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## **Abstract**

In March 2008, SIL-PNG conducted a sociolinguistic survey of the Yabong, Migum, Nekgini and Neko languages, which are spoken in Madang Province, Papua New Guinea. Fieldwork was completed by Daryl Pfantz, Dan Richardson, Hannah Paris, Barbara Hodgkinson and Juliann Bullock. The survey was requested by SIL's Madang Regional Assistant Director (RAD), Mark Hepner. The goals were to distinguish language and dialect boundaries and investigate language vitality. The Yabong, Migum, Nekgini and Neko languages appear to be vital, although there are some trends in Migum and Neko that could ultimately lead to a language shift. Yabong, Migum, Nekgini and Neko are four separate languages.

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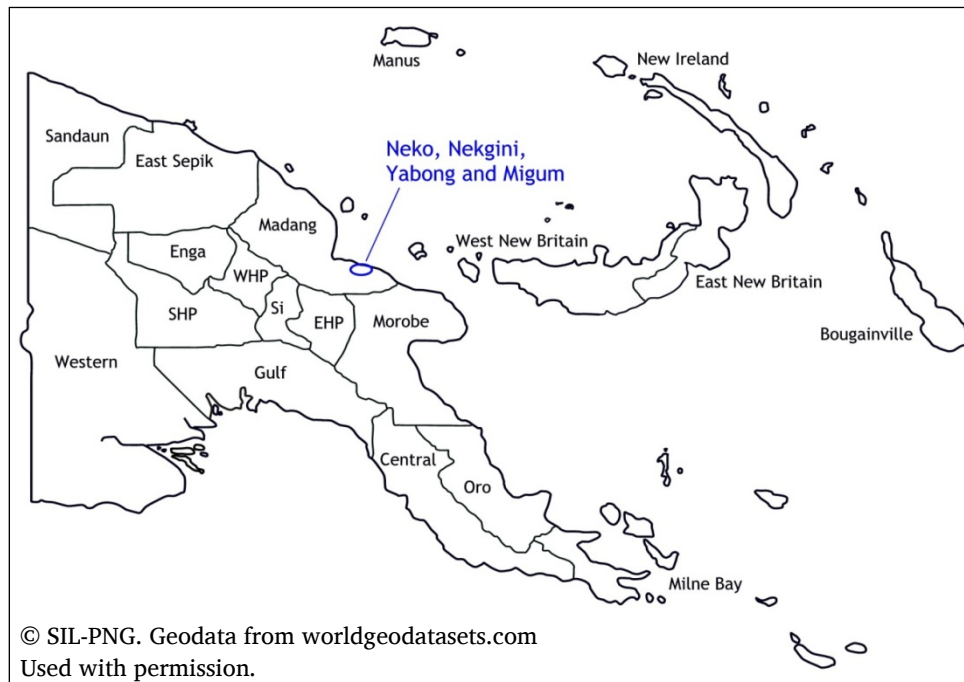
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# 1 Background

## 1.1 Language location

The Yabong [ybo], Migum [klm], Nekgini [nkg] and Neko [nej]<sup>1</sup> languages are located in the eastern part of Madang Province.<sup>2</sup>

Map 1. Language areas in context



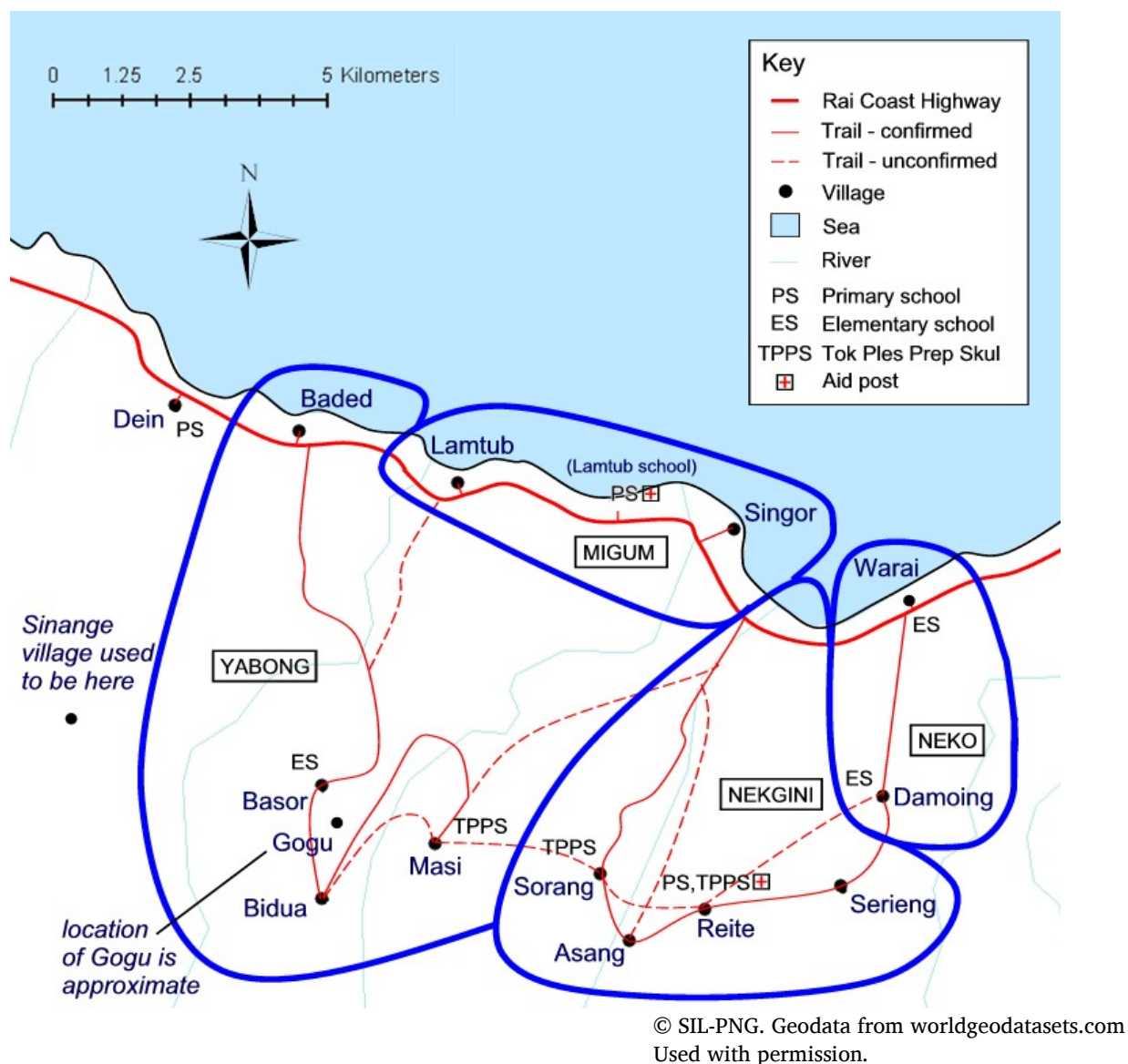
We visited thirteen villages in the area.<sup>3</sup> In this report we refer to groups of villages as “mountain villages” or “coastal villages.” Mountain villages include the Yabong villages of Masi, Bidua, Gogu and Basor; the Nekgini villages of Sorang, Reite, Asang and Serieng; and Damoing, a Neko village. The coastal villages include the Yabong village of Baded; the Migum villages of Lamtub and Singor; and Warai, a Neko village. These village locations are indicated on map 2.

<sup>1</sup>*Ethnologue* (Lewis 2009), ISO codes for each language are listed the first time the language is mentioned.

<sup>2</sup> This area is about 20 kilometres to the west of Saidor, a local government and Catholic mission station.

<sup>3</sup>The SIL-PNG survey team sincerely thanks everyone who helped in the planning of this survey, the survey itself and the writeup. We are particularly grateful to the Yabong, Migum, Nekginig and Neko language speakers who welcomed us into their homes and kindly spent hours working with us, discussing their language.

Map 2. Villages in the Yabong, Migum, Nekgini and Neko language areas



## 1.2 Previous research

Two anthropologists have spent extensive time in this area. James Leach (2010) lived in Reite and has written numerous articles about various aspects of Nekgini culture. He has also written about the new intellectual property rights laws and how they translate to the culture of Nekgini. In Reite, we were shown a published copy of his thesis that he had sent back to the village. Robert Regal lived in Serieng for one month. We have no further information about his stay.

Some phonological information about Nekgini has been compiled by SIL linguists and mother tongue speakers (Lillie n.d.).

According to Barbara Hodgkinson and STEP<sup>4</sup> participants Michael Brugei and Samson Anis, there are some school materials in the Yabong and Nekgini languages. These were completed during an Alphabet Design Workshop in Masi village in 2006. They may be used in the vernacular preschools in the Yabong village of Masi and the Nekgini villages of Sorang and Reite.

### 1.3 Language name and classification

Yabong is classified by *Ethnologue* (Lewis 2009) as Trans-New Guinea, Madang, Rai Coast, Yoganon.

Migum is referred to in *Ethnologue* (Lewis 2009) as Kolom and is classified as: Trans-New Guinea, Madang, Rai Coast, Kabenau.

Nekgini and Neko are classified by *Ethnologue* (Lewis 2009) as Trans-New Guinea, Finisterre-Huon, Finisterre, Gusap-Mot.

Figure 1 shows the language classification of each according to *Ethnologue*. The ISO code for each language is in square brackets. The four languages surveyed are listed in bold blue.



\*have current language projects

\*\*have completed language projects

Figure 1. Language classification according to *Ethnologue* (Lewis 2009).

<sup>4</sup>Strengthening Tokples Education in Papua New Guinea, an SIL initiative to promote local language education.



## 1.4 Population

The 2000 National Census (National Statistics Office 2002) gives the following information on the population of villages in Yabong, Migum, Nekgini and Neko. All the wards are in the Rai Coast Rural district.

Table 1. Village populations

Ward	Village	Households	Persons
Yabong			
Ward 21	Masi	25	115
Ward 24	Basor	58	345
Ward 27	Bidua	15	101
	Gogou	20	123
	Baded	70	377
	Deging	27	146
	Sinange	24	141
	Wado	24	155
Total Yabong	8 villages	263	1503
Neko			
Ward 15	Sereng	5	27
	Yori	27	168
Ward 17	Warai	42	223
Ward 18	Damoing	33	220
Total Neko	4 villages	107	638
Nekgini			
Ward 18	Asang	25	146
	Reite	44	247
	Serieng	25	136
Ward 21	Sorang	29	163
Total Nekgini	4 villages	123	692
Migum			
Ward 17	Lamtub	48	304
	Singor	32	168
Total Migum	2 villages	80	472

## 1.5 Goals

The goals of this survey were to:

- distinguish language and dialect boundaries and
- investigate language vitality.

## 2 Methodology

To address the above goals, the survey team used observations; group interviews guided by the standard SIL-PNG survey questionnaires designed to investigate language use, language attitudes and contact

patterns; and wordlists to investigate language and dialect boundaries. Interviews with church and school leadership were used to determine the level of institutional support towards a language development project.

## **2.1 Tools**

### **2.1.1 Observation**

Language use observations were collected alongside reported language use to investigate the vitality of the languages.

### **2.1.2 Sociolinguistic interviews**

The team used the language use, contact patterns, culture, education and church questionnaires from the sociolinguistics section of SIL-PNG (see appendices D.1 through D.5). Although not every question was asked in every village, these questionnaires were used to guide the interviews in each village.

### **2.1.3 Wordlists**

Wordlists were elicited from each village visited in order to determine dialect grouping within a language as well as lexical similarity between languages. We used the 190-item SIL-PNG wordlist (1999 Revision).

## **2.2 Fieldwork procedure and route**

Fieldwork was completed by Dunc Pfantz, Dan Richardson, Hannah Paris (nee Cockerill), Barbara Hodgkinson and Juliann Bullock (nee Spencer). In each village, the survey team leader explained the work to the local people and asked their permission to proceed. This was granted in all cases, at which stage the local village leaders and the survey team separated those present into appropriate groups for data collection.

Language use, contact patterns and culture interviews were conducted in a group setting with male and female representatives from different age groups when possible. Occasionally culture interviews could only be conducted with men due to local cultural practices that prohibit the presence of women when certain traditions are discussed. Interviews regarding school and church institutions were done on an individual or small group basis with the appropriate leader. Where there was no school, a group community education interview was conducted to get an overview of levels of education in the village.

The survey team observed patterns of language use. We paid particular attention to children's language use, but observations were also made of the languages used by young, middle-aged and older males and females. The survey team observed the languages being used in the village setting (including village meetings), during church services and at a school.

The wordlists were elicited in small groups of speakers including people of various ages and both genders (although there was typically one spokesperson for the group). There were both male and female spokespersons who ranged in age from 22 to 65. Group elicitation allowed for discussion of the most appropriate term for each gloss. Working in a group is also more culturally acceptable than isolating individuals.

The following table shows the dates on which data was collected in each village.

Table 2. Fieldwork route

Date	Location	Language
5 March 2008	Masi	Yabong
6 March 2008	Bidua	Yabong
7 March 2008	Basor	Yabong
8 March 2008	Dein	Karo dialect <sup>a</sup>
9 March 2008	Baded Lamtub	Yabong Migum
10 March 2008	Singor	Migum
11 March 2008	—	—
12 March 2008	Sorang	Nekgini
13 March 2008	Asang	Nekgini
14 March 2008	Reite	Nekgini
15 March 2008	—	—
16 March 2008	Serieng	Nekgini
17 March 2008	Damoing	Neko
18 March 2008	Warai	Neko

<sup>a</sup> Karo is a dialect of the Rawa language found further inland. The village of Dein is located on the coast in the Mindiri language area; Dein is in map 2, and the Mindiri and Rawa language areas can be seen in map 3. According to Jens Meyer, an SIL literacy worker in the Rawa language, there are many Karo settlements along the coast near Dein but there is no evidence that the Mindiri language boundaries have changed; language use patterns in these settlements indicate shift from Karo to Tok Pisin (Meyer, personal communication, September 2012).

## 2.3 Critique

There are some weaknesses in the language use data we collected. When observing language use, we were only able to discern the difference between Tok Pisin and local languages. We could not differentiate between the various local languages, thereby limiting our ability to truly understand the language use situation; ideally more time would be taken to observe language use; and people usually knew in advance that we were coming, which sometimes biased their language use patterns during our stay. For instance, in Sorang village (Nekgini language area), the people were ready for us and stated that they were purposefully using Nekgini because we were there.

Throughout the survey, the team was accompanied by STEP participants from the Yabong and Nekgini languages. These men helped the team relate to village leaders and collect accurate data, but they also wanted to raise awareness for the necessity of TPPS<sup>5</sup> schools in the area. While their assistance proved to be invaluable, it should be noted that their presence may have skewed answers given during interviews, particularly as they were promoting use of the vernacular in education.

At times, the order of questions in both the church and education interviews caused confusion for interviewees. The answers given for questions asking for percentages or numbers were often vague.

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<sup>5</sup>Tokples Prep Skul, i.e., Vernacular Prep School, a one-year education programme conducted in vernacular, in preparation for English-medium school.

The culture interviews went smoothly with the groups in all villages. Respondents often quickly reached a consensus on the answers. The only disagreements were related to questions about sorcery and magic, although these were not frequent.

It is culturally more appropriate to gather data in a group setting, so the wordlist was elicited from one person with a group listening. This caused disagreements and noise issues (hampering recording), but also helped us gather more accurate data that was eventually agreed upon by everyone.

During future surveys it would be helpful to have the guides make language use observations as they can often distinguish between the local languages. Also, it is important for each team member to be conscious of the number of observations they are making, as well as the demographics of the people they are observing, and try to be consistent in each village.

### 3 Language vitality

The data presented in the following three sections was collected to address the goal of assessing language vitality.

#### 3.1 Language use

Bilingualism in the local vernacular and Tok Pisin was the expected standard of language use across the survey area. Children and adults who have attended school are also expected to be able to speak and read English, although they are not expected to use it outside the classroom or in other formal settings.

Four of the five members of the survey team collected observation-based data which was then compiled and evaluated by one team member. However, before we look at observed language use, first we will consider reported language use.

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

Reported information regarding the languages used by children when they are talking to their parents, grandparents, siblings and age mates, and when they are angry, is as follows.

In the Yabong language area, the three villages in the mountains<sup>6</sup> reported that children only use Yabong. People in the coastal village of Baded reported children using both Yabong and Tok Pisin in all interactions.

In the Migum language area, interviewees in Lamtub village reported that children use both Migum and Tok Pisin for all interactions. Respondents in Singor village reported children using Tok Pisin for all interactions and only using Migum as well when speaking to immediate family.

In the Nekgini language area, interviewees in three of the four villages reported that children only use Nekgini. Those in Reite reported that children use both Nekgini and Tok Pisin in all interactions.

In the Neko language area, it was reported in both villages that children use Neko and Tok Pisin in all interactions.

In each village, people were asked the questions shown in table 3. It should be noted that interviewees in four of the twelve villages in the areas of the languages surveyed stated that their children learn Tok Pisin as their first language. Only half of the villages claimed that their children know the vernacular as well as the adults.

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<sup>6</sup>Masi, Bidua and Basor.

Table 3. Reported language learning by children

	Village	What language do their children learn first?	Do they know the vernacular by school age?	Do they speak it as well as you?	Do they mix Tok Pisin with it?	How much do they mix it?	What do you think about children mixing languages?
Yabong	Masi	Yabong	Yes	Yes	Yes	A little	No response
Yabong	Bidua	Yabong	Yes	Yes	No	--	--
Yabong	Basor	Yabong	Yes	Yes	No	--	--
Yabong	Baded	Yabong	Yes	Half way	Yes	A lot	It is not good
Migum	Lamtub	Tok Pisin	Yes	Yes	Yes	A lot	Feel happy
Migum	Singor	Tok Pisin	Some of it	Not quite	Yes	A lot	It is wrong
Nekgini	Sorang	Nekgini	Yes	A little	Yes, some do	A little	Not too good, scold them
Nekgini	Asang	Nekgini	Yes	Yes	Yes	A lot	Not good, warn children not to
Nekgini	Reite	Tok Pisin	Yes	Not quite as well	Yes	A lot	Not good, should use "stret tok ples" (pure vernacular)
Nekgini	Serieng	Tok Pisin	No	A few words	--	--	Concerned they do not learn Nekgini
Neko	Damoing	Neko	Yes	Not too well	Yes	A lot	It is good. Tok Pisin is PNG's "tok ples" (vernacular)
Neko	Warai	Neko	Yes	Yes	Yes	A lot	Not happy, scold them

In general, there is a negative attitude towards children mixing the local language and Tok Pisin. Interviewees in three of the villages reported that they reprimand their children for mixing languages. The exception to this generalisation is in Lamtub where they "feel happy" when the children are mixing languages and in Damoing where they said, "It is good. Pidgin is Papua New Guinea's language."

Most of the villages reported that they like to hear stories in their own local language, with two exceptions; in Singor they reported Tok Pisin as the preferred language for hearing stories and in Serieng they named both Tok Pisin and Nekgini.

When asked questions about what languages the children know well and currently speak, as well as what languages they think future children will speak, the overwhelming response was the local language, with the exception of Singor and Serieng. Respondents in the Migum village of Singor reported that children speak Tok Pisin, which did not seem to concern them. Respondents in the Nekgini village of Serieng said that they think their children and future children should learn the local language. These responses indicate that the people of Singor and Serieng believe their language will be lost within the next couple of generations. The people in Serieng demonstrated regret over this possibility while those in Singor did not appear concerned at all.

### 3.1.2 Children's observed language use

It is important to note that when making general language use observations our survey team was only qualified to distinguish between Tok Pisin and local languages. We were unable to differentiate between the local languages. However, since reported language use for the area indicates that most people can only speak their own vernacular and Tok Pisin, this is the only likely distinction that needs to be made. Also, a main concern of this survey is whether or not Tok Pisin is replacing local languages. It is therefore sufficient to distinguish between Tok Pisin and local languages, without determining which vernacular was being used.

Eighty seven of the total language use observations involved children speaking to one another or elderly people speaking to children. There were not enough of these observations to break them down by language, so this analysis only gives the total for all four languages, which is summarized in table 4. The table shows that the local language was used 59 percent of the time and Tok Pisin was used 41 percent of the time. The team observed the use of the local language more often than the use of Tok Pisin.

Table 4. Languages used in different situations with children

	Vernacular	Tok Pisin
To grandparents	1	--
From grandparents	5	1
To parents	6	3
From parents	19	15
To brothers & sisters	3	1
From brothers & sisters	3	2
With playmates	14	14
Totals (87)	51 (59%)	36 (41%)

Table 5 shows these observations as percentages of the use of both the local language and Tok Pisin by children and people speaking to children. The difference in language use between these groups is 3 percent, which is not a significant difference considering all the uncontrolled variables in our observations. These figures seem to imply that the choice of vernacular or Tok Pisin is the same for children as for people speaking to children.

Another fact that should be taken into account is that the percentages for observed children's use of the vernacular are 8 percent lower than the percentages for observed adults' vernacular use (see section 3.1.4). However, we are not able to make any claims about actual children's language use from our data because we were unable to get enough observations to make accurate generalisations. The only claim we can make is that adults' and children's language use is generally similar, with the vernacular being used more often than Tok Pisin.

Table 5. Comparison of languages used with and by children

	Vernacular		Tok Pisin		Totals
	Occurrences	%	Occurrences	%	
Spoken by children	24	57%	18	43%	42
Spoken to children	27	60%	18	40%	45

We were not able to observe children of mixed marriages closely enough to ascertain whether their language use patterns differ substantially from the average.

### 3.1.3 *Adults' reported language use*

#### *Yabong language*

Masi, Bidua and Basor reported using only Yabong for interactions between all age and gender groups.

Baded village reported using only Yabong for interactions between all age and gender groups with a few exceptions. Along with using Yabong, middle-aged men also use Tok Pisin with their wives. Adults reported using both Tok Pisin and Yabong to talk to children, and observations confirmed this report. Adults were observed speaking to children thirty five times, and seventeen of these interactions were in Yabong, while eighteen were in Tok Pisin.<sup>7</sup>

#### *Migum language*

Lamtub reported that people use only Migum for interactions between all age and gender groups.

Singor reported that people use both Migum and Tok Pisin for interactions between all age and gender groups.

#### *Nekgini language*

Both Sorang and Asang reported using primarily Nekgini for interactions between all age and gender groups with only the following exceptions: in Sorang, interviewees reported that middle-aged men use both Nekgini and Tok Pisin when talking with their wives, and old men reportedly use both languages when talking to children; in Asang, they reported that young men use both Nekgini and Tok Pisin when talking to their immediate family.

Reite reported using Nekgini for interactions between all age and gender groups, but Tok Pisin is also reported as being used by young and middle-aged people of both genders. An exception to this is the parents of middle-aged women. They do not talk to the middle-aged women or their children in Tok Pisin. Data about the use of Tok Pisin by elderly women in Reite was inadvertently not collected.

Serieng reported using both Nekgini and Tok Pisin for interactions between all age and gender groups with the following exception: Tok Pisin is not used by young men when talking to their parents.

#### *Neko language*

Damoing and Warai reported using Neko for interactions between all age and gender groups, and Tok Pisin is also used by young and middle-aged people of both genders. However, the parents of young women in Damoing do not speak to them in Tok Pisin, and men in Warai do not talk to their parents in Tok Pisin, nor do their parents use Tok Pisin to speak to them. Also in Warai, women do not talk to their immediate family using Tok Pisin. Elderly men and women do not use Tok Pisin, except when elderly men in Warai scold their grandchildren.

### 3.1.4 *Adults' observed language use*

In general, observed language use coincides with reported language use. However, some use of Tok Pisin was observed in the Migum village of Lamtub and the Yabong villages of Masi, Bidua and Basor even though these villages reported that only the vernacular is used by all gender and age categories. Although the local language is strong, the self-report of using only the local language is inaccurate.

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<sup>7</sup>The context of the speech act was not always noted. However, out of the thirteen speech acts that were noted as being commands/scolding, ten of those were in Tok Pisin.

The survey team recorded a total of 259 language use observations. According to these observations, the local language was used 64 percent of the time and Tok Pisin was used 36 percent of the time (see table 6).

Language use percentages were also calculated for each individual language (also shown in table 6). It should be noted that three languages, Yabong, Nekgini and Neko, all show about the same percentages (63 percent to 67 percent vernacular and 33 percent to 37 percent Tok Pisin) while Migum shows a much higher use of Tok Pisin (45 percent) and a lower use of the vernacular (54 percent). This seems to indicate a stronger shift toward Tok Pisin in the Migum language than in the other languages. Although these percentages show a clear pattern, it is not known how accurate they are due to the uncontrollable variables involved in these observations.

Table 6. Total language use observations

Language	Vernacular	<sup>a</sup> %	Tok Pisin	%	Total
Yabong	71	63%	42	37%	113
Migum	14	56%	11	44%	25
Nekgini	59	65%	32	35%	91
Neko	20	67%	10	33%	30
TOTAL	164	63%	95	37%	259

<sup>a</sup> The percentages given for each language are comparing use of the vernacular and Tok Pisin in that language.

Adult language use is actually slightly lower than indicated by the above table because 42 of these observations were of children speaking (see section 3.1.2 above). If these 42 observations are removed from the above totals then the total number of adult language use observations is 217. There are 140 observations of adults using the vernacular (65 percent) and 77 observations of adults using Tok Pisin (35 percent). The difference between adults' language use and the language use of the total population is, however, slight.

### 3.1.5 *Domains of language use*

To determine the domains for individual languages, people were asked the following twelve questions in each village. Their responses are recorded in appendix A.3.

What languages do you use when:

- arguing with family
- praying at home
- organizing wedding or funeral feasts
- at the market
- joking
- playing sports
- talking with outsiders who do not know your language
- participating in court
- transactions in town
- you go to town
- most people are on the way to town
- most people are at the town's market
- most people are in stores



With the exception of Baded village, where the Karo dialect is used for arguing with family, all responses to the above questions were either their own local language, Tok Pisin or both. To evaluate responses, each village was given a three-part score. The number of domains where Tok Pisin was given as a response were counted and entered in table 7 on the line for that village under the heading “Tok Pisin domains.” Then the number of domains where the local language is used were counted and entered on the same line in the table under the heading “Vernacular domains.” Next, the number of domains that received a response of both Tok Pisin and the local language were counted and entered in the table for that village under the heading “Overlap.”

For example, in Masi, Tok Pisin was used in eight domains, the vernacular was used in four and there are no domains in which both were used. In Sorang, Tok Pisin was used in eight domains and the vernacular was used in six, but Tok Pisin was also used in two of those six.

Table 7. Language domains and overlap between languages

Language	Village	Tok Pisin domains	Vernacular domains	Overlap
Yabong	Masi	8	4	0
	Bidua	7	5	0
	Basor	7	5	0
	Baded	12	5	5
Migum	Lamtub	12	4	4
	Singor	12	4	4
Nekgini	Sorang	8	6	2
	Asang	8	6	2
	Reite	8	7	4
	Serieng	12	5	5
Neko	Damoing	12	7	7
	Warai	12	8	8

Table 7 was reorganized to produce table 8, which ranks the languages from the most vulnerable to shifting into Tok Pisin to the least. It was reorganized by using the criteria explained below.

Since Tok Pisin has spread throughout the Rai Coast area in the last 70 years, we assume that the situation in the area started without Tok Pisin being used in any domains and that the increase in Tok Pisin has been steady. The vitality of the languages becomes more threatened when Tok Pisin begins dominating more domains.

The languages where Tok Pisin is also used in all the domains in which the local language is used are more threatened than the languages that have one or more domains in which Tok Pisin is not used. This assumption is supported by the basic ecological principle that no two organisms can live in the same place. One will eventually overwhelm the other. The only time two languages will survive in a bilingual setting is when they each have at least one unshared domain.

Another indication that a language is under threat is when it is being used in fewer domains. This remains true even if it is the only language used for the domains in which it remains.

The ranking of language vitality shown in table 8, from least vital to most, is supported by data discussed in other areas of this report and by our general observations.

Table 8. Ranking of language viability by village

Language	Village	Tok Pisin	Vernacular	Overlap
Migum	Singor	12	4	4
Migum	Lamtub	12	4	4
Yabong	Baded	12	5	5
Nekgini	Serieng	12	5	5
Neko	Damoing	12	7	7
Neko	Warai	12	8	8
Nekgini	Reite	8	6	4
Nekgini	Asang	8	6	2
Nekgini	Sorang	8	6	2
Yabong	Masi	8	4	0
Yabong	Bidua	7	5	0
Yabong	Basor	7	5	0

### 3.1.6 Language use in schools

In addition to looking at all the schools in the Yabong, Migum, Nekgini and Neko language areas, we interviewed the headmaster at Dein Primary School. Although this school is located in the Karo dialect area, it is attended by many students from the Yabong language area. In the following sections, however, generalisations made about the schools in the language area do not include Dein Primary School. If there was no school in the village, then we interviewed a small group of community members consisting of mothers and the students themselves.<sup>8</sup>

There is more education-related language data in section 3.2.2 since it pertains to attitudes.

#### *School staff*

There are clear trends in the background of the school staff. While TPPS and elementary schools are staffed entirely by teachers from the respective language area, the primary schools have virtually no teachers from the area.<sup>9</sup>

The primary schools have a higher rate of staff turnover than the elementary or TPPS schools. According to the teachers, the TPPS schools all have committed, permanent teachers. In reality, these schools have only been operating for a short time, so the level of commitment is difficult to determine. However, the majority of teachers have been with the TPPS schools since they opened. The same holds true at the elementary schools. At Basor, the school has only been open since 2007, but at the time of the survey the teachers there felt that they were permanent, and they all came from the language area. The

<sup>8</sup>Bidua, Baded, Singor, Asang and Serieng have no school present so the interviews were completed with community members. Lamtub village is a 20 minute walk from Lamtub school, and so a community interview was completed in Lamtub village as well as an education interview at the school. Reite has a Tok Ples Prep Skul (TPPS) as well as a primary school, so teachers from both schools were interviewed.

<sup>9</sup>One teacher at Lamtub Primary School is from Migum. The headteachers of Dein Primary School and Lamtub Primary School are from the Highlands. The remaining staff come from the Sepik, the Islands or other language areas in Madang Province (Bel, Karo and Bargam).

other two elementary schools, in Damoing and Warai, are more established with committed teachers. However, in all three primary schools the rate of turnover sharply increases. All of the teachers are from outside the language area and often remain at the school only as long as they are required to by the government. This time varies depending on their level of experience, but it is usually one or two years. The headmaster at Reite Primary School reported that this was because the teachers tend to feel isolated from their families and that living there is hard.

### **3.1.7     *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 team interviewed local pastors and lay leaders asking questions related to vernacular use in the church and the team attended church services in order to observe language use.

As detailed below, Tok Pisin is used more frequently within the church domain in the Yabong, Migum, Nekgini and Neko language areas. In all four language areas, Tok Pisin is used exclusively for the liturgy and Scripture reading; these resources do not exist in the vernacular. For singing, prayer, preaching and announcements, Yabong, Migum and Nekgini are sometimes used along with Tok Pisin. Neko is not used within the church because the church leaders in the area do not speak Neko. Outside of church services, church leaders in the Neko language area use Tok Pisin, church leaders in the Migum area use mostly Tok Pisin with some Migum, church leaders in the Nekgini language use both Nekgini and Tok Pisin and church leaders in the Yabong language use mostly Yabong with some Tok Pisin.

#### *As reported*

Throughout the entire area, Scripture is read in Tok Pisin. If liturgy is used, it is in Tok Pisin as well. Church leaders reported that most songs are sung in Tok Pisin, although there are a few songs in the Yabong, Migum and Nekgini languages. Most spontaneous prayer is also done in Tok Pisin, although leaders in the Yabong and Nekgini languages reported that people sometimes pray in the vernacular. Sermons are mostly in Tok Pisin with some vernacular, except in the Neko language area, where the church leaders do not speak Neko. Announcements are also given in both Tok Pisin and the vernacular in every language group except Neko, where only Tok Pisin is used. For youth services, women's groups and children's Sunday school, leaders in the Yabong and Nekgini language areas reported that both Tok Pisin and the vernacular are used. Migum leaders reported that Tok Pisin is the primary language used for these activities, along with some Migum. The language use of church leaders outside of church services varies between the languages areas. Yabong church leaders use mostly Yabong with some Tok Pisin; Nekgini church leaders use both Nekgini and Tok Pisin; Migum church leaders use mostly Tok Pisin with some Migum; and Neko church leaders use only Tok Pisin.

#### *As observed*

The survey team attended a Lutheran church service in Baded village, in the Yabong language area. Singing, prayer, Bible reading and the sermon were all in Tok Pisin. There was one announcement in Tok Pisin and one in Yabong.

In the Nekgini language area, the survey team attended a Catholic worship service in Serieng and observed that the liturgy, singing, prayer, Scripture reading, sermon and announcements were entirely in Tok Pisin. The team also attended an evening worship service in Reite. During this service, three songs were sung in Nekgini and four in Tok Pisin while everything else was in Tok Pisin.

### 3.1.8 *Contact with other language groups*

People gave three main sources of contact they have with other language groups: trading, travel to town and marriage. For people living inland, these contacts vary from once a week to once every few months. Children going to school spend time in the villages of Lamtub (Migum) and Dein (Karo) while attending school.

Migum has more contact with outside languages due to the traffic of people on their way to town, coming to attend Lamtub Primary School, and buying from the trade stores.

#### *Trading patterns*

Traditionally, trading patterns reached from the coastal villages as far away as Bilbil (near Madang). Clay pots and other items available along the coast were the basis for the trades. After establishing trade routes along the coast, the coastal villages began trading with villages in the mountains.

With one exception, all the mountain villages claimed one of the coastal villages of Singor, Lamtub or Warai as a traditional trading partner. All Yabong villages listed Lamtub as a traditional trading partner, while some also mentioned Singor. All Nekgini villages listed Singor as their traditional trading partner. Damoing, a village in the Neko language area, listed Warai (also in the Neko language area) as their trading partner along with several villages further east.<sup>10</sup>

At the present time these trading relationships continue, but in a diminished manner. Two villages claim that it has ended completely. The current pattern seems to be built on relationships between individual villages. It is not clear whether traditional trading relationships were only between individuals or if they were formally recognised at the village or language level.

Coastal villages supply dry coconuts and fish while mountain villages supply betelnut, peanuts, and tobacco. The pattern of trade stores on the coast and dinghies for transport seems to show that the current cash economy was built on these traditional trading patterns. We found no evidence of any other traditional social contacts.

#### *Traditional enemies*

Six of the twelve villages visited reported that their traditional enemies were neighbouring villages. The other six villages identified their traditional enemies as the nearest neighbouring communities of Karo, Iyo or Ngaing speakers. Unidentified people in the mountains were also mentioned as enemies. The one exception to these responses was Singor, who did not know who their traditional enemies had been.

There does not appear to be any remaining animosity or tension with traditional enemies. Respondents in all language groups consistently reported that fighting ended long ago and there are no remaining problems. As far as we could tell from our short trip, there is no evidence of enmity between any villages or larger groups of people.

#### *Ease of travel*

The preferred means of travel inside the survey area is on foot. In order to go farther from their language area, people travel by dinghy or ship along the coast as that is the fastest and most available method of travel. Only the Yabong people need to leave their language area to catch a dinghy or ship and when they do they go to the Migum villages of Lamtub and Singor.

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<sup>10</sup>Along the Rai Coast there are usually language areas located on the coast that only include villages located on the coast. The same is true of language areas located inland; normally they do not include any coastal villages. However, Neko is an exception because it has both Warai, a coastal village, and Damoing, an inland village.

Villages on the coast seem to be the ones most affected by current travel patterns due to the location of the schools and the fact that many people come through their villages on the way to town.

### 3.1.9 Immigration and emigration

Language vitality is influenced by immigration and emigration (Landweer 1991). Specifically, Landweer states that immigration and emigration contribute to positive vitality when immigrants are proficient in the local dialect and when emigrants maintain their home language and continue to identify with their home language group in their new location.

Immigration and emigration patterns vary greatly from language to language. Because migration patterns sometimes vary greatly, even within individual languages, each language will be discussed separately. However, some generalisations can be made. With the exception of Warai village (Neko) and Singor village (Migum), the immigration rates for all the villages surveyed range from between 2 percent to 7 percent. Six of twelve villages visited reported a 4 percent immigration rate. These figures imply that immigration is generally low throughout the area.

#### *Yabong language*

Table 9. Summary of Yabong immigration

	Men	Women	Total	Population	% of Immigrants
Masi	0	7	7	115	6%
Bidua	0	4	4	101	4%
Basor	0	15 +	15	345	4%
Baded	10 +	4	14	377	4%
Totals	10	30	40	938	4%

There are a minimal number of people immigrating into the Yabong area with three-fourths of Yabong immigrants comprised of women marrying into the language area. Interviewees reported that most of these women learn the language quickly and their children usually grow up knowing Yabong.

All the Yabong villages, except Baded, reported no men immigrating into their village. In Baded they reported more than ten Karo speakers buying land from them. These are most likely Karo speakers moving out of the mountains to be near the coast. It was reported that these Karo speakers did not learn Yabong, which is understandable as everyone in Baded, except children, are reportedly able to speak Karo.

Table 10. Summary of Yabong emigration

	Men	Women	Total	Population	% of Emigrants
Masi	5	5	10	115	8%
Bidua	6	0	6	101	6%
Basor	32	10 +	42	345	11%
Baded	13 +	3	16	377	4%
Totals	56	18	74	938	7%

The number of people emigrating from the Yabong area is about double that of people immigrating into the area. The number of men leaving the area is more than five times the number of men coming in. It is reported that most of these men left to find work and ended up marrying and settling down near

their work place. The number of women marrying out of Yabong is only about 60 percent of those marrying in.

It is reported that many emigrants return once a year, or once every few years, and that they normally use Yabong when they return. About half of their children are reported to know Yabong when they return to the language area or learn some when they visit.

Emigrants are reportedly scattered across Madang Province and other provinces. There do not appear to be any settlement blocks even in Madang town. Respondents reported that people are scattered around town. We only found one well-educated retired man who had returned and bought a block of land near Lamtub Primary School where people from Masi village could live and send their children to school.

In general, immigration and emigration do not seem to have a negative impact on the vitality of the Yabong language. However, the villages of Basor and Baded do seem to be more affected than the other villages.

### *Migum language*

Table 11. Summary of Migum immigration

	Men	Women	Total	Population	% of Immigrants
Lamtub	3	4	7	304	2%
Singor	3	13+	16	100	16%
Totals	6	17	23	404	6%

In Migum, it was reported that few people are moving into Lamtub, so the rate of immigration should not have any effect on language vitality. However, Singor does have an immigration rate that is more likely to be having a negative effect on language vitality. The immigrants in Singor are mostly women and it is reported that women marrying in often do not learn the Migum language well. This could possibly overwhelm the language with people who do not speak it, increasing the use of Tok Pisin.

Table 12. Summary of Migum emigration

	Men	Women	Total	Population	% of Emigrants
Lamtub	1	2	3	304	1%
Singor	2	4	6	100	6%
Totals	3	6	9	404	2%

Interviewees indicated that few people leave the Migum language area. The reported 2 percent emigration average in Migum probably has a limited effect on vitality.

Three of the six emigrants from Singor return fairly often. However, both they and their children are reported to speak a mix of Migum and Tok Pisin when they return. This trend is not indicative of long term language vitality. We did not meet any well-educated elderly people in the Migum language area.

*Nekgini language*

Table 13. Summary of Nekgini immigration

	Men	Women	Total	Population	% of Immigrants
Sorang	1	5	6	163	4%
Asang	1	5	6	146	4%
Reite	0	9	9	247	4%
Serieng	0	9	9	136	7%
Totals	2	28	30	692	4%

There are very few people immigrating into the Nekgini area and all but two (7 percent) of these immigrants are women marrying into the language area. Respondents reported that most women who marry into the language area learn at least some of the language, if not all of it, and most can understand it. About half of their children grow up knowing Nekgini. Women and children who have not learned Nekgini well communicate in Tok Pisin.

Table 14. Summary of Nekgini emigration

	Men	Women	Total	Population	% of Emigrants
Sorang	15	10	25	163	13%
Asang	3	12	15	146	9%
Reite	7	5	12	247	5%
Serieng	No data <sup>a</sup>	No data	---	(136)	---%
Totals	25	27	52	556 <sup>b</sup>	9%

<sup>a</sup> This portion of the data collection was inadvertently skipped in Serieng.

<sup>b</sup> This total does not include Serieng because emigration data was not collected there.

Unlike the consistently low level of immigration within Nekgini, the level of emigration varies widely from village to village. Data for this topic was inadvertently not collected in Serieng village, making it more difficult to make generalisations, but the available data shows a high rate of emigration from Sorang and Asang villages, which is likely to affect the language vitality at least in those villages.

The total number of male emigrants is nearly equal to the total number of female immigrants, even though there are varying patterns within individual villages. The men generally leave to find work while the women leave to marry. About 52 percent of the total number of emigrants remain somewhere on the Rai Coast, while only 11 percent go to Madang town. The rest go to quite a number of places scattered across the country. There do not appear to be settlements where Nekgini people have gathered anywhere outside the language area.

Respondents reported that more than half of the emigrants never return to the language area and the others seldom return. Only a few of the children who return with their parents know any Nekgini.

Immigration seems to be low throughout the language area, but emigration in Asang and Sorang is higher and may be negatively affecting the language vitality. It is not clear why the level of emigration is so much lower in Reite village.

### *Neko language*

Table 15. Summary of Neko immigration

	Men	Women	Total	Population	% of Immigrants
Damoing	1	7	8	220	4%
Warai	5	21	26	223	12%
Totals	6	28	34	443	8%

The immigration patterns for the two villages visited in Neko differ widely, but the main reason for immigration is marriage. This is true even among the men, where three of the six men immigrated due to marriage. The other three settled in the area because of church work.

Table 16. Summary of Neko emigration

	Men	Women	Total	Population	% of Emigrants
Damoing	6	7	13	220	6%
Warai	25	42	67	223	23%
Totals	31	49	80	443	15%

The strong difference between Damoing and Warai villages also appears in the emigration patterns. While 6 percent of the residents reportedly leave Damoing, Warai reports a percentage that is almost four times that of Damoing.

Warai reported twenty men working in Madang and six men living in various provinces. They also reported ten women living on the Rai Coast, ten living in Madang town, seven in other parts of Madang province and fifteen living in other provinces.

There do not appear to be any specific settlements of Neko speakers in Madang or anywhere else.

In general, the high emigration rate for Warai has a negative effect on the vitality of the language. However, they reported that the men return to the village reasonably often, speak the language when they return, and bring their children who also speak Neko.

#### **3.1.10 Marriage patterns**

Most men within the Yabong, Migum, Nekgini and Neko language areas marry women from within their own language group, with a small number of men marrying someone from another language area. When a marriage does occur with someone from outside the language area, the general pattern across all four language groups is for the wife to move to the husband's village.<sup>11</sup>

<sup>11</sup>There are exceptions. For example, when young single men emigrate to find work they often settle away from the language community and marry a woman from that area.



### *Yabong language*

In three of the four Yabong villages, each village has four to seven women married in from outside the language area.<sup>12</sup> Basor is the exception, with ten women married in from the neighbouring Karo language, as well as four women from various other languages.

We were only able to gather data about the languages spoken by nine of the thirty women reported to be married into the Yabong language area (out of a population of 938). Respondents said that four of these women learned the language quickly and speak it well while five of them have not learned it. It is reported that the children of the women who learned Yabong also speak Yabong. One of the women who did not learn Yabong is from the Neko language. She speaks Neko and Tok Pisin, as do her children.

Respondents stated that the only men who have come into the area are ten Karo men who bought land in Baded twenty years ago. We were unable to determine whether these men are married to women from Baded or from their own language area.

### *Migum language*

There are only two known villages within the Migum language area, and they will be described separately as there are notable differences between them.

Three men and four women are married into Lamtub (out of a population of 304). One of the men and one of the women married in about twenty years ago, and interviewees reported that this man can understand Migum, but not speak it. All the rest have been married between one and three years. One of the men, who has been married for two years, is reported to use both Migum and Tok Pisin and the other man has only been married for one year and uses Tok Pisin.

Language use data was only collected for three of the four women married into Lamtub. These three are reported to use both Migum and Tok Pisin and two of them are reported to know Migum well. The children of people married in are reported to use both Migum and Tok Pisin.

Singor village (with a population of 100) reported that three men and more than thirteen women have married into the village. All of the men and three of the women came from outside the Rai Coast. The three men and two of the women from outside the Rai Coast speak only Tok Pisin in the village, and no further information about the other woman was collected.

Respondents reported that two of the men and two of the women have been married in for at least ten years. The five children of one of these speak both Tok Pisin and Migum while the twelve children of the other three speak only Tok Pisin.

### *Nekgini language*

In each of the four Nekgini villages, there are five to ten women who have married in from outside the language area. Of the twelve women whose language ability was reported, seven were reported to know the language well, two to know it moderately well, one to be able to understand it (and not speak it) and two to not know it at all.

There are reportedly only two men married into Nekgini from outside the language area. One of these men is living in Sorang and he is from the Rai Coast. He has been married for twenty years, speaks Nekgini well and has taught all six of his children to speak Nekgini well. The second man, living in Asang village, is from West New Britain. He has only been married one year and is in the process of learning the language.

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<sup>12</sup>See table 1 for total population figures.

### *Neko language*

Of the seven women married into Damoing village, it was reported that one uses Neko in the village, two use both Neko and Tok Pisin and one uses only Tok Pisin. No data was reported for the other three. Sixteen women have married into Warai. Five of these reportedly use Neko in the village, ten use both Neko and Tok Pisin, and nothing was reported regarding the language use of the remaining woman. Although data regarding level of proficiency in Neko was not obtained for all the women, three of the women in the language area were reported to speak Neko well. According to respondents, the children of women married into the language area are able to speak Neko.

Three men have reportedly married women from Neko and then settled into one of the Neko villages. All of these men know some Neko, but none were reported to know the language well.

#### **3.1.11 Population Movement within the Language Variety**

In general, the population of the area seems to be quite stable. In the Yabong language there is a movement of people coming out of the mountains to settle near the two schools on the coast so their children can attend. This movement consists mostly of people settling on the edge of Yabong land. We saw this as we approached the coast and found a number of villages consisting of people resettled from the Yabong villages of Bidua or Gogou. On the coast between Lamtub village and Lamtub Primary School we came across a settlement of Yabong people from Masi village, where a retired corrections worker had bought a small block of land.

In the Yabong language area a change appears to be occurring in the traditional living patterns as people are moving closer to the coast so their children can attend school.

The Nekgini villages do not appear to be making the same kind of shift. This could be due to the location of St. Monica Reite Primary School which is in the middle of the Nekgini language area.

The Yabong villages of Bidua, Basor and Baded seem to have a close relationship with each other, as well as with nearby Karo-speaking villages. This relationship is supported by the fact that many people in these villages seem to be bilingual in Yabong and Karo. The Karo speakers from Sinange village claimed that the people in these three villages are speakers of their dialect of Karo. There is a lot of intermarriage between these villages and neighbouring Karo-speaking villages. The relationship between Baded, Basor and villages in the Karo language area is further supported by the fact that Baded and Basor together send 156 children to Dein Primary School, which is in the Karo dialect area, but only send twelve students to Lamtub Primary School, which is about the same distance away.

Otherwise, there are very few ties made across language boundaries. Masi appears to have very little interaction with Sorang and Reite villages even though they are relatively nearby. No students from Masi attend Reite school even though, from the map, the Reite school looks closer than Lamtub.

Outside of the relationships existing from the traditional trading patterns (see section 3.1.8) there do not appear to be special social relationships that cross linguistic boundaries.

#### **3.1.12 Roads and quality and availability of PMVs**

In the 1970s and 1980s the Rai Coast Highway (see map 2) was built, connecting Saidor to Madang. Another road was also built in the Nekgini-Neko area as far as the Nekgini village of Reite. In the last ten years lack of road maintenance has diminished the accessibility of these roads to four wheel drive traffic only, and even that only during the peak of the dry season. There is a fairly new bridge over the Yakar River between Lamtub Community School and Singor village, both of which are in the Migum language area. It is possible to walk along the Rai Coast Highway between Warai (Neko), Singor (Migum), Lamtub (Migum) and Baded (Yabong). All these villages are located on or very close to the highway.

The Rai Coast Highway is a good footpath and useful for carts pulled by water buffalo. There are a few public motor vehicles (PMVs) that use the road during the dry season, and Warai residents report that a PMV ride to Madang takes three hours.

### **3.1.13 Water routes and transport systems**

The only reliable transport in and out of the area is by sea. Respondents in every village reported that some people travel to and from Madang by sea, and respondents from every language area reported sea travel to Saidor. In addition, people in the Migum language area reported traveling to Biliau<sup>13</sup> by sea and those in the Nekgini language area reported traveling to Lae, Bukati, Basamuk and Rai Coast High School.

There are about ten local dinghies that function like PMVs and carry passengers from the villages of Lamtub (Migum), Singor (Migum), Warai (Neko), Biliau and Saidor. Three dinghies are owned by residents of Lamtub and one is owned by residents of Singor, both of which are in the Migum language area. The dinghies make one round trip per day. It can take up to a couple of days to find a dinghy that is going to Madang.

Small private ships also travel along the coast picking up passengers and cargo. The timing of these ships is unpredictable.

Most people have been to town. In most of the area surveyed, interviewees reported travelling to Madang one to three times per year; some have not been to town for several years.

### **3.1.14 Trails**

All travel inland from the coast is done on foot. Due to the lay of the land, with rivers coming straight out of the Finisterre range and valleys and ridges running straight up towards the mountains, there are very well used trails running north and south between the mountains and the coast. One reason these trails are well used by those farther inland is the access to goods and transportation that is found on the coast. Trails going east to west are not as well maintained because of the steep ridges running north to south.

Of the trails the survey team experienced, the well-maintained trails are those from Basor to Baded (both in Yabong) and from Singor (Migum) to Sorang (Nekgini), and on to Asang (Nekgini), Reite (Nekgini), Maibang (Ngaing), Serieng (Nekgini), Damoing (Neko) and finally Warai (Neko). The Yabong trails from Masi to Bidua and then part of the way to Basor were less travelled and in poorer condition. Along the coast we either walked on paths along the Rai Coast Highway, on trails near the beach, or on the beach itself. All of these were easily passable.

According to interviewees, no major trails have fallen into disuse.

### **3.1.15 Economics**

Most people, especially those in the mountains,<sup>14</sup> are subsistence farmers. There are a few local businesses and some people raise cash crops.

People living in or near coastal villages<sup>15</sup> tend to have more access to cash. Some operate dinghies, while others run trade stores. Since they live near the coast, they can often wait for less expensive ships to take their produce to Madang, whereas the person carrying a heavy load down from the mountains may feel the need to take the first (perhaps more expensive) dinghy available.

People in the Nekgini and Neko language areas seem to have been developing their cash economy for a longer time and more aggressively than people in the Yabong area. One result of this is that they have more possessions purchased from outside that area.

<sup>13</sup>People travel to Biliau because there is a market there, as well as a health centre.

<sup>14</sup>Mountain villages are defined in section 1.1.

<sup>15</sup>Coastal villages are defined in section 1.1.

### *Commercial ventures*

There are no large commercial ventures within the area surveyed and there do not appear to have been any in the past.

The nickel-cobalt processing plant at Basamuk, located to the west of the language area, has very little economic impact on the area. However, there are six Yabong people from Baded village who work there and one Nekgini man from Asang village who, from time to time, is a mechanic there. Apparently, the people working at the plant live in Basamuk. It takes less than one hour by dinghy to get from Basamuk to Baded, so workers from that village can easily return home for breaks.

It appears that big business, including the Basamuk processing plant, does not have any noticeable effect in shaping the social structure or linguistic vitality of the vernacular languages in the area surveyed.

### *Local businesses*

People sell betelnut, betel pepper<sup>16</sup> and tobacco to each other. Locally grown foods are sold at markets located at schools and along the coast. All three primary schools in the area have established markets and charge a small vendors' fee as a fund raiser for the school. There are larger independent markets at Singor (in the Migum language area) and Biliau (in the Awad Bing language area). People also take their produce to Madang to sell it.

There are five dinghies, privately owned, in the Migum villages of Lamtub and Singor, that are operated as PMVs. Since dinghies are reportedly often full and hard to find, the dinghy business is likely a profitable one.

Most villages have a trade store stocking five to ten common items. There are more trade stores in villages along the coast with more items for sale.

There are no private plantations in the area, but along the coast there are individual coconut holdings that are generally well tended. These are mostly older, although some replanting has been done. We saw people caring for and harvesting coconuts as well as some functional copra dryers.

Inland from the coast the main cash crop is cacao beans. We hiked through many cacao stands that varied in both size and how well they are tended. We hiked through one in the Yabong language area that was well cared for and was at least a hectare or more in size. The average person may make between 200 to 500 kina<sup>17</sup> per year from the sale of their cacao beans. We heard some people mention that they were expanding their plantings.

We observed a number of cacao fermentors in villages. Nekgini interviewees in Reite village claimed to have three fermentors and we observed one of them in operation. Also, Yabong people in Basor reported having three fermentors as well as three cacao dryers, one of which we saw. We watched the buying of cacao beans in the Nekgini village of Asang and met people on the trail from Asang to Singor (Migum) carrying beans to sell.

Betelnut grows well in the area. Many people stated that both betelnut and betel pepper are cash crops. They were also given as gifts to survey team members at the welcoming ceremony in Sorang village.

Vanilla was mentioned as a crop that had been established in the area, but was abandoned when the price dropped. We saw a number of vanilla plants still growing but they were not well tended.

Coffee was mentioned as a cash crop in Basor (a Yabong village). We did not see any coffee growing or any signs of it being processed.

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<sup>16</sup>In Tok Pisin, *daka*.

<sup>17</sup>US \$7 = 17 kina at the time of the survey.

People in the Yabong language area grow large amounts of peanuts for their own consumption and for sale locally in Madang. However, those in the other areas do not grow as many.

### **3.1.16 Bilingualism with other vernaculars**

In general, only a few people in each village know the neighbouring languages, and usually not very well. There does not seem to be any particular prestige in knowing other vernacular languages, and speakers of these other languages show little interest in learning Yabong, Migum, Nekgini or Neko, unless they have marriage ties with one of those languages.

There are, however, fairly complex exceptions. Due to this complexity, the information has been separated by language and village.

#### *Yabong language*

The people of Masi claimed that there are some people from each age group who are passively bilingual in neighbouring languages including Neko, Nekgini, Migum, Iyo or Karo. Elderly men and women are also able to speak these languages.

Bidua claimed that everyone speaks the Karo dialect, but nobody understands or speaks any of the other neighbouring vernaculars.

Basor also claimed that almost everyone, except boys and middle-aged women, speak the Karo dialect, but only 'a few' boys and middle-aged women can. They also claimed that all the elderly men and women speak Migum, some of the middle-aged and young women speak Migum and very few of the middle-aged and younger men and children speak Migum. It appears that the ability to understand Migum is being lost as time passes. Nobody understands or speaks any of the other neighbouring vernaculars.

Baded claimed that all the middle-aged and elderly people, both men and women, can speak Karo. They also said that some of their middle-aged men can understand the Migum language, while some of the elderly men can both understand and speak it.

Within the Yabong language area, bilingualism with Karo appears to be the result of marriage and other relationship patterns, such as children attending school in the Karo-speaking village of Dein.

#### *Migum language*

Lamtub stated that while some of their adults can understand but not speak Yabong, only a few of their children can understand it.

Singor claimed that they are not able to understand or speak any other vernacular languages.

#### *Nekgini language*

Sorang and Asang claimed that they are not able to understand or speak any other vernacular languages.

Reite claimed that a small number of their people can speak Iyo and Ngaing and a small number can understand but not speak the Migum language.

Serieng claimed that everyone except the children can understand but not speak Ngaing.

The fact that Reite and Serieng report more bilingualism than the other two Nekgini villages is probably related to the contact they have with neighbouring languages. Reite's contact seems to be due to the aid post and the school, which has students from the Neko and Ngaing language areas. Serieng is close to the Ngaing border, bringing greater contact with Ngaing-speaking people.

#### *Neko language*

Damoi and Warai claimed that they are not able to understand or speak any other vernacular languages.

### 3.1.17 *Summary*

#### *Yabong language*

Use of the Yabong language is strong, especially in the more isolated villages of Masi and Bidua. Masi and Bidua's main contact with the outside world is through Lamtub on the coast. There do not seem to be any social changes occurring that would have a negative impact on language vitality in these two villages, apart from the Masi man who now lives in Lamtub and provides housing for children attending Lamtub Primary School.

Basor and Baded have marriage ties with the Karo dialect. Except for younger children and some middle-aged women, everyone is bilingual in Karo. This seems to be an ongoing, long-term relationship that will not necessarily have a negative effect on the use of Yabong in these villages.

Baded is located on the Rai Coast highway, close to the beach. People in Baded seem to have more contact with Dein (Karo) and the Migum villages than the other Yabong villages do, making Baded the Yabong village that has the most consistent contact with sources of social change. Such contact could lead to language shift away from Yabong.

#### *Migum language*

Even though people told us that their children are not learning Migum, we observed children using the vernacular in many settings. Observed vernacular language use in Migum was, however, about 10 percent less than what we observed in the other languages on this survey (see table 6). Both Migum villages also reported that their children learn Tok Pisin as their first language (see table 3).

Many people travel through the Migum language area on their way to town or come to the Migum villages to buy trade store goods. In Singor it was reported that there are three adults (a man and two women) who have immigrated and lived in the village for more than ten years, and they only speak Tok Pisin. They have a total of twelve children who also only speak Tok Pisin. The best population figure that we have for Singor is about 100 people, so this means that at least 15 percent of the village does not speak Migum.

It was reported that Tok Pisin was used in all of the twelve domains that we asked about in our research (section 3.1.5), while Migum was reported as being used in only four domains. Also, when we asked people which languages children use to relate to family members, they reported Tok Pisin as an acceptable choice in every situation.

At present Migum is still a viable language, but trends have been established that are leading to a shift into Tok Pisin and possibly even the language's eventual death.

#### *Nekgini language*

The Nekgini language is strong in the villages of Sorang and Asang. It is weaker in Reite and Serieng because of the opportunities for outside contact available in these areas. St. Monica Reite Primary School and the aid post in Reite have been established for about forty years. Both of these bring in outsiders and the availability of education may encourage young people to leave the village for higher education and employment.

#### *Neko language*

We collected varied data about the strength and viability of the Neko language. Language use observations show a strong use of the vernacular (see table 6). However, Warai village has high emigration levels. Although both villages reported many domains where the local language is used (see table 7), all of these domains also overlap with Tok Pisin.

Use of Neko seems to be fairly strong, but high levels of emigration and use of Tok Pisin in all domains could lead to a language shift toward Tok Pisin.

## 3.2 Language attitudes

### 3.2.1 *As reported by residents*

All four languages surveyed appear to have neutral prestige based on the attitudes of outsiders. Speakers of other languages do not seem to have any interest in learning the languages in the survey area, except where there are marriage ties. While in town or travelling to town, people reported using primarily Tok Pisin. However, when we asked what language they would use in that same setting to speak to a friend from their language area, they reported that they would use their vernacular. This indicates that their language is not assigned low prestige by outsiders, because they are willing to use their language in public settings in town.

It appears that there are no local vernaculars that have a higher prestige than the others. Most people from the languages surveyed did not report any interest in knowing any of the other vernacular languages. The exception was villages of western Yabong where they speak Karo because of marriage and social ties with nearby Karo villages. There still does not appear to be any special prestige in knowing Karo.

There are two things that would help increase positive language attitudes in the surveyed languages. There are no written materials in these languages except for some prep school materials that have been produced recently. Increasing the production and distribution of these materials may foster positive language attitudes. Speakers in none of these languages reported their local language being used on radio broadcasts. Changing this may also encourage more positive language attitudes.

Nevertheless, the responses to the following questions indicate that people in the area generally do have positive attitudes toward their own language.

*What languages do you like hearing stories in?* Everybody reported their local language, except in the Nekgini village of Serieng, where they reported Tok Pisin.

*What languages do you want your children to know well?* Everyone's first response was their own language. The second response was usually Tok Pisin, followed by English.

*What languages do you think your children will use when they grow up?* Singor (Migum) was the only village to respond with Tok Pisin. The rest believe their children will use the local language.

*What languages do you think your grandchildren will use when they grow up?* With only two exceptions the response in all villages was their own local language. In Singor (Migum) they reported Tok Pisin and in Baded (Yabong) they reported Tok Pisin and English.

*What language do the children in this village learn first?* The response to this question in Yabong villages was always Yabong. Responses from villages in the other language groups were varied and are shown in table 17.

*Before school age do the children understand/use the vernacular well? and Do they speak it as well as you?* The response to both of these questions in Yabong villages was always "yes" with the exception of Baded village where they said the children only speak the language about half as well as adults. The responses of the other villages were somewhat mixed and are shown in table 17.

Table 17. Children's first language

Language	Migum		Nekgini				Neko	
Village	Lamtub	Singor	Sorang	Asang	Reite	Serieng	Damoing	Warai
What language do the children in this village learn first?	Tok Pisin	Tok Pisin	Nekgini	Nekgini	Tok Pisin	Tok Pisin	Neko	Neko
Before school age do the children understand/use vernacular well?	Yes	Some of it	Yes	Yes	Yes	No	Yes	Yes
Do they speak it as well as you?	Yes	Not quite	A little	Yes	Not quite as well	Know ABC's & a few words only	Not too well	Yes

Considering the data shown above, it appears that in all four languages people feel that their own language is still important. Their interest in its survival seems strongest in the mountain Yabong villages and weakest in Singor village, in the Migum language area. Serieng and Reite, both Nekgini villages, also show some signs of weakening language vitality.

### 3.2.2 As reported by school staff and parents

The survey team asked questions during both the education and community questionnaires to examine language attitudes. The responses varied depending on what type of school was being researched. In every village, the reported attitude towards outside languages is neutral. People do not have negative attitudes towards neighbouring languages or feel as though they are treated negatively when they leave their language area.

At the TPPS schools the attitude towards the vernacular is positive. The teachers of these schools feel passionately about the importance of children learning their language and about using the vernacular in school before starting government schools.

The school policy on language use changes as children move from elementary school to primary school. In the elementary schools, the vernacular is used in the classroom in order to build the foundations for Tok Pisin and English, but in the lower primary classes Tok Pisin is used rather than the vernacular. As the students progress through the grades, less Tok Pisin and more English is used until all the classes are in English. Policies restricting speech to English, both inside and outside the classroom, do not start until primary school. If children use the vernacular on school grounds the most common punishment is school grounds-keeping.

At Kibu Elementary in the Yabong village of Basor, the teacher reported that English and Tok Pisin are used as much as possible, and the vernacular is only used to explain concepts. He also reported that the children are encouraged to use English and Tok Pisin, but are allowed to use the vernacular as well. However, in response to a subsequent question about whether the children are punished for using the vernacular he replied that they are spanked. Several other men in the group, who are not teachers, disagreed, stating that it is against the law to spank children and is therefore not practiced.

The headmistress at Lamtub Primary School (Migum language area) and the headmaster at St. Monica Reite Primary School (Nekgini language area) have opposing views of the vernacular. At Lamtub the headmistress sees the vernacular as a threat to unification and does not see a value in having TPPS schools. The headmaster at St. Monica Reite Primary School is supportive of TPPS schools and wants to try to start bringing their graduates in at a higher grade level so they can avoid the boredom of lower-level work that they have already mastered in TPPS schools.



In the Migum village of Warai, the elementary teachers are interested in English education and learning how to improve the children's English quickly so they will be prepared for primary school and the economic world. They feel that vernacular education is important, but not at their school. They believe their job is to prepare the children for higher grades and the work world.

The difference between the attitude of teachers on the coast and in the mountains was marked. Teachers at the coastal schools, which included both schools in the Migum language area and one in the Neko language area, are less excited about vernacular education and more enthused about English. In some cases the teachers would be willing to teach a vernacular component, but had no response from the community or were criticized by the community. Some parents feel strongly that children should learn English in school and the vernacular at home. The only time children were observed at school was at Damoing Elementary (Neko) during a morning break. The children were code switching between Neko and Tok Pisin, but mainly using the vernacular.

In the communities, there was always enthusiasm for a better educational system even though there were varying degrees of openness to vernacular education among the teachers and headteachers. Each village expressed a desire for a school closer to their area or in their village. In the Neko villages of Damoing and Warai, and the Nekgini villages of Asang and Sorang, the teachers and community asked questions about how they could get practical help in expanding the educational possibilities for their children. The teachers at the TPPS schools in the Yabong and Nekgini language areas are, at the least, supportive of vernacular teaching, and often quite passionate about it. However, teachers in the higher level grades feel that English and Tok Pisin should be used within the domain of the classroom. Many responded that it was the law and whether they liked it or not they must abide by it. Among the parents and community members many people had positive reactions to vernacular education while a small number believed schools should teach the children English, not their own language or culture.

The people in this area highly value literacy. When asked how many men and women were able to read, none of the villages were able to give a specific number, but simply stated "too many people to count." Reite is the only village in which interviewees reported that more women than men can read.

There is a high degree of interest in language development and how SIL can practically help the people gain easier access to both vernacular education and higher grade levels. The communities are happy with their current schools because they are available, but they would like to see more educational opportunities come into their areas.

### **3.2.3 As inferred from behaviour**

In general, the language attitudes discussed above are supported by our observations, which showed that in this area the local languages are used the most (see section 3.1.4). Tok Pisin is spoken and understood by everybody in the area, but according to our recorded observations it is only used in villages about one-third of the time.

There are some clear exceptions to the above generalisations. The two Migum villages differed widely in their reported beliefs about the vitality and importance of the local language. Respondents in Singor reported that they are shifting to Tok Pisin while the people in Lamtub village indicated that the local language is still strong. Our observations seemed to agree with Singor's report of language shift.

Warai village, in the Neko language area, reported that their vernacular is strong, but most of our observations indicated a shift to Tok Pisin similar to the shift we observed in the Migum villages of Lamtub and Singor.

Even though overall we observed more use of the vernacular than Tok Pisin, commands were mostly given in Tok Pisin. Commands are used to exert control over other people and therefore can be an indicator of what is considered to be the "language of power." We observed seventeen commands or reprimands given to children or adults. Of these, eleven (65 percent) were in Tok Pisin and six (35 percent) were in the vernacular. If Tok Pisin is truly seen as the language of power, this could be a factor driving a further shift toward Tok Pisin.

### **3.2.4 *Requests for assistance***

Mark Hepner, SIL's Madang Regional Assistant Director, requested a survey of this area in response to expressed interest in literacy and translation. Both Yabong and Nekgini have sent three participants to STEP in 2007 and 2008. They are doing well in their training and are establishing TPPS schools. Hepner also received a letter written by a group of people from the area, including names of people from both Migum and Yabong, with reference also made to Nekgini and Neko. The letter asks SIL to send a translator, help with TPPS materials and bring better services to the area. Some land in the Lamtub area has been tentatively set aside for SIL; however, as the entire community was not involved in thinking about this, it would need to be confirmed.

After the survey, a note was sent from the leaders of Sorang village to one of the surveyors requesting that they come back and start a translation project.

### **3.2.5 *Interest in a language development project***

Overall there appears to be interest in a language development project in this area. Throughout the survey we were accompanied by three STEP participants from Yabong and Nekgini. Michael Brugei (Masi) travelled with us for the duration of the survey while Leo Kuder (Bidua) and Samson Anis (Sorang) travelled during the first and last weeks, respectively. They came to help us relate to village leaders and collect accurate data, but they also wanted to raise awareness for the necessity of TPPS schools in the area. After the education questionnaire they were available to answer questions about how to start TPPS schools and to speak of their importance within the community. In the communities where TPPS schools were not available, people expressed interest in starting one. The communities where TPPS schools were already in existence were generally grateful for those schools.<sup>18</sup>

In the Nekgini and Neko communities, especially Warai, questions were raised about the accessibility of training programmes for language development and teacher training. There seemed to be a desire for a language development project in the language area with indications of a willingness to support such a project.

### **3.2.6 *Summary***

Each village visited has a similar general attitude towards the vernacular. They believe it is important to pass on the heritage of their language to their children and grandchildren; however they also believe it is important for the children to be educated in Tok Pisin and English in order to be "successful." Although one group of teachers in the Neko language area feels that TPPS schools are not worthwhile, overall the reported attitude towards the vernacular is positive.

## **3.3 *Group identity***

On the whole, the people in this area of the Rai coast still value their culture and make an effort to preserve it. Many villages have what they call a "customs committee."<sup>19</sup> This is one person who is responsible for giving advice about how to run events in the traditional manner and is responsible for ensuring that the village's traditions are taught to the younger members of the community (e.g., during

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<sup>18</sup>This attitude was not demonstrated by the people in Neko. The teachers in Damoing were neutral towards TPPS schools, while the teachers in Warai did not seem interested in them at all. They wanted someone to come and teach the children English in order to prepare them for the primary school in Biliau.

<sup>19</sup>We found out about this position relatively late during the survey and so could not determine exactly how many villages in the area have a customs committee.

initiation). However, in the Migum village of Singor the former customs committee reported that he resigned from his position because people did not listen to him. At the time of the survey no one had been chosen to replace him.

The most important customs to the people in this area are bride price, male initiation and the practice of giving gifts to members of one's extended family in order to develop good relationships.

Males at least twelve years old are initiated by spending approximately one month in a men's house. During this time they are taught how to fish, hunt, look after a wife, settle disputes, perform magic and keep other customs of the village. After this time they come out of the men's house with their bodies painted red and a *singsing*<sup>20</sup> is performed. In every village where we asked about initiation, we were told that it is common practice for all men to be initiated.

Magic still plays a significant role in the lives of the people in this area. Interviewees reported that, among other uses, it is a very effective way to seduce someone or make one's garden productive; it "always" works and "many" people use it. The only exception to this report was in Singor village (Migum language), where respondents said that many people use magic but many others do not. Also, the vast majority of interviewees reported being afraid of *sanguma*.<sup>21</sup>

Not all respondents explicitly stated whether or not they continue to practice traditional customs. It was reported in the villages of Serieng (Nekgini) and Warai (Neko) that traditional customs are still practiced. However, in Damoing, another Neko village, people said that their customs are changing, and in the Migum village of Singor interviewees reported that they have lost all of their customs apart from their traditional men's house.<sup>22</sup>

Although most people still appear to value their customs, they do not see themselves as having any traditions that are fundamentally different from the language groups around them. The only unique things they reported having are certain *singsing* and carvings that are unique to clans, but these are markers of clan identity, rather than language. As a welcome into a number of villages, the survey team was able to experience some of these *singsing* (see appendix A.2).

The villages that are farther away from the coast have less access to outside supplies. As we walked down from the mountain villages to the coast we saw increasing amounts of kerosene pressure lamps and roofing iron, we were fed more rice and the trade stores were better stocked.

In conclusion, the speakers of these four languages do have distinct clan identities although they do not seem to have cultural identities distinct from those of the language groups surrounding them. Many of the people are making an effort to retain aspects of their culture, such as the men's house. The coastal villages are experiencing a more rapid shift away from their traditional culture as a result of easier contact with Madang, the nearest town.

### 3.4 Conclusions on language vitality

From the data we collected, it appears that Yabong, Migum, Nekgini and Neko are all vital languages. There are some trends in Migum and Neko that could ultimately lead to language death, but the languages are still being used and are perceived by the speakers as valuable.

There are a number of factors that contribute to the vitality of the Yabong language. Villages in the Yabong language area are relatively remote, as travelling to town requires a hike lasting several hours and then a two-hour boat ride that costs 20-50 kina.<sup>23</sup> In addition, Yabong, rather than Tok Pisin, is reportedly used during sports and for joking and arguing at home, as well as in traditional domains such as weddings and funerals. It was also reported that most women marrying into the language area learn Yabong, as do their children, and church leaders usually use Yabong when interacting with people

<sup>20</sup>Singsing are traditional dances and songs.

<sup>21</sup>Sorcery used to harm people.

<sup>22</sup>In Tok Pisin, *haus tambaran*.

<sup>23</sup>US \$7 = 17 kina at the time of the survey.

outside of church services. However, there are also factors that indicate a threat to the vitality of the Yabong language. There is no primary school in the language area, so most Yabong children attend school in the Migum or Karo language areas. Also, the survey team observed unbounded code switching between Yabong and Tok Pisin.

Several trends observed in the Migum language area indicate a possible threat to language vitality. A few people in the language area own dinghies, which they use to take people to Madang town on a daily basis. Although Migum is reportedly used for sports, joking, arguing at home and organizing weddings and funerals, Tok Pisin is used in these domains as well, and there is no domain in which Tok Pisin is not used. Respondents in Singor village reported that most of their traditional customs are no longer practiced, and it was reported that many of the women who marry into Singor do not learn Migum. The survey team also observed unbounded code switching between Tok Pisin and Migum. Although there is a primary school in the language area, as well as markets, Tok Pisin is used in the school and probably in the markets as well, since people from other language areas often pass through the Migum area on their way to town. All of the church leaders in the area are Migum speakers, but reported that they usually use Tok Pisin when interacting with people outside of church services.

Within the Nekgini language area, several factors indicate positive vitality for the Nekgini language. As in the Yabong language area, traveling to town from most Nekgini villages requires several hours of hiking as well as a two-hour boat ride that costs 20-50 kina. Nekgini respondents reported that Nekgini, rather than Tok Pisin, is used for arguing and praying at home, as well as for traditional events such as weddings and funerals. It was also reported that many women who marry into the Nekgini language area can speak Nekgini, and most can at least understand it. Most church leaders are Nekgini speakers and reportedly use both Nekgini and Tok Pisin when interacting with people outside of church services. However, the survey team did observe unbounded code switching between Tok Pisin and Nekgini.

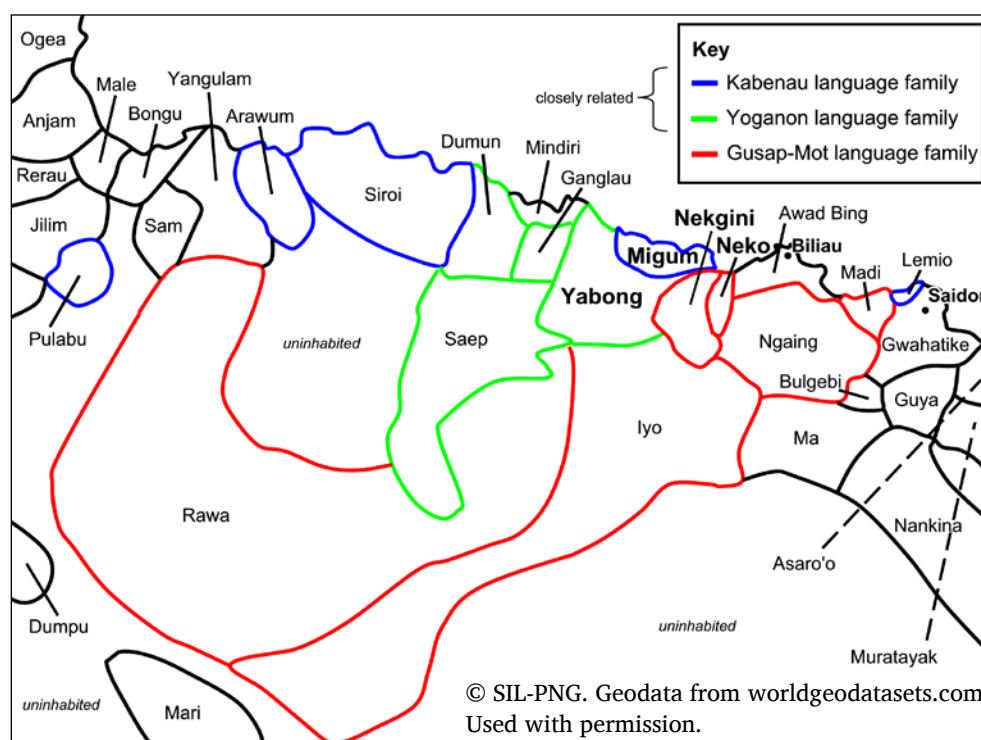
Although 15 percent of the Neko population<sup>24</sup> has reportedly emigrated, respondents reported that emigrants and their children often speak Neko when they return to the language area. It was also reported that some of the women who have married into the language area speak Neko, although language use data was not gathered for all immigrants. While the use of Neko by some immigrants and emigrants may be a positive factor for the vitality of the Neko language, there are a number of factors that indicate that language vitality may be at risk. The Neko language area is located on the coast, with easy access to dinghies making daily trips to Madang town. Although Neko is reportedly used for arguing and praying at home, organizing weddings and funerals, joking, sports, market and while traveling to town, Tok Pisin is used in all of these domains as well, and there is no domain in which Tok Pisin is not used. There is no primary school in the Neko language area, forcing children to travel outside the language area for education, and none of the church leaders interviewed are able to speak Neko.

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<sup>24</sup>Based on data collected in the two villages visited, Damoing and Warai.

## 4 Language and dialect boundaries

Map 3. Language boundaries



As seen in map 3, Migum is a member of the Kabenau language family, Yabong belongs to the Yoganon family and Neko and Nekgini are in the Gusap-Mot family.

### 4.1 Reported language and dialect boundaries

There are no clear perceived dialect distinctions within these four languages. The distinction between the languages themselves seems to be clear and undisputed with the exception of Nekgini and Neko, which are seen by a number of villages as being the same language. In both of the Neko villages visited (Damoing and Warai), respondents listed all of the Nekgini villages as part of the Neko language area. Also, respondents in the Nekgini village of Serieng identified Damoing and Warai as part of the Nekgini language.

#### *Yabong language*

The four villages that we visited (Masi, Bidua, Basor and Baded) have all reported themselves as being in the Yabong language area. All four villages also reported Gogou village to be a part of the Yabong language. Some villages reported that the following hamlets are near larger villages and other speakers may consider them to be a part of the larger villages: Amasi (Masi village), Fogwang (Baded village) and Frengen (Baded village).

Three of the four Yabong villages we visited reported that Lalo, which is a small village near Lamtub, is a Yabong-speaking village. Bidua village did not report this information. This is interesting since Lamtub reported that only a few of their people have the ability to understand Yabong, and none can speak it. It could be that this report was referring to a settlement of Yabong speakers near Lamtub.

Bidua village reported Singor as a Yabong-speaking village. However, Singor reported that people there cannot understand or speak any vernacular other than Migum.

Masi village reported that all of the villages except Baded are part of the Kaum dialect of Yabong. There were no other clear dialect distinctions made by the people, except for a few comments that Baded did not speak very pure Yabong.

#### *Migum language*

Lamtub and Singor each reported the other as a Migum village. Lamtub also reported a village called Kwarbeng as being part of the Migum language, but we were not able to locate it. No other villages were ever reported to be part of the Migum language by any other village.

Lamtub reported that all the Migum villages speak the same language, whereas Singor claimed that they themselves spoke differently from the rest of the language area.

#### *Nekgini language*

The four villages that we visited (Sorang, Asang, Reite, Serieng) each reported their own village and the other three as being part of the Nekgini language. Three of these four villages reported that Damoing village is also part of the Nekgini language area. Asang village did not report this information. However, Reite described Damoing as speaking Neko even though they listed it as a village within the Nekgini language area. Reite and Serieng also included Warai village in the Nekgini language area. Sorang reported the Ngaing-speaking village, Maibang, as speaking Nekgini. Serieng reported Goriyo village as Nekgini.

When asked about differences in the Nekgini language, all Nekgini villages reported that they each speak a little differently from the others and that the variety spoken in their own village is the purest form of Nekgini. There is one exception to this rule in that Reite claimed that Serieng also speaks the same as they do, although Serieng did not make that same claim about Reite.

#### *Neko language*

Damoing and Warai villages are in complete agreement as to who speaks the Neko language. They claim that both of their villages speak the Neko language and they also include the four villages of the Nekgini language as speaking Neko along with the village of Goriyo.

There is not a clear reported distinction between the Neko and Nekgini languages. Most villages in both language areas reported that all or most of the villages in the other language speak the same language as they do. It is not clear if this is due to linguistic similarity between the two languages, to passive bilingualism, or to both of these factors combined.

### **4.2 Methodology of lexical comparison**

Barbara Hodgkinson elicited and transcribed wordlists in twelve different villages: Masi, Bidua, Basor, Baded, Lamtub, Singor, Sorang, Asang, Reite, Serieng, Damoing and Warai. In Basor, she also transcribed wordlists from residents of Baraking and Samung villages, for a total of fourteen wordlists. She used the 1999 revision of the SIL-PNG 190-item wordlist. Of these 190 items, twenty are sentences which were not used in the lexicostatistical comparison. Elicitation was always done in a group setting, with one person designated as the spokesperson for the group. The spokesperson was required to know the language well, to be known as someone who spoke the language well, to have been born in that village with parents from that village, and to have lived the vast majority of their life in that village. Hodgkinson elicited the wordlists in Tok Pisin.

Three items<sup>25</sup> were excluded from all fourteen lists because they contained no new morphemes. eleven additional items<sup>26</sup> were excluded from some lists for the same reason.

In addition, four items were excluded from some lists because of probable confusion in elicitation i.e., the word given for ‘you (pl.)’ in Bidua was the same as the word given for ‘we’. See appendix A.4 for a complete list of excluded items.

WORDSURV was used to determine the percentage of the remaining words that shared lexical similarity. Words were considered to be similar if they met the criteria of 50 percent lexical similarity described by Frank Blair (1990:30–33). When roots could be identified, only the roots were compared and additional affixes were excluded. See appendix A.5 for a list of excluded affixes.

### 4.3 Characteristics of the language

The following table shows the phonetic inventory for the Yabong, Migum, Nekgini and Neko languages.

Table 18. Yabong, Migum, Nekgini and Neko consonant chart

	Bilabial	Labiodental	Alveolar	Post-alveolar	Palatal	Velar	Glottal
Plosive	p b		t d			k g	ʔ
Fricative		f v	s				h
Affricate				dʒ			
Nasal	m		n		ɲ	ŋ	
Trill			r				
Lateral Approximant			l				
Approximant	w				j		

Out of these phones, the [dʒ] and [ɲ] phones occur only in the Migum language, while the [v] and [h] phones occur only in the Yabong and Nekgini languages. Phonetic charts for each language can be found in appendix A.2.

Although the [ɲ] phone was transcribed as [ɲ] and [nj], the two transcriptions were considered to be identical when comparing words.

In the Yabong, Migum and Nekgini languages, word initial prenasalization often occurs before [b], [d] and [g]. This was transcribed as a prenasalized plosive (in [ˈndaub], Yabong, item 76, Baded village); and as a consonant cluster (in [ndab], Yabong, item 76, Baraking village). The two transcriptions were considered to be identical when comparing words. More research is needed to determine whether these sounds should be treated as consonant clusters or prenasalized plosives.

There are six different vowels occurring in the Yabong, Migum, Nekgini and Neko languages. These are shown in table 19.

<sup>25</sup>Items 49 (person), 63 (he drinks) and 65 (he kills).

<sup>26</sup>Items 15 (foot), 28 (girl), 29 (boy), 62 (he knows), 89 (wet), 90 (dry), 104 (rain), 111 (seed), 114 (meat), 118 (feather) and 167 (they two).

Table 19. Yabong, Migum, Nekgini and Neko vowels

	Front	Back
Close	i	u
Close-mid	e	o
Open-mid		ɔ
Open	a	

The [i], [e], [a], [o] and [u] phones occur in all four languages. The phone [ɔ] was only transcribed twice, in items 159 and 163, in the Yabong language (Baded village). However, according to Hodgkinson, most of the phones transcribed as [o] were actually pronounced as [ɔ] in all four languages, although the difference between the two phones did not appear to be significant to the speakers. Hodgkinson reports that within the same village, one speaker would use [o] while another speaker used [ɔ].

Clusters of two or three vowels are very common in all four languages. Eight different combinations of vowel clusters are found in the Neko language, thirteen in Nekgini, seventeen in Yabong, and eighteen in Migum. See appendix A.3 for a list of vowel clusters occurring in each language.

Word order in all four languages is generally SOV, as exemplified by the following Migum sentence (from item 180, Lamtub village).

- (1) paran    pai    nis-oi  
       man    yam    eat-3.SG.PRES  
       ‘The man eats the yam.’

When there is an indirect object in the Migum, Nekgini and Neko languages, the indirect object occurs between the direct object and the verb, as shown below (from Nekgini, item 186, Reite village).

- (2) ai        ŋu-ta    patuwaŋ    mimotuŋ    ŋu    ena-jaŋ  
       man    he-?    dog        boy        he    give-3.SG.PAST  
       ‘The man gave the dog to the boy.’

In the Yabong language, the direct and indirect objects both occur between the subject and the verb, but either the direct object or the indirect object can come first, as shown below (from item 186, Gogou village and Masi village).

- (3) iri-be    maksa    so        nu-rem  
       man-?    boy        dog        give-3.SG.PAST  
       ‘The man gave the dog to the boy.’
- (4) nuŋ-gut    so        maksa-te    nu-rem  
       he-?        dog        boy-IO        give-3.SG.PAST  
       ‘He gave the dog to the boy.’

Notice that when the indirect object comes after the direct object, it is marked with a suffix, presumably an indirect object marker.

In all four languages, adjectives (including numbers) follow the nouns that they modify, as shown in the following Yabong sentence (from item 185, Gogou village).



- (5) iri ndaŋube so ginupta a-rem  
 man big dog small hit-3.SG.FUT  
 ‘The big man hit the small dog.’

In the data elicited for the Yabong and Migum languages, time words are always the first word in the sentence as in this example (from Yabong, item 181, Masi village).

- (6) ewaŋ nuŋ murek u-rem  
 yesterday he yam eat-3.SG.PAST  
 ‘Yesterday he ate the yam.’

In the data elicited for Nekgini and Neko, time words always precede the verb, but they can occur either before or after the subject, as shown in the following two sentences (items 178 and 181 from Reite village).

- (7) ai ŋu itom alo-juŋ  
 man he yesterday go-3.SG.PAST  
 ‘The man went yesterday.’
- (8) itom ŋu wainu na-jaŋ  
 yesterday he yam eat-3.SG.PAST  
 ‘The man ate the yam yesterday.’

Tense, as well as number, is marked on the end of verbs in all four languages. The following tables show the probable verb suffixes in each language for singular subjects in the past, present and future tenses, as well as plural subjects in the present tense. Data for plural subjects in the past and future tenses was not elicited. Example sentences can be found in appendix A.4.

Table 20. Yabong verb suffixes

	Present	Past	Future
Singular	-dem	-rem	-udem
Dual	-ribik	not elicited	not elicited
Plural	-ribiŋ	not elicited	not elicited

Table 21. Migum verb suffixes

	Present	Past	Future
Singular	-oi	-at	-au
Plural	-aking	not elicited	not elicited

Table 22. Nekgini verb suffixes

	Present	Past	Future
Singular	-tiŋ or -teŋ	-jaŋ	-wiŋaŋ
Plural	-kaŋ or -karaŋ	not elicited	not elicited

Table 23. Neko verb suffixes

	Present	Past	Future
Singular	-tiŋaŋ	-jaŋ	-waŋ
Plural	-jak	not elicited	not elicited

In the Yabong language, a sentence appears to be negated by adding the prefix *e<sup>i</sup>-* and the suffix *-ku* to the verb root, as shown in the following pair of sentences (items 183 and 184, Gogou village ).

- (9) irip      so      a-rem  
       man    dog    hit-3.SG.PAST  
       ‘The man hit the dog.’
- (10) irip            so      e<sup>i</sup>-a-ku  
       man            dog    NEG-hit-NEG  
       ‘The man did not hit the dog.’

Negation appears to be shown in the Migum language by affixing the suffix *-ai* to the verb root, followed by the word ‘kalom’. This is shown in the following pair of sentences (items 183 and 184, Singor village).

- (11) paran        ngon        ul-at  
       man        dog        hit-3.SG.PAST  
       ‘The man hit the dog.’
- (12) paran    ngon    ul-ai      kalom  
       man    dog    hit-NEG   not  
       ‘The man did not hit the dog.’

In the Nekgini and Neko languages, negation is shown by inserting the word ‘kumo’ before the verb, as shown in the following pair of Nekgini sentences (Nekgini, items 183 and 184, Asang village).

- (13) ai      ŋu    patuwaŋ    ura-jaŋ  
       man   he    dog        hit-3.SG.PAST  
       ‘The man hit the dog.’
- (14) ai            ŋu            patuwaŋ      kumo      ura-jaŋ  
       man        he            dog        not        hit-3.SG.PAST  
       ‘The man did not hit the dog.’

Hodgkinson notes that in Masi, Bidua and Basor villages (Yabong language area) stress always occurs on the second syllable. No further statements can be made regarding stress, as it was not transcribed consistently.

#### 4.4 Lexical similarity chart

Tables 24 through 27 show the percentage of lexical similarity between individual villages within each language.

Table 24. Percent of similarity between Yabong villages

Baraking	86				
Bidua	84	80			
Baded	80	84	76		
Masi	88	80	81	71	
Samung	92	93	86	81	85
	Basor	Baraking	Bidua	Baded	Masi

Table 25. Percent of similarity between Migum villages

Lamtub	84
Singor	

Table 26. Percent of similarity between Nekgini villages

Sorang	73		
Serieng	79	63	
Asang	84	79	72
	Reite	Sorang	Serieng

Table 27. Percent of similarity between Neko villages

Damoing	78
Warai	

The following table shows the average percentage of lexical similarity between languages.<sup>27</sup>

Table 28. Average percent of similarity between Yabong, Migum, Nekgini and Neko

Migum	5		
Yabong	4	8	
Nekgini	61	5	4
	Neko	Migum	Yabong

O. R. Claassen and K. A. McElhanon (1970:48–49) compared wordlists from the Yabong, Migum, Nekgini and Neko languages. Each wordlist had between 47 and 128 words, and McElhanon compared the words using Gudschinsky's "inspection method" (Claassen and McElhanon 1970:47). Table 29 shows the percentage of similarity according to McElhanon.

<sup>27</sup>See appendix A.7 for a table of lexical similarity between all villages surveyed.

Table 29. Percent of similarity according to McElhanon

Migum	8		
Yabong	11	19	
Nekgini	68	7	19
Neko		Migum	Yabong

The fourteen wordlists from the Yabong, Migum, Nekgini and Neko languages were also compared with a wordlist from the Ngaing language, using the method described in section 4.2. The Ngaing wordlist shown in table 34 was elicited in 1994 by Anne Dondorp. Table 30 shows the average similarity of Ngaing to the Yabong, Migum, Nekgini and Neko languages.

Table 30. Average percent of similarity between Ngaing and neighbouring languages

Ngaing	31	28	4	3
	Nekgini	Neko	Migum	Yabong

As seen in this table, Ngaing shares very little similarity with any of these languages. It is therefore unlikely that they could be served by literature in the Ngaing language.

#### 4.5 Interpretation

Using the average link method (Grimes 1995:69–73), the lexical similarity between villages in the Yabong, Migum, Nekgini and Neko language areas is as shown in figure 2.

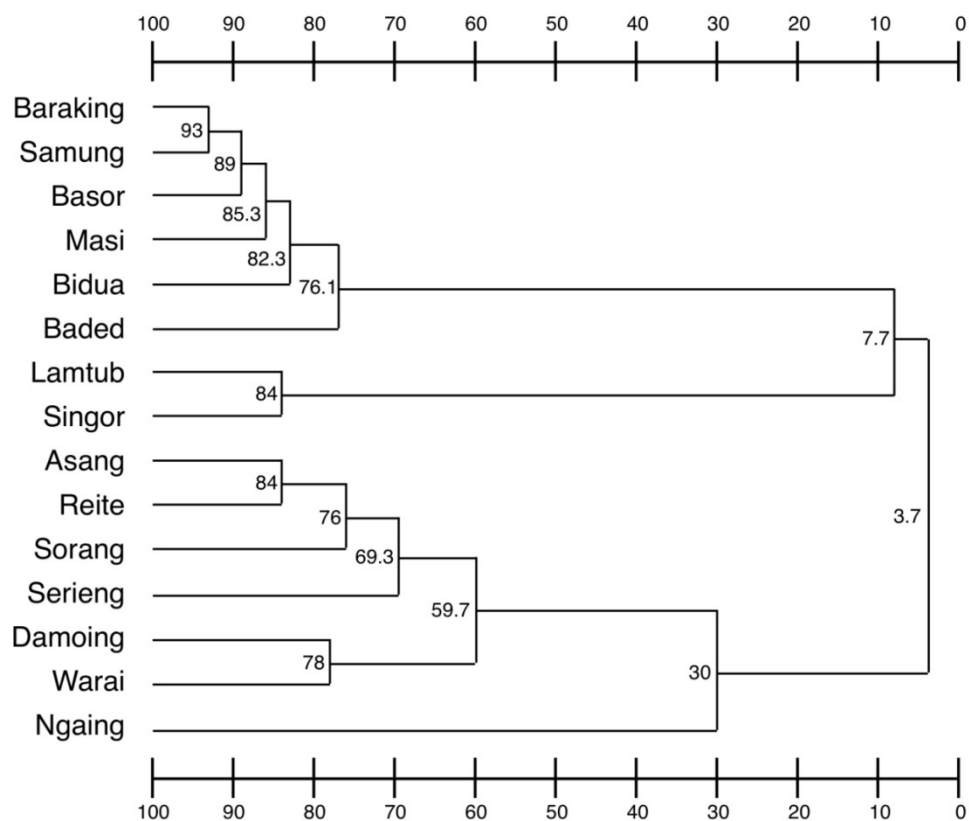


Figure 2. Lexical similarity according to the average link method.

Lexical similarity, both between languages and between villages within each language, is surprisingly low. It is particularly surprising that Neko and Nekgini are (on average) only 61 percent

similar, since they are both in the Gusap-Mot language family and many Neko and Nekgini speakers report that they are actually the same language. However, according to Hodgkinson, lexical similarity in the Rai Coast area is often rather low, even between varieties that are mutually intelligible. In line with that observation, in 1994, John Brownie, Anne Dondorp and Lynn Landweer conducted a survey of the Ngaing language area and stated that “the percentages between the Ngaing villages are rather low.... The majority of the percentages are below 80 percent...despite these low apparent cognate percentages, the people still reported that Ngaing was one language, and, more importantly, that they could all understand each other” (Brownie et al. 1994:18).

It is also possible that the perceived similarity between Neko and Nekgini is due more to acquired passive bilingualism than to actual lexical similarity. This would explain both the reported intelligibility between the two languages and their apparently low lexical similarity.

#### 4.6 Conclusion

In this report, we refer to Yabong, Migum, Nekgini and Neko as individual languages. Nekgini and Neko report that they are the same language, however they have a very low percentage of lexical similarity. A similar situation occurred within the villages of Ngaing, a neighbouring language, and is therefore not uncommon along the Rai Coast. We visited two of the three villages in the Neko language area and both claimed that the four Nekgini villages are part of the Neko language. Not all of the villages in Nekgini made the same claim about Neko; however, some of them do include one or both Neko villages as part of the Nekgini language. Although our data is not complete enough to truly understand the situation, we suggest that there may be acquired passive bilingualism between Nekgini and Neko rather than actual lexical similarity between the languages.

First, the two languages share on average only 61 percent lexical similarity. While it is possible, as mentioned previously, that languages on the Rai Coast simply tend to have a lower lexical similarity even when they are mutually intelligible, 61 percent is still quite low for two varieties to be considered as the same language.

Second, some villages reported that they can understand the other language, while others do not. Both Neko villages reported that they can understand all the villages in the Nekgini language. Two villages in the Nekgini language reported being able to understand the Neko villages, while respondents in another Nekgini village reported that they cannot understand the Neko villages. Reported comprehension between Nekgini and Neko is summarized in the following table.

Table 31. Reported comprehension between Nekgini and Neko languages

Language	Village	Adults able to understand villages in the other language?	Children able to understand villages in the other language?	Children able to understand their own language?
Nekgini	Sorang	yes <sup>a</sup>	no <sup>b</sup>	yes
	Asang	no data	no data	yes
	Reite	no	no	yes
	Serieng	yes	no	no
Neko	Damoing	yes	no	some
	Warai	yes	no	yes

<sup>a</sup> Unfortunately, this data was not collected during the survey. At a later meeting, this is what Samson Anis said.

<sup>b</sup> Unfortunately, this data was not collected during the survey. At a later meeting, this is what Samson Anis said.

If comprehension between the two languages was due to lexical similarity, it would be expected that all villages could understand each other. It is possible, of course, that some villages are more lexically similar than others, but Reite, the Nekgini village reporting that they cannot understand the Neko villages, actually shares more lexical similarity with Neko than do any of the other Nekgini villages.<sup>28</sup>

Finally, the two Neko villages reported that, while they can understand the Nekgini villages, their children cannot understand the Nekgini villages. Their children can, however, speak their own vernacular. If understanding was due to lexical similarity, then there would be no reason why children who speak their own vernacular could not understand a similar language that adults were able to understand. This hypothesis was confirmed by Samson Anis, a resident of Sorang village and speaker of Nekgini. Samson reported that people in his village are able to understand the Neko language, but he thought that a man who had stayed in Sorang all his life and never been to a Neko village before would not be able to understand Neko.

We decided to keep Nekgini and Neko as separate languages because there does not appear to be enough evidence to the contrary. Regardless, many speakers of these languages do see Nekgini and Neko as one language.

## 5 Conclusions

From the data we collected, it seems that Yabong, Migum, Nekgini and Neko are all vital languages. There are some trends in Migum and Neko that could ultimately lead to language death, but the languages are still being used and are perceived by the speakers as valuable.

Yabong, Migum, Neko and Nekgini are four separate languages. Although some people reported Neko and Nekgini to be the same language, lexical similarity and reported comprehension seem to indicate that they are, in fact, separate languages.

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<sup>28</sup>See appendix A.7.

## Appendix A. Wordlists and analyses

### A.1 Wordlists

From table 32 through table 34, words in italics are synonyms or alternate pronunciations; words in bold were excluded from the lexicostatistical comparison.

Table 32. Yabong wordlists

		Yabong					
		Masi	Bidua	Basor	Baraking	Samung	Baded
1	head	bikiŋ	bikiŋ	bikiŋ	bikim	bikim	bikiŋ
2	hair	inu	inum	inuŋ	inu	inu	inut
3	mouth	mangahet	mangahem	mangaset	mangasem	mangasem	mangaset
4	nose	wamet	wamem	wamem	wamem	wamem	wamet
5	eye	amat	amam	amam	amam	amam	amat
6	neck	ŋ'guroŋ	n'guroŋ	nguroŋ	ngurom	ngurom	kuduŋ
7	belly (exterior)	simut	simum	simum	simum	simum	sumut
8	skin	garaŋ	gaton	garaŋ	anuŋ	garan	<sup>n</sup> gatoŋ
9	knee	bakit	bakim	bakim	bekim	bakim	bekit
10	ear	sedep	sedem	sidem	sidem	sedem	sidet
11	tongue	mangut	meŋum	meŋum	meŋum	meŋum	meŋut
12	tooth	mepap	mapam	mapam	mapam	mapam	mapat
13	breast (her)	susut	susum	susum	susum	susum	susut
14	hand	amop	amom	amom	amom	amom	amot
15	foot	anet japtu	<b>anim</b>	anim japtu	enim pusot	anim pusot	<b>enit</b>

		Yabong					
16	back	i'wup	ibum	ibum	ibuŋ	ibuŋ	ibut
17	shoulder	ka'rip	karim	karim	mburem	kalim	gaidet
18	forehead	a'hap	asam	asam	asam	asam	asat
19	chin	mepdet	medemem	medem	medem	medem	medet
20	elbow	kawit	amom bakit	amom kwavit	amom kebit	am kwabit	amot kwebik
21	thumb	munu	amom munu	amom munu	amom munu	amom munu	amot munu
22	leg	ani	daugom	anim	enim	anim	enit
23	heart (pumps blood)	pusot gaŋut	pusom gaŋut	pusom gaŋut	pusom gaŋut	pusom gaŋut	kupiŋ
24	liver	da'up	kaudome	daup	<sup>n</sup> doum	<sup>n</sup> daum	dese <sup>i</sup> tu
25	bone	si'tu	fitum	fitut	fitum	fitum	fitut
26	blood	nda <sup>h</sup>	nda <sup>h</sup>	ndamjem	nda <sup>h</sup>	nda <sup>h</sup>	<sup>n</sup> da <sup>h</sup>
27	baby	<sup>n</sup> dare roko	abu	abu	abu	abu	abu
28	girl	wanemak'sa	wanemaksa	wanemaksa	wane maksa	wane maksa	wane maksa
29	boy	iri mak'sa	iri maksa	iri maksa	iri maksa	iri maksa	iri maksa
30	old woman	wan da'wak	wandawak	wandawak	wane duak	wanduak	wane duak
31	old man	iri da'wak	iri duwak	iri dawak	iri duak	iriduak	iri duak
32	woman	wa'ne	wane	wane	wane	wane	wane
33	man	iri	iri	iri	iri	iri	iri
34	father	ga'ku	ga'ku	di	ndi	ndi	<sup>n</sup> di
35	mother	munu	munu	umo	wom	omo	wom
36	brother (older of man)	'aunu	aunu	baba	aunundab	au nundaube	au unu
37	sister (older of man)	niknu	aunu domube	niknu	nik nun daub	nik nundaube	nigne



		Yabong					
38	name	im	imut	imut	imut	imut	imut
39	bird	amahai	uwe	kwe?	kwe?	kwe?	kwe
40	dog	so	so	so?	so?	so?	so
41	pig	bo	bo	bo?	bo?	bo?	bo
42	cassowary	namba <sup>k</sup>	kawad	kawat	kewed	kawad	kewed
43	wallaby	da'vi	da'bi	dabi	debi	dabi	debi
44	flying fox	mbiaŋ	ndamiŋ	ndamiŋ	ndemiŋ	ndamiŋ	<sup>n</sup> demiŋ
45	rat	sago	sago	sago?	sago	sago	sago
46	frog	ndako	ndako	ndako	<sup>n</sup> dako	<sup>n</sup> dako	da <sup>u</sup> ko
47	snake	kuna	kuna	sawai	sawai	sawai	sawai
48	fish	pa'det	pa'det	padet	paded	paded	paded
49	person	iri	iri	iri	iri	iri	iri
50	he sits	fa ki jem	fakebu	fak jem	nuŋ fakem	nuŋ fakem	nuŋ fakem
51	he stands	di kijem	dikem	dik jem	nuŋ dikem	nuŋ gikem	nuŋ dikem
52	he lies down	sina jem	sinerem	sinejem	nuŋ sinedem	nuŋ sinedem	nuŋ sinedem
53	he sleeps	ama buŋijem	ama buŋbe sinerem	amambumba sinejem	amam buŋdesinedem	amam buŋbasinedem	nuŋ amambungba
54	he walks	ahijem	asidem	nuŋ asijem	nuŋ asidem	nuŋ asidem	nuŋ asidem
55	he bites (the dog bites the man)	sot gahijem	so da iri gadem	soda iri gajem	so? iri gadem	so? iri gadem	sod iri gadem
56	he eats	u'jem	ma udem	nuŋ ujem	nuŋ maudem	nuŋ maudem	gadem
57	he gives it to me	wakejem	manebem	nebijem	nebem	nebem	na nedem
58	he sees	ne'jem	nedem	ne'jem	nugut nedem	nuŋgut nedem	nuŋ nedem
59	he comes	jejem	se'jem	se'jem	se'em	se'em	nuŋ se'jem

		Yabong					
60	he says	bi'jem	bidem	bi'jem	nugut bidem	nungut bidem	nun bidem
			<i>nungut bidem</i>				
61	he hears	ti 'jem	manda tidem	ti'jem	nun tidem	nun tidem	nun tidem
62	he knows	<b>nun ti 'jem</b>	<b>manda tidem</b>	<b>nun ti'jem</b>	<b>nun tidem</b>	<b>nun tidem</b>	nun watai
63	he drinks	<b>u'jem</b>	<b>jag udem</b>	<b>nun jag ujem</b>	<b>jag udem</b>	<b>jagudem</b>	<b>nun jag udem</b>
64	he hits	a'jem	adem	ajem	adem	adem	nun adem
65	he kills	<b>an mo 'jem</b>	<b>am modem</b>	<b>an mojem</b>	<b>an modem</b>	<b>an modem</b>	<b>nun an modem</b>
66	he dies	mo'rem	ak modem	morem	ap mom	ap mom	ap modem
67	it burns	fa rojem	fa rodem	fa rojem	fa rodem	fa rodem	fa rodem
68	it flies	puputik ahijem	puputidem	puputik asijem	puputik asidem	puputik asidem	nun puputik asidem
69	he swims	jak so'jem	jag soudem	jag suajem	jag ndemem	jag ndemem	nun jag suwodem
70	he runs	bu ti ijem	butidem	butijem	butidem	butidem	butidem
71	he falls down	a 'jem	adem	ajem	wok adem	okadem	nun busuk tidem
72	he catches	gena wahat'jem	tapok wadem	wasag jem	geba usak kem	geba wasakem	gen na usakem
73	he coughs	duku a'jem	duku adem	dukuajem	nduku adem	nduku adem	nun duku adem
74	he laughs	awuk i'jem	abukem	abuk jem	abukem	abukem	nun abukem
75	he dances	jamu a'jem	jamnedem	jam najem	jam nedem	jam nedem	jam nedem
76	big	<sup>n</sup> da'huwe	mandaub	nda'huwe	ndab	ndawube	<sup>n</sup> daub
77	small	ginuwe	ginibe	ginube	gib	<sup>n</sup> ginube	gib
78	good	sam'tu	sam'tu	sam'tu	samtu	samtu	samtu
79	bad	fi'tu	fi'tu	fitu	fitu	fitu	fitu
80	long	petku	petku	kwanu	kanu	peku	kanu
81	short	<sup>n</sup> gamnu	ngamnu	ngamnu	ngamnu	ngamnu	gabnu

		Yabong					
82	heavy	taot	ta'ot	ta'ot	daut	taut	tawot
83	light	fa'ej	fawom	fa'onj	fa <sup>u</sup> onj	faonj	pakonj
84	cold	gimu	ginu	ginu	ginu	ginu	ginu
85	warm, hot	nga'inu	ngainu	ngainu	gainu	ngainu	<sup>n</sup> gasnu
86	new	kengam	kengam	kingam	tengam	kingam	kingam
87	old	tupu	buratopu	tapu	suo'tik	suoitik	suoitik
88	round	papum	papum	papum	papum	papum	papum
89	wet	buku	buku	<b>jag gidonj</b>	<b>jag didonj</b>	<b>jag didonj</b>	buku
90	dry	kekren	gareku	gareku	risej	<b>jag mim</b>	lisej
91	full	fatiku	fatidem	fatiku	fatiku	fatiku	fatiku
92	road	fara	fara	fara	fara	fara	fara
93	stone	sa'mo	samo	samo	samo	samo	samo
94	earth	da'ri	dari	dali	<sup>n</sup> deri	<sup>n</sup> dali	deli
95	sand	ka'um	kawuj	ka'uj	kauj	kauj	kauj
96	mountain	ka'ep	baptu	baptu	fakutiku	<sup>m</sup> baptu	baptu
97	fire	fa	fa	fa	fa?	fa?	fa
98	smoke	fafa'k	fafaik	fafaik	fafaik	fafaik	fafaek
99	ashes	fa'deo	fa'deo	fa deo	fadeo	fadeo	fadeu
100	sun	ke	ke	ke	ke?	ke?	ke
101	moon	rawo	jabo	jabo	rabo	rabo	labo
102	star	<sup>n</sup> gipa	<sup>n</sup> gipa	gipa	gipa	gipa	gipa
103	cloud	sawonj	sabonj	sabonj	sabonj	sabonj	simtu
104	rain	a'ut	a'ut	a'ut	aud	aud	awud

		Yabong					
105	wind	dak	dag	dak	dag	dag	didij
106	water	jak	jag	jag	jag	jag	jag
107	vine	ruma	ruma	ruma	ruma	ruma	ruma
108	tree	vi	vi	wi	vi	vi	vi
					wi	wi	
109	stick	vi'konj	vi siket	wit konj	wit konj	wit konj	vi siket
110	bark	vinj ngotonj	vi gatonj	wi garonj	wi gatonj	wi gatonj	vi gatonj
111	seed	<b>vi gaŋut</b>	<b>vi gaŋut</b>	<b>wi gaŋut</b>	<b>wi gaŋut</b>	<b>wi gaŋut</b>	<b>vi goŋut</b>
112	root	vi be <sup>u</sup> vengut	vi bebenjut	wi bebenjut	wi bebenjut	wi bebenjut	vi bebenmo
113	leaf	i'nut	vi inut	wi inut	wi iŋtu	wi inut	vi intu
114	meat	<b>pa'det</b>	mandak	<b>bo padet</b>	<b>paded</b>	<b>padet</b>	mundak
115	fat	weren	weren	weren	weren	weren	weren
116	egg	gaŋut	gaŋut	gaŋut	gaŋut	gaŋut	goŋut
117	louse	imiŋ	imiŋ	imiŋ	imiŋ	imiŋ	imiŋ
118	feather	<b>amahai inut</b>	<b>kuwe inut</b>	<b>kuwe inut</b>	kwem buŋbunju	<b>kwe inut</b>	<b>kwe intu</b>
119	horn	gamatu	gamatu	gamatu	gamatu	<sup>n</sup> gamatu	gamatu
120	wing	ba'den	baden	baden	baden	badentu	baden
			<i>badentu</i>				
121	claw	divit	divit	hamo divit	amot dibit	amodibit	dibit
122	tail	diŋut	diŋut	diŋut	diŋut	diŋut	diŋut
123	one	beairek	berere	beairek	berere	berere	osab
124	two	awude	abude	awude	abude	abude	abde
125	three	apre	able	abre	able	able	abdebe

		Yabong					
126	four	ba'di	badi	badi	bedi	badi	bedi
127	five	ambe	ambe	ambe	ambe	ambe	ambe
128	ten	am awude	neg dagam	ama wudeŋ	am abude	amabude	amabde
129	taro	ta'mat	waŋ	waŋ	waŋ	waŋ	waŋ
130	sugarcane	ba'dam	kapau	mapai jau	kapau	kapau	daŋ
131	yam	murek	mureg	murek	mureg	muleg	muleg
132	banana	<sup>n</sup> goŋ	<sup>n</sup> goŋ	goŋ	goŋ	goŋ	goŋ
133	sweet potato	mbak	mbak	mbak	mbak	mbak	mbak
134	bean	ma'hai	masai	masai	muse <sup>i</sup>	masa <sup>i</sup>	kapek
135	axe	padgip	paindik	padit	roŋ	pa'ndik	loŋ
136	knife	su	su	su	su?	su	su
137	arrow	ko	ko	ko?	ko?	ko?	ko
138	net bag	kap	kap	kap	kap	kap	kap
139	house	au	au	au	au	au	au
140	tobacco	faek	fa'ek	faek	fa'k	fa'ek	faek
141	morning	memenku	memenku	memenku	memenku	memenku	memenku
142	afternoon	<sup>n</sup> gamuŋku	gamonku	gamonku	ngamonku	ngamonku	<sup>n</sup> gamuŋku
143	night	su'ku	suijem	baisu	be'su	ba'su	be'su
144	yesterday	evaŋ	ebaŋ	avaŋ	abaŋ	ebaŋ	abaŋ
145	tomorrow	memen	memen	mandanŋaŋ	mandanŋa	mandanŋa	mandanŋa
146	white	ka'hetiku	gibo't	gahatiku	gibot	gibot	gibot
147	black	sukatiku	sukatiku	sukatiku	su katiku	su	su
148	yellow	mbuiptu	mbuiptu	mbuiptu	mbu'ptu	mbu'ptu	<sup>n</sup> gawatu

		Yabong					
149	red	rurutiku	rurutiku	rurutiku	roku	rurutiku	roku
150	green	kapbi	kadbi	kadbi	jaŋgut	kadbit	janmut
151	many	kundisoŋ	kundisoŋ	kundisoŋ	kundisoŋ	kundisoŋ	kundisoŋ
152	all	didon	biŋ didon	didon	didon	didon	didon
153	this	ena	ena	ena	ina	ena	ina
154	that	ete	bena	ete	ete	ete	ene
155	what?	mambe	mambe	mambe	mambe	mambe	mamab
156	who?	nodo	nam nodo	nodo	namno	namno	noda
157	when?	mamgatke	mamgatke	mamgatke	mamgatke	mamgatke	mamgotka
158	where?	ndomka	ndomganŋe	ndomkaŋ	<sup>n</sup> dom	ndon	<sup>n</sup> domsaŋ
159	yes	jau	jo	jao	eksa	jowa	jɔ
160	no	mim	mim	mim	mim	mim	mim
161	not (he is not standing)	nuŋ ediku	mim netiku	ediku	ediku	ediku	nuŋ ediku
162	I	na	nate	na	na	na	na
163	you (singular)	nairek	nairek	nairek	nam	nam	nɔm
164	he	nuŋ	<b>sip abude</b>	ete	nuŋ	nuŋ	ene
165	we two (exclusive)	sip awut	<b>nap abude</b>	sip agut	sipat	sipat	sip
166	you two	<b>sip pat</b>	<b>sip abude</b>	napabut	napat	napat	na <sup>u</sup> p
167	they two	na tet	abude mande	<b>iri awude</b>	naktet	natet	lakabde
168	we (pl exclusive)	siŋgat	<b>siŋdidon</b> mande	siŋgat	siŋgat	siŋgate	siŋ
169	you (plural)	naŋ tet	siŋdidon mande	naŋgat	naŋgat	naŋgapte	nɔm
170	they (plural)	naŋ	gaŋ didon mande	naŋtet	naŋ	naŋtep	naŋ

		Yabong					
171	he is hungry	maja mojem	ma'ja modet	ma'ja morem	ma'ja modem	ma'ja modem	nuŋ ma'ja modem
172	he eats sugar cane	nuŋ badam u'jem	kapau udem	mapaija urem	kapaudem	kapa udem	nuŋ daŋ udem
173	he laughs a lot	awuk ijem	iri abuk edem	abuk ak mojem	abukak modem	abukak modem	nuŋ aubukok modem
174	one man stands	iri diki'jem	iribe dikem	iri be dikjem	irip dikem	irip dikem	iri osab dikem
175	two men stand	iri awude dikrek	iri awude dikebi	iri awude dikribik	iri abu dikridik	iri abude dikebik	iri abde dikribik
176	three men stand	iri apre dikriŋ	iri abe dikebem	iri able dikribik	iri abe dikribiŋ	iri able dik eblim	iri abdebe dikribiŋ
177	the man goes	iri ahi'jem	iri asidem	iri asijem	irip dasidem	iri asidem	iri asidem
178	the man went yesterday	ewaŋ ap ahem	ebaŋ iri asidem	abaŋ iri ap asirem	abaŋ irip deasidem	ebaŋ iripde asidem	abaŋ iri asirem
179	the man will go tomorrow	memen nuŋ ahi udem	memen asi udem	mandanŋa iri asudem	mandan na irip dasiudem	mandanŋa iripde asiudem	mandan na asiudem
180	the man eats the yam	nuŋ murek u'jem	mureg udem	iri murek ujem	iripde moreg udem	iri mureg udem	iri moreg udem
181	the man ate the yam yesterday	ewaŋ nuŋ murek urem	ebaŋ mureg udem	abaŋ iri murek urem	abaŋ iripde moreg urem	ebaŋ iripde moreg urem	abaŋ moreg urem
182	the man will eat the yam tomorrow	memen nuŋ murek udem	memen iri mureg udi'jem	mandanŋa iri murek udem	mandanŋa iripde moreg urem	mandanŋa iripde moreg udem	mandanŋa udem
183	the man hit the dog	iri bet so am	irido so adem	irip so arem	iripte so am	iripte so am	irip so am
184	the man didn't hit the dog	iri bet so e? aku	irido so aku	irip so e <sup>i</sup> aku	iripte so ijaku	iri so iaku	irip so eaku
185	the big man hit the little dog	iri nda uwep so inu arem	iri donjube so inu arem	iri ndanube so ginup ta arem	iriŋda nupte so gipte am	iri ndanupte so ginup team	iri dabbe so inu arem
186	the man gave the dog to the boy	nuŋgut so maksate nurem	iri teda so inu norem	iribe maksa so nurem	iriŋ daupte so iri ginup te nom	iri ndanupte iri ginup te so am	iribe so inu iri gipbe norem

		Yabong					
187	the man hit the dog and went	iri tet so awa irarem	irite so abo asirem	iribe so auba irarem	iripte so aba iram	iriptet so aba iram	iri so aba irarem
188	the man hit the dog when the boy went	maksate ahina iritet so arem	iri ginibe asida so irem	maksa iratbiŋ irida so arem	iri gipte am na so iram	iri ginupte irang na so am	iri gib asina irindab be so arem
189	the man hit the dog and it went	iri tet so ana so ahem	iri akso ana so ana asirem	iribe so ana so irarem	iripte so am na so iram	iritet so am na so iram	iri so ana so irarem
190	the man shot and ate the pig	iri tet bo rama urem	iri te bo abau urem	iribe bo abau uŋ	iripte bo am baum	iriptet bo abum	iri bo ramba bo urem

Table 33. Nekgini and Neko wordlists

		Nekgini				Neko	
		Sorang	Asang	Reite	Serieng	Damoing	Warai
1	head	pitanenŋ	pitaninŋ	pitaninŋ	tapoaŋ	pitninŋ	pitninŋ
2	hair	june <sup>a</sup> nenŋ	june <sup>a</sup> ninŋ	me <sup>i</sup> janinŋ	me <sup>i</sup> jinŋ	me <sup>i</sup> ninŋ	ai me <sup>a</sup> linŋ
3	mouth	maganenŋ	maganinŋ	maganinŋ	maganinŋ	makaniŋ	makaniŋ
4	nose	uranenŋ	uraninŋ	uraninŋ	uraninŋ	uraninŋ	uraninŋ
5	eye	te <sup>i</sup> nenŋ	te <sup>i</sup> ninŋ	te <sup>i</sup> ninŋ	te <sup>i</sup> ninŋ	te <sup>i</sup> ninŋ	te <sup>i</sup> ninŋ
6	neck	puŋenenŋ	puŋeninŋ	puŋeninŋ	puŋeninŋ	puŋeninŋ	puŋeninŋ ka <sup>i</sup>
7	belly (exterior)	arunenŋ	aruninŋ	aluninŋ	aluni	aluninŋ	alulninŋ
8	skin	tokanenŋ	tokaninŋ	tokaninŋ	tokaninŋ	tokaninŋ	tokaninŋ
9	knee	takumanenŋ	takumaninŋ	takumaninŋ	takumaninŋ	tarakumaninŋ	tarakumaninŋ
10	ear	atipanenŋ	asipaniŋ	asipaniŋ	asipiniŋ	asipninŋ	asipninŋ



		Nekgini				Neko	
11	tongue	topaneŋ	topaniŋ	topaniŋ	topaniŋ	malepniŋ	melepniŋ
12	tooth	masineŋ	masiniŋ	masiniŋ	masiniŋ	masiniŋ	matniŋ
13	breast (her)	mamuneŋ	mamuniŋ	mamaniŋ	mamaniŋ	mamniŋ	mamniŋ
14	hand	ataneŋ	ateniŋ	ataniŋ	ataniŋ	atniŋ	atniŋ
15	foot	tarenaŋ panaŋ	panaŋ	<b>tareniŋ</b>	<b>tareniŋ</b>	tareniŋ laso	<b>tareniŋ</b>
16	back	sakaraŋeŋ	sakaraŋiŋ	sakaraŋiŋ	sakaraŋiŋ	tumbaraŋiŋ	finiŋ
17	shoulder	buwaraŋeŋ	waraniŋ	waraniŋ	waraniŋ	warniŋ	warniŋ
18	forehead	imuneŋ	imuniŋ	imuniŋ	imaniŋ	emaniŋ	iminiŋ
19	chin	mereteneŋ	mereteniŋ	meleteniŋ	meleteniŋ	meletniŋ	meletniŋ
20	elbow	atena kukaŋ	atene kukaŋ	atene kukaŋ	atiniŋ kukaŋ	atniŋ kuko	atniŋ kungaŋ
21	thumb	atena neŋ	atena neŋ	atene neŋ	ata na'n	atniŋ nain	atniŋ nain
22	leg	tarenaŋ	tareniŋ	tareniŋ	tareniŋ	nanginiŋ	tariniŋ
23	heart (pumps blood)	pupuaŋeŋ siŋ	pupuaŋiŋ siŋ	pupuaŋ siŋ	pupuwani siŋ	pupuwaniŋ siŋ	farafara
24	liver	koparaŋeŋ	koparaŋiŋ	kopelaŋiŋ	kopeleniŋ	sawalek	salawik
25	bone	uteneŋ	nakeniŋ	wimbiniŋ	wimbeniŋ	uterniŋ	uterniŋ
26	blood	asuraŋeŋ	asuruniŋ	asuruniŋ	asoraŋ	asurniŋ	asurniŋ
27	baby	nono	nonoŋ	neke	nonaŋ	neka	neka sumwal
28	girl	pariŋ mamoto	pariŋ mamoto	pariŋ mimotoŋ	paraiŋ momotoŋ	paraiŋ motaŋ	<b>neka pariŋ</b>
29	boy	siman ai	ai mamoto	ai mimotoŋ	ai momotoŋ	<b>nekai</b>	<b>neka ai</b>
30	old woman	pariŋ sakuŋ	pariŋ sakuŋ	pariŋ sakuŋ	paraiŋ sakuŋ	paraiŋ sakuŋ	paraiŋ sakuŋ
31	old man	ai sakuŋ	ai sakuŋ	ai sakuŋ	ai sakuŋ	ai sakuŋ	ai sakuŋ
32	woman	pariŋ	pariŋ	pariŋ	paraiŋ	paraiŋ	paraiŋ

		Nekgini				Neko	
33	man	ai	ai	ai	ai	ai	ai
34	father	naboŋ	naboŋ	nawoŋ	nawon	nawaŋ	nawiŋ
35	mother	ne <sup>i</sup> ŋ	na <sup>i</sup> ŋ	ne <sup>i</sup> ŋ	na <sup>i</sup> n	na <sup>i</sup> n	na <sup>i</sup> n
36	brother (older of man)	maran	maran	kakiŋ	kagiŋ	kakiŋ	kakiŋ
37	sister (older of man)	upani mari	kumaniŋ	upaniŋ	upaiŋ	upaiŋ	upaiŋ
38	name	wawaneŋ	wawiŋ	wawiŋ	wawiŋ	wa	wawiŋ
39	bird	nun	nun	nun	nun	nun	nun
40	dog	we <sup>i</sup>	patowa	patowaŋ	patowaŋ	patowa	kuna
41	pig	po	po	po?	po	po?	po?
42	cassowary	namba	kawari	kawari	kawari	kuwiki	juwir
43	wallaby	merendoko	merendoko	merendokoŋ	karitejaŋ	kalimbali	pusi
44	flying fox	bijaŋe	bijaŋ <sup>e</sup>	bi jaŋ	mbiaŋ	malbaŋ	malpo
45	rat	kasubi	kasubi	kasubi	opi	uju	uju
46	frog	parikoŋ	kambiŋ	kambiŋ	palikuŋ	kwara	kwerkwer
47	snake	pu <sup>i</sup>	pu <sup>i</sup>	pu <sup>i</sup>	pu <sup>i</sup>	pu <sup>i</sup>	po <sup>i</sup>
48	fish	titani	sisani	sisaniŋ	pa <sup>i</sup> upa <sup>i</sup>	kapu	kapu
49	person	<b>aiahaitagaŋ</b>	<b>ai</b>	<b>ai pariŋ</b>	<b>ai aput</b>	<b>ai kutaŋ</b>	<b>ai</b>
50	he sits	hai totateŋ	totaju	ngu totajuŋ	toti	tote	totajaŋ
51	he stands	kaŋeteŋ	kaŋajaŋ	ngu kaŋajaŋ	kaŋi	ka <sup>i</sup> ŋ k <sup>i</sup> etiŋ	kaŋ jajaŋ
52	he lies down	gorateŋ	gorajaŋ	gorajaŋ	koran	korajaŋ	koratijaŋ
53	he sleeps	kora kanda keteŋ	kiruŋ kai	tiŋ koranke korajaŋ	te <sup>i</sup> koranket koran	daiŋ koranka <sup>i</sup> ja	da <sup>i</sup> ŋ koronkit

		Nekgini				Neko	
54	he walks	atatuteik	utejaŋ	kaŋet ujuŋ	kaŋji	parakit	parakit
55	he bites (the dog bites the man)	ko <sup>i</sup> ne na neteŋ	patuwaŋ ai kasi jeŋ	patuwanda ai kunajaŋ	patowaŋ ai ŋu ne <sup>i</sup> ti	patowaŋa ai nit	kuna ai nit
56	he eats	neteŋ	ne <sup>a</sup> tiŋ	najaŋ	niti	nitin	ne <sup>i</sup> tijaŋ
57	he gives it to me	na nunateŋ	nuntiŋ	na nuntiŋ	nuntiŋ	nunte	nuntijaŋ
58	he sees	enteŋ	entejaŋ	waŋaritiŋ	entiŋ	waŋarit	waŋaritiŋ
59	he comes	ahiteŋ	ahitejaŋ	apitiŋ	apitiŋ	aputiŋ	apitiŋ
60	he says	je <sup>a</sup> teŋ	vikijaŋ	ni jajaŋ	jasakitiŋ	jeŋ	je <sup>i</sup> tijaŋ
61	he hears	iŋateŋ	iŋatiŋ	ni inajaŋ	iŋati	ŋatiŋ	ŋatiŋ
62	he knows	iŋateŋ	iŋatiŋbe	ni inatiŋ	iŋati	ŋatiŋ	ŋatiŋ
63	he drinks	tupune <sup>a</sup> teŋ	tupu ne <sup>a</sup> tiŋ	tupu najaŋ	tupuŋ nitiŋ	sona netiŋ	niŋ wai nitiŋ
64	he hits	ureteŋ	uri <sup>a</sup> tiŋ	urajaŋ	uritiŋ	uretiŋ	niŋ ure <sup>i</sup> tijaŋ
65	he kills	urena muwateŋ	urena muwatiŋ	uren umajaŋ	ureni umatiŋ	uren mutiŋ	niŋ uren motiŋ
66	he dies	kamamuwaja	kamuwajaŋ	ka mumatiŋ	umatiŋ	mutiŋ	niŋ mojaŋ
67	it burns	tei teteŋ	ti tejaŋ	ti titiŋ	tite <sup>j</sup> a titiŋ	tite <sup>j</sup> a tetiŋ	tite <sup>j</sup> a titiŋ
68	it flies	piruk keteŋ	wiru katu tejaŋ	wiru kitiŋ	nuŋ wirukitiŋ	nuŋ wirikit	nuŋ wirikitiŋ
69	he swims	siru keteŋ	topu siru kitiŋ	tupu silukitiŋ	tupuŋ nuidak utei	silkitiŋ	niŋ wai silkitiŋ
70	he runs	kindu keteŋ	kindu kitiŋ	kindu kitiŋ	kindu kitiŋ	kindu kiti	niŋ kingije <sup>i</sup> tijaŋ
71	he falls down	kereŋ korateŋ	urijaŋ	aputuritiŋ	uritiŋ	kusukte	niŋ kusuk tiŋ
72	he catches	tore <sup>a</sup> teŋ	pakareni tore <sup>a</sup> tiŋ	talitiŋ	tolande taliŋ	alale talit	alale talitiŋ
73	he coughs	tukureteŋ	tukuri <sup>a</sup> tiŋ	fofaŋ kitiŋ	fofaŋke	fofaŋ kiti	fofaŋ kitiŋ

		Nekgini				Neko	
74	he laughs	era teten	era kitin	ela kitin	elake	ela kiti	ela kitijan
75	he dances	sarike <sup>a</sup> ten	sarike <sup>a</sup> tin	sari kitin	sariki	sarkiti	sarkit
76	big	sakuin	sakuin	sakuin	sakuin	ekuin	sakuin
77	small	kekeka	kekeka	kekek	kekek	sumangarin	sumal
78	good	jumun	jumun	neson	nison	nisun	sulin
79	bad	we'jan	wo'jo	wijun	wijan	ripaka	we'jan
80	long	piru	piruwo	sirin	sirin	sirin	sirin
81	short	sujan	sunun	sunun	sukun	sujan	sujan
82	heavy	kitarin	kitarin	kitarin	kitarin	kitarin	kitarain
83	light	tajan	tajan	tajan	tajan	tajan	tajan
84	cold	mapumin	mapumin	tikanetin	imbamin	imbomin	sior
85	warm, hot	wanajan	wanajan	wanajan	wanaj	wanawana	wananain
86	new	kejan	kejan	kejan	kejan	keman	kemin
87	old	asin	asin	asin	asin	asin	asin
88	round	tamparirin nain	tamparira main	tamparirinin	tambaririnin	tambirnenan	tambinjeni
89	wet	tapuan	tapuan	turijin gari	imbamin	tapuwan	tapuwon
90	dry	memesen	memasin	memasin	memasain	memasain	erijan
91	full	makiret	ma'kirajan	makilai	mekalitin	kafute	kafurijan
92	road	senan	senan	senan	sinan	arapu	arapuk
93	stone	si	si	si	si	si	sisim
94	earth	nara	nara	nala	noga	nala	noka
95	sand	sakari	sakari	sakari	sagari	parnam	parnam
96	mountain	kipin	kipin	kipin	mara	kepin	uran

		Nekgini				Neko	
97	fire	te <sup>i</sup>	ti	ti	tite <sup>i</sup> ja	tite <sup>i</sup>	tite <sup>i</sup> ja
98	smoke	te <sup>i</sup> ak	ti osa	ti jusa	tite <sup>i</sup> ja os	titosa	tite <sup>i</sup> ja aso
99	ashes	koko <sup>u</sup>	ti sinaga	ti sinapu	sinapu	tanapa	tite <sup>i</sup> ja tanapa
100	sun	ata	usawa	usawa?	usawu	ama	ata
101	moon	tapuŋ	tapuŋ	tapuŋ	kalambola	tapoŋ	tapiŋ
102	star	tatu	tatu	tatu	mirisina	po <sup>i</sup> ŋ	po <sup>i</sup> ŋ
103	cloud	rata	sapaŋ	samalau	samalau	lala	sam
104	rain	<b>tupuŋ</b>	<b>tupuŋ</b>	<b>tupuŋ</b>	<b>tupuŋ</b>	<b>sona</b>	<b>wai</b>
105	wind	tikaŋ	tikaŋ	tikaŋ	senasene	senasena	jaŋ
106	water	tupuŋ	tupuŋ	tupuŋ	tupuŋ	sona	wai
107	vine	aru	aru	alu	susui	pumba	tuka kitin
108	tree	te <sup>i</sup>	ti	ti	sakaga	te <sup>i</sup>	te <sup>i</sup>
109	stick	te <sup>i</sup> takin	togoŋ	tokoŋ	sakaga takin	te <sup>i</sup> takin	te <sup>i</sup> nin
110	bark	te <sup>i</sup> toke <sup>i</sup> ŋ	ti tukin	ti tokain	sakak tokain	te <sup>i</sup> tokain	te <sup>i</sup> tokain
111	seed	te <sup>i</sup> sin	ti sin	ti sin	sakak akin	te <sup>i</sup> sin	te <sup>i</sup> akin
112	root	te <sup>i</sup> toreŋ	ti toreŋaŋ	ti toleŋ	sakak tolaŋ	te <sup>i</sup> tolejaŋ	te <sup>i</sup> tolin
113	leaf	saŋ	ti saŋ	ti saŋ	sakak saŋ	komerin	tei saŋ
114	meat	mitarin	misarin	misalin	pununan	misan	misel
115	fat	wawaŋ	sabaŋ	sabaŋ	sapaŋ	wawaŋ	wawin
116	egg	miten	miten	mitan	mitain	mitan	mitan
117	louse	imin	imin	imin	imin	imin	imin
118	feather	<b>nuŋ saŋ</b>	<b>nuŋ saŋ</b>	nuŋ junin	<b>nuŋ saŋ</b>	nuŋ junawin	nuŋ junun
119	horn	nuŋ tonggeri	sariwin	sarejaŋ	sarejaŋ	fa <sup>i</sup>	fa <sup>i</sup> jeŋ

		Nekgini				Neko	
120	wing	wiriŋ	wiriŋ	wiriŋaŋ	wiriŋ	wiriŋaŋ	wiriŋaŋ
121	claw	tamoŋ	tamoŋ	tamoŋuŋ	tamoŋ	tamiŋ	tamiŋaŋ
122	tail	nuŋ apowo	ata kiriŋ	ata kiriŋ	ata kiriŋ	ata kerin	ataŋ geriŋ
123	one	konake	konake	ko naki	kwanaki	kwa nik	kwanik
124	two	ire	irise	iri	iri	iri	iri
125	three	aropo	aropa	arap	arapa	arap	arap
126	four	paware	paware	pawole	pawoli	pawol	pawol
127	five	ati ko	ati ko	atiko	adiko	atiko	atiko
128	ten	ati iri	ati iri	ati iri	adi iri	ati iri	ati iri
129	taro	pera	pera	pele	nowaŋ	pela	pela
130	sugarcane	keta	keta	keta	kese	sinda	saŋ
131	yam	bunuwa	wanugu	wa'nu	wa'nu	wo	wo <sup>u</sup>
132	banana	anaŋ	anaŋ	anaŋ	anaŋ	anaŋ	aliŋ
133	sweet potato	embe	embe	embi	patuŋ	kalapat	kalapat
134	bean	sajuri	puti	puti	puti	sakeraŋ	bute <sup>i</sup>
135	axe	pakarik	paringis	palangis	palangis	palangis	plagis
136	knife	naŋke	naŋge	naŋgi	naŋgi	puru	silai
137	arrow	supira	jiŋ	tenaŋ	supila	kansara	jeuŋ
138	net bag	au	au	au	pemberŋ	aror	aror
139	house	ja	ja	ja	kambasi	ja?	ja
140	tobacco	aka	osu	usu	osa	osa	osa
141	morning	musiŋga	urukak	urukak	urukaka	urokak	uruok
142	afternoon	kamaŋkete	kamugak	kamaŋgak	kamaŋgak	kamaŋkit	kamaŋgaŋ

		Nekgini				Neko	
143	night	tatikon	takindom	itomgiti	itomun	utelapkit	utelap
144	yesterday	itom	itom	itom	itom	itom	itom
145	tomorrow	musija	jewun	musiji	musiju	musi	musije
146	white	sara	sara	sara	sare	sara	sara
147	black	tapuran	tapuran	tapulun	imbamin	tapulan	tapulin
148	yellow	kandata <sup>u</sup>	kandadawanak	kandadawu	kandandawan	kandada	kandanda
149	red	roranjain	roronjen	roronjen	roranjain	asuran	sinanin
150	green	katupi	tisanage	katipin	tisanag	katap	te'san matin
151	many	asowarin	asowo	asowu	asowarin	asonag	asonak
152	all	ajaso	soson	soson	wetat	kutan	kutin
153	this	na	na	na	na	na	einu
154	that	neune nu	no	no	nu	nu	einu
155	what?	ngu nekini	nekene	nekeni	nekeni	neken kit	neko
156	who?	ai kani	kagane	kakawani	kawoni	ka kawon	kawani
157	when?	nekini naru	neka naru	ngu amini	amini	neko nal	aminin
158	where?	japitano	takina	ngu takini	da	dakin	japai takin
159	yes	jo	ijo	iju	ija	jo	jo
160	no	maran	maru	malan	malan	malan	malan
161	not (he is not standing)	kuma kanajan	kuma kanetin	kum kanajan	kumakaniti	kum kaingit	jukum kanja
162	I	na	na	nanu	na	na	nana
163	you (singular)	nanu	ka	ka	ka	ka	kaka
164	he	kanu	nu ene	no	no	no	nila

		Nekgini				Neko	
165	we two (exclusive)	nekakakak	neka kaka	nekakak	na kakak	ne kakak	nenajiri
166	you two	je aijire	ja jiri	iri ŋu	<b>ai iri</b>	ne a'jiri	je'ai iri
167	they two	aijire tendakiret	ai iri ŋo keta iretekaraj	iri ŋorakŋu	ai iri ŋoraki	<b>ŋu a'jiri</b>	<b>niŋ ai iri</b>
168	we (pl exclusive)	netotoŋ	ne naked	neja	ne watati	net nak	lena
169	you (plural)	je	je naked	jeŋu	je wati	jenak	jeja
170	they (plural)	aisoŋ	ai ŋo kutaro	jaŋ ŋurakŋu	jaŋo	pun iretik	jejeo <sup>u</sup>
171	he is hungry	auriŋ pitikatu	aruŋ ja	aluŋ pitikiti	ni pariti	nu'ŋ tuktukte	niniŋ tuktukte'ja
172	he eats sugar cane	keta neteŋ	keta n'etiŋ	ni keta ni'etiŋ	kesa niti	sinda netiŋ	niŋ saŋ nitijaŋ
173	he laughs a lot	era keteŋ	era kemuatiŋ	ni elija	elamanaj	ela kit	niŋ ela kitijaŋ
174	one man stands	ai ko naka koŋai	ai ko naka kaŋeti	ai ko kaŋajaŋ	ai konak kaŋai	ai koka'ŋ kit	ai ko kwani kaŋja
175	two men stand	ai iri kaŋakaŋ	ai iri kaŋeti	ai iri kaŋakakaraŋ	ai iri kaŋakaraŋ	ai jiri kaiŋ kiti	ai iri kaŋjak
176	three men stand	ai aropo kaŋakaŋ	ai jarop kaŋetekaŋ	ai arop kaŋakaŋ	ai aropa kaŋakaraŋ	ai arap kaiŋ jetik	ai arap kaŋjak
177	the man goes	ai jutekaŋ	ai ŋu aruateŋ	ai ko alutiŋ	ai kon aluti	ai ŋu alotiŋ	ai alutijaŋ
178	the man went yesterday	ai idommukaŋ	ai itoma arojuŋ	ai ŋu itom alojuŋ	itoma alojaŋ	itom alojaŋ	ai itom alojaŋ
179	the man will go tomorrow	musi ai ubekaŋ	ai ŋu musi uwejaŋ	ai ngu musi ito alowijaŋ	musi alowijaŋ	musi alowaŋ	musi ai alowaŋ
180	the man eats the yam	ai wunuwa neteŋ	ai ŋu wanugo najaŋ	ai ŋu wainu ni'etiŋ	ai ŋu wa'no ne'ti	ai ŋu wo net	ai wo <sup>u</sup> ne'tijaŋ
181	the man ate the yam yesterday	idomu wunuwa najaŋ	ai ngu itomu wanugo najaŋ	itom ŋu wainu najaŋ	itoma wa'no najaŋ	itom wo na'jaŋ	itom ai wo <sup>u</sup> naijaŋ



		Nekgini				Neko	
182	the man will eat the yam tomorrow	musiju wunu wannewaka	musijo ai ɲu wanugo newi	musi wa'nu newikuɲ	musi wa'no newijaɲ	musi ai ɲu wo newaɲ	musi ai wo <sup>u</sup> newaɲ
183	the man hit the dog	ai ko <sup>i</sup> nu uraraɲ	ai ɲu patuwaɲ urajaɲ	ai ɲu patuwaɲ urajaɲ	ai ɲu patowaɲ uriti	ai ngu patuwaɲ urajaɲ	ai kou na urajaɲ
184	the man didn't hit the dog	ai ngu ko <sup>i</sup> na kumuraɲ	ai ɲu patuwaɲ kumo urajaɲ	ai ɲu patuwaɲ kumo urajaɲ	ai ɲu patowaɲ kuma uriti	ai patuwa kumu urajaɲ	ai kou nokum urajaɲ
185	the big man hit the little dog	ai sakuɲ ko <sup>i</sup> nu simaɲ uraɲ	ai sakuɲ patuwaɲ simaɲ urajaɲ	ai sakuɲ ɲu patuwaɲ simaɲ urajaɲ	ai sakuɲ ɲu patowaɲ simaɲ uriti	ai sakuɲ patuwa simaɲ urajaɲ	ai sakuɲ kona simiɲ urai
186	the man gave the dog to the boy	ai ɲu ko <sup>i</sup> nejai keke ngu	ai ɲu patuwaɲ simaɲ enajaɲ	ai ɲuta patuwaɲ mimotuɲ ɲu enajaɲ	ai ɲu patowaɲ simaɲ enti	ai ɲu patuwa simaɲ neka enajaɲ	ai kouna simiɲ ai suma lelaɲ
187	the man hit the dog and went	ai ɲu ko <sup>i</sup> nurewakat uteɲ	ai ɲu patuwaɲ ureta wakata arojaɲ	ai ɲu patuwaɲ urewakat utejaɲ	ai ɲu patowaɲ uret wakat aluti	ai ɲu patuwaɲ uret wataɲ alowaɲ	ai koula urep ai alojaɲ
188	the man hit the dog when the boy went	ai kuke gune ai ngu ko <sup>i</sup> nuretaɲ	ai ɲu arojaɲ patuwaɲ urajaɲ	mamotoɲ uni ai ɲu patuwaɲ urajaɲ	momotuɲ aloni patowaɲ uriti	neku ɲualoɲ ai ɲu patuwaɲ urajaɲ	neka soma alon ai koula urajaɲ
189	the man hit the dog and it went	ai ngu ko <sup>i</sup> nure nuteɲ	ai ɲu patuwaɲ ureni arojuɲ	ai ɲu patuwaɲ uren nutejeɲ	ai ɲu patuwaɲ ureni aluti	ai ɲu patuwaɲ urajaɲ patuwaɲ alowaɲ	ai koula uren koula alojaɲ
190	the man shot and ate the pig	ai ɲu po sikera neteɲ	ai ɲu po sakiret nietiɲ	ai ɲu po uret ni <sup>e</sup> tiɲ	ai ɲu po sakireni umani niti	ai ɲu po uret najaɲ	ai po uret najaɲ

Table 34. Migum and Ngaing wordlists

		Migum		Ngaing
		Lamtub	Singor	Sibog
1	head	pasu	pasu	tubanji
2	hair	dʒuga	dʒugo	meja
3	mouth	dʒugu <sup>w</sup> ab	dʒugobab	mayak
4	nose	sombe?	sumbe	nom
5	eye	ampatun	ampatun	dɛniŋ
6	neck	bisine <sup>u</sup>	busune <sup>o</sup>	wutʃuniŋ
7	belly (exterior)	sinai	sinai	awatiniŋ
8	skin	mande	mande	dagaiŋiŋ
9	knee	kabe bakum	kabe bakum	tagumat
10	ear	kuŋgalamban	kuŋgalamban	adzibi
11	tongue	muinji	mu <sup>n</sup> ji	nɛ:balin
12	tooth	bage?	bage	ma:tiŋ
13	breast (her)	au	au	keruŋ
14	hand	kulasik	kula	a:tiŋ
15	foot	kabesik	kabe sataŋwe	<b>tame</b>
16	back	badid	badid	usik
17	shoulder	kalmbu	kalmbu	mɔŋ
18	forehead	tumambul	tumambul	imuŋ
19	chin	kakai	kakai	mɛ:tak
20	elbow	kulabakum	kulabakum	guŋga:ŋ
21	thumb	kulasik inote	kula ŋadek sagai	mamiŋ
22	leg	kabe	kabe	tame
23	heart (pumps blood)	<sup>n</sup> gamu tutuite	ngompatun	buaniŋ siŋ
24	liver	ngompalaŋ	ngompalaŋ	nuik
25	bone	tutu ute	tutu	utet
26	blood	<sup>n</sup> dale	<sup>n</sup> dale	maŋgima
27	baby	nonoŋ	nonoŋ	kɔŋet

		Migum		Ngaing
28	girl	pano tangil	pano mbaras	tayara
29	boy	minfaran	walfu	ajami
30	old woman	toub pano	pano mandal	baraiŋ saguiŋ
31	old man	toub paran	paran mandal	eg saguiŋ
32	woman	pano	pano?	baraiŋ
33	man	paran	paran	ek
34	father	adʒa	adʒa	ta:si
35	mother	ana	ana	ma:ma
36	brother (older of man)	ou paran	matu	kayanin bi:ŋ
37	sister (older of man)	ou pano	matu pano	upaniŋ bi:ŋ
38	name	n <sup>i</sup> u	ɲu	wawa
39	bird	jen	i'jen	nuŋ
40	dog	ˈgoʊn	ˈgon	goni
				<i>kuma</i>
41	pig	mbuo <sup>i</sup>	mboi	bot
42	cassowary	kawar	kawar	mo:naŋ
43	wallaby	dabi?	dabi	me:raŋ
44	flying fox	malbuoŋ	malboŋ	maliboŋ
45	rat	gasuwai	kasawai	obaik
46	frog	paŋgo	paŋgo	kambiŋ
47	snake	sawai	sawai	buik
48	fish	sieb	sieb	gabuwā
49	person	<b>parande</b>	<b>sine paran</b>	
50	he sits	me <sup>i</sup> kat	nu meikoi	dʒenaŋ
51	he stands	baɖaŋ kat	nu baɖaŋ koi	gaŋgeti
52	he lies down	kinjat	nu kipoi	karati
53	he sleeps	am kirijenkat	nu am kurenpakinsoi	garaiŋ tabuk
54	he walks	taga batijet	nu tagoi	aloguti

		Migum		Ngaing
55	he bites (the dog bites the man)	<sup>n</sup> gon go paran gagawat	<sup>n</sup> gon paran gagawoi	juwija
56	he eats	ɲat	nu amej isoi	neti
57	he gives it to me	nongo sisat	nu sisoi	nunaɲ
58	he sees	no ta <sup>i</sup> wat	nu taiwoi	ɛnati
59	he comes	nomo <sup>i</sup>	nu moi	abiti
60	he says	no udiwat	nu udiwoi	jeti
61	he hears	no sat	nu soi	igati
62	he knows	<b>no so<sup>i</sup></b>	<b>nu sat</b>	igagireti
63	he drinks	<b>jaɲ jat</b>	<b>nu jaɲ noi</b>	<b>kukneti</b>
64	he hits	ulat	nu ulat	ureti
65	he kills	<b>ulat kumat</b>	<b>nu ulat kumoi</b>	<b>uriɲ umaɲi</b>
66	he dies	kumpa tambalat	nu kumat sagum	umaɲ
67	it burns	pa <sup>i</sup> awo <sup>i</sup>	pa <sup>i</sup> awoi	dɛti
68	it flies	riokat	nu rio pokoi	pururuk
69	he swims	silikat	nu silikoi	gabu alotu
70	he runs	parukat	nu farukoi	kiririɲ
71	he falls down	busukat	nu musukoi	ureti
72	he catches	tate fa sagwat	nu sagwoi	rati
73	he coughs	dʒugol tat	nu dʒugol toi	ukawa kiti
74	he laughs	ndʒukat	nun ndʒukoi	ijuma
75	he dances	kabeso <sup>i</sup>	nu kabesoi	ola
76	big	soɲgo	soɲgo	biniɲ
77	small	gadiknde	gadiknde	simanɲ
78	good	ajundaima	aju	tobi:ɲ
79	bad	ɲajo	ɲajo	buliɲ
80	long	goidʒo	gudʒo	saronɲ
81	short	katuwante	katawanɲto	kanɲanɲ
82	heavy	kubute	kubuto	gitariɲ
83	light	lalkijai	lalkajai	ta:ɲ

		Migum		Ngaing
84	cold	asote	ndenɗen kajai	matumiŋ
85	warm, hot	kakante	paŋar	atitiŋ
86	new	ndʒunte	ndʒuŋ	kema:ŋ
87	old	mburiep nome	asote	aitʃaŋ
88	round	kukelwai	kaulilwai	doŋdaliŋ
89	wet	dabute	silkijai	dabuwaŋ
90	dry	workiai	wor kijai	adʒaŋ
91	full	lawat	lawat	hak
92	road	saŋgo	saŋgo	bigu
93	stone	naŋge	naŋge	tituwat
94	earth	ɲar	ɲar	no:ga
95	sand	dʒar	dʒar	samat
96	mountain	pul	pul	tawela
97	fire	pa <sup>i</sup>	pa <sup>i</sup>	tejak
98	smoke	pa <sup>i</sup> boko?	pa <sup>i</sup> buku	bugak
99	ashes	pa <sup>i</sup> gugu	pa <sup>i</sup> kuge	muluk
100	sun	ke	ke	atet
101	moon	tambun	tambun	kamboli
102	star	jamba <sup>i</sup> pe	mbuai	tʃagarik
103	cloud	timtaem	timtaem	kaboriŋ
104	rain	kwob	kwob	<b>kuk</b>
105	wind	dʒag	dʒag	gitaŋ
106	water	jaŋ	jaŋ	kuk
107	vine	muli?	muli?	gatan
108	tree	al	al	dik
109	stick	al pai	al pa <sup>i</sup>	wisiŋ
110	bark	al ŋgarulte	al ngarol	dayaiŋ
111	seed	<b>al patunte</b>	<b>al patun</b>	ayiŋ
112	root	al bilbirte	al bilbir	doliŋ
113	leaf	we <sup>i</sup> te	al uwe	saŋ

		Migum		Ngaing
114	meat	munte	busuneutuon	oŋarak
115	fat	luonte	luonto	sabaŋ
116	egg	patunte	patun	siŋ
117	louse	jieou	neo <sup>u</sup>	imiŋ
118	feather	<b>mbante</b>	jen ban	noŋ uiŋ
119	horn	site	sikto	dʒuŋgirak
120	wing	mbante	mbanto	wiriŋ
121	claw	kula gilgelte	kula gilgel	tigowat
122	tail	muŋgate	muŋga?	ataŋet
123	one	nda <sup>i</sup> ma	nda <sup>i</sup> ma	gula
124	two	lalapa	lalapa	irisak
125	three	kiepa	kiepa	atbusak
126	four	baudipa	baudipa	<b>atbusak</b> <b>abaŋkai</b>
127	five	kulande	kulande	ati gula muk
128	ten	kulalala	kulalala	ati iri
129	taro	ŋalo	ŋalo	uni
130	sugarcane	juwa	juwa	dʒaŋ
131	yam	ŋai	ŋai	uŋ
132	banana	muŋgu?	muŋgu?	inamuk
133	sweet potato	mbak	mbak	patuŋ
134	bean	baba	asoi	tubawit
135	axe	palagis	palagis	paŋaŋis
136	knife	silai	silai	silaik
137	arrow	tun	ŋandʒar	naŋaŋ
138	net bag	pale?	pale?	pimbaŋ
139	house	wande?	wande?	jumbaŋ
140	tobacco	boko	boko	ak
141	morning	sumel aijo	sumel	itumiŋasi
142	afternoon	juwai nome	juwai none	ugamaŋ
143	night	bubur	bubur	idoma

		Migum		Ngaing
144	yesterday	fuope	forpe	wɛjaŋ
145	tomorrow	jambo?	jambo?	kɛp
146	white	kaukijai	kaukijai	ka:k
147	black	gugut kijai	gugut kijai	uma:
148	yellow	kalonj kijai	kalonj kijai	dʒaŋam
149	red	lulu kijai	lulu kijai	asi:k
150	green	kienkiai	kienkijai	atabat
151	many	"gatomien	"gatomien	tʃawin
152	all	gadzuonma	gadzuon	kutaŋ
153	this	ame aro	eno	ŋa
154	that	e aro	ero	ŋɔ
155	what?	amarande	amerande	ŋain
156	who?	imaŋgo	ima	gawoni
157	when?	amolam	amolam	dayanak
158	where?	amoka	amoka	dana
159	yes	aijo	au	ia
160	no	kaluom	kalom	juŋ
161	not (he is not standing)	no badaŋ ka'ja <sup>i</sup> kalom	no badaŋ kijai kalom	
162	I	i?	iŋga	na
163	you (singular)	iŋgande	ne	ga
164	he	no?	no?	ŋɔ
165	we two (exclusive)	tandala?	sila	<b>niŋ irisak</b>
166	you two	sila?	tandala?	<b>dʒiŋ iri</b>
167	they two	nandala	nundula	<b>iri</b>
168	we (pl exclusive)	sini gadzuon	sina gadʒon	niŋ
169	you (plural)	tani gadzuon	tane	dʒiŋ
170	they (plural)	nane?	nane?	morijaŋ
171	he is hungry	kamwat	kamwoi	
172	he eats sugar cane	juwain pat	no juwa niso	

		Migum		Ngaing
173	he laughs a lot	ndʒukat	nu ndʒukoi	
174	one man stands	paran nda'ma badanʒkat	parande badanʒkoi	
175	two men stand	paran lala badanʒkat	paran lala badanʒ kakinʒ	
176	three men stand	paran kijepa badanʒkat	paran kiepa badanʒ kakinʒ	
177	the man goes	paran kijet	paran koi	
178	the man went yesterday	kwope paran kijet	kwope paran kijet	
179	the man will go tomorrow	jambo suom paran kajau	jambo sum paran kejau	
180	the man eats the yam	paran jai niso	paran jai niso	
181	the man ate the yam yesterday	kwope paran jai jat	kwope paran jai jat	
182	the man will eat the yam tomorrow	jambo paran jai jao	jambo som paran jai jau	
183	the man hit the dog	paran ngoun ulat	paran ngon ulat	
184	the man didn't hit the dog	paran ngoun ulai kalom	paran ngon ulai kalom	
185	the big man hit the little dog	paran songo ngoun gadikde ulat	paran sungo <sup>n</sup> gon gadiknde ulat	
186	the man gave the dog to the boy	paran ngoun mingadikde tuwat	paran ngon min gadikde tuwat	
187	the man hit the dog and went	paran ngoun ulpa kiet	paran <sup>n</sup> gon ulpa kiet	
188	the man hit the dog when the boy went	min gadikde kiet so paran ngoun ulat	sain min gadiknde kiet paran ngon ulat	
189	the man hit the dog and it went	paran ngoun uloi ngoun kiet	paran ngon ulat ngon kiet	
190	the man shot and ate the pig	paran mboi ulpa jat	paran mboi sepa jat	



## A.2 Phonetic Inventory

Table 35. Yabong phonetic inventory

	Bilabial	Labio-dental	Alveolar	Post-alveolar	Palatal	Velar	Glottal
Plosive	p b		t d			k g	ʔ
Fricative		f v	s				
Nasal	m		n			ŋ	
Trill			r				
Lateral Approximant			l				
Approximant	w				j		

Table 36. Migum phonetic inventory

	Bilabial	Labio-dental	Alveolar	Post-alveolar	Palatal	Velar	Glottal
Plosive	p b		t d			k g	ʔ
Fricative		f	s				
Affricate				dʒ			
Nasal	m		n		ɲ	ŋ	
Trill			r				
Lateral Approximant			l				
Approximant	w				j		

Table 37. Nekgini phonetic inventory

	Bilabial	Labio-dental	Alveolar	Post-alveolar	Palatal	Velar	Glottal
Plosive	p b		t d			k g	ʔ
Fricative		f v	s				h
Nasal	m		n			ŋ	
Trill			r				
Lateral Approximant			l				
Approximant	w				j		

Table 38. Neko phonetic inventory

	Bilabial	Labio-dental	Alveolar	Post-alveolar	Palatal	Velar	Glottal
Plosive	p b		t d			k g	ʔ
Fricative		f	s				
Nasal	m		n			ŋ	
Trill			r				
Lateral Approximant			l				
Approximant	w				j		

### A.3 Vowel clusters

#### *Yabong*

ae, ai, ao, au, ei, eo, eu, ia, oi, ou, ua, ue, ui, aie, auo, eai, uoi

#### *Migum*

ae, ai, au, ea, ei, eo, eu, ie, io, iu, oi, ou, ui, uo, aia, iai, uoi, ieou

#### *Nekgini*

ai, au, ea, ei, ia, oi, ou, ua, ue, ui, eai, eia, aiu

#### *Neko*

ai, ei, eu, ie, io, oi, ui, eou

### A.4 Example sentences

#### *Yabong (items 177–179, 175–176, Baded village)*

- (1) iri      asi-dem  
man   go-3.SG.PRES  
'The man goes.'
- (2) abanj      iri      asi-rem  
yesterday   man   go-3.SG.PAST  
'The man went yesterday.'
- (3) mandajna      asi-udem  
tomorrow      go-3.SG.FUT  
'The man will go tomorrow.'
- (4) iri      abde      dik-ribik  
man   two      stand-3.DUAL  
'Two men stand.'
- (5) iri      abdebe      dik-ribin  
man   three      stand-3.PL  
'Three men stand.'

#### *Migum (items 180-182, 176, Singor village)*

- (1) paran   jai      nis-oi  
man   yam   eat-3.SG.PRES  
'The man eats the yam.'

- (2) kwope paran jai n-at  
yesterday man yam eat-3.SG.PAST  
'The man ate the yam yesterday.'
- (3) jambo som paran jai n-au  
tomorrow ? man yam eat-3.SG.FUT  
'The man will eat the yam tomorrow.'
- (4) paran kiepa badanj-akiŋ  
man three stand-3.PL  
'Three men stand.'

*Nekgini (items 177-179, Reite village, item 176, Sorang and Pateng villages)*

- (1) ai ko alu-tiŋ  
man one go-3.SG.PRES  
'The man goes.'
- (2) ai ŋu itom alo-juŋ  
man he yesterday go-3.SG.PAST  
'The man went yesterday.'
- (3) ai ngu musi ito Alo-wijaŋ  
man he tomorrow ? go-3.SG.FUT  
'The man will go tomorrow.'
- (4) ai aropo kaŋa-kaŋ  
man three stand-3.PL  
'Three men stand.'
- (5) ai aropa kaŋa-karaŋ  
man three stand-3.PL  
'Three men stand.'

*Neko (items 177-179, 176, Warai village)*

- (1) ai alu-tijaŋ  
man go-3.SG.PRES  
'The man goes.'
- (2) ai itom alo-jaŋ  
man yesterday go-3.SG.PAST  
'The man went yesterday.'

- (3) musi ai alo-waŋ  
tomorrow man go-3.SG.FUT  
'The man will go tomorrow.'
- (4) ai arap kaŋ-jak  
man three stand-3.PL  
'Three men stand.'

#### A.5 Exclusions and exceptions

Item #	Gloss	Excluded from comparison	Reason for no entry or disqualification	Exception to *Blair's standard	Reason for exception or other comment
14	hand			mn	Vowel elision
14	hand			g	Unexplained morpheme
15	foot	bdkln	Same as word for 'leg'		
17	shoulder			i	Unexplained morpheme
19	chin			d	Unexplained morpheme
21	thumb			lmn	Probable change in morpheme order
24	liver			n	Metathesis
28	girl	n	'baby' + 'woman'	m	Absence of unexplained morpheme
29	boy	mn	Same as word for 'baby'		
34	father			f	Prenasalization
38	name			a	Vowel insertion
38	name			m	Reduplication
46	frog			n	Reduplication
49	person	all lists	Same as word for 'man'		
50	he sits			d	Unexplained morpheme
53	he sleeps			ahikl mn	Unexplained morpheme
54	he walks			k	Unexplained morpheme
55	he bites			a	Unexplained morpheme

56	he eats			ce	Unexplained morpheme
60	he says			j	Unexplained morpheme
61				d	Unexplained morpheme
62	he knows	acdefghi jklmn	Same as 'he hears'		
63	he drinks	all lists	'he eats' + 'water'		
65	he kills	all lists	'he hits' + 'he dies'		
66	he dies			bcde	Unexplained morpheme
71	he falls down			ce	Unexplained morpheme
72	he catches			fjlmn	Unexplained morpheme
76	big			d	Unexplained morpheme
85	warm, hot			lm	Unexplained morpheme
87	old			d	Unexplained morpheme
89	wet	cef	'water' + 'all'		
90	dry	e	'water' + 'no'		
93	stone			n	Unexplained morpheme
98	smoke			n	Metathesis
98	smoke			l	Vowel elision
103	cloud			n	Unexplained morpheme
104	rain	ijklmn	Same as word for 'water'		
111	seed	abcdefg h	'tree' + 'egg'		
112	root			j	Unexplained morpheme
113	leaf			bc	Metathesis
114	meat	acef	Same as word for 'fish'		
118	feather	abdefhjl	'bird' + 'leaf'		
118	feather	g	Same as word for 'wing'		
119	horn			n	Unexplained morpheme
120	wing			de	Unexplained morpheme
124	two			j	Unexplained morpheme
141	morning			g	Unexplained morpheme

141	morning			l	Reduplication
143	night			kl	Unexplained morpheme
147	black			be	Unexplained morpheme
148	yellow			jl	Unexplained morpheme
151	many			il	Unexplained morpheme
152	all			d	Unexplained morpheme
154	that			i	Unexplained morpheme
155	what?			b	Vowel insertion
156	who?			m	Reduplication
156	who?			dg	Unexplained morpheme
159	yes			l	Vowel cluster
162	I			dkn	Unexplained morpheme
163	you (sing)			n	Reduplication
164	he	d	'we' + 'two'	ij	Unexplained morphemes
165	we two	d	Probably means 'you two'		
165	we two	n	'we' + 'two'		
166	you two	ad	Probably means 'we'	m	Unexplained morphemes
166	you two	l	'man' + 'two'		
167	they two	fmn	No new morphemes		
169	you (pl.)	d	Same as word for 'we'		
170	they (pl.)			efk	Unexplained morphemes

\* Blair 1990

Key: Village excluded  
or exceptions

a = Masi  
b = Baded  
c = Baraking  
d = Bidua  
e = Samung

f = Basor  
g = Lamtub  
h = Singor  
i = Sorang  
j = Asang

k = Reite  
l = Pateng  
m = Damoing  
n = Warai

## A.6 Possible affixes excluded from lexicostatistical comparison

### *Yabong*

-dem	3rd singular present
-ribik	3rd dual present
-ribiŋ	3rd plural present
-rem	3rd singular past
-udem	3rd singular future
-p	possessive marker
-t	possessive
-m	possessive

### *Migum*

-oi	3rd singular present
-aking	3rd singular plural
-at	3rd singular past
-au	3rd singular future
-te	?

### *Nekgini*

-tiŋ	3rd singular present
-teŋ	3rd singular present
-kaŋ	3rd plural present
-karaŋ	3rd plural present
-jaŋ	3rd singular past
-wiŋaŋ	3rd singular future
-niŋ	possessive

### *Neko*

-tiŋaŋ	3rd singular present
-jak	3rd plural present
-jaŋ	3rd singular past
-waŋ	3rd singular future
-niŋ	possessive



### A.7 Percentage of similarity between villages

Masi																
Bidu	81															
Gogo	88	84														
Bara	80	80	86													
Sam	85	86	92	93												
Bade	71	76	80	84	81											
Lamt	6	7	8	7	7	8										
Sing	6	8	9	8	9	8	84									
Sora	6	4	4	3	4	3	5	5								
Asan	4	4	4	4	6	3	6	6	79							
Reit	3	3	3	3	3	2	4	4	73	84						
Pate	3	3	3	3	3	2	3	3	63	72	79					
Dam	4	4	4	3	4	4	4	4	59	62	67	62				
Wara	3	4	3	3	3	4	4	5	54	57	63	58	78			
Ngai	3	2	3	3	3	3	4	4	27	30	32	35	27	29		
	Ma	Bi	Go	Bar	Sa	Ba	La	Si	So	As	Re	Pa	Da	Wa	Ng	

## Appendix B. Welcoming ceremony

During a number of our visits to different mountain villages in the Yabong and Nekgini language areas, the people welcomed us with traditional singing and dancing. As directed, we approached a fence<sup>29</sup> and were greeted with a challenge from the other side: “Who are you? What do you want?”<sup>30</sup> After we had explained ourselves, the entrance was cleared for us to walk through and we were presented with flower necklaces while women used traditional red paint to colour our faces. A procession of people performing a traditional ceremony would then lead us to a place where we could rest, drink coconut juice and sometimes eat bananas, cucumbers and papayas.

The people performing the ceremony painted their bodies with traditional red paint and wore traditional garments. The men wore a loin cloth or sometimes a grass skirt and a headdress decorated with bird feathers. In some villages performers wore bodily decorations made out of leaves and necklaces or headwear decorated with animal teeth.<sup>31</sup> In one village, all the men wore a necklace featuring pig tusks. The women wore grass skirts. The only musical instrument used was a small drum made out of bush materials.

After the traditional part of the welcome, some villages sang a song accompanied by guitars. When the ceremony was over, a leader from the village would formally welcome us, give us time to eat and drink the gifts of food, coconut and water. They would then allow us to begin data collection.

<sup>29</sup>They had erected a fence (Papua New Guinea villages do not normally have fences around them) outside the village (made out of sago leaves and other bush material) in order to provide a symbolic entrance to the village.

<sup>30</sup>They called out in Tok Pisin, except once that was in the local language and was translated for us.

<sup>31</sup>These may have been shark or dog teeth.

## Appendix C. Language use data

The following tables show the responses given to language use questions.

Table 39. Yabong language use

Yabong villages		Masi village (middle aged men)		Bidua village mixed gender/age		Basor village (middle aged men)		Baded village (men-mixed ages)		
What languages do you use when:		Yabong	Tok Pisin	Yabong	Tok Pisin	Yabong	Tok Pisin	Yabong	Tok Pisin	Karo
Arguing with family		X		X		X		X	X	X
Praying at home			X	X		X			X	
Organizing wedding or funeral feasts		X		X		X		X	X	
At the market			X (at the coast)	(No market)			X	X	X	
Joking		X		X		X			X	
Playing sports		X		X		X		X	X	
Outsiders who know your language			X	X	X	X	X	X		
Outsiders who do not know your language			X		X		X		X	
Working court			X		X		X		X	
Trans-actions in town	You go to town?		X		X		X		X	
	Most people use on the way?		X		X		X	X	X	
	Most used at town's market?		X		X		X		X	
	Most people use in stores?		X		X		X		X	

Table 40. Migum language use

Migum villages		Lamtub village (mixed gender/age)		Singor village mixed gender/age	
What languages do you use when:		Migum	Tok Pisin	Migum	Tok Pisin
Arguing with family		X	X	X	X
Praying at home			X		X
Organizing wedding or funeral feasts		X	X		X
At the market			X		X
Joking		X	X	X	X
Playing sports		X	X	X	X
Outsiders who know your language		X	X	X	X
Outsiders who do not know your language			X		X
Working court			X		X
Trans-actions in town	You go to town?		X		X
	Most people use on the way?		X	X	X
	Most used at town's market?		X		X
	Most people use in stores?		X		X

Table 41. Nekgini language use

Nekgini villages		Sorang village (middle aged men)		Asang village (middle aged men)		Reite village (middle aged men)		Serieng village (Leading men)	
What languages do you use when:		Nekgini	Tok Pisin	Nekgini	Tok Pisin	Nekgini	Tok Pisin	Nekgini	Tok Pisin
Arguing with family		X		X		X		X	X
Praying at home		X		X		X			X
Organizing wedding or funeral feasts		X		X		X		X	X
At the market		X	X	X	X	X	X	X	X
Joking		X		X		X	X	X	X
Playing sports		X	X	X	X	X	X	X	X
Outsiders who know your language		NR	NR	NR	NR	NR	NR	NR	NR
Outsiders who do not know your language			X		X		X		X
Working court			X		X		X		X
Transactions in town	You go to town?		X		X		X		X
	Most people use on the way?		X		X	X	X		X
	Most used at town's market?		X		X		X		X
	Most people use in stores?		X		X		X		X

Table 42. Neko language use

Neko villages		Damoing village (men & women)		Warai village (middle aged men)	
What languages do you use when:		Neko	Tok Pisin	Neko	Tok Pisin
Arguing with family		X	X	X	X
Praying at home		X	X	X	X
Organizing wedding or funeral feasts		X	X	X	X
At the market		X	X	X	X
Joking		X	X	X	X
Playing sports		X	X	X	X
Outsiders who know your language		NR	NR	X	
Outsiders who do not know your language			X		X
Working court			X		X
Trans-actions in town	You go to town?		X	X	X
	Most people use on the way?	X	X	X	X
	Most used at town's market?		X		X
	Most people use in stores?		X		X

## Appendix D. Sociolinguistic interview questionnaires

### D.1 Language use questionnaire

LANGUAGE USE					
Village _____	Language _____				
Province _____	Date _____				
Researcher _____	Group composition _____				
<p><b>Instructions:</b></p> <p>This questionnaire is designed to find out who speaks what language, to whom, and in what circumstances. This is extremely important, as the more situations in which the tok ples is used exclusively, or mostly, by most people, the stronger that language is and hence the more likely to continue. It also touches on identification of the local language, its dialects; relative prestige of local varieties spoken, and presence and/or desire for literature in the vernacular.</p> <p><b>Sampling:</b> In order to get this information you could ask a group that is representative of the language group, i.e. there should be some male, some female, some old, some young etc. From among the group consciously select at least one individual per age/gender grouping and concentrate on their answers, noting them on the form. At the same time note anything that the group disagrees upon. Make sure to get background information on each of your "representatives." Find out whether they come from this particular village and if their parents came from this particular village. If not, then the answers that they may have provided on behalf of the group are very likely to be void. Minimally your sampling should include four people: one older male, one older female, one young male and one young female. This way you will get a more accurate picture of intersex and intergenerational diachronic changes of language use. See the suggested categories for the chart of Adult's Language Use (pg. 3).</p> <p><b>Aim:</b> Your aim should be to get a good overview of all the different languages that are used at this particular location.</p> <p><b>Observation:</b> It is also extremely important that you take careful note of what is actually happening in the village with respect to language use. You should listen for, and try to quantify, instances of people (especially children) mixing languages, either using borrowed words, or switching from one language to another for larger segments of discourse. Note the languages involved, the people who are doing it, who they are talking to at the time, and the topic of and/or situation in which the conversation is occurring. The more information of this sort you can observe the better.</p> <p><b>Hints:</b> When asking the questions below, note the order in which languages are mentioned, this may indicate relative prestige. Don't be surprised if more than one language is mentioned for just one event. It is significant when only one language is mentioned consistently, especially if that language is the Tok Ples — but note all other languages mentioned too. In this way you may be documenting a shift of language attitude and/or language use in process.</p> <p>Where appropriate, the questionnaire is set out in groups of questions, each group followed by a chart representing those questions. This is designed to simplify the process of recording results.</p>					
<p><b>Language Name</b></p> <p>Name of people group: _____</p> <p>Name of language: _____</p> <p>Other name(s) of language: _____</p> <p>Who uses these other names? _____</p> <p>Which name(s) do you prefer? _____</p> <p>List villages in language group _____</p>					
<p><b>Reported Dialect Groupings</b> (<i>Map the boundaries of this language group's land</i>)</p> <p>What villages speak just like you? _____</p> <p>_____</p> <p>_____</p>					
Dialect name	Village(s) in dialect	Population	Can you understand?	6/7 year old understand?	Rank ease of understanding
<p><b>Relative Prestige (Place/Dialect/Language)</b></p> <p>Where is the purest form of your language spoken? _____</p> <p>Where is the second purest form of your language spoken? _____</p> <p>What makes it the purest form? _____</p>					

Do people from neighbouring languages learn your language? \_\_\_\_ Which dialects? \_\_\_\_\_

Has anything been written in your language? \_\_\_\_ Title(s)? \_\_\_\_\_

Radio programmes in your language: \_\_\_\_\_

Which languages do most people around here learn? Why? \_\_\_\_\_

### Bilingualism & Bidialectalism

What languages do you speak or understand? (Speak = able to speak, Hear = hear/understand **but not speak**)

(Fill in with an "r" for reported data, and an "o" for observed data. Try to get both.)

Languages & Dialects		Young Men	Men (kids in home)	Old Men	Young Women	Women (kids in home)	Old Women	Boys	Girls
Local	Speak								
	Hear								
Tok Pisin	Speak								
	Hear								
English	Speak								
	Hear								
	Speak								
	Hear								
	Speak								
	Hear								
	Speak								
	Hear								
	Speak								
	Hear								
	Speak								
	Hear								
	Speak								
	Hear								
	Speak								
	Hear								

### Adults' Language Use

What languages do [see chart] use when speaking to [see chart]?

(Fill in with an "r" for reported data, and an "o" for observed data. Try to get both.)

**ym** = young man

**yw** = young woman

**mm** = married man with children at home

**mw** = married woman with children at home

**om** = old man

**ow** = old woman

**Men**

Group composition:	Local			Pidgin			English											
	ym	mm	om	ym	mm	om	ym	mm	om	ym	mm	om	ym	mm	om	ym	mm	om
You (pl) to...																		
...your parents																		
...your bros & sisters																		
...your wife																		
...teach your (grand) kids																		
...scold your (grand) kids																		
Your wife to your kids																		
Your parents to your kids																		
Your parents to you																		

**Women**

Group Composition:	Local			Pidgin			English											
	yw	mw	ow	yw	mw	ow	yw	mw	ow	yw	mw	ow	yw	mw	ow	yw	mw	ow
You (pl) to...																		
...your parents																		
...your bros & sisters																		
...your husband																		
...teach your (grand) kids																		
...scold your (grand) kids																		
Your husband to your kids																		
Your parents to your kids																		
Your parents to you																		

Group Composition: _____		Local	Pidgin	English					
<b>What languages do you use when:</b>									
Arguing w/ family									
Praying @ home									
Organizing wedding or funeral feasts									
At the market									
Joking									
Playing sports									
Outsiders who know your language									
Outsiders who don't know your language									
Working court									
<b>Trans- actions in town</b>	you go to town?								
	Most people use on the way?								
	Most used at town's market?								
	Most people use in stores?								

(Fill in with an "r" for reported data and an "o" for observed data.)



### Children's Language Use

What languages do your children use when speaking [see list]?

(Fill in with an "r" for reported data and an "o" for observed data. Try to get both.)

Group Composition	Local	Pidgin	English						
To grandparents									
To parents									
To bros & sisters									
w/ playmates									
when angry									

What language do children in this village learn first? \_\_\_\_\_

Before they go to school, do the children in this village understand/use tok ples well? \_\_\_ Yes \_\_\_ No

Do they speak it as well as you? \_\_\_\_\_

Which languages do they mix with tok ples? \_\_\_\_\_

How much? \_\_\_\_\_

What do you think about children mixing languages? \_\_\_\_\_

(Observe children playing. What languages do they use?) \_\_\_\_\_

### Language Attitudes

What language(s) do you like to listen to stories in? \_\_\_\_\_

What languages do you want your children to know well? \_\_\_\_\_

What language do you think your children will use when they grow up? \_\_\_\_\_

(If not the traditional language) What do you think of this? \_\_\_\_\_

When your grandchildren become adults what language(s) do you think they will speak to their children? \_\_\_\_\_

(If the tok ples is not in the list) Why do you think they will speak (supply languages listed)? \_\_\_\_\_



**Accessibility and Transport**

Get GPS coordinates for possible chopper pads

Is there an airstrip near here? How long does it take to get there? \_\_\_\_\_

Is the airstrip still in use? \_\_\_\_\_ If not, how long since it was used? \_\_\_\_\_

Are there local people who have flown in an aeroplane? (If so) Who? \_\_\_\_\_

When did they last fly somewhere? \_\_\_\_\_

Where to and at what rates? \_\_\_\_\_

Where do you go to by road? \_\_\_\_\_

What is the quality of the road? \_\_\_\_\_

(Add your own observations \_\_\_\_\_)

How long does it take to get to the nearest PMV stop? \_\_\_\_\_

What routes do PMVs take in the area? \_\_\_\_\_

At what rates? How frequently? \_\_\_\_\_

How many people use the PMVs? \_\_\_\_\_

Are there people in this village that own private cars/PMVs? \_\_\_\_\_

How often are these private cars used? \_\_\_\_\_

(If appropriate) What are the frequently used water routes? \_\_\_\_\_

What kind of boats do you use? (canoe, outrigger, ships, dinghies) \_\_\_\_\_

Are any locally (privately) owned? If so by whom? \_\_\_\_\_

Are boats used like PMVs? \_\_\_\_\_

(If so) At what rates? \_\_\_\_\_

How many people use these PMV-boats? \_\_\_\_\_

Which villages do you normally go to by path? \_\_\_\_\_

Are there any trails not being used right now? \_\_\_\_\_ Why? \_\_\_\_\_

(Add your own observations \_\_\_\_\_)

When you walk for more than one day, where do you overnight? \_\_\_\_\_

**Supply Needs**

How many trade store(s)/canteens are in your village? \_\_\_\_\_ (if 0) Where is the nearest trade store/canteen? \_\_\_\_\_

How long has it been here? \_\_\_\_\_

Where does it get its supplies? \_\_\_\_\_

How often does it run out of supplies? \_\_\_\_\_

What are the things you can always buy there? \_\_\_\_\_

Are there things that are difficult to get? \_\_\_\_\_

When you go to town, which town do you usually go to? \_\_\_\_\_

Who goes to town (Men/Women/Young people/Whole families)? \_\_\_\_\_

For what purpose do they go (e.g. buying, selling, education, work, health, visiting)? \_\_\_\_\_

How do you get there? \_\_\_\_\_

How long does the trip to town take for men only? \_\_\_\_\_

How long does the trip take for women and children? \_\_\_\_\_

How often do you go? \_\_\_\_\_

What other places can you buy things without going to town? \_\_\_\_\_

**Medical Needs**

Which aid post(s) or health centre do you use? \_\_\_\_\_

How long has it been here? \_\_\_\_\_

Where does it get its supplies? \_\_\_\_\_

What can you always get there? \_\_\_\_\_

How far away is it? \_\_\_\_\_

How often is it open? \_\_\_\_\_

Who are your health workers (names):

Nursing sister \_\_\_\_\_ Aid Post Orderly \_\_\_\_\_

Village Birth Assistant \_\_\_\_\_ Community Health Worker \_\_\_\_\_

Where are they from? \_\_\_\_\_

What language(s) do they speak? \_\_\_\_\_

(If yes) What language(s) does he speak when working? \_\_\_\_\_

What language does he speak when he's in his village but not working at the aid post? \_\_\_\_\_

What language(s) do you use at the Aid Post \_\_\_\_\_

Have any health workers visited the village? \_\_\_\_\_

For what reasons? \_\_\_\_\_

What are the main sicknesses? \_\_\_\_\_

\_\_\_\_\_ Sanguma? \_\_\_\_\_

If people need to go to the hospital or Health Centre, where do they go? \_\_\_\_\_

What language(s) do they speak while at the subcentre? \_\_\_\_\_

Are there traditional healers in the village? \_\_\_\_\_

Do people usually go to the traditional healers or aid post first? \_\_\_\_\_

What is Tok Ples for "healer"? \_\_\_\_\_

**Commercial Ventures**

Are there any "big" businesses in the area (timber, rubber, plantations, mines, fisheries, etc)? \_\_\_\_\_

What are the names of the businesses? \_\_\_\_\_

What do they make/mine/produce? \_\_\_\_\_

When did they come to the area? \_\_\_\_\_

How have they helped you? \_\_\_\_\_

How many of your people work there? \_\_\_\_\_

What jobs do they have? \_\_\_\_\_

What languages do they use there? \_\_\_\_\_

Do people from other areas work there? From where? \_\_\_\_\_

What language(s) do they speak when they talk to you? \_\_\_\_\_

**Local Businesses**

How do people earn money here (e.g. markets, PMV, private plantations, sell things)? \_\_\_\_\_

### Contacts with Other Languages

When you go to town, what villages do you pass through on the way?

<b>Villages:</b>						
<b>Language:</b>						
<b>Language you use:</b>						

### Trade

In the past, were there people from another language that you used to trade with? \_\_\_\_\_

\_\_\_\_\_

Do you still trade with these people? \_\_\_\_\_

(If so) What language do you use when trading with these people? \_\_\_\_\_

Do many people visit this village? \_\_\_\_\_

What for? \_\_\_\_\_

	Who visits?	Why do they come?	Know local lang?	Lang used when visiting
<b>Church leaders</b>				
<b>Government members</b>				
<b>Other Government people</b>				
<b>School teachers</b>				
<b>Relatives</b>				
(Other)				

### Disputes, Compensation and Crime

*The aim of this section is to find out about the security situation with respect to other groups coming into the area and demanding compensation or other forms of payment. This may include "raskol" activity.*

Which groups were traditionally your enemies? \_\_\_\_\_

Do you do anything with them these days? (What?) \_\_\_\_\_

Do you have disputes with neighbouring language groups these days? \_\_\_\_\_

How are they handled? \_\_\_\_\_

Do any of the neighbouring groups ever come asking for compensation? \_\_\_\_\_

What for? \_\_\_\_\_

How do they enforce their claims? Police, guns, traditional weapons, etc? \_\_\_\_\_

What happens if you refuse to pay? \_\_\_\_\_

Do you have many raskol problems around here? \_\_\_\_\_

When was the latest incident? \_\_\_\_\_

What happened? \_\_\_\_\_

Has anyone in this village taken a criminal to court? \_\_\_\_\_

When? For what crime? \_\_\_\_\_

What was the result? \_\_\_\_\_

### D.3 Culture questionnaire

<b>CULTURE &amp; SOCIETY</b>							
Village _____	Language _____						
Province _____	Date _____						
Researcher _____	Group Composition _____						
<i>The purpose of this questionnaire is to explore the cultural supports for the use of the traditional language. Questions that are indented are dependent on previous questions, and may need to be modified before asking, or not asked at all. The questions should be asked of a group NOT an individual. The group should be as representative of the language group as possible, i.e. there should be some male, some female, some old, some young.</i>							
Composition of responding group: _____							
<b>Material Evidences</b>							
(Observation) Are there different types of buildings in the village (family houses, long house, men's house, hauswin)? _____							
What distinguishes you from other groups? (pottery, carving, garden, hunting/fishing, dress, canoe, house, worship)							
	pottery	carving	garden/ hunt/fish	dress	Canoe/house	worship	Other
Who made them?							
Still teach kids/youth?							
Who does it the same?							
Who does it different?							
What material do the women use for making bilums/baskets, grass skirts and mats? _____ Do teenage girls know how to make bilums/baskets, and mats? _____ Do you still make traditional instruments (garamut, kundu, flutes, etc.)? _____ (If so) Do you teach your children how to make these? _____							
What kinds of outside things (western goods) do they have? (radio, 2 way radio, generator, Coleman, water tanks, tools, etc.) Reported _____ Observed _____							
Do you buy material to build houses (nails, roofing iron)? Reported _____ Observed _____							
How many buildings in the village have electricity? _____							
<b>Social Practices - Social Organization</b>							
Reported Tok Ples for clan: _____							
Reported Definition of clan: _____							
Are there different levels of clan? _____							
Which clans cross village lines? _____							
Which clans cross language lines? _____							
Which clans cross dialect lines? _____							
Names of the clans in this village: _____							
Does each clan have a chief? _____							
Their job: _____							
Who is the overall chief? _____							
His job: _____							
If two clans have a dispute, how is the matter settled? _____							
What are the things you cannot do with other clan members? (eg marriage) _____							
What are the things you can only do with other clan members? (eg sister exchange) _____							

Do you ever work together with other villages? Which villages? \_\_\_\_\_

(If yes) When you work together, who is in charge? \_\_\_\_\_

Of all your customs, which are the most important? \_\_\_\_\_

Ward councilor name/clan/village: \_\_\_\_\_

His job: \_\_\_\_\_

Do church/traditional/government leaders agree/work together? \_\_\_\_\_

Highest authority: \_\_\_\_\_

How has attitude to leadership changed? \_\_\_\_\_

### Disputes and Warfare

Who were your traditional enemies? \_\_\_\_\_

Location \_\_\_\_\_

Do you have new enemies? \_\_\_\_\_

Location \_\_\_\_\_

How do you handle these disputes now? \_\_\_\_\_

### Land

Has this ground always been yours? \_\_\_\_\_

Who owns the ground? \_\_\_\_\_

Who can inherit ground from whom? \_\_\_\_\_

Are there fights about ground? \_\_\_\_\_ Who with? \_\_\_\_\_

Where is your water source? \_\_\_\_\_

When do you run out of water? \_\_\_\_\_

### Rites of Passage *(Note that you may be limited in what you can appropriately ask by your gender)*

Do you have initiation rites for boys when they become men? \_\_\_\_\_

When were the last traditional initiation rites held when a boy becomes a man? \_\_\_\_\_

*(If appropriate)* At what age do boys move into the men's house? \_\_\_\_\_

*(Make observations of living patterns — family houses, clan houses, married men's houses)*

Do the women have initiation rites for the girls? \_\_\_\_\_

When a baby is born, when is it named? \_\_\_\_\_

What do you do to present the baby to the community? \_\_\_\_\_

Who tells the traditional stories to the children? \_\_\_\_\_

*(Try to elicit a traditional story from people of varying ages)*

What are the tasks of younger children? \_\_\_\_\_ Do older kids do these too? \_\_\_\_\_

### Traditional Festivals

When do you have feasts?

\_\_\_\_\_ Weddings \_\_\_\_\_ Funerals \_\_\_\_\_ Pig Exchanges \_\_\_\_\_ Harvest \_\_\_\_\_ Church openings

Other \_\_\_\_\_

Do you have traditional singsings? \_\_\_\_\_ Tok Ples names \_\_\_\_\_

What language(s) are the words in? \_\_\_\_\_

What is the "work" of the singsings? \_\_\_\_\_

When was your last singsing? \_\_\_\_\_

Are singsings/bilas shared over clan/village/dialect/province? Details: \_\_\_\_\_

**Magic** (Note: This may be a sensitive topic.)

If a man dies, what do you do to determine the cause? (askim mambu, pulim mambu) \_\_\_\_\_

If a man likes a woman and wants to make her like him, what can he do? \_\_\_\_\_

What can you do to help good hunting/fishing/gardening/diving/tok tok/weather? \_\_\_\_\_

Do you leave your rubbish (buai skin/kaikai) where people can take them? \_\_\_\_\_

When do you get afraid? (strange dog comes, bay flies around house, insect cries) \_\_\_\_\_

Both men & women do sanguma? \_\_\_\_\_ Inherited? \_\_\_\_\_

What do people do when they know a person has done sanguma? \_\_\_\_\_

What do Christians do to protect themselves against sanguma? \_\_\_\_\_

Tok Ples for Marila: \_\_\_\_\_

Definition of Marila: \_\_\_\_\_

Tok Ples for Sanguma \_\_\_\_\_

Definition for Sanguma \_\_\_\_\_

**Marriage**

How old should a man be before he can marry? \_\_\_\_\_

How old should a woman be before she can marry? \_\_\_\_\_

How does one arrange a marriage? \_\_\_\_\_

Is there a bride price to be paid? If so, who pays it? \_\_\_\_\_

What things are used as part of the bride price? \_\_\_\_\_



## D.4 Education questionnaire

<b>EDUCATION QUESTIONNAIRE</b>					
<p><i>This questionnaire is to be used to elicit information on the education situation from each <b>school headmaster</b> in the area. It will also give information about the potential impact of education on the area, and on language use, as well as possibly helping to identify potential partners in translation and literacy.</i></p>					
<p>School _____ Language _____ Province _____</p>					
<p>District _____ Date _____ Researcher _____</p>					
<p>Respondent's Name _____ His/Her Mother Tongue _____</p>					
<p>Contact Address _____</p>					
<p>Qualifications _____</p>					
<p><b>History of Education</b></p>					
<p>Please note the names/locations and dates of founding for schools in the area.</p>					
Reform System	Old System	Name	Location	Date founded	Founded by
Elementary (EP-E2):	Prep-schools: (TPPS)				
Primary (3 - 8): (7 & 8 Top Up)	Community Schools (grades 1-6)				
Secondary (9-12): (11 & 12 Top Up)	Provincial High School: (grades 7-10)				
National High School: (grades 11 & 12)					
Vocational / Technical schools / Kisim Save schools					
Other					
<p>Have any schools closed? _____</p>					
<p>Dates of operation? _____</p>					
<p>Why did it close? _____</p>					
<p><b>If not under Reform yet:</b> (Prov. Office may be the best source for this info.)</p>					
<p>When is the Education Reform scheduled to be introduced in this language group? _____</p>					
<p>Where will new schools be located? / plans for other schools _____</p>					
<p>Which language(s) will they use? _____</p>					

**School Staff**

List the Headmaster, Teachers, Board Chairman, and any other influential people:

Name	Position/Grade Taught	Years Here	Home Area/Prov.	Mother Tongue
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

How long do teachers usually continue to teach at the school? \_\_\_\_\_

**Size and Attendance**

What are the attendance figures for this school? (*Respondent's school*) \_\_\_\_\_

How many children in this area are school-aged? (*APO may have this figure.*) \_\_\_\_\_  
 (*Compare total "school-aged" children with actual attendance.*)

**Children/villages represented:** Which grades are in session? What is the enrollment per grade?  
 Which villages do your students come from? (*insert grade levels as appropriate*) B=boys G=girls

GRADES:																	
Village Name	Tok Ples	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G
Total Number Per Grade																	

How often does a new (E Prep/G1) class start? \_\_\_\_\_

How many children were of age to start E Prep/G1 this year? \_\_\_\_\_ How many started? \_\_\_\_\_

What reasons do parents give if their children do not attend school? \_\_\_\_\_

**Attitude to the Local Traditional language**

What languages are used in class? \_\_\_\_\_

What language(s) are the textbooks written in? \_\_\_\_\_

Do you have a traditional language component or local culture component? \_\_\_\_ Yes \_\_\_\_ No

If so: Describe it. \_\_\_\_\_

Who teaches it? \_\_\_\_\_

What language is used? \_\_\_\_\_

How long does it last? \_\_\_\_\_

(If no) Would you be willing to have a traditional language component? \_\_\_\_\_

(If willing) How could it be scheduled and how much time could be given for each session (eg 15 min/day, 30 min/week)? \_\_\_\_\_

Language(s) children use on the playground, among themselves? Reported: \_\_\_\_\_  
(Confirm this by observation if possible as there may be an "official" answer)

Observed: \_\_\_\_\_

School's policy concerning children's language use on the school grounds? \_\_\_\_\_

What happens if the children use the traditional language? \_\_\_\_\_

What languages do teachers use outside school?

with their families: \_\_\_\_\_

with other teachers: \_\_\_\_\_

with village adults: \_\_\_\_\_

Are any of the teachers learning the local language? \_\_\_\_\_

Attitude of surrounding language groups towards this language group? \_\_\_\_\_

Attitude of this language group towards its own language? \_\_\_\_\_

#### Questions For Teachers from the Local Community

If a child asks you a question about a school subject away from school grounds, in what language do you respond to him/her? \_\_\_\_\_

In what language do you prefer to teach? \_\_\_\_\_

If you had a chance to teach in the local language, would you do so? \_\_\_\_\_

Why? \_\_\_\_\_

#### Academic Achievement

Have you noticed any changes due to vernacular education? \_\_\_\_\_

(such as?) \_\_\_\_\_

#### What happens to school leavers?

Leavers left in past two years	Numbers who Remain in village (names?)	Numbers who Found work (names?)	Work Where?	Work type
Grade 6				
Grade 8				
Grade 10				

<b>Higher Ed</b>				
<b>Other</b>				

How many of your last graduates went on for further education? \_\_\_\_\_

Where? \_\_\_\_\_

How many of them are still in school? \_\_\_\_\_

If some left school, why did they leave? \_\_\_\_\_

\_\_\_\_\_

**Community Attitude Toward School**

Is the community satisfied with the way the school(s) work(s)? \_\_\_\_\_

List areas of satisfaction/dissatisfaction: \_\_\_\_\_

\_\_\_\_\_

If dissatisfied, has the community/council discussed a solution to the problem(s)? \_\_\_\_\_

\_\_\_\_\_

What "hevi's" do the children encounter at school? \_\_\_\_\_

\_\_\_\_\_

When children finish school and go back to the village, can they read and write well? \_\_\_\_\_

\_\_\_\_\_

Do they use reading and writing to help the village? (List specifics) \_\_\_\_\_

\_\_\_\_\_

How does this language group treat outsiders living among them? \_\_\_\_\_

\_\_\_\_\_

**Literacy**

Can many men read? In what languages? \_\_\_\_\_

Can many women read? In what languages? \_\_\_\_\_

Are there any literacy programmes in the area to teach people to read in the local language? \_\_\_\_\_

If so, how many people attend these programmes? \_\_\_\_\_

Do people from this community think it is important to be able to read? \_\_\_\_\_

Are the elementary schools using an alphabet? Give details: \_\_\_\_\_

## D.5 Church questionnaire

<b>CHURCH QUESTIONNAIRE</b>	
Village _____	Language _____
Province _____	Date _____
Researcher _____	
Church denomination _____ Church name _____	
Number of: ____ Priests ____ Pastors ____ Lay Workers ____ Expat missionaries ____ PNG missionaries ____ Evangelists	
Name _____	
Contact Address _____	
<b>History of Work in the Area</b>	
When did the Denomination start working in the area? _____	
Where did the missionaries/evangelists come from? _____	
Where in the area did they start their work? _____	
What other villages have a church of this denomination? _____	
_____	
What significant events have come up in this church's history? _____	
_____	
Which villages represented in your congregation? _____	
_____	
What other denominations are in the area? _____	
Do you know when they started working in the area? _____	
Have there been any churches that started here in the area, but didn't survive? _____	
<b>Church Hierarchy</b>	
Who is the District Pastor/Bishop/President? _____ Where is he located? _____	
When did he last visit? _____ When did you last see him? _____	
Names of catechists /pastors in the villages _____	
_____	
How long do pastors normally work in the church community? _____ Do they rotate within a church circuit? _____	
Leadership turnover _____ Level of participation in denomination structure _____	
<i>(If the respondent is a different person than the pastor)</i> How long have you been here? _____	
<b>Local Church Leader(s)</b>	
How is the Church leadership selected for service? _____	
What type of training has the Pastor/Priest/Lay worker received? (name of individual, name/location of school, duration; dates/years of attendance. Highest Grade completed?) _____	
_____	
When in training, do they receive financial help? Other help? _____	
Who gives the help and how is it administered? _____	
Does the community/church help with pastoral training fees? _____ If so, give an example: _____	
<b>Language Use and Attitude</b>	
What is the Pastor's/Priest's/Lay worker's Mother Tongue? _____	
What other languages he speaks or understands? _____	
What languages does the pastor/priest use in the community; outside church services? _____	
What is the official church language? _____ What languages are used in the church for the liturgy? _____	
Hymns? _____ Songs? _____	
Spontaneous prayer? _____ Sermon/homily? _____	

Announcements? _____	Scripture reading? _____
Youth Services? _____	Women's groups? _____
Sunday School (children) r? _____	Other? _____

If you could read the Bible in any language, what language would you prefer? 1<sup>st</sup> choice \_\_\_\_\_ 2<sup>nd</sup> Choice \_\_\_\_\_

**Spiritual Life (Confirm through observation)**

Number of church members: \_\_\_\_\_ What days do you hold church services? \_\_\_\_\_

Is the church usually full for these services? \_\_\_\_\_ Half full? \_\_\_\_\_

What activities are run by the church? (outreach projects, bible studies, prayer groups, etc.) \_\_\_\_\_

\_\_\_\_\_

What languages are used in these activities? \_\_\_\_\_

\_\_\_\_\_

Which villages are actively involved in church activities? \_\_\_\_\_

\_\_\_\_\_

How much formal teaching is done in the church? How long is the actual Bible teaching on Sunday? Midweek Meetings? \_\_\_\_\_

List any church materials that have been written in the local language \_\_\_\_\_

Have there been any worship songs written in the local language? \_\_\_\_\_

\_\_\_\_\_

How many people have been baptized and/or confirmed? \_\_\_\_\_ No. of people from this language call selves Christians? \_\_\_\_\_

Do you think some people are skin Christians? \_\_\_\_\_ How many? \_\_\_\_\_ Everyone in language knows who Jesus is? \_\_\_\_\_

Do you see any sign of magic or *sanguma*? If so, what? \_\_\_\_\_

Tell me about cargo cult \_\_\_\_\_

**Church materials written in the language:** \_\_\_\_\_

Who uses these materials and how often are they used? \_\_\_\_\_

Are there Christian programs broadcast on local radio stations? If so, in what language(s)? \_\_\_\_\_

How often do you listen to the radio? \_\_\_\_\_

Worship songs in the local language?(Composer, number?) \_\_\_\_\_

Are the songs used in the services? How often? \_\_\_\_\_

**Potential translation project assistance:**

Do groups in the community do projects together (i.e. community work day)? \_\_\_\_\_

Which groups? What kind of projects do they do? \_\_\_\_\_

Do the groups ever cooperate with each other on a project? \_\_\_\_\_

Which villages work together? \_\_\_\_\_

(If they do) Who is in charge of the project? \_\_\_\_\_

**Information to be elicited from Church leadership** (e.g. Bishop, Circuit Pres., District Pastor)

*Note: Record your impressions of how the person felt about the questions, and why you got that impression, as well as their actual answers.*

Do different churches in the area work together on projects/outreach/joint services? \_\_\_\_\_

How and When? \_\_\_\_\_

Church prayer requests: \_\_\_\_\_

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