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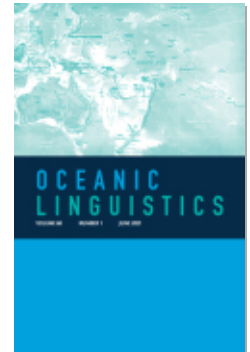
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Avaipa, a Language of Central Bougainville

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This work presents initial data from Avaipa, a previously undocumented language of central Bougainville. In the sparse literature that exists on this variety, it is anecdotally described as a mixed language. It will be demonstrated that the perception of language mixing is due to lexical borrowing, both from Papuan and from Oceanic sources, though a large-scale lexical comparison suggests a significant connection to the South Bougainville group. A tentative classification of Avaipa as a Papuan language is offered, where the language can be shown to be most closely related to the South Bougainville group, but because of the presence of certain lexical and structural features, the possibility is raised whereby Avaipa serves as a bridge to the North Bougainville group.

Keywords: Bougainville; Papuan; Oceanic; Mixed Language

1. INTRODUCTION.¹ This article introduces a previously undocumented language: Avaipa. Avaipa is spoken in the Paru Paru valley, northwest of the town of Arawa, in the Autonomous Region of Bougainville, Papua New Guinea. The literature on Avaipa is nearly nonexistent. There is no mention of Avaipa in the most comprehensive overviews of Bougainville languages, including in Allen and Hurd (1965), Wurm (1975), Tryon (2005), and Stebbins et al. (2016). The only references to the Avaipa language are from Regan’s (2005:428) work on identity in Bougainville, where he mentions that “west of the Simeku is the isolated Paru Paru Valley, occupied by people known as the Avaipa,” a single mention by Tanis (2005) in the same volume, in the context of outlining the peoples and regions near the Java River, and a sole mention in Hamnett’s (1977) thesis on population mobility in the region. To our understanding, the only existence of published Avaipa words is a set of bird names in the appendix to Hadden (2004) (where the variety is referred to as *Awaipa*).

1. We gratefully acknowledge Thomas Aupa, who worked with us as a consultant on the Avaipa language. We also acknowledge the support of the Bougainville Heritage Foundation, Allan Gioni, Paul Gioni, Nicholas Dukoro, and Chris Singkona. This research was made possible by a Faculty Research Development Fund, provided by The University of Auckland. The authors’ names appear in alphabetical order. All errors are our own.

This article first raises the possibility that Avaipa is a contact language, spoken on the border of four other language groups. It further aims to present Avaipa language structures collected from fieldwork in order to enrich the current documentation on the language. In doing so, it attempts to draw a genetic relationship to the South Bougainville (S.B.) group, establishing Avaipa as a Papuan language. Despite this, it will also be shown that there are certain characteristics of the language that are unusual and found in the Oceanic and North Bougainville languages of the region, but inconsistently in the S.B. languages. Having a strong lexical similarity to S.B. languages, but innovative pronominal forms (supported by data from Avaipa's sister language, Simeku), is an indication of language contact in the region, which is a current theme in the research on Bougainville languages. This article thus highlights the current problems for setting Avaipa within the typology of Bougainville languages and discusses avenues for future research aimed at untangling aspects of language contact in central Bougainville.

2. BACKGROUND. The geographical area that forms the background for this research is central Bougainville. Bougainville is home to no fewer than twenty-four languages in total (Tryon 2005), including both Oceanic languages (predominantly in the northern regions of the island) and Papuan languages. The Papuan languages constituting the North Bougainville group include Konua, Keriaka, Rotokas, and Eivo; those forming the S.B. group include Naasioi,² Nagovisi, Motuna, and Buin. The northern and southern languages form distinct families and are not readily relatable to each other (Ross 2005; Stebbins et al. 2016). The Oceanic languages are typically scattered around the coast, with Banoni and Torau being the relevant languages for the purposes of this study. The geographic placement of these languages is indicated in the map of Bougainville in figure 1.

As noted above, Avaipa is spoken in the vicinity of the Paru Paru Valley.³ The geographic location of this valley places Avaipa directly on the boundaries of several different language and cultural groups, which is relevant to previous descriptions of the language. The only substantial references to Avaipa in the literature⁴ come from Regan's (2005) work on identity in Bougainville.⁵

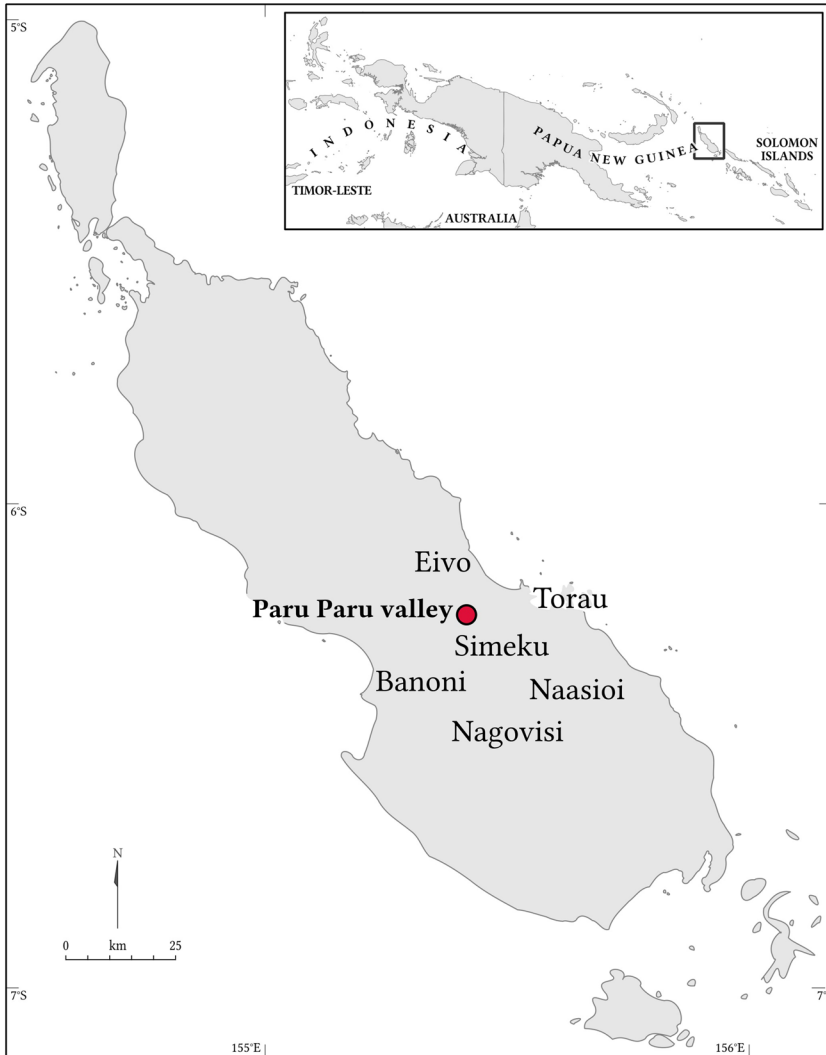
2. The language name has two different spellings that occur in the literature: Nasioi and Naasioi. We have opted for Naasioi for two reasons. The first is that, as pointed out by Hurd and Hurd (1970), stress is on the first vowel of the name, and since stress falls on the second syllable of words, this implies a long vowel (where each vowel equals a syllable). The second reason is that after much discussion and consultation, this appears to be the community preference.

3. According to the 2011 Papua New Guinea National Population and Housing Census (Ward Population Profile), the Avaipa Local Level of Government (LLG) includes 722 households and 3,533 individuals. See www.nso.gov.pg.

4. There are other mentions in the local media, mostly to the Avaipa/Awaipa region or LLG. Temple (2016:283) claims to have collected words and phrases in numerous languages of the region and includes Avaipa among them, though no data are presented in that work.

5. Tanis (2005) associates the Avaipa people as being from the Kieta district; they apparently border the Veripe (Java River) region. It stands to reason that if there were trade up and down the river, then there was a high amount of contact between different groups, a point which will be explored shortly.

FIGURE 1. APPROXIMATE LOCATIONS OF PARU PARU VALLEY AND ADJACENT LANGUAGE AREAS.



Describing the language of the Avaipa people, Regan (2005) notes that “on the boundary of four languages, they speak a mixture of Simeku/Nasioi, Nagovisi, Eivo, and Banoni. They can understand those four languages, but their complex mixture of language elements is not readily understood by the speakers of those languages.” At first glance, this would suggest that Avaipa is a mixed language (or, on certain readings of this statement, a pidgin or creole). What

is remarkable, however, is that if this is the case, Avaipa appears to have at least four source languages from three distinct language families: Oceanic, North Bougainville, and S.B. On the contrary, Hamnett (1977:34) makes mention that his informants considered Avaipa to be a variety of the Simeku language (along with Simeku [proper] and Kotuna).⁶ Allen and Hurd (1965) classify Simeku as a “sub-language” of Naasioi, which would imply that there is potentially a dialect chain that extends northeastward within the Central District. Our lexical comparisons (to be presented in section 3) indicate that there is perhaps a tighter relationship between Avaipa and Simeku than any other languages in the region, and that these likely constitute the extreme endpoints of a larger S.B. continuum.

Recent work indicates that there is considerable language contact in the Bougainville region, with structural features from the Papuan languages appearing in the Oceanic languages (Evans and Palmer 2011; Smith 2016) and with lexical items from Oceanic languages appearing in Papuan languages (Stebbins et al. 2016). Thus, it stands to reason that Regan’s assessment, however cursory, is accurate, and that Avaipa constitutes in one extreme case a mixed language, and in the more conservative case, the product of heavy lexical or structural borrowing through contact. Hamnett (1977, 1985) notes that there is a great deal of population mixing in the convergence zone that includes the Paru Paru valley, and that there are several mixed Eivo/Simeku villages. Allen and Hurd (1965) also make mention of several border villages in the region that have speakers of more than one language. Thus, the opportunities for language contact are present, which would be a natural consequence of cultural contact in the convergence zone.

While the Oceanic, North Bougainville, and S.B. families are normally thought of as unrelated, Müller (1954) makes the somewhat unusual claim that the languages of Bougainville are broken up into three distinct sets: the Papuan languages in the south, the Oceanic languages in the north (his “Melanesian”), and the central languages, which have mixed properties (he terms these the “Papu-Melanesian Mixed” languages). Müller asserts that the central languages exhibit a set of properties that are drawn from both the Papuan languages and the Oceanic languages of the region. His set of shared properties includes: (i) no marking of nominals for number (like the Oceanic languages), (ii) a constituent order of subject-object-verb (like the Papuan languages) and verbal suffix morphology involving subject person (marked separately by number and gender for third person), and (iii) an inclusive versus exclusive pronominal distinction (like the Oceanic languages). While Müller’s work is arguably dated and relies on typological features to determine language affiliation, it remains one of the clearest expositions on language contact and relatedness in central Bougainville. Thus, Müller’s claim sets the context for the discussion of language contact in the region and will be revisited in section 6.

6. This mention of Avaipa is the only one in Hamnett’s thesis.

3. INITIAL COMPARISONS OF LEXICAL SETS. The first attempt at situating Avaipa in terms of genetic affiliation is to compare lexical sets. The only published data for Avaipa are a (not insignificant) set of avian species names collected by Hadden (2004). Since Hadden's collection of species names also includes lists from some of the language groups near the Avaipa-speaking area, these can be cross-referenced in order to determine whether there are any lexical relationships between Avaipa, the S.B. languages, the North Bougainville languages, or the Oceanic languages. The results from these comparisons are presented in appendix I and indicate that there is a large degree of overlap in vocabulary across Avaipa, Naasioi, Banoni, and Eivo, with Avaipa sharing around a third of its overlapping vocabulary with each of the other languages.

According to Comrie (2000), one method of disentangling genetic relationships from language contact effects (i.e., large-scale lexical borrowing) is to test whether the appearance of cognates is restricted to semantic fields. In this particular case, it might be that the large overlap in apparent lexical items is restricted to the field of birds. Relevant is the fact that it can be demonstrated that lexical items for marine life show a similar trend, with large numbers of borrowings from the Oceanic languages in the Papuan languages. Thus, a large list of lexical items was collected from Avaipa, then compared with a list collected from Simeku (fieldnotes), Naasioi (fieldnotes), Nagovisi (Decker 1981; Evans 2009; [The Rosetta Project digital archive 2010b](#) [referred to as 'Sibe']), Eivo ([The Rosetta Project digital archive 2010a](#) [referred to as 'Askopan']), Rotokas (Lincoln 1976a; Firchow and Firchow 2008), and Banoni (Lincoln 1976a,b). This compiled lexical comparison appears in appendix II.

The Avaipa data presented here were collected in the field⁷ at the village of Boira, in central Bougainville (though the speaker is from the village of Atamo, a central point in the Paru Paru Valley). Boira constitutes the extreme edge of the Avaipa-speaking territory. As part of this fieldwork, lexical sets were collected. The basis for these sets is the Swadesh list adapted for Melanesian languages by Ross Clark. These words are grouped into semantic sets, with a high probability of occurrence in any given Melanesian language. Words were collected from this list, along with several directly elicited syntactic structures and a volunteered narrative. There are 158 lexical items collected from Avaipa (out of a total of 492 items on the Melanesian list). This includes forms which may appear as two synonyms for a single item on the Melanesian list, and does not include repetitions (where two repeat occurrences of a single lexical item occur for slightly different items on the list). There are forty-two semantic sets on the master list, including body parts, kinship relations, types of animals and plants, food, dwellings, etc., though not all of the categories have Avaipa exemplars.

Despite the lexical mixing that is characteristic of the bird species names, there is a strong affinity with the S.B. languages (only) in the Melanesian list. There are thirty-one forms with no identifiable cognates in any other language;

7. The Naasioi and Simeku data were also collected by the authors during the same field trip to central Bougainville.

that is, forms which are unique to Avaipa. There are 127 forms which have a cognate in one of the S.B. languages. Thirteen forms were cognate only with forms in Simeku, indicating that these two languages may be more tightly related than the other two S.B. languages.⁸

The sound correspondences for all of the Avaipa phonemes, in nearly all positions, are abundant throughout the data, though a complete presentation of all sound correspondences is likely impossible due to the time depth of the divergence of these languages. Therefore, we have presented here only those correspondences which illustrate what is presumably a historical change (as these are fairly systematic through the dataset) and which explain the majority of variants found in the S.B. datasets. Reference will be made largely to Avaipa (A), Naasioi (N), and Simeku (S). The noteworthy sound correspondences are the following:

- Preconsonantal and final nasals in Naasioi are largely absent in Avaipa (apart from those that have a corresponding form in Nagovisi or Simeku). Examples include N. *tampara* ‘good’, A. *tapara*; N. *meneŋ* ‘tongue’, A. *mene*.⁹ Syllabic word-initial nasals are also not present in Avaipa: N. *ntoŋ* ‘water’, A. *ton* (cf. S. *ton* for the retention of the final nasal). In other cases, they are replaced with a vowel: N. *nta?* ‘fire’, A. *ita*.
- Some instances of word-final [i] in Naasioi are absent in Avaipa: *apes* ‘chin’, N. *apesi* ‘chin’. This also occurs in some word-internal contexts, yielding consonant clusters in Avaipa that are not tolerated in Naasioi: N. *mosika* ‘dog’, A. *moska*. What might be viewed as historical loss of the nasal in Avaipa preceded a probable loss of final [i], evidenced by the following forms: N. *paŋkaiŋ* ‘big’ > A. *pakaa* and N. *doŋkani* ‘man’ > A. *doka ana*.
- Setting aside fluctuations in vowel length, there are several sporadic (and at present unmotivated) vowel correspondences: N. *paβa* ‘house’, A. *poba*; N. *bana* ‘stick’, A. *buna*; N. *aβu* ‘give’, A. *abe*.

In addition, there are the following comparisons with respect to morphological endings:

- There are cases of what appear to be derivational or inflectional affixes showing up with some consistency in Avaipa. The ending *-ai* appears to

8. According to Stebbins et al. (2016), four verbs that are suppletive (largely around a first versus second/third person distinction) are shared among the S.B. languages (*to be*, *exist*; *to go*; *to come*; *to die*). While first and second person forms were not elicited for these verbs in Avaipa, nor was the verb for ‘to die’, the 3SG forms for the other verbs are cognate with those in the other S.B. languages. This is additional evidence that Avaipa is genetically related to this group. Thanks to an anonymous reviewer for pointing this out to us.

9. That this is a case of nasal loss in Avaipa, and not nasal insertion in Naasioi, is evidenced by the fact that there is not a consistent condition on the presence of final nasals in the latter; cf. forms with final vowels such as *sina* ‘seed’ or *boru* ‘snake’.

be a verbal suffix, occasionally with a linking consonant or vowel: N. *oo* ‘see’, A. *ooiai*, and *-na* appears to be a derivational suffix: N. *kakaara* ‘white, white man’, A. *kakaarana*.¹⁰

- Avaipa has potential dropping of what is perceived to be a suffix in some of the numerals (N. *benaumo* ‘three’, A. *been*; N. *karenaumo* ‘four’, A. *karen*).
- There are other sporadic cases which appear to be morphological endings: N. *kua* ‘run’, A. *kuapeiai*.

There were only six forms with a potential cognate (i.e., anything beyond a mere resemblance) in any of the North Bougainville or Oceanic languages (represented by Proto-Oceanic [POC]). These include:

- A. *paapa* ‘uncle’, Rotokas *paapaato* (also shared with other S.B. languages)
- A. *baaro* ‘clothes’, Rotokas *baroa* (also shared with other S.B. languages)
- A. *boru* ‘snake’, Banoni *koru* (also shared with other S.B. languages)
- A. *kamoi* ‘cloud’, Banoni *kamo* (sourced from *qaRoq [Ross 2007:143])
- A. *bisio* ‘star’, Eivo *bisinako*, Rotokas *bisiuriko* (shared with Simeku)
- A. *pakaa* ‘big’, Banoni *baʔana* (cf. Naasioi *paŋkaiŋ*; contrast with POC *lapuat)

While the relationship of Avaipa *boru* ‘snake’ to *koru* in Banoni is tenuous, as it requires an otherwise unmotivated sound change, the rest are potential cognates or borrowings. The last form is noteworthy, as it meets the expectation that some Papuan words would be borrowed by neighboring Oceanic languages (Ross 2010), where it is clear that Banoni has borrowed this form from one of the S.B. languages.

These results strongly suggest that Avaipa is related to the other S.B. languages and is likely most closely related to Simeku (see the comparative lexicon as presented in appendix II).

4. AVAIPA AS A PAPUAN LANGUAGE. There are several anecdotal reports of the language such that speakers of Naasioi note that Avaipa speakers can understand Naasioi and can produce “broken” versions of it, but that they are not fluent, and conversely, that Naasioi speakers do not understand Avaipa (recall also Regan’s comments from section 2). As indicated in the comparison of the lexical sets in section 3, Naasioi and Avaipa share many cognates, and once Simeku and Nagovisi are factored in, there is a clear lexical affiliation with the S.B. languages. Thus, it stands to reason that Avaipa is genetically related to the S.B. languages (rather than that the language simply exhibits these

10. The ending *-na* is a productive derivational suffix in Naasioi.

similarities due to lexical borrowing). The structural properties of Avaipa, gleaned from the syntactic structures observed in direct elicitation and in narrative data, will be investigated in order to further probe the question of relatedness. Much of the comparison in this section will be of Avaipa to Naasioi, which is the northernmost S.B. language with the richest documentation (and which is also the language with the most widespread use in the central region). The phonology of the language will be presented, followed by some basic syntactic structures, especially where these are typical of Papuan (vs. Oceanic) languages of the region. The section also includes a discussion of the pronominal forms extracted from elicited paradigms, where these will be compared to Naasioi, Rotokas (as an exemplar of a North Bougainville language), and Banoni.

A word of caution is in order regarding the morphological segmentation of Avaipa word-forms. Given that there is a high degree of morphophonology in Naasioi that is also apparent in Avaipa, it stands to reason that the underlying morphological boundaries are obscure for this small set of data. Any morphological analysis presented here is therefore tentative.

4.1. PHONOLOGY. The surface phonological inventory of Avaipa is similar to that of Naasioi, with few consonants, and perhaps no true approximants. In tables 1 and 2, the two inventories can be compared, with allophones indicated in square brackets (insofar as these can be identified as such) and segments presumed rare in parentheses square brackets.

As indicated in the chart, some of the phones presented are allophones. Some sounds also have occurred sporadically in Avaipa; the only occurrences of [β] are in the lexical item *maskavete* [maskaβete] ‘right hand’ and in the narrative that was collected; [g] only occurs in the narrative, but in multiple clear examples, including in intervocalic contexts. In contrast to Naasioi, there is a contrast between [ŋg] and [ŋk] (where in Naasioi there is neutralization to [ŋk] only, as all stops are devoiced postnasally; cf. Hurd 1977 and Brown 2017).

TABLE 1. AVAIPA PHONOLOGICAL INVENTORY.

	Bilabial	Alveolar	Velar
Stop	p b	t d	k ([g])
Fricative	(β)	s	
Nasal	m	n	ŋ
Flap		r	

TABLE 2. NAASIOI PHONOLOGICAL INVENTORY.

	Bilabial	Alveolar	Velar	Glottal
Stop	p b	t d	k	ʔ
Fricative	[β]	[s]		
Nasal	m	n	ŋ	
Flap		[r]		

**TABLE 3. AVAIPA/NAASIOI
VOWEL INVENTORY.**

i	u
e	o
a	

The vowels make up a symmetrical, five-vowel system, and they are presented below in an abstract format. While there is evidence for the Naasioi long vowels to be analyzed as sequences of underlying singletons (on par with other sequences of nonidentical vowels; cf. Hurd 1977), it is at present unclear whether the same argumentation applies to Avaipa (table 3).

Despite the surface similarities in phonemic inventory structure, there are notable differences in syllable structure between Avaipa and Naasioi. For instance, while Naasioi only permits singleton onsets and a limited set of codas (including nasals and glottal stop), Avaipa is much less restrictive, allowing complex onsets and a wider range of coda consonants. The syllable template for Avaipa is as follows: (C)(C)V(V)(C). The permissible coda consonants include: [p, r, s, n]. The codas are likely the result of a sound change that eliminated final vowels (cf. the discussion of sound correspondences in section 3).

It must be kept in mind that having a relatively small phonemic inventory is also characteristic of the Oceanic and North Bougainville languages. There are differences with some of these other languages; for instance, Banoni makes use of a contrastive voiced velar fricative. The syntactic structures, however, are fairly clearly Papuan in nature, and these will be examined next.

4.2. SYNTACTIC STRUCTURES. The basic structures of Avaipa clausal syntax closely resemble features found in other S.B. languages. This section aims to compare many different diagnostic constructions, in order not only to determine whether Avaipa is closely aligned with S.B. but also to determine whether there are any contact features. As it turns out, the ditransitive clauses are suggestive of a genetic relationship, and a clusivity distinction in the first-person pronominal forms is indicative of language contact.

4.2.1. Intransitive clauses. Intransitive structures are of the form subject–verb and mirror those of Naasioi, though this is also true of the other languages of the region.¹¹

11. Published forms are presented as they are presented in the original sources, which normally involves a phonetically transparent orthography. The same is true for the Avaipa and Naasioi forms collected during fieldwork. We have largely retained the glossing conventions from cited sources, though where relevant, these glosses have been modified to be compliant with the Leipzig Glossing Rules. For simplicity and ease of comparison, the beta notation in Robinson's (2011) glossing of the Rotokas data has been suppressed. Abbreviations not found in the Leipzig Glossing Rules include the following: CONT, continuous; DPST, distant past; IPST, immediate past; PRO, pronoun; PPRO, personal pronoun; RPRO, resumptive pronoun; REAL, realis.

- (1) AVAIPA [S V]
 Ne naia-ma.
 1SG eat-PRS
 'I eat.'
- (2) NAASIOI [S V]
 mosika aatu-nung.
 dog sleep-DPST
 'The dog slept.'

Since this constituent order is characteristic of the other languages as well, the presentation of intransitive structures is mostly just for the purpose of describing Avaipa.

4.2.2. Transitive clauses. Pragmatically neutral transitive clauses are canonically SOV, as they are in Naasioi. Constituent order in Naasioi is relatively free and can deviate considerably from this order. However, it is not presently known how much word order flexibility exists in Avaipa.

- (3) AVAIPA [S O V]
 Tei=e kokore oo-ma.
 3SG=ERG chicken see-PRS
 'he sees the chicken.'
- (4) NAASIOI [S O V]
 Dongkaani=e manikuma oo-ing.
 man=ERG woman see-IPST
 'The man saw the woman.'

This constituent order can also be compared to Rotokas, which is similarly SOV:

- (5) ROTOKAS [S O V]
 Pita gapu-to oira-to tario-re-voi
 Peter naked-SG.M man-SG.M chase-3SG.M-PRS
 'Peter is chasing the naked man.' (Robinson 2011:164)

Banoni transitive clauses are characterized by an SVO structure, typical of many of the Oceanic languages of the region:

- (6) BANONI transitive clause [S V O]
 Na ko puana-a-i kare ngam
 I 1S:REAL open-3SG-DEF PL nut
 'I opened the nuts.' (Lynch and Ross 2002:447)

Thus, Avaipa exhibits canonical Papuan constituent order for transitive clauses (as does Naasioi and Rotokas), and Banoni exhibits canonical order for an Oceanic language. It is also evident that the ergative marking in Naasioi is also found in Avaipa, though this aspect of both of these languages remains largely underexplored.

4.2.3. Ditransitive clauses. There is a slight difference in the form of ditransitive structures between Avaipa and Naasioi, though this may be a negligible difference. In Avaipa, the ditransitives that were directly elicited involved a postverbal indirect object. In the examples below, the determiner complex, which is marked for gender (and case), serves as the subject argument of the clause.

- (7) a. AVAIPA [S O V IO]
 Tei=e beku abma manikuma nan
 DET=ERG basket give woman person
 ‘The man gives the basket to the woman.’
- b. Te-ni=e beku abma dokaana [S O V IO]
 DET-F-ERG basket give man
 ‘The woman gives the basket to the man.’

In contrast, in Naasioi, the indirect object appears before the direct object (and verb) in what are presumably pragmatically neutral contexts:

- (8) NAASIOI [S IO O V]
 Stepheni=e Allan moisi avu-ing
 Stephen=ERG Allan betelnut give-IPST
 ‘Stephen gave Allan betelnut.’

Comparisons to Banoni indicate that there are few similarities, with a postverbal indirect object (and with no real expectation of the possibility of a nontopic preverbal indirect object). Lynch and Ross (2002) note that the oblique proform which marks the patient of ‘give’, and where they claim the object is the recipient. Given that there is some flexibility in the postverbal field when it comes to core and peripheral arguments (and where preverbal arguments are highly dependent on topic status), we present the form for a ditransitive but do not commit to a particular fixed constituent structure. Thus, it remains to be seen whether Banoni exhibits a structure that is similar to Avaipa.

- (9) BANONI
 Ke man-aa vai nna borogho toom.
 3SG:REAL give-1SG OBL 3SG pig two
 ‘He gave me two pigs.’ (Lynch and Ross 2002:453)

Rotokas, on the contrary, employs the same strategy of postposing the indirect object as Avaipa, as illustrated in the following:

- (10) ROTOKAS [S O V IO]
 Rosiovi ira akuku-vira kokai vate-re-vo ragai=pa
 Rosiovi RPRO.3.SG.M free-ADV chicken give-SG.M-IPST PRO.1SG=BEN
 ‘Rosiovi gave me a chicken for free.’ (Robinson 2011:178)

This brief glance at ditransitive structures indicates that Avaipa shares similarities with Rotokas. Naasioi also allows postverbal arguments; however, there is

a substantial amount of postverbal scrambling that is tolerated in the language, so it is not clear whether this is only a superficial difference; that is, whether the preverbal indirect object in Naasioi is in a neutral sentence, and likewise, whether the postverbal indirect object in Avaipa is the order for a pragmatically neutral clause.

4.2.4. Adpositions. Typical for Papuan languages of the region and in general, Avaipa makes use of postpositions:

- (11) AVAIPA [N P]
 Nukumia moska poba=ko kuua otoma
 black dog house=LOC inside be
 ‘The black dog is in the house.’

The same is true for Naasioi:

- (12) NAASIOI [N P]
 Ning kareni ko nan-a-mang tomato kako
 1SG garden LOC go-1-PRS.PROG tomato pick
 ‘I am going to the garden to pick tomatoes.’

In both languages, relational nouns can give the impression of prepositional structures in an otherwise head-final syntax. However, postpositions play the role of heading true adpositional phrases.

4.2.5. Negation. Clausal negation is marked as a suffix in the Avaipa verbal morphology and has an apparent cognate in Naasioi.

- (13) a. AVAIPA negation
 Ni aatu-ma
 1SG sleep-PRG
 ‘I am sleeping.’
 b. Ni aatu-paru-ma
 1SG sleep-NEG-PRG
 ‘I am not sleeping.’

In Naasioi, negation is marked in the verbal morphology, following the number suffixes, with a form consistently surfacing as *-aru* (Hurd and Hurd 1970:57; glosses are ours).

- (14) NAASIOI
 oo-r-aav-aru-ing
 see-2-3PL-NEG-IPST
 ‘They didn’t see you.’

According to Robinson (2011), in Rotokas, clausal negation is formed with the negator appearing preverbally, but where it may also precede the object.

(15) ROTOKAS

viapau roru-a-voi
 NEG happy-1SG-PRS
 ‘I am not happy.’

(Robinson 2011:134)

In terms of surface appearance, it seems possible that the *pau* portion of *viapau* may be cognate with Avaipa *-paru*, though these morphemes appear to have a very different distribution. This possibility will be left as an open question.

Banoni negation is expressed with a preverbal particle which bears little resemblance in form or distribution to negation in Avaipa:¹²

(16) BANONI

Ke to bekeu.
 s.3SG NEG dog
 ‘It isn’t a dog.’

(Lynch and Ross 2002:451)

4.2.6. Possessives. Possessive phrases are formed by a possessive “complex” in both Avaipa and Naasioi, with the possessor preceding the possessive complex and the possessum. The possessive complex includes pronominal affixes which mirror those of the verbal morphology (though are prefixes, and not suffixes; cf. Hurd 1977).

(17) a. AVAIPA

Ng-kan-a moska
 1SG-POSS-one dog
 ‘my dog’

b. Da-kan-a moska
 2SG-POSS-one dog
 ‘your dog’

c. Te ba-kan-a moska
 3SG 3SG-POSS-one dog
 ‘his dog’

It can also be noted that the use of the article/demonstrative *te* is used as a pronominal in these forms (as it encodes person, number, and gender), evidence which we use to justify inclusion of this morpheme as a pronominal in section 5. The Avaipa possessive complex has been morphologically segmented on par with those of Naasioi, as illustrated in the following:

(18) NAASIOI

John ba-kan-aa dapo
 John 3SG-POSS-one hair
 ‘John’s hair’

These possessor-possessum orders are in contrast to what is found in Rotokas, where the reverse order is typically found:

12. Lynch and Ross (2002:451) note that preverbal particles are not found in verbless clauses, except in contexts of negation, which indicates that this is clausal negation, and not negation of an NP.

(19) ROTOKAS possessives

kepa oaive eva oa vura-pa-ri
 house PPRO.3PL.M DEM.3SG.N RPRO.3SG.N look.at-CONT-2SG

‘That’s everybody’s house that you’re looking at.’ (Robinson 2011:121)

The possessive pronoun follows the possessed noun in Rotokas, though it is also possible to have the order possessor-possessed-suffix (see Robinson 2011:122).

Finally, the “indirect” possessives of Banoni involve the possessive morpheme *ghe-* which is suffixed with a morpheme which indexes possessor person and number, a pattern also unlike those of Avaipa and Naasioi:

(20) a. BANONI

ghe-m numa
 POSS-2SG house
 ‘your (sg) house’

b. *ghe-na* moono

POSS-3SG wife
 ‘his wife’

(Lynch and Ross 2002:446)

Many of the possessive orders have become generalized through language contact in Bougainville (Evans and Palmer 2011), though the specific instantiation of possessor-complex-possesum is likely unique to the S.B. languages and to Naasioi in particular (Evans and Palmer 2011:512).

In sum, there are numerous structural similarities between Avaipa and Naasioi that are not shared with other languages of the region. In any event, this, in addition to the lexical evidence, indicates that Avaipa exhibits both lexical and structural characteristics of the S.B. languages.

5. PRONOUNS. There has been much discussion of language contact in the region, and this is very relevant to Avaipa, given Regan’s description of the language. One characteristic that seems pertinent in attempting to classify the language is clusivity. Müller (1954), for example, lists a clusivity distinction as a feature of the proposed “central” languages, which feature being an influence from the Oceanic languages.¹³ What is noteworthy is that while Avaipa exhibits many structural similarities with the S.B. languages, it also exhibits a slightly different set of pronominals, which show signs of clusivity, though the data are not conclusive at this stage. These are illustrated in the paradigm for the verb ‘to sleep’ in table 4.¹⁴

13. Stebbins et al. (2016) discuss whether this is an innovation, a contact feature, or an archaic feature of a parent of both South and North Bougainville groups.

14. The paradigms in (24) and (25) exhibit what are presumably morphophonological characteristics which would make the labelling of the verbal morphology little more than an educated guess at this point. Though we have done some preliminary segmentation, more data are needed in order to determine the morphological boundaries and the functions of these forms. We have therefore left the paradigms un glossed for the most part.

TABLE 4. AVAIPA PARADIGM (ROOT: /aat/ ‘TO SLEEP’).

			Pronoun	Verb
1	SG		-†	-
2	SG		-	aas-ia-∅
3	SG	MASC	te	aat-u-ma
	SG	FEM	ten	aat-u-ma
1	PL	INCL	niike	aat-uk-ma
1	PL	EXCL	nangke	aat-u-ma
2	DL		nenaaka	aa-pe-ma
2	PL		tebo	aas-ia-ma
3	PL		ookara	aas-ia-ma

†The sentence that was volunteered for 1SG was *doo kumarama*. The 1SG pronominal form that was volunteered for this paradigm, *doo*, is likely a conventionalized or idiomatic phrase. This is obvious given the structure of the rest of the paradigm, as well as the (expected) first-person singular pronominal form in the paradigm in (25).

There are some regularities with respect to the morphophonology that are worth noting. The present progressive tense suffix *-ma* is almost certainly cognate with the Naasioi present progressive suffix *-mang/-maang*. The alternations in the root (*aat-/aas-*) are conditioned by the presence of a following high-front vowel. This is consistent with the pattern found in Naasioi. In addition, it appears that in the 2DL forms the root changes from *aat-* to *aa-* preceding [p], possibly as a strategy to resolve a potential consonant cluster [tp]. It can be noted that there is a difference in both the pronouns and the verbal forms used for the 1PL, and where it is unclear whether the morphological segmentation of the verbal form for the 1PL inclusive is *aat-u-k-maa* or *aat-uk-ma*, as there is little evidence to indicate either way. We have thus conservatively segmented the suffix as *-uk*.

When the 1PL.INCL and 1PL.EXCL forms in table 4 are compared, there appears to be a *prima facie* inclusive versus exclusive contrast, both in the forms of the pronouns used (*niike* vs. *nangke*) and in the verbal morphology (*-u* vs. *-uk*). This analysis in part breaks down upon inspection of the paradigm for the verb ‘to eat’ in table 5, which illustrates a slightly different range of use for the pronominals.

As above, the *-ma* suffix on the verb is taken to mark tense. In contrast to table 4, there is no clear minimal difference between the inclusive and exclusive 1PL forms in the verbal morphology, and instead there are radically different verb forms used. Future research, and more data, will hopefully determine whether clusivity is coded in Avaipa verbal morphology. While *nangke* appears as the 1PL.EXCL pronoun in table 4, it also appears as both the 1PL.INCL and 2PL pronouns in table 5. Thus, the contrast in table 4 cannot be taken to be firm evidence for clusivity. The Avaipa pronouns, extracted from these paradigms, are presented in table 6. Finally, it can be noted that the 2DL form *nenaaka* is cognate with Naasioi *nenaangka* ‘two’.

**TABLE 5. AVAIPA PARADIGM (ROOT:
/nai/ ‘to eat’).**

			Pronoun	Verb
1	SG		nii [†]	nai-a-ma-no
2	SG		Da	nai-e-ma-to
3	SG	MASC	Te	nai-u-ma-to
		FEM	Ten	nai-u-ma-to
1	PL	INCL	nangke	- [‡]
1	PL	EXCL	nangke	nai-a-ma
2	DL		nenaka	nai-a-pe-ma
2	PL		nangke	-
3	PL		tebo	nai-ra-pe-ma

[†]It should be noted that in example (4) the 1SG pronoun is *ne*. As this resembles the form here, it can be assumed that there is some phonological variation present.

[‡]The form given for 1PL and 2PL was *taama-me-ma*. This alternate form of the root derives from the word *taama* ‘food’ in Avaipa. *Naira* also means ‘food’ and appears to be used as emphasis in ‘we (EXCL) are eating’ and ‘you (DL) are eating’ (*nangke naira naiama* and *nenaka naira naiapema*, respectively).

These pronouns can be compared to Naasioi in table 7, which lacks a clusivity distinction. The pronominal set presented below differs from that of Stebbins et al. (2016) in that (i) the 2SG form is *da*’ [da?] instead of *da* (cf. Hurd 1977:160, and author field notes), and that we have included a set of third-person pronouns (also contra Onishi 1994 for Motuna, etc.). The third-person pronouns, which are typically used as articles/deictics, are also found in possessive structures (see example 20 for Avaipa), justifying their presentation as pronominal forms.

The comparison of the Avaipa and Naasioi pronominal forms provides an argument for the source of the Avaipa pronouns. The Avaipa 1PL inclusive form resembles Naasioi *nii* (with the expected final nasal loss plus what is presumably the allomorph of the ergative case clitic =*ke*). It is possible that Avaipa

TABLE 6. AVAIPA PRONOUNS.

		SG	DL	PL
1	INCL			niike/nangke
	EXCL	nii		nangke
2		da	nenaka	tebo/nangke
3	MASC	te		tebo/ookara [†]
	FEM	ten		

[†]*Tebo* and *ookara* both express meanings such as ‘all’ or ‘group’ in Avaipa, and according to current data, appear to be used somewhat interchangeably as plural pronominal forms or as reinforcement of another pronominal form. Further data are needed to clarify this issue.

TABLE 7. NAASIOI PRONOUNS.

	SG	DL	PL
1	ning	nec	nii
2	da'	dee	dii
3	MASC	te	
	FEM	teni	

TABLE 8. SIMEKU PRONOUNS.

	SG	DL	PL
1	INCL	nare	nari
	EXCL	nii	nan
2	daa	dare	dari
3	nare	dare	nan

nangke resembles the plural/associative marker *nangka* in Naasioi, but it is also possible that it constitutes a form, *nan*, with a reanalyzed ergative clitic, =*ke*. A quick comparison of the Simeku pronouns (from appendix II, summarized in table 8) sheds some light on this issue. The Simeku pronouns were elicited as standalone forms and do not include full paradigms.

As is evident, while there are many cases of syncretism across these forms, there is a much stronger case to be made for a clusivity distinction in the 1PL pronominals. It is also clear that the 1PL.EXCL pronoun *nan* is cognate with Avaipa *nangke*, which lends evidence to the idea that the Avaipa form evolved from a reanalysis of the ergative clitic (and not from the plural/associative morpheme in Naasioi).

Based on this, we can conclude that the Avaipa pronouns are of S.B. origin, and that the 1PL(INCL) form *niike* is an innovation. It appears as though Avaipa does not use plural pronouns, and instead uses common nouns or quantifiers ('all', 'group', or the associative morpheme) in their place. This raises the question of how a 1PL=ERG structure was reanalyzed as a 1SG/PL form, and how the ergative clitic was reanalyzed as a plural suffix.

In the context of a discussion of clusivity, these pronouns can be compared to those of the Oceanic languages and the North Bougainville languages. For instance, Rotokas is the southernmost North Bougainville language that we have reliable data for, so a comparison can be made with this pronoun inventory. It can be noted that Rotokas exhibits the inclusive/exclusive pronominal distinction only in 1PL forms, with the 1DL forms being syncretic (table 9).

In addition, the forms can be compared to the Banoni pronouns, which also exhibit a clusivity distinction (table 10).¹⁵

15. It is noteworthy that the Banoni third-person plural form is identical to the first-person plural inclusive form in Simeku. We leave this for future research.

TABLE 9. ROTOKAS PRONOUNS (ROBINSON 2011:54; STEBBINS et al. 2016).

	SG	DL	PL
1	INCL	vegei	vigei
	EXCL	ragai	igei
2		vii	visii
3	MASC	rera	vaiterei
	FEM	oira	vairei
	N	va	varei
			vara

TABLE 10. BANONI PRONOUNS (ADAPTED FROM LYNCH AND ROSS 2002:442).

	SG	PL
1	INCL	ghata
	EXCL	ghamam
2	no	gham
3	[Mabesi dialect]: nna, [Mariga dialect]: e(ie), e nana	nari

Oceanic languages also have a clusivity distinction in the bound verbal morphology; North Bougainville languages do not (i.e., the distinction is marked only in pronouns).

Clusivity is generally thought of as a feature of Oceanic and North Bougainville languages, but not S.B. languages (Stebbins et al. 2016). The Avaipa pronouns suggest an innovative use of a pronominal; the Simeku pronouns, though less well understood, appear to encode a clusivity contrast. For Simeku, one possibility would be that language contact has given rise to the structures observed; that is, that the forms of the pronouns resemble those of S.B., but the structure of the paradigm was perhaps borrowed from North Bougainville or directly from Oceanic (a common strategy for the development of clusivity; see Bickel and Nichols 2005). Upon closer examination, however, it appears that Motuna in fact expresses a clusivity distinction in its 1PL pronoun paradigm, with *nee* representing the inclusive and *noni* the exclusive (Onishi 1994:128), and where the 1PL.INCL resembles the Naasioi 1DL pronoun. Buin (Laycock 2003), Nagovisi (Decker 1981:83), Naasioi, and all neighboring languages of Motuna lack a clusivity distinction. While the Simeku data are more limited (in that full paradigms were not collected), it appears to be a more promising example of clusivity, where *nari* is the 1PL inclusive form and *nan* its exclusive counterpart.

Also noteworthy is the fact that the shape of the pronominals is not the same in S.B., North Bougainville, or Oceanic. This raises the question of where the influence came from. Though it is often argued that pronouns are not readily borrowed across languages, Thomason and Everett (2002) present evidence of

several cases of pronoun-borrowing. Assuming, as we have been, that Avaipa exists on the S.B. continuum, part of that continuum exhibits clusivity (Simeku and Motuna), and half does not (Avaipa, Naasioi, Nagovisi, and Buin). This leaves us with an open question of the origin of this feature and a number of possibilities: (i) clusivity may have been a feature of the Papuan languages, but overtime has been lost from some but not all of the S.B. languages; (ii) clusivity was borrowed into North Bougainville from Oceanic and into S.B. from North Bougainville (leaving open the question of Motuna's use of clusivity, since Banoni is its closest clusivity-expressing neighbor); or (iii) some North Bougainville and S.B. languages independently borrowed clusivity from Oceanic.

6. DISCUSSION ON LANGUAGE CONTACT. As outlined in section 2, the possibility that Avaipa (and also possibly the central Bougainville languages generally) is a “mixed” language has been raised by Regan (2005) (and in the older literature, by Müller 1954). The lexical and syntactic data that are relevant to these claims have been presented, including from the North Bougainville, S.B., and Oceanic families. Thus, these claims can now be evaluated in the context of this evidence.

Mixed languages are defined as languages with two, or a few, identifiable parent languages that typically emerged from a situation of community bilingualism (Velupillai 2015). Prototypical examples include Michif, Media Lengua, and Gurundji Kriol. There is some disagreement on the precise definition and identification criteria for mixed languages, however. Thomason (2003:21) argues, for example, that a mixed language is simply “any language whose grammatical and lexical subsystems cannot all be traced back primarily to a single source language.” Note that this definition does not exclude other forms of contact languages such as pidgins or creoles. More commonly, others have proposed stricter criteria such that a mixed language must consist of at least two identifiable components, typically with the sources differing between the lexicon and the grammar, or the nominal system and the verbal system (known as “intertwined languages;” Bakker 2003; Velupillai 2015). Mixed languages might also be of the “converted language” type, in which languages adopt the formal and syntactic structures of another language or other languages while maintaining their lexicon (Velupillai 2015).

Avaipa does not appear to match any of these typical descriptions of mixed languages, as it shows limited lexical mixing (evidenced by the low percentage of vocabulary shared with North Bougainville) as well as limited evidence of structural borrowing. Sparse information on the sociohistorical circumstances and timeline of Avaipa's emergence also make it difficult to state with any certainty that it belongs in the same group as the strictly defined mixed languages mentioned above. The fact that it exhibits syntactic features which are largely consistent with Naasioi, and also shares the vast

majority of its lexicon with Simeku and Naasioi, indicate that Avaipa forms the northern extreme of a dialect chain that extends at least from the south-eastern coast. Thus, on the face of it, the evidence speaks strongly in favor of Avaipa as an S.B. language.

Despite the lexical similarities, the presence of some lexical mixing as well as the structural elements from both North Bougainville and S.B. language groups (such as clusivity in Simeku and syntactic features, respectively) suggests that this is not simply a case of heavy lexical borrowing from a neighboring language. The use of the clusivity distinction in the S.B. language Simeku is especially intriguing in this regard, though it ultimately opens more questions about language contact in the region than it answers. For instance, that clusivity is a feature that is prone to diffusion has been established by Bickel and Nichols (2005), and these types of distinctions have arisen in several Papuan languages, as well as lost in several Oceanic languages throughout the region (van den Berg 2015). The situation is even more complex against the backdrop of what we know about the phenomenon in the region, as there are some Papuan languages which have developed an innovative use of inclusive pronouns (van den Berg 2015). Likewise, Bradshaw (2017) notes that there was an innovative development of a clusivity distinction in Binanderean (Papuan) languages, where there are no current Oceanic languages. This includes an innovative development of clusivity in the verbal suffixes. Thus, while the fact that there may be clusivity coded in the verbal morphology of Avaipa, this in itself may not be sufficient to establish what the source of that distinction is. While there appear to be features of language contact in the region, the exploration of this is at present limited.

Ultimately, the profile of the language looks to be one that is fundamentally S.B. in nature, but with elements acquired potentially through contact with the North Bougainville and Oceanic languages of the region.

7. CONCLUSION. It appears overall that Avaipa straddles the north/south divide for the Papuan languages. It indexes person and number in the verbal morphology, like the S.B. languages. With regard to its lexicon, we see in the avian names an equal distribution of terms shared with Naasioi and terms shared with Eivo, though in the larger lexical database, Avaipa words are mostly shared amongst the S.B. languages.

Returning to Müller's (1954) classification of "Papu-Melanesian" mixed languages, Avaipa so far appears to match some of their proposed properties. The constituent order is SOV like the Papuan languages, and person is marked in the verbal morphology. If Simeku is thought to be Avaipa's closest relative, it also exhibits a clusivity distinction, though as discussed above, this can no longer be associated solely with Oceanic languages or even Oceanic and North Bougainville languages (given that this feature exists in Motuna). Whether nominals are marked for number is not yet clear. It may still be premature to propose a central "Papu-Melanesian" group, and there would probably be

little reason to entertain this as a genetic grouping (as the idea is admittedly dated), but the effects of language contact are clear.

This article represents a first (rough) attempt at situating Avaipa in the complex linguistic landscape of Bougainville. We expect that this new set of data from a previously undocumented language provides a documentary foundation that can be built on in the near future and eventually provide further clues to the story of language contact in central Bougainville. Finally, the value in adding Avaipa (and Simeku) data to the existing empirical base of S.B. languages is significant. While previous analyses have relied on Naasioi, Nagovisi, Buin, and Motuna as the sole members of the S.B. family and have reconstructed the protofamily accordingly, the data from these additional members will no doubt result in a more highly articulated family history (including family relations), as well as stronger hypotheses regarding protoforms.

APPENDIX I

AVIAN SPECIES NAMES

The following avian species names are from Hadden (2004) (see table 11). In order to determine whether there is significant overlap in vocabulary, the entire Avaipa list was used as a baseline and compared to the same species names found in Naasioi (as the closest S.B. representative), Eivo (as the closest North Bougainville representative), and Banoni (as the closest Oceanic representative). Similarities in each of these could indicate either genetic relationship or language contact; similarities across multiple languages could indicate more extensive language contact in the region. In order to control for direction of contact with Oceanic, species names for POC from Clark's (2011) reconstructions have also been included in the comparisons, where relevant (where page numbers from that source are indicated).¹⁶ The logic is that if a form is shared with Banoni, and there is a correspondence in POC, then the lexical form has an Oceanic source.¹⁷

From these lists, likely shared vocabulary items in the list of bird names were identified. There are seven forms shared with Naasioi (Blyth's Hornbill [1], Brahminy Kite [3], Common Golden Whistler [7], Moustached Treeswift [17], Purple Swamphen [23], Willie Wagtail [40], and Woodford's Rail [41]), seven forms shared with Eivo (Fearful Owl [11], Island Imperial-Pigeon [13], Red-knobbed Imperial-Pigeon [26], River [Common] Kingfisher [28], Sanford's Eagle [30], Uniform Swiftlet [35], and White-rumped Swiftlet [38]), three which can be considered "Papuan" (as shared by Naasioi and Eivo: Bush-hen [4], Common Koel [8], and Pale Mountain-Pigeon [21]), and six

16. Or the most relevant subfamily reconstruction; for example, forms from the Meso-Melanesian (MM) linkage.

17. And likewise, if a Banoni form shares similarities with Papuan forms, but there is no clear POC cognate, it is possible that this constitutes a Papuan loan.

shared with Banoni (Ducorp's Cockatoo [9], Pacific Baza [crested Hawk] [which is lacking in Naasioi] [18], and Solomons Hawk-Owl [33]). Broadly speaking, about one-third of the Avaipa bird names are shared with S.B. (Naasioi) only, another one-third are shared with North Bougainville (Eivo) only. Noteworthy is the fact that names for three of the species appear to be region-wide (and Oceanic in origin): Ducorp's Cockatoo (9), Pacific Baza (crested Hawk) (which is lacking in Naasioi) (18), and Solomons Hawk-Owl (33). One Banoni form appears to be borrowed from Avaipa (on the evidence that there is no POC cognate): the form *kiire* for 'Cardinal Lory' (5).¹⁸ Finally, one Avaipa form is from Tok Pisin (*pato* 'Pacific Black Duck', 19).

The scientific names of these birds are as follows:

1. Blyth's Hornbill *Rhyticeros plicatus*
2. Bougainville Honeyeater *Stresemannia bougainvillei*
3. Brahminy Kite *Haliastur indus*
4. Bush-hen *Amaurornis (moluccanus) olivaceus*
5. Cardinal Lory *Chalcopsitta cardinalis*
6. Claret-breasted Fruit-Dove *Ptilinopus viridus*
7. Common Golden Whistler *Pachycephala pectoralis*
8. Common Koel *Eudynamis scolopacea*
9. Ducorp's Cockatoo *Cacatua ducorpsi*
10. Eclectus Parrot *Eclectus roratus*
11. Fearful Owl *Nesasio solomonensis*
12. Finsch's Pygmy-Parrot *Micropsitta finschii*
13. Island Imperial-Pigeon *Ducula pistrinaria*
14. Mackinlay's Cuckoo-Dove *Macropygia mackinlayi*
15. Marbled Frogmouth *Podargus ocellatus*
16. Melanesian Scrubfowl *Megapodius (eremita) freycinet*
17. Moustached Treeswift *Hemiprocne mystacea*
18. Pacific Baza (Crested Hawk) *Aviceda subcristata*
19. Pacific Black Duck *Anas superciliosa*
20. Pacific Golden Plover *Pluvialis fulva*
21. Pale Mountain-Pigeon *Gymnophaps solomonensis*
22. Pied Goshawk *Accipiter albogularis*
23. Purple Swamphen *Porphyrio porphyrio*
24. Rainbow Lorikeet *Trichoglossus haematodus*
25. Red-flanked Lorikeet *Charmosyna placentis*
26. Red-knobbed Imperial-Pigeon *Ducula rubricera*
27. Reef Egret *Egretta sacra*
28. River (Common) Kingfisher *Alcedo atthis*
29. Sacred Kingfisher *Halcyon (Todiramphus) sancta*

18. This is a noteworthy finding, given Ross' (2010) statement that no Papuan loans were identified in his data.

30. Sanford’s Eagle *Haliaeetus sanfordi*
31. Shining Bronze-Cuckoo *Chrysococcyx lucidus*
32. Singing Parrot *Geoffroyus heteroclitus*
33. Solomons Hawk-Owl *Ninox jacquinoti*
34. Ultramarine Kingfisher *Halcyon (Todiramphus) leucopygia*
35. Uniform Swiftlet *Aerodramus vanikorensis*
36. Variable Dwarf Kingfisher *Ceyx lepidus*
37. Variable Goshawk *Accipiter (hiogaster) novaehollandiae*
38. White-rumped Swiftlet *Aerodramus spodiopygius*
39. White-winged Fantail *Rhipidura cockerelli*
40. Willie Wagtail *Rhipidura leucophrys*
41. Woodford’s Rail *Nesoclopeus woodfordi*

TABLE 11. AVIAN TERMS.

Bird	Avaipa	Naasioi	Eivo	Banoni	POc	Notes
1. Blyth’s Hornbill	manua	manua	oueto	komo	*binam (339)	PWOc *komo
2. Bougainville Honeyeater	kirikiri	mosi’eng	nikiniki	mede-medede (346)	*midi ‘honeyeater’ (346)	
3. Brahminy Kite	kanai	kaa’ngang, tangtaio	kuropa	manuarai / rau / kaana	*manuka ‘sea eagle’ (297)	*manuk-lapat ‘big bird’, ‘White-bellied Sea Eagle’
4. Bush-hen	koneko	koo’neu	konikoniko			
5. Cardinal Lory	kiribito	donaru / unakaru’	sirivin	kiire	*sipi (324)	*sipi(r,R)i, *siri
6. Claret-breasted Fruit Dove	kukutaai	kuikainara’	bisikoko		*(k,g)upuR ‘pigeon or dove’ (315) *bune (310) generic	MM:Roviana: kukuva ‘small green dove sp.’
7. Common Golden Whistler	boopia	boopia’			*sau (345)	
8. Common Koel	tuwo	tooc’	tuwo	soogha	*seke (cuckoo, possibly Centropus sp.) (329)	Only reconstruction that includes MM
9. Ducorp’s Cockatoo	kakata	kaaketa’ / kake’a / keekata’	kakata	kaakata	*wakeke~ *kakawe ‘sulphur-crested Cockatoo, Cacatua galerita’ (321)	MM:Nduke: vak’voa ‘Ducorps Cockatoo’ Maringe: veyā ‘Cacatua ducorps’
10. Eclectus Parrot	kiakara	muungbarang / orung / kirong (f) / kiaara (m)	sikaran / siko	kiako (f) / karaka (m)	PWOc *ka(l,R)ana (r,R) (322) POc * kaRa (male) (321)	Clark gives B. karaka as ‘male’

Bird	Avaipa	Naasioi	Eivo	Banoni	POC	Notes
11. Fearful Owl	wiman	tutukuri	iman	puputsunu	*kuru(dr,d)u (330) 'owl', *drudru(r,R) 'owl' (331)	
12. Finsch's Pygmy-Parrot	sikata	kirikiti	tanapakipaki			Rotokas tsiipu/sisi parako
13. Island Imperial-Pigeon	urumau	kuukuu'	urumaau	kunume	*(k,g)upuR 'pigeon or dove' (315)	
14. Mackinlay's Cuckoo-Dove	purur	bokutei'	bopuke	boku	*woku (317) 'Cuckoo Dove, Macropygia sp.'	Includes Banoni
15. Marbled Frogmouth	ove	Akoova / keparungkung	kororo	siruna		
16. Melanesian Scrubfowl	kokora	pa'ao	orua	paau		Bismarck Scrub Fowl <i>Megapodius eremita</i> *m ^w alau (305), *k ^w al(i)au (306), *k(a)iau (306)
17. Moustached Treeswift	siraka	sii'danka	piura	sisinakarue/ tsiura	*kabakabal 'wiflet, Aerodramus or Collocalia spp.' (334)	Proto Malaita-Makira *sisiri 'swiftlet' (335)
18. Pacific Baza (Crested Hawk)	kikio	siitou'	kito	kiitou	*ki(t,s)o (300)	B included
19. Pacific Black Duck	pato	eenaang / naa'daka	darakit / nadaka	naaraka	*ŋaRaQ 'wild duck' (293) *ŋaRa 'duck' (293)	B. included <i>Pato</i> also, in Koromira; <i>Pato</i> from Tok Pisin (originally from Portuguese)
20. Pacific Golden Plover	ruirua	bibironi				*jipiu 'wader' (359), B civiu 'small migratory waders'
21. Pale Mountain-Pigeon	taviru	taviru'	taviru		POC *kurau (319)	MM: Nduke kuratu 'Pale Mountain Pigeon'
22. Pied Goshawk	irinsia	ooro	kikinana		POC *roqa 'eagle' (299) – based on <i>accipiter</i>	
23. Purple Swampphen	karioi	karioi	siuke	kaba	*b ^w alaRe (307), *b ^w iru (308)	
24. Rainbow Lorikeet	kirivis	tonki'kaa	tekorori	rakiten	*sipi(r,R)l (324)	Proto Malaita-Makira *kirori (326)

Bird	Avaipa	Naasioi	Eivo	Banoni	POC	Notes
25. Red-flanked Lorikeet	sis'sis	ko'munsiri' / konkiris'i' / tankiris'i			POC middle-sized parrot *siri 'parrot, perhaps Cardinal Lory' (325)	
26. Red-knobbed Imperial-Pigeon	sirento	burareng / buruau' / buruburuto / urareng	sirento	ririme	*baluc 'pigeon, <i>Ducula</i> sp.' (312)	
27. Reef Egret	maraka	kaaka- kumanang' / mutanu koovi / kakura koovi	konawa	koko / sari	*kao(i) 'heron, probably Egretta sp.' (289)	B. included Kaki or ka'a in Koromira
28. River (Common) Kingfisher	minaka	siiring	minaka		? *(s,j)iko (336)	
29. Sacred Kingfisher	kinokino	teitei'	kiki	keva	*ki(o)kio, *kiki 'kingfisher' (338)	
30. Sanford's Eagle	kenakena	mareoi'	kenakena	manuka	*manuka 'sea eagle' (297)	Includes B.
31. Shining Bronze-Cuckoo	buria	karutampae / kipau / mairanai				
32. Singing Parrot	kinetora	kiire / kiireng	kiraniko	kiakaa	*(k ^(w) ,g)j (l,n)e (327)	No B.
33. Solomons Hawk-Owl	kuru	kuuruu	kuru	kuuru	*kuru(dr,d)u 'owl' (330)	Includes B.
34. Ultramarine Kingfisher	tuabukuma	siisii		robake ?		Rotokas <i>Tuituie</i>
35. Uniform Swiftlet	kanakero	sikisiki	kanake		*kabakabal 'swiftlet, <i>Aerodramus</i> or <i>Collocalia</i> spp.' (334)	
36. Variable Dwarf Kingfisher	sisipa	sinsi'navaang	nokopinopinosisikaa		*(s,j)iko 'kingfisher' (336)	B. included
37. Variable Goshawk	ive	oromani / sivensiven / tobita	manekau		POC (?) *p ^w a(r,R)a 'hawk'	See *manuka 'sea eagle', Pied Goshawk MM: Roviana vari (ivu) 'eagle sp.'
38. White-rumped Swiftlet	kanakero		kanake			Eivo same as Uniform Swiftlet; not possible to reconstruct individual swiftlets
39. White-winged Fantail	birika	kikirau' / siere			*takere 'Fantail, Rhipidura sp.' (343), *laki 'fantail'	Proto NW Solomonic *pitikole 'fantail' (343)

Bird	Avaipa	Naasioi	Eivo	Banoni	POc	Notes
40. Willie Wagtail	maneka	maaneka	siriuriu / siropen	tsiropen	(see fantails)	Nothing resembles B., nor others
41. Woodford's Rail	kuvis	kuvisi	bito	kokote		Nothing resembles in rails

APPENDIX II

CENTRAL BOUGAINVILLE COMPARATIVE LEXICAL ITEMS

The phonetic forms in the lexical sets require some comment. The Avaipa, Simeku, and Naasioi data were transcribed from fieldnotes (tables 12 and 13). The only change to the Rotokas data was where orthographic <r> is represented here as a flap [r] and <v> as [β] (according to Robinson's 2011 description). To our knowledge, there is no Eivo source which outlines the phonetics but <r> appears to be a flap (and where the first forms on the list were checked with a native speaker). According to Lincoln (1976a), Banoni <r> is a flap, <gh> is a voiced velar fricative [ɣ], and where <ts> and <dz> represent palatal affricates. Nagovisi is a more complex case. It is unclear what the symbols <ö> and <ä> are meant to represent. Orthographically <y> is employed; this has been interpreted to be the glide [j]. We think it is a reasonable guess that <r> is a flap. <ng> sequences have been interpreted as [ŋ] (following Brown 2017), unless this sequence was immediately followed by a vowel, as it is unclear whether [ŋ] is allowed in prevocalic contexts (where in Naasioi it normally is not).

TABLE 12. UNIQUE AVAIPA ITEMS.

English	Avaipa	Simeku	Naasioi	Nagovisi	Eivo	Rotokas	Banoni
Head	bokes	bavaka	bore	boreʔ, vole	natat	kukueβa	tope
left hand	akokamia [†]	mareapke	oranau			koike, koike βaβae	
boy	orakara doka anu [†]	nemaka		nugan, βaikarah	aito	kakaeto	
girl	orakan manikuma	nemaka	sikoreβa	mani kuma, neraiʔna	anekon	kakaeβa	
husband	damaiko	sii bakumas	baʔung	motainala, iŋ		βatuato	
wife	bamaiko	ten bakumas	baʔung	iina		βatuaβa	
aunt	daka apo	boumanen	kampo			kauo	

English	Avaipa	Simeku	Naasioi	Nagovisi	Eivo	Rotokas	Banoni
grandchild	daraikap ⁷	baite	baʔdompe ŋ	robe		aβuβa/ aaoβa (f), aβuto/ aao (m)	
yam	espa	koro	koro			utu	vivi
flower	purpur	apo	iio			kokookoa, kokoa	
fruit	mareba	puara	puara			kuea	
sun	dobena	duana	duaa	take	daβinio	raβireo	para, nanga
hurricane	dobi pakaa [#] (big wind)	pitukapake	pion pankain			riroto kiuβu	
rope	mus	mota	moʔmin			kopiroβu, iroiro, koroβiri	
black	nukumia	nupenia	mutanu	mutaa, mo:niʔ	kakasito	katokato, rakao	dotsi/ nunumini
cut	teka		napuʔ	napuʔ, tagi		kogo	kotsi, peyi
split	betape		berera			pero	
scratch	keketa		doridori	iki		apei, gagarike, kuri, oriori	
work	wakarara [§]		mintin			koβo	
sit	mantara		baaʔnan	mami, mamujä	torionoi	pau	gonna
plant (v)	mitaia		keeŋ			pau	piriki
have	kopee		oton	oto			
finish	kamear, opar		opariŋ			gogoto	
here	eukoo		aaʔ			βoa	ni
there	aruka		teeʔ			βaβo, uβa	
now	iromata		emu	mmenaʔ, en		βaoβiopaβ ira	naguam, nata
far	iskaro		isipo	isipo		tauai	
under	baroa		boon	wooruʔna viiʔ		reroaro	
over, on top	siro oka, deiai		daʔu			roeβira, ariararo	γareγe
in front of	urumabai		urokano			iraβira	
no	beebe		otoa			eαβioβa, oβuβara, paapu	γinawa

[†]Cf. the form *akonai* ‘left’ in Nagovisi (Mitchell 1976).

[‡]While the Avaipa forms for ‘boy’ and ‘girl’ morphologically employ the roots for ‘man’ and ‘woman’, respectively, and while these roots are cognate to those in Naasioi, the morphological strategy for forming these stems in Avaipa is different, and so, therefore, these terms have conservatively been placed on the “unique” list.

[#]Based on the argumentation for the Avaipa forms for ‘boy’ and ‘girl’, this morphologically complex form, while employing the word for ‘big’, exhibits a strategy of word formation which is inconsistent with other S.B. languages, and so we do not consider it cognate.

[§]It is possible that this is a form derived from English or from Tok Pisin *wok*.

TABLE 13. FORMS SHARED WITH S.B.

English	Avaipa	Simeku	Naasioi	Nagovisi	Eivo	Rotokas	Banoni
hair	dapo	daaka	dapo, ipi	lapo	nesin	orui	punu, punna
ear	dome	domeka	dome	lon, i, oŋ	mamato	uʔareoua (external), kokito (canal)	tangina
nose	ken	bisbis	nuaŋ	keŋ		iruʔaoto	vivitsi, bisu
tongue	mene	mene	menen	mene	areʔauto	areʔuoto	mea
tooth	sira	siraka	sira	kawe, kariʔe, kave	aito	reuriara	nuki
eye	duta	duta	duuta	uta, wutah	osiroito	osireito	mata
forehead	oi	oii	oiŋ	oi, wole	pikon	kagaʔe	
mouth	murka	murka	karan	nua, nuah	kopaitot	gisipo	mangona, dasena
beard	nuusi	nusii	ape			giʔugiʔu	
chin	apes	kar	apesi	apes, apis	kentan	keeta	
body	monon	omon	mono			ʔaraua	
shoulder	ukama	ukama	ukamau	ukama, ukama?	mutoon	ʔutuoua	
hand/arm	maareka (hand) taka (arm)	mareka	tanʔa tanʔa	kapata, unʔah	kometakot kaamokoto	ʔaʔae/ ʔuʔuko, taviraoto	numa, kamarigina
finger	paireka	paireka	biren	panʔaringe	pinokot	sipareo/ piiro	
right hand	maskavete ^a	maskamia	tampanau	meeʔna		oirapapa ʔaʔae	
person	nan	nani	naniŋ	nan, nadoh, nanme	oiran	ʔaao (f), ʔaaro (m)	tavana
people	nanta	nemita	nanton	nadöö		oirapure	
man	doka ana, nan	dokan	dotʔkani	nugam ~ nunʔan, nugan	amariato	oirato	tamata, taavana
woman	manikuma	kanikuma	manikuma	manikuma	niakon	riakoʔa	moonoo
child	orakara	orakei	karanu, toto	eʔ, wol waikesi, tootoo	derakan		natsu, megara
young man	nemaka		nemaka			koruoto	
young woman	neraina		neraina				
old man	pakaranan	pake nani	panʔkaraa			ʔituasito	
old woman	pakaranan manikuma	pake nen	panʔkani				
married	bokueres	book	nampesi			aʔukarei/ uroturei (married couple)	
father	mmama	mmata	mma	b ^w omah, mma, woma	aisi	aite	tama

English	Avaipa	Simeku	Naasioi	Nagovisi	Eivo	Rotokas	Banoni
mother	noono	nono	ŋko	b ^w ok _o , ngo ^b , woko	akai	aako	tsina
uncle	paapa	papa	paapa			paapaato	
grandparent	daitekera	daitekura	kakadarin			aβuirara	mau (grandfather)
brother	tata	baraman	tata	b ^w ata:ta, watata	tata	βaβuata (sibling)	
sister	damar	mama	mari	wamama, b ^w ara?mada?	tataua	βaβuata (sibling)	
friend	damaakota ^c	maikota	maiko			βateto	tawana
chief	oborin	nani pake	oβontuŋ			urui tokipato	
white man	kakaarana	arareko	kakaara	monokakata	kakarapato	popotepato, uβuapato, kaapopato	navaita
house	poba	paβane	paβa	pauah, pava, pawa	tunato	kepa	numa
door	kurupe, top ⁷ na	topina	ku?nuŋ, karanaj (doorway)	kubi		rataoa	
village	os	os	osi	osi		atoia, uruia	ram
road	siru	siru	tauŋ ^d	pangauka ^h , tolulu, toruru	deumato	raiβa	sanana
basket	beku	kaβara	kaβara, beku	namme (work basket), paake		pekuriβa, auro kaepa	baro
clothes	baaro	kokono	kaβo	waaro?		βaroa, kuβuara	
dog	moska	moska	mosi, mosika	mosika, mosikah	kakau	kaakau, keβira, βaβaraiβa	bekeu
mosquito	simka	simuka	mutaka	taa?nka	mirikono	riβuko	merikono
spider	kaabura	kaβeu	kari			akaβe, siβataeko	
snake	boru	boru	boru	b ^w akiroh, visa	nakuru	βuaki, korikoripaβa	koru
bird	bare	bare	bareŋ	βareŋke, walege	kokioto	kokioto	manuŋu
crab	kakata	kakata	kakuu			asiurike, ereku	
food	taama, naira	naira	taamaŋ			aioa, gataa	
taro	bau	bau	bau			opoa	dzupana
sweet potato	koteu	koteo	koteu	wabo, aane		upiriko	
sugar cane	tana	tana	tanaŋ			koβaβa, sipoa	
banana	biakoi	biakoi	biaŋ	bila		ito	
breadfruit	bareko	bareko	kiriŋ	kiling		oβeu	parau
dry coconut	koraa mou (mou = coconut)	naka	koraa (mou = coconut)	kaakasi, (moo = coconut)		atope	maghasa (teese = coconut)

English	Avaipa	Simeku	Naasioi	Nagovisi	Eivo	Rotokas	Banoni
pawpaw	netoo (if ripe, popo/fofo if not)	mameto	mamio			βaβaia, βaβioko, torotae	
tree	koi	kor	koi	udu, madu, koina?, koina	εmauto	eβaoβa, asiao	mara-bona, napini
stick	buna	buna	bana	wanake		rao, βisiraio, βurukoto	
leaf	parai	parai	para	paba, panda?	kunuara	guruβa, βagai, βakia	nanna, vivitsi
seed	sina	sina	sinaŋ	kamali, kamari? koi?βo:ri	masipato	βurua	vana, kamari
root	biira	arata	biira	koβoh, pulpulia	baunto	βaβurupa	bayara
world	kas (also 'earth, soil')						
sky	doo	dona	doona	pan		βuβuiua	
moon	kaake	kake	kare, kara	peγia, pe:γgia?	daraβo	kekira, utaβai	madava
star	bisio	biso	bento	siribe, sirimbe?	bisinako	aβiko, βisiuriko	pipito
cloud	kamoi	kamoi	ka?mo	kamo, kamo?	nukuuta	rukuta	kamo, kabu, nukuita
rain	tua	motera	apo	apo, dua, tua	dakapu	kokeβa, kokeriβa, rauriβa	γarau
wind	domaa, doobaa	pituka	pioŋ	piidu?, loβih, lovi	kiβuto	kiuβu	
water	ton (also 'river')	ton	ntoŋ	bu, ndo	kakaato	uukoa	koromo
earth	kas	kas	kansi	mesi, mesi?e	nasinua	rasito	gomono
stone	kapa	sima	kapaŋ	kobele, kompore?, sira?	lapoto	aβeke	paratsi
mountain hill	miinan (mountain) mesma (hill)	minan	boia?mii	mete?	pusiko	toisikoβa, kokoβua	tonoso, mete
valley	maato	mato	biri			kaβoβoa, βisipa, opesiko	
earthquake	umi	im	umi			raβurike	
sea	piru	piru	piruŋ			toruβa	tagisi
fire	ita	ita	nta?	warito?, wanto	otokoito	tuitui, eto	dzai, dzaso
pot	kopiri	topiri	utau (clay pot)			pitokaβa	dota (clay pot)
arrow	topar	darapi	tumpari	bah, toka	na'to	kairi	

English	Avaipa	Simeku	Naasioi	Nagovisi	Eivo	Rotokas	Banoni
white	kakaara	kaketa	kakaara	kaakata?, kakata		kaakaaβo, pogara, popote	kakata
red	erento	erento	kiβirong	oroungasi?, ulugasi	deβasipato	reβasia	masimasini, bubu
yellow	netoo ^f	kane	meraa	loriko	aropeto	kese	kakarasa, marekatsi
big	pakaa	borusana	pankaiŋ	pagem, pangeng, panna	pauto	rei, riro, tuupuu	bangana ^g
ripe	netoo	kane	neeto?			peru, βioroi	
one ^h	narea	narer	narurj	namo?, nau	katepato	katai	kadaken
two	kerkaara	ketara	kenanŋka	keuka, kemoka	besiatoarɛ	erao	toom
three	been	banakapa	benaumo	weekango?, bekango?	penuma	βo peruβa	dapisa
four	karen	karen	karenaumo	karekango?	nesiuna	βo resura	tovatsi
five	panoko	panoko	panoko	paʔnoko?	akamoko	βaβae, βo βaβae	γinima
six	panoko ita narea	panoko ke ta narer	panoko keta naururj taa	nauke nōōra		katai βatara	bena
seven	panoko ita kerkaara	panoko ke ta ketara	panoko keta kenanŋka taa	keukake nōōra		erao βatara	bena tom
ten	kibora	naretaken	narurj kiβora	nōōra		katai tau	manoyɑ
night	mutura	mutura	mutane	mʉ:na, mule	daβinutai	βokiaro	bongi
morning	taniketa	mataketa	matane, oratane	taneno, taneʔno?	koropisi	βokipaβira	γasina bobongi
tomorrow	netanda	tanda	tane?	akoroo, akolo	anume	βokipaβira	γasinam
I	nii	nii	niiŋ	ni	naŋa	ragai, ragoa	na
you (sg.)	da	daa	daa?	la?		βii	no
he/she	te ten	nare		te, wakam	era ne:nera	roira, rera, iraaira, iria	nna
we (incl, plural)	niike	nari	nii?	nii?		βigoa	γata
we (incl, dual)		nare		nee?		βegei	γata
we (excl, plural)	nanke	nan	nii? ookara	ni, ni: laʔlopah	mineko	igei	γamam
we (excl, dual)		nare	nee?	nee?, neʔ laʔlopah, ninga	meneko	βegei	γamam
you (plural)	tebo ⁱ	dari	dii?	lii?			
you (dual)	nenaka	dare	dee?	lee?, le, langa	inama'o	βei	

English	Avaipa	Simeku	Naasioi	Nagovisi	Eivo	Rotokas	Banoni
they (plural)	ookara, tebo (all)	nan	teij (dem)	tewöō, okopo?, tevo	oinua	airoa	nari
they (dual)		dare	kenan̄ka (numeral)	tei, ai, tevo	otario	βaiterei	
give	abe		aβu	amai, ni ami, awena, au?, ausis	isiporaram	βate	mana
wash	duutara		duu	luu?		sisu	sisi
see	ooiai		oo	obo-ali, oβw̄ij	kekeponoi	keke	reye
hear	taararabai		taara	talavi, tarab ^w ui, taraumai	marekonoi	uβu	nongono
smell	nuueai		nuu	nuu		βupa	
know	taspeai ^j		tasi	anapi-e, taripujā	neponoi	tarai	kuki
dig	nekeiai		neŋke			eri	γano
go	beai		nanu?	we		aβa	tai
come	poo		poaiŋ ^k	poh, poi, poo	inionoi	urio, βage	taima
stand	dokonia		doŋkoŋ	lamb-ali, rambariā	torere nyimpo:noi	tore	tsiyom
sleep	aasia		asi	asi, asijā?	isionoi	pepe, uusi	tsereye, sabara, matsure
walk	nania		nanu	ulapali, kurapariā, nabeka-ali, nambai?ara	kakariponoi, okaponem	βoka	tai
run	kuapeiai		kua			ikau	
fall	puar		dua?	lula-ali, pu?ari, rura	koβepanoi	koβe	butsu
eat	naiai		naai	nai (staple foods), tai (nonstaple foods), wau ala, wau aramai	tunapoonoi	aio	tam
want	pia		pia			ruipa, βoβou	γaba
try	paraia		paara			akeake, oβooβo raga	
start	tutupe		tutuŋ			kareke pie, roβo, pirupako, rogo	
all	niike ookara ^l		okara	okopo, okopo?	toton	βara rutu	ke kota/na kota
in(side)	kuua		kuuŋ			atoaro	
outside	damaruaa		dama?u			ratau	

English	Avaipa	Simeku	Naasioi	Nagovisi	Eivo	Rotokas	Banoni
behind	tamaruai ^m		damake			siroβa	
between	meuke		meu?			βuruβuru-ia, βuβutaaro	
yes	eeo		ee?	eu?, eu	ε	iu, ari, aure	oo

^aThe form for ‘right hand’ has been included in this list of shared S.B. cognates due to the fact that the Avaipa form includes what appears to be a(n) archaic root *maska*, evidenced by the Simeku form *maskamia*. The fact that the ending *-mia* appears on the A. form *akokamia* ‘left hand’ further supports this analysis, though this form appears on the unique Avaipa list. Thus, the forms for left and right hand together indicate a shared feature; however, we have conservatively included ‘right hand’, but excluded ‘left hand’.

^bIn the original source, this form is syllabified [n.go].

^cThis form appears to have a (fossilized) initial syllable *da-*.

^dThis word is of Torau origin (*tauna*); see the University of Surrey’s Torau dictionary (compiled by Bill Palmer): <https://www.smg.surrey.ac.uk/languages/northwest-solomonic/torau/torau-dictionary/>

^eBut garden = *kasi*.

^fThis is also the word for ‘ripe’, which is cognate with other S.B. languages. This constitutes a case of semantic extension.

^gContrast with the POC form **lapuat*. This indicates a borrowing from one of the S.B. languages.

^hThe numerals can be compared to the comparative list in Lincoln (2010), who notes that despite widespread unusual formations for numbers across the Oceanic and Papuan languages of Bougainville; these appear to be innovations in each group (and also, for the most part, *within* each group).

ⁱThe Avaipa term *tebo* also means ‘all’ or ‘group’ and is cognate with the 2PL form in Nagovisi *tewöö*.

^jBecause the forms share the first phonemic sequence [tas], and because Avaipa exhibits a systematic loss of final [i] forms in Naasioi, this item is tentatively listed as cognate with Naasioi *tasi*.

^kThe root is *po-* in this form, and is bound, in contrast to Avaipa.

^l*niike* is a pronominal form.

^mIt is hypothesized that *tama/dama* is a root shared between Avaipa and Naasioi.

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