Wuvulu Grammar and Vocabulary

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Dedicated to Jim Hafford

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Abstract

This dissertation is a description of Wuvulu, an Oceanic language spoken on Wuvulu Island, the westmost member of the Admiralty Islands, located about 150 miles from the north coast of Papua New Guinea. As Admiralty languages are not well-documented, the present work provides typologically critical linguistic data that augment what is currently known of the phonological as well as morphosyntactic typology of Oceanic languages. Wuvulu exhibits features of a canonic Oceanic language such as SVO constituent order, verbal subject/object clitics, and realis/irrealis for past and future events (Ross, 2004b), yet it demonstrates several interesting innovations in its morphosyntax, particularly in the complexity and richness of its verbal morphology.

The grammar is written from a functional perspective (Foley & Van Valin, 1984; Van Valin & LaPolla, 1997; Dik, 1997a/b) and discusses important features of the language, including linguistic affiliation and sociolinguistic context, in addition to phonology, morphology, and syntax. The vocabulary section consists of more than 2000 lexical items, including species of flora, fauna, and fishes. Audio files of Wuvulu narratives that served as a basis for the examples cited in the grammar and much of the vocabulary have been archived at the Pacific and Regional Archive for Digital Sources in Endangered Cultures (PARADISEC) and are available online.

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List of Abbreviations

.	compound.gloss
-	morpheme-break
=	clitic=break
1	first person
2	second person
3	third person
ADDR	address
ANIM	animate
ART	article
CAUS	causative
CLASS	classifier
COMP	complementizer
CONC	concomitant
CPLT	completed
DEM	demonstrative
DEON	deontic
DER	derivation
DET	determiner
DNEG	deontic negation
DU	dual
EV	eventual
EXCL	exclusive
EXST	exist
FREQ	frequently
IJ	interjection
INAN	inanimate
INCL	inclusive
INFREQ	infrequently
INTS	intensifier
IRR	irrealis
LOC	locative
LRC	Lynch, Ross & Crowley 2002
NEG	negation
NYET	not yet
o	object clitic
O	object
PAdm	Proto Admiralty
PERF	perfective
PL	plural
POc	Proto Oceanic
POSS	possessive
PRON	pronoun
PROPN	proper noun

RC	relative clause
REAL	realis
RECIP	reciprocal
RED	reduplication
REL	relative
REP	repetition
RFLX	reflexive
SEQ	sequence
SIM	simultaneous
SG	singular
s	subject clitic
S	subject
TAG	tag question
TAM	tense/aspect/mood
TR	transitive

Part I: Grammar

1   Introduction

1.1   Wuvulu Island

1.1.1   Geography

Wuvulu Island is located about 150 miles from the north coast of Papua New Guinea (PNG). Wuvulu is the westmost member of the Admiralty Islands, a chain of small islands that spans a distance of about 390 miles.[1] The Admiralty Islands are part of the larger Bismarck Archipelago, which includes New Ireland, New Britain, and some 60 smaller islands.

Figure 1.1 Wuvulu, Aua, the Admiralty Islands, and the Bismarck Archipelago.

The inset of Figure 1.1 shows the relative positions of Wuvulu and Aua (not to scale). Wuvulu is shaped like a butterfly and measures approximately 4.5 miles east-west and 2.5 miles north-south. The island has a maximum elevation of about 10 feet above

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[1]The Admiralty Island chain is bounded by Wuvulu in the west, and Nauna Island in the east (east of the relatively larger Manus Island, and nearly 400 miles from Wuvulu). The GPS coordinates of Wuvulu are 1˚43'0''S, 142˚49'59''E.

sea level. Aua Island is approximately 21 nautical miles northeast of Wuvulu and is inhabited by people who speak a dialect of the language spoken on Wuvulu. The main population centers of the two islands are located in three villages—two on Wuvulu, and one on Aua. Most of the fieldwork for this dissertation was done in Onne Village, located at the northwest corner of Wuvulu.

1.1.2   Meterological phenomena

During the southern hemisphere summer, Wuvulu Island is in the direct path of the winds of the Inter-Tropical Convergence Zone (ITCZ), also known as "the Doldrums". Seasonal winds affect practical aspects of daily life, such as fishing, gardening, and travel. Ross, Pawley & Osmond, 2007 (RPO) comments on meteorological phenomena among speakers of the hypothetical Proto-Oceanic language (POc):

> If POc speakers lived in the Bismarcks, then they encountered two seasons: the dry, when the southeast trades blew with reasonable consistency, and the wet, when there were sporadic northwesterly winds. The POc terms for the winds associated with these seasons, were respectively *raki and *apaRat. They may also have referred to the seasons, with typical weather and wind direction as inevitable components of their meanings, as well as having associations with navigability and agriculture (119).
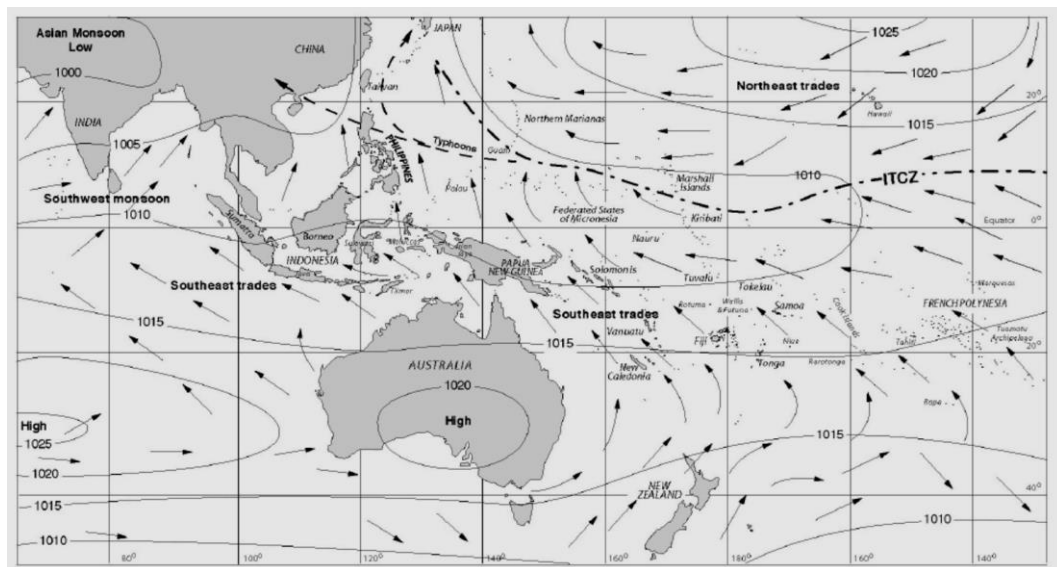
Figure 1.2 Wuvulu wet season, *afā* 'west wind', April-October (after RPO:120).
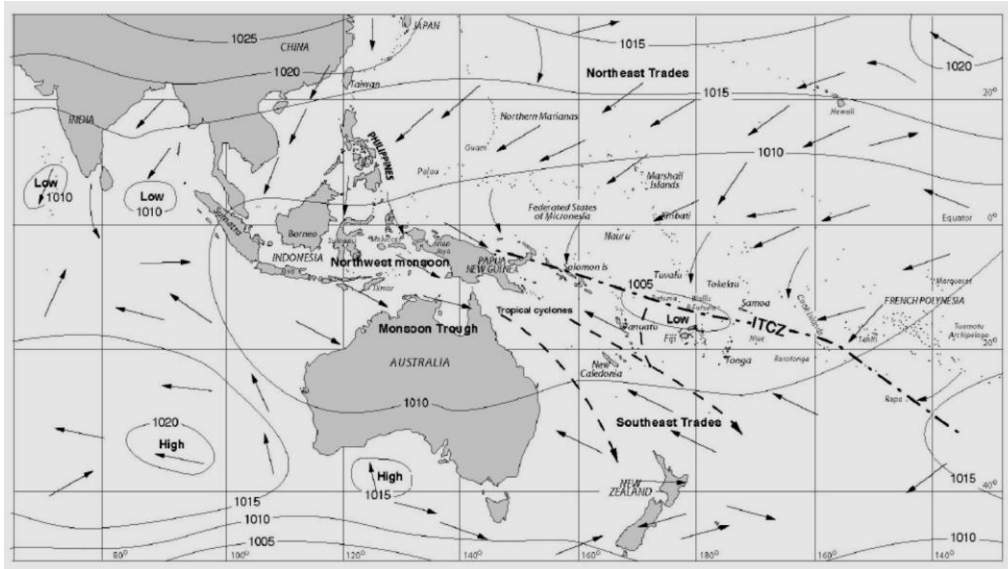
Figure 1.3 Wuvulu dry season, *rai* 'east wind', November-March (after RPO:121).

The Wuvulu terms for wet and dry seasons are *afã* 'west wind' (POc **apaRat*), and *rai* 'east wind' (POc **raki*), respectively. Transitional times between seasons are called *tetefolo* 'erratic winds', and can last 4-6 weeks.

The average annual temperature in the shade is approximately 80˚ Fahrenheit (28˚C), but the temperatures can range between 75˚F and 94F˚, depending on cloud cover and wind conditions. The Southern Oscillation (El Niño) periodically wreaks havoc on Wuvulu, as was the case in 1997, when Wuvulu (and much of PNG) experienced drought.

1.1.3 Demographics

There are an estimated 1600 speakers of the Wuvulu language with about 1000 speakers on Wuvulu, 400 on Aua, and 200 scattered around PNG. Population estimates are extrapolated from census data of 1,000 speakers in 1982 (Lewis, Simons & Fennig, 2015), and 1,288 speakers in 2000 (Pokawin, 2001)—a 29 percent population increase over eighteen years. A span of 15 years (2000-2015) at the same rate would be an increase of 309 people, bringing the total to 1597.

1.2　　　　Linguistic affiliation

The genetic lineage of the Wuvulu language is Austronesian, Malayo-Polynesian, Central-Eastern, Eastern Malayo-Polynesian, Oceanic, Admiralty Islands, Western Admiralty Islands, Wuvulu-Aua (Lewis, Simons & Fennig 2015).
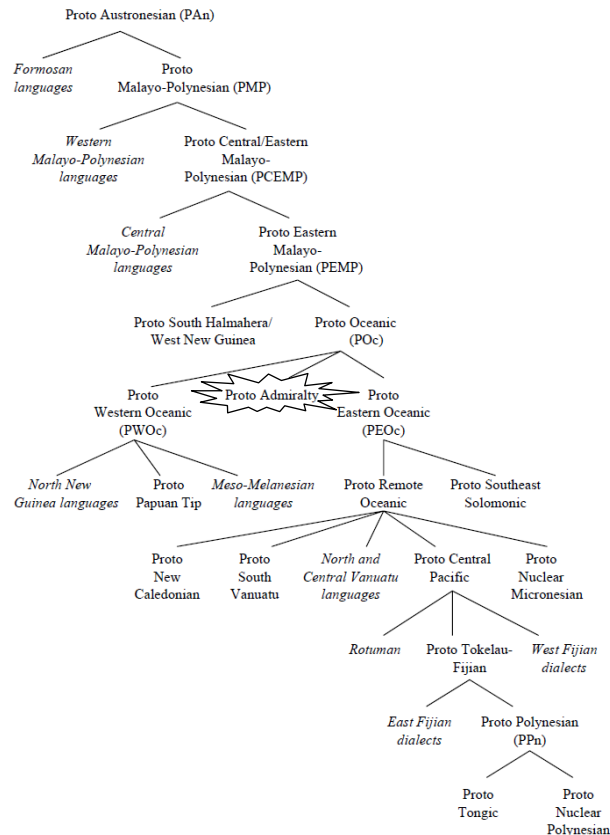
Figure 1.4 The Austronesian family and major subgroups, RPO: xvi).

Proto-Eastern Malayo-Polynesian (PEMP) is thought to have originated in the vicinity of the "Bird's Head" (northwest) area of the island of New Guinea. In that same area, the precursor of the Proto Oceanic (POc) language was descended from PEMP.

Prior to the Oceanic dispersal, this pre-POc language spread east along the north coast of New Guinea to the area around Jayapura, Indonesia. Wuvulu is by far, the closest island of the Bismarck Archipelago from the point of dispersion on the mainland. Malcolm Ross writes, "My assumption here [is] that POc was spoken in the Bismarck Archipelago" (RPO, 119).

Figure 1.5 The Austronesian family and major subgroups (RPO: xvi).

The Admiralty subgroup of Oceanic languages is the only primary branch of POc that is defined by shared innovations (Blust, 2002). The 31 languages of the Admiralty subgroup are further divided into Western and Eastern subgroups. The Western subgroup consists of only two living languages: Wuvulu-Aua [wuv], and Seimat [ssg] (the other Western language Kaniet [ktk], is extinct).[2] The 28 languages of the Eastern subgroup are concentrated hundreds of miles away on Manus Island and its satellites.

Typologically, Wuvulu is an SVO language with a canonical syllable shape of CV. Greenberg's (1963) predictions for the phrasal syntax of VO languages generally hold true for Wuvulu: the language has prepositions, the head noun precedes the possessor in possessive constructions, the head noun precedes a relative clause, question words are sentence-initial, and subjects are prefixed to the verb.

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[2] The International Organization for Standards (ISO) created the alpha-3/639-3 standard "to provide as complete an enumeration of languages as possible, including living, extinct, ancient, and constructed languages, whether major or minor, written or unwritten." Each of the world's languages is specified by a unique 3-character code enclosed in square brackets.

1.3   Dialects

Wuvulu-Aua is the official name of the language spoken on the islands of Wuvulu and Aua (Lewis, Simons & Fennig 2015). Two dialects of the vernacular are spoken on Wuvulu Island in the villages of Onne and Auna, and one dialect is spoken on Aua. The difference between the two Wuvulu dialects is has to do with the phoneme /l/. In the Auna dialect /l/ is pronounced [l̥] before the vowel [o], and it pronounced [l] otherwise. In the Onne dialect, /l/ is pronounced [d] if adjacent to a high vowel, it is pronounced [l̥] before [o], and it is pronounced [l] otherwise.[3]

The dialectical differences between the islands of Wuvulu and Aua are lexical and phonological. One of the differences in dialects is an interesting example of a sound change in progress involving the phoneme /r/. In the Aua dialect, an alveolar trill [r] is produced for the phoneme /r/. And, in the two Wuvulu dialects, speakers born before about 1940 also produce a trilled [r] for phonemic /r/. However, Wuvulu speakers born after the 1940s produce one of the two conditioned allophones [x] or [g] for /r/ (see Chapter 2). A second phonological difference between the islands is that on Aua, /l/ is produced as it is in the Onne dialect of Wuvulu.

There are also lexical differences between the dialects of the two islands. In some cases, the same word has different meanings, e.g., Wuvulu *wero* 'type of fish' versus Aua *wero* 'satiated, not hungry'; Wuvulu *lama* 'deep sea' versus Aua *lama* 'in-law' versus Wuvulu *ramaʔa* 'person, in-law'. Some words are found exclusively either in the Wuvulu dialect, or in the Aua dialect. For example, the Aua word *muta* 'chew' is not in the Wuvulu dialect.

This dissertation is based on the two Wuvulu dialects, with about 75% of the data from speakers of the Onne dialect, and about 25% the data from speakers of the Auna dialect. As noted previously, there are no grammatical or lexical differences between Onne and Auna dialects.

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[3] Dempwolff (1905) and Blust (personal communication) both recorded [l̥] before high vowels. I worked mostly with Onne speakers, so this may be a variant of the Auna dialect.

1.4   History of contact

1.4.1   European discovery

European contact with Wuvulu and Aua began in the 16th century, when on August 19, 1545 the Spanish explorer Yñigo Ortiz de Retes discovered Wuvulu and Aua. The ship's crew did not attempt to go ashore because natives in canoes threw stones and spears and shot arrows at them.[4] More than two centuries later, on September 19, 1767, Captain Philip Carteret sighted and named Wuvulu and Aua as Matty and Durour, respectively. No direct contact was attempted at that time. In 1817 Captain Bristow of the *Sir Andrew Hammond* sighted Wuvulu, but didn't realize that it had previously been discovered. He named Wuvulu "Tiger Island" because of the perceived ferocity of the people.

1.4.2   Theil, Hellwig, Luschan, and the "Matty Mystery"

An interesting facet of the history of European contact with Wuvulu Island has to do with the so called "Matty Mystery" (as noted above, Wuvulu was formerly called Matty Island). This mystery came into focus late in the 19th century and had to do with the ethnicity of the Wuvulu people.

Two observations were made at that time. First, the material culture was not like that of any known New Guinean culture (except perhaps that of the Ninigo Islands, 50+ miles to the east). Buschmann (2009:41) refers to a collection of 37 artifacts that were sold by to the main ethnographic museum in Berlin.

> ...the [Wuvulu] collection ended up in Berlin's Ethnological Museum, where it came to Luschan's attention. Luschan recognized that the artifacts forwarded by the New Guinea Company barely resembled those from the New Guinea mainland. Nonetheless, based on the scarce evidence of thirty-seven artifacts and Kärnbach's brief notes and recollections, Luschan proclaimed the importance of "Matty" island. What initially dazzled Luschan was that the island, located roughly 150 kilometers from the mainland, displayed a previously unknown material culture.

The second observation was that the physical characteristics of the Wuvulu people were unlike those of most Melanesians (41):

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[4] Ortiz de Retes is the captain who named the island of New Guinea (Nueva Guinea) although it had already been discovered by Jorge de Menendez in 1526.

Similarly, according to Kärnbach's sketchy firsthand observations, its inhabitants were of lighter skin color than their Melanesian neighbors. Their weapons, some spiked with shark's teeth, suggested an affinity with some neighboring islands, especially the Ninigo group, as well as some superficial connections to the area known as Micronesia.

The interest of German ethnographers in Wuvulu material culture, and in the "Matty problem" paved the way for the establishment of a coconunt plantation at the end of the 19th century.

1.4.3   Coconut plantation

In 1893, the German company *Deutsche Neuguinea-Kompagnie* (DNK), negotiated the purchase of Wuvulu land for a coconut plantation. DNK eventually transferred its holdings to the German Hernsheim & Company. In 1896, Captain A.F.V. Andersen of the schooner *Welcome* visited Wuvulu, and Schielkopf, an agent of Hernsheim & Company, was allegedly killed by the local people (Buschmann, 2009:28). In 1899, outsiders again attempted to open a trade post on Wuvulu, but did not go ashore because they felt threatened. In the early 1900s Hernsheim & Company sold its holdings of Wuvulu and Aua to the Swedish consul, Heinrich Richard Wahlen.

In 1903, Danish trader Edward Christian Antonius Nielsen Ørtoft (renamed William Leonard) settled on Wuvulu, and took women to be his wives. The Wuvulu people named him *Fai'u* 'tough strand of a coconut husk'.

1.4.3.1   Resettlement

Before the days of the coconut plantation, homes were built close to the shore and surrounded the perimeter of the island. At that time, clans were territorial so clan membership determined where people lived and gardened. When the plantation came, people were required to dismantle their homes from various locations around the island and reconstruct them in rows, in two separate settlement villages: Auna and Onne[5]. This radical reconfiguration of traditional settlement patterns had the effect of forcing different clans and lineages to be next-door neighbors.

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[5] In pre-plantation Wuvulu society, each house had a unique name. Houses were constructed of hardwoods and were fitted together such that the gaps between planks wouldn't allow mosquitos inside (there were also fitted doors and windows).

1.4.3.2 Mortality

As a result of outside contact, the Wuvulu people contracted a variety of diseases that decimated their population. Birger Mörner (1913:28) reported that in the early 20th century, a population of over 3000 was reduced to a mere 380 people in less than two decades:

> As for Wuvulu, the local population has, after being forced to open their country to all comers, had more than enough of sickness. It has been estimated, and conservatively, that some three thousand natives have died from sickness in the past fifteen years. This leaves a population today of only 380. The most severe recent epidemic was dysentery; 114 died in the course of a single fortnight...During the months I have spent here three epidemics have ravaged the island in turn.

Mörner states that poor nutrition was also a factor in the steep mortality rate (ibid.):

> The reason for the enormous mortality—or rather the low infection resistance—of the Wuvulu people, is most probably dietary deficiencies...the inferiority of the [taro] fields of Wuvulu, however, is not caused by some soil difference or other natural cause...it is more probable that the cause is found in insufficient cultivation. But how could the Wuvulus be expected to devote sufficient work to the [taro] ponds? Every weekday all healthy Wuvulus—men, women and children—go out to gather and prepare copra, returning only in the evening. There is simply no time left for their own needs.

The plantation had a significant impact on traditional clan-based settlement patterns, and nearly caused the extermination of the people by disease. In addition to these scourges, most of the old-growth hardwood trees were cut down in order to maximize the productivity of the coconut plantation.

1.4.4 Church influence

In 1952, local PNG missionaries of the Seventh Day Adventist church (SDA) arrived on Wuvulu from Manus Island and built churches in Onne and Auna. Since that time, the SDA church has caused much change in Wuvulu social structure, including the elimination of traditional Wuvulu religious practices, and the traditional practice of polygamy. Before the church arrived, spiritual power was wielded by the *puela* 'spiritual authority'. A *puela* had the power to bless or curse, and also possessed the ability to conduct spirit-travel to a parallel world called *Sinara*, in order to perform certain rites that could cause change in the real world.

In traditional Wuvulu society, both adelphic polyandry and sororate polygyny were sanctioned and normative. With the advent of the SDA church these marriage

patterns were abolished. The church mandated that men could no longer have marital relations with their brothers' wives, and woman could no longer have marital relations with their sisters' husbands. The kin term reflecting these relationships, *aro* 'spouse' persists, however.

1.4.5   The Summer Institute of Linguistics (SIL)

In 1992, two SIL workers, Audrey and Vinton Goff were invited by government and church leaders to live on Wuvulu, learn the language, and work with the people to translate the New Testament. During their time on Wuvulu, the Goffs experimented with an orthography, transcribed three stories, and collected a word list. In 1993, after 18 months on Wuvulu, the Goffs finished their work in PNG prematurely, and returned to Canada in order to care for an elderly relative.

In 1995, under the auspices of SIL, I moved to Wuvulu with my wife and children and continued the work begun by the Goffs. The Wuvulu New Testament was dedicated in 2005.

1.5   Purpose and scope

The main purpose of this dissertation is to document the Wuvulu grammar. Because this is such a broad objective, the scope of the work is constrained to a presentation of the most important features of the language. The grammar is presented in Part 1, and is followed a vocabulary in Part 2.

The grammar component is written from a functional-descriptive perspective with an intended audience of linguists, particularly those working in Admiralty or Oceanic languages. The work is also intended to serve as a possible resource for field linguists, anthropologists, ethnomusicologists, literacy workers, language survey personnel, translators, and others who have an interest in documentary linguistics. In addition, this publication has the potential to serve as the basis of a pedagogical grammar to be used in future workshops with Wuvulu and Aua people.

In Part 1 the discussion of each chapter generally builds on previous information. Chapters are arranged in the following order: 1. Introduction, 2. Phonology, 3. Noun phrase, 4. Verb structure, 5 Clause structure, 6. Complex constructions, 7. Summary and prospects.

1.6   Previous research

Linguistic publication on Admiralty languages is scarce. Only two Eastern Admiralty grammars have been published—Loniu (Hamel, 1994) and Sivisa Titan (Bowern, 2011; a grammar based on German data from the early 20th century). Linguistic documentation of Western Admiralty languages includes several small collections of lexical items that were recorded in the early 1900s by German ethnographers Thilenius (1903), Dempwolff (1904), and Hambruch (1908). Additional lexical data were recorded by Z'graggen (1975), and Blust (1978). There are several publications that discuss aspects of Wuvulu phonology, including: Blust 1978 and 1996; Lynch 2000 on syllables and stress patterns; Blust 2004 on the possibility of Proto Oceanic *t > k* in Wuvulu; Blust 2005 on the suffix *-ia* as a marker of imperative; and Blust 2008, a reanalysis of the Wuvulu phoneme system.

For over three decades articles were published on Wuvulu phonology with a continued focus on what appeared to be a complicated problem involving velar phones and their underlying phonemes (Blust 1978, 1996, 2008). Hafford 2012 provided the solution to this long-standing linguistics puzzle involving velar obstruent consonants.

The following descriptions from Blust 1996 are provided to give the reader a sense of vexing nature of the problem (italics added): "[Wuvulu velars are] *at the very least, rather puzzling*" (11); "*Most distracting of all*, /k/ appears to vary freely between [k], [g], [x], and [ɣ]" (11); "*Perhaps the most serious problem* of free variation in Wuvulu concerns the phonemic status of the velar phones" (13); "at face value these observations suggest *an extraordinarily complex system* of velar obstruents" (14); "Perhaps *subtler and more pernicious to the general concept of the phoneme*, however, is the question how 'free' free variants really need to be (22); "Wuvulu and Aua both show *an exceptional amount of variation* (40); "including some features of 'free' variation that may turn out to have *interesting consequences for general linguistics theory*" (40).

The present research builds on previous work, is the first description of its kind for a Western Admiralties language.[6]

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[6] Hafford 1999, and Wozna & Wilson 2005 are very brief sketch-level grammars without vocabularies.

1.7 Wuvulu society

The information presented in this section is based on data that were collected during my fieldwork on Wuvulu Island. The elicitation of genealogies from village people was extremely productive in the language-learning phase of our fieldwork. In addition to collecting kin terms, it allowed for people to talk about others in their family trees, and to explain the complications that resulted from the change of marriage patterns when the church came.

1.7.1 Kinship

Kinship relations play a significant role in Wuvulu social interaction. Wuvulu kinship is organized by unilineal descent within a clan. Nearly everyone is aware of how they are related to others on the island. In contemporary society, land is transferred to the male descendants of a clan, including garden lands in the interior of the island. Traditional taro swamps, *tuta,* are inherited through the paternal lineage.

The Wuvulu kin system seems to be at the end of a shift from the standard *Iroquois* system in which children of either ego's father's sister, or of ego's mother's brother were classified together, and in which ego's siblings were differentiated from parallel cousins. The *Hawaiian* system is currently practiced, classing together ego's siblings, cross cousins, and parallel cousins. Among elderly speakers, a vestige of the *Iroquois* system is the term *ole* "ego's father's sister, ego's mother's brother", which are being replaced by *ʔina* 'mother' and *ʔama* 'father', respectively. The reciprocal term for *ole* "ego's father's sister, ego's mother's brother", is the term *ara* "children of ego's opposite-gender sibling". The term *ara* is being replaced with the *naʔu* 'child'. In the Wuvulu system, ego's father's brothers have the same role and responsibilities of ego's father, and ego's mother's sisters as having the same role as ego's mother.

Wuvulu social structure of the past was strongly clan oriented. The clan as a whole was considered to be the minimal social unit; lineages within a clan did not function autonomously. Each clan was governed by a local chief who was responsible for the function of the clan. He held final authority in matters of work assignments, inter-clan fights, intra-clan disputes, marriage, adoption, inheritance—basically every aspect of life within the clan.

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In contemporary society, the clan has diminished as the dominant social structure and the nuclear family is more of a focus with regard to the practical aspects of daily living. A nuclear family consists of a man, his wife and their children (natural and adopted). In the past, the *lofu* 'brother-brother' relationship was the dominant dyad, but has been replaced by the husband-wife relationship. Husbands and wives work gardens together and share in most decision-making.

An exception to this is that when young people marry, their father's lineage has voice in discussing the marriage proposal, but the mother's side does not. The siblings of ego's father discuss the potential spouse. The marriage feast is attended by the extended family of both the bride and groom, and usually involves most of the village.

Adoption is pervasive in Wuvulu society and seems to serve the function of providing male or female offspring to help with gender-specific tasks such as fishing, gardening, and cooking. If there are no male children to receive a man's inheritance, a boy is often adopted. Adoption typically occurs within a given clan. In addition to its utility, adoption also appears to strengthen relationships between the nuclear families involved in the adoption.

1.7.2   Sociolinguistics

Vernacular is used in nearly all speech domains on Wuvulu, though most adults are bilingual in Tok Pisin [tpi] (henceforth, "pidgin"). Pidgin is used with the government workers who live and work on the island, and with visitors to the island.

Wuvulu has a vernacular-language elementary school for grades 1-3. The school began operating in 1998 as part of a literacy program for the translation project. There are now two vernacular schools on Wuvulu; both are funded by the Manus Provincial Government. The provincial government continues to support Wuvulu vernacular elementary instruction, including teacher salaries, teacher-training, and curriculum production.

In grades 4-6, English is the language of instruction. Most government teachers are not native English speakers, and sometimes mix or switch between English and pidgin. Because of this, children are exposed to pidgin before they have opportunity to travel to the PNG mainland. Because vernacular is used almost exclusively in most domains, the language appears to be flourishing. The vernacular literacy rate among

adults is about 75%. Many of the elderly are literate in pidgin with a high level of fluency and comprehension.

Wuvulu people who live away from the island are scattered throughout PNG, including the coastal towns of Vanimo, Wewak, Madang, Lae, and Port Moresby; and the interior of mainland PNG in Goroka, Kainantu, Aiyura, Yonki Dam, the Markham Valley, and the Fly River. Wuvulu people also live on various islands of PNG, including Manus, New Ireland, and New Britain. The Wuvulu people also have a settlement in the PNG coastal town of Wuvulu, at the Mangaro Compound. At any given time, there are 15-20 Wuvulu people at the compound, which serves as a transit house for Wuvulu people traveling between Wuvulu and Wewak. About 10-15% of the youth leave Wuvulu to attempt grades 7-12.

Due to socio-economic factors, most young people choose to live on Wuvulu, rather than to work and live on the PNG mainland. Wuvulu students excel on national qualifying exams for grades 8 and 10, and many are able to complete their education and secure jobs on mainland PNG.

Wuvulu people understand their inherent dependence on the physical world for food and shelter. This dependence seems to also implies a dependence on vernacular language. Much of the Wuvulu lexicon consists of words related to the physical world. According to Stephen Schooling, an SIL linguist who has done research in PNG's Manus Province, language viability is correlated to its use in domains that meet basic survival needs (1990:4, 5):

> To predict language maintenance...key clusters must be examined. The strength of a cluster depends a great deal on the extent to which it meets basic survival needs, such as the physical needs of nourishment, health and well-being, the emotional needs of identification with a caring group, a sense of achievement and purpose, and social needs, which vary from culture to culture and group to group. The first three key clusters, kinship-culture, geographic location, and occupation, fall within the survival category. The fourth key cluster, voluntary association, deals with selection needs, the need to be creative, to make decisions, and to be involved in activities and relationships based on personal preference.

According to these criteria, the Wuvulu vernacular is likely to be maintained, because it is used in domains related to basic survival needs. There are specialized terms related to astronomy, weather, tides, currents, and living species of the sea, reef, and bush. The lexicon is rich with terms for flora, fauna, insects, lizards, and many other

species of the physical environment. Without the vernacular it would be inefficient (or impossible) for Wuvulu people to communicate nuanced information in domains such as fishing, working in the garden, or cooking. Vernacular is used in the discussion of interpersonal relationships and in reference to all aspects of kinship and social structure.

On the other hand, borrowing from other languages does occur, even when there is a Wuvulu equivalent, for example, the pidgin *meri* [megi] 'woman' is frequently used, even though there is a Wuvulu word, *pifine* 'woman'. Another example is *pisi* 'fish', a word that is borrowed (and adapted), even though there is a Wuvulu word, *nia* 'fish'.

In the 1980s workers from Gospel Recordings (renamed Language Recordings) visited Wuvulu and produced audio recordings of 40 Bible stories, narrated in the Onne dialect of the Wuvulu language. I obtained an audio cassette tape of these stories from SIL workers Audrey and Vinton Goff. The stories consist of a total of 7,738 words (including multiple occurrences of the same word). Of this total, 580 words are borrowed from English or pidgin.

Of the borrowed words, 198 words are comments or questions about the pragmatics of the recording session (for example, *Dispela stori em i go wantaim piksa namba tri* 'This story goes with picture number three'). There are also 200 references to proper nouns.

Excluding proper nouns and words related to pragmatics, there are 182 borrowed words, of which 113 have no vernacular equivalent; so only 69 words were gratuitous borrowings of words that have a vernacular equivalent. People were instructed to tell the stories in vernacular, so there was probably less borrowing than in natural setting. Certain gratuitous borrowings, such as the pidgin *meri* 'woman', were used by more than one narrator.

When borrowing occurs, words are adapted to conform to Wuvulu phonology. For example, words with consonant codas are adapted to fit the canonical CV syllable shape, so the English *book* is borrowed phonetically as [buʔu]. Borrowing also reveals that there is no [k] in the language, as demonstrated in the previous example and in the pidgin *kilok* 'clock', which becomes [ʔiloʔo]. Borrowings with [r] also reveal the allophonic variants [x] and [g] as in *America*, borrowed as [ʔamɛxiʔa], and the pidgin *meri* 'woman' borrowed as [megi]. These phenomena are discussed further in Chapter 2.

1.8   Data and methodology

Fieldwork was conducted on Wuvulu Island over a period of about 10 years, with approximately 20 trips to the village, ranging from three to six months in duration. Field notes were transcribed into bound exercise books, and include elicited words, phrases, sentences, and cultural observations. In addition to field notes, audio recordings of traditional narratives were recorded onto cassette tapes. Working with a native speaker, the audio recordings were transcribed into the *Toolbox* computer application, and were then analyzed, glossed, and translated into English.

The interlinearization of texts in *Toolbox* generated lexical entries consisting of words, affixes, and clitics. In addition to entries from elicited narratives, hundreds of lexical items were elicited in a Wuvulu dictionary workshop that was held in 2004. The workshop was based on the work of Ronald Moe (2001, 2003), and includes an outline of semantic domains that spans most of the categories found in Yale University's Human Relations Area Files.

The dictionary workshop was conducted over a period of eight days with about four hours of elicitation per day, utilizing six teams of three or four people. Participants were in the age range of 16-70. Each team received a portion of the semantic domains outline and worked with a native speaker of English to record unique lexical items. Field guides of PNG flora, fauna, and fishes were used to elicit lexical items. This method allowed for the identification of a great number of species that might not have otherwise occurred to the participants.

Audio recordings of the elicited narratives were produced using a Marantz PMD222 3-head cassette recorder and a PZM-6D microphone. Cassette recordings were stored in industrial-grade air-tight containers with silicon desiccant. The audio tapes were eventually digitized and electronically deposited in the Pacific and Regional Archive for Digital Sources in Endangered Cultures (PARADISEC).

Field notes were written in ink, and were sprayed with hair spray in order to minimize deterioration. Field notes, audio recordings, and valuable books were transported in waterproof brief cases and river bags. Wuvulu computer data from *Toolbox* was backed up to CD-ROMs and archived at the Summer Institute of Linguistics in the Eastern Highlands Province of Papua New Guinea.

1.9   Contribution

This dissertation contributes to the study of Oceanic linguistics in several ways. First, the geographic position of Wuvulu and its linguistic affiliation suggest the possibility that Wuvulu could have been near the homeland of POc, particularly given the eastward migration of Oceanic peoples. And, because Admiralty languages are not well-documented, the present work augments what is known of the typology and grammars of Oceanic languages. The grammar description also contributes to future linguistic research in any of the Admiralty languages in that it gives examples of phenomena that are expected for Oceanic languages, as well as those that have not been reported—for example, the complexity of Wuvulu verbal morphology.

The vocabulary section contributes to the record of what is known of human language and culture. The vocabulary has intrinsic value as the record of a unique ethnolinguistic culture, and it has extrinsic value as a reference for further linguistic research. The vocabulary could be especially helpful in Oceanic or areal comparative studies. The audio archive in PARADISEC enhances the value of the work by providing original audio recordings of the language, and serves as a reference for the future publication of the archived Wuvulu narratives.

Because New Guinea is the most linguistically diverse place in the world, the rapid disappearance of natural languages portends a tremendous loss of knowledge and culture in this part of Oceania. It is hoped that in some small way, the documentation of Wuvulu grammar and vocabulary will be a beacon of linguistic hope in a country that is confronting widespread pidginization and language death.

This documentation works in conjunction with the intense effort that has been made to bolster the Wuvulu language in practical ways, such as the creation of the Wuvulu alphabet, the initiation and continued operation of Wuvulu vernacular elementary schools, and the translation of the Wuvulu New Testament.

2   Phonology

2.1   Typological overview

In Chapter 1 Wuvulu was described as a member of the Oceanic subgroup of Austronesian languages. As a point of reference, this chapter begins with a phonological characterization of Oceanic languages from Lynch, Ross & Crowley 2002 (LRC):

> ...languages in this subgroup are frequently phonologically less complex than those of many other linguistic groupings in the world. Syllable structures tend to approximate a simple CV type, and phoneme inventories tend to be both fairly small, and characterized by relatively few complex articulations… Distinctive vowel length is much less common in western Oceania. (34, 35)

As expected for an Oceanic language, Wuvulu does not have a particularly complex phonology. There are no consonant clusters or complex consonant phonemes. Wuvulu does have an affricate phone, and a phone with secondary articulation: [tʃ] and [lð] (allophones of /t/ and /l/, respectively). In contrast with Wuvulu, most phonologies of Eastern Admiralty languages are more complex, with most having at least two complex phonemes.[7]

Additionally, there are certain vowel pairs that act as diphthongs. These diphthongs function as the unit nucleus of a syllable. Another typical Oceanic feature in Wuvulu is that it has CV canonic syllable shape, where V can be a vowel, a diphthong, or a long vowel. Vowel length is predictable in certain grammatical constuctions, however, there is contrastive vowel length in the language.

A syllable in Wuvulu is considered "heavy" if it bimoraic, i.e., if it has a diphthong or long vowel. Blust (2008:276) states that Wuvulu stress "falls on the penult and shifts rightward under suffixation to remain penultimate in the word". An alternative analysis that seems to explain the data is that the prosodic foot in Wuvulu is a moraic trochee, with stress falling on the penultimate mora.

Although there has not been much linguistic documentation of Wuvulu, there are several publications on Wuvulu phonology, and these are somewhat controversial. The controversy stems, in part, from a phenomenon in which surface allophones of the phonemes /l/, /r/, and /t/ are conditioned by the height of adjacent vowels (see §2.2.1).

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[7] The Eastern Admiralty languages Bipi, Khehek, Kurti, Lele, Loniu, Lou, and Nali each have at least two of the following consonant phonemes: /bʷ/, /ᵐb/, /ᵐʙ/, /ⁿd/, /ⁿdr/, /gʷ/, /kʷ/, /mʷ/, /pʷ/, /ᵐw/.

2.2   Phonemes

Wuvulu has 20 phonemes, including ten consonants, and 10 vowels (5 vowels and their long counterparts). In §2.1, Wuvulu phonological features were discussed in light of the features that are commonly found in Oceanic languages. If the focus is narrowed to phonologies of the Admiralty subgroup, it is apparent that Western Admiralty languages (Wuvulu and Seimat) have phoneme inventories that are somewhat simpler than phoneme inventories of Eastern Admiralty languages.[8]

2.2.1   Consonants

There are three publications that posit Wuvulu phonemes: Blust 1996 and 2008, and Hafford 2012. The differences between the three proposals have mostly to do with consonant phonemes. Table 2.1 provides a side-by-side comparison of these previously posited consonant phoneme proposals. Wuvulu consonant phonemes were not well understood in the decades following Blust's 1975 elicitation of Admiralty language data. In Table 2.1, four of the 14 entries of Blust 1996 are uncertain (indicated by parentheses).

Table 2.1 Wuvulu consonant phonemes

Blust 1996					Blust 2008				Hafford 2012		
p	t	k	?		p	t		?	p	t	?
b	(d)				b				b		
f			(h)		f		x	h	f		
m	n	(ŋ)			m	n			m	n	
	l					l				l	
	(r)					(r)				r	
w					w				w		

There were three significant differences between the consonant phonemes of Blust 1996 and Blust 2008. One is that the number of possible consonant phonemes was reduced from 14 to 12. This reduction was achieved by recognizing that /ŋ/ does not exist in the language, and that [d] and [l] are allophones of /l/. The other important differences

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[8] Phoneme inventories of Admiralty languages in the Manus Province include: Bipi (19 phonemes), Khehek (18), Kurti (20), Lele (22), Loniu (23), Lou (22), Nali (21), Nyindrou (26), Seimat (20). Phoneme inventory data is from http://www-01.sil.org/pacific/png/show_lang.asp?list=Manus&by=province (June 10, 2013).

are that the phoneme /k/ was recast as /x/, and /h/ was upgraded from its uncertain status as a phoneme.

It is worth noting that Blust 2008 posits /k/ as a phoneme in order to "yield a 'complete' set of voiceless stops", and the motivation for positing /x/ was, at least in part, that "it helps to fill in the set of fricatives" (288):

> The argument for representing the velar obstruent phoneme as /k/ is basically that this yields a "complete" set of voiceless stops /p/, /t/, /k/, and /ʔ/. However, there are more compelling arguments for representing this phoneme as /x/, because (1) it is more frequent than [k], (2) it occurs in the "elsewhere" environment in relation to [g], and (3) … it helps to fill in the set of fricatives with /f/, /x/, and /h/.

One problem with this analysis is that the data do not support /k/. And, although it is generally true that phoneme systems tend to pattern symmetrically, Wuvulu phonemes can be determined without shifting their positions for the sake of symmetry. Hafford 2012 presents the rationale for each phoneme, particularly the controversial velar consonants, but the important conclusions are summarized in the present chapter.

Minimal pair data are given in Table 2.2. Note that /t/ has 3 allophones—[t], and two phones that are in free variation, [s]~[tʃ]; /r/ has three allophones—[r], [x], and [g]; and /l/ has three allophones—[l], [d], and [lᶞ].

Table 2.2 Consonant phoneme contrasts

	labial	coronal	glottal
bilabial	/b/ *baʔa* 'knock sound' /p/ *paʔa* 'very'		
plosive	/p/ *papa* 'adjacent'	/t/ *tata* 'error' allophones [t], [s]~[tʃ]	/ʔ/ *ʔaʔa* 'with'
fricative	/f/ *fefe* 'bow down'	/r/ *rere* 'shake' [xexe] allophones [r], [x], [g]	
nasal	/m/ *meme* 'rubbish'	/n/ *nene* 'to follow'	
lateral		/l/ *lele* 'crawl' allophones [l], [d], [lᶞ]	
plosive fricative	/p/ *palu* 'pigeon' /f/ *falu* 'to hammer'		
plosive nasal	/b/ *baʔa* 'knock sound' /m/ *maʔa* 'to see'		
plosive rhotic		/t/ *tata* 'error' /r/ *rara* 'blood'	
plosive approximate	/b/ *balu* 'child' /w/ *walu* 'knife'		
plosive Ø			/ʔ/ *ʔumu* 'mouth' Ø *umu* 'house'

Along the lines of Hafford 2007, Blust 2008 also appealed to minimal pair data to recognize that [x] and [g] are allophones that are conditioned by the height of an adjacent vowel (283):

> Because the phonetic basis for such a statement of complementation is opaque, I initially was skeptical about its accuracy. However, on reexamining my field notes, I discovered overwhelming support for Hafford's claim …where my field notes show 172 supporting examples of this surprising correlation as against four contrary cases.

But is the phonetic basis for the complementation of [x] and [g] truly opaque? This question is explored further in §2.2.1.4. The status of /r/ and POc *k are discussed below in §2.2.1.1 and §2.2.1.2, respectively.

Though there are a number of differences between the consonant phonemes of Blust 1996 and Blust 2008, the phonemic status of /r/ remained uncertain in both publications (cf. Table 2.1). But the status of /r/ is crucial in resolving the problem of how [x] and [g] fit into the phonemic system. The phonemic status of /r/ and POc *k are discussed below in §2.2.1.1 and §2.2.1.2, respectively.

2.2.1.1   The status of /r/

The backing of coronal [r] (rhotic dorsalization) is well-attested in Romance languages. Variants include French [r] > [ʀ] (Haden 1955); European Portuguese, [r] > [ʀ], and Brazilian Portuguese [r] > [x] (Whitlam, Davies & Harland 1997); the phenomenon also occurs in Puerto Rican Spanish in which "trilled r becomes the uvular trill [ʀ] or the velar fricative [x]" (Goldstein & Inglesias 1996:84). A similar change involving the backing of rhotic [r] to the velar fricative [x] has occurred in the Oceanic language Ngatikese (Ken Rehg, 2011: personal communication).

In the synchronic phonology of Wuvulu there is evidence that trilled alveolar [r] may have backed to a velar obstruent—[x] or [g] (Hafford, 2012). The diachronic details of rhotic backing are not known for Wuvulu, but a possible sequence is [r] > [ɣ], followed by a change in manner, [ɣ] > [g], when adjacent to a high vowel, and a change in voicing [ɣ] > [x] otherwise.

One of the crucial assertions of Hafford 2012 is that /r/ is the phoneme that underlies the phones [r], [x], and [g]. Support for this is: 1) the existence of the variant [r] in contemporary dialects of Wuvulu and Aua wherever [x] or [g] can occur; 2) the correspondence of POc *r with contemporary Wuvulu [x] and [g]; and 3) [r] is borrowed

from pidgin and English as either [x] or [g], depending on the height of adjacent vowels. The evidence clearly supports the notion that, a single phoneme underlies [r], [x], and [g].

The first support for /r/ is that the phone [r] is still spoken by the elderly on Wuvulu and by all speakers on the island of Aua. Whenever [r] is spoken, it is possible to substitute one of the conditioned velar consonants, [x] or [g]. For example, *warea* 'word', is pronounced [warea] in the Aua dialect, but it is pronounced [waxea] in the two Wuvulu dialects. The word *rufu* 'village' is pronounced [rufu] in the Aua dialect, but it is pronounced [gufu] in the Wuvulu dialects. Furthermore, elderly Wuvulu speakers still regularly produce alveolar trilled [r] (in environments in which [x] and [g] occur), and it is intelligible to children.

A second argument for /r/ as the underlying phoneme of [r], [x], and [g] comes from historical data, where POc *r becomes [g] adjacent to a [+hi] vowel and [x] elsewhere (from Blust 2008:290-292):

Table 2.3 /r/ in POc and Wuvulu

Proto Oceanic		Wuvulu surface forms
*rua 'two'	>	[gua]
*mariri 'cold'	>	[magigi]
*muri 'stern of canoe'	>	[mugi]
*raun 'leaf'	>	[xauna]
*rato 'whale'	>	[xaʔo]
*rodom 'dark'	>	[xoxo]

A third argument for /r/ as the phoneme of [r], [x] and [g] has to do with the manner in which Wuvulu borrows words from English (E) and pidgin (P). If /r/ is adjacent to a high vowel it is borrowed as [g], otherwise it is borrowed as [x]. Examples include *meri* (P) 'female' > Wuvulu *megi*; *kakaruk* (P) 'chicken' > Wuvulu *ʔaʔaxo*; and *truck* (E) > Wuvulu *taxaʔa* (note that [k] is borrowed as [ʔ]).

2.2.1.2   The status of POc *k

Blust 1996 posited that Wuvulu had four velar phones in free variation: [ɣ], [g], [x], and [k]. Blust 2008 revised the proposal to recognize the conditioned allophones [x] and [g] (after Hafford, 2007). The revision also excluded [ɣ] due to its rarity. This left a conundrum in which each of the conditioned variants, [x] and [g] was purportedly in free variation with [k].

The most basic problem in dealing with [k] is that the phone has not been documented in the large corpus of phonetic data collected by the present writer.[9] It should be emphasized that speakers of all dialects reject [k] as a phone in the language. The claim that [k] is absent in the language is supported by the manner in which words are borrowed from pidgin and English. The phone [k] is always borrowed into Wuvulu as glottal stop, [ʔ]. For example, *buk* (P) 'book' is borrowed as *buʔu*, *kilok* (P) 'clock' is borrowed as *ʔiloʔo*, and *America* is borrowed as *ʔamexeʔa* (note too that [r] is borrowed as [x]). Furthermore, historical data in Table 2.4 (from Blust, 2008:292) suggest that POc *k was deleted (or became glottal) in synchronic Wuvulu.

Table 2.4 POc *k loss in contemporary Wuvulu

Proto form	Wuvulu
PAN *aku '1 sg. pronoun'	*iau*
PAN *kururu 'lightning'	*ʔururu* 'thunder'[10]
POc *kalia 'cod'	*alia*
POc *pweka 'fruit bat'	*bea*
POc *panako 'to steal'	*fafanao*
POc *ikan, PAdm *nika 'fish'	*nia*
PAdm *busiko	*pusuʔo*
POc *babak 'to strike'	*baʔa*
POc *bekeR 'defecate'	*ʔeʔe*
POc *lako 'to go'	*-lao* 'away from listener'

Data from the Austronesian Comparative Dictionary (ACD) are also evidence against /k/ (Trussel, 2013). Table 2.5 shows that POc *r is interpreted as /k/. Note that there is direct correspondence between POc *r and synchronic Wuvulu /r/.

Table 2.5 /k/ data from the Austronesian Comparative Dictionary

POc	ACD	Hafford data
*parara 'thunderclap'	*pakaka*	*parara* [paxaxa]
*muri 'stern of canoe'	*muki*[11]	*muri* [mugi]
*quran 'spiny crawfish'	*uka*	*ura* [uga]

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[9] The present author keyboarded all of Blust's Admiralty field notes, including language data from Wuvulu, Seimat, Nyindrou, Bipi, and Lou. Blust's field notes have 51 transcriptions of [k]. In my own work, I have not heard [k], and in fact, it seems to be avoided by native speakers. It is possible that Blust's informant spoke [k] idiolectically.

[10] The Hafford corpus has /ururu/ [ugugu] 'thunder' and /utila/ [usida] 'lightning'.

[11] Trussel 2013 continues to list /muki/ 'stern of canoe' even though Blust (2008:291) has switched the underlying phoneme from /k/ to /x/.

The ACD includes data for which Blust transcribed [k] and should presumably be changed now that /k/ is no longer recognized (Blust 2008).

2.2.1.3 The phonetic space of POc *k and POc *r

Diachronically, it is reasonable to posit that the loss of POc *k could have effected the reallocation of phonetic space, with the expression of /r/ backing to the velar place of articulation for the production of the conditioned allophones [x] and [g].

Assuming cardinal phonetic values, coronal consonant phonemes take a disproportionate 50% of the articulatory space (Table 2.6), versus 31% for anterior consonants, and 19% for back consonants. The greatest imbalance in the distribution of consonant phonemes occurs between coronal (50%) and back (19%) consonants—the places of articulation for the posited phonetic shift.

In Table 2.6 the /r/ token occurs 15% of the time (disproportionately high, given that there are only 10 consonant phonemes). But if the 1528 /r/ tokens are counted according to their phonetic surface forms, [x] and [g], they generate an evenly balanced space of phonetic articulation. Of the four coronal phonemes, /r/ occurs with the second-highest frequency (after /n/). The alveolar nasal, /n/, is the default consonant in the language (for example, borrowed transitive verbs take the transitive suffix –na, rather than one of the other choices (-ʔa, -fa, -ma, -ra).

Table 2.6 Distribution of consonant phonemes

	anterior					coronal				back	
	p	b	f	m	w	t	n	l	r	ʔ	total
frequency	690	232	837	852	578	573	1954	998	1528	1953	10,195
percentage	6.8%	2.3%	8.2%	8.3%	5.7%	5.6%	19.2%	9.8%	14.9%	19.1%	100%
frequency	3189					5053				1953	10,195
percentage	31%					50%				19%	100%

Table 2.7 Consonant phones by place of articulation

anterior (labial)	coronal (alveolar)	back (velar, glottal)	
p,b,f,m,w	t,n,l,(r)	[x], [g]	ʔ
3189	3525 (5053-1528)	3481 (1953+1528)	
31%	35%	34%	

Table 2.7 shows that the expression of /r/ as the velar phones [x] and [g] balances the distribution of consonant phones to 31% anterior, 35% coronal, and 34% back. The target of an evenly distributed phonetic space is a possible motivation for the diachronic change in the phonetic expression of /r/.

2.2.1.4 Sonority correlation

The present discussion returns to the question of whether the conditioning environment for the allophones of /r/ is "opaque". In other words, is there really no phonetic basis for the conditioning of allophones [x] and [g]? The allophonic conditioning in this case is that if the phoneme /r/ is adjacent to a high vowel, then [g] is produced; otherwise [x] is produced.

Blust 2008 makes the observation that a high vowel would be expected to correlate with the less sonorant voiceless consonant [x], rather than the allophone [g]. But, counter to expectation, a high vowel favors [g] rather than [x]. Table 2.8 is reproduced from Blust (2008:285). It posits ad hoc scalar feature values <+feature>, rather than conventional binary values [+feature], and thereby allowing for finer distinctions of sonority and constriction among the vowels. The five vowels are grouped into two stricture classes, where '+' and '-' refer to scalar values of 'more' and 'less', respectively.

Table 2.8 Blust 2008 consonant and vowel stricture features

[i], [u] =   <+constricted>   [o], [a], [e] =   <-constricted>
             <-sonorant>   <+sonorant>

Blust 2008 notes the conundrum that although vowel height correlates well with theoretically expected differences of manner, it does not correlate with expected differences of voicing. But this type of problem is resolved on a language-specific basis. Although stops are less sonorous than fricatives, a given language may choose to treat either the voiced stop or the voiceless fricative as 'more sonorous'.

So, for the Wuvulu data, gradient features are not necessary; it suffices to say that for the phoneme /r/, the [-continuant] allophone [g] is correlated with an adjacent [+hi] vowel and the [+continuant] allophone [x] occurs elsewhere. Blust 2008 discusses this phenomenon only as it applies to the allophones of /r/, however, the same pattern occurs with the phoneme /l/; its [-continuant] allophone [d] occurs adjacent to a high vowel and

the [+continuant] allophone [l] occurs elsewhere (*ali* 'to pull upward' > [adi], *lifo* 'tooth' > [difo], *balu* 'child' > [badu]). The liquid phonemes /l/ and /r/ surface as [-continuant] if adjacent to a high vowel and as [+continuant] otherwise.

Table 2.9 Consonant phones by [continuant]

	[-continuant]	[+continuant]
phoneme	p, b, (t), ʔ	f, m, w, n, (l), (r)
phone mappings	[p, b, t, tʃ, d, g, ʔ]	[f, m, w, n, l, s, x]
frequency	4884	5311
percent	48%	52%

Table 2.9 shows that after taking into account vowel and consonant interaction, consonant phones are fairly evenly balanced between [-continuant] and [+continuant]. The phonemes /t/, /l/, and /r/ appear in parenthesis to indicate that they map to more than one phone: /t/ has allophones [t], [s], and [tʃ]; /l/ has allophones [l], [d], and [lð]; and /r/ has allophones [r], [x] and [g].

2.2.2   Vowels
Wuvulu has 10 vowel phonemes, including five standard vowels: *i, u, e, o, a*; and five long vowels: *iː, uː, eː, oː, aː*.

2.2.2.1   Five vowels
Wuvulu has five standard vowel phonemes: *i, u, e, o,* and *a*. Table 2.10 shows contrastive words for the vowels (the phonetic quality of the phoneme *e* is [ɛ]).

Table 2.10 Evidence of vowel phonemes

mimi 'urine',
meme 'rubbish'
mama 'breadfruit'
momo 'coconut shell'
mumuʔa 'vomit'

The low central vowel [a] is by far the most frequent vowel, accounting for about 33% of all vowels in the corpus. In terms of articulatory position in the oral cavity, the distribution of vowels is fairly evenly balanced between front (37%), central (33%), and back (30%).

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Table 2.11 Vowel frequencies

front		central	back		total
i	e	a	o	u	
2332	1123	3033	1506	1292	9286
25.1%	12.1%	32.7%	16.2%	13.9%	100%
37%		33%	30%		

Table 2.11 shows a stark difference in frequency between the two front vowels *i* and *e*. The vowel *i* occurs more than twice as frequently as *e* (2332 tokens versus 1123). Back vowels, on the other hand, show a much smaller difference in frequency between the high vowel *u,* and the mid vowel *o* (16.2% versus 13.9%).

Table 2.12 Vowel height

	front	central	back	
high	i		u	39%
mid	e		o	28%
low		a		33%
				100%

In Table 2.12 mid vowels are least frequent (28%) and high vowels are most frequent (39%). Because phoneme systems involve interactions of vowels and consonants, a greater frequency of high vowels may be related to the shift of alveolar /r/ to [g] and the conditioned expression of /l/ as [d]. In Table 2.7 about half of the 1528 /r/ tokens were adjacent to a high vowel; resulting in the surface phone [g], and about two-thirds of the 998 /l/ tokens were adjacent to a high vowel, resulting in the surface phone [d]. In both cases there has been a diachronic shift to [-continuant] consonants adjacent to high vowels.

2.2.2.2   Long vowels

Wuvulu has five long vowel phonemes: *iː, uː, eː, oː, aː.* Long vowels have the same phonetic quality as the five standard vowels, but are longer in duration than standard vowels. Long vowels always bear word stress, and occur in the lexicon in both words and affixes. There are also grammatical contexts in which vowels are lengthened, including suffixation that results in vowel gemination, and the lengthening of final vowels in the first of juxtaposed NPs.

Some words and affixes in the lexicon have long vowels, including *afa:* 'west wind', and *-li:* 'perfective'; and the transitive allomorphs *-Ca:,* where C is a thematic consonant.[12] Vowel length also occurs as the result of gemination, when *-u* '1SG possessor' is suffixed to a *u*-final noun, or when the circumfix, *fi-<stem>-i* 'reciprocal' occurs with an *i*-final word.

2.2.2.2.1 Lexical length

Long vowels exist in perhaps as much as 5% of the lexicon. Most words that have long vowels are nouns, such as, *aila:* 'chief', and *parara:* 'kind of black bird' (contrasts with *parara* 'thunder'). Long vowels also occur in grammatical words, such as, *ʔua:* 'because'. In some words, vowel length has to do with the historical loss of intervocalic consonants that resulted in pairs of adjacent geminate vowels.

The word *fula:* 'taro', for example, is used in all dialects of the language and is cognate with POc **pulaka* 'swamp taro: *Cyrtosperma*'. After the loss of POc **k* (and POc **p > f,* the resulting form is *fula:*. A similar result occurred with POc **apaRat* 'northwest wind' > *afa:* 'west wind' in synchronic Wuvulu. Lexical items with long vowels include *aroma:* 'tree species', *aro:* 'black trevally, *fanaʔu:* 'Lined Monocle-Bream', *lilipiti:* 'shoreline', and *marale:* 'Archer Cherry'.

2.2.2.2.2 Transitive suffix

There are four forms of transitive morphemes: i) =C*au* '1SG object', ii) =C*io* '2SG object', iii) =C*ia* '3SG object', and, iv) –C*a:* 'transitive marker'. In (2.1) the verb *ato* 'taste, smell' is used intransitively. The same verb root is used in the transitive construction of (2.2).

> (2.1) *ʔi=na-ato*
>   3SG=REAL-taste
>   'He tasted.'

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[12] The word-final consonant of a transitive verb was reanalyzed as the initial segment of the transitive suffix in Wuvulu. This phenomenon is widespread in the Oceanic subgroup with language-specific variations in grammatical function of the morpheme in which C appears.

(2.2) *ʔi=na-ato-fa*   *fei nia*
        3SG=REAL-taste-TR the fish
        'He tasted the fish.'

Each transitive verb in the lexicon has a thematic consonant, C, associated with its transitive morphemes (=C*au,* =C*io,* =C*ia,* and –C*aː*). The thematic consonant *f* is associated with the verb *ato* 'to taste, smell' in (2.2) and the thematic consonant *ʔ* is associated with the verb *tafi* 'to carve' in (2.4). (Transitive morphemes are discussed in more detail in Chapter 4.)

(2.3) *ro=na-tafi*
        3PL=REAL-carve
        'They carved."

(2.4) *ro=na-tafi-ʔa*   *feni   wa*
        3PL=REAL-carve-TR this.INAN canoe
        'They carved this canoe.'

2.2.2.2.3 1SG suffix

The Wuvulu first person singular possessive suffix, *–u,* is from POc *-gu '1SG possessive'. Inalienable nouns can be suffixed by the singular possessive morpheme (cf. Chapter 3). If a noun ending in *u* is suffixed by the possessive morpheme *–u*, a long vowel results, for example, *umu* 'house' > *umuː* (*umu-u*) 'my house', *ʔumu* 'mouth' > *ʔumuː* 'my mouth', *rufu* 'village' > *rufuː* 'my village'. Long vowels that are formed in this way are pronounces as a single vowel (of longer duration), and not as two like vowels with rearticulation.

2.2.2.2.4 Reciprocal circumfix

Wuvulu intransitive verbs and verbs denoting existential states may take the circumfix *fi-*<verb>*-i* to indicate reciprocal action. If the reciprocal circumfix inflects a verb stem ending in *i,* the resulting geminate vowel is realized as a long vowel instead of rearticulation.

(2.5) *larua   fi-ari-i*
        PRON.3DU RECIP-opp.sib-RECIP
        'The two are brother and sister.'

(2.6)   *larua*   *fi-tafi-i*
          PRON.3DU RECIP-sister-RECIP
          'The two are sisters.'

(2.7)   *laru=na-fi-foʔa-i*
          3DU=REAL-RECIP-hit-RECIP
          'The two fought.'

2.2.2.2.5 NP juxtaposition

Wuvulu grammar demonstrates an interesting relationship between syntax and prosody, where the first of two juxtaposed NPs has a heavy final syllable (see §2.3.2). In this case, vowel length occurs as a post-lexical process.

(2.8)   *ro=na-maʔiru* *ʔi*   *umu:* *roʔou*
          3PL=REAL-sleep LOC house PRON.3PL
          'They slept at their home.'

(2.9)   *ti-feni*   *ʔei*   *meme:* *roʔou*
          it.is-this.INAN the.PL rubbish PRON.3PL
          'This is their rubbish.'

(2.10) *ia*   *ari:*   *mei pifine*
          PRON.3SG opp.sib the woman
          "He is the woman's brother."

Note that in the present section, vowel length is marked on the first of juxtaposed NPs, but because length is predictable in this type of construction, it is not marked in other sections.

2.2.2.3   Diphthongs

2.2.2.3.1 Vowel-pair sonority

There are 20 possible vowel pair permutations of the five standard vowels, arranged in Table 2.13 according to whether the tongue is rising, falling, or level. Of these, there are eight pairs with rising tongue height, eight pairs with falling tongue height, and four pairs for which tongue height is level. In general, rising tongue height corresponds with a decrease in sonority, and falling tongue height corresponds with an increase in sonority. The terms "rising" or "falling" diphthongs have to do with a rise or

fall in sonority, and not a rise or fall in tongue height. The pairs *eo, oe*, and *ae* do not occur in the language. (Transcriptions of *oe* and *ae* are considered erroneous).

2.2.2.3.2 Tongue height transition

In Table 2.13 all valid vowel pairs with rising tongue height are considered to be diphthongs, i.e., they act as a unit nucleus in the syllable. The seven diphthongs are: *ai, nomai* 'come'; *au, maunu* 'rain'; *ei, rirei* 'door'; *eu, beu* 'empty'; *oi, oila* 'kind of fish'; *ou, roʔou* 'PRON.3P'; and *ao, nabao* 'hungry'. Diphthongs are always stressed (cf. §2.3.2).

Table 2.13 Vowel pair tongue height transition

rising	ai	au	ei	eu	oi	ou	*ae	ao	
	656	257	284	9	77	46	3	126	1458
	45%	17.6%	19.5%	0.6%	5.3%	3.2%	0.2%	8.6%	100%
	front-to-back (*j*-epenthesis)				back-to-front (*w*-epenthesis)				
falling	ia	ie	io	ea	ua	uo	ue	oa	
	554	7	77	76	266	7	5	106	1098
	50.5%	0.6%	7%	6.9%	24.2%	0.6%	0.5%	9.7%	100%
level	iu	*eo			ui	*oe			
	21	0			67	1			

*invalid sequence

All valid vowel pairs that do not have rising tongue height undergo glide epenthesis: *j*-epenthesis for front-to-back pairs, and *w*-epenthesis for back-to-front pairs. Vowel pairs that undergo glide-epenthesis result in two syllables: *pie* 'sand' > [pije], *io* 'spear' > [hijo], *nia* 'fish' > [nija], *pea* 'bait' > [peja], *ʔua* 'only' > [ʔuwa], *roa* 'red' > [xowa].

2.2.2.3.3 Diphthongs

Although Wuvulu has surface diphthongs, there is no reason to posit underlying "true diphthongs" as phonemes. A true diphthong consists of a single, complex vowel of the form, /Vᵛ/. The introduction of complex segments lacks clear motivation in the language. And, according to Rehg (2007:16), cross-linguistic evidence suggests that true diphthongs have limited distribution in a language, e.g., English diphthongs /aⁱ/, /aᵘ/, and

/ɔⁱ/. But, Wuvulu surface forms permit seven of the eight possible permutations of falling diphthongs.

And, Donegan (1985) points out that diphthongs usually originate in vowels that are underlyingly long. The diachronic loss of intervocalic consonants appears to be the source of at least some of the diphthongs that occur in the lexicon (i.e., their sources are not long vowels). Examples of historical sources for diphthongs are given in Table 2.14.

Table 2.14 Historical sources of diphthongs in Wuvulu

source	contemporary surface form
PAN *aku '1 sg. pronoun'	*iau*
POc *dahun 'leaf'	*rau*
PEMP *qayawan 'banyan'	*aiwa*

2.3   Prosody

2.3.1   The syllable

The syllable template of Wuvulu is (C)V, where the consonant, C, is optional, and the vowel, can be a standard vowel, a long vowel, or a diphthong. The V of the syllable template is the nucleus of a syllable, and can be V, V:, or V_1V_2 ($V_1{\neq}V_2$), where a vowel has one mora of weight, and long vowels and diphthongs have two moras.

2.3.2   Stress

2.3.2.1   Previous descriptions

Blust (1996:16) discusses Wuvulu stress in terms of syllable position from the right edge of the word:

> Primary stress in fact falls optionally on the initial or penultimate syllable of the tri-syllabic bases, but on the penult in others. Surface final-syllable stress derives from an underlying penultimate geminate vowel cluster, for example, kufu [gúfu] 'island' vs. kufu-u [gufú] 'my kinsman'.

Lynch 2000 makes reference to Blust 1996 in his discussion of the stress pattern of Western Admiralty languages:

The extant languages of the Western Admiralty family, Seimat, Wuvulu, and Aua fall into a category of languages that have only open syllables, and assign primary stress to the penultimate syllable if the final vowel is short, or to the final syllable if its vowel is long or if it contains a vowel cluster.

The descriptions of Wuvulu stress given by Blust 1996 and Lynch 2000 both make reference to syllable distinctions that involve weight (*short, long, vowel-cluster, geminate vowel cluster*), and they both refer to rules that require conditions that are sensitive to syllable weight.

2.3.2.2 The mora and syllable weight

Previous publications describe Wuvulu stress in terms of syllable position. An alternate explanation appeals to the notions of the mora and weighted syllables. Such an approach captures a generalization regarding weight distinction in the language and simplifies stress assignment rules. A mora is associated with a vowel. A light syllable has one mora and a heavy syllable has two moras as in (2.11).

Wuvulu Syllable Weight:

(2.11)   a. light (L)   b. heavy (H)—long vowel c. heavy (H)—two vowels

$$
\begin{array}{ccc}
\sigma & \sigma & \sigma \\
| & \diagup\diagdown & \diagup\diagdown \\
\mu & \mu\quad\mu & \mu\quad\mu \\
| & | & | \quad | \\
(C)\quad V & (C)\quad V{:} & (C)\quad V_1\quad V_2
\end{array}
$$

Examples: lo, a   i:, po:, fu: au, mau, bai
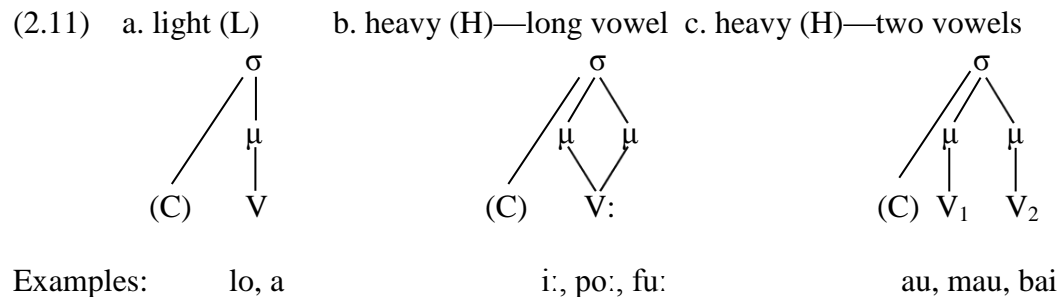
Recall that Lynch (2000) assigns stress to the penult syllable if the final vowel is short, or to the ultima if it contains a long vowel or a vowel cluster. So, *maunu* 'rain' and *lolo* 'sink' have penultimate stress because they have a final short vowel, i.e. a mono-moraic ultima. The words *babai* 'hot' and *rufu:* 'my village' have ultimate stress because their nuclei are bi-moraic. A heavy syllable always receives stress, because a prosodic foot in the language is built from either one heavy syllable or two light syllables.

2.3.2.3 Foot structure

The Wuvulu prosodic foot is a trochee consisting of two moras. A moraic trochee in Wuvulu is built counting moras right-to-left from the right edge of the word. A foot can consist of either one heavy syllable (σH) or two light syllables (σL) as in (2.12).

(2.12)   a. (x   .)   b. (x   .)
                    μ   μ   μ   μ
                     \ / | |
                     σH   σL   σL
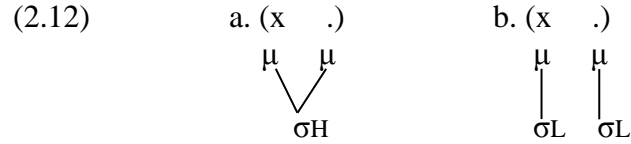
Stress falls on the head of the trochee. In (2.13)b. the foot is built from a heavy syllable, and the ultima is considered to be extrametrical (where the head of the foot is indicated by 'x' and the dependent is indicated by '.').

(2.13)   a. (x   .)   b. (x   .)

                             μ   μ   μ   μ μ
                             | | | /
                             σ   σ   σ   σ
                            pa   pa   mau   nu

                          papa 'beside'   *maunu* 'rain'
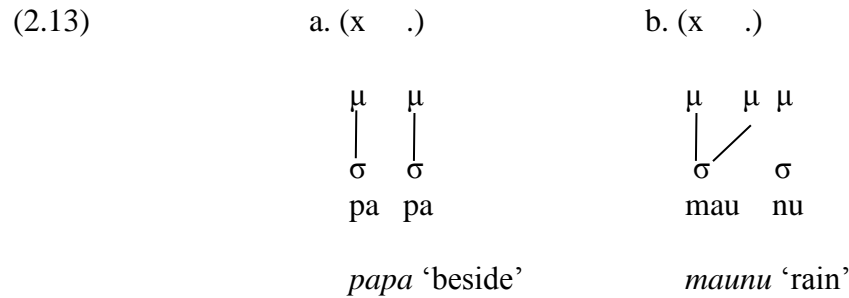
2.3.3   Word structure

Words are right-headed, meaning that cumulative, primary stress falls on the right-most trochee of the word, and with secondary stress, if present, falling on the second trochee from the right edge of the world.

(2.14)
    word   (.   x   )   (.   x   )
    foot   (x   .) (x   .)   (x   .) (x   .)

                     μ   μ   μ   μ   μ   μ   μ   μ
                     | | | | | / | |
    syllable   σ   σ   σ   σ   σ   σ   σ
                    ma   nu   ma   nu   ʔai   ʔo   lu

                  manumanu 'something'   *ʔaiʔolu* '1P.EXCL'
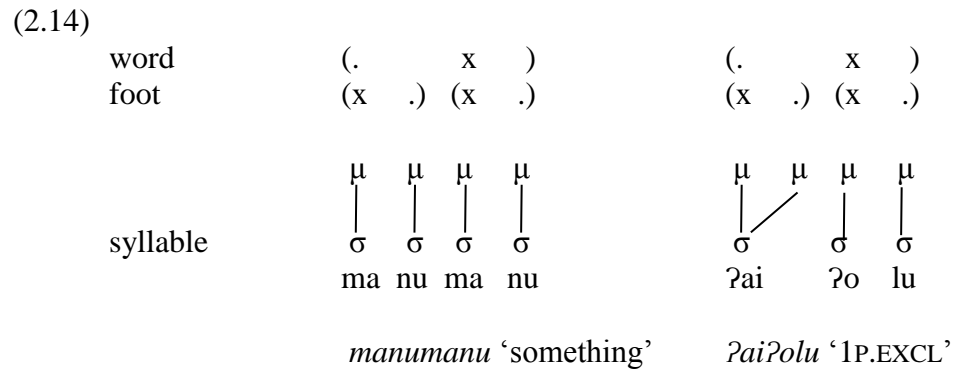
2.3.4   Phrasal intonation

2.3.4.1   Statements

A statement in the language has level intonation, with a very slight drop in pitch at the end of the phrase.

(2.15) *ro=na-re-to=nia*
3PL=REAL-DIR-get=3SG
'They went and got him.'

2.3.4.2   Content questions

Content questions syntactically consist of a *wh*-question word followed by a verb. A content question is similar to a statement in that both have a level intonation contour that falls at the end of the phrase. There is a marked difference, however, in the amount of contour drop between the two types of propositions: statements have a very slight drop, but content questions have a steep drop in phrase-final intonation.

(2.16) *ini   na-biri=ʔia*
PRON.3PL REAL-DIR-get=3SG
'Who did this?.'

2.3.4.2.1 Tag questions

A tag question in the language is used a rhetorical device consisting of a statement followed by the morpheme, *na* 'tag question'. Tag questions are essentially rhetorical questions that operate like statements, where the answer to the question is understood to be affirmative. The statement portion of the tag question has level intonation, like a statement, but is followed by a sharp rise in intonation.

(2.17) *mei pilaua   na-biri-ʔia,   na*
the foreigner REAL-work-3S TAG
'The foreigner did this, right?'
(interpretted as '(We both know) the foreigner did this.')

2.3.4.2.2 Yes/no questions

Yes/no questions have a flat intonation contour with an abrupt rise at the end of the phrase.

(2.18) *ʔo=na-rawani*
2SG=REAL-good
'Are you okay?'

2.3.4.3 Rising-falling intonation (subordination)

Subordination in the language demonstrates an interesting intersection of syntax, morphology, and prosody. Syntactically, subordination usually involves two clauses, the first of which is subordinate to the second. Morphologically, the verb of the subordinate clause is inflected with the irrealis mood morpheme, *ʔa-,* and is spoken with rising intonation as in (2.19)a. The verb of the main clause is inflected for realis and has a falling intonation contour (2.19)b. (Verbal morphology is discussed further in Chapter 4.)

(2.19) a. *ro=ʔa-no-mai*   b. *ro=na-re-to=nia*
        3PL=IRR-move- DIR   3PL=REAL-DIR-get=3SG
        'When they came, they went and got him.'

The sentence in (2.20) involves an embedded clause.

(2.20) a. *naba ʔi=ware   te   ro=ʔa-no-mai*   b. *ro=na-re-to=nia*
       if   3SG=talk okay 3PL=IRR-move- DIR   3PL=REAL-DIR-get=3SG
       'If he says ok they're about to come, (it means) they went and got him.'

The details of subordination are discussed in Chapter 6, but it is interesting to note that morphology, syntax, and prosody are all involved in inter-clausal propositions.

2.4 Phonological processes

2.4.1 Epenthesis of h

A small amount egressive airflow precedes the onset of a word-initial vowel. However, as noted in §2.2.1, [h] is not considered to be phonemic. Note that phonemic /h/ does not appear in proto forms of synchronic Wuvulu words such as *alo* 'sun' (POc *qalo), and *afi* 'fire' (POc *afi).

The insertion of [h] occurs in the word-initial position and word-internally at morpheme boundaries as in (2.21)c. The target CV syllable shape may be the motivation for *h*-insertion.

(2.21) Ø → h / [__V
      a. *alo* 'sun' → [halˠo]
      b. *upu* 'green coconut' → [hupu]
      c. *ʔi=na-ato=fia* → [inahatofia]
        3SG=REAL-smell=3SG
        "He smelled it."

The glottal fricative in Wuvulu has very little aspiration compared to English *h*. Word-initial glottal stop contrasts with the glottal fricative in words such as: *upu* 'green coconut', *ʔupu* 'grandparent/grandchild'; and *alo* 'sun', and *ʔalo* 'send'.

2.4.2   Glide-epenthesis

A glide is inserted between two consecutive vowels that do not comprise a diphthong (cf. Table 2.13). Glide insertion may be motivated by canonic syllable shape. Words that undergo glide epenthesis include: *bie* 'insane' [bije], *lio* 'vagina' [lijo], *wia* 'fat' [wija], *bea* 'fruit bat' [beja], *rua* 'tree kangaroo' [guwa], *poa* 'hole' [powa].

(2.22) Ø → j / i__V, V ≠ i
Ø → j / e__V[-hi], V ≠ e
Ø → w / u__V, V ≠ u
Ø → w / o__V[-hi], V ≠ o

2.4.3   Word-final vowel deletion

In rapid speech, word-final high vowels are sometimes deleted.

(2.23) V[+hi] → Ø / __#
lomi → *lom* 'no'
humumu → *humum* 'your house'

2.4.4   Fricative voicing

The fricatives [f] and [x] are sometimes voiced intervocalically.

2.4.4.1   Voicing of intervocalic /f/

The voiceless fricative /f/ is sometimes voiced intervocalically.

(2.24) f → [+voice] / V_V
fafi 'afternoon greeting' → [favi]

2.4.4.2   Voicing of intervocalic [x]

In rapid speech the voiceless velar fricative [x] is sometimes voiced if it is intervocalic.

(2.25) x → [ɣ] / V_V
ere 'going on…' [exe] → [eɣe]

2.4.5   Spirantization

Before a high vowel /t/ becomes the voiceless alveolar sibilant in free variation with the voiceless alveolar affricate.

(2.26) t ➝ [s] ~ [tʃ] / __V[+hi]
        tua 'to paddle' ➝ [sua] ~ [tʃua]
        tifi 'to deceive' ➝ [sifi] ~ [tʃifi]

Application of (2.26) can be seen in borrowings from pidgin and English: *lotu* (P) 'worship' ➝ *losu*; *Satan* (E) ➝ *tatana*. In the English example, [s] becomes [t] and the word adds a final vowel to conform to the target syllable shape. Although [s] is an allophone of /t/ it would be a violation of the condition that /t/ must precede a high vowel in order for the allophone [s] to surface.

2.4.6   Allophones of /r/
2.4.6.1   Posterior allophones of /r/

The phoneme /r/ has three allophones—[r], [g], and [x] (cf. §2.2.1.1). The [r]-variant is used by everyone on Aua, and is still spoken by the elderly on Wuvulu. The use of [r] is not conditioned by a phonological rule, but [x] and [g] are. And, although [r], [x], and [g] are given here as allophonic, in actual usage, there is a more general contrast at work: [r] vs. ([x] or [g]). In other words, either [r] is uttered, or [x] and [g] are uttered in complementary distribution. In any case, this appears to be a sound-change in process. Blust (2008:288) lists both /x/ and /r/ in its revised Wuvulu phoneme chart. If /r/ is adjacent to a high vowel, [g] is uttered, otherwise [x] is produced.

(2.27) r ➝ [g] / %__V[+hi], r ➝ [x] otherwise.
        rufu ➝ [gufu] 'village'
        fira ➝ [figa] 'How many?'
        ware ➝ [waxe] 'to speak'

In (2.28) two rules determine the surface form of /tiri/ 'swim'. There is no ordering dependency in the application of the rules.

(2.26)   t ➝ [s] ~ [tʃ] / __V[+hi]
(2.27)   r ➝ [g] / %__V[+hi], r ➝ [x] otherwise.

(2.28) *tiri* ➝ [sigi] ~ [tʃigi] 'swim'

2.4.6.2 Allophones of /l/

2.4.6.2.1 Adjacent to high vowel

In the dialects of Onne and Aua, the phoneme /l/ becomes the voiced alveolar stop if adjacent to a [+hi] vowel.

> (2.29) l → [d] %___V[+hi]
>   *balu* → [badu] 'child'
>   *fula* → [fuda] 'taro'
>   (cf. *mala* [mala] 'long')

2.4.6.2.2 Before /o/

/l/ becomes a lateral with the secondary articulation of a voiced interdental fricative [ð] before the mid-back vowel, /o/. Note that there is no secondary articulation of /l/ in (2.30)c.

> (2.30) a. l → [l^{ð}] / ___o
>   b. *ruapalo* → [guapal^{ð}o] 'two'
>   c. *ola* → [ola] "male sib of a female's mom,
>   or female sib of a male's father"

The complex allophone [l^{ð}] is further support for the correlation of vowel and consonant sonority. For the phoneme /l/, the allophone [d] represents the greatest degree of stricture and occurs adjacent to a high vowel, it occurs as [l^{ð}] mid vowel [o], or it occurs as [l] otherwise. It should be noted that Dempwolff (1905) records [l^{ð}] in environments other than a preceding /o/, as does Blust (personal communication).

2.4.7   l-deletion

Wuvulu has four plural pronouns, all are based on *ʔolu* 'three' (POc *tolu): *ʔoʔolu* 'PRON.1PL.INCL', *aiʔolu* 'PRON.1PL.EXCL', *amuʔolu* 'PRON.2PL', and *roʔolu* 'PRON.3PL'. For each of the plural pronouns, /l/ can be deleted as shown in (2.31).

> (2.31) *ʔoʔolu* 'PRON.1PL.INCL' → *ʔoʔou*
>   *aiʔolu* 'PRON.1PL.EXCL' → *aiʔou*
>   *amuʔolu* 'PRON.2PL' → *amuʔou*
>   *roʔolu* 'PRON.3PL' → *roʔou*

In §2.3.2.2 a distinction was made between light and heavy syllables. The loss of intervocalic /l/ in plural pronouns results in formation of the diphthong *ou*. And, although a syllable is lost, the overall duration of the word remains approximately the

same, because a heavy, bi-moraic syllable is created from two light mono-moraic syllables.

The motivation is for alternate forms of pronouns is not clear. Full pronouns and their reduced counterparts appear to vary freely, but it is possible that reduced forms are preferred for prosodic reasons.

2.4.8   Morphophonemic processes

2.4.8.1   Diphthongs

A diphthong can be created at the boundary of a word that ends in *a*, and a verb that begins with the first- or third-person subject clitics *ʔu=* and *ʔi=,* respectively. In these cases, the initial glottal stop is deleted, resulting in a diphthong.

In example (2.32) the complementizer *ba* forms the diphthong *au* with the word that follows it.

(2.32) *ʔu=na-ware   ba   ʔu=na-no-mai*   ➝ *ʔunaware baunanomai*
　　　　1SG=REAL-talk COMP 1SG=REAL-move-DIR
　　　　'And I came.'

In (2.33) the complementizer *ba* forms the diphthong *ai* with word that follows it.

(2.33) *ro=na-ware   ba   ʔi=nei-tama-lao*   ➝ *ronaware baineitamalao*
　　　　3PL=REAL-talk COMP 3SG=DEON-paddle-DIR
　　　　'They said that he must paddle away.'

2.4.8.2   Vowel coalescence

Two adjacent words can form a single phonological word if they have identical vowels on their boundary. In (2.34) the word-final vowel of *ʔaʔa* 'with' and the initial vowel of *amuʔolu* 'you' are the same, so a single word is produced, *aʔamuʔolu* 'with you'. A word that is formed by means of vowel coalescence follows the normal rules for word stress.

(2.34) *ʔi=na-biri   fipui   ʔaʔa amuʔou* ➝ *ʔinabiri fipui ʔaʔamuʔou*
　　　　3SG=REAL-work together with PRON.2PL
　　　　'She worked together with you.'

As in the case of morphophonemic diphthong formation in §2.4.8.1, morphophonemic vowel coalescence results in the loss of a syllable.

2.5   Orthography

An orthography has been in use on Wuvulu since 1992, when SIL workers Audrey and Vinton Goff lived on the island. The present orthography is not completely optimal due in part to certain conventions were adopted while the orthography was still in trial status. Another factor that has influenced orthographic decisions is the requirement that a single alphabet be acceptable to speakers of both Wuvulu dialects. A case in point is that [d] is an allophone of /l/ in the Onne dialect, but not in the Auna dialect. Onne is more populous than Auna, so a majority of people speak [d].

At an orthography workshop, attended by both Auna and Onne speakers, it became apparent that the expression of /l/, both phonetically and orthographically, is a marker of identity and prestige.[13] For sociolinguistic reasons, both <d> and <l> were adopted into the alphabet to represent the phoneme /l/, with <d> written next to a high vowel, and <l> written elsewhere.[14] So, the word *balu* 'child' is written as <badu>. The decision for over-differentiation was made in spite of the fact that [d]-speakers automatically produce [d] when reading <l>.

A further case of over-differentiation has to do with /r/ and its allophones. The alphabet committee adopted <r> for allophones [r] and [x], and <g> for the allophone [g] (cf. §2.4.6.1). The argument for over-differentiation in this case was that children would be able to learn to read English more easily by including both <r> and <g> in the orthography.[15] Similarly, it was decided that /t/ would be written as both <t> and <s> for the allophones [t], and [s] ~ [tʃ], respectively. The present author participated in the Wuvulu alphabet workshop, but did not vote on which letters would be included in the orthography. The idea was to provide information without unduly influencing decisions, especially in the few cases where there were strong differences of opinion.

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[13] Speakers of the two dialects consider their own variety to be the most prestigious. In contemporary Wuvulu society, Onne has the largest population, and is home to most of the island's wood-carvers (an important source of income), yet people from both villages know that in plantation times, Auna was the center of traditional leadership.

[14] Orthographic representation is given in angle brackets, < >.

[15] The national government of PNG supports vernacular education with funding for teachers, teacher-training, and materials production. Wuvulu has vernacular education for grades K-2 with English instruction beginning in grade 3.

Because of the prestige of English in PNG, the argument for orthographic bridging between languages was used advantageously by Onne (the most populous speech community). Socio-linguistically, the "bridging" argument seemed to allow for mitigation in building consensus, though it is not clear whether orthographic bridging enhances literacy skills in English or Wuvulu.

Vowel-initial words in the language are uttered with a slight initial [h], but there is not a phonemic glottal fricative /h/ in the language. The glottal stop /ʔ/, however, is phonemic and occurs in initial and medial positions. For words that are vowel-initial, the alphabet committee adopted the convention of writing <h> word-initially (before the vowel phoneme), and it adopted the convention of not writing word-initial glottal stop. So, the words *ʔupu* [ʔupu] 'grandchild/grandparent', and *upu* [hupu] 'green coconut' are written as <upu> and <hupu>, respectively. These conventions are used because word-initially, a vowel is much less frequent than the glottal stop, and word-initial <h> is easier to read than word-initial apostrophe <'> (the character selected to represent the glottal stop).

2.6 Chapter summary

The features of Wuvulu phonology fit fairly well with what is expected for an Oceanic language. Wuvulu has one of the smallest known phoneme inventories among Admiralty languages with only 10 vowels and 10 consonants. Evidence suggests that diphthongs are not phonemic in the language.

There has been controversy over proposals of Wuvulu consonant phonemes (Blust (1996, 2008); Hafford (2007, 2012)). The main controversy had to do with velar consonant phones and discerning their underlying phonemes. The discovery of conditioned velar allophones (Blust 2008) generated theoretical questions regarding the relationship of vowel height and consonant stricture. For example, allophonic variants of the phonemes /r/ and /l/ correlate vowel height and consonant stricture.

Ultimately the relationship between vowel height and consonant stricture seems to be related to sonority constraints. There are still questions, however, regarding the history of change in the consonants POc *k and POc *r. The hope is that future research on Admiralty languages will give a clearer picture of how POc *k disappeared and how

POc *r is related to the synchronic velar phones [x] and [g]. Perhaps Blust's forthcoming volume on Admiralty languages will shed light on these phenomena.[16]

Syllables fit a template of the form (C)V, where V can be a vowel, a long vowel, or a diphthong. Vowels each have one mora of weight; long vowels and diphthongs have two moras of weight. Mono-moraic (light) syllables are distinguished from bi-moraic (heavy) syllables with heavy syllables always attracting stress. The Wuvulu stress pattern is consistent with a trochaic foot structure based on moras where a light ultima is extra-metrical if the penult is heavy.

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[16] In personal communication, Blust shared the tentative title of his forthcoming volume, *Eight languages of the Admiralty Islands, Papua New Guinea* (presently 149 pages). The the eight languages for which sketches will be provided are: 1. Likum, 2. Lindrou, 3. Levei, 4. Drehet, 5. Loniu, 6. Bipi, 7. Sori, and 8. Seimat.

3   Noun phrase

3.1   Introduction

This chapter discusses the Wuvulu noun phrase (NP). In Wuvulu an NP is minimally a head noun with no additional modification. Nouns can have semantic content, as in words such as *blood* or *stonefish*; or they can have grammatical content in words such as pronouns.

Nominals in the language include words (such as common nouns and pronouns), and bound forms (such as clitics and possessor suffixes). Like POc, Wuvulu verbs take subject and object clitics that agree in person and number with an antecedent that is known somehow from the context. Wuvulu is also like POc in that it distinguishes between alienable and inalienable nouns.

LRC categorizes POc nouns as *personal, local,* or *common.* These categories are similar to the basic definition of a noun as a person, place or thing. Personal nouns in Wuvulu include names of people and address forms of kin terms. Local nouns include names of places (proper nouns); familiar personal places, such as one's home, village, or garden; familiar public places, such as the bush, beach or ocean; and locative part nouns—words that are semantically like prepositions (*on, under, over,* etc.), but that have the morphology and distribution of nouns. The category of common nouns includes prototypical nouns such as *stone* and *tree*.

According to LRC (69), POc nouns can be placed into two broad categories based on possessive constructions: "most, and perhaps all, nouns belonged by default to either the directly possessed or the indirectly possessed category". In both Wuvulu and its linguistic ancestor, POc, directly possessed nouns take a possessor suffix. In contrast, indirectly possessed nouns cannot take a possessor suffix. Instead, a special possessive noun takes the suffix (§3.5.2.2). LRC writes that in POc, indirectly possessed nouns "occur with one of three (or more) possessive classifiers which specify more narrowly the nature of the possessive relationship" (LRC: 37). In Wuvulu there are three possessum nouns (often referred to in the literature as "classifiers"): *ana* 'food', *numa* 'drink', and *ape* 'general'.

A noun can be derived from an adjective or a verb by the suffix, *–a* 'DER'. (Adjectives are discussed in §3.6.3.1, and criteria for the class *verb* are discussed in

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Chapter 4.) Although reduplication and compounding are derivational processes in many Oceanic languages, neither is productive in Wuvulu. There are, however, words in the noun class that are obvious products of reduplication or compounding. The noun class is generally open, in that words can be added to the class by coining or borrowing. But, certain subclasses of nouns are closed (e.g., locative part nouns).

The present chapter describes the categorial features of nouns, and then discusses the POc noun phrase, and the Wuvulu noun phrase in light of POc, and what is expected in Oceanic languages. The organization of the chapter starts with a discussion of prototypical nouns, and continues with the word class noun, and the composition and function of an NP. Chapter sections are presented in the following order: §3.1 Introduction, §3.2 Word class noun, §3.3 Noun derivation, §3.4 Pronominals, §3.5 Possession, §3.6 NP structure, and §3.7 Chapter summary.

3.2   Word class noun

As noted in the introduction, nouns in Wuvulu can be classified as *common*, *personal*, or *local*. Common nouns include words with semantic content, such as *naʔa* 'stone', *aiai* 'tree', and *raʔo* 'whale'. Personal nouns include names and address forms. Some nouns, like locative part nouns have functional content as in *pafo* 'above'.

3.2.1   Common nouns

Common nouns account for the greatest number of words in the noun class. Within an NP, a common noun can be optionally modified by other phrasal constituents (e.g*., aipani baua aʔu* 'five big tuna', *fei uwiʔa* 'the octopus')*. The structure of an NP is discussed in §3.6.

3.2.1.1   Basic vocabulary

Cross-linguistically, nouns tend to be more semantically stable over time than other parts of speech (Givón, 1984). And within the noun class, basic vocabulary items tend to be the most semantically stable nouns over time. In Wuvulu this includes words like *stone* 'muro'*, rara* 'blood' (POc *daRaq), and *alo* 'sun' (POc *qaco*).

The Wuvulu lexicon shares cognate vocabulary with about 500 Oceanic languages, including words from a number of large semantic domains such kin terms, fishes and other living species, e.g., *nofu* 'stonefish' (POc *nopuq).

3.2.1.2   Compounds

Wuvulu has compound nouns, but compounding is not a productive process in the language. Examples of compounds include *balaʔari* 'doctor fish' from *balafai* 'rat' and *ari* 'ocean'; *fanatao* 'hammerhead shark' from *fana* 'weaving motion' and *tao* 'hat'; *naʔupolu* 'PNG highander' from *naʔu* 'child' and *polu* 'bush'; *puneafi* 'coral stove' from *punei* 'ribbed box' and *afi* 'fire'; *wariʔeni* 'today' from *wari* 'related to' and *ʔeni* 'now'; *puputapaʔa* 'spotted triggerfish', from *pupu* 'triggerfish' and *tapaʔa* 'spotted'; *tawaparara* 'large rainbow runner (fish)' from *tawa* 'table' and *parara* 'seabird', meaning the fish is large like a table that a seabird can stand on.

Evidence of compound nouns is indicated by prosody. The stress of a compound word is different than that of a pair of juxtaposed NPs in a possessive relationship. In (3.1) stress on the word *naʔupolu* [ˌna.ʔu.ˈpo.lu] 'highlander' is on the first syllable and the penult. This stress pattern indicates that the word is a compound noun, because if these were examples of juxtaposed nouns, stress would fall on the ultima of the first word, and the penult of the second word: *naʔu polu* [na.ˈʔu] [ˈpo.lu] 'child (of the) bush' (cf. §3.5.1).

> (3.1)   *mei naʔupolu   na-uri   pafo wa*
> the highlander   REAL-jump on   canoe
> 'The highlander boarded the canoe.'

3.2.1.3   Reduplication

Reduplication is not a productive noun derivation process in Wuvulu. Nouns that are reduplicated in form have been fossilized in the lexicon, e.g., *waliwali* 'driftwood', *ʔanoʔano* 'carpenter', and *wiliwili* 'bicycle' (borrowed from pidgin *wilwil* 'bicycle').

3.2.1.4   Onomatopoeia

Some common nouns are onomatopoeic. Examples include *ʔioʔio* 'Bismarck Kingfisher', and *baʔa* 'knock'. Onomatopoeic words are sounds associated with the words' referents. So, [ʔioʔio] is the name of the Bismarck Kingfisher, because of its call, and *baʔa* [baʔa] or [baʔabaʔa] 'knock' sounds like a knock. Onomatopoeic words generally pattern as alienable nouns.

3.2.2   Personal nouns

Names and address forms are nominals that refer to people. Names of people (and locations) are considered proper nouns because they cannot be modified and they cannot take possessive suffixes. Address forms are created by prefixing the address morpheme *o-* to any kin term or title name, e.g., *o-ʔama* 'Dad…', *o-lofu* 'Brother…', *o-fatu* 'Leader…'.

3.2.2.1   Names

Wuvulu people a have a traditional given name and family name. The family name can be the father's given name or it can be a clan name. Most Wuvulu people born after 1950 also have an English given name. A name is a proper noun that serves as the head of an unmodified NP. As an NP, a name can function as a syntactic argument, or it can serve as an adjunct.

Proper nouns that are borrowed from English or pidgin are adapted to Wuvulu phonology. *James* is borrowed as [semesi], the PNG town *Wewak* [wiwæk] is borrowed as [wiweʔe], and *America* is borrowed as [amexeʔa]. In (3.2), the proper noun, *Pulei* functions as a subject NP that is co-referenced by the verbal clitic, *ʔi=* '3SG'.

(3.2)   *tiʔei   Pulei   ʔi=na-poro-ʔa   fei muro*
    therefore PROPN 3SG=REAL-carry-TR the stone
    'Therefore, Pulei carried the stone.'

3.2.2.2   Address form

Kin terms and other terms denoting professions can function as proper nouns when used in the address form. The address morpheme *o-* 'ADDR' prefixes an addressee. The address form can be used with any noun that is an addressee, including kin terms: *o-tafi* 'Sister,…', *o-lofu* 'Brother,…', *o-ʔama* 'Father,...', *o-feroia* 'Teacher,...'.

(3.3)   *o-ʔina,   fani ana-u*
    ADDR-mother give food-my
    "Mother, give my food (to me)."

3.2.3   Local nouns

Local nouns include proper names of locations; locative part nouns, such as *pafo* 'on', *aro* 'under', and *papa* 'beside'; and familiar locations that require no further

specification, such as *polu* 'bush', *ari* 'ocean', one's *umu* 'home', and one's

peʔiape 'garden'. Local nouns are often preceded by the locative preposition, *ʔi*

(cf. §3.2.3.2).

3.2.3.1   Location names

Names of Wuvulu locations are based on clan names. For the sake of efficiency,

the German plantation on Wuvulu resettled all people into the two present-day villages of

Onne and Auna. Prior to resettlement, the names of locations around the island became

associated with clan names, which reflect contemporary patterns of ownership and

inheritance. Onne Village was settled by six clans: *Baramaia* (with territories *Ture,

Punanora, Piela, Wiwi, Roafe*), *Male* (*Rarufu, Foranai, Pora*), *Timi* (*Faofao, Purupale,

WaluʔaʔaZao, Piefolo, Ofabara*), *Panimala* (*Ufupuʔu, Piroa, Arewera, Walue, Wali, Turi*),

Lifa (*Falura, Muri, Amai, Oretala*), and *Onne* (*Lare, Wala, Bara, Ware, Amai*).

Proper location names are often preceded by the locative preposition, *ʔi* 'LOC', as

in (3.4).

(3.4)   *na-paʔi   baua lalaia   ʔi   Onne*
　　　　REAL-have big   marriage LOC PROPN
　　　　'There is a big wedding in Onne.'

3.2.3.2   Locative preposition

The locative preposition, *ʔi* 'LOC', takes an NP location as its object. LRC (87)

states that the POc preposition **i* governed local and temporal nouns, and its occurrence

with a common or personal noun had to be mediated by a directly possessed local noun

(POc: **i lalo-ña* 'PREP inside-3SG', cp. Wuvulu: *ʔi lalo-na* 'LOC inside-3SG').

A locative part noun can optionally occur with a locative preposition, as in (3.5)

where the locative preposition governs the locative part noun *lalo* 'inside'.

(3.5)   *ʔi=na-maʔiru ʔi   lalo   fei nopa*
　　　　3SG=REAL-sleep LOC inside the room
　　　　'He slept inside the room.'

(3.6)   *ʔi=na-maʔiru   ʔi   pie*
　　　　3SG=REAL-sleep LOC beach
　　　　'He slept at (the) beach.'

Proper names of places can also serve as the complement of a locative preposition.

(3.7) *ʔi=na-maʔiru   ʔi   Madang*
        3SG=REAL-sleep LOC Madang
        'He slept at Madang.'

In (3.8) the preposition *ʔi* precedes the locative part noun *ʔaʔa* 'with'.

(3.8) *ʔi=li   na-to-na   mei balu ʔi   ʔaʔa meni Ninitapuli*
        3SG-go REAL-get-TR the child LOC with this PROPN
        "He went and got the child, there with Ninitapuli."

Wuvulu is like POc in that the preposition *ʔi* can govern temporal nouns as well as local nouns. In (3.9) the local preposition precedes *narani* 'tomorrow'.

(3.9) *fei wa   ʔi=we-no-mai   ʔi   narani*
        the canoe 3SG=EV-move- DIR LOC tomorrow
        'The ship will come tomorrow.'

3.2.3.3 Locative part nouns

LRC (87) refers to directly suffixed "locative part nouns ('inside', 'above', 'beneath'…)". Locative part nouns comprise a small closed set of words that are semantically like English prepositions, but that function in the language like nouns. Table 3.1 lists Wuvulu locative part noun.

Table 3.1 Locative part nouns

aro	under
lalo	inside
maʔa	in front of
muri	behind
pafo	on
papa	beside
peto	beyond, behind
taba	on
tuwule	on the other side
ʔano	outside
ʔaʔa	with, for, to
lupua	among
memewa	center
watola	between

With regard to their morphosyntax, locative part nouns pattern like possessed nouns As we shall discuss more fully in the section on possession (§3.5), there is a class of nouns that take singular possessive suffixes. For example, *taba* 'head', *umu* 'house', and *ʔama* 'father' can take the possessor suffix *-mu* '2SG', to give the forms *taba-mu* 'your head', *umu-mu* 'your house', and *ʔama-mu* 'your father'. Morphologically, locative part nouns function in the same way: *lalo-mu* 'your inside', *pafo-mu* 'your top', *peto-mu* 'your backside'. And like a possessed NP, a locative part noun can take the first-, second-, or third-person singular possessor suffixes, *-u*, *-mu*, or *-na*, respectively.

The suffix, *-na* '3SG' is attached to the possessed noun, *pani* 'hand' in (3.10).

(3.10) *na-babaruru pani-na*
   REAL-excited hand-3SG
   'It is exciting to him (literally, his hand).'

In (3.11) the suffix *-na* '3SG' is attached to the locative part noun *pafo* 'on', following the pattern of the possessed noun in (3.10).

(3.11) *na-mariri pafo-na*
   REAL-cold on-3SG
   'Its top is cold.'

In §3.5 it will be shown that a second strategy for expressing possession in Wuvulu is the juxtaposition of NPs, where the first NP is possessed and the second is possessor. In (3.12) the two NPs are *tooth* and *dog*, meaning dog's tooth. (The comma represents a pause.)

(3.12) *fei, lifo   ponoto*
   the tooth dog
   'That is (the) tooth of a dog.'

The same syntax occurs with locative part nouns, where the first of two juxtaposed nouns is an attribute that is possessed by the second noun. In (3.13), for example, *muri* 'back' is the possessed attribute, and *wa* 'canoe' is the possessor of that attribute.

(3.13) *ʔi=na-ruta   muri fei wa*
   3SG=REAL-sit back the canoe
   'He sat in the stern of the canoe.'

Note that locative part nouns can optionally be preceded by the locative preposition, *ʔi* 'LOC'.

(3.14) *ʔi=na-ruta   ʔi   muri fei wa*
      3SG=REAL-sit LOC back the canoe
      'He sat at the stern of the canoe.'

(3.15) *ʔi=na-ruta   ʔi   muri-na*
      3SG=REAL-sit LOC back-3SG
      'He sat at its stern.'

For possession involving juxtaposed nouns, the final vowel of the first noun is lengthened (§2.2.2.2.5).[17] The analysis that locative part nouns function like possessed nouns is further supported by the fact that the ultima of locative part noun is lengthened when it when it precedes another NP, just as it is for the first of two juxtaposed NPs. In (3.12) the first NP *lifo* 'tooth' has a long final vowel. The locative part noun in (3.13) *muri* 'back' is like the possessed noun of (3.12) in that it also has a long final vowel. In both cases, the possessed NP has a long final vowel and is possessed by the second NP.

There are three locative part nouns that require a non-singular possessor: *watola* 'between' requires a dual or plural possessor, and *lupua* 'center' and *memewa* 'in the midst of' each require a plural possessor. Because they require non-singular possessors, none of the three nouns can take a singular possessor suffix.

Note that the locative part nouns of (3.16)-(3.18) all have final long vowels (unmarked here), as expected for a possessive relationship expressed by means of juxtaposed NPs.

(3.16) *ʔi=na-ruta   watola   mei pifine ma mei wawane*
      3SG=REAL-sit between the woman and the man
      'S/he sat between the woman and the man.'

(3.17) *ʔi=na-ruta   lupua roʔolu*
      3SG=REAL-sit among them
      'S/he sat among them.'

(3.18) *ʔi=na ruta   memewa   ʔei   baʔo*
      3SG=REAL-sit in.the.midst the.PL crab
      'S/he sat in the midst of the crabs.'

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[17] For convenience, final long vowels are not marked on juxtaposed NP constructions.

3.2.3.4 Familiar places

Nouns of familiar places require no further specification by modifiers. Familiar places include personal locations such as one's *umu* 'home', *rufu* 'village' or, *peʔiape* 'garden'.

> (3.19) *ʔa-li-na   umu*
>   IRR-go-TR house
>   '(I) will go home.'

The NP *umu* 'house' in (3.19) is a bare noun. There are no NP modifiers, and there is no possessor suffix. A possessor suffix is unnecessary because a familiar location is understood to be possessed by the speaker.

Familiar places are public locations including *polu* 'bush', *pie* 'beach', *namo* 'reef', and *ʔari* 'ocean'. Familiar personal and public locations can also function as common nouns that take determiners.

3.3   Noun derivation

The suffix –*a* 'DER' derives nouns either from verbs that were historically vowel-final, or from adjectives. There is a set of consonant-initial allomorphs of the derivative suffix for nouns that are derived from verbs that were historically consonant-final (cf. §4.5.3.2).

3.3.1   Historical V-final roots

The derived noun *warea* 'word' in (3.20) is the head of an NP that is modified by the demonstrative *ʔeni* 'these'.

> (3.20) *ʔeni   ware-a*
>   these talk-DER
>   'these words'

The example given in (3.21) does not have a derivational form, but is given to show that the head noun *ramaʔa* 'person' is modified by both the adjective *weleru* 'short'.

> (3.21) *mei weleru ramaʔa*
>   the short person
>   'the short person'

In (3.22) the demonstrative *mei* 'the' modifies the derived noun *welerua* 'short (person)'.

> (3.22) *mei weleru-a*
>   the short-DER
>   'the short (person)'

The adjective *tare* 'tall' in (3.23), is used to derive the noun of (3.24).

> (3.23) *fei tare umu*
>   the tall house
>   'the tall house'

> (3.24) *fei tare-a-na*
>   the tall-DER-3SG
>   'its tallness'

A derived noun can take nominal suffixation as in (3.25). If noun derivation from vowel-final root results in a geminate or diphthong, the word will have ultima stress (cf. Chapter 2).

> (3.25) *ʔeni   ware-a-u*
>   these talk-DER-1SG
>   'these words of mine'

3.3.2   Historical C-final roots

Verbs that were historically consonant-final reflect the final consonant when undergoing noun derivation. Derivational suffixes that reflect thematic consonants are considered to be allomorphs. The verb *panaro* 'hold' is used in the subordinate clause of (3.26), and the derived noun *panarofa* 'grip' is used in the main clause.

> (3.26) *ʔena ʔi=na-panaro=fio,   ʔaba panaro-fa ʔena manumanu*
>   those 3SG=REAL-hold=2SG NEG hold-DER those thing
>   'Those (things) that hold you, are not the grip of those things.'

In (3.27) a noun is derived from the verb *biri* 'work' by means of the derivational allomorph *-ʔa* 'DER', and is then suffixed with the possessive suffix *–na* '3SG'.

> (3.27) *ʔei   mau   biri-ʔa-na*
>   the.PL character work-DER-3SG
>   'The characteristics of his work.'

The verb *ʔau* 'put' is used to derive a noun in (3.28) by means of the suffix *-ra* 'DER'. The derived noun is modified by the demonstrative *ʔena* 'those', and it is in a possessive construction that is formed by juxtaposed NPs.

(3.28) *ʔapuna talai-to-to-ʔua=ia*   *ʔena ʔau-ra efiʔa ramaʔa*
      do.not walk-RED-get-only=3SG those put-DER some person
      'Do not just wander taking those things that other people leave.'

3.4 Pronominals

Wuvulu has free pronouns and verbal pronominal clitics. Verbal clitics have their origins in free pronouns that were phonologically reduced and bound to the edges of the verb stem as coreferential subject and object markers.

Free pronouns can function as subjects and objects, and they agree with NP antecedents in person and number. The interaction of NP arguments, and verb-marked pronominals is discussed further in Chapter 5. Object clitics are discussed in §3.4.2.2 below.

3.4.1 Pronouns

Wuvulu pronouns distinguish in number between singular, dual, and plural; and in person between first, second, and third. First person dual and plural pronouns further indicate inclusive/exclusive reference to the listener.

Table 3.2 Pronouns

	singular	dual		plural	
person		inclusive	exclusive	inclusive	exclusive
1	*i-au*	*ʔa-rua*	*ai-rua*	*ʔo-ʔolu*	*ai-ʔolu*
2	*i-oi*	*amu-rua*		*amu-ʔolu*	
3	*i-a*	*la-rua*		*ro-ʔolu*	

Contemporary Wuvulu pronouns are fossilized forms, however, their composition could be further analyzed. Singular forms begin with an initial *i*, with *au, oi,* and *a* as first, second, and third person, respectively. Dual and plural pronouns are each composed of two forms. For duals, the second form is *rua* 'two' (POc *rua 'two'); for plurals, it is *ʔolu* 'three' (POc *tolu 'three'). First person dual and plural forms distinguish between inclusive, *ʔa-/ʔo-,* and exclusive, *ai* (cp. POc *ka[m]i '1.EXCL'). The

non-singular second person morpheme is *amu-* (POc **ka[m]u* '2SG'). Third person non-singulars are *la-* and *ro-* (POc **[k]ira* '3SG').

Wuvulu apparently had a trial category (*ʔolu* 'three') which eventually came to refer to three or more entities. Singular pronouns in the language are based on POc independent pronominal forms: POc **[i]au* '1SG' > Wuvulu *iau*; POc **[i]ko[e]* '2SG' > Wuvulu *ioi*; and POc **ia* '3SG' > Wuvulu *ia*. (Note that the pronominal system gives further evidence of the loss of POc **k* in the language).

3.4.2   Verbal clitics

Pronominal clitics in Wuvulu are modified forms of free pronouns that bind to the edges of a verb stem. In accordance with the SVO constituent order typology of Wuvulu, the grammaticalization of free pronouns has resulted in a set of subject clitics that bind to the initial position of a verb stem, and a set of object clitics that bind to the final position of a verb stem. Verbal clitics serve cross-referentially as subject and objects of a clause, or they can be co-located in a clause with NP arguments. The morphosyntax of clauses is discussed in Chapter 5.

3.4.2.1   Subject proclitics

Based on the frequency of their appearance in modern Oceanic languages, subject proclitics are thought to have existed in POc. Wuvulu subject proclitics resemble one of three possible sets of reconstructions for proto forms of subject clitics given in LRC (68).

Table 3.3 shows singular subject clitic forms in POc and Wuvulu. The first person singular clitic POc **au=* became Wuvulu *ʔu=*. The second person clitic is consistent with the deletion of POc **k* in Wuvulu, and the third person form is from POc **i*.

Table 3.3 Singular subject clitics in POc and Wuvulu

person	POc	Wuvulu
1	**au=*	*ʔu=*
2	**ko=*	*ʔo=*
3	**i=*	*ʔi=*

In (3.29) there are four subject proclitics. It should be noted that in the first instance, *ʔi=li* can be glossed as 'it goes', where the third singular form 'it' refers to a span of time, and functions at the discourse level to move the storyline forward.

(3.29) *tiʔei, ʔi=li,   ro=ʔa-li   ʔi=na-ware   ba,   "Nali, amuʔou=nei-poʔo-maʔiru."*
so,   3SG-go 3PL=IRR-go 3SG=REAL-talk COMP okay 2PL=DEON-INTS-sleep
"So time went by, when they went, he said, "Okay, you must sleep deeply.""

Subject proclitics exist for each of the free pronouns, and are discussed further in Chapter 4 in the context of verbal morphology.

3.4.2.2   Object enclitics

Object enclitics have their origins in free pronouns that have undergone phonological reduction. As postulated for POc, Wuvulu enclitics exist only for singular objects. For transitive constructions in POc, if the verb was vowel final, the object enclitic, *-a* was directly attached. Otherwise, the close ('short') transitive suffix, *-i*, was added, followed by the object enclitic (Evans, 1997). Wuvulu object enclitics attach to transitive verbs that do not have a final historical consonant, e.g., *talu* 'bite'.

(3.30) *ʔi=na-talu=au*
3SG=REAL-bite=1SG
'It bit me.'

The first person enclitic is identical to its POc counterpart. The second and third person enclitics *=io*, and *=ia* are likely fossilized from the POc transitive suffix *-i* and the object forms *=o,* and *=a* respectively (*k has been lost in Wuvulu).

Table 3.4 Object clitics in POc and Wuvulu

person	POc	Wuvulu	free pronoun
1	*=au	=au	iau
2	*=ko	=io	ioi
3	*=a	=ia	ia

(3.31) *ware-fana=au*
talk-give=1SG
'Tell me.'

(3.32)   *ʔi=na-talu=io*
3SG=REAL-bite=2SG
'It bit you.'

(3.33)   *ʔi=na-talu=ia*
3SG=REAL-bite=3SG
'It bit her.'

(3.34) *ʔana ʔaba ʔo=we-talai-to-to-ʔua=ia*
also NEG 2SG=EV-walk-RED-get-only=3SG
"Also, you won't just walk around taking things."

As discussed in §4.5.3.2, allomorphs of object enclitics have an initial thematic consonant.

(3.35) *unu=mia*
drink=3SG
'Drink it!'

(3.36) *ʔi=na-tafi=ʔia*
3SG=REAL-carve=3SG
'He carved it.

(3.37) *ʔi=na-timi=nia*
3SG=REAL-throw=3SG
'She threw it.'

(3.38) *mei pifine namo na-ware ʔaʔa-na ba fufu=ʔia ʔei lepo-mu*
the woman reef REAL-talk with-3SG COMP lift=3SG the net-2SG
'And the woman of the reef said to her, "Lift your nets."'

3.4.3   Inclusory pronominals

Lichtenberk (2000:3) refers to "inclusory pronominals" in certain Oceanic languages (such as Toqabaqita). Wuvulu also has inclusory pronouns. An inclusory pronominal is essentially a type of NP in which a pronoun precedes another noun and defines a set in which the following noun is a member. In (3.39) the first person inclusive dual pronoun *airua* defines the set of actors; the proper noun, *Peter* is included in the set of two.

(3.39) *airua   Peter na-li-na   polu*
PRON.1DU.EXCL PROPN REAL-go-TR bush
'Peter and I went to the bush.'

The included NP can also be a pronoun. Unlike(3.39), in which the included NP is a proper noun (Peter), in the context of (3.40), the listener knows from context the antecedent of *larua* 'PRON.3DU'.

(3.40) *aiʔolu   larua   na-li-na   ʔari*
     PRON.1PL.EXCL PRON.3DU REAL-go-TR sea
     'The three of us went to the sea.'

Inclusory pronominals can occur in subject position, as in (3.39), and (3.40), but they can also occur in recipient position as in (3.41).

(3.41) *ro=na-ware-na   ʔaʔa airua   Lois*
     3PL=REAL-talk-TR with PRON.1DU.EXCL PROPN
     'They talked with me and Lois.'

Finally, inclusory pronominal constructions can also function in questions, as in (3.42).

(3.42) *amurua   ini?*
     PRON.2DU who
     'You (and) who (else)?'

(3.43) *amuʔou   ini?*
     PRON.2PL who
     'You (and) who (else, pl.)?'

3.4.4   Sociolinguistic function

The semantics of certain pronouns have been extended to take on secondary meanings that are determined by social factors. In particular, inclusive pronouns are used as a means of persuasion, and the second person dual pronoun is used as an honorific address form.

3.4.4.1   Inclusive exhortation

Inclusive first person dual and first person plural pronouns are used rhetorically to persuade, or to mitigate exhortation. By using a first person form, the speaker includes herself or himself, indicating some responsibility in heeding the exhortation, and thereby mitigating some of the responsibility of the listener.

(3.44) *lomi na-rawani ba   ʔarua   to nia ʔaʔa fei*
     NEG REAL-good COMP PRON.1DU.INCL get fish with it
     'It is not good for the two of us to get fish using it [poison].'

Another rhetorical device is to use a dual inclusive pronoun (or proclitic), rather than a plural form, to refer to "the two of us" when exhorting more than one person. The effect is that the speaker is having a personal conversation with each listener.

(3.45) *ʔaru=nei-roba=ia*   *fei malalarufu*
1DU.INCL=DEON-cut=3SG the field
'The two of us must cut the grass (addressing a group).'

3.4.4.2   Inclusive ownership

In Wuvulu, a common way of asking to borrow something is to refer to the possession with an inclusive pronoun, thus implying shared ownership. This is accomplished by means of a possessive construction of juxtaposed NPs, with the possessed NP followed by an inclusive pronoun (possessor NP).

(3.46) *na-rawani ba*   *ʔu=ʔa-to-na*   *wiliwili ʔarua*
REAL-good COMP 1SG=IRR-take-TR bicycle PRON.1DU
'Is it okay that I take "our" bicycle?'

3.4.4.3   Honorific dual

In-laws have a formal respect relationship with one another such that they avoid joking or talking about sensitive topics. Another way that in-laws show respect is that they address one another with the second person dual pronoun, *amurua* 'you two'. In addressing an in-law, the reference figuratively refers to two people. The second person dual reference expresses the idea that the listener is equal to two people. A shortened alternate of *amurua* 'you two', is *meru*. The phrase *mafufuo, meru* 'Good morning, you two', for example, can be used to address either two people, or one in-law.

3.5   Possession

There are two ways of expressing possession in Wuvulu, either by the juxtaposition of two NPs, or by a suffix that agrees with the possessor in person and number. In both NP juxtaposition and possessive suffixation, the first entity is the possessum NP, and the second is the possessor:

NP (possessum) NP (possessor)
NP (possessum)-suffix (possessor)

In the literature of Oceanic linguistics, "direct possession" often correlates with the semantic notion of *inalienability*, where a possessum is an inherent possession of its possessor. Kin and body parts are prototypically inalienable. Other nouns that take direct possession suffixes include familiar places (e.g., one's *umu* 'house'), and indispensable objects (such as *wa* 'canoe' and *walu* 'bush knife'). Indirect possessions are generally correlated with nouns that are not inherently related to the possessor.

In the literature, the term *classifier* is also used in a nuanced way to describe a type of possessum noun that takes a direct possessor suffix (see Palmer & Dunstan, 2007). There are three such words that serve as possessum nouns in Wuvulu: *ana* for food, *numa* for drink, and *ape* for possessums that are not food or drink (cf. §3.5.2.2).

In this dissertation the terms *alienable* and *inalienable* are used for the sake of terminological consistency with the literature, and because they generally fit semantically. But, because the term *classifier* is somewhat misleading in the literature, it is not used in the description of Wuvulu possessum nouns.

3.5.1 Juxtaposed NPs

As mentioned in §3.5, two NPs can be juxtaposed to indicate possession, where the first NP is the possessed and the second NP is the possessor as in (3.47).

(3.47) *taba ramaʔa*
        head person
        'head of a person'

Because the juxtaposition of two NPs is itself an NP, this resultant NP is considered to be a recursive structure. In (3.48) [*taba* [*ramaʔa*]] "person's head" serves as an embedded NP (possessor) in the NP [*ube* [*taba* [*ramaʔa*]]].

(3.48) *ube*   *taba ramaʔa*
        coconut.shell head person
        "skull of a person's head"

As noted in §2.2.2.2.5, the first of juxtaposed NPs has a final long vowel. In the embedded structure of (3.48) both possessed NPs have final long vowels as a result of possessive formation.

For alienable nouns, a possessum noun is juxtaposed with a following possessor NP as in (3.49). (The comma indicates a pause.)

(3.49) *ape   roʔolu,   ponoto*
        possession PRON.3PL dog
        'Their pet dog'

3.5.2   Possessor suffixes

A possessor suffix is directly attached to an "inalienable" possessum noun. Inalienable possessum nouns include body parts, kin terms, locative part nouns, derived nouns, and three particular possessum nouns that represent alienable nouns: *ana* for 'food', *numa* for 'drink', and *ape* 'general'. Direct possession suffixes agree with a possessor in person and number (singular): *-u* 'my', *-mu* 'your', and *-na* 'his/her/its' (cp. POc *-gu* 'my', POc *-mu* 'your', and POc *-ña* 'his/her/its' (Ross, 1988:112)).

(3.50) *taba-na*
        head-3SG
        'his head'

(3.51) *ape-na,   ponoto*
        possession-3SG dog
        'his dog'

(3.52) *ape-na*
        possession-3SG
        'his possession'

(3.53) *ana-mu*
        food-2SG
        'your food'

(3.54) *numa-u*
        drink-1SG
        'my drink'

3.5.2.1   Direct possession

Directly possessed nouns are generally considered inalienable with respect to the possessor, and they take possessive suffixes. Indirectly possessed nouns denote entities that are generally considered alienable and do not take possessive suffixes. In many

cases, the logic of why a given noun is considered to be *alienable* or *inalienable* has been lost, so that the semantics of alienability is not obvious.

Wuvulu conforms to the POc pattern for inalienable nouns: "Directly possessed nouns in POc probably included most body parts, most kin terms, and most locative parts…" (LRC (76)).

3.5.2.1.1 Body parts

Body parts (such as *taba* 'head') can take a direct-possession suffix *-u* 'my', *-mu* 'your', or *-na* 'his/her/its'.

> (3.55) a. *taba-u*   'my head'
> b. *taba-mu*   'your head'
> c. *taba-na*   'his/her/its head'

All body parts take direct possessor suffixes, except genitalia (cf. §3.5.2.2.3).

3.5.2.1.2 Kin terms

As mentioned previously, the Wuvulu kin system seems to be close to the end of a shift from an Iroquois type of kin system which distinguishes between cross cousins and parallel cousins, and a Hawaiian type of system which classifies cousins as siblings, nephews and nieces as children, and aunts and uncles as parents.

Kin terms take singular possessive suffixes, as in *ʔama-u* 'my father', *ʔama-mu* 'your father', and *ʔama-na* 'his/her/its father'. In (3.56) the suffixed head noun *naʔu* 'child' is modified by the definite article *mei*, which is optional.

> (3.56) *na-wanini-li   mei naʔu-na*
> REAL-birth-CPLT the   child-3SG
> 'Her child was already born.'

Most consanguineal kin terms are known and used by Wuvulu speakers and include the words *ʔama* 'father' (POc *tama), *ʔina* 'mother' (POc *tina), *naʔu* 'child', *lofu* 'brother of male', *ʔari* 'opposite-gender sibling', *tafi* 'sister of female', *ʔupu* 'grandchild, grandparent'. Affinal kin terms are: *aro* 'spouse', *ramaʔa* 'in-law', *tala* 'spouse of kin as road or path to in-laws'.

There are three consanguineal terms that are not well known among younger speakers, primarily because the relationships that they imply are no longer in place in

society. These terms are *ara* "male's sister's son", the reciprocal term *ola* "male's mother's brother", and the bidirectional term *wane* "female's brother's daughter, female's father's sister". In contemporary Wuvulu, cross cousins refer to one-another as siblings. People also refer to a paternal uncle as father and a maternal aunt as mother. Nephews and nieces are referred to as children. Details of the Wuvulu kin system are documented in Hafford 2006.

3.5.2.1.3 Derived nouns

Derived nouns are frequently used with direct possession. In (3.57) the head noun of the phrase *ʔei wareamu* 'your words' consists of a noun derived from the verb *ware* 'talk' (> *ware-a* 'word'). The derived noun takes the direct possessor suffix, *-mu* 'your (sg.)'. Phrasal syntax further indicates that *wareamu* 'your word' is a noun because it can be preceded by the plural demonstrative *ʔei* 'the'.

(3.57) *faʔua, ʔei ware-a-mu*
        true   the talk-DER-2SG
        'Your words are true.'

3.5.2.2   Indirect possession

Alienable nouns cannot take a direct possession suffix. Instead, a substitute possessum noun is used to host a direct possession suffix. There are three such possessum nouns, *ana* 'food' (POc *kan 'eat'), *numa* 'drink' (POc *unum 'drink'), and *ape* 'general', which is used in place of a more general category of nouns that do not take direct possession suffixes, including stories, wood carvings, pets, and genitalia.

The nouns *ana* 'food', *numa* 'drink', and *ape* 'general' can each take any of the direct possessor suffixes *–u* 'my', *-mu* 'your', and *-na* 'his/her/its'. The suffixed possessum noun is optionally followed by a more specific alienable noun as in, *ana-u, fula* 'my food, taro'.

3.5.2.2.1 Food

In (3.58) the possessum noun *ana* refers to food. It takes a possessor suffix and is optionally followed by the explicit alienable noun. For example, the noun *nia* 'fish' indicates the specific food that the noun *ana* refers to.

(3.58) *fani ana-u   nia*
        give food-1SG fish
        'Give (me) my fish (to eat).'

In (3.59) there is no mention of a particular food noun. In the absence of an
explicit alienable noun, the possessum noun *ana* is used, and can refer to the general
category of food, or it can refer to a particular noun that the listener understands from
context (as in *nia* 'fish' in (3.58)).

(3.59) *fani ana-u*
        give food-1SG
        'Give (me) my food.'

3.5.2.2.2 Drink

In (3.60) the possessum noun *numa* 'drink' takes the suffix *–mu* followed by the
alienable noun *upu* 'green coconut'. Again, the presence of the specific alienable NP (in
this case, *upu* 'green coconut') is not required if understood from context.

(3.60) *to-na   numa-mu upu*
        take-TR drink-2SG green.coconut
        'Take your coconut (to drink).'

3.5.2.2.3 General

The possessum noun, *ape*, is used with alienable nouns that are not included in the
categories of food or drink. This category includes genetalia and general possessions
such as stories, and pets, e.g., *ape-u ʔuʔura* 'my story', and *ape-mu ponoto* 'your dog'.

(3.61) *ʔi=na-to-na   fei ape-na   ponoto*
        3SG=REAL-take-TR the general-3SG dog
        'She took her dog.'

Contrary to the pattern of direct suffixation for body parts, the noun *ape* is used
with terms related to genitalia. The inalienable possessor suffixes are typically used in
possessive reference to body parts, but such references to genitalia are an exception. A
possible motivation for the substitution of the noun *ape* is to impose a level of indirect
reference for the sake of modesty whereby the speaker can avoid reference to terms for

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the genitalia by using only the suffixed possessum noun *ape* 'possession' without an explicit co-referential NP.

3.6   NP structure

The structure of an NP in POc (adapted from LRC (75)) is given in (3.62):[18]

POc Noun Phrase Structure

(3.62)   ART + (NUMBER/QUANTIFIER +) NOUN (+ MODIFIER) (+ DEMONSTRATIVE)

Wuvulu Noun Phrase Structure

(3.63)   (ART/DEMONSTRATIVE +) (NUMBER/QUANTIFIER +) (MODIFIERS +) NOUN (+ MODIFIER)

In POc, an optional demonstrative occurred as the final constituent of an NP (cf. (3.62)). In Wuvulu, an optional demonstrative is in complementary distribution with articles (cf. (3.63)). In both POc and Wuvulu, the second constituent position of an NP is occupied by an optional number/quantifier. Also, in both languages, an adjectival modifier optionally follows the head noun. In Wuvulu, however, there is also a position immediately before the head noun that can be optionally occupied by an intensifier and one or two adjectives.

3.6.1   Articles and demonstratives

Articles and demonstratives in the language distinguish between two categories of animacy. Animate entities include humans and spiritual beings, including *aniʔu* 'spirit of the dead, devil' (PMP *qanitu 'spirit of the dead') and, *pirea* 'evil spirits', from Wuvulu traditional religion. In the past 50 years, God, Satan, angels, and other spiritual beings have been incorporated into Wuvulu the animacy system.

The animacy features of the Wuvulu grammar have been adapted to accommodate biblical terms, where God, angels, and other spiritual beings are classified as animate, as are spiritual beings in the traditional religion of Wuvulu.

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[18] The POc NP structure given by LRC (75) implies by the absence of parenthesis that an article is obligatory, yet LRC (70) states that, "The first element of the POc noun phrase was *often* an article…" (emphasis added).

3.6.1.1 Articles

LRC (38) states that languages of Manus generally do not have articles. According to Wozna & Wilson 2005, there are no articles the Seimat language (Wuvulu's closest linguistic sister). Wuvulu is an exceptional Admiralty language in that it does have articles.

Wuvulu articles distinguish between animate and inanimate nouns. Indefinite articles are based on the number one. The article *epalo* 'one, a/an' is used with inanimate nouns, and the article *emea* 'one, a' is used with animate nouns.

(3.64) *ia emea ramaʔa ʔi=na-faufau*
      he one   person 3SG=REAL-strong
      'He was a person who was strong.'

(3.65) *ʔi=na-paʔi   epalo ape   larua,   palu*
      3SG=REAL-have one   possession PRON.3DU pigeon
      'There was a pet that belonged to the two, a pigeon.'

In Wuvulu discourse indefinite articles function to introduce participants, and definite demonstratives are used for subsequent reference. Definite articles pattern with demonstratives and are discussed below.

3.6.1.2 Demonstratives

Ross 2004 states that demonstratives that exhibit a three-way distinction in distance are common in Oceanic languages, and that such a distinction was likely present in Proto Oceanic (177):

> Demonstratives in Oceanic languages usually make a three way distinction based either on person—near speaker, near addressee, near neither or near a third person—or on relative distance—proximal, intermediate, distal—or on a mixture of both. With some systems it is difficult to distinguish between these two possibilities as their members seem to be used in both ways. So widespread are such three-way systems that it is virtually certain that Proto Oceanic had such a system, and it is reasonably certain that it was person-oriented, as are the majority of systems in both Oceanic and non-Oceanic Austronesian languages.

Wuvulu demonstratives are also based a three-way distinction in distance from the speaker with forms *eni* 'near', *ena* 'far', and *ei* 'neither'. These forms are fossilized with initial *m-* 'animate', *f-* 'inanimate', and *ʔ-* 'plural'. In the present analysis, demonstratives have a deictic function, and articles do not, so a distinction is made between demonstratives and definite articles.

Table 3.5 Demonstratives and articles

		demonstratives		articles	
distance		near	far	unspecified	
singular	animate	*meni* 'this'	*mena* 'that'	*mei* 'the'	*emea* 'a'
	inanimate	*feni* 'this'	*fena* 'that'	*fei* 'the'	*epalo* 'a'
plural		*ʔeni* 'these'	*ʔena* 'those'	*ʔei* 'the'	*efiʔa* 'some'
definiteness		definite			indefinite

Although the Wuvulu demonstrative system is based on only three morphemes, the referential possibilities are fairly rich. The plural, close demonstrative *ʔeni* is glossed 'these' in reference to close objects, 'now' in reference to time, and 'close anaphor' in reference to discourse material.

Along these same lines, the plural, far demonstrative *ʔena* is glossed 'those' in reference to objects, 'then' in reference to time, 'distant anaphor' in reference to antecedent discourse material. The plural form that is unspecified for distance, *ʔei,* is considered here to be an article. It is used somewhat generally to reference plural entities, time, and antecedent discourse material without regard to proximity.

Singular demonstratives and articles modify nouns for animacy, but plural demonstratives and articles do not modify nouns for the feature of animacy. The word-initial consonant of the singular definite articles is /f/ for inanimate forms, and /m/ for animate forms. The three base forms of the system *ʔei/ʔeni/ʔena* 'the'/'these'/'those' all specify plural referents with no specification of animacy. Animate reference in Wuvulu is limited to humans, ancestor spirits, divine messengers, and other spiritual beings with personality.

(3.66) *meni ʔama* 'this father'
          feni wa 'this canoe'

(3.67) *mena ʔama* 'that father'
          fena wa 'that canoe'

(3.68) *mei ʔama* 'the father'
          fei wa 'the canoe'

(3.69) *ʔi=na-ware   ʔaʔa mei ponoto*
　　　 3SG=REAL-talk with the   policeman
　　　 'He talked with the policeman.'

(3.70) *fei paiwa na-talu-a   mei wawane*
　　　 the shark REAL-bite-TR the man
　　　 'The shark bit the man.'

(3.71) *ʔei ramaʔa na-uri   pafo wa*
　　　 the people REAL-jump on   boat
　　　 'The people boarded the ship.'

The most basic use of demonstratives occurs in speech acts in which referents are present in the context of the speaker-hearer, where reference indicates relative distance from the speaker, even if the referents are a great distance. So in Wuvulu it is natural to refer to a constellation of stars as close relative to a group of stars that is perceived to be far, as in (3.72).

(3.72) *ʔeni piʔu na   paʔa weʔai*
　　　 these star REAL very light
　　　 'These stars are very bright'

In (3.73) the speaker uses a far demonstrative, "those", because a group of stars appears to be far relative to a closer group of stars.

(3.73) *ʔena piʔu na   weʔai*
　　　 those star REAL light
　　　 'Those stars are bright'

3.6.1.2.1 Particular referents

A feature of definite articles and demonstratives is that they can be used to "sandwich" an NP in order to refer to it as a particular entity.

(3.74) *mei ramaʔa mei, ia,   ripe wawane*
　　　 the person the PRON.3SG big man
　　　 "The particular person is a big man."

(3.75) *meni   ramaʔa meni,   na-lalai   minoa*
　　　 this.ANIM person this.ANIM REAL-marry yesterday
　　　 "This particular person, married yesterday."

(3.76) *feni   ʔuʔura feni,   ʔuʔura mina*
      this.INAN story   this.INAN story   past
      "This particular story is a story of the past."

3.6.1.2.2 Pronominal reference

Wuvulu articles and demonstratives can function pronominally as NP arguments. The demonstrative *mena* in the following example functions as the object of the verb.

(3.77) *ʔu=nei-pono-ʔa   epalo*
      1SG=DEON-buy-TR ART
      'I must buy one (of them).'

(3.78) *ʔi=we-no-mai   mei*
      3SG-EV-move-DIR ART
      'The (person) will come.'

(3.79) *ro=na-ware-a   fei*
      3PL-REAL-buy-TR ART
      'They said it.'

(3.80) *ro=nei-no-lura-mi   mena*
      3PL-DEON-move-get-DIR that
      'They must fetch that (person).'

An article or demonstrative can also be post-verbal and it can be co-referential with the third person subject clitic *ʔi=* '3SG' or *ro=* '3PL'.

(3.81) *ʔi=na-no-mai   fena*
      3SG=REAL-move-DIR that
      'That (thing) came.'

(3.82) *ro=na-no-mai   ʔena*
      3PL=REAL-move-DIR those
      'Those (people/things) came.'

(3.83) *ʔi=na-pati   epalo*
      3SG=REAL-fall one
      'One (of them) fell.'

Pronominal demonstratives can be used in equational clauses. Equational clauses in the language are juxtaposed NPs with a null copula that are distinguished phonologically by stress on the first NP and a pause before the second NP. Note that in (3.84)b., the predicate is topicalized by fronting to the initial position.

(3.84) a. *feni, aiai* '*this* is a tree'
b. *aiai, feni* 'this is a *tree*'
c. *iau, meni* 'It is *I*'
d. *ponoto, feni* 'this is a *dog*'
e. *feni, baua ponoto* '*this* is a big dog'
f. *baua ponoto, feni* 'this is a *big dog*'
g. *mena, naʔu-u* '*that* is my child'
h. *naʔu-u, mena* 'that is *my child*'

Demonstrative identifiers in Wuvulu specify distance, animacy and number, and can serve as a minimal NP as in (3.85).

(3.85) *ro=na-biri-ʔa   feni*
3PL=REAL-work-TR this
'They did this.'

3.6.1.2.3 Adverbial demonstratives

Wuvulu demonstratives can serve adverbially to indicate the location of the verbal activity. The preposition POc **i* 'at' has been fossilized in the forms *ieni* 'here', *iena* 'there' (further), *iei* 'there'. Note that none of the forms has a glottal stop.

(3.86) *ʔi=na-ʔau=ria   ieni*
3SG=REAL-put=3SG here
'He put it here.'

(3.87) *ro=nei-ʔule   iei*
3PL=DEON-stay there
'They must stay there.'

(3.88) *ro=nei-ʔule   iena*
3PL=DEON-stay there
'They must stay there (distant).'

Three morphemes that can occur with demonstrative morphemes to indicate location are *ʔi* 'at', *pepe* 'beside', and *fawele* 'vicinity'. The form *pepe* 'beside' is similar in shape to the locative part noun *papa* 'beside'. The form *fawele* 'vicinity' is fossilized from *fa* 'causative' + *welo* 'round'. Locational forms are given in Table 3.6.

Table 3.6 Combinations of locative and demonstrative forms

at	beside	vicinity
i-eni 'here'	*pepe-eni* 'this side'	*fawele-eni* 'close vicinity'
i-ena 'there'	*pepe-ena* 'the far side'	*fawele-ena* 'distant vicinity'
i-ei 'there'	*pepe-ei* 'beside'	*fawele-ei* 'vicinity'

Locational forms for *beside* and *vicinity* are preceded by the locational preposition, *ʔi*. Locational forms with distance morphemes typically function in adjuncts to a core clause. The final vowels of *pepe* 'beside' and *fawele* 'vicinity' coalesce with the initial vowel of the demonstrative morphemes.

3.6.1.2.4 Equivalence and similarity

There are two morphemes that can be prefixed to definite determiners in order to give meanings of identification and similarity. The prefixes *ti-* 'it is' and *ale-* 'like' can combine with the articles and demonstratives given in Table 3.7.

Table 3.7 Combinations of identification/similarity and demonstrative forms

ti- 'it is' *ale-* 'like'	+	*meni* 'this'	*mena* 'that'	*mei* 'the'	animate
		feni 'this'	*fena* 'that'	*fei* 'the'	inanimate
		ʔeni 'these'	*ʔena* 'those'	*ʔei* 'the'	plural

The identification morpheme *ti* 'it is' combines with definite forms to give the meanings *timeni* 'it is this (person)', *timena* 'it is that (person)', *timei* 'it is the (person)'; *tifeni* 'it is this (thing)', *tifena* 'it is that (thing)', *tifei* 'it is the (thing)', *tiʔeni* 'it is these (things/people)', *tiʔena* 'it is those (things/people)', and *tiʔei* 'it is the (things/people)'. In addition to its function in deixis involving real world objects, the word *tiʔei* can also be glossed 'therefore' (cf. (3.2)).

The comparison morpheme *ale-* 'like' occurs with each definite form to give the meanings *alemeni* 'like this (person)', *alemena* 'like that (person)', *alemei* 'like the (person)'; *alefeni* 'like this (thing)', *alefena* 'like that (thing)', *alefei* 'like the (thing)', *aleʔeni* 'like these (things/people)', *aleʔena* 'like those (things/people)', and *aleʔei* 'like the (things/people)'.

3.6.2   Numbers/quantifiers

A number or quantifier optionally occurs in the second constituent position in a noun phrase:

NP = (ART/DEMONSTRATIVE +) (NUMBER/QUANTIFIER +) (PREMODIFIERS +) NOUN (+ MODIFIER).

It is possible to have an NP consisting only of a number/quantifier and the head noun:

(3.89) *ʔi=na-tafi-ʔa   oloroa wa*
      3SG=REAL-carve-TR six   canoe
      'He carved six canoes.'

In addition to the obligatory head noun, a number/quantifier can co-occur with other optional constituents as in (3.90) (cf. § 3.6.3).

(3.90) *ʔena aipani baua tarea ramaʔa afelo ro=na-no-mai*
      those five   big   tall   person bad 3PL=REAL-move-come
      'Those five big, tall bad people came.'

3.6.2.1   Numbers

Many Oceanic languages have base 10 counting systems (LRC:39):

> The most widely distributed pattern of numerals in Oceanic languages is based on a decimal system, found throughout Polynesia and Micronesia, as well as in much of Melanesia. These languages often also have separate lexical items for 'hundred' and 'thousand'.

The basic Wuvulu system is a base five system that functions as a base 10 system in that the counting repeats in groups of 10. The Wuvulu word for five is based on the word for 'hand'(*pani*).

There are two systems for counting with morphemes for 100 and 1000. The two base 10 counting systems distinguish animacy. The animate system is used to count people and spiritual beings; the inanimate system is used to count inanimate objects, as well other species of living things including flora, fauna, and fishes.

3.6.2.1.1 Counting

The first four Wuvulu numbers are from the first four numerals of POc. Table 3.8 gives the Wuvulu numbers for 1-10, together with their POc etymologies (from LRC:72).

Table 3.8 POc etymologies of Wuvulu numbers

gloss	Proto Oceanic	Wuvulu morphemes	Inanimate	Animate
1	*kai	*ai/e* 'one'; *palo* 'thing'; *mea* person'	*e-palo*	*e-mea*
2	*rua	*rua, roa* '2'; *larui* 'two people'	*rua-palo*	*e-larui*
3	*tolu	*ʔolu* '3'; *manu* 'thing';	*ʔolu-manu*	*ʔoʔolui*
4	*pati, *pat	*fa* '4'	*obao*	*runaroa*
5	*lima	*ai-pani* 'one hand=5'	*aipani*	*aipani*
6	*onom	*ʔolu-roa* '3x2'	*ʔoloroa*	*ʔoloroa*
7	*pitu	*ʔolo-roa-ma-epalo* '(3x2)+1'	*ʔolorompalo*	*ʔoloromea*
8	*walu	*fai-na-roa* '4x2'	*fainaroa*	*fainaroa*
9	*siwa	*fai-na-roa-ma-epalo* '(4x2)+1'	*faimpalo*	*faimea*
10	*sa[-ŋa]-puluq	*fua* 'fruit'	*efua*	*efua*

It is interesting to note that Seimat also has a counting system based on the number five. Seimat is Wuvulu's closest linguistic sister, and the languages have cognate terms for the first three numbers, and for the number five. Seimat counting specifies the number of hands (*te-panim* 'one hand') and the number of digits (1-4). Three hands and four is 19. The number 20 is *seilon* 'person', presumably including toes. In Seimat, numbers up to 500 are combinations of people, hands, and digits.

3.6.2.1.2 Morphemes for 10, 100, 1000

The most frequently used counting systems are decimal (base 10) systems used for counting ordinary objects. The conjunction *ma* 'and' is used in number formation for numbers in which there is a tens place number and a units place number. For example, *efua ma epalo* 'ten and one=11'; *efua ma ruapalo* '10 + 2'; *faimfua paʔaniana ma faimpalo* '90 + 9'. The morpheme *paʔaniana* denotes the tens place, *puʔu* denotes the hundreds place, and *pufabaʔa* denotes the thousands place. In Table 3.9 numbers are given for counting by tens, hundreds, and thousands.

Table 3.9 Counting by 10, 100, 1000

10 *efua paʔaniana*	100 *efua puʔu*	1000 *efua pufabaʔa*
20 *ʔenu paʔaniana*	200 *ʔenu puʔu*	2000 *ʔenu pufabaʔa*
30 *ʔolufua paʔaniana*	300 *ʔolufua puʔu*	3000 *ʔolufua pufabaʔa*
40 *runaroa paʔaniana*	400 *runaroa puʔu*	4000 *runaroa pufabaʔa*
50 *aipani paʔaniana*	500 *aipani puʔu*	5000 *aipani pufabaʔa*
60 *olora paʔaniana*	600 *olora puʔu*	6000 *olora pufabaʔa*
70 *oloramfua paʔaniana*	700 *oloramfua puʔu*	7000 *oloramfua pufabaʔa*
80 *fainaroa paʔaniana*	800 *fainaroa puʔu*	8000 *fainaroa pufabaʔa*
90 *faimfua paʔaniana*	900 *faimfua puʔu*	9000 *faimfua pufabaʔa*

3.6.2.1.3 Counting by 2, 4, 16

Wuvulu has specific lexical forms associated with counting by increments of two, four, and sixteen. These systems are ideal for counting pairs of coconuts tied together by strands of their husks. The pairs are stacked into groups of 16 coconuts or partial groups of 16. Fluency in counting was a prized skill during the days of the coconut plantation. The elderly population of present-day Wuvulu speakers is the last generation whose parents were alive during the plantation days of the early 1900s.

Table 3.10 Counting by 2, 4

2	*roa*	4	*ʔobao*
4	*rua*	8	*ruaʔo* (2x4)
6	*ʔolu*	12	*ʔoluʔo* (3x4)
8	*fa*	16	*emoro* (1x16)
10	*rea*	20	*emoro ma ʔobao*

Table 3.11 lists base 16 forms through 100 x 16; the hundreds place continues with *ruapuʔupiʔi* '200 x 16', *ʔolupuʔupiʔi* '300 x 16',…, *faimfuapuʔupiʔi* '900x16'.

Table 3.11 Hexadecimal counting

1x16 *emoro*	11x16 *ʔawanaemoro*	10x16 *epiʔi*
2x16 *ruamoro*	12x16 *ʔawanaruamoro*	20x16 *ruapiʔi*
3x16 *ʔolumoro*	13x16 *ʔawanaʔolumoro*	30x16 *ʔolupiʔi*
4x16 *runaroamoro*	14x16 *ʔawanarunaroamoro*	40x16 *runaropiʔi*
5x16 *aipanimoro*	15x16 *ʔawanaaipanimoro*	50x16 *apanipiʔi*
6x16 *oloroamoro*	16x16 *ʔawanaʔoloroamoro*	60x16 *ʔoloroapiʔi*
7x16 *ʔoloroamamoro*	17x16 *ʔawanaʔolorompalomoro*	70x16 *ʔoloromfuapiʔi*
8x16 *fainaroamoro*	18x16 *ʔawanafainaroamoro*	80x16 *fainaroapiʔi*
9x16 *faimamoro*	19x16 *ʔawanafaimpalomoro*	90x16 *faimfuapiʔi*
10x16 *epiʔi*	20x16 *ruapiʔi*	100x16 *efapuʔupiʔi*

3.6.2.2 Numeral classifiers

Numeral classifier systems are somewhat of an areal phenomenon among Admiralty languages, including Wuvulu (LRC:39):

> Some languages of Micronesia and the Admiralties, as well as the languages of the Kilivila family as characterized by fairly elaborate systems of numeral classifiers which are either postposed to the numeral, or directly suffixed to it.

Wuvulu classifiers are still known fairly well among the elderly, but they are not widely used in younger generations of speakers. This is likely due to the fact that these systems were used extensively during the plantation era, but are no longer in use. Counting classifiers are morphemes that combine with numerals, and that classify counted entities according to some physical or dimensional property, such as length, shape, or bi-sectional cuts (cf. Table 3.12).

Table 3.12 Numeral classifiers

Class	one	two	three	four	five	six
flat things	*e-papa*	*rua-papa*	*ʔolu-papa*	*runaroa-papa*	*aipan-papa*	*ʔoloroa-papa*
long things	*e-tui*	*rua-tui*	*ʔolu-tui*	*runaroa-tui*	*aipan-tui*	*ʔoloroa-tui*
round things	*e-wiʔi*	*rua-wiʔi*	*ʔolu-wiʔi*	*runaroa-wiʔi*	*aipan-wiʔi*	*ʔolaroa-wiʔi*
long edibles	*e-nono*	*rua-nono*	*ʔolu-nono*	*runaroa-nono*	*aipan-nono*	*ʔoloroa-nono*
bisected things	*e-waru*	*rua-waru*	*ʔolu-waru*	*runaroa-waru*	*aipan-waru*	*ʔolaroa-waru*
not known	*e-wilo*	*rua-wilo*	*ʔolu-wilo*	*runaroa-wilo*	*aipan-wilo*	*ʔolaroa-wilo*

Elicited data on numeral classifiers involved the counting of different types of entities. Counting sheets of paper is *epapa* 'one'*, ruapapa* 'two', *ʔolupapa* 'three'...etc. For the bisection of things the speaker counts as she or he makes the cut, *ewaru, ruawaru, ʔoluwaru* '1, 2, 3, ...' Further research should be conducted to determine

whether these morphemes can be used in combination with other elements in a phrase, or whether they can be used in any other manner. In contemporary Wuvulu, speakers usually use just two systems for counting—one for people (and animates), and one for all other entities.

3.6.2.2.1 Ordinal numbers

Available data show ordinal counting to be limited to the three terms: *first, second, third*, but further research may reveal that ordinal counting goes beyond three. Ordinal numbers are formed by suffixing *-poa* to the number root of the inanimate set: *e-poa* 'first', *rua-poa* 'second', *ʔolu-poa* 'third'. The ordinal morpheme, *–poa* is not used in any other context, and appears to be fossilized with the numerals as *epoa, ruapoa, ʔolupoa.*

3.6.2.3   Quantifiers

Wuvulu has a small set of quantifiers that modify the head noun of an NP. With respect to syntactic distribution, quantifiers and numbers are mutually exclusive in that they occupy the same constituent position in an NP (cf. (3.63)).

Table 3.13 Quantifiers

epepalo 'each (inanimate, count)'
ememea 'each (animate, count)'
epalo 'one, indefinite article (inanimate, count)'
emea 'one, indefinite article (animate, count)'
lomi epalo 'not one (inanimate)'
lomi emea 'not one (animate)'
epalo liai 'another (inanimate, count)'
emea liai 'another (animate, count)'
efia 'some (in/animate, mass/count)'
maʔila 'small amount (mass)'
wataula 'much, many (mass)'
mina 'all'

Wuvulu quantifiers reveal a distinction between mass nouns and count nouns. Mass nouns include *malarufu* 'soil', *ranu* 'water', *ʔari* 'salt', *luʔua* 'food', *rara* 'blood', *pie* 'sand', and *tiara* 'rice'. Count nouns include countable objects, e.g., *nia* 'fish', *palu* 'pigeon', *io* 'spear', and *umu* 'house'. Quantifiers in the language include words like *efia* 'some', *wataula* 'many', *maʔila* 'small amount', and *mina* 'all'. Quantifier words come

before the head nouns they modify, but an adjective can be interposed between a quantifier (or number) and a head noun. Quantifiers such as *maʔila* 'small amount' can modify only mass nouns such as *ranu* 'water' and *rara* 'blood'. Quantifiers, such as *epepalo* 'each (inanimate)' can modify only countable nouns such *nia* 'fish' and *aiai* 'tree'.

As the following examples show, there is some flexibility in how words are classified. In (3.91) the phrase *wataula maumau* 'many shapes', the quantifier *wataula* patterns as an adjective of the head noun *maumau* 'shape'; but in (3.92) *wataula* functions adverbially to modify the verb *rararapa* 'wander'.

(3.91) *ʔi=na-paʔi   wataula maumau ʔei   papalei*
        3SG= REAL-have many   shape   the.PL cloud
        'The clouds have many forms.'

(3.92) *ma ʔo=ʔa-ra-ra-rapa   wataula,*
        and 2SG=IRR-RED-RED-wander much
        'And if you gallivant a lot,

                maʔila luʔua airua   na-paʔi   ioi lomi ana-mu
                little   food 1DU.EXCL REAL-have you NEG food-2SG
                the limited food of us two (parents) won't be your food.'

In terms of literary structure, the moral of the story in (3.92) contrasts the quantifiers *wataula* 'much' and *maʔila* 'small.quantity', with the idea that *much* wandering results in *little* food.

3.6.3   Pre-noun modifier

The optional pre-noun modifier position is the third constituent position of the NP. The pre-nominal modifier position immediately precedes the head noun, and can be optionally filled by up to two adjectives (from (3.63)):

NP = (ART/DEMONSTRATIVE +) (NUMBER/QUANTIFIER +) (MODIFIERS +) NOUN (+ MODIFIER).

3.6.3.1 Adjectives

The pre-noun modifier position can be filled by an adjective. Adjectives in the language include words that describe dimension, temperature, and colors: *putuʔoro* 'small', *baua* 'big', *mala* 'long', *weleru* 'short', *babai* 'hot', and *mariri* 'cold', *poʔia* 'white', *mamarawi* 'green', *arara* 'black', *roa* 'red', and *rewa rau tao* 'yellow'.

An optional intensifier *paʔa* 'very' can precede an adjective as in (3.93).

(3.93) *paʔa poʔia umu*
'very white house'

It is possible to conjoin a second adjective as in (3.94).

(3.94) *poʔia ma mamarawi umu*
'white and green   house'

3.6.3.1.1 Derived adjectives

Adjectives can be derived from nouns with the suffix *–i.*

(3.95) *Fufulu*
'Wuvulu'

(Note that the vernacular word for Wuvulu is Fufulu.)

(3.96) *Fufulu-i*
Wuvulu-DER
'Wuvuluan'

Other examples of derived adjectives include: *Aua* (Island), *Aua-i* 'Auan'; *pifine* 'woman', *pifine-i* 'womanly'; *wawane* 'man', *wawane-i* 'manly', *balu* 'child', *balu-i* 'childish'. Derived adjectives are typically used in adjective predicate constructions (see Chapter 5).

3.6.4   Post-nominal modifier

Appealing again to the Wuvulu NP structure given in (3.63), there is an optional modifier position following the head noun of an NP:

NP = (ART/DEMONSTRATIVE +) (NUMBER/QUANTIFIER +) (MODIFIERS +) NOUN (+ MODIFIER).

The syntax of the Wuvulu NP is like that of POc in that they both have a modifier position following the head noun. One difference in the two languages is that Wuvulu has added a pre-nominal modifier position, while retaining the post-nominal modifier position.

(3.97) *ʔi=na-poma-i-na   ʔei aipani paʔa poʔia ma mamarawi umu   putuʔoro*
3SG= REAL-paint-DER-TR the five very white and green   house small
'He painted the five, small, very white and green houses.'

3.7   Chapter summary

Many of the features of Wuvulu nominals have been retained from POc. Possessor suffixes are nearly identical in form and function in Wuvulu and POc. Subject proclitics and object enclitics also appear to have their origins in POc pronominal forms. Like POc, Wuvulu has locative part nouns and a preposition that occurs before a locative or temporal NP. The Wuvulu system of deixis is also based on a three-way system of demonstratives that originated with POc. Wuvulu has also retained much of the vocabulary of POc and there are cognate forms found in their counting systems. And like POc, Wuvulu has articles, which are rare for Admiralty languages.

Nominal structures in Wuvulu suggest that grammaticalization has occurred in forms such as possessive suffixes and verbal clitics. For possession, the sequence of possessed and possessor is the same for juxtaposed NPs and for an NP with a suffix, suggesting grammaticalization. In the verb phrase, subject proclitics and object enclitics are the results of the grammaticalization of free pronouns.

Language change is also evident in the structure of a Wuvulu NP, where demonstratives have moved from phrase-final to phrase-initial position, and in the addition of an adjectival modifier position before the head noun.

A study of nouns in the language also suggests the imminent loss of vocabulary in certain domains such as counting classifiers and kin terms. The loss of vocabulary is also suggestive of culture loss, for example, the change of kin relations between cross-cousins.

4   Verb structure

4.1   Introduction

"It is in the area of verbal morphology and verb phrase syntax that Oceanic languages generally exhibit the greatest complexity" ~ (LRC:45) ~

Wuvulu has perhaps the most complex verbal morphology that has been documented in any of the approximately 500 Oceanic languages. A single Wuvulu verb can be composed of as many as 20 morphemes (including the root, affixes, and clitics). Regarding the morphology of Oceanic verbs, LRC states that, "The number of preverbal markers can be quite large" (45). No indication is given, however, of how large, or whether there is also a large number of postverbal markers. In personal communication with Malcolm Ross, he was unsure of the maximum number of pre-verbal markers in an Oceanic language, but he mentioned that Wuvulu is "high on the list." (4/2014).

Even if it were discovered that there is an Oceanic language with a more highly agglutinating verb than Wuvulu, the point is that the verbal morphology of Wuvulu is fairly complex. And, words of the verb class can have a much more complex morphology than words of other classes. A verb root can be reduplicated to indicate imperfective aspect. Verbs can be bound with subject and object clitics, and they can be inflected for mood, aspect, intensification, direction, action, repetition, completion, transitivity, and object agreement.

Two types of verbal markers that are relevant to deixis are: clitics, and what Ross (2004: 193) refers to as "directionals", or "forms that are derived from a set of Proto Oceanic verbs that occurred phrase-finally in directional serial-verb constructions". Wuvulu verbal morphology is distinguished from POc verbal morphology in that it has pre-verbal directionals, as well as the post-verbal directionals of POc that are found in many Oceanic languages.

Throughout this chapter, the Wuvulu verb phrase is discussed in light of what is known of the Proto Oceanic verb phrase. A Wuvulu verb phrase consists minimally of an uninflected verb root that serves as the head of a phrase (verbless predications are discussed in Chapter 5). An example of a minimal verb phrase is the imperative, *Poni* 'Run!'. A verb phrase can also consist of an inflected verb root, and NP complements, as per the requirements of the verb. For example, *timi* 'throw' can be used

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intransitively, but it can also be used transitively with a bound object marker, for example, *Timi=nia!* 'Throw it!'. The verb root can also take the transitive morpheme, -C*a*, which signals that an NP object immediately follows, for example, *Timi-na fei muro* 'Throw the stone!'. The verb *poni* 'run' is inherently intransitive and cannot take an object unless its valence is increased by means of causative morphology, *Fa-poni=a* (CAUS-run=3SG) 'Run it'.

The word class *verb* is established according to distributional and morphological features, including verb derivation. Verbs can be derived from words of other classes, and transitive verbs can be derived from intransitive verbs. The topic of derivation is a natural segue to the discussion of transitivity in the language. In this chapter, transitivity is discussed in terms of verbal morphology, involving clitics, and the transitive morpheme. Transitivity as it relates to the interaction of arguments is discussed in Chapter 5.

This chapter focuses on verbal morphology, beginning with the morphological and distributional criteria for membership in the verb class. Topics are discussed in the following order: §4.1 Introduction, §4.2 Overview, §4.3 Word class verb, §4.4 Derivational morphology, §4.5 Verb morphology, and §4.6 Chapter summary.

4.2   Overview

For the sake of terminological consistency with LRC, "verb phrase" is used here in the discussion of the Wuvulu verb complex. The POc verb phrase given by LRC does not include an object NP, and although a Wuvulu VP can have an NP argument, the focus of the present chapter is verbal morphology. The discussion of NP arguments is reserved for Chapter 5 and the discussion of clause structure. The Proto Oceanic verb phrase (LRC:83) is reproduced in (4.1), and is followed in (4.2) by the Wuvulu verb phrase.

(4.1) POc VP

(ASPECT/MOOD=)SUBJECT=VERB(=OBJECT)(=DIRECTIONAL)

(4.2) Wuvulu VP

(SUBJECT=)(MOOD/ASPECT-)(DIRECTIONAL-)(ADVERBIAL-)VERB(-ADVERBIAL)(=OBJECT)(-DIRECTIONAL)

Compared to the POc VP, the Wuvulu VP has undergone six innovations worth noting: i) the transposition of (ASPECT/MOOD=)SUBJECT= to (SUBJECT=)(MOOD/ASPECT-), ii) the transposition of (ASPECT/MOOD=) to (MOOD/ASPECT-), iii) the inclusion of negation and adverbials in (MOOD/ASPECT-), iv) the addition of a preverbal (DIRECTIONAL-) position, v) the addition of a preverbal (ADVERBIAL-) position, and vi) the addition of a postverbal (-ADVERBIAL) position.[19]

LRC states that many modern Oceanic languages have undergone a series of diachronic processes that have resulted in the transposition of (subject=) and (aspect/mood=). The authors of LRC hypothesize that given the original syntax of (aspect/mood=)(subject=), if there were a phrase-initial, independent pronoun, and if the (subject=) position were empty, then over time the independent pronoun would be reduced phonologically and would cliticize to the (aspect/mood=) marker.

Two other differences between VPs in POc and Wuvulu are: i) LRC implies (by an equal sign "=") that every morpheme attached to the verb is a clitic, and ii) the subject clitic of (4.1) is not enclosed in parenthesis, implying that it is obligatory. And, as previously noted, LRC states that a typical clause in POc probably had no core NPs:

> It is important to note that the presence or absence of a subject proclitic was in no way dependent on the presence or absence of a subject noun phrase. In all probability in POc, as in many modern Oceanic languages, the typical clause in narrative or conversation had no core noun phrase, or at most one, as the task of referent tracking was performed by the clitics, which also remained when the relevant noun phrase was present. The one apparent exception to this occurred if the object was a generic referent – 'apparent exception' because the generic 'object' was incorporated into the verb phrase, forming a compound intransitive verb (83).

A Wuvulu verb phrase can have NP arguments in the presence or absence of verbal agreement clitics, but NP arguments are not obligatory. The possible morphosyntactic combinations of clitics and NP arguments is presented in Chapter 5.

4.3   Word class verb

The criteria for classifying a Wuvulu word as a *verb* are morphological and distributional. Verb roots in the language are words that pattern like other words in the verb class in terms of morphology and distribution. A verb in the language can also be derived from a noun or adjective.

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[19] In (4.2) the forward slash '/' of (mood/aspect-) indicates that one or both can be present.

4.4 Derivational morphology

"Verbs in Oceanic languages typically do not have extensive patterns of derivational morphology" LRC (43). Wuvulu is somewhat typical, in that it does not have extensive patterns of derivational morphology, but verbs can be derived from nouns and adjectives, and transitive verbs can be derived from intransitive verbs.

4.4.1 Transitives from intransitives

The causative marker, *fa-*, derives transitive verbs from intransitives, including verbs that were previously derived from nouns and adjectives.

(4.3) *ʔi=na-poni*
3SG=REAL-run
'He ran.'

(4.4) *ʔi=na-fa-poni=a*
3SG=REAL-CAUS-run=3SG
'She made it run.'

(4.5) *ʔi=na-ruta*
3SG=REAL-sit
'She sat.'

(4.6) *ro=na-fa-ruta=nia*
3PL=REAL-CAUS-sit=3SG
'They made her sit.'

4.4.2 Verbs from nouns

A stative verb can be derived from a noun by suffix, *–i*. A verb derived from a noun is intransitive, and may then take the causative *fa-*, to derive a transitive verb.

(4.7) *fei muro*
the stone

(4.8) *ʔi=na-muro-i*
3SG=REAL-stone-DER
'It is stone.'

(4.9) *ʔi=na-fa-muro-i-na   larua*
3SG=REAL-CAUS-stone-DER-TR PRON.3DU
'She turned the two (people) to stone.'

When a noun denotes an object that can affect another entity, such as *awa* 'blanket', a the subject of the derived verb is the patient.

(4.10) *fei awa*
      the blanket

To express *it is a blanket,* the words of (4.10) can be used with a slight pause after the article as in (4.11).

(4.11) *fei, awa*
      the, blanket
      'It is a blanket.'

(4.12) *Ɂi=na-awa-i*
      3SG=REAL-blanket-DER
      'It is blanketed.'

Note that verb derivation from a noun involves the realis marker *na-* and does not correlate with past events in these types of constructions. To convey a past event in a construction such as (4.12), a time adjunct, is used. Possible examples include *minoa* 'yesterday'*, mina* 'in the past'.

(4.13) *Ɂi=na-awa-i*   *mina*
      3SG=REAL-blanket-DER in.the.past
      'It was blanketed in the past.'

The derived verb can also take additional verbal morphemes, such as the completive suffix, *-li*, or the causative, *fa-*.

(4.14) *Ɂi=na-awa-i-li*
      3SG=REAL-blanket-DER-CPLT
      'It is already blanketed.'

(4.15) *ro=na-fa-awa-i=nia*
      3PL=REAL-CAUS-stone-DER=3SG
      'They blanketed it.'

(4.16) *fei pa*
      the basket

(4.17) *Ɂi=na-pa-i*
      3SG=REAL-basket-DER
      'It is basketed.'

(4.18) *ro=na-pa-i=a*
3PL=REAL-basket-DER=3SG
'They basketed it.'

(4.19) *fei upu*
the green.coconut

(4.20) *ʔi=na-upu-i*
3SG=REAL-green.coconut-DER
'It has the characteristics of a green coconut.'

(4.21) *fa-upu-i=nia*
CAUS-green.coconut-DER=3SG
'Let it become a green coconut (allow it to get to that state).'

4.4.3 Verbs from adjectives

4.4.3.1 Intransitive

Verbs are derived from adjectives in the same way that they are derived from nouns, with the derivational morpheme, *-i* suffixed to the adjective stem.

(4.22) *fei putuʔoro muro*
'the small   stone'

(4.23) *ʔi=na-putuʔoro-i*
3SG=REAL-small-DER
'It is small.'

(4.24) *ro=na-fa-putuʔoro-i=nia*
3PL=REAL-CAUS-small-DER=3SG
'They made it small.'

4.4.3.2 Transitive

A transitive verb can be derived from an adjective by the causative *fa-* 'CAUS'. The derived forms take either a transitive marker, followed by an object NP, or it takes an object suffix or clitic.

(4.25) *ʔi=na-fa-rawani=nia*
3SG=REAL-CAUS-good=3SG
'He treated her well.'

(4.26) *ʔi=na-fa-afelo=ia*
3SG=REAL-CAUS-bad=3SG
'He destroyed it (lit. caused it to be bad).'

(4.27) *ʔi=na-fa-afelo-a*   mei pifine
      3SG=REAL-CAUS-bad-TR the woman
      'He treated the woman badly.'

(4.28) *ʔi=na-fa-rawani-na*   *ʔei*   *ponoto*
      3SG=REAL-CAUS-good-TR the.PL dog
      'He treated the dogs well.'

4.5 Verb morphology

A verb stem can include morphology for subject, mood, aspect, direction, causation, manner, and object. A verb root can undergo whole or partial (syllable) reduplication to encode for imperfective aspect. Table 4.1 gives an overview of the structure of the Wuvulu verb.

Table 4.1 Verb structure							
SUBJ=	*na-* *ʔa-* *nei-* *neiʔa-*	*ta-* *fane-* *fi-* *li-*	*ʔu-* *ʔo-* *loʔo-* *poʔo-* *we-* *mina-*	root RED-root serial roots *fa-* *fi*-V-*i*	*-ʔua* *-li(r)* *-li(n)*	=OBJ -TR	*-mai* *-wau* *-lao* *-rai/-rio*
Subject	Mood	Aspect	Adverbial	Verb stem	Adverbial	Object	Directional

4.5.1 Preverbal morphology

Preverbal morphemes of the Wuvulu verb stem, repeated here in (4.29), consist of positions for subject clitics, and inflectional prefixes denoting mood/aspect, direction, and adverbials:

(4.29) (SUBJECT=) (MOOD/ASPECT-) (DIRECTIONAL-) (ADVERBIAL-) VERB (-ADVERBIAL) (=OBJECT) (-DIRECTIONAL)

4.5.1.1 Subject

The subject proclitic is the first possible element of the verb stem. One of the differences between the verbal morphology of POc and that of Wuvulu is that the positions for subject and mood/aspect have been transposed, such that subject clitics come first and are followed by mood/aspect. LRC describes how this transposition could have come about in modern Oceanic languages (84-85):

> Clitics have often been the subject of phonological attrition and there has been a strong tendency for elements which occur before the verb phrase to become cliticised to it and themselves to undergo reduction. These preverbal elements fall into two categories. Firstly, independent pronouns serving as a topicalized (preverbal) subject noun phrase have become procliticised to the aspect/mood morpheme, forming new subject proclitics...Secondly, temporal adverbs and conjunctions occurring immediately before the (otherwise clause-initial) verb phrase have become procliticised to it…It is easy enough to see that processes of this kind could result in a flip-flopping of the order of the preverbal proclitics over time.

This explanation resonates with what is observed in Wuvulu pre-verbal morphology, particularly with the tendency for a subject NP to occur post-verbally.

(4.30) *ʔi=na-ware-lao*
      3SG=REAL-talk-DIR
      'He was talking.'

(4.31) *laru=na-foʔa=ia*
      3DU=REAL-hit=3SG
      'They (dual) hit him.'

(4.32) *ro=na-timi-na   ʔei muro*
      3PL=REAL-throw-TR the stone
      'They threw the stones.'

Verbal proclitics and their pronoun counterparts are given in Table 4.2.

Table 4.2 Subject proclitics

pronoun	proclitic	gloss
iau	*ʔu=*	1SG
ioi	*ʔo=*	2SG
ia	*ʔi=*	3SG
arua	*aru=*	1DU.INCL
airua	*airu=*	1DU.EXCL
amurua	*amuru=*	2DU
larua	*laru=*	3DU
ʔoʔolu	*ʔoʔou=*	1PL.INCL
ʔaiʔolu	*ʔaiʔou=*	1PL.EXCL
amuʔolu	*amuʔou=*	2PL
roʔolu	*ro=*	3PL

4.5.1.2 Mood

The first element of the POc verb phrase in (4.1) is "aspect/mood", rather than "tense/aspect/mood". POc and many of its descendants lack a tense category (LRC:84).

Wuvulu also lacks a tense category, but conveys tense by means of mood and aspect markers, and time phrases. The realis mood inflection, *na-*, is often used with past events, because speakers have a high degree of certainty about of events that have already occurred. Note, for example, the difference in interpretation of a clause marked with realis mood (4.33), and a clause marked with irrealis mood in (4.34).

  (4.33) *ro=na-biri=ʔia*
      3PL=REAL-work=3SG
      'They did it.'

  (4.34) *ro=ʔa-biri=ʔia*
      3PL=IRR-work=3SG
      'They are about to do it.'

In (4.33) the realis morpheme correlates with a past event, but in (4.35) the realis marker correlates with a present state of being.

  (4.35) *ʔi=na-putuʔoro-i*
      3SG=REAL-small-DER
      'It is small.'

So the translation in is 'it is small', rather than 'it was small'. This makes sense semantically, because a present state predication represents a high degree of certainty in the mind of the speaker.

  Payne (1997:233-4) describes the categories of aspect and mood as they relate to the category of tense:

> ...operations that anchor or ground the information are expressed in a clause according to its sequential, temporal, or epistemological orientation. Tense is associated with the sequence of events in real time, aspect with the internal temporal "structure" of a situation, while mode relates the speaker's attitude toward the situation associated with verbs.

  Payne's description of tense has to do with "a sequence of events in real time". Wuvulu makes up for the lack of a tense category by using time adverbials, and aspectual marking for sequence, repetition, and completion. There are three verbal markers related to the sequence of events—one preverbal, and two postverbal. Preverbally, the adverbial form *loʔo-* 'first' indicates that the action of the verb occurs before any other action.

Postverbally there are morphemes for repetition and completion, each with an intransitive form and a transitive form: *-liai* 'repeated' (intransitive), and *–linia* 'repeated it' (transitive); and *-li* 'completed' (intransitive), and *-liria* 'completed it' (transitive). The 3SG transitive forms of the suffixes, *-linia* 'repeated', and *-liria* 'completed' are given in the examples below, but there are also forms for first and second person, as well. And there are forms without an object clitic, *–lina* and *–lira*, that are immediately followed by an NP object. Mood and aspect inflections are discussed further in §4.5.1.2 and §4.5.1.3.

In both POc and Wuvulu, a basic distinction is made between realis mood and irrealis mood. Palmer (2001:4) states that "Typically with mood, all or most clauses are either realis or irrealis: the system is basically ('prototypically') binary." Palmer also notes that realis/irrealis systems usually do not occur with tense marking.

The mood position in Wuvulu is filled by one of four inflectional forms: *na-* 'realis', *Ɂa-* 'irrealis', *nei-* 'deontic', or *neiɁa-* 'negated deontic'. Present tense declaratives in the language commonly omit mood morphemes, as in (4.36) and (4.37).

(4.36) *Ɂi=no-mai*
      3SG-move-DIR
      'He comes.'

(4.37) *Ɂi=fi-no-mai*
      3SG=SIM-move-DIR
      'He is coming.'

4.5.1.2.1 Realis

As mentioned above, the realis mood marker, *na-*, generally denotes a high degree of certainty, and often correlates with past events, or present stative clauses like the English *it is green*. Realis mood is also used to mark the verb of an independent clause, with irrealis marking on the verb of a dependent clause (cf. Chapter 6).

In addition to indicating past events, realis marking is used in existential, stative, and attributive clauses. The form below *Ɂi=na-paɁi* 'it has' is a common way to express an existential predication.

(4.38) *ʔi=na-paʔi   e-laru   ʔei ramaʔa mina*
       3SG=REAL-have CLASS-two PL person before
       'In the past, there were two people.'

The next example is from a text in which a monitor lizard gives a description of itself, using realis marking on each of the attributive verbs.

(4.39) *na-wala-wala-ʔua   fei alia-u ma taba-u   na-tau-tio-tio*
       REAL-RED-round-only the ear-1SG and head-1SG REAL-narrow-RED-taper
       'My ears are round and my head is tapered (and) narrow.'

4.5.1.2.2 Irrealis

The irrealis marker, *ʔa-*, is used for a range of attitudes which express uncertainty on the part of the speaker. Irrealis mood marks verbs of subjunctives, interrogatives, subordinate clauses, the immediate future, and dependent clauses. Irrealis is also used in the protasis of conditional statements.

(4.40) *ʔeni ba   ʔu=ʔa-ʔuʔu-ra   laru   ʔeni fi-lofu-i*
       now COMP 1SG=IRR-story-TR PRON.3DU these RCPR-brother-RCPR
       'Now I am going to (tell a) story about these two brothers.'

Irrealis marking is also used in questions in which the person asking is uncertain of what the response will be.

(4.41) *ma mei ʔari-mu,   ari-mu,   o aru=ʔa-foʔa-fa-maʔe=a?*
       and the opposite.sib-2SG opposite.sib-2SG or 1DU=IRR-hit-CAUS-die=3SG
       'And is your brother [really] your brother, or shall we kill him?'

4.5.1.2.3 Deontic

Deontic mood is signaled by the inflection *nei-* 'must'. Deontic mood relates to obligation or permission emanating from an external source (Palmer 2001:9).

(4.42) *nali amuʔo-nei-li ma amuʔo-nei-poʔo-maʔiru*
       okay 2PL-DEON-go and 2PL-DEON-really-sleep
       'Okay, you must go and you must really sleep.'

Deontic mood is semantically similar to a true imperative, but one difference is that an imperative is unmarked with respect to subject. It can be argued that the imperative is also unmarked in the sense that it is used by a person in full authority

whereas deontic modality (*must*) is used by someone who is not in full authority (Palmer, 2001).

4.5.1.2.4 Deontic negation

The morpheme, *ʔa-* 'DNEG' is used only with the deontic marker *nei-* 'must', to give a prohibitive sense to a proposition: *nei-ʔa-* 'must not'. The prohibitive marker is identical in shape to the irrealis marker *ʔa-* 'IRR'.

> (4.43) *ʔo=maʔamaʔa fei tala ba   ro=nei-ʔa-we-no-ʔua-mai*
> 2SG=RED-watch the road COMP 3PL=DEON-DNEG-EV-move-just-DIR
> 'Watch the road so that they must not just come.'

4.5.1.3   Aspect

Comrie (1976:3) defines *aspect* as "different ways of viewing the internal temporal constituency of a situation". The meanings of the Wuvulu verbal aspect morphemes are difficult to tease apart because of the number of possible combinations of verbal morphemes and because of the interaction of semantics between morphemes. Another thing that complicates the analysis is that some morphemes do not always occupy the same positions relative to one another.

One of the basic contrasts in the morphology of the verb is perfective aspect versus imperfective aspect. Comrie (1976:12) points out that "perfective denotes a situation viewed in its entirety, without regard to internal temporal constituency."

There are four possible preverbal aspect markers: i) perfective, ii) imperfective negation, iii) simultaneous, and iv) habitual. Aspect can also be marked by the reduplication (cf. §4.5.2.1). Some of these aspect markers co-occur, e.g., *po-we-* 'definitely will'*; na-we* 'finally', indicating that an expected event finally occurred; and *fi-po-we-*, 'finally occurring as expected'.

4.5.1.3.1 Perfective

The perfective *li-* views an action as a whole that has been completed before another action. In (4.44) *ʔinaliwarefarawani* 'he had already clearly told', the morphemes *na-*'realis' and *li-* 'perfect' give a sense of a past perfect event.

> (4.44) *maʔua ʔi=na-li-ware-fa-rawani   ʔaʔa roʔou, Barafi*
> but   3SG=REAL-PERF-talk-CAUS-good with them   PROPN
> 'But, Barafi had already clearly told them.'

4.5.1.3.2 Imperfective negation

The marker, *ta-* 'not yet' signals that an action has not yet occurred. This is semantically imperfective in that the action of the verb may yet occur. It does not indicate the probability of whether the event will occur.

(4.45) *ʔi=ta-no-mai*
        3SG=NYET-move-DIR
        'It has not yet come.'

The morpheme *ta-* 'not yet' only occurs in conjunction with verbs that are irrealis, or that are not marked for mood.

4.5.1.3.3 Simultaneous

The prefix *fi-* 'SIM' indicates action that is simultaneous to another action, or an action that is in process of occurring. One of the distinctions between simultaneous/in-process action and that of the reciprocal circumfix, *fi- -i,* is that the simultaneous morpheme allows for other morphemes to intervene between *fi-* and the verb root, but the reciprocal *fi-* always immediately precedes the verb root. Simultaneous and reciprocol morphemes have semantic overlap.

(4.46) *ʔi=na-panaro-puluʔi-na   ruapalo ʔei   pani Puleafo*
        3SG=REAL-hold-together-TR two   the.PL hand PROPN

        ma ʔi=fi-unu
        and 3SG=SIM-drink
        'He held together the two hands of Puleafo while drinking.'

The simultaneous affix *fi-* only occurs with singular subject clitics. For dual and plural subject clitics, the forms *ʔei-* and *i-*are used for the same function and occur in free variation with one another.

4.5.1.3.4 Habitual

The marker *fane-* can indicate either recurring or habitual activity. The marker is somewhat rare, but it is attested by native speakers.

(4.47) *ma ʔi=na-fane-nara-nara   fei nara   faninilo ba,   ʔaleʔena ba*
And 3SG=REAL-HAB-RED-think the thought PROPN   COMP like   COMP

ini liai   mei ramaʔa mei
who again the person the

'And the thought kept occurring to Faninilo,
   "Who is this particular person?"'

4.5.1.4   Adverbial

The pre-stem adverbial position can be occupied by one of six different morphemes to indicate that an action is complete, frequent, infrequent, eventual, intensified, or sequential.

4.5.1.4.1 Completely

In (4.48) the adverbial *mina-* 'totally, completely' qualifies the action of the verb. The free-standing word *mina* 'all' is an NP quantifier meaning 'all' or 'every', e.g., *mina roʔolu* 'all of them' (the comma indicates a pause).

(4.48) *ro=na-mina-ai-fa-rawani,   ʔei   lalaura*
3PL=REAL-totally-cry-CAUS-good, the.PL singer
'The singers sang really well.'

4.5.1.4.2 Frequently

The markers *ʔu-* and *ʔo-* seem to go together semantically. Frequently occurring events are marked with *ʔu-;* infrequently occurring events are marked with the morpheme *ʔo-* (§4.5.1.4.3).

(4.49) *ʔua   ro=mina-ʔu-foʔa-ʔua   aiʔou*
because they=totally-FREQ-hit-just us
'...because they frequently just slaughter us.'

4.5.1.4.3 Infrequently

The morpheme, *ʔo-* 'infrequent', is rare (as is *ʔu-* 'frequent').

(4.50) *Ma ʔi=na-ʔo-filu-lao   fei ape   larua,*
  And 3SG=REAL-INFREQ-fly-DIR the possession PRON.3DU

  ma ʔi=na-ʔo-no-mai,   ro=na-ʔala-timi=nia   fei alatai
  and 3SG=REAL-INFREQ-move-DIR 3SG=REAL-untie-discard=3SG the bracelet

'And when their pet bird occasionally flew away and occasionally came back, they untied and discarded the bracelet.'

According to one native Wuvulu speaker, it is possible for the morpheme *fane-* 'habitual' to combine with either *ʔu-* or *ʔo-* to give *fane-ʔu-* or *fane-ʔo-* for frequent and infrequent habitual behavior. These combinations do not show up in the corpus, so further research is required to elicit and confirm the grammaticality of *fane-* in combination with *ʔu-/ʔo-* 'frequent/infrequent'.

4.5.1.4.4 Eventual

The eventual morpheme, *we-*, indicates that an action will eventually occur.

(4.51) *ma ʔi=we-no-rio   Lifuroroʔa.*
  and 3SG=EV-move-DIR PROPN
  'And Lifuroroʔa will come.'

Although the eventual marker can indicate that an event will occur in the future, it is not a future tense marker, *per se*. For example, the realis marker, *na-* frequently co-occurs with *we-* to indicate that an action finally (eventually) occurred in past, as in (4.52).

(4.52) *laru=na-we-fi-foʔa-i*
  3DU=REAL-EV-RECIP-hit-RECIP
  'The two finally fought.'

The co-occurrence of the forms *poʔo-* 'INTS' and *we-* 'ev' marks a temporal subordinate clause. The two markers, *we-* and *fi-* can also combine with *powe-* to give the forms *wepowe* and *fipowe*, but not *powewe*, or *powefi*.

(4.53) *Ma ʔa-po-we-ware-ware ba,   ʔi=na-pelu,*
       and IRR-INTS-EV-RED-talk COMP 3SG=REAL-finish,

         iʔi, amo=nei-ʔu-to=nia,   ʔena io   amuʔolu
         yes, 2PL=DEON-stand-get=3SG those spear PRON.2PL

       'And when I eventually say, "It's finished",
         okay, you must stand, [and] take your spears.'

The morphemes of (4.53) can also occur transposed as *we-poʔo-* as in (4.54) with the meaning '*when it eventually happens*'.

(4.54) *ʔi=li,   Funu na-ʔai-ware-ware-na-lao   ʔaʔa mei tafi-na   ba,*
       3SG=go PROPN REAL-cry-RED-talk-TR-away with the friend-3SG COMP

         oo ma ʔi=we-poʔo-feta   mei naʔu tafi-mu
         IJ and 3SG-EV-really-how the child friend-2SG

       'Funu went crying to his friend,
         "Oh, and how will the child of your friend really be...?"'

The data corpus also has the combination *we-po-we* 'EV-INTS-EV' which refers to an event finally happening in the future. This is not a common form, but it is attested as grammatical by native speakers. One of the differences between the sentence in the previous example, and the sentence below is that *we-po-we* 'EV-INTS-EV' in occurs in the main clause.

(4.55) *ʔo=we-po-we-naba-uru-fa   fei ape-na   palu.*
       2SG=EV-INTS-EV-chew-swallow-TR the possession-3SG pigeon
       'You can finally eat her pet pigeon.'

Another rare but grammatical form is the combination *fi-po-we-* which refers to an event that is finally be in the process of happening.

(4.56) *fi-po-we-ware-ware,   Bau, "Oo! ..."*
       SIM-INTS-EV-RED-talk Bau IJ
       Bau was finally in the process of talking, [saying] "Oh! ..."

4.5.1.4.5 Intensifier

The intensifier *poʔo* 'INTS' is equivalent with the English adverb *very*.

(4.57) *ʔi=na-poʔo-mua-a   fei, ʔale-ʔena ʔanoʔano*
        3SG=REAL-INTS-win-TR the like-those skilled.person
        'He really won it, like an expert."

(4.58) *nara-a-u   ro=na-poʔo-maʔiru-li   ʔeni*
        think-DER-1SG 3PL=REAL-INTS-sleep-CPLT now
        'My thinking (is that) they have begun really sleeping now.'

4.5.1.4.6 Sequence

The sequence morpheme *loʔo* 'SEQ' indicates that the modified verb occurs prior to some other event.

(4.59) *ʔi=na-loʔo-luri-na   ʔei   ramaʔa*
        3SG=REAL-SEQ-gather-TR the.PL person
        'He first gathered the people.'

4.5.1.5 Directionals

Ross defines the term *directional* as "a morpheme—often a clitic—that occurs in a verb phrase and has deictic meaning," and states that directionals are, "forms that are derived from a set of Proto Oceanic verbs that occurred phrase-finally in directional serial-verb constructions" (2004:193). Ross's use of the term "directional" is adopted in the present discussion, because it describes the form and function of Wuvulu morphemes that are cognate with the POc forms.

In Wuvulu, directional markers are not considered to be verbs. They can only occur as inflections of a verb. The POc verb phrase, reproduced in (4.60), has only one position for directionals. One of the innovations of the Wuvulu verb phrase (4.61), is that it takes two directional positions—one pre-verbal, and one post-verbal.

(4.60) POc VP
(ASPECT/MOOD=) SUBJECT= VERB (=OBJECT) (=DIRECTIONAL)

(4.61) Wuvulu VP
 (SUBJECT=) (MOOD/ASPECT-) (DIRECTIONAL-) (ADVERBIAL-) VERB (-MODIFIER) (=OBJECT) (-DIRECTIONAL)

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Wuvulu directionals are similar to POc directionals in form and function. In the Wuvulu system the short form of the directional is always preverbal and the long form is post-verbal; the only exception is that *–mai* 'toward speaker' sometimes shortens to *–mi*. Long forms are never preverbal.

Table 4.3 Directionals in POc and Wuvulu

POc		Wuvulu		
*mai, *ma*	'come towards speaker'	*mi-*	*-mai*	'come towards speaker'
ua[*ta*]	'go towards addressee'	*wi-*	*-wau*	'go away from speaker'
*lako, *la*	'go (to)'	*li-*	*-lao*	'go to'
*pano, *pa*	'go away, go across'	*re-*	*-rai, -rio*	'go to; go vertical'

Examples of preverbal directionals are

(4.62) *mi-to-nia*
         DIR-get-3SG
         'Come get it.'

(4.63) *wi-to-nia*
         DIR-get-3SG
         'Go get it.'

(4.64) *mi-to-na-lao*
         DIR-get-TR-DIR
         'Come get (it and) go.'

4.5.2   Verb stem

A verb stem consists minimally of a verb root, but it can include a reduplicated root, serialized roots, or it can be derived from a noun or adjective. Except for derivation, verbs are built from monomorphemic roots according to verb class criteria. A word that cannot take verbal inflection without derivation is not considered a verb root.

4.5.2.1   Reduplication

Reduplication is present in nearly all Oceanic languages (LRC:44). There are two forms of reduplication in the Wuvulu—initial syllable reduplication, and full root reduplication. Although reduplication is a means of expressing imperfective aspect, it was not discussed in the section on aspect in §4.5.1.3, because the verb complex is presented in the order in which morphemes occur, from left to right.

4.5.2.1.1 Initial syllable

The initial syllable of a root can be reduplicated to show continuous or repeated action. In (4.65) the initial syllable is reduplicated to indicate continuous action, *roni* 'hurry' vs. *roroni* 'hurrying'.

> (4.65) *tani ʔo-mina-ro-roni-ʔua*
>   why 2SG=totally-RED-hurry-ADV
>   'Why are you just hurrying?'

It is possible to reduplicate an initial syllable twice as in (4.66) to indicate that a continuous action is persistent or repeated.

> (4.66) *tani ʔo-mina-ro-ro-roni-ʔua?*
>   why 2SG=totally-RED-RED-hurry-ADV
>   'Why do you just keep hurrying?'

4.5.2.1.2 Full reduplication

In addition to initial-syllable reduplication, a whole verb root can be reduplicated to indicate continuous aspect.

> (4.67) *ʔi=na-biri-biri*
>   3SG=REAL-RED-work
>   'He was working.'

Reduplication of a verb root typically indicates imperfective aspect, including continuous or durative action. In (4.68) the root *ware* 'talk' is reduplicated to indicate a form of imperfect aspect.

> (4.68) *ro=ʔa-no-lao   na-ware-ware ʔaʔa roʔou Baule*
>   3SG=IRR-move-DIR REAL-RED-talk with them PROPN
>   'When they went, Baule talked with them.'

4.5.2.2 Reciprocal

The circumfix *fi- -i* 'reciprocal', indicates reciprocal action (from POc *pai 'reciprocal'). The prefix portion of the confix, *fi-*, is always immediately to the left of the verb root, and the suffix portion of the confix, *-i*, binds to the right edge of the verb. For example, *fi-wareware-i* 'converse', and *fi-foʔa-i* 'fight'.

(4.69) *ma narani   ʔoʔou=we-fi-ware-ware-i*
     and tomorrow 1PL.INCL=EV-RECIP-RED-talk-RECIP
     'And tomorrow we will converse.'

The reciprocal confix requires a dual or plural subject.

4.5.2.3 Causative

The causative is generally expressed by a verbal prefix in Polynesian and Micronesian languages (LRC: 43,44). In Wuvulu the verbal prefix, *fa-* 'CAUS' (from POc *pa[ka]* 'causative'), is a marker that can derive a transitive verb from an intransitive verb. In (4.70) *fa-* 'causative' increases the valence of the intransitive verb *ʔu* 'stand' so that it takes the direct object *roʔolu* 'them'.

(4.70) *ma ʔi=li,   na-fa-ʔu-na   roʔolu*
     and 3SG=go REAL-CAUS-stand-TR PRON.3PL
     'And he went and caused them to stand (stood them up).'

In (4.71) the causative *fa-* is used in a reflexive construction, in which the subject humbles himself. Note that the subject NP and the object pronoun are co-referential.

(4.71) *ma   ʔi=na-fa-fafau-na   ana ia   pu*
     and 3SG=REAL-CAUS-humble-TR RFLX PRON.3SG below
     'And he humbled himself low.'

4.5.3   Postverbal morphology

Recall that the Wuvulu verb phrase in (4.2) has post-verbal positions for adverbial, object, and directional information.

Wuvulu VP (from (4.2))

(subject=)(mood/aspect-)(direction-)(-adverbial) verb (-adverbial)(=object)(-directional)

There are three types of post-verbal morphemes that occupy the adverbial position: i) a limiter, ii) a set of completive forms, and iii) a set of repetition morphemes. For transitive verbs, the post-verbal object position takes either an object enclitic, or a transitive marker signaling a following object NP. Like the final position of the POc VP, the final position of the Wuvulu VP can be occupied by a directional morpheme.

4.5.3.1 Adverbial

The adverbial position can be filled by a suffix or a derived adverbial. There are three adverbial suffixes—a limiter, a marker of repetition, and a completive. A manner adverbial can also be incorporated into the verb nucleus by means of the causative, *fa-*.

4.5.3.1.1 Limiter

The adverbial, *-ʔua* 'only, just' limits the action of verb in some way.

(4.72) *ʔi=na-rawani-ʔua*
       3SG=REAL-good-only
       'It (is) just fine.'

The position of the limiter is before object marking in transitive clauses.

(4.73) *ʔi=biri-ʔua=ia*
       3SG=REAL-work-only=3SG
       'He did it anyway.'

(4.74) *laru=na-no-ʔua-lao*
       3DU=REAL-move-only-DIR
       'They just went away.'

The limiter can also function as an independent word as in the English *I just arrived*.

(4.75) *ʔu-na-no-mai*   *ʔeni ʔua*
       1SG=REAL-move-DIR now only
       'I arrived just now.'

In (4.76) *ʔua* 'only, just' is also used in a phrase.

(4.76) *ʔu=na-paʔi*   *olumanu ʔua*
       1SG=REAL-have three   only
       'I have only three.'

4.5.3.1.2 Repetition

There are two types of repetition morphemes—an intransitive form, *-liai*; and transitive forms with the consonant *n*: *–li-na*, used with NP object; and the forms, *-li-nau, -li-nio,* and, *-li-nia*, used with 1/2/3 SG pronominal objects, respectively.

(4.77) *ro=na-unu-liai*
       3PL=REAL-drink-REP
       'They drank again.'

(4.78) *ro=na-unu-li=nia*
         3PL=REAL-drink-REP=3SG
         'They drank it again.'

(4.79) *ro=na-unu-li-na   ʔei   upu*
         3PL=REAL-drink-REP-TR the.PL coconut
         'They drank the coconuts again.'

4.5.3.1.3 Completion

The completive morpheme, has three forms of grammatical marking—an intransitive form, *-li*; and transitive forms with the consonant *r*: *-li-ra,* used with an NP object; and *–li-rau, -li-rio,* and, *-li-ria*, used with 1/2/3 SG pronominal objects, respectively.

(4.80) *ro=na-biri-li*
         3PL=REAL-work-CPLT
         'They worked to completion.'

(4.81) *ro=na-biri-li=ria*
         3PL=REAL-work-CPLT=3SG
         'They finished working it.'

(4.82) *ro=na-biri-li-ra   fei umu*
         3PL=REAL-work-CPLT-TR the house
         'They completed work (on) the house.'

4.5.3.1.4 Manner derivation

In addition to adverbial suffixes, the post-verbal adverbial position can be filled by a manner adverbial derived by the causative, *fa-*. A derived adverbial follows the verb that it modifies. Prosody indicates that a derived adverbial is brought into the nucleus from the (extended) clause core (cf. §5.9.1). The morphology of manner adverbials is evidence for drawing a distinction between manner adverbials and time/location adverbials.

There are two kinds of manner adverbials—those that take the causative, *fa-*, and those that do not take the causative. Prosodically, adverbials derived by the causative are considered to be part of the verb nucleus.

(4.83) *ʔi=na-poni-fa-rawani*
         3SG=REAL-run-CAUS-good
         'He ran well.'

Note that adverbials that take the causative cannot modify the verb without the causative.

(4.84) **ʔi=na-poni rawani*

(4.85) *laru=na-biri-fa-weʔi*
         3DU=REAL-work-CAUS-strong
         'They worked hard.'

(4.86) **laru=na-biri weʔi*

There is also a set of adverbials that do not take the causative. These adverbials are words that immediately follow the clause nucleus.

(4.87) *ʔi=na-poni   maluare*
         3SG=REAL-run quick
         'He ran quickly.'

Note that adverbials that can modify the verb without a causative cannot take a causative.

(4.88) **ʔi=na-poni-fa-maluare*

(4.89) *ʔi=na-ruta   wiwiwili*
         3SG=REAL-sit happy
         'He sat happily.'

(4.90) **ʔi=na-ruta-fa-wiwiwili*

There is morphological evidence that manner adverbials are distinct from time/location adverbials. The adverbial *maluare* 'quick' is phonologically distinct from the verb and seems to operate as an adjunct to the core. But unlike time and location adjuncts, manner adverbials that do not take the causative can be brought into the nucleus, by means of derivation.

(4.91) *ro=na-biri-maluare-i=nia*
         3PL=REAL-work-quick-DER=3SG
         'They hurried the work.'

(4.92) *ro=na-biri   batafa*
          3PL=REAL-work fast
          'They worked fast.'

(4.93) *ro=na-biri-batafa-i=nia*
          3PL=REAL-work-fast-DER=3SG
          'They worked it fast.'

Dik (1997a:50) recognizes a *core predication* as a nuclear predication that is qualified by a manner adverbial and distinguishes an *extended predication* as a core predication that is located in time and space. Morphosyntactically, it is clear that Wuvulu manner adverbs have a tighter relationship with the verb nucleus than do time and location adverbials. This is discussed further in Chapter 5.

4.5.3.2   Transitivity marking

Although Wuvulu words have final open syllables, the lexicon of POc had verbs with final consonants. Diachronically, verb-final consonants were reanalyzed together with attached vowels as object clitics and final consonants were lost from the lexicon.

The object of a transitive verb can be an NP or an enclitic. By way of review from Chapter 4, if the verb takes a transitive marker, -C*a*, and it is followed immediately by an NP object. The "C" of the transitive marker is a thematic consonant associated with the historical final consonant that was diachronically reanalyzed. For example, in *aro-fa mei balu*, 'call-TR the child', the transitive marker, *-fa*, is used because POc **arof* 'call' + POc **-a* 'TR', was reanalyzed in Wuvulu as *aro–fa*.

If a transitive verb has no final historical consonant, then the transitive enclitic that attaches to it also has no consonant: *=au/=io/=ia* '1/2/3 SG'. If the verb has a final thematic consonant associated with it, then the object clitic will have the thematic consonant, *=Cau/=Cio/=Cia* '1/2/3 SG' (where C is one of the consonants *f, m, n, r,* or *ʔ*).

Like most Oceanic languages, Wuvulu has CV canonic syllable shape. There are are no closed syllables syllables in the language, although, as mentioned in previous sections, there are many words that had final closed syllables. Words that had final consonants include *arof* 'call'; *unum* 'drink', *timin* 'throw', *afur* 'punch', and *biriʔ* 'work'. The final consonants of these words were deleted from the verb and became the onset consonant of the enclitics, where verb=clitic sequences such as *arof=ia* were

reanalyzed as each *aro=fia*. The Wuvulu verb *aro* 'call', can be marked by four possible forms: *-fa, =fau, =fio,* and *=fia,* for the transitive suffix, and 1/2/3 SG object clitics, respectively. The four forms each have five allomorphs—one for each of the thematic consonants.

4.5.3.2.1 Transitive suffix

For verbs associated with thematic consonants, the transitive marker is –C*a*, where C is the historical thematic consonant.[20] The verb *moro* 'sever' in (4.94), for example, had a historical final glottal stop. Thus, it takes the glottal-initial allomorph of the transitive suffix. The transitive always occurs as a heavy final syllable.

(4.94) *ma ʔi=na-moro-ʔa   fei wawa pure-na*
     and 3SG=REAL-sever-TR the cord belly-3SG
     'And she cut its umbilical cord.'

(4.95) *e-ai   arewa Barafi ʔi=na-biri-ʔa   ʔei ana-na*
     CLASS-one day   PROPN 3SG=REAL-work-TR the food-3SG
     'One day Barafi prepared his food...'

On of the the transitive markers, *-na* 'TR' can occur on verbs of motion, followed by a location "argument". Verbs of motion may occur with or without the transitive marker. If a motion verb does not have the marker, it does not take a location. If a motion verb has the transitive marker, a location is obligatory. In (4.96) the verb, *li* 'go' is used intransitively.

(4.96) *ma laru=na-li.   laru=ʔa-no-lao.*
     CJ 3DU=REAL-go 3DU=IRR-move-DIR
     'And the two went. They were going.'

In (4.97) the intransitive verb, *li* 'go' takes the transitive marker, *-na*, which requires a location.

(4.97) *ʔei   nara-u ba   iau,   ʔa-li-na Weweʔe.*
     the.PL think-1SG COMP PRON.1SG IRR-go-TR PROPN
     'My thinking is that I will go to Wewak.'

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[20] For convenience vowel length is not written for the transitive marker *-Cā*, but it is marked in the lexicon.

An alternative explanation is that *-na* is perhaps a preposition, *na,* instead of a verbal marker. The problem with this is that final word stress on the verbs that have *-na* indicates that *–na* is part of the verb rather than a free preposition.

It is plausible that a preposition became a transitive suffix diachronically, possibly by analogy. A transitive verb that takes a direct object NP has a transitive marker; and analogously, a motion verb with a transitive suffix takes a location adjunct NP. The marker *-na* can also occur with two verbs that are not verbs of motion, but which convey a sense of direction.

(4.98) *laru=na-ware-na ʔaʔa John*
      3DU=REAL-talk-TR   with PROPN
      'They spoke to John.'

(4.99) *ʔi=na-fanunu-na   pie*
      3SG=REAL-look-TR beach
      'He looked to (the) beach.'

4.5.3.2.2 Object clitics

Object clitics were discussed in Chapter 3 (§3.4.2.2). Table 4.4 gives examples of synchronic forms of verbs and their thematic object clitics. Very few verbs in the lexicon subcategorize according to *m*-initial clitics and suffixes. The nasal alveolar, *n,* on the other hand, is the most frequent thematic consonant, and is also the default consonant for borrowed verbs, such as *shoot=nia* 'shoot it', and *drive=nia* 'drive it'.

Table 4.4 Verbs and historical thematic consonants

intransitive	transitive	1SG object	2SG object	3SG object	gloss
aro	*aro-fa*	*aro=fau*	*aro=fio*	*aro=fia*	'call'
ato	*ato-fa*	*ato=fau*	*ato=fio*	*ato=fia*	'smell'
panaro	*panaro-fa*	*panaro=fau*	*panaro=fio*	*panaro=fia*	'hold'
alu	*alu-ma*	*alu=mau*	*alu=mio*	*alu=mia*	'help'
tu	*tu-ma*	*tu=mau*	*tu=mio*	*tu=mia*	'cover'
ʔono	*ʔono-ma*	*ʔono=mau*	*ʔono=mio*	*ʔono=mia*	'swallow'
ararati	*ararati-na*	*ararati=nau*	*ararati=nio*	*ararati=nia*	'slander'
furoi	*furoi-na*	*furoi=nau*	*furoi=nio*	*furoi=nia*	'hold down'
timi	*timi-na*	*timi=nau*	*timi=nio*	*timi=nia*	'throw'
nene	*nene-ra*	*nene=rau*	*nene=rio*	*nene=ria*	'follow'
pelu	*pelu-ra*	*pelu=rau*	*pelu=rio*	*pelu=ria*	'finish'
pile	*pile-ra*	*pile=rau*	*pile=rio*	*pile=ria*	'wrestle'
abe	*abe-ʔa*	*abe=ʔau*	*abe=ʔio*	*abe=ʔia*	'hang'
biri	*biri-ʔa*	*biri=ʔau*	*biri=ʔio*	*biri=ʔia*	'work'
eru	*eru-ʔa*	*eru=ʔau*	*eru=ʔio*	*eru=ʔia*	'scoop water'

4.5.3.3 Directionals

Table 4.5 Wuvulu directionals

mi-	*-mai*	'come towards speaker'
wi-	*-wau*	'go away from speaker'
li-	*-lao*	'go towards goal'
re-	*-rai, -rio*	'go to; go vertical'

Directionals occur with verbs of motion: *no* 'move', *no-mai* 'come'; *lele* 'crawl', *lele-mai* 'crawl here!'; *lele-wau* 'crawl away'. Two particular directionals *-mai* and *-lao,* in addition to expressing the direction of physical movement, also function to express direction that does not have to do with physical movement. The two markers can function to express a passage of time leading up to the action of the verb (*-mai*), or away from the action of the verb into the future (*–lao*).

Directionals function to mark a passage of time with verbs that are inherently atelic like *think* and *sleep,* but they can also mark verbs that seem to be inherently telic, such as *foʔa* 'hit'. In these cases, the function of the marker seems to be more aspectually

related to the verb. Compare the semantics of the atelic and telic verbs in (4.100) and (4.101).

> (4.100) *ʔi=na-nara-mai*
>   3SG-REAL-think-DIR
>   'He thought about it until now.'

> (4.101) *ʔi=na-foʔa-lao*
>   3SG-REAL-hit-DIR
>   'He kept hitting.'

Example (4.102) is similar to that of (4.100) in that the main verb is an atelic verb, and not a verb of motion. With respect to the inherent properties of the verb *sleep* in the language there is a sense of imperfective aspect, but the motion indicated by *–lao* has to do with the passage of time into the future.[21]

> (4.102) *ʔi=na-maʔiru-lao*
>   3SG=REAL-sleep-DIR
>   'He was sleeping.'

> (4.103) *ʔi=na-tama-lao*
>   3SG=REAL-paddle-DIR
>   'He paddled away.'

4.5.3.3.1 Two directionals per verb

A somewhat unusual innovation in Wuvulu verbal morphology is the grammaticalization of a preverbal counterpart for each of the post-verbal directionals. A Wuvulu verb can simultaneously host both a preverbal and a postverbal directional.

> (4.104) *mi-to-na-wau   fei wa*
>   DIR-get-to-TR-DIR the canoe
>   'Come get the canoe (and) go.'

Note that directional markers come after the transitive marker in (4.104) and (4.105). The direct object NP of (4.104) is optional if the object is understood. In such constructions the transitive marker is still present as in (4.105).

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[21] Lichtenberk1991 correlates physical movement with time and aspect, "GO for continuative and future, COME for ingressive and future".

(4.105) *mi-to-na-wau*
 DIR-get-TR-DIR
 'Come get the (it and) go.'

It is not possible, however, to have both an object enclitic and a directional on a verb as in (4.106).

(4.106) **mi-to=nia-wau*
 DIR-get-to-3SG-DIR
 'Come get it (and) go.'

(4.107) *re-to-TR-mai   fei wa*
 DIR-get-to-DIR the canoe
 'Go get the canoe and come.'

(4.108) *wi-to-na-mai*
 DIR-get-TR-DIR
 'Go get (it and) come.'

(4.109) *mi-to-na-lao*
 DIR-get-TR-DIR
 'Come get (it and) go.'

Post-verbal markers are summarized in Table 4.5.

Table 4.5 Post verbal morphemes

function	form	section
Limiter	*-ʔua*	§4.5.3.1.1
Repetition	*-liai, -linia*	§4.5.3.1.2
Completion	*-li, liria*	§4.5.3.1.3
Transitive suffix	*-Ca*	§4.5.3.2.1
Object clitics	*=(C)au, =(C)io, =(C)ia*	§4.5.3.2.2
Directionals	*-mai, -lao, -wau, -rai*	§4.5.3.3

4.6   Chapter summary

In this chapter, it is evident that the Wuvulu verb phrase is conservative with respect to many features of POc grammar. In Chapter 5 we will continue to see that Wuvulu is a canonic, "well-behaved" Oceanic language. Yet, it is also obvious that Wuvulu has been quite innovative, especially with regard to the morphological structure of the verb.

In the introduction, the claim was made that the Wuvulu has perhaps the most complex verbal morphology documented in any Oceanic language. In the New Testament, and in the corpus of text data, it is clear that Wuvulu has an agglutinating, polysynthetic verb, with the possibility of many morphemes occurring on a given verb. To test the limits of verbal inflection a language game was played with several linguistically gifted native speakers. The speakers generated forms that were then tested for grammaticality across dozens of native speakers.

"Let's play a game!" The game was a contest to come up with the longest inflected verb that is grammatically acceptable. The longest form was built-up by adding morphemes and testing grammaticality with different groups of native speakers. It was reassuring to get "starred" expressions along the way—i.e., ungrammatical forms that were rejected. The longest grammatical form tested so far was based on the noun *aru* 'dry brown coconut'.

(4.110) *fei aru* 'the coconut'

(4.111) *ʔi=na-aru-i*
       3SG=REAL-dry.coconut-DER
       'It is (the character of a) dry coconut.'

The present writer discovered that a coconut can reach the 'dry' state by causing it to remain untouched.

(4.112) *fa-aru-i=nia*
       CAUS-dry.coconut-DER=3SG
       'Let it become a dry coconut.'

(4.113) *ro=na-fa-aru-i=nia*
       3PL=REAL-CAUS-dry.coconut-DER=3SG
       'They let it become a dry coconut.'

It was also serendipitously discovered that the process of a coconut going to the dry state (turning brown in color) is commonly used as a metaphor for allowing an adolescent person to reach maturity.

(4.114) *ro=na-fa-aru-aru-i=nia*
       3PL=REAL-CAUS-RED-dry.coconut-DER=3SG
       'They let it him become mature.'

(4.115) *ro=po-we-fa-aru-aru-i=nia*
3PL=INTS-EV-CAUS-RED-dry.coconut-DER=3SG
'They would definitely allow him to eventually become mature.'

(4.116) *ro=fi-po-we-fa-aru-aru-i=nia*
3PL=SIM-INTS-EV-CAUS-RED-dry.coconut-DER=3SG
'They were definitely in the process of allowing him to eventually become mature.'

(4.117) *ro=fi-po-we-paʔa-mina-fa-aru-aru-i=nia*
3PL=SIM-INTS-EV-INTS-totally-CAUS-RED-dry.coconut-DER=3SG
'They were definitely in the process of allowing him to eventually become totally, very mature.'

The previous iterations mostly involve testing the limits of preverbal inflection.

(4.118) *ro=fi-po-we-paʔa-mina-fa-aru-aru-i-fa-rawani=nia*
3PL=SIM-INTS-EV-INTS-totally-CAUS-RED-dry.coconut-DER-CAUS-good=3SG
'They were definitely in the process of allowing him to eventually become totally, very mature, very well.'

Ultimately, the word in (4.119) was the most complex grammatical verb generated. The group of participants was quick to reject ungrammatical forms. And, because it was a game, they were eager to disqualify one another. In other words, the forms that appear here have be verified as grammatical. Post-verbal inflection was added, and the object was removed so that the predication is intransitive. Serialization also appears to function adverbially.

(4.119)

ro=ʔei-fi-po-we-paʔa-mina-re-fa-aru-aru-i-fa-rawani-maʔa-maʔa-aʔaʔpo-i-li-na-lao
3SG=IRR=SIM=INTS-EV-INTS-totally-DIR-CAUS-RED-dry.coconut-DER-CAUS-good-RED-see-last-DER-go-TR-DIR
"They are really in the process of eventually very much, totally going to cause maturity really well, to the very end."

Although (4.119) is grammatical, there are no forms as long as this in the corpus. This is perhaps somewhat like the English where iterative embedding can go on indefinitely, constrained by practicality and the human capacity to remember a limited expression. It would not be surprising to find that other Oceanic languages can also generate extremely long verbs that are grammatical.

5 Clause structure

5.1 Introduction

Wuvulu has both verbal and verbless clauses. Verbless clauses are formed by the juxtaposition of two noun phrases as in *ia, fatu* 'he (is a) chief', where the subject and predicate are separated by a pause (indicated by a comma).

Verbal clauses are described in terms of the functional grammar model (FG) espoused in Foley & Van Valin (1984) and Van Valin & LaPolla (1997). In this model, the clause is structurally layered around a nuclear verb (depicted in Figure 5.1).

[CLAUSE [ADJUNCT] [CORE [NUCLEUS]] [ADJUNCT]]

Figure 5.1 FG layered clause

In the present analysis, the *nucleus* of a Wuvulu clause consists of a verb and its clitics and affixes (cf. Chapter 4). The clause *core* is composed of a nuclear verb and any direct or oblique arguments. *Adjuncts* occur on the periphery of the clause core and include time and location modifiers. A Wuvulu clause with a verb nucleus, two core arguments, and two adjuncts is given in (5.1).

(5.1)   *minoa,   ʔei   wawane, ro=na-paʔuru-paʔa-a   ʔei   aʔu, ʔi ʔari*
          yesterday the.PL man   3SG=REAL-cast-have-TR the.PL tuna at sea
          'Yesterday the men caught the tuna at sea.'

In terms of FG theory, the clause of (5.1) is depicted in Figure 5.2.

[CLAUSE [ADJUNCT yesterday] [CORE the men [NUCLEUS they=caught] the tuna] [ADJUNCT at sea]]

Figure 5.2 Wuvulu layered clause

Morphologically, verbal clauses can be classified into two categories: attributive clauses, that are somewhat restricted in their verbal morphology, and non-attributive clauses that can have a more complex verbal morphology.

The verb of an attributive clause is typically composed of an attributive word with realis mood marking. Color, height, weight, and other attributes can occur with take realis marking, as in *ʔi=na-poʔi* '3SG=REAL-white (it is white)'; *ro=na-weʔi* 'they=REAL-strong

(they are strong)'; *na-waiwa, iau* 'REAL-cold, I (I am cold)'. Attributive clauses are intransitive clauses in which the subject (S) is in the semantic role of undergoer (U).

Verbal clauses that are not attributives can have subjects that function in the semantic role of actor (A) or undergoer, U. The subject of transitive clauses typically serves as A and the object typically serves as U (the exception is reflexive constructions where the subject and object are co-referential). Intransitive clauses can have subjects that are A or U depending on semantics, for example, *ʔi=na-poni* '3SG=REAL-run (He ran)', versus *ʔi=na-pati* '3SG=REAL-fall (He fell)'.

The syntactic roles of subject and object are typically encoded by clitics that agree in person and number with their antecedents. There are, however, grammatical sentences that have clitics and co-referential argument NPs within the same clause. A transitive verb can take either a cross-referential object agreement clitic, or it can take a transitive marker, -C*a* followed by an obligatory object NP (where C is a thematic consonant).

As noted in Chapter 4, core syntactic arguments, S and O, can be arranged in a variety configurations with the verb, and with co-referential clitics. The interaction of verbal clitics and the syntactic constituents S, V, and O allows for the following combinations: SVO; (S)sVO; VOS; sVO(S); (O)VoS; (O)SVo; (O)sVoS; (O)SsV=o; SVo, O; sVo, O. And for imperatives, V!; Vo!; and VO!

This chapter is organized as follows: §5.1 Introduction, §5.2 Syntactic typology, §5.3 Verbless clauses, §5.4 Verbal clauses, §5.5 Interrogative clauses, §5.6 Negation, §5.7 Transitivity, §5.8 Syntactic variation, §5.9 Adjuncts, and §5.10 Chapter summary.

5.2   Syntactic typology

Wuvulu is classified as an SVO language, as are her 30 linguistic sisters in the Admiralty subgroup of Oceanic languages. Yet, the ordering of constituents is frequently VOS. This seems to be consistent with the hypothesis that constituent syntax in POc was perhaps verb-initial (LRC:86):

It is sometimes assumed that the basic clause structure of POc was SVO, on the grounds that the subject clitic/affix precedes and the object clitic/affix follows the verb in the majority of Oceanic languages. However the reconstruction of developments in the period between PMP and POc provides an explanation for the subject proclitics/prefixes and also favours a verb-initial structure, with the possibility of topicalisation of an argument or adjunct to preverbal position.

Wuvulu does, in fact, show a tendency for VOS syntax. It is also noteworthy that POc was itself classified as SVO because of the respective ordering of pre-verbal subject marking, and post-verbal object marking. Wuvulu is very much like POc in terms of both its verbal agreement marking and its propensity for the subject constituent in final position. A ditransitive clause that has no NP, has the form s=V=o; however, if a subject NP is present, the clause is likely to be encoded: s=V=o, S. In other words, even though the subject and object marking are sVo, the S constituent is post-verbal unless it is topicalized before the verb nucleus. Wuvulu morphosyntax is likely the result of diachronic subject fronting, followed by cliticization.

From a typological perspective, Wuvulu possesses the features of what Ross (2004b:500) refers to as a "canonic Oceanic language": SVO constituent order; prepositions; verbal subject proclitics; a set of mood and aspect markers that follow the subject proclitic; the absence of tense marking; a grammatical distinction between realis and irrealis mood; the use of realis to mark past, and irrealis to mark future; postverbal aspect and directional markers; a set of singular object enclitics; transitive clauses with subject as actor, and object as undergoer; and intransitive clauses with subject as actor for action verbs, and as undergoer otherwise.

5.3   Verbless clauses

Verbless clauses are constructed by the juxtaposition of two NPs with a slight pause between the NPs (indicated by a comma in the examples).

5.3.1   Predicate nominals

Predicate nominals are formed by the juxtaposition of NPs. Typically the first NP in such a predication is the subject, and the second is the predicate.

(5.2)   *ia,*   *fatu*
PRON.3SG chief
'He is a chief.'

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(5.3) *ia,   mei fatu*
       PRON.3SG the chief
       'He is the chief.'

(5.4) *roʔou,   puala*
       PRON.3PL sorcerer
       'They are sorcerers.'

(5.5) *Bara,   fatu*
       PROPN chief
       'Bara is a chief.'

(5.6) *ia,   emea*
       PRON.3SG one
       'He is one (of them).'

(5.7) *ara   laru ʔei   ramaʔa laru ʔei, Barafi ma Puleafo*
       name two the.PL person two the.PL PROPN CJ PROPN
       'The names of the two particular people are Barafi and Pudeafo.'

5.3.2   Predicate locative

A predicate locative is a verbless clause in which a topical noun precedes a
location noun.

(5.8) *ia,   Wewak*
       PRON.3SG PROPN
       'He is in Wewak.'

(5.9) *ia,   iei*
       PRON.3SG there
       'He is there.'

The location phrase can optionally include the locative preposition, *ʔi.*

(5.10) *roʔou*,   *ʔi   polu*
       PRON.3PL LOC bush
       'They are in the bush.'

5.3.3   Demonstrative subjects

Wuvulu demonstratives mark a distinction in distance, animacy, and number
(cf. Chapter 3). Demonstrative subjects are similar to nominal predications, except that
the subject of the predication is a bare demonstrative with no head noun.

This is a cross-linguistic phenomenon that Diessel (1999:79) refers to as a demonstrative predication. In (5.11), demonstrative pronouns occur as the subject of the nominal construction. The emphasis is on the subject (demonstrative), as indicated by italics in the English translation. Note that the articles *fei* 'the' (inanimate), and *mei* 'the' (animate) can also be used as subjects, as in (5.11)e.

(5.11) a. *feni, aiai* '*This* is a tree.'
       b. *mena, naʔu:* '*That* is my son.'
       c. *fena, ponoto* '*That* is a dog.'
       d. *feni, baua ponoto* '*This* is a big dog.'
       e. *fei, baua ponoto* '*It* is a big dog.'

In (5.12) the positions are switched, with the demonstrative occurring after the predicate nominal (with the emphasis on the predicate).

(5.12) a. *baua ponoto, feni* 'This is a *big dog.*'
       b. *ponoto, feni* 'This is a *dog.*'
       c. *aiai, fei* 'It is a *tree.*'
       d. *iau, meni* 'It is *I.*'

5.4 Verbal clauses

A verbal clause contains a verb in the predicate (cf. Chapter 4).

5.4.1 Existential

Existential clauses use the verb *paʔi* 'have' to denote the existence of something. The same verb is also used in stories to introduce participants. The verb takes the subject clitic *ʔi=* '3SG' as a non-referential dummy subject.

(5.13) *ma inene, ʔi=na-paʔi   efa   ʔau afelo na-no-mai*
       and later 3SG=REAL-have some time bad REAL-move-DIR
       'And later, there will be some bad times that come.'

5.4.2 Declarative

A declarative clause is a statement or assertion about something. A typical declarative has a verb marked for realis mood, although irrealis mood marking can also be used in a declarative clause.

(5.14) *ʔi=na-biri=ʔia*
       3SG=REAL-work=3SG
       'He did it.'

The declarative clause in (5.15) is marked for irrealis mood and declares that the speaker is about to do something.

(5.15) *ʔu=ʔa-biri=ʔia*
       1SG=IRR-work=3SG
       'I will do it.'

A declarative clause can also be unmarked with respect to mood marking if the verb has the aspectual marker *fi-* 'SIM' as in (5.16).

(5.16) *ʔi=fi-biri=ʔia*
       3SG=SIM-work=3SG
       'He is doing it.'

5.4.3   Imperative

True imperative clauses have no overt expression of a subject, either as an NP or subject clitic, but instead, a second person subject is always assumed. Directionals are the only morphemes that can occur preverbally in imperatives, but the full range of postverbal inflections can be used in an imperative clause.

(5.17) *mi-to=nia!*
       DIR-get=3SG
       'Come get it!'

(5.18) *Ware*!
       'Talk!'

An imperative can be transitive, or intransitive.

(5.19) *unu*!
       drink
       'Drink!'

(5.20) *re-unu=mia*!
       DIR-drink=3SG
       'Go drink it!'

5.4.4   Deontic

Deontic modality, marked by *nei-* 'must', is like imperative modality in that it is also used in commands. The differences between deontic and imperative modalities are

that imperative modality is unmarked and assumes full authority. Deontic modality, on the other hand, is marked grammatically and appeals to duty or obligation.

(5.21) *amuʔou=nei-ʔaunu*!
         2PL=DEON-go
         'You must leave!'

Another important distinction between deontic and imperative clauses is that imperatives have no overt subject, though second person is assumed. Deontic clauses specify an overt subject, and the subject is not necessarily second person. The imperative clause *poni!* 'Run!' has no overt expression of the subject, but the deontic clause *ro=nei-poni!* 'They must run!' specifies a third person subject, and marks obligation.

(5.22) *ro=nei-pono=ʔia*
         3PL=DEON-buy=3SG
         'They must buy it.'

(5.23) *ʔo=nei-aliweʔi-mai   narani*
         2SG=DEON-return-DIR tomorrow
         'You must return tomorrow.'

5.4.5   Reflexive

Reflexive constructions consist of a transitive verb followed by a phrase consisting of the word *ʔana* 'RFLX' and a pronoun. Before looking at a reflexive construction, it is helpful to review the structure of a transitive clause. The clauses in (5.24) and (5.25) show an object clitic and a direct object NP, respectively.

(5.24) *ʔi=na-talu=ia*
         3SG=REAL-bite=3SG
         'He bit it.'

(5.25) *ʔi=na-talu-a   fei nia*
         3SG=REAL-bite-TR the fish
         'He bit the fish.'

The example in (5.26) shows the typical pattern of a reflexive clause. The reflexive phrase always immediately follows a transitive verb.

(5.26) *ʔi=na-talu-a   ʔana ia*
         3SG=REAL-bite-TR RFLX PRON.3SG
         'He bit himself.'

The reflexive morpheme can also be used as an intensifier, like the English *he himself*, as in (5.27).

(5.27) *Ma tani ʔi=ʔa-poro=ʔia ʔana ia?*
CJ why 3SG=irr-lift=3SG RFLX PRON.3SG
'And why does he lift it himself?'

The object pronoun of a reflexive construction always agrees with the subject in person and number.

(5.28) *ro=na-foʔa-a ʔana roʔou*
3PL=REAL-lift-TR RFLX PRON.3PL
'They hit themselves.'

As previously noted, the reflexive also functions as an intensifier.

(5.29) *ʔua ʔana ioi, ʔo-na-waluʔai-ʔua-na lalo-na*
because RFLX PRON.2SG 2SG=REAL-enter-just-TR in-3SG
'Because you yourself, you enter into it.'

(5.30) *ʔana airua beri-fana amurua, airua*
RFLX PRON.1DU.EXCL husk-give PRON.2DU, PRON.1DU.EXCL
'We two ourselves will husk for you two.'

5.5　Interrogative clauses

Questions are constructed like statements, but are prosodically distinguished from statements. A statement has a flat intonation pattern, but a question has a sentence-final rise in intonation.

5.5.1　Polar questions

5.5.1.1　Intonation

Polar questions in Wuvulu are identical to statements, but they contrast with statements in phrasal intonation. Statements have level intonation, but polar questions have a sentence-final rise in intonation.

(5.31) *ʔi=na-paʔi wao?*
3SG=REAL-have rope
'[Does] he have rope?'

If (5.31) is spoken with level intonation, it means, 'He has rope.'

5.5.1.2 Answers to polar questions

Polar questions are typically answered with a 'yes'/'no' response. Other possible responses include *mai* 'I am uncertain', *lomi na-aila* 'NEG REAL-know ('(I do) not know')', and *ini na-ʔaila* 'who knows?'

5.5.1.3 Yes

The affirmative response to a polar question is *iʔi* 'yes',

(5.32) *ah na-paʔi   tala baluti?*
        IJ REAL-have road airplane
        'Ah, is there an airstrip?'

(5.33) *ʔi=na-ware   ba,   iʔi*
        3SG=REAL-talk COMP yes
        'He said, "Yes."'

5.5.1.4 No

The negative response to a polar question is *lomi* 'no' (or in free variation, *loʔe* 'no, not', cf. §5.6).

(5.34) *ah na-paʔi   tuʔulu*
        IJ REAL-have school
        'Ah, is there a school?'

(5.35) *na-ware   ba,   lomi*
        REAL-speak COMP no
        '(I) said, "No."'

(5.36) *na-paʔi   lotu*
        REAL-have church
        '(Is there) a church?'

(5.37) *"Loʔe."*
        'No.'

5.5.1.4.1 Negative polar questions

A polar question can be negated phrase-initially by means of the words *loʔe* 'NEG', or *lomi* 'NEG'. Negative polar questions have rising intonation at the end of the phrase.

(5.38) *lomi ro=na-no-mai*
        NEG 3PL=REAL-move-DIR
        'They did not come?'

Wuvulu is like many other Oceanic languages in that the answer to a negative yes/no question is an answer to the truth value of the whole proposition. So, a "no" answer to the question, *They did not come?* means that they did come, and a "yes" answer means they did not come.

5.5.2   Tag questions

A tag question consists of a statement, followed by a pause and the tag word, *na* 'okay?'. The intonation contour of a tag question is flat, with rising intonation on the phrase final *na* 'okay?'. The tag question is rhetorical, assuming agreement with the listener. It is equivalent to the English *okay* in "I'm going to the store, okay?".

> (5.39) *te ʔo=na-ruta,   na*
>   CJ 1SG=REAL-sit TAG
>   'So you stay, okay?'

> (5.40) *ma ʔo=nei-mina-ʔu-tau-fa-weʔi,   na*
>   and 1SG=DEON-totally-stand-hold-CAUS-strong TAG
>   'And you must hang on tightly, okay?'

A yes/no question in the language can also be followed by *o loʔe* 'or not' as in (5.41). The word *lomi* can be substituted for *loʔe* with no variation in meaning. The answer to a yes/no question is either *iʔi* 'yes' or *loʔe* 'no'. The word *lomi* 'no' can be spoken in free variation with *loʔe* 'no' as the answer to a yes/no question.

> (5.41) *amuru=na-rawani, o loʔe*
>   2DU=REAL-good   or NEG
>   'Are you two alright, or not?'

5.5.3   Content questions

The focus of this section is the syntax of content questions. It is worth noting that Wuvulu demonstrates affinity with POc in the vocabulary of questions for "when?", and "how many?".

Table 5.1 Question words

aira	'when?' (past)
naira	'when?' (future)
amaia	'where?' (animate)
afaia	'where?' (inanimate)
itani/ia	'where?'(inanimate/animate)
batanai	'how?'
fira	'how many?
tamanu	'what?'
ini	'who?'
(*ama*)*tani*	'why?'

5.5.3.1   When?

Wuvulu has two question words for 'when'—one that asks when something happened in the past, and one that asks when something will happen in the future. This distinction exists in the vocabulary POc **(q)ana- ŋican* 'when (past)?' and, POc **(ŋ,q)a-ŋican* 'when (future)?'. The Wuvulu question words *aira* 'when?' (past), and *naira* 'when?' (future), demonstrate a pattern of dyads that distinguish between past and future, based on the presence of word-initial phoneme /n/ (cf. Table 5.1).

The 'when' question can occur in sentence-initial position, or in sentence-final position. There is a slight pause between the question word and the rest of the sentence.

(5.42) *aira,   ro=na-nafa-ʔa   mena ʔola-u*
       when.PAST 3PL=REAL-spear-TR that   moms.bro-1SG
       'When did they spear my mother's brother?'

(5.43) *ro=na-nafa-ʔa   mena ʔola-u,   aira*
       3PL=REAL-spear-TR that   moms.bro-1SG when.PAST
       'When did they spear my mother's brother?'

The question word *naira* 'when?' (future) forms a dyad with *aira* 'when' (past). Like *aira* 'when (past)'*, naira* can occur in the first or last position of a sentence.

(5.44) *ma naira,   tala ʔoʔou?*
       and when.FUT road 1PL.INCL
       'And when is our journey?'

(5.45) *tala ʔoʔou,   naira?*
       road 1PL.INCL when.FUT
       'And when is our journey?'

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5.5.3.2 Where?

There are two words for 'where', *amaia,* and *itani.* The word *amaia* tends to be used with animate reference, to ask where someone is. The word is fossilized, but appears to be composed of the morphs *a* 'IJ' + *ma* 'and' + *ia* '3SG', with a literal meaning of 'and s/he?'.

The form *itani* is used with about equal frequency for animate and inanimate 'where' questions. The distinction in animacy includes people and spirits, but not other living forms such as animals, fishes, or plants. The 'where' word typically comes first and is followed by the subject with a slight pause between the two.

(5.46) *amaia, Bara*
     where PROPN
     'Where is Bara?'

The order of the where word can also appear in sentence-final position.

(5.47) *Bara, amaia*
     PROPN where
     'Where is Bara?'

(5.48) *Alo,   ma pifine Mona, itani?*
     PROPN and woman PROPN where
     'Where are Alo and the woman, Mona?'

(5.49) *itani Alo,   ma pifine Mona?*
     where PROPN and woman PROPN
     'Where are Alo and the woman, Mona?'

In constructions involving verbs, a 'where' word can also appear in an adjunct position on the left or right periphery of the clause.

(5.50) *ro=na-biri=ʔia,   itani*
     3PL= REAL-work=3SG where
     'Where did they do it?'

(5.51) *itani, ro=na-biri=ʔia*
     where 3PL= REAL-work=3SG
     'Where did they do it?'

5.5.3.3 How?

The question word *batanai* 'how?' is fossilized, but appears to be composed of the forms *ba* 'COMP', and *tani* 'why?'.

(5.52) *batanai, fei io*
  how the spear
  'How is the spear?"

(5.53) *maʔa=ia, ʔarua batanai*
  see=3SG 1DU.INCL how
  'See, how will we be?'

The meaning of *batanai* can also have the sense of the question, *How will things be then?* as in (5.54).

(5.54) *ʔena amuʔou=mina-ʔiwa-pelu,*
  DEM 2PL=totally-yell-finish

    ʔua ro=ʔa-baʔarofo, ma batanai?
    because 3PL=IRR-surprise and how

  'When you totally finish screaming,
    because they will be surprised, and (so) how will they be?'

(5.55) *batanai, fei biri-ʔa-na*
  how the work-DER-3SG
  'How does it work?'

5.5.3.4 What?

The 'what?' question word can function as syntactic subject or object. In (5.56) *tamanu* 'what' functions as the subject of a transitive verb.

(5.56) *tamanu na-fa-afelo-a fei umu*
  what REAL-CAUS-bad-TR the house
  'What damaged the house?'

In (5.57) *tamanu* 'what' serves as the syntactic object argument of a transitive verb *biri* 'work, do'.

(5.57) *ma mei Aua mei, fi-biri-ʔa tamanu*
  and the.ANIM PROPN the.ANIM, SIM-do-TR what
  'And as for this particular Aua person, what is he doing?'

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In (5.58) 'what?' is topicalized in sentence-initial position, and is co-referential with the object clitic =ʔia.

(5.58) *tamanu, ro=na-biri=ʔia*
         what   3PL=REAL-work=3SG
         'What did they do?'

In (5.59) 'what?' occurs in a possessive construction with the locative part noun *ʔaʔa* 'with'.

(5.59) *ro=na-fa-wane-wane=ia   ʔaʔa tamanu*
         3PL=REAL-CAUS-RED-straight=3SG with what
         'What did they straighten it with?'

5.5.3.5 Why?

The 'why?' question word, *tani*, always comes sentence-initial. An alternate form of *tani* 'why' is *amatani* which is possibly a fossilized form of
a 'IJ' + *ma* 'and' + *tani* 'why'.

(5.60) *amatani Barafi ʔi=poʔo-luri-li-na   ʔei   ramaʔa*
         why   PROPN 3SG-INTS-gather-REP-TR the.pl person
         'Why [does] Barafi again gather the people?'

(5.61) *na-mina   ruta-ʔiʔiri-na mei aro-na   ba, "Tani? ʔei maʔa-mu?*
         REAL-totally sit-ask-TR   the spouse-3SG COMP why the.PL see-2SG
         'Her spouse sat and sat and asked, "Why? What is your perspective?"'

5.5.3.6 Who?

The question word *ini* 'who?' can function syntactically as the subject of nominal and verbal clauses, or it can serve as the object of a transitive verb or preposition. In (5.62) and (5.63) *ini* 'who' functions syntactically as the subject both initial and final positions.

(5.62) *ini   ara-mu*
         who name-2SG
         'What (lit. who) is your name?'

(5.63) *ioi,   ini*
         PRON.2SG who
         'Who are you?'

In (5.64) *ini* 'who' functions as syntactic subject.

(5.64) *ini   na-ware-fani=o?*
      who REAL-talk-give=2SG
      'Who told you?'

In (5.65) *ini* 'who' functions as syntactic object.

(5.65) *ro=na-ware-fana-a   ini?*
      3PL=REAL-talk-give-TR who
      'Whom did they tell?'

In (5.66) *ini* 'who' functions as the object of a preposition (locative part noun).

(5.66) *ro=na-ware-ware   ʔaʔa ini?*
      3PL=REAL-RED-talk with who
      'They talked with whom?'

5.5.3.7   How many?

The question word *fira* 'how many' can serve as syntactic subject, or syntactic object. The Wuvulu word for 'how many?' is etymologically related to POc *pica(n) 'how many?'. In (5.67) the word *fira* 'how many' serves adjectivally to modify the NP *ramaʔa* 'person'.

(5.67) *fira   ramaʔa na-waluʔai-mai*
      how.many person   REAL-enter-DIR
      'How many people entered?'

In (5.68) the subject is implicitly understood and *fira* stands alone, functioning as syntactic subject.

(5.68) *fira   na-waluʔai-mai*
      how.many REAL-move-DIR
      'How many entered?'

In (5.69) *fira* functions as the syntactic subject of a transitive clause.

(5.69) *fira   na-foʔa=ia*
      how.many REAL-hit=3SG
      'How many hit him?'

In (5.70) *fira* functions to modify the syntactic object of a transitive clause. Note that the modified head noun *pigeon* can be omitted if understood from context.

(5.70) *ro=na-fanunu-a   fira   palu*
         3PL-=REAL-see-TR how.many pigeon
         'How many pigeons did they see?'

In (5.71) *fira* functions as the object of a nominal construction, whose subject is a complex NP.

(5.71) *fira   ʔei   ware-a-u   ba   amuʔo=nei-poʔo-no-ruta*
         how.many the.PL talk-DER-1SG COMP 2PL=DEON-INTS-move-sit
         'How many times have I said that you must really go and stay?'
         (literally, 'how many were my words that …')

The word *fira* can also be glossed 'how much' and can be used with mass nouns such as water, sand, and oil.

(5.72) *fira   ranu*
         how.many water
         'How much water?'

5.6   Negation

Negative clauses in Wuvulu are indicated by the words *lomi* 'NEG' and *loʔe* 'NEG', which freely vary with one another. Other negators include *ʔaʔa* 'NEG', and *ʔaba*, which is a contraction of *ʔaʔa* 'NEG', and the complementizer, *ba.* Commonly used negative words include the prohibitive form *ʔapuna* 'do not' (taboo), and *aria* 'on the contrary'.

5.6.1   Verbal constructions

In negative verbal predications *lomi/loʔe* 'NEG' occurs directly before the verb.

(5.73) *lomi laru=na-fi-foʔa-i*
         NEG 3DU=REAL-RECIP-hit-RECIP
         'The two did not fight.'

(5.74) *loʔe laru=na-fi-foʔa-i*
         NEG 3DU=REAL-RECIP-hit-RECIP
         'The two did not fight.'

Note that in the following examples, the scope of negation is affected with the transposition of the negator and adjunct in (5.75) and (5.76), resulting in a significant difference in meaning.

(5.75) *minoa,   lomi laru=na-fi-foʔa-i*
         yesterday NEG 3DU=REAL-RECIP-hit-RECIP
         'Yesterday, the two did not fight.'

(5.76) *lomi minoa   laru=na-fi-foʔa-i*
NEG yesterday 3DU=REAL-RECIP-hit-RECIP
'(It was) not yesterday, (that) the two fought.'

5.6.2   Nominal constructions

In (5.77) *lomi* 'NEG' modifies a nominal clause. Note that *fi-foʔa-i-a* is a derived noun (from the root *foʔa* 'hit' > *fi-foʔa-i* 'verb, fighting (reciprocal)' > *fi-foʔa-i-a* 'noun, fighting'.

(5.77) *lomi fi-foʔa-i-a.*
NEG RECIP-hit-RECIP-DER
'(There is) no fighting.'

In (5.78), the negative word *lomi* forms a nominal predication with an animate indefinite article *emea* 'a (animate)'.

(5.78) *lomi emea*
NEG one.ANIM
'(There is) not one (person).'

Example (5.79) is like the previous example with the exception that the inanimate indefinite article is used.

(5.79) *lomi epalo*
NEG one.INAN
'(There is) not one (thing).'

(5.80) *lomi maʔila*
NEG few
'(There is) not (even) a little.'

The intensifier *paʔa* is often collocated with one of the negators *lomi*, or *loʔe*. In (5.81), the negator (*lomi*) occurs immediately before the subject (*emea roʔou* 'one (of) them').

(5.81) *paʔa lomi emea roʔou na-ʔu-tau=ia.*
very NEG one them REAL-stand-take.leaf=3SG
'There definitely was not one of them who stood and took the leaf.'

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5.6.3 Complements

The word *ʔaba* 'not that' is a contraction of *ʔaʔa ba* 'not that'. The contracted word *ʔaba* is used more frequently than the phrasal form, but both take a clause complement.

(5.82) *minoa   ʔaʔa ba   laru=na-fi-foʔa-i*
　　　 yesterday NEG COMP 3DU=REAL-RECIP-hit-RECIP
　　　 'Yesterday the two did not fight.'

The more common negators *loʔe* and *lomi* can also be used with a complement, but they are not as frequent as *ʔaʔa ba* (or *ʔaba*).

(5.83) *loʔe ba   ʔo=ʔa-li-foʔa-fa-maʔe-a   emea ramaʔa*
　　　 NEG COMP 2SG=IRR-go-hit-CAUS-die-TR ART   person
　　　 'You should not go kill a person.'

5.6.4 Locatives

Locative words in the language can be negated with *lomi*/*loʔe* 'NEG' in a nominal predication in which there is no copula.

(5.84) *lomi ieni*
　　　 NEG here
　　　 '(It is) not here.'

A locative preposition, *ʔi*, can optionally occur immediately before the locative word or phrase in the expression of a negated locative.

(5.85) *ia,   lomi ʔi   wiweʔe*
　　　 PRON.3SG NEG LOC PROPN
　　　 'He is not there in Wewak.'

5.6.5 Prohibition

The word *ʔapuna* 'forbidden, taboo' is etymologically related to POc **tabu* 'forbidden, taboo'. The word is typically used in an imperative form where a second person subject is assumed and the verb is unmarked with respect to aspect/mood.

(5.86) *ʔapuna biri=ʔia*
　　　 do.not   work=3SG
　　　 'Do not do it!'

5.7   Transitivity

5.7.1   Intransitive clauses

Clauses with intransitive verbs take at most a single NP argument that serves as syntactic subject (except for imperative clauses, where there is no overt expression of subject). As mentioned previously, a typical clause in Wuvulu has no overt NP. The subject of an intransitive clause can be an NP or a subject proclitic. In (5.87) the subject NP is the first person singular pronoun, *iau* 'I'.

    (5.87) *na-ruta-faloloʔaʔi, iau*
         REAL-sit-sorry   PRON.1SG
         'I was sorry (literally, 'I sat sorry').'

Alternatively, as shown in (5.88) and (5.89), respectively, an intransitive clause can take a subject proclitic in the absence of an overt NP antecedent, or it can have both a subject proclitic and an overt NP antecedent. (The word *faloloʔaʔi* 'sorry' is a fossilized form of the morphemes *fa-* 'causative' and *loloʔaʔi* 'sink'.

    (5.88) *ʔu=na-ruta-faloloʔaʔi*
         1SG=REAL-sit-sorry
         'I was sorry.'

    (5.89) *ʔu=na-ruta-faloloʔaʔi, iau*
         1SG=REAL-sit-sorry   PRON.1SG
         'I was sorry.'

Stative predications are another type of intransitive clause (cf. Chapter 4). In (5.90), the verb *na-arara* 'REAL-black' serves as the predicate, and 'this skin of my body' serves as an NP subject.

    (5.90) *na-paʔi   ʔobao pine-u ma feni uli ʔunu-u   na-arara*
         REAL-have four   leg-1SG and this skin body-1SG REAL-black
         'I have four legs and the skin of my body is black.'

In (5.91) the predication *naʔilaʔila* 'is spotted' is modified by *niu alo* 'yellow'. In this case, the subject is an embedded possessive NP, where 'my body' is possessor and 'this skin' is possessed.

    (5.91) *na-ʔila-ʔila   niu   alo feni uli ʔunu-u*
         REAL-RED-spot coconut sun this skin body-1SG
         'This skin of my body is spotted yellow.'

5.7.2   Transitive clauses

The syntax of the transitive clause in (5.92) is SVO. The verb has a transitive suffix, and an NP direct object, *his food*. The subject NP, Barafi is cross-referenced on the verb by the third person singular clitic *ʔi=*.

(5.92) *eai arewa Barafi ʔi=na-biri-ʔa   ʔei   ana-na*
         one day   PROPN 3SG=REAL-work-TR the.PL food-3SG
         'One day Barafi prepared his food.'

(5.93) *ro=na-timi-na   ʔei   muro*
         3PL=REAL-throw-TR the.PL stone
         'They threw the stones.'

As noted in Chapter 4, verbs of motion can take the transitive suffix, *–na,* followed by a location that functions as the object of the verb. In (5.94), the verb *go* takes the transitive marker, *-na,* and is immediately followed by the location NP, *Port Moresby*.

(5.94) *ro=na-li-na   Port Moresby*
         3PL=REAL-go-TR PROPN
         'They went to Port Moresby.'

5.7.3   Ditransitive clauses

Ditransitive verbs in the language include *fani* 'give' (POc *pani), *ʔalo* 'send', and more recently, the borrowed word *imel* 'email'. Ditransitive verbs subcategorize for a subject, object, and recipient. Subject and object are typically expressed overtly as NPs (or as agreement markers (§5.7.2)). A recipient can be specified as the object of a prepositional phrase, or as an enclitic that has been promoted from the clause core. A third strategy that Wuvulu uses to express a recipient argument is the use of a possessive form, where the possessor is the recipient and the possessed is a direct object NP.

5.7.3.1   Prepositional phrases

Wuvulu fits the profile of an Oceanic language in that it uses "prepositional phrases" to express an indirect object of the verb 'give' (as noted, words that are semantically like prepositions actually function as nouns in the language). In particular, the locative part noun *ʔaʔa* 'with, to' is used to mark the recipient argument.

When a prepositional phrase is used to specify the recipient of the verb *fani* 'give', the direct object comes immediately after the verb, and is followed by a preposition (locative part noun) whose object is the recipient.

(5.95) *laru=na-fana-a   fei   apara   ʔaʔa mei   ramaʔa*
       3DU=REAL-give-TR the.INAN fishing.pole to   the.ANIM person
       'They gave the fishing pole to the person.'

Recall that in Wuvulu, preposition-like locative part nouns can be inflected for singular possessive suffixes.

(5.96) *laru=na-fana-a   fei   apara   ʔaʔa-u*
       3DU=REAL-give-TR the.INAN fishing.pole to-1SG
       'They gave the fishing pole to me.'

(5.97) *laru=na-fana-a   fei   apara   ʔaʔa-na*
       3DU=REAL-give-TR the.INAN fishing.pole to-3SG
       'They gave the fishing pole to him.'

Note that the verb *fani* 'give' loses its final vowel for either a transitive marker, *-a,* or an object enclitic (promotion).

5.7.3.2   Promotion of recipient

A recipient can be promoted from the clause core into the clause nucleus as an object clitic, with the direct object demoted to a NP.

(5.98) *ro=na-fani-u   fei   apara*
       3PL=REAL-give=1SG the.INAN fishing.pole
       'They gave me the fishing pole.'

(5.99) *ro=na-fani=o   fei   apara*
       3PL=REAL-give=2SG the.INAN fishing.pole
       'They gave you the fishing pole.'

(5.100) *ro=na-fani=a   fei   apara*
       3PL=REAL-give=3SG the.INAN fishing.pole
       'They gave him the fishing pole.'

A second form of promotion is that a recipient can be promoted syntactically into a position immediately following a verb with a transitive suffix. The direct object appears as an NP immediately after the promoted recipient.

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(5.101) *laru=na-fani-a   emea ramaʔa fei   apara*
　　　　3DU=REAL-give-TR ART   person the.INAN fishing.pole
　　　　'They gave a person the fishing pole.'

(5.102) *ʔi=na-fani-a   mei   lofu-na   fei apara*
　　　　3SG=REAL-give-TR the.ANIM brother-3SG fishing.pole
　　　　'He gave his brother the fishing pole.'

5.7.3.3 Possessive constructions

In addition to promotion, Wuvulu ditransitive clauses can exploit one of the possession strategies in order to specify a direct object and a recipient. Recall that possession can be expressed by the juxtaposition of NPs, or by an direct possessor suffix (Chapter 3).

5.7.3.3.1 NP juxtaposition

Recall that when possession is indicated by juxtaposed NPs, the syntax is possessed NP, followed by possessor NP.

(5.103) *umu   roʔou*
　　　　house PRON.3PL
　　　　'(That is) their house.'

This same structure serves to indicate the direct and indirect object arguments of a ditransitive clause, where the first NP (possessed) correlates with the direct object, and the second NP (possessor) correlates with the recipient.

(5.104) *ro=na-fani   umu   amuʔou*
　　　　3PL=REAL-give house PRON.2PL
　　　　'They gave (your) house (to) you.'

This strategy can also be used with non-pronominal recipients, such as a proper nouns.

(5.105) *ʔi=we-alo   pono-ʔa Bo*
　　　　3SG=EV-give pay-DER PROPN
　　　　'He will send money to Bo.' (Literally, "He will send Bo's money.")

(5.106) *laru=na-fani   ana   roʔolu*
　　　　3DU=REAL-give food PRON.3PL
　　　　'They gave food to them.'

(5.107) *laru=na-fani   ape   roʔolu,   ponoto*
　　　　3DU=REAL-give possession PRON.3PL dog
　　　　'They gave a dog to them.'

5.7.3.3.2 Possessor suffixes

Ditransitive constructions can also indicate direct and indirect objects by means of singular possessor suffixes.

(5.108) *ro=na-fani   ana-u*
      3PL=REAL-give food-1SG
      'They gave me food.' (Literally, 'They gave my food.')

(5.109) *Ɂi=na fani   unu-mu*
      3SG=REAL-give drink-2SG
      'He gave you drink.'

(5.110) *laru=na fani   ape-na*
      3DU=REAL-give possession-3SG
      'They gave the possession to her.'

5.8   Syntactic variation

This section considers the syntactic variation of Wuvulu clauses in terms of the combination of S, V, O, s=, and =o, where S and O are NPs, and s=, and =o are clitics. Mathematically, there are six possible permutations of the three major constituents: SVO, SOV, VSO, VOS, OSV, and OVS. But as shown in Table 5.2, only four possibilities are valid in Wuvulu: SVO, OVS, OSV, and VOS. When these four occur in combination with verbal agreement markers, a symmetry emerges, with four combinations of VO syntax, and four combinations of OV syntax.

Table 5.2 Morphosyntactic configurations with S, V, and O

clitics	V-medial		V-final		V-initial	
Ø	SVO	*OVS	*SOV	*OSV	*VSO	VOS
only s=	SsVO	*OsVS	*SOsV	*OSsV	*sVSO	sVOS
only =o	*SVoO	OVoS	*SOVo	OSVo	*VoSO	*VoOS
both s= & =o	*SsVoO	OsVoS	*SOsVo	OSsVo	*sVoSO	*sVoOS

5.8.1   VO configurations

Each of the examples of this section are in VO order.

(5.111)   SVO
      Ɂei   raɁo na-talu-a   fei   paiwa
      the.PL whale REAL-bite-TR the.INAN shark
      'The whales bit the shark.'

(5.112) S, sVO
ʔei raʔo, ro=na-talu-a fei paiwa
the.PL whale 3PL=REAL-bite-TR the.INAN shark
'As for the whales, they bit the shark.'

(5.113) VOS
na-talu-a fei paiwa, ʔei raʔo
REAL-bite-TR the.INAN shark the.PL whale
 'The whales bit the shark '

(5.114) sVO, S
ro=na-talu-a fei paiwa, ʔei raʔo
3PL=REAL-bite-TR the.INAN shark the.PL whale
 'The whales bit the shark.'

5.8.2 OV configurations

Each of the examples of this section are in OV order.

(5.115) O, VoS
fei paiwa, na-talu=ia ʔei raʔo
the.INAN shark REAL-bite=3SG the.PL whale
'As for the shark, the whales bit it.'

(5.116) O, SVo
fei paiwa, ʔei raʔo na-talu=ia
the.INAN shark the.PL whale REAL-bite=3SG
'As for the shark, the whales bit it.'

(5.117) O, sVo, S
fei paiwa, ro=na-talu=ia, ʔei raʔo
the.SG shark 3PL=REAL-bite=3SG the.PL whale
'As for the shark, they bit it—the whales.'

(5.118) O,S, sVo
fei paiwa, ʔei raʔo, ro=na-talu=ia
the.INAN shark ART.PL whale 3PL=REAL-bite=3SG
 'As for the shark, the whales—they bit it.'

Table 5.3 shows that there are four valid syntactic combinations that include object agreement, all of which are OV, and there are four combinations that include subject agreement, two of which are S-final.

Table 5.3 Allowable morphosyntactic configurations

VO		OV	
SVO	VOS	OVoS	OSVo
SsVO	sVOS	OsVoS	OSsVo

In cases where there is both an argument and a co-referential agreement clitic, the general semantic of the clause remains the same, even if the argument is omitted (with the possible exception of focus/topic constructions).

5.9 Adjuncts

The literature of Oceanic linguistics uses the terms "non-core arguments", and "peripheral arguments" interchangeably (LRC:87). In the present analysis, arguments are by definition in the clause core, and adjuncts occur in the clause periphery. Time and location adjuncts can occur before or after the clause core. Adverbial manner phrases, on the other hand, occur after the clause core, but before a time or location adjunct (if present).

5.9.1 Manner

Manner adverbials occur only after the clause core, and can be followed by a time or location adjunct. The morphology of manner adverbials provides added evidence for drawing a distinction between manner adverbials and time/location adverbials.

There are two kinds of manner adverbials—those that take the causative, *fa-* 'CAUS', and those that do not. Prosodically, adverbials derived by the causative are considered to be part of the verb nucleus in that they follow the word stress rules of the verb, with no phonetic separation between the verb and the modifier.

(5.119) *ʔi=na-poni-fa-rawani*
　　　　3SG=REAL-run-CAUS-good
　　　　'He ran well.'

Note that adverbials that take the causative cannot modify the verb without the causative.

(5.120) **ʔi=na-poni rawani*

(5.121) *laru=na-biri-fa-weʔi*
　　　　3DU=REAL-work-CAUS-strong
　　　　'They worked hard.'

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(5.122) *laru=na-biri weʔi

There is also a set of adverbials that do not take the causative. These adverbials immediately follow the clause nucleus.

(5.123) ʔi=na-poni   maluare
        3SG=REAL-run quick
        'He ran quickly.'

Note that adverbials that modify the verb without a causative cannot take a causative.

(5.124) *ʔi=na-poni-fa-maluare

(5.125) ʔi=na-ruta   wiwiwili
        3SG=REAL-sit happy
        'He sat happily.'

(5.126) *ʔi=na-ruta-fa-wiwiwili

In addition to the syntactic constraints on manner adverbials, there is also morphological evidence that manner adverbials are distinct from time/location adverbials. In (5.123) *maluare* 'quick' is phonologically distinct from the verb and seems to operate as an adjunct to the core. But unlike time and location adverbials, manner adverbials that do not take the causative can be incorporated into the nucleus by means of derivation.

(5.127) ro=na-biri-maluare-i=nia
        3PL=REAL-work-quick-DER=3SG
        'They worked it quickly.'

(5.128) ro=na-biri   batafa
        3PL=REAL-work fast
        'They worked fast.'

(5.129) ro=na-biri-batafa-i=nia
        3SG=REAL-fast-DER=3SG
        'They worked it fast.'

Dik's model of functional grammar distinguishes between manner adverbials and time/location adverbials (1997a:50). In this model, a *core predication* is a nuclear predication that is qualified by a manner adverbial. The model also distinguishes an *extended predication* as a core predication that is located in time and space. From a

morphological perspective it is clear that manner adverbs have a tighter relationship with the verb nucleus than do time and location adverbials.

5.9.2   Time

Time adverbials can occur in the adjunct positions of clause (cf. §5.1). The time adjunct *one day* in (5.130) is clause-initial.

(5.130) *e-ai   arewa   Barafi na-biri-ʔa   ʔei   ana-na*
CLASS one day   PROPN REAL-work-TR the.PL food-3SG
'One day Barafi prepared his food.'

In (5.131) the time adverbial, *yesterday afternoon*, occurs in the post-clause periphery.

(5.131) *mei nanao na-pono-ʔa   fei ape-na   ponoto fafi   minoa.*
the girl   REAL-buy-TR the possession-3SG dog   afternoon yesterday.
'The young lady bought her dog yesterday afternoon.'

(5.132) *fafi   warieni ʔa-ware-fani=o   feni ʔuʔura Turafua.*
Afternoon today   IRR-talk-give=2SG this story   PROPN
'This afternoon will tell you this story of Turafua.'

The word *wariʔeni* 'today' is a fossilized form composed of the morphemes *wari* 'regarding', and *ʔeni* 'now'. So, *wariʔeni* 'today' literally means 'regarding now'. Table 5.4 provides a list of time adverbials. Note that time words typically occur as clausal adjuncts.

Table 5.4 Time adverbials

aipoilao	'two or more days before yesterday'
aipoi	'day before yesterday'
minoa	'yesterday'
wariʔeni	'today'
narani	'tomorrow'
namafuo	'day after tomorrow'
naʔauru	'two days after tomorrow'
naʔaurulao	'more than two days after tomorrow'
ʔeʔeni ʔua	'just now' (literally, 'here just')
ʔana ʔeni ʔua	'at this very moment'
ʔana ʔei ua	'at that moment' (literally, 'too then just')
mina	'in the past, once upon a time'
lomi ʔi peluto	'never ending'
inene	'before' (cf. Table 5.5)
nene	'after' (cf. Table 5.5)

Wuvulu also has a set of polar time dyads that distinguish between past and future according to the presence of word-initial /n/.

Table 5.5 Time dyads

vowel-initial	PAST	*n*-initial	FUTURE
inene	'before'	*nene*	'after'
emea	'a (person)'	*nemea*	'a person'
eai	'one (thing)'	*neai*	'one thing'
efarani	'sometime'	*nefarani*	'sometime'
aira	'when?'	*naira*	'when?'

Adverbials that are related to frequency pattern syntactically with time adverbials, including *efarani* 'sometime (past)', *nefarani* 'sometime (future)', *ranimai* 'always', *epepalo arewa* 'each day', and *mina ei arewa* 'all days, every day'.

(5.133) *efarani, ʔama-u ma ʔina-u, laru=na-fa-rawani=au*
sometime father-1SG and mother-1SG 3DU=REAL-CAUS-good=1SG
'Sometimes my father and mother, they would treat me well.'

(5.134) *ranimai, ʔo=ʔaunu-na ʔari*
always 2SG=go-TR sea
'You always go to the sea.'

5.9.3 Location

Locative adjuncts can be clause-initial or clause-final. In (5.135) the sentence-initial phrase *iei fawelei rufu* 'there in the vicinity of the village'.

(5.135) *iei fawelei rufu, ʔi=na-ware-fana=u.*
there adjacent village 3SG=REAL-talk-give=1SG
'There in the vicinity of (the) village she told me.'

In (5.136) the same location adjunct phrase from (5.135) is in the sentence-final position.

(5.136) *ʔi=na-ware-fana=u iei fawelei rufu*
3SG=REAL-talk-give=1SG there vicinity village
'She told me there in the vicinity of (the) village.'

In example (5.137), a time adjunct is sentence initial. Time adjuncts can also occur in the sentence-final position.

(5.137) *minoa   ro=na-ruta-fa-malu   ʔi umu mei   fatu*
       yesterday 3PL=REAL-sit-CAUS-quiet LOC house the.ANIM chief
       'Yesterday they sat silently at the house of the chief.'

5.9.3.1 Locative part nouns

A locative part noun is optionally preceded by a locative marker, *ʔi*.

(5.138) *fei ponoto na-ruta ʔi   pafo wa*
       the dog   REAL-sit LOC above canoe
       'The dog sat on the canoe.'

A locative part noun serving as a location adjunct can occur in the initial or final position of a sentence.

(5.139) *ʔi   pafo-na ro=na-ʔau-ra   ʔei upu*
       LOC on-3SG 3PL=REAL-put-TR the coconuts
       'They put the coconuts on top of it.'

The locative preposition *ʔi* is optional.

(5.140) *fei wa   na-paʔi   ʔei upu   lalo-na*
       the canoe REAL-have the coconut inside-3SG
       'The canoe has the coconuts in it.'

5.9.3.2 Demonstrative forms

The words for *here* and *there* in the language are expressed by the forms *iei/ieni/iena* 'there/here/there'. These forms appear to be composed of the locative preposition, *ʔi* (from POc **i*), that has fused with the demonstrative morphemes *ʔeni* (proximal), *ʔei* (neutral—considered and article), and *ʔena* (distal). As is the case with temporal demonstratives, there is a contrast between the non-proximal forms *iena* 'there' and *iei* 'there'. The difference is that *iei* 'there' specifies a location without information about relative distance.

(5.141) *ʔi=na-ʔau=ria   ieni*
       3SG=REAL-put=3SG here
       'He put it here.'

(5.142) *ro=nei-ʔule   iena*
       3PL-DEON-stay there
       'They must stay there.'

(5.143) *e-ai   ʔarewa Barafi na-biri-ʔa   ʔei   ana-na*
　　　　class-one day   PROPN REAL-work-TR the.PL food-3SG
　　　　'One day Barafi prepared his food.'

(5.144) *ʔi=na-ware-fana-u   iei   fawelei rufu*
　　　　3SG=REAL-talk-give=1SG there area   village
　　　　'She told me there, near the village.'

5.10   Chapter summary

Typologically, although Wuvulu is an SVO language, it is reasonable to consider that the syntax of major consituents may have originated from a VOS ordering which diachronically fronted and cliticized the subject constituent. In the investigation of constituent order patterns it is clear that Wuvulu is a head-initial, VO language with a fair amount of flexibility in the syntactic order of subject and object arguments.

A Wuvulu clause is characteristically Oceanic in its morphosyntax, where a typical clause has no overt subject or object NP, and where reference to syntactic constituents is made by means of co-referential subject and object clitics. The present analysis, subject and object clitics are considered to be in the clause nucleus, and arguments (syntactic and oblique) are outside the nucleus, but inside the core ,ayer.

In the functional grammar analysis of Foley & Van Valin (1984), arguments are included in the clause core, and adjuncts to the core occur in a peripheral layer. Dik (1997a/b) introduces an additional layer between the clause core its and adjuncts, called the *extended core*, which encompasses manner adverbials. This additional layer of analysis seems to be appropriate for Wuvulu on the basis of morphosyntactic properties of manner adverbials.

6   Complex constructions

6.1   Introduction

This chapter investigates complex constructions and serial verb constructions. "Complex construction" here refers to sentences with multiple clauses. The features of complex constructions in Wuvulu are examined in light of what LRC (53) refers to as "complex sentences".

> Oceanic languages generally do not have especially complicated systems of overt marking of subordination, and subordinate markers often perform other functions in these languages. Relative clause markers, for example, are often similar or identical in shape to demonstratives, and reason clauses are often expressed by means of a causal preposition. There is often a single subordinator that expresses a wide range of subordinating functions. It is not uncommon for clauses to be simply juxtaposed without any linking morphemes at all. The structural relationship between clauses may be shown instead by interdependence in inflectional marking between main and subordinate clauses, with the range of categories that are expressed in subordinate clauses typically being a subset of those encountered in main clauses. Conjoined sentences are generally linked by a small set of conjunctions. There is wide spread use of a lexical verb meaning 'say' marking subordinate clauses to verbs of location or perception.

The features of complex constructions in Wuvulu fit well with what is expected for Oceanic languages. Conjunction is used for addition, alternation, and contrast. Subordination is expressed by a variety of means, including mood marking of juxtaposed main and subordinate clauses. The complementizer, *ba* 'COMP' (POc *ba), introduces complement clauses. The complementizer is also used to signal intent, or an imminent action, as in *ba ʔu=ʔa-ʔaunu-na rufu* 'COMP 1SG=IRR-go-TR village' (I'm about to go to the village). Wuvulu also has a variety of morphemes that signal logical relationships between clauses, such as *or, if, this,* and *because*.

The approach of the chapter is to look at complex constructions in light of POc features. Features of complex constructions in POc have been discussed by LRC, and Moyse-Faurie & Lynch, 2004 (M-F & L). The latter provides an excellent typology of coordination in Oceanic languages, but is admittedly, "focused heavily on Southern Melanesian and Polynesian languages, and has examined rather less data from other Oceanic subgroups" (M-F & L, 482). The present chapter seeks to widen the scope of the examination by contributing data from an area of the Oceanic subgroup for which there has been negligible linguistic documentation.

Chapter topics are presented in the following order: §6.1 Introduction, §6.2 Conjunction, §6.3 Subordination, §6.4 Serial verb constructions, §6.5 Recursion, and §6.6 Summary.

6.2 Conjunction

Wuvulu has clausal conjunctions for coordination, alternation, and contrast. The coordinating conjunction in Wuvulu *ma* 'and' is nearly ubiquitous in Oceanic languages (from POc **ma* 'and'). The conjunction *ʔo* 'or' is used for alternation, and the subordinating conjunction *maʔua* 'but' expresses contrast between clauses.

6.2.1 Coordination

Typologically, Oceanic languages can be characterized by whether they use multiple coordinators for various functions or a single coordinator that "deals with a whole constellation of values, translated, according to the language" (M-F & L:447). Coordinating morphemes in many Oceanic languages "appear to cover other related semantic notions, all clustering around an 'additive' perspective" (ibid.). These functions include coordination of numerals, NPs, VPs, clauses, and sentences. Wuvulu uses just one coordinator for these functions, *ma* 'and'.

6.2.1.1 Numbers

The coordinating conjunction *ma* 'and' is used in the formation of numbers, for example *seven* (6+1) and *nine* (8+1), because they involve the addition (conjunction) of *epalo* 'one'. The coordinator is also used for the conjunction of numbers in the tens place and units place (cf. Chapter 3).

6.2.1.2 NPs

Although NP coordination was discussed in Chapter 3, it is mentioned here again in the context of M-F & L's typology. It should be noted that Wuvulu does not distinguish between how semantically tight or loose conjuncts are to one another, nor does it distinguish between the conjunction of two common nouns, and the conjunction of two proper nouns.

(6.1) *ara   laru   ʔei   ramaʔa Barafi ma Pudeafo*
       name PRON.3DU the.PL person PROPN and PROPN
       'The names of the two people are Barafi and Pudeafo.'

6.2.1.3 VPs

The coordinator *ma* 'and' is used to conjoin VPs. The distinction between VP coordination and clause coordination is made based upon whether the VPs share a subject and/or TAM marking. In (6.2) *Barafi* 'PROPN' serves as syntactic subject of the first VP, 'get-carry-return the stone'. The second VP, 'put-return it again' has no overt expression of subject (i.e., the 3SG subject clitic *ʔi=* is absent), but shares the subject of the first VP, so this is considered an example of VP coordination.

(6.2)   *tiʔei,   Barafi na-to-po-aliweʔi-na   fei muro*
        therefore PROPN real-get carry-return-TR the stone

        ma na-ʔau-aliweʔi-li=nia   ʔi   lalo fei tuta.
        and REAL-put-return-REP=3SG LOC in   the taro.garden

'Therefore, Barafi, carried the stone back, and returned it into the taro garden'

In (6.3) there are three conjoined VPs. The first of the VPs is marked for subject agreement and deontic mood. The other two VPs have no overt subject or mood marking, but share the subject and TAM marking of the first VP, i.e., the second person subject clitic *ʔo=* '2SG' and the mood marker *nei-* 'DEON' operate on all three VPs. An interesting feature of this example is that the third VP, 'give-see' is transitive and takes the second person object clitic, *=io* '2SG' implying a reflexive semantic. The first two VPs are intransitive.

(6.3) *ʔo=nei-talai   ma   mamaʔau ma fani-maʔa=io*
       2SG=DEON-walk and fear   and give-see=2SG
       'Your must walk about, and fear, and watch yourself.'

6.2.1.4 Clauses

In (6.4) the singular proper noun, *Baule,* is the syntactic subject of the first clause 'finally thinking'. The second clause has a different subject, marked by the third person plural clitic *ro=* '3PL'. There is a switch of subjects from *Baule* 'PROPN' in the first clause which is conjoined by *ma* 'and', to the second clause which has a different subject, the 3PL clitic, *ro=*.

(6.4)　*ma Baule   nawe-nara-nara*
　　　　and PROPN finally-RED-think

　　　　　　ma ro=na-aliweʔai-li-na　　paʔulu, fa-lafe-li-na　　　paʔulu
　　　　　　and 3PL=REAL-return-go-TR above   CAUS-drift-go-TR above

　　　'And Baule was finally thinking,
　　　　　and they returned above, caused to drift above.'

6.2.1.5 Discourse

　　　The coordinator *ma* 'and' is commonly used in the initial position of a sentence to move the storyline forward. One of the prosodic indications of sentence conjunction of this type is a sentence-final drop in the intonation of the preceding sentence, followed by a pause. This prosodic pattern distinguishes discourse coordination from clause coordination within a sentence (§6.2.1.4).

　　　Additional potential signals of possible sentence conjunction are a change of subject or a switch in location. The sentence of (6.5) occurs in the introductory section of a famous narrative.

(6.5)　*e-ʔai　　ʔarewa Barafi ʔi=na-biri-ʔa　　ʔei　　ana-na*
　　　　CLASS-one day　PROPN 3SG=REAL-work-TR the.PL food-3SG
　　　　'One day Barafi prepared his food.'

　　　The formulaic "once upon a time" statement in (6.5) is followed in (6.6) by a sentence with an initial *ma* 'and'. Although the subject remains the same, a new participant *Baule* is introduced.

(6.6)　*Ma ʔi=na-ware　　ʔaʔa Baule*
　　　　and 3SG=REAL-talk with PROPN
　　　　 'And he (Barafi) talked with Baule.'

　　　The discourse of (6.6) continues in (6.7), again employing the sentence-initial use of *ma* 'and', and again, functioning with a scope that transcends the clause.

(6.7)　*Ma ʔi=maʔa-paʔi=a　　mei lofu-na,　　na-tiba*
　　　　and 3SG=see-have=3SG the brother-3SG REAL-angry
　　　　'And when his brother saw he was angry.'

　　　The coordinating conjunction often precedes a conditional sentence that has a logical relationship with the preceding sentence. In (6.8) the preceding discourse warns against violating an *ʔapuna* 'prohibition'.

(6.8) *Ma naʔa ʔo=ʔa-neneri-ʔua=ia   ʔena naranara-mu ba, ...*
and if   2SG=IRR-follow-just=3SG those thinking-2SG COMP
'And when you just follow your own thinking that...'

6.2.2   Contrast

The Wuvulu conjunction *maʔua* 'but' occurs between two clauses, and functions to show contrast. The contrastive conjunction functions in (6.9) to express the concession that, *although I am sick, I am your bodyguard.*

(6.9) *na-funu, maʔua iau   ufa-mu*
REAL-sick but   PRON.1SG umbrella-2SG
'I'm sick, but I'm your bodyguard (lit. umbrella [of protection]).'

In (6.10) *maʔua* 'but' contrasts the action of two different subjects, *they finally went*, but *you will work*.

(6.10) *ro=na-we-barua   maʔua, amuʔou=na-faufau, ʔo=ʔa-re-biri*
3PL=REAL-EV-go.to.village but,   2PL=REAL-strong   2SG=IRR-DIR-work
'They finally went to the village, but you who are strong, you will go work.'

In (6.11) the contrastive statement is *we slept,* but *I did not sleep.*

(6.11) *aiʔou=na-maʔiru   maʔua iau   lomi na-maʔiru*
1PL.EXCL=REAL-sleep but   PRON.1SG NEG REAL-sleep
'We slept, but I did not sleep.'

6.2.3   Alternation

The Wuvulu conjunction, *ʔo* 'or', is used to specify alternates, and is used with NPs, VPs and clauses. The conjunction *ʔo* 'or', also functions to indicate paraphrase, or a correction, and it can occur as a question prompt in clause-final position.

6.2.3.1   NP Alternation

Although NP alternation does not demonstrate complex predication, it is included here to show the range of function of *ʔo* 'or'. The sentence of (6.12) exemplifies an equative clause where the right side of the predication is an alternation of the NPs, 'good time' versus 'bad time'.

(6.12) *e-feni,   ʔau rawani, ʔo ʔau afelo*
CLASS-this time good   or time bad
'Is this a good time or is it a bad time?'

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As a conjunction of NPs, *ʔo* 'or', occurs between the two conjuncts, for example 'good time or bad time' in (6.12), and 'the rat or the cat' in (6.13).

(6.13) *ʔi=li   ʔale-ʔena fena balafai, ʔo fena pulipuli*
      3SG=move like-those that rat   or that cat
      'It moves like the rat or the cat.'

(6.14) *biri-biri   fei talatala nia, ʔo tamanu ʔena ʔapaʔa-mu.*
      RED-work the channel fish or what   those knowledge-2SG
      'Work on the fish channel, or whatever knowledge you have.'

6.2.3.2 VP alternation

The verb phrases of (6.15) are conjoined by *ʔo* 'or'. The first VP takes the subject clitic *ʔi=* '3SG', and the second VP is unmarked with respect to subject and shares both the subject clitic of the first VP, and the negation operator. Each VP takes an object clitic that has the same referent.

(6.15) *loʔe ʔi=to=nio,   ʔo panaro-fio*
      NEG 3SG-get=2SG or hold=2SG
      'It will not get you or hold you.'

The morpheme *ʔo* 'or' can also serve as an illocutionary prompt to the listener in order to elicit an alternative, where the response given is in a sense conjoined to an anaphoric alternate. The question in (6.16) can either be interpreted as a yes/no question, or it can be taken as the elicitation of an alternative to *ravman* 'government'.

(6.16) *e-feni   titia feni,   wa ini? gavman,   ʔo?*
      CLASS-this.INAN ship this.INAN canoe who? government, or
      "This ship—whose ship is it? The government's, or (whose)?"

Table 6.1 Coordinators

Coordinator	function	range of glosses	scope
ma 'and' (POc **ma* 'and, with')	additive coordination	'and, with, and then, so'	numbers, nominals, VPs, clauses, paragraphs
maʔua	contrastive	'but'	VPs, clauses
ʔo	alternation coordination	'or', tag question	nominals, VPs, clauses

6.3   Subordination

6.3.1   Mood marking

Subordination can be expressed by mood morphemes on the verbs of juxtaposed clauses, where there is no overt coordinator. The subordinate clause is usually the first of the juxtaposed clauses and has a meaning of 'if' or 'when', depending on context.

If the verb of the subordinate clause is marked for irrealis mood, and the verb of the main clause is marked for realis mood (as in (6.17)), the meaning of the construction is that the action of the subordinate clause occurred when the action of the main clause occurred.

(6.17) *ro=ʔa-no-rai,   ʔi=na-re-to=nia*
       3PL=IRR-move-DIR 3SG=REAL-DIR-get=3SG
       'When they came, he went and got it.'

If the verbs of both clauses are marked for irrealis mood, then it is an instance of coordination (without a conjunction), and the action of both clauses is in the future.

(6.18) *laru=ʔa-no-rai,   ro=ʔa-re-to=nia*
       3DU=IRR-move-DIR 3PL=IRR-DIR-get=3SG
       'The two will come (and) they will go get it.'

If the verbs of both clauses are marked for realis mood, the first clause must be preceded by a time adjunct *ʔei* 'when' or *ʔena* 'when' to indicate that when the action of the first clause occurred, then the action of the second clause occurred.

(6.19) *ʔei   ro=na-no-rai,   ʔi=na-re-to=nia*
       when 3PL=REAL-move-DIR 3SG=REAL-DIR-get=3SG
       'When they arrived he got it.'

Example (6.20) has an initial dependent clause which is unmarked with respect to mood, *ʔi=no-rio* 'she came', followed by a clause which is marked with *fi-* for simultaneity. The first clause is subordinate to the second.

(6.20) *ma ʔi=no-rio,   ana ro=fi-no-rio*
       and 3SG=move-DIR also 3PL=SIM-move-DIR
       'And when she was coming, they were also coming.'

6.3.2   Conditionals

This section provides an overview of the morphosyntactic structure of conditional sentences. Typically, a conditional sentence has the protasis marked by *naʔa/naba* 'if', and an apodosis, optionally signaled by *te* 'then, so'. Regardless of whether *te* is present, the apodosis is marked prosodically by falling intonation in the second clause. (In the examples, a pause is indicated by use of a comma.)

6.3.2.1   Simple conditions

The words *naʔa* and *naba* are both glossed 'if'. The two forms are interchangeable in most contexts, but the word *naʔa* 'if' can precede the complementizer, *ba* 'COMP, however, the word *naba* 'if' cannot precede the complementizer. The word *naʔa* 'if' can also be preceded by the morpheme *ba* 'comp': *ba naʔa* 'if it is the case that...'. The form *naba* 'if' cannot be preceded by *ba* 'comp'.

In (6.21) if the protasis is true, the apodosis is true: *if you carve the top of the crooked, the keel will also be crooked.*

(6.21) *Ma naʔa ʔo=ʔa-tafi-ʔa   fei pafo-na ma ʔi=wa-wali,*
        and if   2SG=IRR-carve-TR the top-3sg and 3SG=RED-crooked

                ana ʔi=wa-wali   fei puru-na
                also 3SG= RED-crooked the keel-3SG

        'And if you carve its top and it is crooked,
                its keel will also be crooked.'

The aposdosis of (6.22) is overtly marked by the conjunction, *te* 'then, so'. The word *te* 'then, so', implies that the second clause is true if the first clause is true.

(6.22) *ma naʔa amuʔou-no-aliweʔi-mai, te   ʔa-poʔo-fani-na   pani*
        and if   2PL-move-return-DIR   then IRR-INTS-give-TR hand
        'And if you return, then I will definitely help.'

The word *te* 'then, so', functions in the same way, even if the first clause lacks a conditional *if* word, as in (6.23). (In §6.3.1 it was mentioned that irrealis marking in the first clause can be interpreted as either *if* or *when*, depending on context.)

(6.23) *ʔo-ʔa-fa-ruta-na   fei ulu-na,   te   ro=na-we-fanunu-ʔa fei wa*
        2SG=IRR-CAUS-sit-TR the prow-3SG, then 3PL=REAL-EV-see-TR art canoe
        'When you place its prow, then they will finally evaluate the canoe.'

The conditional clause in (6.24) is a hypothetical statement.

(6.24) *Ma naba lomi laru=na-fi-tiba-i,*   *larua*   *ʔei fi-tafi-i,*
      and if NEG 3DU=REAL-RECIP-anger-RECIP, PRON.3DU the RECIP-sister-RECIP

          lomi ʔi=mamara fei   *Aua*   *ma Fufulu.*
          NEG 3SG=dry   the.INAN PROPN and PROPN

    'And if the two sisters had not fought,
        Aua and Wuvulu would not have been created.'

Example (6.25) demonstrates that the conditional, *naʔa* 'if', can be used in combination with modal marking to express a condition of potential. The first clause is marked realis, and the second clause does not have mood marking.

(6.25) *naʔa ʔo-na-biri-fa-weʔi,*   *ʔo-to*   *pono-ʔa-mu*
     if   2SG=REAL-work-CAUS-strong 2SG-get pay-DER-2SG
     'If you work hard you will get your pay.'

6.3.2.2 Counterfactual

Counterfactual propositions can be encoded using a conditional conjunction *naba* 'if' in the dependent protasis clause. Mood marking is the same in both clauses, and there is a pause between the clauses, with *ʔale-ʔei* 'like' before the second clause.

(6.26) *naba ʔo=na-biri-fa-weʔi*   *ʔale-ʔei, ʔo=na-to*   *pono-ʔa-mu*
     if   2SG=REAL-work-CAUS-strong like-PL 2SG=REAL-get pay-DER-2SG
     'If you had worked hard, like that, you would have gotten your pay.'

6.3.2.3 Negation of conditional clauses

There are three ways of negating protases and apodoses of conditional clauses: the protasis is negated, but not the apodosis; the apodosis is negated, but not the protasis; and both the protasis and apodosis are negated. An example of each of these is given below. The narrator is a master storyteller, and is known in the culture as an *ʔanoʔano* 'exceptionally talented person, expert wood-carver'. Using a variety of negated conditional statements, the narrator emphasizes that if his advice is followed, disaster can be avoided.

6.3.2.3.1 Negation of protasis

There are several combinations of negators that go with either the protasis or apodosis of a conditional statement. Note that it is not uncommon for logical operations to be expressed by means of an interjection, such as *ʔea* which has meaning at the

discourse level, but which is not necessarily conventionalized—in this case, "if not X (then) Y". These types of expressions seem to have a logical function, and warrant further investigation.

(6.27) *naʔa loʔe ʔo=na-fanunu-fa-rawani=nia   fena ʔuʔuma-na,ʔea,*
     if   NEG 2SG=REAL-look-CAUS-good=3SG that   curse-3SG IJ

        loʔe ʔo=ʔaila-fa-rawani
        NEG 2SG=know-CAUS-good

     'If you do not carefully consider its curse, then,
        you will not have good understanding.'

(6.28) *ma naʔa lomi ʔo=fani-maʔa-io   ʔena biri-ʔa-mu,*
     and if   NEG   2SG=give-see=2SG those work-DER-2SG

     ʔo tamanu manumanu ʔo=na-paʔi,   ʔi=panaro=fio, ʔena manumanu
     or what   thing   2SG=REAL-have 3SG=hold=2SG those thing

     'And if you do not watch your work,
      or whatever thing(s) you have, those things will hold you.'

6.3.2.3.2 Negation of apodosis

In (6.29) the protasis is not negated, but the apodosis is negated.

(6.29) *ma naʔa ʔo=na-neneri-maʔa=ia   ʔeni ware-a-u,*
     and if   2SG=REAL-follow-see=3SG these talk-DER-1SG

        ʔaa, loʔe ʔi=to-nio,   ʔo panaro=fio
        IJ   NEG 3SG=get-2SG or hold=2SG

     'And if you carefully follow these words of mine,
        it will not get you, or hold you.'

Again, the author states that if you know the signs and curses (as he does) then you will not be caught (held).

6.3.2.3.3 Negation of protasis and apodosis

In (6.30) both the protasis and the apososis are negated. The logic of the condition is similar to that of the previous examples.

(6.30) *Ma naʔa loʔe ʔo=na-ʔaila   ʔei   ʔuʔuma feni   malarufu warieni,*
and if   NEG 2SG=REAL-know the.PL curse   this.INAN ground   today

loʔe ʔo=na-ʔaila
NEG 2SG=REAL-know

'And if you do not know the curses of this ground today,
you will not know.'

6.3.3   Reason and purpose

There are three words that mark reason relationships between a main clause and a subordinate clause: *ʔua* 'because', *ʔamate* 'because', and the complementizer, *ba* 'purpose' (cf. §6.3.4).

6.3.3.1   Because: *ʔua*

The word *ʔua* 'because' occurs in complex sentences in which there is a main clause, and a subordinate reason clause. The reason clause is preceded by *ʔua* 'because'.

(6.31) *loʔe ʔo=fanunu-paʔi=a   ʔua   ʔi=na-urua*
NEG 2SG=look-have=3SG because 3SG=REAL-grass
'You cannot see it because it is overgrown.'

The syntax can be switched for the subordinate and main clauses of (6.31) as in example (6.32).

(6.32) *ʔua   ʔi=na-urua   loʔe ʔo=fanunu-paʔi=a*
because 3SG=REAL-grass NEG 2SG=look-have=3SG
'Because it is overgrown, you cannot see it.'

6.3.3.2   Because: *ʔamate*

The word *ʔamate* 'because' functions in the same syntactic positions as *ʔua* 'because'. Syntactically, a subordinate reason clause that is preceded by *ʔamate* 'because' can either precede or follow the main clause.

(6.33) *ʔamate   ia   gipe ramaʔa, ʔi=na-pati*
because PRON.3SG big   person   3SG=REAL-fall
'Because he was a big person, he fell.'

The syntax of clauses in (6.33) can be swtched with the same meaning as in (6.34).

(6.34) *ʔi=na=pati,   ʔamate ia   gipe ramaʔa*
      3SG=REAL-fall because PRON.3SG big   person
      'He fell, because he is a big person.'

6.3.3.3 Purpose: *ba*

The complementizer, *ba,* can function to introduce a purpose clause (cf. §6.3.4).

(6.35) *ʔi=li-na   fe-feroi-a   ba   ʔi=to   ʔapaʔa-na.*
      3SG=go-TR RED-teach-DER COMP 3SG=get knowledge-3SG
      'She goes to school to gain knowledge.'

(6.36) *te, ʔana mina ʔena ware-a-u   ʔena,*
      so, also all   those talk-DER-1SG those

          ba   loʔe nemea ba   ʔi=we-tama
          COMP NEG someone COMP 3SG-EV-paddle

'So, also all of those particular words of mine (are)
      in order that there is no one that travels.

6.3.4   Complement clauses

The complement of a matrix clause is marked by the complementizer *ba* 'COMP'.
In Wuvulu, sentential complements are used with verbs of ability, cognition, speech, and emotional states.

The mood marking of the verb in a complement clause depends on the context and semantics of the verbs in both the matrix clause and the embedded clause. The subject of the complement may be coreferential with the subject of the matrix clause, or it may be different. When it is coreferential with the matrix subject, an overt subject is not obligatory in the complement clause.

6.3.4.1 Ability

The sentence in (6.37) has an added degree of complexity in that the embedded clause is itself composed of two clauses. Irrealis mood is marked on the verbs of both the matrix clause and the apodosis of the embedded clause (I'll be happy). The protasis (if) in the embedded clause is not marked for mood.

(6.37) *iau   ʔa-awia ba   ʔa-ruta niʔe-niʔe   naba ʔi=no-rio*
      PRON.1SG IRR-able COMP IRR-sit RED-happy if   3SG=move-DIR
      "I'll be able to be happy if he returns."

6.3.4.2 Cognition

Examples (6.38) and (6.39) have different verbs of cognition in their matrix clauses. The matrix verbs of both examples are marked for realis mood. It is worth noting that the meaning of the cognition verb in (6.38) is *know*, and the mood marking of its complement is realis. Realis mood implies a degree of certainty and correlates semantically with the verb to know.

(6.38) *ʔi=na-aila   ba   Laru na-li-na   umu ʔaloʔalo*
       3SG=REAL-know COMP PROPN REAL-go-TR house sell
       'He knows that Laru went to [the] store.'

The cognition verb in (6.39) is *think*, and it is also marked for realis mood, with a complement that is unmarked for mood, but marked for eventual aspect.

(6.39) *ʔi=na-nara   ba   ro=we-no-mai   narani*
       3SG=REAL-think COMP 3PL=EV-move-DIR tomorrow
       'He thought that they would come tomorrow.'

Although it has not been checked out statistically, it is reasonable presume that the semantic of the matrix verb affects the modality of the complement.

6.3.4.3 Fear

The complement of the verb *maʔau* 'fear' expresses the object of fear.

(6.40) *na-maʔau iau   ba   emea ramaʔa afelo ʔi=panaro-fa mei aro-u*
       REAL-fear PRON.1SG COMP ART   person bad   3SG=hold-TR the spouse-1SG
       'I am afraid that an evil person will abduct my wife.'

6.3.4.4 Speech

Complements of speech are used with a variety of speech verbs, including *talk, yell,* and *sing.* The complementizer *ba* is required both when the complement is reported speech, as in (6.41), or a direct quote, as in (6.42).

(6.41) *ʔi=na-ware   ba   Laru na-li-na   umu ʔaloʔalo*
       3SG=REAL-talk COMP PROPN REAL-go-TR house sell
       'He said that Laru went to the store.'

(6.42) *ʔi=no-rio   Piapilu, ʔi=na-ware   ba   "Haa amate   anunu-u,*
3SG-go-DIR PROPN   3SG=REAL-talk COMP IJ   because reflection-1SG

fei ma fei anunu   ini
the and the reflection who

'When Piapilu came, he said, "Ha! Because that is my reflection,
and so, whose reflection is that ?"'

6.3.5   Relative clauses

In Wuvulu, as in POc, a relative clause (RC) occurs after the head noun that it modifies, and the determiner of the modified head noun is copied to the initial position of the RC (LRC:80). In (6.43) the NP *meni pifine* 'this woman' is being relativized, so a copy of the determiner *meni* 'this' marks the beginning of the RC. Note that there is a pause before and after relative clauses.

(6.43) *meni pifine,* [*meni ʔi=na-mare*],   *na-pati*
this woman [this 3SG=REAL-cough] REAL-fall
'This woman who coughed fell.'

In (6.44) the determiner of *ena pifine* 'those women' is *ena* 'those'. A copy of *ena* 'those' occurs in the initial position of the RC.

(6.44) *ena pifine,*   [*ena   ro=na-mare*],   *na-pati*
those women [those 3PL=REAL-cough] REAL-fall
'Those women who coughed fell.'

A similar syntax of DET N DET was discussed in §3.6.1.2.1, however in that case, a pause comes after the second determiner. For relative clauses the pause comes immediately before the second determiner.

Keenan & Comrie (1977) states that the ability to relativize applies to a continuous segment of the universal NP accessibility hierarchy. The implication is that if a language relativizes on some position along the hierarchy, it will also relativize on positions to the left.

(6.45) Subject > Direct Object > Indirect Object > Oblique > Genitive > Object of comparison

Regarding the Oceanic subgroup, LRC (43) states that, "These languages generally allow relativization of NPs well down the universal Accessibility Hierarchy". Wuvulu relativizes all the way down to objects of comparison, and as predicted, it relativizes everything to the left, i.e., every position of the hierarchy. As shown in the

examples below, the position of relativization refers to an element inside the relative clause that agrees with the relative clause marker (which is itself an identical copy of a determiner that modifies the head noun).

6.3.5.1 Subject

The RC in (6.46) uses a pronominal clitic agreement strategy in which the subject clitic *ʔi=* '3SG' agrees with the relative clause marker *mei* 'the' in number.

> (6.46) *mei pifine,* [*mei ʔi=na-foʔa=u*],   *na-pati*
>   the woman [the 3SG=REAL-hit=1SG] REAL-fall
>   'The woman who hit me fell.'

Example (6.47) is identical with (6.46), except that a gap strategy is used, i.e., the subject clitic is absent.

> (6.47) *mei pifine,* [*mei na-foʔa=u*],   *na-pati*
>   the woman [the REAL-hit=1SG] REAL-fall
>   'The woman who hit me fell.'

6.3.5.2 Direct object

In (6.48) a pronominal clitic agreement strategy is used. It is important to note that inside the RC there are two possible 3SG clitics, but the correct extraction occurs because only one of them fits the allowable morphosyntactic constraints (OsVoS, cf. Table 5.3).

> (6.48) *fei nia,* [*fei ʔi=na-ana=ia fei ponoto*], *ʔu-na-nafa=ia*
>   the fish [the 3SG-eat=3SG   the dog]   1SG=REAL-shoot=3SG
>   'I speared the fish that the dog ate.'

6.3.5.3 Indirect object

In (6.49) a pronominal strategy is used, however, unlike the subject and object extractions of previous examples, the pronominal is an inalienable possessor suffix *-na* '3SG', and it is attached to the locative part noun *ʔaʔa* 'to'.

> (6.49) *mei ramaʔa,* [*mei John na-fani   nia ʔaʔa-na*], *na-pati*
>   the person   [the John REAL-give fish to-3SG]   REAL-fall
>   'The person to whom John gave the fish fell.'

6.3.5.4 Oblique

A pronominal strategy is used in (6.50) to extract an oblique object. An inalienable possessor suffix *-na* '3SG' occurs inside the relative clause and is interpreted

as coreferential with the head noun. The subject clitic is co-referential with the post-verbal subject, John.

> (6.50) *ʔi=na-ma-mara   fei tawa, [fei ʔi=ruta pafo-na, John]*
>   3SG=REAL-RED-dry the table [the 3SG=sit on-3SG PROPN]
>   'The table that John sat on is dry.'

6.3.5.5 Genitive

In (6.51) a pronominal strategy is employed to extract an inalienable possessor. The inalienable possessor suffix *–na* '3SG' occurs inside the relative clause and is interpreted as co-referential with the head noun.

> (6.51) *mei ramaʔa, [mei umu-na   na-ruʔa],   na-lalai*
>   the person   [the house-3SG REAL-burn] REAL-marry
>   'The person whose [lit. (that) his] house burned got married.'

6.3.5.6 Object of comparison

Object extraction in (6.52) employs a pronominal strategy on the possessor suffix, *–na* '3SG'.

> (6.52) *fei wa,   [fei MV.Tawi ʔi=putuʔoro-i ʔaʔa-na], na-paʔi   tiʔara*
>   the canoe [the PROPN   3SG=small-DER with-3SG] REAL-have rice
>   'The ship that is smaller than the MV Tawi has rice (on it).'

An exception to the general rule that the relative clause marker follows immediately after the specified head noun of the main clause is given in (6.53). In this example, the determiner *mei* 'the' still marks the relative clause, but the NP immediately before it is the pronoun *ia* 'PRON.3SG', and a pronoun cannot take a determiner. The pronoun is the second NP in the verbless equative clause. The RC marker is copied from the first NP of the main clause *mei balu mei* 'that particular child'.

> (6.53) *mei balu mei, ia,   [mei ʔi=na-tama-na   Aua]*
>   the child the PRON.3SG [the 3SG=REAL-paddle-TR Aua]
>   'That particular child is the one who paddled to Aua.'

6.4   Serial verb constructions

Serial verb constructions are a feature of many Oceanic languages. LRC (47) provides a characterization of the types of serialization that occur:

Serial verb constructions in Oceanic languages differ in the extent to which the verbs in question are structurally linked. Some languages make a contrast between 'nuclear' serialisations, where the verbs are bound together and have only a single set of arguments (i.e the serial construction behaves just like a single verb), and 'core' constructions, where the verbs remain separate words and usually share just one argument, any other argument being the subject or object of just one of the component verbs.

Wuvulu has both nuclear and core serialization.

6.4.1   Nuclear serialization

Nuclear serialization consists of two or three verbs with preverbal morphemes on the first verb, and with post-verbal morphemes on the last verb. The serialization of nuclear verbs includes verb roots and derived verbs. In (6.54) there are two verb roots, *no* 'move', and *paʔa* 'contact'.

(6.54)   ro=*na-no-paʔa-lao*   *fei male afi*
       3PL=REAL-move-contact-DIR the ash fire
       '[They] went up to the ashes of the fire.'

In (6.55) the serial verbs *maʔa* 'see', and *paʔi* 'have' share preverbal and postverbal inflections.

(6.55)   *ma ʔi=maʔa-paʔi-a*   *Barafi, ʔi=na-tiba*
       and 3SG=see-have-TR PROPN 3SG=REAL-angry
       'And when Barafi saw it, he was angry.'

In (6.56), the action of the third verb, *kill*, is caused by the action of the second verb (hit).

(6.56)   *loʔe ba*   *ʔoʔou-ʔa-li-foʔa-fa-maʔe=ia*
       NEG COMP 1PL.INCL=IRR-go-hit-CAUS-die=3SG
       'We will not go kill a person.'

Another semantic type of serialization is where the first verb is modified by a manner verb. In (6.57), the second verb *watch* is modified by the derived verb, translated *carefully*.

(6.57)   *ʔo=nei-mina-ʔo-fa-fanunu-fa-rawani*
       2PL=DEON-totally-stay-RED-watch-CAUS-good
       'You must totally stand watching carefully.'

6.4.2   Core serialization

The repetition of VPs is a rhetorical device that is frequently used in Wuvulu discourse to express elapsed time. VP repetition is distinguished from nuclear serialization by structural and functional properties. For core serialization, clauses can

each carry prefixes and suffixes. Core serialization occurs most often with verbs of motion where each clause bears a directional suffix, as in example (6.58).

(6.58) *ma ʔi=no-mai   no-mai   no-mai   mina ʔaleʔei fi-mina-foʔa-i=a*
and 3SG=move-DIR move-DIR move-DIR all like-PL SIM-totally-hit-SIM=3SG
'And he came, came, came like that killing him.'

In (6.59), the clauses share a common subject, but the first two clauses are intransitive, and the third clause takes a direct object. This could possibly be classified as nuclear serialization.

(6.59) *ʔei   re-ra-rapa,   wawaniʔo, biri-ʔa ʔena pele nara-a-u.*
the.PL DIR-RED-wander, play,   work-TR those end think-DER-1SG
'Then go wander, play, do those things that came to mind.'

Although one of the distinguishing features of serial verbs is affixation of only the initial and final verbs, a similar pattern can occur with repeated clauses. Again, (6.60) could arguably be considered nuclear serialization, but directionals are considered suffixes, so this is classified as core serialization.

(6.60) *fi-no-lao   no-lao   no-lao   na-no-paʔa-lo   fei male afi*
SIM-move-DIR move-DIR move-DIR REAL-move-touch-DIR the ash fire
'[He] was going, going, going, going up to the sign of the fire.'

Perhaps the clearest case of core serialization is (6.61), where each of the clauses is bound by a direct object enclitic. As noted above, clauses of nuclear serialization would not typically have object enclitics on each verb.

(6.61) *ma larua-mina-faru=ia,   faru=ia, faru=ia,   faru=ia*
and 3DU=totally-feed=3SG feed=3SG feed=3SG feed=3SG
'And the two really fed it, fed it, fed it, fed it.'

6.5   Recursion

Hauser, Chomsky & Fitch (2002:1569) hypothesize that recursion "is the only uniquely human component of the faculty of language." In Wuvulu, the complementizer, *ba,* is frequently invoked to form recursive constructions.

In (6.62) there are three occurrences of the complementizer *ba*, each marking an embedded clause. Like other languages (except perhaps *Pirahã*), Wuvulu has the ability to "infinitely" invoke recursive structures that embed clauses within clauses.

(6.62) *ma inene ʔi=na-ware   Bau   ba,   ama   ʔi=poʔo   lomi nemea*
  and later 3SG=REAL-talk PROPN COMP because 3SG=INTS NEG   anyone

        ba   ʔi=na-poʔo-ʔapa=ʔia   ba   fei pure itani-a-na
        comp 3SG=REAL-INTS-know=3SG COMP the belly where-DER-3SG

  "And later Bau said, 'Is there really not one of you
        who definitely knows where the belly is?'"

6.6   Chapter summary

Wuvulu has a variety of means available to express multi-clausal interaction, including conjunctions for coordination, contrast, and alternation; subordination by means of mood marking, conditionals, reason and purpose clauses, complement clauses, and relative clauses; serial verb constructions; and recursion.

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7   Summary and prospects

This chapter summarizes the main contributions of Chapters 1-6, and provides some ideas for future research.

7.1   Summary

From the perspective of geographic migration, the precursor of the Proto-Oceanic language was most likely spoken by people who moved eastward along the northern coast of New Guinea, prior to the Oceanic dispersion. LRC (97) states that:

> pre-POc speakers left their kin, who presumably lived near Cenderawasih Bay in Irian Jaya, and settled in the Bismarck Archipelago, possibly on the north coast of New Britain.

The, according to LRC (97), the settlement of the Admiralties is thought to have taken quite a circuitous route to Wuvulu:

> Oceanic speakers reached the Admiralties via the St. Matthias Islands, and their languages are directly descended from the language of the first settlers.

Because Wuvulu is, by far, the closest island of the Bismarck Archipelago from the New Guinean coast, the hypothesis that the people migrated first to New Britain or St. Matthias and then migrated backward (westward) to Wuvulu seems counterintuitive.

It is also not clear that the "Matty Mystery" was ever solved, in terms of providing an explanation for the obvious difference between the physical features of Wuvulu people relative to others in the region. The prospect of DNA sampling in the Bismarck Archipelago may shed light on the dispersion of Admiralties peoples.

Wuvulu phonology presents an interesting example of sound change in progress, with the phoneme /r/ demonstrating the unexpected allophony of [r] and the conditioned allophones [g] and [x]. A possible motivation for the backing of /r/ is a balancing of the phonetic distribution of consonants across the articulatory space. The deletion of [k] (or merger with [ʔ]) would have freed up phonetic space for the [+back] velar allophones [x], and [g]. Prior to such a change, 50% of the consonant phonemes were coronal, with the remainder divided between consonant phonemes with surface forms that are either [+anterior], or [+back]. After the change, consonant phones are distributed nearly evenly in the phonetic space between anterior, coronal, and back.

The structure of the Wuvulu VP is quite similar to that of the POc VP, and Wuvulu possesses the morphosyntactic features of a well-behaved, "canonic" Oceanic language, as described by Ross (2004b). In light of POc features, Wuvulu also possesses the types of complex clauses that are expected for synchronic Oceanic languages, including relativization, and complementation. It was also noted that the complementizer is used as a means of recursive embedding.

7.2   Prospects

Chants are rare, if non-existent in contemporary Wuvulu. During the fieldwork for this dissertation, an audio recording was made of a chant by the last living *puala* 'priest'. The *puala* and his wife had the ability to intone chants that are perhaps known to no one else. Our principal linguistic informant told us that she could not interpret the chant, and that she would need help from the narrator and his wife. Unfortunately, our informant and the elderly couple are now deceased.

It is possible that the semantics of the one recorded chant might never be recovered, but an effort could be made to obtain a transcription and translation of the chant. The recital of the chant was amazing. Although there is a consistent and repetitive metrical pattern, there are no repeated phrases. About four minutes into the chant, the narrator stopped for about 15 seconds before his wife supplied a word that he had forgotten. He then continued non-stop to the end. The chant was obviously memorized word-for-word by both the husband and wife. This chant represents a potential trove of salvageable lexical items that will otherwise vanish from the Wuvulu record. And, there are almost certainly features of the morphosyntax that could indicate something more about the grammar of Proto-Admiralty, or an intermediate form of the grammar between POc and Wuvulu.

 The metrical structure of the recorded chant is also valuable. Regardless of the opacity of the semantics, the metrical structure supports the notion of a prosody that is built on moraic trochees. Throughout the chant, there are two beats (two syllables), followed by a heavy beat that lasts twice the duration of one of the two initial beats. The chant is available via the PARADISEC archive of Wuvulu audio files.

Another prospective line of linguistic research would be to do a cross-Admiralty typological study of morphosyntactic features in order to compare degrees of affinity

with the features of a canonic Oceanic language (Ross 2004b). The Wuvulu grammar could be used as a basis of comparison with the other Admiralty languages.[22]

Along these same lines, the morphological complexity of the Wuvulu verb raises questions about whether this level of complexity might be found in other Admiralty languages, or even in other Oceanic languages. It is probable that the verbal morphology of other Admiralty languages is more complex than has been reported. Much of the previously published material on Admiralty languages was based on small sets of elicited data. Possible exceptions are Hamel (1994), Stutzman (1997), Wozna & Wilson (2005), and Bowern (2011). But even among the exceptions, Bowern (2011) is the only grammar that includes a critical mass of glossed texts, albeit the texts are about 100 years old.

A further prospect is to archive and/or publish a collection of glossed narrative texts from Admiralty languages. The collection would include the two living Western Admiralty languages (Wuvulu and Seimat), and minimally the Eastern Admiralty languages of Kurti, Lele, Nali, Nyindrou, and Titan. There has been a history of SIL fieldwork in these languages, so part of the work may already exist in an unpublished form. The collection of texts could serve as a basis of comparison and could be archived in PARADISEC as a data source for continuing research.

Recursion and embedding were briefly mentioned in Chapter 6. These topics could also be investigated further. Different types of embedding could be elicited, such as a complement clauses embedded in relative clauses, relative clauses embedded recursively, complement clauses embedded recursively, and relative clauses embedded in complement clauses. Chapter 6 gives only examples of recursive complement clauses, but other types of embedding and recursion could be studied. A possible follow-on is to test child acquisition of a variety of linguistic structures, including relative clauses and complement clauses, in order to determine a chronology of acquisition for different structures.

In Wuvulu at least five categories of deixis can be identified—spatial, temporal, person, social, and discourse.[23] There are presently no publications on deixis in the

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[22] Blust (forthcoming, on Admiralty languages) will hopefully reveal the degree to which canonic features are found across Admiralty languages. If not, this could be a worthy object of research.

Admiralties subgroup of Oceanic languages. And, in the published descriptions of the Oceanic languages for which there are descriptions of deixis, the work is restricted almost exclusively to the category of spacial deixis (Senft 1997, 2004a,b; Ross 2003).

Wuvulu demonstratives, on the other hand, are frequently employed in more than one category of deixis. This is illustrated by the demonstrative *ʔeni*, which is typically glossed 'near' in spatial reference, but is also glossed 'now' in temporal reference, and 'close anaphor' in discourse reference. The semantic component [+PROXIMAL] is encoded by the deictic, *ʔeni*, and is interpreted according to the semantic domain, as to whether the referent is an object in space, a point in time, or a close antecedent in a discourse.

The three Wuvulu demonstratives *ʔei/ʔeni/ʔena* 'the/these/those' (or article and two demonstratives) are the basis of a coherent system of deixis in which particular grammatical forms are used cross-categorically according to shared semantic components of pragmatically bound distance- and person-oriented deictics, and are extended metaphorically into domains such as time, discourse anaphora, and social register.

Discourse analysis is another topic in which further research should be considered. Discourse analysis is often neglected in linguistic descriptions, including Oceanic grammars. Longacre (1983:340) borrows the metaphor of a spectrum to discuss dynamism as it relates to the movement of a storyline in narrative discourse:

> ...the analysis of a narrative text reveals a cline of information which ranges from the most dynamic elements of the story to the most static (depictive) elements; successive positions along the cline correlate well (as a whole) with distinctions among the verb forms of a language.

The salience features of Figure 7.1 are given as a proposed cline of information in terms of a correlation between dynamism and verbal morphology in a Wuvulu discourse.

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[23] The first four are Bühler's *Zeigarten* 'kinds of pointing' (1990). The category of *discourse* deixis in Wuvulu includes anaphoric/cataphoric, and imaginary reference.
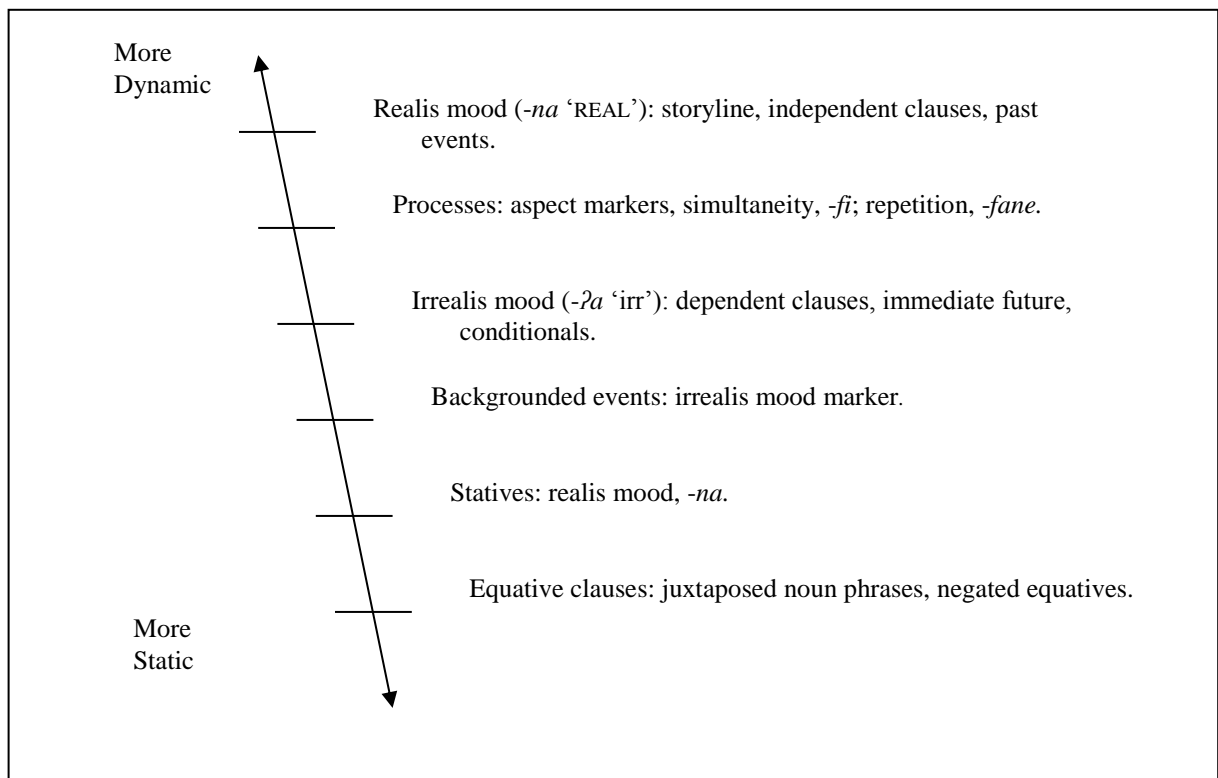
Figure 7.1 Wuvulu narrative salience spectrum

Events on the story line are encoded by realis mood, *-na*. Realis marking is ranked higher on the spectrum than the aspectual forms *–fi* 'simultaneity', and *–fane* 'repeated action'. This is because realis marked clauses move the story along with greater velocity than do aspectual forms. Stative clauses and equative clauses are about the same as one another in terms of dynamism, but stative forms are ranked slightly higher, because states seem to have a greater potential for change.

In the relatively short history of Oceanic linguistics, there has been little focus on Admiralty languages. Much of the low-hanging linguistic fruit has already been picked in places that are easily accessible. In contrast, just getting to Wuvulu Island is difficult and expensive. There is a sense in which data from a language in an area that has received so little attention make a disproportionately greater contribution to the typological picture of the Oceanic subgroup. And, as noted in the Chapter 1, Admiralty languages have not been well-documented. The hope is that this dissertation will make at least a small contribution to the linguistic record of the Admiralty area.

Part II: Vocabulary

Much of the vocabulary in Part II consists of lexical entries that were created using the *Toolbox* computer application. Entries in the lexicon are morphemes, and include words and affixes that convey grammatical and semantic content. In addition to vocabulary from narratives, hundreds of the lexical items were elicited in a Wuvulu dictionary workshop that was held in 2004. The workshop was based on the work of Ronald Moe (2001, 2003), and includes an outline of semantic domains that spans most of the categories found in Yale University's Human Relations Area Files.

Vocabulary entries appear in boldface type with a trailing hyphen for prefixes, and leading hyphen for suffixes. Clitics are indicated by a trailing equal symbol for proclitics, and a leading equal symbol for enclitics.

If a vocabulary item has a historical word-final consonant associated with it, the consonant appears in parentheses immediately following the entry. Abbreviations for parts of speech appear are italicized, and follow immediately after the main entry (or historical consonant). Morphemes with grammatical content are capitalized. Latin scientific names are italicized and underlined. Vowel length is specified by geminate vowels. Some entries include a vernacular phrase that appears in boldface type, followed by an English free translation.

A - a

=a 3SG object clitic.
-a DER, noun derivation from a verb.
-a TR, transitive marker.
aa *ij.* Haa!
aba 1. *n.* frond, 2. *n.* lip, 3. adj., linear.
abe *v.* grow.
abe (ʔ) *v.* hang.
abeabe *n.* rope.
afa *n.* section.
afaa *n.* westwind, west.
afafarai *n.* hairless, part line of scalp.
afai *v.* careful approach in hunting, spear fishing, approaching someone.
afamala *n.* Movement of water; e.g., bamboo, sugarcane.
afaru *n.* e.g., bamboo, sugarcane.
afau *n.* thigh.
afeafe *v.* masturbate.

afelo *adj.* bad.

afe *n.* blanket, food cover, shoes.

afi *n.* fire.

afoai *propn.* clan name.

afu *n.* Either a sponge with fleshy plates (Carteriospongia flabellifera, or something close to it) or a stony coral species (Acropora sp.) that also forms plate-like shapes. Both were identified with the same term from photos. See ʔugafuʔ. *Carteriospongia flabellifera or Acropora sp.*.

afu (r) *v.* whip, hit, strike.

afua *n.* pepper vine.

afuafu *n.* fight stick, whip.

ai *class.* number classifier, *e-ai, ru-ai, olu-ai*

aiai *n.* tree, wood.

aie *v.* prompt someone to continue.

aino *v.* lie down.

aipani *num.* five.

aira *adv.* when? (past).

airua *pron.* 1DU.EXCL.

aiwa *n.* Banyan tree. Also known as the Indian Banyan. It is named for Indian traders named Banyans. This tree is a huge evergreen and is sacred to the Hindus. It has aerial roots that grow earthwards from horizontal branches that support the tree, so that the tree can cover large areas. *Ficus benghalensis.*

aiwa *n.* Moreton Bay Fig tree. The underside of the leaves of this tree are smooth and rusty, and this feature is what distinguishes it from other fig trees. It begins its life as an epiphyte, living in the branches of a larger host tree. Later, when its roots have reached the ground, it strangles the host tree, causing it to die and decay. *Ficus macrophylla*.

aiʔolu *pron.* 1PL.EXCL.

ala (f) *v.* re-grease coconut.

alaba *n.* turtle.

alala *n.* croton.

alamaʔe *n.* discarded coconut meat after having been squeezed.

ale *n.* friendship.

aleale *adj.* seductive.

alelena *n.* Double-bar Spinefoot. Inhabits coral reefs, often seen in pairs. Distinguished by a pair of diagonal dark bars on the head and front of the body. Size to 30 centimetres. *Siganus doliatus.*

ali *n.* belly.

alia *n.* cod; the general name for this kind of fish.

alia *adj.* pregnant, enlarged (abdomen).

alia bea *n.* Trout Cod. Inhabits coral reefs, usually seen around coral bommies in lagoons. Distinguished by overall dark coloration, a pattern of dark spotting, and white saddles on the forehead, the middle of the dorsal fin, and on the tail base. Size to 50 centimetres. *Epinephelus maculatus.*

alia namo *n.* Honeycomb Cod. Ihnabits protected inshore reefs and lagoons. Distinguished by a dense network of large spots on the body and fins--does not

have the triangular white spots like the Hexagon Cod. Size to 28 centimetres. *Epinephelus merra.*

alia poa *n.* Camouflage Rockcod. Inhabits coral reefs in both lagoons and outer reefs. This fish is not a true cod, but belongs to the grouper family. It has no fear of humans and will swim straight over for a better look. This characteristic has made them rare, because they are easy to catch. They are distinguished by a pattern of spots and mottling with a series of irregular forward-slanting bars on the sides and have a pronounced black saddle on the tail base. Size to 61 centimetres. *Epinephelus microdon. Also named Epinephelus polyphekadion.*

alia roro *n.* Tomato Rockcod. It inhabits coral reefs, often in deeper water (25 to 80 metres). Distinguished by humped forehead and red to brown colour with small reddish spots. Juveniles are plain pinkish. Size to 58 centimetres. *Cephalopholis sonnerati.*

alia tuia *n.* White-spotted Rockcod. Inhabits shallow coral reefs and stays close to shelter. Distinguished by general dark colouration with irregular-shaped white spots and blotches on head and body. Size to 60 centimetres. *Epinephelus caeruleopunctatus.*

alia wawau *n.* Diagonal-banded Sweetlips. Inhabits coral reefs. Distinguished by black-spotted yellow fins and diagonal black bands on upper two-thirds of its body. Size to 50 centimetres. *Plectorhinchus lineatus.*

alialifa *n.* centipede.

alimau *n.* a swimming crab of the genus Portunidae. *Charybdis sp.*

alipuʔi *n.* a variety of sponge that forms thin, fragile cups. Has probiscus. Two species were identified as belonging to this Wuvulu category. Compare ʔalapau. *Kallypilidion sp. and Aka sp.*

aliweʔai *v.* return.

aliweʔi *v.* return.

alo *n.* sun.

alo *n.* Rufus Night-Heron (mature with black cap, or immature—streaked, some pinkish). *Nycticorax caledonicus.*

alo *v.* downward curl of the hand.

aloaina *n.* noon, *adv.* good afternoon.

aloaloa *adj.* clear sky.

alolomi *n.* scoop liquid with a cup or small container.

alomi *v.* scoop liquid with a cup.

alu (m) *v.* help.

alu *n.* Great Barracuda. Inhabits coastal waters and offshore reefs. Feeds on fishes. Distinguished by faint oblique bars on back and usually has scattered black blotches on its sides. Size to 170 centimetres. *Sphyraena barracuda.*

alualu *n.* gun, slingshot, shooting marble.

aluawa *n.* temporary cook house.

aluawai *propn.* constellation

amatani *q.* why?

amai *n.* Rainbow Runner. Inhabits coral reefs and is usually seen in schools. Feeds on fishes and planktonic crustaceans. Distinguished by a pair of blue stripes on the middle of its sides and isolated small fins on the tail base. Size to 120 centimetres.

Elagatis bipinnulata.

amamani *n.* sacrfice.

amamarua *adj.* indecisive.

amamarua

amo= *clitic.* 2PL subject proclitic.

Amuluna *propn.* Southern Cross.

Amuluna Puluʔa *propn.* false Southern Cross.

amuru *n.* a shiny silver reef fish, which prefers sandy areas. Average size is 30 cm.

amurua *pron.* 2DU.

amuʔolu *pron.* 2PL.

ana *n.* head noun that takes direct possessor suffixes for edibles; *v.* eat.

anaa *q.* really?

anai *n.* hibiscus.

anamo *n.* a species of tree commonly called wild cherry.

anana *v.* eat.

ani *n.* ask.

anitua (f) *v.* interrogate.

aniʔu *n.* spirit, spirit of dead, Satan.

aniʔu nofu *n.* reef watchman.

ano *n.* penis.

anu *n.* meaning.

anu *adj.* baldness.

anunu *n.* shadow, silhouette, reflection, picture.

anuru *n.* torso back.

apafu *n.* taro species.

apaniu *n.* large wave.

apara *n.* 1) chief or king; so called because he holds the scepter (apara). 2) the main stem of the frond of a sago palm or bamboo used as a fishing pole.

aparanuru *n.* back bone.

apawai *n.* wisdom tooth.

apaʔa *n.* knowledge.

    — *v.* know.

ape *n.* head noun that takes direct possessor suffixes for a general class of possessums.

apei *v.* watch.

apera *adj.* dry.

aperara *v.* persecute.

api (r) *v.* rub.

apilotu *v.* huddle.

apipiri *n.* oil.

apipori *v.* hug, hugging.

apipu *n.* vine.

apiri *v.* rub oil.

apiroro *v.* embrace.

apitilo *n.* cyclone.

apiʔi *n.* squeeze, wring.

apunai *v.* crashing wave.

ara *v.* rub.

ara *n.* used figuratively for humans. Titi ara scratchy neck from smoking, or a longing to see someone.

araara *n.* seizure.

arafi *propn.* large stones at the southeast point of Wuvulu.

arafu *n.* clan name.

araia pula *n.* menstration.

aramaʔaia *v.* rub two sticks to get fire.

arara *adj.* black.

arara *n.* charcoal, sandpaper, black foreigner.

ararapaʔo *adj.* black.

araʔuu *n.* south, south wind.

are *n.* circle of coconut leaves 40 metre diameter, using heap of stones, then slapping surface of the water to scare fish into stones, then trap them in net.

arenua *n.* life, soul, spirit.

areoro *n.* a black, shiny snake.

ari *n.* large black ant.

aria *n.* Orange-striped Emperor. Inhabits coral reefs, often sheltering amongst branching corals during the day while taking on a mottled colouring. Distinguished by a general pale colour with a broad yellow stripe between the pectoral fin and the base of the tail. Size to 40 centimetres. *Lethrinus obsoletus.*

ariri *n.* infected sore.

aririi *n.* Jansen's Wrasse. Inhabits shallow coral reefs, often in water less than 1 metre deep. Feeds on gastropods, fishes, polychaetes and crustaceans. Distinguished by broad dark bars on its body with yellowish spaces in between. Size to 20 centimetres. *Thalassoma jansenii.*

ariʔai *v.* pain from baby moving inside.

aro (f) *v.* call, name, call out. **arofia: name him/her/it**

aro *n.* a tree called garamut in Melanesian Pidgin, and also known by the names Vitex and bitum within Papua New Guinea. The common English name is New Guinea Teak. It is a medium to large tree, growing to 40 metres with a bole diameter of up to 130 cm. The trunk is usually not buttressed. Leaves are opposite and may have fine hairs on the underside; the tree is deciduous and sheds its leaves in the dry season. Flowers are white to pale purple; fruits are round to oblong, 5-12 cm, contain 1-4 seeds and are dark violet when mature. The timber is pale and dense and has a leathery scent when freshly cut. It is difficult to treat with preservatives. *Vitex cofassus.*

aro *n.* spouse (traditionally also spouse's same-gender sib).

aro *prep.* under.

aroa *n.* married.

aroaro *n.* spongy part of pandanus (aroaroo tutu ʻnippleʼ).

aromaa *n.* tree species.

aroo *n.* Black Trevally. Inhabits coastal waters and offshore reefs. Distinguished by its dark colour ranging from dusky grey to dark brown. The median fins and scutes are also dark brown to black. Size to 80 centimetres. *Caranx lugubris.*

aropipila *n.* tree species.

arota *n.* clan name, location.

aru *n.* pancreas.

aru *n.* smoke.

aru *n.* dry coconut.

aru *v.* love.

aruaru *v.* sweat.

arui *n.* crab species. (arui unu-na: mature young man).

arulue *n.* drift coconut.

arulue *n.* trigger fish species.

aruru *n.* Coconut Crab. This is the largest of the hermit crabs, and lives its juvenile and adult life on land. The females lay their eggs by wading into the sea, and the larva live in the sea. *Birgis latro.*

aruu *n.* 1. dry coconut, 2. testicles.

aruʔu *adv.* excuse me.

atabaibai *n.* stomach ache.

ati *n.* bottom of container.

ati fora *n.* black tip reef shark.

atioi *v.* sneeze (onomatopoei).

ato (f) *v.* 1. smell, snif (atofa pula: 'smell eyes' figurative for kiss), 2. taste.

ato *n.* outrigger stick.

atomaʔaia test by smelling.

atu *n.* Nautilus. A cephalopod, related to squids and octopus. They live at a depth of 150 to 200 metres and cannot survive long in water that is warmer than 25 degrees Celcius. *Nautilis pompilius.*

atu (m) *v.* scoop (using nautilus shell).

atu *v.* turtle mating. (figure of speech for intercourse).

atuana *n.* false labor.

au *n.* dew.

=au *pron.* 1SG object clitic.

Aua *propn.* Island 25 miles northeast of Wuvulu, whose inhabitants speak a dialect of Wuvulu.

aua *adj.* swollen.

aufolo *n.* crosspiece, cross, crucifix.

Auna *propn.* Village on southwestern point of Wuvulu

auna *n.* breeze.

auʔolua *adj.* thick.

awa *n.* covering.

awa *n.* tree species.

awa *n.* fish species. Coronation Trout. Inhabits outer reef slopes. Distinguished by a bright pattern of elongated blue spots, and yellow edges on the fins and the crescent-shaped tail. Size to 80 centimetres. *Variola louti.*

awai (n) *v.* describe animate things (humans, animals, fish).

awawa *n.* tiny winged insects attracted to light.

aweawe *n.* Common Dart. Inhabits coastal waters, frequently in the surge zone off sandy beaches. Distinguished by strongly forked tail and 1 to 5 large spots along the middle of the side. Size to 61 centimetres. *Trachinotus botla.*

aweawe *n.* fish species.

aweni (n) *v.* relieve.

aweri *n.* wrap-around garment. *See:* **lawalawa**.

aweri (n) *v.* 1. adornment including grooming of the hair, 2. to bless someone or something.

awi (ʔ) *v.* cut.

awi *n.* Trochus. This cone-shaped mollusk is one of the most important commercial molluscs in the Pacific, as its shell is used to make shell buttons. It is found easily in intertidal waters or very shallow sub-tidal waters. Since it is so easy to harvest, many island states have had to make laws to limit the harvest and protect the Trochus from being decimated.

awi *n.* shark-tooth sword.

awi *adj.* crooked, e.g., joint.

awia *v.* able

awiawi *n.* shark-tooth weapon.

aʔe *n.* originally referred to lungs, but meaning has become 'heart'.

aʔi *n.* one of four types of pandanus; grows in the muddy swamp area.

aʔifa *n.* drum type.

aʔile *propn.* the original name before German replacement > Aile.

aʔo *n.* from coconut leaves, but generally refers to roof of any material.

aʔolo *n.* tree species.

aʔolu *n.* turtle egg, chicken egg; spherical shape, including basketball, etc.

aʔu *v.* lie down.

aʔu *n.* Dogtooth Tuna. Inhabits coral reefs; usually seen by steep outer reef slopes. Feeds on fishes. Distinguished by large cone-shaped teeth, has a relatively large eye and wavy lateral line. Size to 150 centimetres. All tackle world record: 131 kg. *Gymnosarda unicolor.*

aʔuaʔu *n.* fever.

aʔui *v.* stretch,

aʔui *v.* heat.

aʔule *n.* Mackerel Scad. Inhabits coastal waters and swims in schools. Distinguished by a clear to dusky tail and 0 to 4 scales in the straight part of the lateral line in front of bony scutes. Size to 32 centimetres. *Decapterus macarellus.*

B - b

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ba *comp.* that. Introduces complement clauses and purpose clauses.

bababauʔu *v.* whisper, gossip.

babai *adj.* hot, high temperature--ambient, or of a person, liquid, or solid; figuratively for anger.

babanaʔi *n.* cover.

babanini *adv.* quiet.

babareʔa *adj.* scabbish.

babariana *v.* talk harshly.

babarii *n.* cooking pot or pan.

babarii *v.* cook. **babarii duʔua** cook food

babaroʔi *n.* Azure Triggerfish. Inhabits steep outer reef slopes, sometimes seen far out at sea around logs or other floating debris. Distinguished by relatively long body, triangular dorsal and anal fins, a rounded caudal fin with the upper and lower lobes slightly longer. Its color can change from grey to blackish, and it often has small white spots covering the head and body. Size to 35 centimetres. *Canthidermis maculatus.*

babatua *n.* moving sea.

babauʔu *n.* talking to self, gossip, whisper.

babaʔorui *v.* nod off.

babaʔu *n.* tree species.

babu *n.* whip.

bafu *n.* charcoal.

bafuro *n.* red coal.

bafuu *n.* black cod with blue spots.

bai *n.* puffer fish.

bai *v.* scoop or fetch water.

baibai *n.* mosquito.

baioʔo *v.* interrupt.

baira (ʔ) *v.* tear, rip.

balafai *n.* rat.

balai (n) *v.* slash.

balai *n.* tail.

balapea *n.* busy body.

balaturu *n.* Boxfish. Inhabits coral reefs. The young are bright yellow with black spots. Larger fish are brownish yellow with dark-edged pale spots. The largest adults are purplish brown with the spots faint or absent. This fish is also known as the Black-Spotted Boxfish. Size to 45 centimetres. *Ostracion cubicus.*

balaʔari *n.* Crescent Grunter. Inhabits inshore reefs, bays, harbours and river mouths. Distinguished by a pattern of curved dark stripes on its sides and dark bands on tail. Size to 32 centimeters. Eats excrement under the sea toilet. *Terpon jarbua.*

balaʔuʔu *v.* tremble.

balou *v.* bend down.

balu *n.* child.

bana (ʔ) *v.* join with something sticky, like glue.

banabana *adj.* sticky.

banabana pine bala *n.* sticky tree used to catch bala(fai) = rat.

banari *n.* scabies.

bani *v.* slam.

bao *n.* valley, box.

bao *n.* box.

bao *adj.* hungry.

bapaʔaa *v.* encounter.

bapaʔi *v.* run into, discover.

bara *n.* location, coral, coconut cup.

Baraa *propn.* clan, location.
barafe *v.* disobey.
barafe *adj.* premature.
Barafi *propn.* Barafi. *[Anth:* legendary hero*]*
baramapu *n.* rash.
baranafi *n.* cooking coral.
bareu *adj.* eye pain.
bareu *v.* nap.
bareʔa *v.* burp.
bari *v.* cook.
barito *n.* beetle hole
barito *adj.* greedy (figurative from beetle).
barito *n.* the hard shell left behind by the beetle that eats taro and banana.
baritoro *adj.* sunken eyes.
baro *adj.* concave.
barofu *v.* snap, break.
barofu *n.* fracture line.
barofuna *n.* cliff.
baroro *adv.* in container.
baroro *v.* stomach growl.
baru *v.* insert hand.
barua *v.* return to village or shore from bush.
barubaru *v.* a method of catching fish by reaching into the hole where they are hiding and pulling them out.
batafa *adv.* hurry.
batanai *q.* how?
batiri *v.* splash, rustle.
batuetue *n.* small swell.
Bau *propn.* Bau. Legendary traditional leader.
bau *n.* old man.
baua *adj.* large.
baua *n.* headman.
baubara *n.* young man.
baubau afelo *adj.* selfish.
baubau rawani *adj.* generous.
baubau ʔafelo *adj.* not sharing.
baufele *adj.* weak.
Baule *propn.* legendary leader who established peace between Wuvulu and Aua.
bawi *adj.* crooked.
baʔa *v.* tap, knock, pound, thump (onomatopoeic).
baʔa *n.* tap, knock, thump, pounding, explosion.
baʔale *n.* basket.
baʔananarai *n.* 1. violence, 2. recalcitrance.
baʔarere *n.* 1. money, from the onomatopoeic words from the 'tapping' (**baʔa)** and 'shaking' (**rere)** of coins, 2. coins.
baʔarofo *adj.* startled.

baʔautilai *adj.* sparkle, shine, flash.

baʔawera *v.* start from sleep.

baʔera *v.* burp, belch.

baʔileʔile *v.* limping.

Baʔo *propn.* constellation.

baʔo (f) *v.* cut.

baʔo *n.* Xanthid-type crabs. These are the most typical crabs with which people are familiar. The three species listed were identified with this term.; crab; the general word for crabs. *Atergatis floridus, Atergatis intergerrimus, Carpilius maculatus.*

baʔo ʔanuta *n.* a xanthid-type crab of light-orange coloring with evenly scattered rounded rust-coloured spots. *Liagore rubromaculatus.*

baʔoro (f) *v.* interrupt.

baʔua compound word from ba and ua. *rel.* that, in order to.

bea *n.* fruit bat.

beabea *n.* 1. Spotted Unicornfish. Inhabits coral reefs. Distinguished by a relatively long spike in front of the eyes and vertical dark lines on its sides (which may be small spots on the sides of fish not yet adult). This fish is also known as the Longnosed Unicornfish. Size to 50 centimetres. *Naso brevirostris*, 2. Sleek Unicornfish. Inhabits steep outer reef slopes, usually seen in schools. Feeds on zooplankton. It is brown to bluish-grey, but it can quickly change to pale blue. Rear edge of cheek and gill cover are often dark brown. Size to 75 centimetres. *Naso hexacanthus.*

Beatau *propn.* Beatau.

beberinamu *n.* guardian spirit.

bei *v.* blow.

bera *n.* husk.

beri (ʔ) *v.* 1 peel the skin of a betelnut fruit by biting and tearing away, 2. pick a cluster (of betelnut), 3. do and depart.

beʔa *n.* Twin-leaved Coogera tree. A 6 to 7 metre tree growing in the rainforest understory and in the open. Fruits are yellow, red and black.

bibiei *adj.* confused, crazy.

biei *v.* exasperate, vex. **Tani i po'o biei?** Why is he so annoying?

bilolo *n.* butterfly.

bilolo *v.* 1. dimming light **Nabilolo, fei weʔai.** The light has dimmed, is dimming, 2. descend. **Nabilolo fei manufifidau.** The bird descended.

binilo *n.* a black and white barred species of ribbon worm. *Baseodiscus mexicanus.*

biri (ʔ) *v.* work.

biro *v.* wink, pinch, blink, squint.

Biroti *v.* demolish, knockdown.

bitala *v.* used with searching in the grass or in hair, seaweed.

bitawe *v.* seperate.

biʔofei *v.* 1. wag, 2. shake, esp. body part (head, leg)

biʔolei *v.* encircle.

bo *n.* pierce-hole.

bobo *adj.* very dry.

boboʔai *v.* 1. cover, e.g., cover wound, 2. bandage, tie.

boboʔai *v.* 1. imprison.

bobo?i *n.* bundle rope.

boru *v.* go.

boru *n.* a fish species.

buniwa *n.* window. A window opening on traditional homes that could be sealed mosquito-tight. This type of window is referred to in one of the famous legends of Wuvulu going to Aua and enforcing a peace treaty.

E - e

e- *aff.* CLASS.

eai *num.* one, used to count days, weeks, years. *See:* **neai**. [used temporally to refer to an indefinite time in the past].

eai *art.* indefinite article. **eai arewaa Baule na tamanaa Aua.** One day Baude sailed to Aua.

efa *det.* some, shortened form of **efi?a**. **efa manumanu na panarofau** 'Some things held me'

efarani *adv.* sometime. **efarani na'aununaa** Sometimes I go to Wewak *See:* **nefarani**, **sometime (future)**.

efawala *n.* particular location.

efi?a *det.* some.

elaa *n.* tree species.

elarui *num.* two anim.

elelerui *adv.* two-by-two. (cf. **em-emea** (animate), and epepalo (inanimate)).

eli *adv.* conviction, guiltily.

elu *n.* mud.

ememea *adv.* each person, one-by-one (animate).

enaa *n.* tree species.

epepalo *adv.* each thing, one-by-one (inanimate).

epapau *num.* each pandanus box.

erere *n.* a guard, (erere pie 'guards of the beach'.

ero *n.* crab species.

eru (?) *v.* scoop water.

eruai *num.* a set of two.

etuwi *num.* half.

F - f

fa- *aff.* caus.

-faa *aff.* TR. transitive suffix, allomorphic with other historical consonants, Caa.

fafa (?) *v.* piggyback.

Fafala *propn.* loc.

fafanao *v.* steal.

fafanini *v.* tickle.

fafara *n.* toilette paper, coconut leaf tp.

fafari *v.* wipe arse.

fafaruru *adj.* slow.

fafau *adj.* low ceiling, *v.* humble.

fafaʔarai *adj.* 1. clean, pure.

fafelo *adv.* damage,ruin.

fafeloia *v.* break,destroy(a carving,eg).

fafi *n.* afternoon, *adv.* afternoon greeting.

fafifiʔi *v.* challenge.

fai *n.* substitute word. **substitute for words, e.g., intercourse**

faimamea *num.* nine anim.

faimapalo *num.* nine inanim.

fainaroa *num.* eight.

faipania *n.* friday.

fairuaia *n.* tuesday.

faiʔana *n.* affirmation.

fala (r) *v.* split.

falalapa *v.* act irresponsibly, misbehave.

falari *v.* ascend, *adv.* upright.

falatiti *v.* skid.

falatuu *n.* tree species.

fali *v.* laugh, smile.

faliawe *n.* coral branch. *Lambis truncata*.

faloloaiʔi *adv.* sorry, sad, mercy.

falu *v.* nail.

falulu *v.* judge.

falure *v.* oppose.

faluri *v.* give backside.

famalu *v.* be silent.

famamaʔaia *v.* tidy.

famanu *v.* gone forever.

famaʔa *adv.* before.

fameto *v.* humping.

famini *v.* smile.

fana *n.* gift.

fanafana *v.* swim (fish).

Fanamao *propn.* clan name, location. *Falaʔutu* chief's son born ti (plant) at Fanamao...Chifanamao (Max) name derives from**.**

Fanaro *propn.* 1. clan name, 2. location.

fanataoa *n.* hammerhead shark.

fanaʔuu *n.* Lined Monocle-Bream. Inhabits sandy areas near coral reefs. Distinguished by bold black stripes on upper half of body. Size to 24 centimetres. *Scolopsis lineatus.* **fana swim,ʔu**

fane *v.* climb.

fane- *asp.* habitually.

fanemaʔaia *v.* try to climb.

fani *v.* give.

fanini *n.* Hexagon Rockcod. Inhabits coral reefs; usually found in exposed outer reef areas in shallow water. It is similar to the Spotty Cod, but has a pattern of 6-sided dark spots, separated by small triangular white dots. Size to 30 centimetres. *Epinephelus hexagonatus.*

fanitoo *v.* give take back.

fanunu *v.* look.

fanunu laraia *adv.* mistaken identity.

fapalari *v.* lean back, recline.

fapapanai *n.* parasite plant, abut.

fapere *adv.* gone.

fapiʔo *adj.* pregnant.

fara *n.* spongy sphere in new coconut, used metaphorically for "brain".

farafara *n.* spirit medium.

farefuau *adv.* happy.

fareʔi *v.* close.

faria (n) *v.* punish.

fariri *adv.* slowly, gently, softly.

faru *v.* feed.

fatete *v.* return from sea, finish food, finish giving birth.

fatila *n.* pregnant.

fatititi *v.* surf.

fatiʔia *v.* patient, endure.

fatu *n.* 1. base, tree trunk, 2. leader, lord, God, source.

fatu *v.* poke.

fatupau *n.* shoulder blade.

=fau 1SG object enclitic.

faufau *adj.* strong.

faufau *n.* strength, rope.

faufau *n.* rope.

fautio *n.* a species of cuttlefish. It is able to change its colour and texture, but is easily recognized when displaying its yellow colour pattern. *Sepia latimanus.*

fawawalua *adj.* sad.

fawawia *v.* wait.

fawelei *n.* area.

fawenai *v.* breathe.

faweweni *n.* life, breath.

fawi (ʔ) *v.* lock, tighten.

fawiwiʔa *v.* wait, be patient.

faʔa *v.* depart.

faʔa (n) *v.* displace.

faʔaia *v.* inform.

faʔana *n.* migrant.

faʔawatai *n.* pressure.
faʔawatai *v.* to pressure.
faʔaʔa *adj.* straight.
faʔaʔa *adv.* straight.
faʔenai *v.* spy, confirm, verify check.
faʔobao *n.* thursday.
faʔoluaia *n.* wednesday.
faʔono (m) *v.* cause or teach to sing. **faʔonomau** teach/cause me to sing
faʔua *adj.*
    — *adv.* true.
fefe *v.* squeeze out, bow, kneel.
fei *art.* the.
felo *v.* bend.
felofelo *n.* pocket knife.
fena *dem.* that.
feni *dem.* this.INAN
feroi *v.* teach.
feta (n) *v.* do.
fetanai *adv.* doing. **Oi fetanai?** What are you doing?
feti *v.* slip.
    — *adj.* slippery.
feto *v.* retract. **trigger, retract foreskin, lever, light.switch**
fetu *v.* wash.
feʔo
feʔoa *v.* speak.
fi- *ASP.* simultaneous.
fi- -i *ASP.* reciprocal circumfix.
=fia *pron.* 3SG object enclitic.
fiarenii *v.* arguing with each other (reciprocal).
fiaroi *adv.* paired.
    — *n.* couple.
fifani (n) *v.* juggle.
fifanunui *v.* good to one another. **literally look at one another**
fifilei *adv.* food drink preference.
fifirai (n) *v.* play, be rambunctious.
fifiʔi *n.* head sore.
fifiʔii ʔunu *n.* temper.
filati *v.* cutting dialogue.
file *adj.* tangled.
filii *n.* Intermediate or Great Egret. *Egretta intermedia or Egretta alba.*
filori (n) *v.* exchange, change.
fiminaʔei *adv.* same.
finaʔuii *adj.* parent child. **parent child relationship**
finefine *n.* any type of material, weapons, clothes, etc.
fineu *v.* fishing type (women at night).
=fio *pron.* 2SG subject proclitic.

fipanaʔii *n.* unity, touching, adjacency.

fipapaʔii *adv.* two things touching.

fipetoi *adv.* this is derivable from the grammar.

fipoai *adv.* facing one-another.

fipui (n) *v.* combine.

fira *q.* how many?

firafira *v.* 'schooling' fish.

firafiʔii *adv.* too close.

firi *v.* pry, pull out fishgills, flick. **pry out coconut meat.**

firialo *n.* white foreigner.

firifiri *n.* small, 2 cm. crustacean that is light in color and can startle a person by its ejective action against the skin. *Gonodactylus sp.*

firipopoʔo *adj.* swelling of a puffer-fish, or the inflation of a ball.

firitataa *adj.* overworked, forked.

fitani *v.* press down.

fitanii *q.* How are they related?

fitatafii *v.* romance.

fititibai *v.* continuous conflict.

fiwalei *v.* race.

fiʔalarii *v.* divorce.

fiʔi *v.* pain.

fiʔupui *adj.* grandma pa child.

fiʔuʔui (n) *v.* clench teeth.

fofolaa *n.* bully.

foitai *v.* toss and turn.

folari *v.* stretch.

folo (r) *v.* cut type.

foloʔeʔe *adj.* flat.

fora *v.* pull a rope, or pull=influence a person. **foraiaa pinena influence, pulling a story**

fora *n.* coconut grease \ps n.

foranini *v.* compound of pull and rip.

foraʔaʔari *v.* extremely windy.

forefore *n.* shoulder.

fota *n.* flower.

fotaa *v.* bloom.

fotaroo *n.* a tree commonly called kerosene wood in Papua New Guinea because of the dark smoke it gives off when it is burned. *Corsia subcordata.*

foʔa *v.* hit, fight.

foʔu *n.* louse.

fua *n.* fruit.

fua *v.* rise.

fuaiʔita

fuara *n.* crocodile.

fuefue *n.* vine type.

fufu (ʔ) *v.* extract, uproot.

fufu *n.* baby step.

fufulu *propn.* Wuvulu.
fufumoumou *v.* learning to walk, walk and fall.
fula *n.* taro species.
funi *v.* shake to waken.
funu *adj.* sick
funua *n.* sickness.
funurere *v.* shiver, as from fever or fear.
fuowo *n.* tree species.
furafura *n.* poison.
furo *v.* get ready.
furofuro *adj.* sandy skin.
furoi (n) *v.* hold down.
furu *n.* tree species.
futo *v.* erase.

I - i

ia *adv.* where as a question only for people.
ia *pron.* 3S.
=**ia** 3SG object clitic.
iau *pron.* 1SG.
iei *adv.* there.
ieni *adv.* here.
ine *n.* footprint.
inene *adv.* later.
ini *q.* whoever, who?, anyone.
inoru *n.* tree species.
inu *n.* a sponge with a frosted-looking outer surface and a very flabby texture. It is found in inshore areas, often on overhangs or beneath ledges. *Prianos osiros.*
io *n.* spear.
=**io** *obj.* 2SG.
io malai *n.* spear Malaysia.
ioi *pron.* 2S.
ipo *n.* anchor.
itani *q.* where?
iʔi *adv.* yes.

L - l

labari (n) *v.* search.
labe *v.* catch, caught, run aground.
labeta *n.* Banded Sergeant. Inhabits shallow reefs exposed to surge to a depth of about 3

metres. Feeds mainly on algae. Distinguished by 6 to 7 greyish bars. Size to 17 centimetres. *Abudefduf septemfasciatus.*

lafe *v.* drift.

lafe *adj.* unlucky.

lafelafe *n.* current.

lafiri *v.* cut.

lafulafu *v.* light rain, pray.

lailai *n.* trochus shell. *Trochus niloticus*.

lala *n.* sign.

lala (ʔ) *v.* request, summon, invite.

lalai (n) *v.* marry.

lalamira *n.* twister, tornado.

lalaofa *n.* 1. white tip shark. Inhabits coral reefs, usually in lagoon passes or near to outer reef dropoffs. Feeds on squid, crabs and fishes. Distinguished by a black margin on the tail. This is a dangerous shark that quickly forms a feeding frenzy. Size to 255 metres. *Carcharhinus amblyrhynchos*, 2. Tiger Shark. Inhabits inshore and deeper offshore reefs. Feeds at night and hides in deeper areas during the day; eats anything that moves. Distinguished by its blunt snout, stripes on its side (although the stripes are faint or absent in large adults) and by a bony ridge on the side of the tail base. It is grey with a pale belly. This is a very dangerous shark. Size to 650 centimetres. *Galeocerdo cuvier.*

lalapa *n.* disrespect.

lalare *n.* wind.

lauri *v.* sing.

lalaʔo *n.* poisonous leaves, causes pain.

lalaʔo ʔari *n.* a delicate soft coral with eight-branched tentacles that look like little palm trees. *Clavularia sp.*

lalili (n) *v.* examine, inspect, choose.

lalo *prep.* in, inside.

lama *n.* sea.

lama pula *n.* pupil.

lamaa *adj.* blustery (sea).

lamalama *adj.* very smart.

lamalama *n.* puddle, flood.

lao *n.* voice, fly.

-lao *dir.* from spkr.

laoa *n.* figurative for someone who is upset.

lapai *n.* Fringelip Flathead. It inhabits sandy bottoms adjacent to coral reefs and usually buries itself in the sand. It feeds mainly on crabs and prawns. Distinguished from other New Guinean flatheads by skin flaps on the edge of its lips. Size up to 25 centimetres. *Thysanophrys otaitensis.*

lapari *v.* slap.

lapena *n.* Northern Threadfin. Inhabits coastal waters, frequently off sandy beaches. Feeds on crabs, shrimps and certain worms. Distinguished by a divided pectoral fin with the lower part containing 5 free filamentous rays, and a blunt snout with a sub-terminal mouth. Size to 45 centimetres. *Polydactylus plebius.*

lapopo *n.* tree species.

lara *v.* lara uwi = lust.

lara *v.* drip, run(ny).

larai *v.* to mistake a person for someone else.

laraia *v.* change form.

Laree *n.* clan name, location.

lari *n.* skipjack tuna.

lari *adj.* upright.

laro *n.* particles: sand, cereal, etc.

larofi *v.* splash, interrupting throught, sudden realization.

laru *n.* Red Firefish. It inhabits coral reefs, usually in caves or under ledges during the day, but is often seen in the open at dusk or at night when they are feeding. It mainly feeds on crabs and prawns, but will also eat fishes. Distinguished by broad filamentous pectoral rays. Size up to 38 centimetres. *Pterois volitans.*

laru= *pron.* 3DU subject proclitic.

larua *pron.* 3DU.

latelate *n.* coral species.

lato *v.* loss of arm or leg.

lato *adj.* shortened cylindrical object: finger, pencil, stick.

lau *n.* seed, clan name, location.

laua *n.* Pennantfish (Giant trevally) Inhabits coastal waters and offshore reefs. Distinguished by steep angular forehead profile. The juvenile has long, filamentous fin rays. The adult has a relatively large eye. Size to 130 centimetres. *Alectes ciliaris.*

laur *v.* carry a bag or something with handles that hangs.

laura *n.* song.

lauri *v.* sing.

lauruao *n.* type of ginger, yellowish inside.

lauruʔua *adj.* brave.

lawalawa *n.* wrap-around skirt, laplap. *From:* Tok Pisin.

lawara *n.* barrier.

lawari *v.* block.

lawaʔulo *n.* spider web.

lawe *adj.* high, far.

laʔuri *v.* example: something that abutts another object so can't be moved.

lea *n.* shelf, store.

Leaa aruru *n.* location.

leatai *n.* a big red ant.

lele *v.* walk, crawl, locamotion.

leru *n.* tree species.

leru *v.* oil hair (apply oil to hair).

leti *n.* by tail, like a tube underneath that eggs are delivered through.

lewa *n.* green before blue sea.

Lewore *n.* a beach on the western north shore of Wuvulu Is. with a natural pool (by Lumiri and Lumiriri).

li *v.* go.

liai *adv.* again.

liala *n.* taro species.

liba *n.* scar.

libaitina *n.* Black and White Snapper. Inhabits coral reefs, most commonly found on outer reef slopes to at least 90 metres deep. Feeds on plankton. Juvenile form has striking black and white markings. The adult is black with lighter spots on the upper back and a lighter stripe down the middle side. Size to 60 centimetres. *Macolor niger.*

Lifa *propn.* clan name, location.

lifaʔuʔu *n.* midnight.

lifo *n.* tooth.

lifowai *n.* scorpion.

lili *adj.* spotted.

lilipitii *n.* shoreline.

liliweʔa *n.* skin spotting, lit. spots of an eel.

lio *n.* vagina.

li- *asp.* PERF.

lira *n.* small, just-hatched louse.

lira *v.* rip meat.

lirare *adj.* argumentative.

loa *n.* a kind of jellyfish. It often drifts ashore when blown in by wind and current. *Porpita pacifica.*

loai *v.* dance.

loaloaia *n.* leaf dance.

loati *n.* grille, small knife.

lofu *n.* males bro, fathers bros son.

loli *n.* Lunar-tailed Bigeye. Inhabits coral reefs, living in caves during the day and coming out to feed on fishes and small invertebrates at night. Looks similar to the Duskyfin Bigeye, but is distinguished by its lunar- or crescent-shaped tail. Its colour can change rapidly from pinkish silver to intense red. Size to 40 centimetres. *Priacanthus hamrur.*

loliloli *v.* indecisive about which direction to go.

loli (n) *v.* decide.

lolo *v.* sink down.

lolo *n.* dirt.

loloa *adj.* dirty.

lolomaʔu *n.* grass species.

lomi *neg.* no, not.

lopi *n.* cup, container.

lora *adj.* charred food.

lora *v.* cut through or traverse waves to go to deep sea.

loralora *n.* sore.

lore *n.* dragonfly.

lori *n.* belly.

lori (n) *v.* end

loto *v.* block.

lotoloto *adj.* constipated.
lotu *n.* 1. worship (from Tok Pisin *lotu* 'worship'), 2. church.
lou *n.* swollen belly..
loʔe *neg.* no.
loʔo *n.* abcess.
loʔo- *adv.* Verbal prefix indicating first in a sequence.
luae *adj.* paralyzed.
luafi *n.* ash.
lufa *adj.* fragrant.
lufu *n.* remainder; Of the five fish, two remain.
lulu *adj.* 1. dull, esp. a cutting tool. 2. stupid.
lulua *n.* court trial.
luluna *n.* pillow.
Lumiri *propn.* clan name.
Lumiriri *propn.* clan name, location.
lumu *n.* algae.
lupu *v.* swell.
lupua *prep.* among. **Ina ude dupua ei nia.** It was among the fish.
lupua mefi *adv.* between dreams.
lupulupu *n.* mound.
lura₁ *n.* feather.
lure *v.* 1. support an object, 2. support/encourage a person.
lure *n.* 1. brace, 2. cane
lure *n.* eye-cyst.
luri (n) *v.* get person.
lurii *n.* taro species.
luʔu *n.* knee.
luʔu *v.* chew, crush.
luʔua *n.* food.

M - m

ma *conj.* and.
ma *adv.* so?
-maa *aff.* TR.
mafa *adj.* ashamed.
mafawe *n.* earlobe.
mafo *adv.* dried (sore).
mafufuo *n.* morning.
mafufuo *adv.* morning greeting.
mafufuoi *n.* leftover for breakfast.
-mai *dir.* to spkr.
maia *n.* clan chief, location.
maila *n.* moss.

mala *n.* Black-Lipped Pearl Oyster. Oysters like this produce commercially valuable pearls. *Pinctada margaritifera.*

malaa *adj.* long.

malafofo *n.* feeling when fingernails against chalkboard.

malafu *n.* plant species.

malai *n.* an upright stony coral which has flattened branches with pale ends.; a barrel sponge. One of the largest sponges on the coral reef. It is found in a wide variety of habitats and colours. Its shape is globular with sharp vertical ridges. *Pocillopora eydouxi.*; *Xestospongia (species?).*

malala *n.* 1. ground, 2. area.

malalaa *n.* Common Dolphinfish. Other names for this fish are Mahimahi and Dorado. It inhabits oceanic waters well offshore. Feeds on fishes and is often sighted around floating logs or other debris. Distinguished by its laterally compressed body and unusual shape with long-based dorsal and anal fins. Males have a bulging forehead profile and yellowish color on the belly. Females are less colorful and do not have the bulging forehead. Size to 200 centimetres. *Coryphaena hippurus.*

malalaa wero *n.* fish species.

malarufu *n.* ground, Earth, world, soil, dirt.

malau *n.* Blue-lined Surgeonfish. Inhabits coral reefs exposed to wave action. Distinguished by blue and yellow stripes. The caudal spine is venomous. This fish is also known as the Striped Surgeonfish. Size to 38 centimetres. *Acanthurus lineatus.*

malawa *n.* Eastern Curlew. *Numenius madagascariensis.*

malaʔare *n.* loquatious person.

malaʔuʔu *adj.* sick feeling.

Male *propn.* clan name, trace sign.

malefa *v.* daydream.

malefa *adj.* astonished, suprised.

malefalefa *adj.* nauseated.

malele *adj.* scent, odor.

maleu *n.* tree species.

malewa *adj.* transparent liquid.

mali *adj.* salty eyes.

malianaa *n.* vibrant green.

malii *v.* endure, continue, persist. **I malilao...** After quite a while...

malii *adv.* long time. **Namina malii noranamai.** He/it is taking a long time to come.

malili *v.* lost, trapped, stranded.

malimali *n.* plant species, poisonous plant used to kill fish.

malimalii pula *n.* tree species.

malino *adj.* calm sea.

malipoʔai *v.* gusting wind.

maliʔi (n) *v.* forget.

malo *n.* ant.

malomalo *n.* cyst.

malopa *n.*

malopa *v.* dent.

maluafi *n.* ash.

maluare *adv.* hurried, quickly.

malumu *adj.* quiet, humble.

maluofo *v.* taken aback.

maluru *adj.* tired.

maluta *adj.* soft.

maluʔare *v.* hurry.

mama pilaua *n.* Jack Fruit tree. Also spelled Jak Fruit or Jac Fruit. This tree is a relative of the Breadfruit tree, and comes from Malaysia or India. The fruits grow on the trunk, and can weigh up to 30 kilograms each. The ripe fruit has an unpleasant odor, but the taste is good. The yellowish flesh can be eaten raw, boild, or fried and is delicious in curries. The large white seeds are also good roasted, tasting something like chestnuts. *Artocarpus heterophyllus.*

mamaa *n.* breadfruit, breadfruit tree; Breadfruit tree. This tree came from Malaysia. It grows 10 to 20 metres high and has large split leaves that can be 40 to 100 centimetres long. The round fruits can weigh up to 8 kilograms. The wood has been used for canoes, the bark for making tapa cloth, and the sap to fill in the seams of canoes and tapa. One or two breadfruit trees provides enough food for a family for a year. The fruit is high in carbohydrates, and is a source of Vitamin A, B, and C. *Artocarpus incisus.*

mamalai *n.* temple at side of eyes.

mamalaro *v.* desire to eat fish.

mamalawia *adv.* feeling good.

mamaliai *adj.* forgetful.

mamalo *n.* joint.

mamalou *adj.* sad.

mamamaʔa *n.* visionary, prophet.

mamapu *n.* Smooth Flutemouth. It inhabits coastal waters near reefs, feeds on fishes, and is distinguished by its long snout and the trailing filament on its tail. Size up to 163 centimetres. *Fistularia commersoni.*

mamara *adj.* dry.

mamari *adv.* sting sensation.

mamario *adj.* shady.

mamaruru *n.* pride, gloating, boast, happy, joyful.

mamaua *n.* breaking wave.

mamaunua *adj.* rainy.

mamawa *v.* yawn.

mamaʔa *adj.* cleared out.

mamaʔa *v.* waken.

mamaʔaa *n.* clear area.

mamaʔirua *n.* Sunday.

mami *n.* Double-headed Maori Wrasse. Inhabits coral reefs, usually seen on steep outer slopes at 10 to 100 metres deep. Feeds on molluscs, fish, crustaceans, brittle stars, urchins, and crown-of-thorns starfish. Distinguished by its huge size and the hump on its forehead. This fish is also known as the Humphead Maori Wrasse. It usually swims alone. Size up to 229 centimetres and 190 kilograms. *Cheilinus undulatus.*

mamo *v.* swing to side.

mamomamo *adj.* rocking sideways.

manafiri *adj.* thin.

manawa *v.* choke on food, center of area, center of head.

mani (ʔ) *v.* try.

maniwa *n.*

— *conche.shell.* Trumpet Triton. This is a predator of echinoderms, such as starfish. *Charonia tritonis.*

mano *n.* termite.

manopuwao *n.* overhang edge.

manoʔu *v.* hiccup.

manu *adv.* invisible.

manuaa *n.* Little Grebe. *Tachybaptus ruficollis.*

manufau *adj.* new.

manufi *n.* cheek.

manufifilu *n.* bird.

manulelele *n.* legged animal.

manumanu *n.* thing.

manupila *n.* spongy moss.

manuro *n.* red flea.

manuʔaa *n.* type of unicornfish.

mao *adj.* bruised.

mapu *v.* sweat.

mapu *n.* sweat.

Mapua *propn.* clan name, location.

mapulufa/raipo *n.* sweet-smelling tree.

Mara *propn.* clan name, location.

mara *adj.* ripe yellow.

— *n.* Mimic Surgeonfish. Inhabits coral reefs. Distinguished by a dark brown area on the lower and rear part of the head and a yellow edge on the tail. Size to 25 centimetres. *Acanthurus pyroferus.*

marafu *n.* clam.

maralee *n.* Archer Cherry. This bush is common in drier parts of coastal rainforests. In some conditions it is able to grow as high as 15 metres. The droopy stems and shining wavy leaves look a lot like the coffee plant. The soft red fruits contain about 10 hard seeds. Sometimes the fruits are orange or purple. The flowers are creamy white and fragrant. *Aidia racemosa. Also known as Randia cochinchinensis.*

maralele *adj.* worn out.

marana parafu *n.* Freckled Hawkfish. Inhabits coral reefs. Feeds mainly on fishes. Distinguished by numerous brown to red spots on its head. This fish is also known as the Blackside Hawkfish. Size to 23 centimetres. *Paracirrhites forsteri.*

marao *n.* bird species.

marapapa *n.* Gold-spotted Spinefoot. Inhabits coral reefs, usually seen in pairs. Distinguished by a dense network of small dark-edged orange spots. This fish is also known as the Spotted Spinefoot. Size to 40 centimetres. *Signaus punctatus.*

marapati *n.* rotten fruit.

marapuʔi *n.* mushroom, fungus.

marapuʔia *adj.* bad-tasting.

marari *n.* Dash-dot Goatfish. Inhabits sand-rubble bottoms near coral reefs. Distinguished by a black stripe from the snout through the eye then continuing on the upper side, and a black spot on the tail base. Size to 50 centimetres. *Parupeneus barberinus.*

marata *v.* smash.

marauwi *n.* green coconut.

marawa *adj.* green.

maraʔe *adj.* smooth.

mare *v.* cough.

marereroi *n.* Scrub Bloodwood tree. The bark of this tree exudes a pale sap when it is cut that soon changes colour to bright red. This is why the tree?s common name is ?bloodwood?. The wood is so full of resin, or sap, that it will burn when it is still green. The Srub Bloodwood has long-lasting red and green fruits and is often found growing on the edges of the rainforest or in stony places beneath it. *Baloghia inophylla.*

marewa *n.* peripheral vision.

mariri *adj.* cold, e.g., liquid, body.

mariwee *n.* Yellowlip Emperor. Inhabits coral reefs. Distinguished by yellow-brown to olive colouring, sometimes with indistinct dark spots scattered on the side, and its upper lip is yellow or orange. Size to 60 centimetres. *Lethrinus xanthochilus.*

maroa *n.* group.

maru *adj.* full, satisfied.

maruru *n.* sudden death. used metaphorically, if someone's words stun another person.

matafofo *v.* sudden conviction.

matala *v.* disperse, crumble, dissipate.

matanii *n.* poisonous turtle that can be fatal. The smallest of the three sea-turtles that visit Wuvulu. Its shell is reddish.

matapaʔa *n.* wild passionfruit.

matarawe *n.* trochus species.

matata *n.* monotone voice.

matawa *n.* sea anemone. This word was used to identify several sea anemone species from photos. *Heteractis magnifica, Heteractis crispa, 2 Heteractis sp., and Macrodactyla doreensis.*

matoa *adj.* urine smell.

matonu *n.* tremble, earthquake.

matorutoru *v.* cry breathe, sob.

matue *v.* overflow liquid.

mau *n.* a thing class, character, characteristic, crocodillian longtom.

=mau *pron.* 1SG object enclitic.

maua *v.* 1. arrive, 2. appear.

maruaru *v.* sweat.

maui *n.* left hand.

maunu *n.* rain.

mauri *adj.* healthy.

mauʔu *adj.* smelly.

maʔa *v.* see.

maʔa *prep.* front; eg. of a canoe, shirt.

maʔala *v.* untie, unloose.

maʔalaa *n.* sea urchin with long, skinny, sharp black spines. *Diadema savignyi*.

maʔamea *n.* Trevally. Inhabits coastal waters and offshore reefs. Distinguished by its steep forehead profile and silvery to dusky colouration. It is also known as the Lowly Trevally. Size to 170 centimetres. *Caranx ignoblis.*

maʔaraa *n.* rash.

maʔatutu *n.* fetus.

maʔau *adj.* right handed.

maʔau *v.* fear.

maʔe *v.* die.

maʔi *n.* low tide.

maʔila *adj.* few, some.

Maʔilolo *propn.* particular constellation.

maʔiru *adj.* sleepy.

maʔiru *v.* sleep.

maʔiʔi *n.* landslide.

maʔua *adj.* strong, firm.

maʔuaa *conj.* but, however.

maʔuu *n.* Hump-headed Parrotfish. Also known as the Bumphead Parrotfish. Inhabits coral reefs. Distinguished by its large size and the hump on its forehead. Bluish colour. Usually swims in schools. Size to 120 centimetres.; Humpback Unicornfish. Inhabits coral reefs. Distinguished by the angular profile of its back. The adult male has a long tapering ʔspikeʔ in front of the eye, the female has only a bump. Size to 60 centimetres. *Bolbometopon muricatum.*; *Naso brachycentron.*

mefi *v.* dream.

mefo *n.* whisker, beard.

mei *art.anim.* the.

melomelo *n.* big belly.

meme *n.* debris, trash.

memero *n.* epilepsy, seizure.

memewa *adj.* middle.

memewai *v.* scream.

memeʔii *n.* tree species.

mena *dem.*anim.sg.dist. that.

meni *dem.anim.* this.

mere *adj.* full liquid.

meru *addr.* 2DU address form (hey, you two…), used to refer to one's in-law.

metu *v.* overflow.

mewai *v.* loud exclamation.

meʔo *addr.* 2PL address form (hey, everyone…).

meʔo *n.* Red Bass. Inhabits coral reefs to at least 70 metres deep. Distinguished by a deep groove or pit from the nostril to the front of its eye, a reddish colored belly and

lower sides and a prominent black upper edge of the pectoral fin. This is a good eating fish, but large specimens should be avoided because of possible ciguatera poisoning. Size to 75 centimetres. _Lutjanus bohar._

mi- _dir._ to spkr.

=mia _pron._ 3SG object enclitic.

mimi _n._ urine.

mimi _v._ urinate.

mina _adj._ all, totally.

mina- _adv._ before.

minamina _adv._ long ago.

mini _n._ ray tail.

minoa _adv._ yesterday.

=mio _pron._ 2SG object enclitic.

mole _v._ deficate.

molemole _n._ Parrotfish. This is the general word used for at least two species seen in Wuvulu waters. Parrotfish feed on algae growing on dead coral, eating this vegetable matter and excreting a fine white sand. _Scarus ghobban and Hipposcarus longiceps._

momo _n._ dry coconut shell.

momo _n._ tree species.

momole _n._ golfball sized new coconut.

momoʔai _v._ turn around.

mona _n._ pandanus with small red corn like fruit.

monu _n._ Smooth Squirrelfish. This fish inhabits coral reefs, frequently found amongst branching corals. It is distinguished by its mainly silver colour with faint spots forming longitudinal lines on its side. It has a plain dorsal fin. Size up to 25 centimetres. _Neoniphon argenteus._

mori _n._ tree species.

moro (ʔ) _v._ transverse cut, split wood.

motararaa _n._ Paddletail. Inhabits coral reefs. Distinguished by its forked caudal fin with rounded lobe, a deep notch in the rear margin of the cheek, and obliquely oriented scale rows both above and below the lateral line. This fish is not recommended for eating because it has frequently caused ciguatera poisoning. Size to 50 centimetres. _Lutjanus gibbus._

motu _v._ sever.

mou _v._ fall.

moubiabia _adj._ no food.

moʔi _v._ tie around.

-mu _poss._ 2SG.

mua (n) _v._ win.

mulau _n._ frog.

mumuni _n._ mute.

mumuni _v._ rinse mouth.

mumuʔa _v._ vomit.

munai _adj._ unfortunate, unlucky.

muri _prep._ behind.

Murii *propn.* clan name, location.
muro *n.* stone.
muropuolewa *adj.* soil high in phosphate.
muti *v.* diarrhea, watery fart.
muti *n.* diarrhea, watery fart.
muʔui *v.* grunt.

N - n

na *ij.* affirm.
na- *mood.* REAL.
-naa *aff.* TR.
-na *aff. poss.*3SG.
naba *conj.* if.
nafa *v.* shake down.
nafa *v.* spear, throw, shoot.
nafalaʔuri *v.* bump.
nafaruʔi *v.* hold together.
nafi *n.* servant.
nafu *n.* arm band.
naira *q.* when? (future).
naira *adv.* later.
nalenale *n.* flame.
nali *ij.* okay.
namafuo *n.* two days hence.
naminamia *adj.* unsalted.
namo *n.* shallow reef.
namo *n.* blood.
Namorii *propn.* name of a small namo, location by Dumuri.
Namua *propn.* clan name, location.
nanaa *n.* pus.
nanafita *adj.* stubborn.
nanamui (n) *v.* feel.
nanao *n.* female adolescent, young woman.
nanauwi *v.* teach, model behavior, imitate.
napi *n.* groin lymph node.
nara *v.* think.
nara *n.* thought.
narani *adv.* tomorrow.
nari *v.* scrape.
nariana *v.* unfortunate, unluckily.
narinari *adj.* tingle.
naro *v.* bark.
naro *v.* confront.

nati *n.* tree species.

=nau *pron.* 1SG object enclitic.

nawe- *asp.* finally.

nawi *n.* tree species.

nawi *v.* peel.

naʔa *adv.* nearly, when.

naʔa *conj.* if.

naʔa *v.* warm, e.g., to warm one's self by fire.

naʔa *n.* rock.

naʔauru *adv.* three days hence.

naʔi *v.* write.

Naʔinaʔi *adj.* tight string, or tight trousers.

naʔu *n.* child, tree species.

naʔu matawa *n.* Spine-Cheek Anemonefish. Lives with sea anemones (usually Entamaca quadricolor) both on sheltered inshore reefs and on outer slopes. Feeds on zooplankton and algae. Disinguished by overall red colour, three pale bars, and an enlarged spine below the eye. They are found in pairs where the female is usually 2 or 3 times larger than the male and the female's colour is less brilliant. Size to 16 centimetres. *Premnas biaculeatus.*

naʔu piye *n.* Blood Mouth Conch. It gets its name from the red color inside the shell opening. Commonly found in sandy bottoms around reefs. *Strombus luhuanus.*

neai one (future).

nefarani *adv.* later.

nefi *v.* scratch body.

nei- *mood.* deontic.

nemea *art.* SG.ANIM.

nene (r) *v.* follow.

nene *adv.* later.

nene *prep.* behind.

nenetaipoa *n.* food preference.

Nenewaʔau *propn.* Milky way.

nera *adj.* sexually aroused.

nera *n.* erection.

neʔi *v.* write, paint, draw.

ni *adv.* take!

nia *n.* fish.

=nia *pron.* 3SG object enclitic.

nia tawa *n.* Bridled Parrotfish. Inhabits coral reefs, usually swims in small groups. Distinguished by abruptly lighter areas on the lower half of its head and rear of its body. The female has 6 to 7 darkish stripes on its sides and reddish fins. This fish is also known as the Six-Banded Parrotfish. Size to 40 centimetres. *Scarus frenatus.*

Nifele *propn.* clan name, location.

nifi rawa *adj.* bad mood, wrinkle forehead, frown.

nifirei *v.* inhale, clear throat.

nimanima *n.* slight breeze.

nimaufina *n.* rough sea (strong enough to sink a canoe).

nini *v.* shred.

ninio *n.* a beetle that eats coconut.

ninirara *v.* about to strike.

ninito *adj.* senseless.

niniwai *n.* chest.

=nio *pron.* 2SG object enclitic.

nirofi *v.* force into.

nito *v.* fat (widening) person appears to shrink vertically.

niu *n.* Coconut Palm. This tree may live as long as 100 years. It has a single trunk 20-30 metres tall, with smooth grey bark marked by ringed scars left by fallen leaf bases. Leaves are 4 to 6 metres long, pinnately compound; fruits are as big as a man's head and weigh 1-2 kg. *Cocos nicifera L.*

niʔe *adj.* happy.

no *v.* move.

nofi *v.* fill.

nofii *n.* contents.

nofu *n.* Smallscale Scorpionfish. This fish inhabits coral reefs, usually lying motionless on rock or coral. It feeds on fishes and crustaceans. Distinguished from other New Guinean scorpionfishes by its large size and elaborate branched skin flaps on its head. Its colour varies--usually mottled brown in shallower water, but reddish below 10 to 15 metres. Size up to 30 centimetres. *Scorpaena oxycephala.*

noi *v.* beg.

nono *n.* wall.

nono *n.* Noni tree, also called the Indian Mulberry tree. This is a small tree with leaves that are about 20 centimetres long. The fruits look like tiny breadfruits that turn from light green to white when ripe. The bark produces red dye and the root produces yellow dye. In a myth from Tonga, Maui was brought back to life when the leaves of the "Nonu" were placed on his body. *Morinda citrifolia.*

nono *n.* sandfly.

nono *v.* penetrate.

nonomi (n) *v.* remember.

nopa *n.* sleep house.

noria *v.* accompany.

noro *adj.* heavy.

noro *adj.* wet.

noroi *v.* snore.

noʔoa *adv.* forever.

noʔu *n.* treetop, mast, prow, pinnacle.

noʔu *v.* raise voice.

nubanuba *n.* open space, low voice.

nuei *v.* shake.

nufi *v.* wash body.

numa *n.* drink.

nunu (f) *v.* wash body.

nunu *n.* tree species.

nunu *n.* ebb tide.

nunumi (n) *v.* desire, want.
nunurui *n.* in-out current.
nunuta *v.* resign, give up.
nunuta *adj.* lonely.
nure *n.* nose.
nurui *v.* current shore to sea.
nutu *v.* sprout.
nutunutu *v.* cut-in (in line).
nutunutu *adv.* crowded.
nuwenuwe *adj.* happy.

O - o

o *ij.* oh.
o- *aff.* address. Address morpheme, combines with kin terms and positions (leader, teacher, etc.).
-o *pron.* 2SG object enclitic.
Oabea *propn.* location.
Oalau *propn.* location.
Oalau *adj.* north
Oalau *n.* north wind.
oapu *n.* grave.
Oapuu *propn.* location.
ofa *n.* nest.
ofatauneneru *v.* go inland from shore.
ofe *v.* persuade.
oi *adv.* term of endearment.
oi *n.* sweetheart.
olaa *n.* fish species.
Olaola *propn.* constellation Pleades.
oli (ʔ) *v.* replace, repay.
olo *n.* sprout tip.
oloniu *n.* Gold-saddled Goatfish. Inhabits coral reefs. Has two colour phases, one yellowish grey to dark brown with blue markings on scales and a yellow saddle on top of the tail base, and the other entirely yellow. Size to 50 centimetres. *Parupeneus cyclostomus.*
Onne *propn.* village name.
ope *v.* empty liquid.
ope *v.* urinate.
opi *n.* old woman.
ora *v.* chew.
oreore *v.* block.
ori *v.* tie, mark something, hook.
ori *adj.* rough.

oriori *n.* traditional spear.
oro *n.* buttocks.
orua *n.* Australian Pelican. *Pelecanus conspicillatus*.
ota *v.* literally to speak, but used figuratively for verbal attack.
oto *n.* planted in ground used to husk coconut.
oʔo *adj.* satisfied.

P - p

pa *n.* basket.
pa anana *n.* stomach.
pafea *adv.* above, heaven.
pafo *prep.* on, above.
pafua *n.* standby, reserve.
pai *n.* Blue-Spotted Stingray. Inhabits sand bottoms, frequently near coral reefs. Feeds mainly on molluscs. Distinguished by diamond-shaped body and blue to brownish spots. It has venomous spines on the tail. Size to 45 centimetres width of body, 70 centimetres total length. *Dasyatis kuhlii.*
pai *n.* family line or geneology.
pai *v.* put into a basket, fill (a basket).
pai roe *n.* Spotted Eagle Ray. Inhabits coastal waters near reefs, often seen in lagoons of along outer reef slopes. Feeds mainly on molluscs. Distinguished by protruding head and snout and white spots on dark background. There are 2 to 6 barbed spines at the base of the tail. Size to 350 centimetres body width. *Aetobatus narinari*.
paipai *v.* swim.
paiwa *n.* shark.
Paiwa Timiri *propn.* Scorpion star.
pasiʔaunu *v.* leave group.
pala *v.* jump type.
palapala *v.* traditional dance.
palawe *adj.* very high.
paleai *n.* Military Seapike. Inhabits coastal waters and offshore reefs; often seen in schools on outer reef slopes. Feeds on fishes. It looks similar to the Great Barracuda, but it lacks the black blotches and has black bars that extend well below the middle of the sides. Size to 90 centimetres. *Sphyraena qenie.*
palo *n.* thing.
Palu *propn.* constellation.
palu *n.* Pacific Imperial Pigeon. *Ducula pacifica.*
palu lama *n.* Blue Fusilier. Inhabits coral reefs, forms mid-water schools. Distinguished by its deep blue colour and black tips on the lobes of the tail. The tail and tail base may be yellow in juveniles, but the black tips are still present. Size to 40 centimetres. *Caesio lunaris.*
palupalu *n.* continuous waves.
pana (ʔ) *v.* to stick, adhere, hold.

pana arara *n.* literally hold black (raincloud).

panapana *n.* lit. when rain touches skin.

panarafiʔi (n) *v.* grab close.

panaro (f) *v.* grab.

panau *n.* tree species.

pani *n.* hand, arm, club.

Panimala *propn.* clan name, location.

panui *v.* out of sight.

pao *n.* figurative calm sea like oil.

papa *prep.* side, beside.

papaa *adj.* lightweight.

papai *v.* put on skirt.

papalei *n.* cloud.

papani *v.* guard.

papapa *n.* Manta Ray. Inhabits coastal reefs, most often seen along theedge of the outer reef slopes. Feeds on small planktonic organisms. Distinguished by its large size, shape, and a pair of protruding flaps at the front of the head. This is a harmless species that often makes leaps above the surface. Size to 600 centimetres body width and weight over two tons. *Manta birostris.*

paparafi *n.* tree species.

papararai *v.* shouting.

papauri *n.* dagger.

papaʔana *v.* touch.

para *n.* pandanus species.

parafa *n.* back of knife.

parafo *n.* plant species.

parafu *n.* banana, both the plant and its fruit. *Musa (there are over 300 varieties worldwide).*

parafufufu *n.* herb species.

parapara *adj.* unwilling.

parara *adj.* flat.

pararaa *n.* thunder.

pararaa *n.* Brown Noddy. *Anous stolidus.*

paraʔa *adj.* bitter.

pare *n.* Bird's Nest fern. This fern grows in a wide variety of locations throughout most rainforests. It can grow as an epiphyte on large trees but may also be seen on rocks on the forest floor if good light is available. *Asplenium australasicum.*

parepare *adj.* shallow.

pari *v.* prepare.

patapata *n.* worn around waiste.

pataruru *v.* inject.

pati *v.* fall.

patiʔo *n.* giblet.

patu *n.* clamshell.

pau *n.* pandanus.

pau *n.* pandanus leaf boxes used to cook fish.

pau *n.* 1. side fins of fish, 2. turtle fins.

pawe *n.* Moses Perch. Inhabits inshore waters and offshore coral reefs. Distinguished by its pinkish colour and a black spot (which may be faint) on its back. Size to 45 centimetres. *Lutjanus russelli.*

paʔa *adv.* very, definitely.

paʔafi *n.* 1. reason, cause, 2. front of torso, 3. fishgun stock.

paʔafora *n.* coconut for grease.

paʔafu *n.* plant species.

paʔai *adj.* lost.

paʔaia *v.* light fire.

paʔale *n.* dolphin.

paʔania *quan.* tens place.

paʔapaʔa *n.* tree trunk.

paʔapaʔai *n.* calf of leg.

paʔaro *n.* breast or chest.

paʔataa *n.* Native Monstera Vine. The large leaves of this vine are deeply cut. It may grow up to 15 to 20 metres. Mature plants produce small creamy flowers on spikes, which later form soft green fruits which are edible. *Epipremnum pinnatum. Also known as Raphidophora pinnata.*

paʔato *n.* tree species.

paʔatoo *n.* land lubbers.

paʔera *n.* residue around tip of penis.

paʔi *v.* have.

paʔie *n.* dorsal fin.

paʔu *n.* fishing stonewall.

paʔu *n.* hammer, club.

paʔulu *adv.* above.

paʔuru *n.* fishing from canoe with a sago frond (apara).

pea *n.* bait fish.

pele *n.* endpoint.

Pelee *propn.* location.

pelu (r) *v.* finish.

pelu *adv.* completely.

penu *n.* coconut husk.

pepe *v.* defecate.

pepea *n.* intestines.

pepei *prep.* yonder.

pepeluu *n.* tree species.

pepetu *adj.* full.

pepeʔa *n.* snap break.

pere *v.* die out, diminish, extinguish fire.

pero *n.* fart.

pero *v.* fart.

peto *prep.* behind.

petu *v.* displace by squeezing, e.g., toothpaste.

peʔa *v.* ignite.

peʔi *n.* 1. taro bank, 2. container.

peʔi *v.* float.

peʔi *v.* moor.

peʔi foʔafoʔa *n.* early labor.

Peʔipa *propn.* location.

pia *n.* taro species.

piania *n.* Warty-lipped Mullet. Inhabits sandy lagoons and shallow seaward reef flats. Feeds on detritus and algae. Distinguished by its emarginate tail with pointed lobes, the dark stripes on its sides, and by its thick lips having 1 to 10 rows of warty projections. Size to 40 centimetres. *Crenimugil crenilabris.*

piapia *n.* Sago palm. This tree is not a true palm; it is a cycad. These trees have erect, sturdy trunks that are 30-60 cm in diameter. The trunk is rough and retains the old leaf bases. Leaves are 3 1 to 1.5 metres, or longer if the tree is in the open sun. Leaves can be used for making morota (roof thatching), fishing poles, etc. The inside of the trunk is a starchy food-source. *Cycas revoluta.*

pie *n.* 1. sand, 2. beach.

Piyefuro *propn.* location.

Piemai *propn.* location.

piepie poa *adj.* appears in mouths of babies.

piepiena *adj.* sandy.

pifine *n.* woman.

pifinei *v.* become woman.

pila *n.* coward.

pila *n.* Buff-banded Rail. *Rallus philippensis.*

pilaua *n.* foreigner.

pile (r) *v.* wrestle.

pilewai *v.* twist.

pilu *n.* Blue Trevally. Inhabits coastal waters and offshore reefs. Distinguished by scaleless areas on breast and the base of the pectoral , and 5 or 6 somewhat chevron-shaped dark bars on the sides. Size to 70 centimetres. *Carangoides ferdau.*

pinai *n.* leg, foot.

pinini *v.* high pitched voice.

pinipini *n.* very small seashell.

pipi *n.* Sea Hearse tree. This is a coast-loving tree which frequently grows at the high water mark on the beach. Its height is usually 10 to 15 metres. Leaves tend to crowd toward the end of the branches, and the leaf stalk attaches to the leaf some distance in from the leaf edge, somewhat like the leaf of the water-lily. The white flowers form in groups of three, and evolve into transluscent waxy globes surrounding the fruit. Fruits are black, round and strongly-ribbed, and contain a hard inner seed. *Hernandia nymphaeifolia. Also known as Hernandia peltata.*

pira *n.* squirrel fish.

pira welo *n.* Red Soldierfish. It inhabits coral reef caves and ledges, usually on the outer slopes below 20 metres. It is distinguished by its bright red-orange colour and white tips on the dorsal spines. Size is up to 20 centimetres. *Myripristis vittata.*

pirapira/pirowai *n.* vine species.

pirea *n.* crazy person, demon, lunatic, mad man.

piri *n.* tree species.

piri ʔalia *n.* ear lobe.

pirio *n.* meat, muscle.

piru *v.* roll, translate.

piru *v.* twist joint.

pitapita *n.* Pink Ash tree. A common pioneer tree in rainforest regrowth. Its broad, silver-backed leaves are rusty when young. The bark and leaves contain methyl salicylate, and smell like liniment if rubbed. *Alphitonia petriei.* **same as malimali pula**

pitii ʔalia *n.* Tawny Nurse Shark. Inhabits shallow reefs, sometimes seen resting on the bottom during the day. Feeds on bottom invertebrates such as lobsters, crabs and octopus, but also eats fishes. Distinguished by equal-sized dorsal fins and barbels on its snout. Harmless. Size to 320 centimetres. *Nebrius ferrugineus.*

pitione *n.* a white, larger sandfly; doesn't fly, but hops.

piʔalee *n.* Beach Calophyllum tree. This tree likes to grow right above the high water mark on the beach. It has a short, massive trunk with low, spreading branches that overhang the beach. The leaves are glossy and exude a milky sap. The flowers are white, and the fruits are yellow-ish and contain a seed that floats and is dispersed by the sea. The seed can yield a thick, dark-green, scented oil which is poisonous but can be used for lighting and for making a bright yellow soap. *Calophyllum inophyllum.*

piʔo *adj.* pregnant.

piʔu *n.* star.

Piʔu pafo *propn.* Jupiter.

Piʔu ʔarewa *propn.* Morning star.

poa *n.* 1. mouth, 2. opening, 3. door.

poa *n.* axe.

poa *ord.* ordinal base: e-poa 'first', rua-poa 'second', olu-poa 'third'.

poafi *n.* Red-flushed Rockcod. Inhabits coral reefs usually near caves or under ledges. Distinguished by elevated shape of its body, dark colouring and often by a pale vertical streak on the side of the belly. Size up to 60 centimetres. *Aethaloperca rogaa.*

Poaliba *propn.* location.

poapoa *adj.* crazy.

poepoe *n.* wild yam with vine.

poi *n.* night.

poi *adv.* night greeting.

poipoi *n.* Yellow-margined Seaperch. Inhabits coral reefs. Distinguished by its dark tail and soft dorsal fin, both of which have a narrow white margin, and by its yellow anal, pelvic and pectoral fins. Size to 40 centimetres. *Lutjanus fulvus.*

poiri *n.* a species of zoanthid that looks like a coral head.; Either a rounded, dark-colored, relatively smooth-surfaced sponge which has commercial value if prepared properly, or a stony coral of similar rounded shape. These two species were identified with the same term from photos. *Palythoa tuberculosa.*; *Hippospongia ammata or Astreopora gracilis.*

pololoi (n) *v.* rock baby.

poloʔe *n.* excrement.

polu *n.* jungle.

polupolu *n.* tree species.

poma *n.* white color used to paint canoes and houses; also used to clean diving masks.

pomaure *n.* grows among the taro.

poni *v.* run.

ponoto *n.* figuratively as "police".

ponoʔa *n.* cost.

pono (ʔ) *v.* buy.

ponu *n.* the largest of the three species of sea-turtle that visit Wuvulu. It lays its eggs on the beach.

popo *n.* mid section.

popola *adj.* swollen.

popona *v.* running exercise.

poponai *adj.* upside-down.

popoʔo *v.* 1. swell, 2. inflate, 3. expand.

pore *n.* canoe paddle, gums.

poro (ʔ) *v.* carry, lift.

potea *n.* taro bread.

poupou *n.* rubbish basket.

poʔai *adj.* finished, rusty.

poʔi *adj.* white.

poʔo *n.* blister.

poʔo- *mood.* intensifier.

pu *adv.* below.

puala *n.* sorcerer.

puawi *v.* embrace.

puaʔo *n.* rainbow.

pufabaʔa *quan.* thousands place.

pula *n.* eye, moon, month.

pula roro *n.* moonless.

pula wera *adj.* blind.

pula wera *n.* White-Cheeked Surgeonfish. Distinguished by its overall dark color with a white patch under the eye and behind the mouth and yellow stripe at base of dorsal and anal fins; tail is white with a yellow bar near the outer edge. The razor-sharp spine on the caudal peduncle is also yellow. The spine is used for defence and to ward off intruders. Size to 21 centimetres. *Acanthurus glaucopareinis / glaucoparius. Also named Acanthurus nigricans.*

pula ʔaʔa *v.* seasonal sign.

pularo *n. angry face*.

pularoo *n.* small type trevally.

Puleiafo *propn.* name.

pulele *n.* squash.

pulepulewiana *n.* snail found in the buch.

pulewa *n.* Portuguese Man-of-War jellyfish. This jellyfish is one of the most painfully stinging and dangerous. Its tentacles may extend as far as 6 metres underwater. It

has no means of propulsion and drifts with the wind. *Physalia physalis.*

Puli *propn.* location.

pulita *n.* harpoon.

pulo *n.* buttocks (Aua dialect).

pululu *adj.* humble, ignorant.

pulumi *v.* hands together.

puluru (f) *v.* submerge.

pulurufai *adj.* submerged, baptized.

puluʔi (n) *v.* join, bind.

puluʔu *v.* bend.

pumanurawe *n.* blue sky.

punapuna *n.* Narrow-banded Batfish. Another name for this fish is the Orbicular Batfish. It inhabits coral reefs. Distinguished by two wide black bars, one of which passes through the eye, and a blackish margin on dorsal and anal fins. Size to 50 centimetres. *Platax orbicularis.*

pune *n.* White-breasted Fruit Dove, mainland race. *Ptilinopus rivoli.*

pune tifiri *n.* Orange-fronted Fruit Dove. *Ptilinopus aurantiifrons.*

puneafi *n.* coral stove.

punene *n.* small javelin.

punenei *v.* skim the punene; a game to see who can skim it farthest.

Punenerufu *n.* northwest wind.

punuʔu *n.* asthma.

puo *n.* sharpening stone.

pupona *v.* attack, invade.

puponi *adj.* completed house.

pupu *n.* triggerfish; the general word for this kind of fish.

pupu arulue *n.* Black Triggerfish. Inhabits outer reef slopes, usually seen in groups. Distinguished by its black colouration and narrow white stripe at the base of the dorsal and anal fins. Size to 35 centimetres. *Melichthys niger.*

pupu falewaa *n.* Wedge-Tailed Triggerfish. Inhabits coral reefs, usually seen on outer reef flats exposed to surge. Distinguished by broad black diagonal band from the eye to the anal fin base and a black wedge-whaped mark on the tail base. Size to 24 centimetres. *Rhinecanthus rectangulus.*

pupu maratawai *n.* Yellow-Margin Triggerfish. Inhabits coral reefs. Distinguished by raised spines on the sacles of its tail base, yellow margins on the fins, and a cross-hatch pattersn on the sides. Size to 60 centimetres. *Psuedobalistes flavimarginatus.*

pupu marawa *n.* White-Barred Triggerfish. Inhabits coral reefs, usually seen in sand-rubble flats. Distinguished by three rows of raised black spines on the tail base, a dark brown area on the middle of the side, white diagonal bars above the anal fin base, and a yellow stripe between the mouth and the lower pectoral fin base. Size to 25 centimetres. *Rhinecanthus aculeatus.*

pupu meroo *n.* type of orangish trigger fish.

pupu namo *n.* Black-Patch Triggerfish. Inhabits sheltered coral reefs, including silty inshore areas. Distinguished by a large black patch on the lower side and a narrow brown bar through the eye to the pectoral fin base. Size to 23 centimetres. *Rhinecanthus verrucosus.*

pupu roiaa *n.* Yellow-Spotted Triggerfish. Inhabits coral reefs. Distinguished by overall darkish colouration with bluish markings on the head. The young are yellowish with blue lines and spots. Adults have prolonged caudal fin tips. Size to 55 centimetres. *Psuedobalistes fuscus.*

pupu tapaʔa *n.* Starry Triggerfish. Inhabits mud or silty sandbottoms near coral reefs. Distinguished by its relatively long shape, very slender tail base, blue to orange spotting on the body, and frequently with three white patches on the back at the base of the dorsal fin. Size to 60 centimetres. *Abalistes stellatus.*

pupu ʔapati *n.* Orange-Lined Triggerfish. Inhabits coral reefs. Distinguished by narrow orange to red diagonal stripes on the head and body. Also known as the Red-Lined Triggerfish. Size to 30 centimetres. *Balistapus undulatus.*

pupua *n.* mold growth, ridge cap.

pupualai *adj.* supernatural power.

pupule *n.* tree species.

pupulee *n.* hermit crab--the kind that live on the shore. (As opposed to the marine kind that spend their life under water.)

pupulee ʔari *n.* marine hermit crab. *Dardanus megistos.*

pupulita *n.* a short, fat, black sea cucumber. *Actinopyga miliaris.*

pupulu *adj.* equidistant.

pupuno *n.* tree species.

pupupua *adj.* slightly rough sea.

pura *n.* small beige lizard with short tail.

puraa *n.* stages of coconut: momole, puraa, upu muraa, paʔa upu, duaʔa, aru.

purapura *v.* foam.

pure *n.* bellybutton.

puroʔa *n.* cockroach.

purufatu *n.* lower back.

purufora *n.* taro species.

purumi (n) *v.* add firewood.

purutawepira *n.* Estuary Cod. Inhabits silty inshore coral reefs. Distinguished by its large size and forward slanting brown bars over a pattern of numerous small red-brown spots on head, body and fins. Size to 100 centimetres. *Epinephelus coioides.*

puruʔia *n.* lower abdomin.

putei *n.* Golden Trevally. Inhabits coastal waters and offshore reefs; sometimes swims in schools. Distinguished by large fleshy lips, a lack of discernable teeth and its golden belly. The juvenile form is bright yellow with dark bars. Size to 111 centimetres. *Gnathanodon speciousus.*

puti *n.* sperm.

puto *v.* yank.

putuʔo *adj.* small.

putuʔoro *adj.* small.

Puʔalie *propn.* location.

puʔu *quan.* hundreds place.

puʔu *n.* Beach Barringtonia tree. Other English names are Box Fruit and Fish-Killer Tree. This is a beach plant that occurs in coastal rainforests. The flowers are white with long stamens, bloom mostly at night and last less than a day. The leaves are

large and glossy and grow mostly in clusters at the end of the branches, which can form an uneven canopy which often spreads to ground level. The trunk can be massive and the tree grows anywhere from 5 to 30 metres high, though the most common height is 5 to 8 metres. The box-like fruit yeilds a potent fish stunner when pounded. *Barringtonia asiatica.*

puʔufurimo *adj.* between shoulder blades.

R - r

ra *n.* a red hardwood (ironwood).

-raa *aff.* TR. transitive marker.

raba *n.* bag.

rafa *v.* bird pecking, capsize.

rafe *adj.* competent.

rafei (n) *v.* select.

rafemaʔaia *n.* strong suit, specialty.

rafile *adj.* inability, bad at.

rafile *n.* striped lizard, larger than the gecko but similar.

rafilele *adj.* weak.

rafiʔi *v.* proximal.

Rai *propn.* Eastwind, east.

-rai *dir.* from.

raia *adj.* stinky.

Raiaraʔuu *propn.* southeast, southeast wind.

rama *v.* cut open, fishing type.

rama *n.* rama is a torch made of dried coconut leaves.

rama *n.* type of fishing at night with a torch.

ramarama *adj.* transparent.

Ramawa Talo *propn.* Venus.

ramaʔa *n.* person, in-law.

ramea *n.* Flag-tailed Rockcod. This fish inhabits coral reefs. Distinguished by an overall brown colour (darker toward the rear), faint dark bars, and a pair of oblique white marks on the tail. Size up to 27 centimetres. *Cephalopholis urodeta.*

ramuʔa *n.* Diamond-scale Mullet. Inhabits coastal waters, frequently in mangrove areas. Feeds on algae and detritus. Distinguished by square-shaped tail and a network pattern of dark scale margins. Size to 55 centimetres. *Liza vaigiensis.*

ranimai *adv.* always.

ranu *n.* fresh water.

ranulufa *n.* tree species.

ranuwa *v.* water breaking (birth).

rao *adj.* pain.

rao *n.* light ray, reflection

Raorao *propn.* comet.

raorao *n.* broom.

rapa *v.* avoid.

rapirapi *adj.* protected.

rapirapii *n.* shield.

rapu *v.* shake hands.

rapuʔana *v.* receding (tidal).

rara *n.* branch.

rara *v.* warm by fire.

raraa *n.* blood.

raraa ʔunu *adj.* healthy.

raraba *adj.* heavy.

rarafii *n.* extra teammates or workers.

rarafiʔii *n.* fem pad.

rarai *v.* to dry something, or when tide goes out => dry.

rarai alo *n.* brittlestar starfish; the general term for this kind of starfish. *Various: Ophionereis porrecta, Ophiothrix purpurea, Ophionereis porrecta, Macrophiothrix sp., Ophioarachna incrassata, Ophiomastix sp., Ophiolepis cincta, etc..*

raramai *n.* big toe.

raramomo *n.* stinging pain.

rarapa *v.* wander.

raraulu *n.* breadfruit sap.

raraweʔi *n.* lime.

raru *n.* seaward wave.

raruwa *n.* tree species.

rata *adj.* difficult.

rau *n.* leaf.

=rau *pron.* 1SG object enclitic.

rau anai *n.* Lemon Damsel. Also known as the Golden Damsel. Inhabits steep outer reef slopes 12 to 25 metres deep. Lives alone and guards a small and diverse area of the coral reef; feeds mainly on zooplankton. Distinguished by its circular body shape and deeply incised dorsal spines, as well as its bright yellow color. Size to 6 centimetres. *Amblyglyphidodon aureus.*

rau rufu *n.* island visibility.

raua *adv.* far.

raulei *adv.* rauleni = this side, raulena=other side.

rauporaa *n.* tree species.

rautii *n.* One-spot Seaperch. Inhabits coral reefs. Distinguished by overall light grey to yellowish colour without stripes. The black spot on the upper side may be faint or absent in adults. In Tahiti this fish is not eaten because of problems with ciguatera poisoning, but apparently this is not a problem in Papua New Guinea (as of 1993). Size to 50 centimetres. *Lutjanus monostigma.*

rauwe *adj.* noisy.

rauwe *n.* fish species.

rauwe ʔumu *n.* tale bearer.

Rawa *n.* clan name, location.

rawa *v.* release, water flow, flood. **with object rawaia = to throw away**

rawa *v.* 1. flow, 2. flood.

rawa ʔaʔafai *v.* literally, to give up carrying.

rawai *adj.* incoming (tide).

rawani *adj.* good, excellent.

rawani *adv.* thank you.

rawarawa *adj.* first.

rawaura *n.* rainfall rivulette.

rawe *adj.* lucky, fortunate.

rawe *n.* Spiny Chromis. Inhabits coral reefs from the shallows to 65 metres. The young stay with the parents after hatching. Feeds on plankton. Distinguished by 17 dorsal spines and overall dark color. Size to 14 centimetres. *Acanthochromis polyacanthus.*

rawee pula *n.* eyelash.

rawerawe *n.* tounge.

raweʔ *v.* taste.

raʔo *n.* whale.

re- *dir.* from spkr.

Rea *propn.* tradition has that there was quicksand there.

rea *n.* twig used for pau boxes and brooms.

reai *adj.* in line.

refu (ʔ) *v.* cut off base.

refu *adj.* excited.

rere *v.* vibrate, shake, wind stop, tremble.

rerefai *v.* spy.

rerei *v.* shaking. **narerei fei io** the spear is shaking

rereni *v.* cry.

rewa *adj.* grey (hair).

rewa rau ra *adj.* color of ra leaf, new leaf.

Rewi *propn.* clan name, location.

reʔereʔe *adv.* impatience.

reʔi *v.* gut fish.

=ria *pron.* 3SG object enclitic.

ribau *n.* Black Booyong tree, also called the Tulip Oak. This is one of the large, buttressed trees of the mature rainforest canopy. The shiny leaves are usually in groups of 7 leaflets arranged palmately, like fingers around the palm of a hand. Its flowers are white and bell-shaped, and are followed by winged brown fruits. When the fruits are ripe they spiral down from the tree, drifting some distance away even when there is no wind. Another Wuvulu name for this tree is ʔtolalaiʔ. *Argyrodendron actinophyllum ssp. actinophyllm. Also called Heritiera actinophylla.*

rifarifa *n.* white sea bird.

rimeʔai *n.* flickering.

rimo *n.* voice box.

rimo *n.* tree species.

-rio *dir.* to spkr.

rio *pron.* 2SG object enclitic.

riorio *adj.* overcast.

ripe *adj.* large.

rirei *n.* door.

riri *v.* open.

riri *adj.* open.

ririi *adj.* slow.

ro (f) *v.* sweep.

ro- *pron.* 3PL subject proclitic.

roa *n.* shooting star.

roa *adj.* red.

roa *v.* cut.

roalo *n.* Rufous Night-Heron (mature with black cap, or immature-streaked). *Nycticorax caledonicus.*

roba *v.* cut grass.

roʔa *v.* grab.

rofo *v.* jump.

roi (n) *v.* care for someone, esp. elderly.

roiroi *n.* scratch sound.

roma *n.* seaweed species.

ropa *v.* rain.

ropi *n.* Butterfly fish. *Chaetodon, various species.*

Rorina *propn.* clan name, location.

roro *v.* go ashore.

roroa *n.* dock.

rorofa *adj.* wet.

roroi *v.* name person.

roroma *n.* darkness.

roroʔi *v.* bind.

rotiroti *n.* Gold-spotted Trevally. Inhabits coastal waters and offshore reefs. Distinguished by scattered gold or yellowish spots on sides. Looks a lot like the Orange-spotted Trevally, except that the Gold-spotted Trevally has a steeper snout profile and its body is longer. Size to 130 centimetres. *Carangoides fulvoguttatus.*

Rou *propn.* clan name, location.

roʔai (n) *v.* stretch out.

roʔo *adj.* delicious.

roʔolu *pron.* 3PL.

ru *adj.* short.

rua *num.* two.

ruafi *v.* choke someone.

ruai (n) *v.* hear.

ruana *n.* grass.

ruana aniʔu *n.* grass species.

ruana pinai *n.* grass species.

ruana rea *n.* Filmy Maidenhair Fern. This fern is rarely more than 30 centimetres high. It has black stems and prefers damp and cool locations. *Adiantum diaphanum.*

ruarua *v.* fish with line.

ruarua *v.* dying.

ruarua *n.* tree kangaroo.
ruaruai *n.* cultural dance.
ruatiti *n.* sunstroke.
Ruaumu *propn.* The wife of Puleiafo.
ruaʔaunu *v.* faint.
rufi *v.* ladle water, blow.
rufu *n.* village.
rufuanana *n.* lit. house-eater.
rui *n.* bone.
rui tiro *n.* tree species.
rui ua *n.* collarbone.
ruia *adj.* strong.
ruirui *n.* White Tern; used figuratively for a caucasian person. *Gygis alba.*
ruo *n.* necklace.
rupu *n.* bunch.
rupu *n.* can refer to a grouping regardless of animacy.
rupurupu *n.* group.
ruru *v.* inject, poke into.
ruruai *v.* listening.
rurualia *n.* grass species.
rurufarao *n.* anesthesia.
rurui *v.* plant peg.
ruta *v.* sit.
ruta falafe *adv.* care free.
rutaruta *n.* chair.
ruweruwe *v.* wiggle.
ruʔa *v.* burn.
ruʔu (n) *v.* curse.
ruʔu (n) *v.* smash.

T - t

taba *n.* head.
taba balaʔari *adj.* obstinate.
taba fora *n.* reef edge.
taba naʔa *n.* at Tatabee, Dumiri, Dumiriri, Pie Sure, Pie Furo.
Tabaa *propn.* location.
tabaraʔo *n.* praying mantis.
tabarii *n.* Longfin Emperor. Inhabits coral reefs. Distinguished by a dark band from eyes to snout and light bars are usually present on the rear half of the body. Size to 50 centimetres. *Lethrinus erythropterus.*
tabe *v.* serve food.
tafe *n.* rim of penis, ship run aground.
tafi *n.* sister of female.

tafi *n.* friend.

tafi (?) *v.* carve.

tafunu *n.* cradle cap, head scabs, head crust.

tafuri *v.* splash water.

Tafutufuare *propn.* location.

tai *n.* tree species, fruit.

taina *n.* plant species.

tala *n.* road.

talai (n) *v.* walk.

talama *n.* a dark-colored starfish. *Possibly, Echinaster luzonicus.*

talanenei *v.* scatter.

talara *n.* fern species.

talaraa *n.* Gristle Fern. The new growth of this hardy fern is pink. It can be found on dry hillsides under tall forests, or in swampy places. Gristle Ferns in the rainforest may have darker leaves, and the mature fronds are tough and leathery. *Blechnum cartilagineum.*

talatala *v.* hunt.

Talaure *propn.* location.

tale *adj.* fast.

talemaʔa *adj.* unconscious.

talili (n) *v.* 1. exclude, 2. set aside.

talili (n) *v.* detour.

taliweloi *v.* spin.

taliweʔa *adj.* global.

taloa *n.* firewood.

talonalonalo *adj.* skinny.

talu *v.* bite.

talu *adj.* sharp.

talu poa *v.* kiss.

talulire *v.* bite rip.

tama *n.* outrigger.

tama *v.* row.

tamafoi *adj.* 1. tired, 2. lazy, 3. fed-up.

tamanu *pron.* whatever, what?

tamaʔa *n.* voyage.

tamaʔai (n) *v.* prohibit.

tamelo *n.* hired servant.

tanari *n.* head.

tanarii *n.* Spanish Mackerel. Inhabits coastal waters, often near reefs. Feeds on fishes. Distinguished by its long, slender shape and pattern of bars on its sides. Another name for this fish is the Narrow-barred Mackerel. Size to 235 centimetres. All tackle world record is 44.9 kilograms. *Scomberomorus commerson.*

tani *q.* why?

tanu *v.* write song.

tao *n.* Papaya tree. Also called Pawpaw, Tree Melon, and Mummy Apple. There are about 45 species of papaya. Its leaves are deeply lobed and cluster at the top of a

hollow trunk. The fruit contains Vitamins A, C, and G, and most parts of the tree contain papain, a digestive enzyme which can be used as a meat tenderizer. *Carica papaya.*

tapanau *n.* tree species.

tapio *n.* Tapioca. The Wuvulu word tapiʔoʔo is borrowed from English. Another English name for the plant is cassava. This bush grows 1 metre to 3 metres high and has been a source of food since early times. The long, tuberous roots that look like sweet potato are high in starch. Although the sap is poisonous, the poison disappears with cooking and washing. *Manihot esculenta. Also known as Manihot utilissima*.

tapora *n.* 1. mist, 2. blur, 3. smudge.

tapu *n.* fog, clouded thinking.

tapu *v.* walk fast from ocean to bush.

tapurere *v.* 1. shiver, 2. tremble.

tara (f) *v.* snatch.

tarafia pula *adj.* sleeping, grab under nose.

tarara *n.* gassy dirrahea.

taraupu *n.* grasshopper.

taraʔumuʔio *n.* type of vine.

tare *adj.* tall.

tare *v.* overthrow.

tari *adj.* skinny.

tari *adj.* short.

tata ruru *adj.* squeamish.

Tatabe *propn.* location.

tatarara walaʔe *n.* soft stool.

tatarere *adj.* bad mood.

tatari *n.* small path.

tatariana *n.* shortage.

tatariri *adj.* little.

tatawei *v.* fidget.

tatawewe *v.* enjoy.

tataʔai *v.* sudden fright, give way.

tau *v.* hold.

tau *v.* go sleep.

tau *n.* fishing style.

tau faʔuria *v.* welcome.

tau lama *n.* middle of ocean.

tau polu *adj.* in the bush.

taua *v.* catch sickness.

taua *v.* hold.

tauaforefore *v.* encourage.

taubea *n.* tree species.

taufunufunu *adj.* weak from hunger.

taulara *adj.* hanging.

tautau *v.* hand by hand.

Tawa *n.* location.

tawa *n.* 1. table, 2. platform, 3. bed.

tawai *n.* Betelnut Palm. Grows to 10 metres. The trunk is dark green with light-coloured rings. This palm is grown for its fruit throughout SE Asia (and in the lowland areas of Papua New Guinea) The fruit is chewed for its intoxicating effect and for its supposed beneficial side effects as an aid to digestion and in controlling internal parasites and dysentery. *Areca catechu.*

tawara *adj.* tooth gap.

tawariari *adj.* 1. malnourished, 2. thin.

tawariri *n.* 1. small bed, 2. small passage.

tawatulai *n.* a soft, sticky, encrusting sponge. Its colour may vary from near-white to a deep blue-purple, but its surface texture is always marked by little holes. *Haliclona sp.*

tawe *v.* 1. transplant, 2. adopt.

tawetawe *n.* Black-banded Seaperch. Inhabits coral reefs, usually between 10 and 30 metres deep. Distinguished by a series of dark bars on its side and a large dark spot on the tail base. Size to 35 centimetres. *Lutjanus semicinctus.*

tawi (ʔ) *v.* sew.

te *conj.* because, so, then.

tela *v.* 1. escape, 2. save.

temu *adj.* out of breath.

temu awawai *v.* gasping for air.

terateraa *adj.* striped.

Tere *propn.* clan name, location.

teretere *n.* Yellowstripe Goatfish. Inhabits sandy areas near coral reefs, often seen in schools. Similar to the Yellowfin Goatfish (iyoo), but does not have yellow fins and has a dark spot above the pectoral fin. Size to 40 centimetres. *Mulloides flavolineatus.*

tete *v.* chase.

tetefolo *n.* season between afaa and rai where the wind direction is indeterminate.

tetewa *n.* northeast wind, northeast.

ti (ʔ) *v.* sting.

ti *n.* plant species.

ti- *aff.* points at, indicates, 'it is'

tiafa *n.* magic potion.

tiai *n.* unfertilized egg, impotence.

tiarani *n.* small snail that lives by the sea.

tiba *v.* angry.

tiba *n.* anger.

tibarao *n.* swordfish.

tibatiba *n.* angry person.

tibaʔulo *n.* stinging.caterpillar.

tifana *n.* plant species.

tifelo *v.* bend over.

tifi *v.* deceive, lie.

tifiri *n.* Red-flanked Lorikeet. *Charmosyna placentis.*

tile (ʔ) *v.* burn.

timi *n.* birthmark.

timi (n) *v.* discard.

Timii *propn.* clan name, location.

Timiri *propn.* constellation.

timitimi *n.* tree species.

tina *n.* Maori Seaperch. Inhabits inshore and offshore reefs to a depth of at least 50 metres. Distinguished by fleshy lips, wavy lines on its head, and yellow-edged fins. Size to 65 centimetres. *Lutjanus rivulatus.*

tinafei *n.* Silvertip Shark. Inhabits steep outer reef slopes, usually below 20 metres. Feeds on fishes. Distinguished by white tips and margins on all fins. This shark is curious and may approach people closely; will attack if provoked. Size to 300 centimetres. (great white also?). *Carcharhinus albimarginatus.*

tinifolo *adj.* wide-eyed.

tinoro *v.* sleep deeply.

tio *n.* short rainbow.

tiowai *n.* a bird with whiskers.

tipawa *n.* plant species.

tipopo *n.* grille.

tipou *n.* firm when dry.

tiri *v.* swim.

tiriri *adj.* thirsty.

Tiro *propn.* clan name, location.

tiro *n.* short knife.

Tiroaa *propn.* cave once used for hiding from enemies.

tirotera *n.* Singing Starling, mature plumage. *Aplonis cantoroides.*

titi *v.* slide.

titibaroo *n.* Mangrove tree, also called the Oriental Mangrove tree. This tree has many roots that grow right in the water. The wood is hard and tough and has been used for bows. The flowers are red, pink and yellow. *Bruguiera gymnorhiza. Also known as Bruguiera conjugata.*

titii *adj.* itchy.

titiri *n.* dawn.

titiri *v.* shave.

tiʔara *n.* rice (borrowed).

tiʔei *adv.* therefore, and so.

to (n) *v.* get.

to pula *v.* menstruate, literally get moon.

toa *n.* hip.

toai *n.* style, fashion, technique.

tofilein *v.* select.

tofu *n.* drift grass.

tofu ʔumu *n.* expression of anger.

tofurai *v.* clear snorkle or blow out water.

toiri *v.* give space.

tolalau *n.* Black Booyong tree, also called the Tulip Oak. This is one of the large,

buttressed trees of the mature rainforest canopy. The shiny leaves are usually in groups of 7 leaflets arranged palmately, like fingers around the palm of a hand. Its flowers are white and bell-shaped, and are followed by winged brown fruits. When the fruits are ripe they spiral down from the tree, drifting some distance away even when there is no wind. Another Wuvulu name for this tree is ʔgibauʔ. *Argyrodendron actinophyllum ssp. actinophyllm. Also called Heritiera actinophylla.*

tolara *v.* misunderstand.

toloʔaa *v.* intercede.

toneneru *n.* shoreline to vegetation.

topuae *adv.* loudly.

topuei *adj.* unison laughter.

toro *v.* conceive.

toru *n.* frog.

torui *n.* croak.

tu (m) *v.* cover.

tua *v.* paddle.

tuabe *n.* no show. **maʔe tuabe = widow**

tuafia *v.* pass each other.

tualuma *n.* backup help.

tuapea malino *adj.* very calm.

tuari *v.* manipulate with stick.

tuaroi *n.* Double-spotted Queenfish. Inhabits coastal waters, often seen in schools. Feeds on fishes. Distinguished by spike-like dorsal spines and a double row of 6 to 8 dark spots on its side. Size to 70 centimetres. *Scomberoides lysan.*

tuatua *adj.* stiff, muscular.

tuei (n) *v.* contract muscle.

tufe *n.* Fragrant Fern. This fern may be found climbing on trunks of trees or rocks or on the ground. The fronds may be simple and 5 to 10 centimetres long, or the may be deeply lobed and up to 50 centimetes long, depending on their age. Some think this fern is fragrant, but others think it smells like squashed insects. It is very similar to the Kangaroo Fern (Microsorum diversifolium), but the Kangaroo Fern has stiffer, more leathery fronds and a bigger, more fleshy rhizome.; Tailspot Squirrelfish. Inhabits coral reefs, frequently in caves and under ledges, but often out in the open. It is distinguished by a silvery-white spot behind the base of the dorsal fin, or the entire rear part of the fish may be silvery-white. Up to 21 centimetres. *Microsorum scandens.*; *Sargocentron caudimaculatum.*

tufu *v.* sprout.

tufu *n.* Ehrenberg's Seapearch. Inhabits coral reefs and inshore areas, sometimes gathers under wharves. Distinguished by its whitish overall colour, horizontal orange stripes and a dark spot on its upper back. Size to 35 centimetres. *Lutjanus ehrenbergi.*

tufudai *v.* arrive.

tula *v.* poke fruit stick.

tulai *n.* fish species, small dark cowrie.

tulele *n.* back of head.

tulu *n.* grey hair.
tuma *v.* catch.
tumale *n.* blue marlin.
tumaloli *v.* turn around.
tumara *n.* a small black bird, smaller than the starling.
tumarii *n.* nari rosewood.
Tumu *propn.* location.
tumulei *prep.* other side.
Tumuwe *propn.* location.
tura *v.* mark.
Ture *propn.* clan name, location.
turiaa *n.* Lesser Golden Plover. *Pluvialis dominica.*
turo *n.* Crocodilian Longtom. It inhabits open waters near reefs, feeds on fishes, and is distinguished by its large size and the fleshy ridge on the side of the tail base. Size to 130 centimetres. *Tylosurus crocodilus.*
tuta *n.* taro swamp.
tuta *v.* obstruct.
tutu *n.* cover.
tutu *v.* suck.
tutubai *n.* mosquito net.
tutuni *v.* push, shove.
tutupara *n.* small wart.
tutupoa *v.* kiss.
tuturu *adj.* sloped.
tutururu *n.* crumple sound, static.
tutuwii *n.* tree species.
tuwituwi *v.* chirp (lizard).
tuwulei *prep.* other side.

U - u

-u *poss.* 1SG.
-u *pron.* 1SG object enclitic.
ua *n.* neck.
uapu *n.* 1. grave, 2. hole, 3. pit.
Uapuu *propn.* location.
ube *n.* empty container.
ubee maraa *n.* empty clamshell.
ufi *n.* giant clam.
ufi *n.* dustpan.
ufu (r) *v.* disclose.
ufu *v.* pick fruit.
uli *n.* skin, tree bark, fruit skin.
ulia *n.* namesake.

uliri *n.* a small white snake.

ulu *adj.* peeling, sunburned.

ulua *n.* high tide.

ulura *n.* a whitish sponge that has petal-like formations on a larger plate-like base. It looks somewhat like a cabbage. *Spongia sp.*

umu *n.* house.

umuwa *n.* slave.

una *n.* 1. fingernail, 2. toenail

una *n.* footprint.

una *n.* fish scale.

uni *v.* shrill call out.

unu (m) *v.* drink, back up.

ununu *n.* sponge; the general word for sponges. This word was also given for a blue vase sponge, Cribrochalina olemda, which is common on reefs and frequently found on inshore patch reefs.

uoa rufu *adj.* homesick.

upiʔi *v.* join.

upu *n.* green coconut.

ura *n.* spiny lobster or crawfish; used to tie. *Panulirus versicolor or Panulirus pencillatus.*

ura *adj.* yes answer.

ure *n.* taro garden.

urere *n.* cowrie species.

uri *v.* mount transport (canoe, ship, bike).

uria *v.* follow.

uro *n.* hair.

uro ano *n.* pubic hair.

uroa *adj.* hairy.

uroʔoʔo *n.* back of turtle, back of crabl.

uru *n.* coconut fiber.

uru *v.* wipe.

uru (f) *v.* blow.

urua *n.* grassy.

uruana *n.* na'urua.

urufeti *v.* slide.

urupenu *n.* coconut pen.

ururu *n.* tree species.

utila *n.* lightning.

utouto *n.* large wart.

utu *n.* elbow, heel.

utu *n.* elbow.

uwa *n.* ribs.

uwi *n.* saliva.

uwiʔa *n.* octopus. *Octopus macropus (identified with this term from photos).*

uʔo *n.* tree species.

uʔoo *n.* Golden-lined Spinefoot. Inhabits sheltered harbours and lagoons, also seen

among mangrove roots. Distinguished by orange-yellow stripes on its side and a large yellow spot below the rear part of the dorsal fin. Size to 43 centimetres. *Siganus lineatus.*

W - w

wa *n.* canoe.
wafaa *n.* odor.
wafu *adj.* stinky.
wai *adj.* difficult.
waiapinai *n.* ankle.
waile *n.* gravel.
wairi *adj.* noisy.
waiwa *adj.* cold.
waiwai *adj.* hard, difficult.
wala *adj.* center.
walaa aweawe *n.* Black-spotted Dart. Inhabits coastal waters, frequently in the surge zone off sandy beaches. Distinguished by a strongly forked tail and 1 to 5 small black spots along the middle of the side. Size to 54 centimetres. *Trachinotus bailloni.*
walafei *adj.* in an area.
walalo *adj.* deep.
walamanuʔa *n.* type of unicornfish.
walapulu *adj.* clumsy.
walaruu *adj.* short.
walawala *n.* hole.
walaʔee *n.* excrement.
wale *v.* gouge.
walefo *n.* vagina (Aua dialect).
walifei *n.* tree species.
walimou *n.* Bluestripe Squirrelfish. It inhabits coral reef caves and ledges; distinguished by its plain red colouring and faint bluish stripes on lower sides. Size up to 33 centimetres. *Sargocentron tiere.*
waliwali *n.* driftwood.
walu *n.* knife.
walu *v.* carve out.
waluafi *n.* gun, literally fire knife.
waluai *v.* go in.
waluero *n.* crab hole.
Walupi *propn.* location.
waluwaa *n.* fishing spear.
waluwalu *n.* adze, traditionally made with clamshell.
Waluʔa *propn.* clan name, location.
wana *n.* midwife.

wananaa *n.* mud.

wanene *v.* make someone happy.

wanewane *adj.* straight.

wanini *v.* give birth.

waniri *n.* tree species.

waniwani *n.* breeze.

waniwanina *n.* current.

wano *v.* come ashore.

wanoʔoʔoʔui *adj.* coming to shore with no fish and head down.

wanu *n.* tropical ulcer.

wanua paiwa *adj.* receding hairline.

wanuenue *v.* hear coconut water in a dry coconut (aru).

Wanura *propn.* clan name, location.

wanura *adj.* slack (skin in older people).

wanuranura *n.* slack skin, wrinkle.

wanutufai *v.* mess up order.

wao *n.* string, rope.

wao raraa *n.* vein, literally blood rope.

waoro *v.* cut off.

wapo *n.* plant species.

Wara *propn.* Wara.

wara *v.* rip.

wara *n.* root.

wara *n.* plant species.

wara *n.* fish species.

waranalia *n.* vine species.

wararu *adj.* spoiled.

warataa *n.* Bandicoot Berry. This shrub grows 1 to 3 metres high in moist sheltered areas of lowland rainforests. The long-lasting fruits gradually darken from green through red-brown to black. *Leea indica.*

waraʔa *v.* tear cloth.

ware *v.* talk.

warei *v.* count.

warelalo *v.* guess.

wareu *adj.* pregnant.

wareʔoni *adj.* hypocrite.

wari *adj.* related to.

wariau *n.* Either of two species of branching red to pinkish hydroid, or a sea fan of similar appearance (identified from photos). *Stylaster sanguineus or Distichopora borealis, or Subergorgia mollis.*

warieni *adv.* today.

wariʔi (n) *v.* care for things or people.

wariʔuʔu *n.* hard rain.

waro *n.* grass knife.

waroa *n.* Bluefin Trevally. Inhabits coastal and offshore reefs, sometimes seen in schools. Distinguished by blue fins and dark speckling on upper half of body. Size

to 100 centimetres. *Caranx melampygus.*

waroba *n.* phosphate.

Waroo *propn.* clan name, location.

waroti *n.* miscarriage.

Waruaa *propn.* star.

warumo *n.* Common Rasp Fern. This fern have small curved teeth and thickened margins on the leaf segments give the leaves a harsh feel. They grow both in moist rainforests and in tall open forests. *Doodia media ssp. media.*

waruʔu bara *adj.* heart-broke.

wata *n.* tooth decay.

wataa *n.* twins.

wataaro *n.* divorced, widow.

wataruru *n.* junction.

watau *n.* placenta.

wataula *adv.* much.

watawata *n.* leprosy.

watiwati *n.* sodomy.

watobatoba *n.* empty.

watola *prep.* between.

watolaa *n.* Climbing Pandanus. When there is enough light, this vine forms dense columns, hiding its supporting tree trunk or rock. It sends out long untidy stems which droop and then turn upwards and look like long-legged green centipedes. There is another vine named Pothos (Pothos longipes) that looks similar but does not put out these long stems. The Climbing Pandanʔs flower has an orange bract which surrounds a closely packed flower spike that later produces bright-red pointed fruits crowded on an oblong head. These fruits are edible. *Freycinetia excelsa.*

watutu *n.* mucus.

watutu *v.* blow nose.

-wau *dir.* away.

wauro *adj.* cut-off.

wauʔapa *v.* bounce.

wawa *n.* mid wife.

wawa *n.* Scribbled Leatherjacket. Inhabits coral reefs, usually seen on outer slopes. Distinguished by its large size, fan-shaped tail (often the edge is ragged), and irregular blue scribble markings on the head and body. This fish is also known as the Scrawled Leatherjacket. Size to 75 centimetres.

wawaa pure *n.* umbilical cord.

wawailea *adj.* stoney.

wawairi *adj.* noisy.

wawalua *adj.* lonely, sadness.

wawane *n.* man, immature male.

wawanei *n.* mature male.

wawanini *adj.* weak.

wawaniʔo *v.* child play.

wawaoroo *v.* slight urination.

wawaroro *n.* grossed out.

wawatutu *n.* mucus.

wawauʔu *v.* drown.

wawauʔu *n.* tree species.

wawawa *n.* baby carrier.

wawawa ʔalia *n.* ear lobe plug.

wawaʔai *adj.* selfish, greedy.

wawaʔauna *adj.* hot and sweaty.

waʔa *n.* snake, worm, larva, caterpillars.

waʔa ro *n.* reddish.snake.

waʔa talara *n.* a long.brittle.snake.

waʔawaʔai *n.* maggot.

waʔi *n.* A monitor lizard, most likely the mangrove monitor. The skin is very dark with yellow speckles. This is probably the same species known as the kundu lizard within Papua New Guinea (so called because its skin is used for making kundu drums). It is generally disliked because it eats chicks and chicken eggs. *Varanus indicus (or a very similar species).*

waʔue *n.* oil on fish scales.

we- *asp.* eventual.

Welii *propn.* location.

weliweli *n.* water spring.

welo *n.* spinning toy.

weloi *v.* spin, circle.

welowelo *adj.* round.

wenu *v.* pull out.

wera *v.* wake from sleep.

wera pula *adj.* blind.

werawara *adj.* open eyes.

wero *n.* fish species.

wero ʔapia *n.* fish species.

wero ʔuri *n.* fish species.

weruweru *v.* blaze.

weta *n.* smashing waves.

weta *adj.* two currents meeting.

wewe *n.* louse egg.

wewea *n.* hard worker.

wewela *adj.* many stars visible.

weweti (n) *v.* inspect.

weʔa *n.* Painted Moray eel. Inhabits shallow reef flats and tidepools. Feeds mainly on crabs. Distinguished by pepper-like spot pattern. it is harmless, but may frighten reef-walkers if disturbed. Size to 100 centimetres.; bald because it looks like an eel head. *Siderea picta.*

weʔi *adj.* 1. strong, 2. ripe.

wi- *dir.* away.

wia *n.* grease, jovial, friendly.

wia *adj.* jovial, friendly.

wileri *adj.* incompetent.
wini *v.* pinch.
wirii *v.* flow (liquid).
wiro *adj.* misaligned, crooked.
Wiwi *propn.* clan name, location.
wiwili *adv.* happily, interesting.
wiwitoi *v.* gossip.
wiwiʔa *adj.* contented.
wiʔiʔi *n.* fat cheeks.
woroo *adv.* perhaps, suppose.
woroti *n.* miscarriage.
woroti *v.* miscarry.
wowoʔii *n.* vine.

ʔ

ʔa- *aff.* irrealis mood.
-ʔaa *aff.* TR. transitive marker.
ʔaba *adv.* not.
ʔabarii *n.* tree species.
ʔabaruʔa *adj.* murky.
ʔabaʔaba *n.* lip sore.
ʔabe *n.* armpit.
ʔafaia *q.* which? (inanimate)/
ʔafala *v.* split.
ʔafero *v.* sprain.
ʔafeto *adj.* crippled.
ʔafi *n.* strainer.
ʔafola *v.* rip cloth.
ʔafuana *propn.* islet off Wuvulu.
ʔafurafura *adv.* overflow (dry material).
ʔafuto *adj.* erased.
ʔai (r) *n.* drone sound, cry.
ʔaila *n.* wise person.
ʔaila *v.* know, understand.
ʔaimao *v.* lose consciousness.
ʔaipoi *adv.* two.days.ago.
ʔaipoilao *adv.* three days ago.
ʔala (r) *adj.* free, removed, without.
ʔalabe *n.* trip (e.g., while walking).
ʔalai *v.* lean over
ʔalai *n.* clamshell adze.
ʔalapaa *v.* regret.
ʔalapau *n.* Giant clam. *Tridacna gigas.*

ʔalatai *n.* chain.
ʔalawata *adj.* naked.
ʔalawera *adj.* pale.
ʔalaʔala *adj.* naked.
ʔale- *adv.* like.
ʔali *n.* swamp bank.
ʔali *n.* belt.
ʔalie *n.* pili nut tree, or okari nut.
ʔalimao *n.* large brown crab.
ʔalite *v.* curl.
ʔaliʔali *v.* fish (style of fishing).
ʔalo (r) *v.* send.
ʔaloe *adj.* loose.
ʔaloʔalo *n.* messenger, angel.
ʔama *n.* 1. father, 2. father's brother.
ʔamaia *q.* where? (animate).
ʔamate *conj.* because, since.
ʔamaʔana *v.* move to.
ʔamelo *adj.* broken.
ʔamero *v.* dislocate.
ʔameromero *adj.* refers to canoe.
ʔamoa *adj.* finished.
ʔamuraa *adv.* expert.
ʔana *adv.* also.
ʔana *q.* really?
ʔana *adv.* rflx.
ʔanaa ulu *n.* show-off.
ʔanafelo *n.* herb species.
ʔanalapa *n.* 1. big toe, 2. thumb.
ʔanalo *n.* east, sunrise.
ʔanari *n.* pinky.
ʔanaʔana *n.* 1. finger, 2. toe.
ʔani (n) *v.* lift.
ʔanini *v.* rip.
ʔaniuii *adj.* violent, fierce.
ʔaniwa *adj.* hungry.
ʔano *prep.* outside.
ʔano *n.* world.
ʔano *n.* field.
ʔanoʔano *n.* expert carver, expert, knowledgeable person, skilled person.
ʔapa *n.* brace stick.
ʔapai *v.* gather people, search.
ʔapalele *v.* relax.
ʔaparanono *n.* one side of back.
ʔapari *v.* brush off.
ʔaparii *n.* The Bigeye Trevally. Inhabits coastal waters and offshore reefs. Distinguished

by a relatively large eye with well developed gelatinous membrane, well developed scutes, and a white tip on the dorsal and anal fin lobes. Size to 78 centimetres. *Caranx sexfasciatus.*

ʔapatii *n.* blackpatch triggerfish. It has an orange stripe from mouth to pectoral fin base. *Rhinecanthus verrucosus.*

ʔapaʔi *v.* know.

ʔapia *n.* wooden bowl.

ʔapia pine *n.* calf of leg.

ʔapiaore *n.* goose bumps.

ʔapiaore *adj.* hair-raising.

ʔapile *n.* greenish, somewhat transparent.

ʔapilewa *n.* iguana.

ʔapipi *adj.* out of place.

ʔapipiri baʔoa *n.* Candle Bush. Other names for this same plant include Golden Bush, Seven Golden Candlesticks, God?s Candle, and Roman Candle. The closely packed yellow flower spikes look like yellow candles. The bark can be used for tanning. *Cassia alata.*

ʔapitai *v.* endure.

ʔapoi (n) *v.* finish.

ʔapuna *adj.* sacred.

ʔapuna *n.* Burrawang Palm. The leaves are shiny and evenly arranged. It grows in moist open forest and rainforest margins, and its height can be from 2 metres to 5 metres. The seeds are highly poisonous. *Lepidozamia peroffskyana*.

ʔapuna *n.* prohibition.

ʔapuna *v.* prohibit.

ʔapuri *v.* stab.

ʔapuru *adj.* toothless.

ʔara *v.* look up.

ʔaraa *n.* Spiny Squirrelfish. It inhabits coral reef caves and ledges; distinguished by its large size, a very long spine on the lower corner of the cheek, and yellow-ish fins. Size up to 45 centimetres. *Sargocentron spiniferum.*

ʔarafalu *n.* coconut leaf cover.

ʔarara *adj.* black.

ʔararati (n) *v.* slander.

ʔaraʔara *adj.* eyes turned up.

ʔare (n) *v.* 1. punish, 2. attack with words. **fiarenii** arguing with each other (reciprocal)

ʔarenai pani *n.* palm of the hand.

ʔarenai pine *n.* sole of the foot.

ʔarene *adj.* accidental.

ʔarere *adj.* generous.

ʔarero *n.* a black, smooth snake (compare to harehoro--lizard. Is this the same thing?).

ʔarewa *n.* dawn.

ʔarewa *adj.* well-lit, clear thinking.

ʔarewaa *n.* day.

ʔarewaa *n.* Blue-green Chromis. Inhabits inshore reefs, passages, and outer reefs areas. Swims in large schools that feed on plankton. Distinguished by sky-blue color and

having no black dot at the pectoral axis. Size to 8 centimetres. *Chromis viridis.*

ʔareʔe *v.* go ashore.

ʔari *n.* sea, salt.

ʔari *n.* opposite gender sibling.

ʔari (f) *v.* dig, fan, blow.

ʔaria *adv.* no.

ʔariafelo *adj.* rough sea.

ʔarifaʔaʔa *n.* straight wind.

ʔarima *adj.* shiny.

ʔariʔai *adj. painful* (birth).

ʔariʔari *n.* fan.

ʔarua *pron.* 1DU.INCL.

ʔarua- *pron.* 1DU.INCL subject proclitic.

ʔaruei *v.* scrape coconut.

ʔaruru *v.* extract (e.g., tooth).

ʔaruʔaru *adj.* toothless.

ʔaruʔaru *n.* ruffian.

ʔata *v.* climb.

ʔatabaibai *adj. painful* (stomach).

ʔatafilefile *v.* side-winding movement like a snake or shark.

ʔatawali *adj.* crooked, bent.

ʔataʔata *v.* undulating, snaking.

ʔatifora *n.* Black-Tip Reef Shark. Inhabits shallow coral reefs, often the most common shark in this habitat. Feeds on small fish and crustaceans. Distinguished by prominent black tips on fins, especially the first dorsal. Harmless unless cornered. Size to 180 centimetres. *Carcharhinus melanopterus.*

ʔatioi *n.* sneeze.

ʔatiti *v.* slide down, diminish.

ʔatiʔa *v.* get up.

ʔatoifurai *v.* spit sneeze.

ʔatona *n.* Monday.

ʔau *n.* time period.

ʔau *n.* constellation.

ʔau (r) *v.* put.

=ʔau *pron.* 1SG object enclitic.

ʔau ufuʔa *n.* harvest season.

ʔaualo *n.* literally time of sun.

ʔaunu *v.* go.

ʔawata *adj.* heavy.

ʔawata *n.* used figuratively for a problem or burden.

ʔawei *v.* warn.

ʔawela *v.* pop eyes out.

ʔawero *n.* red coral branch.

ʔaʔa *ij.* disagree.

ʔaʔa *adv.* neg.

ʔaʔa *prep.* with.

ʔaʔafi *v.* carry, clean.

ʔaʔafi *v.* clean.

ʔaʔanai *v.* clear throat.

ʔaʔapo *adj.* final.

ʔaʔarati *v.* insult.

ʔaʔare *adj.* stinking (fish smell).

ʔaʔariri *v.* breaking (wave).

ʔaʔaro *n.* chicken, borrowed word from Melanesian Pidgin kakaruk.

ʔaʔaroia *n.* rooster crow.

ʔaʔawa *propn.* location.

ʔaʔe *v.* growing (baby).

ʔaʔe *v.* uproot.

ʔaʔu *adj.* adolescent 15-17 years of age.

ʔe *n.* excrement.

ʔeaa *n.* Dusky Moorhen. *Gallinula tenebrosa.*

ʔebaʔeba *n.* rising tide.

ʔee *ij.* discourse marker.

ʔei *dem.* plural, definite demonstrative.

ʔei *adv.* when.

ʔena *dem.* plural, definite, distal demonstrative.

ʔena *adv.* when.

ʔenai *v.* glimpse.

ʔeni *dem.* plural, definite, proximal demonstrative.

ʔeni *adv.* now.

ʔeʔe *v.* step.

ʔeʔea *n.* floor.

ʔeʔeni *adv.* now, these, think of someone.

ʔeʔeʔe *v.* walk on reef.

ʔi *prep.* at.

ʔi= *pron.* 3SG subject proclitic.

ʔia *n.* belly.

=ʔia 3SG object enclitic.

ʔialama *adj.* southwest.

ʔiara *n.* path between suta (taro gardens), hallway.

ʔiba *n.* charred coconut-shell cup.

ʔila *n.* freckle, mole.

ʔilaʔila *adj.* blackheads, black spots.

ʔilia *n.* a beetle that eats taro and banana.

ʔilo *v.* touch.

ʔiloʔilo *n.* kerosine wood; same as fotaro.

ʔiloʔo *n.* clock (from Tok Pisin kilok).

ʔina *n.* mother, mother's sister.

ʔinilala *n.* a sea urchin with thick, blunt spines most visible. *Heterocentrotus trigonarius.*

ʔinoru *n.* Beach Naupaka, also called the Half Flower. This spreading shrub grows wild on beaches throughout the tropics. Its height can be 1 to 3 metres, and the small white flowers are streaked with purple. The flowers are unusual because they look

like just half of a flower. It produces berries which are white when ripe. According to Polynesian legend, lovers were separated leaving the half flower of the young man blooming alone in the mountains, and the girl blossoming alone on the beach. (There is a variety of Naupaka called Mountain Naupaka that grows only in the mountains.) *Scaevola taccada.*

ʔio *n.* Yellowfin Goatfish. Inhabits sandy areas near coral reefs, often seen in schools. Distinguished by bright yellow fins and yellow stripe on the middle of the side. Size to 38 centimetres. *Mulloides vanicolensis.*

ʔioʔio *n.* taro species.

ʔioʔio *n.* Beach Kingfisher. *Halcyon nigrocyanea.*

ʔiri *v.* pour.

ʔiriri *n.* a beetle that eats breadfruit.

ʔiro *v.* 1. look down, 2. read.

ʔirolaraia *v.* misread.

ʔita alo *v.* gesture come.

ʔitai *v.* feel, touch.

ʔitalafui *v.* put in order, analyze.

ʔitiʔa *v.* arise, get up.

ʔiu *n.* tree species.

ʔiwa *v.* yell, bark.

ʔiwaʔiwai *n.* shin.

ʔiʔiba *n.* Flashlight Fish. It inhabits reef crevices and ledges. It is a nocturnal fish with a large luminous organ below the eye. This fish has two dorsal fins and travels in schools. Its size is up to 12 centimetres. There is another, similar fish that has only one dorsal and travels singly. Its name is Photoblepharon palpebratus. Size to 12 centimetres. *Anomalops katoptron.*

ʔiʔifi (n) *v.* bury.

ʔiʔiloi *v.* gardening.

ʔiʔire *n.* taro species.

ʔiʔire purufora *n.* taro species.

ʔiʔiri (n) *v.* ask.

ʔiʔitaa *n.* Pacific blue-tailed skink. *Emoia caeruleocauda.*

ʔiʔolu *n.* vine species.

ʔo *conj.* or.

ʔo *n.* cane, walk stick.

ʔo- *pron.* 2SG subject enclitic.

ʔoa *n.* Kwila; also known as merbau or ifil. A medium to large tree, up to 15m in height and 150 cm in diameter. The bark is grey; the base of the trunk is often buttressed. The leaves are compound and dark green. Flowers have a single pinkish-white petal and three stamens. The fruit is a leathery pod, 10-30 cm long, containing large, flattened, brown seeds. The wood is dense, reddish brown and highly termite resistant. *Intsia bijuga or Intsia palembanica.*

ʔoa *v.* stay, abide.

ʔoala *n.* northwind, wind.

ʔoapune *n.* a species of tree.

ʔoaro *n.* plant disease.

ʔoba *n.* box, pouch, sheath.

ʔobao *num.* four.

ʔobaʔoba *n.* cheek.

ʔofafaufau *v.* get ready.

ʔofalure *v.* stand against.

ʔofea *v.* influence.

ʔofoa *propn.* clan name, location.

ʔofu *n.* butt.

ʔoila *n.* Convict Surgeonfish. Inhabits coral reefs, sometimes seen in schools. Distinguished by six narrow black bars on the head and body. Size to 26 centimetres. *Acanthurus triostegus.*

ʔola *n.* mother's brother, dad's sister.

ʔolo *n.* tree species.

ʔoloroa *num.* six.

ʔoloromea *num.* seven (six and one).

ʔolumanu *num.* three.

ʔomaʔa *v.* watch.

ʔomaʔa *v.* care for.

ʔomaʔa *v.* wait.

ʔomaʔoma *v.* blinking (of a star).

ʔomaʔoma *v.* oversee.

ʔomaʔoma *n.* overseer, care taker.

ʔonne *propn.* Onne village.

ʔono *v.* 1. swallow, 2. sing.

ʔonoʔono *n.* throat.

ʔopaluria *v.* turn against, ignore.

ʔopapani *v.* stand by.

ʔope *v.* urinate.

ʔopi *v.* inhale.

ʔore *v.* cut.

ʔoreʔore *n.* knife.

ʔori *n.* lizard species.

ʔori banabana *n.* sticky gecko.

ʔoroa *n.* companion.

ʔoroʔoro *v.* throbbing pain.

ʔotei *v.* contemplating, struggling, thrashing.

ʔoti *n.* mouth.

ʔoʔou= *pron.* 1PL.INCL subject proclitic.

ʔoʔi *n.* hiccup.

ʔoʔolu *pron.* 1PL.INCL pronoun.

ʔoʔolui *num.* three anim.

ʔoʔonai *adj.* encouraging.

ʔoʔonu *n.* low throb sound.

ʔoʔoraʔa *n.* a synaptid holothurian that looks like a giant hollow worm. They are very soft and flexible, and their bodies are expanded by water. Their surface is sticky, and they can travel across the sandy bottom surprisingly quickly by expanding and

contracting their bodies like an accordian. *Euapta godeffroyi, possibly also Opheodesoma sp.*

ʔoʔote *n.* skin problem between fingers and toes.

ʔoʔoʔo *n.* Stripe-face Unicornfish. Inhabits coral reefs. Distinguished by yellow-edged dark stripe on the snout and yellow-orange tail-base. Also known as Orange-spine or Poll Unicornfish. Size to 45 centimetres. *Naso lituratus.*

ʔoʔoʔu *adj.* confident.

ʔoʔoʔui *adj.* head-down.

ʔoʔoʔui *v.* bow.

ʔu (r) *v.* stand.

ʔu *n.* post.

ʔu= *pron.* 1SG subject proclitic.

ʔua *adv.* only.

ʔuaa *conj.* because.

ʔuatani *adv.* because, why?

ʔubatai *n.* tree species.

ʔubaʔuarai *adv.* sudden.

ʔufa *n.* umbrella.

ʔufafefe *v.* ready posture.

ʔufalo *n.* taro species.

ʔufaluria *v.* stand back to person.

ʔufaʔufa *v.* dance.

ʔule *v.* stay.

ʔulo *n.* Surge Demoiselle. Inhabits shallow reefs exposed to surge. Feeds on algae, fish eggs and small benthis invertebrates. Two colour forms are commonly seen--one variety is mainly yellow with a brilliant blue stripe along the back and the other is a dark variety with white bars. Size to 8.5 centimetres. *Chrysiptera leucopoma.*

ʔulo *n.* spider.

ʔulo afea *n.* a kind of spider that does not make a web.

ʔulo puli *n.* a kind of spider with dots like a leopard.

ʔulofo *n.* top.

ʔululu *n.* commander.

ʔulururu *adv.* dissatisfied.

ʔumaʔua *adj.* firstborn.

ʔumu *n.* mouth.

ʔumu *v.* curse.

ʔumulo *n.* mute, quite person.

ʔumurauwe *n.* tale bearer.

ʔumuri *adj.* next born.

ʔuna *v.* kick with heel or sole, for example starting motorbike.

ʔuna *reflx.* self.

ʔunalifai *v.* go back.

ʔunari *n.* scabies, grille.

ʔuni *v.* point, show.

ʔunifani *v.* show someone.

ʔunilalo *v.* guess.

ʔunu *n.* body.

ʔunu (r) *v.* to slide or pull one object out of a pile of many.

ʔunuaa *n.* young coconut meat, egg white.

ʔunuwenuwe *adv.* excited.

ʔupeʔupe *v.* imagine romance.

ʔupu *n.* grandparent, grandchild.

ʔupu *v.* descend.

ʔupua ʔari *n.* first menstration.

ʔupunaa pani *v.* born arms first.

ʔupunaa pinai *v.* born legs first.

ʔurafu *n.* coral species.

ʔuratauneneri *v.* yes with crowd.

ʔuraʔura *v.* pulsing, throbbing, beating.

ʔurere *n.* Tiger cowry. A dark-spotted cowry, popular as a curio item. *Cypraea tigris.*

ʔurua pula *n.* swollen eyes.

ʔurufana *v.* show.

ʔurupeni *v.* step on.

ʔurupi *propn.* location, clan name.

ʔurupula *n.* eyebrow.

ʔuruʔuru *v.* drip.

ʔutafeʔai *v.* hold on.

ʔutaroba *n.* phosphate.

ʔutauai *n.* stand firm, hold on.

ʔutomaʔa *v.* hold try.

ʔutupulepule *n.* hermit crab shell.

ʔuwarau *n.* Black-blotched Moray eel. Inhabits coral reef crevices. Feeds on fishes. Distinguished by bold dark spotting on white ground colour. It is usually harmless but can cause serious injury if provoked. Size to 180 centimetres. *Gymnothorax favagineus.*

ʔuʔale *n.* tree species.

ʔuʔnaʔaa *v.* remove.

ʔuʔu *v.* stare.

ʔuʔu (r) *v.* narrate, storytell.

ʔuʔufai *n.* fish species.

ʔuʔumi (n) *v.* recognize.

ʔuʔupu *v.* go down.

ʔuʔupua *propn.* location.

ʔuʔura *n.* story.

ʔuʔurafu *n.* stationary cloud on the horizon.

ʔuʔurai *adj.* different, seperate, alone, unique.

ʔuʔuri (n) *v.* separate.

ʔuʔuru *v.* drip.

ʔuʔuu *n.* a bird like a pigeon, walks (instead of flying).

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