A SOCIOLINGUISTIC SURVEY OF MEHEK AND SILIPUT

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INTRODUCTION

This paper presents the results of a sociolinguistic survey conducted in the Makru-Klaplei Census Division of the Nuku District, West Sepik Province. The survey was undertaken to gather information on (1) boundaries and dialects of the languages spoken within the area, particularly Mehek, (2) attitudes towards and usage of the vernaculars and Tok Pisin, (3) missions working in the area, and (4) allocation factors.

The survey field work was done between October 6 and October 18, 1980. The primary mode of transportation was walking. Yiminum was the only village within the division in which data was not collected. In places it is literally only a stone's throw away from the neighbouring village of Ifkindu, and it was assumed that the data gathered for Ifkindu would be representative for Yiminum.

The following types of data were gathered in the course of the survey:

- (1) The 106 Item Word List elicited in eight different locations. The first 27 items of this list were elicited in two other locations-Klaplei 1 and Klaplei 3- to insure their isomorphism with Klaplei 2 (which was chosen as representative of the Klaplei area because of its medial position between the other two Klaplei villages).
- (2) The <u>General Sociolinguistic Questionnaire</u> administered in eight locations.
- (3) The Questionnaire on Language Use and Attitudes administered to a total of 24 people in ten different locations.
- (4) A Tok Pisin literacy test (See Appendix C) administered to ten people in ten different locations. The reading of the texts and answers to the comprehension questions were recorded for later analysis.
- (5) 1978 Census figures, obtained for all villages in the Makru-Klaplei area from the provincial government in Vanimo.
- (6) Personal observations, noted in a diary at the end of each day.
 - (7) Interviews with mission personnel working in the area.

Table 1 presents a summary of the data obtained during the course of the survey.

TABLE 1. SUMMARY OF SURVEY DATA

Village	106 Word List	27 Word List	General Socio. Quest.	Lang. Use And Att. Quest	Lit Test.	Mission Worker Interviews
Akosamei 1	Χ		X	3X	X	
Akosamei 2	X		X	3X	X	
Klaplei 1		X		2X	X	X
Klaplei 2	X		X	3X	X	
Klaplei 3		X		X	X	
Wilwil	X		X	4X	X	
Ifkindu	X		X	. X	X	
Mantsuku	X		X	3 X	X	X
Nuku	X		X	3X	X	2 X
Seleput	X		X	X	X	

1.

GENERAL INFORMATION

1.1 Language Classifications

Laycock (1975) indicates that there are three languages located within the Makru-Klaplei area: Siliput, Mehek, and Kwanga. He classifies Siliput as being in the Maimai Family of the Maimai Stock, Torricelli Phylum. Mehek is considered to be a member of the Tama Family of the Tama Stock, Upper Sepik Super-stock, Sepik Sub-Phylum, Sepik-Ramu Phylum. Kwanga is placed in the Nukuma Family of the Middle Sepik Stock, Middle Sepik Super-Stock, Sepik Sub-Phylum, Sepik-Ramu Phylum.

1.2 Language Locations

The speakers of Siliput and Mehek, excepting those who have left to work on plantations or in the cities, live entirely within the boundaries of the Makru-Klaplei Census Division. The speakers of Siliput live in the village of Seleput, located eight kilometers northwest of Nuku, the district headquarters. The use of the term "village" in this paper follows the usage of the term by the local people of Makru-Klaplei: a big conglomeration of hamlets. These hamlets have individual names, but they identify themselves quite strongly as being part of a big village. The speakers of Mehek live on a strip of land roughly five kilometers wide which runs from Nuku southeast to the East Sepik-West Sepik border.

Only one village within Makru-Klaplei speaks Kwanga: Akosamei. #1. It is located on the west side of the Bongos river near the border between the East and West Sepik provinces. The Kwanga language extends from Seim in the West Sepik Province east to the Nanu River south of Balif in the East Sepik Province and thus will not be dealt with in detail in this paper.

1.3 Number and Distribution of Speakers

Based on 1978 Census data, there are 242 speakers of Siliput and 3591 speakers of Mehek who are resident in Makru-Klaplei. In addition, there are 21 absentee speakers of Siliput and 436 absentee speakers of Mehek. There are 683 speakers of Kwanga who presently live in Makru-Klaplei, 22 being absent. Table 2 presents the 1978 Census data grouped by villages.

TABLE 2	1070	CENICHE	ETCHDEC	EOD	MARDII	MIADIET	VILLACEC
TABLE 2.	1978	CENSHS	FIGURES	FUR	MAKRII-	- K L A P L E L	VILLAGES

Language	Village	Residents	Absentees
Kwanga	Akosamei 1	683	22
Mehek	Akosamei 2	197	8
	Klaplei 1	592	63
	Klaplei 2	438	26
	Klaplei 3	357	59
	Wilwil	637	135
	Ifkindu	157	65
	Yiminum	384	32
	Mantsuku	440	83
	Nuku	389	65
	(Mehek total)	3591	436
Siliput	Seleput	242	21
Siliput	Wilwil Ifkindu Yiminum Mantsuku Nuku (Mehek total)	637 157 384 440 <u>389</u> 3591	135 65 32 83 <u>65</u> 436

The government center at Nuku currently administers the Makru-Klaplei Census Division, as well as the Wan Wan, Maimai-Nambilo, Seim, East Palei, and West Palei Census Divisions.

1.4 Neighbouring Languages

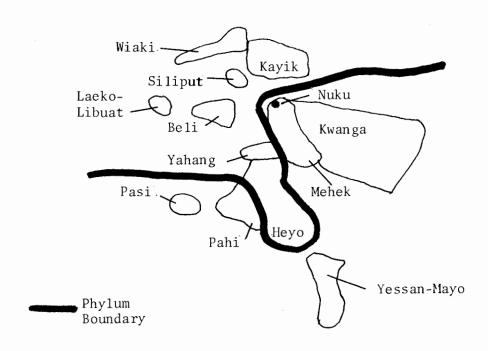
According to Laycock (1975), Mehek is bordered on the east by Kwanga; on the south by Yessan-Mayo; on the southwest by Heyo, Pahi, and Pasi; on the west by Yahang, Beli, and Laeko-Libuat; and on the north by Siliput and Kayik. Of these, only Yessan-Mayo, Pahi, and Pasi are closely related, the three of them and Mehek being included in Laycock's Tama Family. Kwanga relates to Mehek at the sub-phylum level. All other neighbouring languages are in an entirely different phylum.

Siliput is bordered on the northeast by Kayik; on the southeast by Mehek; on the south by Laeko-Libuat, Yahang, and Beli; and on the west by Wiaki. It relates to Yahang and Heyo at the family level and to Laeko-Libuat, Beli, and Wiaki at the stock level. Siliput

joins with Kayik only at the phylum level. Mehek is in a different phylum from Siliput.

All of this information is diagrammed in Figure 1.

FIGURE 1. GEOGRAPHIC RELATIONSHIPS AND CLASSIFICATION OF SURROUNDING LANGUAGES (Extracted from Laycock, 1975)





1.5 S.I.L. Work in Related Languages

The Summer Institute of Linguistics is currently working in two languages related to Mehek: Kwanga and Yessan-Mayo. The team of Takashi and Kazue Manabe is working in the super stock-related Kwanga language. Velma Foreman and Helen Marten have just completed a linguistic/literacy program and also the New Testament in the family-related Yessan-Mayo language.

The only S.I.L. work in a language related to Siliput is that of Dave and Jackie Scorza in the Au language. Au joins with Siliput only at the phylum level, however.

1.6 Churches and Missions in the Area

Three missions are currently working in the Makru-Klaplei Census Division: the South Seas Evangelical Mission (S.S.E.M.), the Christian Missions to Many Lands (C.M.M.L.), and the Catholic Church. The S.S.E.M. works in the southwest portion of the area from Akosamei 1 to the three Klaplei villages, and the C.M.M.L. works in the northern portion from Wilwil to Seleput. The Catholic Church works throughout the area.

Presently, the S.S.E.M. has no expatriate personnel permanently stationed within Makru-Klaplei; all work is being carried out by nationals. S.S.E.M. churches are located in Akosamei 1, Akosamei 2, and Klaplei 2 and are very active in evangelism and preaching. There is a one year Bible school which is operated by S.S.E.M. nationals at Akosamei 1.

The C.M.M.L. has been working in the area since 1959 and currently has two expatriate couples stationed there, one at Nuku and one at Yimbrasi. The ministry of the C.M.M.L. consists of teaching, evangelistic preaching, visitation of those in jail or the hospital, religious instruction in local schools, operating a primary school at Nuku, and the work of the Bible school at Yimbrasi. The program of the Bible school provides instruction in reading, writing, public speaking, the Bible, and some practical skills. Courses vary in length from six months to just a few days. The C.M.M.L.-related churches within Makru-Klaplei are located at Wilwil, Yiminum, Nuku, and Seleput. The C.M.M.L. churches seem to be vigorous and growing.

Catholics have been working in the Nuku District since 1949. Presently, there are Catholic expatriates stationed at Klaplei, Wati-Mantsuku, and Nuku. The program of the Catholic missionaries includes medical help, home economics training for the local women, remedial literacy programs, local youth club assistance, education of catechists, and traditional parish work. The Catholic Church has the largest number of adherents.

In the future, the C.M.M.L. hopes to nationalize its work completely, while maintaining or expanding its present ministry. Even now, much work is done by national pastors and evangelists. The immediate plans of the Catholic mission are to strengthen national marriage

relationships via a program of education and to work on developing strong national church leaders out of the village 'big men'.

1.7 Schools

The people of the Makru-Klaplei Census Division are fortunate in that most of their children have excellent access to primary schools. Only the students from Seleput are more than an hour's walk away from one. There are primary schools located at Akosamei 1, Klaplei 1, Wilwil, Mantsuku-Wati, and Nuku. At Nuku there are two schools; one is government-Catholic and the other is operated by the C.M.M.L.

St. Francis's High School in the Seim Census Division services the whole Nuku District. In addition to the high school and primary schools with their more general curriculum, there are the two Bible schools at Akosamei 1 and Yimbrasi. Table 3 presents some current data on the primary schools.

TABLE 3.	CHRRENT	DATA	ON	PRIMARY	SCHOOLS
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^{*} Figures not available

More boys attend school than girls. Where individuals were able to provide quantitative estimates of attendance (many could indicate only 'plenty' or 'few') the ratio of boys to girls ranged from 3:1 to 5:1. Villagers report that many to all of the children go to school, but my observations indicate that a significant number do not. The percentage of children attending primary school is probably higher than fifty percent.

The top third of each graduating class from primary school is permitted to go on to high school. Those who are not able to go on tend to be assessed rather negatively by most people. Interviews indicated that recent school-leavers either do not do anything at all

^{**} Projected

or just work in their gardens like other villagers. A few of the brightest ones are employed as store keepers in the local trade stores. Very few students make it to teacher's college, university, or other advanced educational institutions.

In the light of the rather limited material returns for education, it was surprising to find that most people were pleased with the schools and felt it was a good thing to go to school. This positive assessment is probably because of the few people who do manage to go all the way through the system and then get a good job.

1.8 Accessibility and Transportation

There are two finished airstrips in Makru-Klaplei; one is at Nuku and the other at Klaplei 1. Both of them accomodate light aircraft and the one at Nuku handles some types of twin engine planes. A third airstrip is under construction at Akosamei 1 and 2, but when it will be completed is not known.

The airstrip at Nuku is noteworthy because several commercial airlines as well as M.A.F., fly there regularly. The airstrip at Klaplei 1 was constructed by the Catholic Church and is basically just used by them.

There is a fairly good road system within the area. All-weather roads run from Nuku north into the Palei area and from about a mile outside Nuku east to the Seim mission. In addition, there are four good-weather-only roads. One of them runs from the Seim mission to the three Klaplei villages and then on to the two Akosamei villages. Another comes off the Seim all weather road and runs through Yiminum, Ifkindu, Wilwil and on to Wulbowe in the Wan Wan Census Division. A third goes from the Nambilo area to Mantsuku-Wati and then merges with the Wan Wan road. The final road connects Yimbrasi with the Palei all-weather road. All the roads are sufficiently rough to make a four-wheel-drive vehicle preferred.

There seem to be a fair number of community and privately owned vehicles based around Nuku. These would probably be available for hire.

Access to Seleput is very limited. A four-wheel-drive vehicle can make it to Yimbrasi, but from there it would be necessary to travel on foot (another one and a half or two hours).

There are no water transportation routes in Makru-Klaplei.

1.9 Materials Published in and about the Vernaculars

A Gudschinsky-style 64 page primer on Mehek is the only book published in that language. The book is entitled *Makwru Suma Buk 1* and is by Ignas Wunumo. It was prepared during the 1975-1976 Lahara Session of the University of Papua New Guinea and later published by the University.

No linguistic descriptions on languages in that area have been published.

2. PRESENT LANGUAGE USE

2.1 Introduction

A preliminary matter to consider before discussing which languages are used when is "What languages are available to the speaker?" Within Makru-Klaplei, the vernaculars, Tok Pisin, and English constitute the set of languages available. But not everyone has equal access to these languages. Figure 2 was prepared to show how language repertoires vary for different age and sex groups.

FIGURE 2. LANGUAGE REPERTOIRES

70 60 50 40 30 20	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00000				
0		······	"	Ti.	01.1	01.1
	Young Men	Young Women	Men	Women	01d Men	01d Women

- Able to speak a vernacular, Tok Pisin, and a small amount of English
- ☐ Able to speak a vernacular and Tok Pisin
- Able to speak a vernacular and a small amount of Tok Pisin

It will be noted from Figure 2 that:

- (1) The vernaculars are the only languages which reach all demographic groups.
- (2) Tok Pisin is the second most dominant language.
- (3) Women tend to have less competence in Tok Pisin.
- (4) Younger people have greater competence than their elders in Pisin and English, many older people being monolingual in the vernacular except for a few phrases in Tok Pisin.

This patterning of speech repertoires clearly correlates with the language usage patterns which will be described shortly, two general

principles being:

- (1) People can only use what is available to them.
- (2) Limited competence in a language goes hand in hand with limited usage of the language, or, stated more positively, the language which is known best is spoken most.

Thus, it is no surprise to find that the vernaculars are used most, followed by Tok Pisin, with English used least, this trend being more accentuated for women and older people.

In the discussion which follows, the Mehek and Siliput vernaculars will be treated as a unit. This is done because their patterns of usage are the same.

2.1 Oral Usage

The vernacular is the first language learned, but a fair number of people indicate that they try to teach their young children Tok Pisin at the same time. Adults talking with children and children talking amongst themselves use both Tok Pisin and the vernacular, but the vernacular is dominant. Young men and young women use both Tok Pisin and the vernacular among themselves, but again, the vernacular dominates, especially for the young women. Among older people only the vernacular is heard.

Tok Pisin is used especially for government matters and in contact situations with speakers of another language. It is also used at school.

Catholic churches use only Tok Pisin, whereas S.S.E.M. and C.M.M.L. churches usually use Tok Pisin which is often subsequently translated into the vernacular.

English is significantly used in only one setting: school. Personal observations indicate that youngsters who leave school after grade six have only minimal ability in English. Those who are in high school are much better; but I found I had to speak slowly and use a basic vocabulary when I spoke English with them.

To summarize, Tok Pisin and English are predominantly used only in activities which are foreign to the traditional culture - i.e. church, government, and school. Tok Pisin is also used as a lingua franca with speakers of different languages. In all traditional activities, however, the vernacular dominates.

2.2 Written Usage

2.2.1 Vernacular

Although only one book has been published in Mehek and although there are no provisions for vernacular literacy, 72 percent of the people interviewed claimed they could write their language. This is almost the same percentage as those claiming literacy in Tok Pisin, indicating an attitude that literacy in Tok Pisin implies literacy in the vernacular. What they seem to do in practice is to adapt the Tok Pisin alphabet to the vernacular. In gathering lexicostatistic data I had the chance to observe the process, as my more educated informants constantly sought to advise me on how items should be written. There were some differences of opinion, but by and large there was good agreement.

2.2.2 Tok Pisin

Sixty-eight percent of the people interviewed claimed they could read and write Tok Pisin. My personal observations would indicate that the true percentage is probably lower than 40. Tok Pisin literates are mostly young, mostly male. Most literates learned how to read in the primary schools. Some older men and women learned via brief one or two year adult education programs called "Kisim Save Schools". These were administered by the local missions and were conducted entirely in Tok Pisin. This contrasts with the present practice in the primary schools of instructing in English.

To determine what level of reading ability qualifies one as a good reader in the eyes of the people, a simple reading test (see Appendix C) was administered to some individuals who were singled out by the nationals as being their best readers. The test was designed to measure reading speed, accuracy, and comprehension. Two passages, each of which was about 100 words long, and some standard questions constituted the test. The individual taking the test was asked to first read a passage to himself and then read it again out loud. Following this, he was questioned on the content of the passage, using the standard questions. Both the second reading and the answers to the questions were taped for later analysis.

After completing the first passage, which was selected as being somewhat easy, the same individual went through the same procedure again, using a second, more difficult text and set of comprehension questions.

Analysis of the data consisted of determining the number of words read per minute, the number of reading errors (any word read incorrectly, whether or not it was corrected, counted as an error, as did false starts and repetitions.), and the number of comprehension questions answered correctly. (There were four comprehension questions for each text.)

The texts and questions used were taken from Moeckle and Moeckle, 1980 (Appendix D). The first dealt with the improper diet of some children in the East Sepik Province; the second described the great amount of interest shown by the Chinese in learning English.

The comprehension questions used in the text were somewhat of a problem. The third question for the first text proved to be ambiguous, many people answering what parents should do rather than what they actually do. The last question for the second text was also unsuitable,

asking for a statistic from the passage (which seems a bit unfair). These problems did not show up in a trial run of the test, because the individual who took it was bright and was thus able to cope well with the difficulties. It was only after the test had been given in several locations that the problems became apparent. Thus, the comprehension figures of Table 4, which presents the results of the literacy tests, are probably lower than actual.

TABLE 4. LITERACY TEST RESULTS

Village	Wds. Read /Minute	Errors	Comp.	Wds. Read /Minute	Errors	Comp.
Akosamei 1	120	4	3/4	95	7	2/4
Akosamei 2	97	1	3/4	72	1	2/4
Klaplei 1	133	2	4/4	108	1	2/4
Klaplei 2	125	4	3/4	101	3	1/4
Klaplei 3	100	4	3/4	72	3	2/4
Wilwil	108	1	3/4	80	3	4/4
Ifkindu	91	8	3/4	86	8	4/4
Mantsuku	120	2	2/4	68	8	2/4
Nuku	171	1	4/4	151	0	3/4
Seleput	125	2	3/4	99	4	2/4

Note that between the two texts there is a marked drop in the number of words read per minute. This accords with the fact that the text was chosen to be more difficult. Comprehension, too, is less, but the decrease may be due to skewing introduced by the two unsuitable comprehension questions. Overall, scores seem relatively good, indicating that the local people's designations of good readers are valid.

2.2.3 English

English literacy is extremely low in the Makru-Klaplei Census Division. The only group even claiming to read English was that of the young people who were or had been attending school. Based on observations of their attempts to read English Bibles and *Time* magazines, their abilities are minimal. Just sounding out the words was difficult for them.

3. ATTITUDES TOWARD LANGUAGES

3.1 Vernaculars

Mehek speakers have a very positive attitude towards their language. Despite a high degree of bilingualism in Tok Pisin, the vernacular remains the first choice for communication. A New Testament is desired; several times offers were made to me on the spot for land and help in building a house should I desire to stay and translate the Bible. Seventy percent of the speakers interviewed desired to read and write the vernacular. During my stay in Wilwil, one of the Mehek-speaking villages, there was much more enthusiasm for work in Mehek than there was for work in Tok Pisin.

Siliput speakers seemed to view their language almost as positively as those of Mehek, the major difference being that they didn't mention literacy in Siliput as being something they desired. But the omission may be due to their assuming that vernacular literacy would automatically be included in a program of Scripture translation. They would very much like to have a Siliput translation of the New Testament.

3.2 Tok Pisin

The speakers of Tok Pisin within the area feel it is sufficient for all communication purposes. My personal observations uphold this; I hardly ever heard someone switching from Tok Pisin to a vernacular because they were having trouble getting their point across. The one situation where this did tend to happen was when a young person was talking with an older person whose knowledge of Tok Pisin was limited.

Despite this, there was an almost even break between people who felt the *Nupela Testamen* was hard to understand and those who felt it was easy. Even among those who felt the *Nupela Testamen* was easy to understand there was an almost unanimous consensus that the Bible would be even more clear if it was translated into the vernacular.

3.3 English

I received no indications that English was felt to be an intrinsically better language. It is generally seen in a utilitarian light as something which is needed in order to get a good job and advance in life. English literacy especially is valued.

4. PREDICTED CHANGES IN LANGUAGE USE

4.1 Oral

4.1.1 Vernaculars

Both Mehek and Siliput will probably persist in the immediate

future. Mehek's vitality will be due to the following factors:

- (1) Mehek dominates the other languages in the Nuku District in number of speakers.
- (2) Mehek is clearly the first choice for communication by Mehek villagers for all age and sex groupings at present.
- (3) Mehek speakers have a very positive attitude towards their language.
- (4) By and large most Mehek speakers exist in the traditional manner of subsistence agriculture because of a lack of other opportunities of advancement. Competence in Tok Pisin and English is not really needed for this sort of existence. Thus, motivation to drop the vernacular and just speak Tok Pisin and/or English is lacking.

Speakers of Mehek believe their language will persist, though they recognize that in time complete bilingualism in Tok Pisin will be a reality for all demographic groups. They insist that Mehek will remain predominant. The Mehek speakers I interviewed can not even imagine a time when they would totally leave their vernacular. In fact, some of them were a little insulted when I suggested the possibility.

Siliput speakers, too, maintain that their language will persist. The situation is harder to assess, though, than that of Mehek. Siliput is comparatively isolated, and it only has a small number of speakers. Also, the language is noticeably changing, according to the Siliput speakers. Certainly, however, Siliput will persist over the next fifteen years. The interest of Westerners in the language would add greatly to its prestige and would counteract the present pro-Tok Pisin-disinterest-in-vernaculars attitudes evidenced by some of the expatriates and government officials stationed at Nuku.

4.1.2 Tok Pisin

Within fifteen years most villagers will be completely bilingual in Tok Pisin, but both Mehek and Siliput speakers insist that their vernaculars will remain dominant. In all probability Tok Pisin will encroach from its rather limited domains of church, government, school, and contact with strangers into some of the more traditional ones.

4.1.3 English

It is hard to imagine the oral use of English increasing very much in the near future. The present practice of immersion into English from the first grade on does not seem to be producing many capable speakers, and the subsequent opportunities for using English are so limited that the students probably lose a fair amount of what they do learn. Still, with the government's strong emphasis on the learning of English, speaker proficiency should rise slightly.

4.2 Written

4.2.1 Vernaculars

The degree and usage of vernacular literacy will probably remain the same. People will continue idiosyncratically to use the Tok Pisin orthography when writing their language. The only sort of documents likely to be written would be letters. A linguistic team would impact this situation significantly by their generation of vernacular materials, gift of a well-designed, easy-to-read alphabet, and encouragement of vernacular literacy. The two demographic groups with the highest motivation for literacy, vernacular or Tok Pisin, would be the Christians and young people.

4.2.2 Tok Pisin

Literacy in Tok Pisin will increase through the years but will probable always lag behind oral competence in the language, the reason being the life-style of the people. Subsistence farmers just do not have that much need for reading and writing. Tok Pisin literacy will be highest among young people and Christians because they are the two groups which have the most contact with books.

4.2.3 English

English literacy will rise throughout the years due to the emphasis placed on it by the schools, but the increase will be slight for the reasons outlined in the section on predicted changes in the oral use of English. A program of vernacular literacy followed by teaching of English as a second language would probably help the situation by insuring a better understanding of English, but the problem of English skills attrition due to lack of opportunity and need for their use would remain.

5. LINGUISTIC SURVEY

5.0 Introduction

A lexicostatistic survey was conducted throughout the Makru-Klaplei Census Division to substantiate the linguistic groupings posited in Laycock (1975) and to discover the significant dialects within languages. Also, data on speaker intuitions regarding the linguistic similarity of surrounding languages was gathered. Finally, comparisons between Makru-Klaplei languages and the surrounding vernaculars were made to substantiate Laycock's classification of the languages of the southern half of the Nuku District.

Laycock indicates there are three languages in Makru-Klaplei: Siliput, Mehek, and Kwanga. The villages speaking the languages are stated to be:

Siliput : Seleput

Mehek: Ifkindu, Klaplei 1-3, Mantsuku, Nuku, Wilwil.

and Yiminum

Kwanga: Akosamei 1,2 and many other villages in the Seim Census Dision of the Nuku District and in the East Sepik Province

My data confirms the presence of Kwanga, Mehek, and Siliput, but the lists of villages speaking Mehek and Kwanga must be adjusted slightly. Within Mehek, there is one dialect break and possibly one sub-dialect break.

5.1 Procedures

5.1.1 Collection of Data

5.1.1.1 Lexicostatistic

In the course of the survey, lexicostatistic data from ten out of the eleven major villages in the area was gathered, the village of Yiminum being excepted because of its proximity to another village, Ifkindu. Klaplei 3 was the only village for which data was gathered outside the village (in Klaplei 2). All informants were prescreened to insure that both their father and mother were from the village being surveyed. Elicitation was done in Tok Pisin. The word list used was the Standard SIL Word List as modified by Loving using the elicitation guidelines suggested by Ezard (1977: 55-59). Some further modifications proved to be necessary, because the semantic fields of some items proved to be too broad or too narrow. Table 5 indicates the further modifications which were necessary to obtain a workable word list.

TABLE 5. ITEMS MODIFIED FROM LOVING'S 106 ITEM WORD LIST

Item	Problem	Solution
root	Tok Pisin 'rop biling diwai' is ambiguous. It can mean either vine or root.	Emphasize that it goes into the ground when eliciting.
louse	Tok Pisin 'laus' can be either the one which lives on the ground or the one which lives in hair.	Emphasize that it lives in hair when eliciting.
shoulder	Different names for different regions of the shoulder.	Point to or touch the very top- most part or the shoulder.
ful1	Must specify full of water or full of food.	Full of food used.

The full 106 word list was used in eight of the ten villages where data was gathered. In Klaplei 1 and 3, however, just 27 items-the first two pages of the list-were obtained. The purpose in this was to insure that the Klaplei 2 lexicostatistic data could legitimately be used to represent Klaplei 1 and 3, which are near neighbours to Klaplei 2.

5.1.1.2 Speaker Intuitions

The data on speaker intuitions regarding the similarity of surrounding languages and dialects was gathered via the use of the last page of the General Sociolinguistic Questionnaire. The questionnaire was administered to a group of people and a consensus opinion sought.

5.1.2 Analysis of Data

5.1.2.1 Lexicostatistic

The analysis of the lexicostatistic data consisted of:

- (1) Determining which items on the 106 word list seemed most unreliable and could be omitted (the aims being to rid the list of items which were difficult to elicit and thus seemed unreliable), obtain a more standard number (100) of items, and so simplify the percentage calculations.
- (2) Determining which items were cognate. The criteria used here were a combination of McElhanon's (1967:8) and Z'graggen's (1971:6) criteria; i.e. 50 percent correspondence between phones on the basis of phonetic similarity, with special emphasis on consonants and the first syllable. In addition, where the presence of inflection could be reasonably well-established on the basis of re-occurring partials, the inflection was ignored and the comparison done only on the stem of the word. There were no problems with multiple cognates, because only one form was accepted during elicitation.
- (3) Computing percentages of cognates between villages. These were calculated using the cognate set method as described in Sanders (1977:36,37). This method was used to reduce the amount of time spent in making cognate decisions and to increase the consistency of the decisions.
- (4) Tabulating the cognate percentages in a matrix.
- (5) Looking for diagnostic blocks of similar cognate percentages within the resultant matrix, which indicate significant language and dialect groupings.

5.1.2.2 Speaker Intuitions

The analysis of the data on speaker intuitions consisted of tabulating responses in a matrix and, again, looking for homogeneous blocks of responses within the matrix. These groupings were then compared with the results of the lexicostatistic analysis to see if the two supported each other.

5.2 Results

5.2.1 Lexicostatistic

The results of performing steps 4 and 5 on the 100 word lists are as follows.

Step 4: Tabulated Cognate Percentages

<u>Ak o</u>	same	<u>ei 1</u>					
24	Akc	same	i 2				
24	87	K1ap	lei	2			
25	89	97	Wi1	wi1			
23	86	92	93	Ifk	indu	_	
23	86	92	94	97	Man	tsuk	<u>u</u>
23	86	91	93	95	97	Nuk	u
4	5	4	5	5	6	9	Seleput

Step 5: Extraction of Diagnostic Blocks

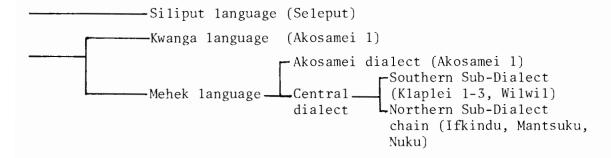
This block indicates quite clearly that the Seleput vernacular is a separate language.

Akosamei	1	
24	Akosamei 2	This block shows the vernacular
24	Klaplei 2	of Akosamei 1 to be a separate
25	Wilwil	language from the vernaculars
23	Ifkindu	of the remaining Makru-Klaplei
23	Mantsuku	villages. It is more closely
23	Nuku	related to them than the verna- cular of Seleput is, however.

Akosa	mei 2			
87 89 86 86 86	W I M	Taplei 2 Tilwil fkindu Mantsuku Muku		This block shows the vernacular of Akosamei 2 to be a separate dialect from the remaining villages.
Klap1	ei 2 Wilw	i1		
92 92 91	93 94 93	Ifkindu Mantsuku Nuku		This pattern indicates Klaplei 2 and Wilwil constitute a distinct, but closely-related sub-dialect from the villages of Ifkindu, Mantsuku, and Nuku.
	ndu Mantsuku 97 Nuku	ı		This lexicostatistic pattern is diagnostic of a slight chaining relationship between these three villages-i.e.
			Ifkindu	←97 → Mantsuku ← 97 → Nuku

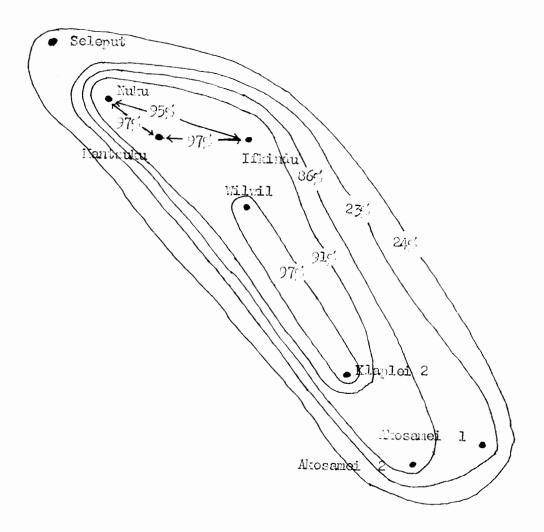
All of these relationships are summarized in Figure 3.

FIGURE 3. LINGUISTIC RELATIONSHIPS BASED ON LEXICOSTATISTIC DATA.



As an aid to visualizing the geographic and linguistic relationships between the villages of Makru-Klaplei, Figure 4 is given, which contours the cognate percentages between villages.

FIGURE 4. CONTOUR DIAGRAM OF COGNATE PERCENTAGES



The only difference between these findings and the information contained in Laycock is that the people of Akosamei 2 are shown to be speakers of Mehek rather than Kwanga.

5.2.2 Results of Speaker Intuitions

Table 6 presents the results of the survey of speaker intuitions regarding the linguistic similarity of the vernaculars of surrounding villages.

TABLE 6. RESULTS OF SPEAKER INTUITION SURVEYS

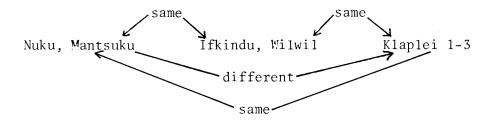
Vi	11a	ges	Gi	vin	g I	nfo	٠.	Language Spoken
								in village <u>Discussed</u>
Е	E	E	E	E				Неуо
			Е			Е	E	Kayik
	Ι		Е		Е	Е	Е	Yahang
	I_{-}			D				Yessan-Mayo
	L			D				Pahi
					С	С		Be1i
								Kwanga
								Kwanga
B,C	_							Kwanga
	D	E		D		D		Kwanga
	_					<u> </u>		Mehek
			A		_			Mehek
				A				Mehek
	_				Α.	_		Mehek
	_				_	Α	-	Mehek
	Α						E	Mehek
	Н	A	A		A			Mehek
				E		E		Siliput
Αk	Αk	K1	Wi.	Ιf	Ма	N _N	Se	
osa	058	ap]	1 w i	kir	nts	ku	le!	KEY
ımei	mei	ei	<u>.</u>	ubı	uku		ut	A = Exactly alike
	2	2			_			B = Almost the same
								but slightly
								different
								C = Different but
								completely
								intelligible
								D = Fast speech not
								intelligible
	E A B,C	E E A B B,C B B,C E D A A A A A A A A A A A A A A A A A A	E E E A B B C B E B,C B E B,C B E A A A A A A A A A A Akosamei	E E E E E E E E E E E E E E E E E E E	E E E E E E E E D D D D A B E B C E E D D E D D E D D A A A A A A A A A A	E E E E E E E E E E E E E E E E E E E	E E E E E E E E E E E E E E E E E E E	E E E E E E E E E E E E E E E E E E E

E = Totally different language.

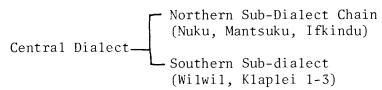
Looking over Table 6, Seleput's linguistic isolation is evident from the fact that people could not name a surrounding village which spoke similarly. Akosamei 1 clearly identifies with the Kwanga grouping of languages. The significant difference from Mehek can be seen by people's failure to even mention a Mehek-speaking village. Akosamei 2 villagers, however, clearly identify their language as Mehek and strongly maintain that their speech is exactly the same as the other Mehek-speaking villages.

Klaplei 2, Wilwil, and Ifkindu villagers are unanimous in identifying themselves, Mantsuku and Nuku as speaking exactly the same language. There is some sort of difference, in the estimation of Mantsuku and Nuku villagers, between the speech of the Klaplei area and their own. When questioned a little more closely, they indicated that the Klaplei speakers "turned Mehek in the throat". They also informed me that the differences between the speech of Klaplei and their own would not be evident from the items on the word list. But when I asked them to illustrate, they were not able to do so.

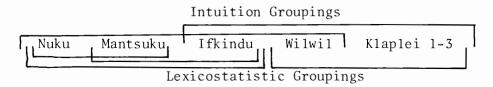
The contrast between the Mantsuku and Nuku villagers' assessment of the speech of the Klaplei area and that of the Ifkindu and Wilwil villagers is probably due to a chaining effect, the links of the dialect chain being Nuku, Mantsuku/Ifkindu, Wilwil/Klaplei 1-3. The only problem with this explanation is the Klaplei villagers' insistence that they speak the same as Nuku and Mantsuku; but this could easily be due to their desire to be affiliated with Nuku, which has high prestige because of the many government and mission facilities located there. A graphic portrayal of the intuition data makes the chaining quite evident.



For ease of comparison, the lexicostatistic results regarding just these villages are reproduced again.



If both the lexicostatistic and intuition groupings are imposed on one list of villages, the following diagram results:



Comparing the two sets of results, it can be seen that the intuition data has three basic groupings while the lexicostatistic data has only two. Also, it should be noted that the big lexicostatistic break is right at the middle of the three intuition groupings. Finally, it is important to note that both sets of results indicate some chaining; it is only the extent which is in question.

What seems to be going on is that the lexicostatistic analysis acts to smooth the minor variations and yield only the larger groups, or, put another way, the intuition analysis is more sensitive.

5.3 Relationships to Surrounding Languages.

To verify Laycock's assessment of Mehek and Siliput's relationships to the languages which surround them, a further comparison was undertaken. The methodology used in this comparison was exactly the same as that described above. The data used were my word lists for the languages in Makru-Klaplei, two additional word lists gathered by myself from speakers of the Kayik language, and additional word lists gathered by two co-workers of mine who were working in the neighbouring Wan Wan and Maimai-Nambilo Census Divisions. The results of this comparison are given in Table 7.

TABLE 7. COGNATE PERCENTAGES BETWEEN MEHEK AND SILIPUT AND SURROUNDING LANGUAGES.

	Mehek	Siliput
Mehek	-	5
Siliput	5	-
Kwanga	24	5
Kayik	3	13
Laeko-Libuat	7	19
Beli	7	13
Неуо	12	24
Pahi	51	3
Yahang	12	20-34
Mayo	31	5
Pasi	38	4

The languages closest to Mehek, then, are (in descending order) Pahi, Pasi, Mayo, and Kwanga, while those closest to Siliput are Yahang, Heyo, Laeko-Libuat, Beli, and Kayil. This data basically affirms Laycock's classification.

5.4 Summary

There is dialectal variation in Mehek, though the exact nature of the variation is not yet clear. Speaker intuitions indicate a chaining relationship between Nuku, Mantsuku/Ifkindu, and/Wilwil the three Klaplei villages. Lexicostatistic data appears to 'smooth' the linguistic relationships, breaking the chain between Ifkindu and Wilwil to form two, more comprehensive sub-dialects. The speech of Akosamei 2 is clearly distinct from that of the other Mehek villages based on lexicostatistic data.

6. ALLOCATION FACTORS IN MEHEK

6.1 Dialect Factors

The Central Dialect is obviously the dominant dialect with Mehek; it is geographically central, has the greatest number of speakers, and is more prestigious.

The sub-dialect picture, as has been noted before, is not clear. Should the lexicostatistic data be weighted more heavily, the sub-dialect spoken in Ifkindu, Mantsuku, and Nuku, and Yiminum would be most central linguistically. But, if the language chaining picture of the intuition data is accepted, then the villages of Yiminum, Ifkindu, and Wilwil, which constitute the middle link of the chain, would be

linguistically most central.

In terms of prestige, both Wilwil and Nuku are important. Wilwil has high prestige because of its strong traditional culture. Nuku is prestigious because of the many Western facilities located there.

Klaplei 1-3 is the highest population center in the area. If Wilwil is included as well, as per the hypothesized Southern Sub-Dialect, a group encompassing 2024 of the 3591 resident speakers is obtained.

Weighing all these factors, the sub-dialect spoken in Wilwil and the three Klaplei villages--the Southern Sub-Dialect--seems to be the dominant one and the best choice for allocation.

6.2 Village Factors

Within the Southern Sub-Dialect, the two villages recommended as allocation sites would be Wilwil first, followed by Klaplei 2. Wilwil is in the dominant and linguistically central sub-dialect, is more accessible, is geographically more central, is more removed from mission stations, and is closer to supplies available in Nuku. Klaplei 2 has the highest population concentration within Mehek and has a slightly better water supply, but it is less central linguistically and geographically and is not as easily accessible by road.

SUMMARY

Two languages are completely contained within the Makru-Klaplei Census Division: Siliput and Mehek. There is a major dialect break in Mehek between Akosamei 2 and all the other villages. Based on speaker intuitions, there is some sort of dialect chaining between the villages of Nuku, Mantsuku, Ifkindu-Yiminum, Wilwil, and the Klaplei villages. Lexicostatistic data indicates chaining between Nuku, Mantsuku, and Ifkindu-Yiminum, but fails to show further chaining, simply separating off Wilwil and the Klaplei villages as speaking a separate sub-dialect. Wilwil and Klaplei are recommended as first and second choices, respectively, for allocation sites.

8. ACKNOWLEDGEMENTS

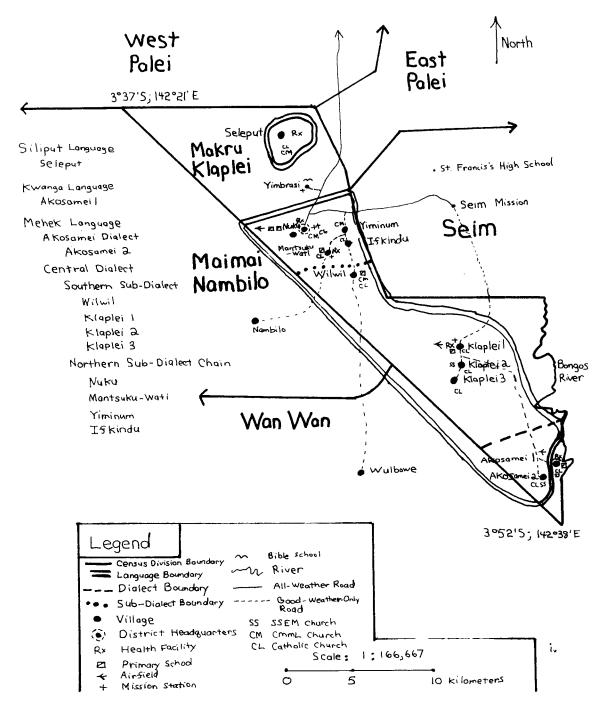
I would like to gratefully acknowledge the help of the Provincial Census Officer in providing population figures for the Makru-Klaplei Census Division. The Nuku School Inspector assisted me by providing attendance figures for some of the local schools. I am appreciative of the hospitality shown by Mr. and Mrs. Max Lambert, Mr. and Mrs. Robert Davis, Father Fabien and Father Eugene. Last, but certainly not least, I would like to thank the many local people of Makru-Klaplei who provided food, shelter, information, guides and in many other ways made this survey possible.

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THE MAKRU-KLAPLEI CENSUS DIVISION



APPENDIX B. TABLES AND FIGURES

- Table 1. Summary of Survey Data
- Table 2. 1978 Census Figures
- Table 3. Current Data on Primary Schools
- Table 4. Tok Pisin Literacy Test Results
- Table 5. Items Modified from Loving's 106 Item Word List
- Table 6. Results of Speaker Intuition Surveys
- Table 7. Cognate Percentages with Surrounding Languages
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- Figure 2. Language Repertoires
- Figure 3. Linguistic Relationships Lexicostatistic Data
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APPENDIX C. TOK PISIN LITERACY TEST (from Moeckle and Moeckle)

Text A. Kaikai Nogut

Wanpela wok painimaut i soim olsem planti pikinini long Is Sepik i save gat sik bun nating long wanem ol i no save kisim gutpela kaikai. Ol pikinini i no kisim gutpela kain kaikai i ken kisim sik nogut isi tru na tu bai i mekim ol i les na i no inap long lainim gut samting long ples na long skul.

As bilong dispela samting long wanem planti ol pap na mam, i wok long baim ol rabis kaikai na i givim long ol pikinini bilong ol.

Ol gutpela kaikai ol pikinini i ken baim long ol stua em long: pinat, bisket wantaim pinat bata, kokonat bisket na olgeta dring i gat susu long en.

Askim:

- 1. Bilong wanem planti pikinini i gat sik bun nating?
- 2. Sapos ol pikinini i no kisim gutpela kaikai, wanem samting bai i kamap long ol?
- 3. Dispela man i tok planti ol papa na mama i wok long baim wanem kain kaikai na i givim long ol pikinini bilong ol?
- 4. Wanem kain dring ol pikinini i ken baim em long ol stua na kisim gutpela kaikai?

Text B. Saina

Planti pipel bilong Saina i seksek tru long lainim tok Inglis. I luk olsem tok Inglis bai kamap namba tu tokples bilong Saina. Nambawan tokples bilong ol, ol i kolim Mandarin. I gat ripot olsem planti sumatin i karim ol buk i gat tok Inglis long en na ol i save pasim ol man long rot na askim ol long paitim tok Inglis wantaim ol. Olsem bai ol i lainim tok Inglis hariap. Namba bilong ol sumatin i laik lainim Inglis i bikpela tru. I gat 150 milien sumatin long praimeri skul, 65 milien long hai skul, no 860 tausen sumatin long bikskul olsem yuniversiti na kolis.

Askim:

- 1. Planti pipel bilong Saina i seksek long wanem samting?
- 2. Nambawan tokples bilong Saina i wanem samting?
- 3. Bilong wanem ol i save pasim ol man long rot?
- 4. Hamas sumatin i gat long hai skul?