

Mato [met]

Dialect Survey

.....

Morobe Province



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Introduction

The intent of this paper is to describe the dialect situation in the Mato language in order to determine the target group for the Mato translation program and identify the means necessary to ensure materials are usable by the subgroups within the target group. Mato is an Austronesian language with SVO typology. Since February of 1997, the author Scot Stober and his wife Cherie have lived and worked among the Mato people of Morobe Province in Papua New Guinea as members of SIL. I am a linguist/translator and Cherie is a literacy specialist. We have been living in Gambulanglune village.

The Mato language is located on the northern coast of Papua New Guinea, just inside Morobe Province. It is situated in the Uruwa River plain at the base of the Saruwaged Mountains. It is 38 km due west of Wasu Station, 20 km north of Sapmanga Village, and approximately 55 km southeast of Sador Station (located in Madang Province). One village, Bualu, is on the beach; the others are inland. The geographical area is mapped in the Appendix.

Mato is listed in the *Ethnologue* (Grimes 2000:773) as Mato [NIU]. The language code has since been changed to [met]. Alternate names given are Nenaya, Nengaya and Nineia. The people call the language Mato which means '(you) come now'. Further information given in the *Ethnologue* is:

Austronesian, Malayo-Polynesian, Central-Eastern, Eastern Malayo-Polynesian, Oceanic, Western Oceanic, North New Guinea, Ngero-Vitiaz, Vitiaz, Roinji-Nenaya. Dialects: BONEA, NANAYA. 67% lexical similarity with Ronji, 39% with Barim and Arop-Lokep, 38% with Malasanga, 29% with Sio, 23% with Tuam-Mutu. Speakers want 'Mato' for the language name. SVO. Literacy rate in first language: 4%. Literacy rate in second language: 41%. Savannah, tropical forest. Mountain slope, coastal plain. Swidden agriculturalists. 0 to 1,700 feet. Christian, traditional religion. (p. 773)

The literature is varied as to language classification. McElhanon (1978:2) classifies Mato as belonging to the Siassi Family, Vitiazan Sub-family, Island Group, Nengaya. Ross (1988:161) categorizes the language in this manner: Proto Oceanic, Proto North New Guinea, Proto Ngero/Vitiaz, Proto Vitiaz, Nenaya.

The Morobe provincial government has given the two dialects the names of Bonea and Nanaya, based on place names no longer inhabited. In this paper, I will use the Mato names for the dialects, Tabares (Bonea) and Ramuk (Nanaya), which refer to their respective clan names. Please see the map in the Appendix for dialect and clan boundaries.

1. LOCATION

The Mato language covers approximately 220 km² of mountain slopes, plains, and coastal regions on the north coast of Papua New Guinea. It is located at the base of the Saruwaged mountain range in Morobe Province. The Uruwa River, which drains the valley between the Saruwaged and Finnestere ranges, empties into the Bismarck Sea on the Mato coast near Lepsius Point.

Mato is bordered by several languages, both Austronesian and Non-Austronesian. Moving in a clockwise direction from the west, Yopno (Non-Austronesian) borders mostly on the western side of the Uruwa River, though Yopno villages are quite distant from the Mato border. To the northwest along the coast lies Ronji, an Austronesian language occupying the two villages of Ronji and Gali. Ronji is 67% cognate with Mato (Stober, McHenry and Troolin 1996:18) and where the two are cognate, there is minimal variation. Singorokai (Austronesian), a related language, lies to the northeast. To the east is Nukna and to the south lies Yau, both Non-Austronesian languages.

The nearest town is Wasu, where the Local Level Government (LLG) Council is located. Wasu has a dock that is mostly serviced by Lutheran Shipping, an airstrip, a high school, a police department and a smattering of small businesses. The Etep Health Centre lies in the mountains just to the south of Wasu. While the Mato people look to the Morobe Provincial Government in Lae for services, they do most of their commerce in Madang as it is geographically closer by shipping route. Hence, Madang is where they sell their copra and cocoa.

Other than locally grown cocoa and copra, there are no commercial interests in the Mato area. It is very isolated, being out along the border with Morobe and Madang provinces, at the end of the line for government or commercial interests. There are no roads, and the nearest airstrip is 20 km to the south in Sapmanga (a rugged journey of a day and a half on foot).

2. LINGUISTIC VARIATION

There is minimal variation between the two Mato dialects. As previously stated, there are two major clan divisions: Tabares and Ramuk. These clan divisions each speak a different dialect, based upon their own perception and social divisions which are clearly demarcated. Thus, I have labeled the dialects Tabares and Ramuk. According to my most recent research, these dialects show a cognate similarity of 96%. Among words that are cognate, there is a regular phonetic variation that occurs in the velar fricative. Otherwise the cognate words are usually pronounced the same. The grammar between the dialects does not vary.

The two dialects each have 3 villages, with a few isolated hamlets occurring in each. The Tabares villages are Baximanamuya, Gambulanglune and Bualu. The population of Tabares speakers, based on my earlier research, totaled 252 (Stober 1998:12). The Ramuk villages are Baxuya, Buxaringine and Bobua. The Ramuk speakers in 1998 numbered 309 (p. 12).

To determine the level of lexical similarity, I elicited words in each village using the SIL Survey Word List (August 1999 Revision). This list includes 170 words (see Appendix B for word lists). Cognate decisions were made using the inspection method and the 50% rule. If two words were phonologically identical or regularly similar in 50% or more of the segments, they were deemed to be cognate (Sanders 1977:33-35). Of the 170 words in the word list, 6 showed cognate dissimilarity. These are shown in the table below. While these lexical items are preferred in the respective dialects, each knows well the other's usage, and there is some cross-utilization.

	Tabares	Ramuk
‘boy’	,gana'nuna	'lup to'ʔona
‘mountain’	bim'biʔ	,raba'ɣana
‘round’	,manru'ɣana	,tambo,boʔi'ɣana
‘seed’	ma'rana	ha'tuna
‘smoke’	bu,nuyu'yana	,uti'ana
‘what’	,bara'ɣinta	'ʔata

Table 1. Cognate Variation in Phonetic Forms

It should be noted that while ‘seed’ appears to be cognate according to the above criteria, it was ruled dissimilar for two reasons. First, it is an inalienable noun in third person form, so the suffix ‘-na’ was not counted. Second, while the third position ‘r’ and ‘t’ have the same point of articulation, they do not regularly correspond between the two dialects. Thus, three of the four segments are dissimilar.

An examination of the word lists shows that there is minimal variation in some words from village to village in either dialect. This is deemed to be the speaker's personal preference on how to pronounce the given elicitation and there is insufficient data to draw any conclusions. Usually, when I pointed these discrepancies out to others from the same village, they indicated that the word could be pronounced according to any of the recorded transcriptions.

Mato has sixteen consonant phonemes and five vowel phonemes. There is variation in only one segment, the consonant phoneme /x/.

		Bilabial	Alveolar	Palatal	Velar	Glottal
Plosive	vl	p	t		k	
	vd	b	d		g	
Nasal		m	n		ŋ	
Fricative			s		x	h
Trill			r			
Approximant		w		j		
Lateral			l			

Table 2. Consonant Phonemes

In the Tabares dialect, the velar fricative /x/ is realised as [x] word initially and [ɣ] (voiced) intervocally, except when followed by the high front vowel /i/, where it is also retroflexed [ɣ̠]. Word final, /x/ is pronounced [ʔ], but only in isolated speech. Speakers of the Ramuk dialect pronounce /x/ as [ʔ] in all environments.

- | | | | | | |
|-----|---------|---|-----------|------------|-------------------|
| (1) | /xalux/ | → | [xa.'luʔ] | ‘door’ | (Tabares speaker) |
| | /xalux/ | → | [ʔa.'luʔ] | ‘door’ | (Ramuk speaker) |
| (2) | /buxu/ | → | [ˈbu.ɣu] | ‘pig’ | (Tabares speaker) |
| | /buxu/ | → | [ˈbu.ʔu] | ‘pig’ | (Ramuk speaker) |
| (3) | /baxi/ | → | [ˈba.ɣi] | ‘medicine’ | (Tabares speaker) |
| | /baxi/ | → | [ˈba.ʔi] | ‘medicine’ | (Ramuk speaker) |

3. SOCIAL VARIATION

As stated above, there are two major clan divisions among the Mato. They are referred to here as ‘divisions’ rather than moieties, as marriage typically occurs within the division rather than across divisions, which is the major indicator of a moiety. Notions of equality pervade the relationship between the two divisions. Political offices, i.e. LLG and Magistrate, are divided between the two groups evenly when elections are held. When money distributed by the government is divided unevenly, tensions arise. Each division prefers their pronunciation and usage of the Mato language. The prestige, if any, lies with the Tabares clan, as it is the most senior of the two divisions, and it encompasses the larger landmass. Refer to §5. Social Structure of *Mato Social Organization* (Stober and Stober 2002:12-20) for a more detailed explanation.

4. SURROUNDING LINGUISTIC SITUATION

While Mato is surrounded by several languages, there is no significant shift to these or the national languages of Tok Pisin or English. The linguistic situation is very stable, due in part to the geographical isolation of the Mato people. Social and linguistic identity also play a large part in retention of the Mato language in nearly every domain. Apart from church liturgy and Scripture readings, which are done in Tok Pisin as they have not been translated into Mato yet, the Mato use their own language for every domain of village life that includes other Mato speakers. See *Mato Sociolinguistic and Literacy Study* (Stober 1998:10-13) for more details.

5. COMPLETED LANGUAGE WORK

All language analysis and materials have been produced by SIL. The bibliography includes the technical analysis completed: *Mato and Ronji Sociolinguistic Survey* (1996), *Mato Sociolinguistic and Literacy Study* (1998), *Mato Social Organization* (2002), *Mato Organized Phonology Data* (2005), *Mato Organized Phonology Data Supplement* (2005), and *Essentials of Mato Grammar* (2005). There is not, nor has there been, any other entity involved in language work or Bible translation among the Mato.

Several books and primers have been produced through our work – four small booklets containing traditional stories, five primers, eleven shell books in several categories and two books containing stories written during Writer’s Workshops. In addition, draft copies of the sizeable book “How the Jews Lived”, and draft Scriptures have been circulated to the ten co-translators, who come from five of the six Mato villages.

Response to the written materials has been mostly positive. The only challenge the Mato usually note is their reading efficiency. Adult literacy and fluency classes would go a long way to improving this situation.

6. CHURCHES

Aside from traditional religion, the Mato have only one organized church – Lutheran. The area was evangelized by indigenous Lutheran missionaries sometime between 1925 and 1930 (see Stober and Stober 2002:22), and no other church has made inroads among the Mato. The Ronji language group has New Apostolic and Catholic Churches, while to the east in Nukna there is a Pagesu church, and in Sio there is a Baha’i church. A few (less than 10) Mato have been intrigued by the Pagesu church in the Nukna village of Siang, and have attended some of their larger meetings, but the Lutheran evangelist serving in Bobua has convinced about half of them to return to the Lutheran church. For further information on the Mato church situation, see *Mato Sociolinguistic and Literacy Study* (Stober 1998:14).

The local Lutheran church encourages use of the vernacular where possible. Hymns are mostly sung in Mato, adapted to traditional music. Scripture is read in Mato, where available, which amounts to drafts of Genesis 1-3, Jonah and Mark. Prayer is conducted in the vernacular, except when being read from the Tok Pisin Lutheran Liturgy. Sermons are usually a mixture of Mato and Pidgin, Mato being the predominate language except when the speaker is non-Mato or non-Mato speakers are in church.

This homogenous situation leads to little or no conflict over using the vernacular in the church setting. The church and parishioners respond positively to the idea of vernacular Scriptures and literacy, especially the leaders.

7. IMPACT ON THE LANGUAGE PROGRAM

The homogenous social, church and language setting among the Mato means that there are few problems in the dialect situation that impact the language program. A committee of 10 translators, five from the Tabares dialect and five from the Ramuk dialect have chosen to use the Tabares lexical items when there are variants. The orthography utilizes the single letter ‘x’ to represent both dialects’ pronunciation of the velar fricative.

Problems that remain to be address include improving adult fluency through reading and literacy skill transfer classes, and maintaining an equilibrium in the work between the two clan divisions. We expect to work the literacy classes into the language program over the next few years. Goodwill and equality is maintained by choosing equal numbers of translators and checkers between the clan divisions and intentionally dividing any community development work between the Tabares and Ramuk clans.

8. BIBLIOGRAPHY

- GRIMES, BARBARA F. 2000. *Ethnologue: languages of the world*. Dallas: The Summer Institute of Linguistics.
- MCELHANON, KENNETH A. 1978. *A classification of the languages of Morobe Province, Papua New Guinea with the linguistic situation of individual villages*. Canberra: The Australian National University.
- ROSS, MALCOLM D. 1988. Proto Oceanic and the Austronesian languages of western Melanesia. *Pacific Linguistics* C98.
- SANDERS, ARDEN G. 1977. Guidelines for Conducting a Lexicostatistic Survey in Papua New Guinea. *Workpapers in Papua New Guinea Languages* 21.21-41.
- STOBER, SCOT F. 1998. *Mato Sociolinguistic and Literacy Study*. Unpublished ms.
- STOBER, SCOT F. 2005. *Essentials of Mato Grammar*. Unpublished ms.
- STOBER, SCOT F. 2005. *Mato Organized Phonology Data Supplement*. Unpublished ms.
- STOBER, SCOT F. 2005. *Mato Organized Phonology Data*. Unpublished ms.
- STOBER, SCOT AND CHERIE STOBER. 2000. *Mato Program Plan*. Unpublished ms.
- STOBER, SCOT AND CHERIE STOBER. 2002. *Mato Social Organization*. Unpublished ms.
- STOBER, SCOT, MARISA MCHENRY AND DAVID TROOLIN. 1996. *Mato and Ronji Sociolinguistic Survey*. Unpublished ms.

Appendix A: Mato Language Area Maps

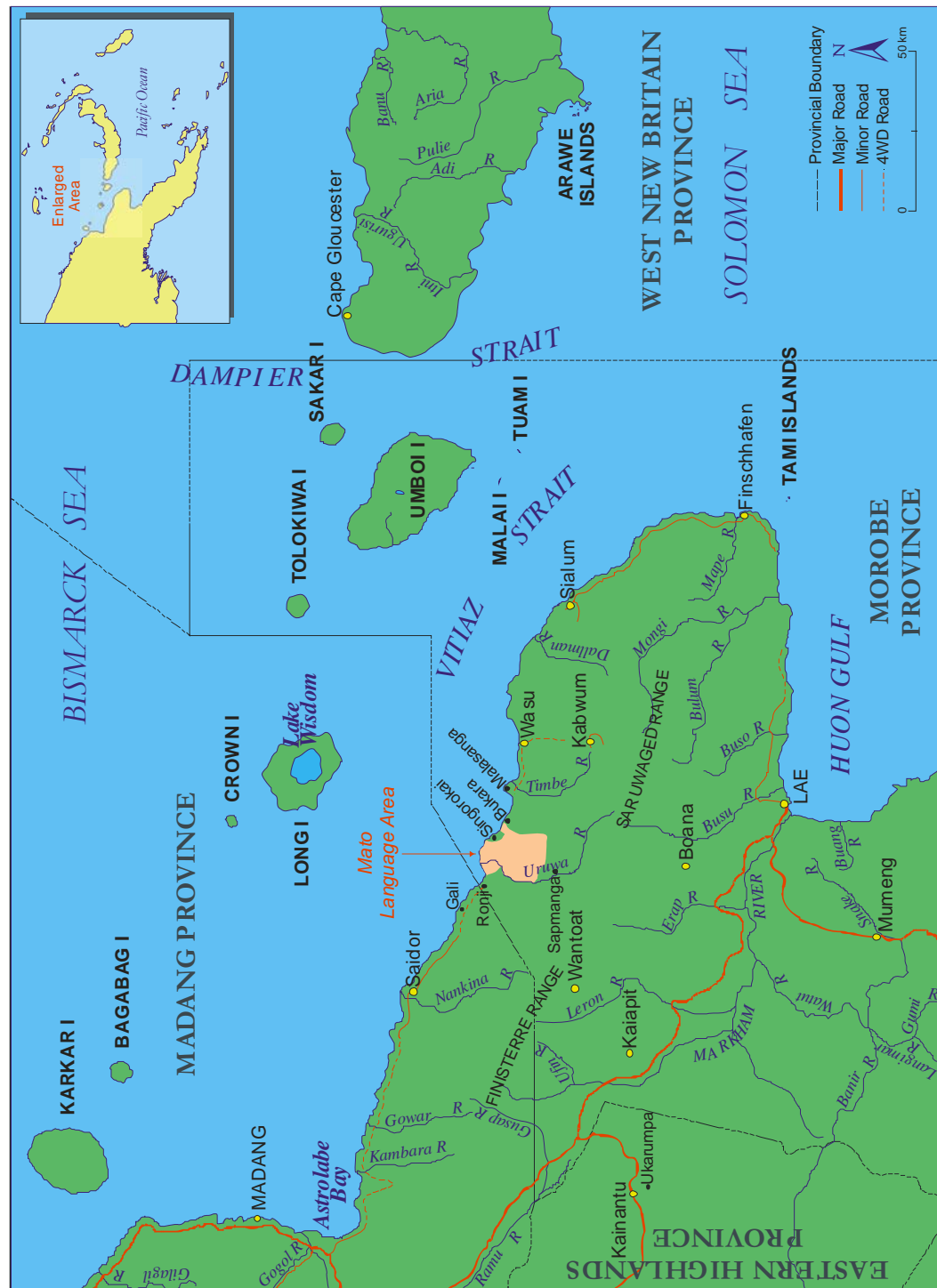


Figure 1. Mato Language Area shown in Huon Peninsula area

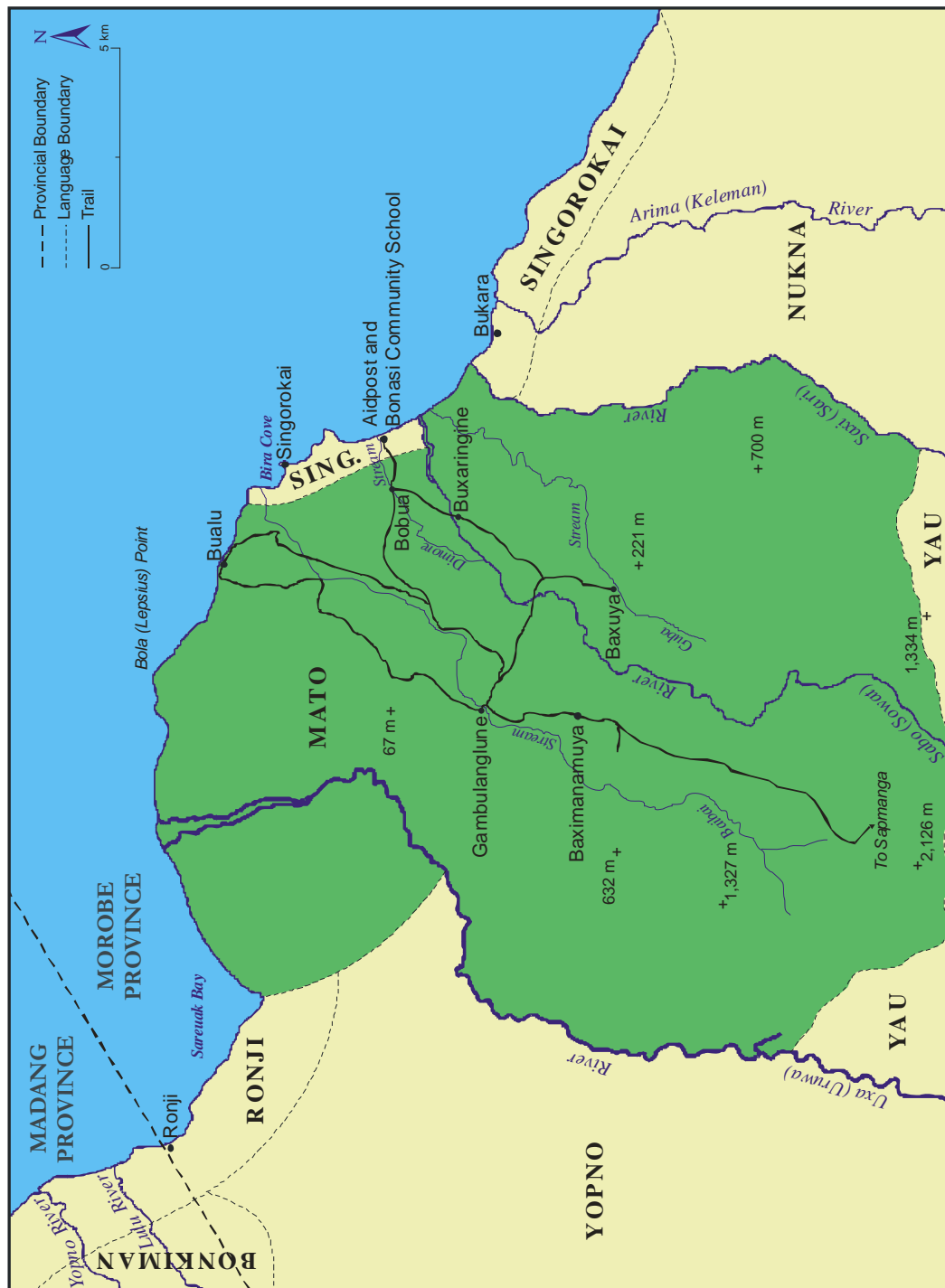


Figure 2. Mato Language Area shown in context of surrounding languages



Figure 3. Mato Language Area shown with dialect and clan divisions

Appendix B: Word Lists

SIL Survey Word List, English Tok Pisin Version (1999 Revision), August 1999

		Date:	09-Jun-03	09-Jun-03	13-Jun-03	13-Jun-03	16-Jun-03	25-Jun-03
		Language:	Mato	Mato	Mato	Mato	Mato	Mato
		Dialect:	Ramuk	Ramuk	Ramuk	Tabares	Tabares	Tabares
		Village:	Bobua	Buxaringine	Baxuya	Gambulaglune	Baximanamuya	Bualu
		Province:	Morobe	Morobe	Morobe	Morobe	Morobe	Morobe
		Subdistrict:	Kalasa	Kalasa	Kalasa	Kalasa	Kalasa	Kalasa
		Informant:	Ronu	Roi	Opanga	Unganing	Hatayanga	Barnabas
		Age:	44	39	53	38	38	35
		Sex:	Male	Male	Male	Male	Male	Male
		Reliability:	Good	Good	Good	Good	Good	Good
		Elicited by:	Scot Stober	Scot Stober	Scot Stober	Scot Stober	Scot Stober	Scot Stober
1	<i>his head</i>		to'ʔona	to'ʔona	to'ʔona	to'ʔonoa	to'ʔonoa	to'ʔona
2	<i>his hair</i>		ta'lona	,ta'a'lona	,ta'a'lona	,toyo'lona	,toyo'lona	,toyo'lona
3	<i>his mouth</i>		,su'ʔu'huna	,su'ʔu'huna	,su'ʔu'ɣunua	,suʔu'ɣunua	,suʔu'ɣunua	,suʔu'ɣunua
4	<i>his nose</i>		juŋ'ʔana	juŋ'ʔana	juŋ'ʔanoa	juŋ'ʔanoa	juŋ'ʔanoa	juŋ'ʔanoa
5	<i>his eye</i>		ma'ʔana	ma'ʔana	ma'ʔanoa	ma'ʔanoa	ma'ʔanoa	ma'ʔanoa
6	<i>his neck (all or nape)</i>		wa,ʔuŋtu'ana	wa,ʔuŋtu'ana	a,ʔuŋtu'ana	wa,ʔuŋtu'anoa	wa,ʔuŋtu'anoa	wa,ʔuŋtu'anoa
7	<i>his belly</i>		ga'mona	ga'mona	ga'mona	ga'monoa	ga'monoa	ga'mona
8	<i>his skin (human)</i>		saŋ'gana	saŋ'gana	saŋ'gana	saŋ'ganoa	saŋ'ganoa	saŋ'ganoa
9	<i>his knee</i>		'kiŋ tu'ʔuna	'kiŋ tu'ʔuna	'kiŋ tu'ʔunua	'kiŋ tu'ʔuna	'kiŋ tu'ʔuna	'kiŋ tu'ʔuna
10	<i>his ear (external)</i>		ta,ŋaŋli'ana	ta,ŋaŋli'ana	ta,ŋaŋli'anua	ta,ŋaŋli'ana	ta,ŋaŋli'ana	ta,ŋaŋli'ana
11	<i>his tongue</i>		ma'nana	ma'nana	ma'nanua	ma'nanua	ma'nanua	ma'nanua
12	<i>his tooth</i>		'wena	'wena	'wena	'wena	'wena	'wena

13	(her) breast	su'ina	su'ina	su'inua	su'ina	su'inoa	su'ina
14	his hand	ri'mana	ri'mana	ri'mana	ri'mana	ri'manoa	ri'mana
15	his foot (heel)	'kiŋ tam'boŋ	'kiŋ tam'boŋ	'kiŋ tam'boŋ	'kiŋ tam'boŋ	'kiŋ tam'boŋ	'kiŋ tam'boŋ
16	his back	u'buna	u'buna	u'buna	u'bunoa	u'bunoa	u'bunoa
17	his shoulder	ja'ʔuna	ja'ʔuna	ja'ʔuna	ja'yuna	ja'yunoa	ja'yunoa
18	his forehead	ᵐramra'mona	ᵐramra'mona	ᵐramra'mona	ᵐramra'mona	ᵐramra'monoa	ᵐramra'mona
19	his chin	ho'ʔana	aʔu'wana	aʔu'wana	ho'yana	ho'yanoa	ᵐhoʔo'yana
20	his elbow	ri'maŋ tu'ʔuna	ri'maŋ tu'ʔuna	ri'maŋ tu'ʔuna	ri'maŋ tu'yuna	ri'maŋ tu'yunoa	ri'maŋ tu'yuna
21	his thumb	ri'maŋ ti'nana	ri'maŋ ti'nana	ri'maŋ ti'nana	ri'maŋ ti'nana	ri'maŋ ti'nana	ri'maŋ ti'nana
22	his leg	'kina	'kina	'kina	'kina	'kina	'kina
23	his heart	ᵐtutu'rina	ᵐtutu'rina	ᵐtutu'rina	ᵐtutu'rina	ᵐtutu'rinoa	ᵐtutu'rina
24	his liver	wa'tina	a'tina	wa'tina	a'tina	a'tinoa	a'tina
25	his bone	tu'ana	tu'ana	tu'ana	tu'ana	tu'anoa	tu'anoa
26	his blood	si'bina	si'bina	si'bina	si'bina	si'binoa	si'bina
27	baby	'gara ᵐkamba'gina	'gara ᵐkamba'gina	'gara ᵐkamba'gina	'gara ᵐkamba'gina	'gara ᵐkamba'gina	'gara ᵐkamba'gina
28	girl	'he'ŋ na'nuna	'he'ŋ na'nuna	'he'ŋ na'nuna	'he'ŋ na'nuna	'he'ŋ na'nuna	'he'ŋ na'nuna
29	boy	'lup to'ʔona	'lup to'ʔona	'lup to'ʔona	ᵐgana'nuna	ᵐgana'nuna	ᵐgana'nuna
30	old.woman	an'ronŋi'aŋ	an'ronŋi	an'ronŋi	xan'ronŋi	xan'ronŋi	xan'ronŋi
31	old.man	du'aŋa	du'aŋa	du'aŋa	du'aŋa	du'aŋa	du'aŋa
32	woman	'he'ŋ	'he'ŋ	'he'ŋ	'he'ŋ	'he'ŋ	'he'ŋ
33	man	'lup	'lup	'lup	'lup	'lup	'lup
34	his father	ti'buna	ti'buna	ti'buna	ti'buna	ti'buna	ti'buna
35	his mother	'ba"na	'ba"na	'ba"na	'ba"na	'ba"na	'ba"na
36	brother (older of man)	ᵐsaba'hanua	ᵐsaba'hanua	ᵐsaba'hanua	ᵐsaba'hanoa	ᵐsaba'hanoa	ᵐsaba'hanoa
37	sister (older of man)	ᵐhemu'haŋ sa'baŋa	ᵐhemu'haŋ sa'baŋa	ᵐhemu'haŋ sa'baŋa	ᵐhamu'haŋ sa'baŋa	ᵐhamu'haŋ sa'baŋa	ᵐhamu'haŋ sa'baŋa
38	name	'jaja	'jaja	'jaja	'jaja	'jaja	'jaja
39	bird	'maŋ	'maŋ	'maŋ	'maŋ	'maŋ	'maŋ
40	dog	'koma	'koma	'koma	'koma	'koma	'koma
41	pig	'buʔu	'buʔu	'buʔu	'buyu	'buyu	'buyu

42	<i>cassowary</i>	su'am	su'am	su'am	su'am	su'am	su'am
43	<i>wallaby</i>	so'naŋ	so'naŋ	so'naŋ	so'naŋ	so'naŋ	so'naŋ
44	<i>flying fox</i>	ban'dim	ban'dim	ban'dim	ban'dim	ban'dim	ban'dim
45	<i>rat</i>	,gambu'ʔam	,gambu'ʔam	,gambu'ʔam	,gambu'ʔam	,gambu'ʔam	,gambu'ʔam
46	<i>frog</i>	ha'ʔiŋgu	ha'ʔiŋgu	ha'ʔiŋgu	ha'ʔiŋgu	ha'ʔiŋgu	ha'ʔiŋgu
47	<i>snake</i>	'moʔa	'moʔa	'moʔa	'moʔa	'moʔa	'moʔa
48	<i>fish</i>	'sɔŋ	'sɔŋ	'sɔŋ	'sɔŋ	'sɔŋ	'sɔŋ
49	<i>person</i>	li'puʔ	li'puʔ	li'puʔ	li'puʔ	li'puʔ	li'puʔ
50	<i>he sits</i>	'ruŋ	'ruŋ	'ruŋ	'ruŋ	'ruŋ	'ruŋ
51	<i>he stands</i>	'li	'li	'li	'li	'li	'li
52	<i>he lies down (reclines)</i>	'kinu	'kinu	'kinu	'kinu	'kinu	'kinu
53	<i>he sleeps</i>	'kinu 'matabu	'kinu 'matabu	'kinu 'matabu	'kinu 'matabu	'kinu 'matabu	'kinu 'matabu
54	<i>he walks</i>	'haʔa	'haʔa	'haʔa	'haʔa	'haʔa	'haʔa
55	<i>he bites (a dog)</i>	'gaʔu	'gaʔu	'gaʔu	'gaʔu	'gaʔu	'gaʔu
56	<i>he eats</i>	'aŋ	'aŋ	'aŋ	'aŋ	'aŋ	'aŋ
57	<i>he gives it to me</i>	'sina na'ŋa	'sina na'ŋa	'sina na'ŋa	'sina na'ŋa	'sina na'ŋa	'sina na'ŋa
58	<i>he sees</i>	'baɣu	'baɣu	'baɣu	'baɣu	'baɣu	'baɣu
59	<i>he comes</i>	'ma	'ma	'ma	'ma	'ma	'ma
60	<i>he says</i>	ha'rua	ha'rua	ha'rua	ha'rua	ha'rua	ha'rua
61	<i>he hears</i>	'luŋu	'luŋu	'luŋu	'luŋu	'luŋu	'luŋu
62	<i>he knows</i>	'abia	'abia	'abia	'abia	'abia	'abia
63	<i>he drinks</i>	'nuŋ	'nuŋ	'nuŋ	'nuŋ	'nuŋ	'nuŋ
64	<i>he hits</i>	'taha	'taha	'taha	'taha	'taha	'taha
65	<i>he kills</i>	'uŋ	'uŋ	'uŋ	'uŋ	'uŋ	'uŋ
66	<i>he dies</i>	'mati	'mati	'mati	'mati	'mati	'mati
67	<i>it burns (fire is burning)</i>	'lu	'lu	'lu	'lu	'lu	'lu
68	<i>it flies</i>	'ɔti	'ɔti	'ɔti	'ɔti	'ɔti	'ɔti
69	<i>he swims</i>	'jum	'jum	'jum	'jum	'jum	'jum
70	<i>he runs</i>	'luki	'luki	'luki	'luki	'luki	'luki

71	<i>he falls down</i>	^h uŋ mari	^h uŋ mari	^h uŋ mari	^h xuŋ mari	^h xuŋ mari	^h xuŋ mari
72	<i>he catches</i>	^h tuʔuti	^h tuʔuti	^h tuʔuti	^h tuɣuti	^h tuɣuti	^h tuɣuti
73	<i>he coughs</i>	u ^h wa ^h wa	u ^h wa ^h wa	u ^h wa ^h wa	u ^h wa ^h wa	u ^h wa ^h wa	u ^h wa ^h wa
74	<i>he laughs</i>	ma ^h 'sisi	ma ^h 'sisi	ma ^h 'sisi	ma ^h 'sisi	ma ^h 'sisi	ma ^h 'sisi
75	<i>he dances</i>	^h 'siga	^h 'siga	^h 'siga	^h 'siga	^h 'siga	^h 'siga
76	<i>big</i>	sa ^h 'baŋa	sa ^h 'baŋa	sa ^h 'baŋa	sa ^h 'baŋa	sa ^h 'baŋa	sa ^h 'baŋa
77	<i>small</i>	ka ^h 'kana	ka ^h 'kana	^h kaʔu ^h 'kana	^h kaɣu ^h 'kana	^h kaɣu ^h 'kana	^h kaɣu ^h 'kana
78	<i>good</i>	^h ʔa ^h	^h ʔa ^h	^h ʔe ^h	^h xa ^h	^h xa ^h	^h xa ^h
79	<i>bad</i>	do ^h 'jana	di ^h 'ana	di ^h 'ana	di ^h 'ana	di ^h 'ana	di ^h 'ana
80	<i>long</i>	me ^h 'ɣewa	me ^h 'ɣewa	me ^h 'ɣea	ma ^h 'ɣea	ma ^h 'ɣea	ma ^h 'ɣea
81	<i>short</i>	ra ^h ʔabi ^h 'ana	ra ^h ʔabi ^h 'ana	ra ^h ʔabi ^h 'ana	ra ^h ɣabi ^h 'ana	ra ^h ɣabi ^h 'ana	ra ^h ɣabi ^h 'ana
82	<i>heavy</i>	ma ^h 'wana	ma ^h 'ʔana	ma ^h 'ʔana	ma ^h 'ɣana	ma ^h 'ɣana	ma ^h 'ɣana
83	<i>light</i>	ma ^h 'niana	ma ^h 'ʔana	ma ^h ʔa ^h 'nia	ma ^h 'ɣana	ma ^h 'ɣana	ma ^h 'ɣana
84	<i>cold (water)</i>	^h ʔari ^h 'jana	^h ʔari ^h 'jana	^h ʔari ^h 'jana	^h xari ^h 'jana	^h xari ^h 'jana	^h xari ^h 'jana
85	<i>warm, hot (water)</i>	^h sali ^h 'ana	^h sali ^h 'ana	^h sali ^h 'ana	^h sali ^h 'ana	^h sali ^h 'ana	^h sali ^h 'ana
86	<i>new</i>	^h ha ^h 'na	^h ha ^h 'na	^h ha ^h 'na	^h ha ^h 'na	^h ha ^h 'na	^h ha ^h 'na
87	<i>old</i>	mu ^h 'gaŋa	mu ^h 'gaŋa	mu ^h 'gaŋa	mu ^h 'gaŋa	mu ^h 'gaŋa	mu ^h 'gaŋa
88	<i>round</i>	^h tambo ^h boʔi ^h 'jana	^h tambo ^h boʔi ^h 'jana	^h tambo ^h boʔi ^h 'jana	^h manru ^h 'jana	^h manru ^h 'jana	^h manru ^h 'jana
89	<i>wet (clothing)</i>	la ^h 'jina	la ^h 'jina	la ^h 'jina	la ^h 'jina	la ^h 'jina	la ^h 'jina
90	<i>dry (clothing)</i>	mama ^h 'sana	mama ^h 'sana	mama ^h 'sana	mama ^h 'sana	mama ^h 'sana	mama ^h 'sana
91	<i>full</i>	^h baʔa ^h 'gi	^h baʔa ^h 'gi	^h baʔa ^h 'gi	^h baɣa ^h 'gi	^h baɣa ^h 'gi	^h baɣa ^h 'gi
92	<i>road</i>	da ^h 'ʔaŋa	da ^h 'ʔaŋa	da ^h 'ʔaŋa	da ^h 'ɣaŋa	da ^h 'ɣaŋa	da ^h 'ɣaŋa
93	<i>stone</i>	si ^h 'aŋ	si ^h 'aŋ	si ^h 'aŋ	si ^h 'aŋ	si ^h 'aŋ	si ^h 'aŋ
94	<i>earth (ground)</i>	^h 'titi	^h 'titi	^h 'titi	^h 'titi	^h 'titi	^h 'titi
95	<i>sand</i>	u ^h laŋu ^h 'laŋ	u ^h la ^h ŋu ^h 'la ^h ŋ	la ^h ŋ'la ^h ŋ	u ^h laŋu ^h 'laŋ	u ^h laŋu ^h 'laŋ	^h laŋu ^h 'laŋ
96	<i>mountain</i>	bim ^h 'biʔ	^h ra ^h ba ^h 'jana	^h ra ^h ba ^h 'jana	bim ^h 'biʔ	bim ^h 'biʔ	bim ^h 'biʔ
97	<i>fire</i>	^h ʔap	^h ʔap	^h ʔap	^h ʔap	^h ʔap	^h ʔap
98	<i>smoke</i>	^h uti ^h 'ana	^h uti ^h 'ana	^h uti ^h 'ana	bu ^h nuɣu ^h 'jana	bu ^h nuɣu ^h 'jana	bu ^h nuɣu ^h 'jana

99	<i>ashes</i>	ha ^h jata	ha ^h jata	ha ^h jata	ha ^h jata	ha ^h jata	ha ^h jata
100	<i>sun</i>	ai'dap	ai'dap	ai'dap	xai'dap	xai'dap	xai'dap
101	<i>moon</i>	so'bak	so'bak	so'bak	so'bak	so'bak	so'bak
102	<i>star</i>	ha'tuŋ	ha'tuŋ	ha'tuŋ	ha'tuŋ	ha'tuŋ	ha'tuŋ
103	<i>cloud</i>	mu'gap	mu'gap	mu'gap	mu'gap	mu'gap	mu'gap
104	<i>rain</i>	'kuja	'kuja	'kuja	'kuja	'kuja	'kuja
105	<i>wind</i>	'jaŋ	'jaŋ	'jaŋ	'jaŋ	'jaŋ	'jaŋ
106	<i>water</i>	'laŋ	'laŋ	'laŋ	'laŋ	'laŋ	'laŋ
107	<i>vine</i>	'waʔu	'waʔu	'waʔu	'wayu	'wayu	'wayu
108	<i>tree</i>	'a ⁱ	'a ⁱ	'ʔa ⁱ	'xa ⁱ	'xa ⁱ	'xa ⁱ
109	<i>stick</i>	'tuki	'tuki	'tuki	'tuki	'tuki	'tuki
110	<i>bark</i>	'a ⁱ san'gana	'a ⁱ san'gana	'ʔa ⁱ san'gana	'xa ⁱ san'gana	'xa ⁱ san'gana	'xa ⁱ san'gana
111	<i>seed</i>	ha'tuna	ha'tuna	ha'tuna	ma'rana	ma'rana	ma'rana
112	<i>root</i>	wa'ʔana	,waʔo'ʔana	wa'ʔana	,oʔo'ʔana	,oʔo'ʔana	,oʔo'ʔana
113	<i>leaf</i>	'lona	'lona	'lona	'lona	'lona	'lona
114	<i>meat</i>	mu,tutu'ŋana	mu,tutu'ŋana	mu,tutu'ŋana	mu,tutu'ŋana	mu,tutu'ŋana	mu,tutu'ŋana
115	<i>fat</i>	wa'rana	wa'rana	wa'rana	o'rana	o'rana	o'rana
116	<i>egg</i>	,hata'ʔuna	,hata'ʔuna	,hata'ʔuna	,hata'ʔuna	,hata'ʔuna	,hata'ʔuna
117	<i>louse</i>	gi'rak	gi'rak	gi'rak	gi'rak	gi'rak	gi'rak
118	<i>feather</i>	bu'ʔana	bu'ʔana	bu'ʔana	bu'ʔana	bu'ʔana	bu'ʔana
119	<i>horn</i>	sa'lam	sa'lam	sa'lam	sa'lam	sa'lam	sa'lam
120	<i>wing</i>	baŋ,gito'ŋina	baŋ,gito'ŋina	baŋ,gito'ŋina	baŋ,gito'ŋina	baŋ,gito'ŋina	baŋ,gito'ŋina
121	<i>claw</i>	kiŋ go'ana	kiŋ go'ana	kiŋ go'ana	kiŋ go'ana	kiŋ go'ana	kiŋ go'ana
122	<i>tail</i>	wa'ʔana	wa'ʔana	wa'ʔana	wa'ʔana	u'ʔana	u'ʔana
123	<i>one</i>	ta ⁱ nina	ta ⁱ nina	ta ⁱ nina	ta ⁱ ni'na ^u	ta ⁱ ni'na ^u	ta ⁱ ni'na ^u
124	<i>two</i>	'luwa	'luwa	'luwa	'luwa	'luwa	'luwa
125	<i>three</i>	'tuwa	'tuwa	'tuwa	'luwa hili'ana	'luwa ,hili'ana	'luwa ,hili'ana
126	<i>four</i>	'luwa 'luwa	'luwadi 'luwadi	'luwa 'luwa	'luwadi 'luwadi	'luwadi 'luwadi	'luwadi 'luwadi

127	<i>five</i>	'luwa 'luwa ,hili'ana	'luwadi 'luwadi hi,lia'diŋa	'luwa 'luwa ,hili'ana	'luwadi 'luwadi hi,lia'diŋa	'luwadi 'luwadi hi,lia'diŋa	'luwadi 'luwadi hi,lia'diŋa
128	<i>ten</i>	ri'mara ,hata,iŋ,hata'ina	,hata,iŋ,hata'ina	,hata,iŋ,hata'ina	,hata,iŋ,hata'ina	ri'mara ,hata'ina ri'mara ,hata'ina	h,ata,iŋ,hata'ina
129	<i>taro</i>	'baŋ	'baŋ	'baŋ	'baŋ	'baŋ	'baŋ
130	<i>sugarcane</i>	'tup	'tup	'tup	'tup	'tup	'tup
131	<i>yam</i>	'gui	'gui	gu'i?	gu'i?	gu'i?	gu'i?
132	<i>banana</i>	ba'ʔup	ba'ʔup	ba'ʔup	ba'ʔup	ba'ʔup	ba'ʔup
133	<i>sweet potato</i>	sem'bak	,saʔim'bak	,saʔim'bak	,saʔim'bak	,saʔim'bak	,saʔim'bak
134	<i>bean</i>	ka'la'i	ka'la'i	ka'la'i	ka'la'i	ka'la'i	ka'la'i
135	<i>axe</i>	ki'laŋ	ki'laŋ	ki'laŋ	ki'laŋ	ki'laŋ	ki'laŋ
136	<i>knife</i>	wa'ʔaŋ	wa'ʔaŋ	wa'ʔaŋ	wa'ʔaŋ	wa'ʔaŋ	wa'ʔaŋ
137	<i>arrow (spear)</i>	'gulu	'gulu	'gulu	'gulu	'gulu	'gulu
138	<i>net bag (woman's)</i>	'taŋa	'taŋa	'taŋa	'taŋa	'taŋa	'taŋa
139	<i>house</i>	'numa	'numa	'numa	'numa	'numa	'numa
140	<i>tobacco</i>	'kasi	'kasi	'kasi	'kasi	'kasi	'kasi
141	<i>morning</i>	bu,rara'gina	bu,rara'gina	bu,rara'gina	bu,rara'gina	bu,rara'gina	bu,rara'gina
142	<i>afternoon</i>	buŋ'buŋ	buŋ'buŋ	buŋ'buŋ	buŋ'buŋ	buŋ'buŋ	buŋ'buŋ
143	<i>night</i>	jam'boŋ	jam'boŋ	jam'boŋ	jam'boŋ	jam'boŋ	jam'boŋ
144	<i>yesterday</i>	nu'la ^u	nu'la ^u	nu'la ^u	nu'la ^u	nu'la ^u	nu'la ^u
145	<i>tomorrow</i>	,bura'gina	,bura'gina	,bura'gina	,bura'gina	,bura'gina	,bura'gina
146	<i>white</i>	,usa'mana	,usa'mana	,usa'mana	,usa'mana	,usa'mana	,usa'mana
147	<i>black</i>	,mutu'ʔuna	,mutu'ʔuna	,mutu'ʔuna	,mutu'ʔuna	,mutu'ʔuna	,mutu'ʔuna
148	<i>yellow</i>	,saga'jana	,saga'jana	,saga'jana	,saga'jana	,saga'jana	,saga'jana
149	<i>red</i>	,sabu'ʔana	,sabu'ʔana	,sabu'ʔana	,sabu'ʔana	,sabu'ʔana	,sabu'ʔana
150	<i>green</i>	,gama'tana	,gama'tana	,gama'tana	,gama'tana	,gama'tana	,gama'tana
151	<i>many</i>	u'mana	u'mana	u'mana	'xumana	'xumana	'xumana
152	<i>all</i>	'longalo	'longalo	'longalo	'longalo	'longalo	'longalo
153	<i>this</i>	a'la li	a'la li	a'la li	a'la li	a'la li	a'la li
154	<i>that</i>	a'la ba	a'la ba	a'la ba	a'la ba	a'la ba	a'la ba
155	<i>what?</i>	'ʔata	'ʔata	a'ʔata	,bara'ʔinta	,bara'ʔinta	,bara'ʔinta

156	<i>who?</i>	,gaʔa'rea	,gaʔa're	,gaʔa're	,gaya'rea	,gaya'rea	,gaya'rea
157	<i>when?</i>	bu'ɲintabi	bu'ɲintabi	bu'ɲintabi	bu'ɲintabi	bu'ɲintabi	bu'ɲintabi
158	<i>where?</i>	'bila	'bila	'bila	'bila	'bila	'bila
159	<i>yes</i>	'ne	'ne	'obe	'wane	'obe	'wane
160	<i>no</i>	'tegu	'tegu	'tegu	'tegu	'tegu	'tegu
161	<i>not</i>	'te	'te	'te	'te	'te	'te
162	<i>I</i>	'ɲa	'ɲa	'ɲa	'ɲa	'ɲa	'ɲa
163	<i>you (singular)</i>	'uŋ	'uŋ	'uŋ	'uŋ	'uŋ	'uŋ
164	<i>he</i>	'ina	'ina	'ina	'ina	'ina	'ina
165	<i>we two (exclusive)</i>	am'tam	am'tam	am'tam	am'tam	am'tam	am'tam
166	<i>you two</i>	aŋ'taŋ	aŋ'taŋ	aŋ'taŋ	aŋ'taŋ	aŋ'taŋ	aŋ'taŋ
167	<i>they two</i>	diŋ'taŋ	diŋ'taŋ	diŋ'taŋ	diŋ'taŋ	diŋ'taŋ	diŋ'taŋ
168	<i>we (plural exclusive)</i>	'am	'am	'am	'am	'am	'am
169	<i>you (plural)</i>	'aŋ	'aŋ	'aŋ	'aŋ	'aŋ	'aŋ
170	<i>they (plural)</i>	'diŋ	'diŋ	'diŋ	'diŋ	'diŋ	'diŋ