	l	n	r	k	g	gb	kp	ʔ	Total
p	0	0	0	0	0	2	0	0	0	0	12	9	0	0	0	0	23
f	0	1541	103	1194	34	1918	357	767	8341	1081	1276	48	544	5	949	512	18670
b	0	12	483	41	0	481	81	55	1545	163	828	69	54	1	1	1131	4945
m	0	15	5	1125	0	626	128	277	5254	349	476	1520	23	0	0	146	9944
w	0	0	0	0	212	192	1352	338	4693	19	72	0	0	0	0	9	6887
t	0	855	49	149	0	868	149	169	5533	1014	372	916	107	0	135	1661	11977
s	235	330	23	27	0	1	117	216	4401	538	73	675	218	0	60	362	7276
d	0	66	0	76	0	1	54	107	154	558	900	70	0	0	173	64	2223
l	8	3216	143	1274	62	2106	4177	962	1887	2467	2	1639	1084	4	100	327	19458
n	0	24	2	317	1	644	731	313	3354	1486	51	23	265	0	2	7	7220
r	0	1217	518	45	0	350	1171	598	505	3377	822	485	364	14	19	223	9708
k	1	17	17	136	1	312	1038	52	152	274	341	178	2	0	97	42	2660
g	0	48	4	11	0	115	122	34	3096	283	9510	0	49	0	1	19	13292
gb	0	10	0	0	0	0	0	0	52	5	17	0	0	1	0	0	85
kp	0	0	0	0	0	1493	108	47	2253	136	34	1	69	0	61	47	4249
ʔ	0	441	183	5372	0	657	245	518	11729	664	8106	1351	214	0	36	261	29777
Total	244	7792	1530	9767	310	9766	9830	4453	52949	12414	22892	6984	2993	25	1634	4811	148394

Table D.5: Observed values for POA...POA sequences separated by a vowel

	P	T	K	KP	Q	Total
P	4765	30682	2267	956	1798	40468
T	8637	40223	5846	507	2644	57857
K	235	15329	229	98	61	15952
KP	10	4145	70	62	47	4334
Q	5996	21920	1565	36	261	29778
Total	19643	112299	9977	1659	4811	148389

Table D.6: *falalau-* 'teach'

	<i>faa-</i>	<i>fa-</i>		σ_H^-	σ_L^-
<i>-lalau</i>	128	147		128	147
<i>-lalau-na</i>	57	130		78	139
<i>-lalau-a</i>	14	8		6	11
<i>-lalau-da</i>	7	1		1	2
<i>-lalau-na-la</i>	5	10		1	0
<i>-lalau-na-da</i>	0	1			
<i>-lalau-na-moulu</i>	1	0			
<i>-lalau-na-ga</i>	1	0			
<i>-lalau-na-miu</i>	1	2			
total	214	299		214	299

Table D.7: *farono-* 'tell'

	<i>faa-</i>	<i>fa-</i>		σ_H^-	σ_L^-
<i>-rono</i>	139	27		139	27
<i>-rono-na</i>	0	233		3	283
<i>-rono-a</i>	2	47		0	5
<i>-rono-na-la</i>	0	5		0	3
<i>-rono-na-miu</i>	0	3			
<i>-rono-da</i>	1	3			
total	142	318		142	318

Table D.8: *fatalo-* 'cause to spread'

	<i>faa-</i>	<i>fa-</i>		σ_H^-	σ_L^-
<i>-talo</i>	50	54		50	54
<i>-talo-na</i>	6	60		7	60
<i>-talofo</i>	1	0			
total	57	114		57	114

Table D.9: *famauri-* 'cause to live/survive'

	<i>faa-</i>	<i>fa-</i>		σ_H^-	σ_L^-
<i>-mauri</i>	75	7		75	7
<i>-mauri-a</i>	37	4		47	10
<i>-mauri-na</i>	1	3		19	5
<i>-mauri-da</i>	9	3		6	7
<i>-muri-na-la</i>	19	5		1	2
<i>-mauri-na-la</i>	2	2		0	1
<i>-mauri-na-ga</i>	4	1			
<i>-mauri-na-da</i>	0	4			
<i>-mauri-na-miu</i>	1	2			
<i>-mauri-na-mami</i>	0	1			
total	148	32		148	32

Table D.10: *famalifii*- 'suffer'

	<i>faa-</i>	<i>fa-</i>		σ_H^-	σ_L^-
<i>-malifi</i>	0	2	$-\sigma_L\sigma_L\sigma_L$	0	2
<i>-malifii</i>	5	57	$-\sigma_L\sigma_L\sigma_H$	5	57
<i>-malifii-a</i>	0	1	$-\sigma_L\sigma_L\sigma_H\sigma_L$	0	1
<i>-malifii-na</i>	0	58	$-\sigma_L\sigma_L\sigma_H\sigma_L$	0	58
<i>-malifii-da</i>	0	1	$-\sigma_L\sigma_L\sigma_H\sigma_L$	0	1
<i>-malifii-na-la</i>	0	1	$-\sigma_L\sigma_L\sigma_H\sigma_L\sigma_L$	0	1
total	5	120	total	5	120

Table D.11: *fasui*- 'cause to finish'

	<i>faa-</i>	<i>fa-</i>		σ_H^-	σ_L^-
<i>-sui</i>	2	1	$-\sigma_H$	2	1
<i>-sui-a</i>	37	8	$-\sigma_H\sigma_L$	37	8
<i>-sui-na-i</i>	1	0	$-\sigma_H\sigma_L\sigma_L$	5	5
<i>-sui-na-la</i>	4	5	total	43	14
total	43	14			

Table D.12: *faba'ela*- 'make big'

	<i>faa-</i>	<i>fa-</i>		σ_H	σ_L^-
<i>-baela</i>	0	1	$-\sigma_H\sigma_L$	0	1
<i>-baela-a</i>	0	12	$-\sigma_H\sigma_H$	0	12
<i>-ba'ela</i>	7	6	$-\sigma_L\sigma_L\sigma_L$	7	6
<i>-ba'ela-a</i>	2	0	$-\sigma_L\sigma_L\sigma_H$	2	0
<i>-baela-na</i>	0	1	$-\sigma_H\sigma_L\sigma_L$	0	1
<i>-ba'ela-na</i>	0	2	$-\sigma_L\sigma_L\sigma_L\sigma_L$	0	3
<i>-ba'ela-da</i>	0	1	$-\sigma_H\sigma_L\sigma_L\sigma_L$	0	1
<i>-baela-na-la</i>	0	1	$-\sigma_L\sigma_L\sigma_L\sigma_L\sigma_L$	0	9
<i>-ba'ela-na-la</i>	0	9	total	9	33
total	9	33			

Table D.13: *fafuta*- 'cause to be born'

	<i>faa-</i>	<i>fa-</i>		σ_H^-	σ_L^-
<i>-futa</i>	4	5	$-\sigma_L\sigma_L$	4	5
<i>-futa-a</i>	14	2	$-\sigma_L\sigma_H$	14	2
<i>-futa-na</i>	2	0	$-\sigma_L\sigma_L\sigma_L$	2	0
<i>-futa-na-la</i>	0	1	$-\sigma_L\sigma_L\sigma_L\sigma_L$	0	1
total	20	8	total	20	8

Table D.14: *famadakwa*- 'make clear'

	<i>faa-</i>	<i>fa-</i>		σ_H^-	σ_L^-
<i>-madakwa</i>	8	8	$-\sigma_L\sigma_L\sigma_L$	8	8
<i>-madakwa-a</i>	0	1	$-\sigma_L\sigma_L\sigma_H$	0	1
<i>-madakwa-na-gu</i>	0	1	$-\sigma_L\sigma_L\sigma_L\sigma_L\sigma_L$	0	1
total	8	10	total	8	10

Table D.15: All attested reduplicated forms with putative base identified.

Reduplicated form	Gloss	Attested base	Gloss
age~age	n. 'foundation'	age	n. 'foundation'
alu~alu	v.i. 'say.goodbye'	alu-	v.t. 'put'
ara~arai-na	n.devbl. 'marriage'	arai	v.i. 'get.married'
asi~asi-la	v.i. 'be.salty'	asi	n. 'salt'
agwa~agwa	v.i. 'secretly'	agwa	v.i. 'hide'
balu~balu-a	v.i. 'be.angry'	balu-fi-	v.t. 'rebuke'
beli~beli	v.i. 'steal'	beli-	v.t. 'steal'
boe~boe-ta(a)	v.i. 'be.worried'	boe-si-	v.t. 'worry'
bora~bora-(a)	v.i. 'blue/purple'	bora	v.i. 'blue/purple'
buli~buli	v.i. 'be.unclean'	buli-	v.t. 'smear'
da~dala	v.i. 'be.naked'	dalaa	v.i. 'be.poor'
eta~eta	num. 'first'	eta	num. 'one'
fa~fa-rono-na	n.devbl. 'testament'	fa-rono-na	n.devbl. 'testment'
fa~fa-sui-	v.t. 'end'	fasui-	v.t. 'end'
fai~fai-maasi	v.i. 'wait'	fai-maasi	v.i. 'wait'
fasi~fasi	n. 'planting.seed'	fasi-	v.t. 'plant'
fau~fau-(a)	v.i. 'stony'	fau	n. 'stone'
fii~fii	v.i. 'sting'	fii-	v.t. 'hurt'
fili~fili	v.i. 'choose'	fili-	v.t. 'choose'
firi~firi	v.i. 'bind.upon'	firi-	v.t. 'tie'
foli~foli	v.i. 'pay'	foli-	v.t. 'buy'
fu~fua-	n.inal. 'seed'	fua-	n.inal. 'seed'
fu~fuu-	n.inal. 'breast'	fuui	n. 'tribe'
funu~funu	v.i. 'bear.fruit'	funu	v.i. 'bear.fruit'
sama ga~galo	v.i. 'fumble.about'	galo	v.i. 'work'
galo~galo	v.i. 'work'	galo	v.i. 'work'
ge~gere	v.i. 'write'	gere-	v.t. 'write'
gi~gilu, gi~gilu-na-	n. 'grave'	gilu	n. 'grave'
go~gola-fa(e),	v.i. 'dark'	gola	v.i. 'black'
gola~gola-fa			
gula~gula	n. 'matter'	gula	n. 'side'
gulu~gulu	v.i. 'heavy'	gulu-fau-	v.t. 'weigh.down'
idu~idu-na	n.devbl. 'reading'	idu	v.i. 'read'
iko~iko	v.i. 'be.lost'	iko	'NEG'
io~io	v.i. 'sit/stay'	io	v.i. 'sit/stay'
iro~iro-(a)	v.i. 'be.precious(stone)'	iro	v.i. 'inspect'
isu~isuna	n. 'ancestry'	isuuna	n. 'ancestry'
ka~karaikua	n. 'cock'	karai	n. 'chicken'
keta~keta	v.i. 'be.different'	keta-	v.t. 'disperse'
koro~koro	v.i. 'be.blind'	koro	v.i. 'be.blind'
koto~koto	v.i. 'be.false(prophet)'	koto	v.i. 'howl'
ku~ku	v.i. 'wither'	kuu	n. 'leprosy'
ku~kui-	n.inal. 'tail'	kui	n. 'dog'
la~lama	v.i. 'powerful'	lama	v.i. 'be.deep'
la~lao	v.i. 'run'	laofi-	v.t. 'enter'
lau~launi	v.i. 'decorate'	launi-	v.t. 'decorate'
le~lesi-	v.t. 'see'	lesi-	v.t. 'see'
li~liu, liu~liu	v.i. 'walk'	liu	v.i. 'walk'
lima~lima-	n.inal. 'hand'	lima-	n.inal. 'hand'
lio~lio	v.i. 'look'	lio	v.i. 'look'
logo~logo-na-	n.devbl. 'crowd'	logo-na-	n.devbl. 'crowd'
lo~logo-si	v.i. 'store.away'	logo-si-	v.t. 'gather'
lu~lumu-i	v.i. 'be.drunk'	lumu~lumu-(i)	n. 'sponge'
mae~mae	v.i. 'die'	mae	v.i. 'die'
mai~maili	v.i. 'be.watchful'	maili-	v.t. 'watch.over'
mala~malata	v.i. 'think'	malata	v.i. 'think'
mata~matai	v.i. 'be.sick'	matai	v.i. 'be.sick'

Table D.15: All attested reduplicated forms with putative base identified (Cont'd.).

Reduplicated form	Gloss	Attested base	Gloss
mau-mauri	v.i. 'live'	mauri	v.i. 'live'
mea-mea	n. 'flame'	mea-	n.inal. 'tongue'
mo-mo'osu, mo-mosu-la	v.i. 'sleep'	mo'osu	v.i. 'sleep'
nasi-nasi-a	v.i. 'be.firm'	nasi	v.i. 'remain'
ni-nidu-a	n. 'honey'	nidu-	n.inal. 'lips'
nuru-nuru	v.i. 'whisper'	nuru	v.i. 'whisper'
oga-oga-ta'a	v.i. 'be.angry'	oga-ta'a	v.i. 'be.angry'
oli-oli	v.i. 'distinguish'	oli	v.i. 'return'
oli-oli-si	v.i. 'change.money'	oli	v.i. 'return'
oli-olita-	n.inal. 'heir'	olita-	n.inal. 'heir'
olo-olo	v.i. 'swim'	olo	v.i. 'swim'
peko-peko	v.i. 'do.wrong'	peko	v.i. 'do.wrong'
'aba~'aba	n.inal. 'wing'	'aba-	n.inal. 'leaf'
'afa~'afa	v.i. 'be.unpleasant'	'aba	v.i. 'be.bitter'
'ago~'ago	v.i. 'be.hot'	'ago	v.i. 'burn'
'a~'ae-	n.inal. 'foot'	'ae-	n.inal. 'foot'
'ani~'ani-	v.t. 'eat'	'ani-	v.t. 'eat'
'e~'ela	v.i. 'dislike'	'ela	v.i. 'dislike'
'ilu~'ilu	v.i. 'bitterly(?)'	'ilu-	v.t. 'influence'
'isi~'isi	v.i. 'be.last'	fafu'isi	v.i. 'be.last'
'oi~'oi	n. 'measurement.unit'	'oi-	v.t. 'break'
'oso~'oso	v.i. 'be.hypocrite'	'oso-	v.t. 'deceive'
'ui~'ui	v.i. 'strike.at'	'ui-	v.t. 'shoot'
rae-rae	v.i. 'be.high'	rae	v.i. 'ascend'
raga-raga-a	v.i. 'intensely'	raga	v.i. 'be.hot'
ramo-ramo-(a)	v.i. 'boldly'	ramo	v.i. 'be.mighty'
ra-rada	v.i. 'be.equal'	rada	v.i. 'be.correct'
rara-dani~dani-a	v.i. 'be.brilliant'	dani	n. 'morning'
rau-raunae	v.i. 'build'	raunae	v.i. 'build'
ro-roa, kaka'asi-roa-roa	v.i. 'bright.white(?)'	roa	CLF ¹
ro-rono	v.i. 'hear'	rono-	v.t. 'hear'
rua-rua	num. 'twice'	rua	num. 'two'
sae-sae	v.i. 'talkative'	sae	v.i. 'talk'
sai-sai	v.i. 'wise'	sai	v.i. 'know'
sake-sake	v.i. 'collect'	sake-	v.t. 'take'
sifo-sifo-na	n. 'hill'	sifo	v.i. 'descend'
si-siu	v.i. 'be.washed'	siufi-	v.t. 'wash'
sui-sui-na	n.devbl. 'edge'	sui	v.i. 'finish'
oli-suu-suu	v.i. 'question'	suu	v.i. 'argue'
tae-tae 'are	n. 'container'	tae-	v.t. 'raise'
tafu-tafu	n. 'filth'	tafu	n. 'dirt'
tai-tai	v.i. 'sew'	tai-	v.t. 'weave'
tara-tara-	v.t. 'draw.carriage'	tara-	v.t. 'draw'
ta-tae	v.i. 'get.up'	tae-	v.t. 'raise'
ta-tafe	n. 'nest'	tafe	n. 'bed'
ta-tali-	v.t. 'loosen'	tali	v.i. 'flee'
ta-talo-(fa)	v.i. 'rule'	talo	v.i. 'spread'
tau-tau-	v.t. 'do'	tau-	v.t. 'do'
teo-teo	v.i. 'lay'	teo	v.i. 'lay'
tole-tole-	v.t. 'take/marry'	tole-	v.t. 'take.marry'
too-too	v.i. 'have'	too	v.i. 'have'
toro-toro	v.i. 'drape'	toro	v.i. 'wear'
to-too	v.i. 'torment'	too	v.i. 'be.sharp'
tu-tura-na	n.devbl. 'donation'	tura-na-	n.devbl. 'donation'
udu-udu-i	n. 'droplet'	udu	v.i. 'drip'

Table D.15: All attested reduplicated forms with putative base identified (Cont'd.).

Reduplicated form	Gloss	Attested base	Gloss
ula~ula-	<i>n.inal.</i> 'fish.scale'	ula	<i>n.</i> 'blade'
wai~wai	<i>n.</i> 'oil'	wai	<i>n.</i> 'bottle'
wa~waa	<i>n.</i> 'worm'	waa	<i>n.</i> 'snake'
wa~walo	<i>v.i.</i> 'submerge'	walo	<i>n.</i> 'water.body'
wela~wela-a	<i>v.i.</i> 'be.young'	wela	<i>n.</i> 'child'
gwae~gwae	<i>n.</i> 'crowd'	gwau-	<i>n.inal.</i> 'head'
gwau~gwauru	<i>v.i.</i> 'sit'	gwauru	<i>v.i.</i> 'sit'
kwate~kwate	<i>v.i.</i> 'give'	kwate-	<i>v.t.</i> 'give'

Table D.16: Possible reduplicated forms lacking witness of the putative base in the corpus.

agi~agi	'CLF' ²	gua~gua	<i>n.inal.</i> 'be.receptive'
kwali~kwali	<i>n.</i> 'star'	gao~gao	<i>v.i.</i> 'tear.off'
mela~melaa	<i>v.i.</i> 'be.red'	kara~karaa	<i>n.</i> 'thorn'
kalo~kalo-	<i>n.inal.</i> 'root'	kuru~kuru	<i>n.</i> 'thunder'
suna~suna-	<i>n.inal.</i> 'skin/hide'	kidi~kidi	<i>v.i.</i> 'knock.on.door'
'uli~'uli	<i>v.i.</i> 'be.dirty'	fura~fura	<i>v.i.</i> 'degrade'
lebe~lebe	<i>v.i.</i> 'tremble'	nisi~nisi	<i>n.</i> 'fragment'
fula~fula	<i>n.</i> 'fountain'	fari~fari	<i>n.</i> 'scorpion'
kori~kori	<i>v.i.</i> 'shave'	futo~futoa	<i>v.i.</i> 'foam.up'
futo~futo	<i>n.</i> 'foam'	fola~fola	<i>v.i.</i> 'be.calm(water)'
niri~niri	<i>v.i.</i> 'tightly(?)'	saka~saka	<i>v.i.</i> 'leap'
tene~tene	<i>n.</i> 'moment/instant'	mari~marikioaa	<i>v.i.</i> 'purple'
tari~tarifaa	<i>v.i.</i> 'be.unsympathetic'	fero~fero	<i>v.i.</i> 'be.ashamed'
sino~sino	<i>v.i.</i> 'be.glorious'	moli~molia	<i>v.i.</i> 'be.folded'
samu~samua	<i>v.i.</i> 'be.a.tassel(?)'	buru~burui	<i>v.i.</i> 'burn(?)'
lumu~lumu(i)	<i>n.</i> 'sponge'	bala~balaa	<i>v.i.</i> 'pale'
mata~matafaana	<i>n.devbl.</i> 'dispute'	walu~walufa	<i>v.i.</i> 'be.concerned(?)'
neke~neke-	<i>v.t.</i> 'overflow'	'ida~'ida	<i>n.</i> 'sweat'
gilu~gilua	<i>v.i.</i> 'be.rough'	bou~bou-	<i>n.inal.</i> 'kernel(?)'

¹ Cf. table 7.3.² Cf. table 7.3.

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