

**UNHAS-SIL Sociolinguistic Survey:
Kabupaten Mamuju**

Kari Valkama

TABLE OF CONTENTS

	page
INTRODUCTION	100
1. NONLINGUISTIC INFORMATION	100
2. METHODOLOGY	101
3. RESULTS	105
4. RESIDUE	110
5. BIBLIOGRAPHY	111
APPENDICES	113
 MATRICES:	
Matrix 1. Central Sulawesi Stock	105
Matrix 2. South Sulawesi Stock	108
Matrix 3. West Austronesian Superstock	113
 MAPS:	
Map 1.a. Kabupaten Mamuju, Northern section	114
Map 1.b. Languages of Kabupaten Mamuju, Northern section	115
Map 2.a. Kabupaten Mamuju, Southern section	116
Map 2.b. Languages of Kabupaten Mamuju, Southern section	117

INTRODUCTION

The survey was conducted in three parts during the period September 19 - November 14, 1985. The first trip was made by Tom Laskowske and Kari Valkama September 19 - October 2 to kecamatan Kalumpang and from there up the coast to kota kecamatan Pasangkayu. The second trip was made by Don Barr and Kari Valkama October 18 - 25 to kecamatan Pasangkayu. The third trip was made by Kare Strømme and Kari Valkama November 6 - 14 to kecamatan Budong-Budong, Kalukku, Mamuju and Tapalang. (The author acknowledges valuable input from survey partner Thomas V. Laskowske to this report, especially in the determination of similarity sets and matrix relations. Maps 1a and 2a were drawn by Kare J. Strømme.)

The goal of the survey was to complete earlier UNHAS-SIL surveys in the area, i.e. the initial survey by Grimes and Grimes in January 1983, thus bringing the general survey of the whole area to completion. In other words our purpose was to investigate the linguistic situation in kabupaten Mamuju in order to establish language boundaries by comparing lexical similarity between wordlists taken in the area concerned.

1. NONLINGUISTIC INFORMATION

The area covered by our survey belongs to one administrative unit, kabupaten Mamuju. Under the Dutch rule and since independence until 1959 the area was a subdivision of the Mandar administrative area. Kabupaten Mamuju is divided into six kecamatans: Tapalang, Mamuju, Kalukku, Kalumpang, Budong-Budong and Pasangkayu, counting from south to north.

The whole area is still underdeveloped, the two northernmost kecamatans being the least developed. Large road building projects are under way. We were told that there is a plan to build a road along the coast from Mamuju to BAMBAMUA in Central Sulawesi. At present there is a vehicular road from Mamuju to BENGGAULU, but most of the bridges are still missing. We were told that 90 bridges are needed. There is also a road building project from TASIU to Kalumpang. At present the road has reached PABETTENGAN, but again the bridges are missing. There are usually rafts to get motorcycles across the rivers and sometimes the rafts are big enough for a car.

Until the roads and bridges are completed, most travel of any distance is by boat. There is regular traffic from Mamuju to Kalukku, Sampaga, Babana and Pasangkayu. One can also travel upstream on the big rivers: Karama, Budong-Budong and Lariang. If one can travel as an ordinary passenger, the fare is usually cheap, but he may need to wait for a boat that is leaving for his

destination. The other way is to charter a boat, but then one pays a lot more. Travelling by boat during the rainy season can be dangerous.

Kabupaten Mamuju is basically mountainous, except for the coastal plain, which can be from five to 20 kilometers wide. Most of the people live on the coastal plain. The mountainous areas are, generally speaking, uninhabited, except for kecamatan Kalumpang. But even there most of the people live in the valleys. We were told that there are isolated groups living in the mountains in the Budong-Budong and Pasangkayu kecamatans, but it is difficult to verify whether that is true. The government has programmes to move those isolated groups down to more developed areas, where there are schools and clinics. There is a lot of migration going on in the area, especially in the sparsely populated Budong-Budong and Pasangkayu kecamatans. There are both local and national transmigration projects that are being carried out and more are planned. This may be an important factor for the language situation in the areas concerned.

Subsistence farming is the livelihood of most people in the area, rice being the most important crop. Both wet and dry field cultivation is used. Corn, cassava, soybean and sweet potato are cultivated to a lesser extent. Dried fish is part of the daily diet, chicken is eaten less frequently. Copra and coffee seem to be the most common cash crops. Cocoa and cloves are also cultivated and rattan is cut from the jungle.

The majority of the villages have primary schools (over 130 SDs in the whole kabupaten). There is a secondary school (SMP) in each kecamatan (two in Tapalang) and one high school (SMA) in Mamuju.

There are over 100,000 inhabitants in kabupaten Mamuju. About 85% are Muslim, about 12% are Christian and about 1% are Hindu.

2. METHODOLOGY

2.A. General

The goal of the survey was to determine tentative language boundaries by comparing lexical similarity between wordlists taken in the area concerned.

Our definition of language implies mutual intelligibility. So, when we speak of two separate languages, we imply lack of intelligibility. Even though lexicostatistics is not a sufficient means of predicting intelligibility, we assume that the measure of lexical similarity roughly correlates with the degree of intelligibility. We feel that lexicostatistics can be used to indicate language relationships, but that any resultant classification must be considered tentative. (Smith 1982.) Dyen

notes: "The reason that lexicostatistical classification is inconclusive would be the same that affects any classification; not all the knowable facts are known at the time of classification unless one chooses to wait hopelessly until all knowable facts are known. Based on fewer facts than that, a classification remains open to correction as additional facts become available." (Dyen 1966:35.)

The additional facts that make the language classification final would be intelligibility testing between all those language communities which show lexical similarity between 60 to 95 percent. This is because, whereas lexical similarity is one component of linguistic similarity (together with phonological, grammatical and semantic factors), intelligibility scores represent linguistic similarity directly, being composite measures of the several factors which determine linguistic similarity. (Simons 1979:15,57f,67-87.)

2.B. Eliciting data

During the survey trips 26 wordlists were elicited. All those wordlists are listed in Matrix 3 (see appendix). Lists elicited during the first trip are marked (L/V), those of the second trip are marked (B/V), and those of the third trip are marked (S/V). In the smaller South Sulawesi Stock matrix (Matrix 2) Pedasi and Tobada lists were not used because the former was an incomplete list (containing only 41 words) and the latter was elicited from a nonnative speaker. We also included eleven wordlists from Grimes and Grimes: Languages of South Sulawesi (to appear), four wordlists from Strømme and Valkama's survey of southwestern section of kabupaten Polewali Mamasa and four wordlists from Friberg and Kim's survey of the northern part of kecamatan Mambi in kabupaten Polewali Mamasa. These are marked (G), (S/V), and (F/K), respectively, in our matrix. We also included one wordlist from Michael Martens (M) and two wordlists from Seko survey made by Laskowske and Laskowske (L/L). This makes the total number of wordlists 48.

The wordlist we used was a 210-item list, which was quite similar to the Grimes and Grimes, Strømme and Valkama, Friberg and Kim and Laskowske and Laskowske lists, and identical with the Martens list. Out of the 210 items, 200 were also on the Grimes and Grimes list, 190 were on the Strømme and Valkama list, 207 were on the Friberg and Kim list and 209 were on Laskowske and Laskowske list. All these lists are substantially similar to the Swadesh 200 list.

Before eliciting a wordlist, the respondent was screened to ensure that he was a native speaker and the offspring of native speakers of the language/dialect in question. We permitted other local people to advise and correct the respondent, but we required

that the respondent himself pronounce the words, so that uniformity of pronunciation could be maintained for a given location.

When Pedasi and Tobada wordlists are not counted, the following statistics can be given from the remaining 24 wordlists elicited during our Mamuju survey: Our respondents' ages ranged from 21 to 77: 2 were between 20 and 29, 8 were between 30 and 39, 4 were between 40 and 49, 7 were between 50 and 59, 1 was between 60 and 69, and 2 were between 70 and 79. 8 of the respondents were farmers, 1 was ketua adat, 1 was ketua kantor agama, 1 was karyawan CV, 1 was kepala RT, 1 was kepala RK, 1 was kepala lingkungan, 2 were kepala desas, 1 was kepala jaga, 1 was isteri RT, 1 was ketua BP3, 1 was sekretaris desa, 2 were imams, 2 were guru SDs. 21 of our wordlists were elicited in the respective speech community and 3 of them outside of the speech community. Only one of the respondents was female. The language of elicitation was Indonesian.

2.C. Lexical similarity

All 48 wordlists were later transferred to a wordbook where each page contained one item in all its 48 varieties. Where a given wordlist elicited more than one response, each response was entered on the wordbook page. After that each word was assigned to its appropriate lexical similarity set according to the principles explained in Bugenhagen (1981:12-14). A lexical similarity set is a set of forms which are all lexically similar to one another (Sanders 1977:36).

It is to be noted that here we use the terms lexically similar and lexical similarity set instead of the terms cognate and cognate set, because we want to make it clear that we are making synchronic comparisons rather than diachronic comparisons. Bugenhagen refers to McElhanon (1967:8), according to whom two items are lexically similar if there is correspondence between fifty percent or more of the phonemes, either as a regular correspondence (for the comparative method) or by phonetic similarity (for the inspection method). (For a discussion of comparative method and the inspection method, see Sanders 1977:33,34.) Bugenhagen combines the comparative method with the inspection method to the extent that regular correspondences are taken into consideration. However, he does include loanwords, which are excluded in the comparative method. So, basically we followed the inspection method, with the addition that regular correspondences were also taken into consideration. The decisions were made on a lexically similar/lexically different basis according to the 50% correspondence guideline.

2.D. Disqualifications

Out of the 210-item wordlist, six items were disqualified because of ambiguity, lexical repetition, confusion, and lack of correspondence between the language of elicitation and the language elicited. The items were #39 "danau", #47 "hangat", #105 "timur", #106 "barat", #152 "nenek moyang", and #207 "menjatuhkan".

A few other items were disqualified from some wordlists, because we strongly suspect that the wrong item was elicited. So, after the disqualifications, the wordlist contains 206 items, and some individual wordlists even less.

2.E. Matrix

A matrix containing the comparisons between the 48 wordlists was then produced with the help of a computer. The procedure for "reducing" matrices as outlined by Gary Simons (1977:75-105) and as used in the UNHAS-SIL survey of southwestern Polewali-Mamasa and kabupaten Majene was not used here, for the following reason. Though we realize that two percentage figures, say 68% and 75% may not be significantly different at the confidence level of .10, the representation of that in the matrices using the number of comparisons we used (1128 comparisons on 48 wordlists) becomes meaningless. The number of instance of percentages between 70 to 79 inclusive is represented below.

percentage:	70	71	72	73	74	75	76	77	78	79
number of										
instances:	12	14	13	17	11	12	13	23	19	19

If we arbitrarily, for the sake of illustration, reduce 70%-74% to 72% and 75%-79% to 77% we are hard put to explain why a 69%-73% and a 74%-78% reduction to 71% and 76%, respectively, isn't equally valid. Furthermore, we hide the fact that two percentages, here 74% and 75%, are not significantly different while 70% and 79% are shown to be, though both sets are represented as the reduced pair, 72% and 77%. It seems best to abandon a matrix representation of reduction for as many comparisons as we have been using. This abandonment notwithstanding, we still showed sensitivity to significant differences in our assignment of the accompanying linguistic taxonomy.

3. RESULTS

3.A. General

Percentages above 80 are considered to indicate one language. Percentages between 75 and 80 are considered to indicate the same subfamily of languages; between 60 and 75, the same family of languages; between 45 and 60, the same stock of families; between 25 and 45, the same superstock of stocks. (Grimes and Grimes, Languages of South Sulawesi (to appear).) All the wordlists of this survey belong to the same West Austronesian Superstock. (See Matrix 3.) Lexical similarity percentages are generally not used to differentiate between dialects, so we did not break languages down into dialects based on that.

3.B. Central Sulawesi Stock

As the Central Sulawesi Stock matrix shows (Matrix 1.), this stock is divided into two families: the Kaili-Pamona Family, which contains the Uma, Sarudu, Kaili, and Topoiyo languages, and the Bada Family, of which Ako' is a member.

Matrix 1. Central Sulawesi Stock

Ako' (L/V) Bada family										
52	Kantewu (Pipikoro) (M)								Kaili-Pamona	
51	90 Benggaulu (L/V)				Uma			Family		
50	75	80	Nunu (Sarudu) (L/V)							
49	70	76	86	Bada (Sarudu) (G)			Sarudu			
53	73	78	84	82	Lariang (L/V)					
48	64	68	74	77	78	Salubiro (Baras) (L/V)				
49	64	68	72	76	80	93 Bambiloka (Baras) (L/V)				
50	65	68	72	77	79	83	84	Tosonde I (Da'a) (B/V) Kaili		
49	66	70	74	77	80	84	85	98 Dombu (Da'a) (B/V)		
51	65	69	75	75	79	78	80	86	88	Kabuyu (Tado) (B/V)
51	60	64	69	74	73	76	77	80	82	83 Tampaure (Doi) (B/V)
41	59	63	65	66	67	68	67	66	66	64 60 Topoiyo (S/V)Topoiyo

3.B.1 The Bada Family

The inhabitants of the Ako' village claim to speak the Bada language of Central Sulawesi, and our Ako' wordlist when compared with the 100-word Bada list found in Barr, Barr and Salombe, shows 90% lexical similarity with it. According to them, they moved from Bada between 100 and 150 years ago. The high lexical similarity with the Bada list poses a problem, however. According to Barr, Barr and Salombe, the Bada language is a member of the Kaili-Pamona Family, but according to our matrix, the language

spoken in the village of Ako' is clearly a member of a different family, which we call the Bada Family, which according to our calculations has a status independent of the putative Kaili-Pamona family of Barr, Barr and Salombe (=BBS).

A look at the comparisons may help clarify what we are saying.

BBS matrix

Bada		
70	Uma	
64	75	Da'a

BBS wordlists counted by Valkama

Bada		
54	Uma	
45	65	Da'a

This survey's wordlist

Ako'		
52	Uma	
49	66	Da'a

Clearly there is a discrepancy in calculation procedures. Though this is not the place to resolve this difference, we may note that figures listed in Grimes and Grimes for Topoiyo, Sarudu, Pamona and Rampi lend support to our separation of Bada, showing that several of the putative members of the Kaili-Pamona Family relate to each other, not as members of the same family, but only as members of the same Central Sulawesi Stock. (e.g., Topoiyo and Rampi relate to each other at only 34%.) More research is assuredly called for.

3.B.2 The Kaili Pamona Family

As noted immediately preceding, the family status of Kaili-Pamona is in doubt. Furthermore, since Sarudu relates both to Uma and Kaili at an average of over 75% lexical similarity (75.3% and 75.6% respectively), we have not divided the family into subfamilies.

The inhabitants of Benggau claim to have come from Kantewu in Central Sulawesi, therefore it is natural that Benggau shows 90% lexical similarity with Kantewu.

The Sarudu language is closely related to both Uma and Kaili. The Grimeses' wordlist is closer to Kaili and our wordlist is closer to Uma. The Grimeses' wordlist shows only 86% lexical similarity with our Nunu list. We were unable to trace where the Grimeses' respondent came from, most probably from a village geographically close to the Kaili Family. All the villages (about 11) of desa Sarudu speak Sarudu, so the language seems quite stable.

The Kaili language is represented by four dialects in our matrix: 1. Da'a/Inde, known also as Bunggu/Binggi in kecamatan Pasangkayu. This dialect is represented by the Dombu and Tosande I wordlists in our matrix. The main area of this dialect is in Central Sulawesi. 2. Tado, represented by the Kabuyu wordlist. According to our information, this dialect is spoken only in desa Pasangkayu. 3. Baras, represented by the Salubiro and Bambiloka

wordlists. This dialect is spoken only in a few of the villages of desa Baras, by about 50 households. The elders fear that their language is dying out, which remains to be seen. 4. Doi, which is represented by the Tampaure wordlist. Three villages in desa Bambaira spoke this dialect. The main area of this dialect is in Central Sulawesi. Also the Ledo, Unde and Rai dialects are spoken in kecamatan Pasangkayu. The main area of those dialects is in Central Sulawesi, so we did not take wordlists for them.

The Topoiyo language was originally spoken by only one village on the Budong-Budong river in kecamatan Budong-Budong. At present it has spread to the neighbouring Tobada village, where it was claimed that only one speaker still spoke the Tobada language. It is also spoken in the Tangkou village. So, even though a small language, it seems to be vigorous and not on the edge of extinction.

3.C. South Sulawesi Stock

The South Sulawesi Stock is represented by the Seko Family and the Northern South Sulawesi Family. (See Matrix 2.)

3.C.1. The Seko Family

Panasuan is spoken in two villages in kecamatan Kalumpang and Tangkou is spoken in the Tangkou village on the Budong-Budong river in kecamatan Budong-Budong. It is also called the Budong-Budong language, which was included as a dialect of Mamuju in Grimes and Grimes' Languages of South Sulawesi (to appear). Tangkou is spoken only by about 11 households. Intermarriage and proximity with Topoiyo seems to be taking over. To more firmly establish Tangkou as a member of the Seko Family, it has to be compared with Seko Padang and Seko Tengah.

3.C.2. The Northern South Sulawesi Family

The Northern South Sulawesi Family is represented in our matrix by the Toraja and the Pitu Ulunna Salu (PUS) subfamilies and the Mamuju and Mandar languages, which do not belong to any subfamily. The Toraja subfamily is represented by five languages in our matrix, of which Talondo' and Kalumpang are spoken in kabupaten Mamuju.

3.C.2.1. The Toraja Subfamily

The Talondo' language is spoken in one village, Talondo', in desa Bonehau in kecamatan Kalumpang. It shows at an average 80% lexical similarity with the Kalumpang language, and was separated from that language because all Kalumpang speakers with whom we discussed the Talondo' language, said that they cannot understand it. The Talondo' list's high lexical similarity with Tarata, Pabettengan and Kalumpang is explained by proximity and by the

Matrix 2. South Sulawesi Stock

Tangkou (S/V)	Tangkou	Seko Family	Toraja Sub-family	Northern South Sulawesi Family
72	Papasuan (L/L)	Panasuan		
61	Talondo (L/V)	Talondo		
57	56	Tarata (Sandana/Ta'da) (S/V)		
55	55	92 Pabettangan (Ta'da) (L/V)		
54	55	83 89 90 Kalumpang (Ta'da) (L/V)		
54	60	77 81 82 81 Bau (Te'da) (L/L)		
56	59	79 86 86 85 94 Kalumpang (G)	Kalumpang	
55	58	78 83 85 83 93 92 Buallo (5) (L/V)		
57	57	78 82 84 80 88 90 93 Batuisi (E'da) (L/V)		
53	55	80 82 86 85 87 91 91 90 Dengen (8) (L/V)		
58	57	75 79 80 78 83 86 85 89 88 Periangian (E'da) (F/K)		
56	58	69 76 76 73 82 83 77 79 76 78 Kanandede (Rongkong Atas) (G)		
53	53	65 70 71 68 77 77 76 79 74 78 81 Makale (Toraja Sa'dang) (G)		
55	54	71 73 74 73 79 79 79 82 80 80 79 Mamasa (G) Mamasa		
60	57	58 68 69 69 71 74 73 76 74 74 75 72 79 Saludadeko (F/K) PUS		PUS Sub-family
66	62	70 63 65 62 62 64 65 67 66 69 64 61 65 76 Tabulahan (F/K) Aralle-		
64	58	66 61 63 60 65 64 69 70 66 68 65 62 67 77 89 Aralle (F/K) Tabulahan		
66	58	68 62 62 59 63 65 65 67 64 65 67 62 64 73 77 81 Botteng (G)		
64	58	67 64 64 63 63 66 65 66 65 66 68 63 65 76 83 83 87 Tasiu (Sondoang) (S/V) Ujumandak		
66	59	67 63 63 60 62 64 66 67 63 64 67 63 62 71 79 80 90 91 Kabiraan/Taukong (S/V;1)		
62	56	66 63 63 60 64 66 65 66 64 65 69 63 64 73 77 80 87 90 93 Kasambang (S/V)		
59	54	60 58 59 55 60 61 61 61 59 59 64 59 59 68 71 77 82 84 87 90 Aholeang (S/V;1)		
62	54	63 60 59 56 58 62 61 62 61 59 62 57 58 64 73 75 83 81 84 84 81 Orobatu (Tappalang) (G)		
65	54	62 63 57 55 58 60 60 62 60 60 63 57 59 66 71 73 83 80 83 79 77 87 Anjoro Pitu (Padang) (G)		
60	54	62 54 52 51 54 58 57 58 56 57 58 56 57 62 67 70 78 75 78 73 74 79 89 Tampapadang (Sinyonyoi) (G)		
60	51	60 56 56 53 56 59 58 59 58 56 61 57 58 61 68 70 79 77 81 79 78 86 88 87 Sumare (G)		
60	50	59 55 55 52 55 59 57 60 57 61 58 59 62 67 70 80 75 81 77 77 86 88 87 98 Rangas (S/V) Mamuju		
56	49	54 53 49 54 58 55 57 55 54 58 55 55 61 61 65 71 71 73 73 72 77 83 80 85 86 Mamuju (G)		
55	47	53 52 51 48 52 57 53 56 53 54 56 54 54 59 61 64 70 69 72 71 71 74 80 79 83 83 96 Babana (L/V)		
55	47	51 52 51 48 53 57 54 57 54 55 57 56 53 59 61 63 68 68 71 70 71 73 78 77 80 81 94 95 Sampaga (L/V)		
57	49	59 57 56 58 60 59 60 58 58 62 59 58 61 64 66 73 73 79 78 76 76 73 72 77 76 72 72 71 Malunda (S/V;1) Mandar		
55	49	57 59 58 56 59 62 59 60 60 62 63 61 59 61 61 63 67 68 74 72 71 66 65 64 68 67 67 82 Tinambung (S/V;1)		

fact that lexical similarity gives only an initial picture of the language situation. Intelligibility testing is needed to give the final word.

The Kalumpang language is divided into eight dialects according to Mr. Darius Timbonga, who himself speaks Panasuan as his mother tongue, but he lives at present in kota Kalumpang. He seemed to be very informed about the dialect variations in kecamatan Kalumpang. It is to be noted, however, that, according to him, desa Karama, which is his home desa, is divided into many small dialects, while dialects in other desas tend to be larger. This shows that he has best information from his own desa, and tends to divide even slightly different speech forms into separate dialects. It remains to be seen whether there are more dialects in other desas, too, or whether some of his dialects in desa Karama should be grouped together. According to him the dialect situation is as follows (underlining indicates a village from where a wordlist has been included in our matrix): 1. Mariri and Limbong villages. 2. Petangunan and Buttu villages. 3. Tambing-Tambing and Kondoan villages. 4. The Te'da dialect, spoken in the Sabamba, Tararang, Salukayu, Rantepata, Salupolin and Bau villages. 5. Buallo, Pekkaro and Salu villages. 6. The E'da dialect, spoken in the Lebani, Bulu, Salusokang, Malolo, Tala, Lasa, Batuisi, Henua, Salu Banga, Salu Eno, Pelosian, Paradang, Salutake, Kallan Baru and Salu Batu villages. (Lasa is mixed with the Toraja language.) 7. The Ta'da dialect, spoken in Tamalea, Pabettengan, Lossa, Tamaleatua, Sumua, Kalumpang, Tamessassang, Tarata, Tamanggeso, and Tambuku. Some people claim that Ta'da should be divided into three dialects: Sandana (Tarata and Tamessassang)' Leling (Tambuku and Tamanggeso) and the rest. We leave this question open. It is to be noted, however, that this is the reason that the Tarata list has Sandana/Ta'da tag in the matrix. 8. Dengen, Mawunggin and Tadossan villages.

The Ta'da dialect is also called the Bone Hau dialect and the E'da dialect is also called the Karataun or Makki/Mangki dialect. These two dialects are the biggest and most important Kalumpang dialects. Grimeses' Kalumpang respondents were from Bulu in desa Karataun and Rantepata in desa Karama. The man from Bulu told us that he had mixed several dialects when he gave the wordlist. It is therefore certain that it does not represent the speech form used in kota Kalumpang. This also explains why our Kalumpang list shows only 85% lexical similarity with the Grimeses' Kalumpang list.

3.C.2.2. The Pitu Ulunna Salu Subfamily

Out of the Pitu Ulunna Salu subfamily, only the Ulumandak language is spoken in kabupaten Mamuju. It is also spoken in kabupatens Majene and Polewali Mamasa. Later, one matrix covering the whole area is needed. According to our findings, Botteng,

Tasiu (Sondoang), and Orobatu (Tappalang) belong to the Ulumandak language as opposed to the Grimeses' grouping of them as dialects of Mamuju. Van der Veen (1929:81-86) includes the area covered by our Ulumandak language as dialects of Pitu Ulunna Salu. According to him the speech form, which we call Ulumandak, is spoken in Kaluku, Rante Dango, Padang Baka, Padang Panga, Taludu and most of the "landschap Talapang" (Talapang area), for example in Lebani, and Lombang-Lombang. Landschap Talapang seems to correspond with kecamatan Tapalang. Generally speaking van der Veen's article is accurate and conforms to a large extent to the findings of our survey.

Orotobatu shows an average of 82.6% lexical similarity with the rest of Ulumandak and an average of 80.3% lexical similarity with Mamuju. With Ulumandak its lexical similarity percentages are consistently above 80% only with Padang, Sumare and Rangas. Its high lexical similarity with Padang, Sumare and Rangas can be explained by proximity and contact more easily than the consistently high percentages with Ulumandak.

3.C.2.3. The Mamuju language

The number of dialects of Mamuju stated in Grimes and Grimes' Languages of South Sulawesi has been reduced by five: Botteng, Sondoang (Tasiu), Tappalang (Orobatu) and Budong-Budong have been assigned to other languages while Sumau and Rangas have been shown to be the same dialect. What remains then are the dialects of Mamuju (Mamuju, Babana and Sampaga), Sumare/Rangas, Padang (Anjoro Pitu) and Sinyonyoi (Tampapadang). We have nothing to say against that dialect grouping, although Grimes and Grimes' location of these dialects on their map is inaccurate.

4. RESIDUE

There are still several questions that need more study: 1. The relationship between the Bada Family (Ako' language) and the putative Kaili-Pamona Family. 2. The relationship of Talondo' to Kalumpang. Is it separate language or not? 3. The border between the Ulumandak and Mamuju languages. Both Orobatu and Anjoro Pitu show lexical similarity at an average above 80% with both languages.

BIBLIOGRAPHY

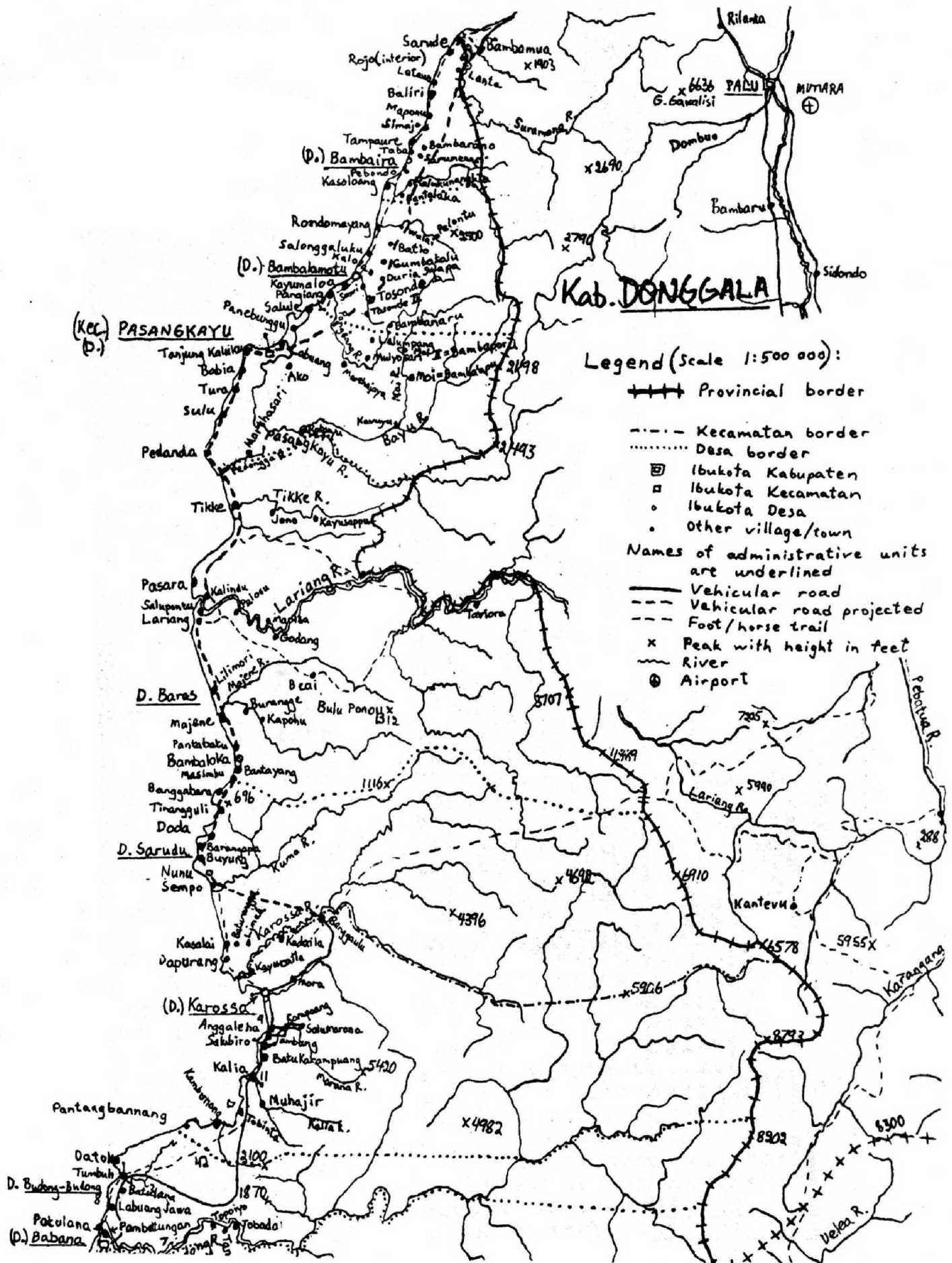
- Bugenhagen, Robert. 1981. A Guide for Conducting Sociolinguistic Surveys in Papua New Guinea. Summer Institute of Linguistics.
- Dyen, Isodore. 1966. Comment. *Oceanic Linguistics* 5:1.32-49.
- Friberg, Timothy. UNHAS-SIL Sociolinguistic survey: Kabupaten Polewali Mamasa, Northern Section. In this volume.
- Grimes, Charles E. and Barbara D. Grimes. 1984. Languages of South Sulawesi. To appear.
- Laskowske, Thomas V. UNHAS-SIL Sociolinguistic Survey: Seko Area. In this volume.
- Loving, Richard. 1977 (ed.). Language Variation and Survey Techniques. *Workpapers in Papua New Guinea Languages*, Vol. 21.
- . Mamuju Dalam Angka 1981/82. Kantor Statistik Kabupaten Mamuju.
- McElhanon, K. 1967. Preliminary Observations on Huon Peninsula Languages. *Oceanic Linguistics* 6:1-45.
- Pelenkahu, R.A., et al. 1974 (eds.). Peta Bahasa Sulawesi Selatan. Ujung Pandang: Lambaga Bahasa Nasional Cabang III.
- Salombe, C., Don Barr and Sharon Barr. 1979. Languages of Central Sulawesi. Hasanuddin University, Ujung Pandang.
- Sanders, Arden G. 1977. Guidelines for Conducting a Lexicostatistic Survey in Papua New Guinea. In Loving ed., 1977.
- Simons, Gary F. 1977. Tables of significance for lexicostatistics. In Loving.
- Simons, Gary F. 1979. Language Variation and Limits to Communication. Technical Report No. 3. Ithaca: Cornell University.
- Smith, Kenneth D. 1982 (ed.). A Compendium of Articles Relating to the Survey of Sabah Languages. To appear.

Veen, H. van der. 1929. Nota Betreffende de grenzen van de Sa'dansche taalgroep en het aanverwante taalgebied. Tijdschrift voor Indische Taal-, Land- en Volkenkunde 69:58-97.

Matrix 3 - West Austronesian Superstock

Central Sulawesi Stock		South Sulawesi Stock																																											
Kaili-Ramona Family		Northern South Sulawesi Family																																											
Seko Family		Toraja Sub-family																																											
PIAS Sub-family																																													
47	39	34	36	34	36	37	39	36	72	Penasuan (L/L)	Seko Family																																		
48	39	38	33	36	35	36	34	36	37	38	40	35	61	59	Talondo (L/V)																														
49	70	76	86	X	(Sarubu) (G)																																								
50	75	80	Nunu	(Sarubu) (L/V)																																									
51	60	64	69	74	73	76	77	80	82	83	Tampare (Dol) (B/V)																																		
52	73	78	84	82	Lariang (L/V)																																								
53	73	78	84	82	Lariang (L/V)																																								
54	64	68	74	77	78	Salubiro (Baras) (L/V)																																							
55	68	72	76	80	93	Bambaloka (Baras) (L/V)																																							
56	68	72	77	79	83	84	Tosorde I (Da'a) (B/V)																																						
57	66	70	74	77	80	84	85	98	Dombu (Da'a) (B/V)																																				
58	69	75	75	79	78	80	86	88	Kabuyu (Tado) (B/V)																																				
59	65	69	74	73	76	77	80	82	83	Tampare (Dol) (B/V)																																			
60	64	69	74	73	76	77	80	82	83	Tampare (Dol) (B/V)																																			
61	59	63	65	66	67	68	67	66	66	64	60	60	60	60	60	60	Toppivo (S/V)																												
62	39	39	35	36	35	38	37	38	39	39	40	43	Trangkou (S/V)																																
63	39	39	34	36	36	34	34	36	36	37	39	36	72	Penasuan (L/L)	Seko Family																														
64	39	38	33	36	35	36	34	36	37	38	40	35	61	59	Talondo (L/V)																														
65	51	54	46	46	54	46	44	43	54	49	54	44	77	75	95	Pedasi (L/V)																													
66	36	34	31	31	34	33	32	33	35	34	36	33	55	51	78	80	Tobada (L/V)																												
67	38	37	33	36	35	36	34	36	37	40	36	57	56	83	75	85	Tarata (Sandana/Ta'da) (S/V)																												
68	38	33	36	36	36	36	34	36	38	37	40	35	55	55	87	88	86	92	Pabettengan (Ta'da) (L/V)																										
69	36	30	33	33	32	31	33	45	35	37	33	54	55	83	83	83	89	90	Kalumpang (Ta'da) (L/V)																										
70	38	33	36	35	35	34	36	37	38	39	36	54	60	77	75	78	81	82	81	Bau (Ta'da) (L/L)																									
71	39	40	35	37	37	36	37	39	42	37	56	59	77	83	86	86	85	94	Kalumpang (G)																										
72	40	36	38	37	38	37	38	40	41	38	55	58	78	78	80	83	85	83	92	Buallo (S) (L/V)																									
73	40	36	37	37	37	35	36	38	40	41	38	57	77	78	83	77	82	84	80	88	90	93	Batuisi (B'da) (L/V)																						
74	40	36	37	37	37	35	36	38	40	41	38	57	77	78	83	77	82	84	80	88	90	93	Batuisi (B'da) (L/V)																						
75	41	35	38	38	38	38	38	38	39	41	42	38	58	57	75	82	75	79	80	78	83	86	85	89	88	Perlangen (B'da) (F/K)																			
76	41	37	41	40	41	40	42	43	43	45	39	56	58	69	69	76	73	82	83	77	79	76	78	78	78	Kanarade (Rongkong Atas) (G)																			
77	41	38	39	39	39	38	39	41	40	43	39	53	53	65	72	69	70	71	68	77	76	79	74	78	81	Makale (Toraja Sa'dang) (G)																			
78	39	35	38	38	38	38	38	40	41	37	55	54	71	72	68	73	74	73	79	79	82	80	80	79	79	Mamasa (G)																			
79	40	40	36	36	37	36	38	38	40	40	50	57	68	70	64	68	69	69	71	74	73	76	74	74	75	72	79	Saluddeko (F/K)																	
80	40	36	38	38	39	38	39	39	41	39	66	62	70	78	58	63	65	62	62	64	65	67	66	69	64	61	65	76	Tabulahan (F/K)																
81	42	36	37	37	39	39	39	39	40	41	39	64	58	66	70	60	61	63	60	65	64	69	70	66	68	65	62	67	77	89	Aralle (F/K)														
82	39	40	36	36	38	41	40	41	42	43	40	66	68	72	60	62	62	59	63	65	67	64	65	67	62	64	73	77	81	Botteng (G)															
83	42	37	38	39	43	41	41	41	42	44	40	66	59	67	76	60	63	63	60	62	64	66	67	63	64	67	63	62	71	79	80	90	91	Kabirany/Taukong (S/V;1)											
84	38	39	34	35	35	39	38	37	37	39	41	36	59	60	58	54	58	59	55	60	61	61	61	59	64	59	68	71	77	82	84	87	90	Aholeang (S/V;1)											
85	40	42	39	38	39	43	41	41	41	43	44	43	62	54	63	65	57	60	59	56	58	62	61	62	61	59	62	57	58	64	73	75	83	81	84	81	Orobatu (Tappalang) (G)								
86	41	44	40	41	38	46	44	48	43	44	45	55	54	62	65	56	63	57	55	58	60	60	60	60	60	60	60	63	57	59	66	71	73	83	80	83	79	77	87	Anjoco Pitu (Padang) (G)					
87	38	41	36	38	37	42	40	38	39	41	41	60	54	62	60	52	54	52	51	54	58	57	58	56	57	58	56	57	62	67	70	78	75	78	73	74	79	89	Tampapadang (Sinyonyoi) (G)						
88	42	38	39	39	44	42	41	41	43	44	42	60	51	60	57	54	56	56	53	56	59	58	59	58	56	61	57	58	61	68	70	79	77	81	79	78	86	88	87	Sumate (G)					
89	41	38	39	40	43	41	40	40	42	41	60	50	59	61	53	55	55	52	55	59	57	60	57	61	58	59	62	67	70	80	75	81	77	77	86	88	87	98	Rangas (S/V)						
90	42	45	42	42	42	47	45	42	43	45	46	66	56	49	54	51	53	53	49	54	58	55	57	55	54	58	55	55	61	65	71	71	73	73	72	77	83	80	85	86	Mamuju (G)				
91	44	41	41	41	46	44	40	41	44	44	44	55	47	53	51	49	52	51	48	52	57	53	56	54	54	56	54	59	61	64	70	69	72	71	71	74	80	79	83	83	96	Babana (L/V)			
92	43	40	40	40	45	43	40	41	43	44	46	55	47	53	51	49	52	51	48	52	57	54	55	57	56	53	59	61	63	68	68	71	70	71	73	78	78	80	81	94	95	Sampaga (L/V)			
93	38	34	36	36	41	39	38	38	39	42	38	57	49	59	58	55	59	57	56	58	60	59	60	59	60	58	62	59	58	61	64	66	73	73	79	78	76	73	72	77	76	72	72	71	Malurda (S/V;1)
94	38	40	36	38	39	43	41	40	40	41	44	38	55	49	57	67	53	59	58	56	59	60	60	62	63	61	59	61	63	67	68	74	72	71	66	65	64	68	67	67	67	82	Tinjambung (S/V;1)		

Map 1a - Kabupaten Mamuju, Northern Section



Legend (Scale 1:500 000):

++++ Provincial border

--- Kecamatan border

..... Desa border

⊕ Ibukota Kabupaten

□ Ibukota Kecamatan

○ Ibukota Desa

• Other village/town

Names of administrative units are underlined

— Vehicular road

- - - Vehicular road projected

..... Foot/horse trail

x Peak with height in feet

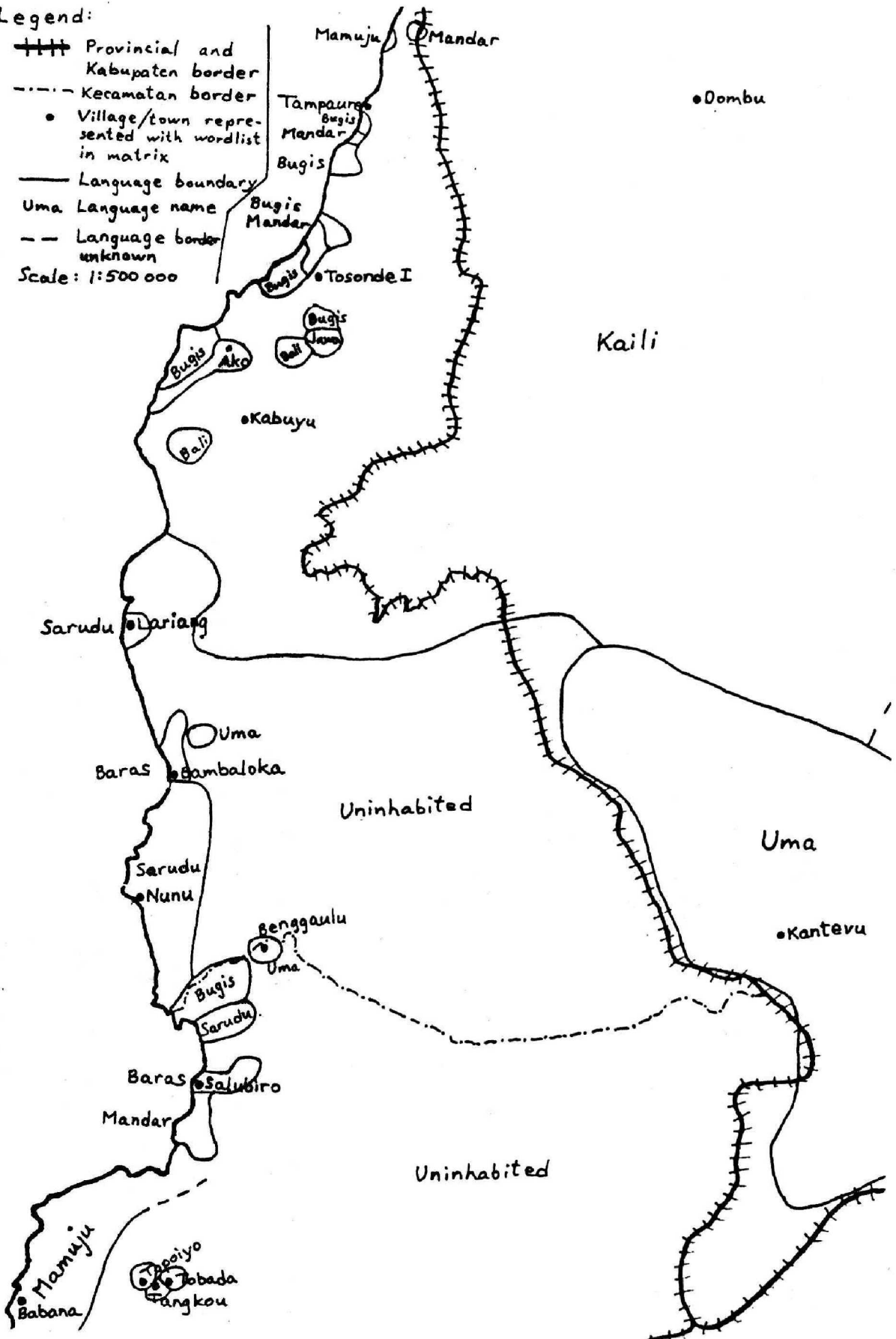
~ River

⊕ Airport

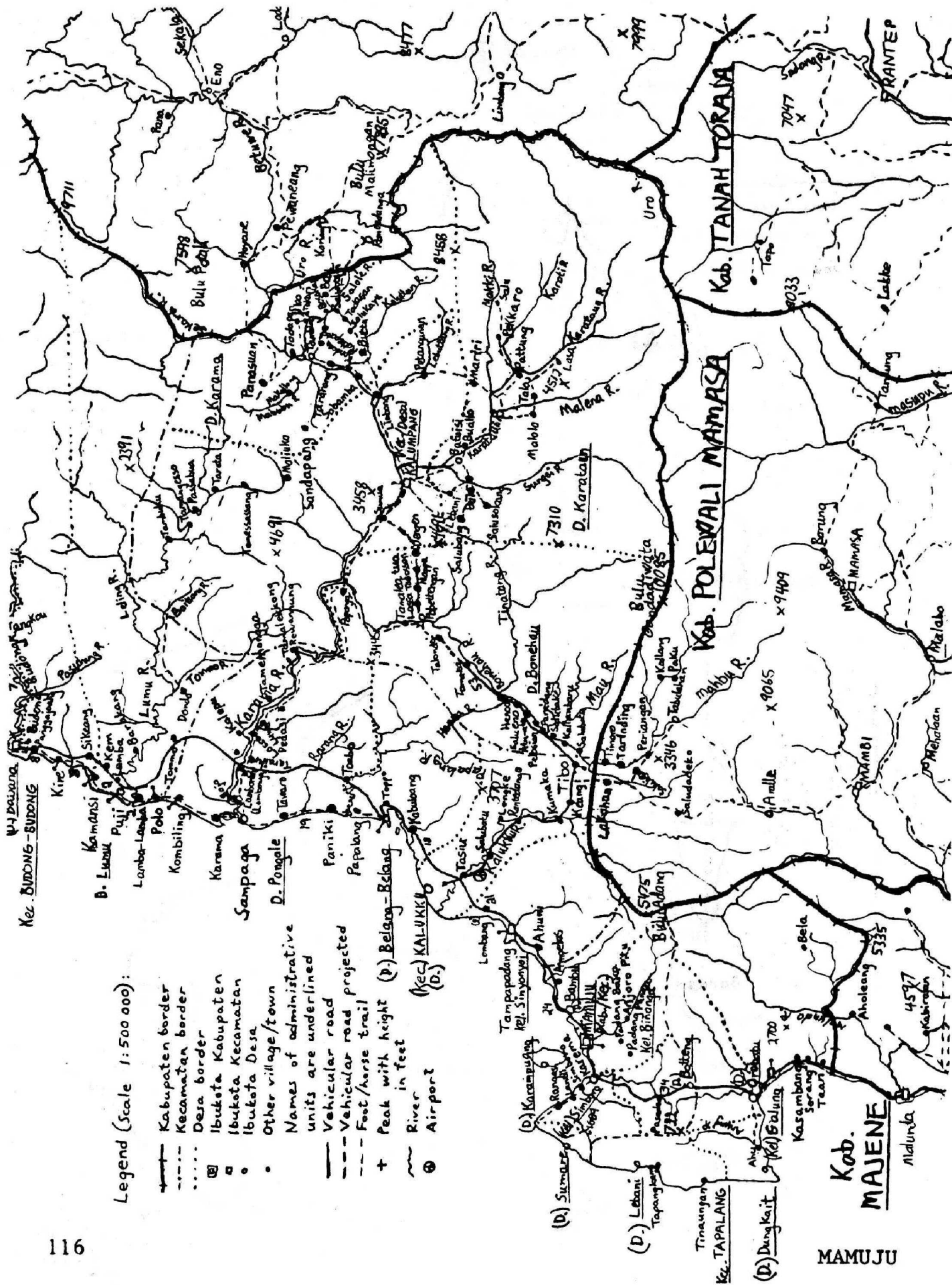
Map 1b - Languages of Kabupaten Mamuju, Northern Section

Legend:

- ++++ Provincial and Kabupaten border
 - Kecamatan border
 - Village/town represented with wordlist in matrix
 - Language boundary
 - Uma Language name
 - Language border unknown
- Scale: 1:500 000



Map 2a - Kabupaten Mamuju, Southern Section



Legend (Scale 1:500,000):

- Kabupaten border
- - - Kecamatan border
- Desa border
- ⊠ Ibukota Kabupaten
- Ibukota Kecamatan
- Other village/town
- Names of administrative units are underlined
- Vehicular road
- - - Vehicular road projected
- - - Foot/horse trail
- + Peak with height (ft) Belang-Balang
- ~ River
- ⊕ Airport

Map 2b - Languages of Kabupaten Mamuju, Southern Section

