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Abstract

Makada is a dialect of Kuanua spoken on the island of Makada, one of the Duke of York Islands, a small group of islands located between the larger islands of New Ireland and New Britain in the Bismarck Archipelago of Papua New Guinea. As a dialect of Kuanua, Makada belongs to the Oceanic subgroup of the Austronesian family. Although some early reports noted Makada's similarity to the Kuanua varieties spoken on the Gazelle Peninsula of New Britain, the Makada dialect has often mistakenly been assumed to be a dialect of Ramoaaina (also known as "Duke of York"), the language of its closest neighbors, spoken on the other islands of the group. Although influenced by Ramoaaina, Makada is a dialect of Kuanua, which is also spoken on the "mainland" of New Britain and on the islands of Watom and Matupit. This paper is intended to serve as an introduction to Makada, presenting its basic features and showing it to be a dialect of Kuanua.

Keywords

Makada; Kuanua; Tolai; Oceanic; Austronesian; Ramoaaina; Duke of York Islands; Bismarck Archipelago; New Britain; New Ireland

1 Introduction

This paper presents a previously undescribed and largely unrecognized dialect of Kuanua (ISO 639-3 code [ksd], glottocode [kuan1248]).¹ Kuanua is an Austronesian language of the Oceanic subgroup. Although spoken predominantly on the island of New Britain, Kuanua is classified as a "New Ireland" language, part of the Meso-Melanesian cluster of Western Oceanic languages (Ross, 1988, pp. 257–258).

Kuanua is frequently referred to as Tolai, a term that is also used to refer to a cultural group whose members speak various related languages.² Other languages associated with the

¹ I wish to thank Roland Kurkuris and Johnny Roland for sharing their knowledge of Makada with me, as well as other members of the Makada community: Daniel Pakanatangala, Michael John, Mathias Tini, and Roland Maniot. I also thank Steven Gagau, Malcolm Ross, René van den Berg, and Craig Volker for helpful comments on earlier drafts, as well as the three reviewers and editor at *Te Reo*. Finally, I must thank the Department of Linguistic and Cultural Evolution at the Max Planck Institute for Evolutionary Anthropology in Leipzig for funding the field research that made this paper possible.

² Other terms that have been used in the literature to refer to Kuanua include the following: Blanche Bay, Gunantuna, Neu-Pommersche Sprache [New-Pomeranian language], Neupommersch [New-Pomeranian], New Britain, Nordgazelle-Sprache [North Gazelle language], Qunantuna, Rabaul, Raluana, Ralum, Talili-Bai [Talili Bay], Tinata Tuna, To-Leute [To people], and Tuna.

Tolai cultural group include Vinitiri, Bilur, and Ramoaaaina.³ Although “Kuanua” and “Tolai” are both widely used terms, not every community member may approve of one term or the other. The word *Kuanua* is said to derive from an exonym used by Ramoaaaina speakers to refer to “the folk over there” (Trevitt 1940, p. 350). It was probably originally a geographical designation: cf. <kuā> ‘at, there’ and <wanua> ‘land, country’ (Brown & Danks, 1882, pp. 112, 305); or <kuaa> ‘be across, over there’ and <wanua> ‘place’ (Davies & Fritzell, 1992, pp. 32, 73). The use of “Kuanua” was popularized by Methodist missionaries, beginning in the late 19th century. The use of “Tolai”, on the other hand, is probably more recent: Epstein (1969, p. 13) found it attested as a group designation no earlier than the 1930s. The term was—and perhaps still can be—used as a salutation (cf. Meyer, 1961, p. 391: <To Le!> ~ <To Lai!> ‘Freund’ [‘friend’]).

The Makada dialect is spoken on the island of Makada in the Duke of York Islands. The Duke of York Islands are located in Saint George’s Channel, roughly equidistant between the large islands of New Britain and New Ireland, both of which belong to the Bismarck Archipelago of Papua New Guinea. Commonly assumed to be a dialect of Ramoaaaina (also known as the “Duke of York” language), the variety spoken on Makada is rather a dialect of the Kuanua language.

Despite being spoken predominantly in New Britain, Kuanua is classified (along with Vinitiri) as having its closest relatives in New Ireland.⁴ The presence of Kuanua in New Britain is generally thought to be the result of a relatively recent migration from New Ireland.⁵ The existence of a Kuanua variety spoken in the Duke of York Islands therefore bears on the history of the settlement of New Britain. The Kuanua-speaking population of Makada Island may stem from an earlier settlement of the Duke of York Islands of people migrating from New Ireland to New Britain, as has been suggested by Schnee (1901, p. 235).⁶ Alternatively, this Makada dialect may indicate a back-migration of Kuanua speakers, as claimed by Rickard (1889, p. v; cf. Ray 1895, pp. 1–2).⁷ Either way, it is not unlikely that the Duke of York Islands provided

³ Vinitiri is also known as Bainig-Ufer [Baining Shore], Baining-Küsten [Baining Coast], Kabair, Kaibara, Kambair, Livuan, Liwuan, Lunga Lunga, Lungalunga, Luvuani, Masava, Masawa, Massava, Minigir, S-Dialekt [*s* dialect (of Kuanua)], and Vunamarita. Bilur is also known as Birar, Birara, and Minigir. Ramoaaaina is also known as Ramoaina, Ramuaaina, and Duke of York.

⁴ See Chowing (1969, p. 24), Beaumont (1972, p. 12), and Ross (1988, pp. 257–262; 1992, pp. 368–369).

⁵ See Bley (1897, p. 85), Kleintitschen (1906, pp. 29–30, 164), Parkinson (1907, pp. 46–49, 724), Burger (1913, pp. 7–8), Salisbury (1970, p. 110, fn. 3; 1975, pp. 134–139), Ross (1988, pp. 261–262), and Chowning (1996, p. 21). Local Tolai narratives support the linguistic evidence of a New Ireland origin (Salisbury, 1972). See Epstein (1969, p. 13; cf. p. 161) and Neumann (1988, p. 216) for critical assessments of some aspects of these narratives (cf. Janssen, Mennis & Skinner, 1973, p. xvi). The archeological evidence further points to a New Ireland origin of the Tolai (or pre-Tolai) peoples (Specht, 1973, p. 449; Summerhayes, 2004, p. 154), as does the genetic evidence (Friedlaender et al., 2008, pp. 184–185; Allaby et al., 2010, p. 153). The migration presumably occurred sometime after the major volcanic eruption that formed the Rabaul caldera around 683 CE (McKee, Baillie & Reimer, 2015; Global Volcanism Program, 2024). Pfeil (1899, pp. 114, 286–287) is thus very much in the minority position in thinking the migration was in the other direction, from New Britain to New Ireland. That said, the earlier ancestors of the Oceanic-speaking people of New Ireland did most likely originally migrate there from New Britain (Ross, 1988, p. 261).

⁶ Indeed, Schnee (1901, p. 234) suggests that the Makada dialect is every similar to the Nondup (i.e., Nodup) dialect (of Kuanua), perhaps even being identical to it. Schnee’s (1901) notes on Makada, including a short text, are reproduced in Appendix 4.

⁷ Powell (1883, pp. 53–54), suggests that the Duke of York Islands were settled from New Britain, the male settlers perhaps subsequently taking wives from New Ireland. Ribbe (1910–1912, pp. 103–104) proposes that the Duke of York Islands were settled both from New Britain and from New Ireland. Meier (1911, pp. 837–838) hypothesizes an initial migration of people from New Britain to the Duke of York Islands and from there to New Ireland, possibly with a back-migration to New Britain. Riesenfeld (1950, pp. 237–278), discussing the archaeological and mythological evidence pertaining to New Ireland, the Duke of York Islands, and New Britain, summarizes several migration theories. See also Lanyon-Orgill (1960, p. 30).

an intermediary step in the movement of Kuanua (or pre-Kuanua) speakers from New Ireland to New Britain (Chowning 1976, p. 380).

The description of Makada presented here is based on elicitation sessions and recordings conducted with native speakers of the dialect in 2022, in the town of Kokopo and on the island of Makada. My two primary consultants were Roland Kurkuris (born 1997) and Johnny Roland (born 1998), two brothers from Makada who were working and residing in Kokopo. The three of us spent about 35 hours between 18 October and 20 November 2022 eliciting data and transcribing and translating texts. I also spent two days on Makada Island (1–2 November 2022), during which I conducted interviews and recorded four other speakers of the language, all men born and raised on the island: Daniel Pakangatanga (born 1940), Michael John (born 1962), Mathias Tini (born 1963), and Roland Maniot (born 1968). Interviews and elicitation sessions with all consultants were conducted in Tok Pisin. The recordings made on Makada Island may be found in the PARADISEC online archive (Barlow, 2022).

Following this introduction (§1), I describe Makada’s sociolinguistic and geographical setting (§2), as well as its orthography (§3), before providing a basic description of the dialect, including topics in phonetics and phonology (§4), morphology and syntax (§5), and the lexicon (§6). Finally, I consider the historical position of the Makada dialect within the Kuanua language (§7) before providing a brief conclusion (§8). This paper also contains five appendices: a 100-item wordlist comparing Makada with other dialects of Kuanua and with the Ramoaaina language, following Swadesh (1971, p. 283) (Appendix 1); a 210-item wordlist for Makada, following the concepts in the ABVD (Greenhill, Blust & Gray, 2008) (Appendix 2); two texts that I recorded on Makada Island in 2022 (Appendix 3); a translation of Schnee’s (1901) documentation of Makada, the only published data on Makada before the data in this paper (Appendix 4); and a comparison of previous classifications of the dialects of Kuanua (Appendix 5).

2 Language use and setting

The Makada dialect is spoken on Makada Island, known locally either as Makada [mækəda] or Makado [mækədo], the latter form also referring to a coconut species with a green husk. Variant spellings for the name of the island or the dialect (or the ‘green coconut’ species) include Makada, Makadā, Makadaa, Makadam, Makadan, Makadao, Makadau, Makado, and Makadoi. People on Makada Island consider their language to be (a dialect of) Kuanua. They sometimes refer to their speech variety as *mərumarug* ‘saying, speech, talk’. They identify as members of the Tolai cultural group.

The island of Makada is the northernmost of the Duke of York Islands, lying northwest of the eponymous main island of the group, separated from it by Makada Harbor. Its geography is discussed briefly by Brown (1877, pp. 137–139), Powell (1881, pp. 84–85), and Sapper (1910, pp. 39, 54–58, 91, 119). Running roughly along a northwest-southeast axis, the hourglass-shaped island is less than 4 km long and less than 2 km across at its widest point. The highest point of the island group is located on Makada Island (about 120 m above sea level). There are four villages on Makada. The largest is Nagaila [nəgaila], located in the northwest. The smallest is Narakoi, located in the west. Raputput, located in the southeast, is home to a guesthouse used as a waypoint for people traveling by boat between New Britain and New Ireland. Palipal [pəlipal], located in the east, is home to a primary school. There was previously a school located at Nagaila (Patrol Reports, 1950–1953, no. Rab. 2, pp. 8, 15–16).

Map 1 depicts the islands of New Britain and New Ireland, with the small Duke of Island located between them in Saint George’s Channel. Map 2 depicts the Duke of York Islands, with Makada Island located in the northwest of the island group.

The Makada dialect (like other dialects of Kuanua) is a relatively vital speech variety. Community members of all ages routinely use the language. Although it is difficult to assess the fluency of younger children living on Makada Island, older children have acquired Makada as a first language. All speakers are also fluent in Tok Pisin, the national language and primary lingua franca of Papua New Guinea. They use Tok Pisin not only with speakers of other languages but also among themselves. Tok Pisin is the primary language of instruction in the Palipal primary school. However, there is also some instruction in the Makada dialect, some of which incorporates pedagogical materials developed by local teachers.

The speech varieties that are geographically the closest to Makada are the dialects of the related language Ramoaaina (i.e., “Duke of York”), sometimes identified locally as follows: (i) Molot, (ii) Aalawa, (iii) Nabual, and (iv) Nakukur.⁸ The Ramoaaina language is more dominant in the area compared to the smaller Makada dialect of Kuanua. Since many Makada residents travel to the other Duke of York Islands for school, work, or other reasons, it is common for Makada speakers to have some facility (or even fluency) with Ramoaaina. The converse, however, is not true: Ramoaaina speakers are generally unable to understand Makada. Makada and Ramoaaina are not mutually intelligible.



Map 1. The islands of New Ireland and New Britain, with the Duke of York Islands located between them. Contains map data © OpenStreetMap contributors, made available under the terms of the Open Database License (ODbL).

It is more difficult, however, to assess the linguistic relationships between Makada and (other) dialects of Kuanua, partly because this language comprises a dialect network. The Kuanua language is closely associated with the Tolai people, who live mainly in coastal settlements at the northeastern end of the island of New Britain. From what I gather, most Tolai people of the New Britain “mainland” are unaware of the Makada dialect (or, rather, they are unaware that the people of Makada Island speak a dialect of Kuanua). Reportedly, some Kuanua speakers from New Britain use Tok Pisin as a lingua franca when they visit Makada. However, I do not know whether this is because they find the Makada dialect sufficiently different from their own variety of Kuanua or simply because they expect the people of Makada to speak Ramoaaina.

⁸ Lanyon-Orgill (1942, p. 91) lists the “languages” of the Duke of York Islands as Molot, Ulu, Mioko, Manuan, Kabotirai, and Utam. Wurm & Hattori (1981, map 13) list these same six as dialects of Duke of York, along with Kerawara and Makada. The map in Davies & Fritzell (1997, p. 25) likewise presents Makada as a dialect of Ramoaaina, along with Molot and Aalawa. *Ethnologue* (27th edition; Eberhard, Simons & Fennig, 2024) describes the dialects of Ramoaaina as follows: “Makada, Molot (Main Island), Aalawa (Aalawaa, Alawa, Mioko, South Islands, Ulu). Makada dialect very different, possibly not intelligible to speakers of other dialects.”

On the other hand, some “mainland” dialects of Kuanua are reported by Makada speakers to be essentially the same as theirs. Indeed, people from the Cape Tavui area are said to be able to speak their dialect when visiting Makada with complete mutual understanding. The relationship between Makada and other dialects of Kuanua is discussed in §7.



Map 2. The Duke of York Islands, showing the four villages of Makada Island: Nagaila, Narakoi, Raputput, and Palipal. Contains map data © OpenStreetMap contributors, made available under the terms of the Open Database License (ODbL).

3 Orthography

Speakers of Makada use an orthography based on that of Ramoaaina, the language of their neighbors on the other Duke of York Islands (cf. Davies & Fritzell, 1992, p. 5; 1999, p. 1). Most Makada graphemes closely approximate the phonetic values of their English or Tok Pisin equivalents, so only a few comments are required here.

Two digraphs are used: <aa> and <ng>. In the Makada orthography, <a> represents the mid central vowel /ə/, whereas <aa> represents the low central vowel /a/, as in the Ramoaaina orthography. The difference between <a> and <aa> does not entail any phonemic length distinction.

In the Makada orthography, <ng> represents the velar nasal /ŋ/. It is always a single segment and never has the value †[ŋg]. This convention is in keeping with most modern orthographic practices for other dialects of Kuanua and for Ramoaaina. In some earlier practices, however, Kuanua /ŋ/ was often written as <g> (or as <ñ>, in Meier, 1909, p. 10), and /g/ was written as <q>. Mosel (1984, p. 14) provides a chart detailing the different orthographic practices that have been used for transcribing Kuanua /g/ and /ŋ/.

In the Makada orthography, <w> represents a voiced bilabial fricative /β/, a sound less typically encountered in Tok Pisin or in English. Here, the Makada orthography differs from that of other dialects of Kuanua, in which <v> is generally used to represent this phoneme, although Costantini (1907, p. 1), following German orthography, used <w>. Rickard (1889,

pp. 293–294, 307) and Waterhouse (1939, pp. 9–10) employed both <v> and <w> (cf. Mosel, 1984, p. 14).⁹

Table 1 presents the graphemes of the Makada orthography with the IPA equivalents of their basic phonetic realizations.

Table 1. Makada orthography

“Standard” Kuanua orthography	Makada orthography	Makada phonetic forms (IPA)	Orthography used here
<a>	<a>	[ə]	ə
<a>	<aa>	[a]	a
		[b ~ ^m b ~ b̥]	b
<d>	<d>	[d ~ ⁿ d ~ d̥]	d
<e>	<e>	[e ~ ε]	e
<g>	<g>	[g ~ ^ŋ g ~ ġ]	g
<i>	<i>	[i ~ ɪ]	i
<k>	<k>	[k]	k
<l>	<l>	[l]	l
<m>	<m>	[m]	m
<n>	<n>	[n]	n
<ng>	<ng>	[ŋ]	ŋ
<o>	<o>	[o ~ ɔ]	o
<p>	<p>	[p]	p
<r>	<r>	[r]	r
<s>	<s>	[s]	s
<t>	<t>	[t ~ t̥ ~ tʃ]	t
<u>	<u>	[u ~ ʊ]	u
<v>	<w>	[β ~ β̥ ~ β̥̥ ~ w̥]	w

The Makada local orthography consists of 17 letters (plus the two digraphs <aa> and <ng>). The letter <s> only occurs in loanwords, such as from Tok Pisin or English. In this paper, I follow the Makada orthographic convention of using <w> to represent the voiced bilabial fricative /β/. However, to avoid potential confusion or misinterpretation, I use the IPA symbols <ŋ> for the velar nasal, <a> for the low central vowel, and <ə> for the mid central vowel. For comparison, Table 1 also shows the modern “standard” Kuanua orthography, as used, for example, by Mosel (1980, p. 14). There are only two differences between the Makada/Ramoaina orthography and the standard Kuanua orthography: (i) standard Kuanua uses <a> for both /ə/ and /a/; and (ii) standard Kuanua writes the bilabial fricative as <v> as opposed to <w>.

⁹ The Tolai (i.e., Kuanua) wordlist provided by Lawrence Vue & Malcolm Ross for the Austronesian Basic Vocabulary Database (ABVD) (Greenhill, Blust & Gray, 2008) also uses both <v> and <w>. This wordlist comes from Ratavul village (Malcolm Ross, p.c.).

4 Phonetics and phonology

Descriptions of Kuanua pronunciation may be found in Bley (1897, pp. 86–88; 1912, 7–9), Costantini (1907, p. 1), Waterhouse (1939, pp. 9–10), Zwinge (1953, pp. 6–8), Wright (1964, p. 7), Franklin, Kerr & Beaumont (1974, pp. 11–19), Mosel (1980, pp. 8–23; 1995, pp. 728–729), and Anonymous (2011).

Like other dialects of Kuanua, Makada has a phoneme inventory consisting of 13 consonants (Table 2) and six vowels (Table 3). (The alveolar fricative /s/, which only occurs in loanwords, is included in parentheses.)

Table 2. Makada consonants

	Labial	Coronal	Velar
Voiceless stops	p	t	k
Voiced stops	b	d	g
Nasals	m	n	ŋ
Fricatives	β	(s)	
Trill		r	
Lateral		l	

Table 3. Makada vowels

	Front	Central	Back
High	i		u
Mid	e	ə	o
Low		a	

The three voiceless stops /p, t, k/ are generally pronounced without aspiration. The voiceless coronal /t/ is typically pronounced as a dental stop. It is occasionally realized as an affricate [tʃ] when immediately preceding the high front vowel /i/, but this has only been observed in forms of the numeral ‘six’ (§6.1). The voiced stops /b, d, g/ are occasionally prenasalized (i.e., [ᵐb, ᵐd, ᵐg]), always in free variation with their non-prenasalized equivalents. In word-final position, the voiced stops may be partially or fully devoiced (i.e., [b̥, d̥, g̥]). The voiced coronal /d/ is typically pronounced as an alveolar stop. There are three nasals /m, n, ŋ/, which match the sets of three voiceless stops and three voiced stops in place of articulation. The only (native) fricative in the language is the voiced labial fricative /β/, which, especially when immediately preceding the low vowel /a/, may be pronounced with much less constriction, as an approximant (i.e., [β̥]), thus closely resembling a labial-velar [w], although with less rounding (i.e., [w̥]). Like the other voiced obstruents, the labial fricative may be partially or fully devoiced in word-final position (i.e., [β̥]). The voiceless coronal fricative /s/ only occurs in loanwords, such as *saksak* ‘sago’, *sol* ‘salt’, or *burus* ‘tobacco’ (from Tok Pisin *saksak*, *sol*, *brus*; see §6.3). There are two liquids: a trilled rhotic /r/ and a lateral approximant /l/. All consonants may occur word-initially, word-medially, or word-finally. There are no syllable-internal consonant clusters (i.e., no complex onsets or complex codas), although a single consonant may follow another across a syllable boundary.

As far as I am aware, Makada is the only dialect of Kuanua that exhibits word-final voiced stops. Indeed, this is an unusual feature for the languages of the area in general. All three voiced stops may occur word-finally: bilabial /b/ (1), alveolar /d/ (2), and velar /g/ (3).

(1) Word-final voiced bilabial stop /-b/

<i>leb</i>	‘to hunt’
<i>lob</i>	‘pond’
<i>lub</i>	‘high tide’
<i>pələbeb</i>	‘thin, flat’
<i>ub</i>	‘earth oven (Tok Pisin <i>mumu</i>)’
<i>wərub</i>	‘to fight’

(2) Word-final voiced alveolar stop /-d/

<i>id</i>	‘3PL.OBJ’
<i>dud</i>	‘to sink’
<i>kud</i>	‘small hand drum (Tok Pisin <i>kundu</i>)’
<i>təd</i>	‘1PL.INCL.OBJ’
<i>udud</i>	‘to scrape (cassava) [RED]’
<i>wud</i>	‘banana’

(3) Word-final voiced velar stop /-g/

<i>mərumarug</i>	‘to say [RED]’
<i>og</i>	‘canoe’
<i>pəlag</i>	‘to split’
<i>puleg</i>	‘nail, claw’
<i>-g</i>	‘1SG.POSS’

The voiced bilabial fricative /w/ [β] can also occur word-finally (4).

(4) Word-final voiced bilabial fricative /w/ [β]

<i>kuw</i>	‘rat’
<i>ruw</i>	‘shy’
<i>tuw</i>	‘sugarcane’

The six vowels consist of two front vowels /i, e/, two back vowels /u, o/, and two central vowels /ə, a/. The front and back vowels may all be realized by more centralized allophones (i.e., [ɪ, ɛ, ʊ, ɔ]). All six vowels may occur word-initially, word-medially, or word-finally. Sequences of two vowels occur within individual morphemes. However, there are no clear examples of two vowels forming a diphthong: two consecutive vowels always belong to two distinct syllables. Sequences of three vowels only occur across morpheme boundaries. The following vowel sequences have been attested /ai, ao, au, ea, eo, eu, ia, ie, io, iu, iə, oa, oe, oi, ua, ue, ui, uə, əi, əu/. I cannot say how many more vowel sequences occur but are simply absent from my relatively limited corpus. I have not found any evidence of sequences of identical vowels nor of phonemic vowel length, which has been described for at least some varieties of Kuanua (Mosel, 1980, pp. 20–21; 1995, p. 729; Anonymous, 2011, p. 2).

There are no phonemic glottal consonants; however, an epenthetic glottal fricative [h] may be inserted before vowel-initial words, as in [hibik] for /ibik/ ‘vegetable species (Tok Pisin *aibika*)’, [hol] for /ol/ ‘head’, or [hur] for /ur/ ‘bone’.

Stress appears to be predominately on the penultimate syllable of multisyllabic words and is not phonemic.

5 Morphology and syntax

The fullest description of Kuanua grammar is that by Mosel (1984). Earlier treatments include those by Rickard (1889, pp. 409–482), Ray (1895, pp. 25–29), Bley (1897; 1912), Costantini (1907, pp. 1–74), Waterhouse (1939, pp. 9–18), Zwinge (1953), and Franklin, Kerr & Beaumont (1974). One notable subsequent grammatical treatment is Rinderknecht (1987).¹⁰ The closely related variety Vinitiri (also known as Lungalunga or Minigir) is described by Van Der Mark (2007).

I have only limited information on Makada grammar. However, based on my data, the basic morphology and syntax of Makada resemble those of other Kuanua dialects, as described in different sources. However, one notable difference from most other varieties of Kuanua is Makada’s conservatism in its pronominal forms. Whereas other dialects of Kuanua have replaced the plural pronouns with paucal forms derived in part from Proto-Oceanic (POC) *pati ‘four’ (Capell, 1971, p. 260; Ross, 1988, pp. 257–259), Makada seems to preserve reflexes of the POC plural forms (cf. Lynch, Ross & Crowley, 2002, pp. 67–69), thereby resembling Vinitiri, which also reflects plural pronouns underived from ‘four’ (cf. Van Der Mark, 2007, p. 63). In this section, I first describe Makada’s pronouns (§5.1) and then mention some tense-aspect-mood (TAM) markers that differ from those of other dialects (§5.2).

5.1 Pronouns

Makada’s pronouns exhibit a four-way number contrast: singular–dual–trial–plural. Different forms are used for subject pronouns and object pronouns (although there is syncretism in the 2SG SUBJ/OBJ forms).¹¹ When there is no pronominal subject that refers exhaustively to the subject of a clause, the subject pronoun is used as a subject marker: it follows the subject and precedes the verb. In practice, this generally means that non-pronominal third person subjects are followed by a third person pronoun functioning as a subject marker that indexes its number. In irrealis-mood clauses, portmanteau subject markers are used. They apparently derive from a formative (*n*)ə ‘IRR’. The object forms—except for *iə* ‘3SG.OBJ’—are also used as independent (or disjunctive) pronouns, for example, as the answer to the question ‘who?’. Demonstrative pronouns are used instead of any 3SG independent form. An independent pronoun may precede its equivalent subject form in a clause (not unlike English; e.g., ‘Me, I went fishing.’). In possessive constructions, the possessum (possessed) generally precedes the possessor (genitive). Inalienable possessions are marked directly by a suffix that affixes to the possessum and indexes the person and number of the possessor. Alienable possessions, on the other hand, are marked indirectly: the suffixes attach to the general classifier *kəri-*, which in turn follows the possessum. The Makada pronominal paradigms are presented in Table 4.

¹⁰ See also the bibliographies in Lanyon-Orgill (1960, pp. 58–60), Laufer (1966, pp. 118–119), Beaumont (1972, pp. 19–33), and Moore & Moore (1980, pp. 96–105). There is reason, however, to doubt the authenticity of some of the unpublished manuscripts cited by Lanyon-Orgill, as the author seems to have used fabricated sources (cf. Geraghty, 1983; Dunn & Ross, 2007, p. 216; Clark, 2011). The bibliography in Moore & Moore (1980) contains several typographical errors in addition to potentially spurious references adopted from Lanyon-Orgill.

¹¹ There is also syncretism between the 1DU.INCL and 3DU subject forms, both of which are *duru*.

Table 4. Makada pronouns

	OBJ/INDEP	SUBJ	SUBJ.IRR	POSS.INAL	POSS.AL
1SG	iau	io	na	-g	kərig ~ kərigu
2SG	u	u	no	-m	kərim
3SG	iə	i	nə	-n	kərin
1DU.EXCL	məmir	miri	mirə	-məmir	kəriməmir
1DU.INCL	dətər	duru	dərə	-dətər	kəridətər
2DU	məmur	muru	murə	-məmur	kəriməmur
3DU	dur	duru	durə	-dur	kəridur
1TRI.EXCL	məmital	mitili	mitələ	-məmital	kəriməmital
1TRI.INCL	tətəl	tulu	tələ	-tətəl	kəritətəl
2TRI	məmutal	mutulu	mutələ	-məmutal	kəriməmutal
3TRI	dital	ditili	ditələ	-dital	kəridital
1PL.EXCL	mam	mi	minə	-mam	kərimam
1PL.INCL	təd	tunu	tənə	-təd	kəritəd
2PL	mui	mu	munə	-mui	kərimui
3PL	id	di	də	-id	kərid

Makada seems to have this alienable possessive classifier *kəri-* ‘POSS.AL’ in common with the Watom dialect, which exhibits <kari> (Meyer, 1961, p. 147). Other dialects exhibit the form <ka-> (Mosel, 1984, pp. 34–37).¹² A shorter form *kə=* ‘POSS.AL’ also occurs in Makada. However, where I have observed it, it is not used with a possessive suffix; rather, it cliticizes to a following subject. Thus the use of *kəri-* ‘POSS.AL’ (5) may be contrasted with the use of *kə=* ‘POSS.AL’ (6).

- (5) ə pap *kəri-n*
 ART dog POSS.AL-3SG
 ‘his dog’

- (6) ə pap *kə=i* Peter
 ART dog POSS.AL=3SG.SUBJ Peter
 ‘Peter’s dog’

It may be possible for a possessor marked with *kə=* ‘POSS.AL’ to precede rather than follow the possessum, as in (7), taken from a text (see Appendix 3: §A3.1, line 2).

- (7) *təmə-n* mə *tinə-n* duru tur-u pai akəni
 father-3SG.POSS and mother-3SG.POSS 3DU.SUBJ stand-TR PFV here
kə=duru bul
 POSS.AL=3DU.SUBJ child
 ‘Father and mother left their child here.’

¹² Dutton & Ross (1992, p. 202) mention <karigu> ‘my’ as a hallmark of Minigir (i.e., Vinitiri) in contrast to the form <kaugu> ‘my’ found in (most dialects of) Kuanua.

It may be the case that the possessum precedes (rather than follows) *kə=* ‘POSS.AL’ only when there is an expressed noun, whether a proper noun—as in (6)—or a common noun—as in (8), discussed below. The form *kə=i* ‘POSS.AL=3SG.SUBJ’ may thus perhaps be analyzed as a possessive preposition (cf. Rinderknecht, 1987, pp. 24–26, 91–94).

The alienable possessive classifiers *kəri-* ‘POSS.AL’ and *kə=* ‘POSS.AL’ can be used for inedible possessions—as in (5), (6), and (7)—as well as for edible (or alimentary) possessions—as in (8).

- (8) *ə wud kə=i tura-g*
 ART banana POSS.AL=3SG.SUBJ brother-1SG.POSS
 ‘my brother’s banana’ (male speaker)

Vinitiri also employs forms like *kəri-* and *kə=*, although the functional distinction between the two is somewhat different (Van Der Mark, 2007, pp. 316–319).

There is another possessive classifier, *a-* ‘POSS.AFF’, which I have only observed with edible possessions, but which I suspect behaves like the classifiers of the same form found in other dialects of Kuanua (see Mosel, 1984, pp. 37–39) and in Vinitiri (see Van Der Mark, 2007, pp. 314–316). Following Mosel’s description and Van Der Mark’s terminology, I gloss it here as ‘AFF’ for “affective classifier”, under the assumption that it indicates a possessive relationship in which the possessor is directly affected by the possession, or in which the possession is determined to be used by the possessor. Example (9) illustrates the use of the affective possessive classifier.

- (9) *u en-i rə a-gu wud*
 2SG eat-TR ART POSS.AFF-1SG banana
 ‘Did you eat my banana?’

5.2 Tense-Aspect-Mood (TAM) markers

Makada employs some preverbal and postverbal TAM markers that differ in form from those of some other dialects of Kuanua. In this section, I describe the following particles: a perfect marker *ta* ‘PRF’, a perfective marker *pai* ‘PFV’, an effective marker *pəki* ‘EFF’, a frustrative marker *mai ~ maimai* ‘FRUS’, and a habitual marker *le* ‘HAB’. For some of the example sentences provided here, I have taken inspiration from example sentences found in Mosel (1984).

Whereas other dialects of Kuanua have a preverbal perfect marker of the form <ter> or <tar> ‘PRF’ (cf. Zwinge, 1953, p. 38; Mosel, 1984, pp. 109–112), Makada employs a shorter form, *ta* ‘PRF’. Meyer (1961, p. 386) gives the form <ta>—along with <tar>, <tei>, <ter>, <teri>, and <tu>—as a perfect marker. Meyer (1910, p. 713) ascribes <ter> to the Vlavolo dialect of Watom Island, <teri> to Banibáni (a subdialect of Vuatom/Watom), and <tei> to Réber (another subdialect of Vuatom/Watom). The Makada perfective marker *ta* ‘PRF’ is illustrated by sentences (10) and (11).

- (10) *i ta wən*
 3SG.SUBJ PRF go
 ‘He has gone.’
- (11) *io ta ian*
 1SG.SUBJ PRF eat.INTR
 ‘I have eaten.’

The cognate forms across the dialects presumably derive from the verb ‘to give’, which, in the Makada dialect, is *təri* ‘to give’. The same form of this verb is found in the Watom dialect: <tari> ‘geben, hin zu’ [‘to give, towards’] (Meyer, 1961, p. 374).

Makada also has a semantically similar postverbal particle *pai* ‘PFV’, which indicates a completed action. The particles *ta* ‘PRF’ and *pai* ‘PFV’ can be used together with the same verb, as illustrated by (12), which may be compared with (11) above.

- (12) *io ta ian pai*
 1SG.SUBJ PRF eat.INTR PFV
 ‘I have eaten.’

Sentence (13) illustrates the use of *pai* ‘PFV’ in a text (see Appendix 3: §A3.1, line 7).

- (13) *munə təbəran di wə-wai pai tə-n ma rə bul-ik*
 PL spirit 3PL.SUBJ CAUS-show PFV to-3SG.POSS DEM ART child-DIM
 ‘Some spirits revealed themselves to that little child.’

In other dialects of Kuanua, the form of this particle is <pa> (cf. Franklin, Kerr & Beaumont, p. 128). Mosel (1984, p. 131), following Bley (1912, pp. 9, 119), refers to <pa> as an effective particle, identifying its basic function as “to indicate that the action denoted by the verb leads up to a terminal point, which implies that it is of short duration and that its end is known”. I assume that these forms both derive from the verb *par* ‘to finish’. The Makada form *pai* ‘PFV’ is perhaps the result of an abbreviated form **pa* fusing with the 3SG subject marker *i* ‘3SG.SUBJ’. Meyer (1961, pp. 206, 289, 291) gives <pai> as the Watom dialect form of <pa> (equivalent to Vinitiri <lava>), but his definitions of this morpheme are not entirely clear.

In addition to <pa>, Mosel (1984, p. 133) describes another effective particle <kapi>, which is used to indicate that the action denoted by the preceding verb is not the final one but is instead followed by another action whether stated or implied. In Makada, this form appears to have undergone metathesis, being pronounced *pəki* ‘EFF’, as in (14) and (15).

- (14) *io gire pəki iə namur io wən*
 1SG.SUBJ see EFF 3SG.OBJ then 1SG.SUBJ go
 ‘I saw it, and then I left.’

- (15) *mi gə kəi pəki rə ləmai*
 1PL.EXCL.SUBJ REM scrape EFF ART coconut
 ‘We scraped coconuts [and then did something else].’

Meyer (1961, pp. 143, 293) ascribes the form <paki> to the Watom dialect.

Like *pai* ‘PFV’, the Makada particle *mai* ~ *maimai* ‘FRUS’ seems to reflect a final /i/ that is lacking in some other Kuanua dialects. Mosel (1984, p. 116) describes this frustrative marker, noting that the form <ma> is used in the Kokopo dialects, whereas the form <mama> is used in the North Coast dialects. Both simple (16) and reduplicated (17) forms seem to occur in Makada, both forms exhibiting the final /i/.

- (16) *i mai təle pu nə pəlum iə*
 3SG.SUBJ FRUST be.possible for 3SG.IRR work 3SG.OBJ
 ‘He was frustrated in his efforts to do it.’

- (17) *i mai~mai rəmai wə-par-i təri rə pə~pəlum*
 3SG.SUBJ RED~FRUST cut.grass CAUS-finish-TR give ART RED~work
 ‘He tried in vain to cut all the grass in the garden.’

Meyer (1961, pp. 230, 231) ascribes both <māi> and <māimāi> to the Watom dialect. The fact that Meyer (1961, pp. 226, 248) records the Vinitiri forms <māsi> and <masimasi> suggests that the final /i/ in the Watom and Makada forms is a retention (cf. §7.4).

Finally, the Makada habitual marker *le* ‘HAB’ corresponds to the marker <la> found in the North Coast dialects (cf. Mosel, 1984, p. 116). It is illustrated in (18). Another habitual marker, *wəla* ‘HAB’, may be used instead of or together with *le* ‘HAB’ (19).

- (18) *tata i le məl-i pal*
 father 3SG.SUBJ HAB repair-TR house
 ‘Father repairs houses.’

- (19) *io wəla (le) gire id*
 1SG.SUBJ HAB (HAB) see 3PL.OBJ
 ‘I always used to see them.’

As with most of the forms of these Makada TAM markers, Meyer (1961, p. 207) ascribes the form <le> to the Watom dialect. Mosel (1984, p. 116) notes that the particle <vala> occurs both in the North Coast dialects and in the Kokopo dialects. Meyer (1961, p. 436) gives the adverb <vála> ‘beständig, gewöhnlich’ [‘continually, usually’]. An example of its use in the Watom dialect occurs in a text from Vunakabái (Meyer, 1910, p. 726). Table 5 summarizes these TAM markers found in Makada, comparing them with the Kuanua forms given in Mosel (1984) and Meyer (1961; cf. Meyer, 1910).

Table 5. Makada TAM markers compared to other Kuanua forms

Gloss	Makada	Tolai (Mosel, 1984)	Vuatom / Watom (Meyer, 1961)	Other Tuna dialects (Meyer, 1961)
‘PRF’	ta	<tar>	<teri>, <tei>	<ta>, <tar>, <ter>, <tu>
‘PFV’	pai	<pa>	<pai>	<pa>
‘EFF’	pəki	<kapi>	<paki>	<kapi>
‘FRUS’	mai	<ma>	<māi>	<mā>
‘FRUS’	maimai	<mama>	<māimāi>	<mama>
‘HAB’	le	<la>	<le>	<la>, <ila>
‘HAB’	wəla	<vala>	<vála>	<vála>

Meyer’s (1961) forms for the Vuatom (i.e., Watom) dialect of Tuna (i.e., Kuanua) are listed in the fourth column of Table 5 to highlight their affinity with the Makada forms (only the forms of the perfect markers are different).

6 Lexicon

Dictionaries of Kuanua include Rickard (1889), Poole (1953), Meyer (1961), and Wright (1964), the last of which is based on Rickard (1889). Rinderknecht (1986) is a glossary of Kuanua words based on the texts of Meier (1909), Meyer (1910), and Kleintitschen (1924).

There are also wordlists of varying length to be found in Strauch (1876), Zöllner (1891, pp. 444–529), Costantini (1907, pp. 75–228), Bley (1912, pp. 191–238), Waterhouse (1939, pp. 29–44), Ross (1977–1982b), Moore & Moore (1980, pp. 93–95), Tryon (1995), and the ABVD (Greenhill, Blust & Gray, 2008). Laycock (1977, pp. 171–172) discusses the history of Kuanua lexicography.¹³ Appendix 1 presents a Swadesh 100-word wordlist (Swadesh 1971, p. 283) of the Makada dialect and corresponding words attested elsewhere for Kuanua and for Ramoaaina. It is readily apparent from this list that Makada is a dialect of Kuanua and not a dialect of Ramoaaina, although the two languages are certainly lexically similar. Appendix 2 provides a more extensive list of Makada vocabulary, following the 210 concepts of the ABVD wordlist (Greenhill, Blust & Gray, 2008).

The following subsections consider aspects of the Kuanua lexicon that may be of particular interest for comparative study, namely, numerals (§6.1), kinship terms (§6.2), and loanwords (§6.3).

6.1 Numerals

Kuanua counting methods have been of considerable interest, and there have been many discussions of Kuanua numerals.¹⁴ Like other Kuanua dialects, Makada employs a numeral system with quinary (base-5) elements for the construction of the numerals ‘six’ through ‘nine’. Although the numerals ‘one’ through ‘five’ reflect POC forms (cf. Lynch, Ross & Crowley, 2002, p. 72), the numerals ‘six’ through ‘nine’ are constructed with a base of *lap* ~ *law*, to which forms of ‘one’ through ‘four’ are added. Ross (2023, pp. 542–543) notes that this form likely reflects POC **lapi* ‘take, get, give’ (Ross, 2016, p. 426). Contemporary Makada has the verb *lopə* ‘to take, to carry’.

Makada employs two slightly different sets of numerals, depending on whether the numerals are “absolute”—that is, they occur independently, as when counting—or “contextual”—that is, they occur attributively in a noun phrase, in which case they always precede the noun (cf. Greenberg, 1978, pp. 286–288). The Makada cardinal numerals from ‘one’ through ‘ten’ are presented in Table 6, both the absolute/independent series and the adnominal/contextual series. There is no formal distinction between absolute and adnominal in the numerals ‘three’ and ‘ten’.

¹³ A note on Lanyon-Orgill’s (1960) dictionary is in order. Laycock (1977, p. 172) writes: “Lanyon-Orgill’s dictionary (1960) remains the most usable Kuanua dictionary; sense-discriminations and usages are lacking, but the entries are extensive (12,000 ‘basic Raluana words’, according to the introduction, but only 6,000, according to A. Lang (5.5.1.2.)), and include much information on dialect forms. The extensive introduction is an important contribution to Pacific linguistic history.” Although I would say that the introduction is rather outdated and includes some patently false classifications, the dictionary is indeed user-friendly, especially in its inclusion of an extensive English-Kuanua finderlist. The dictionary is also comprehensive: Lanyon-Orgill’s (1960, p. 10) claim of “over 12,000” Kuanua words is probably a better estimate than Lang’s (1977, p. 158) approximation of 6,000 entries. Unfortunately, there is reason to question the veracity of Lanyon-Orgill’s work, as mentioned in §5, fn. 9 (cf. Geraghty, 1983; Dunn & Ross, 2007, p. 216; Clark, 2011).

¹⁴ See Powell (1883, pp. 254–260, 283), Codrington (1885, p. 225), Rickard (1889, pp. 430–435), Ray (1895, pp. 28–29), Bley (1897, pp. 94–99; 1912, pp. 75–91), Schnee (1901, pp. 247–248), Kleintitschen (1906, pp. 179–183), Costantini (1907, pp. 23–27), Parkinson (1907, pp. 731–732), Peekel (1909, p. vii), Friederici (1913, pp. 42–43), Waterhouse (1939, pp. 27–28), Kluge (1941, pp. 193–194, 203, 329a), Zwinge (1953, pp. 72–80), Franklin, Kerr & Beaumont (1974, pp. 52, 61, 129), Moore & Moore (1980, pp. 78, 82), Mosel (1980, pp. 61–64; 1984, pp. 21–22, 28, 65), Lean (1985, pp. 15–21), and Gilbert (2011, apud Chan et al., 2019).

Table 6. Makada cardinal numerals 1–10

	English	Absolute	Adnominal
1	‘one’	tikai	wənə ~ ə wənə
2	‘two’	ə uruə	ə urə
3	‘three’	ə utul	ə utul
4	‘four’	ə iwat	ə iwət
5	‘five’	ə ilim	ə ilima
6	‘six’	ləptikai	ləptiken
7	‘seven’	ləwuruə	ləwuruən
8	‘eight’	ləwutul	ləwutulun
9	‘nine’	ləuwat	ləuwətin
10	‘ten’	winun ~ ə winun	winun ~ ə winun

The article *ə* ‘ART’ precedes most numerals but is not typically used before *tikai* ‘one’. It is optional before *winun* ‘ten’. The numeral *ləptikai* ~ *ləptiken* ‘six’ is generally pronounced [ləptʃikai] ~ [ləptʃiken].

The higher numerals in Makada are formed using decimal (base-10) constructions, with special designations for 100 *mar* ‘hundred’ and 1,000 *rip* ‘thousand’. Notably, there is much irregularity in the ligatures used to connect elements in the complex numerals. The ligature *mə* ‘+’ is used in ‘eleven’ (10+1), whereas *ma* ‘+’ is used in ‘twelve’ through ‘nineteen’.¹⁵ No ligature is used in ‘twenty’ (2[×]10), but the ligature *a* ‘×’ is used in ‘thirty’ (3×10), and the ligature *na* ‘×’ is used in ‘forty’ through ‘ninety’. In the hundreds, the ligature *ə* ‘×’ is used in ‘one hundred’ (1×100), no ligature is used in ‘two hundred’ (2[×]100), and the ligature *ə* ‘×’ is used in ‘three hundred’ (3×100). The Makada numerals from 11 through 20 are given in Table 7. Some higher cardinal numerals are given in Table 8.

Table 7. Makada cardinal numerals 11–20

	English	Numeral
11	‘eleven’	winun mə tika
12	‘twelve’	winun ma uruə
13	‘thirteen’	winun ma utul
14	‘fourteen’	winun ma iwat
15	‘fifteen’	winun ma ilim
16	‘sixteen’	winun ma ləptikai
17	‘seventeen’	winun ma ləwuruə
18	‘eighteen’	winun ma ləwutul
19	‘nineteen’	winun ma ləuwat
20	‘twenty’	ə ura winun

¹⁵ The ligature *mə* ‘+’ is formally identical to the coordinating conjunction *mə* ‘and’; the complex numerals formed with *mə* may thus simply be analyzed as containing the word ‘and’.

Table 8. Makada higher cardinal numerals

	English	Numeral
21	‘twenty-one’	ə ura winun mə tikai
30	‘thirty’	ə utul a winun
40	‘forty’	ə iwət na winun
50	‘fifty’	ə ilima na winun
60	‘sixty’	ləptiken na winun
70	‘seventy’	ləwuruə na winun
80	‘eighty’	ləwutul na winun
90	‘ninety’	ləwuwat na winun
100	‘one hundred’	mar ~ tərək ərə mar
200	‘two hundred’	əurə mar
300	‘three hundred’	əutul ə mar
1000	‘one thousand’	rip ~ tərək ərə rip
2000	‘two thousand’	əurə rip
3000	‘three thousand’	əutul ə rip

When counting or enumerating people, *tərək* ‘one (person)’ is generally used (cf. the plural word *tərəi* ‘people’). This form is also sometimes used in regular serial counting, along with the set of collective numerals, which are as follows: *ewut* ‘pair, couple, twosome’, *təbotul* ‘trio, threesome’, *təbəiwat* ‘quartet, foursome’, *təbalim* ‘quintet, fivesome’.

Ordinal numerals are derived from their respective cardinal numerals by means of the prefix *wə-* (elsewhere a causative marker). The ordinal numerals all end in [-Vn].¹⁶ They thus resemble the endings of the complex cardinals ‘six’ through ‘nine’, with which they also generally share the vowel that immediately precedes [-n] (the cardinal numeral ‘second’, however, ends in [-an] rather than [-ən], as found in ‘seven’). Furthermore, the ordinal numeral ‘first’ is suppletive. The ordinal numerals ‘first’ through ‘fifth’ are given in Table 9.

Table 9. Makada ordinal numerals 1–5

	English	Ordinal
1	‘first’	luen
2	‘second’	wəuruən
3	‘third’	wəutulun
4	‘fourth’	wəiwatin
5	‘fifth’	wəilimən

Unlike many numeral systems of Papua New Guinea (cf. Comrie, 2005; 2022), the Kuanua numerals are widely known and used by members of the community. However, there is another Kuanua counting method, which I will refer to here as “esoteric”. Not everyone is familiar with this method, and its origin and functions are obscure. On Makada Island, the system was

¹⁶ Elsewhere, final [-n] occurs as a 3SG possessive ending and as an optional ending in the following color terms: *biro* ~ *biroən* ‘red’, *limut* ~ *limutən* ‘green’, *mərut* ~ *mərutən* ‘black’, *wai* ~ *wain* ‘yellow’.

explained to me as a traditional counting method that was taught to the ancestors by supernatural spirits. In reports of other dialects of Kuanua, I have heard similar methods described simply as “old” methods of counting. Although apparently known to Kuanua speakers from various dialect areas, this esoteric counting method has been only minimally documented. Lean (1985, p. 71) documents “an old counting system which is now rarely used”, noting in particular reports of it from Matupit Island.¹⁷

Table 10 presents four versions of these esoteric numerals: (i) forms that I recorded from Michael John on Makada Island in 2022;¹⁸ (ii) forms that Lean (1985, p. 71) recorded, possibly from speakers from Matupit; (iii) forms that were given to me by Bonnie Emos (p.c., 2023), unassociated with any dialect; (iv) forms that were given to me by Martin Maden (p.c., 2024), also unassociated with any dialect; and (v) forms that are found in Lawrence Vue & Malcolm Ross’s contribution to the ABVD (Greenhill, Blust & Gray, 2008), from Ratavul village.

Table 10. Esoteric numerals in Kuanua

	English	John (Makada)	Lean (Matupit?)	Emos (dialect?)	Maden (dialect?)	Vue & Ross (Ratavul)
1	‘one’	təke	tike	tike	take	tike
2	‘two’	urəde	uradet	urade	urade	urade
3	‘three’	təmapu	tamapu	kamapu	tomapu	tamapu
4	‘four’	kaiti	kaiti	kaiti	kaiti	kaiti
5	‘five’	kaita	kaita	kaite	kaita	kaita
6	‘six’	libur	iluba	libung	iligur	
7	‘seven’	matam	ramatam	makam	mati	
8	‘eight’	tumam	itumam	tumam	tumak	
9	‘nine’	tərerek	pererek	pererek	pererek	
10	‘ten’	mude	idumek	dumek	idumek	

6.2 Kinship terms

Kinship systems and terms used by the Kuanua language community are discussed in Trevitt (1940), Laufer (1956), Fingleton (1986), Simet (1991, pp. 151–181), and Ross & Marck (2023). Table 11 presents the most common Makada kinship terms. Unlike most nouns, many kinship terms have special plural forms. Many of these use the plural kinship marker *bərə-*, whereas some others use the more general plural marker *munə* ‘PL’, which is attested as <umana> in some other dialects of Kuanua (cf. Mosel, 1984, pp. 61–63).

Like kinship terminology documented for other varieties of Kuanua, the terms used in Makada distinguish between parallel and cross cousins. Parallel cousins are considered siblings (i.e., *ture*, *wawi*, or *tai*), whereas cross cousins receive a special designation, *nəwə*. The term *əbu* applies to older and younger generations alike, as it is used both for grandparents and for grandchildren.

¹⁷ A similar counting method is also apparently known to speakers of the closely related Vinitiri language (Paschalis Kinakava, p.c., 2022).

¹⁸ A recitation of these numerals by Michael John, as well as some following explanation in Tok Pisin and Makada, may be found in the sound file associated with the item ID *RB8-20221102_02* in Barlow (2022).

Table 11. Makada kinship terms

Kinship relations	Singular	Plural
male ego's brother; male ego's parent's same-sex sibling's son; child's spouse's father; great-grandfather	ture	bərəturən
male ego's older brother	ɲəl nə ture	ɲəl pire rə bərəturən
male ego's younger brother	kilik nə ture	kilik pire rə bərəturən
female ego's sister; female ego's parent's same-sex sibling's daughter	wawi	bərətinə wawi
female ego's older sister	ɲəl nə tinə wawi	ɲəl pire rə bərətinə wawi
female ego's younger sister	kilik nə tinə wawi	kilik pire rə bərətinə wawi
different-sex sibling; parent's same-sex sibling's child (if different from sex of ego); child's spouse's mother; great-grandmother	tai	bərətain
older different-sex sibling	ɲəl nə tai	ɲəl pire rə bərətain
younger different-sex sibling	kilik nə tai	kilik pire rə bərətain
sibling's spouse; spouse's sibling	nadur	(bərə)bərəpəlikən
father; father's brother; great-great-grandfather	təme	munə tata
father's older brother	ɲəl nə təme	luain pire tata
father's younger brother	kilik nə təme	murun pire tata
mother; parent's sister; parent's brother's wife; great-great-grandmother	tine	munə nana
father's older sister	ɲəl nə tine	luain pire nana
father's younger sister	kilik nə tine	murun pire nana
mother's brother; father's sister's husband; male ego's sister's child	ətu	mətua
mother's older brother	ɲəl nə ətu	luain pire nana
mother's younger brother	kilik nə ətu	murun pire nana
grandparent; son's wife; husband's parent; grandchild	əbu	bərətubun
grandmother	əbu wawin	bərətubun
grandfather	əbu ə tutunən	bərətubun
child; sibling's child (aside from a male ego's sister's child)	natu	munə natud
son	natu ə tutunən	munə natug ə tutunən
daughter	natu ə wawin	munə natu ə wawin
wife's parent; daughter's husband	nimu	bərənimun
parent's different-sex sibling's child	nəwə	bərənəwən

There are, however, apparent differences from other documented Kuanua kinship systems. For example, all of ego's parents' sisters and parents' brothers' wives (i.e., "aunts") are considered to be *tine* 'mother', without any special designation for ego's father's sister (or other female

relations of that generation). Within ego's parents' generation, only ego's mother's brothers and ego's father's sisters' husbands receive a special designation, *ətu*, the other male relations of that generation being considered *təme* 'father'. I do not know whether the system as I recorded it has been influenced by terminology from Tok Pisin.

Kinship terms are generally treated as inalienable possessions and, as such, usually receive direct-possession suffixes (cf. §5.1). Table 12 provides a sample of these.

Table 12. Makada kinship terms with direct-possession suffixes

Kinship relation	1SG.POSS	2SG.POSS	3SG.POSS
male ego's brother	turag	turam	turən
female ego's sister	tinə wawig	tinə wawim	tinə wawin
different-sex sibling	taig	taim	tain
sibling's spouse	pəlikag	pəlikam	pəlikən
father	təmag	təmam	təmən
mother	tinag	tinam	tinən
mother's brother	mətuag	mətuam	mətuən
grandparent	tubug	tubum	tubun
child	natug	natum	natun
wife's parent	nimug	nimum	nimuən
cross cousin	nəwag	nəwam	nəwən
spouse	kərigu tolai	kərim ə tolai	kərin ə toləi
wife	kərigu wawin	kərim ə wawin	kərin ə wawin
husband	kərigu tutunən	kərim ə tutunən	kərin ə tutunən

One uses the vocative forms *nana* 'mother [VOC]' and *tata* 'father [VOC]' to address one's parents directly. A man addresses his brother as *bərətə* 'male ego's brother [VOC]'. This form, if not a loan from Tok Pisin *brata* 'brother', is unexpected, since *bərə-* is otherwise a plural kinship marker, and *ta* is elsewhere attested in Kuanua as meaning 'mother' (cf. Meyer, 1961, p. 350).

The terms for the affine relations *nimu* 'wife's parent/daughter's husband' and *nadur* 'sibling's spouse/spouse's sibling' have certain taboos regarding their use. One must address one's *nimu* with 3SG possessive marking (i.e., *nimuən*, instead of, say, *nimug*). One must address one's *nadur* without any possessive marking (i.e., *nadur*, instead of, say, the suppletive form *pəlikag*). Speakers use 2DU pronouns to address their *nimu* or *nadur* and use 3DU pronouns to refer to those relations when speaking to others.

As in other Tolai groups, the Makada kinship system is matrilineal. Property and genealogical affiliation are both inherited from the mother's side of the family. A group of people who share a common matrilineal ancestor can be referred to with the term *wunətərəi* 'clan', apparently derived from *wun* 'cause, beginning' and *tərəi* 'people'.

Close acquaintances who are not related to the speaker can be referred to with *təlai* 'friend', which also takes direct-possession suffixes (e.g., *təlaig* 'friend [1SG.POSS]', *təlaim* 'friend [2SG.POSS]', *təlain* 'friend [3SG.POSS]', *bərətəlain* 'friends [3SG.POSS.PL]').

6.3 Loanwords

Considering the close contact between the people of Makada Island and the other islands of the Duke of York group and the bilingualism of many Makada people in both Kuanua and Ramoaaina, it is unsurprising that there should be loanwords from Ramoaaina in the Makada dialect of Kuanua. Some suspected loans from Ramoaaina are given in Table 13. The first four Ramoaaina forms and glosses are taken from Brown & Danks (1882, pp. 69, 125, 278). I have adjusted their orthography as follows: <k> → /g/; <ă> → /ə/; their <a> should be understood as underspecified for either /a/ or /ə/. The final Ramoaaina form is taken from Ross's (1977–1982a, p. 5) wordlist from Joseph E. Tobung of Nakukur village on Duke of York Island.

Table 13. Potential loans from Ramoaaina into Makada

Ramoaaina	Gloss	Makada	Gloss
gagə-na	'arm, branch, limb, of a man or tree'	gəgən	'branch; thigh'
lakua	'a feather'	lakuə	'feather'
tori-i	'to stab, to pierce with the spear'	tor-i	'to stab, to pierce [TR]'
vai	'yellow'	wai	'yellow'

The Makada word *lakuə* 'feather' may be an internal metonymic development rather than a loan. Meyer (1961, p. 200) defines <lākua> as 'Kopfschmuck mit langen Hahnenfedern' ['headdress with long rooster feathers'] (cf. the use of <lakua> in Meier, 1909, pp. 90, 214, 232). Alternatively, it may be an archaic retention. Kuanua's generally conservative sister language Lunga Lunga (i.e., Vinitiri) is recorded as having the form <a lakua> 'feather' (wordlist provided by Malcolm Ross for the ABVD: Greenhill, Blust & Gray, 2008).

Makada also employs several loans from Tok Pisin, often to refer to things that are not indigenous to the Duke of York Islands, such as horns (in the sense of hard growths found on animals like cattle). Table 14 provides a few loans from Tok Pisin.

Table 14. Loans from Tok Pisin into Makada

Tok Pisin	Makada	Gloss
bin	bin	'bean'
brus	burus	'tobacco'
kom	kom	'horn'
nil	nil	'needle'
paip	paip	'pipe'
saksak	saksak	'sago'
singapoa	sigəpu	'Singapore taro'
sol	sol	'salt'

7 Classification of the Makada dialect

In this section, I aim to compare Makada to other Kuanua dialects and, in doing so, offer hypotheses regarding its historical position. Lexically, Makada appears to be very similar to other Kuanua dialects. Regarding phonology, the only feature in Makada that is not found in

any other Kuanua dialect is the presence of word-final voiced stops. From the available data, Makada does not seem remarkably divergent in its morphology or syntax, although its plural pronouns differ from those of most other Kuanua dialects.

In the following subsections, I discuss phonological changes that are shared with other dialects of Kuanua, including loss of *s (§7.1) and loss of final vowels (§7.2). This second change, however, has affected Makada in a unique way (giving rise to word-final voiced stops). Although lenition of *p must have occurred to some degree in the ancestor to all New Ireland languages, there may be ways in which Makada shares a form of lenition with Watom and Vinitiri that did not occur elsewhere in Kuanua (§7.3). Furthermore, although changes like loss of *s and loss of final vowels occur throughout Kuanua, there are indications that they may have occurred independently (perhaps in a different order) in the Makada dialect (§7.4). In addition to sound changes, I discuss Makada's pronouns, which are a shared retention with Vinitiri, Watom, and Tavui (§7.5). Finally, I discuss Makada's overall similarity with the Watom and Tavui dialects of Kuanua, concluding that it is likely to be closely related to these dialects, and this affinity seems to match speakers' perceptions (§7.6).

7.1 *Loss of *s*

In considering Makada's relationship to other dialects of Kuanua, it may first be helpful to examine Kuanua's relationship to Vinitiri, which may be regarded either as Kuanua's closest sister language or as a member of a dialect network that includes varieties identified both as "Vinitiri" and as "Kuanua". The Vinitiri varieties are spoken around Ataliklikun Bay (also known as Weberhafen, Kambair Bay, or Kabaira Bay). At least concerning its pronouns and certain phonological features, Vinitiri may be considered more conservative than Kuanua. One such conservative phonological feature of Vinitiri is the presence of the phoneme /s/ (Bley, 1912, p. 8; Capell 1971, p. 265; Mosel 1980, pp. 9, 23–24), which was lost in Kuanua (Ross, 1988, pp. 257, 267; Van Der Mark, 2007, pp. 346–348). Another phonological difference stems from Kuanua having lost (some) word-final vowels (Ross, 1988, p. 257), resulting in a number of closed syllables, a feature rarely found in the more conservative Vinitiri (Van Der Mark, 2007, pp. 27–28, 348). Finally, Vinitiri's retention of plural personal pronouns underived from paucal forms (themselves derived from the numeral 'four') has been mentioned in §5 (and is discussed further in §7.5).

The preservation of POC *s may be a defining feature of Vinitiri, as none of the ("core") dialects of Kuanua has this feature. Mosel (1980, p. 24) mentions that the "marginal" dialect Vuatom (i.e., Watom) also has the phoneme /s/. Meyer (1961) does not seem to identify any forms with <s> as belonging to this dialect: forms with <s> in his dictionary are generally identified as belonging to Vunamarita (i.e., Vinitiri). However, in an earlier work that recognizes considerable diversity within the island of Watom, Meyer (1910, p. 712) notes that some varieties there do preserve /s/, whereas others have apparently replaced it with [h], and still others lack the phoneme entirely. Indeed, it would seem that Meyer (1910) recorded a historical sound change in progress, the common lenition process of *s > h > Ø.¹⁹ We must, however, be cautious in using the presence or absence of /s/ as evidence for genealogical affiliation in this region. Ross (1997, pp. 235–236; 2012, pp. 1261–1262) notes how loss of *s has cut across genealogical groupings, apparently having diffused across geographically proximate languages in the Gazelle Peninsula of New Britain and in the Duke of York Islands: it affected Kuanua (perhaps the originator of the change), Bilur, and Ramoaaina, but it did

¹⁹ The change of *s > h is also reported for Vinitiri: although the Vunamarita dialect retains /s/, this phoneme has lenited to /h/ in everyday speech in the Luvuani (i.e., Livuan) dialect (Van Der Mark, 2007, pp. 24–25, 339–340). In the same discussion of Watom dialects, Meyer (1910, p. 712) seems to imply that the Cape Tavui dialect of the Gazelle Peninsula also exhibits /s/, although this feature does not appear in later documentation of that dialect.

affect not Vinitiri farther to the west, nor did it affect Patpatar or Kandas, both of which are spoken on New Ireland but are closely related to Kuanua and Ramoaina, respectively.

Like most (or perhaps all) dialects of Kuanua, Makada lacks /s/ (it is found only in loanwords). However, there may be an indication that the loss of /s/ in Makada occurred independently of the loss of /s/ in other Kuanua dialects, presumably a borrowed phonological feature from either an /s/-less dialect of Kuanua or from Ramoaina. In other words, it might not be the case that loss of /s/ was a feature of pre-Kuanua; instead, the feature may have spread across dialects after they had separated. The indication comes from word-final vowels, which were generally lost in the various Kuanua dialects. Therefore, it would be valuable to describe the differences in final-vowel loss between Makada and other dialects.

7.2 Loss of word-final vowels

In some ways, Makada has undergone a more extreme form of word-final vowel loss than other dialects, since it lost such vowels even when doing so resulted in word-final voiced obstruents. For example, the Makada words with final voiced stops presented in §4 correspond to words in Vinitiri that end in vowels. Most dialects of Kuanua, however, seem to have a phonotactic constraint against word-final voiced stops; in those dialects, final vowels were retained when such vowel deletion would have resulted in word-final voiced stops. Table 15 compares forms in Makada that have final voiced stops with cognate forms in Vinitiri (Van Der Mark, 2007) and in other dialects of Kuanua (Meyer, 1961). The Kuanua forms for ‘3PL’ are taken from the Watom dialect, which I discuss further below.

Table 15. Word-final voiced stops in Makada compared to Vinitiri (Van Der Mark, 2007) and other dialects of Kuanua (Meyer, 1961)

Gloss	Makada	Vinitiri (Van Der Mark, 2007)	Tuna (i.e., Kuanua) (Meyer, 1961)
‘to fight’	wərub	<várubu> (p. 103)	<varúbu> (p. 462)
‘banana’	wud	<vudu> (p. 90)	<vudu> (p. 484)
‘3PL’	id	<idi> (p. 63)	<di> ~ <idi> (pp. 60, 107)
‘canoe’	og	<oagá> (p. 31)	<oaqa> (p. 282)
‘1SG.POSS’	-g	<-gu> (p. 63)	<-qu> (p. 88)

A similar correspondence, but with a semantic shift in Makada, seems to occur with Vinitiri <lebá> ‘dog’ (Van Der Mark, 2007, p. 90), the archaic Kuanua forms <leba> and <lebe> ‘Hund’ [‘dog’] (Meyer, 1961, p. 207), and Makada *leb* ‘to hunt’. Although the origin of this word for ‘dog’ is itself unclear, the semantic shift of ‘dog’ > ‘to hunt’ is not particularly strange, as similar derivations of a verb meaning ‘to hunt’ from a noun meaning ‘dog’ are attested elsewhere in the Austronesian family.²⁰

²⁰ The Austronesian Comparative Dictionary (ACD: Blust, Trussel & Smith, 2023) gives several examples of Proto-Austronesian *asu ‘dog’ being reflected in verbs meaning ‘to hunt’, such as Iban *asu* ‘hunt, hunting’, Javanese *n-asu n-asu* ‘hunt with dogs’, Binukid (i.e., Talaandig-Binukid) *paŋ-ásu* ‘hunt with dogs’, and a Proto-Western Malayo-Polynesian reconstruction *maŋ-asu ‘hunt with dogs’. An example from an Oceanic language can be found in Suau, which has *kedew* ‘dog’ and *he-kedewa* ‘to hunt’ (Cooper, 1975, pp. 265–266). I suspect that such replacements may, at least at times, be motivated by taboo replacement (cf. Simons, 1982). In the non-Austronesian language Kol of East New Britain Province, speakers do not utter the verb ‘to hunt’ when referring to an ongoing or upcoming hunt; rather, they use the euphemism ‘to go with dogs’ (author’s fieldnotes).

The word-final voiced fricated /w/ [β], which also seems not to occur in this position in most varieties of Kuanua, appears to exhibit somewhat more complicated correspondences. For example, Makada *ruw* ‘shy’ is cognate with Lunga Lunga <ruva> ‘shy, ashamed’ (ABVD: Greenhill, Blust & Gray, 2008) and <rúva> ‘sich schämen’ [‘to be ashamed’] (Meyer, 1961, p. 344) in other Kuanua dialects, thereby reflecting the same pattern of a word-final vowel being lost in Makada but being retained in other dialects when immediately preceded by a voiced obstruent.

7.3 Lenition of *p

There are other cognate forms, however, in which a final /-w/ (or /-u/) in Makada corresponds to a <p> in other dialects (generally final <-p>, although the word for ‘rat’ proves an exception). Notably, Vinitiri and Watom reflect intervocalic <-w-> in these words, thus somewhat resembling Makada. Table 16 illustrates these correspondences. Aside from those forms given for Makada, all forms are taken from Meyer (1961). The forms listed under “Vunamarita” and “Vuatom” are those assigned by Meyer to the Vinitiri and Watom dialects, respectively. The forms listed under “Tuna” are not assigned to any particular dialect of Kuanua. Meyer (1961) does not specify Vinitiri forms for ‘to sleep’ or ‘fire’. However, Van Der Mark (2007) gives Vinitiri <diávu> ‘sleep’ (p. 29) and <iavi> ‘fire’ (p. 91), thereby confirming the correspondence between Makada /-w/ and Vinitiri <-v->.

Table 16. Word-final voiced stops in Makada, compared with Vinitiri, Watom, and other dialects of Kuanua, as given in Meyer (1961)

Gloss	Makada	Vunamarita (i.e., Vinitiri)	Vuatom (i.e., Watom)	Tuna (i.e., Kuanua)	pages in Meyer (1961)
‘rat’	kuw	<kusuva>	<kúva>	<kupau>	pp. 119, 194
‘sugarcane’	tuw		<tuvu>	<tup>	pp. 406, 411
‘to sleep’	diəu		<diavu>	<diép> ~ <diop>	p. 61
‘fire’	iau		<iavi>	<iap>	pp. 104, 105
‘to yawn’	mowiəu	<mauviavu>	<moviávi>	<mauviap>	pp. 253, 263

At first glance, the “core” Kuanua dialects seem to have preserved POC *p in these words.²¹ However, this analysis is complicated by the apparent lenition of word-medial POC *p to Proto-New Ireland *v (Ross, 1988, pp. 51–54), resulting in reconstructed Proto-New Ireland forms such as *kusuve ‘rat’ (p. 68) and *yavi ‘fire’ (p. 53). Perhaps Kuanua forms like <tup> ‘sugarcane’ and <iap> ‘fire’ result from a further fortition of *v to p, following the loss of the final vowel.²² However, the case of POC *mawap ‘to yawn’ is different, since POC *p is word final in this word and would not have been lenited in Proto-New Ireland, unless under the influence of an added vowel. Therefore, the lenition found in Makada, Vinitiri, and Watom may have been a change subsequent to the addition of a final vowel.²³ The Vinitiri-Kuanua

²¹ Cf. POC *kusupe ‘rat taxon’ (Osmond & Pawley, 2011, p. 231), POC *topu ‘sugarcane’ (Ross, 2008b, p. 390), POC *api ‘fire’ (Osmond, Pawley & Ross, 2007, p. 72), and POC *mawap ‘(v) yawn, (N) yawning’ (Ross & Osmond, 2016, p. 300).

²² Meyer (1961, pp. 104, 105) also gives the forms <eavi>, <evi>, and <iav> ‘Feuer’ [‘fire’], the last of which he assigns to the Papatava dialect.

²³ Meyer (1961, p. 253) also gives the form <mauveáv> ‘gähnen’ [‘to yawn’], assigning it to the Papatava dialect. It therefore seems that Papatava, like Makada, exhibits word-final voiced bilabial fricatives, although perhaps only in words for which Makada reflects final /-u/.

words for ‘to sleep’ are more difficult to assess, since they do not seem to have external cognates.²⁴

Thus, it is possible that Makada shared in an innovation with Watom and Vinitiri of leniting *p in some contexts where *p remained unchanged in other dialects of Kuanua, although the situation remains cloudy. At any rate, with respect to Watom and Vinitiri, Makada further lenited *v to *u*, unless *v was immediately preceded by *u, in which case it remained unchanged (as *-w*), as in *ruw* ‘rat’ and *tuw* ‘sugarcane’, and possibly also *ruw* ‘shy’, assuming an etymology from *rupa (?) ‘shy, ashamed’.

Whereas word-final vowels are not deleted in “core” Kuanua dialects when they immediately followed voiced stops, such word-final vowels are indeed deleted in Makada, resulting in word-final voiced stops; the word-final voiced fricative in Makada, on the other hand, appears to be due to a lenition of POC *p, a change that perhaps also occurred in Watom and Vinitiri. The resultant final *-w* in Makada would thus be due to subsequent deletion of a final vowel, suggesting that there was no phonotactic constraint against word-final voiced fricatives in this dialect.

7.4 Retention of word-final vowels following *s

Although there was apparently no phonotactic constraint against word-final voiced fricatives, there may have been one against word-final *s (or perhaps *h).²⁵ Although word-final vowels were generally lost in Makada, they were not lost when immediately following *s. This suggests that an earlier *s (or a reflex of it) blocked the deletion of word-final vowels, much like voiced obstruents in other dialects of Kuanua blocked the deletion of word-final vowels when these consonants immediately preceded them.

Although both Makada and other dialects of Kuanua exhibit both final-vowel deletion and *s deletion, it seems that these were not (both) shared innovations. Either they occurred in different orders in the different dialects, or they were restricted to different conditioning environments in the different dialects. These differences can be seen in the behavior of words ending in *-V₁SV₂. Most dialects reflect *-V₁SV₂ as *-V₁*. In the dialects that exhibit long vowels, the loss of *s may further be reflected in compensatory lengthening of the preceding vowel, resulting in *-V₁*: (cf. Mosel, 1980, pp. 9, 20). In some dialects, like Makada, however, *-V₁SV₂ is reflected as *-V₁V₂*, indicating that final-vowel deletion did not occur when *s immediately preceded the final vowel; further, this indicates that in these dialects *s deletion must have occurred after final-vowel deletion, or else there would have been no conditioning environment for retaining the final vowel.²⁶

Table 17 presents cognate forms reflecting a final *-V₁SV₂ ending. Aside from those for Makada, all forms are taken from Meyer (1961). The forms listed under “Vunamarita” and “Vuatom” are those assigned by Meyer to the Vinitiri and Watom dialects, respectively. The forms listed under “Tuna” are not indicated by Meyer as belonging to any particular dialect. For ‘to pierce’ and ‘earth’ Meyer does not list any Watom forms, although he does give variant Tuna forms; I have very hypothetically placed his forms <qoa> and <pia> in the Watom column, but this is purely speculative on my part.

²⁴ Meyer (1961, p. 61) also gives the form <diav> ‘schlafen, liegen’ [‘to sleep, to lie’], unassociated with any particular dialect, although I wonder whether it could be Papatatava.

²⁵ It may be phonetically more plausible to posit a phonotactic constraint against word-final *-h than one against word-final *-s, especially since other non-glottal obstruents are ultimately permitted in the language. This would imply a sound change of *s > *h at some point in the history of Makada. The fact that Meyer (1910, p. 712) has documented a change of *s > h in apparently closely related Watom dialects may lend support to this hypothesis.

²⁶ When the vowels before and after *s are identical (i.e., *-V₁SV₁), this is reflected in Makada as *-V₁*, the geminate vowel reducing to a single vowel, as there are no phonemic long vowels in this dialect.

It is clear from Table 17 that, where Vinitiri preserves an original $*-V_1sV_2$ ending, Watom and Makada both reflect $-V_1V_2$, whereas other Kuanua dialects reflect $-V_1$. Another possible correspondence may exist in Makada *liə* ‘nit’, which, in other dialects, is ‘Nisse, Läuseeier’ [‘nit, louse eggs’] (Meyer, 1961, p. 209). Ross (1988, p. 76) gives the Minigir (i.e., Vinitiri) form as <lisi> ‘nit’, whose final vowel is unexpected, considering the POC form $*lisaq$ ‘nit’ (Osmond, 2011, p. 375).

Table 17. Final $*-V_1sV_2$ in Makada, compared with Vinitiri, Watom, and other dialects of Kuanua, as given in Meyer (1961)

Gloss	Makada	Vunamarita (i.e., Vinitiri)	Vuatom (i.e., Watom)	Tuna (i.e., Kuanua)	pages in Meyer (1961)
‘good’	boi	<bosi>	<boi>	<bo>	pp. 39, 43
‘to fall’	burəi	<burasi>	<burai>	<būra>	pp. 52, 53
‘to pierce’	goa	<qosa>	<qoa> [?]	<qo>	pp. 84, 85, 88
‘to scratch’	kəi	<kasi>	<kai>	<kā>	pp. 116, 123, 149
‘chin’	kəbea	<kabesa>	<kabea>	<kabe>	p. 119
‘FRUS’	mai	<māsi>	<māi>	<mā>	pp. 226, 230, 248
‘taro’	pau	<pasu>	<pau>	<pā>	pp. 288, 308
‘earth’	piə	<pisa>	<pia> [?]	<pi>	pp. 312, 319
‘sea’	tai	<tasi>	<tāi>	<tā>	pp. 350, 360, 376

Van Der Mark (2007, pp. 346–348) discusses the correspondence between Vinitiri $-V_1sV_2$ and Kuanua $-V_1$ (but not dialects like Makada and Watom, which reflect $-V_1V_2$). However, she also notes some problematic correspondences, in which the expected vowel deletion of Kuanua appears not to have taken place. I suspect that some seemingly irregular correspondences are due instead to dialect differences within Kuanua: for example, Van Der Mark (2007, p. 347) presents <piá> ‘ground, dirt’ as a Kuanua word with an unexpected retention of the final vowel, but Meyer (1961, p. 312) shows that <pi> is attested for at least some dialects of Kuanua. Other cases, however, may be more problematic. For example, Vinitiri <visá> ‘knife’ (Van Der Mark, 2007, p. 347) seems to be reflected across all (/s/-less) dialects of Kuanua as *via* (i.e., with no attested form $\dagger vi$). The Makada form, for example, is *wiə* ‘knife’. Despite being of clear Oceanic origin,²⁷ this word seems to have been borrowed frequently in New Britain (cf. Barlow & Killian, 2023, p. 70), so it is possible that family-internal borrowing has blurred the picture here.

Similarly, Van Der Mark (2007, pp. 355–356) mentions a case of Vinitiri borrowing a Kuanua form. Her consultants used the form <pa> ‘taro’, apparently borrowed from a dialect that had lost both $*s$ and the final vowel. As Van Der Mark mentions, older sources give the Vinitiri form as <pásu> (Hees, 1915–1916, p. 49).²⁸ Here, the Makada form *pau* ‘taro’, with its final /-u/, helps confirm the older Vinitiri form.

There are, however, some correspondences that remain challenging to explain. For example, Vinitiri has *beso* ‘bird’ (Van Der Mark, 2007, p. 134), whereas every attested Kuanua dialect, including Makada, has *beo* ‘bird’, without any dialect reflecting $\dagger be$ ‘bird’. That said, this form—presumably in origin $*beso$ ‘bird’ (?)—is only attested in Vinitiri and Kuanua; it is

²⁷ Cf. POC $*piso$ ‘(bamboo) knife’ (Osmond & Ross, 1998, p. 91).

²⁸ See also Dutton & Ross (1992, p. 202). These forms may derive from Proto-Western Oceanic $*[qa]p^w$ ‘taro leaves’ (?) (Ross, 2008a, p. 269).

apparently not reflected in any other closely related languages—not even Bilur, Label, Patpatar, Ramoaaina, or Kandas—so it is not possible to derive insights from any outside comparative data.

One last thing may be said concerning the reflexes of *s in Makada. At least two forms in Makada reflect an irregular loss of the vowel immediately following word-initial *s- (as well as the regular loss of the *s itself). Thus, where Vinitiri has <sikiliki> ‘small’ and <supu> ‘purposive’ (Van Der Mark, 2007, p. 347), Makada has *kilik* ‘small’ and *pu* ‘for (the purpose of), (in order) to’. On the other hand, all other dialects of Kuanua seem to reflect the original vowel that followed *s. Thus, Meyer (1961) gives <ikíkilik> ~ <ikilik> ~ <ikiliki> ‘ganz klein’ [‘very small’], the last of which is noted as being from the Watom dialect (p. 108); and <upi> ~ <upu> ~ <upui> ‘für, zu, nach, auf das, damit’ [‘for, to, towards, on that, so that’] (p. 419). Similarly, Vunamarita <sakaina> ‘schlecht’ [‘bad’] (Meyer, 1961, p. 6) corresponds to Makada *kain* ‘bad’. Here, however, Makada is apparently not alone in having lost the vowel following *s-, since, although some dialects reflect <akaina>, the North Coast dialects reflect <kaina>, similarly lacking initial *sa- (Meyer, 1961, p. 6). Another possible correspondence between Makada C- and Vinitiri sVC- may be found in Makada *lob* ‘pond’ and Lunga Lunga <solo> ‘lake’ (ABVD: Greenhill, Blust & Gray, 2008), although the *b* : \emptyset correspondence remains unexplained.

7.5 Conservative pronouns

Finally, we may compare Makada’s pronouns with those of other dialects. As mentioned in §5, Makada shares with Vinitiri the conservative feature of plural pronominal forms that have not been replaced by paucal forms. However, Makada is not the only Kuanua dialect that exhibits this feature, since it is also found in the Watom and Tavui dialects.

Table 18. Makada’s pronouns compared to those of Vinitiri (Van Der Mark, 2007), Watom (Meyer, 1910; 1961), and Tavui (author’s fieldnotes)

	Makada (SUBJ)	Makada (OBJ/INDEP)	Vinitiri (SUBJ)	Vinitiri (INDEP)	Watom	Tavui
1SG	io	iau	iá	iau	iau	iau
2SG	u	u	u	iəvəu	u ~ iaváu ~ iavou	u
3SG	i	iə	i	iə	i ~ ia	iə
1DU.EXCL	miri	məmir	miru	iamiru	miru ~ mir	mir
1DU.INCL	duru	dətər	təru	iadori	dāru ~ dār ~ dor	dor
2DU	muru	məmur	muru	iamuru	muru ~ mur	mur
3DU	duru	dur	diru	idiru	dūru ~ dur	dur
1TRI.EXCL	mitili	məmital	mitulu	iəmitalu	mitulu ~ mitalu	mital
1TRI.INCL	tulu	tətal	tulu	iədətalu	tal ~ datálu	datal
2TRI	mutulu	məmutal	mutulu	iəmutalu	mutál ~ mamutálu	mutal
3TRI	ditili	dital	ditulu	iditalu	túlu ~ tul ~ ditul	dital
1PL.EXCL	mi	mam	mi	iəməmami	mi ~ māmi	mamə
1PL.INCL	tunu	təd	də ~ təu	iadə	tunu ~ tada	tadə
2PL	mu	mui	mui	iamui	mui	mui
3PL	di	id	di	idi	di ~ idi	idi

Table 18 compares Makada pronouns with those of Vinitiri, Watom, and Tavui. The Vinitiri forms are taken from Van Der Mark's (2007, p. 63) paradigm of subject markers. I have adjusted her orthography as follows: <á> → /ə/. The Watom forms are taken from Meyer (1910; 1961). I have not included a comprehensive set of Watom pronouns, nor would that be possible, because he does not always indicate every dialect with which a particular form is associated. I have only included forms labeled as being from the "Vuatom" dialect. I have maintained Meyer's orthography, aside from 1SG, written as <yau> in Meyer (1910), which I have updated to <iau>, following Meyer's (1961) orthographic conventions for his dictionary. The Tavui forms come from my fieldnotes from November 2022 of women from Tavui who were selling goods at the market in Kokopo. I observed prenasalization in the intervocalic /d/ of *idi* '3PL' (i.e., [iⁿdi]).

Crucially, Makada, Vinitiri, Watom, and Tavui all exhibit cognate plural forms that are quite different from the innovative forms exhibited by most Kuanua dialects. For example, Mosel (1984, p. 93) gives the Tolai independent plural forms as *avet* '1PL.EXCL', *dat* '1PL.INCL', *avat* '2PL', and *diat* '3PL'; and she gives the Tolai plural subject markers as *ave* '1PL.EXCL', *da* '1PL.INCL', *ava* '2PL', and *dia* '3PL'. Since the set of plural pronouns found in Makada, Vinitiri, Watom, and Tavui is a retention rather than an innovation, it cannot be used as evidence of subgrouping for these varieties. At the same time, since Makada, Watom, and Tavui do not share in the innovation found in (other) Kuanua plural forms, this innovation cannot be used to define a "Kuanua" language that would include Makada, Watom, and Tavui but would exclude Vinitiri.

7.6 *Makada's overall similarity with Watom and Tavui*

Based on similarities in the pronominal paradigms (§7.5), as well as other lexical similarities—including several TAM markers (§5.2)—and potentially also shared phonological innovations (e.g., §7.3), it seems that the Makada dialect is most similar to and probably also genealogically most closely related to the dialects of Watom Island and Cape Tavui (or Tavui Point). This also matches the impressions of the speakers of the Makada dialect with whom I have spoken. Makada speakers identified Tavui, Sea Side Mero, and Nodup as the areas where speakers use a variety most similar to that of Makada. Tavui can refer to any of three villages of that name (Tavui No. 1, Tavui No. 2, or Tavui No. 3), all of which are located on the northernmost cape of the Gazelle Peninsula (i.e., Cape Tavui), commonly referred to by locals as Sea Side Mero (or as SSM). Nodup (or Nondup or Nordup) is also a village in the SSM area, but it is located a bit farther south, along the eastern side of the cape. No speakers of Makada offered Nodup as the location with the most similar dialect to theirs. Still, some responded that the Nodup and Makada dialects were similar when I asked about Nodup (from a list of place names). No one on Makada Island mentioned Watom Island as a place with a similar dialect. However, it is possible that the people I spoke with were unfamiliar with that dialect. People from Tavui, on the other hand, mentioned Watom Island as a place with a dialect similar to theirs.²⁹ They also

²⁹ Meyer (1910, p. 711) writes: "Der Vuatomdialekt ist, außer einigen lokalen Abweichungen, derselbe, wie der der Eingebornen von Nódup (?), Távui (Kap Stephens), Lívuon, Kabáir, Vurár (Insel) und der Bainingküste (Ramádu, Vunalámis, Vunamárita, Masikonápuka)." ["The Vuatom dialect is, with some local variations, the same as that of the natives of Nódup (?), Távui (Cape Stephens), Lívuon, Kabáir, Vurár (Island), and the Baining Coast (Ramádu, Vunalámis, Vunamárita, Masikonápuka)"]. Thus, Meyer considers dialects of areas that are often associated with the Vinitiri language (e.g., Kabaira and Vunamarita) as being similar to the dialects of Watom, Nodup, and Tavui.

named the following villages in SSM as having dialects similar to that of the three Tavui villages: Korere, Matalau, Baai, and Nodup.³⁰

There are also indications that speakers of other Kuanua dialects are likely to perceive close similarities between the Makada dialect and the Watom and Tavui dialects. As mentioned in §2, many speakers of other dialects of Kuanua assume Makada to be a dialect of Ramoaina. Thus, they do not imagine it to be similar to any dialect of Kuanua. However, this is simply due to lack of exposure. When I played (unidentified) recordings of the Makada dialect to two women in Kokopo (speakers of the Kokopo dialect of Kuanua), both women identified the language as Kuanua.³¹ They both could easily understand the stories being told, although they noted that the dialect sounded different from their own. One woman asked whether the speakers were from Watom Island. Previously, both women had thought that the people of Makada Island were speakers of Ramoaina. Similarly, when I met a small group of women from Tavui who were selling mangos in the Kokopo market, they all believed that the people of Makada spoke a dialect of Ramoaina. However, when I introduced them to some women from Makada who were selling woven mats at the other end of the market, the women from Tavui were surprised to learn that they could easily converse with them. The women from Tavui reported that the women from Makada spoke a dialect similar to their own (and different from the dialect of Kokopo).

Schnee (1901, p. 234) notes the similarity between the Makada and Nodup dialects, suggesting that the two might even be identical. Indeed, Rickard (1889, p. v) claims that the Makada people originally came from Nodup, a sentiment recapitulated by Ray (1895, pp. 1–2). Similarly, Salzner (1960, p. 26) lists Makadao (i.e., Makada) as a subdialect of Nodup, in turn grouping Nodup with Vuatom (i.e., Watom) and Masawa (i.e., Vinitiri).³² Lanyon-Orgill (1960, p. 25), on the other hand, claims that the language of Makada Island (“and also possibly at Balanawanga Harbour on the north coast of the main island”) is identical to that at Rabaul, as is the language of Kerawara Island. However, the language of Kerawara is otherwise almost universally considered a dialect of Ramoaina.³³ Lanyon-Orgill’s (1960, pp. 24–26) classifications are particularly difficult to assess, since he treats Kuanua as the same language as Vinitiri, Bilur, Ramoaina, and even Patpatar. Beaumont (1972) does not mention Makada, but on his map of southern New Ireland languages (p. 17), Makada Island is included in the area defined as speaking Tolai. In contrast, the other Duke of York Islands are grouped separately as speaking “Duke of York”. In addition to Makada Island, Beaumont’s (1972, p. 17) Tolai area includes Watom Island and the northeastern coastal region of the Gazelle Peninsula, including Rabaul, Kokopo, Keravat, Malabunga, and Toma, as well as Ataliklikun Bay (where Vinitiri is spoken). The designated Tolai area does not appear to include the area southeast of Cape Gazelle where Bilur is spoken. Moore & Moore (1980, p. 89) note that Makada is the “[s]ame or similar to Watom Island” but, confusingly, list Makada as a dialect of Duke of York, whereas they list Watom as a dialect of Tolai (p. 90).

It seems to me that while “Vinitiri” (as spoken, say, in Vunamarita) and “Kuanua” (as spoken, say, in Kokopo) may be largely mutually unintelligible and sufficiently different to be

³⁰ I may also mention here that no Kuanua speakers from the Gazelle Peninsula that I met were familiar with the Makada dialect. Everyone I spoke to assumed that the language of Makada Island was Ramoaina—that is, the same language as spoken elsewhere in the Duke of York Islands.

³¹ The recordings may be found in Barlow (2022), under the item IDs *RB8-20221101_05* and *RB8-20221102_04*. The latter recording is transcribed in Appendix 3: §A3.2.

³² This classification may have been based on the map of New Britain and New Ireland in Meyer (1932, pp. 188–189), in which the island of “Makadao” is included within the “Nodup” dialect area of “Tuna” and is thus not within the “Ramoaina” language area.

³³ Rickard (1889, pp. v–vi) claims that the small island of Kerawara was settled by people from Birara (i.e., Bilur) who intermarried with people from the Duke of York Islands, resulting in a sort of mixed language; he similarly describes the language of Mioko Island as a mixture of the languages of New Britain and the Duke of York Islands.

considered distinct languages, they are both members of a dialect network with overlapping sets of lexical items and phonological features. In light of the evidence from Tavui, Watom, and Makada, I doubt it would be possible to find language-defining features to differentiate Kuanua from Vinitiri. Emically, the presence or absence of the [s] sound seems to be highly salient for speakers of the various varieties and may suffice as a heuristic for assigning dialects to one language or the other. Here, however, it should be mentioned again that there were earlier reports of [s] being used in some Kuanua varieties spoken on Watom Island (Meyer, 1910, p. 712), while some contemporary Vinitiri varieties spoken in Livuan are reported to be in the process of losing [s] (Van Der Mark, 2007, pp. 24–25, 339–340). Nevertheless, it seems most in keeping with the historical linguistic facts, as well as with speakers' perceptions, to designate Makada as a dialect of Kuanua. The Makada dialect is probably most closely aligned with the Kuanua dialects of Watom Island and Cape Tavui. Appendix 5 summarizes several previous classification schemas of Tolai/Kuanua dialects.

8 Conclusion

This paper has aimed to introduce the Makada dialect to the broader linguistic community. Although there had previously been some uncertainty about its classification, Makada can easily be shown to be a dialect of Kuanua. It is perhaps most closely related to the Kuanua dialects spoken on Watom Island (i.e., Vuatom) or those spoken along Cape Tavui at the northernmost point of the Gazelle Peninsula, extending from perhaps around Nonga village along the western coast of the cape to around Nodup or Baai villages along the eastern coast of the cape. In some ways—notably concerning its pronouns—Makada is a conservative dialect, exhibiting some resemblances to Vinitiri (i.e., Minigir). However, this conservatism is also attested in the Tavui and Watom dialects. It seems plausible that Kuanua and Vinitiri both stem from a migration (or multiple closely related migrations) from New Ireland, which likely stopped at Makada Island while migrating to New Britain across Saint George's Channel. The Makada dialect may be the descendant of the language spoken by such settlers from New Ireland who did not continue to New Britain. However, a back-migration of Kuanua speakers from New Britain to Makada Island cannot be ruled out. Speakers of the Makada dialect have been in contact with speakers of other dialects of Kuanua and with speakers of the related Ramoaaina language, and their speech has no doubt been influenced by such interactions, making precise classification challenging.

Appendix 1. Swadesh 100-word wordlist for Makada

Table A1 presents a Swadesh 100-item wordlist of the Makada dialect along with corresponding words attested for Kuanua from two other sources—Costantini (1907) and Meyer (1961)—as well as a wordlist for Ramoaania, taken mainly from Malcolm Ross’s contribution to the ABVD (Greenhill, Blust & Gray, 2008). The 100 concepts used here follow the list given in Swadesh (1971, p. 283).

The forms in the “Neupommersch” column come from Costantini’s (1907) German-Kuanua finderlist. In every instance, I have taken the first Kuanua word that is listed for the German entry (with one exception; see notes following Table A1). I have adjusted Costantini’s orthography as follows: <ng> → /ŋ/. I have also removed the prenominal article <a>, as in <a tutana> ‘Mann’ [‘man’], and the preverbal marker <i>, as in <i tur> ‘stehen’ [‘stand’]. Finally, a form ending with a hyphen means that the original was indicated as having possessive marking, which I have omitted as well. For example, <a bilauna> ‘Nase’ “(mit pers. End.)” [‘nose’ (“with personal ending”)] is rendered here as *bilau-* ‘nose’.

The forms in the “Tuna” column come from Meyer’s (1961) Kuanua-German dictionary. Meyer’s dictionary contains numerous synonyms and alternative pronunciations, including forms from several Kuanua dialects. Often, Meyer notes when a particular word or pronunciation is associated with a particular dialect. In this table, I have selected the forms from Meyer’s dictionary that most closely resemble those of my Makada wordlist (provided that the meanings also match). In most instances, these forms are not ascribed to any particular dialect. Twelve forms, however, are noted as belonging to the Watom dialect; three forms are noted as belonging to the Cape Tavui dialect; and one form is noted as belonging to the Papatava dialect. The twelve Watom dialect forms are: *tada* ‘we’, *no* ‘this’, *ma* ‘that’, *gunanituna* ‘person’, *pati* ‘seed’, *diavu* ‘sleep’, *diavu* ‘lie’, *tari* ‘give’, *māge* ‘sun’, *kébu* ‘ash’, *ŋai* ‘path’, and *boi* ‘good’. The three Cape Tavui forms are: *i* ‘who’, *tutunána* ‘man’, and *ol* ‘head’. The one Papatava form is *iav* ‘fire’. I have adjusted Meyer’s orthography as follows: <q> → /g/; <g> → /ŋ/. I have also replaced a final set of two periods <. .> with a hyphen <->, as the two periods were Meyer’s way of indicating that a given stem generally takes direct possessive marking. For example, <pal . .> ‘Haut, Rinde, Schale, Fell’ [‘skin, bark, shell, fur’] is rendered here as *pal-* ‘skin’ (and also as *pal-* ‘bark’).

Finally, the forms in the “Ramoaaiana” column come primarily from the ABVD (Greenhill, Blust & Gray, 2008). However, the forms given in brackets are based on other sources and are mainly used to fill gaps in the ABVD data. These sources are as follows: Brown & Danks (1882), Ross (1977–1982a), and Davies & Fritzell (1992; 1997). More details are given in the notes following Table A1.

Table A1. Swadesh 100-word wordlist comparing Makada with other dialects of Kuanua and with Ramoaaiana

	English	Makada	Neupommersch (Costantini)	Tuna (Meyer)	Ramoaaiana (ABVD)
1	‘I’	iau	iau	iau	[iau]
2	‘you’	u	u	u	u
3	‘we’	təd	dat	tada	dat
4	‘this’	no	go	no	bi
5	‘that’	ma	nam	ma	ba
6	‘who’	i	to ia	i	voi
7	‘what’	au	awa	āvá	ava
8	‘not’	pə	pata	pă	wəkir

9	'all'	mutu	dat	par	rəkrəkan
10	'many'	mərəŋon	móŋoro	maŋoro	[moŋoro]
11	'one'	tikai	tikai	tikai	takai
12	'two'	ə uruə	a urua	urua	ru
13	'big'	ŋəl	ŋala	ŋala	ŋala
14	'long'	loi	lolowina	lolō	alaviok
15	'small'	kilik	ikilik	ikilik	natnat
16	'woman'	wawin	wawina	vavina	tabuan
17	'man'	tutunən	tutana	tutunána	muana
18	'person'	gunən nitun	tutana	gunanituna	mulinə
19	'fish'	en	en	en	ian
20	'bird'	beo	beo	beo	pika
21	'dog'	pap	pap	pap	pap
22	'louse'	ut	ut	ut	ut
23	'tree'	dəwai	dawai	davái	[divai]
24	'seed'	pəti	pati-	pati	[vai-]
25	'leaf'	məpinai	mapinai	māpina	dodo
26	'root'	okor	okor	okor	akakar
27	'bark'	pələ dəwai	palina	pal-	[panina divai]
28	'skin'	pələ	pali-	pal-	pani
29	'flesh'	wion	wiono	vio-	kəməngong
30	'blood'	gap	gap-	gap	gap
31	'bone'	ur	ur	ur-	ur
32	'grease'	bir	monoi	bíra	birə
33	'egg'	kiau	kiau	kiau	kiau
34	'horn'	kóm	iti-	it-	—
35	'tail'	kur	tauku-	kurú	tabubui
36	'feather'	lakuə	iwuna	ivu-	lakua
37	'hair'	kəpit	iwu-	ivu-	vevu
38	'head'	ol	ula	ol	lori
39	'ear'	taliŋ	taliŋa-	taliŋa-	taliŋa
40	'eye'	mət	mata-	kiau na mata	mata
41	'nose'	bile	bilau-	biláu-	ŋirŋiro
42	'mouth'	ŋiə	ŋie-	ŋia	ava
43	'tooth'	pəlaŋiə	paləŋie-	pal a gia-	lako
44	'tongue'	kərəmiə	karamea-	karamea-	karme
45	'claw'	puleg	—	tobo	—
46	'foot'	kek	kau-	kéka	kaki
47	'knee'	bukubuku nə kek	buk na kau-	bukul kek	[likulikuna kaki-]
48	'hand'	lim	lima-	limā-	lima
49	'belly'	bəl	bala-	bála-	bala-
50	'neck'	koŋoŋ	koŋkoŋi-	kokóŋi-	kaboro
51	'breasts'	u	u	u	u
52	'heart'	buəi	buai-	buai-	[bala-]
53	'liver'	kat	kat	kat	kəti
54	'drink'	mom	mome	momo	inim
55	'eat'	ian	ian	ian	vaŋan
56	'bite'	kərət	karat	karat	vekarat
57	'see'	gire	gire	gire	bo
58	'hear'	wəloŋor	waloŋore	vəloŋor	valoŋor

59	‘know’	nunure	nunure	nunure	mumure
60	‘sleep’	diəu	diop	diavu	inɛp
61	‘die’	mat	mat	mat	mat
62	‘kill’	doko	wamat	doko	akdoko
63	‘swim’	alir	alir	ákir	rariu
64	‘fly’	pururuŋ	purupuruŋ	púruŋ	rovo
65	‘walk’	wən	wana	van	[van]
66	‘come’	pot	wut	pōt	iap
67	‘lie’	diəu	wa	diavu	inɛp
68	‘sit’	ki	ki	ki	ki
69	‘stand’	tur	tur	tur	tur
70	‘give’	təri	la tar	tari	[tar]
71	‘say’	məruge	warweai	biti	pir
72	‘sun’	mage	matana keake	māge	[møge]
73	‘moon’	gai	gai	gai	kalaŋ
74	‘star’	təgul	tagul	tagúl	naŋnaŋ
75	‘water’	təu	tawa	tava	pala
76	‘rain’	bət	bata	bata	bata
77	‘stone’	wat	wat	vat	vat
78	‘sand’	weo	weo	veo	voio
79	‘earth’	piə	pia	pia	pia
80	‘cloud’	bəkut	bakut	bakut	bakut
81	‘smoke’	mi	mi	mi	mi
82	‘fire’	iau	iap	iav	uŋən
83	‘ash’	kebu	kabu	kébu	kabu
84	‘burn’	o	ió	o	vakup
85	‘path’	ŋai	ŋa	ŋai	akəpi
86	‘mountain’	luan	luana	luana	[taŋai]
87	‘red’	biro	birao	biráo	tar
88	‘green’	limut	mapina	limút	limut
89	‘yellow’	wai	gobol	pakar	vai
90	‘white’	pua	pua	pua	kabaŋ
91	‘black’	mərut	koruŋ	mārum	marut
92	‘night’	mərum	marum	mārum	marum
93	‘hot’	murəruŋ	malamalapaŋ	múruŋ	[wuwən]
94	‘cold’	madiriŋ	mudian	mádiriŋ	madiriŋ
95	‘full’	bukəi	buka	buka	[teŋ]
96	‘new’	kələmən	kalamana	kaláma na	mataki
97	‘good’	boi	boina	boi	koi
98	‘round’	kiau	tawulwulu	kakala	[kaulul]
99	‘dry’	məraŋ	ge	maráŋa	mamage
100	‘name’	iəŋ	iaŋi-	iaŋ-	ia

Notes to items on the wordlist:

- Item 1: *iau* ‘I’: this is the independent form (also used as the object; i.e., ‘me’). The 1SG subject marker is *io*; cf. Meyer (1961, p. 111): <io> ‘ich’ [‘I’] (Cape Tavui dialect). The Ramoaaína form given in the ABVD is <inəu> ‘I’, but this appears to be an error: Brown & Danks (1882, p. 15) give <iau> ‘I’; Ross (1977–1982a, p. 1) gives <iau>; and Davies & Fritzell (1992, p. 13) give <iaau>.

- Item 2: *u* ‘you’: this is the 2SG pronoun. The same form is used for the subject and the object/independent pronouns.
- Item 3: *təd* ‘we’: this is the 1PL.INCL independent pronoun (also used as the object; i.e., ‘us’), possibly < POC *kita. The 1PL.INCL subject form is *tunu*. The 1PL.EXCL independent pronoun is *mam* and the 1PL.EXCL subject form is *mi*, probably < POC *kami (cf. §5.1).
- Item 4: *no* ‘this’: I have also recorded the form *nəgo* ‘DEM’, which resembles the one taken from Costantini (1907, p. 92): <go> ‘dieser, -e, -es’ [‘this’]. Another Makada form is *ni* ‘DEM’, which may be compared with Meyer’s (1961, p. 272) <ni> ‘dieses h[i]er’ [‘this here’], also occurring as <ni> ‘DEM’ in Mosel (1984, pp. 26, 76, 110, inter alia).
- Item 5: *ma* ‘that’: I have also recorded the form *na* ‘DEM’, which may be compared with Meyer’s (1961, p. 269) <na> ‘jener, jene, jenes’ [‘that’], as well as with the form <na> ‘DEM’ that occurs in Mosel (1984, pp. 74, 78, 144, inter alia). Demonstratives are intricate in Kuanua; for some of the complexities of Kuanua deixis, see Mosel (1982).
- Item 9: *mutu* ‘all’: Meyer (1961, p. 268) gives the Watom dialect form <mutu> ‘fertig sein’ [‘to be finished’], noting it to be equivalent to <par>, which is additionally noted as having the meaning ‘alle, alles’ [‘all, everything’] (p. 306).
- Item 10: *mərəŋon* ‘many’: the Makada word has apparently undergone metathesis, perhaps under the influence of *mara* ‘hundred’. There is also a reduplicated form *mərəmərəŋon* ‘many’. For the Ramoaina form, see Brown & Danks (1882, p. 163): <mogoro> ‘many, abundant, plentiful’; Ross (1977–1982a, p. 2): <mongoro> ‘many’; and Davies & Fritzell (1992, p. 26): <mongoro> ‘many’.
- Item 12: *ə urə* ‘two’: the article *ə* ‘ART’ is obligatory; the form has possibly lexicalized as *əurə*.
- Item 14: *loi* ‘long’: cf. *ləloi* ‘coil of shell money’.³⁴
- Item 18: *gunən nitun* ‘person’: literally *gunən* ‘village’ + *ni-tun* ‘NMLZ-true’.
- Item 23: *dəwai* ‘tree’: for the Ramoaina form, see Brown & Danks (1882, p. 60): <diwai> ‘trees, wood’; Ross (1977–1982a, p. 4): <divai> ‘tree’; and Davies & Fritzell (1992, p. 7): <diwaai> ‘tree’.
- Item 24: *pəti* ‘seed’: in his finderlist, Costantini (1907, p. 124) gives only <a patina> ‘Same’ [‘seed’]; however, in his Kuanua-German list, he gives <pat, patina> ‘Same, Kern’ [‘seed, kernel’] (p. 190), thereby suggesting that <patina> contains a possessive suffix.
- Item 25: *məpinai* ‘leaf’: Meyer (1961, p. 244) also gives the form <mapinai> ‘Bananenblatt, Buchseite’ [‘banana leaf, book page’].
- Item 27: *pələ dəwai* ‘bark’: literally ‘skin [of] tree’. For the Ramoaina form, see Brown & Danks (1882, p. 194): <pani-na> ‘body; bark of a tree; skin’; also Ross (1977–1982a, p. 2 of word-list B): <panina divai> ‘bark (of tree)’.
- Item 34: *kom* ‘horn’: loan from Tok Pisin (cf. §6.3). In his finderlist, Costantini (1907, p. 109) gives only <a itina> ‘Horn (des Tieres)’ [‘horn (of the animal)’]; however, in his Kuanua-German list, he gives <it, itina> ‘Horn, hornartige Klaue’ [‘horn,

³⁴ As elsewhere in the Tolai community, *tabu* ‘shell money’ is a very important aspect of the culture on Makada Island. It is counted by length: the shells are strung along a string, which may be stretched from the center of the chest to the fingertips of one hand. This length may, in turn, be doubled. One such fathom of shell money is called a *pokon*. In 2022, one *pokon* was worth 5 Papua New Guinean Kina (PGK). Ten fathoms of shell money (i.e., ten *pokon*) is called an *ariu*. When large quantities of shell money are amassed, they may be spun into a large coil, called a *ləloi*.

- horn-like claw’] (p. 160), thereby suggesting that <itina> contains a possessive suffix.
- Item 36: *lakuə* ‘feather’: this may be a loan from Ramoaaina, if not an archaic retention (cf. §6.3). Costantini’s (1907, p. 99) form <a iwuna> ‘Feder’ [‘feather’] is just the word for ‘hair’ with 3SG possessive marking (<na>). This colexification is overtly indicated by Meyer (1961, p. 115): <ivu> ‘Haar, Feder’ [‘hair, feather’]. It also occurs in Makada *kəpit*, which means ‘feather’ as well as ‘hair’.
- Item 37: *kəpit* ‘hair’: this refers to the hair of the head; cf. Meyer (1961, p. 150): <katíp> ‘Kraushaar’ [‘frizzy hair’];³⁵ there has apparently been metathesis of one form or the other. Makada also has *ewau* ‘body hair’, which looks more like the other Kuanua forms.
- Item 45: *puleg* ‘claw’: this means, more generally, ‘nail’. Costantini (1907) gives no form for ‘claw’, but he gives the form <a pulegi> ‘Nagel’ [‘nail’] (p. 17); he glosses <it, itina> as ‘Horn, hornartige Klaue’ [‘horn, horn-like claw’] (p. 160) (cf. wordlist item 34). Meyer’s (1961, p. 394) form refers specifically to the claw of a crab: <tobo> ‘Schere der Krabben’ [‘claw of the crab’]. In Makada, *kəlkəli nə kuk* ‘finger of crab’ is used to refer to this sort of claw.
- Item 47: *bukubuku nə kek* ‘knee’: literally ‘bulge of leg’. For the Ramoaaina form, see Ross (1977–1982a, p. 3): <likulikuna kakina> ‘(his) knee’; Brown & Danks (1882, p. 23) give <op> ‘the knee-cap’.
- Item 48: *lim* ‘hand’: also refers to the entire ‘arm’.
- Item 52: *buai* ‘heart’: also means ‘areca nut’. The Ramoaaina form also means ‘belly’; see Brown & Danks (1882, p. 38): <balana> ‘inside, heart’; also Ross (1977–1982a, p. 3): <balana> ‘(his) heart’. Brown & Danks (1882, p. 240) also give <tauru> ‘a conch shell, a horn; a fish; the heart’.
- Item 55: *ian* ‘eat’: this is ‘to eat (intransitive)’; cf. *eni* ‘to eat (transitive)’. For this entry I have taken the second entry rather than the first in Costantini (1907, p. 98), since he specifies that the second entry is intransitive: <en> ‘essen (tr.)’ [‘to eat (TR)’], <ian> ‘essen (intr.)’ [‘to eat (INTR)’].
- Item 60: *diəu* ‘sleep’: also means ‘lie’. To specify ‘to sleep’ instead of ‘to lie down’, a speaker may say *diəu dumən* ‘to sleep’; cf. Meyer (1961, p. 67): <duma> ‘tauchen, untergehen’ [‘to dive, to sink’].
- Item 65: *wən* ‘walk’: this also means ‘go’. For the Ramoaaina form, see Brown & Danks (1882, p. 303): <wan> ‘to go or come’; also Ross (1977–1982a, p. 6): <i van> ‘(he) walks; (he) goes’.
- Item 67: *diəu* ‘lie’: also means ‘sleep’.
- Item 70: *təri* ‘give’: for the Ramoaaina form, see Brown & Danks (1882, p. 258): <tara-tai, tari> ‘to give’; Ross (1977–1982a, p. 7): <i tari tang> ‘(he) gives me’; and Davies & Fritzell (1992, p. 31): <taar> ‘to give’.
- Item 71: *məruge* ‘say’: this verb has the reduplicated form *mərumarug* ‘saying, speech, talk’, apparently a nominalization, which is also used as an endonym for the language variety used by the people of Makada. The verb stem *mərug-* appears to be unique to the Makada dialect. Makada also has the form *bia* ‘to say; thus, like this’, apparently cognate with a Watom dialect form given in Meyer (1961, pp. 18, 34, 38): <bia> ‘als’ [‘as’]; ‘sagen, denken, meinen, glauben’ [‘to say, to think, to mean, to believe’].
- Item 72: *mage* ‘sun’: cf. Meyer (1961, p. 229): <māqe> ‘Sonne, Hitze’ [‘sun, heat’] (Watom dialect); cf. Peekel (1909, pp. v–vi): <a mangge> ‘Sonne’ [‘sun’] (both

³⁵ Meyer (1961, p. 150) ascribes this form to Father Fromm’s notes on an early dictionary made by Bley.

- Liwuan-Dialekt [Livuan dialect; i.e., Vinitiri] and Uatom-Dialekt [Watom dialect]). For the Ramoaina form, see Brown & Danks (1882, p. 147): <maʔe> ‘the sun’; Ross (1977–1982a, p. 3): <mage> ‘sun’; Davies & Fritzell (1992, pp. 30, 43): <mage> ‘sun’; and Davies & Fritzell (1997, p. 5): [ˈmøge] ‘sun’.
- Item 84: *o* ‘burn’: this is ‘to burn (intransitive)’; cf. *tunu* ‘to burn (transitive)’.
- Item 86: *luana* ‘mountain’: I did not find a designated lexical entry for ‘mountain’ in Meyer’s (1961) dictionary; his form <luana> is extracted from the phrase <kaka na luana> ‘Bergausläufer, Fuss des Berges’ [‘mountain foothills, foot of the mountain’] (p. 126). For the Ramoaina form, see Brown & Danks (1882, p. 244): <tagai> ‘a hill, a mountain’; Ross (1977–1982a, p. 4): <tangai> ‘mountain’; and Davies & Fritzell (1997, p. 5): [təŋəi] ‘mountain’.
- Item 89: *wai* ‘yellow’: this appears to be a loan from Ramoaina (cf. §6.3).
- Item 93: *murəpəŋ* ‘hot’: this refers to the weather. A hot sensation (as from fever) is *mələpəŋ* ‘hot’. For the Ramoaina form, see Ross (1977–1982a, p. 5): <ivuvan> ‘(he is hot)’; also Davies & Fritzell (1997, p. 9): [ˈwʉwən] ‘hot’.
- Item 94: *madiriŋ* ‘cold’: this refers to the weather. A cold sensation (as from chills) is *mudiən* ‘cold’.
- Item 95: *bukəi* ‘full’: for the Ramoaina form, see Brown & Danks (1882, p. 265): <teg> ‘full’; Ross (1977–1982a, p. 4) also gives <buka> ‘full (e.g. of water)’, but I suspect this is a loan from Kuanua.
- Item 98: *kiau* ‘round’: this means, more generally, ‘egg’. The same colexification of *kiau* ‘egg; round’ is found in Vinitiri (Paschalis Kinakava, p.c., 2024). For the Ramoaina form, see Brown & Danks (1882, p. 81): <kaulul> ‘round’. Brown & Danks (1882, p. 138) also give <lok> ‘a circle, something round’.
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Appendix 2. ABVD 210-word wordlist for Makada

Table A2 presents a list of 210 concepts with their lexical realizations in the Makada dialect. The 210 concepts are taken from the ABVD wordlist (Greenhill, Blust & Gray, 2008). In many cases, I have created multiple Makada entries for a single concept in the ABVD. In the comments column, I clarify meanings, offer notes concerning etymology, and present some attested inflected forms. A final dash <-> in a lexical entry means that the given form is not attested without affixation, in which case, one or more inflected forms are provided in the comments column. For several such verbs, there are forms with suffixes that alternate with forms with prefixal reduplication or partial reduplication. The grapheme <w> represents the voiced bilabial fricative /β/; otherwise, the orthography used here matches that of the IPA.

Table A2. ABVD 210-word wordlist for Makada

English	Makada	Comments
1 'hand'	lim	'hand, arm'; <i>limag</i> 'my hand', <i>limam</i> 'your hand', <i>limən</i> 'his/her hand'
2 'left'	mair	
3 'right'	limətun	
4 'leg/foot'	kek	'leg, foot'; <i>kakig</i> 'my leg', <i>kakim</i> 'your leg', <i>kaken</i> 'his/her leg'
5 'to walk'	wən	'to go, to walk'; <i>wən</i> , <i>wənə</i> , <i>wənəwən</i>
6 'road/path'	ŋai	
7 'to come'	pot	
7 'to come'	tədəu	
7 'to come'	wən ukai	'to go hither'
8 'to turn'	wəliliai	'to turn around (intransitive)'
8 'to turn'	təbe	'to turn, to steer (transitive)'
8 'to turn'	puku-	'to overturn, to flip over'; <i>pukue</i> , <i>pupukuəi</i>
8 'to turn'	lili	'to spin'
9 'to swim'	alir	'to swim, to float, to flow'
10 'dirty'	dur	
11 'dust'	kebu	'dust, ashes'
12 'skin'	pələ	'skin, body'; <i>palig</i> 'my skin', <i>palim</i> 'your skin', <i>palin</i> 'his/her skin'
13 'back'	toru-	<i>torum</i> 'your back', <i>torun</i> 'his/her back'
13 'back'	tamur	
14 'belly'	bəl	<i>bəlag</i> 'my belly', <i>bəlam</i> 'your belly', <i>bələn</i> 'his/her belly'
15 'bone'	ur	<i>urun</i> 'his/her bone'
16 'intestines'	winon	
16 'intestines'	winon nə bəl	'guts of belly'; <i>winon nə bələn</i> 'his/her intestines'
17 'liver'	kat	'liver, heart (?); <i>katig</i> 'my liver', <i>katim</i> 'your liver', <i>katin</i> 'his/her liver'
18 'breast'	u	'woman's breast'; <i>um</i> 'your breast', <i>un</i> 'her breast'

18	'breast'	boŋoboŋ	'chest'; <i>boŋoboŋom</i> 'your chest', <i>boŋoboŋon</i> 'his/her chest'
19	'shoulder'	kəukəuwal	<i>kəukəuwalig</i> 'my shoulder', <i>kəukəuwalim</i> 'your shoulder'
20	'to know, be knowledgeable'	nunure	'to know'
21	'to think'	nuk-	<i>nukia</i> , <i>nunuk</i> ; <i>ninunuk</i> 'thought'
22	'to fear'	burut	<i>burut</i> , <i>burutəne</i>
23	'blood'	gap	<i>gapun</i> 'his/her blood'
24	'head'	ol	<i>olug</i> 'my head', <i>olun</i> 'his/her head'
24	'head'	lor	
25	'neck'	kokoŋ	<i>kokoŋim</i> 'your neck', <i>kokoŋin</i> 'his/her neck'
26	'hair'	kəpit	'hair, feather'
26	'hair'	kəpit nə olun	'hair of his/her head'
26	'hair'	kəpit nə lor	'hair of head'
26	'hair'	ewau	'body hair'; <i>ewauin</i> 'his/her body hair'
27	'nose'	bile	<i>bileug</i> 'my nose', <i>bileum</i> 'your nose', <i>bileun</i> 'his/her nose'
28	'to breathe'	ali wuwu	'to pull wind'; cf. Tok Pisin <i>pulim win</i> 'to breathe'
29	'to sniff, smell'	luŋ-	<i>luŋu</i> , <i>luluŋ</i>
30	'mouth'	ŋjə	<i>ŋjeg</i> 'my mouth', <i>ŋjem</i> 'your mouth', <i>ŋjen</i> 'his/her mouth'
31	'tooth'	pələŋjə	<i>pələŋjen</i> 'his/her tooth'
32	'tongue'	kərəmia	<i>kərəmeam</i> 'your tongue', <i>kərəmean</i> 'his/her tongue'
33	'to laugh'	nəŋon	<i>nəŋon</i> , <i>noŋone</i> ; <i>niŋəŋon</i> 'laughter'
34	'to cry'	təŋi	<i>təŋi</i> ; <i>tinəŋen</i> 'crying, lamentation'
35	'to vomit'	mərumaruəi	
36	'to spit'	gəmi	<i>gəmi</i> , <i>gəmia</i> , <i>gəgəmi</i>
37	'to eat'	eni	'to eat (transitive)'
37	'to eat'	ian	'to eat (intransitive)'
38	'to chew'	məi	'to chew betel nut'; <i>məi</i> , <i>məməi</i> ; <i>minəməi</i> 'chewed-up betel nut'
39	'to cook'	tun-	'to burn (transitive), to cook'; <i>tunu</i> , <i>tutun</i>
39	'to cook'	kur-	'to boil'; <i>kuro</i> , <i>kurua</i>
39	'to cook'	pan	'to fry'; <i>pani</i> ; loan from English <i>pan</i> ?
39	'to cook'	pər-	'to cook in an earth oven, to <i>mumu</i> (Tok Pisin)'; <i>pəre</i> , <i>pəpəpə</i> ; <i>pinəpəpə</i> 'oven cooking, oven cookery'
40	'to drink'	mom	<i>mom</i> , <i>mome</i> ; <i>wamoma</i> 'to make drink'
41	'to bite'	kərət	<i>kərət</i> , <i>kərətia</i> , <i>wəkərat</i>
42	'to suck'	u	same form as 'breast'; <i>wəu</i> 'to make suck, to nurse (transitive)'
43	'ear'	taliŋ	<i>taliŋag</i> 'my ear', <i>taliŋam</i> 'your ear', <i>taliŋən</i> 'his/her ear'

44	‘to hear’	waləŋor	<i>waləŋor, waloŋore</i>
45	‘eye’	mət	<i>mətag</i> ‘my eye’, <i>mətam</i> ‘your eye’, <i>mətən</i> ‘his/her eye’
46	‘to see’	gir-	<i>gire, gigir</i>
47	‘to yawn’	mowiəu	
48	‘to sleep’	diəu	‘to sleep, to lie down’; <i>diəu; nidiəu</i> ‘sleep, rest’
48	‘to sleep’	diəu dumən	
49	‘to lie down’	diəu	‘to sleep, to lie down’; <i>diəu; nidiəu</i> ‘sleep, rest’
50	‘to dream’	ririwon	
51	‘to sit’	ki	
52	‘to stand’	tur	<i>tur, turu</i>
53	‘person/human being’	gunən nitun	‘person’ < <i>gunən</i> ‘village’ + <i>ni-tun</i> ‘NMLZ-true’
53	‘person/human being’	tərək	‘one (person), other’
53	‘person/human being’	tərəi	‘people, men, husbands (plural)’
54	‘man/male’	tutunən	‘man, husband’
54	‘man/male’	tərəi	‘people, men, husbands (plural)’
55	‘woman/female’	wawin	‘woman, wife’
55	‘woman/female’	wəriden	‘women, wives (plural)’
56	‘child’	bul	<i>bul; bulik</i> ‘little child’ (with <i>-ik</i> ‘DIM’)
56	‘child’	natu	<i>natug</i> ‘my child’, <i>natum</i> ‘your child’, <i>natun</i> ‘his/her child’
56	‘child’	naik	‘small, young’
57	‘husband’	tutunən	‘man, husband’
57	‘husband’	tolai	‘spouse’; <i>bərətolai</i> ‘spouses (plural)’
58	‘wife’	wawin	‘woman, wife’
58	‘wife’	wəriden	‘women, wives (plural)’
58	‘wife’	tolai	‘spouse’; <i>bərətolai</i> ‘spouses (plural)’
59	‘mother’	tine	<i>tinag</i> ‘my mother’, <i>tinam</i> ‘your mother’, <i>tinən</i> ‘his/her mother’
59	‘mother’	nana	‘mother (vocative)’
60	‘father’	təme	<i>təmag</i> ‘my father’, <i>təmam</i> ‘your father’, <i>təmən</i> ‘his/her father’
60	‘father’	tata	‘father (vocative)’
61	‘house’	pal	
62	‘thatch/roof’	kəbəkabon	‘thatch’
62	‘thatch/roof’	ol ə pal	‘roof’; literally ‘head on house’
63	‘name’	iəŋ	<i>iaŋig</i> ‘my name’, <i>iaŋin</i> ‘his/her name’
64	‘to say’	mərug-	<i>məruge, mərumarug</i> ‘saying, speech, talk’
64	‘to say’	bia	‘to say; thus, like this’
64	‘to say’	wəriwe	‘to tell’
65	‘rope’	winau	‘vine, rope’

66	‘to tie up, fasten’	wi	
67	‘to sew’	iŋit-	<i>iŋiti, iŋitiə, iŋiŋit, niŋit</i> ‘sewing, stitchery’
68	‘needle’	nil	loan from Tok Pisin <i>nil</i> ‘needle’
68	‘needle’	ur nə niŋit	literally ‘bone of sewing’
69	‘to hunt’	leb	<i>leb, lebi, nileb</i> ‘hunting, pursuit’; from an archaic word for ‘dog’?
69	‘to hunt’	awer	‘to seek, to look for’; <i>awer, awəre</i>
70	‘to shoot’	gulum-	‘to shoot with a short piece of wood’; <i>gulumia, gugulum</i>
70	‘to shoot’	pənak	‘to shoot with a sling’; <i>pənak, pənaki, pəpənak</i>
70	‘to shoot’	ub-	‘to shoot with a spear’; <i>ubia, ubu</i>
70	‘to shoot’	bir-	‘to shoot with a stone or a piece of wood’; <i>biri, biria, biru</i>
71	‘to stab, pierce’	tor-	‘to stab, to stick, to pierce’; <i>tori, totor</i> ; possible loan from Ramoaina
71	‘to stab, pierce’	goa	‘to pierce; to copulate with’
72	‘to hit’	wulət-	‘to hit with a stick’; <i>wuləti, wulətiə, wuwulət</i>
72	‘to hit’	rəpu	‘to hit with the hand’
73	‘to steal’	loŋ	<i>loŋ, loŋi, loŋiə; niloŋ</i> ‘theft’
74	‘to kill’	dok-	<i>doka, doko, wərdədok</i>
75	‘to die, be dead’	mat	
76	‘to live, be alive’	ləun	
77	‘to scratch’	kəi	‘to scratch, to scrape (a coconut)’; <i>kəi, kəkəi, kəkəkəi</i>
77	‘to scratch’	ud-	‘to scrape (cassava)’; <i>udia, udud</i>
78	‘to cut, hack’	bur-	‘to cut (a tree), to chop’; <i>buria, buru, bubur, buburu</i>
78	‘to cut, hack’	kut-	‘to cut (into pieces), to chop’; <i>kutia, kutu</i>
78	‘to cut, hack’	burukut-	‘to cut up, to chop up’; <i>burukutia, burukutu</i>
78	‘to cut, hack’	pok-	‘to cut with a small knife, to slice’; <i>poka, poko</i>
78	‘to cut, hack’	tog-	‘to cut (e.g., bone)’; <i>toga, togo</i>
78	‘to cut, hack’	rəmai	‘to cut grass’
79	‘stick/wood’	pəkən nə dəwai	‘piece of wood’
79	‘stick/wood’	ŋun nə dəwai	‘piece of wood’
79	‘stick/wood’	dəwai	‘tree, wood’
79	‘stick/wood’	buk	‘walking stick’
79	‘stick/wood’	olot	‘digging stick’
80	‘to split’	arik-	<i>arikiə, ararik</i>
80	‘to split’	pəlag	<i>pəlag, pəlagi, pəlagiə, pəpəlag</i>
80	‘to split’	rəbəne	‘to tear apart, to shred’; <i>rəbəne, rəbərabəne</i>
81	‘sharp’	ŋəŋər	
82	‘dull, blunt’	mul	

82	‘dull, blunt’	botbot	
83	‘to work’	pələm-	‘to work, to work in a garden’; <i>pələmiə, pələmu; pəpələm</i> ‘garden’
84	‘to plant’	oe	
85	‘to choose’	pilək-	<i>piləki, piləkiə, pipilək</i>
86	‘to grow’	tawə	
87	‘to swell’	uruŋ	<i>uruŋ, ururuŋ</i>
88	‘to squeeze’	pipit-	<i>pipite, pipitəne</i>
88	‘to squeeze’	pur-	‘to squeeze grated coconut’; <i>puriə, puru</i>
89	‘to hold’	wətur-	<i>wəturia, wəturu, wəwətur</i> ; literally ‘to make stand’?
90	‘to dig’	kəl-	<i>kəli, kəkəl</i>
91	‘to buy’	kul-	<i>kuliə, kulu, kukul</i>
92	‘to open, uncover’	pəpə	‘to open’; <i>pəpə, pəpəi</i>
92	‘to open, uncover’	wəwai	‘to reveal’
93	‘to pound, beat’	tut-	‘to pound, to beat, to crush (e.g., nuts)’; <i>tutiə, tutu, tutut</i>
93	‘to pound, beat’	ak-	‘to pound, to crush, to smash (e.g., shells)’; <i>akiə, akak</i>
94	‘to throw’	bəl-	<i>bəle, bəbələi</i>
94	‘to throw’	pəkəte	‘to throw, to flick, to flip’
95	‘to fall’	burəi	
96	‘dog’	pap	
97	‘bird’	beo	
98	‘egg’	kiau	<i>kiaun</i> ‘its egg’
99	‘feather’	kəpit	‘hair, feather’
99	‘feather’	lakuə	<i>lakuən</i> ‘its feather’; possible loan from Ramoaaia
100	‘wing’	bəbe	<i>bəbean</i> ‘its wing’
101	‘to fly’	pururuŋ	
102	‘rat’	kuw	
102	‘rat’	məŋ	‘bandicoot’
103	‘meat/flesh’	wion	
103	‘meat/flesh’	kirip	‘protein source (including meat, fish, eggs)’
104	‘fat/grease’	bir	<i>birin</i> ‘his/her/its fat’
105	‘tail’	kur	<i>kurun</i> ‘its tail’
106	‘snake’	wui	
107	‘worm (earthworm)’	kalol	
108	‘louse’	ut	
108	‘louse’	liə	‘louse egg, nit’
109	‘mosquito’	ŋətɪŋat	
110	‘spider’	kəbilok	

111	'fish'	en	
112	'rotten'	marer	
112	'rotten'	məraŋ	'dry, rotten'
113	'branch'	gəgən	'branch, thigh'; possible loan from Ramoaaina
114	'leaf'	məpinai	
115	'root'	okor	
116	'flower'	purpur	
117	'fruit'	wunuwəi	
117	'fruit'	wen	'seed, fruit'
117	'fruit'	pəti	'seed'; <i>patin</i> 'its seed'
118	'grass'	wur	
118	'grass'	kunəi	'sword grass'
119	'earth/soil'	piə	
120	'stone'	wat	
121	'sand'	weo	
122	'water'	təu	
123	'to flow'	alir	'to swim, to float, to flow'
124	'sea'	tai	'sea, salt'
125	'salt'	tai	'sea, salt'
125	'salt'	məpək	'bitter, salty'
125	'salt'	sol	loan from Tok Pisin <i>sol</i> 'salt'
126	'lake'	tai lili	'lake' < <i>tai</i> 'water' + <i>lili</i> 'to spin'; cf. Tok Pisin <i>raunwara</i> 'lake'
126	'lake'	lob	'pond'
127	'woods/forest'	ləkor	
128	'sky'	məup	
128	'sky'	bəkut	'cloud, sky'
129	'moon'	gai	'moon, month'
130	'star'	təgul	
131	'cloud'	bəkut	'cloud, sky'
132	'fog'	gawul	
132	'fog'	wal	
133	'rain'	bət	
134	'thunder'	pəgupagur	
135	'lightning'	pipi	
136	'wind'	wuwu	'wind, breath'
137	'to blow'	wu	
137	'to blow'	tur	same form as 'to stand'
138	'warm'	murəpəŋ	'warm, hot (weather)'
138	'warm'	mələpəŋ	'warm, hot (feeling, as from fever)'
139	'cold'	madiŋ	'cool, cold (weather)'; <i>wəmədirij</i> 'to make cold, to freeze (transitive)'
139	'cold'	mudjən	'cool, cold (feeling, as from chills)'

140	‘dry’	geage	
140	‘dry’	məraŋ	‘dry, rotten’
141	‘wet’	buibui	
142	‘heavy’	məmət	
143	‘fire’	iau	
144	‘to burn’	o	‘to burn (intransitive)’
144	‘to burn’	tun-	‘to burn (transitive), to cook’; <i>tunu, tutun</i>
144	‘to burn’	raŋi	‘to singe’
145	‘smoke’	mi	
146	‘ashes’	kebu	‘dust, ashes’
146	‘ashes’	kebu nə iau	‘dust/ashes of fire’
147	‘black’	mərut	<i>mərut, mərutun</i>
148	‘white’	pua	
149	‘red’	biro	<i>biro, biron</i>
150	‘yellow’	wai	<i>wai, wain</i> ; possible loan from Ramoaaina
151	‘green’	limut	<i>limut, limutun</i>
152	‘small’	kilik	
152	‘small’	naik	‘small, young’
153	‘big’	ŋəl	
154	‘short’	ŋun	
155	‘long’	loi	cf. <i>ləloi</i> ‘coil of shell money’
156	‘thin’	pələbeb	‘thin, flat’
157	‘thick’	butubut	
158	‘narrow’	ŋətur	
159	‘wide’	ləben	
160	‘painful, sick’	kədik	‘to be in pain, to hurt’; <i>kədik, kinədik</i> ‘pain’
160	‘painful, sick’	məit	‘sick, to be sick’
161	‘shy, ashamed’	ruw	‘shy’
161	‘shy, ashamed’	wiriwir	‘ashamed, to be ashamed’; <i>wiriwir</i> ; <i>wəwiriwir</i> ‘to cause shame’
162	‘old’	məulun	
162	‘old’	ləpun	‘old person’
163	‘new’	kələmən	‘new, raw, uncooked’
164	‘good’	boi	
165	‘bad, evil’	kain	<i>wəkaina</i> ‘to make bad, to ruin’
166	‘correct, true’	dəwot	‘correct, true’; <i>dəwot, dəwatin</i>
166	‘correct, true’	tun	‘true, right’
166	‘correct, true’	takədoi	‘straight, flat; correct’
167	‘night’	mərum	
168	‘day’	buŋ	‘day (countable)’
168	‘day’	mage	‘sun, day(time)’
169	‘year’	kiləl	
170	‘when?’	wiŋaiə	

171	‘to hide’	pərəu	‘to hide (intransitive)’
171	‘to hide’	doŋ	‘to hide (intransitive)’; <i>doŋ</i> ; <i>doŋdoŋ</i> ‘hiding place’
171	‘to hide’	iwe	‘to hide (transitive)’
172	‘to climb’	koe	
172	‘to climb’	kəkuai	
173	‘at’	ə	‘in, at, on’
174	‘in, inside’	ə	‘in, at, on’
174	‘in, inside’	əra	‘in, inside’
174	‘in, inside’	nə	‘of, in’
175	‘above’	kənəm	
175	‘above’	liu	
175	‘above’	məliu	‘up’
175	‘above’	ərəm	‘up’
175	‘above’	urəm	‘up’
176	‘below’	kəna	
176	‘below’	ur	‘down’
176	‘below’	ura	‘down’
176	‘below’	uri	‘down’
177	‘this’	no	
177	‘this’	ni	
177	‘this’	nəgo	
178	‘that’	ma	
178	‘that’	na	
178	‘that’	mena	
179	‘near’	mərəwəi	
180	‘far’	wəilik	
181	‘where?’	wa	
181	‘where?’	əwa	
182	‘I’	iau	‘me’ (1SG independent/object)
182	‘I’	io	‘I’ (1SG subject)
183	‘thou’	u	‘you’ (2SG independent/object/subject)
184	‘he/she’	iə	‘him, her, it’ (3SG object)
184	‘he/she’	i	‘he, she, it’ (3SG subject)
185	‘we’	mam	‘us’ (1PL.EXCL independent/object)
185	‘we’	mi	‘we’ (1PL.EXCL subject)
185	‘we’	təd	‘us’ (1PL.INCL independent/object)
185	‘we’	tunu	‘we’ (1PL.INCL subject)
185	‘we’	məmir	‘us two’ (1DU.EXCL independent/object)
185	‘we’	miri	‘we two’ (1DU.EXCL subject)
185	‘we’	dətər	‘us two’ (1DU.INCL independent/object)
185	‘we’	duru	‘we two’ (1DU.INCL subject)
185	‘we’	məmital	‘us three’ (1TRI.EXCL independent/object)

185	‘we’	mitili	‘we three’ (1TRI.EXCL subject)
185	‘we’	tətal	‘us three’ (1TRI.INCL independent/object)
185	‘we’	tulu	‘we three’ (1TRI.INCL subject)
186	‘you’	mui	‘you’ (2PL independent/object)
186	‘you’	mu	‘you’ (2PL subject)
186	‘you’	məmur	‘you two’ (2DU independent/object)
186	‘you’	muru	‘you two’ (2DU subject)
186	‘you’	məmutal	‘you three’ (2TRI independent/object)
186	‘you’	mutulu	‘you’ (2TRI subject)
187	‘they’	id	‘them’ (3PL independent/object)
187	‘they’	di	‘they’ (3PL subject)
187	‘they’	dur	‘them two’ (3DU independent/object)
187	‘they’	duru	‘they two’ (3DU subject)
187	‘they’	dital	‘them three’ (3TRI independent/object)
187	‘they’	ditili	‘they three’ (3TRI subject)
188	‘what?’	au	
189	‘who?’	i	
190	‘other’	tərə wənə	‘other, another (person)’
190	‘other’	tərək	‘one (person), other’
190	‘other’	tarə	‘another’
191	‘all’	mutu	
192	‘and’	mə	
193	‘if’	ona	
193	‘if’	tona	
194	‘how?’	bie	
195	‘no, not’	pə	preverbal negator
195	‘no, not’	pətai	‘no (negative response word), nothing’
195	‘no, not’	kir	prenominal negator
195	‘no, not’	wəkir	prenominal negator
196	‘to count’	luk-	<i>lukia, luku</i>
197	‘one’	tikai	absolute numeral
197	‘one’	wənə	adnominal numeral
197	‘one’	ə wənə	adnominal numeral
197	‘one’	tərək	‘one (person), other’
197	‘one’	təke	in esoteric counting
198	‘two’	ə uruə	absolute numeral
198	‘two’	ə urə	adnominal numeral
198	‘two’	urəde	in esoteric counting
199	‘three’	ə utul	absolute/adnominal numeral
199	‘three’	təmapu	in esoteric counting
200	‘four’	ə iwət	absolute numeral
200	‘four’	ə iwət	adnominal numeral
200	‘four’	kaiti	in esoteric counting

201	'five'	ə ilim	absolute numeral
201	'five'	ə ilima	adnominal numeral
201	'five'	kaita	in esoteric counting
202	'six'	ləptikai	absolute numeral
202	'six'	ləptiken	adnominal numeral
202	'six'	libur	in esoteric counting
203	'seven'	ləwuruə	absolute numeral
203	'seven'	ləwuruən	adnominal numeral
203	'seven'	matam	in esoteric counting
204	'eight'	ləwutul	absolute numeral
204	'eight'	ləwutulun	adnominal numeral
204	'eight'	tumam	in esoteric counting
205	'nine'	ləuwat	absolute numeral
205	'nine'	ləuwətın	adnominal numeral
205	'nine'	tərək	in esoteric counting
206	'ten'	winun	absolute/adnominal numeral
206	'ten'	ə winun	absolute/adnominal numeral
206	'ten'	mude	in esoteric counting
207	'twenty'	ə ura winun	
208	'fifty'	ə ilima na winun	
209	'one hundred'	mar	'hundred'
209	'one hundred'	tərək ə rə mar	'one hundred'
210	'one thousand'	rip	'thousand'
210	'one thousand'	tərək ə rə rip	'one thousand'

Appendix 3. Texts from Makada Island

Texts in other dialects of Kuanua can be found in Ray (1895), Schnee (1901, pp. 238–246), Meier (1909; 1913a; 1913b; 1913c), Winhuis (1909; 1912; 1914; 1927), Meyer (1910), Bögershausen (1917–1918), Kleintitschen (1924), and Mosel (1977). There have also been numerous translations of Christian texts into Kuanua. As of 25 April 2024, recordings of the Makada dialect are available on the Christian evangelistic website Global Recordings Network (n.d.), although they are listed there as belonging to the Ramoaaina language.³⁶

In this appendix, I present two texts that I recorded on Makada Island in November 2022. The texts were translated from Makada into Tok Pisin with the help of Roland Kurkuris and Johnny Roland. I later translated them into English. The morpheme-level glosses and analyses represent my best efforts based on my understanding of Makada and on comparison with the grammatical descriptions of other dialects of Kuanua. Subsequently, Steven Gagau, a speaker of the Toma dialect of Kuanua, checked the transcriptions, glosses, and translations.

Nevertheless, these transcriptions may still contain errors and should be considered tentative. The audio recordings of these texts are available in Barlow (2022), along with seven other recordings that currently lack transcriptions (although they do contain descriptions, thanks to Steven Gagau). Unfortunately, the recording quality is poor in some places due to windy weather conditions on the island.

A3.1 *The child Nebiaur and the spirits*

Speaker: Daniel Pakanatangala
 Location: Raputput village, Makada
 Date: 1 November 2022
 Duration: 2 minutes, 40 seconds
 Item ID: RB8-20221101_03
 DOI: 10.26278/S404-JE86

The speaker recounts a traditional story. The story explains the origin of a creek near Narakoi village on Makada Island. The creek is usually dry, but when it rains hard enough, the water flows down the creek and into the ocean.

(1) *Nebiaur natu-n*

[name] child-3SG.POSS
 ‘Nebiaur, the child–’

(2) *təmə-n mə tinə-n duru tur-u pai akəni*
 father-3SG.POSS and mother-3SG.POSS 3DU.SUBJ stand-TR PFV here

kə=duru bul
 POSS.AL=3DU.SUBJ child
 ‘Father and mother left their child here.’

(3) *duru wən duru wa-mono pək iə duru wən*
 3DU.SUBJ go 3DU.SUBJ CAUS-oversee to 3SG.OBJ 3DU.SUBJ go
 ‘The two went, they entrusted her to someone [and] they went.’

³⁶ <https://globalrecordings.net/en/language/4478>

- (4) *duru wən wən wən wən wən ə mage i ki dari*
 3DU.SUBJ go go go go go ART sun 3SG.SUBJ sit thus
 ‘The two went on and on [until] the sun was sitting like this.’ [The speaker points up to the midday sun.]
- (5) *pu i ki urəm ə mage i rawien*
 for 3SG.SUBJ sit up ART sun 3SG.SUBJ afternoon
 ‘So it was sitting up [in the middle of the sky]—the sun; it was afternoon.’
- (6) *duru raun akəni e duru wən akəni ukai rəpui*
 3DU.SUBJ go.around here yes 3DU.SUBJ go here hither plantation
 ‘The two went around here; yes, they came here to a plantation.’ [*raun* ‘to go around’ is a loan from Tok Pisin.]
- (7) *munə təbəran di wə-wai pai tə-n ma rə bul-ik*
 PL spirit 3PL.SUBJ CAUS-show PFV to-3SG.POSS DEM ART child-DIM
 ‘Some spirits revealed themselves to that little child.’
- (8) *dar no*
 like DEM
 ‘Like this one.’ [The speaker points to a nearby girl to indicate the approximate age of the child in the story: younger than five years old.]
- (9) *dar rə wawina-ik əkənikən*
 like ART woman-DIM here
 ‘Like the girl here.’
- (10) *wawina-ik əkənikən iə ə natu Nebiəur dar ma*
 woman-DIM here 3SG.OBJ ART child [name] like DEM
 ‘The girl here: the child Nebiəur was like that.’
- (11) *io ə munə təbəran di tur-u di wə-wai*
 then ART PL spirit 3PL.SUBJ stand-TR 3PL.SUBJ CAUS-show
tə-n pai tə-n dari bia
 to-3SG.POSS PFV to-3SG.POSS thus say
 ‘Then the spirits stood [and] they revealed themselves to her like this.’³⁷
- (12) *di tur-u wə-wai pai tə-n i gire pək id*
 3PL.SUBJ stand-TR CAUS-show PFV to-3SG.POSS 3SG.SUBJ see to 3PL.OBJ
 ‘They stood, revealed themselves to her, [and] she saw them.’

[Sometime after the spirits have revealed themselves to Nebiəur and have left the house, the parents return from their daily activities.]

³⁷ The morphologically transitive form *uru* ‘to stand (something up)’ may be used, it seems, with an apparently intransitive meaning.

- (13) *io uro uro i rawien i mage i ki ur*
 then later later 3SG.SUBJ afternoon 3SG.SUBJ sun 3SG.SUBJ sit down
dari tur-u p̄ai r̄ə t<in>aŋi n̄ə mom
 thus stand-TR beginning ART <NMLZ>cry 3SG.IRR drink
 ‘Then, much later, in the afternoon, when the sun was sitting down like this, [the child] started crying to drink [something].’ [Literally ‘... stood a beginning of the crying for drink.’]
- (14) *t̄aŋi m̄ə i t̄aŋi m̄ə t̄aŋi di t̄ə-i r̄ə*
 cry and 3SG.SUBJ cry and cry 3PL.SUBJ give-TR ART
t̄əu t̄ə-n p̄ə i m̄əiŋe
 water to-3SG.POSS NEG 3SG.SUBJ want
 ‘[She] cried and cried and cried, [so] they [= the parents] gave water to her, [but] she did not want [any].’
- (15) *t̄aŋi k̄əke*
 cry just
 ‘[She] just cried.’
- (16) *t̄aŋi m̄ə i t̄aŋi m̄ə i t̄aŋi m̄ə i t̄aŋi*
 cry and 3SG.SUBJ cry and 3SG.SUBJ cry and 3SG.SUBJ cry
 ‘[She] cried and cried and cried and cried.’
- (17) *di wa-mom-a īə tin̄ə-n i wa-mom-a*
 3PL.SUBJ CAUS-drink-INTR 3SG.OBJ mother-3SG.POSS 3SG.SUBJ CAUS-drink-INTR
īə
 3SG.OBJ
 ‘They implored her to drink; her mother implored her to drink.’
- (18) *i wa-mom-a īə m̄ə r̄ə polo-n n̄ə u p̄ə*
 3SG.SUBJ CAUS-drink-INTR 3SG.OBJ with ART liquid-3SG.POSS of breast NEG
i m̄əiŋe
 3SG.SUBJ want
 ‘She implored her to drink breastmilk, but she did not want [any].’
- (19) *t̄aŋi k̄əke t̄aŋi mun̄ə t̄əb̄əran di ta w̄ə-k̄əin-a*
 cry just cry PL spirit 3PL.SUBJ PRF CAUS-bad-INTR
 ‘[She] just cried [and] cried [because] the spirits had ruined [her].’
- (20) *uro uro uro uro i rawien i m̄ərum*
 later later later later 3SG.SUBJ afternoon 3SG.SUBJ night
 ‘[She] continued [crying] until it was afternoon, it was night.’
- (21) *di dīəu natu-ik Nebīaur i t̄aŋi k̄əke*
 3PL.SUBJ sleep child-DIM [name] 3SG.SUBJ cry just
 ‘They slept, [but] the little child Nebīaur just cried.’

- (22) *təŋi təŋi di diəu*
cry cry 3PL.SUBJ sleep
'Cried [and] cried [while] they slept.'
- (23) *di diəu pai akəni*
3PL.SUBJ sleep PFV here
'They slept here.'
- (24) *id me-rəm Toro munə təbəran-ik me-rəm Toro*
3PL.OBJ there-down [place] PL spirit-DIM there-down [place]
'As for them, they [came] down from Toro, the little spirits [came] down from Toro.'
[Toro is a region of Makada, uphill from Narakoi village.]
- (25) *mə me-nəgi kəni nə təmən io me-nəgəm məliu*
and there-under at of village then there-atop up
'And [they went] down to the village, and then [back] uphill.'
- (26) *di wilə-ur uri uri uri uri uri di lopə iə*
3PL.SUBJ run-down down down down down down 3PL.SUBJ carry 3SG.OBJ
'They ran all the way down [and] they carried her off.'
- (27) *di lopə iə di wiluai me urəm urəm urəm*
3PL.SUBJ carry 3SG.OBJ 3PL.SUBJ go.up there up up up
di kə~kuai me rə e nə leo urəm
3PL.SUBJ RED~climb there ART trunk of ironwood.tree up
'They carried her, they went way up there, [and] they climbed up along the trunk of an ironwood tree.'
- (28) *di aruŋu tər-iə i mom*
3PL.SUBJ order give-3SG.OBJ 3SG.SUBJ drink
'They ordered her to drink.'
- (29) *mom-e rə təu*
drink-TR ART water
'"Drink water!".'
- (30) *lari ərəm məliu rə e nə leo ə polamut*
thus up up ART trunk of ironwood.tree ART pool
'Like this, way up the trunk of an ironwood tree, there was a pool of water.'
- (31) *mom i mom i mom mom mom mom i bia*
drink 3SG.SUBJ drink 3SG.SUBJ drink drink drink drink 3SG.SUBJ say
i ta məur
3SG.SUBJ PRF sated
'[She] drank and drank [and] said that [she] was already full.'
- (32) *i wəriwe rə munə təbəran bia i ta məur*
3SG.SUBJ tell ART PL spirit say 3SG.SUBJ PRF sated
'She told the spirits, said that [she] was already full.'

- (33) *munə təbəran di bia mom*
 PL spirit 3PL.SUBJ say drink
 ‘[But] the spirits said, “Drink!”.’
- (34) *bia u məiŋe rə təu no mom*
 say 2SG.SUBJ want ART water 2SG.IRR drink
 ‘[They] said, “You wanted water, [so] drink!”.’
- (35) *mom i mom i mom ə təu i wilau irop əti*
 drink 3PL.SUBJ drink 3PL.SUBJ drink ART water 3PL.SUBJ run out here
rə bileu-n
 ART nose-3SG.POSS
 ‘[She] drank and drank the water [until] it ran out from her nose.’
- (36) *ti rə ŋie-n ti rə təliŋə-n ə urə*
 here ART mouth-3SG.POSS here ART ear-3SG.POSS ART two
təliŋə-n i mat
 ear-3SG.POSS 3SG.SUBJ die
 ‘From her mouth, from her ear, from her two ears, [and] she died.’
- (37) *i mat io di tur əram məliu iat əram məliu tema*
 3SG.SUBJ die then 3PL.SUBJ stand up up very up up that
e nə leo
 trunk of ironwood.tree
 ‘She died, and then they stood up, way up high on that trunk, the trunk of the ironwood tree.’
- (38) *di or pu Togirərau mə tamə-n*
 3PL.PL shout for [name] yes father-3SG.POSS
 ‘They shouted for Togirarau—yes, her father.’
- (39) *mə Netəkak*
 and [name]
 ‘And Netakak.’
- [The little girl Nebiaur’s father was Togirarau, and her mother was Netakak.]
- (40) *bia Togirəra:::u mə Netəka:k*
 say [name] and [name]
 ‘[They] said, “Togirarau and Netakak!”.’ [The speaker draws out the final vowels of each name.]
- (41) *di or mə di or-i tərəi mutu di waləŋor*
 3PL.SUBJ shout and 3PL.SUBJ shout-TR people all 3PL.SUBJ hear
 ‘They shouted and called to everyone, [and] they heard [it].’
- (42) *bia io io io natu-m i ta mat*
 say hey hey hey child-2SG.POSS 3SG.SUBJ PRF die
 ‘[They] said, “Hey, hey, hey, your child has died!”.’

- (43) *di bəle we*
 3PL.SUBJ throw away
 ‘They threw [the child] down.’
- (44) *i wilau~wilau wilə~wilə wilə~wilə i burəi əri nə təmən*
 3SG.SUBJ RED~run RED~run RED-run 3SG.SUBJ fall here of village
əri Nərakoi
 here [place]
 ‘She went flying, tumbling, stumbling down to the village, here at Narakoi.’
- (45) *bələ rə təmən tapəmər rə bələ-n təu i alir*
 inside ART village break ART belly-3SG.POSS water 3SG.SUBJ flow
i ur
 3SG.SUBJ down
 ‘In the village, her belly broke [and] water flowed down.’
- (46) *i mat*
 3SG.SUBJ die
 ‘She died.’

A3.2 *The pig hunt*

Speaker: Mathias Tini
 Location: Raputput village, Makada
 Date: 2 November 2022
 Duration: 1 minute, 33 seconds
 Item ID: RB8-20221102_04
 DOI: 10.26278/R3E2-C535

The speaker recounts a recent experience hunting a pig.

- (1) *ə buŋ ə iwət ə rə wik i par io wən ura*
 ART day ART four in ART week 3SG.SUBJ finish 1SG.SUBJ go down
rə pə~pəlum
 ART RED~work
 ‘On Thursday last week, I went down to the garden.’ [Roughly ‘... day four in the week that finished’; *wik* ‘week’ is a loan from Tok Pisin.]
- (2) *io wən nə ni-leb awuŋəi mə rə munə pap*
 1SG.SUBJ go of NMLZ-hunt together with ART PL dog
 ‘I went for the purpose of hunting with the dogs.’
- (3) *lo rə rumu əi rə bəroi io wən*
 carry ART spear for ART pig 1SG.SUBJ go
 ‘Carrying a spear for [shooting] pigs, I went.’

- (4) *wən wən wən bəɾəti rə bəroi i en-i rə tapiok əra rə*
 go go go meet ART pig 3SG.SUBJ eat-TR ART cassava in ART
pəlum
 work
 ‘[I] went until I met the pig that was eating cassava in the garden.’³⁸ [*tapiok* ‘cassava’ is a loan from Tok Pisin.]
- (5) *io munə pap di bəti pai rə bəroi di bəti*
 then PL dog 3PL.SUBJ chase PFV ART pig 3PL.SUBJ chase
pai iə mi wən wən wən wən
 PFV 3SG.OBJ 1PL.EXCL.SUBJ go go go go
 ‘Then the dogs chased the pig, they chased it [and] we went and went.’
- (6) *ura rə pui ra ləkor talil muləi~muləi wən wən urəm ə rə*
 down ART woods in forest return RED~again go go up in ART
pəret ə rə doŋ~doŋ
 ditch in ART RED~hide
 ‘Down in the woods, in the forest, [it] came back again and went, went up into a ditch, into a hiding place.’
- (7) *pə kənə tə we*
 NEG out any away
 ‘But there was no way out.’
- (8) *pə kənə tə ŋai muləi pu nə mur-iə io*
 NEG out any path again for 3SG.IRR follow-3SG.OBJ 1SG.SUBJ
ubu we mə rə rumu
 shoot away with ART spear
 ‘[When] there was no longer any path for [the pig] to follow, I shot away with the spear.’
- (9) *ubu we mə rə rumu i wən wən i wən*
 shoot away with ART spear 3SG.SUBJ go go 3SG.SUBJ go
i wən wilo ruku tarə pəret ə rə doŋ~doŋ
 3SG.SUBJ go run enter another ditch in ART RED~hide
 ‘[When] I shot away with the spear, it went and went and ran into another ditch, a hiding place.’
- (10) *i ruku tarə rə kurapol io kə~kuai tarə*
 3SG.SUBJ enter another ART swampy.place 1SG.SUBJ RED~climb another
rə gənə okor rə dəwai
 ART just.now root of tree
 ‘[When] it went into another swampy place, I climbed another [area]—just then, [onto] the roots of the tree.’

³⁸ The verb *pəlum* ‘to work (in a garden)’ is typically nominalized by means of partial reduplication—thus, *pə~pəlum* ‘garden’, as in the first sentence in this text. Here, however, the unreduplicated form is apparently being used with a nominal sense.

- (11) *məliu ə rə paret*
up in ART ditch
'Up in the ditch.'
- (12) *io bur-iə mə rə wiə tog-a rə uru rə*
1SG.SUBJ break-3SG.OBJ with ART knife cut-INTR ART bone ART
toru-n mə rə wiə
back-3SG.POSS with ART knife
'I broke it with a knife, cut at the backbone with a knife.'
- (13) *io i wilau pai muləi uri*
then 3SG.SUBJ run PFV again down
'Then it ran down again.'
- (14) *i wərub mə rə munə pap*
3SG.SUBJ fight with ART PL dog
'It fought with the dogs.'
- (15) *uri ukai muləi i muləi~muləi nə muru ma rə pəkən*
down hither again 3SG.SUBJ RED~again 3SG.IRR back where ART piece
'It came down again, returning back to the place where [I was cutting it].'
- (16) *io tog-a muləi wə-uruə nə pəkən*
1SG.SUBJ cut-INTR again CAUS-two of piece
'I cut again a second time at the [same] place.'
- (17) *wilau muləi uri wə-utul ə pəkən io doko rə bəroi*
run again down CAUS-three ART piece 1SG.SUBJ kill ART pig
i mat
3SG.SUBJ die
'[It] ran down again [and] a third time [at] the [same] place I killed the pig.'
- (18) *io togo kutu pai rə toru-n*
1SG.SUBJ cut break PFV ART back-3SG.POSS
'I chopped up its back.'
- (19) *diəu tar*
sleep on
'[It] lay down.'
- (20) *natu-g ə wawin i wən tədəu iau io*
child-1SG.POSS ART woman 3SG.POSS go approach 1SG.OBJ 1SG.SUBJ
aruŋu we i wilau pu rə munə bul
order away 3SG.SUBJ run for ART PL child
'My daughter approached me [and] I sent her running for the children.'
- (21) *uri nə təmən*
down of village
'[She] went down to the village.'

- (22) *bərə-turə-n di wən ura di ranji pai rə*
 PL-brother-3SG.POSS 3PL.SUBJ go down 3PL.SUBJ singe PFV ART
bəroi di pok-a
 pig 3PL.SUBJ slice-INTR
 ‘The brothers went down; they singed the pig, [and] they butchered it.’³⁹
- (23) *poko mutu we pai rə bəroi di tibe~tibe mutu we*
 slice all away PFV ART pig 3PL.SUBJ RED~share all away
pai iə tə-mam mi wən arikai
 PFV 3SG.OBJ to-1PL.EXCL.OBJ 1PL.EXCL go come
 ‘Having butchered the whole pig, they shared everything out to us [and] we came [to the village].’
- (24) *arikai uri nə təmən di pə~pə*
 come down of village 3PL.SUBJ RED~bake
 ‘[We] came down to the village [and] they cooked it in an earth oven.’
- (25) *pə~pə io mi en-i bəroi ə rə buŋ ə iwət*
 RED-bake then 1PL.EXCL eat-TR pig in ART day ART four
tuk ə pəraide
 until ART Friday
 ‘After [they] cooked it in an earth oven, we ate pork from Thursday until Friday.’
 [*pəraide* ‘Friday’ is a loan from Tok Pisin *Fraide*.]
- (26) *iə kək ma*
 3SG.OBJ just DEM
 ‘That is all.’

³⁹ The kinship term used here, *bəraturən* ‘male ego’s brothers [PL]’, is perhaps unexpected, since the speaker is referring to a female sibling who is summoning a group of brothers; one might instead expect the term *bərətain* ‘different-sex siblings [PL]’.

Appendix 4. Schnee's (1901) documentation of Makada

As far as I am aware, the only previous written documentation of the Makada dialect is by Schnee (1901). His data and description of Makada are reproduced in this appendix [with my translations from German into English given in brackets].

A4.1 *Excerpt from Schnee (1901, p. 234) [translated into English]*

In der Neu-Lauenburg-Gruppe werden 3 Dialekte gesprochen. Der eine umfasst die Insel Makada. Dieser Dialekt steht dem in Nondup auf der Gazellehalbinsel gesprochenen Dialekt sehr nahe und ist vielleicht mit ihm identisch. Der zweite Dialekt wird auf den Inseln Utuan, Mioko, Kerawara, Kabakon und Mualim, sowie in den beiden südlichsten Landschaften von Neu-Lauenburg (Hauptinsel), Kabotirai und Inolo gesprochen. Dieser Dialekt steht dem in Kabanga auf der Gazellehalbinsel gesprochenen Dialekt nahe. Der dritte Dialekt endlich wird in den übrigen Landschaften der Hauptinsel gesprochen.

[In the Neu-Lauenburg Group [= Duke of York Group], 3 dialects are spoken. One comprises the island of Makada. This dialect is very close and perhaps identical to the dialect spoken in Nondup [= Nodup] on the Gazelle Peninsula. The second dialect is spoken on the islands of Utuan, Mioko, Kerawara, Kabakon, and Mualim, as well as in the two southernmost regions of Neu-Lauenburg (main island) [= Duke of York Island], Kabotirai [= Kabiatarai], and Inolo. This dialect is close to the dialect spoken in Kabanga on the Gazelle Peninsula [i.e., Bilur]. Finally, the third dialect is spoken in the other regions of the main island.]

A4.2 *Excerpt from Schnee (1901, p. 235) [translated into English]*

Bei Erforschung aller einzelnen Dialekte wird sich vielleicht noch im Einzelnen der Gang der Besiedelung feststellen lassen können. Nach dem bisher vorliegenden Material ist zu vermuthen, dass die Gegend bei Massava direct von Neu-Mecklenburg aus besiedelt ist. Der dortige Dialekt hat insbesondere den in den Neu-Mecklenburg-Dialekten vorhandenen Consonanten *s* beibehalten, welcher in den übrigen Dialekten der Gazellehalbinsel fehlt. Die Gegend bei Nondup ist wahrscheinlich über Makada (Neu-Lauenburg-Gruppe), die Ostküste der Gazellehalbinsel über die kleineren Inseln der Neu-Lauenburg-Gruppe besiedelt worden.

[By researching all the individual dialects, it may be possible to determine the course of settlement in detail. According to the material that is so far available, it can be assumed that the area near Massava [= Masawa] was populated directly from Neu-Mecklenburg [= New Ireland]. The dialect there [i.e., Vinitiri/Minigir] has retained the consonant *s* present in the Neu-Mecklenburg dialects, which is missing in the other dialects of the Gazelle Peninsula. The area near Nondup [= Nodup] was probably settled via Makada (Neu-Lauenburg Group [= Duke of York Group]), [and] the east coast of the Gazelle Peninsula [was probably settled] via the smaller islands of the Neu-Lauenburg Group.]

A4.3 Excerpt from *Schnee* (1901, pp. 241–242) [translated into English]

Brief des Häuptlings Tokulume (Inok) in Makada (Neu-Lauenburg).
[Letter from chief Tokulume (Inok) in Makada (Neu-Lauenburg).]

Tadapa Dokota Timi.

An Doctor Schnee.

[To Doctor Schnee.]

Ian takapa go raika buku ma iau warawe u
Ich nehme diesen kleinen Brief und ich benachrichtige dich
[I take this small letter and I notify you]

a tena warakurai gala i ki Kokopo.
Richter grosser er wohnt (in) Herbertshöhe.
[judge big he lives (in) Herbertshöhe.]

Tikai ra maqiti i na we u tana ure tikai ra Bulu awe
Eine Sache ich werde sagen dir davon über einen Knaben wir
[One thing I will say to you of it about one boy we

qa paiti kauqu pal ati Makadan ma tikai ra bulu iqa tatike: ba iau
bauten mein Haus hier (in) Makada und ein Knabe er sprach: : ich
[built my house here (in) Makada and one boy he spoke: : I]

pa ina marawuti awati ure nama ra pala iau ke iau
nicht ich werde unterstützen euch bei jenem Haus ich allein ich
[not I will support you in that house I alone I]

kureau pata lului i kureau i nama
bestimme über mich kein Häuptling er bestimmt über mich es ist jenes
[decide about myself no chief he decides about me it is that]

kana tinata ra bulu nama a dowotina iau Inoki u qa tulu torian
seine Rede der Knabe jener in Wahrheit ich Inok du bevollmächtigtest mich
[his speech the boy that in truth I Inok you authorized me]

ati Makadan upi na warakurai ta go ra quna ati ma go ra bulu
hier (in) Makada dass ich richte in diesem Dorf hier und dieser Knabe
[here (in) Makada that I judge (v) in this village here and this boy]

i piamiau ati.
er ist ungehorsam mir hier.
[he is disobedient to me here.]

I para. I gala kakiti kauqu waramari tadapu Dokota Timi
Es ist alles. Es ist gross sehr meine Liebe zu dir Doktor Schnee
[It is all. it is big very my love to you Doctor Schnee]

a tena warakurai gala i ki Kokopo ian Inoki Tokulume.
 Richter grosser er wohnt (in) Herbertshöhe ich Inok Tokulume.
 [judge big he lives (in) Herbertshöhe I Inok Tokulume.]

a talaimu tunu. Ioko.
 Dein Freund wirklich. Leb wohl.
 [your friend truly Farewell.]

[Note: Although presumably written in Makada by a resident of that island, the dialect used in this letter does not particularly resemble the Makada dialect. The plural pronominal forms used are *awe* ‘1PL.EXCL’ and *awati* ‘2PL’, which are not the distinctive conservative Makada forms (cf. §5.1; §7.5; Appendix 4: §A4.4). I suspect that the letter to Dr. Schnee—if indeed written by a speaker of the Makada dialect—was written in a “standard” form of Kuanua. Schnee (1904, pp. 102–103) presents a translation of this letter into German. It is reproduced below, followed by my translation of the German into English.]

Tadap Dokota Timi
 An Dr. Schnee

Ich schreibe diesen kleinen Brief an dich, grosser Richter, der in Kokopo (Herbertshöhe) wohnt. Ich will dir eine Sache über einen Mann hier berichten. Wir bauten hier in Makada ein Haus für mich. Und der Mann sagte: »Ich werde euch bei dem Hausbau nicht helfen. Ich habe allein über mich zu bestimmen, kein Häuptling hat mir etwas zu sagen.« Das waren seine Worte. Tatsächlich hast du mich, Inok, bevollmächtigt, dass ich in diesem Dorf hier richte und dieser Mann gehorcht mir nicht.

Das ist alles. Meine Liebe zu dir ist sehr gross. Dokota Timi, grosser Richter, der du in Kokopo wohnst.

Ich Inok Tokulume
 Dein Freund wirklich. Joko
 (Lebwohl).

[Tadap Dokota Timi
 To Dr. Schnee

I am writing this little letter to you, great judge, who lives in Kokopo (Herbertshöhe). I want to report one thing to you about a man here. We were building a house for me here in Makada. And the man said: “I will not help you build the house. I alone decide about myself, no chief has anything to say to me.” Those were his words. In fact, you have authorized me, Inok, to judge here in this village, and this man does not obey me.

That is all. My love for you is very great. Dokota Timi, great judge, you who live in Kokopo.

I Inok Tokulume
 Your friend truly. Joko
 (Farewell).]

A4.4 Excerpt from *Schnee* (1901, p. 253) [translated into English]

Dialekt von Makadā (Neu-Lauenburg).

[Dialect from Makadā (Neu-Lauenburg).]

ich gehe	<i>na vana</i>		[‘I [will] go’]
du gehst	<i>u vana</i>		[‘you [SG] go’]
er geht	<i>i vana</i>		[‘he goes’]
wir zwei gehen	<i>taravana</i>	(du und ich)	[‘we two [INCL] go’]
wir zwei gehen	<i>miravana</i>	(ich und er)	[‘we two [EXCL] go’]
ihr zwei geht	<i>muravana</i>		[‘you two go’]
wir drei gehen	<i>talavana</i>	(ich und ihr)	[‘we three [INCL] go’]
wir drei gehen	<i>mitalavana</i>	(ich und sie)	[‘we three [EXCL] go’]
ihr drei geht	<i>mutalavana</i>		[‘you three go’]
wir gehen	<i>tanavana</i>	(ich und ihr)	[‘we [INCL] go’]
wir gehen	<i>minavana</i>	(ich und sie)	[‘we [EXCL] go’]
ihr geht	<i>munavana</i>		[‘you [PL] go’]
sie gehen	<i>diavana</i>		[‘they go’]
mein Kleid	<i>kariqu mal</i>		[‘my dress’]
dein Kleid	<i>koum mal</i>		[‘your [SG] dress’]
sein Kleid	<i>kana mal</i>		[‘his dress’]
unser zweier Kleid	<i>katarumal</i>		[‘our two dress’]
euer zweier Kleid	<i>kamurumal</i>		[‘your two dress’]
unser dreier	<i>katalu</i>	(mein und euer)	[‘our three [INCL] dress’]
unser dreier	<i>karimamital</i>	(mein und ihr)	[‘our three [EXCL] dress’]
unser	<i>karitade</i>	(mein und euer)	[‘our [INCL]’]
unser	<i>karimani</i>	(mein und ihr)	[‘our [EXCL]’]
euer	<i>karimui</i>		[‘your [PL]’]
ihr	<i>karidi</i>		[‘their’]

Appendix 5. Comparison of classifications of dialects of Kuanua

Table A5 compares four classifications of Kuanua dialects: those in Salzner (1961, p. 26), Meyer (1961, p. viii), Mosel (1984, p. 9), and Grimes et al. (1995, p. 264).

Table A5. Dialects of Kuanua, according to Salzner (1961, p. 26), Meyer (1961, p. viii), Mosel (1984, p. 9), and Grimes et al. (1995, p. 264)

Qunantuna (Salzner, 1961, p. 26)	Tuna (Meyer, 1961, p. viii)	Tolai (Mosel, 1984, p. 9)	Tolai (Grimes et al., 1995, p. 264)
Kokopo = Vaqtuna	Kokopo-Dialekt	Kokopo dialects	Vanumami [?] Raluana Kokopo [?] Kininanggunan [?] Vunadidir [?]
	<ul style="list-style-type: none"> • Paparatava • Davaun (Raluana) • Tavui-Busch • Vunapope • Takabur • Qunaba 	<ul style="list-style-type: none"> • Paparatava • Raluana 	
Rabaul-Dialekte = Blanchebucht-Dialekte	Rabaul-Dialekt (Nordküste-Dialekt)	Northcoast dialects	Kabakada [?] Rakunei Matupit Rapitok [?] Rebar [?]
<ul style="list-style-type: none"> • Vlavolo • Vatuna • Vuatuna u.a. [inter alia]	<ul style="list-style-type: none"> • Rakunai • Matupit • Malakun • Ratavul (Nordküste) • Ravaira • Tavuilu 	<ul style="list-style-type: none"> • Volavolo • Rakunai 	
Randdialekte = Ruatuna	Randdialekt (Kival-Dialekt)	marginal dialects	Nodup Watom Livuan Masawa
<ul style="list-style-type: none"> • Nodup <ul style="list-style-type: none"> • Makadao • Vuatom • Masawa <ul style="list-style-type: none"> • Urar • Kabair • Masawa <ul style="list-style-type: none"> • Melamela • Muku 	<ul style="list-style-type: none"> • Nodup • Vuatom • Tavui-Kap • Livuan • Vurar • Kabair • Bainig-Ufer (Vunamarita) 	<ul style="list-style-type: none"> • Nodup • Vuatom • Kabair ? Vunamarita and Masava ? 	

Salzner (1961), Meyer (1961), and Mosel (1984) all divide Kuanua into three major dialects with various subdialects, whereas Grimes et al. (1995) present a list of 14 dialect names without any hierarchical structure. I have tried to align the dialects in the different classifications according to their closest geographical equivalents, but I was uncertain about several (and I indicate this with question marks).

I assume that Vanumami is the same as Vunamami. Kininanggunan perhaps refers to the Kinigunan Plantation; concerning “Kininaqunan”, Lanyon-Orgill (1961, p. 25) writes: “on the east side of the peninsula, behind Kokopo”. I am not sure whether Ravaira and Rebar refer to the same place; concerning “Rebar”, Lanyon-Orgill (1961, p. 25) writes: “to the south of Blanche Bay”. Qunaba may refer to Gunanba. Makadao refers to Makada.

Salzner (1961, p. 26) includes two subdialects of Masawa (proper), which is a subdialect of a more general Masawa, itself a subdialect of Ruatuna (the name given to the marginal dialects of Qunantuna [i.e., Kuanua]). The two subdialects of Masawa (proper) are Melamela and Muku. Here, Salzner does not seem to be referring to the Willaumez linkage languages Meramera and Nakanai (also known as Melamela and Muku, respectively): Salzner (1961, p. 27) lists both Melamela and Muku as languages of his West-Neupommern-Gruppe [West-New Pomeranian Group].

Mosel (1984, p. 9) explicitly states that Birar (i.e., Bilur) is not a dialect of Tolai and is indeed more closely related to Ramoaina; she also notes that Meyer includes Vunamarita and Masava as dialects of Tolai, but she does not herself classify them one way or the other.

Salzner (1961) and Meyer (1961) thus both classify Vinitiri and Kuanua as the same language. Mosel (1984) remains agnostic about the classification of Vunamarita and Masava, but she includes Kabair, sometimes considered to be a dialect of Vinitiri, as a dialect of Kuanua. Similarly, Grimes et al. (1995, p. 213) list Minigir (i.e., Vinitiri) as a separate language, but include Livuan and Masawa as dialects of Kuanua, despite these two regions often being considered part of the Vinitiri language area. Salzner (1961) classifies Ramoaina, Bilur, and Kandas as a single language, which he labels “Malu = Ramoaina”. He divides Malu = Ramoaina into four subdialects: Nord-Malu (i.e., North Malu; the northern part of the Duke of York Islands), Süd-Malu (i.e., South Malu; the southern part of the Duke of York Islands), Biar (i.e., Bilur), and Kia (i.e., Kandas); he indicates Kerewara-Mioko as a subdialect of Süd-Malu.

Grimes et al.’s (1995) listing of Kuanua dialects is similar to that given in Wurm & Hattori (1981, map 13): Raluana, Kokopo, Kabakada, Kabanga, Matupit, Nodup, Kininanggunan, Rakunei, Rebar, Watom, and Masawa. The two main differences are as follows: (i) Wurm & Hattori (1981) include Kabanga, which Grimes et al. (1995) do not include; and (ii) Grimes et al. (1995) include Livuan, Rapitok, Vanumami, and Vunadidir, which Wurm & Hattori (1981) do not include. *Glottolog 5.0* (Hammarström et al., 2024) and *Ethnologue* (27th edition; Eberhard, Simons & Fennig, 2024) both use the same list of Kuanua dialects as is found in Grimes et al. (1995).

Franklin, Kerr & Beaumont (1974, p. 133) list the following dialects of Tolai: Rabaul, Vunadidir, Rapitok, Raluana, Vunamami, Livuan, and Matopi. The last of these they also call Matupit, identifying it as a “central dialect”.

Finally, Bley (1897, pp. 85–86) divides Neu-Pommersch [New Pomeranian; i.e., Kuanua] into three major dialects: Blanka-Bucht-Dialekt [Blanche Bay dialect], Nordküsten-Dialekt [North Coast dialect], and Baining-Küsten-Dialekt (S-Dialekt) [Baining Coast dialect (*s* dialect)]. These are somewhat different from the tripartite divisions presented in Table A5, most notably in two ways: (i) his Baining Coast dialect corresponds to Vinitiri; and (ii) his Blanche Bay dialect includes Bilur.

Abbreviations and symbols

1	1 st person	HAB	habitual	PRF	perfect
2	2 nd person	INAL	inalienable	RED	reduplication
3	3 rd person	INCL	inclusive	REM	remote past
AFF	affective	INDEP	independent	SG	singular
AL	alienable	INTR	intransitive	SSM	Sea Side Mero
ART	article	IRR	irrealis	SUBJ	subject
C	consonant	N	noun	TAM	tense-aspect-mood
CAUS	causative	NEG	negation	TR	transitive
DEM	demonstrative	NMLZ	nominalization	TRI	trial
DIM	diminutive	OBJ	object	V	verb
DU	dual	PFV	perfective	V	vowel
EFF	effective	PL	plural	VOC	vocative
EXCL	exclusive	POC	Proto-Oceanic	*	reconstructed
FRUS	frustrative	POSS	possessive	†	unattested

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