PACIFIC LINGUISTICS
Series B - No. 83

A COMPARATIVE STUDY IN ANÊM AND LUSI

by

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Thurston, W.R. *A comparative study in Anêm and Lusi.*
B-83, x + 116 pages. Pacific Linguistics, The Australian National University, 1982. DOI:*10.15144/PL-B83.cover*

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Research School of Pacific Studies
The Australian National University
Canberra, A.C.T. 2600
Australia.

First Published 1982

The editors are indebted to the Australian National University for assistance in the production of this series.

This publication was made possible by an initial grant from the Hunter Douglas Fund.

National Library of Australia Card Number and ISBN 0 85883 260 7

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PREFACE

Anêm, a non-Austronesian language, and Lusi, an Austronesian language, are spoken in contiguous areas of West New Britain, Papua New Guinea. This study introduces evidence that Lusi has been pidginised by speakers of an earlier form of Anêm.

Three main categories of evidence are discussed: 1. While Anêm and Lusi are typologically very similar, neither resembles non-Melanesian Austronesian languages. 2. Compared with either Anêm or non-Melanesian Austronesian languages, Lusi appears structurally simple, a salient feature normally associated with creoles. 3. While the basic vocabulary of Lusi is clearly Austronesian, much of its non-basic vocabulary is of Anêm origin.

The thesis supports the view that the diversity and aberrant characteristics of Melanesian Austronesian languages result directly from pidginisation by speakers of various, diverse non-Austronesian languages. The thesis challenges the current neogrammarian model in which language change is seen as gradual by proposing pidginisation as a central process in language change.

ACKNOWLEDGEMENTS

Most of the data on which this study is based were collected during two fieldtrips to the Kaliai Census Division of West New Britain Province, Papua New Guinea. The first trip, in 1975, was supported by McMaster University and the Canada Council, and was sponsored by the Institute of Papua New Guinea Studies, the National Museum and Art Gallery of Papua New Guinea, and the University of Papua New Guinea. The second trip, in 1978, was funded by the Social Sciences and Humanities Research Council of Canada and sponsored by the University of Papua New Guinea. I am grateful to these institutions for their support.

Professor John J. Chew, my thesis supervisor, encouraged me to pursue this study; I feel extremely fortunate in having had the opportunity to work with him as he helped to demystify concepts in linguistics and anthropology. The other members of my committee were E.N. Burstynsky, F.D. Burton, D.R. Counts, H.A. Gleason, I. Kalmár, T.F. McFeat, H.E. Rogers, and D.H. Turner. All of these people provided useful comments.

David and Dorothy Counts are responsible for initiating my interest in Papua New Guinea and for getting me there in 1975. To them I owe my warmest thanks for teaching me how to conduct research in a different culture, for helping me to maintain my sanity during that first trip, and for kindly providing whatever data I have needed since.

Through the efforts of Rick Goulden, who accompanied me to New Britain in 1978 as research assistant, I was able to accomplish much more than would have been possible alone. By being able to discuss problems in the field, it was possible to redirect the research at crucial points. Rick has also contributed to the Lusi and Kove data used here. Having shared a parrot with me for lunch and having nursed me through malaria attacks, he remains my closest friend.

Nancy Vichert taught me how to write when she was my high-school teacher, but was still both willing and able to provide editorial services in the preparation of this document. All who read this should be grateful to her.

The Niuginians who helped me with this project probably number in the hundreds. I am particularly indebted to the Anêm and Lusi who provided shelter, food, transport, and friendship, as well as data. I continue to be impressed by their patience and interest in teaching me their languages. Among those who deserve special appreciation are: Bubuluŋa, Ensi, Iarande, Iona, Maria, Mua, Sakail, Sasalo, Solou, and Ualasuaŋ.

ABBREVIATIONS

AN	Austronesian
C	any consonant
d	any deictic particle
f	feminine
imp	imperative
k.	kind of or species of
m	masculine
MN	Melanesian (geographic term only)
MNAN	Melanesian Austronesian
n	any noun phrase marking particle
N	any noun
NAN	non-Austronesian
NGAN	New Guinea Austronesian
NGNAN	New Guinea non-Austronesian
p	plural
PAN	Proto-Austronesian
POC	Proto-Oceanic
Q	irrealis
R	any resonant or trill
recip	reciprocal
s	singular
SAN	Standard Austronesian
T	any stop
v	any verb phrase marking particle
V	any vowel
Ø	zero morpheme

*	unattested form
?	uncertainty
...	form unavailable, irrelevant or non-existent
-	morpheme boundary
' '	gloss enclosed
^	back unrounded vowel in Anêm
'	stress in Anêm or Lusi
Is	first person singular
In	first person plural inclusive
Ix	first person plural exclusive
Ip	first person plural
IIs	second person singular
IIp	second person plural
III	third person without specified gender or number
IIIs	third person singular
IIIm	third person singular masculine
IIIf	third person singular feminine
IIIp	third person plural
IIIimp	third person imperative

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CHAPTER 1

INTRODUCTION

1.1. *MELANESIAN LANGUAGES*

Although the term Melanesian has been used in various ways in reference to language groupings, it is restricted here to a purely geographic term designating roughly New Guinea, the Bismarck Archipelago, the Solomon Islands, the New Hebrides, New Caledonia and Fiji. The languages of Melanesia are usually classified into two major categories. The Austronesian (AN) or Malayo-Polynesian languages of Melanesia are related genetically to the languages of Malagasy, Indonesia, the interior of Taiwan, Micronesia and Polynesia. In Melanesia, AN languages are usually restricted in distribution to the smaller islands and to the coastal regions of the larger islands. All the other languages of Melanesia are spoken of collectively as non-Austronesian (NAN) or Papuan, a residual category which most linguists believe to have no overtones of genetic relatedness. The NAN languages are spoken most solidly on New Guinea, particularly in the interior, but also in scattered areas, often interior, throughout the smaller islands of Melanesia.

The AN languages of Melanesia (MNAN) pose several interesting problems for linguists. Although clearly AN, they are an extremely diverse group differing so widely in structure and lexicon from one area to another that no consensus exists on how they should be classified internally, let alone how they relate to AN languages outside Melanesia. The general sparseness of data on these languages makes the solution of these problems much more difficult; most of the languages in question are known only through short wordlists, most unpublished and many collected by linguistically unsophisticated missionaries and colonial officials.

In 1962a, Capell revived a theory introduced by Ray (1926) who had explained the nature of MNAN languages in terms of contacts between indigenous NAN-speaking peoples and immigrant Indonesians. This so-

Thurston, W.R. *A comparative study in Anêm and Lusi.*
B-83, x + 116 pages. Pacific Linguistics, The Australian National University, 1982. DOI:*10.15144/PL-B83.1*

called pidginisation hypothesis postulates that AN-speaking settlers mixed with local populations and imposed their languages, which were then imperfectly learned and pidginised by people speaking diverse NAN languages, with the result that the reformulated AN languages of Melanesia are now as diverse, in some respects, as their original NAN substrata.

Both Capell (1943, 1962a) and Ray (1926) point to the small proportion of Melanesian AN vocabulary that can be related to Indonesian, while Capell (1969, 1971, 1976a) has elaborated on the grammatical similarities between the AN languages of coastal New Guinea and the NAN languages of the interior. According to Capell, the former "languages would seem to be at root NAN languages with a veneer of AN lexicon and less grammar. Facts of this nature suggest that here at least if not also elsewhere in AN linguistic territory there has been pidginisation" (1971:334).

This theory has been less than popular. Of the languages of New Britain, where she has conducted research, Chowning writes:

> I should emphasize the fact that these NAN languages do not seem to have greatly influenced any of the neighbouring AN languages.... It is certainly begging the question to speak of an NAN substratum in such languages when this substratum cannot be derived from any identifiable NAN language. (1969:21)

In the discussion of Capell's 'Oceanic Linguistics Today' (1962a), Dyen, whose lexicostatistical classification of AN (1962b, 1965) points to New Britain as a possible AN homeland, writes: "There are no mixed languages.... The hypothesis of pidginization is untenable" (1962a:404). Goodenough states: "We must conclude that the pidginization theory of MN [=MNAN] languages rests on wrong assumptions and faulty methodology" (1962:407). Subsequently, in the same discussion, Grace makes the following, well-conceived challenge:

> Another reason why I am skeptical of the pidginization hypothesis in its present form is the failure of investigators so far to show any connection between the presumed "non-Austronesian" vocabulary of the Austronesian languages in Melanesia and known Papuan [=NAN] languages. One would suppose that somewhere there would be found a surviving Papuan language which had been closely related to the since discarded Papuan language which had supplied the bulk of the vocabulary for one of the Melanesian [=AN] languages. Thus, somewhere we should find a Melanesian language and a Papuan language which shared the bulk of their non-basic vocabulary. Such a pair of languages, if they could be produced, would constitute a powerful confirmation of the pidginization hypothesis. So far they have not been produced. (1962:409-10)

As far as I know, this is still the case. The primary aim of this thesis is to demonstrate that two languages spoken in West New Britain, Anêm (NAN) and Lusi (AN), constitute just such a pair of languages capable of resolving the argument in favour of Capell and Ray.

Anêm and Lusi are spoken by 400 and 1000 people respectively in contiguous areas of the Kaliai Census Division of West New Britain, Papua New Guinea. A grammar of Lusi has been written by Counts (1969) and the phonology of Anêm described by Thurston (1976). Lusi appears to be an AN language which has been pidginised at least twice, once by speakers of an earlier form of Anêm. It is possible that modern Lusi is based on a lingua franca used by the Siasi traders who carried goods between New Guinea and New Britain across the Vitiaz Strait.

In the succeeding sections of this chapter, field methods are described and the languages of Kaliai are introduced to provide a context for the reader with no previous experience with the area. In Chapter 2, Anêm and Lusi are compared structurally with AN languages spoken outside Melanesia in order to establish that Lusi diverges typologically from what might be called Standard Austronesian (SAN) in the direction of Anêm. In Chapter 3, Anêm and Lusi are compared to show that Lusi is structurally simple in the same way that pidgins and creoles are simple. In Chapter 4, Anêm and Lusi lexicons are examined in order to demonstrate that a large portion of Lusi non-basic vocabulary is derived from Anêm. This exercise also reveals aspects of the nature of the original contact situation. The implications of the study are examined in Chapter 5. These include criticisms of the current neogrammarian-based methods and assumptions in comparative-historical linguistics.

To avoid overburdening the reader with excessive detail within the body of the thesis, and to provide a convenient reference source, appendices are included with maps, a Swadesh 100-word list, details of Anêm and Lusi phonology and morphology, and a sample text.

1.2. *DATA COLLECTION*

Using Tok Pisin as a contact language, data on Anêm were collected on two separate field trips. On the first, from July to November 1975, I worked by myself, focussing most of my attention on the phonology of the language which formed the basis of my M.A. thesis (Thurston 1976). On the second trip, from July to November 1978, I enlisted the aid of a linguist, Rick Goulden, as research assistant. On both occasions, research was conducted from an abandoned house in the coastal village of Karaiai.

Most of the information was exchanged in quite informal sessions that often lasted many hours. Since the Anêm are outgoing, friendly and talkative, I seldom needed to go out of my way to find informants; most of my elicitation sessions were held with a dozen or so people present. Because formal, controlled elicitation sessions were nearly

impossible to organise, most of the data were gathered quite informally while the Anêm taught me their language as they teach foreign languages to their children; it is a common form of entertainment for older Anêm people to teach children to repeat sentences in other nearby languages.

In spite of the sometimes irritating chaos, I quickly learned to appreciate the value of this method of research. First, as my ear became attuned to the sound of the language, I was able to listen to natural speech, pick out phrases and sentences, and integrate them into my notes, often, in the process, generating the speech required to converse about a particular subject. This procedure made it possible to collect data on subjects the Anêm actually talk about, even subjects that initially they were embarrassed to discuss with me - obscene humour, for example.

Second, without having to contrive special sessions, I was able to take notes on speech variation within the community - for instance, the difference in speech between young and old people (Thurston 1976). I was also given the opportunity to observe the same forms used repeatedly by the same people in various contexts and establish the difference in some instances between their prescriptive norms and what they actually said.

Third, by having numerous and varied people present during elicitation, I could rely on a built-in check that was often useful. That is, sometimes a misunderstanding on my part or my informants' was picked up by another person and clarified; sometimes one informant could provide the context, where another could not, to explain subtleties in Anêm that are difficult to convey in Tok Pisin; and sometimes, one informant would return after a session and discreetly explain that another informant had hedged on questions that were apparently sensitive for reasons of kinship, name tabus or some such concerns.

A fourth and perhaps the most important advantage of informal sessions was that they avoided the problems of choosing a "main" informant from a small community and creating resentment and suspicion in the process. The Anêm, an interested and sociable people, would resent being excluded from a group in which information was being exchanged freely in both directions.

In order to obtain continuous texts in formal narrative style, numerous sessions were carefully arranged in which the village noise level was cooperatively suppressed to record on tape stories and myths from a dozen informants. I am grateful to my most talented and reliable informant, Hendrik Sasalo, who spent hundreds of tedious hours helping me to transcribe two of these tapes, one representing a solid hour of spoken Anêm. As part of the transcription process, Hendrik

also made valuable editorial comments of a prescriptive nature and supplied paradigms and meanings for unfamiliar morphemes.

The Lusi data are based largely on Counts (1969) and on unpublished data kindly provided by David and Dorothy Counts. To augment this and obtain data comparable to the Anêm data, part of the 1978 field trip was spent eliciting data on both Lusi and Western Kove, a dialect related to Lusi. Although most of the Lusi and Kove data were provided by visitors to Karaiai, we also spent a week in the Lusi village of Kandoka checking and augmenting our notes on Lusi. Rick Goulden focussed most of his energies on this aspect of the project.

In general, the same informal methods were used with Lusi as with Anêm. One married couple, a Lusi man, Anis, and his wife, Panau, both living in the Lusi village of Atiatu, frequently visited Anêm relatives in Karaiai and provided valuable information on the comparability of Anêm and Lusi forms. Panau was able to take an Anêm form, translate quite reliably into Lusi (or vice versa), and check the form with her husband who knew virtually no Anêm. When checked with other Anêm and Lusi informants, these forms proved invariably accurate.

One of our Lusi informants in Kandoka, Geti Solou, had a remarkable talent for suggesting to us areas of his language that we might otherwise have omitted. We are extremely grateful to this man for spending many hours a day with us, enthusiastically eager for us to get as much information as possible and to get it down in correct form.

Since non-basic vocabulary features strongly in this study, it was important to collect as many names as possible in Anêm and Lusi for items like obscure insects and plants. A taxonomist would have been valuable, since most of the insects and plants of the area are unfamiliar to me. For the Anêm and Lusi too, the names of many of these items fall into the category of esoteric knowledge. Indeed, the knowledge of such trivia correlates positively with the lack of both formal education and involvement in the cash economy. That is, people with some formal education or interest in acquiring cash tend not to know the names for the lower taxonomic orders of plants and animals. The Anêm, who are less educated (in Western terms) than the Lusi, and who have only recently become involved in selling copra, tend to be more generally aware of the names for the 'little' things in their environment than are the Lusi.

Whenever possible, photographs were used to elicit the names of flora and fauna. Probably because of their greater exposure to printed materials, young people were better able to identify animals and plants from pictures than were older people. For some things, however, photographs were useless. Kinds of frogs, for instance, are not recognised

by their appearance, but by the sounds they make and the particular environment they inhabit. In spite of this, the Anêm were able to group many items into taxonomic categories. For instance, x, y and z are types of fresh-water snails, while p, q and r are types of fragrant herbs. If the terms in Lusi and Anêm were in the same category and were phonologically similar, they are classified here as terms referring to the same item. Checks were conducted whenever possible, with bilingual informants or with a Lusi and an Anêm together with the thing to be named.

At times, I felt uneasy about attributing to the Anêm language vocabulary items that seemed to be known to only a single senior person in the society, but on numerous occasions, another old person from another village would produce the same label for the same item, or a related term would turn up unexpectly from the recesses of the memory of an old Lusi person. This checking demonstrated that the terms are reliable and suggests that they were more current in the past than now. Sometimes, no one knew the name; for this reason, I am confident that my informants were not manufacturing names just to please me.

1.3. *THE ANÊM PEOPLE AND THEIR LANGUAGE*

Anêm is spoken by some 400 people in four villages in the Kaliai and Bariai Census Divisions. It is not mentioned by Friederici (1912) who conducted field work in Bariai to the west and Kove to the east of Kaliai, nor is it mentioned by Capell (1962b). It first came to the attention of linguists as a result of a survey of the languages of the Kaliai Census Division conducted by David Counts (1969). Counts collected a standard wordlist of Anêm which established that out of the six local languages spoken in Kaliai, Anêm alone is NAN. Using Counts' data, Chowning (1969) came to the same conclusion.

According to Chowning (1969:20-21), it is unlikely that Anêm can be related to the NAN languages of East New Britain. Greenberg (1971), however, has classified Anêm as a member of the New Britain branch of his hypothetical Indo-Pacific language family, while Wurm places Anêm in what he calls the New Britain Stock, a member of the East Papuan Phylum (1975:25). As far as I know, all three have been working with Counts' original wordlist which is just too small to allow for anything but the most rudimentary identification of morphemes, let alone structure. Having compared Anêm with the available material on Baining (Futscher 1959, Capell 1969), Taulil (Laufer 1950, Futscher 1959), and Sulka (Schneider 1962), some of the NAN languages of East New Britain, I can only reaffirm Chowning's original statement:

> Anem, Wasi, and Kol seem quite distinct from each other and from the little Sulka, Baining and Taulil material I have examined.... At present, the NAN languages of New Britain seem even more diverse than the AN ones. (1969:21)

According to the Anêm, their present territory was once more densely populated. The Anêm did not consider themselves to be a single unit, but were divided into at least ten named, exogamous groups, each occupying a zone, usually a strip of land following a mountain ridge from the ocean to the peak of Mount Andewa and bounded on either side by rivers. Before European contact, these sub-groups engaged in chronic warfare with one another and with all other outsiders.

The Anêm say that their ancestors used to live in fortified hamlets scattered along the crests of the mountain ridges. From there, sentinels kept watch for movements in the vicinity, especially for Kove who apparently conducted raids along the coast. Partly because of the constant threat of attack, particularly on the beach, the Anêm had no tradition of canoe-building or off-shore fishing. When saltwater or shellfish were wanted, armed men accompanied an expedition to the beach at dawn and back to the hamlet before dusk. This ethnographic detail is important for understanding the composition of the Anêm lexicon discussed in Chapter 4.

As stated above, the present Anêm territory used to be more densely populated. Three events are held responsible for the near extinction of the Anêm; judging from genealogical details, these events can be placed in the latter half of the nineteenth century. First, an unusually long period of drought dried up all but the largest rivers, destroying gardens and promoting extensive forest fire damage. The ensuing famine was associated with widespread murder to confiscate food, and with cannibalism. Before they could really recover from the drought, an epidemic of a lethal disease characterised by skin sores left so many dead that they could not be buried. This plague may be associated with the first European contacts in the area. Finally, many people were drowned by a tidal wave that extended quite a distance inland. This may have been associated with the explosion of Ritter Island in 1888 (Harding 1967:146).

Shortly afterward, the Germans arrived, and, finding a sparsely inhabited area, persuaded the loosely congregated family groups to further centralise into villages. The Anêm, for the first time, became conscious of themselves as a group. As late as the mid-1950s, Anêm were still living in villages up on the mountain crests, villages which appear on old maps with their old names. Wanting to facilitate administration, Australian patrol officers prompted them to move into permanent villages on the coast, so that the Anêm could exploit the

abundant food resources of the ocean and gain access to the copra market which depends on sea transport.

Several aspects of this historical sketch are linguistically relevant. First, Anêm seems to have experienced a dialect collapse; there are numerous doublets - equivalent terms which appear to be neither stylistic variants nor borrowings from any AN language in the area. Second, the catastrophic events demonstrate how easily a thriving language can come to the point of extinction. Skeptics of the pidginisation hypothesis find it unbelievable that hypothetical substrate NAN languages should have disappeared, but NAN languages are often spoken by tiny groups which are quite vulnerable to total annihilation.

Anêm is now spoken in four villages. Three of these, Malasoŋo, Karaiai and Pudeliŋ, are on the coast, physically separated by the intervening Lusi territory from the interior Anêm village called Bolo. (See Appendix D, map 3). In accounts of Anêm prehistory given by the coastal Anêm, Bolo, in the old subterritory called Akiblîk, is often passed over or added as an afterthought as though the people of Bolo were not really Anêm. There are several reasons for this: first, Bolo is separated from the coastal Anêm villages by the Lusi and intervening mountain ridges. Consequently, the coastal Anêm and the Bolo Anêm are not in frequent contact. The people of Bolo are culturally oriented toward another AN group called the Aria, with whom their contacts are most intense. Second, the people of Bolo speak a dialect of Anêm distinct from that spoken in the three coastal villages. Although mutually intelligible, they contain differences, mainly in phonology and lexicon. Finally, Bolo Anêm is very close to functional extinction. Although the census lists approximately 50 inhabitants of Bolo, Anêm is known only to the older generations of the community. Presumably, since Bolo is an exogamous unit, most of the Bolo Anêm have married Aria or Lusi and the children of these marriages grow up learning these languages rather than Anêm which is less useful for communication in that area.

In 1975, a Bolo informant of approximately 30 years of age claimed to be the youngest speaker of Bolo Anêm. Thus, Bolo Anêm is a clear example of a NAN language that is quickly becoming extinct. Unless otherwise specified, then, the Anêm dealt with here is the coastal dialect, still the first language of approximately 350 people.

1.4. *THE AUSTRONESIAN LANGUAGES OF KALIAI*

According to Chowning's classification (1969, 1976), the AN languages of Kaliai belong to two groups. Lusi belongs to the Siasi language family which includes Kove, a language differing from Lusi only at the

dialect level. Kove is spoken primarily in Kombe Census Division, but also on the islands called Tamuniai and Arumigi (see Appendix D, map 3) which are technically part of the Anêm territory. Outside Kaliai, the Siasi languages include Bariai, Kilenge (Maleu), the languages of the Siasi Islands, and the AN languages of the north coast of the Huon Peninsula as far west as Astrolabe Bay.

The other AN languages of Kaliai--Mouk (Mok), Aria, and Lamogai--, belong to what Chowning calls the Lamogai language family which includes languages spoken on the south coast of New Britain. Aria and Mouk appear to be related quite closely to a language formerly spoken in the interior of Bariai Census Division, but now spoken in only a few coastal villages. Friederici calls this language Loṅa (Longa, Loŋa) (1912:220), a word meaning interior in Bariai and Lusi, but it is called Amara by the people who speak it. In the most westerly Anêm village, Malasoŋo, some people speak Amara, in addition to Anêm.

1.5. *TOK PISIN AND ENGLISH*

The other major language of the area, Tok Pisin, should be mentioned here because of its profound influence on the modern linguistic picture of the area. Also called Neo-Melanesian, Tok Boi, Melanesian Pidgin English, and a host of pejorative names, it is an English-based creole spoken by just about everyone as one of his/her first languages. That Friederici employed "Pidgin-Englisch" (1912:167) during his fieldwork in Bariai in 1908 indicates that Tok Pisin has been used in the area for at least 75 years, probably more. Only a few old people, particularly women who have spent no time working outside their villages, claim not to be able to speak proper Tok Pisin, and even in these cases, what they usually mean is that, in Tok Pisin, they lack the narrative skills that they have in their local vernaculars.

There are some children of catechists, patrol officers, and teachers in the area who speak Tok Pisin in the classic-definition-of-a-creole manner; that is, these children are mono-lingual in Tok Pisin. Except for the possibility of subtle differences that I have not yet detected, the language of these "creole"-Tok Pisin-speakers is identical to the Tok Pisin used locally by people for whom it is only one of their first languages.

Except when reference is needed to species of socially-unimportant flora and fauna, the names of which are often esoteric knowledge even in Lusi and Anêm, Tok Pisin fulfills the wide range of communicative needs of the people living in West New Britain. Tok Pisin is, moreover, better adapted to speaking about certain topics (government, medicine, outboard engines, etc.) than the local vernaculars, as evidenced by the

fact that the local languages have borrowed heavily from Tok Pisin, especially but not exclusively, lexical items for Western culture.

Young people are more inclined to use Tok Pisinisms in their speech than are older people who say that the youth no longer speak properly, but even skilled narrators find it impossible to tell even a short story without some Tok Pisin intrusions in their speech. The youth, by the way, claim that they use Tok Pisin items in their speech because they speak Tok Pisin much better than their elders.

This is not to imply that Anêm- and Lusi-speakers are unable to identify Tok Pisin words in their speech, nor that the level of competence in Tok Pisin among middle-aged people is low, but should be interpreted as a statement of the high prestige status of Tok Pisin, especially among the young. This is an unusual attribute for a creole (Hymes 1971). This prestige factor is touched on again in the discussion of Lusi borrowings in Anêm.

Although English is taught in the local government schools, the level of exposure is extremely superficial and the children have no opportunity or desire to use it in the village. A few Anêm, primarily those who have worked on ships, understand some English. Several Lusi and Kove who are employed outside the village speak fine idiomatic English; and a few others have a passive knowledge of English, but are too embarrassed to use it. Consequently, except as a source of words for Tok Pisin and hence the local vernaculars, English hardly enters into the linguistic picture of Kaliai.

1.6. *LANGUAGE USE*

Seven languages are in regular use in Kaliai, but, as expected, each has a fairly clearly defined function. For example, in Karaiai, Anêm is the usual language of most mundane conversations with other Anêm. Unless information is meant to be conveyed in secret, Anêm is not spoken in the presence of outsiders, with whom, as a token of hospitality, the Anêm speak Lusi, Kove or Tok Pisin, depending on the ethnicity of the visitor. Since the Lusi and Kove are frequent visitors, their languages are used extensively and Anêm children have ample opportunity and encouragement to learn them fluently before puberty. It is also interesting to note that, given Anêm reservations about the Kove that continue from the pre-European era, Kove is sometimes used among the Anêm for comic effect.

Among middle-aged people or younger, Tok Pisin has become the language of public announcement, originally, perhaps, on the model of patrol officers. Now, even marital disputes that erupt into violence become public events by virtue of the fact that, in the height of

anger, the language of abuse is Tok Pisin. (Anêm and Lusi have a full array of abusive language for other occasions.) In the aftermath of conflict, it is important that all witnesses, even outsiders, understand what was said during the fight.

The Anêm are unusual in the area for their language-learning propensities. Aside from Lusi/Kove and Tok Pisin, some Anêm also know Kilenge, Mouk, Bariai, Amara, or Bali (a Kimbe (AN) language spoken in the Vitu Islands). In contrast, the Lusi feel that it is sufficient to know Lusi and Tok Pisin. They say, "Tok Anem i hevi long nek bilong mipela" (The Anêm language is heavy in our throats). All AN-speaking peoples in the area consider Anêm far too difficult to learn; phonologically and lexically, Anêm is perceived as very different from their own languages. It also has little value as a lingua franca. The Anêm, then, are in the envied position of being able to converse with most of their neighbours, while possessing what is virtually a secret language. The Anêm have elaborated on this advantage further by creating a set of secret code lexemes to talk about common things, the words for which might be recognised by some outsiders. For example, the normal Anêm word for *'pig'* is **/aba/** and many Lusi and Kove know this much, but would fail to recognise the secret term **/tigî tanol/**, literally *'it has four legs'*. Similarly, the normal **/tabu/** *'cassowary'* is rendered as **/tigî niak/** *'it has two legs'*, and **/rais/** *'rice'* (from Tok Pisin) becomes **/nilkî ênîk/** *'tree ant pupae'*. As evidence of the social bond between the Anêm and Lusi, and their common distrust of the Kove, it is interesting to note that they have cognate secret terms--Anêm **/abot/**, Lusi **/avot/**--to announce, in secret, the presence of Kove.

1.7. *RECONSTRUCTION OF SETTLEMENT*

From the distribution of the languages in north-western New Britain, it is possible to identify three separate settlement periods. On linguistic grounds alone, it is impossible to posit any settlement previous to that of the NAN-speaking Anêm, but the existence of petroglyphs and rock paintings for which none of the current peoples has any tradition (other than in myth) suggests either the existence of a culture predating Anêm or a lost tradition in these art forms.

Anêm was once spoken in a larger area than at present. This is indicated by the restriction of Anêm to the most rugged area around Mount Andewa, by the Anêm substratum in Lusi, and by toponymy. An example of the last is the name of the Lusi river **/kaini/**, just a river name in Lusi. Further inland, however, where it enters Anêm

territory, it is called the /ekein/, meaning *'cassowary'* in Bolo Anêm. The phonological adjustment is expected. Furthermore, the Lusi territory is squeezed in between the Anêm territory called Akiblîk which includes Bolo and now Iboki Plantation to the east, and the rest of the Anêm territory to the west. From its geographic position alone, Lusi appears to be intrusive.

The Lamogai language family extends from the south coast of New Britain across a saddle in the mountain range to the north coast in the east between Akiblîk and the Kove territory (Chowning 1976). Given the new information on Amara, it is quite possible that it formerly extended to the north coast to the west of the Anêm territory as well, forming, in effect, a continuous arc around the Anêm territory to the west, south and east. Subsequently, speakers of Lamogai languages have been either pushed back into the mountains or absorbed by the Kove to the east, and by the Bariai to the west.

On the basis of this evidence, the following sequence of events is very tentatively proposed for the known groups. The Anêm occupied an unspecified but larger area. Lamogai-speaking peoples moved north from the south coast, eventually enclosing the Anêm on all sides but the north. Subsequently, Siasi-speaking peoples, ancestral (at least linguistically) to the modern Bariai, Lusi and Kove, settled along the north coast confiscating territory occupied both by Anêm-speaking non-Austronesians and by Lamogai-speaking Austronesians.

In the remainder of this thesis, evidence is brought forth to show that these Siasi settlers, at least in the case of Lusi, brought with them a maritime technology which bestowed upon them enough prestige to entice the former owners of this territory to learn their AN language as one aspect among many of their culture. In the process, this hypothesised Siasi[1] language was modified.

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[1]Siasi in the sense of belonging to the Siasi Language Family as presented by Chowning (1976).

CHAPTER 2

STANDARD AUSTRONESIAN TYPOLOGY

2.1. *INTRODUCTION*

Many, if not most, AN languages spoken outside Melanesia exhibit a recurrent syntactic pattern, so that it is possible to speak of a normative or standard AN typology. As used here, the term "Standard Austronesian" (SAN) refers to those AN languages which conform to the pattern outlined below. It is not my intention to attempt to reconstruct PAN syntax, but merely to demonstrate the widespread occurrence of a typology with which Lusi contrasts as a result of its deviation toward the typology of Anêm.

The examples chosen to demonstrate SAN syntax include languages from disparate islands of the AN area. Ideally this sample should be restricted to those languages spoken by small scale societies in the interiors of the larger islands, as these would be the least likely to have been influenced by maritime travellers speaking radically different languages; and, by virtue of their being economically unimportant over a large area, they would not have been used widely as lingue franche by groups speaking other languages. A perfect example is Mamanwa, spoken by "Negritos living in the marginal out-of-the-way places of northeastern Mindanao" (Miller 1976:16) by people who are "essentially nomadic ... food gatherers, hunters and fishers" with "band level of primitive social organization" (18).

Economically unimportant languages spoken by small groups of people, however, are also the least likely to be described adequately in the literature, if at all; thus, I have had to compromise greatly in many areas. Descriptions of AN languages vary in organisation and completeness. For instance, Tuuk's grammar of Toba Batak (1971) covers the morphology in detail, but fails to mention that Batak is a language

with the verb phrase in clause-initial position, a characteristic which must be inferred from the examples.

One of my assumptions is that languages spoken in contiguous areas will tend to be structurally similar. From the evidence presented here, from India (Gumperz and Wilson 1971, Southworth 1971), and from New Guinea (Capell 1969, 1971, 1976a), this seems to be a valid assumption. Thus, one or two languages chosen from each of the major regions of the AN area should provide an adequate sample. The homogeneity and the consistency of the pattern seems further to validate this method.

Most of what is called "reconstruction of PAN/POC grammar" is actually the reconstruction of proto-morphemes with grammatical functions--affixes, pronouns and such. In setting up the typology of SAN for this study, I have sought broad structural features such as those used by Greenberg (1963). For this purpose, I have emphasised such features as the position of the verb phrase in the clause rather than the occurrence of a reflex of a particular PAN proto-phoneme. Even if the individual morphemes used in particular languages are not cognate, syntactic constructions in two languages are said to have the same structure if there is a one-to-one correspondence in the same order between the morphemes of both languages. Thus, in the following examples, Lusi and Anêm are structurally identical, but different from Bau Fijian which shares two cognates with Lusi.

Anêm

doxa	mîgê
man	*how-much*

'How many men are there?'

Lusi

tanta	pira
man	*how-much*

'How many men are there?'

Bau

e	vica	na	tamata
v	*how-much*	n	*man*

'How many men are there?' (Milner 1972:37)

In this chapter, several broad typological features of SAN are treated separately and supporting data is cited for each feature. In each case, it is shown that Anêm and Lusi have structures that differ from SAN.

2.2. *VERB PHRASE POSITION*

In SAN, a neutral statement containing a verb has the verb phrase before nominal adjuncts if the latter contain head nouns. For Oceanic, Pawley (1972) reconstructs SVO order, but he includes no examples with sentences in which the subject is a noun; a pronominal subject marker occurs before the verb in many Oceanic languages, but this can often be analysed as an element of the verb phrase rather than a separate noun phrase. In the revised version of the same paper, Pawley (1973) is less certain, but still favours the SVO order as basic in POC, and, by extension, in Oceanic languages. The use of Greenberg's (1963) SVO/VSO typology is problematic when applied to AN languages, however, because the very notion of subject is elusive in these languages unless it is identified with the notion of topic or agent, in which case, the latter terms would be preferable. Also, in many SAN languages, pronouns follow the same rules as noun phrases with head nouns--they generally follow the verb phrase.

Batak

sa na	manurati	bajón
durative	*write-it*	*person*

'This person is always writing' (Tuuk 1971:92)

na naing	mamunu	do	ho	di	au
want-to-kill	emphasiser	n	*you*	n	*I*

'You do want to kill me, don't you?' (157)

Dusun

momobog	oko	diyau
hit	*I*	*he*

'I hit him' (Clayre 1970:194)

Wolio

sampe	a-mate	o	La	Ndokendoke
so	*he-die*	n	m	*monkey*

'So Monkey died' (Anceaux 1952:78)

Mamanwa

n-aka-tekeb	ya	piyaq	ka	ambaw
can-catch	n	*cat*	n	*rat*

'The cat can catch the rat' (Miller 1976:51)

Chamorro

ha	li'e	si	Juan	i	palao'an
he	*saw*	n	*Juan*	n	*woman*

'Juan saw the woman' (Topping 1973:106)

Woleaian

ye	be	weriir	meleka lai	maseiipig
it	*will*	*sicken-them*	*children-my*	*epidemic*

'The epidemic will sicken my children' (Sohn 1975:151)

Yapese

kea	liiq	Tamag	ea rea	baahiy	niir
v	*kill*	*Tamag*	n	*pig*	

'Tamag killed that pig' (Jensen 1977:278)

Bau

sā	moce	na	gone
v	*sleep*	n	*child*

'The child is sleeping' (Milner 1972:13)

Maori

ka	tangi	te	tamaiti
v	*weep*	n	*child*

'The child weeps' (Biggs 1969:27)

Unlike SAN, Anêm and Lusi have SVO order. In these languages, a subject is easily defined as the noun phrase or pronominal prefix which immediately precedes the verb.

Lusi

kekele	ne	i-eno
child	d	*he-sleep*

'The child is sleeping'

Anêm

kab	lê	u-sêm
child	d	*he-sleep*

'The child is sleeping'

Lusi

tama-γu	i-řau	γaea
father-my	*he-hit*	*pig*

'My father hit the pig'

Anêm

tita-n-ai	u-b-î	aba
father-my	*he-hit-it*	*pig*

'My father hit the pig'

2.3. *FOCUS*

Within the SAN clause, the relative order of the verb phrase and its dependent noun phrases is not rigid. These languages are remarkable for the flexibility, often permitting several orders. Tung (1964:63) observes this phenomenon in Tsou, but he says nothing about the semantic

differences between sentences with the same constituents but different orders. Few of the sources consulted here analyse semantic correlations with order, but from the work done chiefly on Philippine languages, it is clear that in most, if not all SAN languages, each possible order is associated with obligatory distinctions in focus. Often referred to as "actives" and "passives" in the literature, focus distinctions are usually marked by a combination of verbal affixes, noun phrase marking particles (n), and word order.

Dusun

momobog	oko	diyau
hit	*I*	*he*

'I hit him' [actor-focus] (Clayre 1970:194)

binobog	ku	iyau
hit	*I*	*he*

'I hit him' [object-focus] (194)

momobog	izou	tanak
beat	*I*	*child*

'I beat the child' (Staal 1926:943)

bobogon	ku	do	tanak
beat	*I*	n	*child*

'The child is beaten by me' (943)

Kayan

iha'	takut
he	*fear*

'He fears'

takut	iha'
fear	*he*

'He fears' (Clayre and Cubit 1974:71)

Chomorro

lini'e	i	palao'an	ni	lahi
see	n	*woman*	n	*man*

'The man saw the woman' (Topping 1973:245)

i	lahi	ha	li'e'	i	palao'an
n	*man*		*see*	n	*woman*

'The man saw the woman' (245)

Woleaian

maselipig ye be weriir meleka lai

ye be werlir maselipig meleka lai

ye be	weriir	meleka lai	maselipig
it will	*sicken*	*children-my*	*epidemic*

'The epidemic will sicken my children' (Sohn 1975:151)

Yapese

kea piiq Tamag ea langad ngoog

kea piiq Tamag ngoog ea langad

kea	piiq	ngoog	Tamag	ea	langad
v	*give*	*to-me*	*Tamag*	n	*betel*

'Tamag gave me some betelnut' (Jensen 1977:281)

Bau

au	nanuma	na	kā	oqō
I	*keep-in-mind*	n	*thing*	d

'I keep this in mind' (Milner 1972:96)

e	nanumi	na	kā	oqō
v	*keep-in-mind*	n	*thing*	d

'This is kept in mind' (96)

sā	toboka	na	vuaka	ko	Mārika
v	*catch*	n	*pig*	n	*Marika*

'Marika caught the pig' (97)

sā	toboki	na	vuaka
v	*caught*	n	*pig*

'The pig was caught' (97)

Maori

ka	inu	te	tangata	i	te	wai
v	*drink*	n	*man*		n	*water*

'The man drinks the water' (Biggs 1969:32)

ka	inumia	te	wai	e	te	tangata
v	*drink*	n	*water*		n	*man*

'The water is drunk by the man' (32)

Anêm and Lusi contrast with SAN in having quite rigid SVO order. Focus, which appears to be optional, is marked by greater relative stress on the marked head noun or verb.

2.4. *EMPHASIS*

The single exception to rigid SVO order in Anêm and Lusi is the possibility of placing the object noun phrase before the subject, but this indicates special emphasis rather than focus.

Lusi

avei	ɣane	ŋa-keti	ɣasili
tree	*this*	*I-cut*	*completive*

'It's this tree that I've already cut'

Anem

aŋ	ler	a-kŋ-î	bizaŋ
tree	*this*	*I-cut-it*	completive

'It's this tree that I've already cut'

Chowning also notes this as a possible word order for Kove.

Kove

a-mu	kerlkerl,	sel	pa-γo
your	*ringworm*	*who*	*give-you*

'Your ringworm, who gave (it) to you?' (Chowning 1973:220)

Clayre (1970:194) makes an important distinction between focus and special emphasis as these terms apply to AN languages. Whereas focus is obligatory, emphasis is optional and never occurs over long discourses. She also notes that in the languages of Borneo, special emphasis results in a verbless equative sentence, so distinguished by the occurrence of noun phrase markers (n). This pattern recurs elsewhere in SAN languages. In all the examples, special emphasis is indicated by placing the emphasised constituent in clause-initial position. If better documentation of the AN languages were available, it might reveal that this construction is more widespread than here indicated.

Dusun

i	ina,	o	piglson	ku	di	daglng
n	*mother*	n	*one-cut-for*	*I*	n	*meat*

'It was mother for whom I cut the meat' (Clayre 1970:194)

Tsou

i	e	nia	ŋohóo	e	i	to	opocóza
	n		*Ngohoo*	n		*we*	*kill*

'It is Ngohoo whom we killed' (Tung 1964:75)

Mamanwa

inhatag	nao	ya	kowarta	kan	Melina
given	*by-me*	n	*money*	n	*Melina*

'I gave the money to Melina' (Miller 1976:87)

ya	kowarta	ani	ya	inhatag	nao	kan	Melina
n	*money*	=	n	*given*	*by-me*	n	*Melina*

'Money is what I gave to Melina' (87)

Yapese

ku	guub	u	Donguch
I	*come*	*from*	*Donguch*

'I have come from Donguch' (Jensen 1977:293)

Donguch	ea	ku	guub	riy
Donguch	n	*I*	*come*	*from-it*

'It is Donguch that I came from' (293)

gaeg	ea	ku	guub	u	Donguch
I	n	*I*	*come*	*from*	*Donguch*

'It is I who came from Donguch' (293)

Yapese

chitamngiig Tamag
father-my *Tamag*

'Tamag is my father' (Jensen 1977:265)

chitamngiig ea Tamag
father-my n *Tamag*

'It is my father who is Tamag' (265)

Tamag ea chitamngiig
Tamag n *father-my*

'It is Tamag who is my father' (265)

2.5. *VERBLESS CLAUSES*

In most SAN languages, neutral equative sentences are verbless, consisting of two juxtaposed noun phrases: comment first, topic second. In Bau Fijian, every clause contains a verb phrase indicated by particles, yet the comment-topic constituent order occurs in this language too. This order is consistent with other typological features of these languages. For instance, the verb phrase or predicate occurs as the first major constituent of a neutral clause. A recurrent theme in the descriptions of these languages is that most particular morphemes can function syntactically as verbs, nouns, or adjectives, their function determined by particles or affixes. In most SAN languages, the forms that translate adjectives in European languages are either a sub-class of verbs (usually called statives) or structurally indistinct from them.

Batak

(ma) timbó haju on
high *tree* *this*

'This tree is high' (Tuuk 1971:87)

Wolio

o bawine o saro-na Wa Turuqkoleo
n *girl* n *name-her* f *Turuqkoleo*

'The name of the girl was Wa Turuqkoleo' (Anceaux 1952:86)

Mamanwa

marigqen siran
strong *they*

'They are strong' (Miller 1976:85)

Woleaian

seuw baabiyor gach mele
general-object *paper* *good* *this*

'This is a good book' (Sohn 1975:146)

Chamorro

maolek	i	taotao
good	n	*man*

'The man is good' (Topping 1973:231)

Yapese

ba	maenigil	ea	bineey
stative	*good*	n	*this-one*

'This one is good' (Jensen 1977:272)

ba	seensey	Tamag
stative	*teacher*	*Tamag*

'Tamag is a teacher' (271)

Bau

na	moce	balavu
n	*sleep*	*long*

'A/the long sleep' (Milner 1972:13)

sā	moce	balavu
v	*sleep*	*long*

'she/he sleeps a long time' (13)

sā	itovo	cā	ko	Jone
v	*character*	*bad*	n	*Jone*

'Jone is a bad character' (58)

Bau

e	levu	ko	Suva	ka	lailai	ko	Lautoka
v	*large*	n	*Suva*	*and*	*small*	n	*Lautoka*

'Suva is larger than Lautoka' (Milner 1972:30)

Maori

he	kereru	ngaa	manu	ra
n	*pigeon*	n	*bird*	d

'Those birds are pigeons' (Biggs 1969:24)

he	maunga	a	Pirongia
n	*mountain*	n	*Pirongia*

'Pirongia is a mountain' (25)

Like many SAN languages, Anêm and Lusi equative sentences are verbless, consisting of two noun phrases juxtaposed, with no copula, but the first noun phrase is topic/subject, while the second is comment/predicate. Unlike SAN languages, Anêm and Lusi clearly distinguish verbs from nouns and adjectives morphologically. Verbs occur with an obligatory prefix marking subject; no other word classes occur with prefixes.

Anêm

ue	Kasiaŋa
I	*Kasiaŋa*

'I am Kasiaŋa'

Lusi

viau Mua
I *Mua*
'I am Mua'

Anêm

eŋi-l Kasiaŋa
name-my *Kasiaŋa*
'My name is Kasiaŋa'

Lusi

era-ɣu Mua
name-my *Mua*
'My name is Mua'

Anêm

aba lê omba
pig d *big*
'The pig is big'

Lusi

ɣaea ne paroŋa
pig d *big*
'The pig is big'

2.6. *NOMINAL PHRASES*

In most SAN languages, noun phrases are marked as such by preposed particles (n), often called articles or prepositions, which are often portmanteau morphemes, making distinctions such as definite/indefinite, proper/common, and singular/plural. In many of these languages, the particles which mark the noun phrases conspire with verbal affixes to indicate focus and case distinctions; in others, these functions are performed by separate particles - the languages may have a class of prepositions distinct from noun phrase marking particles. Usually pronouns occur in sets corresponding to focus/case distinctions made by noun phrase marking particles in the language. SAN, Anêm and Lusi all have demonstratives which follow the head noun in a noun phrase.

Batak

na naing mamunu do ho di au
v *want-kill* emphasiser n *you* n *I*
'You do want to kill me, don't you?' (Tuuk 1971:157)

na i Bunga Ihur
mother n *Bunga* *Ihur*
'Bunga Ihur's mother' (302)

Batak

isi ni huta
contents n *village*

'Contents of the village' (Tuuk 1971:301)

djalahi ma di au
find-it n *I*

'Find it for me' (297)

lombu *'cow'*

si lombu *'a person named Lombu'* (245)

pidong on *'this bird'* (220)

pidong an *'that bird'* (221)

Dusun

i ina o pigison ku di daging
n *mother* n *cut-for* *I* n *meat*

'It was mother for whom I cut the meat' (Clayre 1970:194)

udiyoon ku iyau
ask *I* *he*

'I will ask him' (195)

udiyoon oku diyau
ask *I* *he*

'He will ask me' (Clayre 1970:195)

Wolio

o maqa buea
n p *crocodile*

'(The) crocodiles' (Anceaux 1952:36)

o sikola humai
n *school* *that*

'These schools' (37)

o daoa i Baubau
n *market* n *Baubau*

'The market in Baubau' (37)

o la ndokendoke
n m *monkey*

'Monkey' (as a man's name) (78)

o bawine o saro-na wa turuqkoleo
n *girl* n *name-her* f *Turuqkoleo*

'The name of the girl was Wa Turuqkoleo' (86)

Tsou

to féou no úa
n *skin* n *deer*

'The skin of the deer' (Tung 1964:150)

Mamanwa

m-aga-bahog-an mo ya baboy kan Mam ka parot
feed-referent *you* n *pig* n *Mam* n *peeling*

'You are going to feed the peelings to the pigs for Mam' (Miller 1976:52)

i-bahog mo si Mam ka baboy
feed-accessory *you* n *Mam* n *pig*

'You feed the pig for Mam' (52)

Chamorro

matai i lahi
die n *man*

'The man died' (Topping 1973:83)

dankolo si Juan
big n *Juan*

'Juan is big' (219)

hu fa'tinasi si Paul ni kafe
I *make-for* n *Paul* n *coffee*

'I made coffee for Paul' (249)

Chamorro

lini'e' i lahi ni palao'an
see n *man* n *woman*

'The woman saw the man' (Topping 1973:245)

lini'e' ni lahi i palao'an
see *man* *woman*

'The man saw the woman' (245)

lini'e' si Maria as Pedro
see n *Maria* n *Pedro*

'Pedro saw Maria' (245)

Yapese

kea liiq Tamag ea rea baabiy niir
v *kill* *Tamag* n s *pig* d

'Tamag killed that pig' (Jensen 1977:278)

fa gäi yael ii buw roog
n dual classifier n *betel* *of-me*

'Those two betelnuts of mine' (153)

Bau

e dua na vale
v *one* n *house*

'One house' (Milner 1972:14)

na waqa *'a/the canoe'* (Milner 1972:14)

o Viti *'Fiji'* (14)

Bau

na	nodratou	waqa	na	cauravou
n	*their*	*canoe*	n	*young-men*

'The canoe of the young men' (22)

na	vale	nei	Orisi
n	*house*	n	*Orisi*

'Orisi's house' (23)

na	kuro	ni	ti
n	*pot*	n	*tea*

'a/the tea kettle' (24)

Maori

ka	mate	te	wahine
v	*die*	n	*woman*

'The woman is dead/ill' (Biggs 1969:28)

ka	inu	a	Maarama
v	*drink*	n	*Maarama*

'Maarama drinks' (28)

ngaa	whare	na
n	*house*	d

'Those houses' (Biggs 1969:22)

he	maunga	teitei
n	*mountain*	*high*

'a lofty mountain' (25)

The noun phrase in Anêm and Lusi has the following structure: nominal nucleus + (demonstrative) + (adjective) + (numeral). Unlike SAN languages, there is no noun phrase marking particle and no marking of definite/indefinite, common/proper, or singular/plural in noun phrases.

Anêm

aba	lê	omba	bî̂k
pig	d	*big*	*three*

'These three big pigs'

Lusi

ɣaea	ne	paroŋa	tolu
pig	d	*big*	*three*

'These three big pigs'

Particles marking noun phrases occur in other AN languages spoken on New Britain.

Kilenge

na mon *'bird'*

Lakalai

la-hatotolu *'egg'* (Chowning 1973:221)

Tolai

nam	ra	pal	i	tabu
d	n	*house*	v	*sacred*

'That house is sacred' (Franklin et al. 1974:129)

It is noteworthy that Baining, the NAN language spoken in the highlands of the Gazelle Peninsula contiguous to the Tolai area, also has noun phrase markers.

Baining

a ɣwatka *'man'* (Capell 1969:107)

Also of interest is the distribution of languages that lack noun phrase marking particles in northwest New Britain. Although all of the coastal languages (except Anêm) are classified as members of the Siasi family (Chowning 1976), Kilenge has these particles, while Bariai, Lusi and Kove, the languages in closest contact with Anêm, do not.

Case relationships are marked in Anêm and Lusi (a) by word order - subject before the verb, object after, and (b) by a small number of prepositions.

Anêm

tita-n-ai	u-b-î	aba	kan	obul	axî	nan
father-my	*he-kill-it*	*pig*	*with*	*spear*	*in*	*garden*

'My father killed a pig with a spear in the garden'

Lusi

tama-ɣu	i-řau	ɣaea	ŋani	iro	pa	raraŋa
father-my	*he-kill*	*pig*	*with*	*spear*	*in*	*garden*

'My father killed a pig with a spear in the garden'

Lusi also has two postpositions, a rarity among AN languages normally restricted to the New Guinea mainland where they are in contact with NAN languages with postpositions as the norm. Anêm has no postpositions.

Lusi

ŋa-loŋa	luma	iai
I-enter	*house*	*in*

'I enter the house'

nu iai *'on an island'*

karoŋa	waiŋa	aea
ways	*marriage*	*for*

'Married life'

Lusi

nil lam aea
nail lamp for

'A nail for a lamp'

This and other evidence (sections 3.2., 3.6) suggests that Lusi has, in its prehistory, at least one process of pidginisation in contact with a NAN language on the New Guinea mainland.

2.7. *RECIPROCAL*

Many SAN languages have a reciprocal prefix, usually a reflex of *paRi (Pawley 1973:39). Gitua, a Siasi language like Lusi, also forms reciprocals with a prefix.

Gitua

yam amora a-rap
you you-dual *you-hit*

'You two fought him' (Lincoln 1977:24)

yam amora a-pa-rap
you you-dual *you*-recip-*hit*

'You two fought each other' (Lincoln 1977:24)

Bau

e ratou vei-iomani
v *they* recip-*love*

'They love one another' (Milner 1972:111)

Wolio

po-potawa-i
recip-*laugh*-transitive

'To smile at each other' (Anceaux 1952:21)

Lusi, however, marks verbs as reciprocal with a suffix /-ŋa/, which occurs with a redundant suffix marking object on the verb or possessive on the object noun.

Lusi

ti-řau-ŋa-ri
they-hit-recip-*them*

'They fought'

ta-řau-ŋa-ɣita
we-hit-recip-*us*

'We fought'

ti-pala-ŋa rava-ri
they-bump-recip *head-their*

'They bumped heads'

Anêm has a reciprocal clitic or suffix /mak, -ak/. Possible alternatives, which may be stylistic variants, are given below in the Anêm examples.

Anêm

i-pêl mak

i-pêl-ak
they-hit-recip

'They fought'

mî-pêl mak

mî-pêl-ak
we-hit-recip

'We fought'

mî-pêl og-l-êm-ak
we-hit head-its-recip

'We bumped heads'

i-t uas-il mak

i-t uas-il-ak
they-eat tobacco-its-recip

'They smoked each other's tobacco'

In forming reciprocals, Anêm and Lusi are not structurally identical, but they are more similar to one another than either is to a SAN language with a reciprocal prefix.

2.8. *MODALITY*

In SAN languages, modalities such as tense, aspect, negative, dehortative, and so on, are indicated by particles that either precede the verb phrase or are part of the verb phrase in clause-initial position.

Batak

sai na manurati bajón
durative *write-it person*

'This person is always writing' (Tuuk 1971:92)

sowada hu-ida sowada hu-boto
not I-see not I-know

'I haven't seen it and I don't know about it' (256)

nunga hu-ida
already I-see

'I've already seen it' (Tuuk 1971:278)

dung sahat hundul Ibana
pluperfect *sit-down he*

'After he had sat down' (288)

Wolio

inda	**bekuponamisi**	
not	*I-would-suffer*	

'I would not suffer' (Anceaux 1952:43)

boli	**alaakea**
don't	*take-them*

'Don't take them' (43)

pada-mo	**uka**	**kudikaia**
already	*again*	*I-put-it*

'I have already put it again' (43)

so	**aliqkamo**
just	*he-ran*

'He just ran' (44)

Tsou

ukʔá	**ci**	**uachúmu**
not	n	*buffalo*

'There is not any buffalo' (Tung 1964:76)

te avʔa	**pnáa**
don't	*shoot*

'Don't shoot' (111)

Mamanwa

diri	**ambahog**	**ya**	**maimpis**	**ka**	**baboy**	**ka**	**parot**
will-not	*will-feed*	n	*child*	n	*pig*	n	*peeling*
		kan	**Melina**				
		n	*Melina*				

'The child will not feed the pig the peelings for Melina' (Miller 1976:77)

waraq	**siran**	**makakarini**
did-not	*they*	*able-to-come-here*

'They were not able to come here' (77)

abay	**kamo**	**pagmatay**
don't	*you*	*cry*

'Don't cry' (78)

Chamorro

ti	**tumanges**	**si**	**Maria**	**nigap**
not	*cry*	n	*Maria*	*yesterday*

'Maria didn't cry yesterday' (Topping 1973:265)

ti	**dankolo**	**i**	**tronko**
not	*big*	n	*tree*

'The tree is not big' (266)

guaha	**asagua-hu**
exist	*spouse-my*

'I have a spouse' (266)

taya' asagua-hu
not-exist spouse-my

'I don't have a spouse' (266)

munga humanao gi gima'
don't leave house

'Don't leave the house' (267)

Woleaian

ye be mas
he future *die*

'He may die' (Sohn 1975:214)

ye sa mas
he completive *die*

'He is dead' (Sohn 1975:215)

ye tai mii igeiy
he not live here

'He does not live here' (218)

re teit feffasengiur sar kawe
they not-yet call-passive *child* d

'The children have not been called yet' (221)

Yapese

ka ga maa marweei u roem
still you habitual work at here

'Do you still work here' (Jensen 1977:215)

ku mu guy
again you see-him

'Did you see him again' (215)

daawor gu guy
not-yet I see-him

'I haven't seen him yet' (301)

daagthii maenigil ea bineey
not good n *this-thing*

'This thing is not good' (215)

Bau

e sega na kākana
v *not* n *food*

'There is no food' (Milner 1972:44)

e sega ni moce rawa
v *not* n *sleep can*

'He cannot sleep' (45)

Maori

e	koorero	ana	ngaa	waahine
v	*talk*	progressive	n	*women*

'The women are talking' (Biggs 1969:62)

kaahore	ngaa	waahine	e	koorero	ana
not	n	*women*	non-past	*talk*	progressive

'The women are not talking' (62)

i	haere	maatou
past	*go*	*we*

'We went' (63)

kiihai	maatou	i	haere
past-*not*	*we*	past	*go*

'We did not go' (Biggs 1969:63)

kua	tae	mai	ngaa	manuwhiri
perfect	*move*	*come*	n	*guest*

'The guests have arrived' (65)

To mark modality, Anêm and Lusi have parallel sets of particles which occur in clause-final position.

Anêm

u-b-î	aba	mantu
he-kill-it	*pig*	*not*

'He didn't kill a pig'

Lusi

i-r̃au	ɣaea	mao
he-kill	*pig*	*not*

'He didn't kill a pig'

Anêm

u-k	axî	Rabaul	bizaŋ
he-go	*to*	*Rabaul*	completive

'He's already gone to Rabaul'

Lusi

i-la	pa	Rabaul	ɣasili
he-go	*to*	*Rabaul*	completive

'He's already gone to Rabaul'

Anêm

u-gên	ene	pmaga
he-make	*house*	*not-yet*

'He hasn't built a house yet'

Lusi

i-karo	luma	maitne
he-make	*house*	*not-yet*

'He hasn't built a house yet'

Anêm

nê-mên gak
you-come first

'Come here first (before you...)'

Lusi

u-nama muɣa
you-come first

'Come here first'

Anêm

a-sêm pêt
I-sleep just

'I'm just sleeping/lying down'

Lusi

ŋa-eno tere
I-sleep just

'I'm just sleeping/lying down'

Anêm

ne-ki êbêl
you-cry don't

'Don't cry (stop crying)'

Lusi

(u)taŋi mina
(you)cry don't

'Don't cry (stop crying)'

2.9. SUMMARY

It is not my intention to suggest that the SAN languages are all structurally identical, nor that all the typological features mentioned here occur in each of the languages presented; only that these features are widespread and that even though individual languages may deviate in detail, in general, they conform to the overall pattern which contrasts markedly with that of Lusi and Anêm.

The salient typological features of SAN can be summarised as follows:

1. The verb phrase occurs before nominal adjuncts in neutral statements.

2. Several transformations are available to indicate obligatory focus distinctions. These include co-ordinated alternations in the relative order of constituent phrases in a clause, in verbal affixes, and in noun phrase marking particles.

3. A transformation is available to place special emphasis on a constituent of a clause. The emphasised phrase occurs in clause-initial position. This transformation often results in a verbless equative clause.

4. Comment/predicate occurs before topic/subject.

5. Noun phrases are marked by particles which are often portmanteau morphemes indicating distinctions of case, definiteness, specificity and number.

6. Modalities are indicated by particles that either precede the verb phrase or are part of the verb phrase in clause-initial position.

In contrast, Lusi and Anêm can both be characterised by quite rigid SVO order with no particles marking noun phrases, and with modalities marked with particles in clause-final position.

CHAPTER 3

ANÊM AND LUSI TYPOLOGY

3.1. *INTRODUCTION*

As shown in Chapter 2, Lusi is typologically different from SAN, while, in many respects, similar or identical to Anêm. To avoid creating the false impression that Lusi and Anêm are structurally close or identical in all respects, it is useful to compare and contrast Lusi and Anêm in more detail. At relevant points in the discussion, references are made to other AN languages. Full paradigms of the affixes discussed in this chapter are given in Appendix B.

The overall impression of Lusi morphology is of simplicity when it is compared with either Anêm or SAN. Obligatory formal distinctions are few in Lusi and the affixes marking them involve very few morphophonemic processes. Recognising this, the Anêm and Lusi both agree that Lusi is easy to learn in comparison with Anêm, which the Anêm themselves describe as "bent about with many angles". The Lusi describe Anêm as "heavy in our throats".

From the beginning of pidgin/creole studies, simplicity has been taken as a salient feature of pidgins, one which is perpetuated in a creole. The very notion of simplicity, however, is tricky because it is relative. For the present purposes, then, a language is said to be progressively simpler, the more closely it approaches the ideal of a one-to-one correspondence between meaning and form (Anttila 1972:130), and the more it dispenses with obligatory formal distinctions.

On both counts, Lusi is simpler than either Anêm or SAN. In short, Lusi has the typological simplicity associated with creoles and it is therefore reasonable to entertain the notion that there has been a pidginisation process in the recent prehistory of Lusi. The typological features of modern Lusi point to contacts with speakers of NGNAN languages as well as with speakers of a language related to an earlier

form of Anêm. From this it follows that the earliest form of Lusi encountered by the speakers of pre-Anêm was probably already a fairly easy language to learn because of its simplicity, and that it has been reformulated to conform in basic outline to the structure of Anêm.

3.2. *PRONOMINAL POSSESSIVE AFFIXES*

One way in which Lusi is simpler than Anêm is in the morphology of possessive constructions. Like most AN languages and many NAN languages (Capell 1969), both Anêm and Lusi have noun phrase classes based on formal distinctions made in possessive constructions. While Anêm has over 20 such categories, Lusi has three classes which are clearly AN in origin.

In Lusi, body parts and kin generally occur with pronominal affixes attached directly to the nominal stem.

Lusi

tama-ɣu *'my father'*
tama-mu *'your father'*
ai-tama *'his/her father'*
lima-ɣu *'my hand'*
lima-mu *'your hand'*
ai-lima *'his/her hand'*

In the other two classes, pronominal affixes occur with a particle - /a/ for *'edibles'*, or /le/ for other objects. Another category common in other AN languages, *'drinkable'*, is absent in Lusi.

Lusi

le-ɣu luma *'my house'*
le-mu luma *'your house'*
e-le luma *'his/her house'*
a-ɣu moi *'my taro'*
a-mu moi *'your taro'*
ai-a moi *'his/her taro'*
a-ɣu eau *'my water'*

While there are several apparent anomalies, most nouns can be classified according to transparent semantic domains, or occur in two categories depending on meaning.

Lusi

a-ɣu niu *'my coconut (to eat)'*
le-ɣu niu *'my coconut (tree that I planted)'*
a-ɣu ɣaea *'my pork'*
le-ɣu ɣaea *'my pig'*

Although they are based on the same analytic principles as in Lusi, Anêm has at least 20 noun phrase classes, and semantic associations for each are difficult or impossible to establish in most cases. Nevertheless, as in Lusi, a single noun can occur in several classes with clear distinctions in meaning.

Anêm

êdîŋ-at	*'my coconut (to eat)'*
êdîŋ-n-ai	*'my coconut (tree that I planted)'*
aba-k-e	*'my pig'*
aba-i-at	*'my pork'*
ki-l-e	*'my hair (head)'*
ki-ŋ-e	*'my hair (pubic)'*
ki-g-a	*'my hair (body)'*

The greater number of classes in Anêm allows for more semantic distinctions than are possible in Lusi, but semantic correlations with noun phrase classes in Anêm are not particularly transparent.

With the sole exception of /e-/ instead of /ai-/ with /le-/ in the third person singular, Lusi has the same set of pronominal affixes with all classes. Anêm, however, has four distinct sets of suffixes marking pronominal distinctions. In addition to these, Anêm also has irregular paradigms. The Anêm suffixes are composite, almost always occurring with an intervening morpheme which is usually a single consonant in form. Together, these distinguish over 20 ultimate categories. Unlike Lusi, Anêm makes a distinction between masculine and feminine in the third person singular in two of the sets of suffixes.

Anêm

kom-i	*'my water'*
kom-î	*'your water'*
kom-u	*'his water'*
kom-îm	*'her water'*
gi-ŋ-e	*'my child'*
gi-ŋ-ê	*'your child'*
gi-ŋ-o	*'his child'*
gi-ŋ-êm	*'her child'*
ti-g-a	*'my leg'*
ti-g-îr	*'your leg'*
ti-g-î	*'his/her leg'*
mîk-d-at	*'my mat'*
mîk-d-ir	*'your mat'*
mîk-d-it	*'his/her mat'*

Unlike Lusi which has a prefix in the third person singular, Anêm possessive affixes are all suffixes. The /ai-, e-/ prefix is conspicuous in Lusi because of its typological inconsistency and because comparative studies of other AN languages would lead one to expect *-na instead. Chowning notes this as an anomaly in Kove too.

> This peculiarity may be partially explained by what occurs in Manam. There the third pers. s. suffixed possessive is Ø, but the focal form of the pronoun is prefixed to the possessed noun (as also occurs with other persons): Nau-tama-gu, '(I) father-my'; Nai tama, '(he) father-his'.... it is possible that the Kove usage arose out of something like that in Manam. (1973:216)

Since NGNAN languages normally mark possessives with either prefixed or preposed pronouns, the existence of a prefix in the third person singular in Lusi suggests an earlier reformulation of pre-Lusi on the model of a NGNAN language.

In spite of its idiosyncrasies, the Lusi system of possessives is clearly cognate with that of most other AN languages, but either Lusi or one of the other AN languages in contact with Anêm has probably affected the noun class systems of Anêm, as shown by the fact that Anêm has three possessed forms of the word for *'thing'*, each with corresponding forms in Lusi, one for each Lusi category.

Anêm	Lusi	
dêk-n-ai	le-ɣu raŋa	*'my (neutral) thing'*
dêk-at	a-ɣu raŋa	*'my (edible) thing'*
dêk-g-a	raŋa-ɣu	*'my (body) thing'*

In both languages, unless otherwise specified from the context, the last form is frequently used as a euphenism for genitalia. /dêk/ does not occur in other noun phrase classes in Anêm. To this extent, the noun class system of Anêm has assimilated to AN, but the morphological complexity of the Anêm noun class system and the greater number of distinctions made argue for its being an autochthonous system in Anêm and not one borrowed, even conceptually, from any AN language.

3.3. *NOUNS POSSESSED BY NOUNS*

So far in the discussion of possessive constructions, nouns plus pronouns have been mentioned, but nouns also enter into possessive constructions with other nouns, and, again, Lusi is simpler than Anêm. Both, furthermore, diverge structurally from SAN languages which generally have one or several morphemes linking nouns in a N + of + N formula, in which the form translating *'of'* varies according to the classes of the nouns conjoined.

Batak

isi	ni	huta	
contents	*of*	*village*	

'Contents of the village' (Tuuk 1971:301)

na	i	bunga	ihur
mother	*of*	*Bunga*	*Ihur*

'Bunga Ihur's mother' (Tuuk 1971:302)

Bau

na	vale	nei	Bale
n	*house*	*of*	*Bale*

'Bale's house' (Milner 1972:81)

na	yaqona	mei	Mara
n	*kava*	*of*	*Mara*

'Mara's kava' (81)

na	daio	kei	Taitusi
n	*taro*	*of*	*Taitusi*

'Taitusi's taro' (81)

na	yaqona	ni	Viti
n	*kava*	*of*	*Fiji*

'Fijian kava' (81)

na	ulu	i	Biau
n	*head*	*of*	*Biau*

'Biau's head' (81)

Maori

te	aroha	o	te	wahine
n	*love*	*of*	n	*woman*

'The woman's love' (Biggs 1969:45)

ngaa	tamariki	a	teeraa	wahine
n	*children*	*of*	d	*woman*

'That woman's children' (45)

For PAN, Blust reconstructs the particle *ni *'of'* as a genitive marker linking two nouns in a part-to-whole relationship.

PAN

*daSun ni kaS$_2$iw *'leaf of tree'*

*maCa ni waSiR *'spring of water'*

*waSiR ni maCa *'tear of eye'* (Blust 1973:74)

The corresponding Anêm and Lusi constructions lack a genitive marker as such; Lusi uses a N + N-*its* formula.

Lusi

avei	ai-launi
tree	*its-leaf*

'leaves/leaf'

Lusi

pana mata-ri
people eye-their
'people's eyes'

Mua e-le luma
Mua his-neutral *house*
'Mua's house'

Where Lusi has only one possibility, Anêm has two with a quite subtle distinction between them. First, the Anêm N + N-*its* formula is structurally equivalent to the Lusi construction. Syntactically, the two nouns are separate entities conjoined in the construction; each can be modified separately.

Anêm

aŋ ki-l-o
tree leaf-its
'the leaf/leaves of the tree'

aŋ klaŋ lan ki-l-o ombomba
tree diminutive that leaf-its big
'the big leaves of that dear little tree'

onu ei-l-î
people eye-their
'the eyes of the people'

Kasiaŋa ene-it
Kasiaŋa house-his
'Kasiaŋa's house'

aba ene-lt
pig house-its
'the house of the pig/pigs'

The second Anêm construction has a N-*its* + N formula, essentially the reverse of the above formula. This is a type of derivational mechanism that behaves syntactically as a single unit; for instance, nothing can come between the two nouns except the suffix of the first noun, and this is a special suffix which makes no distinction in gender or number. With first and second class nouns, it is identical to the third person singular feminine (/-îm/ and /-êm/; with third class nouns it is indistinct from the normal third person singular suffix (/-î/) which, in any case, makes no distinction in gender; and, with forth class nouns, it is a distinct suffix (/-il/).

Anêm

ki-l-êm aŋ
leaf-its tree
'leaf/leaves'

Anêm

ei-l-îm	onu
eye-their	*people*

'people's eyes'

ene-il	aba
house-its	*pig*

'a pig house'

*kilêm ombomba aŋ klaŋ lan [ungrammatical]

The two contrasting Anêm constructions correspond to the single Lusi construction. This additional distinction and the greater morphological complexity involved in it shows that, in comparison with Anêm, Lusi is simpler. Yet, the Lusi construction is more similar to the Anêm than either Lusi or Anêm is to any AN language with a reflex of *ni or its equivalent. The Lusi possessive constructions involving two nouns appear to be structurally simpler models of a more complex Anêm.

3.4. *SUBJECT PREFIXES*

Anêm and Lusi are alike in having obligatory prefixes to mark subject with all finite verbs[1], but while the Lusi prefixes are single morphemes, the Anêm prefixes are portmanteau morphemes, making, in addition to pronominal distinctions, a formal distinction between realis and irrealis.

Lusi

u-la	*'you went/will go/are going; if you go; go!'*
ŋa-reɣa u-la	*'I want you to go'*

Anêm

na-k	*'you will go; if you go; go!'*
nî-k	*'you are going/went'*
a-gê na-k	*'I want you to go'*
u-k	*'he is going/went'*
do-k	*'he will go; if he goes'*
a-gê do-k	*'I want him to go'*

In addition to these, Anêm has another prefix /o-/ marking third person imperative. Lusi has no such distinction.

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[1] A single minor exception to this exists in Lusi where the second person singular prefix is usually not present with /mina/ *'dehortative'*. e.g. /(u)-taŋi mina/ *'don't cry'*.

Anêm

u-mên *'he came'*

uas o-mên *'let the tobacco come; pass the tobacco'*

na-k	nê-uai-l-o	o-mên	o-sêm	axî	ene-at
you-go	*you-tell-him*	*he-come*	*he-sleep*	*in*	*house-my*

'Go tell him to come sleep in my house'

Lusi

i-nama *'he came'*

wasi i-nama *'pass the tobacco'*

In most of the person-number categories, Lusi has a single prefix corresponding with two prefixes in Anêm. In the third person singular, however, Anêm has five prefixes for a single prefix in Lusi.

Lusi

i- 'third person singular'

Anêm

u- 'third person singular masculine realis'
do- 'third person singular masculine irrealis'
i- 'third person singular feminine realis
dê- 'third person singular feminine irrealis'
o- 'third person imperative'

With this greater number of formal distinctions, Anêm, with respect to subject prefixes, is more complex than Lusi. Here, again, Lusi exemplifies the typological simplicity of a creole.

3.5. *OBJECT SUFFIXES*

Both Lusi and Anêm have suffixes to mark object with verbs and prepositions. Lusi has a single set of suffixes distinct from any other set; each pronominal distinction corresponds with a single invariable form except in the third person singular /-i, -ni, Ø/ where the three allomorphs seem to have a somewhat arbitrary distribution determined by individual stems. A small number of verbs are obligatory reflexives in that they occur with an obligatory object suffix in concord with the subject prefix (Counts 1969:74-6). In other respects, the Lusi system is quite transparent.

Lusi

i-pa-ɣau *'he gave (it) to me'*
i-pa-ɣo *'he gave (it) to you'*
i-pa-ni *'he gave (it) to him/her'*
ŋa-loŋo-ni posaŋa *'I hear talking'*
ŋa-tunu-Ø usu *'I burn thatch'*

Lusi

i-lua-i *'he returns'*

ti-lua-ri *'they return'*

In contrast, the Anêm object suffix system is complex; with only minor differences in detail, the same array of suffixes marking possessive with nouns also marks object with verbs. Although it may be argued that Lusi, with 2 systems of suffixes, is more complicated than Anêm, which uses the same system for both functions, this is an empty argument in view of the fact that the occurrence of a particular set of object suffixes in Anêm is conditioned by the stem with which it occurs in a manner that defies formulation of rules. Thus, like nouns, Anêm stems fit into quite arbitrary classes identifiable only on the basis of their co-occurrent object suffixes. A few verbs occur in two classes with differences in meaning. To demonstrate the arbitrary nature of this system, a few nouns are given below for comparison with the verb examples.

Anêm

i-uai	*'they talk'*
i-uai-l-er	*'they talk to you'*
ki-l-er	*'your hair'*
i-uai-k-îr	*'they talk about you'*
pom-k-îr	*'your chest'*
i-sama-d-it	*'they look for it/him/her'*
mîk-d-it	*'his/her mat'*
u-i-g-î	*'he guessed it'*
bli-g-î	*'his back'*
u-sn-u	*'he gave (it) to him'*
kom-u	*'his water'*
u-be-it	*'he touched it/him/her'*
ene-it	*'his/her house'*
u-k-o	*'he lit it'*
u-b-î	*'he killed it'*
u-ŋo-t	*'he threw it'*
u-kŋ-î	*'he cut it'*
do-b-a	*'he'll kill me'*
do-kŋ-i	*'he'll cut me'*

For the outsider, the morphology of these suffixes gives a night-marish quality equally to nouns and verbs in Anêm. The corresponding Lusi systems are quite transparent and, therefore, easy for outsiders to learn.

3.6. *PREPOSITIONS AND POSTPOSITIONS*

Noun-verb relationships other than subject and object are marked by prepositions in Anêm and by both prepositions and postpositions in Lusi. The basic case relationship markers are given below.

Anêm	Lusi	
axî	pa	
al	iai, -ai, -i	'locative'
kan, dei	ŋa	'instrumental commitative'
dî	aea	'purposive'

Normally, in Anêm, /axî/ occurs with non-humans and /al/ with humans, but /axî/ can be and frequently is used for both. The possibility of this distinction is entirely lacking in Lusi. In the Lusi locatives, the preposition /pa/ is productive and can be used anywhere in place of the postposition /iai/ (or its suffixed allomorphs) which occurs only in common fossilised expressions.

Lusi

sia iai = pa sia *'on the reef'*
nu iai = pa nu *'on the island'*
saru-i = pa saru *'in the jungle'*

Forms of /iai/ occur suffixed to numerous place names in northwestern New Britain - Kaliai, Taveliai, Tamuniai, Bariai, Pisoiai, and even Karaiai, the name of an Anêm village. For some of these, the Anêm use shorter forms in casual speech - Kali, Pisuoi, Kaxai -, but in formal speech, they use the longer forms considering these to be correct.

For commitatives, Anêm uses both /kan/ and /dei/, but /kan/ can occur with an object suffix while /dei/ cannot. Otherwise, as commitative, they are interchangeable, with no detectable difference in meaning. /kan/, but not /dei/, marks instrumental. In Lusi, /ŋa/ marks both commitative and instrumental, but commitative can be unambiguously distinguished by the use of /tomo/ *'together'*.

Purposive phrases are indicated in Anêm by the preposition /dî/, and in Lusi by the postposition /aea/. Unlike the locative postposition /iai/ which is fossilized, /aea/ is wholly productive in Lusi.

Anêm

nil dî lam *'a nail for a lamp'*

Lusi

nil lam aea *'a nail for a lamp'*

Neither Anêm nor SAN languages have postpositions, but Lusi has these two - /aea/ and /iai/. Cognate forms of the locative /iai/ occur in other AN languages in Papua New Guinea as either postposed clitics or suffixes.

> The most interesting Kove affix is -iai, which has the general meaning 'in'. It is usually assumed to be related to a similar suffix found, according to Pawley, in "all the better-known languages of Papua New Guinea from Gedaged east" (1974:fn.19) [=1972:fn.19]. In Motu it appears as -ai, in Molima and many other Milne Bay District languages as -ya. (Chowning 1973:219)

Actually, postpositions in AN languages seem to be largely restricted to New Guinea where the contiguous NAN languages have postpositions or suffixes to mark all case relationships (Capell 1969). Thus, like the prefixed possessive (Section 3.2.), this feature suggests that Lusi has been in contact with a NGNAN language in which post-positions are the norm, or, of course, with a NGAN language which has already been reformulated in this direction. Pawley refers to this as "a common innovation" (1972:fn.19), a feature shared as a result of a period of common development, and, therefore, important in genetic classification, but for reasons discussed in Section 5.3., this hypothesis seems unsound.

3.7. *GENDER IN ANÊM*

Anêm, but not Lusi, has a largely arbitrary gender distinction. All nouns referring to male beings are masculine; all female beings are feminine; and all other nouns referring to entities that are not clearly one sex or the other are arbitrarily assigned to one of the two categories.

Before I had figured this out for myself, one of my informants, Yosep Kaloga, described the distinction to me in these terms: "For us Anêm, everything is either like a man or like a woman. The sun is like a man and the moon is like a woman. My arm is like a woman and my leg is like a man. We divide everything up this way. We go by what sounds right." Yosep's sophisticated insight into the structure of his own language astonished me. Since he described the distinction in this way, I feel that the traditional labels, "masculine" and "feminine" are suitable.

In Anêm, most trees, axes and mountains are masculine, while most vines, the ocean, knives and houses are feminine. The first and second person pronouns are feminine in the singular but masculine in the plural regardless of the sex of the actual referent. Gender is indicated by two systems of concord: 1. between noun and verbal

affixes, and 2. between nouns and deictics.

Anêm

ado u-mê
sun he-shine

'The sun is shining'

klîŋ i-mê
moon she-shine

'The moon is shining'

tîm-n-ai i-lî
arm-my she-swollen

'My arm is swollen'

ti-g-a u-lî
leg-my he-swollen

'My leg is swollen'

doxa sêxa sêxîd i-ken i-k
person *f-former f-over-there she-go she-go*

'The woman who was over there has gone away'

doxa lêxa lêxîd u-kon u-k
person *m-former m-over-there he-go he-go*

'The man who was over there has gone away'

da-l-êm [lam]
I-get-it [lamp]

'I'll get it'

da-l-o [uas-ir]
I-get-it [tobacco-your]

'I'll get it'

The gender system is independent of the noun phrase class system based on possessives; that is, nouns are not specified for gender by virtue of belonging to a particular class.

Anêm

te-n-ai i-kîp
knife-my she-broken

'My knife is broken'

kebesi-n-ai u-kîp
axe-my he-broken

'My axe is broken'

Thus, in order to use a noun freely in Anêm, the speaker must know both its gender and the possible noun class(es) it belongs to. This adds considerably to the difficulty of learning to speak Anêm well.

From a purely subjective standpoint of a non-native speaker struggling with the language's anomalies, the gender system of Anêm seems to

be yet one more isolating mechanism. The alternation between feminine /s...i/ sequences and masculine /l...u/ sequences has the same initial effect as larding one's speech with nonsense syllables, the ploy often used by groups of English-speaking children to conceal messages from the uninitiated. From a semantic point of view, little real information is conveyed by the gender distinction in Anêm; Lusi, a structurally simpler language by virtue of lacking it, is an adequate medium for communication.

3.8. *COMPLEXITY IN ANÊM*

A comparison of Anêm and Lusi gives the clear impression of the relative simplicity of Lusi as opposed to the complexity of Anêm. Lusi has fewer formal distinctions, alternative constructions, irregularities, and morphophonemic processes. It has the typological simplicity that is a salient feature of languages that are undeniably pidgins or creoles. On the other hand, Anêm has a lot of 'baggage', a greater number of formal distinctions, many of which add little, if anything, to the information conveyed. In addition to the complexities discussed in the preceding sections, there are other features which make Anêm less like a pidgin or creole and, therefore, more difficult to learn.

For example, Anêm has numerous suppletive verb stems. Some stems are determined by the number of the subject, others by the number of the object.

Anêm

u-sêm	*'slept'*
i-tel	*'they slept'*
u-k	*'he went'*
i-ul	*'they went'*
u-b-î	*'he killed it'*
u-pel-it	*'he killed them'*
i-b-î	*'they killed it'*
i-pel-it	*'they killed them'*

Although there is no way of predicting which ones, some Anêm stems are subject to rules of regressive vowel assimilation. Vowel harmony also affects some, but not all verbal prefixes.

Anêm

ne-ke-l-e	*'look at me'*
no-ko-l-o	*'look at him'*
nê-kê-l-êm	*'look at her'*

Anêm

e-l-i	*'my shadow'*
o-l-u	*'his shadow'*
ê-l-îm	*'her shadow'*
elk-ŋ-e	*'my children'*
olk-ŋ-o	*'his children'*
êlk-ŋ-êm	*'her children'*
ali-l-i	*'my escape route'*
alu-l-u	*'his escape route'*
alî-l-îm	*'her escape route'*

BUT

og-l-e	*'my head'*
og-l-o	*'his head'*
og-l-êm	*'her head'*
nê-nêŋ-l-e	*'ask me'*
nê-nêŋ-l-o	*'ask him'*
nê-nêŋ-l-êm	*'ask her'*

Morphologically, Lusi is neatly segmentable into morphemes with a clear open-syllable structure. In Anêm, however, many morphemes are difficult to perceive because they consist of only a single phoneme or a consonant cluster.

Anêm

u-kŋ-i	*'he cut me'*
u-tl-i	*'he stabbed me'*
da-b-îr	*'I'll hit you'*
a-sn-u	*'I gave it to him'*
da-l-o	*'I'll get it'*
u-i-g-î	*'he guessed it'*
a-s-î	*'I gathered it'*

At least one Anêm verb has "no stem"; a prefix is attached directly to a suffix which, by its class, determines the meaning of the form.

Anêm

eni	i-Ø-t	kekele
devil	*she-eat-it*	*child*

'The devil ate the child'

eni	de-Ø-n'is
devil	*she-eat-us*

'The devil will eat us'

a-gê	da-Ø-r
I-want	*I-eat-you*

'I'm about to eat you'

With a few other verbs, it is less obvious whether they should be analysed as prefix + Ø + suffix or as forms with stems that are homophonous with the first morpheme of an object suffix. Nouns of the appropriate classes are given below for comparison with the verbal examples.

Anêm

u-g-a	*'he named me'*
u-g-îr	*'he named you'*
pol-g-a	*'my shoulder'*
da-l-er	*'I'll get you'*
i-l-o	*'they got him'*
aŋ-l-o	*'his firewood'*
nê-d-at êbêl	*'stop pushing me'*
a-d-it	*'I pushed it'*
mîk-d-it	*'his mat'*
u-n-îm	*'he copulated with her'*
tîm-n-îm	*'her hand'*

Numerous irregularities exist in Anêm morphology that defy the formulation of rules. In the examples below, asterisked forms are what would be expected.

Anêm

didu	*'skirt'*	
didu-ak-e	*'my skirt'*	
malo	*'bark cloth'*	
mal-ak-e	*'my bark cloth'*	*malo-ak-e
na-k	*'go!'*	*nê-k
ne-t	*'eat!'*	*nê-t
ni-t	*'you ate'*	*nî-t
de-ik	*'I'll drink'*	*da-ik
siê-x-ê	*'your buttocks'*	*siê-x-îr

These features emphasize the typological disparity between Anêm, a long established language full of anomalies, and Lusi, a language in which most of the anomalies that might have accumulated have been levelled out by a recent process of pidginisation.

3.9. *LANGUAGE LEARNING IN ANÊM AND LUSI*

All this "baggage" conspires to make Anêm a frustrating experience for the learner who lacks the benefit of the analytic tools of linguistics. In 1978, during my second fieldtrip, six non-Anêm adults

were living permanently in Karaiai. A Tolai woman who had arrived in about 1969 spoke Anêm fluently, but without full control of the phonology, morphology or lexicon. Her speech was unfortunately the source of a great deal of joking among the Anêm. A Kilenge man who had arrived in about 1971 refused to speak anything but Tok Pisin in the village; he appeared to be oblivious to simple, blatant, personal insults made in his presence in Anêm. In 1974, another, much more patient Kilenge man had married one of my best informants; by 1978, he understood most Anêm, but spoke haltingly in short clipped phrases punctuated with long pauses. Since 1975, he has developed a stutter when speaking Tok Pisin. A Bali woman from the Vitu Islands, who had been there less than a year, and who knew only isolated words for common objects, claimed that she never expected to be able to learn Anêm. A Lusi couple from Atiatu had lived in Karaiai from about 1972, and in 1975, impressed by the progress I had made in learning Anêm, the husband set about learning Anêm seriously in an effort to keep up with village business; by 1978, he could follow most conversation, but spoke almost unintelligibly. His wife and children refused to learn Anêm, interacting rather in Lusi.

The record for adults learning Anêm is poor in Karaiai, but the situation is worse in Bolo, the interior Anêm village, where no children now speak Anêm, even though, presumably, they understand it to some degree. Here, the preferred language of the younger generation is Aria, although most of them also speak Lusi. Since the speakers of AN languages in northwest New Britain are in nearly unanimous agreement that Anêm is impossible to learn, they need to perceive real benefits from learning it before they attempt to do so. On the other hand, Lusi is considered to be an extremely easy language to learn. Chowning also notes this for Kove.

> By contrast with Lakalai [AN], Kove has very few affixes. Indeed, its grammar is notable for its simplicity; Kove-speakers frequently say that for this reason foreigners find Kove very easy to learn. (Chowning 1973:218)

This phenomenon is also reported for the AN languages spoken on Bougainville.

> Both Austronesian and Non-Austronesian languages are found in the Bougainville District.... As a rule the Austronesian languages are considerably easier to learn then the Non-Austronesian languages. (Allan and Hurd 1969:2)

Given the complexities of Anêm, it is extremely difficult for adult non-native speakers to perceive the individual morphemes and to deduce the rules for their combination. Even with a great deal of exposure,

learners of Anêm find difficulty in making connections among words whose affixes sometimes seem to overwhelm their stems. In these circumstances, the perception of Anêm as difficult to learn as a second language seems to be justified.

It cannot be mere coincidence that Lusi is both easy to learn and useful as a lingua franca, while Anêm is considered impossible to learn and has almost no value as a lingua franca. This seems to be typical of the dichotomy between NAN and AN languages throughout Melanesia. As long as a language is learned primarily as a native language, it can continue to develop complexities that are not tolerated by people learning the language as a second language. Thus, the typological simplicity of MNAN languages seems to go hand in hand with the greater mobility of AN speakers and the use of their languages as lingue franche in Melanesia.

CHAPTER 4

ANÊM AND LUSI VOCABULARY

4.1. *INTRODUCTION*

The previous two chapters have focussed on structural aspects of Lusi and Anêm, but a study of the lexicons of the two languages also provides evidence for a major modification in Lusi as a result of contact with Anêm. As shown in the following sections of this chapter, Anêm and Lusi have exchanged a large number of words, mainly non-basic vocabulary items, but this has not been at random. To a certain extent, the patterns of borrowing that emerge from the study make it possible to reconstruct aspects of the nature of the initial contact situation.

Given the scarcity of available data on the languages in the immediate region, establishing etymologies for Anêm and Lusi words is often difficult and obviously hazardous. Although there are probably errors in detail due to unavoidable ignorance, I am confident that the conclusions of this chapter are correct in general outline.

Two guidelines have been employed in establishing etymologies. First, by comparing the phonologies of the two languages, I have been able to identify Anêm borrowings in Lusi. Second, I have relied on the reconstructed forms for PAN, POC and other posited subgroupings of AN as collected by Wurm and Wilson (1975) in order to recognise AN items in both Anêm and Lusi. I have also consulted dictionaries and wordlists of AN languages outside the immediate West New Britain area. Of the remaining items that are clearly the same in both languages, no etymological determination can yet be made. This residual category is large, particularly for those items that can be considered non-basic, the very items that are least likely to be found in dictionaries and wordlists.

The pattern that emerges from studying Anêm and Lusi vocabulary,

however, largely reconfirms the observations of Ray that:

> ...when the IN [=AN] words are extracted from any MN [=MNAN] vocabulary the residuum, except for languages within strictly limited areas, is absolutely incomparable. (1926:4)

and Capell that:

> ...there appears to be very little common matter in the substrata of the languages [MNAN] once the PAN element is accounted for. (1971:334)

Both Ray and Capell propose that the vocabulary in MNAN languages that is not AN belongs to NAN substrata which differ markedly from area to area. One of the major objections to this theory has been that neither Capell nor Ray is able to relate the NAN substrata of MNAN languages to any surviving NAN language. Part of this deficit is accounted for by Anêm vocabulary items in Lusi, as shown in the remainder of this chapter.

Following from the observation that the AN vocabulary in MNAN languages is small and largely confined to basic items, Capell (1962a) proposes that MNAN languages should be placed in a quasi-genetic category "semi-AN". Lusi would belong here in such a scheme, but in Section 5.3., reasons are put forward for objecting to such intermediate categories as having no logical or useful place in any genetic classification. The Swadesh 100-word list given in Appendix A and the sample texts given in Appendix E establish beyond dispute that Lusi is AN and that Anêm is NAN. Genetically, they are in discrete categories.

4.2. *BASIC AND NON-BASIC PHONOLOGY*

The Swadesh list in Appendix A also provides a basis for making a useful distinction between basic and non-basic phonological patterns in Anêm and Lusi. Both languages have clearly stratified lexicons, each with three levels corresponding to the three major sources of words in the languages. Anêm has a basic NAN stratum and Lusi a basic AN stratum, both exemplified in the items on the Swadesh list. Anêm also has a stratum of words borrowed from Lusi (or, perhaps, Kove), while Lusi has a stratum of non-basic items borrowed from Anêm. Both have a recent and quite extensive stratum of words borrowed from Tok Pisin. Each of these three strata has a different phonological pattern.

From the basic vocabulary items, it is possible to establish, in general outline, the basic phonologies of Anêm and Lusi, thereby making possible the identification of many Anêm borrowings in Lusi. In the Swadesh list, the following linear phonemes occur in Anêm and Lusi. (An outline of the phonologies of the two languages appears in Appendix C.)

Anêm			Lusi		
/p/	/t/	/k/	/p/	/t/	/k/
/b/	/d/	/g/	/v/	/r/	/ɣ/
/m/	/n/	/ŋ/	/m/	/n/	/ŋ/
	/l/		/w/	/l/	
	/r/	/x/		/r̃/	
	/s/			/s/	/h/
	/z/				
/i/	/ɨ/	/u/	/i/		/u/
/e/	/ê/	/o/	/e/		/o/
	/a/			/a/	

For Anêm, the inventory is complete; no other linear phoneme is found by consulting a list of over 2000 morphemes. For Lusi, however, one series of phonemes is missing in the items of the Swadesh list - /b d g/, the infrequent prenasalised voiced stops. This exercise confirms Chowning's hypothesis that the prenasalised voiced stops are a recent acquisition in Kove and Lusi:

> The lexical material indicates that at some time, the voiced stops in the proto-language that gave rise to Bariai, Kaliai [=Lusi], and Kove all became voiced spirants in Kove, and possibly in Kaliai as well. Subsequently, however, Kove acquired many words containing voiced stops, though where POC forms are represented, the spirant reflexes are greatly in the majority. (Chowning 1973:195)

The voiced stops /b d g/ in Anêm are not prenasalised, but have fricative allophones identical in phonetic value to Lusi /v r ɣ/ which are fricatives. These fricative allophones in Anêm occur in free variation with the stop allophones with increasing frequency in rapid speech, particularly in intervocalic position. Anêm /u/ has allophones phonetically identical to Lusi /u/ and /w/. Lusi /h/ is probably a phoneme borrowed from Kove as supported by the observation that Kove /h/ regularly corresponds to either /h/ or /r̃/ in Lusi, while /r̃/ does not occur in Kove. Thus, with the exception of /h/, which is deleted from Lusi borrowings in Anêm, the basic Lusi phoneme inventory is a subset of the Anêm inventory. That is, with the exception of /h/, Lusi has no sounds that would be foreign to a hypothetical monolingual Anêm speaker.

The reverse is not true. Anêm /x/, a postvelar trill with voiced and voiceless allophones, is realised in Lusi words of Anêm origin either as /r̃/ or, more rarely, as /h/, possibly because of an intermediary Kove stage. Anêm /z/ becomes Lusi /r/, and the back unrounded vowels /ê ɨ/ become corresponding front vowels /e i/ in Lusi renditions of Anêm words. The correspondences between linear phonemes in items

borrowed by Lusi from Anêm are summarised below.

Anêm	Lusi
/p/	/p/
/t/	/t/
/k/	/k/
/b/	/v/
/d z/	/r/
/g/	/γ/
/m/	/m/
/n/	/n/
/ŋ/	/ŋ/
/l/	/l/
/r x/	/r̃ (h)/
/s/	/s/
/i î/	/i/
/e ê/	/e/
/u/	/u w/
/o/	/o/
/a/	/a/

The Swadesh list also shows the basic canonic shapes of words in Anêm and Lusi. While, in these Lusi words, there are no final consonants, they are frequent in Anêm. In basic Lusi items, consonant clusters are medial and result from partial reduplication of the stem. The basic canonic shape for Lusi then, is: $((C_1)\ V_1\ (C_2))\ (C_1)\ V_1\ (C_2)\ V_2$, most commonly realised as CVCV.

The Swadesh list is not long enough to show all the possible consonant clusters in Anêm, but many appear, especially in initial position. The canonic shape of an Anêm syllable is (TR/C) V (C), where C represents any consonant, V any vowel, T any stop, and R any resonant or trill. For example, words like /tlîxtlîx/ *'spurt'* and /dŋît/ *'for you p.'* pose no problem to Anêm speakers. While many Anêm words have final consonants and consonant clusters in initial position, words of the shape CVCV are also frequent.

These observations provide one basis for identifying words of Anêm origin in Lusi, but since basic Lusi is phonologically a subset of Anêm, the reverse is not possible. When non-basic Lusi items are examined, the phonological description of Lusi must be revised. Lusi words with final consonants and TR-type consonant clusters are actually quite numerous in the non-basic vocabulary. They are particularly conspicuous in the roughly defined semantic domains discussed in

sections 4.4. and 4.5.

Anêm has borrowed a large number of vocabulary items from Lusi, particularly items dealing with maritime phenomena. These are discussed in Section 4.3. It is possible to use phonological criteria in identifying these as Lusi borrowings only by default; that is, as a group, Anêm words dealing with the ocean lack the consonant clusters, final consonants, and back unrounded vowels that would be expected in some words of an Anêm list chosen at random. This is not to say, however, that individual maritime words in Anêm are phonologically marked as Lusi borrowings; they are not. Only when taken together do they appear phonologically peculiar in Anêm.

4.3. *MARITIME VOCABULARY*

The Anêm claim that their traditions dealing with canoe-building and offshore fishing date back only to the period between the First and Second World Wars. Before this time, they lived in hamlets on the mountain crests and dealt with the ocean only when they needed to collect salt-water for cooking and, occasionally, to gather salt-water shellfish. Their word for canoe /êudêl/ (/êgîm/ in Bolo), according to some, originally meant a type of evil being. The very old Anêm say that their fathers used to ambush canoes along the coast, kill the passengers, and destroy the canoes which were useless to them.

Today, the younger generation build canoes and frequently devote a day to fishing for food and sport. The canoes built by the Anêm are quite functional and rudimentary compared with the elaborately decorated and finely designed canoes built by the Lusi. The Kove canoes are even more enormous and elegant than the Lusi canoes. Furthermore, Lusi and Kove of all generations are engaged in canoe-building and offshore fishing.

That maritime technology is a recent acquisition of the Anêm is obvious from an examination of the vocabulary dealing with it. Virtually all the Anêm words dealing with ocean phenomena are borrowings from Lusi or some other AN language in the vicinity. Below is a small but representative sample.

Anêm	Lusi	
(pesia	tari	*'ocean, salt-water'*)
sia	sia	*'reef'*
nu	nu	*'island'*
tabele	tavele	*'point of land'*
labu	lavu	*'sand'*

Anêm	Lusi	
boitini	voitini	*'waves'*
sobo	sovo	*'rollers'*
duduni	ruruni	*'tidal wave'*
-slsi	-slsii	*'break (waves)'*
-monmono	-monmono	*'float'*
-madi	-mari	*'sink'*
masmasl	masmasl	*'salty'*
mani	mani	*'fishy smelling'*
(êudêl	waɣa	*'canoe'*)
pore	pore	*'paddle'*
-uore	-wore	*'to paddle'*
toa	toa	*'punting pole'*
-toto	-toto	*'to punt'*
poŋo	poŋo	'k. *fishnet'*
sakanl	sakanl	'k. *fishnet'*
ia	iha	*'fish'*
bonabona	vonavona	*'batfish'*
dadamuxi	raramuhi	*'flathead fish'*
daŋadaŋa	daŋadaŋa	*'unicorn fish'*
kalubia	kaluvia	*'barracuda'*
kekeke	keke	*'butterfly fish'*
kolome	kolome	*'archer fish'*
koxa	kořa	*'pufferfish'*
lamlami	lamlaml	*'halibut, flounder'*
makitoi	makltoi	*'remora'*
maŋaxa	maŋaha	*'sea perch'*
moxadi	moharl	*'garfish'*
nou	nou	*'stonefish'*
ombaka	aovaka	*'grouper'*
sumusumu	sumusumu	*'triggerfish'*
xaŋxaŋo	řaŋřaŋo	*'scorpionfish'*
mogebo	moɣevo	*'shark'*
nabagabaga	navaɣavaɣa	*'hammerhead shark'*
barikaua	varikawa	*'eagle ray'*
moigagaxa	molɣaɣařa	*'devil ray'*
tuna	tuna	*'eel'*
moani	moani	'k. *eel'*
lumbalumba	lubaluba	'k. *eel'*
aŋoloko	aŋoloko	'k. *eel'*

Anêm	Lusi	
patukulu	patukulu	'k. *coral'*
bisei	visei	*'sea urchin'*
kaxauki	kařoki	*'crab'*
kiki	kiki	'k. *crab'*
kuxixi	kuřeiřei	'k. *lobster'*
mokabe	mokave	*'argonaut'*
gusa	ɣusa	*'squid'*
masilau	masilau	*'mollusk'*
bolokiero	volokieřo	*'tiger conch'*
budu	vuru	*'betulinus cone'*
golomara	ɣolomara	*'giant clam'*
mase	mase	*'trochus'*
matakamo	matakamo	*'pearl oyster'*
patoipa	patoipa	*'chiton'*
perperu	perperu	'k. *clam'*
pixoxo	pihoho	*'pyramid shell'*
sauli	sauli	*'pen shell'*
tu	tue	*'clam'*

The above list is only representative of the whole list of items dealing with maritime phenomena; the list is much longer, yet, among all the entries in this category, only three appear to have autochthonous names in Anêm.

Anêm

êbêl *'white cowrie used as ornament around neck, often in place of boar's tusks'*

plêmplêm *'olive shell used as ornament'*

mêl *'oyster from which is carved a spoon for eating the meat from green coconuts'*

It is possible that these are among the kinds of shells collected by the Anêm in their pre-Lusi contact era. Since they have uses other than as food, they have retained their original names.

Two other items should be mentioned here because they indicate the kind of confusion over meaning that must have occurred when items were first borrowed. One is Anêm /paileŋa/ *'beach'* which comes from Lusi /paeleŋa/ *'walking on the beach'* (/-paele/ *'to walk on the beach'*). The other is Anêm /napaila/ *'sail'* from Lusi /napaela/ *'mast'* and ultimately a Kilenge word with the fossilized noun marker /na/ prefixed to it.

If it is true that a constellation of new vocabulary is often

borrowed along with a new technology, then it is obvious from the sheer bulk of Lusi borrowing in Anêm that the pre-Lusi people brought with them a whole technology dealing with the ocean. This was then acquired as a package by the Anêm. It is also likely that when the Anêm adopted the maritime way of life, many autochthonous Anêm words were displaced by Lusi terms, since it is inconceivable that the predecessors of the modern Anêm people lacked names for all the items now bearing Lusi-derived labels.

By teaching the Anêm how to exploit the ocean for food, the importers of this technology would acquire great prestige. Consequently, from the Anêm point of view, not only the new settlers' fishing methods, but also their language would be worth learning.

David and Dorothy Counts (personal communication) acquired a story in Kandoka which says that, a long time ago, the Lusi lived in trees, had tails, and ate raw food. Then two canoes arrived from Siasi and the settlers took the Lusi from the trees, cut off their tails, and taught them how to cook their food. The Counts also mention that Michael Freedman was told a story in Siasi about a fight which resulted in two canoes departing with people who settled in Kaliai. Although highly symbolised on both sides, the stories dovetail to such an extent that they cannot be mere coincidence. Furthermore, the languages of the Siasi Islands are closely related to Lusi (Chowning 1969, 1976). Thus, there must be more than a mere kernel of historic fact in the stories.

Living on tiny islets in the Vitiaz Strait, the Siasi are seafaring traders carrying goods between New Guinea and New Britain in a trade network that formerly linked Talasea, the site of an important obsidian deposit, with the highlands of the Huon Penninsula and possibly beyond. The scarce food resources of their islands force the Siasi to rely heavily not only on the products of the ocean but also on the profits of trade. The intricate details of this trading system are presented in Harding (1967).

Prior to European contact and the advent of Tok Pisin in the villages on either side of the Vitiaz Strait, communication for trade was accomplished in part by low-level bilingualism and in part by the use of a lingua franca.

> Sio informants say that communication was also based on a pidgin form of the Siassi language (tok Siassi haphap), a trade lingo with a Siassi vocabulary which was useful not only in meetings with the Siassis themselves, but with other island and coastal peoples. (Harding 1967:203)

It is unfortunate that Tok Siasi haphap (pidginised Siasi) is not

recorded. That it existed and was established as a lingua franca, however, suggests the possibility of its having been used by the original Siasi settlers in their initial contacts with the Anêm.

In the scenario hypothesized here, two canoes of Siasi settlers arrived in Kaliai, where they came in contact with the predecessors of today's Anêm who survived mainly on the land by means of hunting, gathering and horticulture. The Siasi skills in providing food from the ocean, trading items, and craftmanship in canoe-building made them a prestigious group. Many Anêm set about learning Siasi ways; this included their language, perhaps in pidginised form. Anêm adults, however, learned the Siasi language imperfectly, imposing upon it much of the structure of their own language. Not only basic vocabulary, but also words related to the ocean were acquired first. As the first generation of Siasi settlers grew old, however, the "true" Siasi words for non-basic items became progressively more esoteric. Meanwhile, a process developed for making "Siasi" words out of the most available source - Anêm. By the time this stage was reached, a new normative code had been created, one no longer properly "Siasi", but peculiar to that area of Kaliai. The processes involved were pidginisation and creolisation, the resultant new code being called Lusi by the people who speak it.

Somehow in this story, the emergence of Kove (and possibly Bariai) is involved, but my familiarity with these people and their languages is quite limited. Nevertheless, since Lusi and Kove are so similar, it is possible to speculate that Kove is the result of the same processes as those described above, but with a substrate dialect of Anêm different from that encountered by the Lusi.

4.4. *BUSH VOCABULARY*

While most of the vocabulary dealing with maritime phenomena are Lusi borrowings in Anêm, the terms dealing with items of the land are largely autochthonous in Anêm. Many of these items would not have been high on the priority list of words to be learned during the original contact between Anêm and Lusi; that is, they are non-basic vocabulary items labelling phenomena of little social or economic importance. In the scenario constructed in Section 4.3., these words would be the last to be learned. By the time a desire for such words had superseded the need for basic communication, the original Siasi settlers, the only source of "true" words, would already be dead. The only readily available source of new vocabulary, then, would be Anêm, and it is clear from the data that the Lusi did indeed borrow many non-basic items from Anêm in the creolisation process. These have been adjusted

in their phonology to conform in some respects with the phonemic inventory of Lusi, but retain consonant clusters and final consonants characteristic of Anêm, but not basic Lusi phonology; hence, many are easily identified in Lusi this way. A few items in Lusi, the minority, have vowels where the Anêm has a final consonant, but since cognate forms are not found in Bariai (Friederici 1912), Kilenge (Dark 1977), or Gitua (Lincoln 1977), it is safe to assume that these too are etymologically Anêm.

Although some of these words may represent names for things that were unknown to the Siasi settlers, it is more likely that they were merely socially and economically unimportant and therefore left unnamed until the first generation of Siasi had died out taking the Siasi names with them. A few items, like *'spider'*, food sources for the earlier Anêm, are now shunned as repugnant both by the Lusi and by the younger generation of modern Anêm.

It is instructive to begin the examples with a list of items referring to creatures that live in the rivers. Several of the Lusi terms were unavailable either because they are too esoteric or because there are no Lusi names for the creatures labelled in Anêm. The list suggests first, that the Anêm have maintained a continuous tradition of collecting food from the rivers, and second, that the Lusi have focussed more of their attention on the ocean than on the rivers.

Anêm	Lusi	
lako	lako	'k. *river fish'*
palaŋa	nasole	'k. *river fish'*
êgalt	pelesaŋ	'k. *river fish'*
samil	...	'k. *river fish'*
êbîŋîn	...	'k. *river fish'*
êmxîn	...	'k. *river fish'*
eiŋop	aromata	'k. *river snail'*
bauli	vauli	'k. *river snail'*
sîklîŋ	sikliŋ	'k. *river snail'*
bêgîmpu	...	'k. *river snail'*
kŋal	...	*'leech* (rare)'

Other non-basic vocabulary items that are Lusi borrowings from Anêm include natural phenomena, land animals, a few birds, arthropods and reptiles.

Anêm	Lusi	
zlzil	riril	*'rapids'*
les	les	*'waterfall'*

Anêm	Lusi	
moum	mauma	*'bandicoot'*
ŋenŋen	ŋenŋen	*'sugar glider'*
kilik	kilik	*'pygmy parrot'*
mêxiaŋ	meřiaŋ	*'hornbill'*
enik	enik	*'nest'*
did	riri	*'k. beetle'*
gumimi	ɣumimi	*'k. millipede'*
sîxgo	siřɣo	*'k. millipede'*
moxoxua	mořořuo	*'spider'*
tagxîŋ	taɣřiŋ	*'cicada'*
mîxmîx	miřmiř	*'k. wasp'*
nioxum	niořum	*'k. ant'*
kalakîx	kalakiř	*'k. landcrab'*
kŋaxe	kŋaře	*'k. landcrab'*
kiki	kiki	*'k. landcrab'*
tux	tuř	*'hermit crab'*
plîp	...	*'k. landsnail'*
alom	alom	*'green tree skink'*
uxuoxu	uřeřu	*'anglehead lizard'*
tiel	tiele	*'python'*
sakul	sakul	*'k. snake'*
tuxtux	tuřtuř	*'k. frog*

Probably the majority of plant names are similar in Lusi and Anêm. It is problematic, however, to decide the source language for each item. Many of the plants were impossible for me to identify; for these, I know only that the Anêm and Lusi words refer to the same plant. Few of the available wordlists and dictionaries of AN languages in the area are extensive enough to include entries for obscure plants. Nevertheless, by scanning the available sources, I have been able to compile a list of Anêm and Lusi equivalents which appear to have been originally Anêm. These are given below.

Anêm	Lusi	
uaŋge	ua	*'Inocarpus fagiferens'*
oxên	ořen	*'Ficus sp.'*
buanê	vona	*'Intsia bijuga'*
poi	puai	*'Eugenia malaccensis'*
naxas	nařes	*'Kentiopsis archontophoenix'*
amsexe	amseře	*'Hibiscus tileaceus'*
amoxu	amořu	*'Samanea saman'*

Anêm	Lusi	
tande	tade	*'Terminalia catappa'*
nuaŋ	noaŋ	*'Pometia pinnata'*
sisi	sisi	*'nettle tree'*[1]
axoi	ařoi	'k. *tree'*
biaux	viauřu	'k. *tree'*
bolo	volo	'k. *tree'*
boxbox	vořvoř	'k. *tree'*
kaxa	kaha	'k. *tree'*
ketal	katal	'k. *tree'*
kikli	kikli	'k. *tree'*
kîx	kiř	'k. *tree'*
oulo	aulo	'k. *tree'*
paxadi	pařari	'k. *tree'*
sal	sal	'k. *tree'*
sigli	siɣli	'k. *tree'*
su	su	'k. *tree'*
uales	wales	'k. *tree'*
glîk	ɣlik	'k. *tree'*[2]
alpei	alpei	'k. *tree'*
bal	vale	*'Rhisophora mucronata'*
axila	ahila	'k. *rattan'*
kexi	keři	'k. *rattan'*
lîŋîs	liŋis	'k. *vine'*
pîlîs	pilis	'k. *bamboo'*
tumbi	tubi	*'orchid'*
sîxêmsîxêm	siřemsiřem	'k. *fragrant herb'*
moxe	moře	'k. *croton'*

It should be borne in mind that this list could probably be multiplied many times if the services of a botanist could be enlisted. Hence, any errors included out of current ignorance of the neighbouring AN languages probably balance out in support of the hypothesis that Lusi has acquired a great proportion of its non-basic vocabulary in this domain from Anêm. This is in line with current observations that creoles tend to fill out their vocabularies by borrowing from the nearest available source language.

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[1]Cf. Anêm /sis/ *'pain'*.

[2]Inhaling the sap of this tree is said to cause vomitting. Cf. Anêm /-glîk/ *'to vomit'*.

4.5. *ANÊM /-gê-/ AND LUSI /-ka-/*

The verbs /-gê/ in Anêm and /-reɣa/ in Lusi fill at least three functions in the languages. First, they mark an incomplete inchoative aspect.

Anêm

u-gê do-pêg *'he is/was about to fall'*

Lusi

e-reɣa i-tapu *'he is/was about to fall'*[1]

Second, the verbs mark desiderative.

Anêm

aba	u-gê	do-t	aniŋa
pig	*he-want*	*he-eat*	*food*

'The pig wants to eat'

Lusi

ɣaea	e-reɣa[1]	i-ani	haniŋa
pig	*he-want*	*he-eat*	*food*

'The pig wants to eat'

Third, the verbs mark a quotation.

Anêm

u-t-î	kokxak	u-gê	na-k	nê-kêl	eidî...
he-send-him	*crow*	*he-say*	*you-go*	*you-see*	*earth*

'He sent the crow saying, "go look at the earth..."

Lusi

ti-posa	te-reɣa	veao	u-muɣa...
they-speak	*they-say*	*you*	*you-precede*

"They spoke saying, "You precede..." (Counts 1969:86)

In Anêm, the independent verb /-gê/ relates to a prefix /-gê-, -kê-/ which occurs with many bases to form a large number of peripheral vocabulary items. While /-gê-/ is more frequent, /-kê-/ occurs with several forms that are independent bases on their own.

Anêm

zi-ŋ-e	*'my urine'*
-ke-zi-ŋ	*'to urinate'*[2]
êslîk	*'torch'*
-kê-êslîk	*'to fish at night with a torch'*

---

[1] /-reɣa/ is the only verb in Lusi that occurs with /e-/ 'IIIs' instead of the regular verbal prefix /i-/, and /te-/ 'IIIp' instead of /ti-/.

[2] The vowel in /-kê-/ tends to assimilate to the following vowel more frequently and consistently than the vowel in /-gê-/.

On the other hand, /-gê-/ occurs with forms that have no independent status in the language; this is clear from the lists given below.

It is just barely possible to speculate that historically these forms were one in Anêm, for, elsewhere in the morphology, there is an apparent alternation between the phonemes /g/ and /k/, as, for instance, in /boŋ-g-a/ *'my mouth'* and /pom-k-a/ *'my chest'* where the alternation is not of allophones in free variation, but in arbitrary distribution that may at a previous stage in Anêm have correlated with some other feature that is no longer active. The distribution of /-gê-/ and /-kê-/ correlates with the position of stress - forms with /-gê-/ have stress on the first syllable after the prefix, while forms with /-kê-/ have stress on the prefix itself.

Anêm

-ké-zlŋ *'to urinate'*
-gê-ɓíŋ *'to be firm'*

This prefix is important in the study because Lusi has a prefix /-ka-/ which functions in a manner identical to Anêm /-gê-/. Taken as a group, Lusi forms with /-ka-/ are characterised by numerous final consonants, by many consonant clusters uncharacteristic of basic Lusi phonology, and by stress on the syllable after the prefix rather than on the penultimate syllable where it normally occurs in Lusi. Moreover, wherever Lusi has a form with /-ka-/, Anêm has a corresponding term with /-gê-/ with the phonological correspondences usually found between Anêm and Lusi borrowed items. In many cases, Anêm has a contrast which is collapsed in Lusi borrowings, because Anem contrasts back unrounded vowels with front vowels, while Lusi has front vowels for both Anêm series. Since it is unlikely that Anêm would develop a contrast to separate two lexemes that are homophonous in Lusi, such correspondences clearly indicate the direction of borrowing.

Anêm	Lusi	
-gê-klêŋ	-ka-kleŋ	*'rest horizontally'*
-gê-kleŋ	-ka-kleŋ	*'rattle, tinkle'*

Following the use of /-gê/ in Anêm as quotative, many of the forms with /-gê-/ in Anem and /-ka-/ in Lusi are onomatopoeic.

Anêm	Lusi	
-gê-gxoŋgxoŋ	-ka-γřoŋγřoŋ	*'rattle'*
-gê-koxkox	-ka-kořkoř	*'crackle'*
-gê-kxît	-ka-křit	*'ping'* (rope pulling apart under tension)
-gê-muxu	-ka-mořu	*'coo'* (pigeons)

Anêm	Lusi	
-gê-ŋasŋas	-ka-ŋasŋas	*'wheeze'*
-gê-ŋîsŋîs	-ka-ŋisŋis	*'sniff'*
-gê-ŋîx	-ka-ŋiř	*'growl'* (dogs)
-gê-ŋo	-ka-ŋo	*'buzz'* (flies)
-gê-potpot	-ka-potpot	*'cluck'* (chickens)
-gê-slusiu	-ka-siusiu	*'buzz'* (cicada)
-gê-têŋtêŋ	-ka-teŋteŋ	*'drip'*
-gê-txum	-ka-tř̃um	*'splash'*

From these, it could be argued that the Lusi have merely borrowed words that are appealing because of their illustrative association, however arbitrary, with the sound for which they stand. But, many other borrowings are found which have nothing to do with sound. Some refer to specific types of motion and often have reduplicated and plain forms with different but related meanings.

Anêm	Lusi	
-gê-mîl	-ka-mll	*'move'*
-gê-mîlmîl	-ka-milmll	*'swing back and forth'*
-gê-mît	-ka-mlt	*'move'*
-gê-mîtmît	-ka-mit	*'wiggle'*
-gê-bot	-ka-vot	*'float to surface'*
-gê-botbot	-ka-votvot	*'bob up and down at the surface'*
-gê-pîl	-ka-pil	*'land (canoe), lean'*
-gê-pîlpîl	-ka-pilpil	*'poke at'*
-gê-blok	-ka-vlok	*'enter (coitus)'*
-gê-plok	-ka-plok	*'withdraw (coitus)'*
-gê-kles	-ka-kles	*'slip, slide'*
-gê-klîp	-ka-klip	*'cover, block'*
-gê-blîk	-ka-vlik	*'flash'*
-gê-zip	-ka-rip	*'disappear quickly from sight'*

Still other forms refer to neither sound nor any motion.

Anêm	Lusi	
-gê-blak	-ka-vlak	*'weak, atrophied'*
-gê-bîŋ	-ka-viŋ	*'firm, secure'*
-gê-bxîk	-ka-vř̃ik	*'low, squat'*
-gê-kol	-ka-kol	*'lightweight'*
-gê-plis	-ka-plis	*'straight'*

Some of the correspondences are nct without problems, but a clear relationship between the forms of the two languages is nevertheless demonstrated.

Anêm	Lusi	
-gê-têk	-ka-teř	*'curve upward'*
-gê-têktêk	-ka-ketket	*'pop, crack'* (tree about to fall)
-gê-pu	-ka-puř	*'pop, explode'*
-gê-kup	-ka-γřum	*'lunge forward'*
-gê-sup	-ka-sum	*'glow faintly'*
-gê-leplep	-ka-lemlem	*'sparkle, shimmer'*

Other forms do not correspond except morphologically, but show the widespread occurrence of this prefix in both Anêm and Lusi.

Anêm	Lusi	
-gê-tlîktlîk	-ka-toktok	*'click tongue,* tsk*'*
-gê-zoxop	-ka-tom	*'plunge silently'*
-gê-bom	-ka-tik	*'stick in and stand up'* (spear in ground)

Whenever a form with /-ka-/ is found in Lusi, a form with /-gê-/ is always found in Anêm, but the reverse is not true. Since these forms originate in Anêm, they would be expected to occur in less peripheral vocabulary.

Anêm	
u-gê-pêkpêk	*'dawn'*
u-gê-sêksêk	*'morning'*
ado u-gê-sip	*'the sun is misted over'*

Lusi	
i-sesesařai	*'dawn'*
boŋboŋi	*'morning'*
aro i-rili	*'the sun is misted over'*

4.6. *SUMMARY*

At this stage in the investigation of Anêm and Lusi, it is clear that Lusi conforms to Ray's (1926) and Capell's (1943, 1962a) picture of a typical MNAN language. That is, when the Lusi vocabulary is examined as a whole, only a small number of words, mainly basic items and maritime items, are AN, and these are common throughout the AN area. The rest of the vocabulary consists of words that are not comparable to AN languages outside the immediate area. A significant proportion of this other vocabulary in Lusi can be demonstrated to be Anêm in origin. As stated in Section 4.1., a large number of words in Anêm and Lusi are clearly related but cannot be assigned an etymology on the basis of the currently available data. With greater accumulation of data on Anêm and Lusi and on the contiguous AN languages known now

only through short wordlists, an even greater proportion of the Lusi vocabulary may turn out to be etymologically Anêm.

By virtue of the Anêm-based items in Lusi, the phonological description of Lusi given in Counts (1969) must be revised to account for final consonants, initial consonant clusters and stress on other than penultimate syllables. In conjunction with the structural features discussed in Chapters 2 and 3, the phonological features of Lusi discussed in this chapter constitute evidence of an Anêm substratum in Lusi.

CHAPTER 5

IMPLICATIONS OF THE STUDY

5.1. *INTRODUCTION*

To this point, evidence has been presented to establish the following generalisations about Lusi:

1. It is structurally different from SAN languages.
2. It is structurally similar to Anêm.
3. It has the structural simplicity of a creole.
4. Its basic vocabulary is AN.
5. A significant portion of its non-basic vocabulary is derived from Anêm.

From these observations, it appears that Lusi is a creole which has developed from a pidginised AN language with an Anêm substratum. That Lusi has two postpositions and a prefixed possessive pronoun suggests that Lusi had been pidginised with a NGNAN language as substratum before its contact with Anêm.

Several pieces of information collaborate to suggest that the original AN settlers on the Kaliai coast whose contact with Anêm gave rise to Lusi were from the Siasi Islands. First, the Lusi language is related to Siasi (Chowning 1976). Second, the Siasi were traders with a sophisticated maritime technology that would have given them prestige in their original contact with the Anêm. The words for this technology, moreover, come from the same source in Anêm and Lusi. Third, the Siasi used a pidginised form of their own language, Tok Siasi haphap, in their trading ventures (Harding 1967:6, 203). Fourth, the Siasi are mentioned in Lusi mythology as culture-bearers.

Judging from the literature, it is unpopular to suggest that any AN language has been pidginised, yet, in the case of Lusi, this conclusion is attractive, adding support to the pidginisation hypothesis which accounts for the diversity of MNAN languages by positing that AN

languages have been pidginised throughout Melanesia with diverse NAN languages as substrata. This hypothesis has serious implications for current theories concerning linguistic change, diversification, and classification. In this last chapter, these implications are examined.

5.2. *MECHANISMS OF LANGUAGE CHANGE*

From written documents of European languages, it is obvious that languages change. By observing that children communicate with grandparents with little or no difficulty that can be attributed to differences in language, linguists working within the neogrammarian theoretical framework drew the conclusion that all language change is gradual, continuous, and largely imperceptible. It is this conclusion, and what logically follows from it, that I would like to take issue with here.

For neogrammarians, gradual change is seen to accumulate over centuries, especially where communication is hampered by physical or social barriers, so that relatively homogeneous languages break up first into dialects, and then, eventually, into separate languages. The repetition of this process is seen to be responsible for the diversity of the languages of the world. The basic assumptions of the model contain within them the logical trap of monogenesis.

Although the standard model is explicit, and a great deal of information has been collected on changes that have taken place in various language groups, the actual manner or mechanism of change remains somewhat mysterious, especially when extralinguistic factors are not taken into account. Part of the picture has been filled out by the sociolinguists. Bright (1964) attributes change in lower caste Indian dialects to borrowings from Brahmin dialects in an effort to imitate more elegant speech; in turn, the Brahmins borrow from literary Sanskrit to maintain their social distance from lower castes. Weinreich (1953) explains change as the result of borrowing from other languages through the medium of bilinguals who transfer syntactic patterns between the languages they know. Labov (1972) shows assimilation and dissimilation of speech patterns according to variables of formality, class membership, and group identity.

All of these studies account for the manner of change in language within an uninterrupted tradition, the kind of change consistent with the standard neogrammarian notions of gradual, continuous, imperceptible change leading to the diversification of languages. Although I would not deny that this kind of change does occur, I would counter that it is not the only kind of change in language; that pidginisation and creolisation are also processes central to the understanding of language

diversification.

Languages are not always transmitted from one generation to the next within a continuous tradition. Sometimes a new tradition is created, not gradually, but abruptly. This notion is dealt with in the literature under the concepts of "substratum" and "pidginisation", both dealing with essentially the same process, though in different degrees. Rarely, however, has the process been integrated into a general theory of language change.

There is nothing extraordinary about people learning and adopting as their own a second language which is not part of their ancestral tradition. Neither is it particularly rare for a whole population to learn a new language. What is rare, however, is for adults (especially) to learn a second language well enough to pass as native-speakers; usually, features of the mother tongue persist in the secondarily acquired language as a substratum. In certain social contexts (Hymes 1971), substrate features can be incorporated into that language to such an extent that the resultant new code constitutes a new norm, a break in the tradition. This phenomenon is usually ignored by neo-grammarians who proceed as though language were always transmitted across generations in a continuous tradition.

Studies of pidgins and creoles establish that this is not the case. For example, European-derived creoles are undeniably the result of the creation of new codes. Southworth's (1971) work in India shows that Marathi can be understood best as a reformulation of an Indo-European language with a Dravidian substratum. Ray (1926) and Capell (1943, 1962a, 1971, 1976a, 1976b) explain the diverse nature of MNAN languages saying that they are pidginised AN languages with diverse NAN substrata. The comparison of Anêm and Lusi given here confirms their hypothesis. Thus, far from being peripheral to the interests of historical linguistics, pidgins and creoles are central to the understanding of language change and diversification.

5.3. *GENETIC CLASSIFICATION*

Incorporation of pidginisation as a central process in language change has serious consequences for the genetic classification of languages; both the criteria used to establish the groupings and their meaning are at issue here.

To begin with, Greenberg (1974:60) and Capell (1969:9) state that a typological classification of languages is valuable in that it can show where to look for genetic relationships. The underlying assumption is that the overall structural organisation of a language is inherited along with vocabulary items in the normal processes of gradual language

change. The Lusi and Anêm data, however, show that two genetically unrelated languages can have similar structures. Thus, if genetic classification is the goal, preliminary typological classification can be extremely misleading. That MNAN languages are typologically closest to the nearest NAN languages is one of the major points of Capell (1969, 1971); with this in mind, it is confusing that he should believe at the same time that typological classification could be useful as an indicator of genetic affiliation. Furthermore, the AN languages include typologically diverse members; this is equally true of Indo-European.

Apart from the phonetic shapes of the morphemes expressing relationships, then, the basis of genetic classification has virtually nothing to do with grammatical structures. The most reliable criterion, and by far the most frequently employed to **prove** a genetic relationship is the establishment of systematic (and believable) sound correspondences among vocabulary items in two or more languages, such that it is possible to reconstruct protoforms. The reconstructed forms, moreover, must include basic vocabulary items to exclude the possibility of reconstructing items of a common substratum.

Swadesh's notion of basic vocabulary is important for genetic classification, but not for the reasons commonly given in the literature. Swadesh (1971) noticed that basic vocabulary items seem to persist for long periods of time in genetically related languages and concluded that they are the items most resistent to borrowing, the least likely to be replaced from other sources. Studies of pidginisation, however, indicate that the basic vocabulary items are the first to be transferred in the formation of a pidgin; that is, they are the most likely, almost inevitable items to be contributed to a contact language, because they are the words most urgently needed to maintain even rudimentary conversation. For this reason they give the appearance of persistence through gradual diversification of languages within a continuous tradition, when, in fact, they are merely the words that survive one process of pidginisation after another. For this reason, Lusi is still clearly AN, even though the data point to at least two processes of pidginisation leading up to its modern form.

In creolisation processes, non-basic vocabulary items are derived partly from the nearest available language, and partly by novel recombination of forms from the pidgin base itself. In the Pacific, if an AN language is creolised with another language which happens to be AN as well, then the resultant new language retains the appearance of a "fully" AN language, while evidence for the pidginisation process may be obscured. For example, Biggs (1965) points out that, in the

AN language of Rotuma, the AN component itself is composite, partly directly inherited and partly borrowed from Polynesian languages. Although Biggs would probably not suspect pidginisation here, it seems to be a likely place to look for it.

If an AN language is creolised with a NAN language, however, the result is a much more aberrant-appearing AN language. Moreover, different NAN substrata yield AN languages which appear to have little in common but basic vocabulary items: and repeated processes of pidginisation eventually erode away at even the basic vocabulary items to the extent that it may be difficult in some cases to actually recognise an AN language. This appears to be what is at issue in Capell's controversial proposal that some MN languages be classified as "semi-AN" (1962a). For the languages in this category, however, data are sparse; therefore, I tentatively agree with Chowning that:

> given adequate data, it is possible to decide a language is AN or not without having to use the intermediate category. (1969:21)

John J. Chew (personal communication) has pointed out that, in spite of massive borrowing from French, English is Germanic rather than Romance, because it is easy to construct an English sentence using only Germanic morphemes, whereas it would be a tour de force to do so using only Romance morphemes. The same test could be applied to those Melanesian languages whose AN or NAN status is in dispute. Rather than trying to judge the relative size of the contributions to a language from AN or NAN sources, a sample text would probably allow unambiguous classification in all problematic cases. The texts given in Appendix E show that Anêm, in spite of its borrowings from AN languages, is definitely NAN, while Lusi, in spite of its Anêm substratum, is clearly AN. These conclusions agree with those based on an examination of the Swadesh 100-word lists given in Appendix A.

If pidginisation is a normal process responsible for at least some language diversification, then several other corrolaries of the neogrammarian theory of gradual, continuous language diversification are also suspect. First, since new languages are created by pidginisation, not all languages are of equal age; that is, some languages are older than others. Not all modern languages (or probably not any languages) are representatives of continuous uninterrupted evolution from the primaeval ooze of language origins. Swadesh (1971:23) claims that language extinction is a rare event, that rather than dying, languages diversify and live on in their daughter forms. Although he notes the existence of pidgins, he considers them in the same class as "semiartificial languages" (1971:23), dismissing them from consideration

in his general theory of language diversification.

If pidgins are young languages, then a second problem is evident in language classifications based on the neogrammarian model - the possibility of a parent language co-existing with a daughter language. This is incompatible with the language-family tree and methods such as lexicostatistics and glottochronology that are popularly used to construct them. This has already been pointed out by Hall:

> It would seem that the 'normal' rate of lexical replacement assumed for glottochronology is not valid in case pidginization has intervened; and, since no one can tell whether this has been the case or not with languages whose previous history we do not know, the entire applicability of glottochronology to language families without documented history becomes doubtful. (1959:7)

Even without documentation, however, the absence of a pidginisation process cannot be assumed, because it is unlikely for the intermediate pidginised forms of languages to be recorded since they are not considered true languages by the people who use them. Only after creolisation is there a community for whom the language would be worthy of a writing system. Without major modification, moreover, the language-family tree diagram cannot reflect the information that a daughter language can be spoken contemporaneously with its parent language. For example, a tree diagram depicting the relationship among English, Tok Pisin, Beach-la-Mar, Sranan, and so forth would show English as a "dead" language; this is absurd.

A third question arises then, as to the meaning of genetic classifications. The prevailing notion is that the geographic area containing the highest degree of diversity in a language family is the origin of the language group and the homeland of its speakers. Particularly in the Pacific, genetic closeness in languages is often associated with genetic closeness of actual peoples; language classification becomes a sort of key to plotting movements and migrations of peoples on a map, with such unrealistic results as Dyen's (1971:13) proposal that the AN peoples be derived ultimately from a source in Eastern Melanesia or the Bismarcks. More on this later.

Related to the previous problem is a fourth difficulty with integrating the notion of pidginisation into the current neogrammarian model of change. Many linguists assume that language diversity is the result of great time depth, because a great amount of time is required for gradual accumulation of small changes to culminate in different languages. From this perspective, since Melanesia contains the most-widely divergent AN languages, they have to have been there longer than in other areas of the Pacific. When it is applied to Melanesia, the problems with this view are insurmountable: for instance, how to get

southeast Asian food plants dispersed with the AN languages from Melanesia when other evidence shows that they appear in Melanesia at a time too late for the proposed AN diaspora from Melanesia. It is much more sensible to explain the diversity of MNAN languages as the result of contact with diverse NAN languages than to posit extreme time depth.

Given the magnitude of disruption to the neogrammarian framework that pidginisation threatens, it is no great wonder that it has been opposed, sometimes venomously, by linguists and other anthropologists working in the Pacific. In the following section, several arguments supporting the pidginisation hypothesis are taken from the literature and discussed.

5.4. *THE PIDGINISATION HYPOTHESIS*

As discussed here, the pidginisation hypothesis refers specifically to the concept that the diversity of MNAN languages and their apparent deviation from other AN languages can be accounted for by positing that they have been pidginised and creolised by speakers of various, diverse NAN languages. The MNAN languages then, are AN languages with NAN substrata of various kinds and to varying degrees. (Excluded from this discussion are the so-called Polynesian Outliers which are Polynesian languages within the geographic area of Melanesia.)

First proposed by Ray (1926) and resurrected by Capell (1943, 1962a et al.), the pidginisation hypothesis has been the subject of severe negative criticism. Part of this is inevitable because of the sparsity of data, but some is the result of misunderstanding and misconception. It seems appropriate here to enumerate the observations supporting the pidginisation hypothesis.

First, the relative distribution of AN and NAN languages in Melanesia suggests that the AN languages are intrusive. The AN languages appear primarily on the smaller islands and on the coastal regions of the larger islands. The interior of New Guinea is populated solidly with NAN-speakers, while on New Britain and some of the larger islands of Eastern Melanesia, NAN languages appear as spotty remnants mostly in the interiors and nearly swamped by AN languages. This distribution suggests that NAN languages were once more widespread and presumably excluded AN languages totally on all the inhabited islands of Melanesia.

Second, the surviving NAN languages are extemely diverse, both in structure and in lexicon. While providing a convenient framework around which to organise the NAN languages, Capell's (1969, 1971) generalisations about them simplify the picture almost to the point of

distortion. Since no proto-forms can be reconstructed, Greenberg's (1971) Indo-Pacific Hypothesis which lumps all the NAN languages of Melanesia together with Andamanese and Tasmanian, seems to be more wishful thinking than fact. This autochthonous NAN diversity persists not only in the surviving NAN languages, but also in the substrata of the MNAN languages.

Third, because of this underlying NAN diversity, the AN languages of Melanesia are the most diverse of any AN languages. Dyen's (1965) lexicostatistical classification of AN results in most of the immediate branches occurring exclusively in Melanesia. Following from the neogrammarian corollary that the area of the highest order of diversity is the homeland of the group, Dyen and others propose that Melanesia is the homeland of the original Austronesians. This theory creates many more problems than it solves. In terms of physical anthropology, it would be impossible to derive the peoples of the rest of the AN area from Melanesia (Howells 1973), much less explain:

> ...why Austronesian languages, originating in the New Guinea-Bismarcks region, should have been able to prevail throughout Indonesia, an area by that time of more advanced culture, while they did not more strongly overrun the Papuan [=NAN] languages so close at hand. (Howells 1973:97)

Within the neogrammarian framework, the development of such diversity in the MNAN languages would also take an inordinate amount of time if this were to be accomplished in situ by the accumulation of slow, continuous, imperceptible changes, particularly in view of Ray's observation that:

> The languages recorded by the Spaniards in the Solomon Islands in 1568 are heard in the same places with little change at the present time after a lapse of nearly four centuries. (1926:2)

The pidginisation hypothesis, on the other hand, simultaneously allows for the rapid linguistic change that must be posited and accounts for the diversity by pointing to the diversity in even the surviving NAN languages, not to mention the NAN languages that must have become extinct with the spread of AN languages.

A fourth observation in support of the pidginisation hypothesis is that MNAN languages tend to be structurally simpler than either SAN or NAN languages. According to Capell, the languages spoken by the Negritos who live in the highlands of the Philippines are "structurally by far the most complicated of the AN languages" (1962a:379). In comparison, the MNAN languages are simple; that is, they have few morphophonemic processes and few obligatory formal distinctions. Simplicity, in this sense, is one of the most salient features of pidgins and creoles.

A fifth observation which makes the pidginisation hypothesis attractive is that MNAN languages tend to be typologically most similar to the nearest NAN languages where the latter have survived. This is shown in broad outline by Capell (1969, 1971, 1976a) and by the data presented here on Anêm and Lusi. The notion to be inferred from this is that the peculiarities of individual MNAN languages can be attributed to NAN substrata which differ from place to place.

As a sixth factor suggesting pidginisation in the AN languages of Melanesia, it is notable that, particularly in the AN languages of Eastern Melanesia, the number of identifiable AN cognates tends to be "in inverse proportion to the size of the island on which settlement took place" (Capell 1962a:394). That is, AN languages on small islands have more AN cognates than do AN languages spoken on large islands. The explanation here is that settlers on small islands would have fewer indigenous NAN-speakers to assimilate and therefore the degree of substratum would be proportionally less. From this perspective, the Polynesian Outliers are understood as the descendents of Polynesians who, because of their superior maritime technology, were able to settle on tiny islands, uninhabitable by NAN-speaking Melanesians, and maintain their language without a pidginisation process. Since most, if not all Polynesia was uninhabited before settlement by the Polynesians themselves, the relative homogeneity of the Polynesian languages in comparison with other AN languages is attributable to the absence of any substrata.

Finally, according to Schmitz, "there is a cultural continuum between Polynesia and Micronesia and Southeast Asia which does not touch New Guinea and Melanesia" (1962:419). Furthermore, there is evidence indicating that, although the Melanesians are internally diverse in terms of their physical anthropology, they are distinct from the surrounding islanders (Howells 1973, Simmons 1968). The inference to be drawn from this extralinguistic information is that, although the initial groups of AN-speakers settling Melanesia must have been physically and culturally distinct from the indigenous NAN-speaking Melanesians, they were both culturally and physically absorbed. Subsequently, reformulated AN languages and cultures were carried around by peoples who were physically Melanesians.

To me, the evidence supporting the pidginisation hypothesis is compelling. The theory accounts for the diversity of MNAN languages and for their relatively simple structures in comparison with either SAN or NAN languages without violating the ethnographic and physical data on the area. The pidginisation hypothesis also avoids the problems created by the neogrammarian approach to language change and

diversification.

The neogrammarian method employed in comparative-historical linguistics tends to cull out the data that would otherwise support the pidginisation hypothesis. For example, a linguist interested in constructing a genetic tree for the AN languages of a particular area **starts** by eliminating the NAN languages from consideration, then proceeds by discarding NAN etyma and structures as irrelevant to the task. The focus is on identifying AN material for comparison with other AN material. Books and articles dealing with the languages of a particular district of Melanesia usually have two sections - one for AN, another for NAN - which treat the two categories separately as though their contiguity were unimportant. Hence, except for Capell (1943, 1969, et al.), there is little accumulation of data on the kinds of relationships shared by contiguous AN and NAN languages. Even Ray (1926) who proposes NAN substrata for Eastern Melanesian AN languages makes no other mention of the NAN languages in the area. To me, this is a classic case of the assumptions of a model directing the investigator in such a way that he/she cannot be confronted with anomalous data.

5.5. *CONCLUSION*

Because of the paucity of data available on Melanesian languages in general, this thesis is built upon an admittedly limited picture of the linguistic situation in West New Britain. There is little information on the languages of the Lamogai family contiguous with Anêm and Lusi, and little data is available on the Siasi language family. Both areas of knowledge would be relevant to the present study. It is hoped that future publications will ameliorate this unfortunate situation.

In addition, in order to provide a wider base of support for the pidginisation hypothesis, more case studies are needed to look for suggestions of pidginisation in AN languages spoken in areas contiguous with NAN languages. This requires that AN and NAN data from the same area be investigated together instead of separately.

APPENDIX A

100-WORD SWADESH LIST

The following list of 100 basic vocabulary items is taken from Swadesh (1971:283). Each item is accompanied by Anêm and Lusi translations and proto-forms reconstructed for PAN, POC or other subgroupings of AN represented in Wurm and Wilson (1975). The reconstructions are given only to demonstrate the AN status of particular Lusi items. The assumption here is that to have been reconstructed as a proto-form, the items must appear frequently in AN languages outside the West New Britain area. This does not assume that each item on the Lusi list with a corresponding AN reconstruction represents a direct inheritance. Such a leap would require a massive accumulation of data that does not yet exist.

Anêm verbs and nouns are shown with pronominal suffix class codes according to the scheme outlined in Appendix B.

	Anêm	Lusi	reconstruction
I	ue	viau	*au
you (s)	nin	veao	...
we (In/Ix)	miŋ/mîn	teita/viai	*tai+*ta/...
this (m/f)	ler/ser	ne	*eni
that (m/f)	lan/san	na	*ena
who?	mên	sei	*nsai
what?	gîmên	saua	*nsapa
not	mantu	mao	...
all	buno	salai	...
many	buno	salai	...
one	mîdê	ere	*isa
two	niak	řua	*rua
big	omba	pařoŋa	...
long	sêgêl	vořu	...
small	boid	kahaku	...
woman	dobalîŋ	tamine	*babinay
man	axaŋ	tamone	*ŋmane
person	doxam	tanta	*taŋmata
fish	la	lha	*ikan
bird	êknîn	manu	*manuk
dog	kaua	kaua	*ŋkaun
louse	seim	tuma	*tuma
tree	aŋ	avei	...
seed	lali-k-3	puapua	*buaq
leaf	ki-l-2r	launi	*ndaun
root	zilŋon-2	wařaři	...
bark	palau-g-3	kukuli	*kulit *'skin'*
skin	palau-g-3	kukuli	*kulit
flesh	be	meřameřa	*meRa *'red'*
blood	esin	siŋi	...
bone	exe-k-3	tuatua	...
grease	êmzêk	veve	...
egg	nil- -2	kakatolu	*toluR
horn	...	...	...
tail	taba	hihiu	*hikuR
feather	ki-l-2r	launi	*ndaun *'leaf'*
hair	ki-l-2r	launi	*ndaun *'leaf'*
head	og-l-2r	rava	...

	Anêm	Lusi	reconstruction
ear	gêt-3	taŋa	*tallŋa
eye	ei-l-lr	mata	*mata
nose	pɪŋl-lr	nuru	*usu ?
mouth	boŋ-g-3	awa	*awaŋ
tooth	lo-g-3	luo	*lipon ?
tongue	êlêŋ-g-3	mae	*maya
claw	gl-s-lr	tal	...
foot	tl-g-3	ahe	*wahay
knee	bol-s-lr	volvolu	...
hand	tîm-n-l	lima	*lima
belly	êtêl-k-3	apo	*kəmpuŋ ?
neck	agîm-k-3	ɣaɣaull	...
breasts	i-l-4	turu	*susu
heart	dokam-k-3	wasu	...
liver	êl-k-3	atete	*atay
drink	-ik	-unu	*inum ?
eat	-Ø-4	-ani	*kani
bite	-ŋai	-ŋotu	...
see	-kê-l-2r	-kona	...
hear	-degiŋ-k-3	-loŋo	*loNo
know	-pun-lr	-watal	...
sleep	-sêm/-tel	-eno	*eno
die	-zik/-lkîl	mate	*matay
kill	-b-3/-pel-4	-řau	*sapu ?
swim	-us	-waia	...
fly	-iê	-řořo	...
walk	-li	-lalao	*lakaw
come	-mên	-nama	...
lie	-sêm/-tel	-eno	*eno *'sleep'*
sit	-sîk/-sîl	-řoa-	...
stand	-lîk/-lul	-ɣunu-	*Gini ?
give	-sn-lr	-pa-	*panl
say	-ual	-posa	[Bau /vosa/]
sun	ado	aro	*qanso
moon	klîŋ	talko	...
star	eilî	motala	*(ma)-ntala ?
water	komu	eau	...

	Anêm	Lusi	reconstruction
rain	iuo	awaɦa	*qunsan ?
stone	pa	patu	*batu
sand	iabu	iavu	...
earth	eidî	tano	*tano
cloud	olok	vuvuɦi	...
smoke	bîl	vosu	...
fire	kmî	riŋa	[Bau /siga/ *'dry'*]
ash	goxub	kahu	...
burn	-pma-d-4	-tunu	*tunu
path	iuŋ	erapu	...
mountain	êbêt	lusi	...
red	êxiêk	siŋsiŋia	...
green/blue	biê	viviriŋa	*bi/r/uh+*siŋa(R) ?
yellow	iaŋo	voivore	*boRaboRa ?/*yaŋo
white	iagu	kaŋkaŋa	...
black	kŋîx	asosoŋa	...
night	nib	voŋi	*mbəŋi
hot	êŋîl	wanana	*panas
cold	epen	pupuli	...
full	êpêx	-onu	*pənuh
new	masîk	pau	*baRuh
good	ieim	poea	...
round	puax	kapoŋa	*kəpuŋ
dry	pît	misi	...
name	eŋi-ir	era	*qansan

APPENDIX B

ANÊM AND LUSI PRONOMINAL AFFIXES

1. ANÊM PRONOMINAL PREFIXES

The pronominal prefixes in Anêm mark subject and occur only with verbs. They make distinctions in person, number, gender, and mood. Singular and plural are distinguished in all persons; masculine and feminine are distinguished in the third person singular only; and, unlike AN languages, there is no distinction between inclusive and exclusive in the first person plural. Realis and irrealis (Q) forms occur for all persons. In addition, there is a third person imperative which makes no distinctions of number or gender.

	Realis	**Irrealis**
Is	a-	da-
IIs	nî-, ni-	nê-, ne-, no-, na-
IIIm	u-	do-
IIIf	i-	dê-, de-
Ip	mî-, mi-	mê-, me-, mo-
IIp	ŋî-, ŋi-	ŋê-, ŋe-, ŋo-
IIIp	i-	dê-, de-, do-
IIIimp	...	o-

In each case where there are allomorphs, these are largely conditioned by phonological rules of regressive vowel assimilation, such that the vowel of the prefix assimilates in tongue position (front or back) and in lip rounding to the vowel in the syllable immediately following in the same word.

Anêm

eni	**de-Ø-nis**
devil	QIIIf-*eat*-In

'The devil will eat us'

Anêm

eni	dê-Ø-ŋî̂t
devil	QIIIf-*eat*-IIp

'The devil will eat you'

Where there is no vowel in the stem, or where the vowel is /a/, the base form, given first, occurs. The form /na-/ 'IIs' appears to occur only with /-k/ *'go'* an irregular verb which occurs also with the unexpected forms /mo-, ŋo-, do-/ in the plural irrealis.

The irrealis can be derived from the realis by two rules:

1. /d-/ is prefixed to all forms beginning with a vowel; and
2. all high vowels are lowered to mid vowels.

2. LUSI PRONOMINAL PREFIXES

Except for the third person singular possessive prefix (Section B.4), treated here as though it were a suffix, pronominal prefixes in Lusi, as in Anêm, the Lusi prefixes make no distinctions in gender or mood and, with only one exception, have no allomorphic variants. This exception is /e-/ 'IIIs' which occurs only with /-reɣa/ *'want'* instead of the regular /i-/; this is the only verb with an irregular prefix that I am aware of in Lusi. The third person imperative is indistinct from the third person singular. Unlike Anêm, Lusi has a distinction between inclusive and exclusive in the first person plural. Thus, there are seven possible pronominal prefixes in Lusi.

Is	ŋa-
IIs	u-
IIIs	i-
In	ta-
Ix	via-
IIp	a-
IIIp	ti-

3. ANÊM PRONOMINAL SUFFIXES

The Anêm pronominal suffixes mark possessives with nouns and objects with verbs. Except in minor details, the same sets are used with nouns as with verbs. There are several sets, each conditicned morphologically, in an almost totally arbitrary way, by the stem with which it occurs.

Most of the suffixes in Anêm are composed of two segmentable morphemes. On the basis of the final morpheme, which makes distinctions of person, number, and sometimes gender, four major classes are

identified; these are reflected in the identification code, numbered 1 to 4. The morpheme preceding this, usually a single consonant in form, distinguishes sub-sets of the four major categories. In the code, this is merely reproduced. Some paradigms have /-ir/ and /-er/ instead of the expected /-î/ and /-ê/ respectively for the second person singular; in the code for these, an /r/ is placed after the class number; for example, s-1r, 1-2r. Except for the second person singular, these 'r-classes' are identical in all other persons to the class without the /r/ in the code.

The following charts show the pronominal suffixes used as possessives with exemplary nouns. I have no confidence that this constitutes an exhaustive account of the possible paradigms in Anêm. The charts are arranged with the class code at the top, over a gloss for the exemplary noun given immediately below.

	Ø-1 *'lime powder'*	n-1 *'father'*	1-1r *'eye'*
Is	glîm-i	tita-n-ai	ei-1-i
In	glîm-iŋ	tita-n-iŋ	ei-1-iŋ
Ix	glîm-în	tita-n-în	ei-1-în
IIs	glîm-î	tita-n-î	ei-1-ir
IIp	glîm-îŋ	tita-n-îŋ	ei-1-îŋ
IIIm	glîm-u	tita-n-u	ei-1-u
IIIf	glîm-îm	tita-n-îm	ei-1-îm
IIIp	glîm-î	tita-n-î	ei-1-î

	Ø-1r *'shin'*	s-1r *'knee'*	u-1 *'garden'*
Is	ob-i	bol-s-i	nan-u-i
In	ob-iŋ	bol-s-iŋ	nan-u-iŋ
Ix	ob-în	bol-s-în	nan-u-în
IIs	ob-ir	bol-s-ir	nan-u-î
IIp	ob-îŋ	bol-s-îŋ	nan-u-îŋ
IIIm	ob-u	bol-s-u	nan-u-u
IIIf	ob-îm	bol-s-îm	nan-u-îm
IIIp	ob-î	bol-s-î	nan-u-î

	Ø-2 *'spouse'*	l-2 *'firewood'*	l-2r *'head'*
Is	d-e	aŋ-l-e	og-l-e
In	d-eŋ	aŋ-l-eŋ	og-l-eŋ
Ix	d-ên	aŋ-l-ên	og-l-ên
IIs	d-ê	aŋ-l-ê	og-l-er
IIp	d-êŋ	aŋ-l-êŋ	og-l-êŋ
IIIm	d-o	aŋ-l-o	og-l-o
IIIf	d-êm	aŋl-êm	og-l-êm
IIIp	d-ê	aŋ-l-ê	og-l-ê

	ŋ-2 *'child'*	k-2 *'dog'*	ak-2 *'skirt'*
Is	gi-ŋ-e	kaua-k-e	didu-ak-e
In	gi-ŋ-eŋ	kaua-k-eŋ	didu-ak-eŋ
Ix	gi-ŋ-ên	kaua-k-ên	didu-ak-ên
IIs	gi-ŋ-ê	kaua-k-ê	didu-ak-ê
IIp	gi-ŋ-êŋ	kaua-k-êŋ	didu-ak-êŋ
IIIm	gi-ŋ-o	kaua-k-o	didu-ak-o
IIIf	gi-ŋ-êm	kaua-k-êm	didu-ak-êm
IIIp	gi-ŋ-ê	kaua-k-ê	didu-ak-ê

	Ø-3 *'ear'*	k-3 *'chest'*	g-3 *'mouth'*
Is	gêt-a	pom-k-a	boŋ-g-a
In	get-iŋ	pom-k-iŋ	boŋ-g-iŋ
Ix	gêt-în	pom-k-în	boŋ-g-în
IIs	gêt-îr	pom-k-îr	boŋ-g-îr
IIp	gêt-îŋ	pom-k-îŋ	boŋ-g-îŋ
IIIs	gêt-î	pom-k-î	boŋ-g-î
IIIp	get-i	pom-k-i	boŋ-g-i

	Ø-4 *'tobacco'*	i-4 *'pork'*	d-4 *'mat'*
Is	uas-at	aba-i-at	mîk-d-at
In	uas-nis	aba-nis	mîk-d-nis
Ix	uas-nit	aba-nit	mîk-d-nit
IIs	uas-ir	aba-ir	mîk-d-ir
IIp	uas-ŋît	aba-ŋît	mîk-d-ŋît
III	uas-it/-il	aba-it/-il	mîk-d-it/-î

	m-4 *'sore'*	moi-4 *'smell'*
Is	beta-m-at	to-moi-at
In	beta-m-nis	to-mo-nis
Ix	beta-m-nit	to-mo-nit
IIs	beta-m-îr	to-mo-r
IIp	beta-m-ŋît	to-mo-ŋît
III	beta-m-ît/-îl	to-mo-t/-l

	Unique *'skin'*	Unique *'buttocks'*
Is	amat	siexi
IIs	amor	siêxê
IIIm	omot/omol	sioxu
IIIf	omot/omol	siêxêm

	Unique *'buttocks'*	Unique *'faeces'*
Is	pelexi	plexi
IIs	pelêxîr	plêxê
IIIm	peloxu	ploxo
IIIf	pelêxîm	plêxêm

The use of Anêm pronominal suffixes to mark objects with verbs is shown in the following partial paradigms. No attempt is made to show all the possible forms or classes.

Anêm

u-sn-i	*'he gave (it) to me'*	Ø-lr
u-sn-ir	*'he gave (it) to you'*	
u-sn-u	*'he gave (it) to him'*	
u-sn-îm	*'he gave (it) to her'*	

Anêm

u-ke-l-e	*'he saw me'*	l-2r
u-ke-l-er	*'he saw you'*	
u-ko-l-o	*'he saw him'*	
u-kê-l-êm	*'he saw her'*	
u-b-a	*'he hit me'*	Ø-3
u-b-îr	*'he hit you'*	
u-b-î	*'he hit him/her'*	
u-uai-k-a	*'he is talking about me'*	k-3
u-uai-k-îr	*'he is talking about you'*	
u-uai-l-e	*'he is talking to me'*	l-2r
u-uai-l-er	*'he is talking to you'*	
u-sama-d-at	*'he is looking for me'*	d-4
u-sama-d-ir	*'he is looking for you'*	
u-be-l-at	*'he touched me'*	i-4
u-be-ir	*'he touched you'*	

4. LUSI PRONOMINAL SUFFIXES

Unlike Anêm, Lusi has two sets of pronominal suffixes, one marking possessives with nouns, the other marking objects with verbs. In nouns, three classes are distinguished on the basis of what the affix is attached to. With nouns for body parts and a few other items, suffixes are attached directly to the stem. For edible objects, the suffixes occur with the preposed particle /a/. For neutral objects, the suffixes occur with the preposed particle /le/. In the third person singular, there is a prefix instead of the expected suffix; it has the form /ai-/ with body parts and edible objects, but /e-/ with the particle /le/ marking neutral objects.

In the verbal suffixes, the third person singular has three allomorphs /-ni, -l, Ø/ which seem to be conditioned morphologically by the stem of the verb.

As with pronominal prefixes, the Lusi pronominal suffixes distinguish inclusive from exclusive in the first person plural forms.

	possessives	objects
Is	-ɣu	-ɣau
IIs	-mu	-ɣo
IIIs	ai-, e-	-nl, -i, Ø
In	-ra	-ɣita
Ix	-mai	-ɣai
IIp	-mi	-ɣimi
IIIp	-ri	-ri

APPENDIX C

ANÊM AND LUSI PHONOLOGY

1. ANÊM PHONOLOGY

A more detailed outline of Anêm phonology is given in Thurston (1976); here, only a brief summary is provided to act as a guide for the reader.

Anêm Consonant Phonemes

bilabial	alveolar	velar	
/p/	/t/	/k/	voiceless stops
/b/	/d/	/g/	voiced stops
/m/	/n/	/ŋ/	nasal resonants
	/l/		lateral resonant
	/r/	/x/	trills
	/s/		voiceless fricative
	/z/		voiced fricative

The stops and nasals are articulated at the bilabial, alveolar, and velar positions. /b d g/ have fricative allophones that occur with increasing frequency in intervocalic position and in rapid speech. /d/ alternates freely with /r/ in some words of the NAN stratum in Anêm, but contrasts with /r/ in other words, particularly those borrowed from Tok Pisin and AN languages. /x/ is articulated in post-velar position. /r x/ have voiced and voiceless allophones which assimilate in voice to the environment. /z/ ranges widely from alveolar to palatal and from fricative to affricate, the latter tending to occur in utterance-initial position. The other consonants have their expected values.

Anêm Vowel Phonemes

front unrounded	back unrounded	back rounded	
/i/	/ɨ/	/u/	high
/e/	/ê/	/o/	mid
	/a/		low

The high vowels assimilate slightly forward or backward to vowels in the following syllables. They also have non-syllabic allophones immediately before or after other vowels. /ɨ/ is not attested in word-initial position. The back unrounded vowels are restricted in occurrence to words of the NAN stratum of Anêm.

The canonic shape of the Anêm syllable is (C/TR) V (C), where C represents any consonant, T any stop, R any resonant or trill, and V any vowel. The occurrence of stress remains to be fully analysed, but in general, it tends to occur most frequently in penultimate position on isolated words. This, however, is subject to other rules in which the stress is moved from one syllable to another as the result of conditioning by other morphemes. For example, /ǎdo/ *'sun'* has stress on the first syllable when uttered alone, but on the second when immediately preceding /nɨŋê/ as in /adǒ nɨŋê.../ *'now that it was daytime...'*. Stress is not attested as phonemic.

2. LUSI PHONOLOGY

Details of Lusi phonology are given in Counts (1969). The orthography used by Counts is slightly revised here for convenience. His /β ^{m}b ^{n}d ^{ŋ}g/ are replaced here with /v b d g/ respectively.

Lusi Consonant Phonemes

bilabial	alveolar	velar	
/p/	/t/	/k/	voiceless stops
/b/	/d/	/g/	prenasalised voiced stops
/v/	/r/	/ɣ/	voiced slit fricatives
/m/	/n/	/ŋ/	nasal resonants
	/l/		lateral resonant
	/r̆/		voiced trill
	/s/		voiceless groove fricative
		/h/	voiceless glottal fricative
/w/			semi-vowel

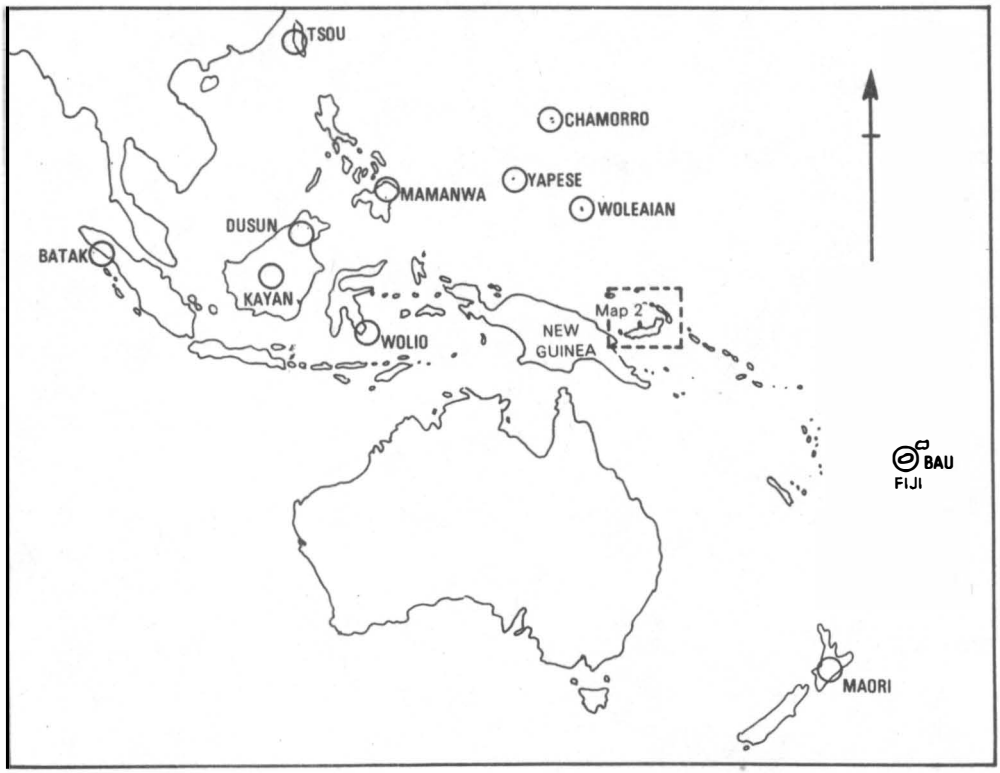
Lusi Vowel Phonemes

front unrounded	central	back rounded	
/i/		/u/	high
/e/		/o/	mid
	/a/		low

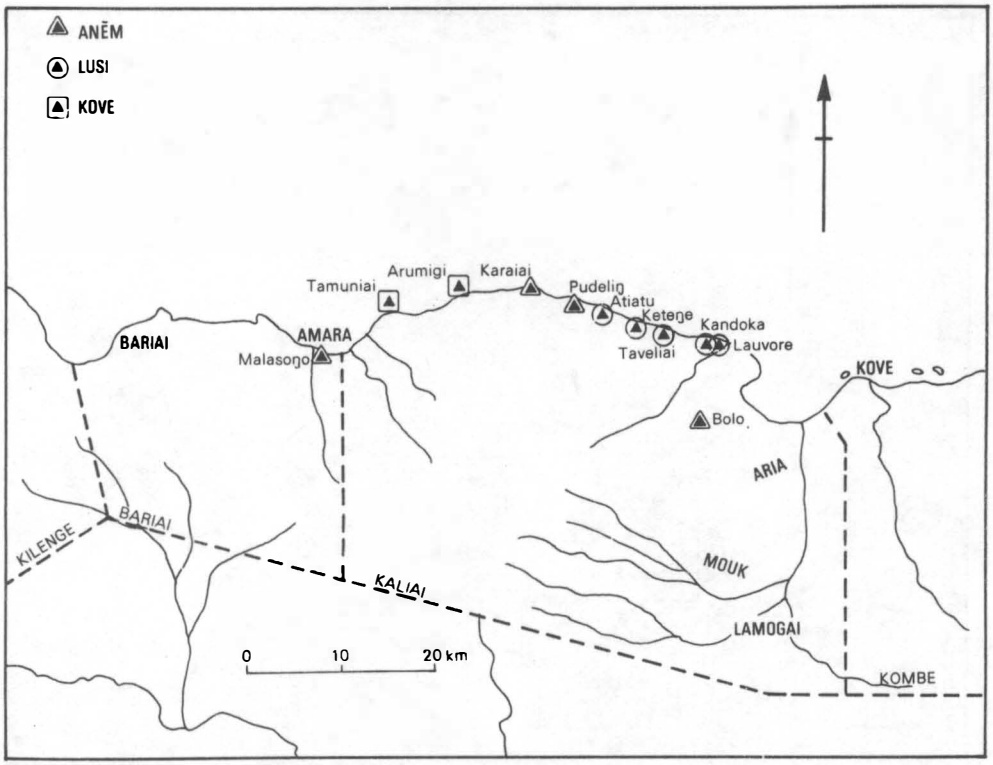
The linear phonemes given in the above two charts have the expected values as described. The canonic shape of the basic Lusi syllable is (C) V, without initial consonant clusters or final consonants. In words of Anêm origin, however, the shape TRVC is common. Except in words of Anêm origin, stress tends to be penultimate, but in Anêm borrowings, the stress occurs on the same syllable as it does in the Anêm word pronounced in isolation.

APPENDIX D

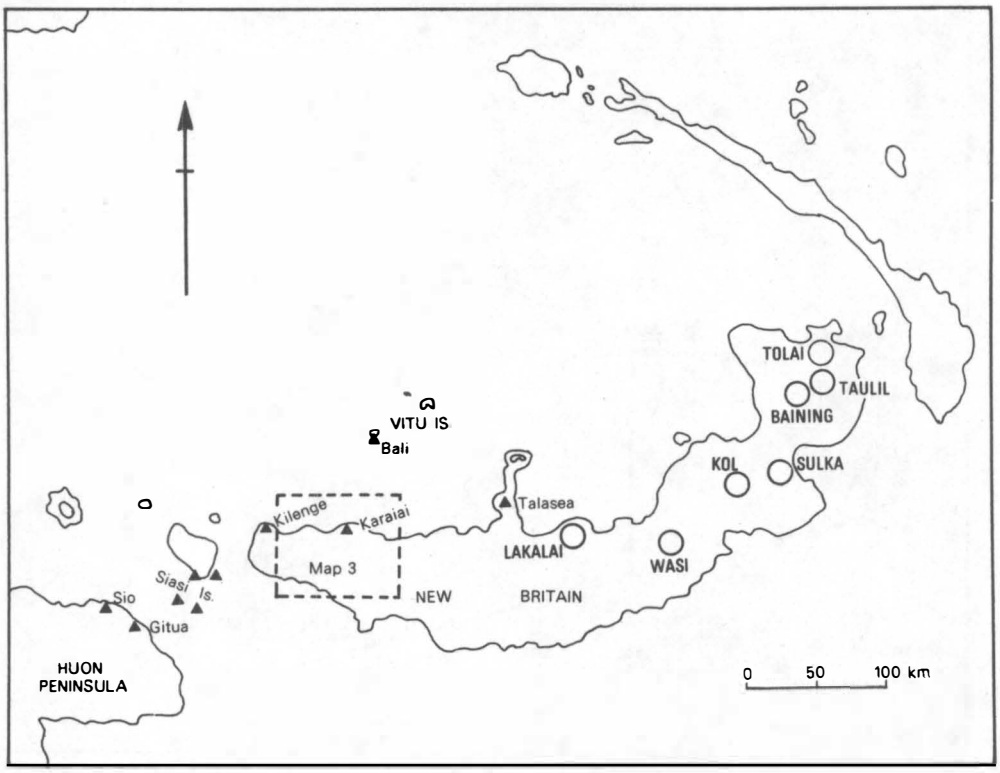
1. THE AUSTRONESIAN AREA



2. THE BISMARCK ARCHIPELAGO



3. THE KALIAI CENSUS DIVISION



APPENDIX E

SAMPLE TEXTS

1. LUSI TEXTS

The following text in Lusi consists of several excerpts from a history of Gavu Sae, one of the patrilineal groups in Kandoka. It is told by Jakob Mua, a man living in Kandoka, in 1967. The text was kindly provided by David and Dorothy Counts, and was translated with the aid of Rick Goulden.

1. ... iro i-otu pa-ni tuvuřu tonarawa.
   spear it-appear in-it area yonder

2. ti-pa-řau ŋa-ni iro sa ti-karo
   they-causative-*fight with-it spear and they-make*

3. ɣa mao. tanta paroŋa ai-era Avio i-vovo-ri
   and not man big his-name Avio he-call-them

4. e-le ɣarlu sa ti-lupu. i-vovo-ri
   his warriors and they-gather he-call them

5. ai-tatari asiri ai-natnatu ti-lupu i-posa
   his-brothers they his-sons they-gather he-speak

6. pa-ri i-posa ɣa e-reɣa, "teita lovone
   to-them he-speak and he-say we(In) *now*

7. ta-moro poea mao. pa-ni ai-lala rio ɣerawa
   we-live good not in-it its-time down there

8. i-nama rawa, ta-moro poea. lovone taune
   it come there we-live good now place

9. riene iro i-otu pa-ɣita ... romo-ɣu
   this spear it-appear to-us(In) *face-my*

10. i-maŋamaŋa ɣasa ta-kamaro ... sa ta-lalao
    it-crazy then we-how so we-walk

11. ta-kona tuvuřu ere poea ta-moro pa-ni."
    we-see area one good we-live in-it

12. io, i-kaka-ri e-le ɣariu ti-lalao.
    alright he-rouse-them his warriors they-walk

13. ti-lalao pa-ni erapu ɣa ti-rio ɣa
they-walk on-it road and they-descend and

14. ti-nama, ti-visi ɣariu ɣa iro tomo
they-come they-take shield and spear together

15. ŋa-ni.... ti-rae tutui pa-ni lusi
with-them they-ascend straight to-it mountain

16. rerava Gavu.... voŋi ti-karo luma
peak Gavu night they-make house

17. aɣia ɣa ti-eno. boŋboŋi ti-voko pare.
ginger and they-sleep morning they-work again

18. sa tanta paroŋa ere Gavu aea ai-era Kaoř̃oko,
and man big one Gavu from his-name Kaoř̃oko

19. Kaoř̃oko Pař̃au, e-reɣa i-lalao mahawa ɣa
Kaoř̃oko Fight he-want he-walk merely and

20. i-la, ai-taŋa e-reɣa i-la i-loŋo-ni
he-go his-ear it-want it-go he-hear-it

21. kavasi patu i-ɣuɣutu avei i-puputu-i
axe stone it-sound tree they-break-themselves

22. ɣa i-ririo tonarawa. "pana sapara ne
and they-fall yonder people who these

23. ti-heri avei i-ririo pa-ni le-ɣu saru?
they-chop tree they-fall in-it my jungle

24. le-ɣu saru ado ɣa ado pana ti-lalalao
my jungle day and day people they-walk

25. pa-ni mao.... ŋa-lalalao ŋa-veta-ri pana
in-it not I-walk I-ask-them people

26. ne muɣa." io, i-lalalao ɣa i-rae
these first alright he-walk and he-ascend

27. i-otu pa-ri. asiri mata-ri i-nama
he-appear to-them they eye-their they-come

28. ti-kona, eai i-kona-ri pare. sa
they-see-him he he-see-them too and

29. ti-watai Gavu le-ri posa-ŋa mao.
they-understand Gavu their language not

30. eai i-watai asiri le-ri posa-ŋa mau
he he-understand them their language not

31. pare. ti-posa ŋa-ni lima-ri. ti-rae
too they-speak with-them hand-their they-arise

32. i-veta-ri, "amiu a-la sora ɣa a-nama?"
he-ask-them you(IIp) you-go where and you-come

33. sa asiri i-rio ti-posa ŋa-ni
and they he-go-down they-speak with-them

34. lima-ri ɣa i-nama pa-ni te-reɣa, "viai
hand-their and they-come to-him they-say we(Ix)

35. via-kaka-ɣai pa le-mai tuvuř̃u sasi ɣaneane
we-start-ourselves in our area bad this-here

36. ɣa via-nama ne. pana salai ti-mate,
and we-come here people many they-die

37. tamine salai ti-mate, kekele salai ti-mate,
woman many they-die child many they-die

38. ŋa-ni iro.... lovone ŋa-kaka-ri le-γu γariu
by-it spear now I-rouse-them my warriors

39. γa via-hawa γa via-nama ne." ...
and we-flee and we-come here

40. io, Kaoř̃oko Pař̃au erawa i-rio i-varo
alright Kaoř̃oko Fight that he-descend he-talk

41. e-reγa, "o tari-γu! poea tao. poea γa
he-say oh brother-my good very good and

42. u-nama...."
you-come

Translation:

(1) ... *There was war in that area.* (2) *They fought with spears until they were* (3) *finished off. A bigman by the name of Avio called* (4) *his warriors together. He called* (5) *together his brothers and sons and spoke* (6) *to them saying, "We, today,* (7) *are not living well. In former times,* (8) *we lived well, but today in this place,* (9) *war has come to us....* (10) *I am distraught, what are we to do? ... Let's walk* (11) *and find a good place to live in."* (12) *So he got his warriors to leave.* (13) *They walked down on a road* (14) *in this direction, carrying shields and spears with them.*

(15) ... *they went straight up onto the mountain* (16) *peak, Gavu.... At night they made a house* (17) *out of ginger and slept. In the morning they continued work.* (18) *A bigman from Gavu by the name of Kaoř̃oko,* (19) *Kaoř̃oko the Fighter, just happened to want to take a walk, so* (20) *he went, but his ears fell upon* (21) *the sound of stone axes and trees crashing* (22) *down in the distance. "Who are these people* (23) *chopping trees down in my jungle?* (24) *My jungle never has people walking in it....* (25) *I'll walk over and ask these people first."* (26) *So, he walked up* (27) *to them. They caught sight of him.* (28) *He saw them too, but* (29) *they did not understand the Gavu language.* (30) *He did not understand their language either.* (31) *They spoke with their hands. They got up and* (32) *he asked them, "Which way did you come from?"* (33) *and as he came down, they spoke with* (34) *their hands toward him, saying,* (35) *"We left our bad area* (36) *and have come here. Many people have died,* (37) *many women have died, many children have died,* (38) *in warfare.... Now I have gotten my warriors* (39) *and we have fled to this place." ...*

(40) *Then, Kaoř̃oko the Fighter came down to chat,* (41) *saying, "Oh brother! Very good. I am glad that* (42) *you have come...."*

2. ANÊM TEXT

The following text in Anêm is an excerpt from a story told by Iona, a woman living in Karaiai, in 1978. It has been transcribed with the help of Hendrik Sasalo of Pudeliŋ.

1. ... i-mên a i-mên a i-gêx-îl
they-come and they-come and they-descend-p

2. a-x-î Pisuoi a lêxan niak i-sîl i
to-it P. River and they two they-remain and

3. ta-lê, "dogo mê-gêx-îl a ne-kesi a-x-î
then when we-descend-p *and you-hold onto*

4. didu-ak-e kêxês i meak mê-gêx-îl." ta-lê
skirt-my strong and we-two we-descend-p *then*

5. i-sêg-îl a didi i-ŋobu i d-êm
they-dress-p *and enough she-precede and husband-her*

6. u-lêxêm-îm i-mên a i-ŋlî sasa
he-follow-her they-come and they-follow k.*tree*

7. i-mên a i-mên a d-êm u-kesi
they-come and they-come and husband-her he-hold

8. a-x-î didu-ak-êm. u-kesi a-x-î kêxês a
onto skirt-her he-hold onto-it firm and

9. nîŋê lêxan niak i-pik-îl. i-pik-îl i-gêx-îl
then they two they-jump-p *they-jump*-p *they-descend*

10. a nîŋê i-i a-x-î agonu a nîŋê,
and then they-appear in village and then

11. Galiki sêxa, eide-n-îm kan ei-n-îm i-kê-l-êm.
Galiki this mother-her and father-her they-see-her

12. "nin nî-gê?" "ue a-gê da-sîk amai a-gê
you you-want I I-want I-stay but I-want

13. da-kê-l-êŋ i a-gê da-mên a-l-êŋ i lalê
I-see-you and I-want I-come to-you and thus

14. a-mên ler." "ua, maim!" i nîŋê i-kei-l
I-come here oh true and then they-enter-p

15. a-x-î ene. i-kei-l a-x-î ene a nîŋê,
into house they-enter into house and then

16. i-sîl, i d-êm pala-mo-t soli miŋ
they-sit and husband-her skin-his like us(In)

17. pmaga miŋ mî-sîl a-x-î agonu eiababa pmaga
still us we-live in village living still

18. ler a u-gêx a nîŋê, i-l-o
here and he-descend and then they-take-him

19. u-kon u-k u-kei a-x-î tebila i i-sê-x-î
he-go he-go he-enter into bowl and they-pluck-it

20. dêk lalê to-mo-t to-mo-t lalê sêuxeŋa
thing that smell-its smell-its that fragrant-herb

21. soli pindi a ŋaixexe a mataimbuta lê
like k.*herb and* k.*herb and* k.*herb that*

22. i-so-x-u u-kei a-x-î eiio-x-î tebila
they-pluck-it it-enter into inside-its bowl

23. a tebila i nîŋê i-ŋo-t u-kei a-x-î
and bowl and then they-throw-him he-enter into-it

24. i u-sêm. i-ki-u u-sêm. u-sêm i
and he-lie they-hide-him he-lie he-remain and

25. onu lalê i-ŋe-d-î boxua, lalê i-deta
people that they-become-it wounded those they-along

26. i-pepel-it lêxa i-t iai a
they-kill-them they they-eat Derris uglinose and

27. i-gelêgîm lê i-sêŋ-k-î to-mo-t
they-hand-themselves they they-smell-it smell-his

28. i i-mên a i-gê de-t i
and they-come and they-want they-eat-him and

29. i-ŋo-l piŋi-i i-gê-ŋîsŋîs kan-o, i-li
they-throw nose-their they-sniff for-him they-walk

30. i-xai amai i sêxan i-ki-u
they-detour frustrative and she she-hide-him

31. kêxês u-sêm u-sêm u-sêm aa, i-gên
secure he-remain he-sleep he-remain and they-make

32. aniŋa omba i nîŋê i-t i nîŋê
feast big and then they-eat-it and then

33. i-l-o u-i a nîŋê i-ko-l-o
she-take-him he-appear and then they-see-him

34. i nîŋê talê i-kan-o i-sîl loxodo.
and then then they-with-him they-live continue

Translation:

(1) *...They came along down* (2) *to the Pisuoi River (which empties into Alulu, the inlet where one of the spirit villages is located) and sat down.* (3) *Then, (she said), "when we go down, hold* (4) *firmly onto my skirt and you and I will go down."* (5) *When they had finished getting dressed up (in ceremonial garb), she went first while her husband* (6) *followed her, and they walked along the tree (which leads to the spirit village)* (7) *and as they came, her husband held* (8) *firmly onto her skirt.* (9) *Then, the two of them jumped down* (10) *and then appeared in the village.* (11) *Galiki (the woman) was seen by her mother and father, (who said,)* (12) *"what are you up to?" "I was going to stay, but I wanted* (13) *to see you and I wanted to come to you and thus* (14) *I have come here." "Oh, really!" and then, they entered* (15) *the house. When they were in the house,* (16) *they sat down, but her husband's skin was like ours,* (17) *(like) us still living in villages, still alive* (18) *here, so when he had gone down, they put him* (19) *into a wooden bowl as they picked* (20) *things that smelled, fragrant herbs,* (21) *like /pindi/, /ŋaixexe/ and /mataimbuta/.* (22) *they picked it and put it inside the wooden bowl* (23) *and they put him into the bowl* (24) *where he was kept hidden, while* (25) *the people who had been fatally wounded, those who had committed suicide* (26) *those*

who had eaten (poisonous) derris root and (27) *had hanged themselves, they smelled his odour* (28) *and came wanting to eat him and* (29) *they turned their noses sniffing for him, (but) they walked* (30) *around him in vain while she kept him hidden* (31) *securely. He remained so until they prepared* (32) *a feast, and when they had eaten it,* (33) *she brought him out for them to see.* (34) *After this, he went on living with them.*

ENDNOTE

Rick Goulden, who has been continuing research on Lusi, has informed me that my phonological analysis of Lusi contains an error. What I have been writing as /w/ in Lusi conceals a contrast between non-syllabic /o/ and /u/. Thus, /wasi/ *'tobacco'* should be /uasi/; /-wore/ *'paddle'* should be /-uore/; /wañ̃o/ *'vine'* should be /oañ̃o/; /wanana/ *'hot'* should be /oanana/; and so on. I am grateful to Mr. Goulden for pointing this out to me. Readers should consult forthcoming publications from Mr. Goulden for clarification of this.

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