



# **A Sociolinguistic Survey of the Avau Language Area**

West New Britain Province

Sara Van Cott and Juliann Spencer

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## **Abstract**

The SIL-PNG survey team completed a sociolinguistic survey of the Avau [avb] language, located in West New Britain Province in Papua New Guinea. Fieldwork was completed from 30 October–5 November 2009. The goals of the survey were to determine language and dialect boundaries and evaluate language vitality. The Avau language is spoken in ten villages, with two reported dialects, and ethnolinguistic vitality is currently high. A striking feature of the Avau language is the fact that verbs in one dialect are inflected to indicate the subject's marital status.

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# 1 Introduction

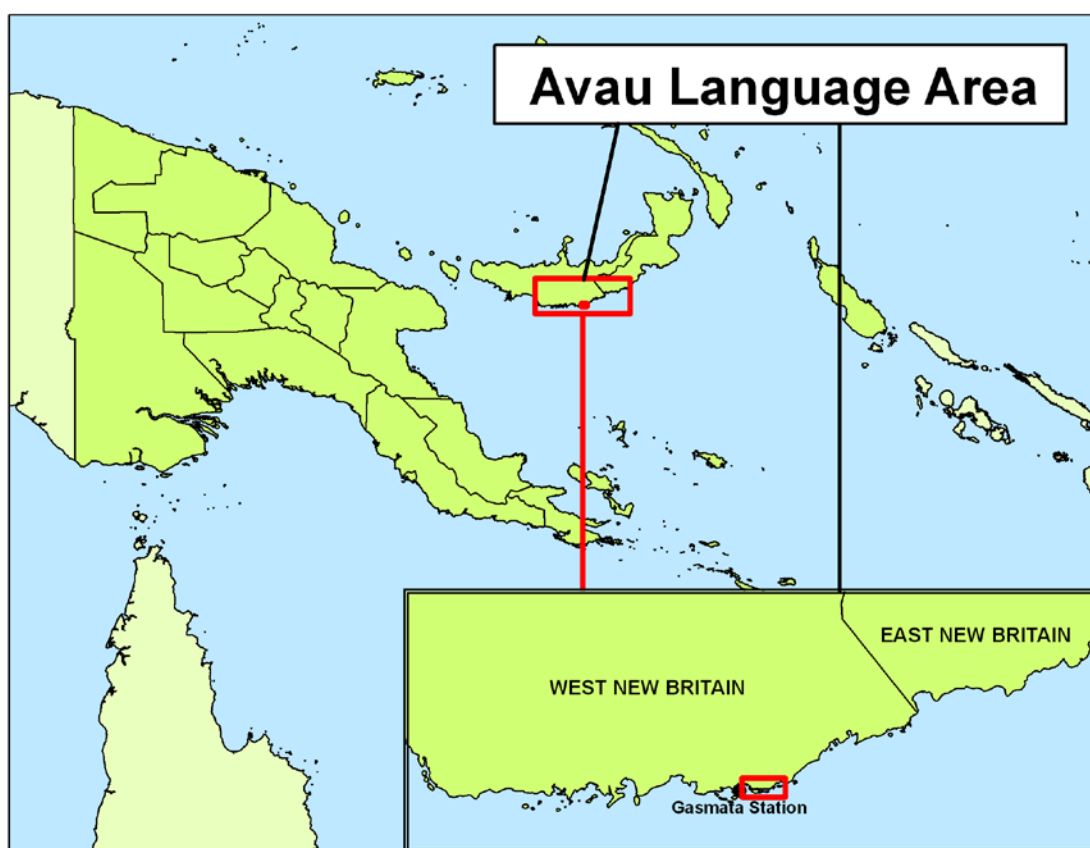
The SIL-PNG survey team conducted a survey of four Arawe languages in West New Britain between 21 October and 10 November 2009. The team consisted of Bonnie MacKenzie, Juliann Spencer, Sara Van Cott and Jacob Bullock. The languages researched during the survey were Amio-Gelimi [let], listed as Lesing-Gelimi in the sixteenth edition of the *Ethnologue* (Lewis 2009); Ambul [apo], called Apalik in the *Ethnologue* (Lewis 2009); Avau [avb] and Bebeli [bek].<sup>1</sup> Fieldwork for the Avau survey was completed between 30 October and 5 November 2009. The goals of the survey were to determine language and dialect boundaries and assess vitality. All maps were created by Sara Van Cott.

The survey team wishes to express its deep appreciation for the kind assistance and hospitality of the people in Lulakevi, Asiwot, Akiwak, Avihain, Metai and Akam communities, without whom this survey would not have been possible.

## 1.1 Language location

The western end of the Avau language area is located two kilometres east of Gasmata, and the area extends ten kilometers farther east, with villages on the coast as well as on nearby offshore islands. The language area covers approximately forty-three square kilometres.

Map 1. Avau in Papua New Guinea

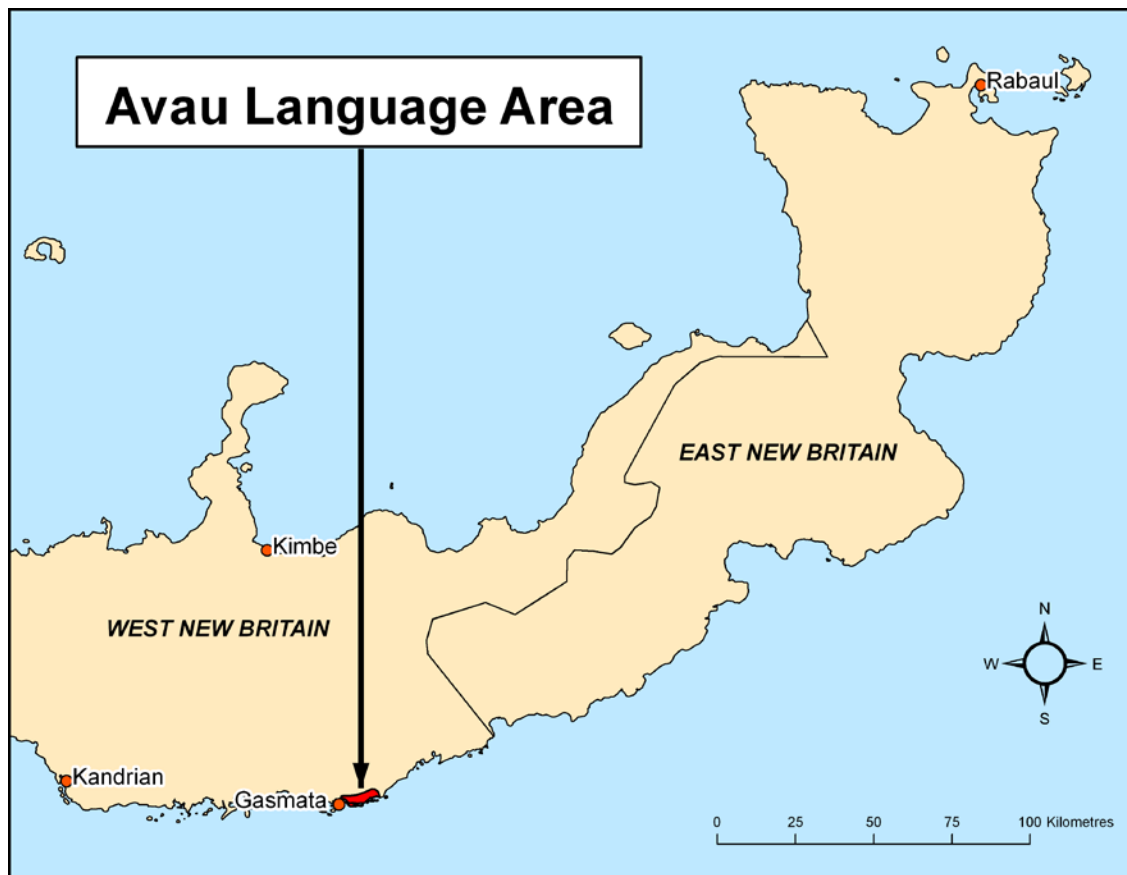


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<sup>1</sup>ISO codes will be listed alongside each language the first time it is mentioned.

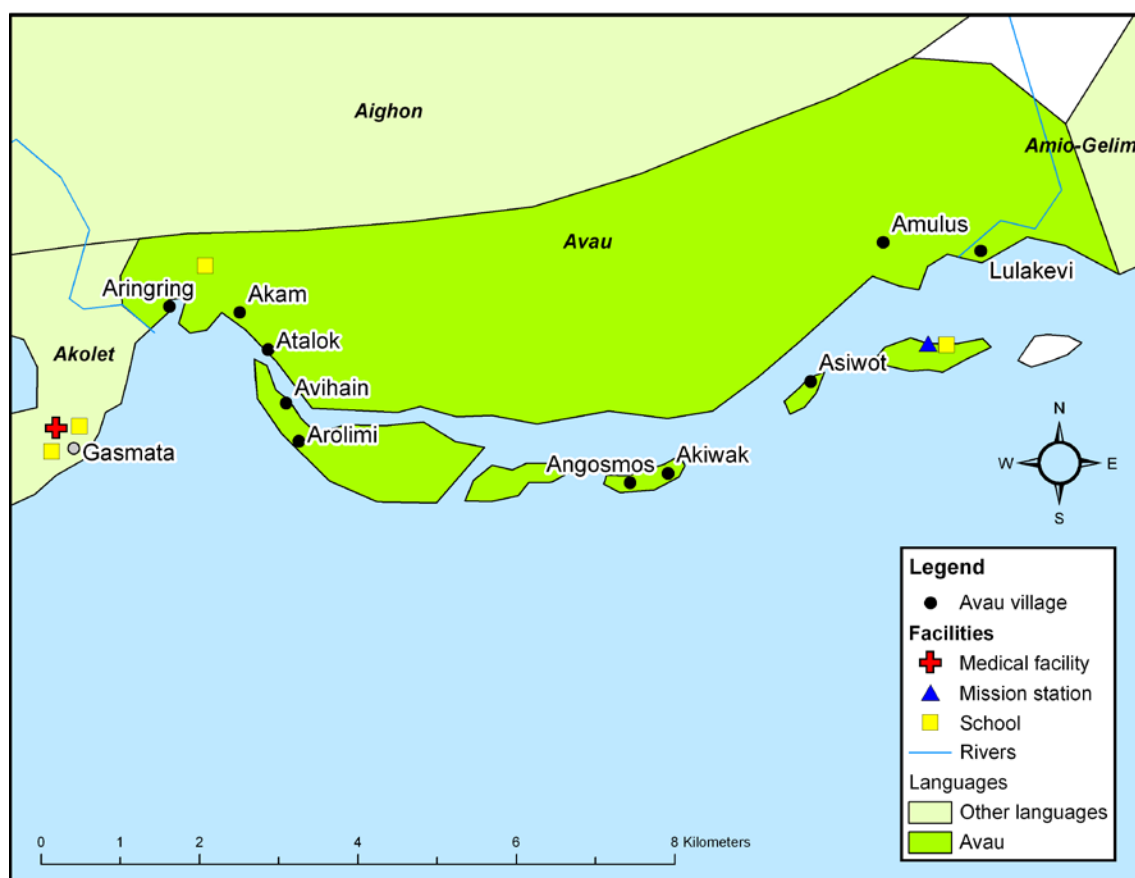
Map 1 shows the location of the Avau language area in Papua New Guinea and Map 2 shows its location in New Britain. Map 3 shows the Avau language area including villages, local facilities and neighbouring languages.

Map 2. Avau in New Britain



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Map 3. Avau villages and facilities



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## 1.2 Language name and classification

Avau is a member of the East Arawe subgroup. The other members of this group are Akolet [akt], Amio-Gelimi and Bebeli. Figure 1 shows the classification of Avau according to the *Ethnologue* (Lewis 2009).

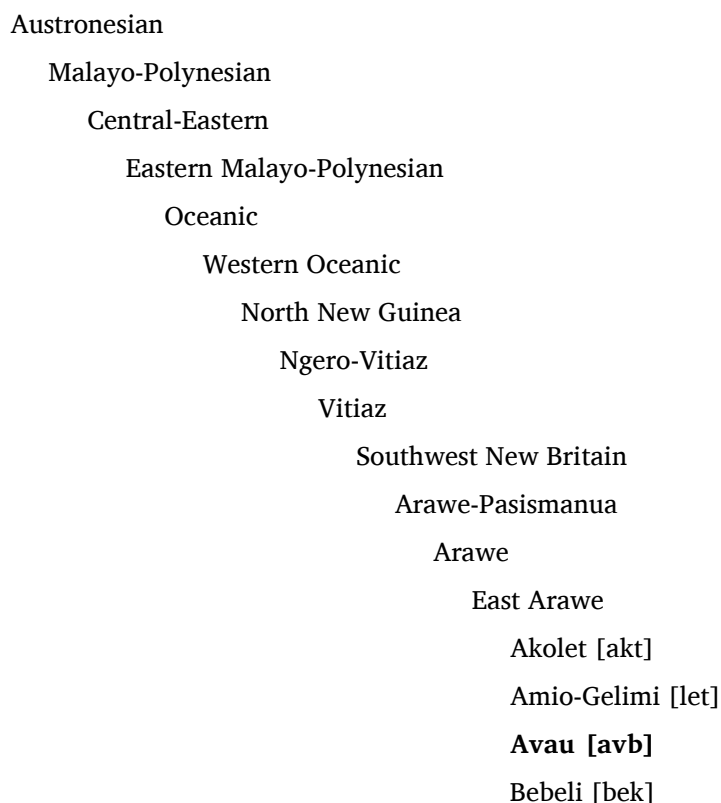


Figure 1. Classification of Avau.

### 1.3 Population

Table 1 shows the population of the census units in the Avau language area, as given by the 2000 national census (National Statistical Office 2002a). According to the census (National Statistical Office 2002b), the average annual growth rate for West New Britain Province between 1980 and 2000 was 3.6 percent. Applying this growth rate to the 2000 population figures yields a projected 2009 population of 1533. Both the 2000 national census data and the projected 2009 population are shown in table 1.

Table 1. Avau population from 2000 census

District	LLG	Ward	Village	Census households	Census population	Projected 2009 population
Kandrian/ Gloucester	Gasmata Rural	Poronga	Lulakevi (Valanguo)	44	255	351
			Akiwak	51	330	454
		Tesopol	Avihain	17	100	137
			Akam	45	230	316
			Aringring	33	200	275
Total			5	190	1115	1533

The census point for Lulakevi, labelled Lulakevi (Valanguo), may include the small number of teachers and others living on Valanguo Island. The figure for Avihain probably also includes people from Arolimi. Similarly, the figures for Angosmos and Asiwot are likely included in the total for Akiwak.

In each Avau village a surveyor asked people to estimate the population of their village; she also attempted to count the number of houses in the village. The number of houses counted in each village has been multiplied by six, the average household size given by the census for the villages listed in the table (National Statistical Office 2002a) to show the current population based on the number of houses. The resulting data are shown in table 2.

Table 2. Recorded Avau village populations

Village	Houses counted	Population based on houses counted	Reported population
Lulakevi	41	246	100 adults, plus children
Akiwak	42	252	200 +
Asiwot	20	120	-
Avihain	13	78	59
Arolimi	13	78	36
Akam	57	342	600
Aringring	36	216	-
<b>Total</b>	<b>222</b>	<b>1332</b>	

## 1.4 Goals

The goals of this survey were to determine language and dialect boundaries and to evaluate language vitality. Language boundaries have been suggested by previous research but have not been confirmed, and it was not known whether there were any dialect differences within the Avau language area. Nothing was known regarding language vitality.

## 2 Methodology

### 2.1 Tools

Language and dialect boundaries were determined based on previous research, reported language and dialect boundaries and lexicostatistic data. Language vitality was evaluated by conducting group and individual interviews and observing language use within Avau communities.

Group interviews regarding language use were conducted in all Avau villages visited, and information collected during these interviews addresses both language vitality and language and dialect boundaries. These interviews were guided by the standard SIL-PNG language use questionnaire. When possible, the interviewer tried to obtain the opinions of both males and females from varying age categories: young, middle-aged and older.

The 170 words and twenty phrases contained in the standard SIL-PNG wordlist (1999 revision) were elicited in each village visited.<sup>2</sup> These six Avau wordlists were compared with each other and with wordlists from the Aighon [aix], Aiklep [mwg], Ambul, Amio-Gelimi, Bebeli, Bola [bnp], Gimi [gip], Mangseng [mbh] and Nakanai [nak] languages, using the lexicostatistic comparison method described by

<sup>2</sup>With the exception of Avihain, where the 170 words were elicited but the twenty phrases were not.

Blair (1990:30–33). This comparison was used along with other data to determine language and dialect boundaries.<sup>3</sup>

Group interviews regarding immigration and emigration were completed in every village visited, and interviews regarding cultural practices were completed in five villages.<sup>4</sup> Individual interviews with school staff and church leaders yielded information regarding language use and attitudes within schools and churches. All of these interviews were guided by standard SIL-PNG questionnaires, with the goal of assessing language vitality.

In every village members of the survey team observed which languages were being spoken, by whom and to whom and recorded these observations. Language use observations gave valuable insights into language vitality.

## 2.2 Sampling

The survey team collected data in six of the ten villages in which the Avau language was reported to be spoken. These villages and the length of time spent in each are shown in table 3.

Table 3. Work schedule

Dates	Village
30–31 October	Lulakevi
31 October–1 November	Asiwot
1–2 November	Akiwak
2 November	Avihain
2–4 November	Akam
4–5 November	Aringring

Three of the four villages in which data were not collected (Amulus, Arolimi and Atalok) are inhabited by only a few families, and at least one member of the survey team briefly visited Amulus and Arolimi. No data were collected in Angosmos village because it is on the same small island as Akiwak, in which data were collected.

For group interviews respondents were chosen based on availability. In an effort to gain the opinions of all demographic groups, everyone who was in the village at the time was invited to participate. For individual interviews respondents were chosen based on their positions in the school or church. Headmasters and catechists were interviewed when possible, or, if they were not available, someone else in a position of leadership was chosen. Spokespeople for the wordlists were chosen by the community but were required to have been born and raised in the village under consideration. Data collection was completed by Bonnie MacKenzie, Juliann Spencer and Sara Van Cott.

## 2.3 Critique

People in all six villages visited reported that there are two distinct dialects within the language area, but these dialects were not confirmed by the lexicostatistic comparison. Reported dialects may be based on differences that are not apparent in the lexicostatistic data. See section 3.3.2 for more information on dialect differences.

Because the survey team members did not spend the night in Avihain, they did not have as much time to make observations in this village as they did in the others. However, they still recorded some observations of language use in Avihain.

<sup>3</sup>See section 3.3.1 for more information on the methodology of the lexicostatistic comparison.

<sup>4</sup>Lulakevi, Asiwot, Akiwak, Akam and Aringring.

The Aiklep and Gimi wordlists used in the lexicostatistic comparison were written phonemically, rather than phonetically like the rest of the wordlists. This discrepancy could have an impact on the results of the comparison. For the comparison, the symbol ‘ng’ was interpreted as the phone [ŋ] and the symbol ‘y’ was interpreted as the phone [j].

Reported language use data are often subjective because the villagers’ perceptions of their language use may differ from their actual language use. However, the fact that the reported and observed language use data are generally consistent gives greater credibility to both sources of data. See section 4.2.5 for a summary of reported and observed language use.

### 3 Language and dialect boundaries

Recognising that there are numerous factors, both linguistic and social, which may affect how one defines a dialect or language, the survey team sought to establish such boundaries in the Avau area on the basis of reported identification, reported comprehension and linguistic similarity. These areas were investigated by using the standard SIL-PNG language use interviews to learn about language attitudes and reported identification and comprehension, and by using the SIL-PNG standard wordlist (190 items) to elicit words and phrases for a comparison of linguistic similarity.

In addition to the three points identified above (identification, comprehension and similarity), the team also researched language and dialect attitudes, i.e. investigating what attitudes are held by the different groups towards each other. Attitudes were investigated during the language use interviews.

It was not the goal of the survey team to be able to identify the precise geographical boundaries between languages or dialects, nor should any resulting maps be considered an indication of land ownership by the speakers of the language or dialect.

#### 3.1 Previous research

Flip Wester and Dan Rath surveyed many languages in New Britain in 1978 and 1979, respectively. In 1980 Dan Hoopert and David Wakefield surveyed twenty-six villages on the southwestern coast of New Britain, including some Avau villages. Their findings can be found in “The Languages and Communities of South-Western New Britain” (Hoopert and Wakefield 1980).

Wester (1978) calls the language “Awau” and says that it is spoken in Aringring,<sup>5</sup> Akam, Lulakevi, Gilimi, Poronga,<sup>6</sup> Atui and Akisook villages. Rath (1979) also refers to the language as “Awau,” listing “Atui” as an alternate name, and includes Aringring, Akam, Akiwak,<sup>7</sup> Lulakevi, Atui and Poronga as villages within the language area.

Hoopert and Wakefield (1980), however, found Atui to be much more closely related to Amio-Gelimi than to Avau. Their research shows a cognate percentage of around 70 percent between Atui and Amio (in Amio-Gelimi), but only around 40 percent between Atui and Aringring (in Avau). Later research in Atui and Poronga by Spencer and Van Cott (2010) confirmed that these are both Amio-Gelimi villages rather than Avau villages.

Hoopert and Wakefield also report that the Avau village of Aringring is “46% cognate with Akur, an Akolet village, and 35% cognate with Amio.”

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<sup>5</sup>Referred to as Ringring by Wester (1978) and Rath (1979).

<sup>6</sup>Referred to as Paronga by Wester (1978) and Rath (1979).

<sup>7</sup>Referred to as Akivak by Rath (1979).

## 3.2 Reported language and dialect boundaries

There are two reported dialects within the Avau language area. The eastern dialect is spoken in Lulakevi, Amulus, Asiwot, Akiwak and Angosmos, and the western dialect is spoken in Akam, Aringring, Avihain, Arolimi and Atolok. The western dialect is sometimes referred to as Putinika by speakers of the eastern dialect, who said that “putinika” means “brother of the language.”

In Asiwot it was mentioned that villagers speaking the western dialect use different forms to refer to different people, depending on gender and marital status. These forms were observed as verbal prefixes during the wordlist elicitation and are explained in greater detail in Appendix A.

Respondents in both dialect areas said that the purest form of the language is the dialect spoken in Lulakevi, Amulus, Asiwot, Akiwak and Angosmos. In Akam people said that the reason it is the purest form of the language is that people in the other dialect mix Avau with Akolet. However, respondents in Aringring said that the purest form of the language is spoken in Aringring, because all Avau people originally lived near Aringring and later scattered to many places on the north coast of West New Britain, to the Bebeli language area and to other Avau villages when a sickness came to the area.

In Akam, Aringring and Avihain it was reported that adults and children can understand both dialects well. People in Lulakevi, however, reported that although adults can understand the other dialect well, children can only partially understand it. In Asiwot respondents said that adults can only understand a little of the other dialect, while children cannot understand it at all. However, since people in Asiwot referred to the other dialect as the “Avihain” dialect, it is not known whether they were referring to the dialect as a whole, or only to the variety spoken in Avihain. As explained in section 3.3.2, Avihain appears to be somewhat different from the other villages associated with the western dialect. It would therefore not be surprising if it is more difficult for people to understand the variety spoken there. Furthermore, it was reported in Aringring that many Akolet speakers fled to Avihain during World War II and married Avihain people, and that most people in Avihain now mix Akolet and Avau.

## 3.3 Lexicostatistic comparison

A lexicostatistic comparison was done between Lulakevi, Asiwot, Akiwak, Avihain, Akam and Aringring. All six villages are at least 79 percent similar, and most share at least 85 percent lexicostatistic similarity. The reported dialect differences are not apparent from the findings of the lexicostatistic comparison.

### 3.3.1 Methodology

In each of the six Avau villages visited, the same member of the survey team elicited 170 words in the Avau language; in five villages<sup>8</sup> twenty phrases were elicited as well. All of these items were elicited using the standard SIL-PNG 190-item list. In addition, twelve words not on the standard list were elicited in some villages and included in the comparison. These additional words are included in the wordlists given in Appendix C.1. In five villages the words were elicited from an Avau speaker whose parents were from that village and who had been born and brought up in that village. In Avihain, however, the spokesman’s father was an Akolet speaker, and it was reported that there was no one present who did not have at least one Akolet parent.

The words elicited in each village were compared using the lexicostatistic similarity method described by Blair (1990:31–33). When possible, affixes were excluded and only the roots were compared. Some items were excluded from the comparison for these reasons: it was believed that the wrong item was elicited, the word given was a Tok Pisin word or the item contained only morphemes

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<sup>8</sup>Lulakevi, Asiwot, Akiwak, Akam and Aringring

that had already been compared in other items.<sup>9</sup> Similarity percentages were then calculated using the WORDSURV computer program (Wimbish 1989).

Following the same procedure, the Avau wordlists were also compared with one Aighon wordlist, one Aiklep wordlist, four Ambul wordlists, four Amio-Gelimi wordlists, three Bebeli wordlists, one Bola wordlist, one Mangseng wordlist and one Nakanai wordlist. More information regarding the sources of these wordlists can be found in Appendix B.

### 3.3.2 Lexical similarity comparisons and interpretation

There is at least 79 percent lexical similarity between every Avau village in the comparison; most villages share over 85 percent similarity.

Table 4. Lexical similarity between Avau villages

<b>Aringring</b>					
95	<b>Akam</b>				
88	91	<b>Asiwot</b>			
85	90	90	<b>Akiwak</b>		
84	89	93	90	<b>Lulakevi</b>	
85	87	82	84	79	<b>Avihain</b>

As seen in table 4, Avihain is lexically the most divergent of the Avau villages, probably as a result of the influence from the Akolet language described in section 3.2. The relatively low similarity of Avihain is further illustrated in table 5, which shows the average similarity of each village with every other village, as well as the range of similarity each village shares with the other villages.

Table 5. Mean similarity and range of similarity between Avau villages

<b>Village</b>	<b>Mean similarity</b>	<b>Range of similarity</b>
Akam	90.4 %	87–95 %
Asiwot	88.8 %	82–93 %
Akiwak	87.8 %	84–90 %
Aringring	87.4 %	84–95 %
Lulakevi	87 %	79–93 %
Avihain	83.4 %	79–87 %

Akam shares the highest degree of average lexical similarity with the other Avau villages, and it is also the only village that shares at least 87 percent similarity with every other Avau village.

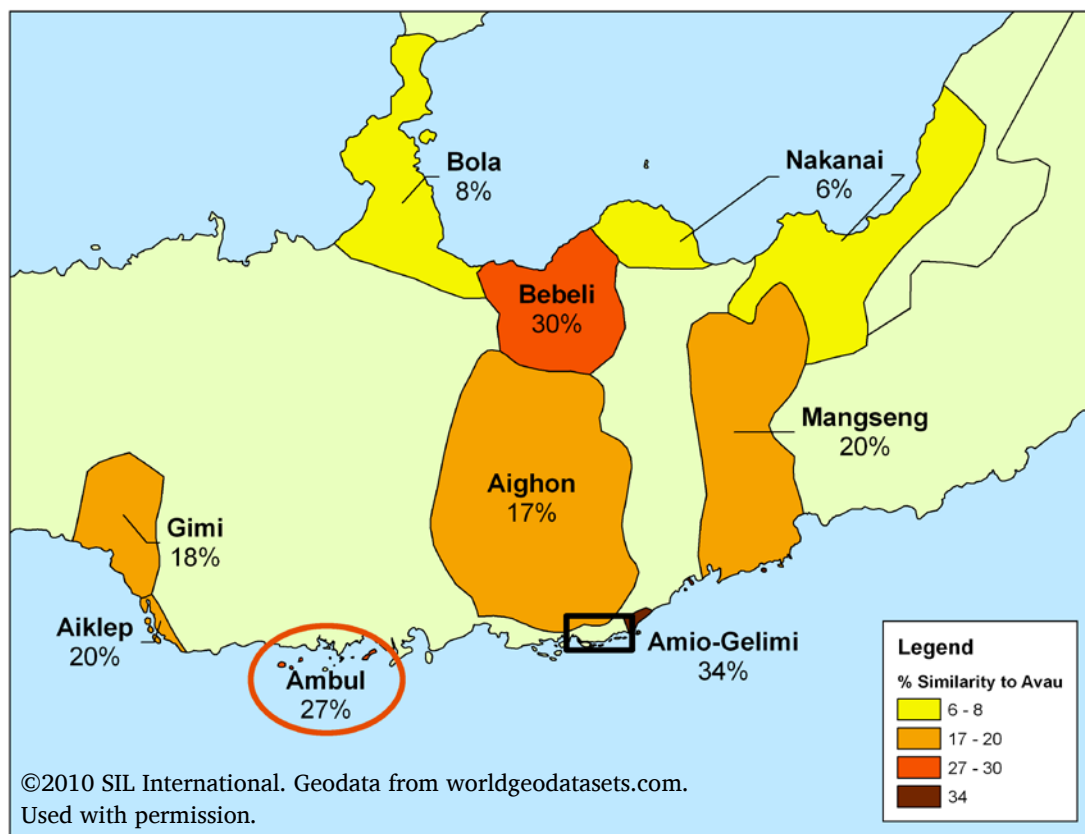
With the exception of Avihain, the villages in the Avau language area appear to form a dialect chain from Aringring to Lulakevi, in the order given in table 4. Given the extensive influence from the Akolet language that is reportedly present in Avihain, it is not surprising that Avihain is an exception to this pattern. The geographically central villages of Akiwak and Asiwot serve as a linguistically central link in this chain, as they both share relatively high degrees of lexical similarity with both ends of the chain. These results are not incongruous with the reported dialect boundaries, which indicate that the three western villages (Aringring, Akam and Avihain) speak one dialect while the eastern ones (Asiwot, Akiwak and Lulakevi) speak another. Reported dialect differences may also be based on differences that are not revealed within the items used in the lexicostatistic comparison. For example, as described in

<sup>9</sup>See Appendix B for a list of excluded items.

Appendix A, verbs in the western dialect are inflected to show the gender, number and marital status of the subject.

The Avau wordlists were also compared with wordlists from the Aighon, Aiklep, Ambul, Amio-Gelimi, Bebeli, Bola, Gimi, Mangseng and Nakanai languages. As shown in Map 4, Avau shares an average lexical similarity of 34 percent with Amio-Gelimi, 30 percent with Bebeli and less with the other languages in the comparison.

Map 4. Average lexical similarity between Avau and neighbouring languages

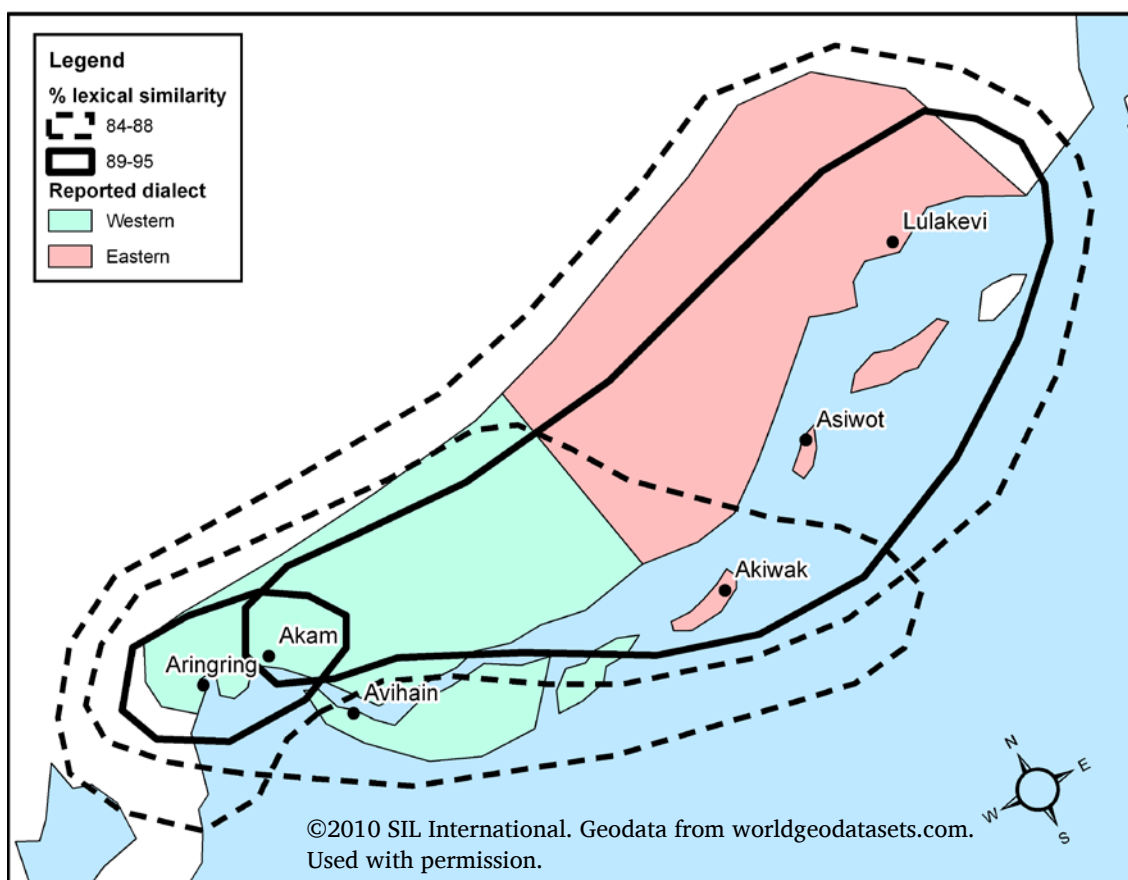


### 3.4 Conclusions

Avau speakers reported that their language is spoken in Lulakevi, Amulus, Asiwot, Akiwak, Angosmos, Avihain, Arolimi, Atalok, Akam and Aringring villages. Wordlists taken in Lulakevi, Asiwot, Akiwak, Avihain, Akam and Aringring villages confirmed that Avau is spoken in those villages. Previous research suggested that Avau was also spoken in Poronga and Atui, but later research showed both Poronga and Atui to be Amio-Gelimi villages.

Reports indicate that an eastern dialect is spoken in Lulakevi, Amulus, Asiwot, Akiwak and Angosmos, and a western dialect is spoken in Avihain, Arolimi, Atalok, Akam and Aringring. These differences are not incongruous with the lexicostatistic comparison, which shows a dialect chain across the language area. Reported dialects and lexicostatistic similarity are shown in Map 5.

Map 5. Avau language boundaries



Speakers of the western dialect can reportedly understand the eastern dialect well, but speakers of the eastern dialect reported some degree of difficulty in understanding the western dialect. Reports also indicate that the eastern dialect is the purest form of the language because speakers of the western dialect tend to mix their language with Akolet.

## 4 Language vitality

Lynn Landweer (2006:213–214) has identified three themes that impact ethnolinguistic vitality: opportunity for contact with other language groups, actual language use and language attitudes. The data presented in the following three sections, which address these three themes, were collected with the goal of assessing language vitality.

### 4.1 Opportunity for contact with other languages

When a language group has more opportunity for contact with other language groups, its language tends to be less vital than those of more isolated language groups. Avau speakers have opportunity for contact with speakers of other languages in a variety of ways: through immigration and emigration, transportation to and through other language area, economic activities outside the language area, and institutions shared with other language areas. None of these areas currently appear to pose a threat to the vitality of Avau.

### 4.1.1 Immigration and emigration

According to Landweer (1991), immigration is less likely to impact language vitality negatively when immigrants are proficient in the local language of their new home, and the population is not saturated with immigrants. The number of immigrants to the Avau area is low at around six percent. Around sixty percent of female immigrants and forty percent of male immigrants can speak Avau. However, almost all children of immigrants can speak Avau. The number of emigrants from the Avau language area is also relatively low. When emigrants return home, all of them still speak Avau, although most of their children only speak Tok Pisin. Immigration and emigration do not seem to pose a threat to language vitality at this time.

There are forty-six adult immigrants living in the Avau area (fifteen men and thirty-one women), who make up about six percent of the population.<sup>10</sup> The number of male and female immigrants is equal in Asiwot, Akiwak and Avihain, but there are many more female immigrants than male immigrants in Lulakevi, Akam and Aringring. Table 6 shows the numbers of male and female immigrants in each village.

Table 6. Immigrants to the Avau area

Village	Male	Female
Lulakevi	2	5
Asiwot	1	1
Akiwak	2	2
Avihain	2	2
Akam	5	10
Aringring	3	11
<b>Total</b>	<b>15</b>	<b>31</b>

Many more female immigrants than male immigrants speak Avau well. Fifty-eight percent of female immigrants (18 of 31) are reported to have learned Avau and speak it well. Only forty percent of male immigrants (6 of 15) are reported to speak Avau well. Even though the number of adult immigrants learning Avau is not very high, almost all children of immigrants speak Avau. Of immigrants with children, children of all male immigrants except one speak Avau, and children of all female immigrants except two speak Avau.

Many immigrants who know Avau are from nearby languages and were reported as learning the language quickly. Of twelve immigrants for whom there is data, all are reported to have learned Avau in a year or less. Some people from Poronga, in the Amio-Gelimi language area, were reported to speak Avau already before they married in, even learning it while they were still children. Others from Akolet were reported to learn Avau quickly since their language is similar.

All of the immigrants to the Avau area moved there because they married Avau people. There are approximately 511 married people living in Avau communities.<sup>11</sup> Of these 256 marital unions,

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<sup>10</sup>Percentage of immigrants living in Avau communities =  $\frac{\text{immigrants}}{\text{projected 2009 population} \times \text{adult percentage}} = \frac{46}{1533 \times 0.521} = 0.0576$

<sup>11</sup>Married people living in Avau communities =  $(\text{projected 2009 population} \times \text{adult percentage}) \times \text{percentage married adults} = (1533 \times 0.521) \times 0.64 = 511$

approximately eighteen percent involve an immigrant.<sup>12</sup> Immigrants to the Avau area come from many places, including other areas of New Britain (the Aighon, Amio-Gelimi, Akolet, Ambul, Solong [aaw], Maleu-Kilenge [mgl] and Kuanua [ksd] language areas), and other locations in Papua New Guinea (Manus Island, Siassi islands, Manam Island and Kavieng).

One hundred and seven Avau people have emigrated from the Avau area. This represents approximately 12.5 percent of the adult population.<sup>13</sup> All male emigrants left the area to work, except for four from Aringring who married and moved to their wives' home areas. All female emigrants left to marry men from other areas, except for one from Lulakevi who married a man from Kimbe and also works there. The number of emigrants from Akam, and Aringring to a lesser degree, is much greater than the number of emigrants from other villages. The reason for this is not known. Excluding emigrants from Akam and Aringring, the percentage of the Avau population that has emigrated drops to 3.6 percent. table 7 shows the number of male and female emigrants from each village.

Table 7. Emigrants from the Avau area

Village	Male	Female
Lulakevi	0	7
Asiwot	2	2
Akiwak	3	9
Avihain	0	5
Akam	29	24
Aringring	17	9
<b>Total</b>	<b>51</b>	<b>56</b>

When emigrants from Avau come back to visit, they reportedly speak Avau, with the exception of male emigrants from Akiwak who mix Avau and Tok Pisin when they return. All children of emigrants are reported to use Tok Pisin when visiting the Avau area, except for the children of one man who is married to an Akolet woman. His children are reported to speak Avau and Akolet when visiting the area.

#### 4.1.2 Transportation

Landweer (2006:174–177) has pointed out that the language vitality of communities with easy access to a population centre where they are likely to mix with speakers of other languages on a regular basis is at greater risk than the vitality of communities with less access to large population centres. Although the Avau people have access to Kimbe through flying, driving and walking, they do not travel there very often. People most often travel around the local area via canoes. They have some contact with people from other languages through transportation, but it is limited and does not seem to have a significant impact on language vitality at this time.

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<sup>12</sup>Percentage of marriages involving an immigrant =  $\frac{\text{immigrants}}{0.5 * (\text{married people})} = \frac{46}{0.5 * 511} = 0.179$

<sup>13</sup>Percentage of emigrants =  $\frac{\text{emigrants}}{(\text{projected 2009 population} * \text{adult percentage}) + \text{emigrants} - \text{immigrants}} = \frac{107}{((1533 * 0.521) + 107 - 46)} = 0.125$

## *Water Travel*

The Avau people live on the coast or small islands near the coast and travel around the local area by canoes. People from all villages visited, except for Aringring,<sup>14</sup> reported that they canoe to Gasmata. Respondents from Lulakevi, Asiwot and Akiwak all reported canoeing to Valanguo where they attend church and school. People also use canoes to travel to their gardens on the mainland and other local villages, such as Poronga and Atui in the Amio-Gelimi area, and Melenglo in the Ambul area.

Avau people also reported traveling by dinghy but not as often. People in Lulakevi and Asiwot reported traveling to the same places by dinghy that they travel to by canoe. Respondents in Akam and Aringring said that they travel to Kandrian and Amio by dinghy. Those from Aringring also said they travel to Uvol and Wowonga.<sup>15</sup> People in Akiwak said that they used to travel by dinghy but do not do so anymore, because all of the dinghies are broken. Approximately five people in the Avau area own dinghies – two white people who have vacation homes in Akam, the magistrate and two others in Aringring.

Although people reported traveling by ship in the past, it seems that this method of transportation is now unreliable and little used by the Avau people. Respondents in Lulakevi said they can travel to Kimbe and Rabaul by ship. Those in Akiwak, Akam and Aringring said that while they used to travel to Kimbe and Rabaul by ship, they no longer do because the ships do not come. In Asiwot people reported traveling by ship occasionally, presumably to Kimbe and Rabaul.

## *Air Travel*

The closest airstrip to the Avau area is the Gasmata airstrip. Although it is fairly close to the Avau area, only a few people have ever flown. People in Lulakevi and Akiwak reported that before, when they had income from a company in the area, some people flew from Gasmata. Now that people have less income, they travel even less. People in all villages visited reported that people very seldom travel by air. The price for flying from Gasmata to Hoskins, the airport closest to Kimbe, is around 350 kina.<sup>16</sup>

## *Road Travel*

There are no roads for cars in the Avau area, but people do travel by road, especially to Kimbe. In Lulakevi, Asiwot, Akam and Aringring, people reported using the Amio to Kimbe road. The road, which was built by a now-departed logging company, used to go from Kimbe in the north to Amio on the coast in the south. The road has deteriorated and, because of broken bridges, is only accessible as far south as Wala,<sup>17</sup> a village two hours upriver from the south coast. People take dinghies to Wala and then wait for public motor vehicles to arrive and take them to Kimbe. The car trip costs around fifty kina.<sup>18</sup> Respondents reported traveling to Kimbe only occasionally, perhaps once a year. Respondents in Aringring said that they also use a road from Atui to walk or drive to Kimbe.<sup>19</sup> People from Akiwak said they do not travel by road.

## *Trails*

People from Lulakevi, Asiwot, Akiwak and Akam reported using walking trails to get to Kimbe. Those in Asiwot and Akiwak reported walking to Kimbe using a trail from Atui. People from Akam reported that there is an old logging company road that they use as a trail to walk to Kimbe. Respondents from the three mainland villages visited, Lulakevi, Akam and Aringring, all reported walking to Gasmata. People in Lulakevi reported using trails to visit the Mangseng village of Asirim and the Sengseng [ssz] village of Akinum, and people in Aringring walk to the Aighon villages of Menpa and Zebu.

<sup>14</sup>People from Aringring are close enough to Gasmata that they use trails to walk there.

<sup>15</sup>The location of Wowonga is unknown.

<sup>16</sup>Approximately US\$133.

<sup>17</sup>The Ambul and Amio-Gelimi people reported that this road accesses Wasum, so Wala is possibly Wasum.

<sup>18</sup>Approximately US\$19.

<sup>19</sup>According to people in Atui, this road is only a walking track and not yet usable by cars.

### **4.1.3 Economics**

According to Landweer (2006:209), language communities that do not need to use a second language to meet their perceived economic needs typically exhibit higher language vitality than those that are dependent on an economic base outside the language area. The Avau people are subsistence farmers who are able to meet most of their needs from within their own community. They have few sources of income. They mostly obtain cash by selling food to others in the community. There are no companies in the Avau area, although a few men do work at timber companies outside the area and speak Tok Pisin and English there. The limited contact with outsiders caused by economics does not seem to pose a threat to the vitality of the Avau language at this time.

Avau people can make money by selling goods to their neighbours or others who visit the area. Their only cash crop is copra, which they dry from coconuts and sell to ships that occasionally come to buy it. People in Lulakevi also reported selling sea cucumbers to Asian merchants. In all villages people reportedly sell goods such as greens, sweet potatoes, fish, pigs, coconuts and betelnut to others in their village. People from Akam and Aringring travel to the twice-weekly market at Gasmata to sell the same kind of items there.

People in Akiwak have some contact with a timber company located west of Gasmata, PNG Timber, located in the Akolet language area. Two men from Akiwak work there and use Tok Pisin to speak with their coworkers from other language areas. Respondents in Akam mentioned that they have some contact with the timber company Sare Sources, which operates out of Kalagen, also in the Akolet language area. One Akam man works there and speaks Avau with those who understand and Tok Pisin with those who do not. People in Aringring mentioned that they have contact with another timber company Asengseng Timber, located at Au in the Akolet language area. Six men from Aringring work there and are reported to speak Tok Pisin with their coworkers and English with their supervisors who do not know Tok Pisin. Respondents in Lulakevi and Asiwot reported that they do not have contact with any companies.

### **4.1.4 Contact through institutions**

The Avau people have contact with other language groups through the schools, churches and health facilities they share. Avau children from Lulakevi, Akiwak and Asiwot attend school on Valanguo Island, along with children from the Amio-Gelimi village of Poronga. People from these same villages attend church together at Valanguo. Children from the other Avau villages, Avihain, Aringring and Akam, attend school at Avau Community, Gasmata Elementary and Gasmata Primary, along with Akolet children from surrounding villages. Respondents from all Avau villages reported using only Gasmata Health Centre for medical treatment. People from Akolet, Ambul and other nearby language areas also use this facility.

### **4.1.5 Summary of contact with other languages**

The percentage of people who have immigrated to the Avau area is quite low. While only about half of immigrants can speak Avau, almost all of their children speak it. The Avau area is remote and travel to urban centres is difficult. People occasionally travel to or through other language areas. Because they are economically quite self-sufficient, the Avau people do not have much contact with outsiders to meet their needs. People sell copra and sea cucumbers to passing merchant ships, some people go to the market at Gasmata and a few men work at timber companies in the Akolet area. The Avau people have some contact with Amio-Gelimi and Akolet speakers through schools, churches and Gasmata Health Centre. This contact has been in place for some decades and does not seem to have affected the vitality of the language yet. It was reported that Avau speakers often use their own language when interacting with Amio-Gelimi and Akolet people (see section 4.2.9). Although Avau speakers have some contact with speakers of other languages, it does not seem to be causing language shift or a major threat to language vitality at this time.

## 4.2 Language use

### 4.2.1 *Children's reported language use*

Avau is the primary language spoken by children in the Avau language area. They reportedly learn Avau first and speak it well by the time they are old enough to attend school. Although most children also speak Tok Pisin and some can speak other languages as well, they use Avau more than any other language, which is a positive sign for the vitality of the Avau language.

Children in every village can speak Avau, and those in Asiwot, Avihain and Aringring can speak Tok Pisin as well. Children in Akiwak can understand Tok Pisin and speak a little, and in Lulakevi children can understand Tok Pisin if they have been to school, and a few of them can speak it as well. In addition, children in Avihain can understand a few words of English, Amio-Gelimi and Aighon, and in Aringring children who have been to school can understand English. Children in Avihain and Aringring can understand Akolet, possibly because these are two of the closest villages to the Akolet language area.

Although many children are able to speak other languages, Avau is the primary language that they speak on a regular basis. Respondents were asked what languages children use when they are speaking to their grandparents, parents, siblings and friends and when they are angry. In all six villages Avau is reported to be the only language children use in these interactions, with a few exceptions. Children in Avihain and Akam use both Avau and Tok Pisin with their friends; children in Lulakevi use Avau along with a little Tok Pisin when they are angry and children in Asiwot use Avau along with a little Tok Pisin when speaking to their parents.

Avau is the first language children learn, although it was mentioned in Lulakevi that children of mixed marriages learn Tok Pisin first. Children in every village can speak Avau well by the time they go to school, and in most villages they can speak it as well as adults by that time. They do, however, mix Tok Pisin with Avau. Most respondents said that children only mix a little Tok Pisin with Avau. However, those in Lulakevi said that they mix in a lot of Tok Pisin, and one older man in Akiwak remarked that children mix more Tok Pisin than they used to, and there are now some Avau words they do not know. People in Akam said that children also mix a little English with Avau.

In four of the six villages people said that they do not like their children to mix languages and some expressed the fear that Tok Pisin would be spoken at the expense of Avau. In Asiwot and Aringring, however, respondents think that it is good for children to mix languages and those in Aringring said that if children mix languages, then they will be able to communicate with people if they go to school outside the language area. However, respondents in Asiwot said that even though they think it is good for children to mix languages, their ancestors would think that it is bad. It was mentioned in both Asiwot and Akiwak that adults mix languages as well.

Children of immigrants are reported to speak Avau, except for the children of one male immigrant and two female immigrants.

### 4.2.2 *Children's observed language use*

Observations of children's language use confirm the reported data. Children were observed using primarily Avau, with only a small amount of Tok Pisin. Out of twenty-eight observed instances of children's speech, only two were in Tok Pisin and the rest were in Avau. Additionally, on twelve separate occasions (at least once in every village), a group of children was observed to be using Avau for an extended period of time. Children were observed using Avau with other children as well as with adults.

Children were observed code switching on a few occasions. Three times in Asiwot and once in Lulakevi,<sup>20</sup> children were observed inserting Tok Pisin words or phrases into Avau sentences. See section 4.2.10 for more information about code switching in the Avau language area.

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<sup>20</sup>These observations are not included in the instances of speech mentioned in the previous paragraph.

### **4.2.3 *Adults' reported language use***

Avau is the primary language spoken by adults in the language area. Many adults can speak other languages such as Tok Pisin, English and other vernaculars, but they use Avau more than any other language in most of their regular interactions. This extensive use of Avau is a positive sign for the vitality of the language.

All adults in the language area are able to speak Avau. Almost all adults can speak Tok Pisin as well, although in Akam it was reported that older women can understand Tok Pisin, but they are only able to speak a little.

Many people can speak some English as well. Young and middle-aged men in Avihain and Akam can speak English, and middle-aged men in the other four villages can understand some. Young men in Aringring can speak a little, and young men in Asiwot can understand a little. Some older men in Avihain and Akam can speak a little English, and those in Aringring can understand a little. Young women in Avihain can speak English, those in Aringring can speak a little and young women in the other villages can understand some. Middle-aged women in Aringring can speak a little English, and those in other villages can understand some. Old women in Akiwak and Avihain can understand a little English.

Some adults can also speak other vernacular languages, including Amio-Gelimi, Aighon and Akolet. See section 4.2.9 for more information regarding multilingualism in other vernaculars.

Although most adults are able to speak more than one language, Avau is reportedly the primary language spoken by adults of all ages in the Avau language area. Adults were asked what languages they use when speaking with their parents, spouses and siblings, and when teaching and scolding children. In four of the six villages Avau is reported to be the only language they use in all of these interactions. In Lulakevi respondents said that Avau is the only language they use, except that middle-aged men also use some Tok Pisin when teaching children. In Asiwot it was reported that everyone uses Avau in all situations, but middle-aged men and women and older women also use a little Tok Pisin when teaching children.

### **4.2.4 *Adults' observed language use***

Observations of adults' language use confirm the reported data. Adults were observed using primarily Avau, with a little Tok Pisin as well. Out of 158 instances of observed speech, 121 were in Avau (over seventy-six percent), thirty-one involved both Avau and Tok Pisin (twenty percent) and only six were in Tok Pisin (less than four percent). Furthermore, all six of the speech instances involving only Tok Pisin were spoken by young and middle-aged women, and it is possible that some or all of these women were immigrants. Of the thirty-one instances of observed speech using both Tok Pisin and Avau, roughly half of the speakers were men and half were women, but most of them (20 of 29) were middle-aged, so many of them could be immigrants as well.

### **4.2.5 *Summary of reported and observed language use***

Both reported and observed data indicate that Avau is the primary language used by adults and children within the Avau language area. Although most people are also able to speak Tok Pisin and some other languages as well, it was reported that both adults and children use Avau in almost all interactions, and observations confirmed these reports. This vigorous use of Avau indicates a high vitality for the language.

#### **4.2.6 *Domains of language use***

In each village visited, the survey team asked which languages people use when organising traditional events, arguing with family, joking, playing sports, holding village court,<sup>21</sup> praying at home, using local health facilities, going to market and going to town. Although Tok Pisin is used almost exclusively for prayer and when visiting local health facilities, Avau is used to some extent in every other domain, and it is used exclusively for traditional events. The use of Avau in such a wide range of domains is a positive sign for the vitality of the language.

Avau is the only language used for traditional events such as weddings and funerals, and it is the primary language used when arguing with family, although respondents in Akiwak reported that some Tok Pisin is used as well. Avau is also used for joking in Avihain and Aringring, and both Avau and Tok Pisin are used for joking in the other four villages.

Both Avau and Tok Pisin are used for sports and for holding village court, and Tok Pisin is the primary language used for prayer, although it was reported in Aringring that some Avau and English are used there during prayer as well. Sports, court and prayer are all domains that have been introduced from outside the Avau culture, and the use of a secondary language in introduced domains is not as great a threat to language vitality as when a second language is used in more traditional domains (Landweer, personal communication, 14 April 2009).

The only medical facility used by the Avau people is Gasmata Health Centre. People from Asiwot and Akiwak reported using only Tok Pisin there, while people from Lulakevi, Akam and Aringring noted that they also speak Avau with the two staff members from Akolet, who understand and reply in Akolet, which is understood by the Avau people.

People use both Avau and Tok Pisin when they go to the market in Gasmata, although in Avihain it was reported that they use Avau for market within the village. Tok Pisin is used in the towns of Kimbe and Rabaul, although people do use Avau if they meet another Avau speaker in town.

Avau is used in every domain except prayer, and it is the only language used for traditional events and the primary language used for arguing with family members. Furthermore, four of the domains where Tok Pisin is used, namely, prayer, sports, village court and using health facilities, involve activities that have been introduced from outside the Avau culture, so the use of Tok Pisin in these domains does not necessarily constitute a threat to the vitality of the Avau language.

#### **4.2.7 *Language use in schools***

Tok Pisin and English are the primary languages used in five of the six schools attended by Avau children. At the schools which reported having books, all of the books are in Tok Pisin or English, and only three teachers are reportedly able to speak Avau. However, since only thirty-eight percent of school-aged children attend school, and many of them are reported to speak Avau at school, the education system is not necessarily a threat to the vitality of Avau at this time.

Avau children attend six schools in or near the Avau language area. Table 8 lists the schools attended by Avau children and the language areas bordering those schools.

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<sup>21</sup>In Papua New Guinea court cases are often resolved by local government representatives within the village.

Table 8. Schools attended by Avau children

School	Location	Language area(s)	Year started	Grades offered
Avau Community	Avau	Avau	2000	1–6
Gasmata Elementary	Gasmata	Avau, Akolet	2008	3, 5
Gasmata Primary	Gasmata	Avau, Akolet	2008	3, 5, 7–8
Valanguo VTPS <sup>a</sup>	Valanguo	Avau, Amio-Gelimi	2009	EP
Valanguo Primary <sup>b</sup>	Valanguo	Avau, Amio-Gelimi	1965	2–4, 7
Atui Primary	Atui mainland	Avau, Amio-Gelimi, Mangseng	1960s	3–4, 6–8

<sup>a</sup>Viles Tok Ples Skul in Tok Pisin, “village vernacular school.” Children from Poronga and the Avau language area attend. No additional data were collected at this school.

<sup>b</sup>Attended by children from Poronga and the Avau language area.

Because both of the teachers at Valanguo VTPS are Avau speakers, Avau may be used for instruction at that school. However, Tok Pisin and English are the primary languages of instruction in all of the other schools attended by Avau children. Instruction at Gasmata Elementary is in Tok Pisin, and both Tok Pisin and English are used at Avau Community and at all three primary schools. Atui Primary has some English books, Gasmata Elementary has Tok Pisin books and there is no data regarding books at other schools.

Neither Gasmata Elementary nor Valanguo Primary has a traditional culture component in their curricula. There is a traditional culture component at Atui Primary, but that school is located in the Amio-Gelimi language. No data is available regarding traditional culture components at the other schools.

At Gasmata Elementary, it was reported that it would be difficult to use any vernacular language in the classroom because there are students from both the Avau and Akolet language areas in attendance. Students at Gasmata Elementary reportedly mix Tok Pisin, Avau and Akolet when they are speaking among themselves. In Akiwak and Akam it was reported that children mainly use Avau at school, and in Asiwot it was reported that they use both Avau and Tok Pisin. Respondents in Aringring said that elementary students use Avau; those attending Avau Community use both Avau and Tok Pisin and children attending Gasmata Primary use Tok Pisin, English and Avau. People in Lulakevi said that children use Tok Pisin at school, but they also mentioned that it was against the rules for them to use the vernacular, so they may have been reporting Tok Pisin as the language children are supposed to use, rather than the language that they actually use.

The two teachers at Valanguo VTPS are Avau speakers, one from Akiwak and one from Asiwot. However, all of the teachers at Valanguo Primary and Atui Primary are from other language areas, including Lamogai [lmg], Kuanua, Ramoaina [rai], Lote [uvl], Mamusi [kdf], Mengen [mee] and Amio-Gelimi. The teacher from Kuanua has married an Avau woman and has learned the Avau language, but none of the other teachers were reported to speak Avau. It was reported that teachers at Valanguo Primary use Tok Pisin with their families, with adults in the village and with other teachers, although they may use English as well when they are discussing school-related issues with other teachers.

Avau children attend high school outside the Avau language area at Pomalal in the Sengseng language area, Kimbe High School or Poinini Technical School in Kimbe. These schools are located outside the Avau language area, so students attending them need to use languages other than Avau.

Table 9 shows the number and percentage of Avau children from each village attending school.

Table 9. Avau children attending school

Village	Children aged 5–19 <sup>a</sup>	Number of children	Percent of children
Akiwak	164	82	50
Aringring	103	45	44
Akam	122	52	43
Lulakevi	141	35	25
Avihain	56	10	18
<b>Total</b>	<b>587</b>	<b>224</b>	<b>38</b>

<sup>a</sup>Projected 2009 census data for each village, multiplied by the percent of the population aged 5–19 (0.3868) according to the 2000 census (National Statistical Office 2002a).

Across the language area, the percentage of school-aged children attending school ranges from eighteen percent in Avihain to fifty percent in Akiwak. However, it should be noted that in Akiwak this is based on the assumption that Angosmos and Asiwot are also included in the Akiwak census point (see section 1.3). If this is not the case, then only twenty-four percent of the children in Akiwak are attending school.

Avau may be used for instruction at Valanguo VTPS, but it is not used for instruction in any of the other schools attended by Avau children. Only thirty-eight percent of the school-aged children attend school, and respondents in four villages said that children use Avau to some degree while they are at school. Therefore, the use of languages other than Avau within the classroom will not necessarily have a negative impact on the vitality of the Avau language.

#### 4.2.8 Language use in churches

Institutional support is a key factor in ethnolinguistic vitality (Giles et al. 1977 and Fasold 1987:221). In Papua New Guinea the church is often the primary institution functioning at the local level. In order to evaluate language use within churches, the survey team interviewed local pastors and lay leaders, asked questions relating to vernacular use in the church and attended church services in order to observe language use. At the two churches attended by Avau people, Tok Pisin is the primary language used. Some Avau is used for singing and giving announcements. More Avau is used in other church activities, but Tok Pisin is also used.

Table 10. Language use in Avau church services

Church	Liturgy	Prayer	Sermon	Scripture reading	Hymns and songs	Announcements
St. Maria Ascension (Valanguo) <sup>a</sup>	Tok Pisin	Tok Pisin	Tok Pisin	Tok Pisin	Tok Pisin, a few Latin	Tok Pisin
Asiwot village <sup>b</sup>	Tok Pisin	Tok Pisin	Tok Pisin	Tok Pisin	Tok Pisin, a few Avau	Tok Pisin, some Avau
St. Michael's (Akam) <sup>c</sup>	Tok Pisin	Tok Pisin	Tok Pisin	Tok Pisin	Tok Pisin, Avau	Tok Pisin, a little Avau

<sup>a</sup>People from Lulakevi, Asiwot and Akiwak attend St. Maria Ascension, along with people from the Amio-Gelimi village of Poronga.

<sup>b</sup>People from Asiwot attend church at Valanguo but also hold church services in their village.

<sup>c</sup>People from Avihain, Akam and Aringring attend St. Michael's.

Table 10 shows language use in church services. The church at Valanguo, attended by Avau and Amio-Gelimi people, uses only Tok Pisin, except for singing a few Latin hymns. When holding church services in Asiwot village, people occasionally sing songs or hymns in Avau and use some Avau for

giving announcements. They use Tok Pisin for the rest of the service. The church at Akam, attended only by Avau people, reported singing equal numbers of Tok Pisin and Avau songs and using a little Avau, along with Tok Pisin, for giving announcements. Tok Pisin is solely used in all other areas of church services there.

Some Avau people also participate in other church-related activities outside of Sunday services. These include youth services, women's groups and children's Sunday school. Table 11 shows church activity language use by village.

Table 11. Language use in Avau church activities<sup>a</sup>

Village	Youth services	Women's groups	Sunday school <sup>b</sup>
Asiwot	Tok Pisin, Avau	Tok Pisin, Avau	Tok Pisin, Avau
Akiwak	Avau	Avau	Tok Pisin, Avau
Avihain	-	Avau	Tok Pisin
Akam	Tok Pisin	Tok Pisin, a little Avau	Avau, a little Tok Pisin

<sup>a</sup>Lulakevi does not have any of these activities; no data is available for Aringring.

<sup>b</sup>Churches from Asiwot and Akiwak attend Sunday school at Valanguo.

Avau is used more in these activities than in church services; however, Tok Pisin is still used in some villages. Of three villages with youth services, Akam uses primarily Tok Pisin, Akiwak uses primarily Avau and Asiwot uses equal amounts of Tok Pisin and Avau. Four villages have women's groups. Akiwak and Avihain use primarily Avau, while Asiwot uses equal amounts of Tok Pisin and Avau and Akam uses mostly Tok Pisin and a little Avau for explanations. The Sunday school programme at Valanguo, attended by children from Akiwak and Asiwot, uses equal amounts of Tok Pisin and Avau. Avau and a little Tok Pisin are used for Sunday school at Akam, and only Tok Pisin is used at Avihain.

The catechist at Akam is an Avau man from Akiwak. He is a mother tongue Avau speaker and speaks Avau in the community with family and friends. At the time of the survey a new priest had just arrived at Valanguo. It is not known what his first language is, but he cannot speak Avau. Each village has lay leaders who speak Avau.

The extensive use of Tok Pisin in church services is a negative sign for language vitality. However, more Avau is used in other church activities, especially in Asiwot and Akiwak. People of these villages attend the Valanguo church, which uses Tok Pisin because of its mixed congregation. The fact that people use more Avau for church-related activities when they are only with other Avau speakers is positive and lessens the overall negative impact on vitality of so much Tok Pisin being used in church services.

#### 4.2.9 Multilingualism with other vernaculars

People in the Avau language area can speak other vernacular languages, including Akolet, Aighon and Amio-Gelimi. The following paragraphs present reported data regarding multilingualism in the Avau language area.

All adults in Avihain, Akam and Aringring can reportedly speak Akolet, and some people in Lulakevi and Akiwak can speak it as well. In those two villages it was reported that some young adults can understand Akolet, middle-aged women can speak it, middle-aged men can speak it a little and some older people can speak it. At least in Avihain, bilingualism in Akolet is likely due to the high degree of intermarriage between Avihain residents and Akolet speakers, as described in section 3.2.

Some adults in Lulakevi, Avihain, Akam and Aringring can speak Aighon as well. In those villages it was reported that some young men can understand Aighon, and those in Lulakevi can speak it a little, while young women in Avihain and Aringring are able to understand it a little. Some middle-aged adults can understand Aighon, most older men can speak it and some older women can speak it as well.

Some young adults can understand Amio-Gelimi, some middle-aged adults can speak it and many older adults can speak it. However, more people can speak the Gelimi dialect than the Amio dialect, probably because the Avau language area is closer to Gelimi than to Amio. In Lulakevi and Aringring,

which are on opposite ends of the Avau language area, respondents reported their proficiency in both the Amio and Gelimi dialects. These reports are shown in table 12.

Table 12. Avau speakers' proficiency in the Amio and Gelimi dialects

Village	Dialect	Young men	Young women	Middle-aged men	Middle-aged women	Older men	Older women
Lulakevi	Amio	Cannot understand	Understand some	Understand some	Cannot understand	Understand	Understand
	Gelimi	Understand	Understand	Speak a little and understand	Understand	Speak	Understand and a few can speak
Aringring	Amio	Understand a little	Understand a little	Some can understand and speak	Cannot understand	Cannot understand	Cannot understand
	Gelimi	Some can understand	Understand a little	Speak some and understand	Speak and understand a little	Some can understand and speak a little	Some can understand and speak

Avau speakers are able to speak other vernaculars, but they often use their own language when interacting with Amio-Gelimi and Akolet speakers. People in Lulakevi, Akiwak and Avihain reported that they speak Avau to Amio-Gelimi speakers, but people in Asiwot said that only older Amio-Gelimi speakers would understand Avau. Aringring residents reportedly speak Avau to Akolet people, although residents of Akam said that they use Tok Pisin when interacting with Akolet speakers. Avau speakers usually use Tok Pisin when speaking to Aighon people, but they use some Avau as well. Therefore, although many Avau speakers are multilingual in other vernacular languages, their multilingualism does not appear to pose a threat to the vitality of the Avau language, since they still use primarily Avau in most situations, even when interacting with speakers of other languages.

#### **4.2.10 Code switching**

On at least thirty-one separate occasions, the survey team observed people code switching between Avau and Tok Pisin. Twenty-eight observations of code switching were of adults, two were of children and one included both children and adults. It should be noted that fourteen of the observations of adults were made in Aringring. Code switching occurred at the lexical level as well as the phrasal level. Most of the inserted Tok Pisin words and phrases referred to concepts that could easily be expressed in Avau, and code switching did not appear to be associated with a change in topic, setting or participants. Unbounded code switching that does not follow a consistent pattern, as is the case in Avau, may be a sign of low language vitality (Landweer 2006:191).

#### **4.2.11 Summary of language use**

Avau is the primary language used by people of all ages in most situations within the language area. Tok Pisin is the main language used during church services, but people use both Avau and Tok Pisin for church-related activities outside of services. Similarly, Tok Pisin and English are used almost exclusively for education, but many children still use Avau when they are at school. Some unbounded code switching was observed, but Avau is used to some extent in every domain except prayer and using local health facilities. It is the only language used for traditional events such as weddings and funerals and the primary language used for arguing with family members. Avau people speak other vernacular languages as well, but they often use Avau when interacting with speakers of other languages. The fact that Avau is

used extensively by most people in a wide variety of domains is a positive sign for the vitality of the Avau language.

### **4.3 Language attitudes**

Landweer's third criterion for measuring ethnolinguistic vitality, language attitudes, deals with the prestige attributed to a language both by speakers of the language and by outsiders, as well as the extent to which a language community is distinguished from the language groups around it (Landweer 2006:214 and 217–218). Language attitudes shape the perceptions of prestige “among other neighboring and regional languages” and the “relative prestige of the language within the linguistic repertoire of the speech community” (Landweer 2006:206). The more positive the language attitudes of both insiders and outsiders are, the higher the prestige they will associate with that language, and “the greater the prestige a linguistic code enjoys, the more likely it will continue to be taught, learned and spoken” (Landweer 2006:206). The Avau people have positive attitudes toward their language, which is a positive indicator for language vitality.

#### **4.3.1 *As reported by residents***

Speakers of Avau have positive attitudes towards their language. They enjoy hearing it, want their children to learn it and even speak it when interacting with speakers of other languages such as Amio-Gelimi and Akolet. These attitudes indicate high vitality for the Avau language.

People in every village said they think Avau is the best language for listening to stories, although in Lulakevi respondents said that Avau is the best language for traditional stories, but that they mix Avau and Tok Pisin when telling other types of stories. Avau is also considered to be the most important language for children to know well. When respondents were asked which languages they want their children to know well, Avau was the only language mentioned in Akiwak, Aringring, Akam and Avihain. Although people listed only Tok Pisin and English in Asiwot, they remarked that children already know Avau, as if they took it for granted that children would learn Avau and therefore did not need to list it. They did, however, mention that they want children to know English well so that they can learn to read and write, indicating that they may not consider Avau to be a suitable language for literacy. No response was obtained in Lulakevi.

People in Asiwot think that their children will use Avau when they grow up, and those in the other five villages think that children will use both Avau and Tok Pisin. However, respondents in Akiwak said that it would not be good for children to use both languages when they grow up. By contrast, people in the other villages think that it would be good for children to use two languages, although in Lulakevi respondents did say that it would not be good if the children spoke less Avau than Tok Pisin. It was mentioned in Aringring that if children learn both languages, they will be able to speak Tok Pisin when they go to town.

Respondents in four villages think that children will speak Avau to their grandchildren. People in Akiwak and Lulakevi think that they will speak both Avau and Tok Pisin to their grandchildren, and people in Akiwak said this would not be good.

As mentioned in section 4.2.9, Avau speakers often use their own language when interacting with speakers of the Amio-Gelimi language and sometimes with Akolet speakers as well. It was also reported that Amio-Gelimi, Akolet and Aighon speakers sometimes learn some Avau, which indicates that speakers of these languages also have positive attitudes towards the Avau language.

#### **4.3.2 *As reported by school staff***

Schools attended by Avau children require students to speak English or Tok Pisin while they are at school. Parents support these policies, saying they will help their children to learn English. However, respondents indicated that these policies are not always enforced and that children often speak Avau at school anyway. It appears that the policies are based on a desire for children to learn English rather than

on negative attitudes towards Avau. School staff at Gasmata Elementary and Valanguo Primary expressed positive attitudes regarding the use of the vernacular for instruction. Therefore, although current school policies prohibit the use of Avau, it does not seem likely that these policies will negatively impact the vitality of Avau.

Respondents in Lulakevi, Akiwak, Asiwot, Akam and Avihain all said that children are not allowed to speak Avau while they are at school and that if they do, they have to do work, such as cutting the grass or pulling weeds as punishment. However, people in Akiwak, Asiwot and Akam indicated that children often speak Avau anyway. In Lulakevi and Akam people said that they think the language policy is good because it will help children learn English. Those in Asiwot and Avihain did not express strong views about the language policy. People in Asiwot did say that children cannot be forced to speak English, and people in Avihain mentioned that one negative result of the policy is that children may be laughed at if they do not know English.

Policy requires children at Valanguo Primary to speak English, and if they do not, they are required to stay after school and work as punishment. However, the headmaster pointed out that it is difficult to enforce this policy because children do not understand, let alone speak English. He said that when teachers speak English to children, the children just laugh.<sup>22</sup> At the time of the survey a vernacular elementary school was being started in Valanguo. Even though the headmaster of Valanguo Primary expressed some concerns regarding this school's effectiveness, he also expressed a desire to start vernacular elementary schools in Akiwak, Asiwot and Lulakevi. He thinks that both Avau speakers and speakers of neighbouring languages have positive attitudes towards the Avau language.

A teacher at Gasmata Elementary also indicated positive attitudes towards the vernacular. She said that the school is trying to start a traditional language component, but it is difficult because children from both the Avau and Akolet language areas attend the school. She said that Avau people are happy with their language and are not ashamed of it, and that surrounding languages view it positively as well.

### **4.3.3 As reported by church leaders**

Church leaders seem to have positive attitudes toward the Avau language. When asked in what language they would prefer to read Scripture, all four church leaders interviewed<sup>23</sup> listed Avau as their first choice and Tok Pisin as their second choice. When asked if there was a need for Scripture translation, they all responded that there was. The fact that leaders view Avau as a good language for Scriptures indicates that they have positive attitudes toward it. All four church leaders are mother tongue Avau speakers. Two of these leaders indicated that they use only Avau when speaking with others in their villages outside of the church context. The others probably speak Avau in the community as well, based on reported language use.<sup>24</sup> By speaking Avau, church leaders demonstrated positive, or at least neutral, attitudes toward the language.

### **4.3.4 Group identity**

Language vitality tends to be higher in communities with a strong internal cultural identity (Landweer 2006:200–201). According to Fasold (1987:240), “[a] prevalent tendency to maintain a distinction between ‘us’ and ‘them’, that is, the ingroup and a particular outgroup, is one sign that shift is not in progress.” The Avau people are part of the Arawe tribe and share many aspects of their culture with the rest of the Arawe tribe, but they do have some cultural elements that distinguish them from other languages in the tribe. Because they do have some unique cultural features, and because even the cultural elements that they share with the Arawe tribe distinguish them from other areas of New Britain

<sup>22</sup>Laughter is often a sign of embarrassment in PNG cultures.

<sup>23</sup>CPC treasurer from Lulakevi, Legion of Mary chairman at Akiwak, catechist from Akam and CPC chairman from Akam.

<sup>24</sup>See section 4.2.3 for more about adults' reported language use.

and from urban Papua New Guinean culture, their identification with the Arawe tribe does not appear to pose a threat to the vitality of the Avau language.

The Arawe area extends approximately 290 kilometres along the south coast of New Britain, from the Solong language area in the west to Amio-Gelimi in the east, and may include the following languages: Solong, Lamogai, Gimi, Aiklep, Kaulong [pss], Sengseng, Karore [xkx], Ambul,<sup>25</sup> Akolet, Avau, Amio-Gelimi, Aighon and Mangseng. It was reported by Avau speakers that there are two divisions within the Arawe tribe: a western group extending from Solong to Aiklep, and an eastern group including the remaining languages. Avau people share many clans with other language groups in the Arawe area, including Ambul, Akolet, Amio-Gelimi and Aighon, although respondents in Aringring said that their clans are different from those in Aighon.

Most of the Avau people's traditional songs and dances, as well as the traditional decorations worn on these occasions, are the same as those used throughout the Arawe area, but they are different from other language areas such as Mangseng and Lote, and some are unique to the Avau language area. Some songs are sung in the Avau language, and some are sung in other vernaculars such as Arop-Lokep [apr]. Carving and gardening are also done the same way throughout the Arawe area, but differently in other language areas. Respondents in Akiwak mentioned that they rake their gardens after clearing and burning the land, but people in the Mangseng language area do not.

Within the Avau language, villages in the eastern dialect (see section 3.2) appear to identify more closely with Amio-Gelimi, while villages in the western dialect identify more with Akolet. Regarding a particular cultural practice involving dancing and a wooden mask,<sup>26</sup> it was reported that the eastern villages do this in the same way as Amio-Gelimi people, while the western villages do it in the same way as Akolet people. It was also reported that the eastern and western villages make canoes in slightly different ways, although Amio-Gelimi and Akolet people make their canoes differently from anyone in the Avau language area.

Many traditional practices are still in place within the Avau language area, although some are no longer practised. Avau people still hold traditional events such as pig exchanges or feasts in association with events such as funerals, children's graduation, taro harvest, the initiation of a firstborn child or the presentation of a chief's son to the community. The practice of paying a bride price to a woman's family when she is married is still in place, and there are still initiation rites for girls,<sup>27</sup> although such rites are no longer practised for boys. People no longer use the traditional axes that their ancestors used, and although they used to make hunting nets themselves, now they buy them. However, people still make drums,<sup>28</sup> flutes, pandanus mats, coconut leaf baskets, bone knives and coconut scrapers made from shells. Most houses are made from traditional materials, with some being made from sawn lumber with iron roofing.

Avau people do have a number of goods obtained from outside the Avau language area, including cooking utensils, dishes, tools, nails, sawn lumber, iron roofing, knives, kerosene, soap, rice, sugar and coffee. There are also two generators in Akam village, although one belongs to an Australian who married a woman from Akam.

In summary, although Avau people do have access to outside goods and share many of their cultural practices with other languages in the Arawe tribe, they still appear to have a distinct identity as Avau people. Many traditional practices are still in place, some of which are unique to Avau people. Even the practices they share with other languages in the Arawe tribe distinguish them from urban Papua New Guinean culture and from other areas of New Britain. The cultural identity of Avau speakers is therefore a positive sign for the vitality of the Avau language.

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<sup>25</sup>Referred to as Apalik [apo] in *Ethnologue* (Lewis 2009).

<sup>26</sup>In Tok Pisin, *tumbuan*.

<sup>27</sup>In Akam, however, they said that there are no longer initiation rites for girls.

<sup>28</sup>In Tok Pisin, *kundu*.

### 4.3.5 *Summary of language attitudes*

Avau speakers have positive attitudes towards their language. They enjoy hearing it, want their children to speak it well and even use it when interacting with speakers of other languages. Although most schools require students to speak Tok Pisin or English while they are at school, these policies are not always enforced, and school staff in the area expressed positive attitudes towards the idea of vernacular education. All of the church leaders interviewed indicated that Avau would be their first choice for church literature, and they often use Avau when interacting with community members outside of church services. Avau speakers share many aspects of their culture with the rest of the Arawe tribe, but they also have some unique cultural practices. Even those they share with other languages in the Arawe tribe distinguish them from other areas of New Britain. These factors indicate a high vitality for the Avau language.

## 4.4 Conclusions on language vitality

According to Landweer (2006:213), language vitality can be assessed by examining the three indicators of ethnolinguistic vitality: opportunity for contact with other languages, actual language use and language attitudes. Avau speakers have minimal contact with large population centres and are able to use Avau for much of their contact with speakers of other languages. Avau is the primary language used by people of all ages in most situations, and Avau speakers have positive attitudes towards their language. These factors indicate a high vitality for the Avau language.

Avau speakers have relatively little contact with speakers of other languages. Because of the remote location of the Avau language area, Avau speakers rarely travel to town, and they are able to meet most of their economic needs within the Avau language area. There are few immigrants to the language area, and most children of immigrants are able to speak Avau. Avau speakers do have contact with Amio-Gelimi and Akolet people, since they share schools, a church and a health centre, but they reported that they often use their own language when interacting with these people.

Both reported and observed data indicate that people of all ages and both genders use Avau more than any other language. Although some unbounded code switching was observed, and Tok Pisin is usually used during church services and for education, people still use Avau for church activities outside of services, and children still use Avau while they are at school. Avau is used in every domain except praying and using health facilities, and it is the only language used for traditional events such as weddings and funerals and the primary language used when arguing with family members.

Avau speakers have positive attitudes towards their language. They enjoy hearing it and want it to be learned and used by future generations. School staff expressed positive attitudes towards vernacular education, and church leaders expressed a desire to use Avau literature during church services. Although Avau people share many cultural practices with other language groups in the Arawe tribe, they do have some unique cultural practices and appear to have a cultural identity as Avau speakers.

In summary, Avau speakers rarely visit large population centres, and they use Avau during many of their interactions with speakers of other languages. Avau is the primary language used by both adults and children, and Avau people have positive attitudes towards their language. The vitality of the Avau language is therefore currently high.

## 5 Conclusions

The Avau language is spoken in ten villages: Lulakevi, Amulus, Asiwot, Akiwak, Angosmos, Avihain, Arolimi, Atalok, Akam and Aringring. It was reported that there are two dialects of Avau: an eastern dialect and a western dialect; the lexicostatistic comparison revealed a dialect chain across the language area. Speakers of the western dialect can reportedly understand the eastern dialect well, but speakers of the eastern dialect reported some degree of difficulty in understanding the western dialect. Reports also indicate that the eastern dialect is the purest form of the language because speakers of the western dialect tend to mix their language with Akolet.

Currently, the Avau language has strong ethnolinguistic vitality. Speakers of Avau rarely travel outside the language area and often use Avau when interacting with speakers of other languages. There are very few immigrants, and most of their children are able to speak Avau. Avau is the primary language used by people of all ages, and Avau people have positive attitudes towards their language.

## Appendix A: Characteristics of the language

### Phonetics

Table 13 and table 14 show the consonant and vowel phones observed in the Avau language.

Table 13. Avau consonant phones

	Bilabial	Labio-dental	Dental	Alveolar	Palatal	Velar	Glottal
<b>Plosive</b>	p p <sup>h</sup> p <sup>ʔ</sup> b		t t <sup>h</sup> t <sup>ʔ</sup>	t t <sup>h</sup> t <sup>ʔ</sup> d		k k <sup>h</sup> k <sup>ʔ</sup> g	ʔ
<b>Fricative</b>	β	v		s			h
<b>Nasal</b>	m			n		ŋ	
<b>Trill</b>				r			
<b>Lateral Approximant</b>				l			
<b>Approximant</b>	w				j	w	

Table 14. Avau vowel phones

	Front	Central	Back
<b>Close</b>	i	i	u
	ɪ		ʊ
<b>Close-mid</b>	e		o
<b>Open-mid</b>	ɛ		ɔ
<b>Open</b>	a		

Thirty-four different vowel sequences were observed in the Avau language, including ae, aε, ai, ao, au, ea, ei, eo, eu, ei, εo, εɔ, εu, ia, ie, iε, io, iu, oi, oε, ua, ue, uε, ui, uo, aeu, aia, εue, iau, iεu, iue, oεu, ouε, uei.

### Morphology

In the dialect spoken in Akam, Aringring, Avihain and Atolok, verbs are inflected to show the gender, number and marital status of the subject. Table 15 shows the verbal prefixes used in this dialect. Verbal inflectional marking for marital status is linguistically noteworthy.

Table 15. Verbal subject prefixes in the western dialect

	Unmarried man	Unmarried woman	Married man	Married woman
<b>Singular</b>	pu-	t <sup>hi</sup> -	som-	si-
<b>Plural</b>	lel-	lel-	ini-	uli-

This dialect also uses different pronouns for married people and for unmarried people, as shown in table 16.

Table 16. Pronouns in the western dialect

	Unmarried	Married
Male	punu	somu
Female	tinu	siyinu

## Grammar

Ambul word order is generally SVO, and sentences are negated by placing a negative adverb at the end of the phrase, as seen in the examples below:<sup>29</sup>

(1) pu suk<sup>h</sup> ɛmoko

SUBJ hit dog

‘He hit the dog.’

(2) pu suk<sup>h</sup> ɛmoko mor

SUBJ hit dog NEG

‘He did not hit the dog.’

Adjectives generally follow the nouns they modify, as shown in the following example:<sup>30</sup>

(3) som ɛk<sup>h</sup>ipa suk ɛmoko ti

Man big hit dog small

‘The big man hits the small dog.’

Indirect objects occur after the direct object, as seen below:<sup>31</sup>

(4) ɛniɲ ɛmoko<sup>h</sup>oi t<sup>h</sup>i ru ɛpoip t<sup>h</sup>i

give dog small to boy small

‘He gives the small dog to the boy.’

Verbs do not appear to be inflected to show past tense. As seen in the following examples,<sup>32</sup> a time word such as ‘yesterday’ is added to the sentence, but the verb remains unchanged.

<sup>29</sup>Items 183 and 184, Akam village.

<sup>30</sup>Item 185, Akam village.

<sup>31</sup>Item 186, Asiwot village.

<sup>32</sup>Items 180–181, Asiwot village.

- (5)  $\varepsilon k^h \varepsilon n$              $\varepsilon u m o$   
       eat                yam  
       ‘He eats the yam.’

- (6)  $\varepsilon k^h \varepsilon n$     $\varepsilon u m o$     $\varepsilon u n e k^h \varepsilon k^h a$   
       eat    yam    yesterday  
       ‘He ate the yam yesterday.’

The affix [la] may be used to indicate an irrealis mode, as shown:<sup>33</sup>

- (7)  $\varepsilon \gamma a \gamma a r$         la                 $\varepsilon k e n$      $\varepsilon u m o$   
       tomorrow        IRR            eat        yam  
       ‘Tomorrow he will eat the yam.’

Two phrases can be joined with the conjunction [su], as shown in the following example:<sup>34</sup>

- (8)  $\varepsilon s u k$      $\varepsilon m o k o i$     su         $\varepsilon m o k o i$         la  
       hit        dog            CONJ    dog                go

‘He hit the dog and the dog went.’

Additional grammatical information gathered in Aringring village is given by Hoopert and Wakefield (1980:13–22) in “The Languages and Communities of South-Western New Britain.”

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<sup>33</sup>Item 182, Asiwot village.

<sup>34</sup>Item 189, Lulakevi village.

## Appendix B: Wordlist addenda

Table 17. Wordlist sources

Language	Village(s)	Date	Transcriber
Aighon	Zebu	2009	Seonok Jung
Aiklep	Asailo	2010	Wayne Baker
Ambul	Ambonge, Asepsep, Ayuvet, Melenglo	2009	Juliann Spencer
Amio-Gelimi	Amio, Kaskas, Atui, Poronga	2009	Juliann Spencer
Bebeli	Banaule, Morokea, Mosa	2009	Juliann Spencer
Bola	Harile	2000	Tim Jore and Michael J. Rueck
Gimi	Mang	2010	Wayne Baker
Mangseng	Lavege and Melei	1992	Lloyd Milligan
Nakanai	Karapi	1975	Ray Johnston

Some items were excluded from the lexicostatistic comparison for these reasons: it was believed that the wrong item was elicited, the word given was a Tok Pisin word or the item contained only morphemes that had already been compared in other items. For example, the word for ‘feather’ in some villages consisted of the morphemes ‘bird’ and ‘hair’, both of which were compared elsewhere. Table 18 shows which items were excluded in each village.

Table 18. Excluded items

Item number	Gloss	Wordlists excluded	Reason for exclusion
12	tooth	Asiwot, Lulakevi, Amio, Banaule, Mosa, Morokea	no new morphemes
15	foot	Asepsep, Ambonge, Melengo, Ayuvet, Aighon, Aringring, Akiwak, Atui, Nakanai, Banaule, Mosa, Morokea, Bola, Aiklep, Gimi	no new morphemes
		Akam, Asiwot, Lulakevi	wrong gloss
17	shoulder	Asepsep	no new morphemes
18	forehead	Morokea	no new morphemes
20	elbow	Asepsep, Ambonge, Melenglo, Ayuvet, Aighon, Aringring, Akam, Avihain, Akiwak, Asiwot, Lulakevi, Poronga, Atui, Kaskas, Amio, Mangseng, Banaule, Mosa, Morokea, Aiklep, Gimi	no new morphemes
24	liver	Mangseng	no new morphemes
28	girl	Ayuvet, Aringring, Akam, Avihain, Akiwak, Asiwot, Lulakevi, Banaule, Mosa	no new morphemes
29	boy	Ambonge, Asepsep, Ayuvet, Melenglo, Aringring, Akam, Avihain, Akiwak, Asiwot, Lulakevi, Poronga, Atui Banaule, Mosa, Morokea	no new morphemes
30	old woman	Aighon, Avihain	no new morphemes

Item number	Gloss	Wordlists excluded	Reason for exclusion
31	old man	Ambonge, Asepsep, Ayuvet, Aighon, Aringring, Akam, Avihain, Akiwak, Asiwot, Lulakevi, Poronga, Atui, Kaskas, Amio, Nakanai, Banaule, Mosa, Morokea, Aiklep, Gimi	no new morphemes
37	sister	Morokea	no new morphemes
49	person	Ambonge, Ayuvet, Melenglo, Aringring, Akam, Avihain, Akiwak, Lulakevi, Poronga, Kaskas, Amio, Mangseng, Mosa, Banaule	no new morphemes
52	he lies down	Lulakevi, Atui, Kaskas, Amio, Morokea	no new morphemes
65	he kills	Asepsep, Ambonge, Melenglo, Ayuvet, Aringring, Akam, Akiwak, Asiwot, Lulakevi, Poronga, Atui, Kaskas, Amio, Mangseng, Mosa	no new morphemes
67	it burns	Amio, Atui, Kaskas, Poronga, Aiklep, Gimi	no new morphemes
69	he swims	ALL	no new morphemes
79	bad	Nakanai	no new morphemes
87	old	Nakanai	wrong gloss
109	stick	Kaskas	no new morphemes
118	feather	Asepsep, Ambonge, Melenglo, Ayuvet, Aighon, Aringring, Akam, Avihain, Akiwak, Asiwot, Lulakevi, Poronga, Atui, Amio, Mangseng, Mosa, Morokea, Aiklep, Gimi	no new morphemes
133	sweet potato	Atui	Tok Pisin
138	net bag	Asiwot	wrong gloss
		Aiklep, Gimi	Tok Pisin
152	all	Aringring, Akam	no new morphemes
161	not	Aringring, Akam, Avihain, Akiwak, Asiwot, Lulakevi, Poronga, Atui, Kaskas, Amio, Mangseng, Banaule, Mosa, Morokea, Aiklep, Gimi	no new morphemes
164	he	Morokea	no new morphemes
166	you two	Amio, Atui, Kaskas, Poronga, Mangseng	no new morphemes
167	they two	Aighon, Aringring, Akam, Avihain, Akiwak, Asiwot, Lulakevi, Poronga, Kaskas, Banaule, Mosa, Morokea, Bola	no new morphemes
168	we (exclusive)	Aiklep, Gimi	no new morphemes
170	they	Akam, Avihain, Poronga, Atui, Kaskas, Amio, Mangseng, Morokea, Aiklep	no new morphemes
additional item	we (inclusive)	Asepsep, Ayuvet, Melenglo, Avihain, Poronga, Atui, Kaskas, Amio	no new morphemes
additional item	widower	Avihain, Akiwak, Asiwot, Lulakevi, Kaskas, Amio	no new morphemes

## Appendix C.1: Avau wordlists

		<b>Lulakevi</b>	<b>Asiwot</b>	<b>Akiwak</b>	<b>Avihain</b>	<b>Akam</b>	<b>Aringring</b>
1	head	pomlimi	pok <sup>h</sup> limi	pok <sup>h</sup> limi	pok <sup>h</sup> limi	pok <sup>h</sup> limi	porolimi pok <sup>h</sup> limi
2	hair	pomlimi k <sup>h</sup> ok <sup>h</sup> ok <sup>h</sup> i	pok <sup>h</sup> limi k <sup>h</sup> uk <sup>h</sup> i	k <sup>h</sup> ok <sup>h</sup> ok <sup>h</sup> i	pok <sup>h</sup> limi ʔoyoyi	pok <sup>h</sup> limi kok <sup>h</sup> oki	poklimi k <sup>h</sup> ok <sup>h</sup> ok <sup>h</sup> i
3	mouth	kwom	kuok	kwok <sup>h</sup>	kwok <sup>ˀ</sup>	kwok <sup>ˀ</sup>	kwok <sup>ˀ</sup>
4	nose	injomlimi	injok <sup>h</sup> limi	ɲoklimi	injoglimi	injoklimi	injok <sup>h</sup> limi
5	eye	moɬom	motok <sup>h</sup>	motok <sup>h</sup>	mot <sup>h</sup> ok <sup>ˀ</sup>	motok <sup>ˀ</sup>	mot <sup>h</sup> ok <sup>h</sup>
6	neck	jipunum	iyipunuk <sup>h</sup>	ipunuk <sup>h</sup>	ibunuk <sup>h</sup>	ipunuk <sup>h</sup>	ipunuk <sup>ˀ</sup>
7	belly	k <sup>h</sup> opoʔ	k <sup>h</sup> opok <sup>h</sup>	k <sup>h</sup> opok <sup>h</sup>	k <sup>h</sup> opok <sup>h</sup>	kopok	k <sup>h</sup> opok
8	skin	k <sup>h</sup> uk <sup>h</sup> unuru	k <sup>h</sup> uk <sup>h</sup> unuk <sup>h</sup>	k <sup>h</sup> unuk <sup>h</sup>	k <sup>h</sup> uyunuk <sup>h</sup>	kukunuk <sup>ˀ</sup>	k <sup>h</sup> uk <sup>h</sup> unuk <sup>ˀ</sup>
9	knee	k <sup>h</sup> oβoro k <sup>h</sup> ak <sup>h</sup> um	k <sup>h</sup> owok <sup>h</sup> k <sup>h</sup> ak <sup>h</sup> um	k <sup>h</sup> ak <sup>h</sup> um	koβok <sup>h</sup> ak <sup>h</sup> um	kuwu k <sup>h</sup> ak <sup>h</sup> um	k <sup>h</sup> oβok <sup>h</sup> ak <sup>h</sup> um
10	ear	tiŋoro	t <sup>h</sup> iŋok <sup>h</sup>	tiŋok <sup>h</sup>	t <sup>h</sup> iŋok <sup>h</sup>	t <sup>h</sup> iŋok <sup>ˀ</sup>	tiŋok <sup>ˀ</sup>
11	tongue	momom	momok <sup>h</sup>	momok	momok <sup>ˀ</sup>	momok <sup>ˀ</sup>	momok <sup>ˀ</sup>
12	tooth	kworo	kwok <sup>h</sup>	not elicited	not elicited	kwok k <sup>h</sup> iŋjana	kwokinjana
13	breast	miŋoro	miŋok <sup>h</sup>	miŋok <sup>h</sup>	minŋok	minŋok <sup>h</sup>	minŋok
14	hand	munum	munuk <sup>h</sup>	munuk <sup>h</sup>	munuk <sup>ˀ</sup>	munuk <sup>h</sup>	munuk <sup>ˀ</sup>
15	foot	koβom kasuswai	kowok <sup>h</sup> kasuswai	kowok <sup>h</sup>	koβoglimi	suswai	kowok <sup>ˀ</sup>
16	back	buru	buk <sup>h</sup>	buk	mbok <sup>h</sup>	buk <sup>ˀ</sup>	buk <sup>h</sup>
17	shoulder	tiŋorop <sup>h</sup> a	tiŋok <sup>h</sup> pa	tiŋokpa	tiŋop <sup>h</sup> a	tiŋop <sup>h</sup> a	munukwe
18	forehead	romorobi	romok <sup>h</sup> wi	romokwi	romogui	romokwi	romokwi
19	chin	iporo	ipok <sup>h</sup>	ipok(eawa)	ipok <sup>h</sup>	ipok <sup>ˀ</sup>	ip <sup>h</sup> ok <sup>ˀ</sup>
20	elbow	munuru k <sup>h</sup> ak <sup>h</sup> um	munuk <sup>h</sup> k <sup>h</sup> ak <sup>h</sup> um	k <sup>h</sup> ak <sup>h</sup> um	munuk <sup>h</sup> ak <sup>h</sup> um	k <sup>h</sup> ak <sup>h</sup> um	munuk <sup>h</sup> ak <sup>h</sup> um
21	thumb	ana	munuk <sup>h</sup> ana	ana	adiŋa	ana	ana
22	leg	koβoro	kowok <sup>h</sup>	koworo	kuwuk <sup>h</sup>	k <sup>h</sup> uwuk <sup>h</sup>	kowok <sup>ˀ</sup>

		<b>Lulakevi</b>	<b>Asiwot</b>	<b>Akiwak</b>	<b>Avihain</b>	<b>Akam</b>	<b>Aringring</b>
23	heart	ek <sup>h</sup> um	kok <sup>h</sup> epospos	(ε)p <sup>h</sup> osp <sup>h</sup> os	p <sup>h</sup> osp <sup>h</sup> os	k <sup>h</sup> ok <sup>h</sup> ek <sup>h</sup> um p <sup>h</sup> osp <sup>h</sup> os	pawurupitpəl kεrε p <sup>h</sup> osp <sup>h</sup> os
24	liver	kεtε	kok <sup>h</sup> ekεtε	ekεte	kεte	ekεt <sup>h</sup> ε	kεrekεte
25	bone	wunuru	jin	jini	iɲuk <sup>h</sup>	jini	inuk
26	blood	εmlek <sup>ˀ</sup>	k <sup>h</sup> ok <sup>h</sup> εmlek <sup>h</sup>	εmlek <sup>ˀ</sup>	εmlek <sup>h</sup>	kok <sup>h</sup> εmlek <sup>h</sup>	k <sup>h</sup> ok <sup>h</sup> εmlek <sup>h</sup>
27	baby	ek <sup>h</sup> ok <sup>h</sup> ok <sup>ˀ</sup>	(ε)k <sup>h</sup> ok <sup>h</sup> ok <sup>h</sup>	ek <sup>h</sup> ok <sup>h</sup> ok <sup>h</sup>	k <sup>h</sup> ok <sup>h</sup> ok <sup>h</sup>	(ε)k <sup>h</sup> ok <sup>h</sup> ok	(εpoip) ek <sup>h</sup> ok <sup>h</sup> ok
28	girl	euli	euliɬi	eulit <sup>h</sup> i	euliti	euli?	εpopεuli
29	boy	ɬamana	εpoi εt <sup>h</sup> amana ɬ <sup>h</sup> i	εt <sup>h</sup> amanat <sup>h</sup> i	t <sup>h</sup> amanati	t <sup>h</sup> amana	εpoipεt <sup>h</sup> amana
30	old woman	εlwakekes	euli εlawā	εmuk <sup>h</sup>	εuek <sup>h</sup> ipa	euli εkipa  t <sup>h</sup> εte euli	at <sup>h</sup> εt <sup>h</sup> euli
	widow	εbasu	euli εmbasu	εmbasu	basu		
31	old man	εlwakekes	tamana elawa	εmuk <sup>h</sup>	εuek <sup>h</sup> ipa	tεtεetamana	at <sup>h</sup> εte tamana
	widower	εbasu	εɬamana εmbasu	εmbasu	basu		
32	woman	euli	euli	euliliau	euliti	liεβuli	ulieulili
	unmarried woman	euli εmiɲatε?	euli εminɲat <sup>h</sup> iɬ <sup>h</sup>	εmiɲate	not elicited	miɲnatit	εpoipεminɲatit
	married woman		euli paraɲi	euli εkuɲok <sup>h</sup> a	not elicited	ek <sup>h</sup> uɲoka  paraɲi	εparaɲi
33	man	ɬamana	ɬamana	εt <sup>h</sup> amaniniau	t <sup>h</sup> amanati	t <sup>h</sup> amanmana	iniεt <sup>h</sup> amanmanai
	unmarried man	ɬamana εmaɲi	εɬamana εmaɲi	εmaɲi	not elicited	εmaɲi?	pouεmaɲi
	married man	not elicited	εɬ <sup>h</sup> amana εparaɲi	εtamana εkuɲoka	not elicited	paraɲi	someparaɲi
34	father	aja	aia	aia	aiwo?	aia	aia
35	mother	ainu	ainu	ainu	ainu?	ainu?	ainu
36	brother	t <sup>h</sup> ut <sup>h</sup> juru	ɬiuk <sup>h</sup>	t <sup>h</sup> iuk	tiuk <sup>h</sup>	tiuk <sup>h</sup>	t <sup>h</sup> iuk <sup>h</sup>

		<b>Lulakevi</b>	<b>Asiwot</b>	<b>Akiwak</b>	<b>Avihain</b>	<b>Akam</b>	<b>Aringring</b>
37	sister	luluru	luluk <sup>h</sup>	luluk <sup>ˀ</sup>	luluk <sup>h</sup>	luluk <sup>h</sup>	luluk
38	name	injero	injok <sup>h</sup>	injok <sup>h</sup>	injɛ?	injok <sup>ˀ</sup>	injok
39	bird	ɛmɛn	ɛmɛn	ɛmɛn	ɛmɛn	(ɛ)mɛn	ɛmɛn
40	dog	ɛmok <sup>h</sup> oi	ɛmok <sup>h</sup> oi	ɛmok <sup>h</sup> oi	mokoi	mok <sup>h</sup> oi	ɛmok <sup>h</sup> oi
41	pig	ɛɣa	ɛɣa	ɛɣa	ɛɣa	ɛɣa	ɛɣa
42	cassowary	ɛɬawo	ɛɬ <sup>h</sup> awo	ɛɬ <sup>h</sup> awo	t <sup>h</sup> awo?	(ɛ)tawo?	ɛt <sup>h</sup> awo
43	wallaby	ɛpongir	ɛp <sup>h</sup> ongir	(ɛ)pongir	pamaŋ	ɛpongir	ɛpasu
44	flying fox	ɛβlaŋapongoi	ɛβlaŋa poŋoi	ɛβlaŋapongoi	ɛβiaŋapongoi	ɛβiaŋapongoi	ɛβiaŋapongoi
45	rat	ɛkapit <sup>ˀ</sup>	ɛkapit <sup>h</sup>	kapit <sup>h</sup>	karik <sup>h</sup>	karik <sup>h</sup>	ɛk <sup>h</sup> arik
46	frog	ɛmamko	ɛmamgo	ɛboprok <sup>h</sup>	mamgo	mamgo	ɛmamgo
	small frog	not elicited	not elicited	ɛk <sup>h</sup> amsuruk <sup>h</sup>	kamsuruk	kamsuruk <sup>h</sup>	ɛk <sup>h</sup> amsuruk <sup>h</sup>
47	snake	ɛusɛsɛsna	ɛusɛsɛsŋa	ɛusɛsɛsŋa		suanggi	ɛsuanggi
	morán	aβino	aβino	aβlonɛn	aβlonɛŋ	ablɔŋɛn	aβlonɛn
48	fish	ɛli	ɛli	ɛli	ɛli	ɛli	ɛli
49	person	ɬamaniniau	ɛβaβau(au)	inditeop <sup>h</sup>	leletamanmai leleulili	indiop <sup>h</sup>	indijop
		ɛuliliau					
50	he sits	ɛruei	ɛruein	ɛruen	ɛronɛn	ruŋɛn	ruŋɛn
51	he stands	ɛraɛmit <sup>ˀ</sup>	ɛraɛmit <sup>h</sup>	ɛrɛmit <sup>h</sup>	ramit <sup>h</sup>	ramit	ramit
52	he lies down	ɛkonongon mori	ɛt <sup>h</sup> uslua	ɛruekeni kalumkele	tiniblaŋ	duslom	at <sup>h</sup> uslok
				ɛleruɛngrin			
53	he sleeps	ɛkonongon	ɛk <sup>h</sup> onugun	ɛk <sup>h</sup> unongun	gonongon	gunuŋgun	gonongon
54	he walks	ɛnes	ɛnes	ɛnes	t <sup>h</sup> ines	ines	anes
55	the dog bites the man	ɛmok <sup>h</sup> oi punɛu	ɛmok <sup>h</sup> oipun(ɛu)	ɛmokoi punɛu	mok <sup>h</sup> oi punpu	ɛmok <sup>h</sup> oi punpu	ɛmok <sup>h</sup> oi punjo

		<b>Lulakevi</b>	<b>Asiwot</b>	<b>Akiwak</b>	<b>Avihain</b>	<b>Akam</b>	<b>Aringring</b>
56	he eats	ek <sup>h</sup> en	ek <sup>h</sup> en	ek <sup>h</sup> en	aken	k <sup>h</sup> en	puk <sup>h</sup> en
57	he gives it to me	eniji rujo	eniji ruio	enijen meo	pujimeo	nije	punije
58	he sees	εβit̩ik <sup>h</sup> i	εβit̩ik <sup>h</sup> (i)	εβit̩'ik <sup>h</sup> e	pujiyiɣi	witik <sup>h</sup>	puwitike
59	he comes	eme	eme	eme	me	mje	pum(ɲ)ε
60	he says	elis	elis	elis	pulis	ɲlis	pulis
61	he hears	eloŋoi	eloŋo	eloŋo	puloŋoi	luŋu	puloŋoi
62	he knows	eploi	elimimierik <sup>h</sup> (wi)	epeteti	pumere <sup>h</sup>	kombrumuwi	pulimirum(e)
63	he drinks	ein	ein	ein	puji	ɲjn	puin
64	he hits	esuk <sup>h</sup> i	esok <sup>h</sup> i	esuk <sup>h</sup> i	pusoyi	suk <sup>h</sup>	pusok <sup>h</sup> i
			εp <sup>h</sup> uni				
65	he kills	esuk <sup>h</sup> i erinji	εp <sup>h</sup> uni larinji	εpuniuerini	pubone	tʃokilarinji	pupuneorinji
66	he dies	erinji ko	rinji k <sup>h</sup> o	erinjik <sup>h</sup> is	purini	rinjik <sup>h</sup> u	puringik <sup>h</sup> o
67	it burns	eokwonwilwil	εok <sup>h</sup> on wilwil	εukwon wilwil	εkwonwilwil	εkwonwilwil	εkwonwilwil
68	it flies	εwowola	wowola	εwowola	puwowo	wula	wuwola
69	he swims	ɛyi	eji	enin	punin	ninin	punin
						jila	puge
70	he runs	εβeŋ	εweŋ	εβen	puen	wεŋ	puweŋ
71	he falls down	εmiliŋ	εmiliŋ	εmiliŋ	pumiliŋ	miliŋ	pumiliŋ
72	he catches	εupui	εupui	εupui	pugomoi	gomoi	puk <sup>h</sup> omoi
73	he coughs	εok <sup>h</sup> ot̩ <sup>ʔ</sup>	εok <sup>h</sup> ot <sup>h</sup>	εok <sup>h</sup> ot̩ <sup>ʔ</sup>	pwokot	ɲok <sup>h</sup> ot <sup>h</sup>	puok <sup>h</sup> ot
74	he laughs	εkulip̩ <sup>ʔ</sup>	εk <sup>h</sup> ulip <sup>h</sup>	εk <sup>h</sup> ulip <sup>h</sup>	pugulip	gulip̩ <sup>ʔ</sup>	puk <sup>h</sup> ulip <sup>h</sup>
75	he dances	εt̩it̩i	εt̩ <sup>h</sup> it̩ <sup>h</sup> i	εt̩ <sup>h</sup> it̩ <sup>h</sup> i	putite	dr̩t̩i	put̩ <sup>h</sup> et̩ <sup>h</sup> ε
76	big	kaik <sup>h</sup> it̩i	εk <sup>h</sup> ip <sup>h</sup> a	εk <sup>h</sup> ipa (ambip)	(pu)εk <sup>h</sup> ipa	εk <sup>h</sup> ip <sup>h</sup> a	εk <sup>h</sup> ipa

		<b>Lulakevi</b>	<b>Asiwot</b>	<b>Akiwak</b>	<b>Avihain</b>	<b>Akam</b>	<b>Aringring</b>
77	small	tikili	elawa p <sup>h</sup> osp <sup>h</sup> os (t <sup>h</sup> i)	kaikiti	kaiyiti p <sup>h</sup> uti	k <sup>h</sup> aik <sup>h</sup> it <sup>h</sup> i	kaikit <sup>h</sup> i
78	good	amanmank <sup>h</sup> a	amanmank <sup>h</sup> a	amanmank <sup>h</sup> a siβiŋa	siβiŋa	amanman siβiŋa	amanman siβiŋa
79	bad	ses	sesŋa	ses	ses	ses	ses
80	long	jilokojoŋ	ɛyilo	eilo(kojoŋ)	ɛyiloɔjoŋ	ɛyilo	ɛyilo
81	short	(ka)kindrok <sup>ʔ</sup>	kindrok <sup>h</sup> (ŋa)	ek <sup>h</sup> indrok <sup>h</sup>	kayindrok	kindrok <sup>h</sup>	kak <sup>h</sup> indrok <sup>h</sup>
82	heavy	pieŋ	pieŋ	pieŋ	p <sup>h</sup> ieŋ	pieŋ	pieŋ
83	light	wet <sup>h</sup> ek <sup>ʔ</sup> t <sup>h</sup> ek <sup>ʔ</sup>	wet <sup>h</sup> ek <sup>h</sup> t <sup>h</sup> ek <sup>h</sup>	wet <sup>h</sup> ek <sup>h</sup> t <sup>h</sup> ek <sup>h</sup>	wet <sup>h</sup> ek <sup>h</sup> t <sup>h</sup> ek <sup>h</sup>	wit <sup>h</sup> ekt <sup>h</sup> ek <sup>h</sup>	wit <sup>h</sup> ekt <sup>h</sup> ek <sup>h</sup>
84	cold	not elicited	kombrin moɣoiɣoi	moɣoiɣoi	kumbrin	ku(mu)mbrin moɣoiɣoi	(eik <sup>h</sup> i) kumbrin
	feel cold	saŋoŋoŋjo	not elicited	saŋoŋoŋ	not elicited	saŋoŋoŋ	saŋoŋoŋjo
85	hot	(nuk)wenwen	wenwen	wenwen	wenwen	wenwen	nuk <sup>h</sup> wenwen
86	new	ɛpia	ɛp <sup>h</sup> ia	ɛp <sup>h</sup> ia	ɛp <sup>h</sup> ia	ɛp <sup>h</sup> ia	ɛp <sup>h</sup> ia
87	old	eniɣi	(ɛ)niɣi(ŋa)	eniŋi	eni	eniɣi	eniɣi
88	round	pakoŋkoŋ	pak <sup>h</sup> oŋk <sup>h</sup> oŋa	pak <sup>h</sup> oŋgoŋ paulu(ulu)	p <sup>h</sup> okoŋkoŋ	luɣuiɣui	paluɣuiɣui
89	wet	pisik <sup>ʔ</sup>	pisik <sup>h</sup> (ŋa)	pisik <sup>h</sup>	pisik <sup>h</sup>	pisik <sup>h</sup>	pisik
90	dry	jeje	yeɣe	yeiɣei	yeiɣei	yeiɣei	yeiɣei
91	full	rak <sup>h</sup> ol	rak <sup>h</sup> ol	(ra)k <sup>h</sup> ol	k <sup>h</sup> ol	rak <sup>h</sup> ol	rakol
92	road	ɛmarukwa	ɛmaruk(wa)	marukwa	marukwa	marukwa	ɛmarukwa
93	stone	ek <sup>h</sup> um	ek <sup>h</sup> um	ek <sup>h</sup> um	ekum	ek <sup>h</sup> um	ek <sup>h</sup> um
94	earth	ɛsiɣi	ɛsiɣi	ɛsiɣi	ɛsiɣi	siɣi	ɛsiɣi
95	sand	ɛnunu	ɛnonu	ɛnunu	ɛnunu	ɛnunu	ɛβa(βi)
96	mountain	ɛtiɣi	ɛt <sup>h</sup> iɣi	ɛt <sup>h</sup> it <sup>h</sup> i	ɛt <sup>h</sup> it <sup>h</sup> i	ɛt <sup>h</sup> it <sup>h</sup> i	ɛt <sup>h</sup> it <sup>h</sup> i
97	fire	ɛukwon	ɛokwɔn	ɛokwon	ɛkwon	ɛkwon	ɛkwon

		<b>Lulakevi</b>	<b>Asiwot</b>	<b>Akiwak</b>	<b>Avihain</b>	<b>Akam</b>	<b>Aringring</b>
98	smoke	eukwon kasuwum	εokwɔn kasuwum	εɔkwon kasuwum	ekwon εsuwum	kwon k <sup>h</sup> asuwum	ekwon k <sup>h</sup> asuwum
99	ashes	kasup <sup>h</sup> sup <sup>h</sup> eukwon kamsinjen	eukwon kasup <sup>h</sup> sup <sup>h</sup>	εɔkwon kasup <sup>h</sup> sup <sup>h</sup>	kasupsup ekwon ek <sup>h</sup> ipa	k <sup>h</sup> asup <sup>h</sup> sup <sup>h</sup>	ek <sup>h</sup> asu
100	sun	eneje	eneje	eneje	eneje	enije	eneje
101	moon	εβlonjo	εβlonjo	εβlonjo	εβlonjo	εβlonjo	εβlonjo
102	star	elumɬik <sup>ɔ</sup>	elumtik <sup>h</sup>	elumtik <sup>h</sup>	εumdik	εundik <sup>h</sup>	εumdik <sup>h</sup>
103	cloud	εwat <sup>ɔ</sup>	εwat <sup>h</sup>	εwat <sup>h</sup>	ewat <sup>h</sup>	εwat <sup>h</sup>	εwat <sup>ɔ</sup>
104	rain	ek <sup>h</sup> i (mul)	ek <sup>h</sup> i	ek <sup>h</sup> i	ek <sup>h</sup> i	ek <sup>h</sup> i	ek <sup>h</sup> i
105	wind	εuseaŋa	(ε)useaŋa	(eu)seaŋa	εpseaŋa	(εus)eaŋa	εuseaŋa
106	water	eik <sup>h</sup> i	eik <sup>h</sup> i	eik <sup>h</sup> i	eiɣi	eik <sup>h</sup> i	eik <sup>h</sup> i
107	vine	εmlaŋ	εmlaŋ (ek <sup>h</sup> elimik <sup>h</sup> a)	εmlaŋ	εmlaŋ	εmlaŋ	εmlaŋ (rumono)
108	tree	ek <sup>h</sup> e	ek <sup>h</sup> e	ek <sup>h</sup> e	ek <sup>h</sup> e	ek <sup>h</sup> ε	ek <sup>h</sup> ε
109	walking stick	εyo	εyo	εyo	εyo	εyo	εyo
110	bark	ek <sup>h</sup> ek <sup>h</sup> uk <sup>h</sup> uni	ek <sup>h</sup> ek <sup>h</sup> uk <sup>h</sup> uni	ek <sup>h</sup> ekuni	ek <sup>h</sup> ekuyuni	k <sup>h</sup> uk <sup>h</sup> uni	ek <sup>h</sup> ek <sup>h</sup> uk <sup>h</sup> uni
111	seed	k <sup>h</sup> iβiβi	k <sup>h</sup> iβiβi	k <sup>h</sup> iβiβi ek <sup>h</sup> εpupuna	kiβiβi ek <sup>h</sup> εpupuna	k <sup>h</sup> iβiβi pop <sup>h</sup> ona	k <sup>h</sup> iβiβi p <sup>h</sup> op <sup>h</sup> ona
112	root	sisele	sisili	sisili	sisili	sisili	sisile
113	leaf	k <sup>h</sup> ok <sup>h</sup> ok <sup>h</sup> i	k <sup>h</sup> uk <sup>h</sup> uk <sup>h</sup> i	k <sup>h</sup> uk <sup>h</sup> uk <sup>h</sup> i	kokoyi	k <sup>h</sup> ok <sup>h</sup> ok <sup>h</sup> i	k <sup>h</sup> ok <sup>h</sup> ok <sup>h</sup> i
114	meat	k <sup>h</sup> amisisa	misisa	k <sup>h</sup> amisisa	kamisisa	(ka)misisa	k <sup>h</sup> amisisa
115	fat	k <sup>h</sup> amar	k <sup>h</sup> amar	k <sup>h</sup> amar	kamar	k <sup>h</sup> amar	kamar
116	egg	(ka)kiklu	(k <sup>h</sup> a)k <sup>h</sup> iklu	k <sup>h</sup> ak <sup>h</sup> iklu	k <sup>h</sup> akiklu	(k <sup>h</sup> a)k <sup>h</sup> iklu	k <sup>h</sup> ak <sup>h</sup> iklu
117	louse	εɣut <sup>h</sup>	εɣut <sup>h</sup>	εɣut <sup>h</sup>	εɣut <sup>ɔ</sup>	εɣut <sup>ɔ</sup>	εɣut
118	feather	εmenk <sup>h</sup> ok <sup>h</sup> ok <sup>h</sup> i	εmenk <sup>h</sup> u(k <sup>h</sup> u)k <sup>h</sup> i	emenk <sup>h</sup> uk <sup>h</sup> uk <sup>h</sup> i	εmenkoɣoyi	εmenk <sup>h</sup> ok <sup>h</sup> ok <sup>h</sup> i	emenk <sup>h</sup> ok <sup>h</sup> ok <sup>h</sup> i
119	comb (of bird)	εndrok <sup>h</sup> ok	(ka)korokrok <sup>h</sup>	kandrok <sup>h</sup> ok <sup>h</sup>	(ka)koroprop	(kan)drokok <sup>h</sup>	kak <sup>h</sup> oroprop
120	wing	(ka)βliŋgiɬi	wligit <sup>h</sup> i	ulingit <sup>h</sup> i	εβleŋgit <sup>h</sup> i	leuβleŋgeti	leuβleŋgeti

		<b>Lulakevi</b>	<b>Asiwot</b>	<b>Akiwak</b>	<b>Avihain</b>	<b>Akam</b>	<b>Aringring</b>
121	claw	minik <sup>h</sup> ak <sup>h</sup> usinsin	mini kapusinsin	mini k <sup>h</sup> ak <sup>h</sup> usinsin	mini kusinsin	mini (k <sup>h</sup> a)k <sup>h</sup> usinsin	kausinsin
122	tail (dog)	lipi	lipi	lip <sup>h</sup> i	lip <sup>h</sup> i	lip <sup>h</sup> i	lip <sup>h</sup> i
123	one	keleŋasok <sup>ˀ</sup>	keleŋasok <sup>h</sup>	keleŋasok <sup>h</sup>	keleŋasok <sup>h</sup>	keleŋasok <sup>h</sup>	keleŋasok <sup>h</sup>
124	two	su	su	su	su	su	su
125	three	mojo	mojok <sup>h</sup>	mojok <sup>h</sup>	mojok <sup>h</sup>	mojok <sup>ˀ</sup>	mojok <sup>h</sup>
126	four	penel	penel	penel	penel	penel	penel
127	five	limi	limi	limi	limi	limi	limi
128	ten	lokoŋa	lok <sup>h</sup> oŋa	lok <sup>h</sup> oŋa	lok <sup>h</sup> oŋa	lok <sup>h</sup> oŋa	lok <sup>h</sup> oŋa
129	taro	ema	ema	ema	ema	ema	ema
130	sugarcane	eɬu	eɬ <sup>h</sup> u	eɬ <sup>h</sup> o	eɬ <sup>h</sup> u	eɬ <sup>h</sup> u	eɬ <sup>h</sup> u
131	yam	eomu	eumo	eumo	mamim	eumo	eumo
132	banana	epur	epar	epur	epoh	epur	epur
133	sweet potato	(e)silrik	esirlik <sup>h</sup>	esirlik	kerimbak <sup>h</sup>	sirlik <sup>h</sup>	esirlik <sup>h</sup>
134	bean	not elicited	not elicited	not elicited	not elicited	not elicited	not elicited
135	axe	ep <sup>h</sup> amula	ep <sup>h</sup> amula	ep <sup>h</sup> amula	eɣe	p <sup>h</sup> amula emos	ep <sup>h</sup> amula
136	knife	eminjo	eminjo	eminjo	eminjo	eminjo	eminjo
137	arrow	(e)peŋe	epeŋe	epeŋe	not elicited	epeŋe	epeŋe
	fish spear	emtak <sup>h</sup> us	emdak <sup>h</sup> us	emdak <sup>h</sup> us	emdak <sup>h</sup> us	emdak <sup>h</sup> us	emdak <sup>h</sup> us
	pig spear	not elicited	not elicited	not elicited	kwapenel (four pronged)	mokoimat <sup>h</sup> a	not elicited
138	net bag	(e)kamuriri	evelin	evelin ek <sup>h</sup> o?	ekanamgor ek <sup>h</sup> o?	eβelin ek <sup>h</sup> o	eβelin ek <sup>h</sup> o
139	house	eβele	evele	eβele	eβele	βele	eβele
140	tobacco	embos	embos	embos	embos	embos	embos
141	morning	eɣarark <sup>h</sup> a	(e)ɣarɣark <sup>h</sup> a	eɣarark <sup>h</sup> a	eɣarɣaresiβina	eɣarɣar	eɣarɣar

		<b>Lulakevi</b>	<b>Asiwot</b>	<b>Akiwak</b>	<b>Avihain</b>	<b>Akam</b>	<b>Aringring</b>
142	afternoon	ek <sup>h</sup> iok <sup>h</sup> a	(ε)k <sup>h</sup> iok <sup>h</sup> a	ek <sup>h</sup> iuka	ek <sup>h</sup> io?	ek <sup>h</sup> io	ek <sup>h</sup> iok
143	night	(ε)miŋen(ka)	(ε)miŋenk <sup>h</sup> a	emiŋenka	εmjen	εmien	εmien
144	yesterday	εunik <sup>h</sup> ik <sup>h</sup> a	εunik <sup>h</sup> ik <sup>h</sup> a	εunikika	εumnikika	εunek <sup>h</sup> ek <sup>h</sup> a	εunik <sup>h</sup> ik <sup>h</sup> a
145	tomorrow	εyarar	εyaryar	εyaryar	εyaryar	k <sup>h</sup> uk <sup>h</sup> elŋe	εyaryar kukelŋe
146	white	εwolwol	wulwolŋa	εwolwol	εwolwol	wulwol	εwolwol
147	black	εyopɣop	wop <sup>h</sup> wop <sup>h</sup> ŋa	εyop <sup>h</sup> wop <sup>h</sup>	εyopwop	ɣopwop	εyopwop
148	yellow	εyoiyoi	ɣoiyoiŋa	εyoiyoi	εyoiyoi	εyoiyoi	εyoiyoi
149	red	εŋerekŋerek	ŋerek <sup>h</sup> (ŋerek <sup>h</sup> ŋa)	εŋerek <sup>h</sup>	ŋerek <sup>h</sup> ŋerek <sup>h</sup>	εŋerek <sup>h</sup>	εŋerekŋerek
150	green	εkirkir	kirkirŋa	εkirkir	ek <sup>h</sup> esk <sup>h</sup> es	kirkir	εkerker
151	many	palok <sup>ˀ</sup> palok <sup>ˀ</sup>	palok <sup>h</sup> (palok <sup>h</sup> )	palok <sup>h</sup>	palok <sup>h</sup>	p <sup>h</sup> alok <sup>h</sup>	palok <sup>h</sup>
152	all	jop	jop <sup>h</sup>	palok <sup>h</sup> ambip <sup>ˀ</sup>	ambip <sup>h</sup>	p <sup>h</sup> alok <sup>h</sup> palok <sup>h</sup>	palok <sup>h</sup>
153	this	na	ni	asude	pat <sup>h</sup> iok <sup>h</sup>	ni	ni
154	that	no	no	asudu	alanɣ	nu	nu
155	what?	ei:	wak <sup>h</sup> a(sinu)	hei(sina)	ei	ei	ei
156	who?	au	au(sinu)	au(sina)	au	au	au
157	when?	aŋek <sup>h</sup> a	aŋek <sup>h</sup> a	aŋek <sup>h</sup> a	aik <sup>h</sup> a	aŋek <sup>h</sup> a	aŋek <sup>h</sup> a aik <sup>h</sup> a
158	where?	nak <sup>h</sup> o	nak <sup>h</sup> o	nak <sup>h</sup> u	naku	nak <sup>h</sup> o	nak <sup>h</sup> o
159	yes	swisinau	ei ai	sai sɪβmi	ai	ei ai	ei ai
160	no	mori	mori	mori	mori	mor	mori
161	he is not sitting	εrueinmori	εrueinmor	εruen mori	ronɣenmor	ruŋen mor	ruŋen mor
162	I	ijo	ijo	ijo	ijo	ijo	ijo
163	you (singular)	inɣu	inɣu	inɣo	inɣo	inɣu	inɣo

		<b>Lulakevi</b>	<b>Asiwot</b>	<b>Akiwak</b>	<b>Avihain</b>	<b>Akam</b>	<b>Aringring</b>
164	he	ei	ei	eino	pu	punu	ijo
165	we two	(in)desu	tesu	indesu	t <sup>h</sup> esu	tesu	t <sup>h</sup> esu
166	you two	kəmsu	k <sup>h</sup> əmsu	kəmsu	kəmsu	kəmsu	ləlsu
167	they two	əusu	susu	susunu	kəmsu	kəmsu	ləlsu
	we (inclusive)	indiop	indijop <sup>h</sup>	indiop(kele)	teopkəli	indijop <sup>h</sup>	indijop <sup>h</sup>
168	we (exclusive)	indipalok <sup>ʔ</sup>	iməm	iməmkele	mamsukele	(iməm) (kwamujop)	iməm(kili)
169	you (plural)	imujop	imu	keop <sup>h</sup>	keop <sup>ʔ</sup>	imujop <sup>h</sup>	imu
170	they	isipalok <sup>ʔ</sup> palok <sup>ʔ</sup>	isi	isijopu	imujop <sup>h</sup>	keijop <sup>h</sup>	ləlijop
171	he is hungry	eimik <sup>ʔ</sup> punjo	eimik <sup>h</sup> puni	eimipunjo	not elicited	eimikpunpu	eimik punio
172	he eats sugar cane	einɛtu	einɛ <sup>h</sup> u	einɛ <sup>h</sup> o	not elicited	puinɛtu	puinɛ <sup>h</sup> u
173	he laughs a lot	əkulip <sup>ʔ</sup> palok <sup>ʔ</sup>	ək <sup>h</sup> ulip <sup>h</sup> ambip <sup>h</sup>	ək <sup>h</sup> ulip <sup>h</sup> ambipkilip <sup>h</sup>	pugulip ambip	gulip <sup>ʔ</sup> ambip	puk <sup>h</sup> ulip <sup>h</sup> ambip <sup>h</sup>
			ək <sup>h</sup> ulip <sup>h</sup> palok <sup>h</sup>			gulip <sup>ʔ</sup> palok <sup>ʔ</sup>	
174	one man stands	eukerəmitɿ	əkiliŋa ramit <sup>h</sup>	ɛugeramit <sup>h</sup>	not elicited	puk <sup>h</sup> eramit	pulamit <sup>h</sup>
175	two men stand	ɛusuramitɿ	susu raimit <sup>h</sup>	ɛusuramit <sup>h</sup>	not elicited	ɛusuramit <sup>h</sup>	ləlsulamit <sup>h</sup>
176	three men stand	ɛomɔjok ramitɿ	siman raimit <sup>h</sup>	ɛumiok <sup>h</sup> ramit <sup>h</sup>	not elicited	ɛumiok <sup>h</sup> ramit	ləlmojok <sup>h</sup> lamit <sup>h</sup>
177	the man goes	ɛla	ɛula	ɛunulakes	not elicited	ɛuk <sup>h</sup> ela	pusomla
178	the man went yesterday	ɛunik <sup>h</sup> ik <sup>h</sup> a ɛlakes	ɛlaɛunek <sup>h</sup> ek <sup>h</sup> ak <sup>h</sup> u	ɛunekeka ɛunelakes	not elicited	ɛunikekapula	pulale ɛunik <sup>h</sup> ik <sup>h</sup> a

		<b>Lulakevi</b>	<b>Asiwot</b>	<b>Akiwak</b>	<b>Avihain</b>	<b>Akam</b>	<b>Aringring</b>
179	the man will go tomorrow	ɛyarar laela	elaɛyarɔr	ɛyarɔarla ɛunela	not elicited	ɛyarɔarlapula	ɛyarɔarlapula
180	the man eats the yam	ɛuik <sup>h</sup> ɛn	ɛk <sup>h</sup> ɛnɛumo	ɛunokɛnɛ umu	not elicited	kukɛl ŋɛlapula puk <sup>h</sup> ɛnɛumo	somk <sup>h</sup> ɛnɛumo
181	the man ate the yam yesterday	ɛunik <sup>h</sup> ik <sup>h</sup> a amk <sup>h</sup> ɛn	ɛk <sup>h</sup> ɛnɛumoɛune	ɛunekeka ɛunokɛnɛ umu	not elicited	ɛunikikapukɛn ɛumo	somkɛn ɛumo ɛunikik <sup>h</sup> a
182	the man will eat the yam tomorrow	ɛyararla amkɛn	ɛyarɔarlaɛkɛn ɛumo	ɛyarɔarla ɛunokɛnɛ ɛomu	not elicited	kukɛlŋɛlapuk <sup>h</sup> ɛnɛumo	kukɛlŋɛ elasom kɛnɛumo
183	the man hit the dog	ɛuki suk ɛmokoi	ɛsuk <sup>h</sup> ɛmok <sup>h</sup> oi	ɛu(no) suk <sup>h</sup> ɛ mok <sup>h</sup> oi	not elicited	pusuk <sup>h</sup> ɛmokoi	pupunɛmok <sup>h</sup> oi
184	the man didn't hit the dog	ɛsuk <sup>h</sup> ɛmokoi mori	ɛsuk ɛmok <sup>h</sup> oimor	ɛuno suk <sup>h</sup> ɛ mok <sup>h</sup> oi mori	not elicited	pusuk <sup>h</sup> ɛmokoimor	punɛmok <sup>h</sup> oimor
185	the big man hit the little dog	ɛɛkipakujon ɛsuk ɛmokoit <sup>i</sup>	ɛɛk <sup>h</sup> ipasuk ɛmok <sup>h</sup> oit <sup>h</sup> i	ɛɛkipano suk <sup>h</sup> ɛ ɛmok <sup>h</sup> oit <sup>h</sup> i	not elicited	somɛk <sup>h</sup> ipasukɛmokoiti	somɛk <sup>h</sup> ipano soke mokoit <sup>h</sup> i
186	the man gave the dog to the boy	ɛu ɛniŋ ɛmokoi ruɛpopt <sup>i</sup> ike	ɛniŋ ɛmok <sup>h</sup> oit <sup>h</sup> i ruɛpoipt <sup>h</sup> i	ɛnoniŋ ɛmok <sup>h</sup> oi ruɛpop tik <sup>h</sup> i	not elicited	somniŋɛmokoi rupu	ninpunɛmok <sup>h</sup> oit <sup>h</sup> i
187	the man hit the dog and went	ɛsuk <sup>ʔ</sup> ɛmokoi suenɛsla	ɛsuk <sup>h</sup> ɛmok <sup>h</sup> oi suela	ɛsuk <sup>h</sup> ɛmokoikesu ela	not elicited	somsukɛmokoi sasomlaku	sompunɛmok <sup>h</sup> oisa somɛŋgit <sup>h</sup> i

		<b>Lulakevi</b>	<b>Asiwot</b>	<b>Akiwak</b>	<b>Avihain</b>	<b>Akam</b>	<b>Aringring</b>
188	the man hit the dog when the boy went	εpoptinoεla su isukεmokoi	εpoiptila suεsuk <sup>h</sup> εmokoi	εpoptino la kisaεu le(ne) suk <sup>h</sup> εmok <sup>h</sup> oi	not elicited	pulale sasomsuk εmokoi	pulale sasompune mok <sup>h</sup> oi
189	the man hit the dog and it went	εsuk εmokoi su εmokoila	εsuk <sup>h</sup> εmokoi su εmokoila	εuno suk <sup>h</sup> εmok <sup>h</sup> oi o εmokoila	not elicited	somsukεmokoi (u) εmokoi lale	sompune mok <sup>h</sup> oi ulale
190	the man shot and ate the pig	εpuneγa su εkeni	eu(ju)εγa suεkeni	εunojo εγa okεneγa	not elicited	sompune γaosomkeni	somjuεγa usomk <sup>h</sup> eni

## Appendix C.2: Ambul wordlists

		Ayuvet	Melenglo	Asepsep	Ambonge
1	head	t <sup>h</sup> umu	kat <sup>h</sup> umu	kot <sup>h</sup> umu	kert <sup>h</sup> umu
2	hair	kakñun	kot <sup>h</sup> umu kakañum	k <sup>h</sup> ak <sup>h</sup> anjun	kert <sup>h</sup> umukakanjun
3	mouth	kerlo	k <sup>h</sup> oklo?	k <sup>h</sup> oklo?	kerlo
4	nose	jirlo	juglo?	juklo?	jirlo
5	eye	met̤er	motok <sup>ˀ</sup>	mot <sup>h</sup> ok	met̤er
6	neck	elerlo	oloklo	olok <sup>ˀ</sup> lo?	kerkorke
7	belly	keretil	koketil	k <sup>h</sup> oketil	keretil
8	skin	iŋeri	iŋoki	koknono?	iŋeri
9	knee	k <sup>h</sup> akum	kuk <sup>h</sup> akum	k <sup>h</sup> ak <sup>h</sup> um	kirkak <sup>h</sup> um
10	ear	leŋeru	loŋokru	loŋokru	leŋeru
11	tongue	k <sup>h</sup> amamelo	k <sup>h</sup> okmamelō	k <sup>h</sup> ok(loka)mamelō	kermamelō
12	tooth	k <sup>h</sup> anino	k <sup>h</sup> okloganino	(k <sup>h</sup> oklo) k <sup>h</sup> anino?	kerlok <sup>h</sup> anino?
13	breast	wiŋer	wiŋok	wiŋok	viŋer
14	hand	imer	imok	imok <sup>h</sup>	imer
15	foot	kir	k <sup>h</sup> uk	k <sup>h</sup> uk <sup>h</sup>	ker
16	back	kerwaŋ	okwaŋgru	k <sup>h</sup> okwaŋ	kerwaŋ
17	shoulder	k <sup>h</sup> ak <sup>h</sup> ak <sup>h</sup>	imok <sup>h</sup> agak <sup>ˀ</sup>	oloklo	imomk <sup>h</sup> ak <sup>h</sup> ak <sup>ˀ</sup>
18	forehead	r̤emerwo	lomokuwo?	romokwo	r̤emerwo
19	chin	s̤ep̤er	sopok <sup>ˀ</sup> (pun)	sopok <sup>ˀ</sup>	s̤ep̤er
20	elbow	k <sup>h</sup> akum	imok kakum	imok <sup>h</sup> ak <sup>h</sup> um	imerk <sup>h</sup> ak <sup>h</sup> um
21	thumb	k <sup>h</sup> ap̤oŋop <sup>ˀ</sup>	imokaloŋoŋ ekupo	imok <sup>h</sup> aloloŋ k <sup>h</sup> upo?	imerkap̤oŋop <sup>ˀ</sup>
22	leg	kir	k <sup>h</sup> uk	k <sup>h</sup> uk <sup>h</sup>	kir
23	heart	kap <sup>h</sup> osp <sup>h</sup> os	kokp <sup>h</sup> osp <sup>h</sup> os	ɛpus	kerɛp <sup>h</sup> us
24	liver	k <sup>h</sup> ak <sup>h</sup> at <sup>h</sup>	k <sup>h</sup> ak <sup>h</sup> at	kak <sup>h</sup> at	kerk <sup>h</sup> ak <sup>h</sup> at <sup>h</sup>
25	bone	kakai	k <sup>h</sup> ak <sup>h</sup> ai	k <sup>h</sup> ak <sup>h</sup> ai	k <sup>h</sup> akai
26	blood	walo	kawalo?	walo?	walo?
27	baby	nok <sup>h</sup> ok <sup>h</sup> ok <sup>h</sup>	k <sup>h</sup> ok <sup>h</sup> o?	nok <sup>h</sup> ok <sup>h</sup> o?	ul̤ɛp(nokoko?)
28	girl	elim	elimut <sup>h</sup> u	elim mutu	elimudu
29	boy	(ɛ)t <sup>h</sup> aman	tamanutu	t <sup>h</sup> aman aiaŋutu	t <sup>h</sup> aman utu
30	old woman	talim kairak <sup>h</sup> rak	not elicited	jupkairak	jup <sup>h</sup> irak <sup>h</sup>
31	old man	tuk <sup>h</sup> airak <sup>h</sup> rak	aik <sup>h</sup> us	kairak	pat <sup>h</sup> irak <sup>h</sup>
32	woman	elim	talim	elim	alim
	unmarried woman	ak <sup>h</sup> owot	ak <sup>h</sup> owot	k <sup>h</sup> owot	kowot <sup>ˀ</sup>

		<b>Ayuvet</b>	<b>Melenglo</b>	<b>Asepsep</b>	<b>Ambonge</b>
	married woman	aulip	aulip	basu	aulip
	widow	not elicited	amjen	amjen	amɛmjen
33	man	tat <sup>h</sup> aman	tat <sup>h</sup> aman	t <sup>h</sup> aman	t <sup>h</sup> uat <sup>h</sup> aman
	unmarried man	aulo	aulo	aulo?	aulo?
	married man	apini	apini?	apini	apini
	widower	not elicited	ɛmot	ɛmot <sup>h</sup>	ɛmot <sup>h</sup>
34	father	aijok <sup>h</sup>	not elicited	aijok <sup>h</sup>	aijok <sup>ː</sup>
35	mother	ainu	not elicited	ainu	ainu
36	brother	t <sup>h</sup> in	tin	t <sup>h</sup> uk <sup>h</sup>	not elicited
			aik <sup>h</sup> it	aik <sup>h</sup> it <sup>h</sup>	aik <sup>h</sup> it
37	sister	lut <sup>h</sup> u	lukut <sup>h</sup> u	t <sup>h</sup> uk <sup>h</sup>	not elicited
			ap <sup>h</sup> a	ap <sup>h</sup> a	apa?
38	name	kasaŋ	k <sup>h</sup> ok <sup>h</sup> saŋ	saŋ	k <sup>h</sup> oksas
39	bird	ɛmon	ɛmon	ɛmon	ɛmon
40	dog	ɛmokoi	ɛmokoi	ɛun	mokoi
					eoun
41	pig	?ɛh	ɛ:	?ɛ:	ɛ:
42	cassowary	ɛtawu	tawuk <sup>ː</sup>	tau	tau
43	wallaby	pasu	taiɛŋgetop <sup>ː</sup>	taiɛŋgetop	tuaieŋketop
44	flying fox	aniβiaŋ	anivjaŋ	anivianɣop	(a)niviaŋgu
45	rat	akarik <sup>h</sup>	(ɛ)karik <sup>ː</sup>	ak <sup>h</sup> arik <sup>h</sup>	ak <sup>h</sup> arit <sup>h</sup>
46	frog	k <sup>h</sup> amsuruk <sup>h</sup>	k <sup>h</sup> am suruk <sup>h</sup>	k <sup>h</sup> alo	k <sup>h</sup> amsuruk
47	snake	amat <sup>h</sup>	amat <sup>ː</sup>	amat <sup>h</sup>	amat <sup>h</sup>
48	fish	ɛli?	ɛli?	ɛli?	ɛli?
49	person	ɛt <sup>h</sup> amanielim	talim(jaŋ)t <sup>h</sup> at <sup>h</sup> aman	tujop <sup>ː</sup>	alimjat <sup>h</sup> aman
				tumuluk <sup>ː</sup>	
50	he sits	suk <sup>h</sup> omdo	suk <sup>h</sup> omdo	su?komdo?	suk <sup>h</sup> omdo
51	he stands	set <sup>h</sup> mit <sup>h</sup>	segmi?	sɛk <sup>h</sup> mit <sup>h</sup>	sɛk <sup>ː</sup> mit <sup>h</sup>
52	he lies down	mɛt <sup>h</sup> ɛpal	suk <sup>h</sup> on	suk <sup>h</sup> ok <sup>h</sup> onjen	k <sup>h</sup> onmetɛpal
			riŋ		(ko)k <sup>h</sup> ondriŋ
53	he sleeps	ku?nok <sup>h</sup> on	ku?nokon	suk <sup>h</sup> ok <sup>h</sup> on	kutnokon
		sukok <sup>h</sup> on			
54	he walks	knes	knes	knes	knes
55	the dog bites the man	ɛmokoikori	mokoikori?	eonkoron	eounkortu
				eonkenwon	

		<b>Ayuvet</b>	<b>Melenglo</b>	<b>Asepsep</b>	<b>Ambonge</b>
56	he eats	k <sup>h</sup> ɛk <sup>h</sup> ɛni	ak <sup>h</sup> ɛni	k <sup>h</sup> ɛk <sup>h</sup> ɛn	k <sup>h</sup> ɛk <sup>h</sup> ɛn
57	he gives it to me	mɛ?	awai	æwauwɔŋg	witimɛkataio
					erisukataio
58	he sees	mɛt <sup>h</sup> ɛk <sup>h</sup> ak <sup>h</sup> i	morokak <sup>h</sup> i	motokak <sup>h</sup> i	metek <sup>h</sup> ak <sup>h</sup> i
			amamat <sup>h</sup> i	mamat <sup>h</sup>	
59	he comes	kmɛ	kmɛ	kmɛ	samɛh
60	he says	k <sup>h</sup> ak <sup>h</sup> anɛs	k <sup>h</sup> ak <sup>h</sup> anɛs	k <sup>h</sup> ak <sup>h</sup> anɛs	k <sup>h</sup> ak <sup>h</sup> anɛs
61	he hears	lɔŋi	alɔŋi	kloŋ	lɔŋi
62	he knows	pɛt <sup>h</sup> ɛt <sup>h</sup>	lok <sup>h</sup> lorumi	loklorum	lolorum
63	he drinks	k <sup>h</sup> in	ain	k <sup>h</sup> in	m
64	he hits	puni	puli	p <sup>h</sup> uni	p <sup>h</sup> uni
65	he kills	punilemat <sup>h</sup>	punikamat <sup>h</sup>	pami(ke)lɛmat <sup>h</sup>	p <sup>h</sup> a:milemat <sup>h</sup>
66	he dies	mat <sup>h</sup> (lɛ)got <sup>h</sup>	mat <sup>h</sup> kut <sup>h</sup>	mat <sup>h</sup> kut <sup>h</sup>	mat <sup>h</sup> k <sup>h</sup> ut <sup>h</sup>
67	it burns	ɛkwonwilwil	ɛkwon wilwil	kwonwilwil	kwonwilwil
68	it flies	joule	ju(lɛ)	julɛ?	julɛh
69	he swims	joule	jo?	ju?	juju
70	he runs	soŋ	tsɔŋ	soŋ	sɔŋ
71	he falls down	piol	piɔl	ploi	ploi
72	he catches	k <sup>h</sup> apak <sup>h</sup> i	kak <sup>h</sup> apaki	k <sup>h</sup> ak <sup>h</sup> apak <sup>h</sup> i	k <sup>h</sup> ak <sup>h</sup> apak <sup>h</sup> i
			biri		
73	he coughs	soŋgot <sup>h</sup>	soŋgot <sup>h</sup>	soŋgot <sup>h</sup>	soŋgot <sup>h</sup>
74	he laughs	mi:ŋ	mi:ŋ	mi:ŋ	mi:ŋ
75	he dances	t <sup>h</sup> i?	t <sup>h</sup> i?	t <sup>h</sup> i?	t <sup>h</sup> i
76	big	kup <sup>h</sup> o?	k <sup>h</sup> po?	k <sup>h</sup> upo?	k <sup>h</sup> upo?
77	small	utu?	ut <sup>h</sup> u?	ut <sup>h</sup> u?	utu
78	good	tu:	tuwu?	t <sup>h</sup> uwo?	t <sup>h</sup> uwo?
79	bad	lowolo	lowolo?	lowolo?	lowolo
80	long	malak <sup>h</sup>	malak <sup>h</sup>	malak <sup>h</sup>	malak <sup>h</sup>
81	short	kakorkor	k <sup>h</sup> akorkor	kakorkor	k <sup>h</sup> akorkor
82	heavy	manik <sup>h</sup>	manik <sup>h</sup>	manik <sup>h</sup>	manik <sup>h</sup>
83	light	malil	malil	malil	malil
84	cold	kamimbrɪŋ	kamembrɪŋ	kamimbrɪŋ	kambrɪŋ
85	hot	wɛnwɛn	wɛnwɛn	bɛn	wɛnwɛn
86	new	tɛŋɛn	tɛŋɛn	t <sup>h</sup> ɛŋɛn	tɛŋɛn
87	old	ɛnik <sup>h</sup>	ɛnik <sup>h</sup>	ɛnik <sup>h</sup>	ɛnik <sup>h</sup>

		<b>Ayuvet</b>	<b>Melenglo</b>	<b>Asepsep</b>	<b>Ambonge</b>
88	round	ruɛwol	ɛwol	ɛwol	ɛwol
89	wet	pusik <sup>h</sup> sik <sup>h</sup>	pusik <sup>ː</sup> sik <sup>ː</sup>	p <sup>h</sup> usik <sup>h</sup> sik <sup>h</sup>	pusik <sup>h</sup> sik <sup>h</sup>
				plik <sup>h</sup>	plik <sup>h</sup>
90	dry	poipoi	poipoi	p <sup>h</sup> oip <sup>h</sup> oi	p <sup>h</sup> oip <sup>h</sup> oi
91	full	sɛk <sup>h</sup> ol	sɛkol	kol	sɛk <sup>h</sup> ol
92	road	ɛsolo	(ɛ)solo?	(ɛ)solo	ɛsolo
93	stone	ɛkum	ɛk <sup>h</sup> um	ɛk <sup>h</sup> um	ɛk <sup>h</sup> um
94	earth	ɛrup <sup>ː</sup>	ɛrup	ɛrup <sup>h</sup>	ɛrup <sup>h</sup>
95	sand	awa?	awa?	awa?	awa?
96	mountain	ɛt <sup>h</sup> it <sup>h</sup> i	ɛt <sup>h</sup> it <sup>h</sup> i?	t <sup>h</sup> it <sup>h</sup> i?	ɛlit <sup>h</sup>
97	fire	ɛk <sup>w</sup> on	ɛkwɔn	ɛkwɔn	ɛkwon
98	smoke	kaiau	kaiau	kaiau	kaiau
			kasum	kasum	
99	ashes	kamsien	kamsien	ɛkwon kapokaskas	pok <sup>h</sup> as
				parap	koropun
					koromete
100	sun	ɛsinan	(ɛ)sinan	sinan	sinan
101	moon	ɛjumu?	ɛjumu?	jumu?	jumu
102	star	ɛumdik <sup>h</sup>	ɛumdik <sup>ː</sup>	umdik <sup>h</sup>	umdik <sup>h</sup>
103	cloud	awat <sup>h</sup>	awat <sup>ː</sup>	awat <sup>h</sup>	awat <sup>h</sup>
104	rain	ɛɛ	ɛɛ?	ɛɛ?	ɛɛ?
105	wind	kololo	tolo	kololo	k <sup>h</sup> ololo
106	water	einun	einon	inun	inun
107	vine	alik	alik <sup>ː</sup>	alik <sup>h</sup> lolo	alik <sup>h</sup>
108	tree	ɛk <sup>h</sup> ɛ?	ɛkɛ?	ɛkɛ?	ɛk <sup>h</sup> ɛ?
109	walking stick	ɛtuk <sup>h</sup>	ɛtuk <sup>ː</sup>	ɛtuk <sup>h</sup>	ɛtuk <sup>h</sup>
110	bark	k <sup>h</sup> ak <sup>h</sup> uklu	ɛkek <sup>h</sup> ak <sup>h</sup> uklu?	ɛke kak <sup>h</sup> uklu	ɛkekakuklut <sup>ː</sup>
111	seed	kaiulk <sup>h</sup> u?	kaiulku?	kaiulku?	kaiungu?
				kak <sup>h</sup> uju?	
	seedling		ɛkek <sup>h</sup> anino?	kanino?	ɛkek <sup>h</sup> anino
112	root	k <sup>h</sup> anajan	kanajan	kanajan	k <sup>h</sup> anajan
113	leaf	kakanjun	(ɛke) kakanjun	kakanjun	k <sup>h</sup> ak <sup>h</sup> anjan
114	meat	kamujɛ?	kamujɛ?	kamujɛ?	kamujɛh
115	fat	kamar	kamar	kamar	kamar
116	egg	kaiulk <sup>h</sup> u	kaiunku?	kaiulk <sup>h</sup> u	kaiunku
117	louse	ɛk <sup>h</sup> ut <sup>h</sup>	ɛk <sup>h</sup> ut <sup>h</sup>	ɛkut <sup>h</sup>	ɛk <sup>h</sup> ut <sup>h</sup>

		<b>Ayuvet</b>	<b>Melenglo</b>	<b>Asepsep</b>	<b>Ambonge</b>
118	feather	emon k <sup>h</sup> ak <sup>h</sup> anjun	emonkakanjun	emon kakanjun	emonk <sup>h</sup> ak <sup>h</sup> anjun
119	comb (of bird)	karoprop	emonkandroko?	emon kandrokok <sup>ˀ</sup>	kandrok <sup>h</sup> ok
120	wing	(emon) pen	emonpen	emonpen	pen
121	claw	kaponjop <sup>h</sup>	kamusen	(emon) imekamusin	kamusin
122	tail (dog)	latapu	lat <sup>h</sup> apu	(la)t <sup>h</sup> apu	
	tail (bird)	punmetete?	jɪn	jɪn	jɪn
123	one	nainen	nainen	nainen	nainen
124	two	kiɪp	kjɪ:p	kiɪp	kiɪp
125	three	miok <sup>h</sup>	miok <sup>h</sup>	miok <sup>h</sup>	miok <sup>h</sup>
126	four	pɛŋ	pɛŋ	pɛŋ	pɛŋ
127	five	liim	liim	liim	liim
128	ten	suŋul	suŋul	suŋul	suŋul
129	taro	ɛmɛ?	ɛmɛ?	ɛmɛ?	ɛmɛ
130	sugarcane	ɛtu?	ɛto?	ɛto?	ɛt <sup>h</sup> u
131	yam	aklut <sup>h</sup>	aklut <sup>ˀ</sup>	ak <sup>h</sup> lut <sup>h</sup>	aklut <sup>h</sup>
132	banana	ɛlɛp <sup>ˀ</sup>	ɛlɛp <sup>ˀ</sup>	ɛlɛp <sup>h</sup>	ɛlɛp <sup>ˀ</sup>
133	sweet potato	ɛkrimbak	ɛkrimbak <sup>ˀ</sup>	krimbak <sup>h</sup>	krimbak <sup>h</sup>
134	bean	not elicited	not elicited	not elicited	ambin
135	axe	ɛnak <sup>h</sup>	ɛnak <sup>ˀ</sup>	(ɛ)nak <sup>h</sup>	(ɛ)nak <sup>h</sup>
					salembo
136	knife	ɛpul	ɛpul	ɛp <sup>h</sup> ul	ɛp <sup>h</sup> ul
137	arrow	not elicited	not elicited	nu?	ɛnu
	fish spear	(ɛ)takui	(ɛ)tak <sup>h</sup> ui	tak <sup>h</sup> ui	t <sup>h</sup> ak <sup>h</sup> ui
	pig spear	not elicited	not elicited	pɛlpɛl	not elicited
138	net bag	ɛkir	ɛkɛr	ɛker	ɛkir
139	house	ɛwin	ɛwin	ɛwin	ɛwin
140	tobacco	ɛmbos	ɛmbos	ɛmbos	ɛmbos
141	morning	arar	arar(tu)	arar	arar
142	afternoon	ɛkio?	ɛkio?	ɛmlɪk <sup>h</sup> mɛdɛ?	ɛk <sup>h</sup> iu?
143	night	ɛmlɪk <sup>h</sup>	ɛmlɪk	ɛmlɪk <sup>h</sup>	ɛmlɪk <sup>h</sup>
144	yesterday	ɛnjɪk <sup>h</sup> ɛk <sup>h</sup> ɛk <sup>h</sup> ɛ	ɛinɪnkɛkɛ	inɪenk <sup>h</sup> ɛk <sup>h</sup> ɛ	injenk <sup>h</sup> ɛk <sup>h</sup> ɛ
145	tomorrow	ɛrilo	ɛrilo	ɛrilo	ɛrilo
146	white	wowulwul	wowulwul	wulwul	wowulwul
147	black	wo?op?op	wo?opop	wopop <sup>h</sup>	wo(?o)p <sup>h</sup> op <sup>ˀ</sup>
148	yellow	(w)oioi	woioi	(w)oioi	oioi
149	red	(wo)mlek	wɔmlek	(wo)mlek	mlek

		<b>Ayuvet</b>	<b>Melenglo</b>	<b>Asepsep</b>	<b>Ambonge</b>
150	green	kɛskɛs	wəkɛskɛs	kʰɛskʰɛs	(wo)kʰɛskʰɛs
151	many	kaiapupo?	kaiapupo?	kaiakʰ pupo?	kaiapʰupo
152	all	jopʰjopʰ	jopjop	eiopʰ	jopʰ
153	this	ja?	ja?	sa?	sa?
154	that	ɛli?	ɛli?	ɛli?	ɛli?
155	what?	eisɛh	eisɛ?	isɛ?	isɛ
156	who?	au	au	au	au
157	when?	aŋɛke	aŋɛke	aŋɛke	aŋɛkʰe
158	where?	inɛh	inɛh	inɛh	inɛh
159	yes	iwai	iwai	(i)wai	iwai
160	no	tʰap	tʰapʰ	tʰap	tʰapʰ
161	he is not sitting	semitʰapʰ	sukʰomdomilikʰ	suʔkomdomilik	sukʰomdomilikʰ
162	I	jo?	jo?	jo?	jo?
163	you (singular)	won	won	won	won
164	he	ja?	ɛli?	ita?	ita
	he (far)	not elicited	not elicited	itiʔili	itili
	she	not elicited	not elicited	a?	nuka
	she (far)	not elicited	not elicited	nugili?	nukili
165	we two	jɛkɪp	jɛkɪp	jɛmkɪp	jɛmkɪp
166	you two	kakɪp	kakɪp	kakɪp	kakɪp
				jomkɪp	jomkɪp
167	they two	jekɪp	jekɪp	jekɪpɪli	jekɪp
				tukɪpɪli	
	we (inclusive)	jɛrjopjop	jɛrjopjop	jɛma?	jɛŋɟulukʰ
			jɛrmjokʰ		tejop
168	we (exclusive)	kɛmkɛmjen	jomjokʰ	mɛŋɟulukʰ	tɛmospʰ
					tɛŋɟulukʰ
169	you (plural)	jomjopʰ	jamɟulup	jom	kaŋɟulukʰ
170	they	tukaiapupo	jeŋɟulup	jeŋɟuluk	ɛŋɟulukʰ
				tupɛŋɟili	kamosopʰ
				tujopɪli	ɛjopʰ
171	he is hungry	ɛmisikʰani	ɛmisikʰanie	misikʰ kanie	misikʰani (puni)
172	he eats sugar cane	inɛtu?	inɛtʰu	inɛto?	inʔɛtʰu

		<b>Ayuvet</b>	<b>Melenglo</b>	<b>Asepsep</b>	<b>Ambonge</b>
173	he laughs a lot	mi:ŋ lekonaiai	mi:ŋ ambip (ləmotom kauŋel)	mi:ŋambip	jakjakamiŋu
174	one man stands	kekeŋen semit <sup>h</sup>	nainen semit <sup>h</sup>	tunakesemit <sup>h</sup>	t <sup>h</sup> unakemit <sup>ʔ</sup>
175	two men stand	tukip semit <sup>h</sup>	tukipsemit <sup>h</sup>	tukipsemit <sup>h</sup>	tukipemit <sup>ʔ</sup>
176	three men stand	tumiok <sup>h</sup> semit <sup>h</sup>	tumioksemit <sup>ʔ</sup>	tumiok <sup>h</sup> semit <sup>h</sup>	tumiokemit <sup>ʔ</sup>
177	the man goes	kle?	kle?	tunakesale?	tunak <sup>h</sup> ele
178	the man went yesterday	le ?enjinkeke	eininkekeke?lekot <sup>ʔ</sup>	injinkeketunakelekot <sup>h</sup>	injenkeke tunakeleket
179	the man will go tomorrow	erilo kalele	erilokalale	erilowakatunakele	erilo tunakele
180	the man eats the yam	kenaklut <sup>h</sup>	kenaklut <sup>ʔ</sup>	tunakekenaklut <sup>h</sup>	tunake kenaklut <sup>h</sup>
181	the man ate the yam yesterday	kenaklut <sup>h</sup> enjinkeke	eininkekeke? kenaklut <sup>ʔ</sup>	injenkeketunakekenaklut <sup>h</sup>	injenkeke tunake kenaklut <sup>h</sup>
182	the man will eat the yam tomorrow	erilo kakenaklut <sup>h</sup>	erilo kalekenaklut <sup>ʔ</sup>	erilokaletuna kekenaklut <sup>h</sup>	erilo kale tunake kenaklut <sup>h</sup>
183	the man hit the dog	punemok <sup>h</sup> oi	punemokoi	tunakepuneoun	tunake puneoun
184	the man didn't hit the dog	punemok <sup>h</sup> oit <sup>h</sup> ap	punemokoi (mɪlik) t <sup>h</sup> ap	puneonmɪlik	tunake puneountap
185	the big man hit the little dog	pat <sup>h</sup> kupoapunemok <sup>h</sup> oi	pat <sup>h</sup> ili punemokoi utu	takono(tuakono)nakepun eontiti	pat <sup>h</sup> konoli puneoun ut <sup>h</sup> u
186	the man gave the dog to the boy	pata?itat <sup>h</sup> emokoi sukaidiutua	pat <sup>h</sup> iliwaemokoi legaitiutuli	takononake witieounsukaitiutuili	patili waiti eoun lekaiti utuli
187	the man hit the dog and went	punemok <sup>h</sup> oi ilekot <sup>h</sup>	punemokoi lelegot <sup>ʔ</sup>	puneoun lelileli	patilipuneoun wakale
188	the man hit the dog when the boy went	itile ijepunemokoi	itilile pari punemokoi	itilile tunakepuneoun	itiutulile ipatili puneoun
189	the man hit the dog and it went	punemok <sup>h</sup> oi le?ε mok <sup>h</sup> oi lek <sup>h</sup> ot <sup>h</sup>	punemokoioromokoi soŋle?	tunakepuneounle?eunle	patlipuneoun puteounle
190	the man shot and ate the pig	milekut <sup>h</sup> keni	pat <sup>h</sup> mile kurekeni	εmilele(?ε)keni	patilimile kut <sup>h</sup> keni

### Appendix C.3: Amio-Gelimi wordlists

		<b>Amio</b>	<b>Kaskas</b>	<b>Atui</b>	<b>Poronga</b>
1	head	εpoh	εpoh	wulwoli	wulwolio
2	hair	poiokokin	poiokokiŋ	juk <sup>h</sup> iŋ	wulwolio rejukil
3	mouth	(ε)kwo	kuho	k <sup>h</sup> uwom	kuor
4	nose	(ε)liŋi	jŋi	juŋom	juŋom
5	eye	mite	mit <sup>h</sup> ε	mit <sup>h</sup> a	mot <sup>h</sup> om
6	neck	ðei	jεhi	jei	ei
7	belly	kopo	kopoh	k <sup>h</sup> op <sup>h</sup> om	k <sup>h</sup> opo
8	skin	nipeti	nipet <sup>h</sup> i	nipit <sup>h</sup> i	nip <sup>h</sup> iti
9	knee	k <sup>h</sup> ak <sup>h</sup> um	k <sup>h</sup> ivi k <sup>h</sup> ak <sup>h</sup> um	k <sup>h</sup> ak <sup>h</sup> um	kivi k <sup>h</sup> ak <sup>h</sup> um
10	ear	tiŋe	t <sup>h</sup> iŋe	t <sup>h</sup> iŋe	tiŋe
11	tongue	mume	mumεh	mumεh	(ε)mumεh
12	tooth	(ε)kwo	kuhoreput <sup>h</sup> ŋa	kwom kinjaŋa	kwo kinjaŋa
13	breast	nεmŋe	nεmŋe	nεmŋe	nεmŋe
14	hand	mēni	mēnih	mēnih	mini
15	foot	maranjuŋaka	maran(uŋ)aka	k <sup>h</sup> iŋi	(ε)kisiŋka
16	back	eimi	eimi	eimi	eimi
17	shoulder	(ε)pinbo	pinbo	pɪnp <sup>h</sup> o	(ε)p <sup>h</sup> iŋpo
18	forehead	pokapal	pokapal	k <sup>h</sup> aval	p <sup>h</sup> oβi
19	chin	kotapi	t <sup>h</sup> api	(k)eip	koip <sup>h</sup>
20	elbow	k <sup>h</sup> ak <sup>h</sup> um	mēnik <sup>h</sup> ak <sup>h</sup> um	(mēni)k <sup>h</sup> ak <sup>h</sup> um	minir k <sup>h</sup> ak <sup>h</sup> um
21	thumb	(ε)nari	kinsuluma	nari	nari
22	leg	keβir	kivi	kivi	kivir
23	heart	k <sup>h</sup> ak <sup>h</sup> um	k <sup>h</sup> ak <sup>h</sup> um	k <sup>h</sup> ak <sup>h</sup> um	imor
			p <sup>h</sup> usp <sup>h</sup> us		
24	liver	kitkit	kit <sup>h</sup> kit <sup>h</sup>	kit <sup>h</sup> kit <sup>h</sup>	k <sup>h</sup> it <sup>h</sup> k <sup>h</sup> it <sup>h</sup>
25	bone	(ε)βin	εβin	powin	powin
26	blood	mblak	mlak	mlak <sup>h</sup>	ɪmla
27	baby	poi	p <sup>h</sup> oi	k <sup>h</sup> ok <sup>h</sup> o	k <sup>h</sup> ok <sup>h</sup> o
28	girl	(ε)li	li aienri	βainesiŋ	wainesiŋ
29	boy	t <sup>h</sup> umon	jok <sup>h</sup> aien(ri)	waint <sup>h</sup> omo	wainet <sup>h</sup> omon
30	old woman	saŋai kuk	saŋai kuk	ɪmuk <sup>h</sup>	εsiŋ ɛmuk <sup>h</sup>
	widow	basu	basu	not elicited	not elicited
31	old man	saŋai kuk	saŋai kuk	ɪmuk <sup>h</sup>	tumon ɛmuk <sup>h</sup>
	widower	basu	basu	not elicited	not elicited

		<b>Amio</b>	<b>Kaskas</b>	<b>Atui</b>	<b>Poronga</b>
32	woman	siŋ	siŋ	isingri	ɛsiŋ
	unmarried woman	nimboloŋ	nimboloŋ	not elicited	wainsiŋa
	married woman	peaŋi	siŋi piaŋi	paraŋi	paraŋi
33	man	t <sup>h</sup> umon	t <sup>h</sup> umon(ri)	tumonri	t <sup>h</sup> umon
	unmarried man	ulpo	jok <sup>h</sup> ɛulpo	ulpo	ɛulp <sup>h</sup> o
	married man	peaŋi	tui piaŋi	paraŋi	paraŋi
34	father	ap <sup>h</sup> o	ap <sup>h</sup> o	awo	awo
35	mother	ani	ani	ani	hani
36	brother	tei	t <sup>h</sup> ɛhi	t <sup>h</sup> ei	(ɛ)t <sup>h</sup> i
37	sister	(ɛ)lu	ɛlu	ɛlu	ɛlu
38	name	ijon	eijo	(e)ijom	ejo
39	bird	imen	imen	imen	hemen
40	dog	mokoi	imok <sup>h</sup> oi	mok <sup>h</sup> oi	(he)mok <sup>h</sup> oi
41	pig	iða	ija	eia	hia
42	cassowary	tawu	t <sup>h</sup> awu	t <sup>h</sup> awo	(he)tawo
43	wallaby	p <sup>h</sup> osun	p <sup>h</sup> osun	ponŋir	ponŋir
44	flying fox	βiaŋ	βiaŋ	poβjaŋ	(he)poβiaŋ
45	rat	puloŋ	puloŋ	moso	moso
46	frog	βau	vao	vao	(he)wao
47	snake	bilimo	bilimo	eusesna	eusesna
	python	not elicited	not elicited	eiŋop <sup>ˈ</sup>	eiŋop <sup>ˈ</sup>
48	fish	silan	silan	silan	silan
49	person	turisingri	t <sup>h</sup> unaisiŋ	ituri	etunaisiŋ
50	he sits	imen	imen	imen	ruimen
51	he stands	mit <sup>ˈ</sup>	imit <sup>h</sup>	imit <sup>ˈ</sup>	iroimit
52	he lies down	ŋorok <sup>h</sup> ŋorok	ŋorokŋorok(mana)	ŋorokŋorok	iŋokaŋok
53	he sleeps	(i)ŋorok	iŋorok <sup>h</sup> (tit <sup>h</sup> )	(i)ŋorok <sup>h</sup>	iŋorok <sup>ˈ</sup>
54	he walks	kis	ik <sup>h</sup> is	ikis	ik <sup>h</sup> is
55	the dog bites the man	mokoi ɛkatiti tu:	mokoi ɛkatit <sup>h</sup> itu mokoi ɛpun itu	(e)mokoi kat <sup>h</sup> it ituwo	mok <sup>h</sup> oi ɛkunit <sup>h</sup> u
56	he eats	ik <sup>h</sup> an(an)	ik <sup>h</sup> an	ik <sup>h</sup> an	ik <sup>h</sup> an
57	he gives it to me	suŋi kiɛ jo	isuŋi	isaŋ	jasik <sup>h</sup> eo
58	he sees	jopoli	jopoli	jopol(i)	jopoli

		<b>Amio</b>	<b>Kaskas</b>	<b>Atui</b>	<b>Poronga</b>
59	he comes	ime	imeh	imeh	imeh
60	he says	iriβene	ilis	iklenj (gejo)	iklenj
61	he hears	nombole	inombul(i)	inumbol	inumbol(i)
62	he knows	lemimerekne	lemimirik	imerek	(h)ijeli
63	he drinks	i:n	ihin	ijn	hijn
64	he hits	isok <sup>h</sup> i	isok <sup>h</sup> i	isok <sup>h</sup>	hisok <sup>h</sup> e
65	he kills	pundrini	ipundrini	isok <sup>h</sup> rini	isuk <sup>h</sup> imairm ipunimairm
66	he dies	irink <sup>h</sup> os	irin <sup>h</sup> kus	erin	hirink <sup>h</sup> us
67	it burns	kasiŋaiek <sup>h</sup> an	k <sup>h</sup> asiŋak <sup>h</sup> an	kasiŋak <sup>h</sup> an	kasiŋaik <sup>h</sup> an
68	it flies	ilepla	ilepla	ilep <sup>h</sup>	ilepla
69	he swims	iðe	i3e	ije	hijeh
70	he runs	isoŋ	uwoipa	isoŋ	hisoŋ
71	he falls down	imat <sup>h</sup> u	imat <sup>h</sup> u	imat <sup>h</sup> u	himaput <sup>h</sup>
72	he catches	komtuni	ure	ire	hikomtit <sup>h</sup> kal
73	he coughs	iju	iju	iju	hiju
74	he laughs	imalel	imalel	imalel	himalel
75	he dances	ises	ises	it <sup>h</sup> i	hit <sup>h</sup> e
76	big	ep <sup>h</sup> ma	ip <sup>h</sup> ma	puma	hepuma
77	small	waiŋati	it <sup>h</sup> un peleŋat <sup>h</sup> it <sup>h</sup> i	t <sup>h</sup> unt <sup>h</sup> i	hetundi
78	good	masiksik	masik <sup>h</sup> ŋa	imasik <sup>h</sup>	masikna
79	bad	sesŋa	sesŋa	sesŋa	sesŋa
80	long	loseksek	losek <sup>h</sup> sek <sup>h</sup> ŋa loŋa	losek <sup>h</sup> sek <sup>h</sup>	losek <sup>h</sup> sek <sup>h</sup>
81	short	korok	korok <sup>h</sup> ŋa	kurkur	kurkur
82	heavy	manik <sup>h</sup>	manik <sup>h</sup> (nik <sup>h</sup> )	manik <sup>h</sup>	manik <sup>h</sup>
83	light	βjoβjo	βjoβjoŋa	bjobjo	βjoβjo
84	cold	merir	merir	kamirir	kamirir
85	hot	pilpil	pilpil	venven	(he) wenwen
86	new	poŋa	poŋa	poŋa	poŋa
87	old	ŋeniŋa	ŋeniŋa	niniŋa	niniŋa
88	round	pok <sup>h</sup> ul pok <sup>h</sup> o	pok <sup>h</sup> ulŋa poβilŋa	(po)kujun <sup>h</sup> kujun <sup>h</sup>	kujun <sup>h</sup> kujun <sup>h</sup>
89	wet	pispis imluk(luk)	pispis	umitn imluk <sup>h</sup>	mluk <sup>h</sup>

		<b>Amio</b>	<b>Kaskas</b>	<b>Atui</b>	<b>Poronga</b>
90	dry	kəlkel	kəlkel	kəlkel	kəlkelŋa
91	full	paun	kontekal	ikol	rok <sup>h</sup> ol
92	road	sopun	sop <sup>h</sup> un	sop <sup>h</sup> un	sop <sup>h</sup> ul
93	stone	(ɛ)kum	ɛk <sup>h</sup> um	(i)k <sup>h</sup> um	ik <sup>h</sup> um
94	earth	koloi	kului	kilvi	ekəlwe
95	sand	onon	unun	rwunwun	(he)(e)wonwon
96	mountain	t <sup>h</sup> i	it <sup>h</sup> e	t <sup>h</sup> it <sup>h</sup> i	hit <sup>h</sup> it <sup>h</sup> i
97	fire	kasiŋa	k <sup>h</sup> asiŋa	k <sup>h</sup> asiŋa	(he)kasiŋa
98	smoke	kaisŋa	k <sup>h</sup> asiŋa k <sup>h</sup> aisiŋa	k <sup>h</sup> asiŋa k <sup>h</sup> asum	ekasiŋa k <sup>h</sup> asum
99	ashes	pus	ɛp <sup>h</sup> us	(ɛ)lumet <sup>h</sup> a kasiŋamet <sup>h</sup> a	kasiŋa mit <sup>h</sup> a  ikasiŋa t <sup>h</sup> ant <sup>h</sup> an
		lumeta			
100	sun	(e)naŋ	inaŋ	ɛnaŋ	hinaŋ
101	moon	ŋoβ	iŋoβ	ɛŋop	hiŋop <sup>ʔ</sup>
102	star	ntuk <sup>ʔ</sup>	induk <sup>h</sup>	nduk <sup>h</sup>	hinduk <sup>h</sup>
103	cloud	tawa	t <sup>h</sup> awa	evaŋ <sup>h</sup>	hiwat <sup>h</sup>
104	rain	iβit	ɛviŋ <sup>h</sup>	ɛviŋ <sup>h</sup>	hiwit <sup>h</sup>
105	wind	ju	ɛjuɛ	ipeneju	peneŋa
106	water	jɛgi	jɛk <sup>h</sup> i	jik <sup>h</sup> i	heik <sup>h</sup> i
107	vine	iβe	iβe (ailinga)	iβe	hiβe
108	tree	kai	ik <sup>h</sup> ai	ik <sup>h</sup> ai	ik <sup>h</sup> ai
109	walking stick	ejo	ik <sup>h</sup> ai	ejo	hejo
110	bark	kaipet <sup>h</sup> i	k <sup>h</sup> aipet <sup>h</sup> ih	kaipit <sup>h</sup> i	kaip <sup>h</sup> it <sup>h</sup> i
111	seed	k <sup>h</sup> uŋɛli	k <sup>h</sup> ut <sup>h</sup> ɛli	kaimonŋa t <sup>h</sup> ili	ɛmonŋa
112	root	rɛpi	rɛpih	(kai)ripi	ɛrip <sup>h</sup> i
113	leaf	jokokin	jokok <sup>h</sup> in	juk <sup>h</sup> iŋ	kaiuk <sup>h</sup> iŋ
114	meat	(ɛ)raŋa	raŋa	k <sup>h</sup> ut <sup>h</sup> i	ɛndraŋa
115	fat	monmon(ŋa)	monmonŋa	monmon	ɛmonmonŋa
116	egg	kuteli	ɛmɛn ɛkut <sup>h</sup> ɛli	kut <sup>h</sup> ili	ɛk <sup>h</sup> utuli
117	louse	iŋut <sup>ʔ</sup>	ŋut <sup>ʔ</sup>	ɛŋut <sup>ʔ</sup>	ɛŋut <sup>h</sup>
118	feather	meneo k <sup>h</sup> ok <sup>h</sup> in	mɛnɛk <sup>h</sup> aum	(i)mɛnjukiŋ	hemenejuk <sup>h</sup> iŋ
119	comb (of bird)	gkokok	kandrok <sup>h</sup> ok <sup>h</sup>	drok <sup>h</sup> ok <sup>h</sup>	k <sup>h</sup> akorok
120	wing	giliti	gilet <sup>h</sup> i	gəlit <sup>h</sup> i	ilingit <sup>h</sup> i
121	claw	plani	plani	kusensen	minikak <sup>h</sup> usinsin
122	tail (dog)	lep <sup>h</sup> o	lip <sup>h</sup> o	lipi	ilip <sup>h</sup> i

		<b>Amio</b>	<b>Kaskas</b>	<b>Atui</b>	<b>Poronga</b>
123	one	k <sup>h</sup> omoli	k <sup>h</sup> umoli	k <sup>h</sup> umoli	k <sup>h</sup> umoli
124	two	kaini	k <sup>h</sup> aini	k <sup>h</sup> aini	k <sup>h</sup> aini
125	three	mek <sup>ˀ</sup>	ɛmik <sup>h</sup>	ɛmik <sup>ˀ</sup>	ɛmik <sup>ˀ</sup>
126	four	pinɛl	pinɛl	pinɛl	(ɛ)pinɛl
127	five	(ɛ)lim	elim	elim	helim
128	ten	ŋulke	ŋulke	ŋulgepake	mulkepake
129	taro	ma	emah	ema	hema
130	sugarcane	tu	ɛt <sup>h</sup> u	ɛt <sup>h</sup> u	het <sup>h</sup> u
131	yam	mom	ɛmom	emom	hemom
132	banana	pur	ɛpur	ɛpur	hepur
133	sweet potato	kolobe	sɪlrik <sup>h</sup>	kaukau	esɪlrik
134	bean	ʔakʔak		tik <sup>ˀ</sup> t <sup>h</sup> ak	
135	axe	ʔɛliŋga	ʔɛliŋga	pamula	p <sup>h</sup> amula
			selembo	ɛmos	
136	knife	lomiŋka	lomiŋga	lomiŋga	elomiŋka
137	arrow	piaŋ	piaŋ	piaŋ	euiŋka
	fish spear	not elicited	mokoikiβi	not elicited	not elicited
	pig spear	not elicited	aliŋu	not elicited	not elicited
138	net bag	oli	uli	tawalis	(e)tawalis
				ŋasiŋ	
139	house	βɛl	ɪvɛl	ɪvɛl	hevɛl
140	tobacco	imbos	imbos	imbos	imbos
141	morning	tur(ə)kaka	tur <sup>h</sup> ak <sup>h</sup> a	jarark <sup>h</sup> a	ejar(ar)k <sup>h</sup> a
142	afternoon	kikaka	k <sup>h</sup> ik <sup>h</sup> ak <sup>h</sup> a	k <sup>h</sup> iek <sup>h</sup> a	hik <sup>h</sup> iek <sup>h</sup> a
143	night	βek <sup>h</sup> a	weik <sup>h</sup> a	βik <sup>h</sup> a	iβi:k <sup>h</sup> a
144	yesterday	neka	nik <sup>h</sup> a	nek <sup>h</sup> ak <sup>h</sup> a	ɛ:mek <sup>h</sup> ak <sup>h</sup> a
145	tomorrow	tolor	tulur	tulur	etulor
			lɛla		
146	white	βɛles	wɛlesŋa	wɛles(ŋa)	wɛlesŋa
147	black	kaup <sup>ˀ</sup>	kaupŋa	mukmuk	muk <sup>ˀ</sup> muk <sup>ˀ</sup> ŋa
				opop	
148	yellow	oioi	oioiŋa	oioi	oioiŋa
149	red	ŋerek	ŋerekŋa	nerek	ŋerekna
150	green	kɛrkɛr	kirkirŋa	kirkir	kɛrkɛrŋa
151	many	lokrinrin	ɛlok <sup>h</sup> (rinrin)	lop <sup>h</sup> uma	lop <sup>h</sup> uma
152	all	eitmop <sup>h</sup> o	(eit)mup <sup>h</sup> o	mosoŋ	mosoŋ

		<b>Amio</b>	<b>Kaskas</b>	<b>Atui</b>	<b>Poronga</b>
153	this	neŋa	(osis)ŋeŋa	eone	eune
154	that	aunoŋa	noŋa	eono	auno
155	what?	ini	ɛni	ini	hɪni
156	who?	au	au	au	hau
157	when?	aŋi	aŋi	aŋika	aŋik <sup>h</sup> a
158	where?	ŋala	aŋai	aŋai	jɪŋai
159	yes	i:	na	ɛ:	ɛ:
160	no	sɛrik <sup>ʔ</sup>	sɛrik <sup>h</sup>	sɛrik <sup>h</sup>	sɛrik <sup>ʔ</sup>
161	he is not sitting	mɪnsɛrik	imɛn sɛrik <sup>h</sup>	imɛn sɛrik <sup>h</sup>	ruimɛn sɛrik <sup>h</sup>
162	I	ejo	ɛjo	ɛjo	ɛjo
163	you (singular)	eoŋ	ɛuŋ	eoŋ	heoŋ
164	he	iði	iʒi	jok <sup>h</sup> o	hiji
	he (far)	eoŋ			hijino
165	we two	ei tokaini	ei <sup>h</sup> tokaini	ei <sup>h</sup> kaini	ei <sup>h</sup> aini
166	you two	jomoi tokaini	eomu (tokaini)	jomu kaini	jomukaini
167	they two	tokaini	eomu (kaini)	jir kaini	jomukaini
	we (inclusive)	eitmopo	eitmup <sup>h</sup> o	eitmosoŋ	ei <sup>ʔ</sup> mosoŋ
168	we (exclusive)	eitmanaoune	eɛm	eitmɪk	eiɛm
169	you (plural)	jomuəne (kime)	jomumana	jomu (mosoŋ)	jomu mosoŋ
170	they	jomumopo	eomu mup <sup>h</sup> o	jir (mosoŋ)	jomu pɛspɛl
171	he is hungry	səŋolŋol	isəŋolŋol	misik punoŋ	ɛmisk <sup>h</sup> puni
172	he eats sugar cane	ŋuŋeto	iŋuŋɛt <sup>h</sup> u	inuŋ ɛt <sup>h</sup> u	iŋuŋɪt <sup>h</sup> u
173	he laughs a lot	malɛlmalɛl	imalɛl kitkit	imalɛl ambip	malɛl ambip iruk <sup>h</sup> imalɛli
174	one man stands	tokomoli ɛmit <sup>ʔ</sup>	tuk <sup>h</sup> omolemit <sup>h</sup>	tokumoli romit	hetukumoliromit
175	two men stand	tokaini ɛmit <sup>ʔ</sup>	tokaini ɛmit <sup>h</sup>	tuk <sup>h</sup> aini romit <sup>ʔ</sup>	hetokainiromit <sup>ʔ</sup>
176	three men stand	tomek <sup>ʔ</sup> ɛmit <sup>ʔ</sup>	tumek ɛmit <sup>h</sup>	tumɪk romit	hetomik romit <sup>ʔ</sup>
177	the man goes	(tumon) tuɛla	tuɛla	ɛt <sup>h</sup> u:la	hɛtuɛla
178	the man went yesterday	neka tuɛlakos	ɛnik <sup>h</sup> a ɛtuɛlakos	i:nɛk <sup>h</sup> ak <sup>h</sup> a ɛtu:la	henɛk <sup>h</sup> ak <sup>h</sup> ɛt <sup>h</sup> ulakos
179	the man will go tomorrow	tolor maila	ɛtulor ɛtuɛla	ɛtulur ɛtu:la	hetulor maitula
180	the man eats the yam	tuɛkanimom	t <sup>h</sup> uɛkanemom	ɛtu: kanemom	ɛtuk <sup>h</sup> animom

		<b>Amio</b>	<b>Kaskas</b>	<b>Atui</b>	<b>Poronga</b>
181	the man ate the yam yesterday	neka tuekanimom	enik <sup>h</sup> a etuekanemom	ɾnek <sup>h</sup> ak <sup>h</sup> a etu kanemom	enek <sup>h</sup> ak <sup>h</sup> a et <sup>h</sup> ukanemom
182	the man will eat the yam tomorrow	tolor tuekanimom	etolor etuekanemom	etulor et <sup>h</sup> ukanemom	etolormaitokanemom
183	the man hit the dog	tuesukemokoi	t <sup>h</sup> uesuk <sup>h</sup> i mokoi	etu: sukemok <sup>h</sup> oi	etusuk <sup>h</sup> imok <sup>h</sup> oi
184	the man didn't hit the dog	tuesukimokoiserik <sup>ʔ</sup>	t <sup>h</sup> uesukemokoi serik <sup>h</sup>	etu: sukemok <sup>h</sup> oi serik <sup>h</sup>	etusuk <sup>h</sup> imok <sup>h</sup> oiserik <sup>ʔ</sup>
185	the big man hit the little dog	tokmasokemokoiɛtun	t <sup>h</sup> ueɾpma esukimokoi t <sup>h</sup> un	tupuma suk emokoi t <sup>h</sup> un	etopumasuk <sup>h</sup> imok <sup>h</sup> oit <sup>h</sup> un
186	the man gave the dog to the boy	tuesuɾjemokoi kiaieɾ	t <sup>h</sup> uesuɾjemok <sup>h</sup> oi aieɾ	etu: suɾjemokoi kevain	etopumaiasimok <sup>h</sup> oi kiwaino
187	the man hit the dog and went	tuesokoimokoimanila	t <sup>h</sup> uesukimokoila manila	tu suk emokoi naila	etusuk <sup>h</sup> imokoi laβus maila
188	the man hit the dog when the boy went	aieɾjela naitu isuk emokoi	aieɾɟulolamunin naitune suke mokoi	evainla (e)tu suk emokoi	ewainola naituno suk <sup>h</sup> i mokoi
189	the man hit the dog and it went	tuesukemokoinaila	tuesukemokoi naimokoila	etu: suk emokoi naiemokoila	et <sup>h</sup> unosuk <sup>h</sup> i mok <sup>h</sup> oi maila
190	the man shot and ate the pig	tueluilamaikani	tueju ija naikania	etu: jueja ik <sup>h</sup> ani	et <sup>h</sup> uejuejanaik <sup>h</sup> ani

## Appendix C.4: Bebeli wordlists

		<b>Morokea</b>	<b>Mosa</b>	<b>Banaule</b>
1	head	p <sup>h</sup> alimi	palumum palimik <sup>h</sup>	palimi
2	hair	pak <sup>h</sup> ok <sup>h</sup> i	pak <sup>h</sup> ok <sup>h</sup> ik <sup>h</sup>	pak <sup>h</sup> okik
3	mouth	k <sup>h</sup> ua	kuek <sup>h</sup>	koromek
4	nose	noholimi	noyolimik <sup>h</sup>	noholimi
5	eye	mat <sup>h</sup> a	met <sup>h</sup> ek <sup>h</sup>	metek
6	neck	hipunu	ip <sup>h</sup> unuk	hik <sup>h</sup>
7	belly	k <sup>h</sup> ap <sup>h</sup> a	k <sup>h</sup> εpek	kepek <sup>h</sup>
8	skin	k <sup>h</sup> uni	k <sup>h</sup> unik <sup>h</sup>	k <sup>h</sup> unik <sup>h</sup>
9	knee	k <sup>h</sup> εve k <sup>h</sup> uvuna	kevek kuwuna	keβek kuβuna
10	ear	t <sup>h</sup> alaŋa	teleŋek	telelimik <sup>h</sup>
11	tongue	manap <sup>h</sup> a	menekpa	menek <sup>h</sup> pa
12	tooth	k <sup>h</sup> ua	kuek	ek <sup>h</sup> oa koromek <sup>h</sup>
13	breast	mina	(ε)minek	minek <sup>h</sup>
14	hand	mini	minik <sup>h</sup>	minik <sup>h</sup>
15	foot	keve	kevek <sup>h</sup>	keβek <sup>h</sup>
16	back	k <sup>h</sup> ahini	kainik <sup>h</sup>	kainik
17	shoulder	lagepe	nogdupunu	dumupunu
18	forehead	mat <sup>h</sup> a	remek	remek <sup>h</sup>
19	chin	hep <sup>h</sup> i	εpek <sup>h</sup>	lasiβa
20	elbow	koβona	mini kuβuna	minik kuβuna
21	thumb	p <sup>h</sup> anaha	ap <sup>h</sup> otun	minik pahebuk <sup>h</sup>
22	leg	keve	keβek <sup>h</sup>	kebek <sup>h</sup>
23	heart	k <sup>h</sup> ak <sup>h</sup> um	elek <sup>h</sup> um	k <sup>h</sup> otek <sup>h</sup> lek <sup>h</sup> um
24	liver	k <sup>h</sup> ote(muhuk <sup>h</sup> )	(me) kot <sup>h</sup> ek <sup>h</sup>	k <sup>h</sup> otek <sup>h</sup>
25	bone	hini	jinik <sup>h</sup>	hinik <sup>h</sup>
26	blood	gogoru	gogoru	gogoru
27	baby	bribop <sup>h</sup>	pubiriwop	lapepeso
28	girl	memε?ili	teili?	teili
29	boy	memε?tamani	puet <sup>h</sup> amana	t <sup>h</sup> amana
30	old woman	walehe buk	tiwalebuk	teiliebuk <sup>h</sup>
31	old man	walehe buk	puwalebuk	putamanaebuk <sup>h</sup>
32	woman	ili	t <sup>h</sup> eili	teili
	unmarried woman	k <sup>h</sup> oβot <sup>h</sup> en	tikoβoteni	memeli

		<b>Morokea</b>	<b>Mosa</b>	<b>Banaule</b>
	married woman	ili paraŋi	tiparaŋi	teili tiana
33	man	t <sup>h</sup> amana	puet <sup>h</sup> amana	t <sup>h</sup> amana
	unmarried man	mani	pumani	pumane
	married man	t <sup>h</sup> amana paraŋi	puparaŋi	puana
34	father	avo	aβo	aβo
35	mother	ani	ani	ani
36	brother	(a)t <sup>h</sup> ini	t <sup>h</sup> ik <sup>h</sup>	nunuk <sup>h</sup>
37	sister	(a)nunu	luk <sup>h</sup>	t <sup>h</sup> inik <sup>h</sup>
38	name	ɛnɛk <sup>h</sup>	ɛnɛk <sup>h</sup>	ɛnɛk <sup>h</sup>
39	bird	mɛn(ana)hak <sup>h</sup> a	imɛnti	mɛnanak <sup>h</sup> a
40	dog	mɛn	imɛn	(i)mɛn
41	pig	iga	iga	iga
42	cassowary	(i)taβo	itaβo	t <sup>h</sup> aβo
43	wallaby	(i)pak <sup>h</sup> asa	p <sup>h</sup> ak <sup>h</sup> asa	p <sup>h</sup> ak <sup>h</sup> asa
44	flying fox	ilabɛk <sup>h</sup> a	labɛk <sup>h</sup> a	labɛk <sup>h</sup> a
45	rat	(i)mak <sup>h</sup> al	imak <sup>h</sup> al	mak <sup>h</sup> al
46	frog	ikoru	ik <sup>h</sup> oru	k <sup>h</sup> oru
	small frog	k <sup>h</sup> amsuk	ik <sup>h</sup> ikɛrɛk <sup>h</sup>	k <sup>h</sup> ɛrɛk <sup>h</sup>
47	snake	mot <sup>h</sup> o	imot <sup>h</sup> o	mot <sup>h</sup> o
	python	mat <sup>h</sup> akoro	mat <sup>h</sup> akoro	mat <sup>h</sup> akoro
48	fish	ili	ile	ile
49	person	t <sup>h</sup> ojo	stamana seili	sɛtoho
50	he sits	orɛhɛn	purɛhɛru	purɛhɛn
51	he stands	orimit	purarumit <sup>h</sup>	purumit <sup>h</sup>
52	he lies down	k <sup>h</sup> onk <sup>h</sup> onk <sup>h</sup> ɛlɛŋa	pumatakalɛŋ	sosk <sup>h</sup> aini
53	he sleeps	ok <sup>h</sup> onk <sup>h</sup> on	puk <sup>h</sup> onk <sup>h</sup> on	puk <sup>h</sup> onk <sup>h</sup> on
54	he walks	ok <sup>h</sup> ik <sup>h</sup> i	puk <sup>h</sup> ik <sup>h</sup> i	puk <sup>h</sup> ik <sup>h</sup> i
55	the dog bites the man	imɛn ɛkor puɛtohu	imɛn korpu	imɛn(a)gorapu
56	he eats	p <sup>h</sup> uk <sup>h</sup> ɛn	puk <sup>h</sup> ɛn	puk <sup>h</sup> ɛn
57	he gives it to me	p <sup>h</sup> up <sup>h</sup> ɛtɛkialo	pup <sup>h</sup> ɛtɛ	pupɛtɛk <sup>h</sup> ialo
58	he sees	pujealo	puje	puje
59	he comes	pume	pumɛ	pumɛ
60	he says	puboloŋ	pubaloŋɛ	pubolone
61	he hears	puloŋoi	puloŋoi	punonoi

		<b>Morokea</b>	<b>Mosa</b>	<b>Banaule</b>
62	he knows	puramahékimi	remekabele karopie	pup <sup>h</sup> ak <sup>h</sup> i
63	he drinks	puin	puin	puin
64	he hits	punuba	pulubai	pulubapu
65	he kills	pusubébelepupuringi	pulubatitiringi	subulepu
66	he dies	purinik <sup>h</sup> ot <sup>ˀ</sup>	purinikot <sup>h</sup>	purinikot <sup>ˀ</sup>
67	it burns	(ε)k <sup>h</sup> oneutut <sup>ˀ</sup>	ik <sup>h</sup> on eut <sup>h</sup> ut <sup>h</sup>	k <sup>h</sup> onatatut <sup>ˀ</sup>
68	it flies	ébébela	puhola	pubébela
69	he swims	puhehe	puhehe	puhehe pubul
70	he runs	ehonon	puonon	puon
71	he falls down	erupus	pupapalakru	purukurin
	he trips	not elicited	pupapar	pupapar
72	he catches	esak <sup>h</sup> omi	pusak <sup>h</sup> omi	sak <sup>h</sup> omi
73	he coughs	ek <sup>h</sup> uhuk <sup>h</sup>	puk <sup>h</sup> uhuk	puk <sup>h</sup> uhuk
74	he laughs	elobobo	puloβoβo	puloβoβo
75	he dances	et <sup>h</sup> et <sup>h</sup> i	put <sup>h</sup> et <sup>h</sup> e	put <sup>h</sup> et <sup>h</sup> e
76	big	ehébuk <sup>h</sup>	ehibuk <sup>h</sup>	ehébuk <sup>h</sup>
77	small	(ε)tébesik <sup>h</sup>	et <sup>h</sup> i	et <sup>h</sup> it <sup>h</sup> i tébesik <sup>h</sup>
78	good	elubul	eluβul	eluβul
79	bad	ehale	ehale	egale
80	long	eloloi	eloloi	eloloi
81	short	ek <sup>h</sup> ok <sup>h</sup> orok <sup>h</sup>	kokorok <sup>h</sup>	ek <sup>h</sup> orok <sup>h</sup>
82	heavy	emai	emai	emai
83	light	elelehek <sup>h</sup> emaisok	elelehek	éβoβolo
84	cold	(kok <sup>h</sup> )merir	(kok)merir	emerin
	feel cold	not elicited	not elicited	inekmerin
85	hot	(ε)roroŋo	roroŋo	erono
86	new	alaba	elaba	alaba
87	old	ehégina	elaβuhu	elabuhu
88	round	k <sup>h</sup> adal k <sup>h</sup> um	k <sup>h</sup> adal	ep <sup>h</sup> ok <sup>h</sup> on
89	wet	ep <sup>h</sup> esik <sup>h</sup>	pesik	(ε)pesik <sup>h</sup>
90	dry	ep <sup>h</sup> op <sup>h</sup> u	p <sup>h</sup> op <sup>h</sup> u	ep <sup>h</sup> op <sup>h</sup> u

		<b>Morokea</b>	<b>Mosa</b>	<b>Banaule</b>
91	full	erakirik	rakirik	irakiriki
92	road	iguluk <sup>h</sup> ua	gulukua	igulukua
93	stone	ik <sup>h</sup> um	ik <sup>h</sup> um	(i)k <sup>h</sup> um
94	earth	ik <sup>h</sup> oli	k <sup>h</sup> ole	(i)k <sup>h</sup> ole
95	sand	imado	imado	imado
96	mountain	ilalolo	idok <sup>h</sup>	idok <sup>h</sup>
97	fire	ik <sup>h</sup> on	ik <sup>h</sup> on	ik <sup>h</sup> on
98	smoke	k <sup>h</sup> on(ε)k <sup>h</sup> uwukna	k <sup>h</sup> on kinana	ik <sup>h</sup> on k <sup>h</sup> ina
99	ashes	(i)bubus	bubus mat <sup>h</sup> a	bubus isukua
100	sun	naharo	naharo	naharo
101	moon	leβono	leβono	noβono
102	star	kirap <sup>ʔ</sup>	kirap	kirap
103	cloud	gusasa	lagusa	lap <sup>h</sup> abu
104	rain	ibit <sup>h</sup> i	bit <sup>h</sup> i	ibit <sup>h</sup> i
105	wind	nehep <sup>h</sup> u	nehep <sup>h</sup> u	nahipu
106	water	(i)nek <sup>h</sup> i	nek <sup>h</sup> i	inek <sup>h</sup> i
107	vine	k <sup>h</sup> usu	kusu (k <sup>h</sup> olok <sup>h</sup> )	inue
108	tree	ik <sup>h</sup> e	ik <sup>h</sup> ε	ik <sup>h</sup> e
109	walking stick	ik <sup>h</sup> odo?	initok	ik <sup>h</sup> odo
110	bark	k <sup>h</sup> εk <sup>h</sup> uni	k <sup>h</sup> εk <sup>h</sup> uni	ik <sup>h</sup> εk <sup>h</sup> uni
111	seed	εp <sup>h</sup> ina	p <sup>h</sup> ina	εp <sup>h</sup> ina
112	root	εseeli	seeli	εseeli
113	leaf	εk <sup>h</sup> ok <sup>h</sup> i	k <sup>h</sup> ok <sup>h</sup> i	k <sup>h</sup> εk <sup>h</sup> ok <sup>h</sup> i
114	meat	misa	misa	εmisa
115	fat	εmunena	munana	εmonena
116	egg	(εka)kot <sup>h</sup> el	kut <sup>h</sup> iliŋa	k <sup>h</sup> otel
117	louse	ider	der	inut <sup>h</sup>
118	feather	(i)menanahak <sup>h</sup> εk <sup>h</sup> ok <sup>h</sup> i	imen k <sup>h</sup> ok <sup>h</sup> i	ip <sup>h</sup> au
119	comb (of bird)	(εla)balolo	kabalalo k <sup>h</sup> adokok	k <sup>h</sup> abalo k <sup>h</sup> alak <sup>h</sup> oa
120	wing	k <sup>h</sup> arap <sup>h</sup> ana	leβulut <sup>h</sup> i	εleβulu
121	claw	gususna	keβε εlepine	εkeβεp <sup>h</sup> a
122	tail (dog)	(ka)εlep <sup>h</sup> e	εlip <sup>h</sup> i	εlep <sup>h</sup> e
123	one	(ε)k <sup>h</sup> asok <sup>ʔ</sup>	kasok <sup>h</sup>	εk <sup>h</sup> asok <sup>h</sup>
124	two	εlukeke	lukeke	εluk <sup>h</sup> e

	<b>Morokea</b>	<b>Mosa</b>	<b>Banaule</b>
125 three	emiok <sup>h</sup>	miok <sup>h</sup>	emiok <sup>h</sup>
126 four	(ε)penel	penel	εp <sup>h</sup> elen
127 five	elimik <sup>h</sup> apeke	limikapεk <sup>h</sup> e	elimikapεk <sup>h</sup> e
128 ten	enuhulk <sup>h</sup> e	enulk <sup>h</sup> e	enuhulk <sup>h</sup> e
129 taro	ima	ima	ima
130 sugarcane	it <sup>h</sup> o	it <sup>h</sup> o	it <sup>h</sup> o
131 yam	imomo	imomo	momo
132 banana	ipur	ipur	ipur
133 sweet potato	imuk <sup>h</sup> ulubi	mulukuβε	mulukuβε
134 bean	t <sup>h</sup> it <sup>h</sup> iεk <sup>h</sup>	t <sup>h</sup> it <sup>h</sup> iεk <sup>h</sup>	
135 axe	lap <sup>h</sup> emu nehe	lap <sup>h</sup> emu	lap <sup>h</sup> emu
136 knife	lavisu	laβiso	laβiso
137 arrow	k <sup>h</sup> ok <sup>h</sup> ome	not elicited	not elicited
fish spear	takura	t <sup>h</sup> εk <sup>h</sup> usi	t <sup>h</sup> εk <sup>h</sup> usi
pig spear	mεnmat <sup>h</sup> a	larumsu	larumusu
war spear	pine	ipine	ipine
138 net bag	nohok <sup>h</sup> o k <sup>h</sup> ulop <sup>h</sup> i	nohok <sup>h</sup> o k <sup>h</sup> anik <sup>h</sup> a	nohok <sup>h</sup> o
139 house	bele	bele	bele
140 tobacco	wat <sup>h</sup> i	wat <sup>h</sup> i	iwat <sup>h</sup> i
141 morning	nendlupa	dulpa	lεdulupa
142 afternoon	nεk <sup>h</sup> ulεsik	nεk <sup>h</sup> ulεsik <sup>ˀ</sup>	lεk <sup>h</sup> ule
143 night	nεmgiliŋ	nεmgiliŋ	lεmigili
144 yesterday	εnunue	nunue	εnunue
145 tomorrow	εlεl	εlεl	εlεl
146 white	εp <sup>h</sup> unp <sup>h</sup> un	εp <sup>h</sup> un	εp <sup>h</sup> un
147 black	εgopgop	εgop <sup>ˀ</sup>	εgop(gop)
148 yellow	mohokmohok	εmohok	εmomohok <sup>h</sup>
149 red	εβururu	εpsikiki	εpisik <sup>h</sup> i
150 green	εk <sup>h</sup> εk <sup>h</sup> εsi	εk <sup>h</sup> obo	εkekese
151 many	εbus	εbus	εbus
152 all	simas	(si)k <sup>h</sup> at <sup>h</sup> u	εk <sup>h</sup> at <sup>h</sup> u
153 this	εveni	εni	ene
154 that	εvenu	εno	εno(n)
155 what?	ini	ini	ine

		<b>Morokea</b>	<b>Mosa</b>	<b>Banaule</b>
156	who?	aho	aho	aho
157	when?	ehɛk <sup>h</sup> a	ehɛk <sup>h</sup> a	ehɛk <sup>h</sup> a
158	where?	ɛhai	ɛdak <sup>h</sup> o	ɛhai
159	yes	ɛ	e	e
			kelɛŋɛha	k <sup>h</sup> ɛnɛk <sup>h</sup> a
160	no	ɛso	ɛso	ɛso
161	he is not sitting	norehɛnso	purɛruso	purenso
162	I	alo	alo?	alo
163	you (singular)	ino	ino	ino
164	he	inu	p <sup>h</sup> u	pu
	she		t <sup>h</sup> i	t <sup>h</sup> i
165	we two	susum	susum	susum
166	you two	musum	musum	musum
167	they two	musum	musum	su
				musum
	we (inclusive)	totokmas	t <sup>h</sup> okatu(ɛhi)	t <sup>h</sup> ok <sup>h</sup> at <sup>h</sup> u
168	we (exclusive)	mɛmɛkelɛŋa	mɛmɛkelɛŋa	mɛmɛk <sup>h</sup> ɛna
169	you (plural)	momok <sup>h</sup>	momok <sup>h</sup>	momok <sup>h</sup>
170	they	momok <sup>h</sup>	mok <sup>h</sup> at <sup>h</sup> u	si
171	he is hungry	purɪŋima	purɪŋima	nɛhɛpunt <sup>h</sup> i
172	he eats sugar cane	puinit <sup>h</sup> o	puinit <sup>h</sup> o	puinit <sup>h</sup> o
173	he laughs a lot	ɛlobobo bulahi	puloβoβobus	puriniki loβoβonu
174	one man stands	pukɛtoho kepurimit <sup>ˈ</sup>	pukasokdobo	purumit <sup>h</sup>
175	two men stand	sutoho lukɛkɛsurimit <sup>ˈ</sup>	sulukeke dobo	suluke surumit <sup>h</sup>
176	three men stand	sɛtohomioksirimit <sup>ˈ</sup>	simiok dobo	simiok <sup>h</sup> sirumit <sup>h</sup>
177	the man goes	putohopula	pula	p <sup>h</sup> ula
178	the man went yesterday	ɛnunueɪ pulakot <sup>ˈ</sup>	ɛnunue punapula	ɛnunue pulak <sup>h</sup> ot
179	the man will go tomorrow	ɛlɛk <sup>h</sup> ipula	ɛlɛpula	ɛlɛl pula
180	the man eats the yam	putohopukenimomo	puk <sup>h</sup> ɛnimomo	puk <sup>h</sup> ɛnimomo
181	the man ate the yam yesterday	ɛnunue puɛto hopuk <sup>h</sup> ɛni imomo	ɛnunuepuk <sup>h</sup> ɛnimomo	ɛnunue puk <sup>h</sup> ɛn imomo
182	the man will eat the yam tomorrow	ɛlɛkipukeni imomo	ɛlɛlpuk <sup>h</sup> ɛnimomo	ɛlɛl puk <sup>h</sup> ɛnimomo
183	the man hit the dog	puɛtoho puluba imen	pulubaimɛn	pulubaimɛn

		<b>Morokea</b>	<b>Mosa</b>	<b>Banaule</b>
184	the man didn't hit the dog	puetoho pulubaimenaso	pulubaimenso	pulubaimenso
185	the big man hit the little dog	puetoho hebupulubaimen etevesi	puɛbikapulubaimentiena	puɛbu pulubai imenet <sup>hi</sup>
186	the man gave the dog to the boy	puetoho pupete imen kipu ememe tevesik	puɛbikapupeteimen kisememe	pupete imen et <sup>hi</sup>
187	the man hit the dog and went	puetoho pulubaimenopulakot	pulubaimenopula	pulubaimenpulakot
188	the man hit the dog when the boy went	puememepula opu etohopulubaimen	puememetipula opuna pulubaimen	pulak <sup>he</sup> puna pulubaimen
189	the man hit the dog and it went	puetohopulubaimenoimenela	pulubaimenoimen erurula	pulubaimen imen ila
190	the man shot and ate the pig	puetohopu besigaopukeni iya	pubesigaokeni	pubesiga pukeni

## Appendix C.5: Aighon, Bola, Mangseng and Nakanai wordlists

		Aighon	Bola	Mangseng	Nakanai
1	head	pon	gi	ipouŋa	gama
2	hair	ikin	not recorded	ðoiŋ	ivu
3	mouth	litoŋ	ŋaβa	iwɔ	hare
4	nose	ŋurin	rupere	ioŋe	maisū
5	eye	matan	mata	iðeki	mata
6	neck	luŋun	loyo	ikei	loho
7	belly	kopin	tamundi	ioɔ	tiala
8	skin	lut	kuli	inipeti	vovo
9	knee	posut	turu	ieŋe pɔmesi	tutu
10	ear	tiŋin	taliŋa	iteŋa	gavusa
11	tongue	mamam	tabele	ilemuma	kalamea
12	tooth	eŋin	ŋi	iwɔpupɔ	togo
13	breast	susun	ru	iasusu	susu
14	hand	βilin	lima	imeni	lima
15	foot	not recorded	βaya	ieŋe salapa	vaha
16	back	gimon	bito	ikime	poga
17	shoulder	siβian	gepe	ikeipɔ	beho
18	forehead	miaŋan	dume	ipɔwe	varu
19	chin	epsin	kumim	iaep	sivova
20	elbow	posut <sup>7</sup>	putu	imeni pɔmesi	butukuha
21	thumb	ponin	kuku	imeni pupɔ ninanɔ	kuku
22	leg	kɪβin	βaya	ieŋe	vaha
23	heart	matangin	bua	ia tutut	bua
24	liver	etan	ɣate	ia puspup	hate
25	bone	embruŋ	tuɣa	ipɔkin	tuha
26	blood	æŋgrik <sup>7</sup>	dara	iamla	kososo
27	baby	(polin)ekokok <sup>7</sup>	koma	pɔvɔðvɔð	pepeso
28	girl	eet a kooβtin	koma ŋataβine	ovote	e guliliki
29	boy	veeɣa maingɪ	koma bakoβi	kulpo	e guliliki
30	old woman	totambasasu	gare	kimet	tavile uru
31	old man	tiabasasu	not recorded	tɔlɔk	tahalo uru
32	woman	panoyo	ŋataβine	seŋ	tavile
33	man	pamasan	bakoβi	toko	tahalo
34	father	tataman	tama	vɔvɔ	tama

		<b>Aighon</b>	<b>Bola</b>	<b>Mangseng</b>	<b>Nakanai</b>
35	mother	tonin	kina	nina	tila
36	brother	waton	tuka	teik	tua
37	sister	elutɲɔ	koroba	luk	tua
38	name	jax	ra	ijon	isa
39	bird	ekin	kandiroβo	mɛn	malu
40	dog	ekin	ligo	nanau	paia
41	pig	juɲ	boro	kie	bolo
42	cassowary	naoko	meɲo	tavo	kehu
43	wallaby	irokʻ	ɲapole	pɔsusun	pakasa
44	flying fox	nimbika	kopa	porou	bureki
45	rat	tanisu	kuruβe	mɔsɔ	kusuke
46	frog	ɛmgo	not recorded	vakɔ	pere
47	snake	nekso	mata	pilimo	pase
48	fish	ɛsmaɲ	manu	silɲ	ia
49	person	patoyu	bakoβi	toko	etibo
50	he sits	βezion	mande	imen	pou
51	he stands	βesipitʻ	pesi	imita	magiri
52	he lies down	βizinokʻ	not recorded	iɲɔ	mavuta
53	he sleeps	βmekruɲ	mayita	inoɲnoɲ	mavuta
54	he walks	βmas	layo	ies	tuga
55	the dog bites the man	βituk	kania	ipun	tolo la tahalo
56	he eats	βien	kani	ian	ali
57	he gives it to me	βetititax	ɣabi	isuɲuiaðoɲe	abi a gu
58	he sees	βipan	masia	iðopoli	hilo
59	he comes	βime	βalai	iesme	go mai
60	he says	βikaisa	tamaia	iri	veia(mago)
61	he hears	βikinoi	loɲo	inoɲbol	lolo
62	he knows	βeminas	not recorded	ilemi mireɲe	rovi
63	he drinks	βenum	ninu	iðin	liu
64	he hits	βeβin	bi	isoi	kue a
65	he kills	βevin	not recorded	ipun nini	bili a
66	he dies	βerun	mate	inin	peho
67	it burns	iβilβil	nono	ian	karere re
68	it flies	ibrim	bembe	irɛr	lovo
69	he swims	βeyoi	huru	ike	puru puru

		<b>Aighon</b>	<b>Bola</b>	<b>Mangseng</b>	<b>Nakanai</b>
70	he runs	βeruos	nunu	iðo	hari
71	he falls down	βekasit <sup>7</sup>	boru	matu	boru
72	he catches	βekom	siko	ieli	sakole a
73	he coughs	βekoyok <sup>7</sup>	loko	ikuk	kulue
74	he laughs	βeruŋ	noŋo	iŋeŋe	lege
75	he dances	βesi	raulo	ses	tilia
76	big	aʔoluŋ	dagi	aoloŋa	uru
77	small	tutun	kiroko	posŋa	bisi
78	good	sosou	kamumu	senuŋa	taritigi
79	bad	jaŋases	ʔale	kereŋa	kama ko kora
80	long	lolo	iola	loloŋa	malau
81	short	karomu	kapo	adoŋa	boto
82	heavy	kiŋgiŋ	maβa	maðe	tikumu
83	light	ʔeglek	maraya	vðoŋal	mavulaha
84	cold	imumbrut	piu	merirŋa	maigi
85	hot	benben	roŋo	veilŋa	tivura
86	new	raman	karaba	pəŋaŋa	halaba
87	old	amux	not recorded	nomeŋa	mumugu
88	round	pəku	rourou	kaluŋa	polo galili
89	wet	mluk	mea	ipis	ba beta
90	dry	ʔeye	kere	klanʔklanʔ	masaga ti
91	full	sekol	not recorded	ivual	volu
92	road	ʔiso	dala	soveŋalo	gauru
93	stone	seke	kedo	um	uati
94	earth	pluk	malala	ulue	magasa
95	sand	zigli	ʔire	wunwun	parava
96	mountain	kalapliŋ	lolo	peŋene	gove
97	fire	kila	kanono	wəsesəŋa	havi
98	smoke	ikin	pokona	wəŋkluŋa	sosobu
99	ashes	popo	kato	vuvus	buburo
100	sun	nelak <sup>7</sup>	ʔaro	naŋ	haro
101	moon	enam	keβa	ŋəv	taio
102	star	kirap <sup>7</sup>	ʔada	sivemit	matatabu
103	cloud		ʔabu	səpsa	tuluvu
104	rain	ekus	βala	vit	hura
105	wind	eip	βilu	ðue	lolovi

		<b>Aighon</b>	<b>Bola</b>	<b>Mangseng</b>	<b>Nakanai</b>
106	water	iki	naru	ðei	lalu
107	vine	ɛlik	mota	we	mota
108	tree	zaŋ	kai	won	obu
109	walking stick	not recorded	not recorded	wɔn tan	butu
110	bark	lutʰ	kulina	peti	kulikuli
111	seed	juyun	not recorded	monŋa	vavua
112	root	kumutʰ	kana	ripi	ua
113	leaf	ikin	pagana	ðoiŋ	galalao
114	meat	imalin	bobona	mekerim	kalia
115	fat	kamar	βi	munmun	molamola
116	egg	kulutʰ	not recorded	otil	hatotolu
117	louse	ŋut	kutu	ŋut	hutu
118	feather	ikin	βu	mɛniðoiŋ	kokoma
119	comb (of bird)	not recorded	not recorded	not recorded	not recorded
120	wing	britʰ	karapa	giniti	palapala
121	claw	piplɛŋgein	kuku	imɛniplani	not recorded
122	tail (dog)	pokutʰ	ku	ilepupɔ	kiula
123	one	tan	taku	omole	sasa
124	two	βuonŋ	rua	aini	lua
125	three	miok	tolu	me	itolu
126	four	nal	βa	penel	ivaa
127	five	ɛsipʰ	lima	lim	ilima
128	ten	sulukanda	raβulu	mule	savulu
129	taro	ŋai	maβo	ma	mavo
130	sugarcane	jɛm	toβu	to	tovu
131	yam	mom	yʉβi	mom	huvi
132	banana	mɔrɔk	βudi	tuli	vugi
133	sweet potato	sirimba	tereβate	siriba	kuruve
134	bean	tiktæk	not recorded	not recorded	not recorded
135	axe	lapemu	kira	telerŋa	pemu
136	knife	ɛpul	βito	lomɛŋa	viso
137	spear	mɪyɪt	mayeto	pearŋ	gata
138	net bag	kanika	kulupi	kole	palo
139	house	bɛle	ruma	vel	luma
140	tobacco	bos	βasi	bɔs	suku
141	morning	iru	yatelaŋa	rulpɔ	kavikoki

		<b>Aighon</b>	<b>Bola</b>	<b>Mangseng</b>	<b>Nakanai</b>
142	afternoon	izeng	maluŋa	penie	maulavi
143	night	ivus	rodo	pemlik	logo
144	yesterday	aizap <sup>7</sup>	raβi	nine	alalavi
145	tomorrow	pleŋadupa	kuduβi	lelkin	galigeli
146	white	βolβol	kea	velesŋa	kakea
147	black	βikβik	kato	pogopgopŋa	para kuru kuru
148	yellow	yoioyi	ŋaŋo	kəðəðŋa	ialalo
149	red	jagrekgrek	βururu	seleleŋa	magese gese
150	green	kirkir	goma	raŋraŋa	ka kesa
151	many	jambip	kupo	pulua	usu
152	all	imut <sup>7</sup>	not recorded	alavusŋa	tomi
153	this	ja	not recorded	ike	aleie
154	that	jare	not recorded	ikola	aleio
155	what?	ele	arana	neke ako	mave
156	who?	wanu	erei	ao	ere
157	when?	asaŋi	garika	penva	gaisa
158	where?	de	βai	kaj(t <sup>h</sup> )	oio ve
159	yes	ii	not recorded	e	ee
160	no	iyom	ijuka	avele	ouka
161	he is not sitting	apsin	kumai	avele	kama
162	I	ŋo	iau	ðo	eau
163	you (singular)	on	ioe	woŋ	eme
164	he	βex	ia	i	eia
165	we two	toy	not recorded	them	a milua
166	you two	mom	marua	thomu	a mulua
167	they two	βloŋ	marua	or	e girua
168	we (exclusive)	pim	mateu		a miteu
169	you (plural)	jom	matou	thomu	a mutou
170	they	ri	ria	or	e giteu

## Appendix C.6: Aiklep and Gimi wordlists

		<b>Aiklep</b>	<b>Gimi</b>
1	head	ka-dumu	ka-dumu
2	hair (scalp) body part with it obligatory	ka-dumu ka-kanun	ka-dumu ka-lengeng
3	mouth	ko	ko
4	nose	yinlo	ka-koroplo
5	eye	mede	mede
6	neck	wolo	wolo
7	belly	ka-idil	ka-dil
8	skin	ka-kuklu	ka-kuklu
9	knee (lit. leg joint)	kin ka-kum	kin ka-kum
10	ear	longo	longo
11	tongue (lit. mouth tongue)	ko kamamelo	same
12	tooth (lit. mouth kernal)	ko kanino	ko kanino
13	breast	yinge	yenge
14	hand (lit. top of the arm)	ime ru	ime ru
15	foot (lit. top of the leg)	kin ru	kin ru
16	back	ka-wang	ka-sakramru
17	shoulder (lit. arm its-joint)	ime ka-kopo	wolo
18	forehead	romowo	romowo
19	chin	sipin	sipin
20	elbow (lit. arm its joint)	ime ka-kum	same
21	thumb	ime ka-longo	same
22	leg	kin	same
23	heart	ka-upus	same
24	liver		
25	bone	ka-kai	same
26	blood	ka-walo	ka-angrik
27	baby	ulep	ulep
28	girl	inuk	kuna
29	boy	idi	ida udu (little male)
30	old woman	yip	yip
31	old man	pat kairak	ida aplak
32	woman	aulip	daulip
33	man	pat	ida / pat
34	father (lit. his father)	teme	tambat

		<b>Aiklep</b>	<b>Gimi</b>
35	mother	tine	tinapu
36	brother (lit.his, my big brother)	dinulip	dinulip
37	sister (lit. opposite gender)	luudu	luudu
38	name	ka-sang	same
39	bird	omon	omon
40	dog	un	wun
41	pig	e	e
42	cassowary	kukyung	omon dabu
43	wallaby	kining	pangi
44	flying fox	sapaiwa	parau
45	rat	au	au
46	frog	kalu	kutwal
47	snake	amat	amat
48	fish	ili	ili
49	person (lit. one human)	du nake	du nake
50	he sits	suk mdo	suk do
51	he stands	se mit	se mit
52	he lies down	suk kon	suk kon
53	he sleeps	kon utkonokong	kon utionong
54	he walks	nes	nes
55	the dog bites the man	un kor pat	wun ko ida si
56	he eats	ken	ken
57	he gives it to me	walel i me kada yo	waka i me ka yo
58	he sees	mede kapling i	mede kapli i
59	he comes	pat me	ida me
60	he says	wo	o
61	he hears	long i	long i
62	he knows	dain	dangini
63	he drinks	in	in
64	he hits	pun	pun
65	he kills	pam	pakam
66	he dies	mat	mat
67	it burns (lit. fire eats it)	kwon ken i	kwon ken i
68	it flies	yu le	yu le
69	he swims	yu le	yu le
70	he runs	pos	pasapong

		<b>Aiklep</b>	<b>Gimi</b>
71	he falls down	piol suk	dek suk
72	he catches (lit. he catches it)	mbir i	mbir i
73	he coughs	songgot	songgot
74	he laughs	ming	miying
75	he dances	ti	ti
76	big	kupo	kupo
77	small	udu	udu
78	good	du	duku
79	bad	lowolo	lowolo
80	long	malak	malak
81	short	it	it
82	heavy	manik	manik
83	light	malil	weswes
84	cold	mirin	mirin
85	hot	wenwen	ngengeng
86	new	dengen	dengen
87	old	inik	inik
88	round	awol	lo lulul
89	wet	blik	blik
90	dry	poipoi	pokpok
91	full	sapal	sapal
92	road	oso	oso
93	stone	ukum	ukum
94	earth	urup	urup
95	sand	daklip	aklip
96	mountain	ilit	ilit
97	fire	kwon	ukwon
98	smoke	kwon ka-yau	ukwon ka-kinkin
99	ashes	kwon ka-parap	asong, kwon ka-usus
100	sun	sinang	sinang
101	moon	yumu	saiku
102	star	kindik	kadang
103	cloud	awat	kawat
104	rain	ere	pakuru
105	wind	oleng	mana
106	water	inung	nen

		<b>Aiklep</b>	<b>Gimi</b>
107	vine	alík	alík
108	tree	eke	eke
109	walking stick	uduk	uduk
110	bark	eke kakuklu	eke kakuklu
111	seed	kanino	kanino
112	root	kamngam	kamam
113	leaf (lit. its covering)	ka-kanun	ka-lengeng
114	meat	werngem	masung
115	fat	muye	kamkal
116	egg	ka-yulkul	ka-kuklu
117	louse (prs.not oblig.)	kinkin	sakapit
118	feather	ka-kanun	ka-lengeng
119	comb (of bird)	ka-akom	ka-setngin
120	wing	pen	pein
121	claw (lit. the foot's nails)	kin kamusin	kin kamusin
122	tail (dog)	yin	ka-kulkul
123	one	nake	nake
124	two	kyip	tip
125	three	miok	mok
126	four	peng	peng
127	five	lyim	lyim
128	ten	sungul	sungul
129	taro	eme	eme
130	sugarcane	udu	udu
131	yam	aklut	aklut
132	banana	elep	elep
133	sweet potato	krimbak	kirimbak
134	bean	ambin	ambin
135	axe	nak	nak
136	knife	upul	upul
137	spear	nu	nu
138	net bag	bilum	bilum
139	house	iwin	num
140	tobacco	ombos	ombos
141	morning	iri lo	yang ka yinginlo
142	afternoon	imlik mede ke	imlik mede ke

		<b>Aiklep</b>	<b>Gimi</b>
143	night	imlik	imlik
144	yesterday	inkeke	nindi
145	tomorrow	iri lo ke	yinglo
146	white	kawawang	wok
147	black	wus	wus
148	yellow	al	kal
149	red	mlek	mlek
150	green	kawir	tipipring
151	many	kayap kupo	kayap
152	all	nguluk	kangenlo
153	this	sa	so
154	that	siwi	si
155	what?	isu	ise
156	who?	au	au
157	when?	loke ine	angau
158	where?	le ine	le we
159	yes	wai	ile
160	no	dap	dap
161	he is not sitting	mdo dap	do dap
162	I	yo	yo
163	you (singular)	wong	wong
164	he (lit. that man)	pat si	ida si
165	we two	mekyip	mip
166	you two	kakyip	kap
167	they two	yei kyip	du dip
168	we (exclusive)	mekyip	mip
169	you (plural)	yum	yom
170	they	yei	yeit

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