

The Sociolinguistic Situation in the Kaser Area

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Abstract

Between 23 November and 2 December 2009, Robbie and Debbie Petterson (SIL), Juliann Spencer (SIL Surveyor) and Dave Wall (NTM Surveyor) undertook a survey of the languages previously referred to in the *Ethnologue* as Omati [mgx] and Ikobi-Mena [meb], which are located in Gulf Province near the southern coast of Papua New Guinea. Residents of the area refer to themselves as the Kaser people, even though they speak several different languages and dialects. The goals of this survey were to determine language and dialect boundaries, evaluate language vitality, and locate the Joso and Juko languages, which are mentioned in the *Ethnologue* but not documented.

The results of the survey indicate that there are three distinct languages within the Kaser area: Ikobi, Mouwase and Barikewa. The Ikobi language includes three different dialects: Upper Turama Kaser, Upper Kikori Kaser and Dukemi. Ethnolinguistic vitality is currently high in all three language areas, as people of all ages primarily use their own local language and have a positive attitude towards their language. Finally, Joso is actually a clan name used by Barikewa speakers in Omati village, and Juko is a clan name used by Ikobi speakers.

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1 Introduction

In the Gulf Province of Papua New Guinea, an area full of rivers, swamps and forests, there are many small language groups. The Kaser area, located near the coast in the western half of Gulf Province, is a linguistically complex area that has been classified in several different ways in recent years. People throughout the area use the name "Kaser" to refer to both themselves and the languages they speak, but they also recognize distinct linguistic differences within the Kaser area. The survey team wishes to thank the Kaser people for their kind assistance and hospitality, without which this survey would not have been possible.

1.1 Location of the Kaser area

The Kaser area is located in Gulf Province, on the southern side of Papua New Guinea, near the mouth of the Omati River, which runs through the middle of the Kaser area. The southern boundary of this area lies approximately twenty-five kilometres north of the coast, with the Turama River to the west and the Kikori River to the east. *Ethnologue* 15th edition (Gordon 2005:619) states that this area is a "lowland limestone pinnacle region". In the Kaser area, there are also many swamps and sinkholes. Map 1 shows the location of the Kaser area within Papua New Guinea.



Map 1. Kaser area²

¹This statement is made under the entry for Omati [mgx].

²Maps for this report were drawn by Mariela Del Pozzi of SIL-PNG survey office.

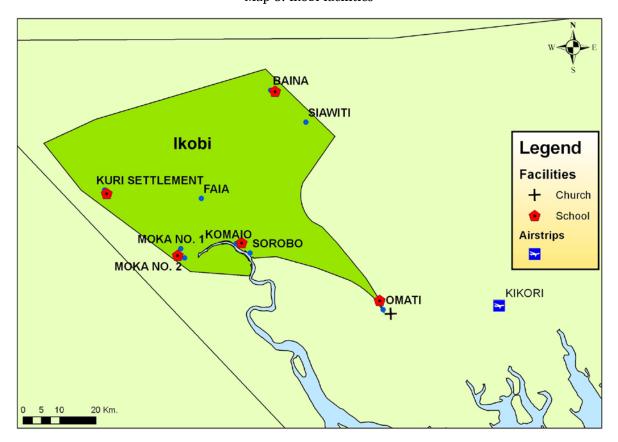
There are three distinct languages within the Kaser area: Ikobi, Mouwase and Barikewa. Map 2 shows the location of the languages spoken in the Kaser area.

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

Legend SLAWITI Ikobi Language boundary - Dialect boundary KURI SETTLEMENT KAIAM 1&2 FAIA Village **Barikewa** 1KOMAIO SOROBO MOKA NO. 2 MASUSU KIKORI OMATI Mouwase KIBEN¶GIBIDAI 5 10 20 Km.

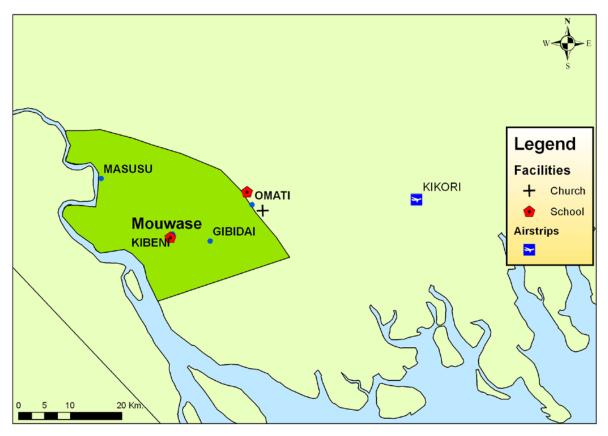
Map 2. Language boundaries within the Kaser area

The following maps show schools, churches and airstrips within the Ikobi, Mouwase and Barikewa language areas.

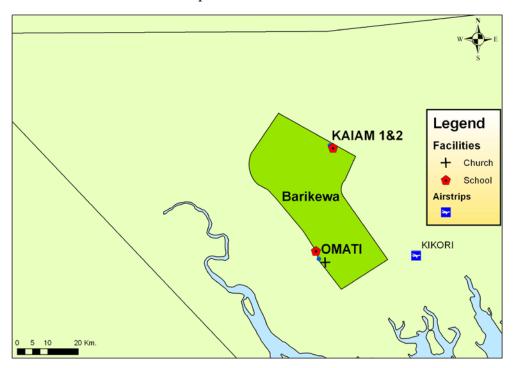


Map 3. Ikobi facilities

Map 4. Mouwase facilities



Map 5. Barikewa facilities



1.2 Previous research

In the past there has been a great deal of confusion regarding language and dialect boundaries within the Kaser area. In 1968, K. J. Franklin identified a language that he referred to as "Kasere", and classified it in the "Kikorian" family (Franklin 1968). A few years later, in 1975, S.A. Wurm identified three languages within the Kaser area, which he called Omati, Ikobi and Mena. Wurm classified these three languages as part of the "Turama-Omatian" family, which he placed in the "Turama-Kikorian Stock" (Wurm 1975).

In light of Wurm's research, the 16th edition of *Ethnologue* (Lewis 2009) currently lists Omati and Ikobi-Mena as the two languages in the Turama-Omatian family, as shown in Figure 1. Alternate language names are given in parentheses, and language codes are given in square brackets.



Figure 1. Classification of the Kaser area according to Ethnologue (Lewis 2009).

However, after interviewing residents of the Kaser area, Phil Carr (2006) suggests that Omati and Ikobi are general terms for the area, rather than actual language names. The five languages spoken in this general area, says Carr, are Mouwase, Barikewa, Kaser (also called Ina), Minanibai, and Morigi.

1.3 Language names and classification

The results of the present survey indicate that there are three distinct languages spoken in the Kaser area: Ikobi, Mouwase and Barikewa. Figure 2 shows the suggested classification for these languages based on *Ethnologue*'s current classification of the languages spoken in the area (Lewis 2009).



Figure 2. Suggested classification of languages in the Kaser area.

1.4 Population

The following tables show the population of each language area based on the 2000 National Census (National Statistical Office 2002). According to the census, the average annual growth rate for Gulf Province between 1980 and 2000 was 2.6 percent. This figure has been applied to the 2000 population to yield the projected 2009 population shown in the tables below. All of the wards in the following tables are located in Kikori district, West Kikori Rural Local Level Government.

Ward	Village	Households	Persons (2000)	Projected 2009 Population	Reported Population
Haiwaro	Kuri Settlement	25	198	249	200
	Kuri Logging Camp	12	292	368	
Moka	Moka No. 1	21	110	139	130
	Moka No. 2	10	56	71	
Komaio	Komaio	34	202	255	400
	Faia	11	80	101	
	Sorobo	10	54	68	20 houses
Baina	Baina	42	211	266	
Kaiam	Siawiti	10	44	55	
TOTAL	9	175	1247	1572	

Table 1. Population of Ikobi villages

Table 2. Population of Mouwase villages

Ward	Village	Households	Persons	Projected 2009	Reported
				Population	Population
Kibeni	Kibeni	22	131	169	400 (75 houses)
	Gibidai	24	166	209	
Masusu	Masusu	13	61	77	
TOTAL	3	59	358	455	

Table 3. Population of Barikewa village

Ward	Village	Households	Persons	Projected 2009 Population
Kaiam	Kaiam 1&2	40	245	317

Omati village is inhabited by speakers of all three languages: Ikobi (Dukemi dialect), Mouwase and Barikewa. There are only two Barikewa speakers living there, but it is not known how many people speak Ikobi and how many people speak Mouwase. The population of Omati is therefore given separately rather than being included in the population of any of the above language groups.

Table 4. Population of Omati village

Ward	Village	Households	Persons	Projected 2009 Population	Reported Population
Omati-Gihiteri	Omati-Gihiteri	79	542	683	700–800 adults

1.5 Goals

The goals of this survey were to determine language and dialect boundaries, evaluate language vitality, and locate the Joso and Juko languages. All three of these goals were accomplished.

Based on previous research, it was unclear how many languages and dialects were actually spoken in the Kaser area. *Ethnologue* currently lists Omati and Ikobi-Mena as the two languages in the area (Lewis 2009), and Carr proposed several different languages in the area, but more research was needed to confirm language and dialect boundaries. The present survey indicates that there are three distinct languages within the Kaser area: Barikewa, Mouwase and Ikobi. Within the Ikobi language there are three different dialects: Upper Turama Kaser (spoken in Faia, Komaio, Kuri and Moka); Upper Kikori Kaser (spoken in Baina and Siawiti) and Dukemi (spoken in Omati and Sorobo).

Little information was available regarding the vitality of the local languages spoken in the Kaser area. A goal of this survey was to discover the predominant language or languages used by people living in the Kaser area, as well as the primary languages used in schools and churches. Results of the survey indicate that people of all ages primarily use their own local language in most situations. Language vitality is, therefore, currently high throughout the Kaser area.

Ethnologue states that some speakers of the Omati [mgx] language also speak "Joso" and "Juko" (Lewis 2009), but neither Joso nor Juko is listed in the Ethnologue. A goal of this survey was to locate and identify the Joso and Juko languages and determine whether they are separate languages or dialects of another language. It was discovered that Joso (more commonly known as Yoso) is an alternate name for the Barikewa language, and Juko (more commonly known as Yukoi) is an alternate name for the Dukemi dialect of the Ikobi language.

2 Methodology

2.1 Tools

Language and dialect boundaries were determined based on previous research, reported language and dialect boundaries, and lexicostatistic data. Language vitality was evaluated by conducting group and individual interviews and observing language use within Ikobi, Mouwase and Barikewa communities. Information about the identity of the Joso and Juko languages was obtained through interviews with residents of the Kaser area.

Group interviews regarding language use were conducted in every village visited. Information collected during these interviews addresses both language vitality and language and dialect boundaries. These interviews were guided by the standard SIL-PNG Language Use Questionnaire. When possible, the interviewer made an effort to gain the opinions of both males and females from varying age categories: young, middle-aged and older.

The standard SIL-PNG wordlist³ consisting of 170 words and 20 phrases was elicited in every Kaser village visited as well as in the Fasu [faa] village of Haiwaro. These wordlists were compared with each other and with wordlists from the neighbouring Rumu [klq] language, using the lexicostatistic comparison method described by Blair (1990:30–33). This, along with reported data, was used to determine language and dialect boundaries.⁴

Group interviews regarding contact with other languages were completed in four Ikobi villages, one Mouwase village, the Barikewa village, and the mixed village of Omati. An interview regarding cultural practices was also conducted in the Ikobi village of Kuri. Individual interviews with a church leader in Moka and with school staff yielded information regarding language use and attitudes within schools and churches. All of these interviews were guided by standard SIL-PNG questionnaires, with the goal of assessing language vitality.

³1999 revision

⁴See Section 3.4 for more information on the methodology of the lexicostatistic comparison.

Throughout the survey, members of the survey team observed which languages were being spoken, by whom and to whom, and recorded these observations. In addition to local languages, Tok Pisin, Hiri Motu and English were sometimes used as languages of wider communication. Language use observations gave valuable insights into language vitality.

2.2 Sampling

The survey team collected data in five of the seven Ikobi villages, two of the three Mouwase villages, and the only village in which Barikewa is the primary vernacular language. Data was also collected in Omati, which is inhabited by speakers of all three languages, and in Haiwaro, where Fasu is spoken. These villages and the dates they were visited are shown in Table 5.

Date	Village	Language Area
Nov. 23	Haiwaro	Fasu
Nov. 24	Kuri	Ikobi
Nov. 25	Moka	Ikobi
Nov. 25	Komaio	Ikobi
Nov. 26	Sorobo	Ikobi
Nov. 26	Kibeni	Mouwase
Nov. 27	Gibidai	Mouwase
Nov. 28	Omati	Ikobi/Mouwase/Iba
Nov. 30-Dec. 1	Baina*	Ikobi
Dec. 1–2	Kaiam	Iba

Table 5. Work schedule

For group interviews, respondents were chosen based on their availability. Everyone who was in the village at the time was invited to participate, in an effort to gain the opinions of all demographic groups. For individual interviews, respondents were chosen based on their position in the school or church. School headmasters were interviewed when possible, or, if they were not available, someone else in a position of leadership was chosen. Spokespeople for the wordlists were chosen by the community, but were required to have been born and raised in the village under consideration. Data collection was completed by Robbie Petterson, Juliann Spencer and Dave Wall.

2.3 Critique

The wordlist in Sorobo and the Barikewa wordlist from Omati village were elicited by Robbie Petterson, and Robbie Petterson provided the Rumu wordlist based on his knowledge of the Rumu language, but the remaining wordlists were elicited by Juliann Spencer. There are no known differences between the methodology used by Petterson and Spencer, but it is possible that there may be discrepancies due to slight differences in personal elicitation methods. Also, most elicitation was done in Tok Pisin, but Hiri Motu was used in some situations when the language spokesperson did not understand Tok Pisin well. These inconsistencies in elicitation may have affected the reliability of the lexicostatistic comparison.

Due to limited time and shortage of personnel, the interviews regarding cultural practices and contact with other languages were not completed in every village. Language contact interviews were

^{*}At the time of the survey team's visit, most Baina residents were camping outside the village at a Benefit Sharing Agreement Forum meeting called by the LNG project to discuss land rights. The survey team collected data at this camp rather than visiting the village itself.

done in every village visited except Gibidai, but a cultural interview was only done in Kuri. Data collected from these interviews may therefore not be as accurate as the language use data, which was collected in every village visited.

During the language use interview in the Mouwase village of Gibidai, respondents often gave conflicting answers. Because respondents did not always agree on the answers given, data from Gibidai may not be entirely reliable.

Very few observations were made of children's language use. This scarcity of data lowers the reliability of the observations that were made.

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

3 Language and dialect boundaries

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

3.1 Previous research

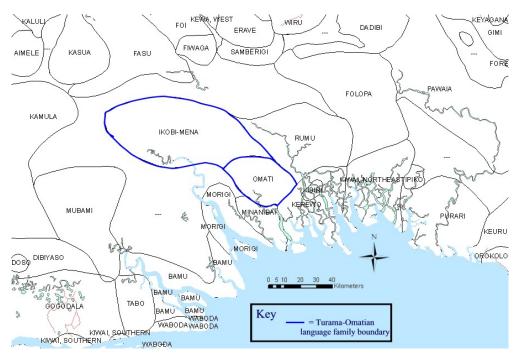
In 1968, K. J. Franklin identified a group of languages located in and around the Kaser area, which he referred to as the Kikorian family. He based his classification on wordlists collected by SIL members and the Reverend John Cribb (with the London Missionary Society), as well as vocabulary found in the Annual Reports of Papua. However, Franklin noted that the Annual Reports lists "appear often to be phonologically and in other ways defective." (1968:20). Table 6 shows the similarity between the languages identified by Franklin. "Kairi" and "Kibiri" are both alternate names for Rumu [klq], and "Kasere" and "Kopo-Monia" are both alternate names for the language currently referred to as Ikobi-Mena [meb] in *Ethnologue* (Lewis 2009). "Barika" is the name for a particular clan in Kaiam village (Petterson, 2010), where the Barikewa language is spoken.

	Kibiri					
	20% Kasere					
Ī		- Karima				
	50%	14%	- Kopo-Monia			
Ī	25%	74%	-	- Kairi		
	18%	57%	44% Barika			

Table 6. Percentage similarity between Kikorian languages (Franklin, 1968)

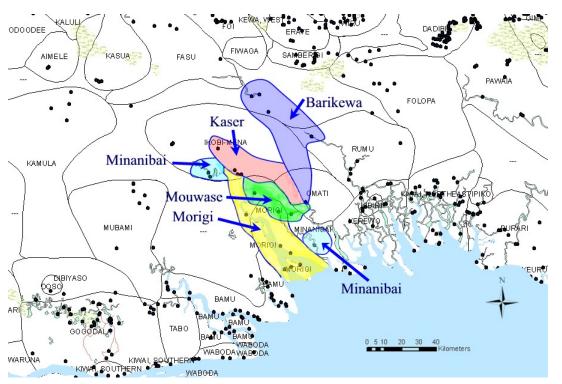
A few years later in 1975, S. A. Wurm classified the languages in the Kaser area as part of a family within the "Turama-Kikorian Stock." Wurm referred to Omati, Ikobi, and Mena as three separate languages within the Turama-Omatian family, although he did state that Ikobi and Mena might be dialects of the same language since they were reported to be mutually intelligible (Wurm 1975:507).

By the time of the survey, the Kikorian family identified by Franklin had been divided into two separate families: Kairi and Turama-Omatian. *Ethnologue* (Lewis 2009) currently lists Omati and Ikobi-Mena as the two languages in the Turama-Omatian family and reports their lexical similarity to be 53 percent. Map 6 shows language boundaries in the Kaser area according to *Ethnologue*.



Map 6. Language boundaries according to Ethnologue (Lewis 2009)

In 2006, Phil Carr spent four days working with Robbie Petterson in Kikori, a town just outside the eastern border of the Kaser area. After gathering information and eliciting wordlists from speakers of surrounding languages, Carr suggested significant changes to language names and boundaries in the Turama-Omatian language area. Map 7 shows the new language boundaries he proposed.

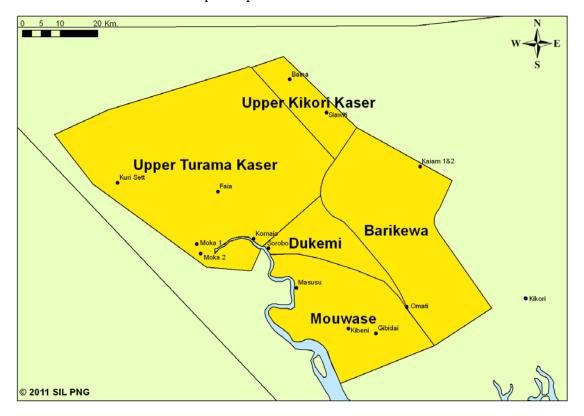


Map 7. Language boundaries according to Carr (2006)

Carr (2006) suggests that Omati and Ikobi are not actually language names. Omati is the name of a village, Ikobi is the name of a tribe, and Mena means "language". The five languages spoken in the Omati and Ikobi-Mena area, says Carr, are Mouwase, Barikewa, Kaser (also called Ina), Minanibai, and Morigi. Of these five, only Minanibai [mcv] and Morigi [mdb] are listed in *Ethnologue*, and Carr suggests revised boundaries for both of them.

3.2 Reported language and dialect boundaries

In every village except Omati, people identified the name of their language as "Kaser". However, throughout the Kaser area, it was reported that there are five distinct varieties. These will be referred to as Upper Turama Kaser, Upper Kikori Kaser, Dukemi, Mouwase and Barikewa, as shown in Map 8.



Map 8. Reported dialect boundaries

Most respondents agreed that Upper Turama Kaser includes Kuri, Moka, Faia and Komaio, although there were exceptions to this report. In both Kaiam and Omati, it was reported that people in Kuri speak the Fasu language, and those in the Fasu village of Haiwaro agreed. Respondents in Sorobo also remarked that Kuri people mix Fasu with their own language, and one of the traditional clans in Kuri also includes some Fasu speakers. Another inconsistency is that respondents in Kuri identified Faia as part of Upper Kikori Kaser rather than Upper Turama Kaser.

Upper Kikori Kaser is spoken in Baina and Siawiti. It was consistently reported that Baina and Siawiti speak the same variety, and that this variety differs to some degree from Upper Turama Kaser.

Dukemi is spoken in Sorobo and Omati. Although respondents in Kuri, Komaio, Kibeni, Gibidai and Kaiam identified Sorobo as part of Upper Turama Kaser, residents of Sorobo themselves reported that they speak the Dukemi variety, along with some residents of Omati. Omati residents confirmed this report, and people in Moka also said that Sorobo differs from the Upper Turama Kaser variety.

The Mouwase variety is reportedly spoken in Kibeni, Gibidai, Masusu and Omati. In Omati, however, it was reported that Kibeni and Masusu speak one variety, and Gibidai and some Omati residents speak a

slightly different variety, which they refer to as Gihiteri. Although no data was collected in Masusu, four out of the five villages that mentioned Masusu identified it in the same variety as Kibeni, including Kibeni residents themselves. Only residents of Gibidai reported Masusu to be part of the Upper Turama Kaser variety. The fact that Kibeni people included Masusu in their own dialect but Gibidai people considered it to belong to a different dialect may indicate the existence of a dialect chain within the Mouwase language.

Barikewa is only spoken in Kaiam, by two people in Omati, and by a number of people who left Omati village and moved to a new village east of Omati. Although three villages (Kibeni, Gibidai and Kuri) said that Kaiam residents speak Upper Kikori Kaser, five villages (Omati, Baina, Komaio, Sorobo and Kaiam) identified Kaiam as a separate variety. Because most villages identified Kaiam as different from Upper Kikori Kaser, including relevant villages such as Baina (an Upper Kikori Kaser village) and Kaiam itself, it is likely that Barikewa is, in fact, a distinct variety spoken in Kaiam.

It should be noted that the situation in Omati is somewhat unique, as three different varieties are spoken there. Some Omati residents speak Dukemi, along with residents of Sorobo, but they call Dukemi "Papa". Others speak Mouwase, which they call "Gihiteri," and two people speak Barikewa, the dialect spoken in Kaiam.

3.3 Reported comprehension

Reports from Kaser people indicate that most adults in the Kaser area are able to understand most language varieties spoken throughout the area. Some children are able to understand other varieties as well, but adults are generally able to understand more varieties than children do.

Speakers of the Upper Turama Kaser dialect reported that adults and older children can understand the Upper Kikori Kaser dialect, and in Kuri it was reported that children can understand Upper Kikori Kaser as well. Most adults can understand Mouwase, as can some children. Some adults can understand Barikewa, but children cannot.

In Baina, an Upper Kikori Kaser village, it was reported that adults can understand Upper Turama Kaser, and children can understand some. Adults can understand some Mouwase and Barikewa as well.

Both adults and children in Mouwase villages can understand Upper Turama Kaser. In Gibidai, it was reported that only old people can understand Upper Kikori Kaser and Barikewa, but people in Kibeni said that both adults and children can understand those two dialects, although both are harder to understand than Upper Turama Kaser.

In the Barikewa village of Kaiam, adults can reportedly understand Upper Kikori Kaser, but children cannot. Adults can also understand some Upper Turama Kaser, and it was reported that older men can speak the Upper Turama Kaser dialect, and young men can understand it. Only older people can understand Mouwase.

In Sorobo, where Dukemi is spoken, both adults and children can understand Upper Turama Kaser and Mouwase. Only adults, however, can understand Upper Kikori Kaser. Upper Kikori Kaser, Upper Turama Kaser, Dukemi and Mouwase may, therefore, form a dialect chain, particularly since Upper Kikori Kaser and Upper Turama Kaser adults can reportedly understand each other. See Section 3.4.2 for more evidence of dialect chaining.

Omati village is inhabited by speakers of Ikobi (Dukemi dialect), Mouwase and Barikewa. It was reported there that adult Dukemi speakers can understand the Upper Turama Kaser dialect, and adult Mouwase speakers can understand some, but children cannot understand Upper Turama Kaser. Adults can only understand a few words of Upper Kikori Kaser, however, and children cannot understand any. When Ikobi and Mouwase speakers marry each other, their children learn both dialects.

3.4 Lexical similarity

3.4.1 Methodology

In each village visited, a member of the survey team elicited 170 words and 20 phrases in the dialect spoken in that village, using the standard SIL-PNG 190-item list. Robbie Petterson elicited the wordlist in Sorobo and the wordlist from the Barikewa dialect in Omati, and Juliann Spencer elicited the remaining wordlists. When possible, the words were elicited from a resident of that village whose parents were from the same village and who had been born and brought up in that village.

The 170 words from each village were compared using the lexicostatistic similarity method described by Blair (1990:31–33). The wordlists elicited during the survey were also compared with a list of 170 words from the Rumu language that was provided by Robbie Petterson, who lived and worked in a Rumu village for eight years. When possible, affixes were excluded and only the roots were compared. See Table 15 for a list of excluded words and the reasons for their exclusion. Similarity percentages were then calculated using the WORDSURV computer program (Wimbish 1989).

3.4.2 Lexical similarity comparisons and interpretation

Results from the lexicostatistic comparison suggest that there are three distinct languages spoken within the Kaser area. These languages will be referred to as Ikobi, Mouwase and Barikewa. Within each of these languages, all villages share over 70 percent lexical similarity (with the exception of Baina and Sorobo), and many share over 80 percent.

The three languages spoken in the Kaser area all share some degree of similarity, as shown in Table 7 Ikobi and Mouwase are the most similar, sharing an average of 58 percent lexical similarity. Barikewa and Mouwase are the least similar, with only an average lexical similarity of 38 percent.

Barikewa
38% Mouwase
46% 58% Ikobi

Table 7. Lexicostatistic similarity between languages

The three dialects within the Ikobi language appear to form a dialect chain, with Upper Turama Kaser as the link between Upper Kikori Kaser and Dukemi. Upper Turama Kaser has 75 percent lexicostatistic similarity with Upper Kikori Kaser and 77 percent with Dukemi, while there is only 65 percent lexicostatistic similarity between Upper Kikori Kaser and Dukemi.

⁵In Gibidai, however, only the first 126 items were elicited due to time constraints on the part of the Gibidai speakers.

Table 8 shows the lexicostatistic similarity between the five dialects in the Kaser area.

Table 8. Lexicostatistical similarity between dialects

Upper Kikori Kaser						
46% Barikewa						
51%	38%	Mouv	Mouwase			
65%	46%	61%	Dukemi			
75%	47%	59%	77%	Upper Turama Kaser		

Ikobi

Based on lexicostatistics, six villages (Kuri, Moka, Faia, Baina, Komaio and Sorobo) belong to the Ikobi language. Table 9 shows the similarity between these six villages.

Table 9. Lexicostatistic similarity between Ikobi villages

Kuri						
88%	Moka					
82%	79% Faia					
78%	79%	74%	74% Sorobo			
74%	71%	82%	65%	Baina		
82%	85%	79%	77%	72%	Komaio	

Note that Baina and Sorobo generally have lower similarity percentages than other villages. This trend confirms the reports that slightly different varieties are spoken in Baina and Sorobo, namely Upper Kikori Kaser and Dukemi, respectively.

Mouwase

Mouwase appears to be spoken in Kibeni and Gibidai villages, and it is also spoken in Omati by speakers who refer to themselves as "Gihiteri." Lexicostatistic similarity between these three groups ranges between 84 percent and 87 percent as shown in Table 10.

Table 10. Lexicostatistic similarity between Mouwase villages

Gibidai				
87%	Omati (Gihiteri)			
86%	84%	Kibeni		

Barikewa

Barikewa is spoken in Kaiam village, and by two residents of Omati village. The lexicostatistic similarity between the speech variety of Kaiam and that spoken by the Omati residents is 76 percent.

Similarity with neighbouring languages

The Kaser area is bordered by the Fasu language area to the northwest, and the Rumu language area to the east. All three of the languages within the Kaser area share very little lexicostatistic similarity with either of these neighbouring languages. Table 11 shows the average percentage of similarity that the languages in the Kaser area share with Fasu and Rumu.

 Rumu

 22%
 Ikobi

 22%
 Mouwase

 28%
 Barikewa

 10%
 10%
 Fasu

Table 11. Lexicostatistic similarity with neighbouring languages

3.5 Conclusions

Based on reported data and lexicostatistic similarity, there appear to be three distinct languages within the Kaser area, one of which includes three different dialects. Ikobi, Mouwase and Barikewa are separate languages, as they all share less than 60% lexical similarity, and people throughout the Kaser area consistently reported differences between them. Within the Ikobi language, there are three distinct dialects: Upper Turama Kaser, Upper Kikori Kaser and Dukemi. Residents of the Ikobi language area reported differences between these three varieties, and the lexicostatistic comparison confirmed that Upper Kikori Kaser and Dukemi do, indeed, differ slightly from each other and from Upper Turama Kaser.

4 Language vitality

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

4.1 Opportunity for contact with other languages

Contact with other languages is a potential threat for the vitality of the languages in the Kaser area, particularly because Kaser people have access to Kikori town and there are relatively high levels of immigration in the Ikobi and Barikewa language areas. However, this threat is lessened because many immigrants learn the local language and Kaser people are still able to meet most of their economic needs within the Kaser area.

4.1.1 Immigration and emigration

According to Landweer (1991), immigration is less likely to negatively impact language vitality when immigrants are proficient in the local language of their new home and no more than 10 percent of the population is composed of immigrants. Based on the proportion of immigrants and the number who have learned a local language, immigration and emigration appear to be impacting some languages in the Kaser area more than others. In the Ikobi language area, immigration is a potential threat to language vitality due to a relatively large proportion of immigrants, although some immigrants do learn Ikobi. Immigration in Barikewa may lower language vitality due to the number of immigrants in the area, but most immigrants learn Barikewa, which greatly lessens the impact of immigration. In Mouwase, there are relatively few immigrants and emigrants, and most immigrants learn Mouwase, indicating that neither immigration nor emigration poses a threat to the vitality of the Mouwase language.

Ikobi

Immigration and emigration trends in Ikobi pose a potential threat to the vitality of the Ikobi language, but there are factors that alleviate this threat. Although immigration rates are relatively high, many immigrants learn to speak Ikobi, which lessens the negative impact that immigration can have on the vitality of a language.

Immigration data was collected in five Ikobi villages: Kuri, Komaio, Moka, Sorobo and Baina. Reports indicate that there are 87 immigrants in this area, which is about 16 percent of the total adult population of 535. All of the immigrants in Moka speak Ikobi, as do some immigrants in Sorobo and Baina. In Kuri and Komaio, all of the immigrants reportedly understand Ikobi, and some immigrants in Komaio speak it as well. It was reported in Komaio that women who have married into the language area speak Tok Pisin or Hiri Motu with their parents and husbands but Ikobi with their children. Most of the immigrants who do not speak Ikobi speak Hiri Motu or Tok Pisin, and a few speak their own languages as well. All the children of immigrants in Moka speak Ikobi, as do some children of immigrants in other villages. Children who do not speak Ikobi speak Hiri Motu or Tok Pisin.

Immigrants have come from many different language areas, including Mouwase, Barikewa, Rumu [klq], Abau [aau], Kibiri [prm], Fasu [faa], Bamu [bcf], Kuanua [ksd], Samberigi [ssx] and Foia Foia [ffi]. People have also immigrated from Kikori, Port Moresby, Kerema, Rabaul, Baimuru, Samoa, Balimo and Southern Highlands Province.

Fifty-six people (eighteen males and thirty-eight females), making up about 10 percent of the adult population, have reportedly emigrated from the Ikobi language area. Emigrants rarely return to the Ikobi area, but most of those who do return use Ikobi during their visits.

Immigration and emigration levels in the Ikobi language area could potentially lower the vitality of the Ikobi language. About 10 percent of the adult population has emigrated, and around 16 percent of the adult population is composed of immigrants from outside the language area, which is well over the 10 percent limit suggested by Landweer. However, most immigrants understand Ikobi, many immigrants speak it as well, and some children of immigrants speak Ikobi, which are all positive signs for the vitality of the Ikobi language, although some immigrants and their children do speak Hiri Motu or Tok Pisin. The fact that emigrants usually use Ikobi when they return to their villages is also a positive factor for language vitality.

Mouwase

Based on information collected in Kibeni and Gibidai, immigration and emigration do not appear to have a significant impact on the vitality of the Mouwase language. Immigration and emigration levels are relatively low, and immigrants tend to learn the Mouwase language.

Kibeni is the only Mouwase village in which numerical immigration and emigration data was collected. Eight people have immigrated to Kibeni from other language areas, making up approximately 9 percent of the adult population. Four of the immigrants are women, and they all reportedly speak Mouwase. The other four are men and they understand Mouwase but speak Tok Pisin. The children of the immigrants in Kibeni speak Mouwase, Tok Pisin, Hiri Motu and their mothers' languages. Immigrants in Kibeni have come from Mt. Bosavi, Madang, Mt. Hagen, Western Province and the Kibiri [prm] language area.

Only five people have reportedly emigrated from Kibeni, which is about 6 percent of the total adult population. Three of those emigrants have come back to visit twice, and they used Hiri Motu during their visits. However, it was also reported that there are about fifteen Mouwase people living in a settlement in Kikori. They use both Tok Pisin and Mouwase.

Although no information was collected regarding the number of immigrants in Gibidai, it was reported there that spouses from different language areas usually learn each other's language, and that women who have married into the area speak their own languages along with Mouwase when speaking to their husbands or children. These reports indicate that most immigrants in Gibidai learn the Mouwase language.

Assuming that the situation in Kibeni is indicative of immigration and emigration throughout the Mouwase language area, only around 6 percent of the population has emigrated and about 9 percent of the adult population is composed of immigrants. Immigration is therefore below the level identified by Landweer as having a serious impact on language vitality. Furthermore, all immigrants in Kibeni can understand Mouwase, half of them can speak it, and immigrants in Gibidai also learn Mouwase. Immigration and emigration, therefore, do not appear to pose a threat to language vitality in the Mouwase language area.

Barikewa

Many people have immigrated to the Barikewa language area, but they have all learned to at least understand Barikewa, and many can speak it as well. There are reportedly 24 immigrants to the Barikewa-speaking village of Kaiam: 9 males and 15 females. These immigrants make up approximately 14 percent of the total adult population of 170. All of these immigrants reportedly understand Barikewa, most can speak it as well, and all of their children speak Barikewa. Immigrants who do not speak Barikewa speak Tok Pisin or Hiri Motu. Immigrants have come from Baimuru, Mendi, Kerema, Central Province, and various places within the Highlands, as well as the Rumu [klq] and Ikobi language areas.

Fifteen people have emigrated from Kaiam, which is about 9 percent of the adult population. These emigrants rarely return to Kaiam but it was reported that when they do the six male emigrants speak Barikewa and the women speak either Barikewa or their husband's language. The children of emigrants use Tok Pisin, English, Barikewa or their father's language when they return to Kaiam.

A relatively large proportion of the adult Barikewa population (14 percent) is composed of immigrants, which is above the level identified by Landweer as having an impact on language vitality. However, the fact that all of these immigrants can understand Mouwase, most can speak it, and all of their children speak Mouwase could greatly lessen their impact on the vitality of the Mouwase language. Immigration and emigration, therefore, will not necessarily threaten the vitality of the Barikewa language.

Omati

All three languages: Ikobi, Mouwase and Barikewa, are represented in Omati village. There are at least seven male immigrants, and probably more, who reportedly use Tok Pisin, and about twenty-five female immigrants who reportedly speak a local language. The children of the female immigrants speak a local language, but nearly all the children of the male immigrants speak Tok Pisin.

⁶With the exception of Omati village, where Ikobi, Mouwase and Barikewa are all spoken.

Immigrants come from many areas, including Baimuru, Kerema, the Sepik, New Ireland Province, Western Highlands Province, Western Province and the Rumu [klq] language area.

At least eleven Omati residents have emigrated from the village for marriage, and there are two groups of people, about five households each, who have settled in camps outside the village. Emigrants rarely return to the village, but when they do they reportedly speak a local language, although it is difficult for their children to speak the local language.

Because it is not known how many immigrants and emigrants have come to or left Omati village, the percentages of immigrants and emigrants cannot be reliably calculated. However, because all female immigrants and their children reportedly speak a local language, and emigrants rarely return to the village, it is unlikely that immigration or emigration is currently affecting language vitality in Omati village.

4.1.2 Transportation

Landweer (2006:174–177) has pointed out that the language vitality of communities with easy access to a population centre where they are likely to mix with speakers of other languages on a regular basis is at greater risk than the vitality of communities with less access to large population centres. People living in the Kaser area do have access to Kikori town, particularly by means of the many rivers in the area, and the vehicles owned by the logging and oil companies. This access does place the vitality of the languages in the Kaser area at risk.

People throughout the Kaser area travel to Kikori town primarily to buy supplies or go to the hospital there, and they also sometimes go to court there or engage in church activities. Whole families travel to Kikori by car, in a dinghy, or on foot, but people in some villages visit Kikori much more frequently than others. Within the Ikobi language area, people from Kuri, Komaio and Baina reportedly go to Kikori often, but those in Sorobo go very rarely. Mouwase speakers from Kibeni also go rarely, but in Omati village it was reported that someone goes to Kikori every day.

Water travel

Water transport is one of the primary means of travel in the Kaser area. Many people own dinghies or canoes, and use them to travel to Kikori and to other villages within the Kaser area.

In the Ikobi language area, there are reportedly fifteen working dinghies owned by people within the language area, and the owners only charge the cost of fuel for their use. People travel by dinghy to Kikori, Kerema, Daru and Kaiam (in the Barikewa language area), and to other villages within the Ikobi language area. Canoes are also used to travel to other Ikobi villages, and in Sorobo, people reported that they travel by canoe to Port Moresby, Kikori, Kamusi, Kerema, Baimuru, Omati and villages in the Mouwase language area.

Residents of the Mouwase village of Kibeni travel by dinghy to Kikori, Port Moresby and Daru. There are reportedly twenty-five dinghies owned by people in the village.

In the Barikewa village of Kaiam, people travel by dinghy to Kerema and to places in Western Province, but it was reported that only men do this because people are afraid of the sea. They also travel by dinghy to Daru and to Sapeawa, where they can find public road transportation to Port Moresby. Some people also travel to the Ikobi village of Baina in a motor canoe or paddle a canoe to Kikori.

Road travel

There is no public road transportation available in the Kaser area, but people from all three language areas are able to get free rides on vehicles belonging to the logging or oil companies working in the area. Within the Ikobi language area, people in Sorobo and Baina reportedly travel to Kikori by road, and those in Sorobo travel by road to Omati as well. Residents of Moka travel to Kamusi by road, and those in Komaio said they can travel to Omati by road but they usually walk. Kuri residents report that they do not travel by road. Barikewa speakers travel to Kikori by road, and Mouwase speakers travel to Sorobo,

Omati and Kamusi. Residents of Omati travel to Kikori as well as other villages within the Ikobi, Mouwase and Barikewa language areas.

Trails

Some people living in the Kaser area travel on foot to Kikori, as well as to other villages in the Kaser area. Ikobi speakers travel to the Barikewa village of Kaiam and to other Ikobi villages by foot, although it was reported in Sorobo that they no longer walk to other villages now that there are roads. Mouwase speakers in Kibeni can walk to Kikori in one day, and they also walk to Ikobi villages and to other Mouwase villages. Barikewa speakers in Kaiam walk to Kikori or to Samberigi, where they can find public transportation to other major cities such as Mendi, Mt. Hagen or Goroka. Omati residents can reportedly walk to the Mouwase villages of Kibeni and Gibidai in about two hours.

Air travel

Although Kaser people do not travel by air on a regular basis, it was reported throughout the Kaser area that many people have flown, mostly to Port Moresby or Goroka, but also to Kerema, Daru or Madang. Most people use the airstrip in Kikori, but people from the Ikobi villages of Kuri and Komaio also have access to airstrips in Haiwaro (in the Fasu language area) and Kamusi. A flight to Port Moresby costs at least one thousand kina.

4.1.3 Economics

According to Landweer (2006:209), language communities that do not need to use a second language to meet their perceived economic needs typically have higher language vitality than those that are dependent on an economic base outside the language area. The presence of logging and oil companies in the Kaser area has great potential to render Kaser people dependent on outside sources to meet their economic needs. Currently, however, the Kaser people appear to be able to meet most economic needs using their own languages within the Kaser area. Relatively few people are actually working for the logging and oil companies, and the presence of trade stores and markets within the Kaser area allows many people to purchase basic supplies without going to Kikori.

There are two logging companies in the Kaser area: RH (Rimbunan Hijau) and TFI. In addition, there is an Australian-owned oil company called Oil Search Limited and another oil project known as LNG. Within the Ikobi language area, it was reported that TFI has assisted local people with school fees and medical expenses, and that Oil Search Limited has provided water tanks and school materials. TFI also built a classroom in the Mouwase village of Gibidai.

At least fifteen Ikobi people, six Mouwase people and four Barikewa people have jobs with the logging and oil companies. These people use Tok Pisin, Hiri Motu or English while they are at work, although it was reported in Kuri that they use Ikobi when speaking with other Ikobi speakers. However, they use their own languages when they return to their villages during time off from work.

Within the Ikobi language area, there are six trade stores in Kuri and two in Baina. There is one trade store in the Barikewa village of Kaiam and a store at the logging camp near Omati. People in the area also have the opportunity to buy and sell garden produce at a large market near Omati, a weekly market near the oil camp in Gobe, and a market in Komaio village.

4.1.4 Summary of contact with other languages

Contact with other languages is a potential threat to the vitality of the languages in the Kaser area, although there are factors that alleviate this threat. Immigration and emigration levels do not appear to put language vitality in Mouwase at risk, but relatively high levels of immigration are a threat to the vitality of the Ikobi language, and possibly the Barikewa language as well. People throughout the Kaser area have access to Kikori town, which could also lower language vitality. However, Kaser people are

currently able to meet most of their economic needs within the Kaser area, although the presence of logging and oil companies in the area has the potential to make the Kaser people more economically dependent on outside sources.

4.2 Language use

Language use throughout the Kaser area indicates high ethnolinguistic vitality for all three languages in the area. People of all ages primarily use their own local language with family members, and they also use it in a wide range of other domains.

4.2.1 Children's reported language use

Reports indicate that children throughout the Kaser area learn their local language first and speak it as well as adults at least by the time they are about ten years old. Children in the Ikobi and Barikewa language areas speak Ikobi and Barikewa, respectively, as their primary language, although they also use a little Tok Pisin and Hiri Motu. In the Mouwase language area, children reportedly speak Mouwase more than any other language, but reports indicate that they tend to use more Tok Pisin than children in the other two language areas.

In Omati village, where three different dialects are spoken, it was reported that children sometimes mix the Mouwase and Dukemi dialects. People joke that someday the two dialects will simply become one language, which could indeed happen, at least in Omati.

Ikobi

Children in the Ikobi language area learn Ikobi first, speak it as well as adults by the time they go to school, and speak Ikobi as their primary language. In addition to Ikobi, children in Kuri also understand some Tok Pisin and easy English words, and in Komaio children also speak some Tok Pisin and understand a little Hiri Motu and English. Children in Sorobo also speak some Tok Pisin and understand some Hiri Motu, and in Baina they also speak Hiri Motu. In Moka, it was reported that children only speak Ikobi.

Children in Kuri, Moka and Komaio reportedly speak only Ikobi to their grandparents, parents, siblings and friends, although those in Komaio also use some Tok Pisin and Hiri Motu when they are angry. In Sorobo, children speak Kaser to their grandparents, both Kaser and Hiri Motu to their parents and siblings or when they are angry, and Tok Pisin with their friends. Children in Baina use Kaser with their grandparents, parents and siblings, and both Kaser and Tok Pisin with their friends or when they are angry. In Omati it was reported that children primarily use the local language, but it is not clear whether this report refers to Ikobi, Mouwase or both, since both languages are spoken by children in Omati.

Children in Sorobo and Baina reportedly speak more Tok Pisin than those in the other three Ikobi villages where data was collected, particularly when speaking with their friends. This trend could be caused by the fact that the Dukemi and Upper Kikori Kaser dialects are spoken in Sorobo and Baina, respectively. Children who speak these dialects may be more likely to use Tok Pisin when interacting with friends from the Upper Turama Kaser dialect.

Children of immigrants to the Ikobi language area use primarily Ikobi as well. In both Kuri and Moka, it was reported that children of immigrants use Ikobi, and in Komaio it was reported that they use both Tok Pisin and Ikobi. Respondents in Baina said that some children of immigrants use Ikobi and those in Sorobo said that children of immigrants use primarily Ikobi, followed by Hiri Motu and then Tok Pisin.

Reports indicate that children sometimes mix Tok Pisin and Hiri Motu with the Ikobi language. People in both Moka and Sorobo said that children mix both Tok Pisin and Hiri Motu with Ikobi, even though it had already been reported in Moka that children only speak Ikobi. Respondents in Komaio reported that children of mixed marriages mix languages, and in Baina it was reported that children mix

a little Tok Pisin with Ikobi. People in Moka and Baina said that it is fine for children to mix languages, and those in Sorobo and Komaio said that it is actually good for children to mix languages. Those in Komaio, however, did point out that it would not be good if their children stopped speaking Ikobi altogether, because then they would lose their customs. People in Kuri think that mixing languages is dangerous because it may cause them to lose their language.

Mouwase

In Mouwase, children learn Mouwase first and speak it as well as adults by the time they are about ten years old, although they are also able to speak Tok Pisin and Hiri Motu. Children in Kibeni use Mouwase with their parents, both Mouwase and Tok Pisin with their grandparents and siblings or when they are angry, and Tok Pisin with some Mouwase and English with their friends. In Gibidai children use Mouwase with their grandparents and friends, although children of mixed marriages use some Tok Pisin and Hiri Motu with their friends as well. Gibidai children use Mouwase with some Tok Pisin with their parents and siblings or when they are angry. However, it was reported in Gibidai that children do not know Tok Pisin very well.

Mouwase children reportedly mix both Tok Pisin and Hiri Motu with the Mouwase language. Respondents think that it is good for children to mix languages, because then they will be able to understand well when they go to school.

Barikewa

Children in the Barikewa village of Kaiam learn Barikewa first and speak it as well as adults by the time they go to school. They also speak Tok Pisin, and understand a little Hiri Motu as well. Children reportedly speak only Kaser with their grandparents, parents and siblings, or when they are angry, although it was reported that children of mixed marriages also use some Tok Pisin with their parents. Respondents initially said that children use Tok Pisin with their friends, but when asked whether children also use Barikewa, they replied that children use mostly Barikewa, and only a little Tok Pisin, with their friends.

Respondents in Kaiam said that children mix a lot of Tok Pisin with the Barikewa language. However, they think that children only mix languages while they are still learning Barikewa.

4.2.2 Children's observed language use

Very few observations of children's language use were made in the Kaser area. However, nearly all observations were of children using their local language, which corresponds with reported data.

Ikobi

Only four language use observations were made of children in the Ikobi language area. Three times children were observed using the Ikobi language, and the fourth time it was not clear whether Ikobi or Hiri Motu was being used.

Mouwase

No observations of children's language use were made in the Mouwase language area.

Barikewa

In the Barikewa village of Kaiam, a child was observed singing in Barikewa. No other observations of children's language use were made.

4.2.3 Adults' reported language use

Many adults in the Kaser area are able to speak Tok Pisin and Hiri Motu, as well as their local language, and some can speak other vernacular languages as well. However, in all three language areas, the local vernacular is reportedly the primary language used by adults on a regular basis.

Because all three languages are spoken in Omati village, reported data from Omati has not been included in any of the following sections. Reports indicate that all Omati adults are able to speak a vernacular language, most are able to speak Hiri Motu, and many can speak Tok Pisin as well. Omati adults consistently use their vernacular language with their family members, although young men also use a little Tok Pisin, Hiri Motu and English with their siblings, and middle-aged women also use some Tok Pisin and Hiri Motu with their siblings and when teaching children.

Ikobi

All adults can speak Ikobi, most can speak Tok Pisin and Hiri Motu, some can speak a little English, and a few can understand other vernacular languages as well. In Kuri, it was reported that Hiri Motu is their second language and that there are some Ikobi words that they always say in Hiri Motu, because they no longer remember the Ikobi word. See Section 4.2.9 for more information regarding multilingualism.

Adults use Ikobi as their primary language, although Ikobi is used more in some villages than others. In Moka, Ikobi is reportedly the only language that adults use when speaking to family members, although respondents mentioned that younger women may also use some Tok Pisin or Hiri Motu with their parents if one of their parents has married in from elsewhere. Similarly, adults in Kuri use only Ikobi, except for middle-aged men, who reportedly also use some Tok Pisin and English when speaking with their spouses and when teaching or scolding children.

In Komaio and Baina, Ikobi is not used quite as much as in Moka and Kuri, although it is still used more than any other language. People in Komaio said that the Ikobi language is like their bones, ⁸ indicating that it is an integral part of their lives. Adults in Komaio usually use Ikobi except that middle-aged men and women also use some Tok Pisin and Hiri Motu with children, middle-aged women also use some Tok Pisin and Hiri Motu with their siblings, and older women also use some Hiri Motu with children. In Baina, older adults always use Ikobi, but young men also use a little Tok Pisin with their siblings, young women use both Ikobi and Tok Pisin with their parents and siblings, middle-aged adults use both Ikobi and Tok Pisin with children, and middle-aged women use both Ikobi and Tok Pisin with their siblings and spouses.

Less Ikobi is used in Sorobo than in any of the other villages visited. Although all adults use Ikobi, reports indicate that most adults use other languages along with Ikobi on a regular basis. Young adults use Ikobi, along with some Tok Pisin and Hiri Motu, when speaking with their siblings and parents, and their parents respond in the same languages. Along with Ikobi, middle-aged adults use some Tok Pisin and Hiri Motu with their parents and siblings, and the same languages, along with a little English, when teaching or scolding children. They use Ikobi with their spouses, unless they are married to someone outside the language area, and their parents use Ikobi with them. It was also reported that middle-aged adults sometimes use Tok Pisin or Hiri Motu with their spouses as a joke. Older men speak Ikobi to their siblings and when they are teaching children, Ikobi and Hiri Motu to their wives⁹, and Ikobi with some Tok Pisin and a little Hiri Motu (to be funny) when scolding children. Older women speak Ikobi to their spouses, and Ikobi with some Tok Pisin and Hiri Motu to their siblings and when they are teaching or scolding children.

The fact that Ikobi is used less often in Sorobo and Baina may be due to the fact that people in those two villages speak the Dukemi and Upper Kikori Kaser dialects, respectively. If speakers of Dukemi and Upper Kikori Kaser are more likely to use Tok Pisin or Hiri Motu with speakers of Upper Turama Kaser,

⁷For example, the word for *crazy* (in Tok Pisin, *longlong*).

⁸In Tok Pisin, *Em bun*.

⁹Older men with wives from outside the language area use Hiri Motu with them.

then intermarriage with Upper Turama Kaser speakers, or even regular interaction with them, could increase the use of Tok Pisin and Hiri Motu within Dukemi and Upper Kikori Kaser villages.

Mouwase

Most adults in the Mouwase area are able to speak Mouwase, Tok Pisin and Hiri Motu. Some people can also speak English, along with other vernaculars. More information about multilingualism is given in Section 4.2.9.

Although Mouwase adults are able to speak several languages, reports indicate that they use Mouwase as their primary language on a regular basis. In Kibeni, adults usually use Mouwase with their family members, although young adults also use some Tok Pisin and Hiri Motu with their siblings, middle-aged adults and older men also use some Tok Pisin, Hiri Motu and English when teaching children, and older men may use Tok Pisin, Hiri Motu and English with spouses from outside the area. Mouwase is also the primary language used in Gibidai, although young men also use some Tok Pisin and Hiri Motu with their parents and siblings, and middle-aged men use Tok Pisin when teaching children.

Barikewa

Apart from two Barikewa speakers in Omati, Barikewa is only spoken in Kaiam village and by a group of people that has moved to a camp west of Omati. All adults in Kaiam can speak Barikewa, most can speak Tok Pisin, and many can speak Hiri Motu as well. See Section 4.2.9 for more information about multilingualism in Kaiam.

Barikewa is the primary language spoken by adults in Kaiam village. Reports indicate that adults consistently speak Barikewa to their family members, except that middle-aged men also use some Tok Pisin with their siblings, and when teaching children if they are married to someone from outside the area.

4.2.4 Adults' observed language use

Although adults were occasionally observed using Tok Pisin or Hiri Motu, most language use observations throughout the Kaser area were of adults using their own local language. These observations correspond with the reports that Kaser adults primarily use their local language in most situations.

Ikobi

Adults in the Ikobi language area were observed using Ikobi for the majority of their communication. Out of thirty-three observed speech acts, twenty-two were in Ikobi, six were in Ikobi or Hiri Motu, ¹⁰ four were in Tok Pisin and one was in Hiri Motu.

Mouwase

Few language use observations were made in the Mouwase language area, but the survey team did not note adults speaking any language besides Mouwase, except when they were interacting directly with the survey team. In both Kibeni and Gibidai, a group of adults was observed having a discussion in Mouwase, and in Gibidai middle-aged adults were observed scolding children in Mouwase. The survey

¹⁰Since the surveyor making these observations was not familiar with Hiri Motu or Ikobi, she could not distinguish between these two languages.

team interacted with adults in either Hiri Motu or Tok Pisin, but people appeared to have a hard time understanding Tok Pisin and understood Hiri Motu much better.

Barikewa

Out of seven observed speech acts in the Barikewa village of Kaiam, five were in Barikewa. In addition to those five, an older man was observed speaking Hiri Motu and Rumu to a man from the Fasu language area, and a drunken young man was observed singing in Tok Pisin.

4.2.5 Summary of reported and observed language use

Both reported and observed data indicate that both adults and children throughout the Kaser area primarily use their own local language. Many adults and children are also able to speak Tok Pisin and Hiri Motu, but on a regular basis they use their own language more than any other. The consistent use of the vernacular by both adults and children is a very positive sign for the vitality of the languages in the Kaser area.

4.2.6 Domains of language use

In each village, the survey team asked which languages people use when arguing with family, joking, organising traditional events, playing sports, holding village court, ¹¹ praying at home, going to market, going to town and using local health facilities. ¹² Lynn Landweer (2006:179) has pointed out that the number of domains in which the local language is used exclusively is a useful indicator of ethnolinguistic vitality. "The greater the number of domains or sub-domains where the target language is the language of choice, the greater the reinforcement of its use and thus maintenance of that language" (ibid., p. 181).

Throughout the Kaser area, local languages are used exclusively for organising traditional events such as weddings or funerals, and they are also used to some extent in the following four domains: holding court, arguing, praying and joking. In the Ikobi and Mouwase language areas, local languages are used when playing sports as well. The fact that local languages in the Kaser area are used in such a wide range of domains is a very positive sign for language vitality. Although Tok Pisin and Hiri Motu are usually used in town, at market, and at local health care facilities, those activities frequently require interaction with outsiders, so the use of other languages in those domains does not necessarily indicate low language vitality.

Ikobi

Ikobi is the only language used for organising traditional events such as weddings and funerals. It is also used in all villages in the domains of holding court, arguing, praying, joking and playing sports, although in some villages Tok Pisin and Hiri Motu are used in these domains as well. For market, Ikobi is the only language used in two villages, and it is used along with Tok Pisin and Hiri Motu in a third village. Only people in Sorobo use Ikobi with health care workers, and Ikobi is not used in town unless people meet other Ikobi speakers.

Residents of Kuri and Moka use Ikobi exclusively in more domains than people in Komaio, Sorobo or Baina do. Table 12 shows language use by domain in each of the five Ikobi villages visited.

¹¹In Papua New Guinea, court cases are often resolved by a magistrate within the village.

¹²Information regarding language use at local health facilities was not collected in Moka, Gibidai, Omati or Kaiam.

Table 12. Domains of language use by village

	Kuri	Moka	Sorobo	Komaio	Baina
Weddings/	Ikobi	Ikobi	Ikobi	Ikobi	Ikobi
Funerals					
Courta	Ikobi	Ikobi ^b	Ikobi	Ikobi	Ikobi/Tok Pisin
Arguing	Ikobi	Ikobi	Ikobi/Tok Pisin/Hiri Motu	Ikobi	Ikobi/Tok Pisin/Hiri Motu
Praying	Ikobi	Ikobi	Ikobi/Tok Pisin/Hiri Motu	Ikobi/Tok Pisin/Hiri Motu	Ikobi
Joking	Ikobi	Ikobi ^b	Ikobi/Tok Pisin/Hiri Motu	Ikobi/Tok Pisin/Hiri Motu/ English	Ikobi/Tok Pisin
Sports	Ikobi2	Ikobi	Ikobi/Tok Pisin/Hiri Motu/ English	Ikobi/Tok Pisin/English	Ikobi/Tok Pisin/English
Market	Ikobi	Tok Pisin/Hiri Motu	Ikobi	Ikobi/Tok Pisin/Hiri Motu	Tok Pisin
Health Care	Tok Pisin/Hiri Motu/ English	Unknown	Ikobi	Hiri Motu/Tok Pisin	Tok Pisin
Town ^c	Tok Pisin/Hiri Motu	Tok Pisin/Hiri Motu	Tok Pisin/Hiri Motu	Hiri Motu	Tok Pisin/Hiri Motu/Ikobi
	7	6	4	3	2
		No. of d	omains where Ikol	oi used exclusively	•

^a In Komaio, however, respondents mentioned that they write in English during court sessions, and people in Moka said that they use Tok Pisin or English if there are outsiders present.

The fact that Ikobi is the only language used in the traditional domain of events such as weddings and funerals is a positive sign for language vitality. A further indication of high vitality is the fact in every village Ikobi is used in all of the above domains except market, health care and town. Because all three of the latter domains often involve interaction with speakers of other languages, it is to be expected that Ikobi is used less frequently in those domains.

Mouwase

Mouwase is the only language used for holding court in the village and for organising traditional events such as weddings and funerals, although people in Gibidai said that they may use Hiri Motu for such events if there are people from other areas present. Mouwase is the primary language used for arguing at home, but people in Gibidai also use some Tok Pisin, Hiri Motu and English. For praying at home, joking, playing sports and going to market, people use Mouwase along with some Tok Pisin, Hiri Motu and English. When they go to Kikori town, Mouwase people use primarily Tok Pisin and Hiri Motu, along

^b Other languages are used when outsiders are present.

^c Ikobi is often used when people meet other Ikobi speakers in town.

with some Mouwase and English. Hiri Motu, Tok Pisin and English are used when interacting with health care workers.

The fact that Mouwase is used in all of the above domains except going to town and obtaining health care (domains in which interaction with outsiders is usually required) is a positive sign for the vitality of the Mouwase language. Furthermore, Mouwase is used almost exclusively in two domains (court and traditional events), a further indication of high language vitality.

Barikewa

In Kaiam, only Barikewa is used for organising weddings and funerals. Barikewa, Tok Pisin and Hiri Motu are all used for arguing and praying at home and for village court, and both Barikewa and Tok Pisin are used for joking. Tok Pisin and Hiri Motu are used when playing sports or in Kikori town.

Barikewa is used in all of the above domains except going to town and playing sports, and it is used exclusively for traditional events such as weddings and funerals. This extensive use of the Barikewa language is a positive sign for the vitality of the language.

4.2.7 Language use in schools

There are seven schools located within the Kaser area: four in the Ikobi language area, one in the Mouwase language area, one in the Barikewa language area, and one in Omati village (where speakers of all three languages live). Although teachers use the vernacular for instruction in many elementary schools, students are taught to read and write English rather than the vernacular in every school except Kaiam Primary School. Nevertheless, very few students are actually able to speak English. Students are often required to repeat grades until they learn enough English to advance to grade 3. While they are at school, students often mix languages, but most school policies require them to use Tok Pisin or English during school hours. Except for those in Kuri, teachers from outside the language area generally use Tok Pisin with students' families rather than learning the local language, but there are many teachers from within the Kaser area. Table 13 shows the name and location of each school, as well as the date it was founded, which grades are offered, and the number of students and teachers.

Language	Village	Name	Date	Grades	No. of	No. of
Area			Founded	Offered	Students	Teachers
Ikobi	Kuri	Kuri SDA Community School	1992	E1, E2, 3–5, 7–8	60	5
Ikobi	Moka	Moka School	2009 ^a	E1, 1–2	55	3
Ikobi	Komaio	Komaio Adventist Primary School	2003	E1, E2, 2, 6	163	4
Ikobi	Baina	Baina Community School	1993	3–4	39	2
Mouwase	Kibeni	Kibeni Community School	Unknown	2, 5	48	2
Ikobi,	Omati	Omati School	Unknown	Unknown	185	1
Mouwase,						
Barikewa						
Barikewa	Kaiam	Kaiam Primary School	1972	E2, 4, 6	48 ^b	2–3

Table 13. Schools in the Kaser area

Language use in Kaser schools indicates both positive and negative factors for language vitality. Many schools use the vernacular in elementary school, and there are many teachers who speak the vernacular, both of which are positive factors for language vitality. However, many of the teachers from outside the Kaser area have not learned the vernacular, and many schools prohibit students from speaking the vernacular while they are at school, which could negatively impact language vitality.

Ikobi

Language use in schools in the Ikobi language area indicates a high vitality for the Ikobi language. Most teachers are either from the Kaser area or have learned to speak Ikobi, and Ikobi is used for instruction along with Tok Pisin in three of the four schools in the area. At least in Kuri, elementary students are also allowed to use Ikobi on the school grounds outside of class. However, older students are punished for using Ikobi, which could negatively impact language vitality.

Only one teacher at Kuri SDA Community School is from the Kaser area, and the rest are from other areas, including the Eastern Highlands Province and the Fasu [faa] language area. However, some teachers have married Ikobi people and therefore use Ikobi when interacting with students and their families. In the classroom, teachers reportedly use about 60 percent Ikobi and 40 percent Tok Pisin in elementary classes, and English or Tok Pisin beginning in grade 3. All books are written in English. Elementary students are allowed to use Ikobi on the school grounds, but once they reach grade 3 they are required to use English and are required to run or cut grass if they do not. Attendance is reportedly excellent. Nearly all children go to school, and they only miss school if they cannot afford school fees, if they are away from the village, or in the case of a significant event such as a flood.

All three teachers at Moka School are from the Kaser area, and at least one is from the Ikobi language area. Instruction is given in both Tok Pisin and Ikobi, but students are required to write in English. Because starting the school was a village effort, nearly all children attend.

^a There was a school in Moka in the past that closed down. In 2009 it was reopened and the elementary classes were started.

^b There are forty-eight primary students, and additional elementary students.

At Komaio Adventist Primary School, two teachers are from the Kaser area and two are from Goroka. Tok Pisin is used for instruction in earlier grades, and English is used later. At the time of the survey, over half the student body had recently stopped attending because they could not afford school fees.

Both Ikobi and Tok Pisin are used for instruction at Baina Community School. Children are also taught how to speak English.

Mouwase

Very little specific information is available regarding language use in Mouwase schools. It was reported, however, that teachers at Kibeni Community School use Mouwase with students' families, which is a positive sign for language vitality.

Barikewa

Two of the teachers at Kaiam Primary School are from the Kaser area and one is from Ihu. ¹³ Instruction is given in Barikewa initially, and English is used in later grades. The school has some handwritten books in the Barikewa language. The use of Barikewa in the classroom and the existence of Barikewa books are both positive factors for the vitality of the Barikewa language.

4.2.8 Language use in churches

Institutional support is a key factor in ethnolinguistic vitality (Giles et al. 1977 and Fasold 1987:221). In Papua New Guinea, the church is often the primary institution functioning at the local level. In order to evaluate language use within churches, the survey team interviewed a local pastor and asked questions relating to vernacular use in the church. Due to time constraints, the survey team was only able to interview a pastor from the Ikobi village of Moka. Also, although no church interviews were conducted in Omati, people in Gibidai reported that the church in Omati uses Hiri Motu, Tok Pisin, English and the vernacular.

The pastor in Moka is from the Daru language area, and he reportedly speaks some Ikobi but preaches in Hiri Motu and generally uses Hiri Motu when interacting with members of the community. Scripture is read in English and songs are sung in English, Hiri Motu and Tok Pisin. Nevertheless, when asked what the official language of the church is, the pastor replied that it is Ikobi. Congregation members reportedly pray in Ikobi, and Ikobi is used for Bible studies, women's meetings, youth meetings and children's programs. There are, however, no written church materials in the Ikobi language.

The fact that Ikobi was identified as the official church language indicates positive attitudes towards the Ikobi language and is therefore a positive sign for the vitality of the language. Ikobi is used for activities in which congregation members actively participate such as prayer and meetings outside the service, which is also a positive factor for language vitality. However, the fact that the pastor, who is in a position of leadership in the village, rarely uses Ikobi could have a negative effect on the vitality of the language.

4.2.9 Multilingualism

Most adults in the Kaser area are able to speak Tok Pisin or Hiri Motu, and some people can speak a variety of other vernacular languages as well. However, because most people in the area still use their own vernacular as their primary language, this multilingualism does not appear to pose a threat to language vitality in the Kaser area.

¹³Ihu is a town in Gulf Province, to the southeast of the Kaser area.

Ikobi

People in Moka said that Hiri Motu is like their own language, and it is spoken by everyone in the language area except young men in Baina, middle-aged women in Moka, and women in Kuri. Everyone in Moka understands Tok Pisin, and everyone in the other Ikobi villages can speak at least some Tok Pisin, except older men in Sorobo, and older women. However, these older people still understand some Tok Pisin, except for older women in Kuri.

Some English is spoken by young and middle-aged men in Sorobo and young and middle-aged women in Baina. There are other people who are reportedly able to understand some English, particularly young adults and middle-aged men in Moka, young women in Sorobo, young and middle-aged men in Baina, and all adults in Komaio except older women.

Some people, particularly older people, are able to speak or understand other vernacular languages. Everyone in Baina understands a little Fasu. In Moka, middle-aged and older women speak a little Foia Foia [ffi], older men understand it, and middle-aged men and young women understand a little. Older women in Moka understand Morigi [mdb] and, in Komaio, Morigi is spoken by older men and understood to some degree by young men, middle-aged men and older women.

Mouwase

Most adults in the Mouwase area are able to speak both Tok Pisin and Hiri Motu. However, older women in Kibeni cannot speak Tok Pisin and can only speak some Hiri Motu, and older women in Gibidai only speak some Tok Pisin.

Some English is spoken by young men in Kibeni and middle-aged adults in both Kibeni and Gibidai. English is also understood to some degree by young women in Kibeni, young adults in Gibidai and older men.

Mouwase residents are able to speak many other vernacular languages as well, particularly in Gibidai. Older men in Kibeni speak Morigi [mdb], and middle-aged men speak some, but all adults in Gibidai can speak Morigi, except for middle-aged women who only understand it. Also in Gibidai, older adults speak Foia Foia [ffi], older adults and middle-aged women speak Minanibai [mcv]. 14 Older men in Gibidai speak Bamu [bcf], middle-aged men speak some, and middle-aged women understand it. It was also reported in Gibidai that older men speak Kiwai [kiw], Kerewo [kxz] and Rumu [klq] and middle-aged men speak some Kiwai and Kerewo and understand a little Rumu.

Barikewa

Many adults in Kaiam, the Barikewa-speaking village, can speak Tok Pisin or Hiri Motu as well as Barikewa. In fact, one older man commented that Tok Pisin is like their own language. Reports indicate that men of all ages and young women are able to speak Tok Pisin, middle-aged women can speak some, and older women can understand some. Middle-aged and older men can also speak Hiri Motu, young adults and middle-aged women can speak some Hiri Motu, and older women can understand Hiri Motu. Young men can speak some English, and young women and middle-aged adults can understand some. Older men can speak a little Rumu [klq] and young men can understand a little. Also, older men can speak a little Fasu [faa] and Kerewo [kxz] and understand a little Folopa [ppo].

4.2.10 Summary of language use

Language use throughout the Kaser area indicates a high vitality for all three languages in the area. Based on reported and observed data, both adults and children throughout the area primarily use their

¹⁴It was reported in Gibidai that everyone living in the Minanibai language area now speaks Morigi instead of Minanibai.

own local language. Even though many people speak other languages as well, the primary use of the vernacular indicates high language vitality. Furthermore, the local languages in the Kaser area are the only languages used for traditional events, and they are used to some extent in most other domains as well. The only domains in which they are not reported to be used regularly are domains that require significant interaction with outsiders, such as going to town or market.

Data regarding language use in schools does not give a strong indication one way or the other for language vitality, since some schools use the local language in the classroom, but others prohibit students from speaking their own language while they are on the school grounds. Very little data was collected regarding language use in churches, and the available data is also inconclusive.

4.3 Language attitudes

Landweer's third theme of ethnolinguistic vitality, language attitudes, deals with the prestige attributed to a language both by speakers of the language and by outsiders, as well as the extent to which a language community is distinguished from the language groups around it (Landweer 2006, p. 214, 217–218). Language attitudes shape the perceptions of prestige "among other neighbouring and regional languages" and the "relative prestige of the language within the linguistic repertoire of the speech community" (ibid., p. 206). The more positive the language attitudes of both insiders and outsiders are, the higher the prestige they will associate with that language, and "the greater the prestige a linguistic code enjoys, the more likely it will continue to be taught, learned and spoken" (ibid.). All three languages in the Kaser area are viewed positively by their speakers which indicates high ethnolinguistic vitality for these languages.

4.3.1 As reported by residents

People throughout the Kaser area have a positive attitude towards their own local language. In all three language areas, residents said that they want their children to learn the local language well, and they think that their children and grandchildren will speak their own vernacular when they are adults. Respondents in the Ikobi and Mouwase language areas also said that they prefer to hear stories in their own local language, and that they sometimes speak their own language even when outsiders are present, indicating at least the absence of shame, if not pride in their own language. These positive attitudes indicate high vitality for the languages in the Kaser area.

Ikobi

Ikobi speakers have a positive attitude towards their language. When asked what language they prefer to hear stories in, respondents consistently chose Ikobi, although people in Baina mentioned both Ikobi and Tok Pisin. Respondents in Moka said that Ikobi is best because then children can understand, and in Komaio people said that when Ikobi is used the entire family can understand well.

When asked which languages they want their children to know well, respondents in the Ikobi language area mentioned Ikobi, English, Tok Pisin and Hiri Motu. In Moka it was mentioned that learning other languages in addition to Ikobi is important so that children can do well in school.

When asked what language their children will use when they grow up, people in Kuri only said Ikobi. People in other Ikobi villages think their children will use Ikobi along with other languages including English, Tok Pisin and Hiri Motu. However, most people think that when their grandchildren grow up they will speak Ikobi to their own grandchildren. Only in Baina did people think that their grandchildren would use both Ikobi and Tok Pisin. These reports indicate that Ikobi speakers view their language as something that will last for many generations.

In Moka it was reported that Foia Foia [ffi] speakers learn the Ikobi language, which indicates a favourable attitude towards Ikobi on the part of Foia Foia speakers. When communicating with Foia Foia speakers, Moka residents reportedly use Ikobi, unless the Foia Foia people don't understand them, in which case they use Hiri Motu. Use of the Ikobi language with outsiders indicates that people are proud

to use the Ikobi language. Furthermore, Ikobi people reported that they use Ikobi in Kikori when they meet other Ikobi speakers, indicating that they are not ashamed of using their own language in front of speakers of other languages.

Mouwase

People in Mouwase also have a positive attitude towards their language. They identified Mouwase as the language they prefer to hear stories in, although people in Kibeni mentioned that they would use Tok Pisin or Hiri Motu if outsiders were present. People want their children to learn English, Tok Pisin and Mouwase well, and think that when they grow up they will use Mouwase, Tok Pisin, Hiri Motu and English. Adults said that they expect their grandchildren will use Mouwase to talk to their own grandchildren unless they are living outside the language area. This prediction indicates that they think their language will be spoken for many generations to come. Mouwase speakers also reported that they sometimes use Mouwase in Kikori, indicating that they are not ashamed to use their language in front of outsiders.

Barikewa

When asked which languages they want their children to learn well, residents of Kaiam only said Barikewa, indicating a strong preference for the Barikewa language over other languages. Barikewa speakers think that their children will use Barikewa when they grow up, and that their grandchildren will speak nothing but Barikewa to their own grandchildren. People in Kaiam also said that Folopa [ppo] speakers learn the Barikewa language, indicating that Folopa speakers have a positive attitude towards the Barikewa language as well. However, they also reported that they usually use Tok Pisin or Hiri Motu when interacting with Folopa speakers.

4.3.2 As reported by school staff

None of the schools in the Kaser area reported having a traditional culture component, but a teacher at Kuri SDA Community School said that they would like to spend thirty minutes per week on traditional cultural activities. Although he remarked that traditional songs are not being learned by young people, he also said, "It is hard to leave our traditional language, even if we go to high school. We like our language." Another teacher in the Kaser area said that the local language is very important and should not be rejected. These reports indicate favourable attitudes towards the local languages on the part of school staff, which is a positive sign for language vitality.

4.3.3 Group identity

According to Fasold "[a] prevalent tendency to maintain a distinction between 'us' and 'them', that is, the in-group and a particular out-group, is one sign that shift is not in progress" (1987:240). People throughout the Kaser area do have a sense of identity as Kaser people. Speakers of all three languages identify themselves as part of the Kaser tribe, even though they recognize linguistic differences within the Kaser area. However, there were no reports of specific cultural items or practices that distinguish the Kaser people from neighbouring people, or that distinguish the language groups within the Kaser area from each other, and easy access to outside goods could affect the cultural identity of the Kaser people.

Outside culture is having an effect within the Kaser area. People in the Kaser area have easy access to goods and materials from outside the language area because there are several timber and oil companies in the area. Many houses in the area are made of sawn timber rather than traditional materials, and people have access to outside goods such as radios, generators, water tanks, outboard motors, tools and even satellite phones. People in Kuri reported that children are no longer taught traditional skills such as carving or making canoes and houses, and traditional initiation rites for boys are no longer practiced either. Traditionally, marriages were arranged, but parents now leave it up to

their children to decide who they want to marry. They do, however, still use traditional chants to bring success when hunting and fishing. It was also reported in Baina that people still compose songs in their own language, even though they don't write them down.

The fact that Kaser people identify themselves as part of the Kaser tribe is a positive sign for ethnolinguistic vitality, although the fact that the Kaser area includes three distinct languages could lessen the unifying effect of this identity. Furthermore, the reports that many traditional skills are no longer being taught and the ease with which Kaser people can access outside goods indicate a potential threat to the vitality of the languages in the Kaser area.

4.3.4 Summary of language attitudes

Throughout the Kaser area, people have positive attitudes towards their own local language, which indicates high ethnolinguistic vitality for the languages in the Kaser area. Respondents indicated that they like hearing their language, want their children to learn it as well, and are not ashamed to speak it in front of speakers of other languages. School staff also indicated positive attitudes towards the vernacular. Although three different languages are spoken within the area, speakers of all three languages identify themselves with the Kaser tribe, an identity which separates them from surrounding language groups and is a positive sign for language vitality.

4.4 Conclusions on language vitality

According to Landweer (2006:213), language vitality can be assessed by examining three themes of ethnolinguistic vitality: opportunity for contact with other languages, actual language use, and language attitudes. Although contact with other languages poses a potential threat to the vitality of the languages in the Kaser area, both language use and language attitudes indicate high ethnolinguistic vitality for all three languages in the area.

Kaser people do have contact with speakers of other languages, which could lower the vitality of the languages spoken in the Kaser area. Although the Kaser people can currently meet their primary economic needs within the Kaser area, there are logging and oil companies in the area that could lead to greater dependence on outside economic sources. Furthermore, the relatively high levels of immigration in the Ikobi and Barikewa language areas potentially threaten the vitality of those languages.

Because most people primarily use their own local language, language use indicates high ethnolinguistic vitality for all three languages in the Kaser area. The local languages in the Kaser area are the primary languages used between family members, and they are used in most domains that do not require significant interaction with speakers of other languages.

Language attitudes also indicate high ethnolinguistic vitality for all three languages in the Kaser area. People in the Kaser area like their own language, want their children to speak it well, and are not ashamed to speak it in front of outsiders. Kaser people also have a strong identification with the Kaser tribe, which distinguishes them from surrounding language groups and encourages ethnolinguistic vitality.

5 Joso and Juko

In the current *Ethnologue* entry for Omati [mgx], it is reported that some speakers of the Omati language also speak the Joso and Juko languages (Lewis 2009). However, neither Joso nor Juko is given its own listing in *Ethnologue*, and no further information regarding either language was available at the time of the survey.

Residents of Omati village reported that Joso (which they referred to as Yoso) is actually the name of a clan consisting of speakers of the Dukemi dialect of Upper Turama Kaser. Similarly, Juko (which they referred to as Yukoi) is the clan name for Barikewa speakers living in Omati village. Neither Joso nor Juko is therefore currently used as a language name.

6 Conclusions

Reported data and lexicostatistic similarity indicate that there are three distinct languages within the Kaser area: Ikobi, Mouwase and Barikewa. Kaser people consistently reported differences between these three varieties, and they all share less than 60 percent lexicostatistic similarity. Furthermore, there are three different dialects within the Ikobi language: Upper Turama Kaser, Upper Kikori Kaser and Dukemi. Both lexicostatistics and reported data reveal differences between the three Ikobi varieties.

Ethnolinguistic vitality within the Kaser area is currently high in all three language areas. Although the amount of contact that Kaser people have with speakers of other languages is potentially a negative factor for the vitality of the languages in the Kaser area, other factors indicate that ethnolinguistic vitality is still high. Speakers of the Ikobi, Mouwase and Barikewa languages use their own language in most interactions with family members, and the local language is used in most domains that do not require significant interaction with speakers of other languages. Furthermore, Kaser people have a positive attitude towards their own language and like to hear it spoken.

Neither Joso nor Juko is actually a language name. Both Yoso and Yukoi are clan names used by speakers of the Barikewa and Ikobi (Dukemi dialect) languages respectively.

Appendix A: Language characteristics

In all three languages in the Kaser area, word order is generally SOV, as shown in the following example from Ikobi. 15

1) poma aea kasa tekinopo man 3SG dog hit

The man hit the dog.

Also in all three languages, negation can be indicated tonally, as seen in the following examples from ${\rm Ikobi.}^{16}$

2) kàrímào kárímào

He is sitting. He is not sitting.

In the Ikobi and Mouwase languages, adjectives usually follow the nouns they modify, as shown below. 17

3) kußea makußama kasa kosmi tekinuao man Big dog small hit

The big man hit the small dog.

Tense, aspect and mood in the Ikobi and Mouwase languages are shown with the verbal suffixes given in Table 14 (examples are from Kuri, 180–182):

Table 14. Ikobi and Mouwase verbal suffixes (Petterson 2010, Pers. Comm.)

Aspect	Tense	Mood
-ta 'continuous'	-r 'past' -m/n 'present' -ba/va 'future'	-ao 'declarative'

Ikobi verbal suffixes are shown in the following examples: 18

4) koβea kesaβ na-ta-m-aoman Yam eat-continuous-present-declarativeThe man is eating the yam.

- 5) hera koβea kasaβ na-r-aoyesterday man yam eat-PAST-DECLARATIVEYesterday the man ate the yam.
- 6) hera koβea kesaβ na-βa-ao
 Tomorrow man yam eat-FUTURE-DECLARATIVE
 Tomorrow the man will eat the yam.

¹⁶Items 50 and 161, Moka.

¹⁵Item 183, Baina.

¹⁷Item 185, Moka

¹⁸Items 180–182, Kuri

Appendix B: Wordlist addenda

Some items were excluded from the lexicostatistic comparison because they contained no new morphemes, because the item was not elicited, or because it was believed that the wrong word had been elicited.

Table 15 shows which items were excluded, along with the reason for their exclusion.

Table 15. Lexicostatistic comparison exclusions

Item #	Gloss	Wordlist(s) Excluded	Reason for Exclusion
13	breast	Rumu	no new morphemes
22	Leg	All	no new morphemes
24	liver	Kibeni	wrong word elicited
28	girl	Baina, Faia, Gibidai, Omati (Gihiteri), Kibeni, Komaio, Kuri, Moka	no new morphemes
30	old woman	Baina, Faia, Fasu, Rumu, Komaio, Kuri, Moka, Sorobo	no new morphemes
36	brother	Omati (Iba)	not elicited
36	brother	Kaiam	wrong word elicited
43	wallaby	Fasu	not elicited
49	person	Fasu, Omati (Iba)	no new morphemes
50	he sits	Moka	no new morphemes
52	he lies down	Gibidai, Omati (Gihiteri), Omati (Iba), Kibeni, Sorobo	no new morphemes
56	he eats	All	no new morphemes
65	he kills	Baina, Faia, Gibidai, Omati (Gihiteri), Kaiam, Kibeni, Komaio, Kuri, Moka, Sorobo	no new morphemes
77–92	See Table 19	Omati (Iba)	not elicited
118	feather	Baina, Faia, Gibidai, Omati (Gihiteri), Omati (Iba), Kaiam, Kibeni, Rumu, Komaio, Kuri, Moka, Sorobo	no new morphemes
126	four	Gibidai, Omati (Gihiteri), Omati (Iba), Kaiam, Kibeni, Moka, Sorobo	no new morphemes
127–160, 162–170	See Table 18	Gibidai	not elicited
128	Ten	Baina, Faia, Omati (Gihiteri), Omati (Iba), Kaiam, Kibeni, Rumu, Komaio, Kuri, Moka, Sorobo	no new morphemes
131	yam	Rumu	not elicited
138	net bag	Omati (Iba)	wrong word elicited
145	tomorrow	All	no new morphemes
150	green	Faia, Omati (Gihiteri), Omati (Iba), Komaio, Kuri, Moka	no new morphemes
161	he is not sitting	Omati (Gihiteri), Omati (Iba), Fasu, Kaiam, Kibeni, Komaio, Kuri, Sorobo	no new morphemes
167	they two	Kuri	no new morphemes

Appendix C: Wordlists

Table 16. Ikobi wordlists

Item	Gloss	Kuri	Faia (Wantobari)	Moka
1	Head	naminəmap	nèmín màp	nimənamab
2	Hair	namenmabor	Mápòr	mæbor
3	Mouth	namenkumer	kómèr	kumer
4	Nose	namenbob	Póp	buβ
5	Eye	namensi	sítŏm	sítùm
6	Neck	boko	Púkò	bogo
7	Belly	kam(baru)	kân	kân
8	Skin	dínkŏr	Kor	kŏr
9	Knee	haimagu	Haimoku	maku
10	Ear	kobi	Kúbì	koβi
11	Tongue	komen	kúmên	kumen
12	Tooth	kukanjo	(ko)káinjô	kẽjo
13	Breast	so	sô	sú
14	Palm	sipai	sépǎi	sεbai
15	sole of foot	haipai	háipǎi	haibai
16	Back	tuβikæul, tuβihaβo (backbone)	Kæul	koluhaβ
17	shoulder	siwoi	Séwèi	siwi
18	forehead	sihab	síhâp	sihaβ
19	Chin	komotu	kómêr	kúmàtú
20	Elbow	setəku	Simoku	sitaku
21	Thumb	sema	Símà	símâ
22	Leg	hai	hǎi	hấĩ
23	Heart	kamo	kàmŏ	kamu
24	Liver	$u\beta$	Uβ	uβ
25	Bone	haβ	Hab	hãβ
26	Blood	kai	Kai	kði
27	Baby	bõmjaru	pónjòrǔ	boiəru
28	Girl	besbum kosmi	pésbòm	besbum kosmi
29	Boy	wanibum kosmi	wàněpòm	wanebum

Item	Gloss	Kuri	Faia (Wantobari)	Moka
30	old woman	besan kaiŋ	besekain	besiken
31	old man	kaimakai	Kaimakae	kaimake
32	woman	bes	pês	bésbùm
33	Man	wanimi	wàně	wanebum
34	Father	aba	Tàbú	abo
35	mother	nono	Nàbú	nunu
36	brother (elder)	at ^h ɛh	ateh	ate
37	sister (elder)	no, at ^h εh	nòké	nô
38	Name	nenen	Nènén	nènén
39	Bird	kai	kâi	kâi
40	Dog	kas	Kás	kás
41	Pig	kən	kôn	kón
42	cassowary	sik ^h ina	Sigina	sikina
43	wallaby	tebere	téperè	tebere
44	flying fox (big)	kube	Kube	pube
45	Rat	kaifari	Kaifiri	kaifori
46	Frog	soβε	sòβέ	siro
47	Snake	har	Har	hấr
			misikε	
48	Fish	main	mằĩ	mâi
49	Person	wɔm	wŏm	wǒm
50	he sits	aiakarimâu	Jakarue	kàrímàu
				karue
51	he stands	aiahaβsihamau	Haβsiue	hæmau
52	he lies down	aiaigɛnohamau	Komepisue	ekɛnohæmau
53	he sleeps	aiabisuhamau	Pisue	bisuhæmau
54	he walks	aiahaβsiutuamau	Ue	utæmau
55	the dog bites the man	kasanewamanatamau	kaswõmfatam	kasenewanetemau
56	he eats	aianokononatamau	Natam	natemau
57	he gives it to	aiamainaortamau	Fourue	iaurtæmau
58	me he sees	aimatotamau	Tue	tutæmau

Item	Gloss	Kuri	Faia (Wantobari)	Moka
59	he comes	aiabentamau	Penue	aiabɛtæmau
60	he says	aimamɛnkɛtamau	(me)kinue	aimekitamau
61	he hears	aimakotamau	Kotam	aikotamau
62	he knows	aiakaniau	Kane	aikanihau
63	he drinks	aiamunatamau	mónètâm	aimunətəmau
64	he hits	aimategetemau	tékìnùè	aiteketemau
65	he kills	aima tegono	tékìnòkàskínùe	aiməkaskiβtəmau
66	he dies	kasgenuau aiakar kasgenuau	mékàskínòàu	aiəkaskinuau
67	it burns	kumahaisiginohamau	Kũwar	kumatewahæmau
68	it flies	aiaboboasiuau	pokonotuam	aiabõtɛmau
69	he swims	aia muwaroutoamau	múbòrŏtùàm	aiamugortɛmau
70	he runs	ifi utuamau	Ífíutùàm	aiaifitemau
71	he falls down	aia doafikinuau	Doafikita	aiadofikitɛmau
72	he catches	ainesitakafofuau	(sé)fòê	simarafatɛmau
73	he coughs	(aia) naru ketamau	nàrú	neruketamau
74	he laughs	aia kwastemau	Kwasitam	aikwastɛmau
75	he dances	aiakwinwasatamau	kwinwɛstam	aiakwiwɛstamau
76	Big	makubu	Makuβu	makuβuau
77	Small	kosmi	Kosme	kwosmiau
78	Good	daro	daro	daruau
79	Bad	fami	fəmi	fəmiau
80	Long	so(makubu)	sŏ(makubu)	soau
81	Short	kofikosmi	Kofikosme	kufiau
82	Heavy	daβi	dὲβí	dəβiau
83	Light	ifε	ífè	ıfeau
84	Cold	komi	kεβe	kıβiau
85	Hot	εβ	ιβ	εβαυ
86	New	kasi	Kàsí	kasiau
87	Old	bari	bari	bariau
88	Round	kwanbir	Bír	kwənbirau
89	Wet	kimin	kímín	kımin(au)
90	Dry	$k^{\rm h}u$	$k^h u$	kuau

Item	Gloss	Kuri	Faia (Wantobari)	Moka
91	Full	teskinohamau	t ^h ais	tesahamau
92	Road	diker	De	dikeau
93	Stone	kam	kâm	kamau
94	Earth	sabo	Dafo	sewoau
95	Sand	kikimab	Kìkìmáb	kiɣiau
96	mountain	kamju	Kamju	kamjuau
97	fire (wood)	kum	kům	kúmàu
98	Smoke	kumisin	Kùmsín	kúmsínàu
99	Ashes	dum	Dukum	(kun)mofæu
100	Sun	jos	Jós	josæu
101	Moon	wasiβa	wεsiβa	wasiβæo
102	Star	siŋkwin	Sikwin	sikwinau
103	Cloud	normu	Normu	nor
104	Rain	kuri	$k^{\rm h}$ áp	kuri(au)
105	Wind	iwa	Íwà	iβau
106	Water	mũ	Mũ	mu(au)
107	Vine	jabu	jàbú(ìré)sò	jaβu
108	Tree	?i	I	î
109	walking stick	t ^h ima	t ^h ímà	t ^h ima(u)
110	Bark	ikor	Íkòr	íkòrâu
111	Seed	konhai	Konsi	kónhằi
112	Root	íhǎi	íhǎi	íhěi
113	Leaf	(i)bor	Ipor	íbôr
114	Meat	konmis	Ímìs	(kon)mis
115	Fat	sam	Sãm	sám
116	Egg	t ^h amɛh	tàméh	tameh
117	Louse	kurom	Kuruom	kùróm
118	Feather	kaibor	Kaipor	kaibor
119	Horn	maβsawa	mabsəwa	maβsəwa
120	Wing	kaihor	Kaiwor	káiòr
121	Claw	kaikojõ	Kaidukif	semabos
				sikukojõ

Item	Gloss	Kuri	Faia (Wantobari)	Moka
122	tail (dog)	kau	Kau	kεu
123	One	sakan	sak ^h an	sakan
124	Two	hãĩ	Hãĩ	hằĩ
125	Three	sir	seri	sír
126	Four	sɛkiv	sἕkĭβ	síhấĩàhấĩà
127	Five	simbor	Sémà	sisəkan(diki)
128	Ten	semhai	séhâi	síhằĩ
129	taro kongkong	fir	Fir	fírmà
130	sugarcane	jou	jεu	jêu
131	Yam	kesaß	kesap	kεsaβ
			Sokon	
132	Banana	nai	nε	nê
133	sweet potato	kaima	Fàiá	kaima
134	Bean	dukor	Dukor	dugor
135	Axe	kàbí	Kàpí	kàbí
136	Knife	firbai	Kírí	fírbài
137	Arrow	wasum	Wasum	wosum
138	net bag	kai	Kae	kéi
139	House	min	Min	mín
140	tobacco	sukõ	Soko	suko
141	morning	kion	kek ^h om	kiom
142	afternoon	sámá	Sama	sama
143	Night	kafon	Kafon	ka∳on
144	yesterday	hir	her	hir
145	tomorrow	hir	her	hir
146	White	sabia	sεβia	sεβia
147	Black	kasio	Kasu	kasio
148	Yellow	jájǎ	Jàjá	јεја
149	Red	kúm	Kum	kúm
150	Green	íbôr	Ípòr	íbôr
151	Many	mon	mŏn	mun
		baia		

Item	Gloss	Kuri	Faia (Wantobari)	Moka
152	All	awoha	Awoha	æwoha
153	This	enau	enæu	enau
154	That	asɛnau	æsiɛnau	asæu
155	what?	kòbâi	Kopai	kobai
156	who?	mai	mâi	mâi
157	when?	kobafainɛ	pésàné	kobaijosmai
158	where?	damənai	dàmâi	damai
159	Yes	jau	Jæu	jæo
			Mo	
160	No	mãĩau	Mãĩ	maiau
161	he is not sitting	aiakarímàu	Jákàrìàro	kárímàu
162	I	ina	Ĩna	ina
163	you (singular)	ja	Ìjá	ijæu
164	Не	ai(au)	Aiau	aiau
165	we two	leri	Nirihai	lerihaiau
166	you two	jirəhai	Jirihai	jerihaiau
167	they two	jir(əhai)au	Apirau	abirau
168	we (exclusive)	nanasa	Nanhau	nanəhau
169	you (plural)	jan(a awoha)	jan(a)	janau
170	they	amenau	amenau	amenau
171	he is hungry	aiasare etamau		nasikɛtamau
172	he eats sugar cane	(aia) junatamau		aiunetemau
173	he laughs a lot	aiakwamakubusitama u	jarimakuβo	kwabaistemau
174	one man	kuβεsagana haβsi		bonsakanahaβsihamau
175	stands two men stand	hamau koβεhai haβsi hamau		bomhaihaβsihamau
176	three men stand	koβεsirhaβsi hamau		bõsirahaβsihamau
177	the man goes	koβeautoamau		kuweauwau
178	the man went yesterday	híràkòbéà úwàu		kuβεhirεuwau
179	the man will	híràkòbéà wăû		hirakuβeawau
180	go tomorrow the man eats the yam	kobea kesaβnatamau		kuβeakεsaβεnatεmau

Item	Gloss	Kuri	Faia (Wantobari)	Moka
181	the man ate the yam yesterday	hira kobea kasaβ narau		hirakuβeakεsaβnεrau
182	the man will eat the yam tomorrow	hira kobea kesaβ nabau		hirakuβeakεsaβ паβаu
183	the man hit the dog	kobea kastekirau		kuβeamakasa tekinuau
184	the man didn't hit the dog	kobeakastekimirau		kuβeama kasate ˈkinuau
185	the big man hit the little dog	kobeamakubune kaskosmitekirau		kuβeamakuβamakasakos mitekinuau
186	the man gave the dog to the boy	kobeama kasbom kosmi uruau		kuβeamakasεbõkasεmiur uau
187	the man hit the dog and went	kobeama kas tekɛnoni ariauau		kuβeama kasate kεnone eriεuau
188	the man hit the dog when the boy went	bomaubabule kobeama kasa tekenuau		boŋkwasime eβaβune kasatekinuau
189	the man hit the dog and it went	kobeama kasatεkε nonewanau		kuema kasa tekinone kasauau
190	the man shot and ate the pig	kobea konaaria habunoau		kueama kona haβone arianuau

Table 17. More Ikobi wordlists

Item	Gloss	Komaio	Sorobo	Baina
1	Head	nəmın mab	mâ:b	máb
2	Hair	mábòr	mâ:bôro	(ma)por
3	Mouth	kwonda	kû: bòkár	kàmàrá
	Lips			kowor
4	Nose	bŏ	bù:β	pop¬
5	Eye	sítŏm	sí:tèum	sî
6	Neck	bókô	bókờ	pókò
7	Belly	kân	kâ:n	kân
8	Skin	kwŏr	kàɔr	kôr
9	Knee	màkú	Màkú	máukù
10	Ear	kóβì	k ɔ ːβì:	kúbì

Item	Gloss	Komaio	Sorobo	Baina
11	Tongue	kúmén	kòmén	kómèn
12	Tooth	kõkĩjõ	kằiồ	kấijò
13	Breast	sú	só:	sộ
14	Palm	síbâi	sê:	sépàe
15	sole of foot	háibâi	háe pàε	hấẽpàe
16	Back	kěur	kéur ^u	kæur
17	Shoulder	síwî	(se)ûi:	séwòi
18	Forehead	síhàb	sí:hà:b	síhàp
19	Chin	kúmàtú	kôndà:	kómòtù
20	Elbow	sítàkû	sé:tàkú:	sétègú
21	Thumb	símâ	sé:mà:	sémà
22	Leg	hấi	haɛbɑu	hấẽ
23	Heart	kấmû	kámù:	kàmố
24	Liver	ûβ	û:β	ŭb
25	Bone	hǎp¬	há:β	háp
26	Blood	kới	kei, kaí	k ŷ i
27	Baby	bỗĩárû	baúm ⁱ yàrù	póŋjὲrù
28	Girl	bésbòm	kúkúβànbâ	péspùm
29	Boy	wánébòm	dεβu baum	wànépùm
30	old woman	bèsén kěin	bèˈsén kèin	pèsámákì
31	old man	kamə kâi	mákèi	káemákè
32	Woman	bés	béis	pês
33	Man	wàní	wàné	wàné(pum)
34	Father	ábò	Τáβù	apa
35	Mother	nònó	Nàβú	nònó
36	brother (elder)	àtéh	átè	àté
37	sister (elder)	nô	náò	wèpú
38	Name	nìnín	Nènén	nànện
39	Bird	kâi	kâε	kâe
40	Dog	k ^h ás	Kás	kâs
41	Pig	kón	kón	kộn
42	cassowary	síkínâ	Síkínà	síkínà

Item	Gloss	Komaio	Sorobo	Baina
43	Wallaby	tébèrè	tébèrè	túpà
44	flying fox (big)	kúbê	kúbèi	kúbè
45	Rat	kàifírí	kàifàrì	kaèfirí
46	Frog	darusube	sὸβέ	sòpé
47	Snake	hár	Har	mísíkê
48	Fish	mẫi	Mái	mŤi
49	Person	wóm	wóm	wôm
50	he sits	kèrúè	áε kàrímàɔ	kàrímò
51	he stands	háβsìùè	hà:m	hápsè(hámò)
52	he lies down	pìsìtámàu	bìsá hà:màɔ	épàhàmò
53	he sleeps	bìsúè	bìsá hà:màɔ	pìsúhàmò
54	he walks	inautamau	aea útámàɔ	útúàmò
55	the dog bites the man	kásàwòmfàtámàu	kás mà:kàsékétámaɔ	kàsàwómà fátá(mò)
56	he eats	(nə)danətamau	(naɔkɔn) natam	nàtámò
57	he gives it to me	jaæurotamau	órótâm	aemainaoropo
58	he sees	(jæ)totamau	tò'ánâɔ	tòtâmò
59	he comes	péntàmàu	ˈpénɛ̀nˈhàmàɔ	pę́ntàmò
60	he says	ménkìtámàu	mên kế támâɔ	mínkètámò
61	he hears	ìnákótámàu	kó:tàm	kòtámò
62	he knows	ìnákánéàu	aɛa kànéâɔ	kánèímò
63	he drinks	nàmúnàtàmàu	áɛàˈmú náˈtámàɔ	múnàtámò
64	he hits	táikétámàu	áɛà tèkºtàmaɔ	té:kìtàmò
65	he kills	(na)tɛkɪtamau	áεà téká kás kètàmaɔ	tékìnòkáskìtàmò
66	he dies	inakaskɛnuo	áɛà mé: kàs kèraɔ	káskìnòpò
67	it burns	kűwârtèmàu	kú:m kàra kàˈrím(aɔ)	kùmàwárìtàmò
68	it flies	bæutæmau	áεà páokérà úrao	pókònò?òpô
69	he swims	muwaratæmau	mú tàfúrà úràɔ	múwàrètámò
70	he runs	ìnáifítùàmàu	ì'fíùraɔ	tapoutuamo
71	he falls down	ìnàdòfíkìtàmàu	dòfíkèr(aɔ)	tófikìnòpò
72	he catches	пєmefatamau	fà ^l támàɔ	tàmàné fòpôu
73	he coughs	naruketamau	naru	nàrú(kɛnoko)
74	he laughs	kwastamau	kəa: seta	kwá:sìtàmò

Item	Gloss	Komaio	Sorobo	Baina
75	he dances	inakwintamau	kúin wástàm(aɔ)	pátì ìtàmò
76	Big	màkúβú	Màkúβù	màkǽubùtar
77	Small	kosmi	kàtéhà	kátòrò
78	Good	daro	ćasb	dárô
79	Bad	fèmí	Fàmí	fámî
80	Long	sô	sáò	sŏa
81	Short	kòfí	kòfé	kòfí
82	Heavy	dèβí	dàβì:	tàpí
83	Light	ìfé	éfέ	ífê
84	Cold	kíβî	kéβê	kìβí
85	Hot	íb	Éβ	îb
86	New	kàsí	Kásí	kàsî
87	Old	bàrî	Mém	pàrí
88	Round	bír	kèkéfò	pîr
89	Wet	kímî	kímîn	kìmín
90	Dry	kú	Kú	kû
91	Full	tes(kinuo)	Tais	tŶis
92	Road	dìké	dìké	(pǔɛn)tâi
93	Stone	kám(bir)	Kám	kâm
94	Earth	sèβó	sáβó	tàfó
95	Sand	kíkî	kíkî	kìkí
96	mountain	kámju	kám jû:	kàmdʒû
97	fire (wood)	kûm	kûm	kŭm
98	Smoke	kúmsí	kúmì'sín	kùsín
99	Ashes	dŭm	Káiβá	dùkúm
100	Sun	jŏs	ⁱ ઇs	jos
101	Moon	wàsíβà	Wásíβà	wàsìpá
102	Star	sínkwĭn	sînkúin	nápô
103	Cloud	nórmǔ	mọ	nórmô
104	Rain	kùré	kòré	kǎp
105	Wind	íwâ	í:wà	íbûp
106	Water	mú	Mú	mû

Item	Gloss	Komaio	Sorobo	Baina
107	Vine	jèβú	(búɛn) íabû	jèbú
108	Tree	î	î:	î
109	walking stick	ţímà	Tímà	tímà
110	Bark	íkòr	î kə̀or	íkòr
111	Seed	sĭ	î hàε	kònwêi
112	Root	íhěi	hái sìsìβ	íhặi
113	Leaf	íbôr	îbôr	ípôr
114	Meat	mĭs	Mís	mîs
115	Fat	sám	Sám	sâm
116	Egg	kátámêh	támè	toum
117	Louse	kúrúóm	kúróm	kúrùòm
118	Feather	káipôr	káε'bôr	kàepôr
119	Horn	máβséwâ	Òβ	jèmí
120	Wing	káiòr	э́г	wor
121	Claw	sigənafi	káε kíf	jàpó
122	tail (dog)	kâu	kás kêu	kňu
123	One	sàkán	Sàkán	sán
124	Two	hấĩ	háε	hẫẽ
125	Three	sír	Sér	sîr
126	Four	sífôr	Háeháe	sékìp
127	Five	simaboro	Sésà	sémâ
128	Ten	síhài	Sèhàe	sεmhậ̃ẽ
129	taro kongkong	fírmà	φěr âɔ	fîr
130	sugarcane	jêu	iau, jʌu	kîu
131	Yam	kèsáb	kεsaβ	sókòn
132	Banana	nê	kôn	nêa
133	sweet potato	jabinâ	Jàβìnà	fàeá
134	Bean	dúkôr	dúkòr	dúkôr
135	Axe	kàbí	heúm	kàpí
136	Knife	fírbâi	φér(àɔ)	kírì
137	Arrow	wàsúm	Wàsúm	ΛÎS
138	net bag	kái	káε	kîi

Item	Gloss	Komaio	Sorobo	Baina
139	House	mín	Min	mîn
140	Tobacco	sùkú	Súkú	sòkố
141	Morning	kîəm	kîəm	kìkôn
142	afternoon	sə́má	Sámá	sámâ
143	Night	kàφón	кафоп	kàfón
144	yesterday	hír	Hér	hêr
145	tomorrow	hír	Hér	hêr
146	White	sέβíà	Saißa	sèpíà
147	Black	kàsìó	kaisə	kàsíò
148	Yellow	jèjá	jɛja	à díàn
149	Red	kúm	Kùm	kûm
150	Green	íbôr	íbór kasi	íbòrkàsí
151	Many	mŏn	Bàí	tàpé
				môn
152	All	áwèhà	Auaha	(kọn) tæfuru
153	This	énâu	čnâɔ	εn
154	That	àsénàu	àsáò	àsèká
155	what?	kóŋkùbâi	kòmháè	kòpá
156	who?	mâ	máè	(pon)mâ
157	when?	kóŋkùbáfàjè	kòmbá:fàɛ	pèsànê
158	where?	dámà	dámánàɛ	tàmâ
159	Yes	mŏ	mΰ	jô
160	No	mấĩàu	mớiào	mŷi
161	he is not sitting	kərímæu	mớiào	káríòrìmò
162	I	ìnâu	Ina	ínà
				ın
163	you (singular)	ìjæ̂u	Ía	jâ
164	Не	aiau	âε	âe
165	we two	nəríàu	léiràɔ	neri
166	you two	jéràu	jéiràɔ	jeri (hẫẽ)
167	they two	abirau	ὰβίτὰɔ	æbori
168	we (exclusive)	nanehasi	nǎ:náò	nanesa

Item	Gloss	Komaio	Sorobo	Baina
169	you (plural)	jánàu	ja:n	jénè
170	they	amenau	àmén	amənɛ
171	he is hungry	sérê	saréa	aèa kónsèrèkètámò
172	he eats sugar cane	(nai)junatamau	jounén kàrìmao	jɛunɛtamo
173	he laughs a lot	kwamagositemau		kwakaumpweti ketamo
174	one man stands	kòbésàgànàhàmâu	kòβé áiná há:màɔ	ponsanahapse itamo
175	two men stand	kòbéhấĩàhàmâu		pònhẫ̃ẽhatamo
176	three men stand	kùbésíràhàmâu		ponsirhapsehamo
177	the man goes	kobeaiautɛmau	wen hamao	bomautuamæu
178	the man went yesterday	hıramonurau	her uraɔ	bomaorboa
179	the man will go tomorrow	hirekiom(ena)wom wæu	her wa:ɔ	bomaherwomo
180	the man eats the yam	(kuβε)wɔmadanatɛmau	kɔβε aina dam natamaɔ	bomatamanatamo
181	the man ate the yam yesterday	herakonara	hér dam naraɔ	heranokonobo
182	the man will eat the yam tomorrow	herakoŋkobanaba	her damnaβaɔ	herapomanohonapomo
183	the man hit the	kásètékètàmàu	kɔβε ainanε kas tɛk²tamaɔ	poma aea kasa tεkinopo
184	the man didn't hit the dog	kasətɛkənaro	kɔβε ain kas tèkîn	pomama kasa tεkınonimo
185	the big man hit the little dog	kobεmakuβuna kasbomtεkətamau	kɔβεmakuβunε kas kateha tɛkeɾaɔ	wəŋkɛwɛma kasaruatɛkinopo
186	the man gave the dog to the boy	koβεnε kasbonuruau	kɔβε ainanε kas bɑum ororaɔ	baum ama pondua kasarua oropoa
187	the man hit the dog and went	koβene kasatekeneuau	kɔβε kastɛkɛranɛ uraɔ	baumama kasa tekino aiaopo
188	the man hit the dog when the boy went	koβeane(une)kasa tekinuau	baum aina εβαβοταπε, koβεαπεkasa tekerao	ponduaobabune pomama kasatekinoko
189	the man hit the dog and it went	womanε kasa(kuβεne)tekinu uau	kasa tekerane kɔ'ra u'raɔ	bomama kasatɛkinone (kasa) upo
190	the man shot and ate the pig	koβeane kona habune noau	kón hàβórà nárào	pomaea kona hapona aeanæupo

Table 18. Mouwase wordlists

Item	Gloss	Kibeni	Gibidai	Omati (Gihiteri)
1	Head	nàmé máβò	Μάβὸ	таβа
2	Hair	máhábórò	máhàbòr(o)	mahaboro
3	Mouth	kúbô	Kúbò	kubo
4	Nose	sóróbû	Súsùm	soroβu
5	Eye	ísítómû	ísítoùm	isi
6	Neck	bókô	Bókóhè	boko
7	Belly	kápùrù	kábùrù	kaburu
8	Skin	kaébô	kεíbô	keibo
9	Knee	mùràβέ	mùràmé	morame
10	Ear	kóβì	kó:βì	koβi
11	Tongue	kòménè	kòménè	komene
12	Tooth	kùkàmé	kùkàmé	kǫkamε
13	Breast	sŭ	sŏ	sŏ
14	Palm	sípâi	sípâɛe	sépâe
15	sole of foot	háepâe	hẫẽpàe	hâepâe
16	Back	kòlòhábò	koruhabo	koruhabo
17	Shoulder	wéihàβò	Wóihàβò	woihaβo
18	Forehead	ìsíhàβò	Ísíhàβò	ísíhàβò
19	Chin	kódâ	Kódáhàβò	kọda
20	Elbow	sītəku	Sítùkù	situk ^h u
21	Thumb	símâ	símâ	símâ
22	Leg	hâi	hẫĩ	hâe
23	Heart	kámû	kámû	kámộ
24	Liver	kósêh	Uβu	ouβu
25	Bone	háβò	Hấβò	haβæu
26	Blood	kəĭ	kěi	kěi
27	Baby	bóbákâ	búbèkà	bobaka
28	Girl	bésèbùmù	bésébùm	bésébùmò
29	Boy	ùníbùmù	Úníbùmù	ùníbùmò
30	old woman	ábèrè	bésàbèrè	(bɛse)ábɛ̀ɾè
31	old man	mákêi	mákèi	mákê

Item	Gloss	Kibeni	Gibidai	Omati (Gihiteri)
32	Woman	bésè	bésè	bé:sè
33	Man	ùní	Ùní	ùní
34	Father	ák ^h ò	Ákò	ákò(æu)
35	Mother	măe	mǎi	měi
36	brother (elder)	átèh	átè	átè(æu)
37	sister (elder)	árèh	Bàbó	ìtébàbò
38	Name	nìnínì	nìnín(à)	nènínì
39	Bird	kâe	kâe	kâe
40	Dog	kásè	kásè	kás(è)
41	Pig	kónò	Kónò	kọ́nọ̀
42	cassowary	síkínà	Sígínà	síkínà
43	Wallaby	tébèrè	tébèrè	tébèrè
44	flying fox (big)	kúbè	kúbèi	kúbèi
45	Rat	káifárî	keífàrì	keífárì
46	Frog	báræ̂u	báræ̀u	báràù
47	Snake	hárè	hấrèe	hárè
48	Fish	máe	Mói	môi
49	Person	bósàkánè	wòmó	wòmó
50	he sits	kèrímàu	kèrímà	kèrímæu
51	he stands	hákùrùhámæu	Hấmàu	áiàhámæ̂u
52	he lies down	dárìbìsànàhámæu	Bìsànàhéwàu	bìsànàhámæu
53	he sleeps	bìsánáhámæu	Bísánæu	bìsànàhámæu
54	he walks	áià wánæ̂u	Ùtámæu	aia ùtámæu
55	the dog bites the	wəma kasane	kàsánéwomatafatámæu	mákàsìkètàmæu
56	man he eats	makesiketamau dánàtàmàu	dámànàtámæù	dámànàtámæu
57	he gives it to me	nameneiaoranæu	Ínáòránæù	òròtámæ̀u
58	he sees	namenetoanæu	Ínátòánæù	tòánæ̀u
59	he comes	áiàbénànæu	Bítàmæù	bínànæu
60	he says	ménàkètámæu	míkètámæu	(mínà) kènánæu
61	he hears	(áià) kòtámâu	Kòánæù	kòánæu
62	he knows	kəníâu	kèníæu	kèníæu
63	he drinks	mpunatəmæu	mǒunàtàmæ̂u	nàtámàu

Item	Gloss	Kibeni	Gibidai	Omati (Gihiteri)
64	he hits	tékètámæu	tékètámæu	tékètàmæ̀u
65	he kills	tɛkakasikɛnanæu	tékànèkàsèkènénàu	tékènànàu
66	he dies	kàsíkénànæu	míkàsìkènénàu	kàsìkènánæu
67	it burns	kumarwaretamau	kúwàræ̂u	(kúmà) nàfòtámæu
68	it flies	bókàwánæu	míbùkàwànæ̂u	bókàβànæ̂u
69	he swims	bánáwánæu	(mɔu)bánàùtámæù	móubànæutèmæu
70	he runs	hiowanæu	Híòhàùtámæù	híòtámæ̀u
71	he falls down	dofikenənau	dófíkènènæù	dófikènènæu
72	he catches	fánæ̂u	mífànæ̂u	fánæ̀u
73	he coughs	nòrú(æ̂u)	nòrú	nòrú
74	he laughs	kọa(sitamæu)	Kóásítàmæù	kóasìtàmæ̀u
75	he dances	aiakúiètàmæ̀u	Kuiosotamæu	kŭinæsòtámæu
76	Big	màkúβâu	Màkúβù	màkúβæ̀u
77	Small	kàtéhàne	kàtéhànè	kàtéhànæu
78	Good	dárô(hamo)	Dáróà	dáròæu
79	Bad	kókósî	Kókósìà	kòkósìæu
80	Long	sótìfì	Sótìfæ̀u	sótìfæ̀u
81	Short	kòfí	kómùæu	komuæu
82	Heavy	ùrùmínì	ùrùmínæu	ùrùmínæu
83	Light	òfé	òfèæ̂u	òfèæ̂u
84	Cold	kíβî	Kíβíæù	kíβì(æ̀u)
85	Hot	ίβὶ	Íβàu	íβæ̀u
86	New	kèsí	késíæ̂u	kèsìæ̂u
87	Old	ined	bóríæu	bòríæu
88	Round	bíríhànè	Sótìfæù	(kò)bíræ̀u
89	Wet	kùrí	Kùríæù	kémìnàtàmàu
				kùrínàtàmæu
90	Dry	fènékènànæu	fènékènànæu	fènékènànæu
91	Full	sέkàβànæ̀u	firikenanæu	firíkènànæu
92	Road	dìké	Dikeæu	dìkéæu
93	Stone	kámò	Kamæu	kámæu
94	Earth	bórómò	bórómæu	bòrómæu

Item	Gloss	Kibeni	Gibidai	Omati (Gihiteri)
95	Sand	βίὸ	Bíòæù	βíòæ̀u
96	Mountain	kámò	Kámæù	kámæu
97	fire (wood)	kúmù	Kúmæù	kúmù
98	Smoke	kúmìsìnì	Kúmísìnæù	kùmísìnæu
99	Ashes	(du)nìrú	dú(no)mòfæu	dúmæu
100	Sun	sòá	sọá	sòá
101	Moon	báirà	báerà	báirà
102	Star	kwínì	Kwínæù	kǔinæ̀u
103	Cloud	òrù sǔ	úrùmúæù	uru muæu
104	Rain	kànàhá	kànàhæu	kanahæu
105	Wind	íbúbù	Íβúwæù	íwúwæ̀u
106	Water	mǒu	mòúæù	mɔuæu
107	Vine	sǽunò	sæunæu	sæonæo
108	Tree	^î	í:æù	î
109	walking stick	tífínò	tífínò(æu)	tìfínóà
110	Bark	íkéibò	íkèibòà	ikebọæu
111	Seed	íhǎi	hấĩæ̂u	kóβâiæ̀u
112	Root	hěi	héiæu	íhěi
113	Leaf	(í)bórò	íbòræù	íbòrò
114	Meat	mísì	Mísæù	kɛiɾikonæu
115	Fat	sámò	Sámæù	sámæ̀u
116	Egg	tòmú	tǒumæ̂u	káitòmæ̂u
117	Louse	kùrómò	kùrómæù	kùrómæu
118	Feather	kâi bórò	Káibólæù	káibòræu
119	Horn	òβú	káikèrìmá	úβæ̀u
120	Wing	òró	òræ̂u	kai òræ̂u
121	Claw	sìmápósò	Sìmàβó	sìmàβô
122	tail (dog)	kásè kôu	Kóùæù	kóuæ̀u
123	One	sàkánè	Sàkánæù	sàkánæu
124	Two	hátài	hátárárì	hàtâe
		hatarari		
125	Three	sírì	síræù	siræu

Item	Gloss	Kibeni	Gibidai	Omati (Gihiteri)
126	Four	hǎihâi	Hàtáihàtàiæù	hàtáihàtàiæu
127	Five	sísàhà		sısahanæu
128	Ten	síhài(a)		sihaeæu
129	taro kongkong	mìní		síræ̀u
130	sugarcane	ræu(m)		lóuæ̀u
131	Yam	h ě o		kὲsáβè
132	Banana	kúnù		kọ́næ̀u
133	sweet potato	tòkòsé		tòkòséæu
134	Bean	dókórò		kàibínì
135	Axe	kàbí		kέβà
		hǽumù		hǒûm
136	Knife	fírì		fírì
137	Arrow	wàsúmù		wòsúmù
138	net bag	kǎe		kǎe
139	House	mínì		mínæu
140	Tobacco	sòkú		sùkúæ̀u
141	Morning	kiómò		keomæu
142	Afternoon	sàmé		sàméæu
143	Night	kàfọnù		kàfúnæu
144	Yesterday	hírì		híræu
145	Tomorrow	hírì		híræu
146	White	sέβéà		sεβεæu
147	Black	sŭ		súæ̀u
148	Yellow	ràrá		làlæ̂u
149	Red	kúmù		kúmæu
150	Green	mou kaimene		íbòrà
				kὲsìæ̂u
151	Many	hóròhòrò		hırioæu
				mònæ̂u
152	All	áwòhà		áwòhàu
153	This	έnà⁄u		έnæ̀u
154	That	àsæ̂u		èsénæ̀u

Item	Gloss	Kibeni	Gibidai	Omati (Gihiteri)
155	what?	bákònò		bákònè
156	who?	mâe		mâe
157	when?	báfâe		besene fae
158	where?	dánè		dádìkè
159	Yes	ĉе		mŏ
160	No	mojæu		mòiæ̂u
		mʌi		
161	he is not sitting	kérímàu	kérímàu	kérímàu
162	I	ínà		ìní
163	you (singular)	ìjâ		ìjæ̂u
164	Не	áià		áiæ̀u
165	we two	nírà		niræu
166	you two	rírà		líræ̀u
167	they two	àβírà		ὲβíræ̀u
168	we (exclusive)	nana semarebobua		nànéhàsæu
169	you (plural)	rana		lánæu
170	they	àménà		àménæ̀u
171	he is hungry	áiàsárê		dánàsìæu
172	he eats sugar cane	roənatəmau		dámànà támæu
173	he laughs a lot	áià kóásótìfi sìtámàu	koakasiketemæu	koasirisiri
174	one man stands	(wɔbu) sakʰana hamau		wəbusakɛnahamæu
175	two men stand	bohataiahamæu		wəbuhataiahuhurumæu
176	three men stand	wəsirahakuhamæu		wəbusirahohuruma
177	the man goes	aiawæihɛmæu		wəbu sakanawanæu
178	the man went yesterday	hıriwanæu		(wəbuma) heriumæu
179	the man will go tomorrow	hɪɾiβæu		kiæumawanæu
180	the man eats the yam	wəma danetamæu		bùénàdámànàtámæu
181	the man ate the yam yesterday	hıridanato		hirabuenadamanara
182	the man will eat the yam tomorrow	hırinatoæu		kiæuma(buena) damana βæu

Item	Gloss	Kibeni	Gibidai	Omati (Gihiteri)
183	the man hit the dog	ainekasatekenanau		kasatɛkɛtamæu
184	the man didn't hit the dog	kasenefoafaimæu		kasateakinimo
185	the big man hit the little dog	boma kuβane kasa tɛkɛnanau		bomatuanekasetekenaro
186	the man gave the dog to the boy	kasebomaorenæu		wonomi bumanekasakateoranæu
187	the man hit the dog and went	(abomane) kasatekenanane (aboma) wanæu		kasena tekaneboma nawanæu
188	the man hit the dog when the boy went	bokatehana waimanε unimukuβ(ane) kasa tekεnana wanæu		bəmana utasine kasena tekenaæu
189	the man hit the dog and it went	bomenane kasatekawanæu		bəmenana kasa tekenenæu
190	the man shot and ate the pig	bomɛnanekona hawanane natamæu		bəmena dua teka nenanæu

Table 19. Barikewa wordlists

Item	Gloss	Omati (Iba)	Kaiam 1
1	Head	máβò	maβ
2	Hair	màbór	mábòr
3	Mouth	úbò	Óbò
4	Nose	jú	Ju
5	Eye	sí	sî
6	Neck	kàβú	kàβú
7	Belly	iáɔ	jžo
8	Skin	dîn	kěo
9	Knee	màkú	mækú
10	Ear	kóβì	kóβì
11	Tongue	kùmén	kòmén
12	Tooth	úmákù	ómækù
13	Breast	sŏ	sģ
14	Palm	sě	sέpàe
15	sole of foot	'dáɛ mà'már	dàebáe
16	Back	kóurù	kóur

Item	Gloss	Omati (Iba)	Kaiam 1
17	Shoulder	síuβì	síwì
18	Forehead	máβódàβ	sídăβ
19	Chin	úmákùdàβ	óměr
20	Elbow	sé wàsì	sítàkú
21	Thumb	sémà bòs	sémâ
22	Leg	dáε dàβ	dǎe
23	Heart	kámò	kámò
24	Liver	úβ	ŭβ
25	Bone	da:β	dăβ
26	Blood	kři	kři
27	Baby	dû(jàrú)	dóiàrú
28	Girl	wádù	(dæo) wadu
29	Boy	wídù	(dæo) wido
30	old woman	wâβὲsὲ	wábèsè
31	old man	kὸβέφὸè	kàemákàe
32	Woman	wâ:	Wa
33	Man	^w ûi:	Wi
34	Father	àbá	Àbá
35	Mother	núnù	nónò
36	brother (elder)		wéβù
37	sister (elder)	árè	árè
38	Name	néné	nénén
39	Bird	dàβέ	dàβέ
40	Dog	ká:sè	kâs
41	Pig	sáε	Sáe
42	cassowary	síkíná	síkíná
43	Wallaby	tébèrè	woja
44	flying fox (big)	kúbèi	kúbèi
45	Rat	kêifàrì	káifàrì
46	Frog	φὸιτόκὶ	sòβέ
47	Snake	kàβś	kàβó
48	Fish	mói	mǎi

Item	Gloss	Omati (Iba)	Kaiam 1
49	Person	wî:	wǒn
50	he sits	a kàrímbò	ae kàrìn
51	he stands	âɛdàkámbò	aédàkàn
52	he lies down	bìsìatá (mbô)	aésìbèrétà
53	he sleeps	bìsìatá (mbô)	aébìsìnì
54	he walks	áὲa ùníβò	áeàùnáβò
55	the dog bites the	kásὲ mákàsíníβô	kásènèwónbìtìn
56	man he eats	due náníβò	áenànì
57	he gives it to me	aεnε ùtíβò	énùtìn
58	he sees	âεn túníβò	ăentùnì
59	he comes	âε bìníβò	áebìní
60	he says	âεa méníβò	mínì
61	he hears	âεa úníβὸ	wènkàrị́n
62	he knows	âε dánέβὸ	áeadànè
63	he drinks	âεa ^u wέnáníβὸ	àeawénànì
64	he hits	âεa bόεníβὸ	bóinì
65	he kills	âεadàφúníβὸ	bóinòànkásìnè
66	he dies	kásέnó ^u βò	mɛkasuno
67	it burns	ìmá náεbírò ^u βò	ímátòwénkàrìn
68	it flies	dàßé úníßò	bóiànùnì
69	he swims	wέà táφíaunìβò	wétàfúànùnì
70	he runs	âεa híɔ máníβò	híèòní
71	he falls down	áεà bísúrú máníβò	kúrà
72	he catches	áεà bìrúβò	áebètà
73	he coughs	nàrúníβò	ónàrú
74	he laughs	^u á:sìnìβò	wásìnì
75	he dances	áεà bètí mànìβò	kwínmànìβò
		kúiníβò	
76	Big	ίφὶ	onifi
77	Small		(ón)sìmbí
78	Good		dárò
79	Bad		fòmá

Item	Gloss	Omati (Iba)	Kaiam 1
80	Long		sòtíf
81	Short		Kòfí
82	Heavy		dàβí
83	Light		ìfέ
84	Cold		kíβí
85	Hot		îβ
86	New		(oŋ)kásî
87	Old		bàrí
88	Round		ómbírî
89	Wet		kìmĭn
90	Dry		Kú
91	Full		ókásìàn
92	Road		tĭ
93	Stone	ámò	ámô
94	Earth	sáβô	sáβó
		díβò	
95	Sand	mìrí(sébà)	mìrí
96	Mountain	(ámó)jù:	ámòjù
97	fire (wood)	ìmá	Ìmá
98	Smoke	ísùn	Ísùn
99	Ashes	ímátúβù	Ítù
			kŕisò
100	Sun	ísù	ísô
101	Moon	wásíβà	wásìβà
102	Star	sìkúnì	kúnî
103	Cloud	nór (mu)	mô
104	Rain	kọrẹ	kóré
105	Wind	àβúbù	àbúbù
106	Water	wé:	wěi
107	Vine	só¹wán	jàbú
108	Tree	î:	î
109	walking stick	tíφínò	tífínôa

Item	Gloss	Omati (Iba)	Kaiam 1
110	Bark	î káurù	íkǎo
111	Seed	ówǎε(túβù)	ónwǎe
112	Root	î:dàβúi	sìsíβ
113	Leaf	íbòr	íbór
114	Meat	(dàβὲ) mís	mĭs
115	Fat	sân	sân
116	Egg	támê	támé
117	Louse	kúrón	kúrúón
118	Feather	dàβὲbɔ́ɾ	dàβὲbór
119	Horn	hàtí	jámí(n)
120	Wing	òr	ŏr
121	Claw	sékènàβ	síkènàfì
122	tail (dog)	dòβǎ	dòβá
123	One	έràkà	írákà
124	Two	ţêi	tái
125	Three	sérè	sîr
126	Four	téitèi	táitài
			sebor
127	Five	sêcra	sémâ
128	Ten	sétèi	sítâi
129	taro kongkong	mé	mΐ
130	sugarcane	jou	jĉọ
131	Yam	késáβ	kìsáβ
132	Banana	náè	nâi
133	sweet potato	kàɛmá	kàemá
134	Bean	dúkò	dúkôr
135	Axe	námà	kàbí
136	Knife	kárà	Fír
137	Arrow	sèĭn	sěin
138	net bag	kàβśs	kàsén
139	House	mínì	mîn
140	Tobacco	soko	sókố

Item	Gloss	Omati (Iba)	Kaiam 1
141	Morning	kî:	Kí
142	Afternoon	sàmá	sàmá
143	Night	káфón	kàfón
144	Yesterday	dárè	dâr
145	Tomorrow	dárè	dâr
146	White	séβà	séβâ
147	Black	kứisớ	kŕisóa
148	Yellow	jàjá	Jèjá
149	Red	kời	kři
150	Green	îbôr	ìbórkàemèn
151	Many	hírìuɔ	mòkòmé
		mòkò ^u βé	
152	All	áu ^w à(hà)	awoha
153	This	érà	ĚΓ
154	That	ásàrì	Ásà
		ásá	
155	what?	ómbâe	ómbâ
156	who?	máè	(a)mẫ
157	when?	bèsánè	ómbâesòmà
158	where?	àréténè	àréà
159	Yes	káróβò	jæ̂o
160	No	mǎ(βò)	mằ
161	he is not sitting	kàrímbò	aè kàrǐn
162	I	ίηβὸ	în
163	you (singular)	áβɔ	â
164	Не	âεβὸ	âe
165	we two	náríβò	nárî(tvi)
166	you two	járì	jàrí(tři)
167	they two	árí àsà	árî
168	we (exclusive)	námè	namera
169	you (plural)	jámè	jàmê
170	they	ámè	ámê

Item	Gloss	Omati (Iba)	Kaiam 1
171	he is hungry		(aea) aenasi
172	he eats sugar cane		aea jæonani
173	he laughs a lot		waeifisiniβo
174	one man stands		dúràkàtàkà
175	two men stand		dæotèi:tàkà
176	three men stand		dǽosírtàkàn
177	the man goes		dæoàwù
178	the man went		dáròdóàwò
179	yesterday the man will go tomorrow		dáráèawî
180	the man eats the		kòβéàbà áenàní
181	yam the man ate the yam yesterday		dáràkòβéa áenàr
182	the man will eat the yam tomorrow		dárà kòβéà áenâi
183	the man hit the dog		kòβéàn kàsàboínì
184	the man didn't hit the dog		koβeanakasbóinĕn
185	the big man hit the little dog		wənurikobe ena kasa boini
186	the man gave the dog to the boy		koβε hεna kas aβa doa utin
187	the man hit the dog and went		koβε hεna kasa(βa) boinoanεu
188	the man hit the dog when the boy went		doawabæu anε(daemaβa)(koβεhεna)kasaβaboinu
189	the man hit the dog and it went		koβεhεnakasaboinoanεkasaβau
190	the man shot and ate the pig		koβεhεnasaeaβadafoanεsaebanou

Table 20. Rumu and Fasu wordlists

Item	Gloss	Kopi (Rumu)	Haiwaro (Fasu)
1	Head	wòtú	nomo?unahai
2	Hair	wòtú pátè	nomo?unahai?iti
3	Mouth	ộ:	nomo?akai
4	Nose	jú:	nomosabε
5	Eye	Íhí	nomohi

Item	Gloss	Kopi (Rumu)	Haiwaro (Fasu)
6	Neck	kóríhò, hìpû	nomomaui
7	Belly	jš máhò	nomoharaba
8	Skin	hčitâu	nomokau
9	Knee	mòkôu	nomokaguna
10	Ear	kộ (pátè)	nomosɛnagi
11	Tongue	òhó	nomoairu
12	Tooth	Mákù	nomoagaimere
13	Breast	nộ:	$nomohot^ho$
		họ̇́:	
14	Palm	hě̞:(pae)	nomohogono
15	sole of foot	lɛ̃:(pae)	nomokolagenama
16	Back	móurâpò	nomomati
17	Shoulder	kòhó, yapurake	nomobataro
18	Forehead	íhírápò	nomohikusumi
19	Chin	tòwŏi	nomoakaifatu
20	Elbow	hè:túpì	nomohogonokamo
21	Thumb	hě:mò:	kakorea
22	Leg	l̃e:	kolake
23	Heart	kàmǎu	himu
24	Liver	Upi	kasiako
25	Bone	lápò, rápò	kiki
26	Blood	hōkōrē	kakusa
27	Baby	hùrìmàtû	hokosapabu
28	Girl	Pái	hinamohogosa
29	Boy	hùrí	aborohogosa
30	old woman	wárápò	hinamosisima
31	old man	ùkírápò	apolosisima
32	Woman	wó:	hinamo
33	Man	ùkî	apolo
34	Father	àpâ	apa
35	Mother	wờî, nọnọ	hũa
36	brother (elder)	Ãĩ	mai

Item	Gloss	Kopi (Rumu)	Haiwaro (Fasu)
37	sister (elder)	Ánà	papa
38	Name	paina, nenena	jano
39	Bird	kǎ, kǎε	mena
40	Dog	kǎ, kǎε	kasa
41	Pig	kôu	salo
42	cassowary	Wãĩ	sikina
43	Wallaby	hòwàrí	
44	flying fox (big)	kùpìâi	kupiai
45	Rat	kèihàrî	fakita
46	Frog	kéu	kuti
47	Snake	kàpô	kanosa
48	Fish	nàmô	pok ^h a
49	Person	wàmê	apolohinamo
50	he sits	má:ké	(ε)kʰakεnapo
51	he stands	rá:ké	lɛkenapo
52	he lies down	híté jâ:kè	ewaforoaka warekenapo
53	he sleeps	Hítáe	ewasikɛnapo
54	he walks	ú:(mò)	epurakanapo
55	the dog bites the man	tę́kí(mò)	kasamo apanonena kanapo
56	he eats	néi(mò)	пєпакапаро
57	he gives it to me	ǎné ì tέi(mɔ̀)	epoanomara kanapo
58	he sees	Wàhékè	karakanapo ɛpoano aseapo
59	he comes	jśi(mɔ)	eapere
60	he says	kì:(mɔ)	εpomakata somela kanapo
61	he hears	wới(mɔ), wáe	εpokaila kanapo
62	he knows	láné mé	εpokanepo
63	he drinks	ù něi(mɔ)	εpohεnanaganapo
64	he hits	pǒû(mò)	єрогиаро
65	he kills	ránà káhérài(mɔ)	εlusa kuεpo
66	he dies	kàhí(mò)	εkusapo
67	it burns	î: nèi(mɔ)	irahũ lakanpo
68	it flies	pónà ú(mò)	epoakapusapo

Item	Gloss	Kopi (Rumu)	Haiwaro (Fasu)
69	he swims	ùtè touna ú(mò)	ehĩatapukua
70	he runs	mòrùà ú(mò)	efoakapurakanapo
71	he falls down	hêi(mò)	ehurupeapo
72	he catches	kitei	epokarumara kanapo
73	he coughs	nèrú	jojokotara kanapo
74	he laughs	komę koroi	ekẽãlakanopo
75	he dances	ō waī	ekelakanapo
76	Big	wòpí	kara
77	Small	màtú(tĉi)	papu
78	Good	kàhộ	sima
79	Bad	kộtộ	watikisa
80	Long	hǎu(rápò)	horopo
81	Short	kòpú(têi)	kitake
82	Heavy	Túmì	umi(sa)
83	Light	έhὸ	ofosa
84	Cold	hàhǎu	inu(sa)
85	Hot	épò	sisipu
86	New	Káhì	kawe
87	Old	púrì	pat ^h e
88	Round	rê	mamusa
89	Wet	kọnẹ	inusa
90	Dry	hènê	kukumasa
91	Full	òròpé	koma(ka)lusa
92	Road	tèî	ijakara
93	Stone	ŵâ:	ikε
94	Earth	hàpû, pèkê	hãuwaka
95	Sand	βὶό	solari
96	Mountain	Ákápú	uri
97	fire (wood)	î:	ilakεpo
98	Smoke	í: ahînò	ilasisi
99	Ashes	í: pótè	katemako(ko)
100	Sun	èhô	(ja)mãia

Item	Gloss	Kopi (Rumu)	Haiwaro (Fasu)
101	Moon	pàrí, kɔ̃aī	$h\epsilon k^h\epsilon$
102	Star	pàrìhìpî	labtin
103	Cloud	ϕτϕ	ako
104	Rain	Kápó	jao(apɛle)
105	Wind	márárì, hahau	aţ ^h ifu
106	Water	ŭ:	hẽ
107	Vine	ę́kę́nę́	soja
108	Tree	î:	ila
109	walking stick	Tùhú	ilatati
110	Bark	í: hɛßitàu	irakau
111	Seed	kò: wæ:	hãĩ, wate
112	Root	í: rùi	pikinu
113	Leaf	í: pàtè	ku
114	Meat	méhémú	maia
115	Fat	kōmē	sawe
116	Egg	kà: rê	hãĩ
117	Louse	ę́mē̄nę̀	japani
118	Feather	kà: pátè	mɛnaʔitʰi
119	Horn	kèpàrî	opa
120	Wing	ótò	aua(ta)
121	Claw	kìpî	kibisigini
122	tail (dog)	tùrâ	keno
123	One	léiápài	hakasa
124	Two	tǎi	tɛta
125	Three	hệrệ	isia
126	Four	tùhî	k ^h itafa
127	Five	hě:mó	kakorea
128	Ten	hè:pǎe tâi	kaiako(su)
129	taro kongkong	mệkệ	jafani
130	sugarcane	kémó	sau
131	Yam		kakana
132	Banana	Kámúkí	kaputa

Item	Gloss	Kopi (Rumu)	Haiwaro (Fasu)
133	sweet potato	reía	faia
		Kaema	
134	Bean	pétá	lukaro
135	Axe	nàmâi	kapi
136	Knife	òtòpâe	kiri
137	Arrow	èùrû, jápó, éihè	fesenaiã
138	net bag	Áu	aku
139	House	mǐ:	ape
140	Tobacco	hókó	sok^ho
141	Morning	kàtàmî	mituru
142	Afternoon	há:né	samapu
143	Night	ríhò	ειe
144	Yesterday	Tàté	lau
145	Tomorrow	Tàté	lau
146	White	pàrúhò	sauejasa
147	Black	kíhópùrì	eresa
148	Yellow	jæjâ	keame(sa)
149	Red	hókóré	susa
150	Green	í:pátèhêi	ainasa
151	Many	tànìhàrî	kara
152	All	àpáimènè	sukara
153	This	จำร์	one
154	That	Àkó	nane
155	what?	kòpâ:	jakapare
156	who?	máâ	epa(re)
157	when?	pàhàkâ	masinaga
158	where?	pàréà	maia
159	Yes	$\hat{ ilde{\epsilon}}$:	jæo
160	No	ἐhέἐ	fa
161	he is not sitting	má:kíì	(ε)kakεnafapo
162	I	ènê	ano
163	you (singular)	Ìkí	ne

Item	Gloss	Kopi (Rumu)	Haiwaro (Fasu)
164	Не	ă, aě	e
165	we two	Nati	eto
166	you two	Kati	τετο
167	they two	Ati	tetane
168	we (exclusive)	Name	isinahagu
169	you (plural)	Kame	lesu
170	they	Ame	disugara
171	he is hungry	kei kəai me	emeamohore
172	he eats sugar cane	à:pò kémó nèi	esauanele
173	he laughs a lot	kómé hàrítámè kòròi	ekarahokomare lakanapo
174	one man stands	ùkí réiápài rà:kè	apo(ro)hagasa are
175	two men stand	ùkí tâi rà:kè	aporoteta?are
176	three men stand	ùkí hêre rà:kè	aporo?isia?are
177	the man goes	ùkíkópò ú:(mò)	aporoapure
178	the man went yesterday	tàtè ùtú	lauaporopusapo
179	the man will go tomorrow	tàtè w̃â:	lauaporopukusapo
180	the man eats the yam	kéi néi	aporokagana nenakanapo
181	the man ate the yam yesterday	kéi nòtò	lau aporokagana nesapo
182	the man will eat the yam tomorrow	kéi pō tàté nâ:	lauaporokagana nakosapo
183	the man hit the dog	ukikəpa ka pəu mə	aporomokasa lusapo
184	the man didn't hit the dog	ukikəpa ka pəukiimə	aporomokasalusa fapo
185	the big man hit the little dog	uki wəpi kəpa ka matutei pəumə	aporokaramo kasa papulusapo
186	the man gave the dog to the boy	uki kopa huri pakare ka: tomo	aporomo kasa hõkosa kikasapo
187	the man hit the dog and went	uki kopa ka pounane umo	aporomo kasa lukua pusapo
188	the man hit the dog when the boy went	huri kə uratima uki kəpa ka pəumə	hokosa puluakano aporomo kasa lusapo
189	the man hit the dog and it went	ka po uki kəpa pəu wahetima umə	aporomo kasa lulakano kasa pusapo
190	the man shot and ate the pig	uki kopa kou ranane nomo	aporomosarokarekea nesapo

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