Data Papers on Papua New Guinea Languages

Volume 63

Bola Grammar Sketch

René van den Berg and Brent Wiebe

2019 SIL-PNG Academic Publications Ukarumpa, Papua New Guinea Papers in the series Data Papers on Papua New Guinea Languages express the authors' knowledge at the time of writing. They normally do not provide a comprehensive treatment of the topic and may contain analyses which will be modified at a later stage. However, given the large number of undescribed languages in Papua New Guinea, SIL-PNG feels that it is appropriate to make these research results available at this time.

René van den Berg, Series Editor

Copyright © 2019 SIL-PNG Papua New Guinea lr-acpub@sil.org.pg

Published 2019

Printed by SIL Printing Press Ukarumpa, Eastern Highlands Province Papua New Guinea

ISBN 9980 0 4482 9

Table of Contents

Index of maps and tables	viii
Example sources	ix
Conventions and abbreviations	xiii
Preface	xiv
1. Introduction	1
1.1 Location and speakers	1
1.2 Language name	3
1.3 Affiliation and earlier studies	
1.4 Dialects	5
1.5 Language use and bilingualism	6
1.6 Bola culture	7
1.6.1 Religion	7
1.6.2 Education	8
1.6.3 Traditional cultural beliefs	8
1.6.4 Economy	9
1.6.5 Diet	
2. Phonology	
2.1 Phonemes and allophonic variation	
2.2 Orthography	14
2.3 Syllable types and root structure	15
2.4 Vowel sequences and long vowels	16
2.5 Stress	
2.6 Morphophonemics	20
2.7 Vowel elision	
2.8 Reduplication	23
2.9 Loan phonology	24

iii

3. Basic typology and word classes	27
3.1 Basic typology	27
3.2 Roots, affixes and clitics	29
3.3 Word classes	30
3.3.1 Open word classes: nouns, verbs and adjectives	30
3.3.2 Pronouns	36
3.3.3 Adverbs	36
3.3.4 Prepositions	36
3.3.5 Articles	
3.3.6 Demonstratives	37
3.3.7 Numerals	
3.3.8 Quantifiers	37
3.3.9 Conjunctions	37
3.3.10 Interjections	
3.3.11 Particles	
4. Nouns and noun phrases	
4.1 Pronouns and pronominals	
4.1 Pronouns and pronominals 4.2 Noun classes	
*	44
4.2 Noun classes4.2.1 Alienable and inalienable nouns4.2.2 Common nouns and proper nouns	44 44 49
4.2 Noun classes	44 44 49
4.2 Noun classes4.2.1 Alienable and inalienable nouns4.2.2 Common nouns and proper nouns	44 44 49 51
 4.2 Noun classes	44 44 51 51
 4.2 Noun classes	

iv

4.7 Adjectives	81
4.7.1 Degrees of comparison	86
4.8 Possession	
4.8.1 Direct and indirect possession	
4.8.2 Possession with <i>ni</i> -nominalisations	96
4.8.3 Benefactive possession	97
4.9 NP structure	98
4.10 NP coordination	99
4.11 NP apposition	101
5. Verbs and the verbal complex	
5.1 Verb classes	
5.2 Subject agreement	106
5.3 Object inflection	107
5.4 Derived verbs	109
5.4.1 Reciprocal verbs	109
5.4.2 Causative verbs	110
5.4.3 Transitivised verbs	112
5.4.4 Collective verbs	112
5.4.5 Passive verbs	113
5.5 Reduplication	114
5.6 Compound verbs	114
5.7 The verbal complex	116
5.7.1 Serial verbs	118
5.7.2 Modal <i>ga</i>	119
5.7.3 Modal <i>bara</i>	125
5.7.4 Modal <i>ma</i>	130
5.7.5 Modal <i>ta</i>	134
5.7.6 Adverbs	138
6. Prepositional phrases	142
6.1 The prepositions <i>na</i> and <i>ne</i>	142
6.2 The preposition <i>o</i>	147
6.3 The preposition <i>manga</i> 'like'	148
6.4 The prepositional noun <i>tura</i>	149

 \mathbf{v}

6.5 The oblique pronouns <i>nau</i> , <i>vomu</i> and <i>vona</i>	150
7. The clause	155
7.1 Introduction	155
7.2 Equative clauses	155
7.3 Locative clauses	157
7.4 Intransitive clauses	158
7.4.1 Unmarked intransitive clauses	159
7.4.2 Stative clauses	160
7.4.3 Existential-locative clauses	161
7.4.4 Existential-possessive clauses	162
7.4.5 Numeral clauses	163
7.4.6 Passive clauses	164
7.5 Transitive clauses	167
7.5.1 Introduction	167
7.5.2 Reflexive clauses	168
7.5.3 Experiencer clauses	169
7.5.4 Ditransitive clauses	170
7.6 Serial verb constructions	172
7.7 Clause periphery	176
7.7.1 Locative periphery	176
7.7.2 Temporal periphery	180
7.7.3 Manner periphery	183
7.7.4 Vocatives	185
7.7.5 Interjections	186
7.8 Adverbs	188
7.9 Constituent order variation	190
7.9.1 Preliminaries	
7.9.2 Intransitive clauses: VS and SV	
7.9.3 Transitive clauses: SVO, VOS, VSO and OVS	195
7.9.4 The position of oblique phrases	202
7.9.5 Fronting	203
8. Clausal modifications	205
8.1 Negation	205

vi

8.2 The imperative mood	211
8.3 The interrogative mood	214
8.3.1 Polar questions	
8.3.2 Content questions	
8.3.3 Indefinite use of interrogatives	
8.4 Tense, aspect and modality	221
8.4.1 Tense	221
8.4.2 Aspect	222
8.4.3 Modality	225
9. Complex sentences	232
9.1 Introduction	232
9.2 Juxtaposition	232
9.3 Conjoining with conjunctions	
9.4 Complement clauses	236
9.4.1 Juxtaposed complement clauses	
9.4.2 Ni-complement clauses	237
9.5 Relative clauses	239
9.5.1 Qualitative relative clauses	242
9.6 Adverbial clauses	
9.6.1 Temporal clauses	
9.6.2 Reason clauses	245
9.6.3 Conditional clauses	246
9.6.4 Purpose clauses	246
9.7 Direct and indirect speech	248
9.8 Verbal repetition	249
10. Residue	251
Appendix: Interlinear texts	253
Text 1. A Vuhuna A Mavo e Pai. 'The Origin of Pai Taro.'	
Text 2. A Ligo Huluvonga. 'The Useless Dog'	258
Text 3. A Nita na Viri i Mate. 'About death'	
References	272

vii

Index of maps and tables

viii

Example sources

As much as possible, each Bola example sentence in this grammar is provided with its source, stated after the free translation. However, isolated phrases and words are mostly given without source. In the few cases where the origin of a full clausal example could not be traced back, this is also indicated. This is the case, for example, in §4.1 and §7.4.1. The following conventions are used to indicate example sources.

t	text (see below for text numbers and titles).				
conv	spontaneous conversations				
dict	-	an unpublished trilingual Bola dictionary database, compiled by Brent and Sandi Wiebe			
elic	elicited material, either translations from Tok Pisin or English, or examples provided to illustrate a particular morpheme, word or construction				
s.u.	source u	inknown			
B:10	Bosco (1979) A Bola grammar, with page number.				
Gn 1:1 etc.	References from <i>A Nitana Vure</i> ('The Word of God'), the Bible in Bola. English abbreviations used for specific Bible books are:				
	1Co 2Co 1Ti Ac Dt Ep Ex Gn Hb	1 Corinthians 2 Corinthians 1 Timothy Acts Deuteronomy Ephesians Exodus Genesis Hebrews	Jn Lk Lv Mk Mt Nm Rm Rt Rv	John Luke Leviticus Mark Matthew Numbers Romans Ruth Revelation	
	Jd	Jude	Tt	Titus	

-m

modified for lexical or grammatical reasons

ix

The following table shows the 40+ texts from which examples have been drawn. Unfortunately, for a number of texts the author was no longer retrievable. Texts 1, 2 and 12 are presented in the appendix with interlinear glosses and free translation.

text	title author		nr of	genre
nr			words	
t1	A vuhuna a mavo e Pai	Erwin Mautu	206	narr
	The origin of Pai taro			
t2	A ligo huluvonga	Leo Malala	561	narr
	The useless dog			
t3	A nuverei ne tuna duku	?	304	narr
	The story of the orphan			
t4	Rakoli	?	180	narr
	Rest			
t5	E kureko rua e mengo	Aloysius M. Baki	1,161	narr
	Chicken and cassowary			
t6	A ngava ni rata rike kunana	Aloysius M. Baki	474	narr
	A made-up story			
t7	A nileho na hania	Aloysius M. Baki	614	expos
	Working in the garden			
t8	I herea e Giru	Giru	466	narr
	Giru wrote it			
t9	A nuverei na kopa	?	344	narr
	A story of bats			
t10	A vinara	Aloysius M. Baki	338	hort
	Instruction			
t11	A ruma ni hae navai	Aloysius M. Baki	810	proc
	How a house is built			
t12	A nita na viri i mate	Benjamin Kiri	270	expos
	About death			
t13	Herman i pango	Herman Pida	780	narr
	Herman goes hunting			

TABLE OF TEXTS

Х

t14	Kulu	Jim	330	expos
	Kulu			-
t15	Barema	?	583	narr
	Sago leaf thatch			
t16	Pasi	?	708	narr
	Adrift			
t18	Andrew	Andrew	446	narr
	Andrew			
t19	Pikeo	?	421	narr
	Sharks			
t20	Ruru na robo	John Malala	405	narr
	Lost in the bush			
t21	Vudi	Leo Malala	825	narr
	Bananas			
t22	A nuverei na bakovi i pango, i ruru	F.B. Taroa	138	narr
	na robo			
	The story of the man who went			
	hunting and got lost in the bush			
t24	Baili	?	162	narr
	Baili			
t25	A nuverei ne tuna duku	John Malala	194	narr
	The story of the orphan			
t26	E mengo rua e kureko	John Malala	587	narr
	Cassowary and chicken			
t27	A nuverei ne mengo rua kinane	?	740	narr
	Rivariva			
	The story of cassowary and the			
	mother of Rivariva			
t28	Raka	Lorence Raka	935	narr
120	Raka	Lorence Raka	755	India
t29	A makitarina ru pango	Maria Gorea	144	narr
	Two siblings go hunting		111	11411
t30	Tuna duku	Peter Bua	413	narr
	Orphan		115	11411

xi

t31	A padi a manu a ruka	Peter Bua	267	narr
	I speared a barracuda			
t32	A mata a bino	Maria Gorea	116	narr
	The brown snake			
t33	A nuruvei nau na tahuna iau a rike	James Vairi	276	narr
	karaba na balus			
	My story about the first time I			
	travelled by plane			
t37	A nuverei iau a matavisi a takiu	Jackline Buku	47	narr
	The story about me finding a			
	possum			
t38	Mateu mete kurabe	Erwin Mautu	229	narr
	We went on a fishing trip			
t39	A leho karaba	Peter Bua	258	narr
	New work			
t40	A hanitu turana koma kiroko	Maria Gorea	136	narr
	The evil spirit and the little child			
t41	Hosi iau a tahoka a kabuna a ligo	Erwin Mautu	322	narr
	ni pango.			
	I used to have a pack of hunting			
	dogs			
t42	Gospel story	Anton Bakani	983	narr
t44	A kio	?	260	narr
	Wildfowl			
t45	A kopa	?	225	narr
	Bats			
t49	A ngatavine a sirula i harogi e	?	598	narr
	huriki a kopa.			
	A girl curses bats.			
t50	Kureko	?	1,165	narr
	Chicken			

xii

Conventions and abbreviations

Conventi	ons for pronouns:	Ν	noun
1,2,3	1st, 2nd, 3rd person	NEG	negator
S	singular	NMLZ	nominaliser
D	dual	NP	noun phrase
PA	paucal	NUM	numeral
PL	plural	OBL	oblique (preposition)
Е	exclusive	OBL.P	oblique with proper noun
Ι	inclusive	ORD	ordinal number
F	free (pronoun)	Р	with following proper
1de.f	first person dual		noun
	exclusive free (maria)	PASS	passive
Other ab	breviations	PASS.COMP	passive in complement
ADJ	adjective, adjectiviser		clause
ADV	adverb	PL, PLUR	plural
ART	article	PERF	perfect
ART.P	article w. proper noun	POc	Proto-Oceanic
CAUS	causative	POSS	possessive
COMP	complementiser	PP	prepositional phrase
DEF	definite article	QUAL	qualitative relative clause
DEF.P	definite article with	REC	reciprocal
	proper noun	RED	reduplication
DEM	demonstrative	SG	singular
e.o.	each other	STAT	stative
IRR	irrealis	V	verb
k.o.	kind of	vi	intransitive verb
LOC	locative	vt	transitive verb
MOD	modal particle		

xiii

Preface

This description of the Bola language is a collaborative effort of two authors, each with his own contribution.

Brent Wiebe began residence in the village of Kilu in November of 1993; his involvement with the Bola people and language lasted until 2012. Brent and his wife, Sandi, learned to speak the Bola language, collected stories, standardised the orthography, developed literacy materials, taught vernacular literacy and oversaw a Bible translation programme. The New Testament and eight Old Testament books (Genesis through Joshua, plus Ruth and Jonah) were published in 2011 under the title *A Nitana Vure* 'The Word of God'. (The remaining OT books are included in Tok Pisin.)

Around 1998, they wrote a 46-page unpublished sketch of Bola, called *Bola Grammar Essentials*. The help of Bob Bugenhagen and Paul Heineman, SIL linguistics consultants, was invaluable and is gratefully acknowledged here.

In late 2008, René van den Berg was asked to help upgrade the grammar essentials. Brent and René worked with three Bola speakers in Ukarumpa for a few weeks in early 2009 on a variety of grammatical topics. René spent time upgrading and revising the grammar essentials for a few weeks in 2011, and finally returned to it for a longer period in mid-2018. This included a three-week period in the Bola area in October 2018, specifically the village of Pasiloke, to check on data, get answers to outstanding questions and work through a number of unprocessed texts.

All of the initial data gathering, including the textual material and the preliminary analysis, was therefore done by Brent. René is responsible for the revisions and the final write-up. We want to thank John Brownie for a

xiv

thorough read-through and helpful comments, and Moss Doerksen for his help in preparing the document for publication in Libre Office.

Finally, we acknowledge the help of our Bola friends without whose help and friendship this work could not have been written: Aloysius M. Baki †, Anton Bakani †, Benjamin Kiri, Erwin Mautu, Leo Malala, John Malala, Herman Pida, F.B. Taroa, Giru, Jim, Andrew, Lorence Raka, Maria Gorea, Peter Bua, James Vairi, Jackline Buku, Ben Loi, Bernard Nuli, Gabriel Kondi, Rokus Tagole, and many others. May the Bola language continue to be used for many generations.

XV

1.1 Location and speakers

The Bola language [bnp] is spoken by approximately 14,000 people on the Willaumez Peninsula, also called Talasea, on the north coast of West New Britain Province (WNB) in Papua New Guinea (see map 1).





^{© 2019} SIL International. Includes geodata from worldgeodatasets.com, OpenStreetMaps and Esri. Used by permission; redistribution not permitted. No claim is made for precision in the placement of these boundaries.

Borders shown on this map represent language data. They do not reflect nor should they be used to make land claims.

15

The language group extends 38 km from Kandoka in the west to Ruango in the east, and stretches 38 km north from Ruango to Vahanakai. Ruango is just east of Kimbe, the provincial capital (see map 2). The terrain ranges from coastal to mountainous, with the highest mountain peak about 1,000 meters. The area is geologically active with ample evidence of volcanic activity over the years. There are several sulphur pools and hot springs. Mount Garbuna, four miles west of Kilu village, was considered a dormant volcano until October 2005, when it became active and spewed ash and steam. It has been active since but has not had a full eruption. Obsidian from the Talasea area is found as far away as Fiji in the east and Borneo in the west. It is believed to have been traded for pottery several thousand years ago, fragments of which are still found on some of the islands in the area.

The average temperatures range from 80 degrees Fahrenheit (26° C) in the evening to mid-90s (35° C) during a sunny day. There are two distinct seasons: rainy and dry season. The dry season extends from approximately April to November. The remainder of the year is rainy season.

The Bola language area is divided into two political groups: East Bakovi and West Bakovi. The major villages in East Bakovi are: Kilu, Harile, Kulungi, Ruango, Pagalu, Dire, Bitokara and Talasea. West Bakovi includes Ganeboku, Garu, Komavavo, Kandoka, Bagum, Valupai, Vahanakai, Liapo, Buluwara and Namova. See map 2 for the location of most of these villages.

A small dialect of Bola, called Harua, developed as a result of a group of people being resettled on an oil palm plantation. These people reside east of Ruango, between Kimbe and Hoskins in Gaongo, Mai, and Buluma villages.

The road from Kimbe to Talasea village is paved and was kept in good condition until recently, but all other roads are gravel. Some are maintained fairly well (Garu), while others have been left to deteriorate (Liapo). There are no serious fords on any of the roads. Only five villages are not linked by road. They are Kambili, Matoto, Bagum, Harongo, and Minda.



Land use varies from hunting and gathering in the jungle to gardening near the villages. About 25% of the land in the Bola area is being used for oil palm growth, with several large commercial plantations. Possibly 50% of the land is used for coconut plantations. Quite a few people also grow cacao (cocoa) along with their coconuts. A few are cultivating vanilla bean.

1.2 Language name

In some writings, the Bola language is referred to as the Bakovi language. This stems from the more recent use of Bakovi (a word meaning 'man') by the people to describe themselves as a people group. Other language groups in the east call them the Talasea people, after the old Talasea station on the east coast of the peninsula that used to be the provincial seat in WNB. Bola people in the west call themselves the Valupai people, after the Catholic mission station situated on the west coast of the peninsula. The word *bola* means 'wide' in the Bola language, but the exact relationship between this word and the name of the language is not clear.

1.3 Affiliation and earlier studies

Chowning (1976: 367, 383) classifies Bola as belonging to the Kimbe family of Austronesian languages. Following Ross (1988), the Ethnologue (21st edition, 2018) classifies Bola as Austronesian, Malayo-Polynesian, Central-Eastern, Eastern Malayo-Polynesian, Oceanic, Western Oceanic, Meso-Melanesian, Willaumez. Other languages in the Willaumez group are Bulu (north of Bola, on the tip of the Willaumez peninsula), Nakanai (east of Bola, described in Johnston 1980b) and Meramera (east of Nakanai). The languages of the islands to the northwest of Bola, Bali (Uneapa) and Vitu (Muduapa, described in van den Berg and Bachet 2006) are also Meso-Melanesian, but do not belong to the Willaumez group. Other neighbouring languages, such as Kove, Aighon and Bebeli belong to the Ngero-Vitiaz branch of the North New Guinea cluster, and are not closely related to Bola. See map 3 for the location of these languages. Note that Meramera, located to the east of Nakanai, is not included in this map.

Literature on the Bola language remains sparse. Earlier studies include general language surveys of New Britain, such as Chowning (1976) and Johnston (1980a). An unpublished grammar sketch of Bola was written by a native speaker of Bola (Bosco 1979). Brent and Sandi Wiebe wrote a Bola sociolinguistic report (Wiebe and Wiebe 1997), a phonological description of the Bola Language (Wiebe and Wiebe 2000), and a Bola worldview paper (Wiebe and Wiebe 2001). There is also a dialect survey of Bola and neighbouring Bulu (Rueck and Jore 2000). Goodenough (1997) has Bola lexical data in his reconstruction of Proto-Kimbe, while van den Berg and Boerger (2011) discuss the passive in Bola.



MAP 3. BOLA AND NEIGHBOURING LANGUAGES

1.4 Dialects

With one exception, the Bola language is remarkably cohesive, with no discernible dialects throughout the entire Willaumez Peninsula. A few lexical items may vary from place to place, such as names for certain fish and plants.

The one exception is the Harua dialect, spoken in three villages east of Kimbe, with variant names Karua, Xarua, Garua, and Mai. This dialect was first classified as a Kimbe family language by Johnston (1980a:113), but he acknowledged that it had a small population and the language was in decline, with the people proficient in Tok Pisin and other Kimbe languages such as Bola. Wiebe and Wiebe (1998:1) report that Harua seems to be a dialect of Bola with a lexical similarity of 77%. However, another survey done by Rueck

and Jore (2000) found a 61% lexical similarity with a margin error of 6.7%. In both cases, however, the attitude by the people seems to indicate it is considered a dialect, in that the Bola people claim that Harua speakers actually speak Bola, but that they speak it poorly. Several Harua speakers claim that they can understand Bola, but not the other way around. An intelligibility test needs to be done to verify these claims.

1.5 Language use and bilingualism

Most Bola people are bilingual in Bola and Tok Pisin. Some also have a good working knowledge of English. Rueck and Jore (2000:9) report the following about language use in the dialect survey: "The stability of the Bola language is also supported by the fact that in every village Bola is used in all domains except church. Though many Bola children understand both Tok Pisin and Bola, their parents use Bola with them as the preferred language for communication. Pidgin is generally only used with outsiders and in church."

The observations of the Wiebes, who lived and worked amongst the Bola people from 1993 to 2011, support the above quote for that time period. The Bola people used the Bola language in every domain, except in church, school, and when talking to outsiders. More and more, though, Tok Pisin loan words were replacing their Bola equivalents.

Some Bola speakers reside in Kimbe town, along with several non-Bola speakers from all over the province and various parts of Papua New Guinea. Tok Pisin is the main language spoken in Kimbe, with English used in the government offices and schools. However, Bola is often heard in town in the business district among Bola speakers who are shopping.

The last few decades have seen a steady growth of Tok Pisin. Large numbers of mixed marriages have resulted in growing numbers of parents speaking to their children in Tok Pisin. As a result, many children are currently more fluent in Tok Pisin than Bola, with only a passive knowledge of Bola. Many parents comment, "Our children can understand Bola, but they respond in Tok Pisin and talk to each other in Tok Pisin." The Provincial Government, with the help of SIL, established vernacular pre-schools in the Bola language area in the early 1990s. Each major village had its own vernacular pre-school, teaching grades Prep, 1, and 2. Due to changed educational policies, all education is now in English, with no place for written materials in Bola (or Tok Pisin). These languages are only used to give oral explanations. Though some churches started using more vernacular in the late 1990s, currently Bola has little or no place in most of the churches in the Bola area.

1.6 Bola culture

1.6.1 Religion

The major religion amongst the Bola people is Christianity, with the majority denomination being Roman Catholic. Possibly some 75-80% of the Bola people identify themselves as Catholics. The church has been present in the area since around 1882. The first missionaries were German priests, followed by Tolai missionaries from the Rabaul area, on the eastern end of the island of New Britain. The Catholic missionaries built churches, but also schools and hospitals. Every major village in the Bola language has a Catholic church, and often a smaller protestant one. Many of the churches are the original buildings built by the Germans. The Catholic station in Bitokara still has a clinic and school built by the Catholic mission, while the church building has scars on it from the second World War. Father Hagen wrote a synopsis of the Gospels and Acts in Bola in the 1950s, but all copies have been lost. There have been at least six Bola men ordained as priests in the Catholic church.

Other churches present are South Seas Evangelical Church (SSEC), Assemblies of God, Four Square, and Seventh-day Adventist (SDA). Cults have also made their way into the area: Jehovah Witnesses and Baha'i with very few followers. There is also a mosque in Kimbe, which a few Muslim families from the Bola language group attend.

1.6.2 Education

The Bola people value education, and are well-educated, with many having completed grade 10 and having taken further practical training for 1-2 years at local technical schools. The literacy rate in Tok Pisin is very high and moderately high in English, although comprehension of English is limited. There are 11 elementary schools in the Bola area, most including grades 1-6; the Patanga School includes grades 1-8. There are high schools in Kimbe and Hoskins for grades 7–10. School fees are a burden, but most parents place a high priority on their children's education.

1.6.3 Traditional cultural beliefs

Traditional cultural beliefs are still strong amongst the Bola people. The people still practice hunting magic, love magic, fishing magic, divination and sorcery. One of the most important parts of the traditional culture is the ceremonies and exchanges surrounding bride price.

There are two marriage ceremonies: the traditional ceremony and the church ceremony. Both of these usually take place after the couple has joined, and often after they have had a child or two.

The church ceremony is usually performed a few years before the traditional ceremony, because it does not require as much money to perform. There is strong pressure on couples in the area to marry in the church and they are looked down upon if they do not. A priest comes to perform the ceremony and, usually for convenience, many couples are married at the same time. The bride will often borrow a white wedding dress to wear. The priest sometimes provides the rings to exchange, then takes them back after the service is over. Rings are not normally worn to signify someone is married.

The traditional ceremony is a large event where money, pigs, shell money and other wealth is exchanged. Each clan gathers separately and eats together. The groom's clan gathers and counts the shell money from amongst their members to exchange with the bride's clan. The bride's clan gathers together and collects food items, such as rice, taro and pigs, to give in exchange to the groom's clan. They also paint the bride, one side of her body black and the other side red.

When the time is right, and the bride is all painted up, her clan blows a conch shell horn to announce they are coming. They sing as they march over to the groom's clan carrying the rice, taro and other things to be used in the exchange. They arrive in the groom's village and the exchange is made. When the shell money is accepted and the ceremony is over, they are considered officially married.

Several bride price exchanges on a smaller scale are performed throughout the marriage, such as when the couple's firstborn has their first haircut, first hunt, first fish, first big trip, other significant "firsts", and reaching of puberty. The last bride price exchange is completed at the wife's funeral.

1.6.4 Economy

There are several ways for people to support themselves. Most people have gardens to provide food for the family and for income by selling the surplus. Most also have one or more of three cash crops: oil palm, coconuts and cacao. A few are cultivating vanilla beans. Jobs available in town include government positions, construction, security and retail positions. Bola people have become doctors, lawyers, teachers, and politicians, to name a few. The current Police Commissioner of Papua New Guinea is a Bola man.

Currently oil palm cultivation and the palm oil industry dominate the economic climate of the province. The oil palm was introduced in the province in the 1960s, when the first plantation at Mosa, east of Kimbe, was opened. At the moment, there are about a dozen large oil palm plantations, all owned by NBPOL (New Britain Palm Oil Limited), producing massive amounts of fruits. Oil palm trees are very productive: they start producing fruit as soon as 18 months after planting, and large bunches of fruits can be harvested every two weeks. Numerous people find work on these palm plantations, as well as in transporting the fruits, and processing them in oil mills and a refinery. By one estimate over 40,000 people find employment in this industry. Thousands of people from other parts of Papua New Guinea have come to West New

Britain because of these economic possibilities. Some of them have bought a piece of land (*blok*), on which they grow their own oil palms. Many villagers have also planted oil palms on their own land, and it is a very common sight to see large heaps of bunches of palm fruits on the side of the road, waiting to be picked up by one of the NBPOL trucks (locally known as *kesti*).

1.6.5 Diet

Traditionally, the major food items were taro (*a mavo*), of which there are various types, supplemented by greens (*a kobo*), bananas (*a vudi*) and fish (*a manu*). Meat from wild pigs (*a livoa*) was obtained during hunting trips in the bush. Nuts were, and still are, often eaten as snacks.

It seems that the villages closer to Kimbe have changed their diet somewhat, and eat more store-bought food (rice, biscuits, scones, tinned meat, tinned fish), than garden food. They say that the pigs in the last ten years have dug up their gardens and hindered their garden production. Some have bought blocks farther from their village and planted gardens on them to resolve this problem, but the distance to their gardens is a challenge now. There are also more people employed now and they have less time to cultivate their gardens. More recently the price of rice and tinned meat has gone up which may spur the trend again towards cultivating gardens. The villages further from Kimbe still have a more traditional diet.

2. Phonology

This chapter presents a brief outline of the phonology of Bola (which is rather straightforward), including phonemes and allophones, stress, syllable types, word structure and morphophonemics. It also briefly addresses loan words. Segmental information with illustrative words is presented in Wiebe and Wiebe (2000), and not repeated here.

2.1 Phonemes and allophonic variation

Bola has 14 consonant phonemes, as outlined in table 2.1. The voiceless fricative [s] is an allophone of /t/, as well as a loan phoneme (see §2.8).

bilabial alveolar vela						
voiceless plosive	р	t	k			
voiced plosive	b	d	g			
voiceless fricative		(s)				
voiced fricative	β		¥			
nasal	m	n	ŋ			
trill		r				
lateral		1				

TABLE 2.1 CONSONANT PHONEMES

The Bola vowel phonemes are presented in table 2.2.

25

TABLE 2.2 VOWEL FROMEWIES					
	front	central	back		
high	i		u		
mid	3		э		
low		a			

TABLE 2.2 VOWEL PHONEMES

Allophonic variations are as follows. (In the examples stress is marked by the symbol <'> preceding the stressed syllable).

a. /t/ is realised as [s] preceding /i/:

/tirula/	[si'rula]	'teenage girl'
/biti/	['bisi]	'grub'
/həti/	['həsi]	'long ago; in the past'

b. When occurring word or phrase initially, the vowel /i/ is pronounced as a glide /j/ before /a, e, o, u/ in ordinary conversation. This is especially common in functor words such as *iau* 'I' ['jau], *ioe* 'you (sg)' ['joɛ], *ieni* 'this' ['jɛni], the phrase *i uka* (3S NEG) 'not', pronounced ['juka], and biblical names such as *lakop* 'Jacob' ['jakop], and *Ioanes* 'John' [jo'anɛs]. In careful speech, however, the initial vowel constitutes its own syllable.

c. The voiced stops /b, d, g/ are sometimes prenasalised and realised as /mb, nd, ng/ in medial position:

/rəbə/	$['robo] \sim ['ro^mbo]$	'bush'
/made/	$['mad\epsilon] \sim ['ma^nd\epsilon]$	'sit'
/aga/	['aga] ~ ['a ^ŋ ga]	'canoe'

The exact extent of the variation is not clear, but it appears that the prenasalised variants are more common in the speech of older speakers. Table 2.3 shows the pronunciation of a few high-frequency items containing voiced stops by a random sample of seven native speakers of Bola. They were asked (in Tok Pisin) to provide the Bola equivalents of a number of words containing a medial voiced consonant. (f = female; m = male).

	gender	f	f	m	m	f	m	m
	age	16	25	35	c. 35	c. 40	53	65
robo	'bush'	b	b	b	b	-	b	b
made	'sit'	d	ⁿ d	ⁿ d	d	d	ⁿ d	ⁿ d
kedo	'stone'	d	d	d	d	d	d	ⁿ d
aga	'canoe'	g	g	g	g	g	g	ŋg
ligo	'dog'	g	g	g	g	g	g	'ng

TABLE 2.3. PRONUNCIATION OF VOICED STOPS.

Drawing conclusions from such a small sample is hazardous, but it is striking that only one older man used a prenasalised velar, and that none of the respondents prenasalised the /b/ in *robo* 'bush'. The 'lone' prenasalisation of /d/ in *made* 'sit' among younger speakers is also conspicuous. Possibly the initial nasal of this word plays a role here. Age is clearly not the only variable.

The variation among voiced consonants (with a trend away from prenasalisation) also means that a number of Tok Pisin words and place names containing sequences of nasal + voiced stop are often pronounced without the nasal. Examples include ['sadɛ] for *Sande* 'Sunday', /'lobo/ 'pepper' (Tok Pisin *lombo*, ultimately from Malay), ['kibɛ] for Kimbe, the provincial capital, and [wa'lidi] for Walindi, a diving resort near Kilu named after a local river.

d. The voiced velar fricative /y/ is often pronounced by younger generations as a voiceless glottal fricative [h].

/yate/	$['yate] \sim ['hate]$	'liver'
/mayeto/	[ma'yetə] ~ [ma'hetə]	'spear'

Table 2.4 shows the variation of this phoneme among roughly the same respondents as in table 2.3. They were asked (in Tok Pisin) to provide the Bola equivalents of two nouns.

gender	f	f	m	m	m	m
age	16	25	35	c. 35	53	65
hate 'liver'	h	h	h	h	h	Y
maheto 'spear'	h	h	Y	h	Y	Y

TABLE 2.4. PRONUNCIATION OF <H>.

The oldest male uses the pronunciation $/\chi$ exclusively, while the younger generation (below 30) only uses /h/. It is also striking that the change appears to follow a path of lexical diffusion, with *maheto* more resistant to the change than *hate*. Whether this is caused by phonetic factors, such as the position of the phoneme in the word, or for other reasons (such as semantics or frequency of usage) remains to be investigated.

2.2 Orthography

In the remainder of this sketch, the following conventions will be used, in accordance with the orthography proposed for Bola in Wiebe and Wiebe (2000).

- v will be written for $\beta/$,
- *h* for $/\gamma/$,
- *ng* for $/\eta/$,
- *e* for $/\epsilon/$,
- o for /3/.

The allophonic variant [s] or [\int] of /t/ before /i/ will simply be written as *s*. Since people are familiar with English and Tok Pisin (both of which have <s>), they prefer to write this allophone as <s> rather than <t>. The sound also occurs in loanwords such as *Sande* 'Sunday', *sen* 'chain' and *dosa* 'bulldozer' (see also §2.9).¹

¹ The absence of /s/ in Bola is due to the fact that Proto-Oceanic *s became /r/ in Bola, as illustrated in the following etyma: *susu > ruru 'breast', *pasoq > varo 'plant', *pose > vore '(canoe) paddle', *tasik > dari 'sea, salt water'.

Some examples of the orthography:

orthographic	phonemic	phonetic	gloss
basi	/bati/	['basi]	'far'
laho	/layo/	['layə] ~ ['lahə]	'walk'
ngava	/ŋaβa/	['ŋaβa]	'mouth'
page	/page/	$['page] \sim ['pa^nge]$	ʻjump'

2.3 Syllable types and root structure

The only occurring syllable patterns in the language are CV and V. Final consonants and consonant clusters are not allowed (though see §2.9 for some exceptions in loan words).

The following chart shows examples of roots consisting of one to four syllables, illustrating the distribution of the two syllable types in the word. Syllable breaks are indicated by full stops, and the glide formation /i/ to [j], discussed in §2.1, is not taken into consideration. Notice that these words are all roots; derived words showing affixation, reduplication or compounding are excluded. Putative monosyllabic roots such as *ta* 'speak' are discussed in §2.4.

1 syllable	V	а	ART
2 syllables	V.V	i.a	'he, she'
	V.CV	a.ga	'canoe'
	CV.V	ga.o	'strong'
	CV.CV	bo.la	'wide'
3 syllables	V.V.V	i.a.u	ʻI'
	V.V.CV	i.e.ni	'here'
	V.CV.V	-	
	V.CV.CV	-	
	CV.V.V	ma.e.a	'like this'
	CV.V.CV	bi.a.ko	'k.o. edible seeweed'

	CV.CV.V	pi.ke.o	'shark'
	CV.CV.CV	ra.vu.lu	'ten'
4 syllables	CV.V.CV.CV	ka.u.ma.ha	'small turtle'
	CV.CV.CV.V	ba.la.hu.a	'earth worm'
	CV.CV.CV.CV	ha.te.la.nga	'morning'

Some of these quadrisyllabic roots are probably frozen compounds. Words of five or more syllables exist, but these are all derivations, compounds, or involve reduplication, e.g. *vakabagetu* 'to decorate' (from *bagetu* 'decorated'), *bulobuloaga* 'dolphin' (from *bulo* 'cut the other side (of a tree), come alongside (a boat)' and *aga* 'canoe').

The majority of Bola roots are disyllabic, though no frequency counts have been carried out to substantiate this claim.

Unlike Vitu, where vowel-initial roots are very uncommon (see van den Berg and Bachet 2006:12-12), Bola has a substantial number of disyllabic vowel-initial nouns and verbs, including *aga* 'canoe', *ege* 'k.o. spider', *ivu* 'feather (for headdress)', *ori* 'bachelor' and *ubi* 'to hit'. Trisyllabic roots with initial vowels, however, are limited to two pronouns (*iau* 'I' and *ioe* 'you'), three demonstratives (*iea* 'this/that', *ieni* 'here', *iene* 'there near you'), as well as a few interjections (*aia*, *aio*, *aue*).

2.4 Vowel sequences and long vowels

All possible vowel sequences occur in roots, with the exception of uo. However, *ie* is limited to three functor words (listed above in the final paragraph of §2.3), while *oe* only occurs in the pronoun *ioe* 'you (sg)' and in at least one shortened name, used as a vocative (*Goe*). However, *oe* is also found in multimorphemic words (see §2.6). Sequences of like vowels such as *aa* or *ee* are not permitted in Bola (though see below). All vowel sequences are shown in the following list.

ie	iea	'this, that'
ia	ia	'he, she'

io	kio	'k.o. wild fowl'
iu	piu	'cold'
ei	kei	'floor'
ea	madea	'leftover food'
eo	pikeo	'shark'
eu	beu	'crippled'
ai	kai	'tree, wood'
ae	nae	'seagull'
ao	vao	'mango'
au	bau	'whistle'
oi	loi	'wash'
oe	Goe	'personal name, short form of Tagole'
oa	koa	'grasshopper'
ou	tou	'they (paucal)'
ui	lui	'dugong'
ue	kue	'squeal'
ua	bua	'heart'
uo	-	

Sequences of three vowels occur, but are fairly rare in roots. Notice that most of these words are functor words and interjections. There is also one four-vowel interjection.

aea	maea	'like this'
aia	aia	'ouch!'
aio	aio	'hey!'
aoa	plaoa	'wheat flour' (from Tok Pisin)
aue	aue	'hey!'
aua	taua	'spirit, demon, white person'
iau	iau	·I,
iea	iea	'this, that'

ioe	ioe	'you (sg)'
oea	koea	'here'
oio	oio	'what a pity!'
uae	kuae	'k.o. large tree'
aioa	aioa	'ouch, oomph, umph'

Other sequences of three vowels are only found in multimorphemic words, all involving the 3s object suffix -a.

aua	pau-a	'adopt him/her'	
eia	tuverei-a	'told it'	
iua	biu-a	'criticise him/her'	
oia	loi-a	'wash it'	
uea	due-a	'dig it'	
uia	tagui-a	'greet him/her'	

As noted above, sequences of like vowels do not occur in the language. It is clear, however, that the vowel in monosyllabic roots such as *ta* 'speak', *va* 'four', *ru* 'put', *pi* 'get fire', *gi* 'count', *me* 'goat' and *ko* 'k.o. bird', is pronounced as a long vowel when it occurs in isolation: [ta:], [ku:], [pi:], [me:] and [ko:]. These vowels are longer than their counterparts in disyllabic words such as *tata* 'my father', *pipi* 'flatten', *meme* 'drizzle, light rain' and *koko* 'defecate', though impressionistically they do not have full double length. We claim that words such as *ta* 'speak' contain two identical vowels and are therefore actually disyllabic. The current orthography — which is in every way satisfactory — simply writes these words with single vowels, but they could conceivably also be spelled as *taa, kuu, pii, mee* and *koo*.

Several pieces of information confirm this disyllabic analysis. The reciprocal verb *va-ta* [REC-speak] 'have a conversation' is pronounced [β a'ta:], rather than as *[' β ata:], in line with penultimate stress placement (see §2.5). The reduplicated form of *va* 'four' is *va va* 'four each' [' β a: ' β a:], with two stresses on two long syllables. Compare this with the verb *vava* [' β a β a] 'swell, rise'. Similar cases are *ni gi* [ni'gi:] [PASS read] 'to be read' versus *nigi* ['nigi] 'coconut leaf stem', and *ni gi ru* [nigi'ru:] [PASS IRR put] 'will be put', versus

ni kiru [ni'kiru] [PASS fill] 'is filled'. In each case the stress falls on the long vowel.

The question then arises why such VV sequences are limited to words of the shape CVV and are never found in trisyllabic roots, since words such as **taaku, *meelo, *kulii* do not exist in Bola. There is no obvious answer to this question, but there is one exception: the word *kapo* 'short' is normally pronounced [ka'po:], with a long vowel in the final stressed syllable. It contrasts with the verb *kapo* ['kapo] 'to wrap'.²

2.5 Stress

Stress is not phonemic in Bola. It normally occurs on the penultimate syllable of the word, and hence stress shifts when the root is suffixed with, for instance, a possessive suffix.

manu	['manu]	'fish'
ravulu	[ra'βulu]	'ten'
ngatavine	[ŋata'ßine]	'woman'
bua	['bua]	'heart'
buagu	[bu'agu]	'my heart'
tabele	[ta'bɛlɛ]	'tongue'
tabelena	[tabe'lena]	'his/her/its tongue'

In case the vowel sequences *au, ai, ae* and *oi* occur in the antepenultimate and the penultimate syllable of the word, stress shifts to the antepenult. In each of these cases the antepenultimate vowel is lower. Some examples:

Bauto	['bautə]	'clan name
mairi	['mairi]	'red clay'
maea	['maɛa]	'like this'
oio	['ɔiɔ]	'oh!'

² It is possible that *kapo* 'short' originally had a final vowel sequence, which has been reduced to a single vowel. Compare Vitu *kapou* 'big', though the semantics do not match.

2.6 Morphophonemics

The only morphophonemic process that occurs in Bola relates to the 3s subject pronoun -a when it is affixed to verbal bases. Since other changes take place with 1s and 2s full object pronouns are cliticised to the verb, these processes are discussed together in this section.

Table 2.5 shows the alternations between the verb roots and the singular object suffixes/enclitics, illustrated by five verbs ending in the vowels *i*, *e*, *a*, *o* and *u*. These pronunciations are common in normal speech; in careful speech full pronouns can also be heard for 1s and 2s. In written texts full object pronoun forms are the norm.

		<i>padi</i> 'shoot'	<i>bole</i> 'take, get'	<i>dava</i> 'wait'	<i>longo</i> 'hear'	<i>tanu</i> 'bury'
1s	=iau	pad=au	bol=au	dav=au	long=au	tan=au
2s	=ioe	pad=oe	bol=oe	dav=oe	long=oe	tan=oe
38	<i>-a</i>	padi-a	bole-a	dave-a	longo-a	tanu-a

TABLE 2.5 MORPHOPHONEMICS OF OBJECT SUFFIXES/ENCLITICS

Two rules are needed to account for the alternations found in these forms. Looking at just the forms with 1s enclitic =iau and the 2s enclitic =ioe, it is clear that the initial *i* of the enclitic pronoun and the final vowel of the verbal root have both been deleted. There appears to be a constraint at work disallowing sequences of four vowels, such that padi + =iau is reduced to pad=au 'spear me' and tanu + =ioe to tan=oe 'bury you'. A rule can be formulated to delete a V before two other Vs (which is applied twice), but since sequences of three, four and five vowels do occur in the language (see §2.4 and below), this rule would crucially need to make reference to the preceding consonant and the intervening morpheme break, symbolised by +. A possible formulation of the rule is as follows:

Vowel deletion

 $V \rightarrow \emptyset/C_{--} + VV$
However, for 3s -*a* one more rule is needed. Four of the forms pose no problems: in *padi-a*, *bole-a*, *longo-a* and *tanu-a* the suffix -*a* is added without any complications. The remaining form is surprising. On the basis of dava + -a we would expect *davaa* or possibly *dava*, but instead we find *davea*, with vowel dissimilation. Apparently the constraint against sequences of like vowels (see §2.4) is responsible for this unusual form. The rule can be formulated as follows:

Vowel dissimilation

 $a \rightarrow e / _ + a$

An alternative analysis would be to argue that the 3s suffix is not -a, but -ia, derived from the 3s free pronoun *ia*. The vowel sequence *ai* in *dava-ia* then naturally coalesces to *e* in *davea*. However, 3s -a is different from the 1s and 2s pronouns in several ways. Of the three pronominal forms, it is

the only one that 'hops' to the end of the verbal complex (see §5.7), and it is also the only one that is acceptable in formal speaking style and in written texts. Comparative evidence also supports the analysis of 3s -a as the object suffix. Proto-Oceanic, the ancestral language of all 450+ Oceanic languages, is reconstructed with *-*a* '3s object suffix' (Evans 1995).

The vowel deletion rule formulated above does not apply to verbal roots that end in two vowels. In these cases the final vowel of the root is not deleted, and the resultant sequence of four or five vowels is retained, as shown in table 2.6.

		pugai	padoi	tau
		'meet'	'touch'	'hang up'
1s	=iau	pugai=au	padoi=au	tau=iau
2s	=ioe	pugai=oe	padoi=oe	tau=ioe
38	-a	pugai-a	padoi-a	tau-a

TABLE 2.6 MORPHOPHONEMICS OF OBJECT SUFFIXES/ENCLITICS (TWO VOWELS)

2.7 Vowel elision

In normal conversational speech, there is frequent elision of unstressed wordfinal vowels following a consonant and before another vowel. Very often the vowel that is responsible for the elision is an article. This elision is usually not reflected in written texts, where such elided vowels are restored to their proper position. Below follow a few examples, all from spontaneous utterances, with the actual pronunciation included on the first line. The elided vowel is underlined.

(1)	<i>Bol<u>e</u> a boro!</i> take/get ART pig 'Get some pigs!' (conv)	['bəla'bərə]
(2)	<i>Kan<u>i</u> a manu!</i> eat ART fish 'Eat some fish!' (conv)	['kana'manu]
(3)	<i>i kani-a pal<u>i</u> a kopa</i> 3s eat-3s PERF ART bat ' the bats have eaten it.' (conv)	[ika'nia 'pala'kəpa]
(4)	<i>A rum<u>a</u> e rei?</i> ART house ART.P who 'Whose house?' (conv)	[a'rumɛ'rɛi]

Sequences of like vowels are normally also reduced to a single vowel.

(5)	<i>I uka a naru</i> 3s NEG ART water	['juka'naru]
	'There is no water.' (conv)	
(6)	<i>I luhoi ta a boro.</i> 3s think MOD ART pig	[ilu'həita'bərə]
	'She thought it was a pig.'	

36

(7)bakovi i [aba'koßi'rua] а rua ART man 3s two 'two men' (8) A а maki iea ['arama'kɛa] ra ART what ART thing DEM 'What is this?' (conv)

From people's intuitions it appears that it is the second vowel that is elided in these cases, not the first vowel. This is possibly influenced by the orthography, as in (5) the reduced variant is more likely to be written as *i uka naru* than as *i uk a naru*, with a non-allowed final consonant in *uk*. Phonologically, however, it is the first vowel that is elided. Notice that in (8) the double *i* is first reduced and then elided. In written and printed materials, these sequences of vowels are usually written, though not always consistently. In this grammar we follow the orthography of our written sources, which leads to a degree of inconsistency, especially with regard to the article *a* following the negator *uka (ma)*.

Interestingly, sequences of vowels in roots do not undergo elision. The final vowels in *pugai* 'meet', *padoi* 'touch', *tau* 'hang up' and *tagui* 'greet' are not elided, as we saw in §2.6 and table 2.6.

Features of Bola conversational speech are an understudied part of this grammar. Apart from elision, there is the frequent insertion of Tok Pisin words and phrases, giving the language as it is currently used in daily life a somewhat different lexical and phonological appearance from the variety described here, which is largely based on texts.

2.8 Reduplication

Reduplication is fairly common in Bola, though impressionistically it is not as frequent as in some other Oceanic languages. It has various semantic functions, including intensification, progressive aspect and plurality. This section focusses on the formal aspects of reduplication. For details of the semantics of reduplication, see §4.3.4 for nouns, §4.7 for adjectives, and §5.5 for verbs.

There are two distinct types of reduplication, the choice of which appears to be lexically determined.

1. **Full reduplication** is suffixing and disyllabic, i.e. the last two syllables of the root are copied. (Because many roots are disyllabic in Bola, it is impossible to tell with disyllabic roots whether this type of reduplication is prefixing or suffixing; it is only with trisyllabic roots that the pattern emerges unambiguously). Full reduplication typically indicates progressive aspect, plurality, intensification or similarity.

ali	'shave'	ali-ali	'be shaving'
gare	'old person'	gare-gare	'old people'
goma	'green/blue'	goma-goma	'green/blue (plural)'
hale	'bad'	hale-hale	'very bad'
kedo	'stone'	kedo-kedo	'rocky'
koma	'child'	koma-koma	'as a child, childish'
sibanga	'limp'	sibanga-banga	'be limping'

2. **Partial reduplication** is prefixing and monosyllabic, i.e. the first syllable of the root is copied. Partial reduplication indicates progressive aspect.

leho	'work'	le-leho	'be working'
pesi	'stand'	pe-pesi	'be standing'
tua	'flow'	tu-tua	'be flowing'
<i>ta</i> [ta:]	'talk'	ta-ta [ta'ta:]	'be talking'

2.9 Loan phonology

Loan words from Tok Pisin have brought in non-native phonological patterns. This is shown in the introduction of the phoneme /s/ (already existent as an allophone of /t/ before /i/), the presence of final consonants and the occurrence of consonant clusters. The following list presents some of the more frequent

unadapted loans from Tok Pisin in Bola, many of which show these non-native phonological patterns.

aen	'iron'
bal	'ball'
balus ~ balu	'aeroplane'
<i>gavana</i> [ga'βana]	'governor'
kar	'car'
lotu	'worship'
mambu	'bamboo'
masin	'engine'
moni	'money'
painim	'find'
pilai	'game, play'
save	'know'
senis	'change'
sip	'ship'
slipa	'flipflop'
su	'shoe'
taun	'town'

However, a number of loans from Tok Pisin (TP) have added a final vowel and broken up consonant clusters. These words presumably represent an earlier stage of borrowing, at a period when they were more or less adapted into the native phonology.

ate	'hat'	TP hat
botole	'bottle'	TP botol
garasi	'grass'	TP gras
haus lotu ~ silotu	'church'	TP haus lotu
kavura	'copra'	TP kopra
kiki	'kick'	TP kik

kolosi	'blouse, clothes'	TP klos
krosi	'cross, angry'	TP kros
kuku	'cook'	TP kuk
lesi	'tired of'	TP les
rosi	'main road'	TP rot

A few words can be identified as loans from Tolai (Kuanua), the language spoken around Rabaul in East New Britain by people who traded with the Bola and were instrumental in introducing Christianity. Tolai loans include *raring* 'pray', *varavai* 'confession' and *Luluai* 'Lord'. These words are now considered archaic and falling out of use. The Bola Bible uses native words for these concepts: *vasileki* 'pray', *taki tala naro hale* 'confess' (lit. say/speak out bad behaviour/habit) and *Bakovi Dagi* 'Big Man, Lord'.

The Bola Bible also contains many loanwords from Tok Pisin (most of them ultimately from English), which are to various degrees adapted to Bola phonology: gol 'gold', silva 'silver', sen 'chain', sipsip 'sheep', donki 'donkey', hos 'horse', bret 'bread', is 'yeast', plaoa 'flour', vit 'wheat', vain 'wine', lita 'litre', sis 'cheese', prister 'priest' (from German), propet 'prophet', karis 'carriage, chariot' and various others.

3. Basic typology and word classes

This chapter gives a basic overview of the major typological features of Bola, followed by a discussion of roots, affixes and clitics, and ending with a brief overview of the various word classes.

3.1 Basic typology

The main typological features of Bola morphosyntax are as follows.

- **Morphology**. There is a limited set of affixes; not counting clitics, these number about a dozen.
 - Three singular possessive suffixes: -gu '1s', -mu '2s', -na '3s'.
 - One object suffix: -a '3s'.
 - A nominalising prefix *ni*-, a frozen nominalising infix *-in*-, and two nominalising suffixes *-nga* and *-Ca*.
 - Two adjectivizing affixes: *ma* and *-ka*.
 - A causative prefix vaka-.
 - A reciprocal prefix va-.
 - A collective circumfix va-...-hi.
- **Pronouns**. The pronominal system distinguishes four numbers: singular, dual, paucal and plural, as well as clusivity for 1st person non-singular. Gender is not indicated in the pronouns, nor anywhere else in the grammar. There are five sets of pronominals: free pronouns (15 forms), subject proclitics (15 forms), object
 - 41

suffix (one form), possessive suffixes (three forms), and oblique pronouns (three forms).

- **Possession.** The alienable–inalienable distinction is only overtly marked by different pronouns in the singular. For non-singulars the same segmental forms are used (*ne* + free pronoun), with only a subtle contrast in stress marking the difference. There are no further semantic subdivisions among alienables, and there are no possessive classifiers.
- Bola has four **articles**: *a* for common nouns, *e* for proper nouns, and two definite articles: *ra* and *re*.
- The **demonstrative** system is relatively simple with six basic adverbial demonstratives. The three nominal demonstratives are not based on differences in distance.
- There are four real **prepositions**. Unusual is the presence of the preposition *o*, which is only used with place names.
- There is extensive **TAM marking** within the verbal complex.
- Clausal **negation** is marked by a bimorphemic verb *uka ma*.
- Bola has a real agentless **passive**, a feature which is extremely rare in Western Oceanic.
- Serial verb constructions are very common, but they cannot really be distinguished from compound verbs.
- **Constituent order** in intransitive clauses is both VS and SV; in transitive clauses the dominant order is SVO. There is considerable word and consituent order variation in the language, also with respect to the placement of oblique phrases in the clause, the position of the article *ra* in the noun phrase, and the position of modal markers within the verbal complex.
- **Apposition** is a common syntactic construction, not only with NPs, but also with oblique phrases.

• There are very few **conjunctions**. Bola has no word for 'and', and simple juxtaposition is the preferred way of combining clauses.

3.2 Roots, affixes and clitics

The basic elements of Bola words are roots, affixes and clitics. Roots can stand on their own as independent phonological words. They belong to a variety of word classes (see §3.3), and usually have a clear lexical meaning. Affixes and clitics are phonologically attached to a root and never appear as independent words. They typically have a grammatical meaning. The difference between affixes and clitics is less straightforward. Clear affixes are the possessive suffixes and elements that are category-changing or valency-changing, such as the nominalising prefix *ni*-, the nominalising suffix *-nga* and the causative prefix *vaka*-. In the case of suffixes, the shift of stress to the penultimate syllable (see §2.5) is a further indication that these elements are indeed suffixes. Singular free pronouns used as objects can be cliticised to the verb, thereby becoming enclitics (see §2.7). The exception is 3s - a, which we treat as a suffix for reasons explained in §5.3.

In the case of dependent elements that precede a root, the choice between proclitics and prefixes is somewhat arbitrary. This includes the articles, the subject markers, as well as modal markers and prepositions. Bola orthography writes all these elements as separate words, and we take this to indicate that these elements have some degree of autonomy in the mind of native speakers. Somewhat surprisingly, passive ni is also written separately, presumably because modal gi can intervene between it and the verb root. We analyse all these elements as proclitics, belonging to various closed classes.

The following elements are all classified as proclitics.

- The articles *a*= (for common nouns), *e*= (for personal nouns) and *ra*= and *re*= (definite articles). See §4.4.
- The subject markers, e.g. a = '1s', i = '3s', miri = '1DE'. See table 4.1 for a full list of subject proclitics.

- The modal particles *ga=*, *bara=*, *ta=*, *ma=*, including combinations with subject markers such as *ge=*, *go=*, *bare=*, and harmonic variants such as *gu=* and *gi=*. See §5.7 for a discussion of these modal markers.
- The passive marker ni=. See §5.4.5 and §7.4.6.
- The prepositions *na*, *ne* and *o*. See chapter 6.

For reasons of readability, we follow the Bola orthography in this study, and hence write all proclitics separately in the example sentences. In other words, we will write *a ruma* 'a house', rather than *a=ruma*; *e Jon* 'John', rather than *e=Jon*, and *i vano* 'he goes', rather than *i=vano*. Especially with sequences of enclitics, such as $ta=miri=gi=vano \ o=Kimbe$ versus ta miri gi vano o Kimbe 'we were about to go to Kimbe', this makes for easier reading. Cliticised object pronouns, however, are written with =, for example *i* long=au (3s hear=1s) 'she heard me', to signal that a vowel has been lost (the root for 'hear' is longo). See also §2.6.

3.3 Word classes

The following word classes for roots are distinguished in Bola: nouns, verbs, adjectives, pronouns, adverbs, prepositions, articles, demonstratives, numerals, conjunctions and interjections. Of these eleven, only the first three, nouns, verbs and adjectives are open classes. All other classes are closed. We now briefly illustrate each category and give some defining features.

3.3.1 Open word classes: nouns, verbs and adjectives

There are three open classes in Bola, each with hundreds of members: nouns, verbs and adjectives.

Nouns typically denote concrete entities and function as the head of a noun phrase, in which case they can be modified by articles, demonstratives, numerals, adjectives, and relative clauses. There are also various abstract nouns. Examples of nouns are *bakovi* 'man', *aga* 'canoe', *kopa* 'bat', *naro* 'deed, behaviour' and *taho* 'time'. Nouns are syntactically defined as items that function as arguments in predications and that can co-occur with articles,

numerals, possessive pronouns, and nominal demonstratives. A noun phrase may function as subject, object, object of preposition, possessive phrase or as nominal predicate in an equative clause. Morphologically, nouns can be divided into inalienable nouns, which are often inflected with a possessive suffix (e.g. *hate* 'liver' in *hate-gu* 'my liver'), and alienable nouns which do not take these suffixes. Another distinction among nouns is that between common nouns (which take the article a) and proper nouns (which take the article e). The common-proper distinction cross-cuts the alienable-inalienable division. For further details see §4.2.

Verbs are also an open class, the members of which typically denote processes and actions. Examples are *made* 'sit', *vano* 'go' and *kani* 'eat'. The characteristic function of verbs is to serve as predicates. Verbs typically co-occur with subject proclitics (see §4.1 and §5.2). Morphologically, verbs can be divided into transitive and intransitive verbs. Transitive verbs are distinguished by taking objects and the ability to be passivised. For further details, see §5.1.

Adjectives typically refer to properties of nouns (*dagi* 'big', *hale* 'bad', *kamumu* 'good'), and are morpho-syntactically similar to verbs in that they take subject proclitics when they function predicatively (see §4.1). They can also be nominalised by ni-. However, when adjectives serve to modify a noun within a noun phrase, the subject marker is absent. In contrast, verbs that modify nouns obligatorily take the subject markers. Compare the following three pairs, showing two adjectives (*tupo* 'dull' and *dagi* ' big') and one verb (*leho* 'to work'). Examples (9a) and (10a) are intransitive clauses with the adjective in predicate position showing the subject marker i; the corresponding (b) examples are noun phrases with the adjective modifying the noun without i. Example (11a) can be either a clause or a phrase, but as (11b) shows, without i a verb cannot modify a noun.

(9) a. A vito i tupo. ART knife 3s dull 'The knife is dull.' b. *a vito tupo*. ART knife dull 'The dull knife.'

- (10) a. A boro i dagi. ART pig 3S big 'The pig is big.'
 - b. *a boro dagi* ART pig big 'a/the big pig'
- (11) a. *a bakovi i leho* ART man 3S work
 - 1. 'the man is working' 2. 'the man who works'
 - b. **a bakovi leho* ART man work

Adjectives can also function adverbially, modifying verbs (see §7.7.3).

A large number of verbs can also function as nouns, e.g. *leho* 'to work' (v) can also mean 'work' (n). A number of adjectives do so as well, e.g. *gare* 'old' (adj), 'old person' (n). This flexibility does not mean that the categoriality of lexical roots is undetermined, and that a root's category as noun, verb or adjective only emerges from a particular syntactic context. Rather, the word class (syntactic category) of the root is an inherent part of its make-up. Various tests are available to check the categorial nature of a lexical root, and the recognition that a root can belong to two or even three categories is enough to adequately cover the range of variation that is found in Bola.

The following tests are available for each open word class. This list is nonexhaustive, but yields solid results.

Nouns can be identified by means of the following tests:

- nouns can be preceded by the article a^1 ;
- nouns can be modified by a numeral;
- nouns can be modified by a possessive pronoun;
- nouns can be followed by the demonstrative *iea* 'this/that';
- nouns cannot be nominalised by *ni*-;
- nouns cannot be preceded by subject proclitics.

Verbs can be identified by means of the following tests.

- verbs can be preceded by subject proclitics;
- verbs can be preceded by modal particles;
- verbs can be nominalised by *ni*-;
- verbs can be followed by the perfective adverb *pali* 'already';
- verbs cannot be preceded by the article a^1 ;
- verbs cannot be modified by a numeral;
- verbs cannot be modified by a possessive pronoun;
- verbs in attributive position need a subject proclitic;
- verbs can occur in qualitative relative clauses preceded by *ni* (see below).

Adjectives can be identified by means of the following tests (the first three of which are the same as for verbs; the last two are unique for adjectives):

- adjectives can be preceded by subject proclitics;
- adjectives can be nominalised by *ni*-;
- adjectives can be followed by the perfective adverb *pali* 'already';
- adjectives in attributive position do not need a subject proclitic;
- adjectives cannot occur in qualitative relative clauses preceded by ni.

¹ This test is tricky, since the article *a* should be carefully distinguished from the 1s subject proclitic a=. A phrase such as *a leho* can mean 'I work' or 'a/the work'.

The last item on the list of tests to distinguish verbs and adjectives is as follows. Bola has a particular type of relative clause called a qualitative relative clause (see also \$9.5.1). These clauses describe qualities or permanent characteristics of items and people, and they are introduced by the particle *ni*. This construction is available for intransitive verbs as well as transitive verbs but adjectives cannot participate in it.

- (12) A bakovi ni leho / ni kalolo / ni nongo.
 ART man QUAL work QUAL sing QUAL sleep
 'A man who likes to work / sing / sleep.' (elic)
- (13) *A bakovi ni dagi / ni kamumu / ni kato.
 ART man QUAL big QUAL good QUAL black (No meaning.)

Table 3.1 shows a few of these tests applied to a number of lexical roots. It turns out that several of them belong to two word classes.

	Tests for N			Tests for	r V	Tests for Adj	
	with numeral <i>taku</i> 'one'	with possessive <i>nau</i> 'my'	with demon- strative <i>iea</i> 'this/that'	with subject proclitic <i>i</i> '3s' or <i>ri</i> '3PL'	with <i>pali</i> 'already'	in a qualitative relative clause with <i>ni</i>	in attributive position without subject proclitic
<i>ruma</i> 'house'	yes	yes	yes	no	no	no	no
<i>leho</i> 'work'	yes	yes	yes	yes	yes	yes	no
<i>ha</i> 'flee'	no	no	no	yes	yes	yes	no
<i>kamumu</i> 'good'	no	no	no	yes	yes	no	yes

TABLE 3.1. WORD CLASS TESTS FOR N, V, ADJ

<i>dagi</i> 'big'	no	no	no	yes	yes	no	yes
<i>panaho</i> 'steal'	yes	yes	yes	yes	yes	yes	no
<i>haro</i> 'day'	yes	yes	yes	yes	yes	no (?) ²	no
<i>gare</i> 'old'	yes	yes	yes	yes	yes	no	yes

The following conclusions can be drawn about each lexical item.

- *ruma* 'house' is a noun.
- *leho* 'work' is both a noun and verb.
- *ha* 'flee' is a verb.
- *kamumu* 'good' is an adjective.
- *dagi* 'big' is an adjective.
- panaho 'steal' is a verb, and also a noun with the meaning 'thief'.
- *haro* is a noun 'day, sun', but also an adjective (occurring only with 3s *i*) meaning 'it is light, it is day'. Unlike other adjectives, it does not appear in attributive constructions. It is unclear how many adjectives are limited to predicative positions.
- gare is both an adjective 'old' and a noun 'old person'.

In summary, we arrive at the following categories: N (*ruma*), V (*ha*), Adj (*kamumu, dagi*), N+V (*leho, panaho*), N+Adj (*gare*), and (possibly) N+Adj+V (*haro*). Further research needs to be done on the following points. 1) Are there other categories, such as V+Adj? This appears very likely, and *mate* 'die' (v), 'dead' (adj) is a potential candidate. 2) Is one of the lexical categories more basic in the case of multiple class membership? Category-based frequency counts, psycholinguistic testing, and language acquisition data may shed light

² A third meaning of *haro* is the intransitive verb 'to say *haro* (good day) at midday; to greet with *haro*'. Unfortunately this meaning was not incorporated in the test.

on this question. 3) Finally, what is the frequency distribution of each of these categories across the lexicon? Presumably most items relating to flora and fauna are only N, but there might also be more combinations than expected.

3.3.2 Pronouns

Bola distinguishes five sets of pronominal elements: free pronouns, subject proclitics, object suffixes, possessive suffixes and oblique pronouns. Of these five sets, only the free pronouns and the oblique pronouns qualify as full words. For further details on forms, meaning and usage of the various pronoun sets, see §4.1.

3.3.3 Adverbs

Adverbs are a closed multifunctional class covering 1) degree words (*hateka* 'very'); 2) temporal adverbs (*ngane* 'now', *muri* 'next, later, then'); 3) manner adverbs (*maradodoe* 'slowly', *malaviriri* 'quickly'); 4) focussing adverbs (*kunana* 'only, just'), and 5) sentence adverbs. See §7.8 for details.

3.3.4 Prepositions

Bola has five prepositions: *na, ne, o, manga* and *tura*. The first two are general prepositions occurring before common nouns and proper nouns respectively. The third preposition, *o*, is used before place names when the place functions as a locative argument in a predication. *Manga* 'like, as' introduces comparisons. *Tura* 'with' is a denominal preposition with unique features. Prepositional phrases bear a wide variety of semantic roles depending on the kind of noun that they govern, including location, purpose, accompaniment and comparison. See chapter 6 for details.

3.3.5 Articles

Bola has four articles: *e*, *a* and *ra*, *re*. The first is the proper article *e*, used with personal nouns such as names and kinship terms: *e Jon* 'John', *e balo-gu* 'my aunt'. The second article is the common noun article *a*, which is used with all

50

other nouns: *a ruma* 'a/the house(s)', *a kopa* 'a/the bat(s)'. This common article in Bola is simply a noun marker and does not indicate definiteness, specificity or number. The articles *ra* and *re* mark definiteness in particular syntactic contexts, but they occur much less frequently. See §4.4 for details on the articles.

3.3.6 Demonstratives

There are five adverbial demonstratives and three nominal demonstratives in Bola: *iea, nga* and *ngi*. The semantics of the nominal demonstratives is odd in that number is a semantic parameter, but not distance. See §4.5 for details.

3.3.7 Numerals

Numerals are a closed class of words expressing precise numbers, including *taku* 'one', *rua* 'two', *tolu* 'three' and *ravulu* 'ten'. Simple numerals are a subclass of intransitive verbs. Complex numbers are made up by various combinations. Because numerals have various unique syntactic and semantic properties (as outlined in §4.6.1), we treat numerals as a separate part of speech.

3.3.8 Quantifiers

Quantifiers are a closed class of a few words which give an imprecise indication of number or quantity: *lobo* 'all', *ranga* 'some'. The numerical quantifiers *tara* 'one' and *varago* 'both' also belong to this category. See §4.6.2 for details.

3.3.9 Conjunctions

Conjunctions are a very small closed class of words which join two syntactic units, especially clauses. Examples are *pali* 'but', *lakea* 'then', *o* 'or' and the phrasal conjunction *a vuhuna* 'because'. See §9.3 for details.

3.3.10 Interjections

Interjections are a closed class of words which express the speaker's emotion or state of mind: *aio* 'hey', and *oio* 'what a pity'. Interjections are discussed and illustrated in §7.7.5.

3.3.11 Particles

Particles are a residual category of short grammatical words that do not fit neatly into any of the existing wordclasses. The main particles in Bola are the modal proclitic particles *bara*, *ga*, *ma*, *ta*, the passive proclitic *ni*, the complementiser *ni* and the qualitative relative marker *ni*.

4. Nouns and noun phrases

This chapter describes the structure of nouns and noun phrases, including pronouns, articles, demonstratives, numerals, quantifiers and adjectives. Possession is also treated in this chapter, but relative clauses (which, strictly speaking, also belong to the noun phrase) are treated in §9.5.

4.1 Pronouns and pronominals

Bola has five sets of pronominal elements, as shown in table 4.1. These are as follows:

- free (or independent) pronouns (15 forms);
- proclitic subject markers (15 forms);
- object suffixes (one form);
- possessive suffixes (three forms, used with inalienable nouns), and
- oblique pronouns (three forms, used as possessors with alienable nouns, and also in various oblique functions).

In addition, there is a special interjection ke 'you', which falls outside the pronominal system. It is discussed in §7.7.5.

Notice that only the first two sets have the full range of person and number options available to them; the remaining paradigms are defective. There is only one object suffix (3s - a), and the possessive suffixes and oblique pronouns are limited to the singular. For 1s and 2s and for non-singular objects, free pronouns are used (and the 1s and 2s pronouns can also cliticise to the verb, see §2.6). For non-singular possessors the language employs the

53

free pronouns in conjunction with the possessive suffix *-ne* or the preposition ne (see also §4.8).

		free	subject proclitic	object suffix	possessive suffix	oblique
sg	1	iau	а	free	-gu	паи
	2	ioe	0	pronoun	- <i>mu</i>	vomu
	3	ia	i	- <i>a</i>	-na ~ -ne	vona
dual	1 ex	maria	miri			
	1 in	tarua	tu			
	2	marua	muru			
	3	rua	ru			
paucal	1 ex	mateu	mete			
	1 in	teu	te	free	<i>-ne</i> + free	<i>ne</i> + free
	2	matou	moto	pronoun	pronoun	pronoun
	3	tou	to			
pl	1 ex	mia	mi			
	1 in	hita	si			
	2	тиа	ти			
	3	ria	ri			

TABLE 4.1 PRONOMINAL SETS

Formally, a number of observations can be made. All 15 free pronouns end in a sequence of two vowels, with the exception of *hita* 'we (plural inclusive)'. The singular forms all have an initial vowel *i*. The duals and trials show the longest forms. This has a simple explanation in that duals and trials were originally compound forms, consisting of a numeral suffixed to a free pronominal plural base. In the free pronoun set, three of the four duals share the element *rua* (obviously related to and derived from the numeral *rua* 'two'), although the 1DU exclusive *maria* shows an unexpected front vowel *i*. Given that Proto-Oceanic is reconstructed with the forms $*ka[m]i \sim *kamami$ 'we (exclusive)', it is likely that maria goes back via *mi-ria to an earlier *mi-rua. Vowel harmony accounts for the change from *mi-rua to *mi-ria, while the current form maria probably arose by analogy with the other trisyllabic pronouns, all of which have a in the first syllable.

The paucal forms are originally trials, as all of them show the form *tou* or *teu*, clearly related to and derived from the numeral *tolu* 'three', with loss of the medial consonant *l* and vowel fronting in the case of *teu* and *mateu*.

Based on the proto-forms $ka[m]i \sim kamami$ 'we (exclusive)' and kita 'we (inclusive)', this vowel fronting in *teu* and *mateu* was probably caused by an original longer form containing the vowel *i*. A possibly historical sequence (with k > h preceding other changes) is hami-tou > hami-teu > miteu > mateu for the 1st person exclusive (by analogy with *maria*), and *hita-tou* > *hita-teu* > *teu* for the 1st person inclusive.

Most of the non-singular subject proclitic forms seem to be derived from the free pronouns by final vowel deletion and vowel harmony. For example, rua > ru, mateu > mate > mete. Exceptions include the 1st person dual pair tarua and tu (instead of the expected *turu) and the 1st person plural inclusive pair *hita* and *si*, which is puzzling. The singular forms have also undergone initial vowel deletion (e.g. 1s iau > a), although historically the initial *i* in the free form is probably a reflex of the personal article **i*.

As for usage, the dual forms are exclusively and obligatorily used when the reference is to two people. There is one exception to this rule: the dual inclusive *tarua* can also be heard in polite exhortations when addressing a large audience, as in sermons. The paucal and plural forms show considerable flexibility. As mentioned above, the paucal forms were originally trials, and the meaning 'group of three people' is still present in the mind of native speakers. In the Bola Bible, for example, the paucal is typically used to refer to three people (of which there are hundreds of examples), but also to four people (Gn 22:19, Mk 9:2), five people (Lk 12:52, 16:28), or to a small, but unspecified number (Lk 8:20). In actual daily usage however, paucals can refer to groups of any size. During a public prayer, for example, someone used

mateu 'we (paucal exclusive)' instead of the plural *mia*, when referring to a congregation of maybe 40-50 people. When asked about this usage, people responded that there is no difference, and that both pronouns are fine in this context. The size of the group is irrelevant. During the first author's stay in Pasiloke, he heard very few instances of *hita* 'we (plural inclusive)', and it seems likely that the 1st person paucal forms *mateu* and *teu* are slowly replacing the first plural forms *mia* and *hita*. It is possible that this process is also happening with 2nd and 3rd person paucal forms, but the evidence for this is too limited to make strong statements.

The third singular ia 'he, she', can also refer to objects:

(1) Ia a aga ne rua.
3S.F ART canoe OBL.P 2D.F
'It is their canoe.' (dict)

The free pronouns function as arguments, either as subjects, object, objects of prepositions, possessors (for non-singular only), and as subjects in equative clauses. These free pronouns can therefore occur in either the preverbal subject slot or the postverbal object slot of a clause. The subject proclitics are obligatory in verbal clauses, and since the identity of the subject is already clearly indicated by the subject proclitics, the use of a free pronoun has a pragmatic function, such as contrastive emphasis.

Bola exhibits a nominative-accusative case-marking system, where transitive and intransitive subjects are distinguished from objects, regardless of how active the state of affairs encoded by the predicate is.

In glossing, three of the pronominal elements are simply given the same abbreviation across the number and person sets: subject proclitic, object suffix and possessive suffix. The position of the pronominal element in the clause (or its suffixation to a noun), makes it clear to which set the pronoun belongs. The free and oblique pronouns receive additional marking in glossing: the free pronouns an F (for free), and the oblique pronouns OBL. For example, both *a*, and *-gu* are simply glossed as 1s, but *iau* is glossed as 1s.F and *nau* as 1s.OBL.

In verbal clauses subject proclitics are obligatory, but additional free pronouns are optional. Here are some examples of the optional free pronouns and the subject proclitics in various clause types, showing a variety of semantic roles.

Agent as subject of transitive clause:

- (2) (Iau) a tolo puru a kai.
 1S.F 1S chop go.down ART tree
 'I cut down a tree.' (s.u.)
- (3) (Maria) miri kani a vudi.
 1DE.F 1DE eat ART banana
 'The two of us are eating bananas.' (s.u.)

Experiencer as subject of a transitive clause:

(4) (*Iau*) a longo-a. 1s.F 1s hear-3s 'I heard it.' (s.u.)

Agent as subject and patient as object of a transitive clause:

(5) *(Ia) i kori iau.* 3s.F 3s help 1s.F 'He helped me.' (s.u.)

Agent as subject of an intransitive clause:

(6) (Iau) a ha.
1S.F 1s run.away
'I ran away.' (s.u.)

Non-agent as subject of an intransitive clause:

(7) (Iau) a giloa.
1S.F 1S sick
'I am sick.' (conv)

A non-human subject in an equative clause is illustrated in (1).

4.2 Noun classes

There are two main distinctions among nouns in Bola. First, there is the contrast between alienable and inalienable nouns; second is the distinction between common and proper nouns. These are discussed in turn in the next two sections.

4.2.1 Alienable and inalienable nouns

Inalienable nouns can be affixed with one of the three possessive suffixes: -gu 'my', -mu 'your' and -na 'his, her, its'. Alienable nouns cannot undergo such possessive suffixation; instead, possession must be coded by means of an oblique pronoun: nau 'my', vomu 'your' and vona 'his, her, its'. For example, mata 'eye' is an inalienable noun, while ruma 'house' is an alienable noun. Hence 'my eye' is mata-gu, but 'my house' is ruma nau. Notice that the distinction between inalienable and alienable nouns in Bola is only relevant in the singular. When the possessor is a non-singular referent (either dual, paucal or plural), the distinction is virtually neutralised. Both types of nouns are marked with the morpheme ne followed by a free pronoun: mata-ne ria 'their eyes' and ruma ne ria 'their houses', though the phonology of these two homophonous morphemes is different. See §4.8.1 for details.

Inalienable nouns typically express the following semantic notions: 1) body parts; 2) bodily products (of humans and animals); 3) kinship terms; 4) parts of wholes (for instance, parts of a house, of a canoe, of trees and plants); 5) locative and dimensional terms; 6) various miscellaneous terms, including a few nominalisations in ni- (see also §4.3.1).

The following lists illustrate these groupings.

1. Body parts

baro	'pimple'	bisiku	'tailbone'
baruke	'gland'	bito	'back'

bobo	'flesh'	kuku(na) lima	'finger'
bua	'heart'	kuku-vaha	'toe(s)'
bubui	'muscle'	kuli	'skin'
dara	'blood'	kumi	'chin'
dole	'testicle'	labu	'thigh'
dume	'forehead'	lima	'hand, arm'
gare	'cheek'	loho	'neck, voice'
gau	'armpit'	mahala	'guts'
gepe	'shoulder'	mao	'gums'
goro	'throat'	тара	'head'
guru	'Adam's apple'	mare-mata	'eyelash'
hanu	'spirit, shadow'	mari	'eyebrow'
hate	'liver'	mata	'eye'
huraba	'brain'	mauri	'left (side)'
kado	'rectum'	mudu	'abdomen'
kakai	'body'	ngala	'front side'
kane	'right (side)'	ngava	'mouth'
kapu	'penis'	ngutu	ʻlip'
karapa	'wing'	pera	'groin'
karira	'facial hair, beard'	poda	'corpse'
karo	ʻrib'	putu	'joint'
kavutu	'stomach'	putuna lima	'elbow'
kidu	'back of the head'	rupere	'nose'
kipo	'lower back'	rua	'vein'
koro	'pubic hair'	siva	'jawbone'
ku	'tail'	tabala	'temple'

tabele	'tongue'	tuli	'ear canal'
tado	'vagina'	tuli-mata	'face'
taga	'buttock'	turu	'knee'
tagula	'fingernail'	vaha	'leg, foot'
talinga	'ear'	vele	'shoulderblade'
tamudi	'belly'	vu	'hair (of head)'
tuha	'bone'	vunga	'body hair'
tuhabure	'backbone, spine'		

A few body parts are exceptional in that there is an alternation between a monosyllabic root (which is only used with possessive suffixes), and a reduplicated root, which is used in isolation. Only three examples of this phenomenon have been found, illustrated for the first person singular:

ngi-gu	'my tooth/teeth'	ngi-ngi	'tooth/teeth'
gi-gu	'my head, my skull'	gi-gi	'head, skull'
ru-gu	'my breast'	ru-ru	'breast'

Historically, it appears that the reduplicated root is original (e.g. *ruru* 'breast', from Proto-Oceanic **susu*), and that the monosyllabic roots are back-formations. Exactly how this process took place and what the motivating factors were deserves further research.

2. Body products

bango	'breath'	miha	'urine'
baru	'mucus, snot'	muta	'vomit'
kalupe	'spittle'	tahe	'faeces'
kuve	'semen'	vere	'drool'
luha	'tears'		

The following bodily products are exceptions to this rule, as they are alienable nouns:

kume	'pus'	ngarava	'sore'
loto	'boil'	pere	'mucus (in the eye)'

61

3. Kinship terms

balo	'(paternal) aunt'	kuraba	'opposite sex sibling'
boge	'twin sibling'	lavo	'in-law'
girihi	'spouse'	mahuru	'sister'
ha	'uncle'	tama	'father'
hamo	'descendant'	tari	'younger brother'
ka	'child-in-law'	tu	'child'
kakai	'body; spouse'	tubu	'grandparent,
kina	'mother'		grandchild'
		tuka	'older brother'

4. Parts of wholes. Some of these words only occur with 3s -na.

House parts:				
bua	'floor'	тара	'roof, top, head'	
butu	'post'	ni-rike	'ladder'	
gaga	'wall'			
Canoe par	ts:			
bolo	'outrigger'	kuli	'stern'	
gula	'floor'	loki	'outrigger connector'	
kakai	'outrigger poles'	тара	'bow'	
kiri	'bed'			
Parts of trees and plants:				
bagi	'offshoot'	kane(na)	'fruit'	
ka(na)	'root'	kuli	'bark'	

pura	'flower'	vutu	'seed'
vua	'fruit'		
5. Locative a	and dimensional terms.		
bike	'back, backside'	ngala	'frontside'
daha	'edge'	rava	'length (of shell money)'
marava	'distance'	taru	'underside'
muri	'place; backside'		
6. Miscelland	eous:		
dala	'way'	ni-laho	'way of walking, life'
dupi	'hole, den'	ni-ola	'length'
gima	'enemy'	ni-ta	'talk, language'
kalava	'part, piece'	ra	'name'
kape	'shelter'	taho	'owner'
тара	'payment, price'	tura	'with' (also a prepo-
naro	'behaviour, habit'		sitional noun, see §6.4)
ni-bola	'width'	velenga	'news'
ni-kanai	'way to eat'	vilo	'custom'
ni-made	'life'	vure	'dream'

Three kinship terms are unique in having suppletive 1s forms (cf. Baerman 2014). That is, the 1s forms are highly irregular and not transparently related to the other forms within the paradigm. The three relevant paradigms are listed below, with the suppletive form bolded. Interestingly, all three suppletive forms are reduplicated disyllabic nouns, possibly reflecting baby speech. They are used as terms of address (vocatives) as well as terms of reference.

tata	'my father' (*tama-gu does not exist)
tama-mu	'your father'
tama-na	'his/her father'

nana	'my mother' (*kina-gu does not exist)
kina-mu	'your mother'
kina-na	'his/her mother'
sisi	'my grandparent' (<i>tubu-gu</i> does exist, but it only means 'my grandchild')
tubu-mu	'your grandparent, your grandchild'
tubu-na	'his/her grandparent, his/her grandchild'

4.2.2 Common nouns and proper nouns

The second distinction among nouns, between common and proper nouns, surfaces in three areas.

- a. The **article**. Common nouns take the article *a*; proper nouns take the article *e*. Examples: *a bakovi* 'a/the man'; *e Jon* 'John'.
- b. The **3s possessive suffix** introducing the possessor. A common noun triggers the possessive suffix *-na*, while a proper noun triggers the possessive suffix *-ne* (a fusion of *na* and *e*). Examples: *a lima-na bakovi* 'the man's hand'; *a lima-ne Jon* 'John's hand'. In slow and careful speech *a lima-ne Jon* can be pronounced as *a lima-na e Jon*.
- c. The general preposition *na* or *ne*. When the noun following the preposition is a common noun, the preposition is *na*, when it is a proper noun, it is *ne*. Examples: *na bakovi* 'of/at/from the man'; *ne tata* 'of/at/from my father'.

Within the class of proper nouns the following subclasses can be distinguished:

Names of people and places: e Sara 'Sarah', e Vadoro 'Vadoro' (the name of a village), e Kavara 'Kavara' (the name of a river). This includes the names of animals functioning as characters in folk tales: a kureko 'a/the chicken', e kureko 'Chicken' (as a character). A special type of proper noun is the locative proper noun (or place name). Locative proper nouns also get the article e when they occur in subject

or in object function, but they take a unique preposition o when they have an oblique function: o Bulu 'in/at/to/from Bulu'. See §6.2 for more details.

- 1. **Kinship terms**: *e tu-na* 'his/her child', *e balo-gu* 'my aunt', *e tata* 'my father', *e tama-mu* 'your father', *e nana* 'my mother', *e tuka-gu* 'my older brother', *e sisi* 'my grandparent'.
- 2. The question word *rei* 'who'.
- 3. The **quantifying noun** *huriki* 'plural marker (for people)'. The phrase *e huriki* itself is followed by the common article in an appositive construction: *e huriki a bakovi* 'the men'; see §4.6.2 for examples.
- 4. **Titles**: *e kabe* 'Mrs' (a title of respect for women), *e Deo* 'God' (from Latin), *e Bakovi Dagi* 'the Lord' (lit. 'the Big Man'), *e pater* 'the priest'. An exception is *a Vure*, the native word for 'God' used in the Bola Bible.
- 5. Non-singular free pronouns occasionally also have the article, but this is relatively rare in our corpus, and limited to the following two situations: a) when the pronoun is a possessor, and then only in careful speech (see §4.8); b) in possessive clauses following the oblique pronoun *vona*: *vona e tou* [3S.OBL ART.P 3PA.F] '[it is] for them; it is theirs' (see §7.4.4).
- 6. Names of **months**, which are associated with natural phenomena occurring during that month: *e Balu Koru* 'January' (lit. 'growing pigeons'), *e Balu Riki* 'February', *e Bike* 'March' (lit. 'sand heaps on the beach during low tide'), *e Mata* 'April' (lit. 'snakes'), *e Kulika* 'May' ('parrots'), *e Kulika Tara* 'June', *e Lubako* 'July', *e Lubako Tara* 'August', *e Bamuri Mavo* 'September', *e Bamuri Kulu* 'October', *e Bera Malai* 'November', and *e Pasinga* 'December.'¹

¹ These names were copied from a 1999 calendar produced by the Wiebes, and retrieved in 2018. It is possible that originally there were only ten months, and that *tara* 'one, also' was added to two months to reach the number 12. The exact meaning of the names was not investigated. This system is no longer in use, and few people have knowledge of it.

- 7. Years: na pida ne 1984 [OBL year OBL.P 1984] 'in the year 1984'.
- 8. At least one name of a **tree**, *e bakato* 'the blackseed breadfruit tree' (more common in the phrase *a kulu e bakato*, see §4.11). The reason behind this is not clear.

4.3 Derived nouns

4.3.1 Nominalisation

There are several forms of nominalisation in Bola, involving prefixation (*ni*-), infixation (*-in*-), as well as suffixation (*-nga* and *-Ca*). Apparently, no verb may undergo more than one process of nominalisation, though there are a few exceptions. The only productive nominalisation is prefixation with *ni*-; the three other processes are no longer productive. Note that the morpheme *ni* has three other functions in Bola, including a passive proclitic (see §5.4.5 and §7.4.6), a complementiser introducing dependent clauses (see §9.4.2), and a particle introducing qualitative relative clauses (see §9.5.1).

a. Nominaliser ni-

All verbs and adjectives can be nominalised by means of ni-:

ni-biri	'oil'	biri	'grease, oil'
ni-hebi	'door'	hebi	'close'
ni-here	'writing'	here	'write'
ni-lobo	'finish, end'	lobo	'finish, complete'
ni-made	'life, living, existence'	made	'sit, live'
ni-madihi	'pain'	madihi	'hurt, painful'
ni-mariu	'trip'	mariu	'travel'
ni-maruhu	'shame'	maruhu	'ashamed'
ni-vasileki	'prayer'	vasileki	'pray'
ni-ta	'talk, word'	ta	'say, talk'
ni-vivi	'joy, happiness'	vivi	ʻglad, happy'

The possessor or agent of these nominalisations is normally encoded as an inalienable possessor, but alienable possessors are also found. See §4.8.2 for a detailed discussion.

Every verb and adjective in Bola can be nominalised by *ni*-, but somewhat unexpectedly this process does not apply to loan words. Many borrowed Tok Pisin verbs simply function as nouns without the nominalising prefix, e.g. *save* 'to know; knowledge'; *lotu* 'to worship; a church service', *pilai* 'to play; a game'. These words were apparently borrowed both as noun and verb.

b. Nominaliser -in-

A number of nominalisations have the frozen infix *-in-*, typically referring to a concrete object. In the few cases where both *-in-* and *ni-* occur, there is no discernable difference in meaning (e.g *ni-hebi* and $h \le in \ge ebi$ 'door').

b <in>ole</in>	'stick for carrying pigs'	bole	'take, get'
h <in>ebi</in>	'door'	hebi	'close'
h <in>ere</in>	'writing'	here	'write'
k <in>ani</in>	'food'	kani	'eat'
k <in>au</in>	'hook'	kau	ʻgrab'
k <in>ori</in>	'help, helper'	kori	'help'
k <in>ovo</in>	'broom'	kovo	'sweep'
p <in>ango</in>	'hunter, hunting'	pango	'hunt'
p <in>elo</in>	'scooper'	pelo	'scoop'
s <in>ovo</in>	'bride price ceremony'	tovo	'pay (bride price)'
v <in>ara</in>	'advice, instruction, law'	vara	'advise, instruct'

c. Nominaliser -nga

The following list gives all the forms recorded with the nominaliser *-nga*. Notice that in three cases a vowel sequence has been irregularly reduced to a single vowel (*gilanga, vabinga* and *vuranga*), and in one case a syllable has been deleted through haplology (*vaponga*).

66

gao-nga	'strength'	gao	'strong'
gila-nga	'sickness'	giloa	'sick'
lohoka-nga	'knowledge'	lohoka	'know'
malu-nga	'coolness, afternoon'	malu	'cool'
mate-nga	'death'	mate	'die'
mole-nga	'adultery'	mole	'commit adultery'
rare-nga	'guilt, conviction'	rare	'be guilty, convicted'
tami-nga	'lie'	tami	'lie, trick, deceive'
va-bi-nga	'battle, fight'	va-ubi	'fight'
vapo-nga	'meeting'	va-popo	'meet'
vura-nga	'death'	vurua	'die'

d. Nominaliser -Ca

A few irregular cases of nominalisation have also been observed, involving -a, -ha and -va. Notice the vowel reduction in *ralo-va* and the haplology in *mi-ha*.

kani-a	'food'	kani	'eat'
mi-ha	'urine'	mimi	'urinate'
marohu-a	'thirst'	marohu	'thirsty'
para-va	'day'	para	'shine'
rakoli-va	'period of rest'	rakoli	'rest'
ralo-va	'dance'	raulo	'dance'
rehi-va ~ rihi-va	'playing, game'	rehi	ʻplay'
rongo-va	'anger'	rongo	'hot'
ruku-va	'space under house'	ruku	'go under house'
vitolo-a	'hunger'	vitolo	'hungry'

4.3.2 Kin group maki-/mata-...-na

A few kin terms allow for a derivation which creates a group of people who are in a reciprocal kin relationship to each other. The derivation is formed by

maki-tari-na	'brothers'	tari	'younger brother'
maki-tubu-na	'grandparent(s) and grandchild(ren)'	tubu	'grandparent, grandchild'
mata-girihi-na	'husband and wife'	girihi	'spouse'
mata-lavo-na	'father/mother-in-law and son/daughter-in-law'	lavo	'in-law'

means of the circumfix *maki-...-na* or *mata-...-na*. The derivations in the following non-exhaustive list are all proper nouns which take the article *e*.

4.3.3 Compounding

Nominal compounding is quite common in Bola. Compound nouns normally consist of two nouns juxtaposed to each other, without an intervening possessive suffix, article or locative marker *ne* or *na*. In each case the second noun semantically modifies the first noun, though in a few cases the first item appears to be a verb (e.g. *bole kori*). These compounds are often written as one word, but separated here for presentation purposes. The literal meanings of the two component nouns is provided in the third column.

bakovi bure	'headman'	(man spine)
bole kori	'helper'	(get/take help)
dari lomu	'lake'	(sea well/pool)
dede kedo	'altar'	(platform stone)
gare ngatavine	'old woman'	(old.person woman)
koma bakovi	'boy'	(child man)
koma ngatavine	ʻgirl'	(child woman)
marungu lolo	'flood, tsunami'	(high.tide mountain)
mata ruma	'front of house'	(eye house)
muri vaha	'footprints'	(place leg/foot)
ngatavine ngoi	'prostitute'	(woman prostitute)
ngava polo	'interpreter'	(mouth go.across)
nugu maheto	'soldier, warrior'	(hold spear)

padi rodo	'trousers'	(shoot push)
pori dala	'gate'	(go.in road)
rau kea	'letter'	(banana.leaf white)
taho dari	'fisherman'	(owner sea)
taho tanga	'villager'	(owner village)
tama hariki	'crown'	(wreath leader)
vaha polo	'shoe'	(leg/foot put.on)

4.3.4 Reduplication

Reduplication (see also §2.7) on nouns is rare. The few clear examples indicate plurality or similarity.

gare	'elder, old person'	gare-gare	'old people'
koma	'child, young person'	koma-koma	'childish, like a child'

For reduplication on a few inalienable nouns such as gi-gi 'head' versus gi-mu 'your head', see §4.2.1.

4.4 Articles

There are four articles in Bola, coming in two pairs: a, e and ra, re. The first pair (a and e) are simply noun markers. Apart from coding the proper noun versus common noun distinction, these two articles do not carry any meaning connected with number, definiteness, indefiniteness, specificity or referentiality. The second pair (ra and re) mark definiteness and are especially common in anaphoric functions, relative clauses and appositions.

4.4.1 The common article a

The common article a is extremely frequent in Bola, as almost every noun phrase containing a common noun is introduced with this article. The following examples are illustrative.

(8) I abu a kai.
3s wet ART wood
'The wood is wet.' (dict)

- (9) I masi-a a ngatavine a sirula...
 3s see-3s ART woman ART girl
 'He saw a young woman...' (t3:25)
- (10) A ni-hae na ruma a leho dagi hateka.
 ART NMLZ-build OBL house ART work big very
 'Building a house is a very big job.' (t11:13)

The article a is normally absent with common nouns when the noun follows the preposition na (see chapter 6). The article a is also absent when the common noun is a possessor in a noun phrase following the 3s suffix *-na*. In both cases the reason is not syntactic, but phonological: the sequence (*-)na* a is simply reduced to (*-)na* (see §2.7 and §4.8). In slow and careful speech, or occasionally in written style, the article may surface in these cases. An example is the title of text 1 in the appendix A vuhu-na a mavo [ART reason-3S ART taro] 'the origin of taro'.

4.4.2 The proper article *e*

As explained in §4.2.2, the proper article *e* obligatorily co-occurs with names, kinship terms (including derivations with *maki-* and *mata-*), animals acting as characters in folk tales, titles, the question word *rei* 'who', the quantifying noun *huriki*, names of months, and a few others. The proper article, which is glossed as ART.P, introduces such noun phrases in various syntactic functions (subject, object, nominal predicate, apposition), illustrated below.

(11) *E* Jon i ta. ART.P J. 3S talk 'John talks.'

70
- (12) *E* tata i le-leho. ART.P my.father 3S RED-work 'My father is working.'
- (13) *E* rei a taho-na ligo iea? ART.P who ART owner-3S dog DEM 'Who is the owner of that dog?' (dict)
- (14) *A* ra-na a bakovi e Baili. ART name-3S ART man ART.P B. 'The man's name is Baili.' (t24:2)
- (15) Lakea e mengo i taki-a e kureko...
 then ART.P cassowary 3S say-3S ART.P chicken
 'So Cassowary said to Chicken...' (t5:12)
- (16) *Ri vano e huriki a ngatavine a bakovi...*3PL go ART.P plur ART woman ART man
 'The men and women went...' (t1:1)
- (17) Ngane a keva e Bike. now ART moon ART.P March 'Now is the month of March.' (elic)

The article e is not normally found in possessive phrases and only rarely does it follow the preposition na. In both cases e merges with the possessive suffix -na (or the preposition na) into ne (see §4.8 for details and examples). Vocatives do not appear with the article, either.

4.4.3 The definite articles *ra* and *re*

The second pair of articles in Bola (ra and re) occurs much less frequently than the first pair. In the twelve analysed texts, we have only four unambiguous examples of ra (as against hundreds of common articles), three of which are discussed below. (In the Bola Bible, on the contrary, it is extremely frequent. The Gospel of Mark, for instance, has over 100 instances.) In each of the three textual instances discussed below, the noun phrase introduced by ra refers back to a known item that is highly topical in the context. Sometimes ra is found in combination with a demonstrative. The article ra only seems to co-occur with common nouns, but it is not found in combination with the common article a; the two are mutually exclusive. Notice that ra is frequently found in relative clauses, discussed in §9.5. In addition, there are two other homophonous morphemes with the shape ra: the question word ra 'what' (this word does occur in combination with the article a, see §8.3.2, and is possibly related to the article), and the inalienable noun ra- 'name', a bound root.

The first example of ra (glossed as DEF) is from a story of a man who leaves his home area for a training workshop elsewhere in the country, travelling by plane. The first mention of the plane is in the first clause of (18); the second mention uses both ra and the demonstrative *iea*.

(18) A balu i bole iau na kuru-haro. Ra balu iea, i
ART plane 3S take/get 1S.F OBL middle-day DEF plane DEM 3S
tahoka a masin vona i taku kunana.
have ART engine 3S.OBL 3S one only
'The plane got me at noon. That plane had just one engine.' (t6:4)

The second example is from an expository text about how to make gardens. At one point, the author discusses big gardens and the way they are taken care of. Then follows this transitional clause:

(19) *Ra* hania dagi maea ni rata...
DEF garden big like.that PASS make
'When a big garden like that is made...' (t7:32)

In spite of its English translation, the article *ra* indicates the author has a specific garden (or type of garden) in mind.

The third example is from a story about how a group of bats carried a black-seed breadfruit tree away to Mutu (a pejorative name for the Nakanai area), which explains why these trees now are scarce in the Bola area. The noun phrase introduced by *ra* stands in apposition to the previous NP *a kulu*, and is an afterthought to the listener to help them identify the breadfruit as the particular type with black seeds.

(20) *Ri ninu ninu, ri hilolo, ri kaloho rike tabu-a a* 3PL drink drink 3PL bathe 3PL carry up again-3S ART *kulu, ra kulu a bakato.*breadfruit DEF breadfruit ART blackseed.breadfruit
'They (the bats) drank and drank and bathed, and took up the breadfruit tree again, that blackseed breadfruit tree.'(t9:7)

An example from the Bola Bible with ra introducing a relative clause (more examples in §9.5):

(21) ...ge bole a muri-ne Abel, ra i rabalaki-a e
IRR.3S take/get ART place-3S.P A. DEF 3S kill-3S ART.P
Kain.
K.
'...he will take the place of Abel, whom Kain killed.' (Gn 4:25)

In combination with a demonstrative, the article *ra* can apparently also be used as an emphatic construction, such as in the following two examples:

- (22) Ra hania iea ne tata.
 DEF garden DEM OBL.P my.father
 'That garden belongs to my father.' (elic)
- (23) **Ra** kompyuta iea ne vomu DEF computer DEM OBL.P 2S.OBL 'That computer is yours.' (elic)

Not everything about *ra* is understood. Apparently it can also occur following nouns. In one text a demonstrative form *rea* occurs, which turns out to be an informal or casual pronunciation, merging *ra* and *iea*. Example (24) shows both the merged and the unmerged forms.

(24) a. *A maki ni kani rea i namika!* ART thing QUAL eat DEF.DEM 3S tasty 'This food here is delicious!' (t1:13)

> b. *A maki ni kani ra iea i namika!* ART thing QUAL eat DEF DEM 3s tasty 'This food here is delicious!' (t1:13-m)

However, the preferred way of saying this is *Ra maki ni kani iea...*, with the definite article *ra* in prenominal position replacing the common article. Other examples of the sequence *ra iea* are found clause-finally in equative clauses:

(25) A tabua ra iea, ... ART firstborn DEF DEM 'This is the firstborn, ...' (Gn 48:18)
(26) A ngava dagi hateka ra iea:... ART mouth big very DEF DEM 'The greatest command is this: ...' (Lit. 'The very big mouth/word...') (Mk 12:29)

Another variant of *ra iea* is *area*, normally written as two words, *a rea*. It probably arose through metathesis, vowel elision and reanalysis: *ra iea* > *ariea* > *area* > *a rea*. This variant is again found clause-finally in equative clauses:

- (27) Ia maki ni kani a rea.
 3S.F something QUAL eat ART DEF.DEM
 'This is something to eat.' (t1:15)
- (28) *Ia a stori ne maria e Malala hosi miri* 3S.F ART story OBL.P 1DE ART.P M. long.ago 1DE

ruru a rea. get.lost ART DEF.DEM

'This is the story of Malala and me getting lost long ago.' (t13:86)

In his grammar of Bola, Bosco (1980:29) lists the following demonstratives: *raea* 'this', *raia* 'that', *ranga* 'these, those', *rangi* 'those'. It appears that Bosco's description is based on a slightly different speech variety of Bola (the author comes from the village of Dire), as these forms are recognisable as combinations of the definite article *ra* plus a demonstrative, but they were only marginally acceptable to our language helpers. Bosco gives a number of noun phrases, including the following (glosses are ours):

(29) *a manu nau raea* ART fish 1S.OBL this 'this fish of mine' (B:29)

Instead of this order with *raea* in postnominal position, our helpers preferred the order *ra manu nau iea* [DEF fish 1S.POSS DEM], with *ra* in prenominal position and split from the demonstrative *iea*. The precise extent of variation and the circumstances under which *ra* is used are clearly matters for further research.

Re is the counterpart of *ra* with personal nouns. Like *ra*, it refers back to known entities, also in relative clauses and appositions. In our textual corpus it is found sparsely (only six times), but in the Bola Bible it is quite frequent, for example in phrases like *re huriki nga* [DEF.P PLUR DEM.PL] 'those people', referring to a group of people previously introduced.

(30) Ra hania dagi maea ni rata, re mata-girihi-na rua DEF garden big like.that PASS made DEF.P REC-spouse-3S 3D.F nga bara ru tahoka tara a habu ru rate-a... DEM.PL MOD 3D have one ART party 3D make-3s
'When a big garden like that is made, that couple will have a party that they hold ...'(t7:32)

- (31) *Ri ninu ninu ninu, ri bole-a re Ko.*3PL drink drink 3PL take/get-3s DEF.P K.
 'They kept drinking, and finished the (aforementioned) (river) Ko.' (t9:30)
- (32) Lakea **re** tu-ne Lot varago nga... then DEF.P child-3S.P L. both DEM.PL 'Then those two daughters of Lot...' (Gn 19:36)
- (33) O bole-a e tu-mu e Isak, re tu-mu a
 2s take/get-3s ART.P child-2s ART.P I. DEF.P child-2s ART
 hate-mu, i ala taku kunana.
 liver-2s 3s unit one only

'Take your son Isak, your beloved child (lit. that child of yours [which is] your liver), your only one.' (Gn 22:2)

4.5 Demonstratives

There are two types of demonstratives in Bola: nominal demonstratives and adverbial demonstratives, all having a deictic function, 'pointing' to one or more referents or to a place in the speech situation or in the discourse. In addition, there is a presentational demonstrative *mara*.

The group of nominal demonstratives has three members (*iea, nga* and *ngi*). Syntactically, they typically occur adnominally as the final constituent of a noun phrase, as discussed in this section.

The set of adverbial demonstratives has six members:

- *ieni* 'here by me (near speaker, but not near addressee)'
- *iene* 'there by you (near addressee, but not near speaker)'
- *koea* 'here by us (near speaker and addressee)'
- *lake* 'over there (within eyesight, but not near speaker or addressee)'
- *iea* 'here/there (known but unspecified)'
- vonga 'there (not within eyesight, usually anaphoric)'

Notice that *iea* is a member of both sets. The adverbial demonstratives are discussed and illustrated in $\S7.7.1$ as part of the locative periphery. This section ($\S4.5$) will focus on the nominal demonstratives.

The three nominal demonstratives encompass one singular and two plural forms. What is typologically rather odd (at least for an Oceanic language) is that the nominal demonstratives do not appear to indicate a spatial contrast. (This is similar to the single Tok Pisin demonstrative *dispela*.) Instead, the distinguishing parameter for the two plural demonstratives is the link or orientation towards the addressee, as shown in Table 4.2 and explained below.

	singular	plural
unmarked		nga
addressee- linked	iea	ngi

TABLE 4.2 NOMINAL DEMONSTRATIVES

The singular demonstrative *iea* has an exclusively deictic function. It usually indicates that the noun it modifies is present in the speech situation, but there are no spatial implications of proximity or distance. Hence *iea* is simply glossed as DEM; its translation as 'this' or 'that' depends on various extralinguistic factors, such as the distance of the speaker (and addressee) to the person or object referred to.

- (34) *A bakovi iea i gao.* ART man DEM 3S strong 'This/that man is strong.' (dict)
- (35) A ra-na manu iea...
 ART name-3S fish DEM
 'The name of this/that fish is... (t38:17)'

- (36) Naha ni rike na bua iea. I palita.
 don't COMP go.up OBL betel DEM 3S slippery.
 'Don't climb up this/that betel palm. It is slippery.' (dict)
- (37) A ra a maki iea, a ligo?
 ART what ART thing DEM ART dog
 'What is that, a dog?'(t2:16)
 [Speaker, a buyer, points to an animal he is not sure about; the exact distance to the speaker is unknown, but probably not more than a few metres.]
- (38) Mu mata-kari kamumu-a a bakovi iea...
 2PL look-protect good-3S ART man DEM
 'Take good care of this guy...' (t6:35)
 [Speaker drops off a newcomer at a friend's place. All three are standing at the door of this friend's house.]

The singular demonstrative *iea* can also have an anaphoric function, as in example (18): *ra balu iea* 'that plane'. Furthermore, *iea* can also function pronominally (and anaphorically), though this is less frequent:

- (39) *Iea e kuraba-na...* DEM ART.P opposite.sex.sibling-3s 'That was his sister....' (t24:17)
- (40) *Iea a rua-na parava.* DEM ART two-ORD day 'That was the second day.' (Gn 1:8)

f the two plural demonstratives $n\sigma q$ is the un

Of the two plural demonstratives, nga is the unmarked one. It adds two meaning components to the noun phrase it modifies: 1) a deictic element, indicating that the referents are present in the speech situation (again, without actually specifying their distance to either speaker or addressee); 2) a number component, indicating that there is more than one referent. Again, English translation equivalents of nga are 'these', 'those' as well as simply 'the', depending on the speech situation.

- (41) I mata-ka a ruma. I vai a viri nga?
 3s eye-ADJ ART house 3s where ART person DEM.PL
 'The house is open. Where are the people?' (dict)
- (42) Ruka, o valai o kani a kalava na niu nga.
 barracuda 2s come 2s eat ART piece OBL coconut DEM.PL
 'Barracuda, come and eat these coconut pieces.' (t5:20)
- (43) O matai a varili nga, i manga i kere pali.
 2s see ART grass DEM.PL 3s like 3s dry PERF
 'Look at the grass (lit. these/those grasses), it looks like it's dried up.' (dict)
- (44) A bakovi ala tolu a bakovi nga.
 ART man unit three ART man DEM.PL
 'There are three men here.' (Lit. 'These/those men are three men.') (t16:4)
- (45) I navai i mangi hale hateka na hini nga?
 3s what 3s smell bad very OBL area DEM.PLUR
 'Why does it smell so bad around here (lit. in these areas)?' (t21:28)
- (46) Lakea i ta navai a pilot nga?
 then 3s say what ART pilot DEM.PLUR
 'So what did the pilots say?' (t8:32)
 (The use of the singular i with a plural subject is treated in §5.2.)

(47) O luhoi e huriki nga o made tura-ne ria
2s think ART.P PLUR DEM.PLUR 2s stay with-3s.P 3PL.F
hosi o Amerika?
long.ago LOC A.

'Do you remember those people you stayed with when you were in America long ago?' (conv)

Notice that *nga* can modify nouns referring to people as well as objects and locations. Example (47) is interesting in that *nga* modifies the quantifying noun *huriki*, which already has a plural meaning (see also §4.6.2). In this case the reference is probably to a variety of people the addressee stayed with, not just to one family. This example is also interesting in that the referents are not present in the actual speech situation, but mentally evoked. This appears to be an identificational use of the demonstrative (Dixon 2010:238).

The demonstrative *ngi* also has two meaning components. Like *nga*, it indicates a plural reference to the noun it modifies. In addition, it typically creates a deictic association with the addressee; hence the gloss DEM2.PLUR. The exact nature of that relationship is determined by extralinguistic factors. In some cases, the presence of *ngi* indicates that the referents are near the addressee. Compare the following pair contrasting *nga* and *ngi*:

- (48) a. E rei a taho-na a ligo nga?
 ART.P who ART owner-3S ART dog DEM.PLUR
 'Who is the owner of these/those dogs?' (dict-m) (The dogs are part of the speech situation, but their exact location is not specified.)
 - b. *E* rei a taho-na a ligo ngi?
 ART.P who ART owner-3S ART dog DEM2.PLUR
 'Who is the owner of those dogs (near you)?' (dict-m)

In other cases, there is no physical proximity of the referents to the addressee, but there is an association with the addressee, the nature of which is left unspecified but determined by the speech situation. Notice the following examples:

(49) Ru nana puru, "Ra maki ngi i vai?"
3D ask go.down DEF thing DEM2.PLUR 3S where
'They asked, "Where are those things?" (E.g. the food you promised to bring.) (t44:31-m)

- (50) Ra moni ngi i vai?
 DEF money DEM2.PLUR 3S where
 'Where is the money?' (Lit. 'the moneys', e.g. the money you should have had with you.) (elic)
- (51) *Ri loko-vai a bakovi ngi*?
 3PL go-where ART man DEM2.PLUR
 'Where have those men gone to? (E.g. your friends, or the company that was with you.)' (elic)
- (52) *Ga bole a maki ngi*. IRR.1s take/get ART PLUR DEM2.PLUR

'I will get those things (things near you, or things over there that are yours, things you talked about, things associated with you etc.)' (conv)

(53) *Ga kona a mavo ngi*. IRR.1S buy ART taro DEM2.PLUR 'I will buy those taros (near you).' (elic)

Because *ngi* is a second-person demonstrative, it most naturally occurs in questions, responses, commands, promises etc., as illustrated above. It is therefore not surprising that *ngi* is virtually absent from written texts, even though some of them do contain dialogue.

Somewhat surprisingly, ngi also functions as a plural anaphoric demonstrative. This is especially common in the Bola Bible, of which we present three examples. In some cases there is still a second-person connection, but in others, such as (56), a link is hard to detect.

(54) I muholi ngi, e Sara e kuraba-gu.
38 true DEM2.PLUR ART.P S. ART.P opposite.sex.sibling-18
'It is true (what you said), Sara is my sister.' (Gn 20:12)

- (55) Ra hini ngi, i uka ngoi vona.
 DEF area DEM2.PLUR 3S NEG prostitute 3S.OBL
 'These places (you're asking about) have no prostitutes.' (Gn 38:21)
- (56) I pe a hini ngi, i lakea...
 38 leave ART area DEM2.PLUR 38 go
 'He left that area (lit. those areas) and went...' (Gn 26:22)

We end this section with the presentational demonstrative *mara*. This word is typically used as an answer to a question about the location of a person or an object. The word cannot be inflected, has irregular stress on the second syllable, and could also be considered an interjection. English translation equivalents are 'this/that is it', 'here/there it is', or the archaic 'behold'. Notice that distance is not part of the meaning of this word, which is glossed 'it.is'. It is frequently heard in daily conversation, but is extremely rare in our corpus. Consider the following elicited question and answer pairs.

- (57) a. Avia a pen nau? where ART pen 1S.OBL 'Where is my pen?'
 - b. *O*, *mara*. oh it.is 'Oh, here it is.'
 - c. *Mara*, *koea* it.is here 'Here it is.'
 - d. *Mara*, *tano na kedo*. it.is below OBL stone

'There it is, down there on the stones.'

4.6 Numerals and quantifiers

4.6.1 Numerals

The numeral system of Bola is a combination of a quinary (base-5) and a decimal (base-10) system. There are basic numbers for 1-5, but 6-10 are compounds on the basis of 5, using the word *polo* 'across' (related to the verb *polo* 'go past, go across'). There is a separate word for 10, and the decades (20, 30 etc.) are formed on the basis of 10. All other words are combinations of these six basic digits, including the word for 100. The word for 1000, however, is another basic digit. Table 4.3 shows the numbers with their literal equivalents. (In actual usage, all numerals are preceded by the particle *i*; see below).

-		
1	taku	'one'
2	гиа	'two'
3	tolu	'three'
4	va	'four'
5	lima	'five'
6	polo-tara	'one across'
7	polo-rua	'two across'
8	polo-tolu	'three across'
9	polo-va	'four across'
10	ravulu (taku)	'(one) ten'
11	ravulu (taku) a polona i taku	'(one) ten plus one'
12	ravulu (taku) a polona i rua	'(one) ten plus two'
13	ravulu (taku) a polona i tolu	'(one) ten plus three'
14	ravulu (taku) a polona i va	'(one) ten plus four'
15	ravulu (taku) a polona i lima	'(one) ten plus five'
16	ravulu (taku) a polona i polo-tara	'(one) ten plus one across'
17	ravulu (taku) a polona i polo-rua	'(one) ten plus two across'
18	ravulu (taku) a polona i polo-tolu	'(one) ten plus three across'
19	ravulu (taku) a polona i polo-va	'(one) ten plus four across'

TABLE 4.3	NUMERALS
\mathbf{I} ADLL \mathbf{T} .	TOMERALS

20	ravulu (i) rua	'two tens'
21	ravulu rua a polona i taku	'two tens plus one'
30	ravulu tolu	'three tens'
37	ravulu tolu a polona i polo-rua	'three tens plus two across'
40	ravulu va	'four tens'
50	ravulu lima	'five tens'
60	ravulu polo-tara	'one across tens = six tens'
70	ravulu polo-rua	'two across tens = seven tens'
80	ravulu polo-tolu	'three across tens = eight tens'
90	ravulu polo va	'four across tens = nine tens'
100	ravulu mule ma murina balaka i taku	'ten goes back to its place once'
200	ravulu mule ma murina balaka i rua	'ten goes back to its place twice'
1000	rangale	'one thousand'

84

A few comments should be made here. Notice that *a polona* in 11-19 is translated as 'plus', for lack of a good English equivalent, though it is obviously a nominal derivation of the verb *polo* 'go past, go across'. *Polo tara* 'six', uses the word *tara* for 'one', rather than *taku*. See §4.6.2 on *tara*.

Nowadays when people count out shell money for a traditional cultural ceremony, they don't use any numbers past ten. They count to ten, and then start over, with someone keeping track of how many tens were counted. This is much faster and less cumbersome than the traditional way of counting.

The descriptive word for 100 ('ten goes back to its place one time') probably goes back to a similar practice: exchanges of food or shell money were counted by heaps of ten. Upon reaching ten heaps of ten items, they started over, with someone keeping track of how many hundreds were counted.

The traditional counting system has been replaced by Tok Pisin and English in daily interaction, especially for numbers higher than five.

Numerals follow the head noun within the noun phrase and are obligatorily preceded by the 3rd singular subject proclitic i. (See below for the explanation.) For the sake of readability, the numbers for 6 to 9 are glossed as

simple digits; *polorua*, for example, is glossed as 'seven', rather than as 'across-two'

- (58) *a boro i rua* ART pig 3S two 'two pigs'
- (59) *a maki i tolu* ART thing 3S three 'three things'
- (60) *a parava i lima* ART day 3S five 'five days'
- (61) a keva i polorua
 ART moon 3s seven
 1. 'seven months' 2. 'the seventh month, July'
- (62) *a karapa-na rea i ravulu rua* ART wing-3S shell.money 3S ten two 'twenty fathoms (lit. wings) of shell money'
- (63) a boro i ravulu i rua a polo-na i polotolu
 ART pig 3s ten 3s two ART plus-3s 3s eight
 'twenty eight pigs' (lit. 'pigs that are two tens plus eight')

The occurrence of i is due to the fact that numerals are intransitive verbs. Hence all these adnominal numerals are actually relative clauses. That is to say, *a boro i rua* 'two pigs' is structurally 'pigs that are two'. The numeral acts as a verbal predicate in a subordinate clause which modifies the noun.

When the numeral refers to humans, the particle *ala* is placed before the numeral, replacing *i*. This use of *ala* (glossed as 'unit') is obligatory with humans and human-like beings such as angels and spirits. The origin of this particle is unclear.

(64) *a koma ala rua* ART child unit two 'two children'

- (65) *a bakovi ala lima* ART man unit five 'five men'
- (66) *a agelo ala rua* ART angel unit two 'two angels'

In the Bola Bible numbers above one hundred are simply given as digits (and read in Tok Pisin or English). Notice the subject marker ri in the following example, showing that all numerals (even when written as digits) are treated as verbs.

(67) *A maka boro ri 2,000.* ART PLUR pig 3PL 2,000 'There were 2,000 pigs.' (Mk 5:13)

When the noun phrase containing the numeral occurs in a clause with future reference, i is replaced by the modal marker ge, used for the future (see §5.7.2). This is also true in imperative clauses, which is another irrealis category. There has to be agreement between the mood in the clause and the mood associated with the numeral in the noun phrase. The following three elicited examples illustrate the contrast between a past declarative, a future declarative and an imperative containing an object NP with a numeral.

(68) *Ravi iau a vano a bole a pelet i tolu.* yesterday 1S.F 1S go 1S take/get ART plate 3S three 'Yesterday I went and got three plates.' (elic)

- (69) *Iau ga vano ga bole a pelet ge tolu*. 1S.F IRR.1S go IRR.1S take/get ART plate IRR.3S three 'I will go and get three plates.' (elic)
- (70) Moto vano moto bole a pelet ge tolu!
 2PA go 2PA take/get ART plate IRR.3S three
 'Go and get three plates!' (elic)

A numeral can also occur as the head of a noun phrase, as in the following example. Even in this case the particle *i* precedes the numeral.

(71) I taku kunana i hamule lakea na tanga.
38 one only 38 return towards OBL place
'Only one (person) returned to the village.' (t27:38)

Ordinal numerals are formed by adding the suffix *-na* (here glossed as ORD; homophonous with the 3s possessive *-na*) to the cardinal numbers: *rua-na* 'second', *tolu-na* 'third', *va-na* 'fourth', *lima-na* 'fifth', *polotara-na* 'sixth', etc. In contast to cardinal numerals, ordinal numerals precede the noun. The word for 'first' is *muga* (following the noun) or *muga-na* (preceding the noun); *muga* is also a verb meaning 'go first'. Some examples:

- (72) *a parava muga / a muga-na parava* ART day first ART first-ORD day 'the first day'
- (73) *a rua-na bakovi* ART two-ORD man 'the second man'
- (74) *a lima-na koma* ART five-ORD child 'the fifth child'

Fractions ('a third', 'two fifths') are rarely, if ever, used. The word *kalava* 'piece, fragment', can be used for 'half', as in *a kalava-na tara* [ART piece-3S

one] 'one half, one piece', but its meaning is rather imprecise. The following elicited constructions are the closest translation equivalents of fractions.

- (75) *a maki tolu, a tabeke-na i taku* ART thing three, ART part-3s 3s one 'one third' (lit. 'three things, one part of it')
- (76) *a maki lima, a tabeke-na i rua* ART thing five ART part-3S 3S two 'two fifths' (lit. 'five things, two parts of it')

4.6.2 Quantifiers

The following quantifiers are found in Bola:

huriki	ʻplural'
lobo	'all, every'
mai	'plural'
maka	'plural'
ranga	'some, a few'
tara	'a, one, a certain; other'
varago	'both'

Most of the quantifiers have unique features. They will be discussed in turn.

1. The plural marker *huriki* is actually a quantifying noun that takes the proper article *e* and is in turn often followed by another noun phrase, thus creating an appositional noun phrase (see §4.9 for details). The presence of *huriki* indicates that the reference of the following noun phrase is plural, usually a group consisting of several people, but objects are not excluded. It does not mean 'many' or 'all', but simply indicates plurality. In many cases the reference appears to be definite, though this is probably not a core component of the meaning of *huriki*. *Huriki* can also be followed by a relative clause.

- (77) *e huriki a sirula* ART.P PLUR ART girl '(the) girls' (t5:10)
- (78) *e* **huriki** *a* maki ne mia. ART.P PLUR ART thing OBL.P 1PLE.F 'our things' (dict)
- (79) *e huriki ala kupo* ART.P PLUR unit many 'many people' (Mk 5:24)

2. The quantifier *lobo* 'all' is primarily an intransitive verb meaning 'to finish, to complete'. In addition, it functions as a completive marker following verbs, as shown in §8.4.2. As a quantifier meaning 'all', it modifies both nouns and pronouns.

- (80) Miri rara maki lobo.
 1DE dry thing all
 'We dried everything.' (dict)
- (81) Pali mia lobo mi made vonga...
 but 1PLE.F all 1PLE sit there
 'And we all sat there...' (t8:17)

Lobo also occurs in combination with two other quantifiers (*huriki* and *maka*) in the meaning 'each, every'. The combination *e huriki lobo* (without a head noun) means 'everyone'.

- (82) E huriki a manu lobo i nana...
 ART.P PLUR ART fish all 3s ask
 'Every fish that he asked...' (t5:47)
- (83) A maka tanga lobo ru vago polo vona...
 ART PLUR village all 3D pole go.past 3S.OBL
 'Each village that the two of them poled past...' (t5:25)

(84) *E huriki lobo ri luhoi*... ART.P PLUR all 3PL think 'Everyone thought...' (t7:4)

In the Bola Bible, *lobo* by itself is often used in the meaning 'every' in temporal expressions, e.g. *parava lobo* 'every day', *pida lobo* 'every year.'

3. The quantifier *mai* 'plural' is rare in our corpus, restricted to the Bola Bible. It indicates plurality, and is only found with kin terms following the noun.

(85) e Noa tura-na e girihina, e tu-na mai e
ART N. with-3S ART.P spouse-3S ART.P child-3S PLUR ART.P
ka-na mai ri rike na aga-rungu...
child.in.law-3S PLUR 3PL go.up OBL canoe-large
'Noa and his wife, his sons (lit. children) and his daughters-in-law went up into the ark...' (Gn 7:7)

4. The quantifier *maka* is virtually identical in meaning to *huriki*, except that it mostly seems to modify non-human nouns. Positionally it occurs between the article and the head noun. It also carries overtones of a sizable group, and in most contexts may be translated as 'quite a few', 'a bunch of', or even 'many'.

- (86) a maka maki / ligo / kopa ART PLUR thing dog bat '(quite a few) things / dogs / bats' (elic)
- (87) *a maka mahala ne ria* ART PLUR cargo OBL.P 3PL.F 'their many goods' (t2:9)

5-6. The quantifiers *tara* and *ranga* share a number of semantic and distributional features, as shown in table 4.4. In each case *tara* refers to just one entity, whereas *ranga* always has plural reference. The two words are

semantically quantifiers, but appear in a variety of structural positions, including prenominally, postnominally, adverbially and pronominally.

		preceding N as quantifier	following N as quantifier	following N as adverb	pronominally (as NP)
tara	SG	'a, one, some'	 'one, a certain' 'another' 	ʻalso'	'one, another one'
ranga	PL	'some, a few'	'other'	ʻalso'	'some, others'

TABLE 4.4 QUANTIFIERS TARA AND RANGA

Preceding the head noun, *tara* only modifies indefinite and sometimes non-referential nouns with the meaning 'a, one, some'.

- (88) E tama-ne rua i pia tara kanono...
 ART.P father-3S.P 3D.F 3S fetch one fire
 'Their father got some fire...' (dict)
- (89) I rate-a a ligo tara boro
 3s meet-3s ART dog one pig.
 'The dog(s) met a pig.' (t13:9)
- (90) ...*lakea i longo visi-a tara rabu ni*... then 3s hear accomplish-3s one custom COMP
 - '... then he thought of a way to (break their canoe)' (t5:30).

When it occurs postnominally, *tara* can mean either 'one, a certain' (specifically with reference to people), but also 'another'.

(91) *a bakovi tara* ART man one 'a man; a certain man; another man'

- (92) A parava tara a laho na dala...
 ART day one 1s walk OBL road
 'One day I was walking on the road...' (dict)
- (93) *Lakea a taua tara i valai...* then ART white.person one 3s come 'Then another white person came...' (t8:11)

Example (93) can possibly also be translated as 'Then a white person came...', but since a white person has been present from the outset of this story, 'another' seems to be a better translation equivalent.

The following (rather complex) example, from a text about gardening, shows both prenominal and postnominal *tara*.

(94) ...ru habi-a tara tabeke bara ni kona, ne vona
3D give-3S one part MOD PASS buy OBL.P 3S.OBL
e rua a tabeke tara.
ART.P 3D.F ART part one

'... they will sell one part of it (= the garden), and another part they will keep.' (Lit. 'They-two will give one part of it to be bought/sold, for them-two [will be] one/another part.') (t7:33)

The contrast between prenominal and postnominal *tara* is not completely clear, but it appears that prenominally it always has indefinite reference without implying a contrast or a comparison with another referent ('another'), whereas postnominally this comparison is potentially there.

In the following example, taken from the story of the origin of taro, *tara* is found functioning as a pronoun:

(95) ...ri kani kilangane-a tara.
3PL eat test-3S one
'...they tried to eat one.' (Lit. '...they test-ate one.') (t1:12)

The quantifier *ranga* means 'some, a few'. It precedes the head noun (taking the place of the article), with reference to both people and objects.

- (96) *ranga* Tolai some T.'some Tolai people' (t2:3)
- (97) *ranga tanga* some village 'some villages'
- (98) O guru puru ranga naru.
 2s pour go.down some water
 'Pour me some water.' (dict)

Ranga can also occur pronominally as the head of an NP:

(99) Ranga ri tahoni na kaika, ranga ri...
some 3PL fill OBL bamboo some 3PL
'Some (of the shell money) they put in bamboo, some/others...' (t2:12)

When *ranga* follows the head noun, its meaning is 'other, some other', always with plural reference:

- (100) *a bakovi* **ranga** ART man other 'some other men'
- (101) *i* taki e huriki a ngatavine ranga...
 3s say ART.P PLUR ART woman other
 'She tells some other women...' (t7:28)

In addition, both *tara* and *ranga* function as focussing adverbs meaning 'also, too'. *Tara* occurs when the preceding noun has singular reference, while *ranga* occurs when the preceding noun has plural reference (see also §7.8). In these cases, both are glossed as 'also'.

(102)*iau tara* 1S.F also 'me too'

(103) *E* Brent tara i dava a maka maki vona... ART.P B. also 3S wait ART PLUR thing 3S.OBL 'Brent was also waiting for his things...' (t8:26)

(104) *A malo iau, a ligo ranga to malo.* 1s rest 1S.F ART dog also 3PA rest 'I rested, the dogs also rested.' (t41:7)

7. The last quantifier to be discussed is *varago* 'both', which post-modifies nouns, as well as (redundantly) dual pronouns:

(105) *vaha-na* **varago** leg-3s both 'both her legs' (t4:6)

(106) *Maria* varago miri lakea na taun. 1DE.F both 1DE go OBL town 'Both of us went to town.' (s.u.)

It may seem surprising that no quantifier is listed here with the meaning 'many, much'. There are, in fact, two separate lexical items for the concept 'many, much' in Bola, *kupo* and *vole*, but both of them are verbs, as shown by the agreement markers. These two verbs typically occur in the predicate slot of the clause.

(107) I kupo a manu na tabeke ne ria.
3s many ART fish OBL part OBL.P 3PL.F
'There are many fish in their area.' (Lit. 'The fish in their part are many.') (dict)

(108) *I* vole vonga o Muku ngane... 3s many there LOC M. now

'Now there are many (breadfruit trees) there at Muku...' (t9:38)

4.7 Adjectives

Adjectives have been defined and contrasted with verbs in §3.3.1. This section focusses on the internal structure of adjectives and their role within NPs.

Formally, there are four types of adjectives: 1) Simple monomorphemic adjectives; 2) adjectives starting with ma- (often derived from transitive verbs); 3) adjectives ending in -ka; 4) reduplicated adjectives.

bareko	'ripe'	karaba	'new'
bobo	'naked'	katoki	'dirty'
bola	'wide'	kea	'white'
buko	'swollen'	kere	'dry'
dagi	'big, large'	kilala	'clear'
gao	'strong'	kiroko	'little, small'
gare	'old'	maga	'clear (water)'
gareka	'raw'	ola	'long, tall'
gavutu	'fat'	palita	'slippery'
golea	'empty, clear'	piu	'cold'
hale	'bad'	rika	'funny'
hupi	'cloudy'	singou	'pregnant'
kabala	'narrow'	tupo	'dull, blunt'
kamumu	'good'	vere	'sharp'

Below is a list of some common simple adjectives:

Adjectives with initial *ma*- include the following, all of which are derived from transitive verbs. The semantics of some of these adjectives and verbs has not been investigated in detail, and the glosses are only rough equivalents.

ma-devu	'broken off (of leaves)'	devu	'break off (a leaf)'
ma-hede	'broken, shattered'	hede	'break, shatter'
ma-kudu	'broken'	kudu	'break (a vine/rope)'
ma-kule	'rolled'	kule	'roll'
ma-pasi	'fallen (of fruit)'	pasi	'pick'
ma-peku	'bent, dented'	peku	'bend, dent'
ma-poda	'burst open'	poda	'open; give birth'
ma-puka	'broken'	puka	'break'
ma-putu	'broken (of sticks)'	putu	'break (a stick)'
ma-rape	'torn (of clothes, leaves)'	rape	'tear up'
ma-rina	'bald, stripped, scraped'	rina	'strip off, scrape off'
ma-vida	'split'	vida	'split'

The following (elicited) examples show several of these pairs, with *ma*-glossed as STAT.

- (109) a. *E* Kulu i rape-a a lavalava. ART.P K. 3s tear-3s ART cloth 'Kulu tore the cloth.'
 - b. *A* lavalava i ma-rape. ART cloth 3s STAT-tear 'The cloth is torn.'
- (110) a. *Iau a tolo pode-a a niu*.
 15.F 1s chop open-3s ART coconut
 'I chopped open the coconut.'
 - b. *A* niu i ma-poda. ART coconut 3S STAT-open 'The coconut is open.'

mahasi	'low (of tide)'	malilo	'calm'
mahari	'brackish'	malulu	'tired'
mahuri	'alive'	maraha	'light (in weight)'
maruhu	'ashamed'	marohu	'thirsty'
malai	'lazy, withered'	matutu	'broken,worn out'
malaku	'long'	mavuru	'rotten, stinking'
malaveo	'weak'		

A good number of adjectives also start with *ma*, but since the root of these words does not exist independently, such cases are best considered examples of fossilised morphology. The following non-exhaustive list is illustrative:

Another group of derived adjectives has the suffix -ka. These are often on the basis of nouns, some of them relating to particular smells. When the base is not a noun, this is indicated.

gatu-ka	'very thick'	gatu	'thick' (adj)
hate-ka	'strong; very'	hate	'liver'
hire-ka	'sandy'	hire	'sand'
kopa-ka	'(smell) of bats'	kopa	'bat'
linge-ka	'half-empty'	linge	'portion of water'
mata-ka	'open'	mata	'eye'
nami-ka	'tasty, sweet, salty'	nami	'taste'
ngava-ka	'wide, spacious, open'	ngava	'mouth'
piri-ka	'farty (smell)'	piri	'fart' (v, n)
tahe-ka	'poopy (smell)'	tahe	'faeces'
tuha-ka	'strong, bony'	tuha	'bone'
vuro-ka	'(smell) burnt'	vuro	'burnt' (adj)

A few adjectives with -ka show idiosyncracies, mostly semantic. The adjective mata-ka [ma'taka] 'open' can also be pronounced as ['mata 'ka:], and is then written as two words: mata ka. Hate-ka 'strong' is mostly used as a degree adverb 'very'. The adjective gare-ka 'raw (of food), new (of firewood)' is possibly related to the adjective gare 'old', but the semantics are not transparent.

Three derivations with *-ka* that are not adjectival are the verbs *loho-ka* 'think, know' (based on the noun *loho* 'neck, voice'), *taho-ka* 'have' (based on the noun *taho* 'owner') and the noun *kani-ka* 'basket', based on *kani* 'eat'.

Reduplicated adjectives are fairly rare. Examples include *hale-hale* 'very bad' (from *hale* 'bad') and *kedo-kedo* 'stony, rocky' (from the noun *kedo* 'stone').

Some examples of adjectives in noun phrases:

- (111) *a ligo kamumu* ART dog good 'a good dog' (t2:18)
- (112) *a rabu hale* ART custom bad 'a bad deed, a bad habit' (t5:62)
- (113) *tara kanena karaba* one fruit new 'a new fruit' (t3:16)
- (114) *a kai kiroko* ART tree small 'small trees' (t7:15)
- (115) *a naru vagole* ART water bitter 'alcoholic drinks' (lit. bitter water)

According to Bosco (1980), adjectives may occasionally also precede nouns. He says: "In a very few cases, where the topic of conversation is indefinite, the speaker changes the order around and puts the descriptive word in front of the head noun." (Bosco 1980:26). He gives the following example, but our corpus shows no examples of prenominal adjectives.²

(116) *a dagi manu kamumu* ART big fish good 'a good big fish' (B:26)

Colour terms are semantically a subset of adjectives. It appears that there are five basic colour terms (widely known and frequently used), and some nine additional terms which are less well-known and tend to have very specific referents.

a. Basic colour terms:

goma	'blue, green'
kato	'black'
kea	'white'
ngango	'yellow'
vururu	'red'

b. Additional colour terms (with their typical referents):

galaua	'yellow' (coconuts)
hudi	'orange' (setting sun)
kua	'purple, pink' (flowers)
logologo	'spotted black and white' (pigs, dogs)
marakeda	'green' (coconuts)
meka	'brown' (muddy water)
more	'grey' (hair)
pari	'mottled black and grey' (dogs, butterflies)
voku	'bright brown' (coconuts)

² Unfortunately, the acceptability of this example was not tested.

Adjectives never function in isolation as the heads of noun phrases. When the item referred to is understood, but not explicitly stated (for whatever reason), the semantically empty noun *viri*, glossed as 'item', functions as the head of the NP. In other contexts, *viri* usually means 'person'.

(117) O padi a viri dagi!
 2s shoot ART item big
 'Shoot the big one (= pig).' (s.u.)

4.7.1 Degrees of comparison

There are no comparative or superlative forms of adjectives, and comparative constructions on the whole seem to be rare in Bola. The following examples, a number of which were elicited, show that the strategy for forming comparatives is A2 in terms of Dixon (2012): the adjective is the head of the predicate, there is no index (a word or morpheme meaning 'more'), while the standard of the comparison is introduced by the oblique preposition $ne \sim na$. The standard can also be an oblique pronoun. The following examples are illustrative:

(118) <i>Iau a dagi ne nana.</i> 1S.F 1S big OBL.P my.mother		
'I am bigger than my mother.' (elic)		
(119) <i>E</i> tata <i>i</i> ola nau. ART.P my.father 3s tall 1s.OBL 'My father is taller than me.' (elic)		
(120) <i>I tuha-ka hateka nau.</i> 3s bone-HAVE very 1S.OBL		
'He is stronger than I am.' (Mk 1:7)		

An alternative is to use the transitive verb *rangi* 'defeat, win, exceed, be superior', as in the following translated example:

(121) *A rabu hale vona i rangi a rabu hale ne mua.* ART deed bad 3S.OBL 3S win ART deed bad OBL.P 2PL.F 'His bad deeds are worse than yours.' (Mt 23:15)

There does not seem to be a dedicated construction to express the superlative. One has to use a circumlocution such as illustrated in the following example:

(122) *A ruma vona i dagi hateka na maka ruma na tanga.* ART house 3S.OBL 3s big very OBL PLUR house OBL village 'His house is the biggest in the village.' (Lit. 'His house is very big in/among the houses in the village.') (elic)

To express equality, the adjective *palupu* 'same' precedes the standard:

- (123) *Iau miri ola palupu e tari-gu.*1S.F 1DE tall same ART.P younger.brother-1S
 'I am as tall as my brother.' (elic)
- (124) *A ni-ola-na tanga i palupu tura-na ni-bola-na.* ART NMLZ-long-3S village 3S same with-3S NMLZ-wide-3S 'The length and the width of the village are the same.' (Rv 21:16)

Notice the inclusory use of the proclitic dual pronoun *miri* in (123); (see also §4.10).

4.8 Possession

From an Oceanic perspective, possession in Bola is rather straightforward, although a fair degree of variation does add some complexity. There is, as expected, a distinction between direct and indirect possession, but this is to all intents and purposes only relevant in the singular. With non-singular possessors, the difference is there, but minimally so. In the singular, direct possession makes use of the possessive suffixes -gu 'my', -mu 'your' and -na 'his, her, its', which can only be attached to inalienable nouns (see §4.2.1).

Indirect possession uses the three distinct oblique singular pronouns *nau*, *vomu* and *vona*.

4.8.1 Direct and indirect possession

The following examples illustrate direct and indirect possession by giving contrasting examples for 1st, 2nd and 3rd person singular:

(125) a. a bito-gu ART back-1s 'my back' b. *a* ruma **nau** ART house 1S.OBL 'my house' (126) a. a muri-**mu** ART place-2s 'your place' b. *a* kani-a vomu ART food-NMLZ 2S.OBL 'your food' (127) a. a kuli-na ART skin-3s 'his/her/its skin' b. *a* vito vona ART knife 3S.OBL

'his/her knife'

With non-singular pronominal possessors (duals, paucals and plurals, twelve forms in total), the contrast is almost absent. Both alienable and inalienable nouns take the morpheme *ne* followed by a free pronoun. There is, however, a subtle difference in that with inalienable nouns, this *ne* is attached

to the noun as a suffix, thereby causing a shift in stress (see §2.5). Historically this *-ne* is the third singular possessive suffix *-na* which merged with the proper article e. (The variant *-na* e is still a possible alternative.) This *-ne* is therefore glossed as 3S.P (for 3rd person singular and proper noun), and written as one word with the preceding noun.

With alienable nouns, on the other hand, the element ne is a preposition, forming a prosodic phrase with the next pronoun (or noun). There is no stress shift in this case. Historically, this ne is the result of exactly the same vowel merger: preposition na + proper article e. Because this ne does not cause a shift in stress, it is written as a separate word (and glossed as OBL.P). Compare the following contrastive example:

(128) mata-ne rua	/ma'tane 'rua/
eye-3S.P 3D.F	
'their eyes'	
(129) aga ne rua canoe OBL.P 3D.F	/'aga nɛ'rua/ not */a'ganɛ 'rua/
'their canoe(s)'	

Some further examples of direct possession, both singular and non-singular (with articles added) follow.

(130) e tu-gu ART.P child-1s 'my child'

- (131) *a turu-gu* ART knee-1s 'my knee'
- (132) e tuka-mu ART.P older.brother-2s 'your older brother'

(133) *a mata-mu* ART eye-2s 'your eye(s)'

(134) e girihi-na ART.P spouse-3S 'his wife; her husband'

(135) *a muri-na* ART place-3S 'his/her/its place'

(136) *a mata-ne hita* ART eye-3S.P 1PLI.F 'our eyes'

(137) *e kina-ne mua* ART.P mother-3S.P 2PL.F 'your (plural) mother'

(138) *e tama-ne ria* ART.P father-3S.P 3PL.F 'their father'

When the possessor is a full dependent noun phrase (in the case of direct possession), the possessive suffix attached to the head noun is -na with a following common noun. But when the possessor noun is a proper noun preceded by the article e, the sequence -na e can again merge to -ne (glossed as 3S.P). There appears to be free variation between -ne and -na e. Compare the following two examples, where the head noun (the inalienable noun vaha 'leg, foot') is possessed by the common noun *mukave* 'octopus' in (139), and the proper noun *tata* 'my father' in (140).

- (139) *a vaha-na mukave* ART leg-3S octopus 'the tentacles (lit. legs) of an octopus'
- (140) *a vaha-ne tata / a vaha-na e tata* ART leg-3S.P my.father ART leg-3S ART.P my.father 'my father's leg(s)'

The free variation between *-na e* and *-ne* is also evident in the Bola Bible. The phrase *tura-na e huriki* 'with them' (based on the prepositional noun *tura* 'with', see §6.3) occurs 273 times in the Bola Bible, the contracted form *tura-ne huriki* is found 349 times.

A dependent common noun following na can also take the article a, but the vowel sequence in *-na* a is almost always reduced to a single a, even in written texts. In some texts there are examples where the article is written, e.g. *tura-na* a *ligo* [with-3S ART dog] 'with the dogs', but in normal conversation the article is not present.

Four syntactic categories can therefore be distinguished, based on the features of the possessor: singular pronoun, non-singular pronoun, proper noun and common noun. All four categories are illustrated (again) below for alienable possession.

a. Singular pronominal possessor:

- (141) *a aga nau* ART canoe 1S.OBL 'my canoe'
- (142) *a tanga vomu* ART village 2S.OBL 'your village'

(143) *a ruma vona* ART house 3S.OBL 'his/her house'

b. Non-singular pronominal possessor:

- (144) *a ruma* (*ne*) *maria* ART house OBL.P 2DE.F 'our (dual exclusive) house'
- (145) *a pilot* (*ne*) *mateu* ART pilot OBL.P 1PAE.F 'our (paucal exclusive) pilot'
- (146) *a ruma* (*ne*) *marua* ART house OBL.P 2D.F 'your (dual) house'
- (147) *a ni-leho ne ria* ART NMLZ-work OBL.P 3PL.F 'their work'

There is considerable variation here, as it appears that the preposition *ne* can be deleted before trisyllabic free pronouns. The phrase *a ruma ne maria / tarua / marua* [ART house OBL.P 1DE.F / 1DI.F / 2D.F] 'the house of us two (excl) / us two (incl) / you two' can also occur without *ne*. But in *a ruma ne rua / ria* [ART house OBL.P 3D.F / 3PL.F] 'the house of them two / them all', the preposition *ne* is obligatory; **a ruma rua / ria* is ungrammatical. The deletion of *ne* appears to be acceptable in both spoken and written language, though constructions with *ne* are much more frequent, especially in written texts.

c. Possessor NP headed by a proper noun:

(148) *a ruma ne rei*? /*a ruma e rei*? ART house OBL.P who ART house ART.P who 'whose house?'
- (149) *a ruma* **ne Alois** / *a* ruma **e Alois** ART house OBL.P A. ART house ART.P A. 'Alois' house'
- (150) *a ni-ta ne Jon / *a ni-ta e Jon* ART NMLZ-talk OBL.P J. ART NMLZ-talk ART.P J. 'John's words.'

The reason the second alternative in (150) is ungrammatical is not phonological (e.g. because *Jon* is a monosyllabic word), but because with *ni*-nominalisations, the use of the preposition is obligatory with non-singular and proper noun possessors.

d. Possessor NP headed by a common noun:

(151) *a ruma na viri* ART house OBL person 'someone's house' (dict)

(152) *a tanga na maka riau* ART village OBL PLUR young.man 'the village of the young men'

The preceding discussion is summarised in Table 4.5.

There are a number of further points that can be made about possession in Bola.

1. The preposition ne (or na) is a general oblique preposition which not only indicates possession (as illustrated above), but a variety of other functions and translations, including 'of, about, for' etc. (see also §6.1). When a prepositional phrase introduced with ne or na follows a noun, the semantics of the relationship between the two nouns is not specified. It can range from true possession to purpose, location and attribution, as well as some vague association.

possessor	direct possession	indirect possession
1s pronoun	-gu	nau
2s pronoun	-ти	vomu
3s pronoun	-na	vona
non-sg pronoun	<i>-ne</i> + free pronoun	<i>ne</i> + free pronoun, or: only free pronoun (if trisyllabic)
NP (proper N head)	-ne + NP or -na + e + NP	ne + NP or $e + NP$
NP (common N head)	<i>-na</i> + NP	na + NP

TABLE 4.5 DIRECT AND INDIRECT POSSESSION

Notice the following examples:

- (153) *a ni-verei ne tu-na duku* ART NMLZ-story OBL.P child-3S orphan 'the story about the orphan child' (t3:1)
- (154) *a bakovi na ralo-va* ART man OBL dance-NMLZ 'a man who likes to dance' (lit. 'a man of dancing') (t5:6)

2. In colloquial speech the oblique preposition *ne* is frequently found with singular alienable possessors as well, as illustrated by *a tanga ne nau* [ART village OBL.P 1S.OBL] 'my village', instead of the 'regular' *a tanga nau*, without preposition. Such forms appear to be acceptable, though the forms without preposition are more common, and certainly more frequent in written texts. The emergence of the preposition with singular pronouns appears to be a case of analogy. Since all non-singular possessors normally take a preposition, this construction is extended to the three singular cases which do not have it. Interestingly, the pronoun in these cases continues to be the oblique pronoun

(*nau*), not the free pronoun *iau*. The use of the possessor can even extend to inalienable possession: the phrase *tata ne nau* (my.father OBL.P 1S.OBL) 'my father' (instead of simply *tata*) was once overheard, though more conservative speakers strongly object to such examples of 'bad Bola'.

From an Oceanic historical-comparative perspective, Bola has undergone major changes in its possessive system. This is remarkable for a language which in many ways is quite conservative. Compared with Proto-Oceanic (POc; data taken from Lynch, Ross and Crowley [2002]), the most important innovations are the following:

- POc had seven suffixes for direct possession (three in the singular, four in the plural/non-singular). Bola has retained just the three singular forms (-gu, -mu, -na). The four plural forms have been lost, and the modern non-singular possessive constructions are periphrastic, built from the 3s -na followed by the proper article and the free pronoun. For example, POc *-da 'our (inclusive)', has been replaced by -ne hita.
- POc had several prenominal possessive classifiers, including *ka- for food items, *m(*)a- for drink items and *na for general possession.
 Bola has lost all classifiers and no further semantic distinctions are made within the general category of alienable possession.
- For indirect possession, Bola mainly uses a postnominal prepositional strategy. The general preposition *na* (or *ne* when it precedes a proper noun) introduces the possessor.
- The three singular oblique pronouns *nau*, *vomu* and *vona* are local innovations. 1s *nau* is possibly a contraction of earlier *na-au*, consisting of the preposition *na* and an earlier form **au* of the free pronoun *iau* (compare POc **[i]au* 'I'). The other two forms clearly show the suffixes *-mu* and *-na*, but the origin of *vo-* (presumably a noun) is obscure. Neighbouring Vitu also has a similar form *vona*, functioning as a lone oblique 3rd singular pronoun, but there is no form *vomu* (van den Berg and Bachet 2006).

4.8.2 Possession with *ni*-nominalisations

The system of indicating the possessor or agent of a nominalisation marked by the prefix *ni*- warrants a separate discussion. The most common pattern is indirect possession, where a singular agent or possessor is indexed by one of the oblique pronouns: *nau* 'my', *vomu* 'your', and *vona* 'his, her, its'. This appears to be possible for all nominalised nouns and adjectives. Two examples are *a ni-havai nau* 'my trip' [ART NMLZ-travel.far 1S.OBL] and *a ni-made vomu* 'your life' [ART NMLZ-sit 2S.OBL].

With certain nouns, however, the inalienable suffixes are also acceptable, sometimes with the meaning 'style or way of doing something': *a ni-ta-gu* [ART NMLZ-say-1S] 'my word'; *a ni-kani-gu* [ART NMLZ-eat-1S] 'my style/way of eating'; *a ni-gi-mu* [ART NMLZ-read-2S] 'your style/way of reading'. With a number of dimensional adjectives such as *bola* 'wide', *mava* 'heavy', *ola* 'long, tall', direct possession appears to be the preferred option with *ni*-nominalisations.

The option for direct possession on these nominalisations appears to be lexically determined and rather arbitrary. Table 4.6. shows grammaticality judgements of possessed nominalisations for a number of verbal and adjectival roots, limited to the third person singular. (vi = intransitive verb, vt = transitive verb).

root		gloss	nominali- sation	gloss	takes 3s <i>-na</i>	takes 3s <i>vona</i>
	gory		sation		<u>38 -nu</u>	JS VOnu
bagetu	adj	'adorned'	a ni-bagetu	'adornment, glory'	yes	yes
bola	adj	'wide'	a ni-bola	'width'	yes	yes
dodo	adj	'be sorry'	a ni-dodo	'grief'	no	yes
deke	vi	'complain'	a ni-deke	'complaint'	yes	yes
gamai	vt	'bless'	a ni-gamai	'blessing'	no	yes
kani	vt	'eat'	a ni-kani	'(way of) eating'	yes	yes
leho	vi	'work'	a ni-leho	'work'	no	yes

TABLE 4.6. POSSESSIVES WITH NI-NOMINALISATIONS

luhoi	vi	'think'	a ni-luhoi	'thinking, mind'	no	yes
made	vi	ʻsit, stay'	a ni-made	'life, way of living'	yes	yes
mate	vi	'die, dead'	a ni-mate	'death'	yes	yes
ola	adj	'long, tall'	a ni-ola	'length, tallness'	yes	yes
tangi	vi	'cry'	a ni-tangi	'crying'	no	yes
tora	adj	'strong'	a ni-tora	'strength, power'	yes	yes

In some cases affixation with 3s *-na* is grammatical, but 1s and 2s affixes were deemed infelicitous. This was the case with *deke* 'complain' and *tora* 'strong': *a ni-deke-na* 'his/her complaint' and *a ni-tora-na* 'his/her/its strength' were fine, but **a ni-deke-gu* (for 'my complaint') and **a ni-tora-gu* (for 'my strength') were rejected in favour of *a ni-deke nau* and *a ni-tora nau*.

The extent of variation, subtle differences in meaning and possible links with word categories remain topics for further research.

4.8.3 Benefactive possession

Like many other Oceanic languages, Bola can use a possessive construction which has a benefactive reading. In example (155), the use of the possessive construction (here a pronoun without ne) does not imply previous ownership or a definite reference. Instead, it indicates that the item will benefit the prospective owner, usually by virtue of it being consumed.

- (155) Mete padi a siku mateu i tolu.
 1PAE shoot ART squid 1PAE.F 3S three
 'We speared three squids for ourselves.' (Lit. 'We shot our three squids.') (t38:7)
- (156) *Ga vano ga kone-a a mitpai nau.* IRR.1s go IRR.1s buy-3s ART meat pie 1s.OBL 'I will buy myself a meat pie.' (t8:4)

4.9 NP structure

Before outlining the full structure of the NP, it is worth pointing out that a few other modifying elements may occur in the NP. These are mentioned here, but not further discussed.

a. Locative and temporal phrases, e.g. *a kai vonga* [ART tree there] 'a tree there', *a manu na dari* [ART fish OBL sea] 'the fish in the sea', *e huriki a propet hosi* [ART.P PLUR ART prophet] 'the prophets of old'.

b. Focussing adverbs such as *kunana* 'only, just': *a tuha-na kunana* 'only her bones'. See §7.8 for further discussion.

c. Relative clauses, including characterising relative clauses introduced by ni. See §9.5.

d. Other clauses dependent on a noun, e.g. a purpose clause. See §9.4.2.

Ignoring some items listed above, such as relative clauses, coordination and apposition, and also quantifiers (each of which seems to be unique), the complete structure of a noun phrase with a nominal head N can be formulated as follows. Numerals are included in this formula, though technically they are relative clauses.

(ART) (PLUR) N (ADJ) (POSS) (PP) (NUM) (DEM) (PP [POSS])

Examples illustrating various combinatory possibilities:

(157) <i>a</i>	maka ligo	vona	Art Plur N Poss
ART	PLUR dog	3S.OBL	
'his o	dogs' (t2:27)		
(158) a	siku mata	u i tolu	Art N Poss Num

(158) *a siku mateu i tolu* ART squid 1PAE.F 3s three 'our three squids' (t38:7)

Art Plur N PP

- (159) *a maka manu na dari* ART PLUR fish OBL sea 'the fish in the sea' (Gn 1:28)
- (160) a kureko kiroko nau i rua nga Art N Adj Poss Num Dem ART chicken little 1S.OBL 3S two DEM.PLUR
 'those two little chickens of mine' (elic)

4.10 NP coordination

Coordination of nouns or noun phrases is accomplished by various means: juxtaposition, dual pronouns and the use of inclusory pronouns. There is no coordinating conjunction meaning 'and' in Bola.

1. Simple juxtaposition of noun phrases with no overt conjunction is the most common way of coordination.

- (161) Ri vano e huriki a ngatavine a bakovi...
 3PL go ART.P PLUR ART woman ART man
 'The men and women went...' (t1:1)
- (162) *I loko-vai e kina-ne mua e tama-ne mua?* 3s go-where ART.P mother-3S.P 2PL.F ART.P father-3S.P 2PL.F 'Where did your fathers and mothers go?' (t1:3)
- (163) E Baki i bole a kai a vito.
 ART.P B. 3S take/get ART tree ART knife
 'Baki took wood and a knife.' (s.u.)
- (164) O vano o bole valai a kira, a vito, a kai.
 2s go 2s take/get come ART axe ART knife ART tree
 'Go bring an axe, a knife and a stick.' (s.u.)

2. The dual pronoun *rua* 'they (two)' is used as a conjunction when two noun phrases referring to human or human-like participants are coordinated:

(165) *E Tagole* **rua** *e Ana ru lakea na hania.* ART.P T. 3D.F ART.P A. 3D towards OBL garden 'Tagole and Ana went to the garden.' (s.u.)

(166) A made ne tata rua e nana.
1s sit OBL.P my.father 3D.F ART.P my.mother
'I was staying with my father and my mother.' (t18:2)

3. Inclusory pronouns. This is a construction consisting of a non-singular free pronoun directly followed by a NP, for example, *maria e Jon* 'we (dual exclusive) [and] John' (*e* is the proper article, not a conjunction). The inclusory dual pronoun *maria* 'we' encompasses both participants in what can be termed anticipatory inclusion. The meaning is therefore simply 'John and I'. The pronouns most commonly used in this situation are the duals, but paucals are occasionally also found with an inclusory sense. (Note that inclusory is not synonymous with inclusive. 'Inclusive' refers to the inclusion of the addressee in the speech situation, distinguishing inclusive and exclusive 'we'. 'Inclusory' refers to a pronoun which anticipatorily includes the next participant(s) in a compound NP, and can occur with exclusive pronouns.) Clausal examples, with (167) illustrating the inclusory use of the exclusive pronoun *maria*:

- (167) Maria e Kulu, miri gi vano.
 1DE.F ART.P K. 1DE IRR go
 'Kulu and I are going.' (Lit. 'We (dual exclusive) [and] Kulu...')
- (168) Marua e Kedo, muru valai!
 2D.F ART.P K. 2D come
 'You (sg) and Kedo come!' (Lit. 'You (dual) [and] Kedo...')
- (169) ...na popoda ne **rua** e girihi-na... OBL rack OBL.P 3D.F ART.P wife-3S '... on the rack of him and his wife...' (t2:43)

4.11 NP apposition

Bola exhibits a complex type of noun phrase in which two noun phrases are juxtaposed, each with its own article. These juxtaposed phrases are in an appositive relationship to each other and semantically act as compound nouns. Examples include the following categories:

- names of specific trees, plants and animals added to generic nouns;
- modification by terms referring to age or gender;
- certain collective nouns (especially the quantifier *huriki*).

The distinguishing feature of appositive NPs is the presence of two articles while the whole NP has a single reference. A coordinated NP can appear to have an identical structure (with two articles), but this always refers to two distinct entities or groups of entities; see §4.10.

Examples of appositive NPs:

(170) *a kai a vao* ART tree ART mango 'a mango tree'

This can be contrasted with *a kai a vito* [ART tree ART knife], as in example (163), which is a case of coordination and means 'a stick and a knife'.

- (171) *a kulu e bakato* ART breadfruit ART.P blackseed.breadfuit 'a blackseed breadfruit tree' (t9:2)
- (172) *a manu a ruka* ART fish ART barracuda 'a barracuda' (t31:12)
- (173) *a mata a bino* ART snake ART k.o.brown.snake 'a brown snake' (t32:4)

(174) *a boro a toga* ART pig ART male 'a male pig' (t15:8)

(175) *a ngatavine a sirula* ART woman ART girl 'a young (unmarried) woman' (t3:25)

(176) *a keva e Bike* ART moon ART.P B. 'the month of March' (elic)

(177) *a tanga e Bulumamiha* ART village ART.P B. 'the village of Bulumamiha' (t5:32)

(178) *a kabu e Karapa* ART clan ART.P K. 'the Karapa clan' (dict)

(179) *e huriki a bakovi* ART.P PLUR ART man 'the men; a group of men' (t11:58)

Other complex noun phrases with appositive NPs:

- (180) *e huriki a koma kiroko* ART.P PLUR ART child small 'the small children' (t20:1)
- (181) *e huriki a taho tanga o Vadoro* ART.P PLUR ART owner village LOC V. 'the villagers at Vadoro' (t2:5)

(182)*ia e Pai* 3S.F ART.P P. 'Pai herself' (t1:9) This chapter deals with verbs, both basic and derived, and various elements occurring around the verb. These elements include subject inflection, object marking, as well as a number of short grammatical words that encode aspect, modality, reality and voice. Together, these elements make up the verbal complex. Since the object NP is not part of these elements, we prefer the term 'verbal complex' to 'verb phrase', following Guérin (2017:927).

5.1 Verb classes

Bola distinguishes intransitive from transitive verbs. Intransitive verbs only allow for one NP in a clause, the subject. A sample of such verbs is given below.

bebe	'fly'	made	'sit, live, be'
darivu	'bleed'	mahita	'sleep'
gaviri	'hide'	rehi	ʻplay'
ha	'run away'	rakoli	'rest'
hamule	'return, go back'	tabuli	'lie, be'
hilolo	'bathe'	tangi	'cry'
kalolo	'sing'	vano	ʻgo'
leho	'work'		

Semantically, intransitive verbs include the following subcategories:

motion verbs: lakea 'go', lakene 'go (towards addressee)', valai 'come', vano 'go', rike 'go up', sike 'go up', puru 'go down', dili 'go in, go towards the bush', tala 'go out' (also pagitala), pori 'go out, go towards the sea', polo 'go past, go across', hamule 'return, go back',

pagepolo 'cross, go across' (lit. jump-cross). These verbs are frequently found in serial verb constructions (see §7.6).

- positional verbs: made 'sit', tabuli 'lie', pesi 'stand' (see §7.4.3).
- numeral verbs (see §4.6.1);
- the quantifier verbs *kupo* 'many' and *vole* 'many' (see §4.6.2);
- the **negative** verb *uka* 'not' (see §8.1);
- the **aspectual** verb *tabana* (variant *tababana*) 'still be, be yet' (see §8.4.2)

Transitive verbs can take a full NP subject and an object in the clause. In addition, transitive verbs can receive object inflection (see §5.3), and can also be passivised (see §5.4.5). Examples of transitive verbs:

bole	'take, get'	ninu	'drink'
dava	'wait for'	rabalaki	'kill'
gutu	'cook'	rata	'make, do'
habi	'give'	ru	'put'
hae	'build'	tolo	'chop'
kani	'eat'	ubi	'hit'
kona	'buy, pay'	varo	'plant'
longo	'hear'		

There is one verb that does not fit the transitive-intransitive dichotomy: the verb *tahoka* 'to have'. It is derived from the noun *taho* 'owner', and takes two noun phrases, but it cannot receive object suffixes (**tahokea*), nor can it be passivised (**ni-tahoka*). The existential verb *vona* 'be, have' is somewhat similar. For further discussion and illustrations of these verbs, see §7.4.4.

There are also two **impersonal** transitive verbs, *kara* 'able to' and *keri* 'unable to', illustrated in §8.4.3 sub 5.

Bola has a small number of verbs showing phonological irregularities.

1. The intransitive verb *valai* 'come' has the form *vilia* in a transitive serial verb construction affixed with 3s -*a*: *o bole vili-a nau* [2s take/get come-3s 1s.OBL] 'bring it to me.' It probably went through the stages *valaia* > *valia* > *vilia* with irregular reduction and vowel harmony due to its high frequency.

2. When the transitive verb *matai* 'see' is affixed with 3s -*a*, the resulting form is *masia*. This is another case of vowel reduction from *mataia* > *matia* = *masia*. (/t/ before /i/ becomes [s].)

3. The inflected verb *bole-a* 'get it, take it' is often pronounced *balea*.

4. When the verb *boko* 'carry' is affixed with 3s -*a* the resulting form is *bokea* 'carry him/her/it', instead of the expected **bokoa*. It is unclear why this forms has undergone vowel fronting, but possibly there is contamination from the high-frequency form *bolea* (from *bole* 'take, get'), which is similar in form and meaning.

5. The verb *ubi* 'hit' is usually reduced to *bi* in the compound verb *bi-mate* [hit-die] 'kill' and in the nominal derivation *va-bi-nga* [REC-hit-NMLZ] 'fight'.

5.2 Subject agreement

The pronominal subject markers are listed and discussed in §4.1. They are short proclitic forms of the pronouns that do not occur independently, and are therefore part of the verbal complex. They are normally present in all verbal clauses, including in numeral clauses, as numerals are a subclass of verbs.

However, there are various cases where a verb is found without subject marker. These include the following.

- In a few cases the subject marker has merged with a modal marker. This is the case with the modal marker *ga*, which has the forms *ga*, *go*, *ge* for 1s, 2s and 3s respectively. See §5.7.2 for details.
- Serial verb constructions. In this case two or three verbs act as a single predicate, taking only one subject marker which precedes the first verb. See §7.6 for details.
- Passive verbs, marked by *ni*. See §7.4.6 for details.

- Verbs in complement clauses introduced by ni. See §9.4.2 for details.
- Optional deletion occurs with verbal repetition. See §9.8 for details.
- Optional deletion also occurs in backgrounded clauses in oral narratives. See §9.6.1.

When there is a full NP subject, the number of the full subject and the subject marker agree. There are, however, various examples of incongruity, where a plural subject co-occurs with a 3s subject marker i. It is possible that this is limited only to postverbal subjects, as illustrated in the following examples.

- (1) I vano pali e huriki.
 3S go PERF ART.P PLUR
 'They have already gone.' (dict)
- (2) I loko-vai e kina-ne mua e tama-ne mua?
 3s go-where ART.P mother-3S.P 2PL.F ART.P father-3S.P 2PL.F
 'Where did your fathers and mothers go?' (t1:3)
- (3) Lakea i ta navai a pilot nga? then 3s say what ART pilot DEM.PLUR
 'So what did the pilots say?' (t8:32)

5.3 Object inflection

Object inflection is limited to the one real object suffix: 3s -a. The full pronouns 1s *iau* and 2s *ioe* can occur in cliticised form on transitive verbs, but this only occurs in spoken discourse; they are very rare in our written corpus and do not occur in the Bola Bible (see §2.6 for details). Notice that final vowels are normally deleted in these cases, as in the following example, where the verb root is *tari* 'wash'.

(4) A vala i tar=au.
ART rain 3s wash=1s
'I got wet in the rain.' (Lit. 'The rain washed me.') (dict)

The occurrence of the third person singular -a, on the other hand, is extremely common, both with and without a following full object NP. However, an important number distinction is made here. The presence of -amakes the object singular, with or without a following NP. When the object is referentially plural, the suffix -a is obligatorily absent. The combination of -aand an object NP therefore indicates a singular object, the presence of an object NP without the suffix indicates a plural object. Object NPs often have an initial common article a. Because of vowel elision, the article a can be absent (see §2.7) in normal speech, and the only difference is stress. In written texts the article is normally present. This is illustrated below in a number of contrasting examples, with the actual pronunciations added. (Notice that there are no phonetic glottal stops breaking up the sequences of vowels.)

(5)	<i>Iau a padi-a.</i> 1S.F 1S shoot-3S 'I speared it.' (t31:22)	['jauapa'dia]
(6)	<i>Iau a padi-a a boro</i> . 1S.F 1S shoot-3S ART pig 'I speared a pig.' (t41:11)	['jauapa'dia'bərə]
(7)	<i>Iau a padi a boro</i> . 1S.F 1S shoot ART pig 'I speared pigs.' (t41:11-m)	['jaua'padia'bərə] ~ ['pada'bərə]
(8)	<i>Mu bole-a a kedo!</i> 2PL take/get-3s ART stone 'Take a stone!' (t1:7-m)	[mubə'lɛa'kɛdə]
(9)	<i>Mu bole a kedo!</i> 2PL take/get ART stone 'Take some stones!' (t1:7-m)	[mu'bəlɛa'kɛdə] ~ [mu'bəla'kɛdə]

- (10) I taki-a e Brent ge dava a pilot nga...
 3s say-3s ART.P B. IRR.3S wait ART pilot DEM.PLUR
 'He told Brent to wait for the pilots....' (t8:27)
- (11) I taki-a e Brent ge dave-a a pilot.
 3s say-3s ART.P B. IRR.3s wait-3s ART pilot
 'He told Brent to wait for the pilot.' (t8:27-m)

5.4 Derived verbs

There is a relatively large set of derived verbs in Bola. These include reciprocal verbs, causative verbs, transitivised verbs, collective verbs and passive verbs.

5.4.1 Reciprocal verbs

A transitive verb is made reciprocal when the prefix *va*- is added. In one case (*gima*) the root is a noun.

va-daki	'fight'	daki	'punch'
va-gege	'argue'	gege	'argue'
va-gima	'hate e.o., be enemies'	gima	'enemy'
va-kani	'share (food)'	kani	'eat'
va-kara	'bite e.o.'	kara	'bite'
va-krosi	'fight'	krosi	'be angry'
va-lemu	'live in peace with e.o.'	lemu	'make peace with'
va-lidi	'knock against e.o.'	lidi	'knock'
va-lili	'chase e.o.'	lili	'chase'
va-longo	'agree with e.o.'	longo	'hear'
va-matai	'see e.o.'	matai	'see'
va-nana	'ask e.o'	nana	'ask'
va-ngaru	'love e.o.'	ngaru	'want, like, love'
va-rata	'fight'	rata	'do'

<i>va-ta</i> [βa'ta:]	'discuss'	ta ['ta:]	'talk'
va-ubi	'fight'	ubi	'hit'

In the examples below, note that a transitive verb ceases to take the object suffixes if it is made reciprocal. In (14)b *vona* introduces an oblique noun phrase; see §6.5.

(12) a. Iau a ubi-a e Kura. 1S.F 1S hit-3S ART.P K. 'I hit Kura.' (elic) b. Miri va-ubi. 1DE.F REC-hit 'The two of us fought (lit. hit each other).' (elic) (13) a. E Babe i padi-a Goe. е 3s shoot-3s ART.P G. ART.P B. 'Babe shot Goe (with a spear).' b. Ru va-padi. 3D REC-shoot 'They shot each other.' (14) a. Te kani-a. 1PAI eat-3s 'We ate it.' b. Te va-kani vona а mavo. 1PAI REC-eat 3S.OBL ART taro

'We all shared the taro.' (conv)

5.4.2 Causative verbs

The prefix *vaka*- creates causative verbs, mostly on the basis of intransitive verbs and a few adjectives.

vaka-bagetu	'adorn, decorate'	bagetu	'adorned'
vaka-boru	'trip, drop'	boru	'fall'
vaka-lobo	'finish (it), complete'	lobo	'finish'
vaka-mahita	'put to sleep'	mahita	'sleep'
vaka-mahuri	'heal'	mahuri	'live, alive'
vaka-nunu	'drive'	nunu	'run'
vaka-pasi	'make drift'	pasi	'drift'
vaka-pesi	'stand (it) up'	pesi	'stand'
vaka-puru	'lower'	puru	'go down'
vaka-sihomo	'comfort'	sihomo	'comfort'
vaka-tabuli	'make lie down'	tabuli	'lie, be'
vaka-velu	'lose'	velu	'lost'
vaka-vora	'enslave'	vora	'slave, servant'

There are a few idiosyncracies. The verb *vaka-vora* is formed on the basis of a noun (rather than an adjective), while *vaka-siri* 'show' has a bound root **siri*. *Sihomo* and *vaka-sihomo* have the same meaning, while two other verbs are causativised by means of the prefix *va-: va-hilolo* 'wash, baptise' (from *hilolo* 'wash, bathe' [intr]) and *va-kani* 'feed' (also meaning 'share (food)', from *kani* 'eat').

Some clausal examples:

(15) a. A longo-a.1s hear-3s'I heard him/her/it.' (conv)

b. *A vaka-longo ria.* 1S CAUS-hear 3PL.F

'I told them.' (Lit. 'I made them hear.') (Ac 26:20)

(16) a. *A koma i mahita.* ART child 3s sleep 'The child is asleep.' (elic)

> b. *E kina-na i vaka-mahite-a e tu-na.* ART.P mother-3S 3S CAUS-sleep-3S ART.P child-3S 'The mother put her child to sleep.' (elic)

We have one example of *vaka*- on an adjective functioning as a manner adverb, a functional convergence which is not uncommon in Austronesian languages (e.g. Fijian, Muna).

(17) a bakovi ni ta vaka-rika
ART man QUAL talk CAUS-funny
'a joker' (lit. 'a man who talks funny') (dict)

5.4.3 Transitivised verbs

A few verbs show a transitive derivational suffix -ki:

ta-ki	'tell, speak to'	ta	'say, speak'
talanga-ki	'listen to'	talanga	'give a reply'

The transitive verb *taringi* 'cry for' is clearly related to *tangi* 'cry', presumably through metathesis from **tangi-ri*. (Cf. Proto-Oceanic **taŋis-i* 'cry for, weep for', with Bola *r* the regular reflex of *s; see footnote 1 in §2.2.)

(18) *A* ra o taringi-a? ART what 2s cry.for-3s 'What are you crying about?' (dict)

5.4.4 Collective verbs

The circumfix *va-...-hi* creates collective verbs on intransitive bases (and at least one adjective), indicating that the subject applies to a large number of entities found at the same time at the same place.

va-made-hi	'all sit'	made	'sit'
va-mahita-hi	'all asleep'	mahita	'sleep'
va-mate-hi	'all dead'	mate	'die, dead'
va-pesi-hi	'all stand'	pesi	'stand'
va-rara-hi	'all ripe'	rara	'ripe'
va-tabuli-hi	'all lie'	tabuli	'lie, be'

(19) *I va-rara-hi a vudi.* 3s COLL-ripe-COLL ART banana

'The bananas were all ripe.' (t1:16)

(20) *Ia kulu e bakato lobo i*3S.F breadfruit ART.P blackseed.breadfruit all 3S *va-pesi-hi muri o Muku*.
COLL-stand-COLL place LOC M.
'All these blackseed breadfruit trees are (standing) at Muku.' (t9:37)

5.4.5 Passive verbs

Bola is unique among Western Oceanic languages in that it has passive verbs, formed by means of an element ni, which is clearly a reflex of Proto-Malayo-Polynesian *ni- (See van den Berg and Boerger (2011) for the implications of this marker for Proto-Oceanic.) In Bola, this morpheme ni is not a prefix but a proclitic. It is usually directly followed by the verb, but can be separated from it by the modal marker gi. As a result ni is written as a separate word in the Bola orthography, a practice which we follow here.

ni gale	'is called'	gale	'call'
ni habi	'is given'	habi	'give'
ni hae	'is built'	hae	'build'
ni rabalaki	'is killed'	rabalaki	'kill'
ni vakani	'is fed'	va-kani	'feed'

For a full discussion of passive constructions and various examples, see §7.4.6.

5.5 Reduplication

Reduplication of verbs, both partial and full, indicates continuous or progressive action (see §2.8 and §8.4.2). Reduplication appears to be less frequent in Bola than in many other Oceanic languages, and we have relatively few examples in native texts. (Notice that the reduplicated form of ta [ta:] 'speak' is written as two separate words: ta ta).

- (21) Na malunga ngane ri ka-kani.
 OBL afternoon now 3PL RED-eat
 'In the afternoon they were eating.' (Jn 13:2)
- (22) E huriki ri pe-pesi tabukoi ri longo-a.
 ART.P PLUR 3PL RED-stand near 3PL hear-3S
 'Those who were standing nearby heard it.' (Mk 15:35)
- (23) *E huriki ri ta ta ne tuna duku i vahele.* ART.P PLUR 3PL RED talk OBL.P child-3s orphan 3s find.wife 'They were talking about orphan, who had found a wife.' (t3:29)

5.6 Compound verbs

There are a number of obvious compound verbs in Bola, as well as some tentative cases. The clear cases include combinations of the verb *lake* 'go' with certain adverbs, showing various vowel modifications: *loko-vai* 'go where' (*vai* 'where'), *loko-muri* ~ *luku-muri* 'go back' (*muri* 'behind'), and *loko-vonga* 'go there' (*vonga* 'there'). Notice that **loko* and **luku* do not exist as free forms.

Another type of compound is made up of a verb and a noun, e.g. *ta-hate* (speak-liver) 'be angry at, rebuke', *pasi-mata* (drift-eye) 'long for, wait expectantly for'. Noun-verb compounds include *ngala-kapulo* (front-turn) 'turn around', *ngala-tada* (front-lie.on.back) 'lie on one's back'. *Ngava-lolo*

(mouth-mountain) 'yawn' is unusual in that the verbal compound is made up of two nouns.

The remaining cases are verb-verb, verb-adverb or verb-adjective combinations. There appears to be little consistency in the spelling of these words. They are either written as one word or two words, and even the Bola Bible is not fully consistent here. The question is what properties distinguish them from serial verb constructions (SVCs, see §7.6). Apart from their (unstable) orthography and possibly their semantics, this is not immediately obvious. We assume that the orthography reflects a real difference between these forms and SVCs, and that they are lexicalised SVCs, since many of the meanings are not fully predictable from their constituent parts. In some cases the meaning of the second element is no longer transparent. For presentation purposes, we write these compounds in hyphenated form.

kolo-tata	'tie, bind'	(tie-tight)
kori-mule	1. 'reply, answer' 2. 'rescue'	(help-back)
longo-kilala	'understand, recognise'	(hear-clear)
longo-kaburungi	'forget'	(hear-?)
longo-visi	'remember'	(hear-succeed)
longo-toto	'obey'	(hear-stretch)
luhoi-kado	'consider'	(think-fix)
luhoi-tora	'believe'	(think-strong)
mata-kana	'search, look for'	(look-seek)
mata-kari	'look out for, watch over'	(look-protect)
mata-kilala	'recognise'	(look-clear)
mata-nono	'stare at'	(look-light/blaze)
mata-para	'able to see, stay awake'	(look-light)
mata-rovi	'not know, disown'	(look-doubt/deny)
mata-taro	'allow, permit, ignore'	(look-first)
mata-visi	'find'	(look-succeed)
pagi-tala ~ page-tala	'go out'	(jump-go.out)

paha-daki	'assume, suppose'	(step.on-assume)
paha-luhoi	'suppose, think (wrongly)'	(step.on-think)
pesi-kari	'stand guard, protect'	(stand-protect)
puga-vuroki	'forgive'	(untie-throw.away)
rata-pile	'destroy'	(make-enemy)

5.7 The verbal complex

The verbal complex in Bola consists of a core element, filled by a verb, preceded and followed by various other elements, as shown in table 5.1. The head is found in the column marked by 0, preverbal elements are numbered consecutively and marked by a minus sign, postverbal elements by a plus sign.

TABLE 5.1.111E VERBAL CONTLEA										
-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
MOD	MOD	SUBJ	PASS	MOD	V	V	V	ADV	OBJ	ADV
ma	ga		ni	ga						та
ta	bara									pali

TABLE 5.1. THE VERBAL COMPLEX

The various elements are briefly listed below, and then illustrated in subsequent sections.

-5 The modal markers *ma* and *ta*.

-4 The modal markers *ga* and *bara*, both of which can merge with the subject marker in position -3.

- -3 Subject proclitics, the short forms of the subject pronouns (see §4.1).
- -2 The passive marker ni (see §5.4.5 and §7.4.6).
- -1 The modal marker ga (and its allomorphs gi, ge, go, gu).
- 0 The main verb, the core of the verbal complex.
- +1 An additional verb acting as the second verb in a serial verb construction (SVC).

+2 A third verb in a SVC.

- +3 A large set of adverbs. This slot can be filled twice, though examples of this are rare.
- +4 An object, either the 3s suffix -a or a full pronoun.
- +5 The aspectual adverbs ma 'yet' and pali 'already'.

A few points need to be made about co-occurence restrictions of these ten positions. The irrealis marker ga is found twice: both in -4 and in -1. These slots are usually in complementary distribution, but may actually co-occur in a few cases (see §5.7.2). Slots -3 (subject marker) and -2 (passive) do not co-occur (and could potentially be merged), and neither do slot -2 (passive) and +3 (object suffix), as passives and object suffixes are mutually exclusive by definition. This means that the maximum number of filled non-core positions is nine, but such a degree of complexity has not yet been encountered. The most complex cases in our corpus have six or seven slots filled, as in the following example with seven slots filled, the adverbial slot (+3) twice.

(24)	Ι	taki-a	ta	ga	mi	gi	made	puru	kamumu	taro.
	3s	say-3s	MOD	IRR	1ple	IRR	sit	go.down	good	first
			-5	-4	-3	-1	0	+1	+3	+3

'He told us to sit down well first.' (elic)

Two more points need to be made.

1. Excluded from the verbal complex is the negator, as the negative verb is the head of its own verbal complex. Further discussion of negation is found in \$8.1. Also excluded from the verbal complex are clause-initial adverbs (such as *ngane* 'now, then'), as they typically precede subject NPs. Adverbs are discussed in \$7.8.

2. Even though the order within the verbal complex is fairly rigid, there is the possibility that it is broken up by an intervening oblique phrase. Such 'intervening' obliques are illustrated and discussed in §7.9.4.

The following sections discuss these slots in turn: serial verbs (slots +1 and +2): §5.7.1; the modal *ga* (slots -4 and -1): §5.7.2; the modal *bara* (slot -4):

§5.7.3); the modal *ma* (slot -5): §5.7.4; the modal *ta* (also slot -5): §5.7.5) and various adverbs (slots +3 and +5): §5.7.6.

5.7.1 Serial verbs

In Bola, combinations of two serialised verb roots are common, but three can also be found. Serial verb constructions (SVCs) are characterised by having a single subject pronoun that governs the sequence of conjoined verb roots. The object suffix (position +4) is attached to the last verb in the series when a third person singular object is referred to. In the following examples the verbal complex is bolded, excluding the subject marker.

- (25) *O* made puru ngane. 2s sit go.down now 'You sit down now.' (t13:4)
- (26) Miri vano, miri laho dili loko-vonga.
 1DE go 1DE walk go.in go-there
 'The two of us went and we walked in there.' (t13:3)
- (27) E Raka i padi mate-a a boro.
 ART.P R. 3S shoot die-3S ART pig
 'Raka killed a pig (by spearing it).' (elic)
- (28) A kaka tale-a a aga nau, a vore pori
 1s drag outside-3s ART canoe 1s.OBL 1s paddle go.out
 na rakaru.
 OBL reef

'I dragged out my canoe and I paddled out to the reef.' (t31:6)

More discussion of SVCs is found in §7.6, including the types of verbs that make up SVCs and various meaning aspects.

5.7.2 Modal ga

Modal ga has several meanings, though all of them are clearly related and roughly deal with the domain of irrealis. Hence ga will be glossed IRR. The combination ma ga is dealt with in the section on ma (§5.7.4), and the combination ta ga in the section on ta (§5.7.5). Formally ga undergoes vowel merger with the 1s, 2s and 3s subject pronouns a, o and i (position -3), leading to the forms ga, go and ge, glossed as IRR.1s, IRR.2s and IRR.3s. When gafollows the subject pronoun (in position -1, only with non-singulars), the vowel assimilates completely to the vowel(s) of the preceding subject pronoun, resulting in the forms gi, gu, ge and go, which will simply be glossed IRR. Table 5.2 shows the various forms, depending on the position of ga in the verbal complex. The free pronouns and the subject markers are also given.

		free subject position -4 position					
		Iree	subject	position -4	position -1		
sg	1	iau	а	ga	-		
	2	ioe	0	go	-		
	3	ia	i	ge	-		
dual	1 ex	maria	miri	ga miri	miri gi		
	1 in	tarua	tu	ga tu	tu gu		
	2	marua	muru	ga muru	muru gu		
	3	rua	ru	ga ru	ru gu		
paucal	1 ex	mateu	mete	ga mete	mete ge		
	1 in	teu	te	ga te	te ge		
	2	matou	moto	ga moto	moto go		
	3	tou	to	ga to	to go		
pl	1 ex	mia	mi	ga mi	mi gi		
	1 in	hita	si	ga si	si gi		
	2	тиа	ти	ga mu	mu gu		
	3	ria	ri	ga ri	ri gi		

TABLE 5.2. IRREALIS GA AND SUBJECT MARKERS

The following six meanings have been found for ga.

a. Simple future

This is probably the most common usage of ga. It indicates simple futurity as well as volitionality, contrasting with *bara* (see below in §5.7.3).

(29)	E	tata	8	ge	valai	kuduvi.
	ART.P	my.fat	her I	rr.3s	come	tomorrow
	'My fa	ather w	ill con	me ton	norrow	.' (elic)
(30)	Ga	vago	na	тара	iau.	
	IRR.1S	pole	OBL	head	1s.f	

'I will pole in the bow (of the boat).' (t5:13)

- (31) *Ga* made muri, *ga* mama IRR.1S sit back IRR.1S chew.betelnut 'I'll sit in the back and I'll chew betelnut.' (t26:14-m)
- (32) Maria i uka ma miri gi lakene
 1DE.F 3S NEG NEG 1DE IRR go.to.you
 'We will not go/come to you.' (Nm 16:12)

b. Purpose

Ga is found in the second clause of a sentence, where it marks purpose, following a plain verb or an imperative in the first clause. This is again very common, with lots of examples in the texts.

- (33) I vano tura-na a ligo vona na robo ge pango.
 38 go with-38 ART dog 38.0BL OBL bush IRR.38 hunt
 'He went with his dogs to the bush to hunt.' (t2:29)
- (34) Taki-a e Brent ge dava a pilot nga...
 say-3s ART.P B. IRR.3s wait ART pilot DEM.PLUR
 'Tell Brent to wait for the pilots...' (t8:27)

Ge can also be followed by a verbless clause (a simple NP) indicating the purpose or use of a particular item:

- (35) Muri ni vai a kapepa ge a ni-hebi...
 next PASS weave ART coconut.mat IRR.3S ART NMLZ-close
 'Then a mat is woven (from coconut leaves) for (i.e. to function as) a door...' (t11:54)
- (36) *E* Leban i habi-a ne Lea a vora-kato ART.P L. 3S give-3S OBL.P L. ART servant-black ngatavine, a Silpa, ge ra-na е а vora vona. ART name-3S ART.P S. IRR.3S ART servant OBL.3s woman 'Leban also gave Lea a female slave, her name was Silpa, to be her servant.' (Gn 29:24)

c. Irrealis in dependent numeral and stative clauses

Numerals always follow the head noun and are preceded by i (non-humans) or *ala* (humans) in realis contexts (past and present), but by *ge* in irrealis contexts, specifically future and imperative. See §4.6.1 for further examples.

- (37) Si gi rakoli na parava ge lima.
 1PLI IRR rest OBL day IRR.3S five
 'Let's rest for five days.' (t12:9)
- (38) ...o rabalaki a tu-na meme ge rua. 2s kill ART child-3s goat IRR.3s two '...kill two young goats.' (Gn 27:9)

The same is true for dependent stative clauses in imperative sentences; they also take *ge* before the adjective.

- (39) Naha ni padoi-a tara ge mate.
 don't COMP touch-3S one IRR.3s die
 'Don't touch one (animal) that is dead.' (Lv 11:27)
- (40) Naha ni habi a varili ge kere ne huriki don't COMP give ART grass IRR.3S dry OBL.P PLUR
 'Don't give them dry grass.' (Ex 5:7)
- (41) O matai a malala ge kamumu hateka.
 2s look ART land IRR.3s good very
 'Look at the the very good land.' (Gn 47:6)

d. Following a negated noun phrase

Normally the word *uka* (*ma*) negates the predicate; see §8.1. In constituent negation the existence of an entity in a verbal clause is denied (often a subject noun phrase), usually translatable as 'nobody' or 'nothing'. The verb in such clauses takes *ge*, even though the reference can be to the past.

- (42) Pali e mengo i uka a viri ge ngutu vona.
 but ART.P cassowary 3S NEG ART person IRR.3S covet 3S.OBL
 'But as for Cassowary, no one coveted him.' (t5:26)
- (43) Uka tara bakovi ge ngar=oe.
 NEG one man IRR.3S want=2S
 'No one will want you.' (B:73)
- (44) I uka tara viri ge lohoka nau.
 3s NEG one person IRR.3s know 1s.OBL
 'Nobody knows me.' (Mt 11:27)

e. As deontic modal: 'should, ought to'

The deontic use of *ga* is comparable to the use of the future 'shall' in (archaic) English to issue commands: 'Thou shalt not steal.'

- (45) A koma bakovi ge hae-a a roho ge ART child man IRR.3S build-3S ART mens.house IRR.3S mahita vona. sleep 3S.OBL
 'A young man should build a men's house and sleep in it.' (t10:20)
- (46) A naro na ni-vasileki ge tabuli tura-ne mua ART behaviour OBL NMLZ-pray IRR.3S lie with-3S.P 2PL.F vakaroro. always
 'You should always pray.' (Lit. 'The behaviour/habit of praying must lie with you [plural] always.') (t10:27)
- (47) E huriki a ngava nga e huriki a ART.P PLUR ART word DEM.PLUR ART.P PLUR ART
 v<in>ara ni gi vara e huriki a koma karaba
 <NMLZ>teach PASS IRR teach ART.P PLUR ART child new
 vona.
 3S.OBL
 'These words are the instructions that should be taught to young

'These words are the instructions that should be taught to young children.' (t10:7)

f. In habitual conditional clauses

These clauses differ from 'normal' conditional clauses marked with *bara*, because there is no doubt that the condition is going to be fulfilled. In all the examples found so far (in one hortatory text only), this usage is followed by an imperative.

(48) *A bakovi dagi ge vaki a tavure, o bele* ART man big IRR.3S blow ART conch.shell 2s arrive *mai-a, o longo a ni-ta-na.* towards-3s 2s hear ART NMLZ-say-3s

'Whenever leaders blow the conch shell (to call a meeting), go to it and listen to the talk.' (t10:16)

- (49) A mosi ge bele taho, ioe o mata-kari kamumu.
 ART visitor IRR.3S arrive fall.on 2S.F 2S look-protect good
 'If/whenever a visitor comes to you, take good care of him.' (t10:22)
- (50) A viri ge rudu ioe, o longo-toto-a.
 ART person IRR.3S send 2S.F 2S hear-stretch-3S
 'When(ever) somebody sends you (on an errand), obey him.' (t10:19)

g. Residue

The following two examples of *ga*, both of them following the negator *uka*, do not neatly fit any of the above categories. It is possible that these are examples of habitual *ga* in negative clauses, or that they have a modal meaning.

(51) A ni-ramo, a ni-vali, a ni-tolo i uka ma ART NMLZ-clear ART NMLZ-cut ART NMLZ-chop 3S NEG NEG ge lobo na parava i taku. IRR.3S finish OBL day 3S one 'Clearing, cutting and chopping would not (cannot, could not?) be

finished in one day.' (t7:26)

(52) A ngatavine iea bara balimavo, i uka ma ge ART woman DEM MOD harvest.taro.early, 3S NEG NEG IRR.3S moro ma a uve, bara i muriki pali a hania. ripe yet ART root.crop MOD 3S overgrown PERF ART garden 'If that woman harvests early, when the taro is not yet ripe, it will (quickly) be an overgrown garden.' (t7:31)

5.7.3 Modal bara

Bara is the second modal particle which occurs preverbally in slot -4 of the verbal complex, before the subject markers. In some people's speech (or in some subdialects) it may merge with the following 3s and 2s subject prefixes leading to forms such as *bari* (< *bara i*) and *boro* (< *bara o*). The form *bari* also occurs before passive *ni*. Such forms are quite frequent in Bosco (1979), but are not acceptable to our consultants, especially in written style.

The meaning of *bara* relates to both tense (future) and epistemic modality. Its main usages are a) to mark non-intentional future; b) to indicate apprehensive modality; c) in conditional sentences, and d) to mark past habitual action.

a. Non-intentional future

Bara ranges from a weak future possibility ('he might come') to virtual certainty ('the sun will rise'), but possibly with the absence of volition on the part of the subject or speaker. Translation equivalents are *will, could, may, might, probably, possibly,* but it should be stessed that *bara* covers the whole spectrum from possibility to virtual certainty. It is therefore not quite right to always give the meaning 'X might happen', 'Y will probably go'. If volition is involved ('I intend to, I plan to'), then *ga* is used instead. This is usually the subject's intention/volition, but sometimes also the speaker's. The difference between *bara* and *ge* is seen in the following pair:

- (53) a. E balo-gu bara i valai. ART.P aunt-1s MOD 3s come
 'My aunt will/may/might come.' (elic)
 b. E balo-gu ge valai.
 - b. *E* balo-gu **ge** valai. ART.P aunt-1s IRR.3s come
 - 'My aunt will come (= intends to come).' (elic)

Example (53)a indicates some uncertainty on the part of the speaker about the possible realisation of the event, more so than (53)b. (53)b stresses the

subject's intention and volition to carry out the action, which the speaker takes as truth. Whether or not the aunt will actually come is of course not predictable. The same pattern can be seen in the following (elicited) pair:

- (54) a. A vik girira ga vakaru vomu ranga moni.
 ART week later IRR.1S send 2S.OBL some money
 'Next week I will send you some money'. (elic)
 - b. *A vik girira bara vakaru vomu ranga moni.* ART week later MOD send 2S.OBL some money 'Next I week I will/may/might send you some money.' (elic)

Example (54)a is a clear promise showing the speaker's intent; the hearer can be fairly certain he will receive the money. Example (54)b is a relatively vague promise, leaving the hearer in some doubt.

However, *bara* by itself does not mean uncertainty. The following examples illustrate that *bara* can be used for a definite future:

- (55) *A haro bara i rike kuduvi.* ART sun MOD 3S go.up tomorrow 'The sun will come up tomorrow.' (elic)
- (56) Na pida girira bara i va.
 OBL year later MOD 3s four
 'Next year he will be four (years old).' (conv)

Example (55) does not mean 'The sun may/might come up.' *Ge* is impossible in this sentence, because the sun is not a volitional agent. In other words, it is the combination of 'future' with 'intent and volition' that makes *ge* stronger in certain contexts. With a non-volitional agent, *bara* may indicate a definite future, as in the examples above.

Sometimes the two appear to be almost used interchangeably, as in the following (translated) sentence, where there is no discernable difference in meaning between *bara* and *ga*.

(57) Ngane bara ruduraha ioe, ga lili tala ioe na now MOD.1S curse 2S.F IRR.1s chase go.out 2S.F OBL malala. ground
'Now I will curse you and I will chase you away from the ground/earth.' (Gn 4:11)

Interestingly, it appears that *bara* is not used in questions. In questions with future reference it is always *ge* which is used, not *bara*. The reason for this is not quite clear, but possibly the issue here is that in questions the focus is on the intent of the subject, not on the questioner's opinion.

(58) *E tama-mu* **ge** valai kuduvi? ART.P father-2S IRR.3S come tomorrow 'Is your father coming tomorrow?' (elic)

The same question with *bara* is ungrammatical: **E tama-mu bara i valai kuduvi?* But the answer can contain either *bara* or *ge: Bara i valai* 'He will/may/might come' or *Ge valai* 'He will come.'

This pattern is also observed in the following excerpt from text 8, where (59) is an indirect question with ge, (60) the answer with bara, and (62) a self-addressed question with ge.

(59) Lakea e Brent i nane-a a pilot na a ra taim then ART.P B. 3S ask-3S ART pilot OBL ART what time ge puru a balus.
IRR.3S go.down ART plane

'So Brent asked the pilot at what time the plane would land.' (t8:18)

(60) Lakea i ta rike a pilot, "Bara i puru na then 3s speak go.up ART pilot MOD 3s go.down OBL 1:00 pm a balus."
1:00 p.m. ART plane
'Then the pilot said, "The plane will land at 1:00 p.m." (t8:19)

- (61) Lakea mete made, mete dava. then 1PAE sit 1PAE wait 'Then we sat and waited.' (t8:20)
- (62) Garika ge puru a balus?
 when IRR.3S go.down ART plane
 'When is the plane going to land?' (t8:21)

b. Apprehensive

The use of *bara* in apprehensive mood signals a warning to the hearer, alerting him or her to risks, dangers or other undesired consequences. It is the equivalent of Tok Pisin *nogut*, and the same effect can be reached by means of the modal combination *ma go* (see §5.7.4). Apprehensive *bara* usually follows an imperative and normally has a second-person orientation.

- (63) Naha ni nugu-a, bara o mate.
 don't COMP touch-3s MOD 2s die
 'Don't touch it, you will/might die!' (Tok Pisin nogut yu dai.) (conv)
- (64) Bari ni todo balaka taku kunana.
 MOD PASS swallow time one just
 (Watch out for crocodiles.) 'You could be swallowed in just one bite.'
 (dict)

If the second person *bara o mate* in (63) would be changed to *bara i* (or *bari*) *mate* the resulting meaning is 'he/it will die; he/it might die.' If *ge mate* was used, the meaning becomes 'let him/it die', as if the speaker wants him/it to die.

In some cases the contrast between the apprehensive and the nonintentional future is blurred, as in the following instance:

(65) *Si* gi lakea ngane, mua naha ni ta, **bara** si 1PLI IRR go now 2PL.F don't COMP talk MOD 1PLI
vakorokoro a livoa. run.into ART wild.pig

'From now on while we are walking, you must not talk, (because) we might run into wild pigs.' (B:60)

c. In conditional sentences

Bara is used both in the conditional clause (the protasis) and in the main clause (the apodosis):

- (66) Bara te laho laho, bara te velu liu.
 MOD 1PAI walk walk MOD 1PAI lost completely
 'If we keep walking, we might get completely lost.' (t20:21)
- (67) Pali ioe bara o kori-a, bara i vivi.
 but 2S.F MOD 2S help-3S MOD 3S happy
 'But if you help him, he will be happy.' (B:48)
- (68) Bara o panaho, bara ni longo hale a ra-mu.
 MOD 2s steal 2s PASS hear bad ART name-2s
 'If you steal, people will speak badly of you.' (Lit. '...your name will be heard badly.') (B:73)
- (69) *Ioe bara o nane-a, bari habi-a vomu.*2S.F MOD 2S ask-3S MOD give-3S 2S.OBL
 'If you ask him, he will give it to you.' (B:48)

Notice that it is not possible to have *bara* in the conditional clause and *ge* in the main clause, in order to indicate stronger volition. An alternative to (69) with *ge* in the apodosis is ungrammatical: **Ioe bara o nane-a, ge habi-a vomu*. In order to make this grammatical, *bara* must be deleted from the protasis: *O nane-a, ge habi-a vomu* 'If you ask him, he will give it to you.'

The same double *bara* is seen in contrafactual conditionals (contrary-to-truth situations; see also §8.4.3):

(70) Bara i uka vala ravi, bara mete rehi.
MOD 3S NEG rain yesterday MOD 1PAE play
'If it hadn't rained yesterday, we would have played.' (elic)

d. Past habitual

Bara is also found in contexts that describe events that happened habitually or at least a number of times in the past. When there is an introductory temporal clause, this is unmarked for modality, *bara* occurring in the main clause. The English modal auxiliary 'would' is a good translation equivalent.

- (71) A maka tanga lobo ru vago polo sirula vona, а ART PLUR village all 3D pole go.past 3S.OBL ART girl ngutu vona kureko. bara ri е MOD 3PL covet 3S.OBL ART.P chicken 'Every village they poled past, the girls would covet Chicken.' (t5:25)loho lege (72) Pali na parava ranga **bara** i vona а
- (72) Pali na parava ranga bara i loho lege vona a but OBL day some MOD 3s think around 3s.OBL ART v<in>ara ne Ioanes.
 <NMLZ>teaching OBL.P I.

'But on some days he would worry about John's teaching.' (Mk 5:20)

5.7.4 Modal *ma*

Modal ma, found in position -5 of the verbal complex, is more elusive than ga or bara, but the following three senses can tentatively be distinguished: a) apprehensive; b) hopeless desire; c) speculation and inference. It is also worth pointing out that modal ma is not the only element ma in the Bola language. Three homophonous forms are:

- the particle *ma* as part of the negative verb *uka ma* 'no, not' (see §8.1);
- the aspectual adverb *ma* (see §7.8.);

• the adverb of degree *ma* meaning 'so', occuring with adjectives in questions (see §8.3.2);

a. Apprehensive

In all the examples where ma indicates the apprehensive, it is followed by the modal particle ge (3s) or go (2s). The difference with bara in apprehensive clauses (if any) is not clear.

- (73) *Ma* go boru! Puru! MOD IRR.2S fall go.down 'Look out or you will fall down! Come down!'/ 'Watch out lest you fall down! Come down!' (conv) (74) *A* niu! Ma ge taho ioe! ART coconut MOD IRR.3S fall.on 2S.F 'A coconut! Look out it does not fall on you!' (elic) Kilu. luhoi tou, bakovi o (75) **Ma** go tou а ge LOC K.
 - MOD IRR.2s think 3PA.F IRR.3s 3PA.F ART man LOC K 'Be careful you don't think that they are from Kilu.'/ 'You shouldn't think that they are from Kilu.' (t14:3)
- (76) O bole-a a gilala vomu, ma ge boru a 2s take/get-3s ART umbrella 2s.OBL MOD IRR.3s fall ART vala ge padi ioe. rain IRR.3s shoot 2s.F
 'Take your umbrella, you might get rained on.' (Lit. '... lest the rain fall and shoot/spear you.') (s.u.)

b. Hopeless desire

The particle ma can also introduce a hopeless desire, an unrealisable longing for something that the speaker knows is impossible to attain. Translation equivalents are 'If only I could...', 'How I wish that....' With 1s subject marker a merges with ma; with other person-number combinations the subject marker

is present, e.g. *ma mi* in (78). The adverb *tavula* 'for no purpose, for no particular reason' is present in all three examples, translated here as 'just'. The exclamation *oio* is found at the beginning in two of the five examples:

- (77) Oio, ma kani tavule-a a kureko iea.
 oh MOD.1s eat nothing-3s ART chicken DEM
 'Oh how I wish I could just eat that chicken.' (elic)
- (78) Oio, ma mi parangi tavula vona a bakovi i vago oh MOD 1PLE marry nothing 3S.OBL ART man 3S pole muga e!
 front yes
 Oh how we wish we could just marry the man who is is poling in

'Oh, how we wish we could just marry the man who is is poling in the front (of the boat), yes! (t5:10)

- (79) Ma rike tavula vona a balus kuduvi.
 MOD.1S go.up nothing 3S.OBL ART plan tomorrow
 'I really wish I could just catch the plane tomorrow (but I have to stay here).' (elic)
- (80) Muholi ma o kani-a mona a kani-a nau. true MOD 2s eat-3s today ART eat-NMLZ 1s.OBL
 'Forget about eating my food today.'/ 'You wish you could eat my food today, but you don't have a chance.' (t5:83)
- (81) Muholi ma o parangi nau! true MOD 2s marry 1S.OBL
 (Girl to boy) 'Forget about marrying me!' (conv)

Example (80) was explained as a taunt (*vakakiririu*) from cassowary towards wild fowl. Wild fowl is hungry, discovers that cassowary has some food, begs for it, but this is the response that he gets from cassowary. In this case the 'hopeless desire' is not the speaker's, but the addressee's.

c. Speculation or inference

In combination with *ga* and referring to the future, *ma* expresses the speaker's guess or speculation about what might happen, or it is an inference about a possibility. There is no strong factual basis for the proposition. So far, we have found only two examples of this, both of which came up during elicitation sessions. The last two (translated) examples illustrate either speculation or an inferential meaning.

- (82) Ma ge valai koea kuduvi.
 MOD IRR.3S come here tomorrow
 'He might come here tomorrow'. (elic)
- (83) Ra kai, ma ni gi tolo kuduvi.
 DEF tree MOD PASS IRR chop tomorrow
 'That tree, it might be cut down tomorrow.' (elic)
- (84) Ma ga agelo vona.
 MOD IRR angel 3S.OBL
 'It might/must be his angel.' (Ac 12:25)
- (85) Ma ge tahoka pali tara viri ge habi a MOD IRR.3 have PERF one person IRR.3S give ART maki ni kani vona. something QUAL eat 3S.OBL
 'There must have been someone to give him food.' (Jn 4:33)

The final example of *ma* is not completely clear, but it seems to mark deontic modality 'should, supposed to'.

(86) O lavo-gu, ma muri-mu vavo na dari.
oh in.law-1S MOD place-2S out OBL sea
'Hey in-law (= turtle), your place should be out in the ocean.'
Or: 'Hey in-law, you are supposed to be out in the ocean.' (t5:71)

5.7.5 Modal *ta*

The modal particle ta, also in position -5, is used in two ways: a) realistic intent or expectation and b) contrafactual. In the first use ta always occurs in combination with ga. In this combination, ta and ga precede the subject proclitics in the singular (1s a, 2s o, 3s i) which merge with ga leading to the forms ga, go and ge. In the non-singular forms, ta precedes the subject marker and ga follows it, harmonising its vowel to the last vowel of the subject marker. The resulting forms are ge, gi, gu and go. For all the non-singular forms there are variants with a double occurrence of ga. First person dual exclusive, for example has both ta miri gi and ta ga miri gi. The longer forms appear to be rarer, and may be falling out of use. Table 5.3 illustrates most of the combinations.

		free	subject	<i>ta ga</i> + subject
sg	1	iau	а	ta ga
	2	ioe	0	ta go
	3	ia	i	ta ge
dual	1 ex	maria	miri	ta miri gi ~ ta ga miri gi
	1 in	tarua	tu	ta tu gu ~ ta ga tu gu
	2	marua	muru	ta muru gu ~ ta ga muru gu
	3	rua	ru	ta ru gu ~ ta ga ru gu
paucal	1 ex	mateu	mete	ta mete ge ~ ta ga mete ge
	1 in	teu	te	ta te ge ~ ta ga te ge
	2	matou	moto	ta moto go ~ ta ga moto go
	3	tou	to	ta to go ~ ta ga to go
pl	1 ex	mia	mi	ta mi gi ~ ta ga mi gi
	1 in	hita	si	ta si gi ~ ta ga si gi
	2	тиа	ти	ta mu gu ~ ta ga mu gu
	3	ria	ri	ta ri gi ~ ta ga ri gi

TABLE 5.3 MODAL TA GA COMBINATIONS

a. Realistic intent/expectation

In present-tense contexts the combination *ta ga* indicates an intention (often a desire, but sometimes an expectation), that is tempered by reality: 'I'd like to, I intend to (but I realise it may not happen)'. Compare the following (elicited) contrastive set of a question and three possible answers.

- (87) Go loko-vai?IRR.2S go-where'Where are you going?' (conv)
- (88) a. Iau ta ga lakea o Kimhe LOC K. 1S.F MOD IRR.1S go 'I'd like to go to Kimbe (but something might happen).' Kimbe. b. Iau ga lakea o 1S.F IRR.1s go LOC K. 'I will/intend to go to Kimbe.' c. Iau bara lakea o Kimhe. 1S.F MOD go LOC K.

'I will/may/might go to Kimbe.'

The following contrastive pair (again elicited) is also illustrative:

- (89) a. A valai ngane ta ga matai ioe. 1s come now MOD IRR.1s see 2s.F 'I've come now to see you.'/'I've come and I'd like to see you (if you have time).'
 b. A valai ngane ga matai ioe.
 - 1s come now IRR.1s see 2s.F

'I've come now to see you.' / 'I want to see you.' (more urgent)

Especially in narrative contexts, the modal combination *ta ga* often signals that something was about to happen or was expected to occur soon, but did in fact not happen, as something unexpected changed the situation. Quite

frequently an imminent aspect is present, but this does not seem to be part of the core meaning of *ta ga*. Translation equivalents include 'wanted to', 'was/were about to', or 'tried to'.

- (90) Ru bele ngane, ta ru gu masi-a, lakea i uka vonga.
 3D arrive now MOD 3D IRR see-3S then 3S NEG there
 'Then they arrived, they wanted/tried to see him, but he wasn't there.' (t14:27-m)
- (91) Lakea ta ga mete valai, lakea a taua tara i then MOD IRR 1PAE come then ART white.person one 3S pori valai. go.out come

'So we were about to come back, but then another white man came out (and so we didn't go back yet).' (t8:24)

There are also various examples from texts where the action did actually happen, even though the verb complex contains *ta ga*:

- (92) Ta ga tuverei na tahuna iau a pe a skul.
 MOD IRR.1S story OBL time 1S.F 1S leave ART school
 'I'd like to tell the story of the time when I left school.' (t28:2) (The narrator proceeds to tell the full story).
- (93) Miri sike, lakea miri vano, ta miri gi pango...
 1PLE go.up then 1PLE go MOD 1PLE IRR hunt
 'We went up, then we kept going, we were going to hunt...' (t13:1)
- (94) Ra robo o rudu lakea mia vona ta ga mi gi DEF bush 2s send go 1PLE.F 3S.OBL MOD IRR 1PLE IRR masi-a, mi masi-a pali. look-3s 1PLE look-3s PERF

'The land that you sent us to explore (lit. see), we have explored it already.' (Nm 13:27)

In the following three examples the combination *ta ga ri gi* (with double irrealis marking) is found in an object complement clause following verbs of mental action: *ngaru* 'want', *kilu* 'regret' and *marikoi* 'not like, not want.' In all cases *ta ga ri gi* indicates the impossibility for the event to be fulfilled.

(95) Huriki bakovi a ngatavine ri valai ri tutu lidi-lidi 3PL come 3PL hit PLUR man ART woman **RED-knock** ri ngaru **ta** ga ri gi dili. па aga, OBL canoe, 3PL want MOD IRR 3PL IRR go.in

'The men and women came and knocked on the canoe (= Noah's ark), they wanted to go inside (but they couldn't).' (t42:7)

- (96) *Ri kilu mai-a a bakovi i vago muga ta ga* 3PL regret towards-3s ART man 3s pole front MOD IRR
 - ri gi parangi.
 - 3PL IRR marry

'They regretted towards the man (= they regretted they were unable to get the man) who was poling in front, they wanted to marry him (but were unable).' (t5:23)

(97) *I marikoi vona e huriki a manu ta ga ri gi* 3s not.like 3s.oBL ART.P PLUR ART fish MOD IRR 3PL IRR *boko polo-a.* carry go.across-3s

'All the fish were unwilling to carry him (cassowary) across (to land).' (t5:74)

b. Contrary-to-fact

Following verbs of speaking or thinking ta introduces a NP or a clause that is or turns out to be factually untrue, as in the following examples. In this case ta occurs without ga; see also §9.4.1.

- (98) E kina-na i luhoi ta a boro...
 ART.P mother-3s 3s think MOD ART pig
 'His mother thought it was a pig (... but it wasn't)' (t25:12)
- (99) A luhoi ta ga mate.
 1s think MOD IRR.1s die
 'I thought I was going to die.' (2Co 1:8)
- (100) Iau a paha-daki ta i dili pali na benk a 1S.F ART step.on-suppose MOD 3S go.in PERF OBL bank ART moni nau. Pali i uka. money 1S.OBL but 3S NEG

'I assumed my money had already gone into the bank. But it hadn't.' (dict)

(101) Na tahuna ri masi-a i laho langa na dari, ri
OBL time 3PL see-3S 3S walk on OBL sea 3PL
paha-luhoi ta ia a hanitu.
step.on-think MOD 3S ART evil.spirit
'When they saw him walking on the sea, they thought he was an evil

5.7.6 Adverbs

spirit.' (Mk 6:49)

The typical position of adverbs within the verbal complex is at position +3, as shown by the fact that they can receive the 3s object suffix -*a*, which is at position +4. Most of these are manner, degree or aspectual adverbs, including a few adjectives functioning adverbially. Temporal and locative adverbs do not normally occur in this position, and neither do the aspectual adverbs *pali* 'already' and *ma* 'yet', which follow the object in position +5. The list below is a non-exhaustive list of adverbs that frequently occur in the verb complex. (Notice that the sequence of stem-final a + suffix -a results in -ea, e.g. *hateka* > *hateke-a; kunana* > *kunane-a*).

hale 'b	ad, badly'		
<i>hateka</i> 'v	'very; really, very much' (also an adjective 'strong')		
kamumu 'g	'good, well'		
kunana ʻju	ust, only'		
<i>lobo</i> 'c	'completely, finish; all'		
<i>muga</i> 'b	efore, earlier'		
palupu 'to	ogether' (also an adjective 'same, similar')		
<i>tabu</i> 'a	gain'		
taro 'fi	irst'		
tavula 'fe	or no reason, without anything' (Tok Pisin nating)		
(102) <i>Teu te luh</i> 1PAI.F 1PAI thin 'We are thinking	•		
1S.F 1S want	hateka nilakea oKimbe mona.veryCOMP goLOCK.todaygo to Kimbe today.' (conv)		
ART.P PLUR al	<i>abo ri luhoi hateke-a a v<in>ara iea.</in></i> APL think very-3S ART <nmlz>teach DEM eved that law/rule.' (t7:4)</nmlz>		
ART leader 3S	<i>ngaru hateke-a a vora vona.</i> like very-3s ART servant 3s.OBL ly liked his servant.' (Lk 7:2)		
2PL look-protec	<i>kamumu-a a bakovi iea!</i> et good-3s ART man DEM e this man!' (t6:35)		
	<i>toto</i> kunane-a <i>a ngava-mu</i> . retch just-3S ART mouth-2S obey your word.' (Gn 41:40)		

- (108) To gutu lobo-a.
 3PA cook finish/all-3s
 'They finished cooking it.' Or 'They cooked all of it.' (t29:10)
- (109) *A kina-na miri padi muge-a.* ART mother-3S 1DE shoot first-3S 'We speared the mother (pig) first.' (t15:9)
- (110) I gale palupu e huriki na tanga.
 3s call together ART.P PLUR OBL village
 'He called together the people of the village.' (Gn 29:22)
- (111) Ri kaloho rike tabu-a a kulu...
 3PL carry go.up again-3S ART breadfruit
 'They picked the breadfruit tree up again...' (t9:7))
- (112) *Te ge matai taro a vilu*. 1PAI IRR see first ART wind 'We will first see the wind.'(t16:12)
- (113) Naha ni dili tavula na tabeke na viri tara.
 don't COMP go.in nothing OBL part OBL person other
 'Don't go into other people's area for no reason.' (t10:24)

There is one example where the 3s object -*a* occurs twice, both on the verb *toha* and on the adverb *kunana*.

(114) A luhoi iau, ga tohe-a kunane-a.
1s think 1S.F IRR.1s try-3s just-3s
'I thought that I would just try it.' (t31:15)

Combinations of adverbs are also possible, though they are very rare in texts. The following example illustrates the combination of a manner and a focal adverb.

(115) *Ri ru puru hale tabu-a*.
3PL put go.down bad again-3s
'They put it down wrong again.' (elic)

The aspectual adverbs *ma* 'yet' and *pali* 'already' which occur in slot +5, following the object pronouns, are illustrated in the following examples:

- (116) I uka ma ri padi mate-a ma.
 3s NEG NEG 3PL shoot die-3s yet
 'They have not yet killed it (by spearing it).' (elic)
- (117) I uka ma mu mata-kilala iau ma.
 3s NEG NEG 2PL look-clear 1S.F yet
 'You still do not recognise me.' (Mk 16:9)
- (118) I vano pali e huriki.
 3s go PERF ART.P PLUR
 'They have already gone.' (dict)
- (119) *Ri tanu-a pali*. 3PL bury-3S PERF

'They have already buried him.' (dict)

- (120)...*muru rata kamumu iau pali.* 2D do good 1S.F PERF
 - '... the two of you have done good to me.' (Gn 19:19)

It is interesting to observe that *pali* and *ma* are the only adverbs to follow the object slot. There is apparently some language-internal pressure for at least *pali* to move to the same place as the other adverbs (position +3), as children are said to frequently utter clauses such as *To gutu pali-a* [3PA cook PERF-3S] 'They have already cooked it', instead of the 'correct' *To gutu-a pali*. Older speakers react strongly to such 'mistakes'.

6. Prepositional phrases

Bola only has four 'real' prepositions (*na*, *ne*, *o* and *manga*), a preposition-like noun (*tura*), and three oblique pronouns. The first two real prepositions are a closely related pair, *na* occuring before common nouns and *ne* before proper nouns (this include pronouns, see §4.2.2). Historically *ne* can be viewed as a merger of *na* and the personal article *e*. Prepositional phrases introduced by *na* or *ne* bear a wide variety of semantic roles, illustrated in §6.1.

The third preposition o is used before place names when the place functions as a locative argument in a predication (§6.2), while the preposition *manga* introduces comparisons (§6.3). The preposition-like noun *tura* 'with' is treated in §6.4, while the oblique pronominal set *nau*, *vomu* and *vona* are discussed in §6.5.

6.1 The prepositions *na* and *ne*

Since these two multi-purpose prepositions are semantically very similar, they are treated together. *Na* is glossed OBL, and *ne* is glossed OBL.P (oblique proper). The semantic functions coded by these prepositions range widely at the clause level: location, both physical and temporal, goal, instrument, recipient and cause. At the phrasal level, they normally mark possession (with nouns and non-singular pronouns, see §4.8) or indicate a characteristic feature.

a. Physical location

(1)	Ε	tari-gu	i	made	na	ruma.
	ART.P	younger.brother-1s	3s	sit	OBL	house
'My y	ounger brother is in	the 1	house.'	(dict))	

- (2) Muri i taparaki puru-a na dala...
 next 3s put.down go.down-3s OBL road
 'Then he put it (the cat) down on the road...' (t1:32)
- (3) A made ne tata rua e nana.
 1s sit OBL.P my.father two ART.P my.mother
 'I was staying with my father and mother.' (dict)

More specific locations ('over, under, between, behind, before') are expressed by using locative adverbs such as *polo-meli* 'above' and *polo-lilo* 'in, inside' (see §7.7.1). Alternatively, one can use a number of locative nouns that take a possessive suffix (usually 3s *-na*), preceded by the oblique preposition *na*.

	<i>na taru-na</i> 'un	der, below'				
	na daha-na 'on	'on the side/edge of, beside, next to' 'in the middle of, between'				
	na kurukuru-na 'in					
	na ngala-na 'in	front of, before'				
	na bito-na 'at	the back of, behind'				
(4)	a made dili na	taru-na roho	a malo.			
	1s sit go.in OBL	under-3s mens.house	1s rest			
	"I sat down under the	men's house and rested	l.' (t41:)			
(5)	I valai tabukoi na	daha-na ngatavine				
	3s come close OBI	0	,			
	'He came close beside	the woman' (Lk 4:39))			
(6)	I pesi na kuruku	r u-ne ria.				
	3s stand OBL middle-	-3s.p 3pl.f				
	'He stood among them	.' (Lk 24:36)				

b. Direction or goal

- (7) *Ri pori na dari.*3PL go.out OBL sea
 'They went out to the ocean.' (t1:7)
- (8) E Roa i aku rike a namo-na niu na ART.P R. 3S scoop go.up ART juice-3S coconut OBL rau. banana.leaf

'Roa dished up some coconut grease (and put it) on a banana leaf.' (dict)

c. Temporal location

- (9) I mate a gare, ri rakoli na haro i lima.
 3s die ART old.person 3PL rest OBL sun 3s five
 'When the old man died, they rested for five days.' (dict)
- (10) Na parava tara, i hadongo e Kulu, i vano i pango.
 OBL day one 3s wake.up ART.P K. 3s go 3s hunt
 'One day, Kulu woke up and went hunting.' (dict)
- (11) A ruma nau i nono lobo na rodo.
 ART house 1S.OBL 3S burn finish OBL night
 'My house burned down during the night.' (dict-m)
- (12) *Na tahuna i longo-a, i tangi.* OBL time 3S hear-3S 3S cry 'When he heard it, he cried.' (dict)

d. Instrument

(13) E tari-gu i tolo a kai na kira.
ART.P younger.brother-1s 3s chop ART tree OBL axe
'My younger brother chopped trees with an axe.' (elic)

e. Recipient

(14) *O habi-a* **ne** tama-mu! 2s give-3s OBL.P father-2s 'Give it to your father!' (elic)

f. Cause

- (15) Lakea i dedo na ngarava vona a gare.
 then 3s groan OBL sore 3s.OBL ART old.person
 'So the old woman groaned about her sore.' (t4:12)
- (16) ...bara i mate na vitolo-a.
 MOD 3s die OBL hungry-NMLZ
 '...he will die of hunger.' (t7:3)

g. Possession

- (17) aga ne ria canoe OBL.P 3PL.F 'their canoe' (conv)
- (18) *a maki ni kani ne mia* ART something QUAL eat OBL.P 1PLE 'our food' / 'something to eat for us' (t1:6)

h. Characteristic

The use of *na / ne* to characterise a person occurs only within NPs, not at the clause level. This is similar to Tok Pisin *bilong* 'of' as in *man bilong pait* [man POSS fight] 'a fighting man' or *meri bilong toktok* [woman POSS speak] 'a talkative woman'.

(19) *a bakovi* **na** va-bi-nga ART man OBL REC-hit-NMLZ 'a man who likes to fight¹' (t5:5)

(20) *a bakovi* **na** *ralo-va* ART man OBL dance-NMLZ 'a man who likes to dance' (t5:6)

This use of characterising a person or an object by means of a phrase introduced by na can be compared to the qualifying relative clauses introduced by ni, discussed in §9.5.

i. Others

Of a number of oblique NPs, the semantic function is not so easy to determine. These include the 'themes' of verbs of speaking, dreaming, thinking etc.

- (21) A vurena na tanga nau.
 1s dream OBL village 1S.OBL
 'I dreamed about my village.' (t6:17)
- (22) A nuverei ne tu-na duku.
 ART story OBL.P child-3S orphan
 'The story of/about the orphan child.' (t3:32)
- (23) nahea mu gu luhoi lege lege na ni-made koea na must.not 2PL IRR think around around OBL NMLZ-sit here OBL malala.
 ground

'Do not worry about your life here on earth.' (Lk 21:34)

¹ The root word for 'to hit' is *ubi*. In the derived noun *va-bi-nga* 'fight' the *u* is deleted (see $\S4.3.1$ sub c).

6.2 The preposition *o*

The locative preposition o is always followed by a place name, and can be considered a portmanteau morpheme which fuses a proper article and an oblique prepostion. (A rare variant *io* occurs in one text.) Depending on the verb (and extratextual information), o can be translated as 'at, in, on, from'. The following pair contrasts the proper article e and the preposition o:

(24) a. A masi-a e Garu. 1s see-3s ART.P G. 'I saw Garu.' (Garu is either a person or a place.) (elic)
b. A masi-a o Garu. 1s see-3s LOC G. 'I saw him/her/it at Garu.' (Garu is a place.) (elic)

Other examples:

- (25) E Eki i made o Walidi.
 ART.P E. 3S sit LOC W.
 'Eki lives at Walindi.' (dict)
- (26) To lakea o Bulu
 3PA go LOC B.
 'They went to Bulu.' (dict)
- (27) E tari-gu i valai o Kimbe mona.
 ART.P younger.brother-1s 3s come LOC K. today
 'My younger brother came from Kimbe today.' (elic)
- (28) Ru vago polo o Garu.
 3D pole go.past LOC G.
 'They poled past Garu.' (t5:8)

Less frequently a PP introduced by *o* functions as a modifier to a noun, used to indicate place of origin:

- (29) *Iau a bakovi o Talasea*.
 15.F ART man LOC T.
 'I am a man from Talasea.' (conv)
- (30) E Sarai i bole-a a vora-kato vona, a ART.P S. 3S take/get-3S ART servant-black 3S.OBL ART ngatavine o Egipto... woman LOC E.
 'Sarai took her slave, the woman from Egypt...' (Gn 16:3)

6.3 The preposition manga 'like'

The preposition *manga* 'like, as' introduces a comparison. (There is also a homophonous adjective *manga*, meaning 'empty (of coconuts), stupid, crazy'.)

- (31) Lakea i taki iau ta **manga** koma... then 3s say 1s.F MOD like child 'Then he told me I was like a child...' (t6:27)
- (32) Bara o mata manga gare.
 MOD 2s look like old.person
 'You will look like an old person.' (B:71)
- (33) *A keva i ma-pulo i vururu manga a dara.* ART moon 3S STAT-change 3S red like ART blood 'The moon changed (and) became red like blood.' (Rv 6:12)

However, in many cases *manga* functions as a verb 'to be like, as if, to look like', preceded by the subject marker *i*.

(34) A hate-gu i rike puru i manga ge boru tala ART liver-1s 3s go.up go.down 3s like IRR.3s fall go.out na ngava-gu. OBL mouth-1s
'My heart (lit. my liver) went up and down as if it would fall out of my mouth.' (t33:27)

(35) A hanitu i pulo-a i manga kopa.
ART evil.spirit 3S change-3S 3S like bat
'The evil spirit changed itself and looked like a bat.' (t40:5)

6.4 The prepositional noun tura

The noun *tura* 'friend' also functions as a bound prepositional noun *tura*-, marking accompaniment ('with, together with') when it is affixed with possessive suffixes. The forms are *tura-gu* 'with me', *tura-mu* 'with you', *tura-na* and *tura-ne*. *Tura-na* refers to a third person singular ('with him/her/it') or is followed by a full noun phrase. *Tura-ne* is only followed by non-singular pronouns and proper nouns.

- (36) *I vano tura-gu e sisi.*38 go with-18 ART.P my.grandparent
 'My grandmother went with me.' (dict)
- (37) *A Vure i tura-mu na maki lobo o rata.* ART God 3s with-2s OBL PLUR all 2s do 'God is with you in everything you do.' (Gn 21:22)
- (38) A rehi tura-na e huriki.
 1s play with-3s ART.P PLUR
 'I played with them.' (dict)

- (39) *Ri panaho-a kuli-na ligo ne rua, ri vano tura-na.*3PL steal-3S skin-3S dog OBL.P 3D.F 3PL go with-3S
 'They stole the dog's skin of the two of them and went off with it.' (dict)
- (40) I uka ma a ta tura-ne tou.
 3s NEG NEG 1s talk with-3s.P 3PA.F
 'I didn't talk with them.' (t6:6)
- (41) *Lakea a ngatavine tara i vuka vudi tura-ne tu-na.* then ART woman one 3s open banana with-3s.P child-3s 'Then the woman peeled a banana together with her child.' (t21:3)
- (42) A made ngane tura-ne pater.
 1s live now with-3s.P priest
 'I then lived with the priest.' (t28:11)

6.5 The oblique pronouns nau, vomu and vona

Bola has three singular oblique pronouns (1s *nau*, 2s *vomu* and 3s *vona*) which function in two ways. The first function is to mark indirect possession for nouns that are alienably possessed. Recall from §4.8.1 that with singular possessors direct possession is marked by possessive suffixes, but indirect possession by means of oblique pronouns. The following pairs are illustrative:

(43)	a	mata-gu,	a	mata-mu,	a	mata-na
	ART	eye-1s	ART	eye-2s,	ART	eye-3s
	'my eyes, your eyes, his/her eyes' (elic)					

(44) *a aga nau, a aga vomu, a aga vona* ART canoe 1S.OBL ART canoe 2S.OBL ART canoe 3S.OBL 'my canoe, your canoe, his/her canoe' (elic)

With non-singular pronominal possessors, Bola makes a subtle distinction between alienable and inalienable possession, both being marked by means of

a morpheme ne which is a suffix in the case of inalienable possession, and a preposition in the case of alienable possession. The difference surfaces as a stress distinction (see §4.8.1).

The second use of the oblique pronouns is to mark a variety of semantic functions. For 1s *nau* and 2s *vomu* these are typically recipient, addressee and theme ('to me/you, for me/you, about me/you'), as shown in the following examples:

- (45) O rata a naro hale nau.
 2s do ART behaviour bad 1s.OBL
 'You do bad to me.' (Lit. 'You do a bad behaviour to me.') (t2:40)
- (46) Ia i vakasiri a ruma vona nau.
 3S.F 3S show ART house 3S.OBL 1S.OBL
 'He showed his house to me.' (elic)
- (47) Moto bele nau.
 2PA arrive 1S.OBL
 'You (paucal) have come to me.' (Gn 18:5)
- (48) O nane-a, ge habi-a vomu.
 2s ask-3s IRR.3s give-3s 2s.OBL
 'I you ask her, she will give (it) to you' (elic)
- (49) O made puru, a tahoka a ngava vomu.
 2s sit go.down 1s have ART mouth 2s.OBL
 'Please sit down, I have something to say to you'.
 (Lit. 'Sit down, I have a mouth/word for you'.) (Rt 4:1)
- (50) *Naha ni parangi pado, vuhuna bari loho tavula* don't COMP marry unripe because MOD.3s think nothing

vomu a tura-mu.
2S.OBL ART friend-2S
'Don't marry young, because your friends will think nothing of you.' (B:71)

However, the 3s form *vona* shows a wider array of functions. Not only does it encode recipient, addressee or theme, but also location, instrument and cause. In such cases it refers back to an entity that has been mentioned in the immediately preceding discourse, as illustrated below.

(51) E tata i vali a dungi, i vilagu a
ART.P my.father 3S cut ART k.o.ginger.plant 3S wrap ART manu vona.
fish 3S.OBL
'Wu fother out some dungi leaves and urganeed the fish in them '

'My father cut some *dungi* leaves, and wrapped the fish in them.' (dict)

(52) E sisi i bole a hotu, i rahi a
ART.P my.grandparent 3S take/get ART thread 3S sew ART
moke vona.
mat 3S.OBL

'Grandma took some thread and sewed the mat with it.' (dict)

(53) E tama-ne rua i pia tara kanono, to gutu-a ART.P father-3S.P 3D.F 3S fetch some fire 3PA cook-3S vona boro.
OBL.3S pig
'Their father fetched some fire and they cooked the pig on it.' (dict)

(54) Ru kaka tale-a o Kadoka a aga ne rua, ru
3D push go.out-3S LOC K. ART canoe OBL.P 3D.F 3D
rike vona ru vano.
go.up 3S.OBL 3D go
'The two of them pushed their canoe out at Kandoka, climbed into it, and went off.' (t5:6)

Not only does *vona* refer back to an entity, it can also refer forward to an oblique argument that immediately follows it. This kind of double marking is illustrated in (55)b, with (55)a providing the simple counterpart. Notice that in (b) *niu* is no longer introduced by a preposition.

(55) a. O rike na niu! 2s go.up OBL coconut 'You climb a coconut tree!' (elic)
b. O rike vona a niu! 2s go.up 3S.OBL ART coconut 'You climb a coconut tree!' (t3:16)

The intransitive verb *rike* 'go up' cannot be directly followed by an object: *o rike a niu [2S go.up ART coconut] is ungrammatical. Instead, it needs the preposition na, as in (55)a. However, the 'anticipatory' or proleptic oblique pronoun vona can perform the same function, without the preposition. It appears that in (55)b vona and a niu are in an appositive relationship to each other. Other examples of this 'anticipatory' vona are given below, each time following an intransitive verb.

- (56) *A aga i vago polo vona a bala kiroko na rakaru*. ART canoe 3s pole go.past 3s.OBL ART passage small OBL reef 'The canoe poled through the small passage at the reef.' (dict)
- (57) I uka ma i kini vona a hole vona, i velu.
 38 NEG NEG 38 look.after 38.0BL ART basket 38.0BL 38 get.lost
 'He did not take care of his basket and it got lost.' (dict)

(58) A bakovi tara i made vona a tanga iea...
ART man one 3S sit 3S.OBL ART village DEM
'A certain man lived in that place...' (Lk 19:2)

Finally, the oblique pronouns can also be preceded by the preposition *ne* to mark predicative possession or benefactive possession: *ne nau* 'mine, for me', *ne vomu* 'yours, for you', *ne vona* 'his/hers, for him/her'. *Ne vona* is also the phrase used preceding non-singular pronouns or plural noun phrases.

- (59) *A ruma iea ne nau.* ART house DEM ART.P 1S.OBL 'That house is mine.' (elic)
- (60) O mata-kari-a ge ne nau
 2s look-protect-3s IRR.3s ART.P 1S.OBL
 'Look after him for me.' (Ex 2:9)
- (61) ...*maka kukulima-na i manga ne vomu*. PLUR claw/nail-3S 3S like ART.P 2S.OBL '...his claws are like yours.' (t45:7)
- (62) ...i uka ma ne vona e huriki a bakovi kamumu.
 3S NEG NEG ART.P 3S.OBL PLUR ART ART man good
 '...it (= the law) is not for good people.' (1Ti 1:9)

7. The clause

7.1 Introduction

This chapter deals with Bola clause structure. After a discussion of various clause types (\$7.2 - \$7.5), the remainder of this chapter will be concerned with serial verb constructions (\$7.6), clause periphery (\$7.7), including vocatives and interjections, followed by a discussion of adverbs (\$7.8) and constituent order variation (\$7.9).

Bola has both verbless and verbal clauses. Further subdivisions are as follows:

A. Verbless clauses	1. Equative clauses (§7.2)
	2. Locative clauses (§7.3)
B. Verbal clauses	3. Intransitive clauses (§7.4)
	4. Transitive clauses (§7.5)

There are various subtypes of intransitive and transitive clauses, distinguished on a structural or a semantic basis. For intransitives these include unmarked clauses, stative clauses, existential-locative, existentialpossessive, numerical, and passive clauses. Subtypes of transitive clauses are reflexive, experiencer and ditransitive clauses.

7.2 Equative clauses

An equative clause consists of a subject NP, followed by a predicate NP without any copular verb. The head of the NP can be a common noun, a proper noun or a pronoun. If the reference is to the future, this is indicated by 3s *ge* which precedes the subject, even with first person pronouns, as in (6).

- (1) *A ra-na e Teu.* ART name-3S ART.P T. 'Her name is/was Teu.' (t18:9)
- (2) *E tu-na a bakovi.* ART.P child-3S ART man 'Her child is a boy.' (elic)
- (3) E rei a taho-na tanga? ART.P who ART owner-3S village
 'Who is the owner of the village?' (a traditional greeting when arriving at an unknown location; t3:6)
- (4) *Iau a bakovi hale!*1S.F ART man bad
 'I am a bad person!' (Lk 5:8)
- (5) *Ge ia e kina-na e huriki a kabu i kupo.* IRR.3S 3S ART.P mother-3S ART.P PLUR ART clan 3S many 'She will be the mother of many clans.' (Gn 17:16)
- (6) Ge iau a vora-kato vomu. IRR.3S 1S.F ART servant-black 2S.OBL
 'I will be your slave.' (Gn 44:33)

Occasionally there are three NPs in an equative clause, as in the following example, where the NPs are separated by |. (Note that the possessive NP *maria e Malala* 'Malala and me' is not taken into consideration.) The initial pronoun *ia* 'it' is in an appositive relationship to the long predicate NP (of which the noun *stori* is the head), whereas the clause-final *a rea* 'this' is the subject (see §4.4.2).

(7) Ia | a stori ne maria e Malala hosi miri
3S.F ART story OBL.P 1DE.F ART.P M. long.ago 1DE
ruru | a rea.
get.lost ART DEF.DEM
'This is the story of Malala and me getting lost long ago.' (t13:86)

7.3 Locative clauses

A locative clause consists of a subject NP followed by a locative PP or an adverb (or a combination of the two) specifying the location of the subject. There is no verb. Locative clauses can function as existential clauses.

- (8) A bakovi tara na lavu.
 ART man one OBL beach
 'There is a man on the beach.' (elic)
- (9) A maka koma polo-lilo na ruma.
 ART PLUR child LOC-in OBL house
 'There are children in the house.' Or: 'The children are in the house.' Or a NP: 'children in the house' (conv)
- (10) *Ioe vai?*2s.F where'Where are you?' (elic)
- (11) *Iau ieni*. 1S.F here 'I am here.'(elic)
- (12) Ia lilo na robo.
 3s inside OBL bush
 'He is in the bush.' (conv)

A subtype of the locative clause is the possessive or benefactive clause, in which the predicate consists of the oblique preposition *ne* followed by an

oblique personal pronoun in the singular (1s *nau*, 2s *vomu*, 3s *vona*), or *vona* plus a free pronoun for non-singular referents. Future is indicated by *ge* before the predicate; see also §6.5 (Notice that *ne vona* can also mean 'so that, in order that, for the purpose of'; see §9.6.4).

- (13) *Ra aga iea ne vomu.* DEF canoe DEM OBL.P 2S.OBL 'That canoe is yours.' (elic)
- (14) *A malala ne nau.* ART land OBL.P 1S.OBL 'The land is mine.' (Lv 25:23)
- (15) ...ge bole-a a bulmakau i mate ge ne vona.
 IRR.3S take/get-3S ART cow 3S die IRR.3S OBL.P 3S.OBL
 '...he will take the dead cow and it will be his.' (Ex 21:36)
- (16) Ra v<in>ara iea ne vona e mua...
 DEF <NMLZ>teach DEM OBL.P 3S.OBL ART.P 2PL.F
 'This law is for all of you...' (Lv 24:22)

7.4 Intransitive clauses

Intransitive clauses are headed by an intransitive verb (or an adjective in the case of stative clauses) and may have only one nominal core argument, the subject. The subject is either realised as a full noun phrase (with articles), a free pronoun, or it may be empty, but there is always a preverbal subject pronoun. For exceptions to this rule, see §5.2. The verb is the core element of the verbal complex, which may additionally contain various modal particles, other verbs and adverbs (see §5.7). Other peripheral elements may be present in the clauses, including temporal, locative and various other oblique phrases. A full subject NP may precede or follow the verb complex. For a discussion of variation in constituent order, see §7.9.

The following subtypes of intransitive clauses can be distinguished in Bola: unmarked, stative, existential-locative, existential-possessive, numerical, and passive clauses.

7.4.1 Unmarked intransitive clauses

An unmarked intransitive clause consists minimally of an intransitive verb, a subject marker and an optional subject NP, which either precedes or follows the verbal complex. Further peripheral elements may also be present, such as oblique phrases and various adverbs.

- (17) *E Jon i ta.* ART.P John 3s talk 'John spoke.' (s.u.)
- (18) *A naru i tu-tua*. ART water 3s RED-flow 'The water is flowing.' (s.u.)
- (19) *Iau ga kori.* 1s.F IRR.1s help 'I will help.' (s.u.)
- (20) *Ri va-ubi.*3PL REC-hit'They fight.' (conv)
- (21) I dede mavonga a gare.
 3s groan like.that ART old.person
 'The old woman kept groaning.' (t4:15)
- (22) *E balo-gu bara i valai.* ART.P aunt-1S MOD 3S come 'My aunt may come.' (s.u.)

- (23) *A bakovi i lakea na robo.* ART man 3S go OBL bush 'The man went to the bush.' (dict-m)
- (24) *E huriki a koma ri rehi.* ART.P PLUR ART child 3PL play 'The children are playing.' (dict)

7.4.2 Stative clauses

Stative clauses are headed by an adjective (see §4.7) and have obligatory subject agreement. The adjective can be modified by an adverb of degree which follows the adjective. The most common degree adverb is *hateka* 'very' (also an adjective meaning 'strong', derived from *hate* 'liver'). Another degree adverb, *liu* 'completely, very', only collocates with a few adjectives. The combination *hale liu* 'very much' (lit. 'bad completely') is also found; cf. Tok Pisin *nogut tru*.

- (25) Iau a giloa.1s.F 1s sick'I am sick.' (elic)
- (26) *A ni-made-mu i kamumu*. ART NMLZ-sit-2S 3S good 'Your life/existence is good.' (conv)
- (27) *Iau a vivi vona a takiu.*15.F 1s happy 3S.OBL ART possum'I was happy with the possum.' (t37:5)
- (28) Na parava iea e Malala i kiroko liu.
 OBL day DEM ART.P M. 3S small very
 'That time (lit. day) Malala was (still) very small.' (t13:40)

- (29) A ngarava vona i mavuru hateka.
 ART sore 3S.OBL 3S rotten very
 'Her sore stank badly.' (Lit. '... was very rotten/stinking.') (t4:7)
- (30) I hateka hale liu ni lakavu a livoa.
 3s strong bad completely COMP catch ART wild.pig
 'It (the dog) is very strong at catching wild pigs.' (t2:18)

7.4.3 Existential-locative clauses

Existential-locative clauses are headed by a small number of intransitive verbs that combine an existential meaning with a postural meaning: *tabuli* 'lie, be located (horizontally), be' (for inanimate objects), *made* 'sit, be, live' (for people and animals), and *pesi* 'stand' (for houses, trees and villages). Almost all examples also contain a locative or a temporal PP.

- (31) A kedo i tabuli na dala.
 ART stone 3S lie OBL road
 'There is a stone on the road.' Or 'The stone is on the road.' (elic)
- (32) A maheto nau i tabuli na rukuva.
 ART spear 1S.OBL 3S lie OBL space.under.house
 'My spear is under the house.' (dict)
 (The spear is in a horizontal position, not necessarily lying on a surface. Typically spears are lodged in rafters or beams.)
- (33) E huriki a gare bakovi ri made na roa.
 ART.P PLUR ART old.person man 3PL sit OBL beach.camp
 'The old men are at the beach camp.' (dict)
- (34) *A puho i made na naru.* ART frog 3S sit OBL water. 'Frogs live in the water.' (dict)

(35) Ranga tanga i pesi na tabeke i piu hateka. some village 3s stand OBL part 3s cold very
'Some villages are located in very cold places.' (t11:10)

7.4.4 Existential-possessive clauses

A special clause type is formed by clauses headed by the verb *tahoka* 'to have, to be'. The root of this verb is the noun *taho* 'owner', suffixed with *-ka* (see also §4.7 and §5.1). As an existential verb, *tahoka* means 'to be' and states the existence of an entity, especially of people who are introduced into the discourse. There is only a subject NP in the clause.

- (36) Na tahuna iea i tahoka tara bakovi hale.
 OBL time DEM 3S be one man bad
 'At that time there was a criminal...' (Mt 27:16)
- (37) Ngane i tahoka tara bakovi i bele a ra-na e now 3s be one man 3s arrive ART name-3s ART.P Abraham.
 A.

'Then a man was born whose name was Abraham.' (t42:8)

The verb *tahoka* can also mean 'have'. In this case *tahoka* takes two noun phrases, though the second one can hardly be called an object, as *tahoka* cannot take the object suffix *-a*, nor can it be passivised by *ni*. This second NP should be considered a subject complement.

- (38) *E Nuli i tahoka bua.* ART.P N. 3s have betelnut. 'Nuli has betelnut.' (dict)
- (39) Jon i tahoka aga i rua.
 J. 3S have canoe 3S two
 'John has two canoes.' (dict)

- (40) Hosi iau a tahoka a kabu-na a ligo ni pango. formerly 1S.F 1S have ART group-3S ART dog COMP hunt
 'In the past I had a pack of hunting dogs.' (dict)
- (41) I tahoka a ngarava dagi a vaha-na varago.
 3s have ART sore big ART leg-3s both
 'She had big sores on both of her legs.' (Lit. 'Both her legs had big sores.') (t4:6)
- (42) Ra balu iea, i tahoka a masin vona i taku DEF plane DEM 3S have ART engine 3S.OBL 3S one kunana.
 only
 'That plane had only one engine.' (t6:4)

This last example nicely illustrates the merger of existential and possessive functions of *tahoka*. In example (42) the oblique possessive *vona* can also be left out.

A different type of existential-locative clause, less frequently encountered in our corpus, has the impersonal verb *vona* 'have, be' at its core. (*Vona* is also an oblique 3s pronoun; see §6.5.)

- (43) A dari iea i vona manu i kupo.
 ART sea DEM 3S have fish 3S many
 'The sea here has many fish.' (conv)
- (44) *A tanga iea i kamumu, i vona a sirula i kupo.* ART village DEM 3s good, 3s have ART girl 3s many 'This village is good, there are many girls.' (conv)

7.4.5 Numeral clauses

Numeral clauses are headed up by a numeral verb (see §4.6.1). This clause type is fairly common as a relative clause (see also §9.5), but rather rare as a main clause.

- (45) A keva vona i lima.
 ART moon 3S.OBL 3S five
 'She is five months old.' (Lit. 'Her moons are five.') (elic)
- (46) A pida ne tou ge tolu.
 ART year OBL.P 3PA.F IRR.3S three
 'They (= the animals) must be three years old.' (Gn 15:9)
- (47) a. *Moto ala riva?*2PA unit how.many'How many of you are there?' (elic)
 - b. *Mete ala ravulu.*1PAE unit ten'There are ten of us.' (elic)
- (48) Ra vure-mu nga, i taku kunana a ngava kapiloho DEF dream-2S DEM.PLUR 3S one just ART mouth hidden vona.
 3S.OBL

'Those dreams of yours, they have the same meaning.' (Lit. '... its hidden mouth is just one.') (Gn 41:26)

7.4.6 Passive clauses

The following features are characteristic of passive clauses.

- The clause is headed by a transitive verb, passivised by means of the proclitic *ni*, part of the verbal complex (see §5.4.5 and §5.7). This marker is glossed PASS and written separately from the main verb.
- The transitive verb can be a derived verb, such as a causative verb.
- There is no subject agreement; *ni* is never preceded by a subject proclitic.
- Passives can occur in serial verb constructions if the first verb is transitive.
- Passives are obligatorily agentless.
- The modal marker *gi* is the only element that can come between the passive marker and the verb.
- Passives are used when the agent is unknown or irrelevant; this is especially common in procedural discourse.

Examples, with *ni* and the verb bolded:

- (49) Ni kapo na moke a poda-na viri i mate.
 PASS wrap OBL mat ART body-3S person 3S die
 'The body of the dead person is wrapped in a pandanus mat.' (t12:6)
- (50) I uka ma ni hae ma a ruma vona.
 35 NEG NEG PASS build yet ART house 3S.OBL
 'His house has not been built yet.' (elic)
- (51) *Na tahuna ni hae lobo a ruma...* OBL time PASS build finish ART house 'When the house has been built...' (t11:57)
- (52) *Iau ni vakasiri a ruma vona.*1S.F PASS show ART house 3S.OBL
 'I was shown his house.' (elic)
- (53) *Ioe ni gi va-kani muri ma.*2S.F PASS IRR CAUS-eat later yet
 'You will be fed later.' (elic)
- (54) Ni habi a madaro na kabu iea.
 PASS give ART peace.offering OBL clan DEM
 'A peace offering was given to that clan.' (dict)

(55) A kai dagi hateka bara **ni** vakatubu ni tolo na ART tree big COMP chop OBL very MOD PASS start hatelanga, i modo na malunga liu. morning 3s fall OBL afternoon very 'People would start chopping a very big tree in the morning, and it would fall in the late afternoon.' (Lit. 'A very big tree would be started to chop/be chopped¹....') (t7:20)

(56) Ni gi kavurike a Vure Meli Liu.
PASS IRR praise ART God up completely
'May God Most High be praised.' (Gn 14:20)

The following examples show SVCs containing a passive verb, the second example followed by another passive in a separate clause:

- (57) Na tahuna ni bole puru a barema...
 OBL time PASS take/get go.down ART sago.palm.leaves
 'When the sago palm leaves have been taken down...' (t11:31)
- (58) ...*ni kaloho lakea na lovo, ni tanu*. PASS carry go OBL hole PASS bury

'... (the body) is carried to the grave and then buried.' (t12:6)

One interesting twist is that in complement clauses, the complementiser ni (see §9.4.2) cannot be followed by passive ni. The expected sequence *ni ni is disallowed, and instead ni gi surfaces, possibly an example of dissimilation. In this case gi is not the irrealis modal marker, but a passive marker in a complement clause (glossed as PASS.COMP). Compare the following two examples, and see §9.4.2 for further examples.

¹ In spite of the English translation, the morpheme *ni* before *tolo* is the complementiser *ni* (not passive *ni*), as *vakatubu* 'start' is always followed by a *ni*-complement clause; see §9.4.2. Unambiguous sequences of two verbs both with passive *ni* have not been found.

(59) a. *I koi ni kori*.
3s not.want COMP help
'He does not want to help.' (elic)

b. *I koi ni gi kori.* 3s not.want COMP PASS.COMP help 'He does not want to be helped.' (elic)

7.5 Transitive clauses

This section describes a variety of transitive clauses, differentiated by semantic and some structural properties.

7.5.1 Introduction

Transitive clauses are headed by a transitive verb, and can take two core arguments: subject and object. Both these roles can be filled by a full noun phrase, a free pronoun, or be left empty. In addition, the object role can be filled by an object pronominal suffix, though in written material this possibility is limited to the 3s suffix -*a*. As explained in §5.3, the combination of the 3s object suffix -*a* and a full NP signals a single referent; without -*a* the reference is plural.

The normal constituent order in transitive clauses is SVO, but clause-final subjects are not uncommon, while oblique phrases may come between the verb and the object noun phrase, as in (65). See §7.9 for a more detailed discussion of variation in constituent order.

- (60) *A bakovi i tolo a kai.* ART man 3s chop ART tree 'A man chops wood.' (elic)
- (61) E Jon i tagui e Goe.
 ART.P J. 3S greet ART.P G.
 'John greets Goe.' (elic)

- (62) A longo a ni-ta ne Jon.
 1s hear ART NMLZ-talk OBL.P J.
 'I heard John's talk.' (elic)
- (63) Iau ga habi a k<in>ori nau.
 1S.F IRR.1S give ART <NMLZ>help 1S.OBL
 'I will give my help.' (elic)
- (64) *I matai iau a bakovi...* 3s see 1s.F ART man 'The man saw me...' (t6:23)
- (65) A maka kopa ri kaloho-a o Bulu a kulu e
 ART PLUR bat 3PL carry-3S LOC B. ART breadfruit ART.P
 bakato.
 blackseed.breadfruit
 'The bats carried the blackseed breadfruit tree to Bulu.' (t9:2)

7.5.2 Reflexive clauses

Reflexive constructions involve a transitive verb, followed by the adverb *mule* 'back' and a full pronoun. This combination of *mule* plus free pronoun makes the subject and the object co-referential, thereby creating a reflexive construction. Example (66) illustrates the plain adverbial use of *mule*, while the remaining examples in this section are all reflexive constructions, mostly elicited.

- (66) I bole mule tabu tou a vilu.
 3s take/get back again 3PA.F ART wind
 'The wind took them back again.' (t16:48)
- (67) I matai mule ia na tuku.
 38 see back 3S.F OBL puddle
 'He looked at himself in a puddle.' (elic)

- (68) Naha ni rabalaki mule ioe! don't COMP kill back 2S.F
 'Don't kill yourself!' (elic)
- (69) *Ri voro puru mule ria na dari.*3PL throw go.down back 3PL.F OBL sea'They threw themselves down in the sea.' (elic)
- (70) A mata-kari mule iau tura-ne huriki ri laho tura-gu.
 1s look-protect back 1S.F with-3S.P PLUR 3PL walk with-1s
 'I looked after myself and those who walked with me.' (Ac 20:34).

7.5.3 Experiencer clauses

Many negative experiences in Bola are encoded as transitive clauses, with the stimulus causing the experience marked as subject, and the experiencer as object. Typical verbs in such clauses are *bole* 'get, take', *kani* 'eat', *hataki* 'feel' and *padi* 'shoot, spear'. It is possible that these structures reflect a strong belief in the external agency of such experiences, making the experience less internally motivated.

- (71) A gila-nga i bole iau.
 ART sick-NMLZ 3S take/get 1S.F
 'I'm feeling sick.' (Lit. 'A sickness takes/gets me.') (conv)
- (72) I kani iau a mavidia kara.
 3s eat 1s.F ART sweat hot
 'I was sweating profusely.' (Lit. 'Hot sweat ate me.') (t33:15)
- (73) I kau iau a poto.
 3s hook 1s.F ART thorny.vine
 'I've got thorns in my skin.' (Lit. 'A thorny vine hooked me.') (t7:2-m)

- (74) I bi mate-au a marohu-a.
 3s hit die-1s ART thirsty-NMLZ
 'I'm dying of thirst.' (Lit. 'Thirst is hit-killing me.') (conv)
- (75) Lakea i rata pile iau a malangi-a. then 3s do enemy 1S.F ART cold-NMLZ
 'The cold was really affecting me.' (t6:31)
- (76) I padi iau a mana pali...
 3s shoot 1s.F ART sense PERF
 'I've had this sense/suspicion...' (Lit. 'A sense has shot/speared me...') (Ex 10:10)
- (77) ...ma ge padi a vaha-mu a kedo. MOD IRR.3S shoot ART foot-2S ART stone.

'...lest you strike your foot against a stone.' (Lit. '...lest a stone shoots/spears your foot/leg.') (Mt 4:6)

(78) I hataki a ni-madihi dagi.
3s feel ART NMLZ-painful big
'He was anguished.' (Lit. 'He felt a big pain.') (Lk 22:44)

7.5.4 Ditransitive clauses

Ditransitive clauses typically have three arguments: the agent, the theme and the recipient. Common ditransitive verbs are *habi* 'give' and *vakasiri* 'show'. In Bola the theme (the item given or shown) is coded as the object, while the recipient is presented in an oblique noun phrase. If both are present as full noun phrases, the recipient normally precedes the theme. The rules governing the presence of the object suffix -a on the verb (which marks the theme) are not yet fully understood. In passive clauses, such as (84), the theme is the subject.

- (79) I habi-a ne Raka.
 38 give-38 OBL.P R.
 'She gave it to Raka.' (dict)
- (80) E Kura i sivu a manu, i habi ne kina-na.
 ART.P K. 3S wrap.up ART fish 3S give OBL.P mother-3S
 'Kura wrapped up the fish, and gave them to his mother.' (dict)
- (81) Pali i habi ne tubu-na a manu, ru gutu, ru kani. but 3s give OBL.P grandrelative-3s ART fish 3D cook 3D eat 'And he gave the fish to his grandparent, they cooked and ate (them).' (t3:11)
- (82) I habi nau a rava-na rea i tolu.
 38 give 18.0BL ART string-38 shell.money 38 three
 'He gave me three strings of shell money.' (dict)
- (83) Lakea e Brent i vakasiri-a ne maria e Alex a then ART.P B. 3s show-3s OBL.P 1DE ART.P A. ART ginipik. guinea.pig
 'Then Brent showed Alex and me a guinea pig.' (t7:11)
- (84) A mapa-na ni habi e ha-na.
 ART payment-3S PASS give ART.P maternal.uncle-3S
 'The payment is given to his maternal uncle(s).' (t12:20)
- (85) Muri ri vakasiri ne ria a taho tanga a maka next 3PL show OBL.P 3PL.F ART owner village ART PLUR mahala ne ria.
 cargo OBL.P 3PL.F
 'Then they showed the villagers their goods.' (t2:9)

With the verb *vakasiri* 'show', it is also possible to code the recipient as an object, and the theme as an oblique, especially with first person singular recipient. In these cases the oblique NP often has an anticipatory oblique pronoun *vona* in apposition to the following unmarked NP.

- (86) I vakasiri iau vona a dala kamumu.
 3s show 1S.F 3S.OBL ART road good
 'He showed me a good road.' (Gn 24:48)
- (87) Vakasiri=au vona a ruma vona! show=1s 3S.OBL ART house 3S.OBL 'Show me his house!' (conv)

7.6 Serial verb constructions

Serial verb constructions (SVCs) consist of two or more verbs strung together within a single verbal complex. The crucial element is the presence of a single subject marker which precedes the first verb. SVCs in Bola are asymmetrical: only a limited set of verbs can occupy the second or third slot in a SVC.

Semantically, the following three types of SVC can be distinguished: a) motion; b) result; and c) manner. These will be illustrated in turn.

a. **Motion**. The second verb in a motion SVC is taken from a small set of motion verbs, including *lakea* 'go', *valai* 'come', *rike* 'go up', *puru* 'go down', *tala* 'go out', *pori* 'go out, towards the sea', *dili* 'go in, towards the land', *polo* 'go across, go past', *hamule* 'return, go back' and possibly others (see also §5.1). The combination *valai-a* is often irregularly reduced to *vilia*.

- (88) A kedo i tere tala.
 ART stone 3s roll go.out
 'The stones rolled away.' (t1:11)
- (89) *Ri* ru puru a rau.
 3PL put go.down ART banana.leaf
 'They put down banana leaves.' (t1:9)

- (90) A boro i due rike a mavo nau na hania.
 ART pig 3s dig go.up ART taro 1s.OBL OBL garden
 'Pigs dug up my taro in the garden.' (dict)
- (91) E Loga i gau lakea na ruma vona a pusi.
 ART.P L. 3S carry.under.arm go OBL house 3S.OBL ART cat
 'Loga carried the cat to his house under his arm.' (t2:20)
- (92) Muri bara ri bole valai e huriki a ngatavine next MOD 3PL take/get come ART.P PLUR ART woman a maki ni kani.
 ART something QUAL eat
 'Then the women will bring the food.' (t7:23)

Some meanings are not fully predictable from the two parts, such as *bele taho* (lit. 'arrive fall.on'), which means 'come to, meet, arrive at.'

(93) *A mosi ge bele taho ioe, o mata-kari kamumu.* ART visitor IRR.3S arrive fall.on 2S.F 2S look-protect good 'If a visitor comes to you, take good care of him.' (t10:22)

Examples of motion SVCs with three verbs:

- (94) O kali tala vili-a!
 2s move go.outside come-3s
 'Move it out this way!' (conv)
- (95) A koma i vore pori lakea na bodu kiroko.
 ART child 3s paddle go.out go OBL island small
 'The boy paddled out towards a small island.' (dict)
- (96) A kedo lobo bara ni ubi puka puru.
 ART stone all MOD PASS hit break go.down
 'All the stones will be broken down.' (Mt 24:2)

(97) I karaka rike loko-vonga e bonu...
3s crawl go.up go-there ART turtle
'The turtle crawled up there...' (t5:61)

The word *mai* 'towards' is frequently found following verbs and sequences of verb, but in Bola *mai* is an adverb, not a verb. In spite of its history as a verb (from Proto-Oceanic **mai* 'come'), it cannot function as a main verb in a clause: **i mai* is ungrammatical. Instead, one uses *i valai* 's/he comes; s/he has come' or *i bele* 's/he has arrived'. The use of *mai* is not limited to movement to the speaker (as is the case in various other Oceanic languages, including Vitu), but to any person or place which is the focus of attention at that point in the narrative. The following five examples illustrate *mai*, but note that *mai* is not part of a SVC.

- (98) Ru lakea mai a gare.
 3D go towards ART old.person
 'They went towards the old woman.' (t4:13)
- (99) Ru mata mai iau.
 3D look towards 1S.F
 'They looked towards me.' (elic)
- (100)...i uka ma ge longo mai ioe...
 3S NEG NEG IRR.3S hear towards 2S.F
 '...if he will not listen to you...' (Ex 11:9)
- (101) Ru mata dili mai e huriki ri raulo.
 3D look go.in towards ART.P PLUR 3PL dance
 'The two of them looked in (that is, from their canoe at sea to the land) at people who were dancing.' (t5:8)
- (102) *Ri* talanga pori mai rua... 3PL reply go.out towards 3D.F

'They replied out (that is, from the land to the sea) to the two of them...' (t5:9)

b. **Result**. The second verb, which can be either intransitive or transitive, describes the result of the action of the first verb.

 (103) E Raka i padi mate-a a boro. ART.P R. 3S shoot die-3S ART pig 'Raka killed the pig by spearing it.' (dict)
 (104) <i>Iau a tolo pode-a a niu.</i> 1s.F 1s chop open-3s ART coconut 'I chopped open the coconut.' (dict)
 (105) A kane-na moni i padi pasi-a a paga-na ART fruit-3S wild.citrus 3S shoot fall-3S ART leaf-3S kulu. breadfruit 'A wild citrus fruit (while falling) broke off a leaf of a breadfruit tree and it fell.' (t4:9)
 (106) A ngarava vona i ma-vuru hateka, i voi ART sore 3S.OBL 3S STAT-rotten very 3S hover pile-a a lango. enemy-3S ART fly 'Her sores were stinking badly, flies were hovering over them and ruining them.' (t4:7)

c. **Manner**. In a manner SVC, the second verb describes the manner in which or the purpose for which the action of the first verb is carried out. In some cases there are idiosyncratic meanings, such as (107), and the distinction between these SVCs and compound verbs ($\S5.6$) is not easy to draw.

(107) Naha ni kani pede viliha.
don't COMP eat roam go.around
'Do not go around mooching for food.' (t10:10)

(108) Lakea a koma i nongo vaki-a e tubu-na i so ART child 3s laugh blow-3s ART.P grandrelative-3s 3s dedo. groan
'So the child laughed at his/her grandparent who was groaning.' (t4:12)

(109) *Ri* keve kilangana ri kani kilangane-a tara.
3PL break test 3PL eat test-3S one
'They tested a piece (of taro) by breaking it off and eating it.' (Lit. 'They break-tested and eat-tested one.') (t1:12)

7.7 Clause periphery

This section discusses various elements that provide extra information on the state of affairs described in the clause core, which (in the case of verbal clauses) consists of the verbal complex and core noun phrases. These additional elements in the clause include temporal, locative and manner phrases, as well as various adverbs. (For practical reasons, all Bola adverbs are briefly treated in §7.8.) The section concludes with a treatment of vocatives and interjections.

7.7.1 Locative periphery

The locative periphery can be filled by three types of phrases or words:

a. A **prepositional phrase**, introduced by the preposition *na* (followed by a common noun) or the preposition *o* (followed by a place name): *na dari* 'at sea', *o Kimbe* 'in/to/from Kimbe'. See §6.1 and §6.2.

b. An **adverbial demonstrative**, of which there are six (see also §4.5):

- *ieni* 'here by me (near speaker, but not near addressee)'
- iene 'there by you (near addressee, but not near speaker)'
- *koea* 'here by us (near speaker and addressee)'

lake	'over there (within eyesight, but not near speaker or addressee)'
iea	'here/there (known but unspecified)'
vonga	'there (not within eyesight, usually anaphoric)'

c. Locative adverbs. There are some nine locative adverbs, four of which have a variant starting with *polo*, possibly derived from the verb *polo* 'go past; go across', although the current meaning of these adverbs is not limited to movements. In the clausal examples, the element *polo* is simply glossed as LOC.

lilo, polo-lilo	'in, inside'
meli, polo-meli	'above, on top, over'
tano, polo-tano	'below, under'
vavo, polo-vavo	'out'
basi	'far' (also an adjective)
langa	'above, on, on top'
muga	'in front'
muri	'behind'
tabukoi	'close by' (also an adjective)

Interestingly, it is not uncommon for these three types of locative peripheries to co-occur in an appositive relationship. This is illustrated, for instance, in (114) - (116), where there is both a demonstrative adverb and a PP. This is another example of the tendency in the language to use apposition.

(110) <i>A</i>	vito	паи	i	tabuli	iene?
AR	г knife	1s.obl	3s	lie	there
'Is	my knit	fe over th	ere	(by you	u)?' (elic)
(111) <i>I</i> 3s	<i>tabuli</i> lie				

'It is here (by me).' (elic)

- (112) Ia ge bele malaviriri nau ieni, maria varago miri 3S.F IRR.3S arrive quickly 1S.OBL here 1DE.F both 1DE gi lakene.
 IRR go.to.you
 'If he comes quickly to me here, the two of us will go to you.' (Hb 13:23).
- (113) *Ioe o valai vai o made iene*?
 2s.F 2s come where 2s sit there
 'Where have you come from that you are (suddenly) sitting there?' (t3:26)
- (114) *Iau a taparaki ioe iene na bodu e Krit...*1S.F 1S leave 2S.F there OBL island ART.P K.
 'I left you there on the island of Crete...' (Tt 1:5)
- (115) Tou a bakovi koea o Bulu.
 3PA.F ART man here LOC B.
 'They are men from here at Bulu.' (t14:30)
- (116) *Mete made koea o Kilu.* 1PAE sit here LOC K. 'We live here at Kilu.' (t18:42)
- (117) *I tabuli lake*. 3s lie there 'It is over there.' (conv)
- (118) Muru muga lakea na tanga kiroko lake.
 2D go.ahead go OBL village small there
 'You two go to that little village over there.' (Lk 19:30)

- (119) *Mi made vonga, mi malo popote.*1PLE sit there 1PLE rest a.little
 'We sat there and we rested a bit.' (t20:9)
- (120)...ri halala ria vonga na roa.
 3PL meet 3PL.F there OBL beach.camp
 '... and they met them there at the beach camp.' (t2:6)
- (121) *I pesi na daha-na koea tara, i pesi na daha-na lake* 3s stand OBL side-3s here one, 3s stand OBL side-3s there *tara.* one
 - 'One (man) stood on the one side, one stood on the other side.' (Lit. '... his side here, ... his side there.') (Ex 17:12)
- (122) Miri vano iea na hini ni gale e Kamama.
 1DE go DEM OBL area PASS call ART.P K.
 'We went to a place there called Kamama.' (t41:3)

Examples of locative adverbs:

- (123) I pori, pori, vavo liu na utu.
 38 go.out go.out out completely OBL deep
 'He kept going away from land, way out to the deep.' (t19:5)
- (124) A matai a bakovi i ala tolu to made polo-lilo pali.
 1s see ART man 3s unit three 3PA sit LOC-in PERF
 'I saw three men already sitting inside (the plane).' (t6:5)
- (125) Ia lilo na robo.
 3S.F in OBL bush.
 'He is in the bush.' (conv)

- (126) *Ria lobo ri sike meli o Kandoka...*3PL.F all 3PL go.up above LOC K.
 'They all went up to Kandoka...' (t24:7)
- (127) *Na tahuna a balu i bebe polo-meli*... OBL time ART plane 3S fly LOC-above 'As the plane was flying above...' (t6:12)
- (128) Lakea i kabebe polo-meli a paga-na kulu, i tere then 3s fly LOC-above ART leaf-3s breadfruit 3s roll polo-tano a kane-na moni.
 LOC-below ART fruit-3s wild.citrus

'So the breadfruit leaf was flying above, while the wild citrus fruit was rolling below.' (t4:10)

(129) I vago muga na mapa-na aga, i tabuli muri na
3s pole in.front OBL bow-3s canoe 3s lie back OBL
kuli-na aga a kane-na niu.
stern-3s canoe ART fruit-3s coconut

'He poled in front, in the bow of the canoe, while the coconut fruit was in the back, in the stern of the canoe.' (t3:2)

(130) E kina-na i uka ma i made tabukoi, e
ART.P mother-3S 3S NEG NEG 3S sit close ART.P
kina-na i made basi na tanga.
mother-3S 3S sit far OBL village
'Her mother was not close by, she was far away in the village.'
(t40:8)

7.7.2 Temporal periphery

The temporal periphery is filled by various expressions referring to time, including temporal adverbs, which are listed below.

barama	'later (today)'
baroko	'earlier'
girira	'later, some time in the future, next (week/month/year)'
hosi	'long ago, in the past'
kuduvi	'tomorrow'
muri	'later, next, then'
muri ma	'later'
mona	'today'
ngane	'now; then (in narrative)'
ranga	'for a while' (also a quantifier 'some' and a focussing adverb 'also')
ravi	'yesterday'
rira	'a few days ago, last (week/month)'
tabaka	'for a long time'
taro	'first'
vakaroro	'always'

The temporal periphery normally occurs at the end of the clause (following verbs and any other PPs), but it is also commonly found clause-initially to establish the time frame for the clause, or to indicate sequential events.

- (131) *Iau ga lakea na tanga kuduvi*.
 1S.F IRR.1S go OBL village tomorrow
 'I will go to the village tomorrow.' (elic)
- (132) *Iau a valai na tanga ravi*.
 1S.F 1S come OBL village yesterday.
 'I came to the village yesterday.' (elic)
- (133) Pali a ngatavine, ra o masi-a baroko...
 but ART woman DEF 2S see-3S earlier
 'But the woman that you saw earlier...' (Rv 17:18)

- (134) Muri a rike na aga, a valai na tanga.
 next 1s go.up OBL canoe 1s come OBL village
 'Then I got in the car and came to the village.' (t39:27)
- (135) *Ngane miri lakavu a boro i tolu.* now 1DE catch ART pig 3s three 'Then we caught three pigs.' (t13:75)
- (136) *Ngane a balus i pupu-laga rike*. now ART plane 3S flap.wings-above go.up 'Then the plane went up.' (t33:25)

Apart from temporal adverbs, the temporal periphery is also filled by a variety of prepositional phrases involving the preposition na (see also §6.1 sub c) and some other phrases. Below is a non-exhaustive listing of such phrases. For temporal adverbial clauses, see §9.6.1

na hatelanga	'in the morning'
na hatelanga pokopoko	'early in the morning, at dawn'
na haro	'around noon, 10-11 am till 1-2 pm'
na kuruharo	'at midday, at noon, around 12 noon'
na malunga	'in the afternoon'
na malunga liu	'late in the afternoon'
na rodo	'in the evening, at night (when it's dark)'
na kururodo	'at midnight'
na kilala iea	'at that hour' (lit. 'at the signal', i.e. the signals of birds, chickens, insects)
na kilala i tolu	'at three o'clock' (used in the Bola Bible)
na parava tara	'one day, one time'
na parava muri	'the next day'
na parava i kupo	'for many days'
na keva iea	'this month'
na keva i lima	'for five months; in the fifth month (May)'

na keva girira	'next month'
na keva rira	'last month'
na pida muri	'next year'
na pida i rua	'for two years'
na pida ne 1984	'in the year 1984'
na tahuna iea	'at that time'
na Tude	'on Tuesday'
muga na ni-kani	'before eating'
muga na ni-mate-gu	'before my death'
muri na keva ranga	'after a few months'
muri na parava ge polu-rua	'after seven days'

Some clausal examples:

- (137) *Iau bara pori na dari mona na malunga*.
 15.F MOD go.out OBL sea today OBL afternoon
 'I will go out to the ocean today in the afternoon.' (s.u.)
- (138) *A bakovi iea i ruru na keva i taku*. ART man DEM 3S lost OBL moon 3S one 'That man was lost for one month.' (t22:14)
- (139) Mete peeBulumanamalungaliu.Vano,mete1PAEleaveART.PB.OBLafternoonverygo1PAEbeleoBilominarodo.arriveLOCB.OBLnightveryveryvery

'We left Buluma late in the afternoon. We went and arrived at Bilomi at night.' (t39:10)

7.7.3 Manner periphery

The manner periphery is filled by a small group of adverbs listed below.

doni 'slowly' 'hurriedly, quickly' hari herehere 'separately' kelekele 'expectantly, in silent expectation' kerikeri 'alone' lae 'around, everywhere, all over the place' 'like this' таеа 'quickly' malaviriri mara(do)doe 'slowly' 'like that' mavonga

When they follow the verb directly, various adjectives can also function as manner adverbs. Examples include *kamumu* 'good, well', *hale* 'bad, badly', and *tora* 'strong, firm, tight(ly)'. Manner adverbs always follow the verb; they are normally part of the verbal complex at position +3 (see §5.7.6), but they can also occur between two verbs in a serial verb construction, as in (140), or following the verbal complex (including the object suffix), as in (144). More research is needed on the constraints that govern the position of manner adverbs.

- (140) I laho malaviriri lakea na kape...
 3s walk quickly go OBL shelter
 'He walked quickly towards the shelter...' (Gn 18:6)
- (141) A koma kiroko ri matai a bisket, ri pesi kelekele.
 ART child little 3PL see ART biscuit 3PL stand expectantly
 'When the little children saw the biscuits, they just stood there in silent expectation (hoping to get some).' (conv)
- (142) *Iau ga vano ga made kerikeri iau.* 1S.F IRR.1S go IRR.1S sit alone 1S.F 'I will go and be alone by myself.' (t27:85)

- (143) *I laho herehere*...
 3s walk separately
 'He walked separately...' (t27:87)
- (144) Miri viro kane-a lae a dala.
 1DE seek search-3S around ART road
 'We searched for the path all over the place.' (t13:34)

These manner adverbs can be modified by degree adverbs such as *hateka* 'very, really', and *liu* 'very, completely'. *Liu* also occurs in such expressions as *hatelanga liu* (morning very) 'early in the morning', and *malunga liu* (afternoon very) 'late in the afternoon'.

- (145) *I kani doni hateka*.
 3s eat slowly very
 'He eats really slowly.' (dict)
- (146) *I navai i mangi hale hateka na hini nga?*38 why 38 smell bad very OBL area DEM
 'Why does it smell so bad in this place?' (t21:28)

7.7.4 Vocatives

Vocatives are nouns that are used to address a person directly. They are typically preceded by the interjection *o*. The following nouns are the most common vocatives. Note that second person free pronouns are also used to address people directly.

lavo-gu	'my brother-in-law!' (term of address for friends)
bakovi	'man!' (general term of address for adult males)
nana	'mother!' (also 'my mother')
ngatavine	'woman!' (general term of address for adult females)
sisi	'grandpa! grandma!' (also 'my grandparent')
tata	'father!' (also 'my father')
tura-gu	'my older brother(s)' (for friends or fellow-believers)

- (147) *O* **lavo-gu**, *o luku-muri valai*. oh brother.in.law-1s 2s go-back come 'Oh friend, come back here.' (t50:13)
- (148) *O* sisi, iau! oh my.grandparent 1S.F 'Grandma, it's me!' (t48:7)
- (149) I luke mule iau, i ta maea, "Bakovi, naha ni 3s comfort back 1s.F 3s say like.this man don't COMP mangenge." afraid

'He comforted me and said, "Don't be afraid, man.""(t6:14)

- (150) Mua! A maki ni kani area i namika.
 2PL.F ART PLUR QUAL eat DEF.DEM 3S sweet
 'Hey all of you! This food is delicious!' (t1:12)
- (151) Mua o huriki a tura-gu, mu longo valai!
 2PL.F oh PLUR ART older.brother-1S 2PL hear come
 'Brothers, listen to me.' (Lit. 'You all, my older brothers,...) (Ac 15:13)

7.7.5 Interjections

Most interjections occur phrase initially, except for *ke*. The exact range of emotions connected with each of the following interjections remains to be investigated.

aia	'ouch' (hurt)
aio	'hey' (disagreement)
aioa	'ouch, oomph, umph' (grunting from pain or exertion)
aue	'hey, what's the matter' (surprise)
е	'yes' (affirmation)

- *elo* 'ok, that's it' (confirmation after heeding instructions)
- *io* 'good, ok then' (relief)
- *ke* 'you!' (irritation or mild anger; always clause-finally)
- na 'yes, sure'
- *o, oe* 'hey' (calling attention)
- *oio* 'alas, what a pity' (unfulfilled desire)
- omo 'poor you, alas' (sorry, pity, sympathy)
- (152) Aio, o ta pakipaki mavonga, i uka ma o kar=oe tara hey 2s talk mature like.that 3s NEG NEG 2s able=2s one maki tara. something one

'Hey, you talk so big, (but) you aren't able to do anything.' (t27:14)

- (153) Aue, i navai i nana, i viro a taho-na tanga?
 hey 3s what 3s ask 3s look.for ART owner-3s village
 'Hey, why is he asking (and trying to find out) who is the owner of the village? (t3:7)
- (154) Oio, ma kani tavule-a a kureko iea.
 alas MOD eat nothing-3S ART chicken DEM
 'How I wish I could just eat that chicken.' (conv)
- (155) Omo tubu-gu.alas grandrelative-my'Oh, my poor grandchild.' (t21:67)
- (156) *A* ra o rate-a ke? ART what 2s do-3s you 'What (on earth) have you done!?' (Gn 3:13)

```
(157) Ivaiavudike?3SwhereARTbananayou
```

'Where (for goodness sake) are the bananas!?' (t21:7)

7.8 Adverbs

This section summarises the information on adverbs. The following adverbial subcategories are distinguished in this description of Bola.

a. Locative adverbs and adverbial demonstratives (e.g. *vonga* 'there', *polomeli* 'above, over') are listed and illustrated in §7.7.1.

b. **Temporal** adverbs (e.g. *ngane* 'now', *muri* 'next, later') are listed and illustrated in §7.7.2.

c. **Manner** adverbs (e.g. *mara(do)doe* 'slowly', *malaviriri* 'quickly') are listed and illustrated in §7.7.3.

d. **Degree adverbs.** *Hateka* 'very, really' and *liu* 'completely, very' are illustrated in §7.4.2. Other degree adverbs include *polo* 'very, really' (from the intransitive verb *polo* 'go across'). The degree adverb *ma* 'so' is discussed at the end of §8.3.2. There is no adverb corresponding to English 'too'. A few adjectives incorporate this meaning component, including *holo* 'too tight, not fitting (of clothes)', and *pahuru* 'too big, oversized (of clothes).'

e. **Aspectual** adverbs (e.g. *bala* 'always, habitually', *pali* 'already', *lobo* 'completive aspect', *liu* 'continuous aspect') are illustrated in §8.4.2.

f. **Focal** adverbs. A number of adverbs are brought together under the label 'focal adverb', as they share a meaning component of focus, though their exact semantics is not always completely clear. Some of these adverbs, such as *kunana* and *tabu* can also function as adverbs in the verbal complex (see $\S5.7.6$).

kikeri	'alone by oneself, only' (cf. kerikeri 'alone')
kunana	'just, only'
ranga	'also' (with plurals)
tabu	'again'

tara'also' (with singulars, also a numeral 'one', see §4.6.2)utu'contrary-to-expection'

- (158) Pali iau kikeri ga polo valai na bito-ne ria.
 but 1S.F alone MOD go.across come OBL back-3S.P 3PL.F
 'But I myself will go across behind them.' (t27:64)
- (159) *A padi kunana a manu i taku*. 1s shoot just ART fish 3s one 'I speared only one fish.' (dict)
- (160) Toni kunana.
 try just
 'Just trying.' (dict) (Tok Pisin traim tasol)
- (161) Ri va-ubi e huriki, pali e Baki i laho malimali
 3PL REC-hit ART.P PLUR but ART.P B. 3S walk free *kunana*, *i* vano.
 just 3S go
 'People were fighting, but Baki just walked freely through, and went away.' (dict)
- (162)...*ria* **ranga** *ri laho tura-na* 3PL.F also 3PL walk with-3S '...they also walked with him.' (Lk 8:2)
- (163) Na malunga liu i bole tabu iau na aga vona.
 OBL afternoon very 3s take/get again 1s.F OBL canoe 3s.OBL
 'Late in the afternoon he took me in his car again.' (t6:33)
- (164) *Iau tara, i uka ma a made tabaka.*1s.F also 3s NEG NEG 1s sit long
 'I did not stay long either.' (t6:37)

(165)*E* Kura i uka ma i valai koea. i malaga ART.P K. 3s NEG NEG 3s come here 3s left Hoskins. i lakea o Rahaul utu 0 contrary.to.expectation LOC H. 3s go LOC R. 'Kura did not come here. She left Hoskins (which we hadn't expected) and went to Rabaul.' (dict)

7.9 Constituent order variation

7.9.1 Preliminaries

Constituent order in Bola is remarkably flexible. Constituents can fill different positions in the clause, depending on various pragmatic factors such as topicalisation, contrastive emphasis, highlighting, backgrounding and possibly other factors. Most of the variation has to do with the position of subject NPs in intransitive clauses (VS versus SV; §7.9.2), and to a lesser extent the position of subject and object NPs in transitive clauses (§7.9.3). But the position of oblique phrases is also far from fixed (§7.9.4), and there is fronting of other constituents as well (§7.9.5).

The examples that have been given so far in this chapter illustrate the more usual order for various clause types, but this section attempts to describe, illustrate and, where possible, explain various permutations in constituent order. These statements are only our initial thoughts on this topic, as much more research is needed to arrive at satisfactory explanations which account for all the data found in texts.

7.9.2 Intransitive clauses: VS and SV

We assume that basic constituent order in intransitive clauses is VS. This is based on three reasons. The first reason is statistical. Table 7.1 shows the proportion of VS versus SV in eight texts for a total of 116 intransitive clauses containing a full NP subject (which includes full pronouns). (The total number of clauses in each text is also shown). 66% (77/116) of these intransitive clauses have the order VS, while 34% show SV. However, it should be noted

that the distribution of the VS/SV ratio over the various texts shows considerable variation. Text 3, for example, has more cases of SV than VS (though the numbers, 5 and 2, are admittedly very small). Text 5, on the other hand, a traditional folk tale about a chicken and a cassowary, has 36 VS clauses, against 7 SV. If text 5 were to be excluded from the total tally, the ratio of VS would go down from 66% to only 56% (41/73), and SV would go up from 34% to 44% (32/73), leaving only a marginal difference. It is unclear what the reasons for this variation across the texts are (genre? style? idiolect?), and whether a larger sample would significantly change the figures.

Texts	t1	t2	t3	t4	t5	t6	t9	t12	total
Nr of clauses	37	89	61	27	208	86	40	48	596
Nr of intrans.	11	8	7	13	43	13	3	18	116
clauses									
VS order	8	5	2	6	36	7	2	11	77
SV order	3	3	5	7	7	6	1	7	39

TABLE 7.1. CONSTITUENT ORDER VARIATION IN INTRANSITIVE CLAUSES

The second reason for stating that VS is the basic constituent order is that this is the typical order in weather expressions, body-part idioms and quote margins. We take the postverbal position of the subject NP in these more-orless fixed phrases to be indicative of the unmarked VS constituent order. This is illustrated in the following VS examples, with the subject NP underlined.

- (166) I boru <u>a</u> <u>vala</u>.
 3s fall ART rain
 'It is raining.' (Lit. 'Rain falls.') (conv)
- (167) I kara <u>a haro</u>.
 3s hot ART sun
 'It is hot.' (Lit. 'The sun is hot.') (conv)
- (168) I rodo <u>a</u> <u>hini</u>, mete mahita.
 3s dark ART area 1PAE sleep
 'When it (lit. the area) was dark, we went to sleep.' (t15:2)

- (169) *I rike pali <u>a</u> haro*. 3s go.up PERF ART sun 'The sun has risen.' (conv)
- (170) I rongo <u>a kuli-na</u>.
 3s hot ART skin-3s
 'She had a fever.' (Lit. 'Her skin was hot.') (Mk 1:30)
- (171)*I madihi <u>a</u> <u>hate-gu</u>. 3s hurt ART liver-1s*

'I was angry.' (Lit. 'My liver hurt.') (t31:10)

- (172) I madihi tata <u>a hate-na e mengo</u>.
 3s hurt continue ART liver-3s ART.P cassowary
 'Cassowary continued being cross.'
 (Lit. 'The liver of Cassowary continued to hurt.') (t5:30)
- (173) I ta maea <u>e</u> <u>ruka</u>...
 3s say like.this ART.P barracuda
 'Barracuda said...' (t5:43)

The third reason is that it is much easier to explain SV as a marked order than the other way round. The most common reasons for fronting (topicalising) a subject noun phrase in intransitive clauses are topic switch, contrastive topic, and formulaic endings. In the following examples the subject NP is again underlined.

1. **Topic switch.** When a section in a text has focussed on one character, and the narrator switches to a different character or another topic, we frequently find SV. In (174), for example, the topic switches from the director to the narrator; the use of the focal adverb *tara* 'also' reinforces this switch. In (175) the topic switches from girls, in postverbal position, to men, in preverbal position.

- (174) Muri i page rike na aga vona, i tarulu next 3s jump go.up OBL canoe 3s.OBL 3s say.goodbye puru iau, i vano. <u>Iau</u> tara i uka ma a made tabaka. go.down 1s.F 3s go 1s.F also 3s NEG NEG 1s sit long
 'Then he (= the director) got in his car, said goodbye to me and left. I didn't stay long either.' (t6:36-37)
- (175) Na tahuna ni dili hae lobo а ruma. i koma а PASS build finish ART house 3S go.in ART child OBL time mahita vonga. <u>E</u> ngatavine, ri <u>huriki a</u> bakovi <u>a</u> ART woman 3PL sleep there ART.P PLUR ART man mahita na roho. ri 3PL sleep OBL mens.house 'After the house is built, the girls go inside and they sleep there. The

men sleep in the men's house.' (t11:57-58)

However, not all switches in topic are accompanied by a change to SV order. This depends partly on the clause type (with transitives we expect SVO anyway), but probably also on the importance of the shift in the author's eyes.

2. Contrastive topic. This phenomenon is particularly clear when two similar subjects are contrasted in preverbal position, as in the following example:

(176) I rodo a hini, <u>ranga e huriki</u> ri hamule na 3s night ART area some ART.P PLUR 3PL return OBL tanga ne ria. <u>Ranga</u> ri made, ri rago-a village OBL.P 3PL.F some 3PL sit 3PL sleep.close.to-3s *a poda-na viri mate.* ART body-3s person die

'When it is dark, some go back to their villages. Some stay and sleep near the body of the dead person.' (t12:3-4)

3. **Formulaic endings**. At the end of narratives, there are more or less formulaic closing statements, typically with the subject occurring preverbally. This is clearly related to the notion of topic switch, discussed above, but in this case probably more or less fixed.

- (177) <u>A nuverei ne tu-na duku</u> i lobo. ART story OBL.P child-3s orphan 3s finish 'The story of the orphan child is finished.' (t3:32)
- (178) <u>A</u> <u>mapa-na</u> <u>boro</u> ge to ne Bare. ART head-3S pig IRR.3S jump OBL.P B. 'The pig head will jump to Bare (= now it's Bare's turn to tell a

story).' (t4:17)

Two other possible reasons for initial subjects in intransitive clauses are tentatively mentioned here, with a view to further investigations.

4. **Introductions**. Main characters in a narrative are often introduced in SV clauses. Though there are various counterexamples, most texts have instances of characters introduced in preverbal position.

(179) Na parava tara <u>e</u> <u>maki tubu-na</u> <u>rua</u> ru rakoli OBL day one ART.P PLUR grandrelative-3S two 3D rest *na haro*.
OBL sun
'One day, a grandparent and his/her grandchild (lit. two grandrelatives) were resting at noon time.' (t4:4)

5. **Presence of a locative PP.** SV is possibly the unmarked order when there is a following locative PP. In other words, the order SV PP appears to be more common than VS PP, though this remains to be statistically confirmed.

- (180)...<u>a</u> <u>pusi</u> i ha hamule na ruma. ART cat 3s flee go.back OBL house '...the cat fled back to the house.' (t2:31)
- (181) *Pali <u>e</u> <u>tubu-na</u> i lakea na loma.* but ART.P grandrelative-3S 3S go OBL flower.garden 'Then his/her grandparent went to a flower garden.' (t3:15)

7.9.3 Transitive clauses: SVO, VOS, VSO and OVS

Table 7.2 shows the extent of constituent order variation in transitive clauses with full NP subjects and objects. It should be noted that the position of oblique phrases is ignored, while serial verb constructions are counted as a single V for the purposes of constituent variation.

	t1	t2	t3	t4	t5	t6	t9	t12	total
Nr of clauses	37	89	61	27	208	86	40	48	596
Nr of transitive	14	33	15	7	62	19	9	11	170
clauses									
VO	12	22	15	3	37	12	7	9	117
O V	-	2	-	-	1	I	-	-	3
S V-o	-	2	-	-	5	2	-	-	9
V-o S	-	-	-	1	6	3	1	-	11
SVO	1	7	-	2	8	2	1	2	23
V O S	1	-	-	1	2	I	-	-	4
VSO	-	-	-	-	2	-	-	-	2
O V S	-	-	-	-	1	-	-	-	1

TABLE 7.2. CONSTITUENT ORDER VARIATION IN TRANSITIVE CLAUSES

Object suffixes and enclitics have mostly not been taken into consideration in this analysis. Like subject proclitics, they are part of the verbal complex, and do not constitute a separate phrasal constituent, even though almost all of them are written as separate words (the exception is 3S -*a*). In other words, clauses such as *A bole-a* [1s get/take-3s] 'I took it', and *Ri hubi ria* [3PL hit 3PL.F] 'They hit them' are technically s-V-o, not SVO, and hence excluded from the tally. Only when there is a full subject NP in combination with V-o is this clause type included in the tally.

In transitive clauses with a full object NP but no subject NP, VO is very dominant (117 VO versus 3 OV). In clauses with a pronominal O and a full subject NP, S is roughly equally common in preverbal and postverbal position (9 SV-o versus 11 V-oS). Even though these numbers are low, they are reminiscent of the position of S in intransitive clauses discussed in §7.9.2. When both S and O are present as NPs, the unmarked order is SVO: 77% (23/30 cases), versus 23% (7/30) for all other orders combined.

In the following paragraphs we will briefly discuss and illustrate a number of these variants. VO and SVO will not be discussed, as a large number of examples of these default orders can be found in §7.5 to §7.8.

1. OV. Fronted objects are relatively rare, occurring only three times in the eight texts analysed. Object topicalisation serves to contrast two kinds of objects which are very similar, as in the following two examples, where O is underlined. Notice that in (183) the pronoun *ioe* 'you' occurs twice (with the transitive verb *ngaru*), but that *iau* 'I' (which is technically not an O) is linked to the 1s oblique pronoun *nau*, the oblique object of the intransitive verb *koi* 'not like'.

- (182) <u>Ranga</u> ri tahoni na kaika, <u>ranga</u> ri tahoni na ngotu.
 some 3PL fill.up OBL bamboo some 3PL fill.up OBL bark
 'Some (shell money) they put in bamboo, some they put in bark.'
 (t2:12)
- (183) <u>Ioe</u> ri ngaru ioe, <u>iau</u> ri koi nau 2S.F 3PL like 2S.F 1S.F 3PL not.like 1S.OBL 'You they like, but me they hate.' (conv)

Another reason for fronting the object is focus. The following example has the object in preverbal position, partly because it is the questioned constituent (and therefore naturally in focus), but also because of the emotion of surprise and possibly irritation conveyed in this rhetorical question. (184)Ita таеа kio. "<u>A</u> ra kani-a е vomu 3S speak like.this ART.P wild.fowl ART what eat-NMLZ 2S.OBL a tangi kelekele mai-a?" expectantly towards-3s 1s cry 'Wild Fowl said, "What food of yours am I begging for?"' (t5:84) (Implied: 'I am not begging at all. You are wrong.')

2. SV-o and V-oS. If we assume that SV-o is the default order, the position of a postverbal subject NP (underlined) can be accounted for by certain pragmatic or syntactic factors. So far, three of these have been tentatively identified.

a. The subject is backgrounded. Compare the following two examples, illustrating SV-o (unmarked order) and V-oS (marked order):

- (185) Pali a Tolai i nongo vaki-a, a vuhu-na i tami-a.
 but ART T. 3s laugh blow-3s ART reason-3s 3s trick-3s
 'But the Tolai laughed at him, because he had tricked him.' (t2:20)
- (186) *I here-a <u>e</u> <u>Giru</u> 3s write-3s ART.P G. 'Giru wrote it.'/ 'Written by Giru.' (t8:1)*

In (186) the author puts his name in postverbal position to background it, possibly as a politeness strategy. Since the passive in Bola is obligatorily agentless (see §7.4.6), he has no other choice for backgrounding the agent. In example (187) the subject is again backshifted, giving emphasis to the pronominal object.

(187) *I navai ri ngaru bala ioe <u>e</u> <u>huriki a</u> <u>ngatavine</u>? 3s why 3PL covet always 2S.F ART.P PLUR ART woman* Pali iau?but 1S.F'Why do the women always desire you? How about me?' (t5:36)

b. V-oS is also quite common in clauses describing adverse weather conditions, often involving idioms. This is comparable to the VS constructions discussed in §7.9.2.

- (188)Aruma bara i uka. bara i kani mate hita а ART house MOD 3S NEG MOD 3S eat die **1PLI.F ART** haro, i boru langa ne hita vala. а sun 3s fall on OBL.P 1PLI.F ART rain 'If there is no house, the sun will scorch us (lit. eat-die us), rain will fall on us.' (t11:6).
- (189)...*lakea i rata pile iau <u>a</u> <u>malangi-a</u>. then 3s do enemy 1s.F ART cold-NMLZ*

'.... and I was very cold.' (Lit. '... the cold was ruining me.') (t6:31)

c. Thirdly, V-oS occurs when the subject NP is 'heavy', often because it contains a relative clause. In the following examples, where the object happens to be a first person pronoun, the relative clause is put in brackets, and only the head subject NP is underlined.

- (190) I vaka-turutu iau <u>a</u> <u>balu</u> [i voro rike puru a
 38 CAUS-surprise 1S.F ART plane 38 throw go.up go.down ART bubu], lakea a hadongo.
 cloud then 18 wake.up
 'I was startled by the plane being thrown up and down by the clouds,
 - so I woke up.' (t6:20)
- (191) *I matai iau <u>a</u> <u>bakovi</u> [i vaka-nunu a balu] a tangi, 3s see 1s.F ART man 3s CAUS-run ART plane 1s cry*

lakea i nana... then 3s ask 'The pilot (lit. the man running the plane) saw me crying and asked...' (t6:23)

Whether these three explanations can account for all cases remains to be investigated.

3. VOS order. VOS order in transitive clauses is fairly rare, and only four cases are reported in table 7.2. In these cases the subject has been back-shifted to clause-final position. This is possibly done to background the subject (which is a given and known entity) and highlight the object, which is the focus of attention. This is shown in the following case, where the back-shifted subject is underlined.

rabu hale (192) Na tahuna i page raga, i rata a 3s jump come.down 3s do ART deed bad OBL time bole-a i bonu i pulo mengo. е е ART.P cassowary 3s take/get-3s ART.P turtle 3s turn ngala-tade-a. front-lie.on.back-3s 'When he jumped off (the canoe), Cassowary did a bad thing, he

took Turtle and turned him upside down.' (t5:62)

In the following VOS example, however, backgrounding is hardly an explanation.

(193) I tahoka a ngarava dagi <u>a vaha-na varago</u>.
3s have ART sore big ART leg-3s both
'She had big sores on both her legs.' (Lit. 'Both her legs had big sores.') (t4:6)

4. VSO order. With only three cases, VSO is a rare permutation. It appears that the verb is placed in clause-initial position for reasons of highlighting; the

few examples we have typically occur at the dramatic peak of a story. This is illustrated by the following two examples (with V underlined).

(194) *Muri* i bole-a е Loga a maheto, i padi next 3s take/get-3s ART.P L. ART spear 3s shoot rike-a rua e na popoda ne girihi-na а pusi, go.up-3S OBL rack OBL.P 3D.F ART.P spouse-3S ART cat padi mate-a. i 3s shoot die-3s 'Then Loga took the spear, shot up into the cat that was on the rack of him and his wife, and killed it.' (t2:43) (195)*I* boru puru е mengo, padi-a i а go.down ART.P cassowary 3s shoot-3s ART 3s fall

kulamoru a hate-na, i mate. broken.branch ART liver-3s 3s die

'Cassowary fell down, a broken branch speared his liver, and he died.' (t5:96-97)

However, the 'dramatic peak' explanation for VSO is not convincing in the following example. We are not yet at the climax of the story, while 'to hear' is hardly a dramatic action. No other explanation is available at this moment.

(196) I longo-a e kio a ni-ta-na, lakea i
3s hear-3s ART.P wild.fowl ART NMLZ-talk-3s then 3s
dodo-a, i pulo ngala-tudu-a.
sorry-3s 3s turn front-lie.on.belly-3s
'When Wild Fowl heard that (lit. his talk), he was sorry for him (the turtle), and flipped him over (on his stomach).' (t5:79)

5. OVS order. This constituent order, which is only found once in the eight texts analysed, could be termed 'inverse', as it is the opposite of the regular SVO word order. It is functionally equivalent to an agented passive, where the patient is highly topical, while the agent is lower in topicality, for example
because it is inanimate, or because it is not present in the speech situation, as in (197). The initial object NP is underlined.

(197) <u>Iau</u> i vaka-longo iau e bulobuloaga ta ri marikoi 1S.F 3S CAUS-hear 1S.F ART.P dolphin MOD 3PL not.like ioe e huriki.
2S.F ART.P PLUR
'I was told by Dolphin that people don't like you.' (t5:52)

In (197) the object *iau* is obligatorily present after the verb, presumably because that is its default position in the verbal complex, and the preverbal *iau* acts as a proleptic topicalised object. Another example of this phenomenon is (183). The 'inverse' construction is also illustrated in (198):

(198) <u>E</u> <u>Brent</u> i kani-a a namo. [...ika'nia'namo] ART.P B. 3s eat-3s ART mosquito 'Brent is being bitten by mosquitoes.' (conv)

This example is somewhat tricky, as the correct reading (with initial object) depends on which syllable of the verb is stressed. Because the 3s suffix -*a* is not pronounced before the article *a* (see §2.7), the verb and following noun comes out as [...ika'nia'namo]. This could also be written as *E Brent i kani a namo* (or ... *i kania namo*) with a single *a*. However, in order to retain the 'inverse' reading (with the preverbal NP functioning as the patient), the stress should remain on the syllable *ni* indicating the object is a single entity. An alternative reading of *E Brent i kani a namo*, with stress on *ka*, would indicate the object is no longer singular, and the most natural reading is then SVO, making the preverbal NP the agent. The sequence [nia] can also be further reduced to [na] in this case:

(199) *E* Brent i kani a namo. [i'kania'namo] ~ ART.P B. 3s eat ART mosquito [i'kana'namo 'Brent is eating mosquitoes.' (conv)

7.9.4 The position of oblique phrases

The usual position of a locative or temporal phrase is at the margin of a clause, usually at the end, following the object (if there is one). For pragmatic reasons such as settings, point of departures and introductions, oblique phrases can also occur clause-initially. Various examples of this are provided in §7.7.

However, our texts also contain a number of cases where the locative phrase follows the verb but precedes the object. The function of this unusual ordering is not entirely clear, but appears to either highlight the object or the location. In this section these 'intervening' oblique phrases (a PP, an oblique pronoun, a locative adverb) are underlined.

- (200)Amaka kopa ri kaloho-a o Bulu a kulu е ART PLUR bat 3PL carry-3S LOC B. ART breadfruit ART.P bakato. blackseed.breadfruit 'A group of bats carried a blackseed breadfruit tree from Bulu.' (t9:2) (201) E rua i pia tara kanono to tama-ne gutu-a
- ART.P father-3S.P 3D.F 3S fetch one fire 3PA cook-3S <u>vona</u> boro. 3S.OBL pig

'Their father got some fire and they cooked the pig on it.' (dict)

(202) *Ri ru puru-a <u>vonga</u> a kulu.* 3PL put go.down-3S there ART breadfruit 'They put the breadfruit tree down there.' (t9:14)

In the next example, an oblique phrase breaks up the verbal complex, splitting the serial verb construction *vore valai*, but the reason for this is not clear.

(203) Na parava tara, ranga Tolai ri valai vore aga na OBL day some T. 3PL paddle OBL canoe come one ni kona a dara. COMP buy ART shell.money 'One day, some Tolais paddled here in canoes to buy shell money.' (t2:3)

The following example, which is the previous sentence from the same story, has two unusually placed locative phrases. The first one is identical to the previous example; the second one has the locative adverb *koea* 'here' breaking up a prepositional phrase introduced by *turana* 'with it'.

(204) *Ri* vore valai o Rabaul. ri na <u>aga</u> luve tura-na 3PL paddle OBL canoe come LOC R. 3PL arrive with-3S dara maka maki ni kona a koea a vona. here ART PLUR thing COMP buy ART shell.money 3S.OBL 'They paddled in canoes from Rabaul and arrived here with things to buy shell money with.' (t2:2)

7.9.5 Fronting

The last section on constituent order variation illustrates the fronting of other constituents than the subject, object or verb. In the following examples the fronted constituents are oblique NPs and a possessor. It appears that fronting happens for the purposes of highlighting, such as contrastive emphasis or focus. In (205), for example, the contrast is between the two main characters of the story, Chicken, whom all the women want to marry, and Cassowary, who fails to draw any attention to himself.

(205) Pali <u>e</u> <u>mengo</u> i uka a viri ge ngutu vona.
but ART.P cassowary 3S NEG ART person IRR.3S covet 3S.OBL
'But as for Cassowary, nobody wanted him.' (t5:27)

(206) <u>Ra leho iea kunana</u> a valai vona. DEF work DEM just 1s come 3s.OBL 'That is precisely the work I came for.' (Mk 1:39)

(207) <u>Iau</u> a ra-gu e Lorence Raka. 1S.F ART name-1S ART.P L. R. 'My name is Lorence Raka.' (t28:1)

This concludes the section on constituent order variation and the chapter on clause structure.

8. Clausal modifications

8.1 Negation

Regular clausal negation happens through the negator *uka* 'no, not' (glossed NEG), normally followed by a second negative element *ma* before a verb or an adjective, but not before an NP. This particle *ma* has no independent meaning, and will therefore also be glossed as NEG. Since *uka* is always preceded by a subject marker (usually the third person singular *i*), *uka* is considered a negative verb which has the following clause in its scope.

- (1) I uka ma i valai.
 3s NEG NEG 3s come
 'She has not come.' (Lit. 'It [is] not [the case that] she came.') (conv)
- (2) I abu a kai, i uka ma i nono.
 3s wet ART wood 3s NEG NEG 3s burn
 'The wood is wet, it does not burn.' (dict)
- (3) Muri i uka ma a vurena tabu. next 3s NEG NEG 1s dream again
 'Afterwards I did not dream again.' (t6:21)
- (4) Pali e tama-na e kina-na, i uka ma ri tovo but ART.P father-3S ART.P mother-3S 3S NEG NEG 3PL teach ria na v<in>ara kamumu. 3PL.F OBL <NMLZ>teach good

'But the mothers and fathers do not give them good instructions.' (t10:6)

- (5) A mangenge a vuhu-na i uka ma a rike na balus
 1s afraid ART reason-3s 3s NEG NEG 1s go.up OBL plane
 hosi.
 long.ago
 - 'I was afraid, because I had not gone on a plane before.' (t33:4)

The combination *i uka* can also be a simple negative response to a question or a command (see also \$8.3.1). In fast conversational speech *i uka ma* can be reduced to *ma*.

In negative clauses with a first or second person singular, the subject prefix before *uka* can 'harmonise' with the following subject, resulting in *a uka* and *o uka*. In the following two examples both *a uka* and *i uka* are acceptable; in (8) both *o uka* and *i uka* are fine.

- (6) A uka ma ga vano.
 1s NEG NEG IRR.1s go
 'I will not go.' (conv)
- (7) A uka ma a rere ni ta tura-na.
 1s NEG NEG 1s familiar COMP speak with-3s
 'I'm not used to talking to him.' (dict)
- (8) Ioe o uka ma o habi nau a naru.
 2S.F 2S NEG NEG 2S give 1S.OBL ART water
 'You did not give any water to me.' (Lk 7:44)

In existential-possessive clauses uka also occurs without the second negative element ma. When ma is present, the meaning is 'it is not', but when ma is absent the meaning changes to 'there is no X, it has no X'. Compare the following pairs. (Notice that the article a before the noun is not pronounced in these cases, as the sequence aa gets reduced to a single a; see §2.7. In written style the a sometimes surfaces.)

(9) a. *I uka (a) naru*.
3S NEG ART water
'There is no water.' (conv)

b. *I uka ma (a) naru.* 3s NEG NEG ART water 'It is not water.' (conv)

(10) a. *I uka a balu na robo iea*.
3s NEG ART pigeon OBL bush DEM
'There are no pigeons in this bush.' (conv)
b. *I uka ma a balu, a kokoa*.

3S NEG NEG ART pigeon ART crow 'It's not a pigeon, it's a crow.' (conv)

When the subject prefix is first or second person, the only meaning of *uka* without *ma* is 'to have'.

- (11) A uka naru.1s NEG water'I don't have water.' (elic)
- (12) O uka bua?2s NEG betelnut'Don't you have betelnut?' (conv)
- (13) Iau a uka kedo.
 1s.F 1s NEG stone
 'I don't have stones/money.' (conv)

Compare (13) with (14), which is a negated equative clause:

(14) *Iau a uka ma (iau) a kedo* 1S.F 1S NEG NEG 1S.F ART stone 'I am not a stone.' (elic) The combination of *uka ma* and the imperfective particle *ma* 'yet' following the verb means 'not yet'.

- (15) I uka ma i rike ma a haro.
 3S NEG NEG 3S go.up yet ART sun
 'The sun had not come up yet.' (dict)
- (16) Pali a viri tara i uka ma i bele ma. but ART person one 3S NEG NEG 3S arrive yet
 'But one person has not arrived yet.' (Rv 17:10)

The combination of *i uka* and the degree adverb *liu* 'very, completely' results in an emphatic negative: 'not at all, certainly not, not even.' Notice that in (17) there is a modal marker gi because of the numeral in the NP, following the pattern described in §5.7.2 sub d.

- (17) ...ri pango i uka liu tara boro ri gi padi-a.
 3PL hunt 3S NEG very one pig 3PL IRR shoot-3S
 '...they hunted, (but) they did not even spear a single pig.' (t30:10)
- (18) I uka ma muru gu mate. I uka liu.
 38 NEG NEG 2D IRR die 38 NEG very
 'The two of you will not die. Not at all.' (Gn 3:4)

We continue this section with a number of clauses illustrating various indefinite negative constituents ('nothing', 'nobody'). Many of these are elicited or taken from translated materials, and illustrate the use of *ge* and *gi* in negated NPs.

- (19) A uka ma a matai tara maki.
 1s NEG NEG 1s see one thing
 'I didn't see anything.' 'I saw nothing.' (elic)
- (20) A uka ma a matai tara viri.
 1s NEG NEG 1s see one person
 'I didn't see anybody.' 'I saw nobody.' (elic)

- (21) *I uka maki ge bele.* 3s NEG thing IRR.3s arrive 'Nothing happened.' (elic)
- (22) *Ria lobo i uka ma ri mulangi.*3PL.F all 3S NEG NEG 3PL win
 'All of them did not win.' 'None of them won.' (elic)
- (23) I uka tara koma ge valai.
 35 NEG one child IRR.35 come
 'Not one child came.' (elic)
- (24) Pali i uka tara viri ge tuveve-a.
 but 3s NEG one person IRR.3s explain-3s
 'But nobody could explain it.' (Gn 41:8)

Another point to make about negation in Bola is that the language has a substantial number of verbs with an inherently negative meaning component, including the following:

bala	'not have'
baniro	'not share food with others'
keri	'be unable'
koi	'not like, not want, not feel like doing something' (compare also <i>marikoi</i> 'not want, not like, hate')
ngavapu	'not have (food)'
ringangi	'not feel good'
ta(ba)bana	'not yet (be)'

(25) A bala a moni, i uka ma a kona a bret.
1s not.have ART money 3s NEG NEG 1s buy ART bread
'I had no money, (and so) I didn't buy bread.' (conv)

- (26) *Iau a bala e tu-gu*.
 1S.F 1S not.have ART.P child-1S
 'I do not have children.' (Gn 15:2)
- (27) O vano o rako. Iau a koi.
 2s go 2s catch.fish 1s.F 1s not.like
 'You go catching fish (in the river). I don't feel like going.' (dict)
- (28) A koi ni longo-a a ni-ta-na.
 1s not.like COMP hear-3s ART NMLZ-talk-3s
 'I didn't want to listen to him.' (t6:16)
- (29) I keri ni lakavu-a, i kalu-a a takiu, i ha.
 38 unable COMP catch-38 38 miss-38 ART possum 38 flee
 'He was unable to catch it, he missed the possum and it fled.' (dict)

We end this section with three unrelated, but interesting points about negation in Bola. First, the combination *ge uka* [IRR.3S NEG] means 'if not, otherwise', as in the following example:

(30) Mu nunu lakea na lolo, ge uka, bara mu mate.
2PL run go OBL mountain IRR.3S NEG MOD 2PL die
'Run to the mountain, otherwise you will die.' (Gn 19:17)

Secondly, there is an idiom *i uka ma i rehi* [3S NEG NEG 3S play], literally 'it does not play', which refers to excessive quantities. Neighbouring Vitu has a similar idiom (*beta ni palage*), and so does Malay/Indonesian (*bukan main*).

(31) I uka ma i rehi e huriki ri vilai.
35 NEG NEG 35 play ART.P PLUR 3PL come
'Lots of people came.' (Lit. 'Not playing people came.') (elic)

(32) I padi i padi i uka ma i rehi, ni rata pile
3s shoot 3s shoot 3s NEG NEG 3s play COMP make enemy *liu* ni padi-na a manu.
completely COMP shoot-3s ART fish
'He was extremely successful in spearing lots of fish.' (Lit. 'He shot and shot not playing, he completely destroyed at shooting fish.')
(t3:4)

The last point is the negative adverb *tavula* 'for no reason, for no particular purpose'. Its semantics is very similar to the Tok Pisin adverb *nating*, and hence it is glossed as 'nothing' (though it is an adverb, not a noun).

(33) A bakovi i mata-nono tavula a tura-na, bara muri ART man 3S look-light nothing ART friend-3S, MOD next ni mata-nono tavula.
PASS look-light nothing

'If a man just stares at his friends (and refuses to help them), then later he will be just stared at too.' (t11:17).

8.2 The imperative mood

The imperative mood is used for giving commands, either positive or negative. Positive commands minimally consist of a verb preceded by a second person subject pronoun: *o* 'you (singular)', *muru* 'you (dual)', *moto* 'you (paucal)' or *mu* 'you (plural)'. Serial verbs are possible in imperatives, and with transitive verbs, an object may follow.

- (34) O valai! 2s come 'Come!' (conv)
- (35) Moto vago!
 2PA pole
 'You (paucal) pole (the canoe).' (t24:23)

- (36) Mu longo valai.2PL hear come'Listen to me (all of you).' (Gn 19:8)
- (37) Mu haro vona!2PL sun 3S.OBL'Say good day to him!' (conv)
- (38) Marua e Kedo, muru valai!
 2D.F ART.P K. 2D come
 'You and Kedo, come!' (Lit. 'You-two and Kedo...') (conv)
- (39) Pali i taki-a, "O rike vona a niu, o pasi-a but 3s say-3s 2s go.up 3s.OBL ART coconut 2s pick-3s tara kane-na karaba."
 one fruit-3s new
 'And he told him, "Go up in a coconut (tree), and pick a new fruit."
 (t3:16)
- (40) Moto vano moto bole a pelet ge tolu!
 2PA go 2PA take/get ART plate IRR.3S three
 'Go and get three plates!' (elic)

An alternative, less direct way of commanding someone to give something is the following:

(41) Ge valai a naru.
IRR.3s come ART water
'Give me some water.' 'Can I please have some water?' (Lit. 'Let water come / water will come.') (conv)

Negative imperative clauses (prohibitives) begin with the words *naha ni*. *Naha* is the negative verb (glossed as 'don't'), followed by the complementiser *ni*. The prohibitive *naha* 'don't' is probably derived from the

transitive verb *naha* 'to leave, to leave behind' (though *naha* is rarely used in this meaning in our corpus).

- (42) Naha ni voro puru-a. don't COMP throw go.down-3s
 'Do not throw it down.' (t3:17)
- (43) Si gi lakea ngane, mua naha ni ta.
 1PLI IRR go now 2PL.F don't COMP speak
 'From now on while we are walking, you must not talk.' (B:60)

Hortatives are constructed with the first person inclusive pronoun si and the modal marker gi. Since si gi can also mean 'we will', it is not always clear whether a hortative or a simple future reading is meant. Following an imperative, as in (45), a hortative reading is the most natural interpretation.

- (44) Si gi rakoli na parava ge lima.
 1PLI IRR rest OBL day IRR.3S five
 'Let's rest for five days.' (t12:9)
- (45) Mu valai, si gi lakea o Kimbe.
 2PL come 1PLI IRR go LOC K.
 'Come, let's go to Kimbe.' Or 'Come, we will go to Kimbe.' (conv)
- (46) Ge polo a keva ge tolu si gi puke-a
 IRR.3S go.past ART moon IRR.3S three 1PLI IRR break.down-3S
 a kape vona.
 ART shelter 3S.OBL

'After three months we will break down his shelter.' (t12:14)

The negative hortative uses *nahea* 'must not' (literally 'leave it')

(47) Nahea si gi rabalaki-a. must.not 1PLI IRR kill-3s 'Let's not kill him.' (Gn 37:27)

8.3 The interrogative mood

8.3.1 Polar questions

Polar questions (or yes-no questions) are constructed like normal sentences, but with a different intonation pattern. Impressionistically the intonation rises up to the penultimate syllable, and then makes a sharp fall on the final syllable. In positive answers the predicate is typically repeated, optionally preceded by the interjection e 'yes'. Consider the following (mostly elicited) question-answer pairs.

- (48) a. *A ruma iea ne vomu?* ART house DEM OBL.P 2S.OBL 'Is this your house?' (elic)
 - b. *E*, *a ruma nau*. yes ART house 1S.OBL 'Yes, it's my house.' (elic)
 - c. *I uka, ne vone Peter.* 3s NEG OBL.P 3s.OBL.P P. 'No, it's Peter's house.' (elic)
- (49) a. *loe go vano tura-na a bakovi iea?*2s.F IRR.2s go with-3s ART man DEM
 'Will you go with this man?' (elic)
 - b. Ga vano IRR.1s go 'I will.' (elic)
- (50) a. *loe o tahoka a viri vomu?*2s.F 2s have ART person 2s.OBL
 'Do you have any relatives?' (Gn 19:12)

b. E, a tahoka. / E, i kupo.
yes 1s have yes, 3s many
'Yes I do.' 'Yes, I have many.' (elic)

- c. *I uka. / I uka viri nau.* 3S NEG 3S NEG person 1S.OBL 'No.' 'No, I don't have any.' (elic)
- (51) a. *I uka ma mu gi-a a puhu?*3s NEG NEG 2PL read-3s ART book
 'Did you not read the book?' (elic)
 - b. *E*, *i* uka ma mi gi-a yes 3s NEG NEG 1PLE read-3s 'No, we haven't read it.' (elic)
 - c. *I uka, mi gi-a.* 3s NEG 1PLE read-3s 'No, we DID read it.' (elic)
 - d. *Tabana. Kuduvi mi gi gi-a.*not.yet tomorrow 1PLE IRR read-3s
 'Not yet. We'll read it tomorrow.' (elic)

Another example, from a text:

- (52) a. *I nana*, "*A duku iea, i valai pali koea*?"
 3S ask ART orphan DEM 3S come PERF here
 'She asked, "Has that orphan child come here already?"
 - b. *Ri ta maea e huriki, "I uka."* 3PL speak like.this ART.P PLUR 3S NEG 'They said, "No." (t21:18-19)

Alternative questions are formed with the negators *uka* 'not' or *tabana* 'not yet' following the conjunction *o* 'or'.

(53) a. Go hilolo o i uka? IRR.2S bathe or 3S NEG 'Will you bathe or not?' (conv)

> b. *E*, ga hilolo. yes IRR.1S bathe 'Yes, I will bathe.' (conv)

- (54) *Ga padi-a o i uka?* IRR.1s spear-3s or 3s NEG 'Will I shoot it or not?' (t31:14)
- (55) a. *E Raka i vano pali, o tabana?*ART.P R. 3S go PERF or not.yet
 'Did Raka go already, or not yet?'
 - b. *Tabana*. not.yet 'Not yet.'

8.3.2 Content questions

Content questions use specific interrogative words to question various constituents of the sentence. Their position varies. Some occur in situ, that is, in the same position as the corresponding constituent in the declarative sentence. Other questioned constituents are typically found in clause-initial position. The following interrogative words have been recorded.

rei	'who' (normally e rei with personal article, also ne rei 'whose')
ra	'what' (normally <i>a ra</i> with common article), 'what kind of, which' (attributively)
navai	'how; why' (also <i>i navai</i>)
garika	'when' (both with past and future reference)
riva	'how many' (normally <i>i riva</i> or <i>ge riva</i>)
vai	'where' (also avai, i vai, and in the verb loko-vai 'go where')

avia 'where'

These interrogative words are illustrated in the following examples.

- (56) *E* rei a ra-mu? ART.P who ART name-2s 'What is your name?' (conv)
- (57) I nana, "E rei a taho-na a tanga?"
 3s ask ART.P who ART owner-3s ART village 'He asked, "Who is the owner of the place?" (t3:5)
- (58) *Ioe e tu-ne rei*? 2S.F ART.P child-3S.P who 'Whose child are you?' (Gn 24:23)
- (59) *A* **ra** *a* maki iea? *A* ligo? ART what ART thing DEM ART dog? 'What is that? A dog?' (t2:16)
- (60) *A* ra o taringi-a? ART what 2s cry.about-3s 'What are you crying about?' (dict)
- (61) *A* ra ga rate-a ngane? ART what IRR.1S do-3S now 'What will I do now?' (Lk 12:17)
- (62) *A* **ra** *naro hale i rate-a*? ART what behaviour bad 3s do-3s 'What bad thing did he do?' (Lk 23:22)
- (63) Navai mu vano mu mate lobo liu?
 why 2PL go 2PL die all completely
 'Why did you all go and die?' (s.u.)

- (64) Garika o bele koea?
 when 2s arrive here
 'When did you get here?' (Jn 6:25)
- (65) *Garika* ge valai? when IRR.3S come 'When will he/she come?' (elic)
- (66) E tu-mu i riva?
 ART.P child-2s 3s how.many
 'How many children do you have?' (conv)
- (67) I riva a tu-na ligo?
 38 how.many ART child-38 dog
 'How many puppies are there?' (conv)
- (68) I riva a k<in>ori vomu o bole...?
 38 how.many ART NMZL-help 28.0BL 28 take/get
 'How much help (or: how many helpers) did you get...?'
 (Lit. 'How many [was] your help [which] you got...?') (Lk 16:5)
- (69) Ri tanu lobo-a, muri ri va-ta ge riva a
 3PL bury finish-3S next 3PL REC-talk IRR.3S how.many ART
 haro ri gi rakoli vona.
 day 3PL IRR rest 3S.OBL

'After they've buried him, they discuss how many days they will rest for him or her.' (t12:8)

There are several words for 'where' in Bola: *vai* (and *avai* and *i vai*) and *avia*. This is somewhat complex and we can only present a rough outline here.

The interrogative *vai* 'where' is used after either the verb or the nominal predicate. It cannot occur clause-initially.

- (70) *Ioe vai*?2s.F where'Where are you?' (conv)
- (71) *Kina-mu* vai? mother-2s where 'Where is your mother?' (conv)
- (72) Mu valai vai ngane?
 2PL come where now
 'Where have you come from now?' (Gn 42:7)

The pair *avai* and *avia* are only found clause-initially and are both used to ask for the location of items. *Avai* has plural reference, whereas *avia* refers to a single item. Compare the following pair:

(73) a. Avai a boro nga? where.PL ART pig DEM.PL
'Where are the pigs?' (elic)
b. Avia a boro? where.SG ART pig

'Where is the pig?' (conv)

Some other examples:

- (74) Avai ra mosi nga ru valai ngane na rodo?
 where.PL DEF visitor DEM.PL 3D come now OBL night
 'Where are those two visitors who came tonight?' (Gn 19:5)
- (75) *Avia e tama-ne mua?* where.SG ART.P father-3S.P 2PL.F 'Where is your father?' (Gn 43:27)

When *vai* is preceded by 3s *i*, it can mean either 'which one?' (among a preselected set) or a very general 'where?' with a fair degree of uncertainty. Compare the following pair:

(76) a. Avia a ligo nau? where.SG ART dog 1S.OBL
'Where is my dog?' (I expect it's somewhere around here.) (elic)
b. I via a ligo nau? 3S where ART dog 1S.OBL
1. 'Where is my dog?' (I have no idea, it could be anywhere.)
2. 'Which one is my dog?' (elic)

There is one adverb that only occurs in questions. The degree adverb *ma* 'so' apparently only occurs in why-questions that are based on stative clauses. This *ma* follows adjectives in question clauses, and indicates an unexpectedly high degree of the quality expressed by the adjective.

- (77) *A ra bakovi i made muga, i navai i mata peda ma?* ART DEF man 3S sit front 3S why 3S look nice so 'That man sitting in front, why does he look so good?' (t26:45)
- (78) Ra ligo iea i navai i kato hateka ma?
 DEF dog DEM 3S why 3S black very so
 'Why is that dog so black?' (elic)

It should be noted that Bola has at least four homophonic morphemes ma: modal ma (§5.7.4), a secondary negative particle ma (§8.1), imperfective ma 'yet' (§8.4.2), and the degree adverb ma 'so' discussed here.

8.3.3 Indefinite use of interrogatives

The interrogative words can also be used to make generic statements in relative or adverbial clauses, in which case they have indefinite reference. This is relatively rare in our texts, but quite frequent in the Bola Bible. The first example is from a prayer, with the question word *vai* reduplicated.

- (79) *Ri made vai-vai, o made tura-ne ria.*3PL sit RED-where, 2s sit with-3s.P 3PL.F
 'Wherever they are, be with them.' (conv)
- (80) Pali e re i mata-visi iau bara i rabalaki iau.
 but ART.P who 3s look-succeed 1s.F MOD 3s kill 1s.F
 'But whoever' finds me will kill me.' (Gn 4:14)
- (81) I mavonga, a ra maki mu ninu, a ra maki mu 3s like.that ART what thing 2PL drink ART what thing 2PL kani, a ra maki mu rate-a... eat ART what thing 2PL do-3s
 'Therefore whatever you get whatever you drink whatever you

'Therefore, whatever you eat, whatever you drink, whatever you do....' (1Co 10:31)

8.4 Tense, aspect and modality

The following three sections deal with tense, aspect and modality (TAM), approaching these topics from a notional point of view. That is to say, rather than taking the language structure as the point of departure (which is done in most of this grammar), we now ask the question 'How is TAM notion X expressed in Bola?' This is somewhat unusual for a grammar sketch, but we believe that such an approach complements a purely structuralist description.

8.4.1 Tense

Except for the future, tense is not overtly marked in Bola. There is no tense distinction between past and present. Depending on the speech context the clause *I made koea* (3s sit/live here) can mean 'S/he lives here' or 'S/he lived here.' Temporal adverbs or temporal phrases such as *ngane* 'now', *mona* 'today' or *hosi* 'in the past' can provide the necessary temporal grounding (see section §7.7.2 for a list of temporal expressions).

¹ E rei 'who' has been reduced to e re because of the following *i*. See §2.7.

To refer to the future, Bola uses one of two modal particles: ga and bara. Though they are similar, ga normally has an element of volitionality that is lacking in *bara*, though in some cases the distinction is blurred. For a full discussion, see §5.7.2 and §5.7.3.

8.4.2 Aspect

Habitual aspect is realised in Bola by the aspectual adverb *bala* 'always, habitually' after the verb, or it is left unmarked.

- (82) E Jon i valai bala nau.
 ART.P J. 3S come always 1S.OBL
 'John always comes to me.' (s.u.)
- (83) I navai ri ngaru bala ioe e huriki a ngatavine?
 38 why 3PL want always 2S.F ART.P PLUR ART woman
 Pali iau?
 but 1S.F
 'Why do the women always desire you? How about me?' (t5:36)
- (84) Hosi i uka ma mi rodo varikia.
 long.ago 3S NEG NEG 1PLE wear clothes
 'In the past we did not wear clothes.' (elic)

Progressive aspect is indicated by reduplication of the verb.

- (85) *A naru i tu-tua*. ART water 3S RED-flow 'The water is flowing.'
- (86) *E* tata *i le-leho*.
 ART.P my.father 3s RED-work
 'My father is working.'

Continuative or **durative** aspect is expressed with the adverb *mavonga* 'like that; continuously' or the verb *tata* 'continue'. They are both used to indicate that an event is ongoing.

- (87) A koma i lili mavonga a lango na ngarava.
 ART child 3s chase like.that ART fly OBL sore
 'The child just kept chasing the flies off the sore.' (t4:8)
- (88) I mahita tata.
 3s sleep continue
 'He keeps sleeping.' (conv)

Repetition of the verb several times is another common strategy to express durative aspect. This is especially common in story-telling.

- (89) To valai valai.
 3PA come come
 'They kept coming.' (t24:30)
- (90) I tangi laho laho e kio i vano.
 3s cry walk walk ART.P wildfowl 3s go
 'Wildfowl went, crying as he walked.' (t5:90)
- (91) *Ri* ninu ninu ninu, ri bole-a re Ko.
 3PL drink drink drink 3PL get-3S DEF.P K.
 'They kept drinking, and finished the (aforementioned) Ko river.' (t9:30)

The aspectual verb *tabana* 'still' indicates that the state or action is or was still ongoing, contrary to expectation. *Tabana* is followed by a *ni*-complement clause. (As a one-word response, *tabana* is a negator meaning 'not yet'; see §8.1.)

(92) Moto tabana ni mahita?
2PA still COMP sleep
'Are you still sleeping?' (Mt 26:45)

(93) Iau a marikoi ni leho, a vuhu-na a tabana ni 1S.F ART not.like COMP work ART reason-3S 1S still COMP kiroko.
small
'I didn't want to work, because I was still little.' (t39:3)

Completive aspect is marked by a serial verb construction consisting of the main verb plus the intransitive verb *lobo* 'finish'. (*Lobo* is also used as a quantifier meaning 'all' or 'every', see §4.6.2).

(94) *Iau a kani lobo*.
1s.F 1s eat finish
'I finished eating.' (conv)

The **perfect** (category combining tense and aspect) is expressed by the sentence-final adverb *pali* 'already'. The use of *pali* typically seems to indicate a past action with present relevance.

- (95) *Iau a kani pali*.
 15.F 1s eat PERF
 'I have already eaten.' (conv)
- (96) *Iau a ruru na robo balaka i va pali*.
 1S.F 1S lost OBL bush time 3S four PERF
 'I've already been lost in the bush four times.' (dict)

Negative imperfective aspect ('not yet') is expressed using the imperfective marker *ma* 'yet' immediately following the negated verb it modifies.

(97) I uka ma i rike ma a haro.
38 NEG NEG 38 go.up yet ART sun
'The sun had not come up yet.' (dict)

- (98) I uka ma ni hae ma a ruma vona.
 38 NEG NEG PASS build yet ART house 3S.OBL
 'His house has not been built yet.' (s.u.)
- (99) I uka ma ri made puru ma.
 3s NEG NEG 3PL sit go.down yet
 'They have not yet sat down.' (elic)

The first *ma* follows the negative verb uka, and is part of verbal negation (see §8.1). The second *ma* follows the verb it modifies, and indicates imperfective. Notice that the imperfective *ma* follows the last verb in a string of verbs.

8.4.3 Modality

In this section we deal with the expression of modal notions. We start with the traditional distinction between epistemic modality (which deals with possibility and probability) versus deontic modality (which deals with obligation and permission). A few additional modal categories are also discussed, including ability, volition and counterfactuality.

1. Possibility

To encode the epistemic modal notion of possibility, Bola uses the modal marker *bara*, discussed in $\S5.7.3$, or the combination *ma ge*. Notice that in (101), the first occurrence of *bara* is translated as the conjunction 'if', the second as a modal auxiliary.

(100) <i>Iau</i>	bara	vano	kuduvi.
1S.F	MOD	go	tomorrow
ʻI wi	ll prob	ably g	o tomorrow. / I might go tomorrow.' (elic)

(101) Bara te laho laho, bara te velu liu.
MOD 1PAI walk walk MOD 1PAI lost completely
'If we keep walking, we might get completely lost.' (t20:21)

- (102) Ma ge giloa ravi.
 MOD IRR.3S sick yesterday
 'He may have been sick yesterday.' (elic)
 (103) Ma ge mate pali.
 - MOD IRR.3S die PERF 'He may/might have died. / Maybe he has died.' (elic)

The modal marker *bara* does not distinguish between degrees of possibility. Furthermore, Bola has no modal adverbs corresponding to English 'possibly', 'perhaps' and 'probably'. This whole notional field is covered by *bara* and *ma ge*.

2. Certainty

When the adjective *muholi* 'true' is placed in sentence-initial position (often preceded by the 3s subject marker *i*) and followed by a plain clause, this indicates the certainty of the following statement (as perceived by the speaker or writer). Its English equivalent is 'truly, surely, certainly, really' and it can be further strengthened by the degree adverb *hateka* 'very'.

ligo i "I muholi maka kukulima-gu i (104)Ata maea, ART dog 3s say like.this 3s true PLUR fingernail-3s 3s uka ma i vere." NEG NEG 3s sharp 'The dog said, "My fingernails are certainly not sharp." (Lit. 'It is true that...') (t45:6) (105) Muholi hateka ia tara ga gamai-a. true very 3S.F also IRR.1S bless-3S

'I will definitely also bless him.' (Gn 17:20).

3. Obligation

Moving to deontic modality, we start with obligation. Here a clear distinction is made between second and non-second persons. For second-person

obligation, the imperative mood is used (§8.2). For non-second persons, the modal particle ga (and variants ge, go, gu and gi) serves to indicate obligation (see §5.7.2). These are also the major strategies used in the Bola Bible to translate obligations.

- (106) O taki ria!
 2s say 3PL.F
 'You tell them! / You must tell them. / You should tell them.' (elic)
- (107) *Mu vano ngane.* 2PL go now

'You all go now. / You must go now. / You should go now.' (conv)

- (108) Naha ni panaho.
 don't COMP steal
 'Don't steal. / You must not steal. / Thou shalt not steal.' (Mk 10:19)
- (109)...na tahuna ni mata-visi, ni gi rabalaki.
 OBL time PASS look-succeed PASS IRR kill
 '...when he is found, he must be killed.' (Ex 21:16)
- (110) Nahea ri gi padoi a maka maki nga.
 must.not 3PL IRR touch ART PLUR thing DEM.PL
 'They must/should not touch these things.' (Nm 4:15)

4. Permission

Permission is normally not overtly marked in Bola. The imperative *vano!* can be translated as a direct command 'go!', but also as a permissive 'you may go, you can go.' Similar examples can be found in the Bola Bible.

(111) A maka kane-na kai lobo o kani, pali...
ART PLUR fruit-3s tree all 2s eat but
'You may eat the fruit of all the trees, but...' (Gn 2:16)

Third-person permissions ('X is allowed to do Y') are coded by the compound verb *mata-taro* 'allow, let, permit, overlook, ignore' (literally 'look-first'). Examples of this construction are limited to the Bola Bible.

- (112) Ri mata-taro e huriki a vora ri laho polo-vavo.
 3PL look-first ART.P PLUR ART servant 3PL work LOC-out
 'They let the servants work outside.' (Ex 9:21)
- (113) *A Vure i mata-taro-a i va-ubi tura-na e huriki.* ART God 3s look-first-3s 3s REC-fight with-3s ART.P PLUR 'God allowed him to fight with them.' (Rv 13:7)
- (114) Ra naro maea nahea ni gi mata-taro ge DEF behaviour like.this must.not PASS IRR look-first IRR.3S bele ne mua.

arrive OBL.P 2PL.F

'This kind of behaviour must not be allowed to occur among you.' (Lv 20:14).

5. Ability

Ability is expressed by the verb *kara* 'can, be able'. *Kara* is an impersonal transitive verb, always taking the 3rd person subject marker *i*, followed by a full personal pronoun functioning as the object, which in turn is followed by ge / go / ga or a *ni*-complement clause. A more literal translation equivalent is therefore 'it is possible for X to...'

- (115) *I kara ioe*?
 3s able 2s.F
 'Are you able? / Can you do it?' (elic)
- (116) *Ioe kunana, i kara ioe go bole mule-a e tu-mu.*2S.F only 3S able 2S.F IRR.2S take/get back-3S ART.P child-2S
 'Only you can take your child back.' (elic)

- (117) I kara iau ga puke-a a roho iea.
 3s able 1s.F IRR.1s break-3s ART building DEM
 'I can break down this building.' (Mt 26:61-m)
- (118) A Vure kunana i kara ni tuveve a ni-ta
 ART God only 3s able COMP explain ART NMLZ-talk
 kapiloho na vurena marua.
 hidden OBL dream 2D.F
 'Only God can explain the hidden meaning of your dreams.' (Gn 40:8)
- (119) Bara i kara ria, bara ri tami tabu e huriki a MOD 3s able 3PL.F MOD 3PL deceive also ART.P PLUR ART bakovi. man

'If they could, they would also trick the men.' (Mt 24:24-m)

Inability is indicated by the impersonal transitive verb *keri* 'unable, too hard', followed by a *ni*-complement clause.

- (120) I keri iau ni bole kedo dagi.
 3s unable 1S.F COMP take/get stone big
 'I am not able to lift big stones.' (elic)
- (121) *I keri tate-a ni huru*. 3s unable tight-3s COMP swim

'He was totally unable to swim.' (lit. 'tightly unable...') (t5:39)

(122)...manga a hire na dari, bara ni keri ni gi. like ART sand OBL sea MOD PASS unable COMP count

'... like the sand in the sea, which cannot be counted.' (Gn 32:12)

6. Volition

Apart from the modal particle *bara*, which may have volitional overtones (see §5.7.3), the main strategy to indicate volition is through the desiderative verb *ngaru* 'want, like, desire, love.'

(123) <i>A</i>	bakovi	ranga	ri	ngaru	ni	matai	ioe.	
ART	man	some	3pl	want	COMP	see	2s.f	
'Some men want to see you.' (dict)								
(124) <i>A</i>	ra o	ngari	и-а з	ga	rate-a?			
ART	what 2	s want	-3s i	rr.1s	do-3s			
'What do you want me to do?' (Mk 10:51)								

The negative desiderative verb is marikoi 'not want', illustrated in §8.1.

7. Conativity

Conative modality, which covers the notion of 'trying to do something', is expressed in two ways. The first method is through the combination of the modal markers *ta ga*, followed by a clause which makes it clear that the intent was not realised, or that the attempt was not successful. (This is called 'realistic intent/expectation' in §5.7.5).

(125) I balaka kupo ta ga lakene mua, pali a dala-gu 3s time many MOD IRR.1s go.to.you 2PL.F but ART road-1s ni putu-kari.
PASS break-protect
'Many times I have tried to come to you (PL), but my road was blocked.' (Rm 1:13)

The second method is through the use of the verb *toni* 'try, test, tempt':

(126) Lakea i toni a bulu-na ge bole-a a ruma. then 3s try ART strength-3s IRR.3s take/get-3s ART house 'Then he tried his best to get the house.' (t49:35)

8. Counterfactuality

In addition to the modal particle *ta*, counterfactuality is indicated by the modal particle *bara*, as illustrated in the following three examples.

ligo dagi, bara kara mate a (127) Bari iau a ngapole. MOD 1S.F ART dog big MOD bite die ART wallaby 'If I was a big dog, I would bite wallabies to death.' (dict) (128) Na tahuna bara i boru ravi vala. bara i uka а yesterday ART rain MOD 3S NEG OBL time MOD 3s fall viri valai. ge person IRR.3S come 'If it had rained yesterday, nobody would have come.' (elic) (129) *Ioe bara o made koea, e* kuraba-gu i uka here ART.P opposite.sex.sibling-1S 3S NEG 2S.F MOD 2S sit

ma ge mate. NEG IRR.3S die

'If you had been here, my brother would not have died.' (Jn 11:21) (This can also mean, 'If you are here, my brother will not die.')

9.1 Introduction

Clause combining is not a particularly complex phenomenon in Bola. There are only a few conjunctions, and with the exception of the non-finite *ni*-complement clauses, there are no obvious marks of subordination. The most common clause-linking strategy is simple juxtaposition, and these juxtaposed clauses can have a variety of semantic functions, including complementation, relativisation and various adverbial functions. This chapter organises clause-combining in the following way, combining syntactic and semantic features:

- juxtaposition (§9.2);
- conjoining with conjunctions (§9.3);
- complementation (§9.4);
- relative clauses (§9.5);
- adverbial clauses (§9.6).

Two additional topics connected with complex sentences are also discussed in this chapter: direct and indirect speech ($\S9.7$) and verbal repetition (\$9.8).

9.2 Juxtaposition

Juxtaposition is the simple pairing of clauses without any overt formal marking, each verb having its own subject marker. Juxtaposition typically marks a sequence of events, for which a natural English translation often requires the use of 'and' or 'then', but can also indicate simultaneous action.

- (1) A vano, a made na haus sik o Noga.
 1s go 1s sit OBL hospital LOC N.
 'I went and I sat in the hospital at Noga.' (t18:24)
- (2) I masi-a boro, i padi-a, i poke-a.
 3s see-3s pig 3s shoot-3s 3s butcher-3s
 'He saw a pig, he speared it and butchered it.'
- (3) Ri malaga ri kaloho-a ri bebe tura-na ri valai ri kalolo.
 3PL left 3PL carry-3S 3PL flew with-3S 3PL come 3PL sing
 'They (the bats) left, put it (the breadfruit tree) on their shoulders, then they flew away with it and sang.' (t9:17)
- (4) ...mete made vonga i kani e Brent.
 1PAE sit there 3s eat ART.P B.
 '...we sat there as Brent ate.' (t8:6)

Not all juxtaposed clauses mark a sequence of events. In fact, many complement clauses, relative clauses and adverbial clauses are also structurally simple juxtaposed clauses. They will be illustrated in the relevant sections below.

If the second clause has a different modal marker (typically ge instead of i), this signals purpose or has future reference.

- (5) *E Mautu i vano ge pango*. ART.P M. 3S go IRR.3S hunt 'Mautu went to hunt.' (dict-m)
- (6) Ngane mi made mi dava a balus ge bele.
 now 1PLE sit 1PLE wait ART plane IRR.3s arrive
 'Then we sat down and we waited for the plane to arrive.' (t33:7)
- (7) *E mengo ngane i pesi na aga, i* ART.P cassowary now 3S stand.up OBL canoe 3S

ngala-tudu, i viro-kane-a a bakovi ge kori-a. front-lie.on.belly 3s search-see-3s ART man IRR.3s help-3s

'Then Cassowary stood up in the canoe, bent down, and searched for a man to help him.' (t26:50)

9.3 Conjoining with conjunctions

Linking clauses by means of a conjunction is a relatively minor strategy in Bola. The most common conjunctions used for linking clauses in Bola are the following:

lakea	'so, then'	(temporal or logical connection; also a motion verb meaning 'go')
pali	'but, and'	(contrast, continuation)
0	'or'	(alternative)
a vuhuna	'because'	(reason; lit. 'its base/reason')

The conjunctions *lakea* and *a vuhuna* are discussed and illustrated in $\S9.6.1$ (temporal clauses) and $\S9.6.2$ (reason clauses) respectively; examples of *pali* 'but' and *o* 'or' follow below.

Pali normally indicates a contrast, but in situations where there is no obvious contrast it simply marks the continuation of an argument, which can be translated as 'and' or even 'so', as in (10). For the sake of consistency *pali* is simply glossed as 'but'.

(8)	Iau	ta	ga	bole-a	a	vao	i	mapasi,	pali
	1s	MOD	irr.1s	take/get-3s	ART	mango	3s	fall	but
			ra i sir 3s ge	<i>iilo.</i> t.it.first					
	(1	1		1 .	1 . 1	1 0 11	1	· TZ 1	

'I was about to grab a mango that had fallen, but Kura beat me to it.' (dict)

- (9) To taki miri ruru na robo, pali i uka ma miri ruru.
 3PA say 1DE lost OBL bush but 3s NEG NEG 1DE lost
 'They said we were lost in the bush, but we were not lost.' (t13:27-28-m)
- (10) A valai ngane ta ga matai ioe. Pali ngane o made 1s come now MOD IRR.1s see 2s.F but now 2s sit rike na loho-gu. go.up OBL neck-1s
 'I came now to see you. So now sit up on my neck (t5:53-54)

The conjunction *o* 'or' is probably a borrowing from Tok Pisin *o*. (Notice that there are two other (homophonous) morphemes *o* in Bola: the 2nd person singular subject marker (as in *o valai* 'you came'), and the locative preposition before place names: *o Bulu* 'in/from/to Bulu'.)

- (11) Ga valai vomu o i uka? IRR.1s come 2s.OBL or 3s NEG 'Shall I come to you or not?' (conv)
- (12) A loho va-gorigori lae, "Ga hamule o ga vano?"
 1s think REC-unsure around IRR.1s return or IRR.1s go
 'I was unsure, thinking, "Will I go back or will I go?" (t33:10)
- (13) Ra ngava a taki, mu longo-kilala o i uka?
 DEF mouth 1s say 2PL hear-clear or 3s NEG?
 'The words that I speak, do you understand them or not?' (Mt 13:51)
- (14) Iau i uka ma lohoka vona, ia a bakovi kamumu o
 1S.F 3S NEG NEG know 3S.OBL 3S.F ART man good or
 ia a bakovi hale.
 3S.F ART man bad

'I do not know whether he is a good man or a bad man.' (Jn 9:25)

9.4 Complement clauses

Complement clauses function as the object of the verb in the main clause. There are two types: juxtaposed and *ni*-complement clauses.

9.4.1 Juxtaposed complement clauses

The first type of complement clause simply follows the main clause without any conjunction or special marking. It is common with verbs of perception such as *matai* 'see', *longo* 'hear', *hataki* 'feel', and mental verbs such as *lohoi* 'think', *padahaki* 'assume, suppose' and *lohoka* 'know'. This last verb is intransitive and the complement clause is introduced by *na* or *ne*, or by the proleptic oblique object pronoun *vona*.

- (15) I matai iau a mangenge.
 3s see 1S.F 1s afraid
 'He saw that I was afraid.' (t6:13)
- (16) Go matai tou made o Kilu ngane.
 IRR.2S see 3PA.F sit LOC K. now
 'You can see them (living) in Kilu now.' (t14:2)
- (17) I longo iau a haloho.
 3s hear 1s.F 1s cry
 'He heard me cry.' (Gn 39:15)
- (18) A hataki a kuli-gu i piu mahaha.
 1s feel ART skin-1s 3s cold very
 'I felt that my skin was very cold.' (t6:31)
- (19) Pali a lohoka ne tou bara to valai koea.
 but 1s know OBL.P 3PA.F MOD 3PA come here
 'But I knew that they were coming here.' (t6:7)
- (20) *Iau i uka ma a lohoka vona a viri i rate-a* 1S.F 3S NEG NEG 1S know OBL.3S ART person 3S do-3S
a naro iea. ART behaviour DEM

'I do not know who did this thing.' (Gn 21:26)

When the complement of a cognitive verb refers to something that turned out to be untrue, the complement clause is introduced by the modal marker *ta*.

(21) Iau a paha-daki ta i dili benk a moni nau.
1S.F ART step.on-suppose MOD 3S go.in bank ART money 1S.OBL
Pali i uka.
but 3S NEG

'I assumed my money had already gone into the bank. But it hadn't.' (dict)

(22) Pali e lahua-na rua, ru luhoi ta i ta padikede.
but ART.P son.in.law-3s two 3D think MOD 3s talk mock/joke
'But his two sons-in-law thought he was joking.' (Gn 19:14)

9.4.2 Ni-complement clauses

The second type of complement clause is introduced by the complementiser *ni* (glossed as COMP), which is followed by a clause that lacks a subject marker, making it a non-finite clause. *Ni*-complement clauses are common following verbs of volition such as *ngaru* 'want, like, love', *koi* and *marikoi* 'not like, not want', as well as various other verbs and even some adjectives, such as *mangenge* 'afraid', *kara* 'can, be able', *tubu* and *vakatubu* 'begin', *lobo* 'finish, stop' and *tabana* 'still be'. The subject of this non-finite complement clause is understood to be the same as that of the main clause. (Note that there are three other (homophonous) morphemes *ni* in Bola: the passive proclitic *ni*, the nominalising prefix *ni*-, and the characterising particle *ni*.)

(23) Ru ngaru ni havai.
3D want COMP go.on.journey
'The two of them wanted to go on a journey.' (t5:2)

- (24) *Iau a marikoi* **ni** *leho.* 1S.F 1S not.like COMP work 'I don't want to work.' (dict)
- (25) A mangenge ni dili tabukoi na lavu iau.
 1s afraid COMP go.in near OBL beach 1S.F
 (The barracuda said), 'I am afraid to go in close to the beach.' (t5:43)
- (26) I uka ma miri kara ni puruvisi a dala.
 3s NEG NEG 1DE able COMP find ART road
 'We were unable to find the road.' (t15:17-m)
- (27) Lakea i vakatubu ni tangi.
 then 3s begin COMP cry
 'Then she began to cry.' (t49:14)
- (28) I lobo ni tua a dara-na.
 3s finish COMP flow ART blood-3s
 'Her blood stopped flowing.' (Mk 5:29)
- (29) Pali na tahuna i tabana ni mahuri...
 but OBL time 3s still COMP alive
 'But when he was still alive...' (Gn 25:6)

Passives do occur in *ni*-complement clauses, but instead of the expected sequence *ni ni*, we find *ni gi*, possibly a case of dissimilation. This *gi* is not the modal *gi*, but a unique feature of complement clauses. Compare the following examples, where (30) illustrates the more common of cases of *ni gi* [PASS IRR], and the following three examples show passive *gi* in *ni*-complement clauses.

(30) *A moni* **ni gi** habi ne tama-na ngatavine ART money PASS IRR give OBL.P father-3S woman 'The money will be given to the woman's father' (Dt 22:19)

- (31) A ngaru ni gi habi nau.
 1s want COMP PASS.COMP give 1S.OBL
 'I want it to be given to me.' (elic)
- (32) Pali i koi ni gi luke...
 but 3s not.want COMP PASS.COMP comfort
 'But she does/did not want to be comforted...' (Mt 2:18)
- (33) ...i kara ni gi kani na parava muri.
 3s able COMP PASS.COMP eat OBL day next
 '... it can be eaten on the next day.' (Lv 7:16)

9.5 Relative clauses

Relative clauses modify a head noun (antecedent) by giving additional information about the referent. In Bola all relative clauses are post-nominal. There are no formal markers for relative clauses, though quite a few of them (especially in the Bola Bible) have an initial definite article *ra*. The relativisable positions are subject, object, oblique and possessor. Except for subject-relativised clauses, traces of the relativised constituent are left in the relative clause in the form of pronominal suffixes or free pronouns. In the following examples the antecedent is bolded, and the following relative clause is put in brackets.

Examples of relativised subjects:

(34) I nongo vaki-a e tubu-na [i dedo.]
35 laugh blow-35 ART.P grandrelative-35 35 groan
'He laughed at his grandmother who was groaning.' (t4:13)

- (35) *Oio*, ma parangi tavula bakovi [i vago тi vona а nothing 3S.OBL ART man 3s pole oh MOD 1PLE marry muga] e! front yes 'Oh, how we would like to just marry the man who is poling in the front (of the boat), yes! (t5:10) (36) *Mia* mi kani a maki [ni habi ne mia na
- (30) Mite mit kan a make [nt nubl ne mite na 1PLE.F 1PLE eat ART thing PASS give OBL.P 1PLE.F OBL haro.] sun 'We ate what was given to us at noon.' (t1:18)

The following examples illustrate the use of the definite article ra in relative clauses. The article can occur either between the antecedent and the relative clause (and function seemingly as a relativiser), but it can also precede the antecedent and occur between the article a and the antecedent, as in (38) and (41). Since ra also means 'what' (typically a ra in clause-initial position, see §8.3.2), this appears to be a case where an interrogative element has acquired a relativising function (compare English *who* and *which*).

In other words, the following constructions are all possible for relative clause formation, and there does not appear to be any semantic difference, though pattern (b) appears to be more common with non-restrictive relative clauses.

a.		[antecedent]		[relative clause]
b.		[antecedent]	ra	[relative clause]
c.	ra	[antecedent]		[relative clause]

Pattern (a) is illustrated above; patterns (b) and (c) are shown below.

(37) I marikoi vona e kina-na ra [i pe-a vonga 3s not.like 3s.OBL ART.P mother-3s DEF 3s leave-3s there i tabuli vonga i vano.]
3s lie there 3s go
'He heted his methor who had left him there to be there and had

'He hated his mother, who had left him there to be there and had gone away.' (t27:49)

(38) A ra bakovi [i made muga], i navai i mata peda ma?
ART DEF man 3S sit front 3S why 3S look nice so
'That man who is sitting in front, why does he look so good?'
(t27:45)

Examples of relativised objects are given below. Notice with a singular object a trace is present in the relative clause in the form of the object suffix -a.

- (39) A bakovi [ri ngaru-a] e kureko.
 ART man 3PL want-3S ART.P chicken
 'The man they wanted was Chicken.' (t5:28)
- (40) A puruvisi-a a hole nau [a pe-a na naru].
 1s find-3s ART basket 1S.OBL 1s leave-3s OBL water
 'I found my basket that I had left at the river.' (dict).
- (41) Moto vuroki a ra maki [moto bole].
 2PA throw.away ART DEF thing 2PA take/get
 'Throw away those things you are holding.' (t1:13)
- (42) I puru harihari ge masi-a a bonu ra [i pulo 3s go.down quickly IRR.3s see-3s ART turtle DEF 3s turn ngala-tade-a].
 front-lie.on.back-3s

'He quickly went to see the turtle that he had flipped over.' (t5:88)

- ngane koea na Muku ra (43) *Si* kulu varo-a е 1PLI plant-3S now here OBL M. DEF breadfruit ART.P kaloho vili-a hakato [si tano]. blackseed.breadfruit 1PLI carry come-3s from.down "Now let's plant this blackseed breadfruit tree that we carried from down there, here at Muku.' (t9:33)
- (44) ...pali i tovo-a ra ngatavine [i tuli-a o Ruango]. but 3s buy-3s DEF woman 3s bring-3s LOC R.
 '...and he bought (paid the bride price for) the girl he had brought from Ruango.' (t3:31)

Examples of oblique relative clauses:

- (45) A maka tanga lobo [ru vago polo vona]...
 ART PLUR village all 3D pole go.past 3S.OBL
 'Every village that they poled past....' (t5:25)
- (46) O karaka rike na hini [i rako vona a vurevure].
 2s crawl go.up OBL area 3s spread 3s.OBL ART k.o.vine
 'Crawl up a place where vines are growing.' (t5:60)

9.5.1 Qualitative relative clauses

Bola has another type of relative clause, one that is introduced by *ni*. These are non-finite relative clauses, as there is no subject marker, but objects and oblique phrases can be present. These clauses are particularly common to describe a permanent quality or a characteristic feature of people or objects, and often have one-word translation equivalents in English. In these constructions *ni* will be glossed as QUAL (for qualitative).

(47) *a lingo ni pango* ART dog QUAL hunt 'a hunting dog' (conv)

- (48) a bakovi ni vaka-bebe a balu
 ART man QUAL CAUS-fly ART plane
 'the pilot' (lit. 'the man flying the plane') (t6:8)
- (49) *a bakovi ni ta vaka-rika* ART man QUAL talk CAUS-funny 'a joker' (lit. 'a man who talks funny') (dict)
- (50) *a maki ni kani* ART thing QUAL eat 'food' (lit. 'something to eat') (t1:13)
- (51) *a maki ni mahita vona* ART thing QUAL sleep 3S.OBL 'something to sleep on' (conv)
- (52) E Noa a bakovi ni leho na hania.
 ART.P N. ART man QUAL work OBL garden
 'Noa was a gardener/farmer.' (Lit. '... a man who worked in the garden.') (Gn 9:20)
- (53) Ia a ngatavine ni kavurike a Vure.
 3S.F ART woman QUAL worship ART God
 'She was a woman who worshipped God.' (Ac 16:14)

The following pair, which is virtually identical in meaning, contrasts a qualitative relative clause headed by a verb with a prepositional phrase introduced by *na*. (Notice that *ubi* 'hit' is reduced to *bi* in the nominalisation.)

(54) a. *a bakovi ni va-ubi* ART man QUAL REC-hit 'a fighter, a warrior' (Mk 15:7) b. *a bakovi na va-bi-nga* ART man OBL REC-hit-NMLZ 'a fighter, a warrior' (t5:4)

village) and we got married.' (t18:4)

9.6 Adverbial clauses

9.6.1 Temporal clauses

There are several ways of joining clauses that are in a temporal sequential relationship to each other. The most common way is simple juxtaposition, as illustrated in §9.2. A frequently used conjunction is *lakea* 'then, so' (also an intransitive motion verb meaning 'to go'). Both strategies are illustrated in the following example, which combines five clauses.

(55) I valai, i made ngane, lakea a vano, a dili ngane, 3s come 3s sit now then 1s go 1s go.in now miri parangi.
1DE marry
'He came and stayed (in our village), then I went, I went in (his

Other ways of linking temporal clauses include the use of the phrase *na tahuna* 'at the time, when, while' to indicate simultaneous action. A very explicit way to encode subsequent events without any temporal overlap is the use of the intransitive verb *lobo* 'finish' in a serial verb construction in the first clause, often in combination with the adverb *muri* 'next, later, then', which introduces the next clause. These, and some others, are illustrated below.

(56) Na tahuna a mahita, a vurena na tanga nau.
OBL time 1s sleep 1s dream OBL village 1s.OBL
'While I slept, I dreamt about my village.' (t6:17)

- (57) I vara lobo mia, muri i pupu-laga a balu.
 38 teach finish 1PLE next 38 flap.wings-go.up ART plane
 'After he (the pilot) had given us instructions, the plane flew up.' (t6:11)
- (58) Ni kolo lobo a barema, muri ni kapi a
 PASS tie.on finish ART sago.palm.leaves next PASS cover ART daha-na ruma.
 wall-3s house
 'When the sago palm leaves have been tied on (to the roof), then the

sides of the house are walled up.' (t11:51)

- (59) Iau a boko polo-a e mengo muri ne rua 1S.F 1S carry go.across-3S ART.P cassowary next OBL.P 3D.F
 e kureko ru mabubu na utu. ART.P chicken 3D sink OBL deep
 'I carried Cassowary across (to land) after he and Chicken had sunk in the deep.' (t5:73)
- (60) A rongo-va ne mua ge lobo muga na haro ART hot-NMLZ OBL.P 2PL.F IRR.3S finish before OBL sun ge rolo. IRR.3S go.under
 'Your anger must finish before the sun sets.' (Ep 4:26)
- (61) I uka ma i tabaka, i vaka-tubu-a a masin.
 3s NEG NEG 3s long 3s CAUS-start-3s ART engine
 'It wasn't long before he started the engine.' (t6:9)

9.6.2 Reason clauses

The denominal phrasal conjunction *a vuhuna* 'because' introduces a clause expressing the reason of the main clause. This word is derived from *vuhu*

'base, trunk (of a tree)' which has further meanings like 'meaning, cause, reason'.

- (62) Iau a marikoi ni leho, a vuhu-na a tabana ni 1S.F 1S not.like COMP work, ART reason-3S 1S still COMP kiroko.
 little
 'I didn't want to work, because I was still little.' (t39:3)
- (63) To hamule valai o Kimbe, a vuhu-na i malunga pali.
 3PA return come LOC K. ART reason-3s 3s afternoon PERF
 'They came back to Kimbe, because it was already late in the afternoon.' (t8:28)

9.6.3 Conditional clauses

There is no conjunction meaning 'if' in Bola. Conditional clauses are formed by means of the modal marker *bara*, which is part of the verbal complex (see section §5.7.3, where various examples are provided). Example (64) is an additional example, illustrating the use of *bara* in both the conditional clause (the protasis), as well as the main clause (the apodosis).

(64) Pali ia bara i ngaru, bara i taki e huriki ri but 3s MOD 3s want MOD 3s say ART.P PLUR 3PL tuhori ri kaloho tala a kai. help 3PL carry go.out ART wood
'And if he wants, he will tell people to help him carry the wood.' (t11:21)

9.6.4 Purpose clauses

As with conditional clauses, there is often no explicit conjunction marking purpose. Instead, the modal marker ga (and variants ge / gi / go / gu) are used, as illustrated in §5.7.2. Negative purpose clauses are introduced by *nahea*.

- (65) O guru puru ranga naru ga ninu.
 2s pour go.down some water IRR.1s drink
 'Pour me some water so that I can drink.' (dict)
- (66) Mu taki-a ge habi-a nau, ga kona tale-a vona.
 2PL say-3S IRR.3S give-3S 1S.OBL IRR.1S buy go.out-3S 3S.OBL
 'Tell him to give it to me, so that I can buy it from him.' (Gn 23:9)
- (67) A Vure, i kara ia ge matakari kamumu mua, ART God 3s able 3S.F IRR.3S look.after good 2PL.F
 nahea mu gu boru. must.not 2PL IRR fall
 'God is able to look after you all, so that you won't fall.' (Jd 1:24)

A more explicit way of marking purpose is the use of the compound conjunction *ne vona* [OBL.P 3S.OBL] 'so that, in order that, for the purpose of', always followed by a *ni*-complement clause. These purpose clauses are particularly frequent in the Bola Bible. Since *ne vona* literally means 'for him/her/it', this can be seen as a case of double marking: first a proleptic purpose by means of an oblique pronoun, followed by the real purpose in a *ni*-complement clause.

(68) *Ri halu* а mego ne vona ni padi tala а 3PL sharpen ART awl in.order.to COMP shoot go.out ART binasi na barema. thatch.sheet OBL sago.palm.leaves 'They make an awl to punch holes in thatch sheets made up of sago palm leaves.' (t11:45) (69) I langa-langa ne vona hae-a dede а ni 3s build-3s ART platform RED-above in.order.to COMP mata-kari а hania.

look-protect ART garden

'He built a high platform to look after the garden.' (Mk 12:1)

(70) Ra kupo-na kedo iea, ne vona ni vakasiri a ngava DEF heap-3s stone DEM in.order.to COMP show ART mouth tu rate-a mona.
1DI make-3s today
(This sile of stores is to work (lit show) the concernent the two of w

'This pile of stones is to mark (lit. show) the agreement the two of us reached today.' (Lit. '...the mouth/word we made'.) (Gn 31:48)

9.7 Direct and indirect speech

Direct quotes follow verbs of speech, which include the following: *ta* 'say, speak, talk' (intransitive), *taki* 'say, speak, tell' (transitive), *tarike* 'say' (intransitive; a compound verb made up of *ta* 'speak' and *rike* 'go up'), *nana* 'ask', *talanga* 'reply' *koli* 'answer, reply' (often in combination with *ta* 'speak') and *magulu* 'call, shout'. Direct speech is typically introduced by means of the manner adverb *maea* 'like this'.

- (71) A ta maea, "O kani a maki vomu."
 1s say like.this 2s eat ART something 2s.OBL
 'I said, "Eat your food (lit. your thing)." (t13:5)
- (72) I nana maea, "E tama-ne mua i tabana?"
 3s ask like.this ART.P father-3s.P 2PL.F 3s still
 'He asked, "Is your father still alive?" (Gn 43:7)
- (73) A koli mule ia a ta maea, "A vurena e 1s answer back 3s 1s say like.this 1s dream ART.P girihi-gu." spouse-1s

'I answered him, "I dreamt about my wife."" (t6:26)

Indirect speech is simply juxtaposed to the main clause containing the verb of speech.

(74) A bakovi ni vaka-bebe a balu i taki iau a made ART man QUAL CAUSE-fly ART plane 3s say 1s.F 1s sit tura-na muga. with-3s front
'The pilot told me to sit in front with him.' (t6:8)

- (75) *Lakea e* Brent i nane-a a pilot na а ra taim 3s ask-3s ART pilot OBL ART what time then ART.P B. ge puru а balus. IRR.3S go.down ART plane 'So Brent asked the pilot at what time the plane would land.' (t8:18)
- (76) ...ri ta tabu vona ge garika ri gi puke-a kape-na.
 3PL talk again 3S.OBL IRR.3S when 3PL IRR break-3S shelter-3S
 '...they talk again about when to break up his shelter.' (t12:14)
- (77) I ta tora ne ria nahea ri gi ta.
 3s talk strong OBL.P 3PL.F must.not 3PL IRR talk
 'He commanded them not to speak.' (Mk 1:34)

9.8 Verbal repetition

Repeating the verb two, three or even more times to indicate continuous or durative action is very common in oral stories. Interestingly, the subject prefix is normally not included in the repetition. Notice the lack of conjunctions in these examples.

(78) I dedo dedo, i mate.
3s groan groan groan 3s die
'She groaned for a long time and then she died.' (t4:14)

- (79) *Ri bebe tura-na valai valai valai, ri marohu.*3PL fly with-3s come come 3PL thirsty
 'They (the bats) kept flying with it (the breadfruit tree) and they became thirsty.' (t9:4)
- (80) Miri made made made, i palala.
 1PLE sit sit sit 3s light
 'We just sat there for a long time until it became light.' (t13:62)

10. Residue

Having come to the end of this description, we realise that there is much more to discover and describe, and that a language doesn't easily give all its hidden treasures away. We therefore end the grammar by listing a number of issues which need further research.

- The extent of bilingualism in Tok Pisin, the nature of code switching between Bola and Tok Pisin, and their effect on the grammar and the lexicon of Bola.
- Vowel elision (§2.7), and possibly other features of connected speech.
- Various questions relating to word class membership, listed at the end of §3.3.1.
- The exact usages and meanings of the articles ra and re (§4.4.2).
- The demonstrative system, including variant forms such as *rea* and the pragmatics of *ngi* (§4.5).
- Comparative structures and strategies (§4.7.1).
- Variation among possession with *ni*-nominalisations (§4.8.2), as well as the syntax of nominalisation, a topic which is not dealt with here.
- Determining whether there is a real difference between compound verbs and serial verb constructions (§5.6).
- More on the difference between irrealis *ga* and modal *bara* with simple future reference (§5.7.2 and §5.7.3).
- The various meanings of *liu*: degree adverb 'very, completely' (§5.7.6), marker of continuous action, and possibly other meanings.

- The extent and significance of constituent order variation (§7.9).
- Relative clauses, including the exact function of *ra*, and the presence of pronominal traces (§9.5).

Appendix: Interlinear texts

Text 1. *A Vuhuna A Mavo e Pai*. 'The Origin of Pai Taro.'

This is an origin myth, describing how taro was supernaturally given to the Bola people. The story was written around 1995 by Edward Mautu from Kilu.

(1) Ri vano e huriki a ngatavine a bakovi ri gi
 3PL go ART.P PLUR ART woman ART man 3PL IRR
 bole a makudukato.
 take/get ART edible.black.clay

'The men and women went to get black edible clay.' [The exact nature of *makudukato* is not clear; 'edible black clay' is one possibility; another suggestion is charcoal.]

- (2) Pali i bele taho ria koma na haro e Pai.
 but 3s arrive come.down 3PL.F child OBL sun ART.P P.
 'Then Pai arrived at the children around noon time.' [The children are by themselves in the village. The gender and nature of Pai is not clear; it was probably some kind of spirit woman.]
- (3) I nana ria, "Ae. I loko-vai e kina-ne mua 3s ask 3PL.F hey 3s go-where ART.P mother-3s.P 2PL.F e tama-ne mua?" ART.P father-3s.P 2PL.F
 'She asked them, "Hey! Where did your mothers and fathers go?"

(4) "Ria ri vano ri gi bole makudukato а ne 3PL IRR take/get ART edible.black.clay OBL.P 3PL.F 3PL go mia. mi gi kani." 1PLE.F 1PLE IRR eat "They went to get edible black clay for us to eat."

- (5) "*A ra a makudukato?*" ART what ART edible.black.clay ""What is edible black clay?"
- (6) "A maki ni kani ne mia."
 ART thing QUAL eat OBL.P 1PLE.F
 "'It is our food." (Lit. 'Something to eat for us.')
- (7) *"Pali mu tunu-a a kedo."* but 2PL light.fire-3S ART stone

"Then light a fire and heat some stones." (Lit. 'Then light a stone.') [This is done in preparation for a traditional earth oven in which food is steamed on hot stones in a cooking pit; Tok Pisin *mumu*.]

(8) *Ri tunu-a a kedo, i nono i nono, i kara* 3PL light.fire-3S ART stone 3S burn 3S burn 3S hot *puru ngane.* go.down now

'They lit a fire and heated some stones, (the fire) burned and burned, became hot and then the heat died down.'

(9) Ri ribi-a ri ru puru a rau, i
3PL spread.stone-3S 3PL put go.down ART banana.leaf 3S
mavuli rike ia e Pai.
lie go.up 3S.F ART.P P.

'They spread the stones, picked some banana leaves, put them down, and Pai herself lay down on top of it.'

- (10) *Ri taro-a, muri ri tagu-a a kedo.*3PL cook.in.earth.oven-3s next 3PL cover-3s ART stone
 'They cooked her in the earth oven, then they covered the stones.'
- (11) Pali ri turutu i vaheri a kedo, i tere tala а 3PL surprised 3S rattle but ART stone 3s roll go.out ART biki-na mavo ni rivi ranga, ni nau ranga, a taro PASS peel some PASS scrape some ART package-3s bagi ranga. small.taro some

'But they were surprised when the stones rattled and out rolled taro! Some of it was peeled taro, some was scraped taro, and there were also packets of small taro.'

['Scraped taro' has not been peeled, but just roasted in the fire. After it is done the burnt and scorched parts are scraped off.]

- (12) *Ri keve kilangana ri kani kilangane-a tara.*3PL break test 3PL eat test-3S one
 'They tested a piece (of taro) by breaking it off and eating it.' (Lit. 'They break-tested and eat-tested one.')
- (13) "Mua! A maki ni kani a rea i nami-ka.
 2PL.F ART thing QUAL eat ART DEF.DEM 3S taste-ADJ
 "Hey everyone! This food is delicious."
- (14) Moto vuroki a ra maki moto bole.
 2PA throw.away ART DEF thing 2PA take/get
 'Throw away the things you are holding.'
- (15) Ia maki ni kani a rea."
 3S.F thing QUAL eat ART DEF.DEM
 'This is real food.'"

- (16) *Ri mata loko-vonga na daha-na tanga.*3PL look go-there OBL edge-3s village 'They looked to the edge of the village.'
- (17) I va-pesi-hi а vudi. Ι va-moro-rehi а 3s COLL-stand-COLL ART banana 3s COLL-ripe-COLL ART а kobo а а tabuka. tovu vero sugarcane ART greens ART k.o.green ART wild.sugar.cane 'Bananas were standing around. Sugar cane, greens, vero greens and wild sugar cane were all ripe.' [Vero is a green leafy vegetable, called aibika in Tok Pisin.]
- (18) I va-rara-hi a vudi.
 3s COLL-ripe-COLL ART banana
 'The bananas were all ripe.'
- (19) Pali ri taki e kina-ne ria e tama-ne ria, but 3PL say ART.P mother-3S.P 3PL.F ART.P father-3S.P 3PL.F
 "Mu vuroki a ra maki mu bole. 2PL throw.away ART DEF thing 2PL take/get
 'And they told their mothers and fathers, "Throw away what you are holding.'
- (20) Mia mi kani a maki ni habi ne mia na 1PLE.F 1PLE eat ART thing PASS give OBL.P 1PLE.F OBL haro."
 sun
 'We are eating what was given to us at noon.'"
- (21) Pali ri kani liu a mavo e Pai.
 but 3PL eat continue ART taro ART.P P.
 'And since then they have been eating Pai taro.'

(22) A nuverei na mavo e Pai i lobo.
ART story OBL taro ART.P P. 3s finished
'The story about Pai taro is done.'

Text 2. A Ligo Huluvonga. 'The Useless Dog'

This is true story written around 1995 by Leo Malala from Kilu, about his grandfather. The story probably took place in the first or second decade of the 1900s. The Tolais, introduced in line 1, are a major ethnic group on the eastern tip of New Britain. They were traditional traders and also one of the first ethnic groups to be in touch with Western culture around 1880. Rabaul (line 2) is the place where the German colonial government, colonial traders and the Roman Catholic mission had their base.

(1) Hosi e huriki a Tolai ri kona a dara long.ago ART.P PLUR ART T. 3PL buy ART shell.money o Talasea. LOC T.

'Long ago the Tolais bought shell money here at Talasea.' [Shell money consists of thousands of small round flakes of cowrie or pearl shell, sometimes only 2-3 mm in diameter, perforated and threaded on a string. The Tolais came to barter for shells.]

- (2) Ri vore na aga valai o Rabaul. ri luve tura-na 3PL paddle OBL canoe come LOC R. 3PL arrive with-3S dara koea a maka maki ni kona a vona. here ART PLUR thing COMP buy ART shell.money 3S.OBL 'They paddled in canoes from Rabaul and arrived here with things to buy shell money with.'
- (3) Na parava tara, ranga Tolai ri vore na aga valai
 OBL day one some T. 3PL paddle OBL canoe come
 ni kona a dara.
 COMP buy ART shell.money

'One day, some Tolais paddled in canoes here to buy shell money.'

(4) Na tahuna ri luve na Bitangare, a roa 0 OBL time 3PL arrive OBL beach.camp LOC B. ART tanga hosi o Kulungi ni gale e roa na beach.camp OBL village old LOC K. PASS call ART.P Vadoro, ri nana е huriki a taho tanga ni V. 3PL ask ART.P plur ART owner village COMP kona a dara. buy ART shell.money

'When they arrived at the beach camp at Bitangare, the camp of the old village Kulungi that was called Vadoro, they asked the villagers whether they could buy shell money.' [*Taho tanga* is a variant of *taho-na tanga*, as in example (3) in §7.2.]

- (5) Ε huriki a tanga o Vadoro ri taho longo a ART.P PLUR ART owner village LOC V. 3PL hear ART velenga-na Tolai ri bele na roa. news-3s T. 3PL arrive OBL beach.camp 'The villagers at Vadoro heard the news that Tolais had arrived at the beach camp.'
- (6) *Ri pori na dari, ri halala ria vonga na roa.*3PL go.out OBL sea 3PL meet 3PL.F there OBL beach.camp
 'They went out towards the ocean and met them there at the camp.'
- (7)Ri tagui ria, lakea e huriki a Tolai ri taki ria, 3PL greet 3PL.F then ART.P PLUR ART T. 3PL say 3PL.F ri ta maea. "Mi valai ni kona a dara. 3PL say like.this 1PLE come COMP buy ART shell.money 'They greeted them, and then the Tolais said to them, "We have come to buy shell money.'

- (8) Ε rei i tahoka a dara. mi ngaru ni ART.P who 3s have ART shell.money 1PLE want COMP mahala mi bole valai." va-kuloi tura-na a REC-exchange with-3s ART cargo 1PLE take/get come 'Whoever has shell money, we want to exchange with him goods that we have brought.""
- (9) Muri ri vakasiri ne ria a taho tanga a maka next 3PL show OBL.P 3PL.F ART owner village ART PLUR mahala ne ria. cargo OBL.P 3PL.F 'Then they showed the villagers their goods.'
- (10) *Ri* vakasiri a maka kira, a vito, a lavalava, a 3PL show ART PLUR axe ART knife ART cloth ART bisi ni huraki. boro, a а pusi tura-na beads QUAL wear.around.neck ART pig ART cat with-3s mahala ranga. а ART cargo some

'They showed axes, knives, cloth, bead necklaces, pigs, and cats, as well as other goods.'

- (11) Lakea e huriki a taho tanga ri bole tala then ART.P PLUR ART owner village 3PL take/get go.out a dara ne ria.
 ART shell.money OBL.P 3PL.F
 'Then the villagers brought out their shell money to them.'
- (12) Ranga ri tahoni na kaika, ranga ri tahoni na ngotu.
 some 3PL fill.up OBL bamboo some 3PL fill.up OBL bark
 'Some (shell money) they put in bamboo, some they put in bark.'

 (13) Muri ri va-kuloi tura-na a maki ri ngaru na next 3PL REC-exchange with-3S ART thing 3PL want OBL Tolai.
 T.

'Then they exchanged it with the Tolai for what they wanted.'

- (14) Pali a bakovi tara, a ra-na e Loga.
 but ART man one ART name-3S ART.P L.
 'But there was one man, his name was Loga.'
- (15) I ngaru-a a pusi i taki-a ta a ligo, i kone-a.
 3S want-3S ART cat 3S say-3S MOD ART dog 3S buy-3S
 'He wanted a cat that he thought was a dog, and he bought it.' [The verb taki 'say, talk, tell' is used here in the meaning 'say to oneself, think'.]
- (16) I uka ma i palala vona.
 3s NEG NEG 3s light 3s.OBL
 'He didn't know it.' (Lit. 'He wasn't light/clear about it.')
- (17) I nane-a a Tolai, i ta maea, "A ra a maki 3s ask-3s ART T. 3s say like.this ART what ART thing iea, a ligo?" DEM ART dog 'He asked the Tolai, "What is that, a dog?"
- (18) A tahona pusi i tamia, i ta maea, "Na. A ligo ART owner cat 3s trick-3s 3s say like.this yes ART dog kamumu. I kara. I hateka hale liu ni lakavu good 3s bite 3s strong bad completely COMP catch a livoa." ART wild.pig

'The owner of the cat tricked him and said, "Sure. A good dog. It bites. It is very strong at catching wild pigs."'

- (19) E Loga i bole-a a pusi, i vivi hateka vona.
 ART.P L. 3s take/get-3s ART cat 3s happy very 3s.OBL
 'Loga took the cat, and was very happy with it.'
- (20) Pali a Tolai i nongo vaki-a, a vuhu-na i tami-a.
 but ART T. 3s laugh blow-3s ART reason-3s 3s trick-3s
 'But the Tolai laughed at him, because he had tricked him.'
- (21) *E Loga i gau lakea na ruma vona a* ART.P L. 3S carry.under.arm go OBL house 3S.OBL ART *pusi.* cat

'Loga carried the cat to his house under his arm.'

(22) Na malunga i masi-a a pusi i rura a vere-na OBL afternoon 3S see-3S ART cat 3S rush ART drool-3S ni lakavu a maka kuruve.
COMP catch ART PLUR rat
'In the afternoon he saw the cat getting very excited (lit. his drool

rushing) catching rats.'

- (23) I vivi hateka na ligo vona.
 3s happy very OBL dog 3s.OBL
 'He was very happy with his dog.'
- (24) *I ta maea*, "I rata kamumu polo ligo nau. а 3s say like.this 3s do good go.across ART dog 1S.OBL Kuduvi tura-na a kabu-na ligo ga pango vona tomorrow IRR.1S hunt OBL.3S with-3S ART group-3S dog nau." 1S.OBL

'He said, "My dog is doing great. Tomorrow I will hunt with it together with my pack of dogs."'

- (25) Na hatelanga pokopoko i lalu tale-a na ruma a OBL morning very.early 3S pull go.out-3S OBL house ART maheto na boro ni gale a Pepele. spear OBL pig PASS call ART P.
 'Early in the morning, he pulled his pig spear called Pepele out of the house.'
 [Pokopoko is based on the noun poko 'smoke', referring to early morning mist and haze. The name Pepele refers to a particular clanowned spear. It is a proper noun, but still takes the common article a, not the personal article e.]
- (26) I asi a maka ligo ri gi lakea na robo ni pango.
 3s call ART PLUR dog 3PL IRR go OBL bush COMP hunt
 'He called his dogs to go to the bush to hunt.'
- (27) *Ri nunu tala a maka ligo vona, ri vano.*3PL run go.out ART PLUR dog 3S.OBL 3PL go
 'His dogs ran out, and they went.'
- (28) Pali a pusi i mahita, i uka ma i kiriko.
 but ART cat 3s sleep 3s NEG NEG 3s move
 'But the cat was asleep, it did not move.'
- lakavu rike-a (29) Muri i а pusi, i gau-a, next 3s catch go.up-3s ART cat 3s carry.under.arm-3s 3s vano tura-na a ligo vona na robo ge pango. with-3S ART dog 3S.OBL OBL bush IRR.3s hunt go 'Then he picked the cat up, carried it under his arm, and went with his dogs to the bush to hunt.'

- (30) I laho basi pali na tanga tura-na a pusi vona.
 3s walk far PERF OBL village with-3s ART cat 3s.OBL
 'He had already walked a long way from the village with his cat.'
- (31) Muri i taparaki puru-a na dala, ge tura-na a next 3s leave go.down-3s OBL road, IRR.3s with-3s ART ligo vona, ge pango na robo. dog 3s.OBL 3s.IRR hunt OBL bush
 'Then he put it down on the road, so it would go with his dogs to hunt in the bush.'
- (32) Na tahuna i taparaki puru-a na dala, a pusi i
 OBL time 3s leave go.down-3s OBL road, ART cat 3s
 ha hamule na ruma, i rike na poda, i mahita
 flee go.back OBL house 3s go.up OBL rack 3s sleep
 langa-langa.
 RED-above

'When he put it down on the road, the cat fled back to the house, and went up on the rack and lay down on top.' [A *poda* 'rack' is a place for storing sleeping mats.]

(33) I masi-a a pusi i ha hamule na tanga, i madihi
35 see-35 ART cat 35 flee go.back OBL village, 35 hurt
hale liu a hate-na.
bad completely ART liver-35

'When he saw the cat flee back to the village, he became very angry.' (Lit. '...his liver hurt very badly.')

(34) I gale muri a maka ligo vona, i hamule na tanga.
3s call back ART PLUR dog 3s.OBL 3s go.back OBL village
'He called back his dogs, and returned to the village.'

- (35) Na tahuna i bele na tanga, i mata-kane-a na OBL time 3s arrive OBL village 3s look-search-3s OBL ruma vona a pusi. house 3s.OBL ART cat
 'When he arrived in the village, he searched his house for the cat.'
- (36) I mata-rike na poda ni ru a moke vona.
 38 look-go.up OBL rack QUAL put ART mat 3S.OBL
 'He looked up in the rack for putting mats.'
- (37) I mata-visi-a a pusi i mahita langa-langa.
 38 look-succeed-38 ART cat 38 sleep RED-above
 'He found the cat sleeping on top.'
- (38) I madihi a hate-na, i ta maea, "Ioe a ligo ngane.
 38 hurt ART liver-38 38 say like.this 28.F ART dog now 'He was angry (lit. his liver hurt), and said, "Hey you dog!'
- (39) A kona ioe na dara nau.
 1s buy 2S.F OBL shell.money 1S.OBL
 'I bought you with my shell money.'
- (40) O rata a naro hale nau.
 2s do ART behaviour bad 1S.OBL
 'You do bad to me.' (Lit. 'You do a bad behaviour to me.')
- (41) Go vaka-lobo tavula a maki ni kani nau.
 IRR.2S CAUS-finish nothing ART thing QUAL eat 1S.OBL
 'You will finish my food for nothing.'
- (42) Pali i uka ma o lakavu a boro."
 but 3s NEG NEG 2s catch ART pig
 'But you do not catch pigs."'

(43) Muri i bole-a Loga a maheto, i padi е next 3s take/get-3s ART.P L. ART spear 3s shoot rike-a na popoda ne girihi-na a pusi, i rua e OBL.P 3D.F ART.P spouse-3S 3S cat go.up-3s OBL rack 3s padi mate-a. shoot die-3s

'Then Loga took the spear, shot it up into the cat that was on the rack of him and his wife, and killed it.'

[Popoda 'rack' is a variant of poda, used in lines 32 and 36.]

Text 3. A Nita na Viri i Mate. 'About death'

This expository text about rituals surrounding death was written in 2009 by Benjamin Kiri from Pasiloke. Some cultural notes have been added.

- (1) A ni-ta na viri i mate.
 ART NMLZ-say OBL person 3s die.
 'An account of death customs.' (Lit. 'A word of/about people [who] die.')
- Na tabeke ne Bola. na i (2)mia tahuna a viri OBL part OBL.P 1PLE B. OBL time ART person 3s mate, bara ni huriki na рири а tavure. е die MOD PASS blow ART conch.shell ART.P PLUR OBL tanga tabukoi bara ri longo-a a tavure, vano. ri village near MOD 3PL hear-3S ART conch.shell 3PL go tangi tala vona viri i mate. ri 3PL weep go.out 3S.OBL ART person 3S die 'In the area of us Bola people, when someone dies, the conch shell

will be blown, and everyone in the nearby villages will hear the conch shell and weep loudly (lit. weep out) for the person who died.'

(3) *I rodo a hini ranga e huriki ri hamule na* 3s dark ART area some ART.P PLUR 3PL go.back OBL *tanga ne ria.* village OBL.P 3PL.F

'At night some go back to their villages.'

(4) Ranga ri made, ri rago-a a poda-na viri mate. some 3PL sit 3PL sleep.close.to-3S ART body-3S person die 'Some stay and sleep close to the body of the dead one.' [In viri mate, the i is elided; cf. viri i mate in lines 1 and 2. Also in lines 6, 13, 14 and 19.]

(5) I palala kuduvi na hatelanga, i vano a maka
3s light tomorrow OBL morning 3s go ART PLUR
riau, ri keli-a a lovo.
young.man 3PL dig-3s ART hole

'The next morning (lit. [when] it is light the next day in the morning) the young men go and dig a hole.'

- Ri keli lobo-a, (6) ni kapo na moke poda-na а 3PL dig finish-3S PASS wrap OBL pandanus.mat ART body-3S kaloho lakea na lovo. ni viri mate, ni tanu. person die PASS carry go OBL hole PASS bury 'After they have dug it, the body of the dead person is wrapped in a pandanus mat, carried to the grave and buried.'
- (7) Muri ni hae a kape-na. next PASS build ART shelter-3S
 'Then his/her shelter is built.' [A kape is a low hut-like structure built over the grave, corresponding to the body size of the deceased, consisting of just four posts and a thatched roof.]
- (8) Ri tanu lobo-a, muri ri va-ta ge riva a 3PL bury finish-3s next 3PL REC-say IRR.3 how.many ART haro ri gi rakoli vona.

sun 3PL IRR rest OBL.3S

'After they bury him/her, they discuss how many days to rest for him /her.'

[The period of *rakoli* 'rest' is a mourning period during which people stay in the village, in and around their houses, and refrain from work such as gardening, building houses, hunting, fishing, and going to town.]

(9) *E huriki a gare ri ta maea, "Si gi rakoli* ART.P PLUR ART old.person 3PL say like.this 1PLI IRR rest

na parava ge lima." OBL day IRR.3s five 'The old men say, "Let's rest for five days."

- (10) *Ria lobo ri longo mai a ni-ta-na gare.*3PL.F all 3PL hear towards ART NMLZ-say-3S old.person 'Everyone obeys the words of the old men.'
- (11) I polo a parava i lima, ri vaka-lobo-a a
 3s go.past ART day 3s five 3PL CAUS-finish-3s ART
 rakoli-va.
 rest-NMLZ

'After five days they finish the resting period.'

boro, ni habi ne (12) *Ni* poka huriki a ngatavine PASS butcher pig PASS give OBL.P PLUR ART woman hamule lakea na ri tanga ne ria. OBL village OBL.3S 3PL.F 3PL go.back go 'A pig is butchered, and given to the women who return to their villages.'

[*Ni poka boro* shows the elision of the article *a* before *boro*; normally this is written: *ni poka a boro*. The same occurs with *kape-na* in line 13. See §2.7.]

huriki a kabu na (13) Na parava iea viri mate е OBL day DEM ART.P PLUR ART clan OBL person die ri ta tabu vona garika ri gi puke-a ge 3PL say again 3S.OBL IRR.3S when 3PL IRR break.down-3S kape-na. shelter-3s

'On this day the family of the deceased talk again about when to break down his/her shelter.'

(14) *E* balo-na viri mate i ta rike. i а ta ART.P paternal.aunt-3S ART person die 3s say go.up 3s say "Ge polo keva tolu таеа. a ge si gi like.this IRR.3s go.past ART moon IRR.3s three 1PLI IRR kape vona." puke-a а break.down-3S ART shelter 3S.OBL

'The aunt of the deceased says, "After three months we will break down his/her shelter."' [In this line *kape* 'shelter' is treated as an alienable noun with the oblique pronoun *vona*; in previous lines (7, 13) is it inalienable with the suffix *-na*: *a kape-na*.]

- (15) Ri ta rike lobo, ri ta maea ge mavonga.
 3PL say go.up all 3PL say like.this IRR.3S like.that
 'All of them speak up and agree that that's how it will be.'
 [It appears that lobo does not mean 'finish' here, but has its quantifying sense; see §4.6.2.]
- gi puke-a (16) I tabukoi a parava ri а kape, ART day 3s near 3PL IRR break.down-3S ART shelter vano, ri е huriki a bakovi ri kurahe na ART.P PLUR ART man 3PL go 3PL go.on.hunting.trip OBL parava i lima. 3s five day

'When the day for breaking down the shelter is near, the men go on a hunting (and/or fishing) trip for five days.'

- (17) *Ri bole valai a maka kani-a.*3PL take/get come ART PLUR eat-NMLZ
 'They bring food.'
- (18) Na malunga ri puke-a a kape.
 OBL afternoon 3PL break.down-3S ART shelter
 'In the afternoon they break down the shelter.'

(19) I hatelanga kuduvi, ri vaka-lobo-a a leho vona 3s morning tomorrow 3s CAUS-finish-3s ART work OBL.3s a viri mate.
ART person die
'The next morning they finish the work for the deceased.'

(20) A mapa-na ni habi e ha-na.
ART payment-3S PASS give ART.P maternal.uncle-3S
'Payment is given to his/her maternal uncle(s).'
[These men represent the clan of the mother of the deceased. If the deceased is a married woman, this is considered the last part of the bride price.]

(21) A karapa-na rea i ravulu rua.
ART wing-3S shell.money 3S ten two
'Twenty strings of shell money.'
[A 'wing of shell money' (Tok Pisin param tambu) is one fathom in

[A 'wing of shell money' (Tok Pisin *param tambu*) is one fathom in length (the space between outstretched arms), around 1.60-1.70 m, and is currently valued at 10 *kina*.]

References

- Baerman, Matthew. 2014. Suppletive kin term paradigms in the languages of New Guinea. *Linguistic Typology* 18: 413–448.
- Bosco, Jon, 1979. A Bola Grammar. Unpublished ms. Ukarumpa, SIL.
- Chowning, Ann. 1976. Austronesian Languages: New Britain. In S.A. Wurm, ed. New Guinea Area Languages and Language Study, Vol. 2, Austronesian Languages. 365-386. Canberra: Pacific Linguistics.
- Dixon, R.M.W. 2010. *Basic Linguistic Theory. Volume 2. Grammatical Topics.* Oxford: OUP.
- Dixon, R.M.W. 2012. Basic Linguistic Theory. Volume 3. Further Grammatical Topics. Oxford: OUP.
- Evans, Bethwyn, 2003. *A study of valency-changing devices in Proto Oceanic*. Canberra: Pacific Linguistics.
- Goodenough, Ward H. 1997. Proto-Kimbe: a new Analysis. Oceanic Linguistics 36: 247-311.
- Guérin, Valérie. 2017. The Oceanic subgroup of the Austronesian language family. In: Aikhenvald, Alexandra Y., and Dixon, R.M.W., (eds.) The Cambridge Handbook of Linguistic Typology. Cambridge Handbooks in Language and Linguistics. 911-941. Cambridge: Cambridge University Press.
- Johnston, Raymond L. 1980a. The languages and communities of the Kimbe Bay region. In: Raymond L. Johnston, ed. *Language, communication and development in New Britain*, 107-158. Ukarumpa: SIL.
- Johnston, Raymond L. 1980b. Nakanai of New Britain: The Grammar of an Oceanic Language. Canberra: Pacific Linguistics.
- Ross, Malcolm D. 1988. Proto Oceanic and the Austronesian languages of Western Melanesia. Canberra: Pacific Linguistics.
- Rueck, Michael, and Timothy Jore. 2000. Bola and Bulu Dialect Survey. Unpublished ms. Ukarumpa: SIL.

- van den Berg, René and Brenda R. Boerger. 2011. A Proto-Oceanic passive? Evidence from Bola and Natügu. *Oceanic Linguistics* 50: 226-251.
- van den Berg, René and Peter Bachet. 2006. *Vitu Grammar Sketch*. Ukarumpa: SIL PNG. [Data Papers on PNG languages, volume 51.]
- Wiebe, Brent, and Sandi Wiebe. 1997. Bola Sociolinguistic Survey Report. Unpublished ms. Ukarumpa: SIL.
- Wiebe, Brent, and Sandi Wiebe. 2000. Organized Phonological Data of the Bola Language. Unpublished ms. Ukarumpa: SIL. Available online at www.sil.org/pacific/png/abstract.asp?id=69.
- Wiebe, Brent, and Sandi Wiebe. 2001. Bola Worldview paper. Unpublished ms. Ukarumpa: SIL.

Data Papers on Papua New Guinea Languages: Volumes 1–63

Paper copies of the Data Papers can be ordered from lr-acpub@sil.org.pg, but volumes marked with * are out of print. Most of these materials are now available online at the following address: https://pnglanguages.sil.org/resources (Volumes 1-31 were titled *Workpapers in Papua New Guinea Languages.*)

Volume	Year	Title of Volume, Languages, and Authors
*1	1973	<i>Three Studies in Sentence Structure (Maring</i> by L. B. Woodward; <i>Abulas</i> by Patricia R. Wilson; <i>Au</i> by David Scorza)
*2	1973	<i>Phonologies of Three Languages of PNG (Biangai</i> by Raymond and Marjorie Dubert; <i>Nii</i> by Al and Dellene Stucky; <i>Yessan-Mayo</i> by Velma Foreman and Helen Marten)
*3	1974	<i>Three Studies in Languages of Eastern Papua (Korafe</i> by Jim and Cindi Farr; <i>Louisiade Achipelago</i> by Jim and Anne Henderson; <i>Iduna</i> by Joyce Huckett)
*4	1974	<i>Phonologies of Four PNG Languages (Baining</i> by Jim and Diana Parker; <i>Urii</i> by Tom Webb; <i>Boiken</i> by Allen and Marlene Freudenberg; <i>Dadibi</i> by George and Georgetta MacDonald)
*5	1974	Golin Grammar by Gordon Bunn
*6	1974	<i>Grammatical Studies in Three Languages of PNG (Washkuk</i> by Orneal Kooyers; <i>Agarabi</i> by Jean Goddard; <i>Kobon</i> by Marcus and May Dawson)
*7	1974	<i>Studies in Languages of the Ok Family (Mianmin</i> by Jean Smith and Pam Weston; <i>Faiwol</i> by Charlotte Mecklenburg; <i>Telefol</i> by Alan Healy)
*8	1974	Suena Grammar by Darryl Wilson
*9	1975	Abau Language Phonology and Grammar by D. A. Bailey
*10	1976	Higher Level Studies of Two Related Highlands Languages (Agarabi by Jean Goddard; Gadsup by Chester Frantz)
*11	1975	Studies on Literacy and Education (PNG Language and Literature Directory by Joice Franklin; Bilingual Education by Joy McCarthy; Language Learning Games by Rosemary Young)

*12	1975	Papers in Five Austronesian Languages (Kiriwina Idioms by John C. Noel; <i>Tolai Comments</i> by Karl J. Franklin; <i>Dobu Text Analysis</i> by David Lithgow; <i>Banoni Orthography</i> by Peter C. Lincoln; <i>Iamalele Clauses</i> by John and Margaret Beaumont)
*13	1975	<i>Phonologies of Five Austronesian Languages (Tinputz</i> by Roman and Carolyn Hostetler; <i>Petats</i> by Jerry Allen and Matthew Beaso; <i>Patep</i> by Karen Adams and Linda Lauck; <i>Kela</i> by Ken and Margaret Collier: <i>Sursurunga</i> by Don and Sharon Hutchisson)
14	1975	Comparative Wordlists 1. (Gulf District by Karl J. Franklin and John Z'graggen; Admiralty Islands by W. E. Smythe and John Z'graggen)
15	1976	Grammatical Studies (Suena by Darryl Wilson; Iduna by Joyce Huckett)
*16	1976	Surveys in Five PNG Languages (Eastern Trans Fly by Lillian Fleischmann and Sinikka Turpeinen; Ambulas by Patricia Wilson; Boiken by Allen Freudenberg; Schraeder Ranges by John Tonson; English-Wasembo Vocabulary by Kenneth McElhanon and Sigkepe Sogum)
17	1976	Grammatical Studies in Patep by Linda M. Lauck and Karen L. Adams
18	1976	<i>Student Research Papers in Literacy and Education</i> (articles by Yvonne Genat, Bruce A. Hooley, Gay Brown and Chester S. Street)
19	1977	<i>Phonologies of Five PNG Languages</i> (<i>Orokaiva</i> by Robert and Marlys Larsen; <i>Yil</i> by Mary Martens and Salme Tuominen; <i>Ningil</i> by Margaret Manning and Naomi Saggers; <i>Dobu</i> by Daphne Lithgow; <i>Samo</i> by R. Daniel and Karen A. Shaw)
20	1977	Proceedings of the SIL Consultants Seminar, Ukarumpa 1976 (25 short articles)
21	1977	Language Variation and Survey Techniques (16 articles)
*22	1977	Miscellaneous Papers in PNG Linguistics (Mianim by Jean Smith and Pam Weston; Selepet by Ken McElhanon; Oksapmin by Marshall Lawrence; Bine by Lillian Fleischmann and Sinikka Turpeinen)
23	1978	<i>Grammatical Studies in Kunimaipa Morphophonemics to Discourse</i> by Elaine Geary
*24	1978	Language Planning and Grammatical Typologies by Robert Litteral, Robert J. Conrad and Elizabeth Murane
25	1979	Miscellaneous Papers on Dobu and Arapesh (articles by David Lithgow, Robert J. Conrad and Joshua Lukas)

270		
*26	1980	Ambulas Grammar by Patricia R. Wilson
27	1980	<i>Grammatical Studies (Fasu</i> by Eunice Loeweke and Jean May; <i>Mt Koiali</i> by Susan Garland)
28	1980	Reports of Vernacular Literacy Programs, edited by Mary Stringer and Joice Franklin
29	1981	Sociolinguistic Surveys of Sepik Languages (Wom by Barry and Bonnie Moeckel; Kombio by Nate and Judi Baker; Mehek and Siliput by Robert D. Bugenhagen; Heyo, Pahi and Mayo Pasi by Ian Hutchinson; Beli, Yahang and Laeko Limgaut by Gregory Cooper; Namie by Ronald and Doris Jane Pappenhagen; Busa and Nagatman by Glenn Graham, Pagi and Kilmeri by Robert Brown; Abau by William H. Martin III)
30	1982	Orokaiva Language Lessons and Grammar Notes by Robert and Marlys Larsen
31	1985	<i>Five Phonological Studies (Maiani, Miani, Mala and Maia</i> by Jean May and Eunice Loeweke; <i>Burum</i> by Soini Olkkonen; <i>Hewa</i> by Paul W. Vollrath; <i>Saniyo Hiyewe</i> by Jenny Hepburn; <i>Urim</i> by Pirkko Luoma)
32	1987	Halia Grammar by Jerry and Jan Allen
33	1987	Studies in Melanesian Orthographies, edited by John M. Clifton (Kopeby John M. Clifton; Mufian by Robert and Jo Ann Conrad, Gahuku byEllis W. Deibler; Kire by David Pryor; Angave by Richard Speece;Karkar Yuri by Dorothy Price; Kamasau by Arden and Joy Sanders,Orthography Issues in New Caledonia by Stephen J. Schooling;Practical Spelling by David and Daphne Lithgow; Madak by RobertLee; Patep by Linda Lauck Vissering)
34	1986	Manam Teaching Grammar by Blaine Turner
35	1989	Bound and Minor Words in Baruya by Richard Lloyd
36	1989	<i>Studies in Componential Analysis</i> , edited by Karl Franklin (<i>Kalo</i> by Ali Laeka; <i>Dobu</i> by Gail Edoni; <i>Kara</i> by Ginny Schlie; <i>Mauwake</i> by Kwan Poh San; <i>Miniafia</i> by David C. Wakefield; <i>Kara</i> by Perry Schlie; <i>Folopa</i> by Neil Anderson)
37	1989	<i>Two Grammatical Studies</i> , edited by John R. Roberts (<i>Tungak</i> by Lesley Fast; <i>Nend</i> by Kyle Harris)
38	1991	<i>Reference Grammar of the Karo/Rawa Language</i> by Norma R. and Donald F. Toland

39	1992	Namia and Amanab Grammar Essentials, edited by John M. Clifton (Namia by Tom and Becky Feldpausch; Amanab by Andy Minch)
40	1993	<i>Phonologies of Austronesian Languages No.2</i> , edited by John M. Clifton (<i>Misiman</i> by Bill Callister; <i>Sio</i> by Dawn Soetenga Clark; <i>Mengen</i> by Daniel D. Rath; <i>Kara</i> by Perry and Ginny Schlie; <i>Patep</i> by Linda Lauck Vissering)
41	1994	Phonology and Grammar of Nankina by Craig and Pat Spaulding
*42	1996	<i>Two Non-Austronesian Grammars from the Islands</i> , edited by John M. Clifton (<i>Kuot</i> by Chul-Hwa Chung and Kyung-Ja Chung; <i>Sulka</i> by Doug Tharp)
43	1998	Orthography and Phonology Database: Islands and Momase Regions, compiled by Ritva Hemmilä (Ambulas, Amele, Boiken, Botn, Buin, Bukawa, Bukiyip, Central Buang, Gende, Guhu Samane, Halia, Kalam, Kobon, Kube, Kunimaipa, Kwanga, Lote, Manam, Menya, Mufian, Nahu, Nehan, Oksapmin, Olo, Patpatar, Ramoaaina, Selepet, Sissano, Sursurunga, Timbe, Tolai, Tungag, Urat, Vitu, Wantoat, Waskia, Yupna)
*44	1999	Orthography and Phonology Database: Highlands and Papuan Regions, compiled by Ritva Hemmilä (Agarabi, Alekano, Chuave, Dadibi, Dobu, Enga, Ewage, Folopa, Fore, Fuyuge, Gadsup, Gimi, Golin, Huli, Kafe, Kamano-Kafe, Kanite, Kapau, Kewa, Kiriwina, Kiwai, Koriki, Kuman, Managalasi, Maring, Mekeo, Melpa, Misima, Motu, Narak, Nii, Orokaiva, Orokolo, Pawaia, Siane, Sinaugoro, Tairora, Tawala, Toaripi, Umbu-Unga, Upper Asaro, Wahgi, Wiru, Yagaria)
*45	2000	Sociolinguistics and Literacy Studies: Highlands and Islands, edited by John Brownie (Lembena by Paul Heineman; Pinai-Hagahai by Markus Melliger; Bariai by Steve and Carol Jean Gallagher)
*46	2000	Sociolinguistics and Literacy Studies: South-West, Sepik and Morobe, edited by John Brownie (Kaluli by Andy and Sylvia Grosh; Konai by Sören and Britten Årsjö; Pouye by Steve Ferree; Hote by John and Amy Lindstrom)
47	2005	Phonological Descriptions of PNG Languages, edited by Steve Parker (Baruga [Tafota] by James and Cynthia Farr; Kuman by Daryl and Mary Pfantz; Mato by Scot and Cherie Stober; North Wahgi [Yu We] by Don and Heather Mc Clean, Sam [Songum, Songumsam] by Dave and Sarah Troolin; Seimat [Ninigo] by Theresa Wilson and Beata Wozna; Kaluli by Sylvia and Andy Grosh; Koluwawa by Brad and Toni Guderian; Wuvulu- Aua by James A. Hafford; Arop-Lokep by Jeff D'Jernes and Mary

		Raymond; <i>Gizrra</i> by Nico and Elly van Bodegraven; <i>Konai [Kalai]</i> by Sören and Britten Årsjö; <i>Migabac</i> by Steve McEvoy; <i>Pinai-Hagahai</i> by Markus Melliger)
48	2005	Seimat Grammar Essentials by Beata Wozna and Theresa Wilson
49	2005	Bariai Grammar Sketch by Steve Gallagher and Peirce Baehr
50	2005	Siar-Lak Grammar Essentials by Karen Rowe
51	2006	Vitu Grammar Sketch by René van den Berg and Peter Bachet
52	2007	Mussau Grammar Essentials by John and Marjo Brownie
53	2007	Fuyug Grammar Sketch by Robert L. Bradshaw
54	2008	Lote Grammar Sketch by Greg Pearson with René van den Berg
55	2008	<i>Kwomtari Phonology and Grammar Essentials</i> , edited by Murray Honsberger, Carol Honsberger and Ian Tupper (<i>Phonology Essentials of Kwomtari</i> by Julia Drew; <i>Kwomtari Grammar Essentials</i> by Katharine Spencer)
56	2009	Iyo Grammar Sketch by Paul Minter
57	2011	Abau Grammar by Arnold (Arjen) Lock
58	2012	Doromu-Koki Grammar Sketch by Robert L. Bradshaw
59	2013	Mato Grammar Sketch by Scot F. Stober
60	2014	Participant Referencing in Gumawana Narrative by Clif Olsen
61	2015	Nukna Grammar Sketch by Matthew A. Taylor
62	2017	Urim Kalpm Texts by Joyce Wood
63	2019	Bola Grammar Sketch by René van den Berg and Brent Wiebe