

MELANESIAN, MICRONESIAN, AND INDONESIAN FEATURES IN LANGUAGES OF THE ADMIRALTY ISLANDS

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0. INTRODUCTION

All languages of the Admiralty Islands are Melanesian in general outline and those of Aua, Wuvulu,² Ninigo Islands and Anchorite Islands particularly so. The languages of Manus (Group 3 below) have strong affinities with Micronesia, while one subgroup (3B) has in addition a few Papuan³ characteristics. This paper outlines the evidence for these generalizations.

The fact that the Group 3 languages should have a strong Micronesian affinity is rather paradoxical, since their speakers are the least Micronesian in appearance. The natives of Aua and Wuvulu, on the other hand, are strikingly Micronesian in features and hair, though speaking much purer Melanesian tongues.

1. LANGUAGE CLASSIFICATION

The languages of the Admiralty Islands may be resolved into three major groups on the basis of their phonetic features listed in Table 1.

LANGUAGE GROUPS IN THE ADMIRALTY ISLANDS

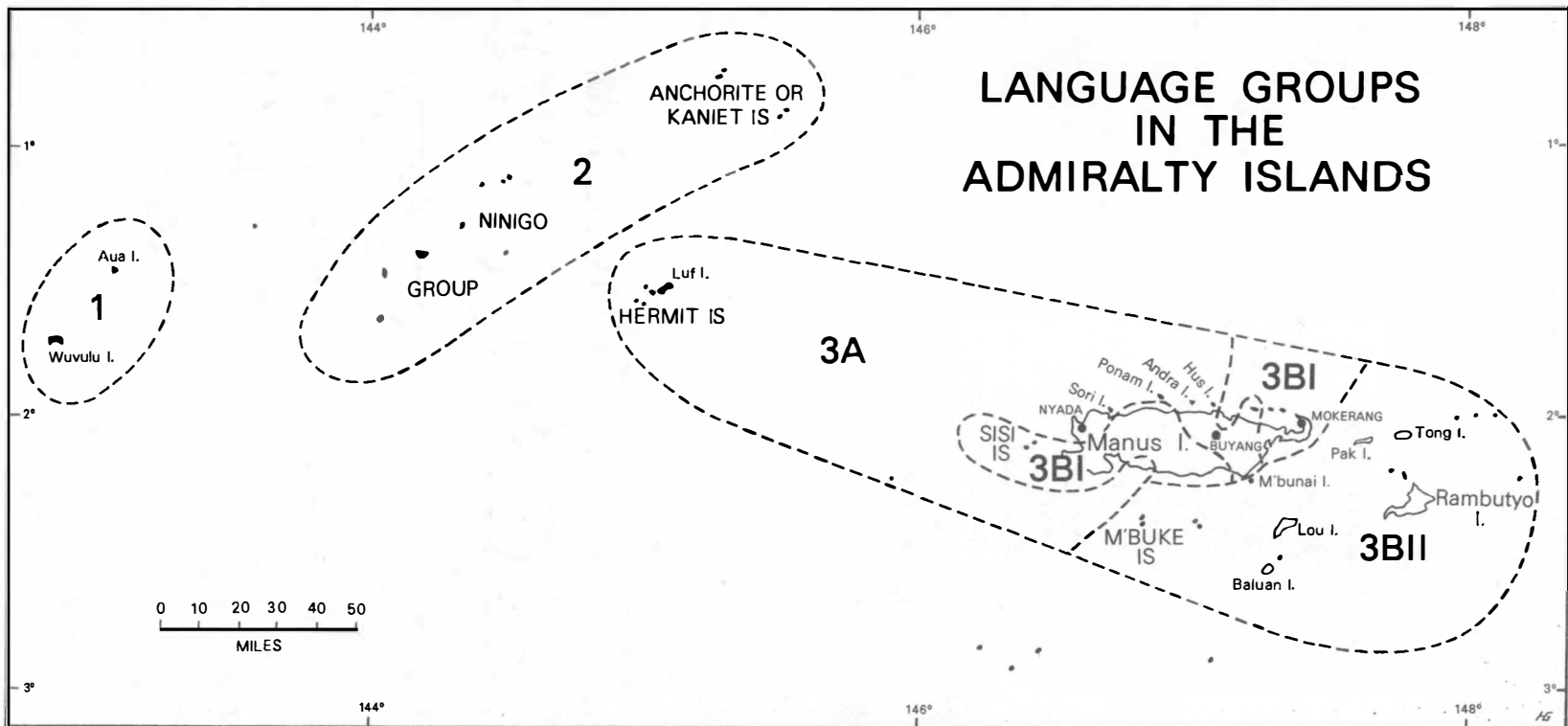


TABLE 1
 PRINCIPAL PHONETIC DISTINGUISHING FEATURES
 OF ADMIRALTY ISLANDS LANGUAGES

	Group 1	Group 2	Group 3
f	+	-	- except in Ponam
i	+	-	-
ɪ	+	-	-
ɸ, ʈ	-	-	+ in many
s	-	+	+
ŋ	-	+	+
ʔ	+ (ʔ)	-	variable
ʃ	+	-	+
j (= y)	+	-	+
x	-	+	- except in Sisi
ä	+	-	-
nasal vowels	-	+	-
syllables	always open	only finals closed	usually closed
consonant clusters	-	-	very common
plosives	both voiced and unvoiced	all unvoiced	all voiced except in certain positions
main position of accent	penultimate	initial	final
rhythm	stress-timed	syllable-timed	mixed type
tones	-	-	+ in some dialects

TABLE 2

GRAMMATICAL CHARACTERISTICS OF ADMIRALTY ISLANDS LANGUAGES

Language and Classification	Inclusive versus exclusive pronouns (+R = recent introduction?)	No. nouns taking possessive enclitics	No. series of possessive enclitics	No. bearer nouns for possessive enclitics (2F = for foods versus non-foods)	VERBS							Numerals classified and number of classes	
					Proclitic personal pronouns (+S = singular only)	Desiderative form	Prefixed future in singular or in all numbers	Transitive versus intransitive marked	Complete versus incomplete marked	Infixed directives	Agentive verbal noun		
Aua 1	-	all	2	1	+						-		3
Ninigo 2A	+	all	1	5	-			+	+	-	+		16
Sori 3A1a	-	some	1	2F	+			-	-	?	-	-	
Luf 3A1b	+	some	1	2F	+	-	sg.	-	-	-	-	-	
Nyada 3A1c	+	some	1	1	+	-	sg.	-	-	-	-	-	+
Ponam 3A2c	+	some	1	1	+	-	sg.	-	-	-	-	-	+
Andra 3A2b	+	some	1	2F	+	+	sg.	-	-	-	-	-	+
Hus 3A2a	+	some	1	2F	+	+	sg.	-	-	-	-	-	+
Buyang 3A3a	+	all	1	2F	+	+	sg.	+	+	+	-	-	42
Mundrau 3A3c	+	all	1	1	+	-	all		+	+	-	-	+
Taui 3A3d	+	all	1	2F	+	+	all	-	+	+	-	-	42?
Yiru 3A4c	+R	some	1	1	+	-	all	-	-	-	-	-	+
Warembu 3A4b	+R	some	1	1	+	-	all	-	-	+	-	-	+
Sabon 3A4a	+R	some	1	1	+S	?	all	-	-	-	-	-	many
Pityilu 3A4d	+R	some	2	1	+	+	all	-	-	-	-	-	+
Mokareng 3BI1a	+	some	2	2	+	+	all	-	-	-	-	-	2
Sisi 3BI1b	+	some	2	2	+S	-	all	-	-	-	-	-	2
Level 3BI2a	+	some	2	2	+	-	all	-	-	-	-	-	+
Tulu 3BI2b	+	some	2	2	+	-	all	-	-	-	-	-	+
Pak 3BII1	+	some	2	1	+	-	all	-	-	-	+	+	+
M'bunai 3BII2	+	some	2	1	+	+	all	-	-	-	+	+	+
Baluan 3BII3a	?	some	2	1	+	+	all	-	-	-	+	+	2-3
Rambutyo 3BII3b	?	some	2	1	+		all	-	-	-	+	+	+

A comparison of their grammatical features listed in Table 2 confirms this classification and enables us further to subdivide the languages of the third group. The following is a scheme setting out the linguistic classification of Admiralty Islands languages according to their phonetic features and grammatical structure:⁴

Group 1

Languages having fairly simple phonetic systems, and open syllables invariably.

Aua,⁵ Wuvulu

Group 2

Languages having very simple phonetic systems, closed syllables in word-final position only, and causative, reciprocal and transitive modifications of verbs.

A. Ninigo Islands (= Seimat)

B. Anchorite Islands (Kaniet)

Group 3

Languages having complex phonetic systems, and closed syllables extremely common, and lacking causative, reciprocal and transitive modifications of verbs.

Subgroup A. Those having Indonesian (IN)-type singular possessive enclitics.

Family 1. a. Sori, Harengan

b. Hermit Islands (Luf)

c. Nyada

Family 2. a. Hus

b. Andra

c. Ponam

Family 3. a. Buyang (= Gele?), Kawaliap, Tingau, Lowa, Liap

b. Waimundra, Badlok, Mundiburio, Pundru

c. Mundrau, Sau, Kup, Derimbat

d. Taul (on Manus), Dramdru (Dromdrau), Drabito, Hatwara, Undrau, Metawari

Family 4. a. Sabon, Tingo, Lundret, Drano, Yiringo

b. Warembu

c. Rossun, Lauis, Yiru, Kapor, Sirra, Sonilu, Bulihan, Katin, Bua (Pwa), Malei

d. Pityilu (?)

Subgroup B. Those having singular possessive enclitics derived from the free cardinal pronouns.

I. Not forming agentive verbal nouns

Family 1. a. Mokerang, Papitalai, Drangot, Labahan, Bowat, Loniu
 b. Sisi (= Bipi), Kali, Sapondralis, Bundrahei, Kogo, Kabuli, Drolli, Salien

Family 2. a. Levei, Lindro, Banum, Drehet, Malai
 b. Tulu, Bohuai, Lohe, Drabwi, Kabunu, Peli, Lala, Yiri, Lowakai, Aran, Matakau, Leiwa, Loi

II. Forming agentive verbal nouns

Family 1. Pak, Tong

Family 2. Mouk, Patusi, M'bunai, Pomassau (Bomsau), M'buke, Ndrihol, Bursu, Pere, Tawi Island

Family 3. a. Baluan, Pam, Lou
 b. Rambutyo, Nauna

2. GRAMMATICAL FEATURES

Before we proceed to deal with the external relationships of the languages of the Admiralty Islands from a grammatical point of view it will be advantageous to summarize the characteristic features of typical Melanesian (MN), Indonesian (IN) and Micronesian (MC) languages.⁶

(1) *Articles*

MN: An article is used with nouns, either as an independent word or as a suffix.

IN: As a rule there are no articles.

MC: Some languages have an article.

(2) *Enclitic Possessive Pronouns*

MN: Enclitic possessive pronouns may be used only with terms of relationship (father, mother, etc.) and parts of things (vanagi lara-na canoe-sail Motu).

IN: Enclitic possessives may either be suffixed to all nouns, or not occur at all, or they may be optional with all nouns.

MC: Enclitic possessive pronouns may be used with all, or at least with very many different types of nouns.

(3) *Possession*

MN: Possession is indicated by enclitic possessives, by prepositions, by possessive nouns (with pronoun enclitics) linking possessed and possessor. Where classification of these possessive nouns (bearer nouns) occurs, the class forms indicate use and origin of the object.

IN: Possession is indicated by suffixed possessives, or by merely placing possessor and possessed together, one acting more or less as adjective to the other. This type may be used with either nouns or pronouns.

MC: Suffixed possessives are optionally used. Some languages exhibit construct forms. Some languages also use possessive nouns (bearer nouns) which exhibit noun classification.

(4) *Verbs*

MN: Verbs do not vary for tense, mood, or voice and may or may not take short pronouns in addition to other subjects. Causative and reciprocal prefixes are found, and various suffixes indicating categories such as transitivity.

IN: The verb may be of three types: (a) no inflection for person or tense; voice either not expressed or expressed by prefix; (b) tense, mood and voice shown by prefix, infix or partial reduplication of verbal root; persons by suffixed pronouns; (c) person shown by short pronouns placed before verb.

MC: In some languages verbs are like IN type (b) and in others they are intermediate between (b) and (c). Some languages incorporate pronoun objects in the verb.

(5) *Numerals*

MN: Numerals are usually simple and decimal. Occasionally classification of numerals appears.

IN: Classification of numerals is very common in some areas.

MC: Numerals all exhibit classification.

(6) *Pronouns*

MN: Pronouns usually have 3, sometimes 4, numbers.

IN: Pronouns have only 2 numbers.

MC: Pronouns have only 2 numbers.

We may now consider the most probable sources of the various grammatical features of the three main groups of languages found in The Admiralties, by comparing Table 2 with the summary given above.

Group 1: Aua, Wuvula. One thing is immediately evident - this is not a MN language in its grammatical features. Only the dual and trial pronouns and the incomplete IN numerals show MN influence. The choice then lies between MC and IN. As the only specifically IN feature appears to be possession by cardinal pronouns, while the only specifically MC one is incorporation of pronoun objects in the verb, some other evidence is needed to make the decision.

Group 2: Ninigo (= Seimat), Kaniet. Here the picture is not so clear cut as with Aua, largely on account of certain features, notably the numerals and verbal nouns, which do not seem to fit anywhere. Otherwise Ninigo seems to fit best into the MC mould. While there is

specifically MN or IN, there are several specifically MC features - construct forms for possession, incorporation of pronoun objects, and class forms of bearer nouns.

Group 3: Manus and adjacent islands, taking Buyang (= Gele?) as a representative. The external relationships of this group are the most difficult to determine. It has no specifically IN or MC features. Nor is it obviously MN in the strictest sense - all nouns taking possessive suffixes, and probably the verb structure, would rule that out. Yet this is the only group without a full set of IN pronouns, and the numerals are definitely MN rather than MC.

3. NON-AUSTRONESIAN VOCABULARY

In estimating the relationships between the various languages by the comparison of vocabularies, it is necessary to treat separately AN and non-AN words. Of the 195 vocabulary items elicited for each language, 35 showed either no, or almost no, demonstrable AN content throughout the 23 languages, and had adequate responses for comparison.⁷ For these 35 vocabulary items a count was made of the number of times each language shared a common root with each of the other languages. After eliminating comparisons that were invalidated by lack of data or by one response of the pair being AN, the approximate percentages of cognates were calculated, and these are presented in Table 3. It may reasonably be objected that a sample of 35 items is insufficient for this purpose. Unfortunately, this was realized only after all the material had been collected and I had left Manus. It shall have to suffice, therefore, until a larger sample can be taken by some other investigator.⁸

From an inspection of these figures it is at once apparent that Aua, Ninigo and Kaniet differ markedly, not only from the rest of the Admiralty Islands, but from each other also. So much so that we may at once consider them as having an independent origin from the rest, and from each other. In the Manus group the languages are much more closely related to each other, although Baluan stands out as rather different from the rest.

4. AUSTRONESIAN VOCABULARY

The total number of AN roots found in the 195 vocabulary items for each language is given in Table 4. The number of AN roots that are exclusive to each language is also tabulated. It will be observed that both Aua and Ninigo apparently possess fewer AN roots than most of the

TABLE 4
 NUMBER OF AUSTRONESIAN ROOTS IN 195 VOCABULARY ITEMS

	Total No. Found	No. of Exclusive AN Roots
Aua	77	8
Ninigo	92	8
Kaniet ⁹	51	1
Sori	100	1
Luf	92	1
Nyada	95	-
Ponam	94	-
Andra	97	-
Hus	100	-
Yiru	88	-
Pityilu	95	-
Buyang	111	1
Mokareng	89	-
Sisi	96	-
Level	79	-
Tulu	76	-
Pak	85	-
M'bunai	96	-
Baluan	80	1

other languages.¹⁰ It seems reasonable to assume from this that, wherever the AN roots of Manus came from, they did not originate from Aua or Ninigo, or from the progenitors of these people. It seems necessary to postulate separate origins for (1) Aua, (2) Ninigo, and (3) Manus and adjacent islands including Luf. This does not necessarily imply that they were derived from entirely different sources (though this might be so), but that the derivation occurred independently for each, whatever the source may have been.

On comparing the geographical distribution of the various AN roots one is left with an impression of great confusion. No doubt this might have been less had more satisfactory vocabularies been taken. Despite this fairly haphazard distribution, however, the following observations can be made.

- (1) There seem to be about 18 AN roots peculiar to the western islands (Aua, Wuvulu, Kaniet), about 10 peculiar to Manus and the adjacent islands, and about 9 others more or less common to both areas.
- (2) Though the western islands as a whole may be separated from the others by certain exclusive roots, they are not in themselves homogeneous, 8 roots being exclusive to each island.
- (3) A few roots are exclusive to localized areas that include 2 to 4 languages. For instance 3 roots are exclusive to Aua and Ninigo and 2 to Aua, Ninigo, and Kaniet.
- (4) About 15 roots seem to have flowed round Manus (often including the western islands also) leaving bare one or more of the central Manus regions.
- (5) The large close-knit grouping (Sisi-Nyada-Sori-Ponam-Andra-Hus-Pityilu-Mokareng) that is evident in Table 3 shows much less homogeneity in its AN roots than in its non-AN ones.

No matter how one attempts to arrange the roots - according to their extent of distribution, according to Capell's classification into four movements,¹¹ or in some other way - there does not appear to have been any recognizable system by which AN words entered the Admiralties, with the exception of the very loose statements made above. Whether this is because there never was any system, or because subsequent mixing and interchange have caused the boundaries to fade, is now too late to say.

An examination of the forms the roots take in present day languages is rather more rewarding. It may be observed that the words *tama, *tina, *susu, and *s-ai do not diverge greatly from the IN originals in practically all the languages of the Admiralties, while words such as *taliŋa, *tijan, and *tasik are nearly always more or less considerably altered. Possibly the greatest example of variability is in

*tawu-matah *person* which appears as rama'a, ha:ma, nda:mak, hamat, ndamat, amat, dja:mou, djamwok, hamar, ramat and jamat, in the various languages, while susu *breast* scarcely varies anywhere.¹²

AN words tending to be stable are:

*tina <i>mother</i>	*tama <i>father</i>	*tanjs <i>weep</i>
*əmpu <i>ancestor</i>	*tijan <i>bear</i>	*babinaj <i>woman</i>
*babuj <i>pig</i>	*(m)batu <i>stone</i>	*baysaj <i>paddle</i>
*wajəy <i>water</i>	*ɔaləm <i>inside</i>	*hənaj <i>sand</i>
*hubi <i>yam</i>	*ikan <i>fish</i>	*mpanir <i>wing</i>
*kawil <i>hook</i>	*kayu <i>tree</i>	*kuluɣ <i>breadfruit</i>
*kutu <i>louse</i>	*laja <i>sail</i>	*lumbija <i>sago</i>
*manaj <i>male</i>	*mayi <i>come</i>	*s-apa <i>what</i>
*s-ai <i>who</i>	*nanah <i>pus</i>	*n-ipi <i>dream</i>
*ijuy <i>coconut</i>	*ŋ-ipən <i>tooth</i>	*lankah <i>step</i>
*paɣi <i>stingray</i>	*paiwak <i>shark</i>	*susu <i>breast</i>
*ɣumah <i>house</i>	*banua <i>land</i>	*baɣuk <i>skull</i>
*utin <i>penis</i>	Numerals	

AN words tending to be unstable are:

*s-apa <i>what</i>	*buhaja <i>crocodile</i>	*bulan <i>moon</i>
*(m)burlt <i>behind</i>	*bawah <i>betelnut</i>	*danum <i>water</i>
*dayah <i>blood</i>	*dəŋəy <i>hear</i>	*ɔawən <i>leaf</i>
*ɔujuŋ <i>dugong</i>	*tambu <i>ban</i>	*hantəluɣ <i>egg</i>
*hasan <i>gill</i>	*matuɔuy <i>sleep</i>	*hudjan <i>rain</i>
*inum <i>drink</i>	*djalan <i>road</i>	*ka(ə)n-i <i>eat</i>
*lima <i>hand</i>	*kulit <i>skin</i>	*lanjit <i>sky</i>
*tasik <i>sea</i>	*ləwas <i>long</i>	*manuk <i>bird</i>
*mata <i>eye</i>	*mataj <i>die (?)</i>	*tawu-matah <i>person</i>
*mbəŋi <i>night</i>	*ŋ-hudjan <i>promontory</i>	*mənjak <i>fat</i>
*ŋaran <i>name</i>	*njamuk <i>mosquito</i>	*punti <i>banana</i>
*ɣusu <i>rib (?)</i>	*sayaman <i>outrigger</i>	*sulud <i>comb</i>
*tabuɔi <i>conch</i>	*tahi <i>faeces</i>	*tali <i>rope</i>
*taliŋa <i>ear</i>	*təbu <i>sugarcane</i>	*tijan <i>belly</i>
*tuhud <i>knee (?)</i>	*tuna <i>eel</i>	*uyita <i>octopus</i>
*utan <i>forest</i>	*kaki <i>leg</i>	Pronouns

It is difficult to find a satisfactory explanation of this phenomenon. Several possibilities suggest themselves -

1. There may be a correlation between age and degree of divergence from the original root; that is, loan-words are adopted in something like their original form and then change as the phonetic features of the adopting language alter with the passage of time. This is untenable

because there are a number of very recent loan-words in which d or t have already become nd

doctor > ndokdah

rain > ndein

Madang > Mandan

kanda > gandah

Further, words of movements I, II, IIa and III as defined by Capell (1943) are about equally distributed among the stable and unstable groups.

2. There may be a tendency for certain sound patterns to be stable or unstable. This appears not to be so, as can be seen from comparing the two lists above. Also *tijan has given rise to a loan word of each type.

3. It is possible that some words may have a psychological force tending to keep them stable. It is noticeable that the words for *father* and *mother* for instance, are stable. Apart from them, however, there seems to be no semantic trend in either list. Indeed, of the two words for *water*, one is stable and the other not.

4. Stable words may have had a different origin from unstable ones. The same remarks about movements I, II, IIa and III cause rejection of this theory also. Even if that were not so, it is most unlikely that every language would have borrowed the word for *person*, for example, from the same distinctive source.

5. Secondary borrowing of AN words back and forth between the languages may have given rise to a great variety of forms, as with *tawu-matah. But this still leaves unexplained cases such as dama! versus ndokdah.

6. Micronesian infiltration may have brought in already unstable words after considerable MN borrowing had already occurred. These new words may have started a 'habit' of assimilating further loan material in a form resembling the MC words. If this were so then the stable words would represent an older MN stratum, the unstable ones the newer MC and subsequent borrowings.

5. MICRONESIAN AND MELANESIAN VOCABULARY IN GELE? AND SEIMAT

Of the possibilities offered above, 6 seems to be the only likely one. It is, moreover, amenable to testing, since such MC influence should have left relics, both AN and non-AN. If the supposition is true, then we should be able to resolve the vocabulary into three parts - (1) stable words closely resembling the AN originals, (2) unstable words more closely resembling the AN forms as found in MC, and (3) demonstrable MC words which are non-AN.

TABLE 5
AN REFLEXES IN GELE? AND SEIMAT

AN	GELE?			SEIMAT		
*a	a, e, o, l			a, e, o		
*ə	o, i			o		
*l	l			i, l:, u		
*u	u, e, i			u, i, o		
*aj	e			e		
	Initial	Medial	Final	Initial	Medial	Final
*b	b-,bw-,mɸ-	-h-, -h-, -b-		p-,h-,b-, -,x-	-p-, -h-	
*d	nd-, -ř-		-	k-,h-		
*ɖ	ř-,d-,nd-, l-,ř-	-ř		h-,d-,t-, l-,ř-	-x	
*dj	s-	-s-		s-	-h-	
*h	-	-	-	-	-	-
*j	-	-		-	-	
*k	g-, -	-	-, -k	-,k-		-, -x
*l	l-, -l-	-l-, -l-, -ř-	-	l-, -l-, n-	-l-, -l-, -x-	-
*m	m-	-m-, -m-, -mw-	-	m-, w-	-m-, -m	-
*n	n-	-n-, -n	-, -n	n-	-n-, -n	-
*p	b-, -b-, -h-	-h-, -h-, -p-, -p		h-	-p-, -p-, -h-, -s-	
*r	ř-, -ř-	-ř-			-x-, -l	-
*s	s-	-s-, -ř-		s-, x-	-s-, -t-, -x-	
*t	d-, t-, nd-	-ř-, -t-, -t-, -ř-, -nd-	-	t-, d-	-t-, -t	
*w	w-	-w-, -w-, -	-u	w-, -	-w-, -w-, -u-, -	-i-, -
*ŋ	ŋ-, -ŋ-	-ŋ-, -ŋ-, -n-, -n	-	ŋ-	-ŋ-, -ŋ-, -n	-
*nj	n-	n-, -n, nj-		n-	-n	
*(m)b	b-, -m-	-b-, -mɸ-		f-, -p-	-p-, -b-	
*nt		-			-t-	
*(m)p				p-, -p-, h-		
*ŋk					-h-, -k	
*ɣ	-, ŋ-	-	-		-, -k-	-
*l	-	-				
*njs					-l-, -l	
*t		-l-			-t-	

Loss of the final syllable is common in both languages.

TABLE 6
TRUKESE CORRESPONDENCES WITH GELE' AND SEIMAT

TRUKESE	GELE'			SEIMAT		
a	-, a			a		
ä	a			a		
e	e			e, a, i		
i	i, u			i		
o	u, o			o, u		
u, ö	u, e			u, o		
ü	u, w, a			u, l, w		
	Initial	Medial	Final	Initial	Medial	Final
ch	s-, nd-	-d-		x-		-x
f	b-, mɸ-	-h-		p-, h-	-h-	-h
k	g-	-g-		k-	-k-, -x-	
m	m-			m-	-m-	-m
n	n-, l-	-n-, -l-	-n-, -l-, -ŋ	l-, n-	-l-, -n-	-l-, -n
p	b-, mɸ-	-b-	-b-	p-	-h-	-p
r	nd-, ɣ-, ɣ̃-	-ɣ̃-	-l-, -ɣ̃	t-	-x-	
s	d-, s-	-s-	-ɣ̃	t-	-t-, -h-	-t
t	s-	-ɣ̃-, -ɣ̃-, -ɣ̃	-ɣ̃	s-, x-	-t-, -t	-t
w		-w-		w-		
ŋ	ŋ-	-ŋ-	-ŋ-	-, ŋ-	-ŋ-	-
pw	b-, bw-			p-, -p-		
mw	m-, mw-	-mw-		-m-, w-		

To test this hypothesis we may examine the vocabulary of the two Admiralty Islands languages for which sufficient information is available. They are Seimat of Group 2, which is spoken on the Ninigo Islands, and Gele' from Group 3, which is spoken on Manus around the village of Buyang.¹³ Unfortunately the only MC material available for this comparison is the Trukese dictionary of S.H. Elbert (1947), and I am unable to say how far Trukese may be taken to represent MC. Table 5 summarizes the reflexes of AN phonemes that occur in Gele' and Seimat and Table 6 indicates the sound correspondences between Trukese and these two languages.

The AN roots which are shared by Trukese and either of these two languages are listed below.¹⁴ Where a cognate was observed in any of the other 21 Admiralty Islands languages this is also given. Those AN words considered to be of MC type have been marked by underlining.

ENGLISH	GELE'	SEIMAT	OTHERS	TRUK	AN
<i>after</i>	e-muř	l-muh	<u>mwir̄in</u>	mwirin	*(m)burit
<i>alive</i>	mwa:ře-	-	-	manaü	*ma-huđip
<i>arm</i>	-	-pani:m 5	pani:-	paü	*mpanir <i>wing</i>
<i>assemble</i>	-	<u>xupuđini</u>	-	lofođenni	*puđpuđ
<i>berry</i>	mɔuei	hua-	-	uwa	*buwah
<i>big</i>	<u>laban</u>	<u>lalap</u>	-	nap	*laba
<i>bill (bird)</i>	-	aw/a-	-	aü/wa-	*wawah
<i>blood</i>	<u>ndaıj</u>	kak/a-	<u>dja:</u>	tja	*dayah
<i>breast</i>	susu-	susu-	susu-	tu-	*susu
<i>canoe</i>	-	<u>wa</u>	<u>wa</u>	wa	*wanka
<i>comb</i>	su(gdi:)	-	tju	tjü	*sujud
<i>person</i>	<u>ndamat</u>	-	<u>řamat</u>	aramas	*tawu-matah
<i>cord</i>	-	tal/i-	nei	sän	*tali
<i>country</i>	bwalj	pon	bwan	funü	*banua
<i>crease</i>	-	<u>lumi</u>	-	numi	*lompit
<i>night</i>	-biđ	lpođ	nepo:i	pwin	*mbęi
<i>die</i>	mat	mat	ma?e	mä	*mataj
<i>bone</i>	<u>nduwi-</u>	kui-	<u>djuwe-</u>	tjü	*tulađ
<i>not</i>	-	tal,tap	-	se,te,sap	*đi
<i>drink</i>	jiđ,-mwi	<u>un,unumi</u>	-	ün,ünümi	*inum
<i>eagle</i>	<u>menweiđ</u>	-	-	munüwo	*manuk <i>bird</i>
<i>ear</i>	ndilđai	taxiđa-	djanıa-	senin/a-	*talıđa
<i>eat</i>	ana-,Jan	a:n, <u>anı</u>	-	änı	*ka(ę)n-l
<i>eye</i>	mařa-	mat/a-	-	mas,mesa-	*mata
<i>father</i>	dama-	tam/a-	-	sam,sema-	*tama

ENGLISH	GELE ⁹	SEIMAT	OTHERS	TRUK	AN
<i>female</i>	blhln	<u>hehin</u>	<u>fefln</u>	fefin	*bablnaj
<i>fire</i>	j-l:h	<u>ah/i-</u>	dj-af	äf	*apuj
<i>fish</i>	ni:j	-	nlk	ik	*lkan
<i>outrigger</i>	sam	xam	samln	tam	*sayaman
<i>fly</i>	-	lan	-	no:ŋ	*lanaw
<i>fresh</i>	mandan	amatan	-	manaü	*mantah
<i>ground</i>	<u>bwaij</u>	pon	<u>bwan</u>	pwün	*banua
<i>hear</i>	dehe- <u>řŋ</u> -ui	<u>hon</u>	ron	ron	*dəŋəy
<i>sky</i>	lan	-	lalan	nəŋ	*lanlt
<i>house</i>	<u>um,umwe-</u>	-	w-um	lm,imwe-	*yumah
<i>inside</i>	lon	lallo-	lon	no:n	*daləm
<i>itch</i>	beřlhin	-	-	pwerlk	*pəđih
<i>jaw</i>	b-ese-	<u>ax/e-</u>	gab-ase-	ŋ-atj	*adjaj
<i>labia major</i>	mβuwl-	-	-	fo/l-	*pukl (?), *mbibiy
<i>leaf</i>	<u>nɗa-</u>	-	laun	tju(n)	*ɗawən
<i>liver</i>	eře-	ate-	eřl-	äeä	*ataj
<i>louse</i>	gu:t	-	gu:k	kü	*kutu
<i>maggot</i>	u:l	u:l	-	un	*ulər
<i>moss</i>	-	lum/u-	-	num	*lumut
<i>mother</i>	dine-	tlɗ/a-	djine-	in	*tina
<i>navel</i>	ge-mbuřo-	put/o-	gadja-buřo	po	*mpuser
<i>octopus</i>	<u>qwi:t</u>	<u>wi:t</u>	<u>qwi:t</u>	küs	*uylta
<i>paddle</i>	bo:s	xo:x	fose	fudün	*bəysaj
<i>stingray</i>	belj	-	bal	fel	*paɣi
<i>road</i>	sal	sal	tjal	an	*djalan
<i>sail</i>	<u>be-leij</u>	-	<u>ba-lel</u>	ame-ra	*laja
<i>scare</i>	-	ha-matau	-	a-musukü	*pa-matakut
<i>scratch</i>	de-guřus	<u>axuti</u>	-	akuttü	*gułut (?)
<i>sea</i>	nɗas	tax/l-	-	sät	*taslk
<i>sleep</i>	mendiř	mati	matlř	muür	*matuɗuy
<i>smoke</i>	-	<u>un,unumi</u>	-	<u>ün,ünümi</u>	*inum
<i>stone</i>	bat	ha:t/u-	bař	faü	* ^(m) batu
<i>tooth</i>	lehe-	ŋls/u-	lɗpu-	ni,ŋi	*ŋ-ipən
<i>under</i>	bahɗa:n	papalaha	-	fa(n)	*babah
<i>vomit</i>	řomu:t	<u>mü:t</u>	<u>mot</u>	mus	*ma-utah
<i>yam</i>	bednuh	-	uh	ep	*hubl
<i>give</i>	-	hana	<u>fanl:a</u>	faŋ	bəyaj
<i>star</i>	buřl:j	-	bitul	fü	bituhən
<i>water</i>	-	<u>kan</u>	<u>akan</u>	konlk	danum
<i>water</i>	-	kan	<u>nɗan</u>	tjun	danum
<i>cut</i>	-	<u>kotl</u>	-	otel	təktək

The non-AN roots which are shared by Trukese and either of Gele⁷ or Seimat are listed below.

ENGLISH	GELE?	SEIMAT	OTHERS	TRUK
<i>ache</i>	řekřegen	-	-	meteketek
<i>adrift</i>	-	manuman	-	man
<i>adultery (?)</i>	nasan	-	-	nlsou
<i>adze</i>	-	tala	-	sene
<i>afternoon</i>	-	al-oha	-	ne-on-oban
<i>ago (?)</i>	munen	-	-	mwan
<i>also</i>	be	ape	-	pwan
<i>angry (??)</i>	-	lenelen	-	nlqerener
<i>bake</i>	-	um/u- oven	-	umuni
<i>heron (?)</i>	-	xaux	-	kaũkaũ
<i>blow</i>	-	uhl	-	usl
<i>dry</i>	-	paxe	-	pwas
<i>blue</i>	ařwan	axaxawan	-	araũraũ
<i>boil</i>	buřden	-	-	pur
<i>ash</i>	-	palon	-	palan
<i>bruise</i>	-	ki-pul	-	fun
<i>think</i>	-	namiloi	-	namenl
<i>crippled (?)</i>	-	pokipok albino	-	puk
<i>cut (?)</i>	řal	tal	-	rel
<i>day</i>	mese-řen	-	-	ran
<i>defecate</i>	-	pepe	-	pe
<i>deposit (?)</i>	sini	-	-	iseni
<i>dive (?)</i>	-	ti:t	-	tũtiu
<i>error</i>	mwan bad	-	mwan bad	mwãn
<i>fall</i>	-	put	-	puũtl
<i>fathom</i>	-ŋah	-	ŋa:fan	ŋaf
<i>feather</i>	-	ole-	-	unun
<i>fertile (?)</i>	-	pet be born	-	patupat
<i>shake</i>	-	xax	-	tjetj
<i>shake (?)</i>	-	huesa	-	obũ
<i>shame</i>	mahah	-	-	mafen
<i>sink</i>	mut	-	-	motlu
<i>skin</i>	-	tin/u-	-	sin/lO
<i>smile</i>	-	mal	-	emmen
<i>sneeze (?)</i>	-	wat	-	mwusl
<i>soak</i>	de-mbulwe	-	-	a-mopur-a
<i>stem (grass)</i>	waslw cane	-	waslw	was

ENGLISH	GELE?	SEIMAT	OTHERS	TRUK
<i>tame</i>	besan	-	-	feslr
<i>taro (??)</i>	os	-	-	ot
<i>torch</i>	sul,ba:suř	-	-	tun
<i>trade</i>	suwl:	-	-	slwlnl
<i>tread on</i>	de-buřdl:	-	-	puratiu
<i>war</i>	ba:hun	-	-	maun
<i>weave (?)</i>	diř	-	-	tuř,türünl
<i>where</i>	-	l:a	-	ia
<i>future sign</i>	-	po	-	pwe
<i>with</i>	-	ka-hltl	-	mei fiti
<i>yawn</i>	-	ma:w	-	maü
<i>swim (?)</i>	jal	-	-	äitl
<i>true</i>	nđutnen	-	tju:du	tjutjun
<i>formerly</i>	bi:ŋi,bl:he	-	-	pin
<i>grow</i>	menda	-	-	meredä
<i>handle</i>	-	pah/e-	-	patj
<i>hide</i>	-	mu:na	-	amona
<i>hide (?)</i>	l-op	-	-	opa,op <i>hidden</i>
<i>hole</i>	ŋat	-	-	ŋat
<i>husband</i>	ne-mđulu-	-	bulu-	pünüan
<i>husk</i>	sel	-	-	otel
<i>inspect</i>	-	niŋahl	niŋ	neŋeni
<i>journey (??)</i>	-	sal <i>towards</i>	-	sal
<i>knowledge</i>	duna-	-	-	slnel
<i>knuckle</i>	gembuře-	-	-	kibwln
<i>lagoon (?)</i>	-	namiah/u-	-	no:m
<i>lean</i>	dedunen	-	-	uneni
<i>leeward side</i>	-	ata	atal	ätä
<i>liquid</i>	nđe-nun	ma-nun	-	nunu
<i>mangrove</i>	sa,sasa	-	-	tjia,saras
<i>mew</i>	ŋaw cat	-	-	ŋäo
<i>muddy</i>	-	ponapon	-	punuk
<i>give</i>	ŋinl	-	-	ŋeni
<i>neck</i>	wo-	-	-	ü,üwa- (wo, won <i>face</i>)
<i>not yet</i>	ma:-bu	-	-	sa-mo
<i>odour</i>	-	po/u-	-	pwo-
<i>or (?)</i>	nđe	-	-	are
<i>small</i>	-	kokol	makole	kükkuñ
<i>pus</i>	lo:t <i>ulcer</i>	-	-	not
<i>pond</i>	-	leipet	-	pat
<i>position (?)</i>	-goř	-	goř	kot
<i>sand</i>	ba:bl <i>beach</i>	hepl	pi:a	pl
<i>scale</i>	-	ull-	-	ünen

Taking the list of common words of AN origin it is now possible in each case to decide by inspection whether the word in question resembles more closely the MC form or the AN original. In many cases there seems to be no reasonable doubt at all - Gele' um, emwe-, for instance. It is almost inconceivable that the AN root *ɣumah could have given rise independently to Gele' um, emwe- and Truk im, imwe-, which are not only almost identical, but both a far cry from the original root. Other such definite cases are M'bunai mwiřin, Seimat xupuřini, Gele? nđaij, Lebei tja:, Andra tju, Aua njeva:vi, Seimat tai, tap, Seimat un, unumi, M'bunai řoŋ. In such cases the decision rests upon marked peculiarities that are shared by the Manus and Truk words. In other cases the decision depends on one's personal opinion as to whether the word appears to resemble most closely the form of the original AN or that of the Truk word. Thus it was decided to link gwı:t with kūs on account of the g/k-, but not wi:t, the form that one would expect *uɣita to take.

It is felt that this evidence satisfies the two conditions proposed previously, that it should be possible to demonstrate AN roots of MC type and of purer IN type existing side by side, and of non-AN roots common to MC and Manus, and this fact seems to explain the many reflexes of certain AN phonemes in Gele' and Seimat that can be seen in Table 5. MC influence seems to have been greatest along the northern aspects of Manus, and least in the M'bunai group. This is of some significance as it has already been noticed that the AN roots in M'bunai are the best preserved of all.

6. CONCLUSION

It is safe enough to assume that the pre-AN was primary chronologically. With regard to the AN material, it has already been discussed and evidence was found that the MN-type material is older than the MC-type. Lastly there is evidence supporting a belief in an even more recent arrival from Indonesia whose focal point is in the M'bunai group.

The pre-AN material surviving consists of the bulk of the word-stocks (which have been analysed above) the 'habit' of classifying, surviving only in the numerals, an active-inactive nominate dichotomy (Pityilu), a nominative-objective dichotomy (Baluan), and a tendency to agglutinate verbal stems together (Buyang and others). Their pronouns were relatively simple - they had only singular and plural and did not differentiate between inclusive and exclusive forms of the 1st person plural.

The AN material of MN-type is found in the IN-type pronouns, the 'stable' AN roots (such as the words for *mother*, *father* and others), certain verbal phenomena such as the causative (now defunct) and transitive (almost defunct), the bearer-nouns, the numerals 1-6, 10, 100, 1000, and the characteristic word order.

The AN material of MC-type is found in the tendency to suffix possessive pronouns of IN-type to all nouns, in a word-stock of 'unstable' AN roots of demonstrably MC origin, and possibly also in the elaboration reached in the systems of numeral classification and the forms assumed.

The last movement from Indonesia is marked by certain AN roots of more pristine type occurring in M'bunai, by the tendency towards simplification of the verb, and finally by a tendency to do away with classification of methods of possession.

N O T E S

1. [From May 1946 till August 1948, and from February till May 1958, the late Dr. W.E. Smythe was stationed at Manus as District Health Officer. He was an avid student of indigenous languages, and in between his medical duties he made a detailed study of Seimat (spoken in the Ninigo Islands) and Gele' (spoken at Buyang in central Manus), and a briefer survey of 21 other languages. The Seimat and Gele' materials are in the hands of Dr. A. Capell of Sydney, and are to be published as Oceania Linguistic Monographs. The survey materials are in the hands of the Summer Institute of Linguistics, New Guinea Branch, and the present article has been abstracted from pages 269-73, 293b, 297/2, 297/11, 297/21-297/31, 365-7, 371-9 and 382-5 by Alan Healey.]

2. Although Hambruch (1908) refers to Aua and Wuvulu as being linked with Indonesia, he seems to regard them as basically Melanesian with some Indonesian elements.

3. There is a noticeable tendency nowadays to prefer the term non-Melanesian to Papuan or Papuanian for the non-MN languages of New Guinea, on the grounds that such languages show no definite homogeneity. I object to the term because all languages except Melanesian languages are non-Melanesian, therefore the term is meaningless. If it be understood that the term 'Papuan' is to be used in a geographical rather than a strictly linguistic sense, I feel that no exception can be taken to it, and prefer to use it myself.

4. [The classification presented here differs somewhat in the way Group 3 is subdivided from the author's (earlier?) classification published in Capell 1962:59-60. --A.H.]

5. [The names listed are village and island names spelt in accordance with the 1968 edition of The Village Directory. Alternate spellings and language names are given in parentheses. --A.H.]

6. For this purpose the following sources have been consulted: MN: Fiji (Marist Brother 1950), Blanch Bay (Waterhouse 1939), Timor (Capell 1943-4), New Guinea (Capell 1940), S.E. Papua (Capell 1943). IN: Capell 1943. MC: Sonsorol (Capell 1950a), Palau (Capell 1950b), Truk (Elbert 1947).

7. After this part of the research was completed, two of these 35 items were found to be unsuitable. The consequent changes in the results are so slight as to leave the conclusions valid, although some of the figures in Table 3 may be in error by small amounts.

8. [During 1966-67, Dr. and Mrs. Theodore Schwartz (of the American Museum of Natural History, at that time) collected fuller information on the languages of the Admiralties, which they plan to publish. --A.H.]

9. The figures for Kaniet are not very reliable owing to the big discrepancy between Thilenius' and my word lists.

10. The word list used cannot give the full IN content of each language, but there is a probability that it has found the majority of the ones especially sought.

11. Capell 1943.

12. All the vernacular examples in this paper are presented in a broad phonetic transcription in which j is a semivowel, ɖ represents flapped [dʀ], and ɓ represents trilled [ɓ]. [The original AN roots are mostly taken from Capell 1943:109-15. --A.H.]

13. The Seimat and Gele' forms are transcribed in broad phonetics. See note 12 above. An outline of the phonemic systems of these two languages may be of interest. The Seimat phonemes are: a ã e ĕ h i ʔ k l m n o õ p s t u ũ w x ŋ. The vowels i, e, a and o have both tense and lax variants. The distinction between nasal and non-nasal vowels is critical and must be written. The voiceless fricative x is alveolo-palatal before front vowels and velar in other contexts.

The Gele? phonemes are: a b ɸ d ɗ e g h i + j l m n o ɸ̃ ɸ̃̃ s u w ʔ ŋ and stress ('). The vowels i, e, o and u have tense variants when long and in certain diphthongs, and low a appears to have front and central variants. High central + is always very soft and sometimes almost inaudible. In some words it is critical and must be written (ɗa| *drum*, ɗ+a| *canoe*), but in most cases it is the result of careless pronunciation.

The voiced plosives b, d, and g unvoice in word-final position and in word-medial position when followed by another consonant. In the same environments h has a variant [H]. The prenasalized consonants ɸ and ɗ are pronounced by some speakers as plosives [mb] and [nd], and by other speakers as trilled [m̃] and flapped [ndʔ]. (At first, this last sound was thought to be [nd̃] but the apparent trill element cannot be prolonged indefinitely.) The distinction between flapped ɸ̃ and trilled ɸ̃̃ is a very important one. Stress, although phonemic, tends to fall on long vowels, on the penultimate of reduplicated forms, on the final syllable of noun stem followed by possessive enclitics, and in other instances on the final syllable of words.

14. To simplify the Trukese material both ö and u have been written as u.

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