

PACIFIC LINGUISTICS

Series A - No. 21

PAPERS IN LINGUISTICS OF MELANESIA No. 2

by

A. Capell

Ann Chowning

S.A. Wurm



Department of Linguistics  
Research School of Pacific Studies  
THE AUSTRALIAN NATIONAL UNIVERSITY

PACIFIC LINGUISTICS is published through the *Linguistic Circle of Canberra* and consists of four series:

- SERIES A - OCCASIONAL PAPERS
- SERIES B - MONOGRAPHS
- SERIES C - BOOKS
- SERIES D - SPECIAL PUBLICATIONS

EDITOR: S.A. Wurm.

ASSOCIATE EDITORS: D.C. Laycock, C.L. Voorhoeve, D.T. Tryon, T.E. Dutton.

EDITORIAL ADVISERS:

B. Bender, University of Hawaii  
D. Bradley, Australian National University  
A. Capell, University of Sydney  
S. Elbert, University of Hawaii  
K. Franklin, Summer Institute of Linguistics  
W.W. Glover, Summer Institute of Linguistics  
G. Grace, University of Hawaii  
M.A.K. Halliday, University of Sydney  
A. Healey, Summer Institute of Linguistics  
L. Hercus, Australian National University  
N.D. Liem, University of Hawaii

J. Lynch, University of Papua New Guinea  
K.A. McElhanon, University of Texas  
H. McKaughan, University of Hawaii  
P. Mühlhäusler, Technische Universität Berlin  
G.N. O'Grady, University of Victoria, B.C.  
A.K. Pawley, University of Hawaii  
K. Pike, University of Michigan; Summer Institute of Linguistics  
E.C. Polomé, University of Texas  
G. Sankoff, Université de Montréal  
E. Uhlenbeck, University of Leiden  
J.W.M. Verhaar, University of Indonesia, Jakarta

ALL CORRESPONDENCE concerning *PACIFIC LINGUISTICS*, including orders and subscriptions, should be addressed to:

The Secretary,  
*PACIFIC LINGUISTICS*,  
Department of Linguistics,  
School of Pacific Studies,  
The Australian National University,

Canberra, A.C.T. 2600.  
Australia.

Copyright © The Authors.  
First published 1969.  
Reprinted 1979.

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

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

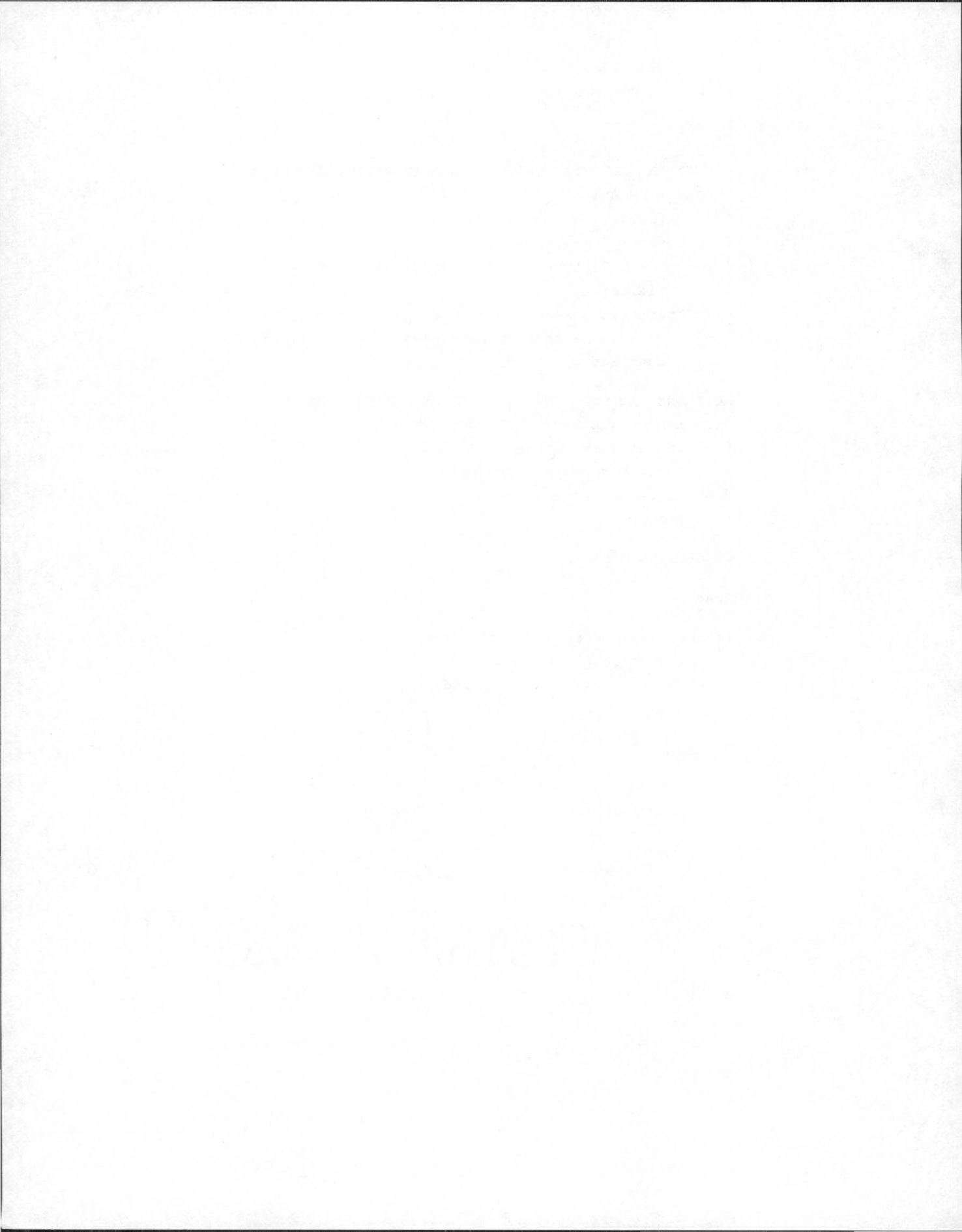
National Library of Australia Card Number and ISBN 0 85883 002 7

## TABLE OF CONTENTS

	<i>Page</i>
NON-AUSTRONESIAN LANGUAGES OF THE BRITISH SOLOMONS, by A. Capell	1
PHONETIC STRUCTURE	3
MORPHOLOGY OF THE LANGUAGES	3
(a) Morphology of the Noun	3
(i) Bilua	4
(ii) Bañata	5
(iii) Lavukáleve	7
(iv) Savosavo	9
(b) Morphology of the Verb	11
CONCLUSION	15
Map: <i>NAN-Languages of the British Solomon Islands</i>	16
THE AUSTRONESIAN LANGUAGES OF NEW BRITAIN, by Ann Chowning	17
0. INTRODUCTION	17
1. THE NON-AUSTRONESIAN LANGUAGES	19
2. OTHER CLASSIFICATIONS	21
3. THE AUSTRONESIAN LANGUAGES	24
3.1. Tolai	24
3.2. Nakgatai	25
3.3. The Kimbe (Nakanai) Family	25
3.4. The Bariai Family	27
3.5. The Arawe Family	29
3.6. The Lamogai Family	30
3.7. The Whiteman Family	31
3.8. The Mengen Family	32
3.9. Tomoip (Tumuip)	34

	<i>Page</i>
4. CONCLUSION	34
<i>Sources of Material</i>	36
<i>Alternate Names of Languages</i>	36
<i>Summary of Language Groupings</i>	38
<i>Percentages of Shared Cognates between Selected Pairs of Languages</i>	39
<i>References Cited</i>	41
<i>Map: New Britain</i>	44
Key to Austronesian languages and dialects on Map	45
 THE LINGUISTIC SITUATION IN THE REEF AND SANTA CRUZ ISLANDS, by S.A. Wurm	 47
1. INTRODUCTION	47
1.1. General Remarks	47
1.2. List of Abbreviations	50
2. THE REEF ISLANDS-SANTA CRUZ FAMILY	51
2.1. Composition of the Reef Islands-Santa Cruz Family	51
2.2. Lexical Interrelationships within the Reef Islands-Santa Cruz Family	58
3. SAMPLE WORD LIST	58
3.1. Introductory Remarks	58
3.2. Remarks on the Phonologies of the Languages and Dialects	59
3.3. Word List	64
4. LEXICAL COMPOSITION OF THE REEF ISLANDS-SANTA CRUZ FAMILY LANGUAGES AND DIALECTS	73
4.1. General Remarks	73
4.2. Close Formal Similarities between RSC Vocabulary Items and their Equivalentents in South-Western Pacific Austronesian Languages	73
4.3. The non-Austronesian Lexical Element	75
4.4. Percentages showing the Lexical Composition of RSC Languages and Dialects	75

	<i>Page</i>
5. STRUCTURAL AND TYPOLOGICAL CHARACTERISTICS OF THE RSC LANGUAGES AND DIALECTS	77
5.1. Introduction	77
5.2. General Characteristics	77
5.3. Special Features of Individual RSC Languages and Dialects	85
5.4. Typological Features shared by two or more Reef Islands-Santa Cruz Languages or Dialects in contrast to others	86
6. AUSTRONESIAN AND NON-AUSTRONESIAN FEATURES OF THE REEF ISLANDS-SANTA CRUZ LANGUAGES AND DIALECTS	96
6.1. Introductory Remarks	96
6.2. Non-Austronesian Features	97
6.3. Austronesian Features	98
6.4. Conclusion	99
7. CONCLUDING REMARKS	100
<i>References</i>	103
<i>Map 1: Languages, Reef and Santa Cruz Islands</i>	55
" 2: Languages, Reef Islands	56
" 3: Languages, Santa Cruz Island	57



## NON-AUSTRONESIAN LANGUAGES OF THE BRITISH SOLOMONS\*

A. CAPELL

Geographically the Solomon Islands form part of Melanesia, and the bulk of the languages in the Group belong to the Melanesian section (as at present accepted) of the Austronesian (AN) family of languages. In fact, one of them - Saʔa - was used by Dempwolff as a criterion language in the establishment of his 'Urmelanesisch' (Proto-Melanesian). There are a few small Polynesian-speaking settlements, but by and large the languages are MN. Not only so, but at the end of last century, P.W. Schmidt regarded them as the most distinctively and clearly MN languages of the whole section, and the south-eastern languages as stepping stones to Polynesia.

C.E. Fox, indeed, has gone a stage further, and regarded the Solomon Islands not Indonesia or the Asian mainland, as the place of origin of the AN languages, see his "Phonetic Laws in Melanesian Languages", *Journal of the Polynesian Society*, 56 (1947), 58-118, especially the first pages.

The problem of linguistic strata in the Solomon Islands is complicated by the fact that the AN element itself does not seem to be a unity. This has been discussed in my paper on the Choiseul languages at this Congress. Apart from AN languages of any sort, however, there are non-Austronesian (NAN) languages, and these form the subject of the present paper. The island of Bougainville, in the Australian Administration, is largely non-AN. It will not be considered here apart from comparisons that will be briefly made in the concluding section of the paper. Those here discussed are found in the British Solomon Islands Protectorate. There are at present four of them, and from northwest to south-east they are Bilua (Vella Lavella), Bañata (Rendova I.), Lavukáleve (Russell I.)

---

\* Paper read at the Canberra 1964 meeting of the Australian and New Zealand Association for the Advancement of Science (ANZAAS).

and Savosavo (Savo I.). On New Georgia there were previously Kazúkuru and Galiguli and apparently Dororo as well, but in modern times they have been replaced by Roviana and it is now difficult to get information about them. Some brief vocabularies have been published (1) but practically no structural detail. Very little will be said of them in this paper, except for suggestions that point to a system of noun-classification at least in Kazúkuru. The details of locations appear in the accompanying map. The bulk of the discussion will be concerned with Bilua, Bañata, Lavukáleve and Savosavo under the abbreviations Bi., Ba., La. and Sa. respectively.

These languages share some common vocabulary, but it is small, and they are more outstanding for their differences not only from AN but amongst themselves. In all cases there are AN loanwords, but the present paper does not attempt to study these. A short vocabulary was given by S.H. Ray as a specimen, another is subjoined, which takes a different, a rather less common group of words which will show the differences between the languages at this level. It is based on the author's own fieldwork. There are points of contrast that will be of interest.

ENGLISH	BILUA	BAÑATA	KAZÚKURU	LAVUKÁLEVE	SAVOSAVO
<i>banana</i>	naka	vabu	vinovo	sa:	sou
<i>betel nut</i>	sangala	(heta)	piku	leo	bekeni
<i>crocodile</i>	esoro	seoto	biṅabiṅa	katalea	(vua)
<i>door</i>	veutu	ua feano	sinama	hoa	ngolo
<i>fly (n)</i>	salosalo	uruzu	zinoṅo	sou	kuvuyindi
<i>food</i>	sailao	e:maso	sinimai	ui	samu
<i>house</i>	pande	va	valou	tail	tuvi
<i>lip</i>	bauta	tevere	mono	leuman	napu sembe
<i>moon</i>	kamboso	indi	retulu	kua	kuṽe
<i>mosquito</i>	kerokero	i:muzu		mulukuita	nonokea
<i>paddle (n)</i>	vozi (AN)	(voze,AN)	avi	kera	kajia
<i>pig</i>	bolo	bo	purono	foe	polo
<i>rat</i>	ruzi	siro		kusukui	kuzi
<i>sugarcane</i>	sisá	eu	mizamiza	sera	kemo
<i>taro</i>	ngoliti	ngoliti	mekohoni	suma	kake
<i>weep</i>	zia	ia:ia		lae	nei
<i>yam</i>	inari	mboe		(uvi,AN)	(uvi,AN)

A few AN loanwords are bracketed; and there are one or two Roviana loans in Bañata. The small degree of cognation must be left at the present to rest on observation; there is no space available to discuss degrees of relationship lexicostatistically.



## PHONETIC STRUCTURE

In spite of the radical differences in vocabulary and structure between these languages, the phonetic and phonemic patterns are remarkably homogeneous, and the peculiarities, such as the occurrence of /z/ are shared with the AN languages of the Western Solomons. A composite Table of Phonemes of the languages would look as follows:

	Labial	Denti- alveolar	Palatal	Velar	Glottal
stops	p, b	t, d		k, g	ʔ
nasals	m	n	ɲ	ŋ	
fricatives	f, v	s, z	ɲj		
laterals		l			
rolled		r			
semivowels	(w)		y		h
Vowels:					
		i		o	u
		e		ɔ	
		ɛ		<u>a</u>	
			a		

The voiced stops are prenasalised, and /j/ varies between (nz) and (ndz). The vowels have an additional component of nasality in Bañata, but this is being disregarded by speakers under about 40 years of age. Both length and stress may be phonemic in a given language, but tone is not so in any of them. As this paper is not a comparative grammar of the languages, it is not necessary to enlarge on the phonetic structure at this point, beyond remarking on the similarity of the Table of Phonemes in each, and adding that none of the languages permits either initial consonant clusters nor syllable final clusters. Some do not permit a final consonant at all - in fact, Lavukáleve is the only one that does so. The chief interest of this paper lies in the presentation of the morphological types of the languages, each of which will now be treated separately.

## MORPHOLOGY OF THE LANGUAGES

### (a) MORPHOLOGY OF THE NOUN

Unlike the MN languages by which they are surrounded, these four languages all possess noun classes - at least the first four on the list do, and indications will be given later that Kazdkuru also

probably does. Of the other languages, Bilua and Savosavo are two-class languages; Lavukáleve has three classes, and Bañata five. The expression of number is linked with that of class. In some of the languages each class has a dual and plural form, and in Bañata a trial also.

The systems of classification differ completely from language to language. Even Bilua and Savosavo, though each possesses two classes, do not appear to work on identical patterns. Lavukáleve with its three classes seems to be just a language like German with 'grammatical gender'. Bañata classifies according to principles quite different from any others. The languages of southern Bougainville also classify the nouns, but in a much more elaborate manner: Nasioi, for instance, has 50 noun classes. A brief language by language survey follows.

(i) BILUA

Here there are two classes of nouns, marked by the occurrence of the particles *vo* and *ko* before the noun: *vo maba*, 'man', *ko ñaña*, 'mother'. These are not articles, simply class markers. They recur with adjectives and certain other qualifiers, and with verbs, though sometimes in allomorphic forms: *runge ala maba*, 'bad man'; *runge ama ñaña*, 'bad mother'. Number is marked by an invariable *madu* or *poso* after the noun, irrespective of class: *maba poso*, *maba madu*, 'men'. An occasional reduplicated plural is found: *reko*, 'woman' > *rekoreko*, 'women'. The verb also carries class markers in the singular number, third person: *vo* and *o* for the one class, *ko* for the other: *o meake se*, 'he saw them' (*o*, 'he'; *m-ea-ke*, 'them-see-did', *se*, 'they', 'them' as subject or object); *vo ta o veake vo*, 'he saw him'; *ko ta ko vavingake vo*, 'she heard of him'. The key markers are *vo* and *ko*, which recur also in the possessive expressions: *maba vo méngora*, 'man's son'; *maba ko váto!o*, 'man's wish'. The particle used depends on the object possessed, not on the possessor. An adjective takes a special allomorph between it and a following noun: *vo* nouns require *ala*, *ko* nouns require *ama*, and the plural for both is *amu*. Examples have occurred above. The class markers may therefore be tabulated as follows:

	with noun	with adjective	with verb
I sing.	<i>vo</i>	<i>ala</i>	<i>vo, o v-</i> (object)
II sing.	<i>ko</i>	<i>ama</i>	<i>ko k-</i> (object)
I & II plur.	--	<i>amu</i>	<i>se m-</i> (object)

Actually certain other markers occur with the verb, which will be mentioned below.

How these classes may be denominated is a difficult question to

which no final answer has been given. The first missionary to describe the language, Rev. R.C. Nicholson, was content to call *vo* nouns masculine and *ko* nouns feminine, on the analogy of French divisions. It is true that *vo maba* is 'a man', and *ko reko* 'a woman' but it is not just a matter of the assignment of a noun to one of two genders. In Bilua, names of male beings (rational or irrational) take *vo*, all other nouns take *ko*, no matter what their significance, i.e. all the nouns traditionally 'neuter' or 'feminine' in English take *ko* in Bilua. The distinction here is rather masculine v. non-masculine. For practical purposes it is perhaps satisfactory to speak simply of classes I and II. Savosavo, with the same number of classes, justifies the use of the gender terms masculine and feminine better than does Bilua. In nearly all the languages here studied, noun-classification is marked by particles in the free form, not by bound morphemes. Lavukáleve has endings, and Bañata frequently both particle and ending. In the languages of Bougainville I., classes are marked chiefly by suffixes, and if the suggestion that Kazúkuru has a form of classification is correct, this would be a matter of suffixation also, as will be shown later.

(ii) BAÑATA

Classification in Bañata is a very different phenomenon from that in any of the other languages, and much more complicated. Both free forms and suffixes are used, and four numbers are marked in all but one class. Thus: 'man': singular, *zo fino<sub>zo</sub>*, plural, *mo fino<sub>mo</sub>*; dual, *zere fino<sub>zere</sub>*, trial, *no fino<sub>no</sub>*. Not all nouns, however, carry the suffix in the singular. This is particularly true for the *vo* class (which is not masculine as it is in Bilua, but contains *vo ngohe*, 'woman'). One never says \**vo ngohevo*. The exceptional class that is indicated by *no* is the class of 'imponderables' to use a Bantu term, such as liquids, that cannot be subdivided and therefore has no dual, trial or plural, e.g. *no fio*, 'water'; *no ti*, 'tea'.

The Bañata classes may be tabulated as follows:

Class	Singular	Dual	Trial	Plural
I	<i>zo</i>	<i>zere</i>	<i>no</i>	<i>mo</i>
II	<i>vo</i>	<i>robe</i>	<i>nu</i>	<i>me</i>
III	<i>no</i>	<i>rede</i>	<i>no</i>	<i>no</i>
IV	<i>na</i>	<i>rede</i>	<i>fio</i>	<i>zo</i>
V	<i>no</i>	--	--	--

Noun classification in Bañata is a very difficult matter. Tendencies may be noticed but overall rules cannot be stated. A few definite

usages stand out: male beings belong to the zo class and female beings to vo, but those classes are not limited to such obvious categories. Similarly the no class contains indivisibles or uncountables such as 'water', 'sand', 'steam' but also many others that are not really of this nature. Body parts are fairly wide in their distribution between the classes, as in most noun-classifying languages, and are as usual a disturbing feature. Some classes are conspicuous for the absence of certain types of nouns, e.g. the no class does not contain nouns relating to clothing, household or occupational utensils relationships, or nouns relating to magic or religion; the vo class similarly does not include the latter, most of which seem to be grouped with na.

Out of a sample of 266 nouns taken more or less randomly (from an alphabetically arranged English-Bañata vocabulary) the following table shows the occurrence in the various classes of each of the following groups of nouns: I. Body parts; II. Clothing; III. Objects about the house; IV. Relationship between people; V. Articles used in native occupations; VI. Fauna; VII. Flora; VIII. Geographical and astronomical objects; IX. Pathologies; X. Religious objects and terminology; XI. Miscellaneous.

na - 80	no - 25	no - 38	vo - 60	zo - 63
I - 6	I - 3	I - 2	I - 4	I - 5
II - 1	II - 0	II - 2	II - 1	II - 3
III - 5	III - 0	III - 4	III - 5	III - 2
IV - 3	IV - 0	IV - 0	IV - 2	IV - 7
V - 9	V - 0	V - 8	V - 10	V - 5
VI - 3	VI - 2	VI - 3	VI - 12	VI - 9
VII - 5	VII - 4	VII - 6	VII - 3	VII - 5
VIII - 12	VIII - 1	VIII - 2	VIII - 4	VIII - 5
IX - 2	IX - 0	IX - 1	IX - 0	IX - 0
X - 7	X - 0	X - 1	X - 0	X - 3
XI - 27	XI - 15	XI - 9	XI - 18	XI - 23

Thus assignment of nouns to a class is not a matter which can be treated definitively in a paper like this. While Class I is apparently chiefly masculine and Class II chiefly feminine in the native mind, native information states that round things, parts of body, leaves, birds and animals may be found in the vo Class, also, e.g. vo *oroma*, 'a log'; 'tree', however, is *no orono*. Class III includes places and times, and its marker is in fact used as a suffixes to express either location or time: area, 'together' > *aro-no*, 'in one place'; but this is not entirely the situation, for many nouns that are not locatives go into this class. The AN loanword *mano-*, 'bird' < (AN *manuk*) becomes

manono. Even here there are complications: manono is really a generic singular, a bird as an item in the landscape. The plural is no mano, birds as a class; specific birds spoken of are mo manomo, Class I plural. Class IV is a locative and contains nouns such as ?avo, 'garden', onga, 'floor', enefea, 'village', va 'house', but also a number of others, even nisa-na, 'slave', ?oro, 'rain', and obi, 'hand'. The word na ta:fo 'wall', gives a dual ta:forodo and trial ta:fofio, but plural like Class III singular, no ta:fozo, but with nasalisation of the vowel preceding the suffix -zo- and this occurs usually before this ending. Clearer statements and lists of nouns contained in each class must await the preparation of a Grammar of the Bañata Language which is projected.

There is a fairly full sentence concord in Bañata, but the allomorphic forms of the different class markers need careful attention. The classifying particles occur in environments such as the following:

1. with numerals:
 

a-zo habiri, 'one hambiri (fish)'
a-no iyana, 'one fish' (< an ikan, 'fish')
a-ná va, 'one house'.
2. with possessives:
 

<u>no</u> ere bo <u>no</u> , 'our yam'
no no uno <u>no</u> , 'your taro'
vo zo ngo <u>he</u> , 'his wife'.
3. with demonstratives
 

de-na fefa-na, 'this book' (fefa < Engl. 'a paper')
nge-mi uve, 'this fruit'.
4. with verbs -
  - (a) in some stative constructions: na zirano 'it (cloth) was torn';
  - (b) in relative clauses: zere finozere oi hinadi nodo-ro- 'the two men whom I saw yesterday'.

The concord used with verbs is quite different in principle from that found in the Bilua verb, as will appear later.

#### (iii) LAVUKÁLEVE

This is the language of the Russell Islands, which has previously been called Laumbe. Laumbe is actually the name given to the Group by the Ysabel people opposite, and not the local name. The correct name is used here.

In La. there are three noun classes. The word for 'man' belongs to Class I, that for 'woman' to Class II, and just to that extent these classes may be denominated masculine and feminine respectively.

Class III does not appear to contain names of living creatures and to that extent is 'neuter'. However, Class I and II do contain inanimates, and so if the gender terminology is used, it must be recognised as 'grammatical gender' much as in German. Here a system of number ring will be used without prejudice to future decisions. Concord is extensive, taking in all kinds of attributes and a number of the verbal forms, and such expressions of locality as "where?", "here" and "there".

Class markers are postposed and unstressed: Class I sing. na, Class II la, Class III ya. These are subject to changes for dual and plural numbers, and - unlike the Bilua and Bañata noun - the noun changes to so. The dual forms of the markers are: Class I nála, Class II la, and Class III va|a. The plurals are Class I and II va, Class III does not occur. The essential element in the dual seems to be /l/ which recurs in the dual suffix -l added to nouns: mitakéu ne, 'the dog', mitakéul nála, 'the two dogs'. These number formations in nouns are, however, extremely irregular. Some correlation between suffix and particle in the plural is likely but has not yet been established.

In addition to the particle following it, the noun itself may bear a class suffix, Class I -m, pl. -y. The other classes carry suffixes not for nouns but for attributives:

	Singular	Dual	Plural
<i>big man</i>	ali kuraim	airal kuraimal	malav kuraiv
<i>big woman</i>	homela kuraiyo	homelaol kuraiyal	homelav kuraiv
<i>big house</i>	tail kurai	tailal kuraiyel	tailav kurair

Suppletive plurals as shown above are not uncommon. The concord extends through the domain of a whole phrase: tailav koisovev ruvalev vuti:v 'many big new houses' exactly as in Latin and Greek. Similarly with locatives: no volu vasiám? 'your gardens are where?'; na tail fo-ya, 'my house (is) here'; na kalem fo-na, 'my father (is) here'; no kala fo:, 'my mother (is) here'. It will be seen that some words take the suffixial indicators, others take the particles as appended, unstressed suffixes.

There is no space to deal with the question of number indication by suffix; a few illustrations must suffice:

English	Class	Singular	Dual	Plural
<i>chief</i>	I	sulu-m	sulu-m-al	sulu-v-erav
<i>child</i>	I	vovou	vovou-l	tula-v
<i>crocodile</i>	II	katelea	katelea-l	katelea-v-il
<i>hill</i>	II	solo	solo-l	solo-v-il or solo-m-al
<i>house</i>	III	tail	tail-al	tail-av

The class markers are again not 'definite articles', though they often do seem to add a degree of definiteness. In combination with the class suffixes, their main purposes are:

i. to indicate a subject in a subject-predicate sentence: o sosa ya + hale, 'his neck + is broken'.

ii. to indicate the subject in a complex phrase: felakoe of sulum na ve-m, 'village its chief has-gone'; sulu-v-erav va ve-v, 'the chiefs have gone'.

iii. the object of a transitive verb, usually definite: ami hin foe na akurum, 'who the pig he-has-killed?'

iv. to indicate that an entire clause or phrase is to be taken as a composite subject or object: akove ŋo me-m na/ hoka tamu, 'he-whom-you-see is not here'; in the local Prayerbook occurs the phrase god kia-m o o loe tamu o-me-m na, 'God strong-one and (o) his (o) end not he-is', 'Almighty and eternal God', with class marker -m throughout and a final unstressed na.

v. the class sign may also serve as a relative pronoun: talu sevoa la o loe tamu o-me-m na, 'the word holy has-come, which (la) was promised'.

It is the syntax rather than the morphology of the la class markers that is complex, although the allomorphs of the number signs also raise difficulties for the learner. The use of the class suffixes in certain forms of the verb has appeared in the above examples. More will be said of it later. In general terms, their presence marks a stative or imperfective aspect.

#### (iv) SAVOSAVO

The earliest account of this language was given by R.H. Codrington in 1885 in his famous *The Melanesian Languages*, pp.559-565. He, however, could not believe that there could be a non-Melanesian language in the middle of Melanesia, as none had then been discovered. So he tried to force Savo into a Melanesian mould, although it was a "remarkably different language", and thus he missed the honour of being the first to find an NAN language in the group.

This language is generally simpler in structure than the other three. It has two noun classes, marked by preposed particles:

Class	Singular	Dual	Plural
I	lo	to	lo
II	ko	to	lo

That is to say, that a formal distinction is made only in the singular, but the other numbers are marked by distinct suffixes for the classes:

	Class I	Class II
Singular	'make' lo pepeí	'woman' ko adaki
Dual	to pepeilo	to adakizalo
Plural	lo pepeíya	lo adakiya

In this language the attribute precedes the nucleus and there is no concord. The markers lo and ko, however, are 'he' and 'she' as pronouns in the verbal phrase; to is 'they two' for both sexes, but 'they' is ze or zepo. The only concord found is in the possessive form of the pronoun, where Cl.I has -va and Cl.II has -ma, e.g. ai-va tone lo-va molae, 'me-of brother him-of canoe', 'my brother's canoe'. Number does not enter into the question, because attributes precede: 'my two houses' is ai-va edo tuvi, 'me-of two house'; to-va vobula, 'them-two-of midst-in', 'between them two'; 'the spirits' houses' is taruna ze-va tuvi, 'spirit them-of house(s)' (taruna is a AN loanword). If, however, a number forms a subject, then the marker may appear: edo to na pa solalala boi pafu, *the two of them have come to the village* (edo, 'two', to, 'dual', na, 'subject'). Demonstratives also contain the class markers as suffixes: ailo, aiko, 'this', matilo, matiko, 'that'; matito adakizalo, 'those two women'. The possessive signs va (sometimes a) and ma occur in a few other settings also, e.g. from dai, 'good'; daito(v)a angutayu lavae, 'he works well'; daitoma angutuyu lamae, 'she works well'. With some kinship terms the particles are omitted: ai mama, 'my mother'.

As in Bilua, there seems to be in Savosavo a simple dichotomy, which does not correspond to a masculine-feminine division, and is not a system of grammatical gender as in French. In Bilua, male beings belong to Cl.I (vo), all others to Cl.II (ko), all others to Cl.I (lo). The moon, however, is ko kuye, and this undoubtedly derives from earlier mythology; but there is also ko kuzi, 'rat'. The few exceptions such as these, stand out clearly. In general it may be said that while in Bilua the classification is male beings as against all others, here the classification is all others against female beings.

Those very brief notes set out the general lines of noun classification in the four languages under discussion. As already said, nothing is known of the grammar of Kazúkuru, Guliguli and Dororo on New Georgia. The Kazúkuru vocabulary, however, shows a number of recurrent noun terminations, which, in view of the class systems in the neighbouring NAN languages, might well prove to be class markers if the morphology of the languages could be investigated. The following list



of endings and examples will at least suggest this possibility within the limitations of the available lists. The vowel endings are doubtful, but these are only 3 out of 14 possible endings:

1. -i (?) *basket*: sukina-i (see No.3 also); *food*: sinina-i; *leaf*: nilo-i; *vine*: sero-i. These are all vegetable products.
2. -o: *dog*: pilipu-o; *spear*: zatoba-o.
3. -u: *basket*: sukono-u; *club*: vendoro-u; *house*: valo-u; *neck*: ningo-u; *leg*: nukolo-u; *valley*: leno-u. Some wooden or wooded objects and body parts.
4. -na: *flower*: ruvo-na; *husband*: laŋasa-na; *woman*: kaza-na; *opossum*: hina pou-n; *stone axe*: taunou-na. Mostly living beings.
5. -ni: *fire*: hika-ni; *name*: zepo-ni; *rain*: makuhu-ni; *taro*: mekoho-ni; *road*: ritani; *stone*: pito-ni; *tongue*: lepa-ni; *water*: koli-ni; *wing*: siporo-ni. Objects and one or two body parts.
6. -no: *foot*: neu-no; *mother*: mama-no (cf. *father*: mama-to); *mouth*: noŋa-no; *pig*: puro-no; *sow*: gopi-no; *tree*: vudo-no; *yam*: miŋo-no; *shield*: lovi-no; *feast*: seoraŋa-no.
7. -ni: *lime*: sine-ŋi.
8. -ŋo: *egg*: lino-no; *fly*: zino-ŋo.
9. -ri: *bone*: sino-ri.
10. -ro: *hill*: miro-ro.
11. -si: *river*: sirati-si.
12. -ti: *blood*: rina-ti; *body*: vini-ti; *death*: metale-ti.
13. -to: *father*: mama-to; as against mama-no, *mother*.
14. -tu: *child*: rino-tu; *father*: ŋginu-tu.

These are only suggestions of a possibility; Guliguli and Dororo are sufficiently like Kazúkuru, according to Lanyon-Orgill's brief vocabularies, to make a similar possibility worth considering in those languages also.

#### (b) MORPHOLOGY OF THE VERB

The present paper does not permit of a statement of verbal morphology as full as that given of the noun. There is less homogeneity in verbal systems, and much more detail would be required to make them clear. The

few remarks that are made here are therefore included only for the sake of presenting as full a picture as possible of the languages within the compass of the available space.

None of the systems is simple; perhaps the least complex again is that of Savosavo. Here the verb is preceded by a subject which is marked by a particle *na* after it. Pronoun objects are both prefixed and suffixed: which verbs take which systems has to be learned. A verb which is nominalised by the suffix *-yu* may still take a prefixed object: *ali*, 'hit' > *lo aliyu*, 'a hitting' > *naliyu*, 'a hitting me': *lo na to leyei lo naliyu*, 'he saw the hitting me, he saw me being hit'. The forms of subject and object are as follows:

	PRONOUN SUBJECT	OBJECT PREFIX	OBJECT SUFFIX
Singular 1.	<i>añi</i>	<i>ñ-</i>	<i>-ñi</i>
2.	<i>no</i>	<i>n-</i>	<i>-ni</i>
3. I	<i>lo</i>	<i>l-</i>	<i>-li</i>
3. II	<i>ko</i>	<i>k-</i>	<i>-yi</i>
Dual 1. incl.	<i>aɣe</i>	<i>mañ-</i>	<i>-ɣiñi</i>
1. excl.	<i>edo mai</i>	<i>ñ-</i>	<i>-ñi (?)</i>
2.	<i>pe</i>	<i>p-</i>	<i>-pi</i>
3.	<i>to</i>	<i>t-</i>	<i>-ti</i>
Plural 1. incl.	<i>mai</i>	<i>ñ-</i>	<i>-miñi</i>
1. excl.	<i>ave</i>	<i>ñ-</i>	<i>-viñi</i>
2.	<i>me</i>	<i>m-</i>	<i>-mi</i>
3.	<i>ze(po)</i>	<i>z-</i>	<i>-mi</i>

Tense and mood are marked as follows: present: *na +* ; past *te + ... +tu*; future: *+te... tai*; imperative mood: *-a*. There are also some other modal signs.

This is a mere outline but serves to show that the Savosavo verbal system is not really complex. By way of contrast, Lavukáleve, Bañata and Bilua are too complex to be illustrated fully here.

In Lavukáleve verbs, a number of principles occur which may cross each other:

1. a verb may be preceded by a pronoun and carry the suffixed class and number markers: *hoina vo-m*, 'he comes'; *hol-nal vo-mal*, 'they two come', *hoi-v vo-v*, 'they come'. These all appear to be statives or imperfectives. In the perfective the markers are dropped: *mariven a vo*, 'yesterday I came'; *kosora fi á vo*, 'I will come now'.

ii. The class suffixes are added to a verb to mark the relevant

features of the object: e: suni e: le-m, 'we all we see-him'; hoina o le-v, 'he sees plural object'; el o lema1, 'us-two he-sees-two'; na o lai-m, 'me he-told-one-Cl.I': subject and object pronouns both precede the verb, usually object before subject as shown above.

iii. The tense scheme is elaborate, and some only of the forms are illustrated here. The negative is expressed by a syllable -la- before the tense markers. There are many periphrases, and class markers play their parts. A few examples:

*I am coming:* nai-vula-nu; neg. nai vo-la-m me-re-m fo-nai

*I will come soon:* nwa-fane vo-re-m fo-nai

*If I don't come:* vo-la-m nai siale

*I will come tomorrow:* nai raine vo-re-m fo-nai

*I will not come tomorrow:* nai raine vo-la-m sia-m

*Yesterday I came:* mariyen nai a vo

*I have come (stative):* na(i) vo-m

*I am about to come:* nai vo-ham fi hilame

*I am coming now:* nai vela filame

*I walk:* nai kelea fi; neg. nai kelca-la-m

*I walked:* nai kelea-m; neg. nai kelo-la-m

*I am walking:* nai kolea-nu; neg. nai kelea-la-m me-re-m

*I will walk:* nai kelea-re-m

*If I walk:* nai a kelea-le

The forms marked by fo- or fi- have many other uses which cannot be discussed here.

Object forms appear in the following examples:

*The snake sees us two:* tagio la mel o lema1

*The snake sees us three:* tagio la mesa o lev

*The snake sees the woman:* tagio la aira o lea

*The snake sees two women:* tagio la airaol o loaol

*The snake sees the women:* tagio la homelav o lev

The full analysis of the La. verb still awaits completion. The basic distinction, peculiar to this language, seems to be one of aspect as against tense.

In Bañata the class markers are involved in the verb only as far as relative clauses are concerned, as has already been shown. There is a suffix -feni which forms negatives; a suffix -?atiri which forms past conditionals (ei no are?atiri, *if I you had seen*). The base form of the verb indicates an imperative: rutu, 'make'. The tenses are based on a derived form in -a: horua, 'buy' (apparently a loanword from \*AN beli). This changes to -e in some tense formations and in such phrase compounds as zo horue finozo, 'the buying man, the merchant'. The -a form is used

after the completive iafa: iafa ei zo hua, 'I have told him'; to the -e form class markers are added: zo hofe zo ei hau-e-no, 'he came and told me'; na va e:do reu-e-nongo, ei ngea i:si-vea, 'the house into when-I-go, I shall sleep-shall'. As shown in this example, tenses are indicated by a number of suffixes (e.g. -vea future) and auxiliaries (e.g. ngea, 'futuraity'). Some of these follow the -a form: zo reu-a mosa, 'he is coming'. The -no classifier is used with the -e form of all verbs where time is stated or implied: revo no ngea voize-ve-no (< -vea-no)? 'when will you go?'. zera ei ngea voize-ve-no, 'I will go tomorrow'. The verbal object precedes the verb, and some verbs reflect it in a suffix: ei no nodo-na, 'I see you'; oi zo nodo-ra, 'I see him'; ei vo nodo-va, 'I see her'; ei zere nodo-ra, 'I see them two'; ei mo nodo-ma, 'I see them'. The person of the subject does not affect this ending.

The Bilua verb shares one or two features with Bañata but generally contrasts with the other languages. It is not affected by the noun classes except for a subject indicator. It changes ending for a number of tenses and moods, a few of which are exemplified here: -a, indefinite present; -la, -kala, near past; -ke, general past; -lou, future; -la, imperative; -te, habitual imperative. The language has -a/-e, forms like those of Bañata, each connected with certain suffixes: rongu-a, 'loves'; rongu-e-ke, 'loved'; rongu-e-lou, 'will love'; rongu-e-la, 'love'.

The verbal subject is a complex phrase. A noun subject is generally followed by ta and then by a verbal pronoun; a pronoun by ta and then repeated in a shortened form: aña ta a rongua, 'I love'. This ta seems to be a subject referent, like Japanese wa and ga, 'as for': ño ta ño ziovou, 'you (as for, you) will go'. In certain instances this ta and the second pronoun are omitted: pui a vai ñaña, kiñovou, 'that I don't know him, you will say'; se ke ola keru, 'they were going time, when they went'. There are also morphophonemic abbreviation of ta and the pronoun.

The object is expressed in two ways. In most verbs there is a stem suffix, before the tense marker: vo ta o rongu-e-la, 'he loves me'; rongu-ena, 'loves thee'; rongu-e-ma, 'loves them'; vo ta o rongu-eñ-ou, 'he will love you'. In others, the object is prefixed: v-sa, 'sees him'; l-ea, 'sees me'; l-o-lou, 'me see will'; k-ea, 'sees her'. Some again are compounded with a base ai and an invariable root: -ai ñaña, 'know' or -ati, as in -ati kue, 'bring'. In these cases the same set of prefixes appears: ño ta ño v-ati kuo-ke, 'you brought him'; o m-ai bazu-s-ka, 'he taught them'.

## CONCLUSION

The above sketch of the NAN languages of the British Solomon Islands is extremely inadequate but must serve until full grammars and vocabularies can be prepared. The noun classification is the interesting feature of these languages. Some resemblances to them may be found in the languages of southern Bougainville, although these classify more elaborately and on different principles. Often the different languages use the same markers for quite different purposes: thus,

so (Siwai), zo (Ba.) mark masculine singular.

-nun, -na (Nasioi), na (La.) mark masculine singular.

lo (Rotokas), lo (Savo) mark masculine class, singular.

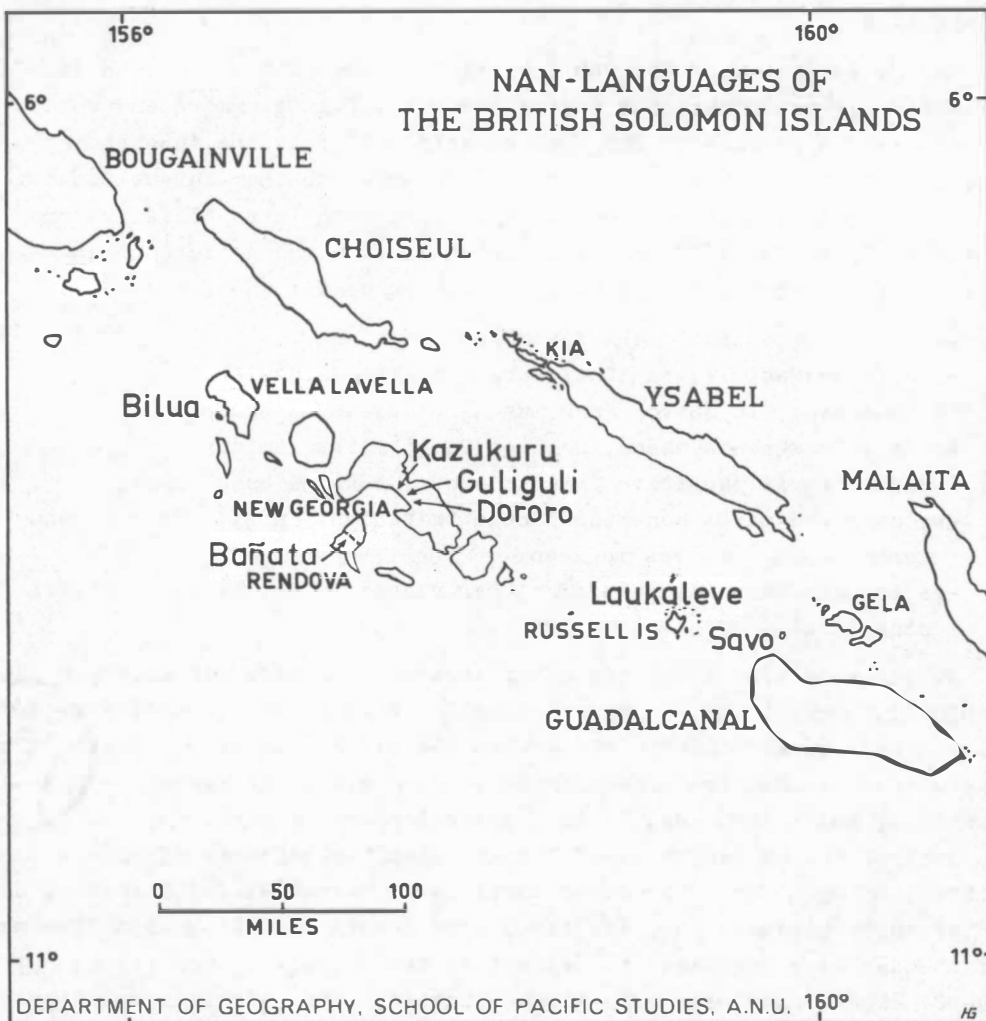
ko (Bi.) marks non-masculine; ko (Savo) marks feminine, while in Nasioi ko is partitive (*hau ko amoi, give me some taro*).

-ma suffixed marks non-masculine attributives in Bi. and Ba., and feminine possessives in Savo.

-ya in Savo marks plurals of either class; in La. it marks Cl.III singular.

At the same time there are other strange contrasts: in La. la marks feminine nouns, in Bi. it marks masculine attributes: *vo mola kale a-la maba, 'the canoe in man', 'the man in the canoe'*; in Bi. vo marks masculines, in Ba. feminines, while in Savo -va marks masculine possessives, and in La. -va, -v is a general plural marker.

Some of the MN languages of Malaita also have systems of noun classification by means of preposed particles. Kwara?ae, for instance, has 14 of these classes; they are set out in detail in N.C. Deck's "Grammar of the Kwara?ae Language" in *Journal of the Polynesian Society* 42 (1933), 39-42. These have been very little studied, but their interrelationships and any possible relations they may bear to the NAN languages, are worthy of further analysis.



# THE AUSTRONESIAN LANGUAGES OF NEW BRITAIN

ANN CHOWNING

## 0. INTRODUCTION

0.1. New Britain, like so many parts of Melanesia, is an area for which relatively little published linguistic material is available. It has, however, attracted the attention of a number of linguists, whose conclusions are frequently at variance with one another. Some of these men, such as Capell, Dyen, Goodenough, Grace, and Laufer, have been able to make use of materials which are still in manuscript and which they have sometimes collected themselves, but even so, there is little agreement between them. It is impossible to resolve or even to explain all the conflicts of opinion. In this paper, I shall inevitably disagree with some of the previous classifications and groupings. A principal reason for the differences in my conclusions is that I have probably had access to more data than anyone else except, presumably, Capell. I would expect almost anyone who examined these data to agree with my conclusions.

0.2. For all of the AN languages to be discussed except Tolai, I have relied primarily on manuscript materials. These have been collected by a number of fieldworkers, including myself, within the past 13 years. I am immensely grateful to all those who have permitted me to use their data; their names and contributions are listed at the end. I have also consulted the available publications. For the part of New Britain south and west of the Gazelle Peninsula, very little has been published except for brief word lists, but these sometimes fill in major gaps in our knowledge. The only two languages in western New Britain which have been described in print, Nakanai and Bariai (Hees 1915-16; Friederici 1908), belong to groups in which I have done field work myself, and I have consequently depended more on my own knowledge of these than on secondary sources.

0.3. In most cases, little grammatical information is available, but I have used it wherever possible. Without going into details, I will say that as far as I can judge, all of the languages which I am calling AN, with the sole exception of Tumuip and Mungen, are grammatically quite like other languages which are usually classified as Melanesian. The Arawe material is particularly meager, and these languages may turn out to have unexpected complexities, as far as I know, those who have talked of a Papuan component in them (Todd 1934; Capell 1962b) were relying on lexical evidence alone. In any case, I have based my classifications on grammatical as well as lexical grounds when I knew enough of the grammar. It should be noted that the cognate percentages reported here were not the only basis for grouping languages together.

#### 0.4. THE COGNATE COUNTS

0.41. The cognate counts should be considered only suggestive, for a number of reasons. First, the large majority of the lists were collected in a single session from a single Pidgin-speaking informant. There is no need to stress the possibilities of error in such cases. The only language lists collected by field workers who actually spoke the language were those for Kaliai (Counts), Kaulong (Goodale), and Bileki, Kove, and Sengseng (Chowning). Almost all collectors used either the old TRIPP list or the SIL list, which are by no means strictly comparable, and often the list was not completely filled out. In comparing any two languages, I have only rarely been able to work with exactly the same list of words. Often the lists were too brief for correspondences to be established with certainty, and I have sometimes simply assumed that two words were cognate. In calculating percentages, I have counted two probable cognates as the equivalent of one certain one. Where two percentages are given, the lower one is based only on reasonably certain cognates. This procedure may sound excessively casual, but is probably no more so than that usually followed in dealing with short lists. I should note that I have eliminated from the SIL list words not normally found on Swadesh lists ("axe", "wallaby", and such), and also "horn", for the obvious reason that there are no native horned animals in the area. Consequently my cognate counts for some languages are lower than they would be if the full SIL list were used.

0.42. I have, in calculating percentages, followed the normal practice (but one different from that followed by Allen and Hurd) of treating all clear cognates as equivalent, no matter how different their present shapes. Bileki liu, Kove unu, and Sengseng num, "to drink" (all from



PAN \*inum) are rated just the same as Bileki, Kove, and Sengseng mata, "eye". In grouping languages together, however, I paid attention to the actual closeness of resemblance as well as to the simple fact of correspondence.

0.43. Only occasionally have I been able to deal with the problem of loans. Sometimes they can be easily distinguished, as in the case of Kapore borrowings of Bileki nouns complete with the prefixed article. Usually, however, I have either felt unable to recognize a loan with certainty, or to be sure of the direction of borrowing. Particular cases in which I suspect distortion from an unusual amount of borrowing are noted in the text.

0.5. Boundaries indicated on the map are probably accurate for the north coast, but not elsewhere. Unfortunately the various maps available to me rarely contain the village names recorded by field workers, and almost never has it been possible to ascertain the exact location or boundaries of a language. Nevertheless, this should be considerably more accurate than previous maps. There are still blank areas, and it is possible that some quite new languages remain to be discovered, but I doubt whether there is anything spoken by more than a few hundred people which will not fit into a group that is now known.

## 1. THE NON-AUSTRONESIAN LANGUAGES

1.1. New Britain seems to contain relatively few languages which are definitely NAN, and almost all of these are concentrated at the north-east end of the island. Those known so far are Taulil-Butam, Baining, Sulka, Kol, Wasl, and Anem. In this paper I am concerned with NAN languages only as they relate to the AN ones, and so will do little here but identify and locate them. Where there has been disagreement about their classification, they will be discussed more fully.

1.2. Taulil and Butam are (or were) two closely related languages spoken on the Gazelle Peninsula, just inland from Tolai. They are generally assumed to be NAN with some AN loanwords, though Lanyon-Orgill (1960:27) calls Taulil AN. I have no information apart from Laufer's short article in *Anthropos* (1950), but on the basis of it, I am willing to accept Laufer's statement that the languages are NAN.

1.3. As far as I know, everyone agrees that Baining is NAN. Baining seems to consist of a number of dialects, or perhaps separate languages.

I am assuming that Makolkol is one of these, and Gaktai another (cf. Laufer 1946-49; Meier 1914). Baining fills the whole of the Gazelle Peninsula except for the relatively narrow strips occupied by Tolai, Taulil-Butam, and the northern extension of Meramera.

1.4. Sulka is also agreed to be NAN. It is confined to a narrow strip along the south side of Wide Bay, and seems to have had some influence on the AN Mengen language just to the south (cf. Laufer 1955:35).

1.5. Beyond the Baining and Sulka areas, the coast of New Britain was, until recently, occupied by speakers of AN languages, with the exception of the small Anem-speaking area to be described below. But most of the interior in the area north of Jacquinot Bay is occupied by speakers of Kol or Kole, which according to O'Neill (1961:220) has two main divisions, Sui to the north and Kol proper to the south. The word lists which I have seen were collected from speakers of the southern dialect (or language), and leave no doubt that Kol is NAN. Allen and Hurd (1963:4) and Panoff (personal communication) report that in recent years, Kol speakers have been persuaded to settle in a single village on the north coast, in the Meramera area, and in several on the south coast, in the Mengen area. These have not been marked on the map.

1.6. The languages to the west of Kol, in the Nakanai Mountains, belong to the Mengen family for a considerable stretch. There is, however, a single small enclave of NAN speakers toward the western end of the range, in the Central Nakanai Census Division. The language, variously called Wasi, Ata, and Peleata, has sometimes been described as AN (Allen and Hurd 1963:7; Dyen 1963:75). Wasi does in fact contain a number of AN cognates, but almost all of these seem to be Nakanai loanwords. The cultural situation in this area makes the relatively large number of borrowings intelligible (cf. van Rijswijck 1966; Allen and Hurd 1963:13). When these are eliminated, neither the remaining vocabulary nor the grammar seem to me to provide grounds for considering the language AN.

1.7. The final definitely known NAN language in New Britain is Anem or Karai, spoken in a few coastal villages and extending inland for a short distance along the Banu River in the Kaliai Census District of west New Britain. Although it shares a certain number of words with the neighbouring AN languages, such as Kaliai and Mok, the rest of the vocabulary, including the pronouns, look quite unlike any of the AN languages in New Britain. I have too little information to appraise the

grammar, but on lexical grounds alone, I am calling it NAN.

1.8. Laufer once listed a number of languages spoken in the interior of New Britain, beyond the Gazelle Peninsula, which he said are fully or partly Papuan (1946-49:500). They comprise Kol (Mobek and Ituri), Boroborogo (Sisuni, Ubai, Kukuta), E Roborobo, Bau, Logologo or Bebel (with four divisions), Maseqi, Aria, Qoqor, Ovenge, Sahe. Of these, Kol is certainly NAN. Boroborogo has not been identified, though Ubai is a dialect of Nakanai (AN). E Roborobo is a Nakanai term meaning "*people of the mountains*", and does not designate any particular linguistic group. Bau, Maseqi (=Mangseng), Aria, and Sahe are AN. Logologo-Bebel may designate Longa-Bibling, also AN (Lamogai Family). Qoqor and Ovenge are also unidentified.

1.9. I have not worked intensively with the NAN languages of New Britain, but I can say that the lexical material which I have examined does not show clear connections between any two of them. Anem, Wasi, and Kol seem quite distinct from each other and from the little Sulka, Baining, and Taulil material I have examined. I have not seen any word lists for the NAN languages which have been reported to exist in New Ireland and Umboi Island (cf. Capell 1962a:77; 1962b:375). At present, the NAN languages of New Britain seem even more diverse than the AN ones. As a final note, I should emphasize the fact that these NAN languages do not seem to have greatly influenced any of the neighbouring AN languages, with the exceptions of Tomoip and Mengen, which are spoken on the edges of a solidly NAN area. The words in the languages of west New Britain which are not traceable to PAN forms are equally impossible to derive from the known NAN languages of New Britain. It is certainly begging the question to speak of an NAN substratum in such languages (cf. Capell 1962b:375) when this substratum cannot be derived from any identifiable NAN language.

## 2. OTHER CLASSIFICATIONS

2.1. Apart from the languages which I am calling NAN, several other New Britain languages which I consider AN have sometimes been excluded from that category. They have either been called frankly NAN or assigned to an intermediate category (Capell's "Mixed Melanesian-Papuan", Capell's and Loukotka's "Semi-AN"). I assume that, given adequate data, it is possible to decide a language is AN or not without having to use the intermediate category, and I have seen no reason to change this position after working with New Britain languages. At the same time, I

readily concede that it is often difficult if not impossible to make a decision on the basis of some published word lists; I could not decide that Tomoip, Arawe, Pasismanua, and Lamogai were AN until I had access to much more material than that published in Parkinson and Chinnery. Loukotka, for one, seems to have relied heavily on these sources. It is necessary to discuss briefly these classifications which disagree with mine.

## 2.2. CAPELL

2.21. Capell has classified Bileki as a mixed language (1962a, Map VIII), undoubtedly because he has confused it with something else. It is precisely the same dialect of Nakanai which Hees described (1915-16), and he classifies Nakanai itself as Melanesian on the basis of Hees's description. The AN status of Nakanai is indisputable (cf. Goodenough 1961a).

2.22. Idne, listed as a mixed language in 1962a and as a NAN language in 1962b, is the name of a river which, according to an unpublished field survey by the Nicholsons (SIL) in 1962, simply marks the boundary between the Kilenge and Arawe areas. Capell himself calls both of these Melanesian languages, and I have found no reports of another language in this area which might be NAN.

2.23. Capell also classifies Maseki (Mangseng) as a mixed language, while calling Rogo, which seems to be a dialect of it, Melanesian. (See discussion in 3.74. below.) Phonologically, Mangseng is somewhat aberrant, but its close similarities in lexicon and grammar to other languages in the Whiteman Family, such as Kapore, make its AN status certain (cf. Goodenough 1961a).

2.24. Mengen has long been subject to dispute. It shows definite NAN influence on the grammar. Nevertheless, both the lexicon and much of the grammar are certainly AN, and again its clear affinities with indisputably AN languages such as Mamusi seem to leave no real doubt about its classification.

2.25. Tomoip looks more dubious than Mengen if we only examine the brief word list in Parkinson, but the much fuller data collected by Grace makes it clear that the language is AN. There is confusion in the literature about its affiliations with Gaktai or Paleava, which are sometimes treated as divisions of Baining. According to Meier (1914: 349) "Paleava" is just a general term for people of the interior. There may well be an area in which Tomoip and Baining have influenced each

other, but certainly Tomoip proper does not belong with Baining.

2.26. In "Oceanic Linguistics Today" (1962b:375), Capell says:

"All the languages of the southwest coast, though classified as AN and certainly containing AN elements, are only NAN languages overlaid with a veneer of AN. This applies from the west end of the island (where Kilenge is much more clearly AN) right along the south coast as far as Cape Orford. Some languages classified by Loukotka as "Papuan" (A Kinum, Pulie) are members of this semi-AN group (Capell, unpublished field notes)".

I can only say here that I simply cannot accept his assertion that these are NAN languages; for one thing, those known to me do not have any of the features which he says tend to characterize NAN languages (*ibid.* 271-2). I have presented elsewhere the evidence that the Pasismanua dialects, which include "A Kinum", are fully AN (Chowning 1966). Obviously Capell and I disagree as to what constitutes an AN language, but I find it surprising that anyone who considers Yabem, Gedaged, and the languages of New Caledonia fully AN (*ibid.* 376-77, 381) could deny that status to the much less aberrant languages of south New Britain.

### 2.3. LOUKOTKA

2.31. Along with the undoubtedly NAN languages of northeast New Britain Loukotka listed as "Papuan" a number of south coast languages. The first three are A Kinun (for A Kinum), Pulie, and Apui; for these he cites only Chinnery. Chinnery states clearly that A Kinum and Apui are a single dialect (n.d.: 93), and it in fact corresponds to Kaulong with a slight mixture of Sengseng, the villages being on the border between these Pasismanua dialects. Pulie is one of the Lamogai languages. There is nothing "Papuan" about either of these. Loukotka also classifies as Papuan a group which he calls Alo, generally equivalent to my Arawe. It is said to include Chinnery's Moewehafen as well as "Gasmata, parlé par 10,000 ind. env. dans plusieurs villages littoraux comme A Napo, Gasmata, Gattmata, etc." and the languages spoken on the offshore islands of Abutumete (Arawe proper), Aveleng, and Amga (Moewehafen) (Loukotka 1957:59). It should be noted that Chinnery specifies that "the language of Getmatta (*šic*) is said to be different from that of its coastal neighbours", i.e., Gasmata (n.d.: 58), and the only words which he records from Getmatta and a Nato (*šic*) ally the language with A Kinum, not with Moewehafen. As noted above, it is difficult to evaluate Chinnery's word lists, even though they are as accurate as most, but they provide no basis for saying that the languages are "de type papou".

2.32. In 1962 Loukotka announced that "to the semi-AN group, very little known languages of south western New Britain [presumably those previously called Papuan - A.C.], it is necessary to add a new language from the north coast, E. Susulu. From the unpublished materials of Prof. Friederici." (415). No further clue is given as to the location of this language, but considering where Friederici was working, it may be Anem and so really NAN. (It should perhaps be noted that Nakanai is spoken in the village marked "Sulu" on some maps.)

### 3. THE AUSTRONESIAN LANGUAGES

#### 3.1. TOLAI (*Gunantuna, Tuna, Kuanua, Raluana Blanche Bay Dialect, New Britain Language*)

3.11. Tolai is so well-known that it hardly needs discussion. It is the language often designated simply as "New Britain" in the older works. Confined to the north end of the Gazelle Peninsula, and surrounded by NAN languages, it has long been known to have its closest affinities with the language of the Duke of Yorks and some of those on New Ireland. Although unquestionably AN, Tolai bears little lexical resemblance to other languages in New Britain. There are a number of items shared with Nakanai, as might be expected from the history of trade between the areas (cf. Hees 1915-16:48 for a description of the special language used by the Nakanai in trading with the Tolai). Other items are shared with south coast languages, which are phonologically more like Tolai than Nakanai is, but these may also have resulted from trade. Despite these shared items, Tolai cannot, on lexical grounds, be grouped with any other New Britain language.

3.12. As early as 1927, however, Stamm pointed out that there are strong resemblances in grammar between Tolai and Nakanai, especially Bileki (quoted in Laufer 1956:996). The resemblance certainly exists, though Stamm overstates it somewhat. Milke, referring to one of the similarities, suggests that Nakanai may have been influenced by Tolai (1965:322). This seems unlikely, in view of the geographical separation of the areas, the known history of relations between them, and the fact that the resemblance is at least as marked in the western part of the Nakanai area as in the east. The problem is too complex to deal with here, but there may be something to Laufer's suggestion that Tolai speakers are not to be derived wholly from New Ireland, but share part of their past history with the Nakanai (Laufer 1956:996).

### 3.2. NAKGATAI

It has often been stated that the area between the Tolai and Nakanai, along the east coast of the Gazelle, is wholly Baining-speaking. In 1942, however, Lanyon-Orgill reported the presence of a village on the "south side of Open Bay", in which a non-Nakanai language called Nakgatai was spoken. He published a very short word list which does support his contention that the language is quite different from Nakanai and most similar to that of Nuguria, a Polynesian Outlier located east of New Ireland. In the absence of additional information, I have not included Nakgatai on my map. Lanyon-Orgill's material was obtained at second-hand. If the village was correctly located, it would be an isolated case of a Polynesian language being spoken in New Britain.

### 3.3. THE KIMBE (NAKANAI) FAMILY

3.31. "Nakanai" is said by Burgmann to be derived from a Tolai word meaning "*dort unten zur Seite hin*" (1961:930). The vague meaning of the word, and its use by the Tolai to designate all the people from whom they obtained Nassa shells along the north coast, may explain the frequent misplacement of the Nakanai area on early maps, as in Parkinson 1907. As a linguistic term, however, its meaning has always been reasonably clear. Most writers have used it to designate the closely related languages, from Meramera through Bileki, found along the coast in what are now the East, Central, and West Nakanai Census Divisions (cf. Hees 1915-16; Goodenough 1961a.) After Hees's time, however, the Roman Catholic priests working in New Britain have extended the term to include the languages of the Willaumez Peninsula (Stamm, op. cit.; Kroll 1938:371; Burgmann 1961:930), perhaps following the example of Powell (1883). There is no question that the Nakanai languages are related to the Willaumez ones, but the use of the term "Nakanai" to designate the whole group is likely to lead to unnecessary confusion, especially as regards shifting the meaning of "Central Nakanai" to designate the people in the West Nakanai Census Division, and "West Nakanai" to designate those on the Willaumez. It seems preferable to accept Goodenough's suggestion (1961b) that they be called "Kimbe", after Kimbe Bay.

3.32. Nakanai languages, in the narrow sense, occupy the north coast of New Britain from about the Toriu River, at the base of the Gazelle, to Kwalakessi (Kova-le-kesi), a mixed Bileki-Kapore village on the west side of Cape Hoskins. There are two separate languages, Meramera and West Nakanai. Meramera (Aeae, Ubili, East Nakanai, Open Bay Dialect) is spoken along the coast, mostly in the East Nakanai Census Division,

and on the island of Lolobau. It is closely related to the West Nakanai group (about 64% shared cognates), which is composed of 3 very similar dialects, Maututu, Vele, and Bileki, and one which is somewhat more divergent, Ubae. Maututu (Loso) and Vele (Vere, Ouka) are in the Central Nakanai Census Division, with Vele extending well up into the Nakanai Mountains. Ubae is spoken in a small area in the interior of the West Nakanai Census Division. Bileki (Muku, Lakalai, Two-Peak Mountain dialect, "Central Nakanai" in Stamm's terminology)<sup>1</sup> is spoken around Cape Hoskins. Because of the various confusing uses of the word "Nakanai", it may be worth noting that various non-Nakanai languages are spoken in the Nakanai Mountains, but do not extend to the coast. Except for a very recent settlement of Kol-speakers in the Meramera area, Nakanai speakers form a continuous band along the central north coast of New Britain. The close resemblances between Bileki and Vele-Maututu may result from the migration of many Bileki east to escape volcanic eruptions early in the century.

3.33. Nakanai is separated from the Willaumez languages by a few Kapore-speaking communities, which will be discussed with the Whiteman languages (3.8.). The Willaumez languages, as described by Goodenough (1961b), begin at the village of Buluma, still in the West Nakanai Census Division, and occupy the whole of the Willaumez Peninsula. Xarua (Mai) is spoken in only a few villages at the extreme east of the area. Bola (Bakovi, "West Nakanai" in Stamm's terminology) covers most of the peninsula, and Bulu is spoken at the tip. Although Kroll (1938:371) and others have treated these three as a single language, they are in fact quite distinct. Goodenough found the number of cognates shared by Xarua and Bola to be 66%, and by Bola and Bulu 53%.

3.34. A fourth language in the area, Bali-Vitu, consists of several dialects spoken in the French Islands. Its closest relations are to Bulu, with a shared cognate count of 36-42% depending on the dialects compared. It is perhaps best considered as a separate Kimbe language, rather than as one of the Willaumez group.

3.35. There is no doubt that the Kimbe languages are more similar to each other than any is to an outside language. The most closely related languages in the Nakanai and Willaumez groups are, not surprisingly, Bileki and Xarua, which are geographically nearest (52% shared cognates). There may have been loans from Bileki to Xarua.

<sup>1</sup>Allen and Hurd claim that the people call themselves Mamuga (1963:3), but I never heard the term. They may have misunderstood the title of *La Testamento ale Mamuga* (ibid:9) which means "Old Testament".



Although Kroll says (1938:374) that the Bulu villages were founded by Bileki refugees from volcanic eruptions, Bileki and Bulu have only about 40% of shared cognates. For Bileki and Bola, the count is 35%. These are the languages which compose Dyen's Willaumez linkage (1963: 55), which may be equated with Kimbe.

#### 3.4. THE BARIAI FAMILY

3.41. Kandoka, a mixed village at the base of the Willaumez Peninsula, marks the western boundary of Bola. From there to Rein Bay, the coast and tiny offshore islands are occupied by speakers of Kove (Kombe), and there is an additional Kove settlement far to the west on the island of Tamoniai. To the west of the main Kove area, a short stretch of coast in the Ketengi region is occupied by speakers of Kaliai (Lusi), a dialect of Kove. Kaliai is flanked by two unrelated languages, Aria of the Lamogai Family (see 3.6.), and Anem, a NAN language. Many Kove and Kaliai villages are reported to contain migrants from the interior who have recently abandoned their own languages in favour of the coastal ones.

3.42. Farther west, extending from Rottock Bay to Borgen Bay, is the Bariai area. Bariai is closely related to Kove-Kaliai (75% cognate). The area at the bottom of Borgen Bay, in which Capell places a language called Sake or Sahe (1962a), is where Friederici locates Sare, a small cluster of hamlets which he says are occupied by speakers of a mixture of Kilenge and Bariai (1912:26-7). (There are shifts between /r/ and /h/ in some of these languages.) Kroll also lists Sahe as a north coast language between Bariai and Kilenge, though on his crowded map, it is placed farther south (1938:371,372). On the evidence, there seems to be no reason to postulate the existence of a separate language, or of one that does not belong to the Bariai Family, in this area.

3.43. The coastal area of the extreme west end of New Britain, in the vicinity of Cape Gloucester, is occupied by speakers of two closely related dialects, Kilenge and Maleu. Maleu (Mariau, Sagsag, NaunoNoNga) is spoken as far as the Itne or Idne River on the south coast. There are some minor linguistic differences within the Maleu-speaking area. Kilenge-Maleu is closer to Bariai than to any other New Britain languages (about 44% shared cognates), but shows some phonological similarities to the languages spoken on the south coast and in the interior.

3.44. The languages of the Kove-Kilenge family share a number of lexical items, with those spoken on Umboi (Rooke) island, in the Siassi Islands, and on the neighbouring mainland of New Guinea. In some cases,

the resemblances are more pronounced between the Siassi languages and those to the east, such as Kove, than to Kilenge. Much more work is necessary before we can be sure of the nature of these resemblances. The Vitiaz Straits is a region of complex trade networks, intermarriage, and population movements (cf. Harding 1967), and many of the linguistic resemblances may be the result of recent borrowing. For the present, I can only say that it seems likely that the Bariai Family will turn out to belong to a larger language family which extends through the Siassi Islands to New Guinea.

3.45. As regards the relation between Kimbe and Bariai, it is weaker than it seems at first glance. As Milke has noted (1965:332), the families share a number of lexical items. Furthermore, the languages in both families contain a notably large number of words which have cognates in other AN languages and in the reconstructed protoforms. In the case of Bariai, this statement applies particularly to the languages east of Cape Gloucester; Friederici long ago (1912) demonstrated its truth as regards Bariai proper. In this, they resemble a few other well-known Melanesian languages such as Motu. Because they are the only New Britain languages with this characteristic, and are adjacent to each other, they tend to seem more alike than they really are. Very often, the basic vocabulary items can be derived from different proto-forms (as Bileki logo, Kove voNi, "night"). The highest percentage of shared cognates between any two languages in the families is 23%, for Bileki and Kove. Kove and Bola share only 19%, but the higher percentage shared with Bileki may simply reflect more accurate recording and my better knowledge of Kove. When we note that the percentage of shared cognates between Kove and Molima, a language spoken in the D'Entrecasteaux, is at least 18%, and Goodenough finds that that between Bileki and Fijian reaches 28% (1961a:115), it is evident that we have no lexical grounds for putting Kove and Bileki into a single local family.

3.46. On non-lexical grounds, there is even less reason to lump Kimbe and Bariai together. Grammatically, Bileki and Kove seem to be as different as any two AN languages spoken in Melanesian. The point needs stressing only because Milke has recently set up a "Nakanai group, including Barriai, Kobe, Bulu, and the French Islands dialects", on the basis of "many isoglosses" plus assumed shared reflexes of PO \*s and \*z. (1965:332,342.) The first point has already been disposed of. As regards the second, the reflexes of \*s and \*z are so irregular in the north coast languages that no clear picture emerges, as Milke himself recognized (cf. *ibid*: 339). In short, despite first

impressions (including my own - Chowning 1966), all that unites Kimbe with Bariai is the fact that they are very clearly AN and, presumably as a result of having long occupied adjacent areas, share a certain number of lexical items.

### 3.5. THE ARAWE FAMILY

3.51. As has been noted above, the Itne or Idne River marks the boundary between Maleu and Arawe, the latter being said by the Nicholsons to extend "along the coast" from the Itne. The westernmost village from which they obtained an Arawe word-list is Aniatmate, but unfortunately they give no clue as to where it is located, and it appears on none of my maps. Since they seem to have obtained all their information from informants encountered in Kandrian, I am not sure whether they are correct in their belief that Arawe is actually spoken along a considerable stretch of the mainland of New Britain. My own information suggests that, with very few exceptions, it is confined to the offshore islands. For the present, I will accept their statement, but suspect that there will turn out to be some coastal villages in the western part of the "Arawe" area speaking non-Arawe languages. An additional source of confusion is the fact that all the people living in southwest New Britain who deform their heads tend to be called and to call themselves "Arawe", regardless of where they live or what language they speak.

3.52. Arawe (Alo) has two main known languages. The most widely separated dialects of these are over 40% cognate. The western language Arawe proper (Pililo), is spoken in the islands of the same name and, presumably, on the adjacent coast. Moewehafen, the eastern language, is spoken from Ayuwet Island in the east throughout the small offshore islands as far west as Moewehafen itself. At Moewehafen, it is also spoken in a few villages on the mainland, notably Iumielo. In the Gimi Census Division somewhat farther west, between the Alimbit and Anu Rivers, dialects of this language extend a considerable distance inland. One of these, Gimi proper, is spoken in the interior, and the other, Loko, on the beach. Judging from the short vocabulary of Gimi which I have seen, it may be proper to treat this as a separate language rather than simply a dialect, but it is nevertheless clear that it belongs with the Moewehafen branch rather than with Arawe proper. Throughout the Arawe area, there are considerable dialectical differences from island to island. Nothing is known of the languages spoken on the small islands to the east of Ayuwet, though information in Chinnery suggests that a related language may be spoken at least as far west as the island of Gasmata, but not on the mainland. If so,

Gasmata may form a third division of Arawe; certainly residents of Ayuwet do not consider it a dialect of Moewehafen.

3.53. Since Arawe-speaking settlements are normally adjacent to larger mainland groups speaking different languages, there has been a good deal of lexical interchange, especially between Moewehafen and the Pasismanua languages (see below). But even with adjacent languages, the highest cognate count obtained with any other group is 25% (Ayuwet dialect with Sengseng), somewhat below the minimum necessary, in theory, to put languages in the same family. This is nevertheless a great deal higher than the percentages obtained in comparing Arawe with Lamogai or Maleu, also adjacent on the mainland. Furthermore, the shared cognates between Ayuwet and Kapore, a geographically distant member of the same family (Whiteman) as Sengseng attain at least 21%. For the present, Arawe must remain in a separate group, but it is clear that its closest relations in New Britain are to the Whiteman family, and it may eventually be possible to put the two together.

### 3.6. THE LAMOGAI FAMILY

3.61. It has been noted that Bariai is largely confined to the coastal strip. Only Maleu, of its members, extends for any distance inland. Arawe is also confined to coastal villages and offshore islands. The remaining area of southwest New Britain, from the Itne to the Alimbit Rivers, seems to be almost wholly occupied by the members of a single language family, Lamogai. This extends through the interior, occupying the hinterland behind the north coast languages, and one language, Aria, reaches the north coast. The known exceptions are the small area on and near the north coast in which the NAN language Anem is spoken, and an inland area west of the Alimbit occupied by speakers of Miu, a Whiteman language. Some other areas are inadequately surveyed. Nothing is known of the languages spoken behind the Kove area, and we do not have enough information about the nature or the boundaries of Longa, spoken inland from Maleu, Kilenge, and Bariai. Judging from the very short word list in Friederic1, it seems to belong to the Lamogai group, and may be just an extension of either Mok or Aria. (In Kove-Kaliai, longa simply means "interior".) Except for the two Anem-speaking villages, and the Gimi area, all of the known interior villages between the Maleu and Pasismanua linguistic areas seem to be occupied by speakers of a Lamogai language.

3.62. The Lamogai languages, proceeding roughly from west to east, are as follows: LoNa; Mok-Aria; Lamogai; Pulie; and Rauto. Mok and Aria

are two closely related languages, sometimes called Bibling, which are spoken along the Bibling Ridge area and down the Aria River to the north coast. Either the Nicholsons and Counts disagree about the boundary between Mok and Aria, or the Nicholsons call both languages "Aria". I follow Counts, who has worked in the area, in drawing the map. Lamogai proper extends from east of Aria almost to the south coast. The known south coast Lamogai languages are Pulie, on the Pulie River; and Rauto, which is closely related to Lamogai, and is bounded by Pulie and Gimi. There may be some Arawe settlements in the Pulie-Rauto area, and there has certainly been some Arawe influence on the languages of this area, as there has been some Bariai influence on the languages closer to the north coast. Basically, however, Lamogai seems quite a distinctive language family, without any close connections with other New Britain languages. Chinnery's statement that the language spoken in the Gimi area was unlike the Pasismanua languages to the north and east (n.d.b:83) makes it even more likely that Gimi may be a Lamogai language.

### 3.7. THE WHITEMAN FAMILY

3.71. The Whiteman Family is perhaps the most diverse collection of languages in New Britain. Its westernmost representatives are the four dialects that compose the Pasismanua group: Miu, Kaulong(a Kinum), Sengseng, and Karore. They occupy the area south of the Whiteman Range, from west of the Alimbit to the Johanna, except for a couple of Moewehafen villages on the coast near Kandrian. Unfortunately the area between the Johanna and the Ania, along the south coast, is virtually unknown linguistically. Pasismanua speakers mention a language called Sokhok or Psokhok, spoken around the Awio River, which some say resembles their languages and some say does not. Chinnery records a few words of an interior language spoken at Getmata and neighbouring villages, which look very much like Pasismanua: the numerals are identical. It seems likely that the languages of this area at least belong to the Whiteman Family, but it is impossible to say more.

3.72. The other three known Whiteman languages are located far to the north and east of Getmata. Bao was recorded by Allen and Hurd as being spoken at a single village, Doa, on the Igluk River, about 12 miles from the north coast. They correctly note the fact that Bao is related to Kapore and Mangseng (1963:7), but it turns out to be far more closely related to the Pasismanua languages, and especially to the eastern ones, Sengseng and Karore. Its location, on a main track across the island which emerges at Gasmata on the south coast, makes

it seem even more likely that other languages similar to the Pasismanua group will be found to the east of the Johanna.

3.73. Kapore (Beli, Bebeli, Banaule) is spoken just north of Bao. As has been mentioned, it extends to the north coast in a couple of villages on the west side of Cape Hoskins. The other villages are located to the south and east of these. Speakers of Kapore, according to their own traditions, came from the interior at the base of the Willaumez Peninsula, and there may be related languages spoken there or even farther west, behind Kove. Kapore has taken over many loan-words from Bileki (members of the coastal villages in which the word lists were recorded are said to be bilingual), but when these are disregarded, it is clear that its closest relations are to Pasismanua, Bao, and Mangseng (cf. Goodenough 1961a; Chowning 1966).

3.74. Mangseng (Masegi) extends from just south of the Ubae and Vele dialects of West Nakanai to the south coast, along the Ania River. A single Mangseng village is said to be located on the south coast proper, west of Fulleborn Harbour; otherwise it is an interior language. Allen and Hurd report that it contains at least 4 quite divergent dialects, which they call Roko, Sampantabil, Kulula, and Mirapu. Presumably their Roko is the same as Capell's "Rogo" (1962a), which he lists as a separate language but puts in the Mangseng area. (His "Maseki" is located in an area which is actually uninhabited.) Mangseng, definitely seems to belong to the Whiteman Family, but its only strong links are with Kapore; it is very different from the Pasismanua languages.

3.75. The Whiteman languages look scattered on a map because of the areas which are uninhabited, such as the heights of the Whiteman Range, and those about which we know nothing. In fact, it seems to be a geographically compact family. Its possible connections with Arawe have been mentioned above. The question of relations between Whiteman and the Mergen Family will be discussed below.

### 3.8. THE Mergen FAMILY

3.81. Immediately to the east of Mangseng, in a small area around Cape Dampier, is spoken a language called Uvol, which seems to be the same as Lote. Capell locates Lote in this area, but it is not quite clear from the available sources (O'Neill 1961; M. Panoff, personal communication) whether the geographical area called Lote coincides precisely with the linguistic division. In any case, the identity and distinctiveness

of Uvol is clear. As Dyen notes (1963:43), it is most closely related to Mamusi and Mengen, to the east; and certainly belongs in the same family with them. At the same time, it shows considerable similarity to Mangseng. This is hardly significant in view of its location, though the sound shifts involved are complex enough so that recent borrowing seems unlikely. Furthermore, the resemblances apply to Kapore as well. They are detailed enough so that I am willing to suggest that Uvol may be the link between the Mengen and Whiteman families; that is, there may be a larger family embracing both of these which might be called Uvolic, except that Dyen has already used the term for what I am calling the Mengen Family (1963:43). This is still a tentative suggestion, however.

3.82. Just behind Uvol is Kakuna, which seems to be the westernmost dialect of Mamusi. Kakuna is spoken mostly along the Melkoi River, and Mamusi proper along the Torlu. Allen and Hurd use Kakuna as the name for the whole language, but distinguish two dialects which seem to be located on either side of the Kakuna-Mamusi border on patrol maps. Like Kakuna, Mamusi is primarily an interior language, extending into the Nakanai Mountains, but both O'Neill and Panoff report that a few coastal villages speak Mamusi as either a first or second language. This is partly a result of recent movements to the coast.

3.83. Mamusi is closely related to Mengen (Maenge), the next language to the east (about 50% cognate, or higher). Mengen contains at least three dialects, two spoken on the coast and one in the interior. One of the coastal dialects, which Müller calls Orford, is located just south of the Sulka area and is considered by Laufer to be heavily influenced by Sulka (Müller 1907:80; Laufer 1955:35). The other, which Grace's informants call Poeng, extends around Waterfall and Jacquinet Bays. Recently some Kol (NAN) speakers from the interior have been settled on the coast just east of the Bergberg River, but in the past the area seems to have been solidly Mengen. It is reported, however, that because of warfare with various interior groups, some of the Mengen fled a considerable distance to a settlement at Mope, north of the Warangoi River, near the northeast tip of the Gazelle Peninsula. This movement took place between 1901 and 1907, according to the German annual reports, and the Panoffs' informants say that relations are still maintained between the northern and southern settlements. There may be other Mengen-speaking enclaves farther south along the east side of the Gazelle Peninsula. (This information was received too late for the Mope group to be included on the map.) In the interior to the south of the Kol-speaking area is the third dialect of Mengen, Longeinga,

otherwise known as "Bush", "Mountain", or "Extended" Mengen. The Mera-mera speakers of the north coast call the dialect Pau, and maintain trade relations with the Longeinga speakers, although there seems to be an uninhabited strip between the Nakanai and Mengen areas.

3.84. Mengen proper shows some influences from neighbouring NAN languages, especially in the formation of plurals, but otherwise seems wholly AN. As well as possibly being connected with the Whiteman Family, the Mengen Family, and particularly Mengen (Poeng) itself, shows some resemblances to the north coast languages. My data are, however, too scanty for me to decide whether these latter are more than superficial. Since Mamusi and Mengen fill much of the hinterland behind Nakanai, except for the small area occupied by the NAN language Wasi, and the Kol and Baining areas in the east, there has naturally been some lexical interchange between these languages.

3.9. *Tomoip* (*Tumuip*), the only other known AN language in New Britain, is situated in a small area inland from Waterfall Bay, between Mengen and Kol speakers, with a settlement at Tokai, on the coast, and also do or did occupy another small area extending inland from Henry Reid Bay, north of the Sulka and south of the Powell River, in the Wide Baby area. (This northern group, and the coastal settlements, are not shown on the map, which was based on incomplete information.) There seem to be very few surviving *Tomoip*, it seems likely that they once occupied a somewhat larger, and continuous, area. The vocabulary contains a large number of AN forms, and there seems to be no doubt about the classification of the language, but it seems quite unlike any other AN language in New Britain on the basis of lexicon alone. There are a number of suggestive but not strong resemblances to some languages located much farther west, in the Arawe and Rauto families. The highest percentage of shared cognates with any other New Britain language is 12%, with the Ayuwet dialect of Moewehafen. Unless there turn out to be other branches of Arawe along the intervening stretch of coast with which the resemblances are stronger, *Tomoip* must remain by itself. Its AN component cannot be explained in terms of loans from Mengen or Meramera; the forms are quite different from those in either language. Geography suggests that its relatives should be sought in New Ireland, but so far I have been able to examine little New Ireland material, and none of it resembles *Tomoip*.

#### 4. CONCLUSION

4.41. It will be obvious from the map that, in one sense, the linguistic



situation in New Britain is not particularly complex. In all cases, the most closely related languages are geographically contiguous to each other, so that we need not postulate elaborate movements from one part of the island to another. Nevertheless, we are left with a large enough number of separate groups to suggest that the AN (and for that matter, the NAN) languages in New Britain have had a long and varied history. I should, however, note one point that may not be clear from the foregoing description. The fact that the percentage of shared cognates between AN languages in New Britain is often low should not necessarily be taken as an indication that the presumed PAN (or Proto-Melanesian, or Proto-Oceanic) contribution to the lexicon of each language is necessarily equally low. The point has already been made as regards Kove and Bileki; it applies to many other cases as well. Some of the languages do, however, contain relatively few words with cognates in other AN languages. This is generally true of the south New Britain families - Rauto, Whiteman, and Arawe. I have suggested elsewhere (Chowning 1966) that some of these languages may have an exceptionally high rate of lexical innovation. Obviously we are involved here with the whole problem of the origin, nature, and distribution of AN languages. I will only say here that I am much more inclined to attribute most of the differences between New Britain languages to movements between islands than to time alone; that is, I think it highly unlikely that New Britain was the AN homeland (cf. Dyen 1963:814). At the same time, it must be admitted that the distribution and diversity of the south coast-interior languages, does make it seem likely that they have been in New Britain longer than the north coast languages which contain more reflexes of postulated PAN forms.

4.2. Clearly it will not be easy to decide what happened in New Britain, and in what order. Although this survey has perhaps reduced the linguistic diversity of New Britain somewhat, it is still true that all the languages which Dyen treated as distinct remain in separate families. We only differ as to the degree of separation between them. Nevertheless, I fully expect that the number of families will be reduced as we investigate still unknown areas of New Britain, and when we consider it as part of a larger geographical area which includes, for example, New Ireland and the north coast of New Guinea. I do not, however, feel that the best way to simplify the picture is to lump languages together according to whether they possess or lack one or two specific traits (cf. Schmitz 1960; Milke 1965).

## SOURCES OF MATERIAL

The word lists which I have used were collected by the following field workers, most of whom also supplied essential data about the distribution of the languages. This survey would have been impossible without their generosity in permitting me to make use of their material. I am also indebted to the Summer Institute of Linguistics for permitting me to quote from the published survey by Allen and Hurd and the unpublished survey by the Nicholsons.

- J. Allen and C. Hurd, SIL - Bao
- A. Chowning - Arawe, Bileki, Karore, Kove, Moewehafen, Sengseng
- D. Counts, Southern Illinois University - Anem, Aria, Kaliai, Lamogai, Mok
- A.L. and T.S. Epstein, Australian National University (not collected in field) - Tolai
- J.C. Goodale, Bryn Mawr College - Kaulong, Miu, Gimi
- W.H. Goodenough, University of Pennsylvania - Kapore
- G.W. Grace, University of Hawaii - Kol, Tomoip, Uvol, Wasi
- R. and R. Nicholson, SIL - Aria, Bariai, Kilenge, Maleu, Rauto
- M. Panoff - Kol
- SIL anonymous (possibly the Nicholsons) - Longeinga, Mengen
- C.A. Valentine, Washington University - Bali-Vitu, Bola, Bulu, Mamusi, Mangseng, Maututu, Meramera, Pau, Ubae, Vele, Wasi, Xarua.

In addition, I have used published word lists collected by the following:

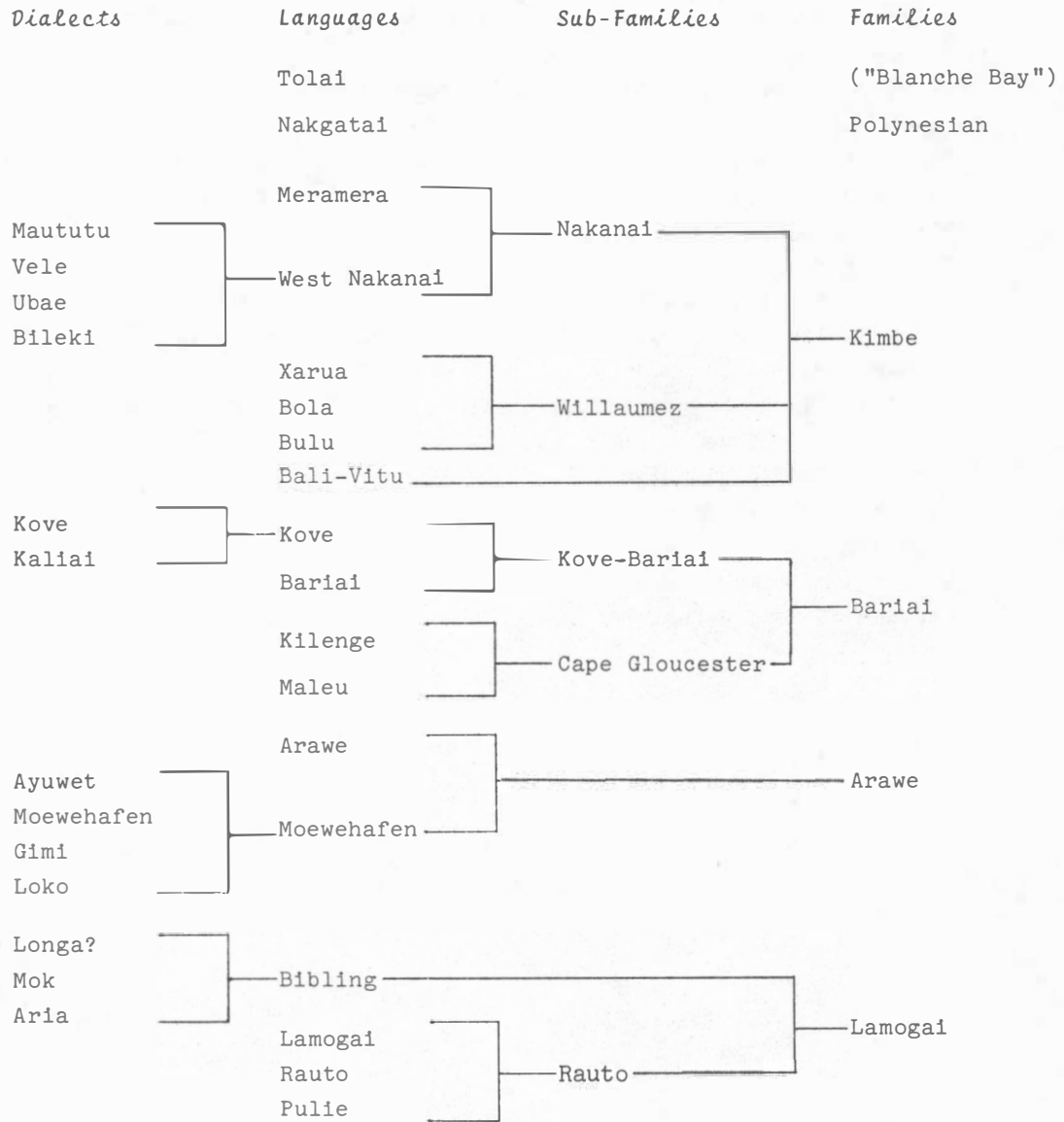
Chinnery (n.d.b), Dempwolff (1905), Friederici (1912), Parkinson (1907).

ALTERNATE NAMES OF LANGUAGES (excluding minor differences in spelling and prefixed articles)

- Anem = Karai-ai, E. Susulu?
- Arawe = Alo, Pililo
- Aria = Bibling (cf. Mok)
- Bali-Vitu = French Islands
- Bileki = Lakalai, Mamuga, Muku, Two-Peak Mountain Dialect, Central Nakanai (Stamm *et al.*), West Nakanai
- Bola = Bakovi, West Nakanai (Stamm *et al.*)
- Kakuna = Pita
- Kaliai = Lusi
- Kapore = Banaule, Bebeli, Beli

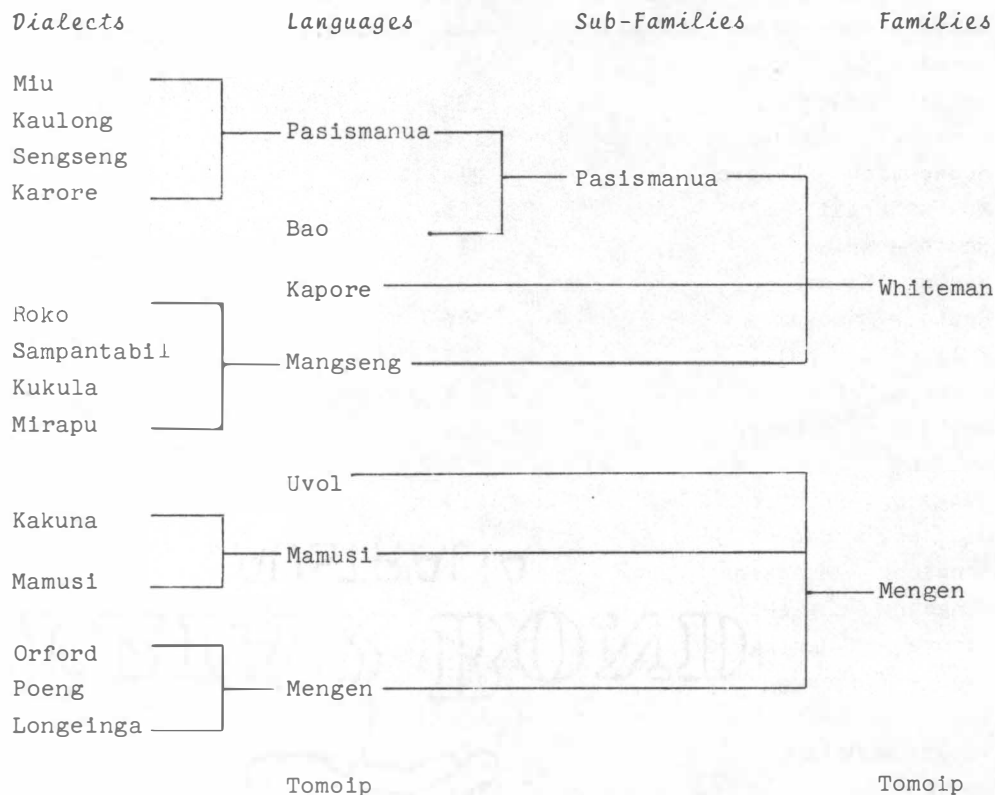
Kaulong = A Kinum and Apui  
 Kimbe = Nakanai (Stamm *et al.*)  
 Kol = Kole  
 Kove = Kombe  
 Longeinga = Bush Mengen, Extended Mengen, Mountain Mengen, Pau  
 Maleu = Mariau, NaunoNoNga, Sagsag  
 Mamusi = Kakuna, Kilolo  
 Mangseng = Masegi  
 Maututu = Loso  
 Mengen = Maenge  
 Meramera = Aeae, East Nakanai, Open Bay dialect, Ubili  
 Mok = Bibling (cf. Aria)  
 Roko = Rogo?  
 Tolai = Blanche Bay dialect, Gunantuna, Kuanua, Raluana, Tuna, New  
     Britain language  
 Tomoip = Tumuip, Tumoive  
 Uvol = Lote?  
 Vele = Ouka, Vere  
 Wasi = Ata, Mimeri, Peleata  
 Xarua = Buluma, Garua, Mai

SUMMARY OF LANGUAGE GROUPINGS



Continued on page 39.

## SUMMARY OF LANGUAGE GROUPINGS - continued



## PERCENTAGES OF SHARED COGNATES BETWEEN SELECTED PAIRS OF LANGUAGES

(Those marked WHG are taken from Goodenough 1961a.) Those based on very short lists are noted.

Tolai - Meramera	20-23%
Tolai - Bileki	20-22%
Meramera - Bileki	64%
Bileki - Bola	35%
Bileki - Xarua	52%
Bileki - Bulu	39% (WHG)
Bulu - Bali-Vitu	36-40% (varying with dialects and lists)
Bola - Xarua	66%
Bola - Kove	19%
Kove - Bileki	23%
Kove - Mok	13-16%
Bariai - Kaliai	75%

Bariai - Kilenge, Bariai - Maleu	44%
Maleu - Arawe (Aniatmate village)	maximum of 5%
Arawe - Moewehafen (Ayuwet)	40% (at least)
Arawe - Mok	10-11%
Arawe - Sengseng	13%
Moewehafen (Ayuwet) - Sengseng	25%
Moewehafen - Kapore	21-24%
Mok - Bariai	18%
Rauto - Aria	41%
Rauto - Maleu	12%
Rauto - Lamogai	78%
Pulie - Lamogai	72%
Pulie - Aria	50% (very short list)
Kaulong - Sengseng	80%
Kaulong - Rauto	15%
Sengseng - Kapore	21%
Sengseng - Bao	55% (very short list)
Sengseng - Mangseng	12-16%
Sengseng - Bileki	12%
Kapore - Mangseng	32% (WHG)
Uvol - Mangseng	19%
Uvol - Mamusi	37%
Mamusi - Mengen	50% (very short list)
Poeng - Longeinga	86%
Mamusi - Maututu	12%
Tomoip - Moewehafen	12%

REFERENCES CITED

- ALLEN, J. and HURD, C.  
1963 *Languages of the Cape Hoskins Patrol Post Division of the Talasea Sub-District, New Britain.* SIL.
- BURGMANN, A.  
1961 "L. Bischof's Vokabulare der Ubili-Sprache (Neubritannien)", *Anthropos* 56.
- CAPELL, A.  
1962a "A Linguistic Survey of the South-Western Pacific", *South Pacific Commission Technical Paper No.136.* Noumea.  
1962b "Oceanic Linguistics Today", *Current Anthropology*, vol.3, No.4.
- CHINNERY, E.W.P.  
n.d. "Notes on Natives of Southern New Britain and Dampier (1928?) Straits", *Territory of New Guinea Anthropological Report* No.3.
- CHOWNING, A.  
1966 "The Languages of Southwest New Britain". Paper read at the 11th Pacific Science Congress, Tokyo.
- DEMPWOLFF, O.  
1905 "Beiträge zur Kenntnis der Sprachen von Deutsch-Neuguinea", *Mitteilungen des Seminars für Orientalische Sprachen zu Berlin*, 1905.
- DYEN, I.  
1963 *The Lexicostatistical Classification of the Austronesian Languages.* New Haven.
- FRIEDERICI, G.  
1912 *Beiträge zur Völker- und Sprachenkunde von Deutsch-Neuguinea.*

Mitteilungen aus den Deutschen Schutzgebieten. Ergänzungsheft 5.

GOODENOUGH, W.H.

- 1961a "Migration Implied by Relations of New Britain Dialects to Central Pacific Languages", *Journal of the Polynesian Society*, 70.
- 1961b "The Willaumez Languages of New Britain". Paper read at the 10th Pacific Science Congress, Honolulu.

HARDING, T.G.

- 1967 *Voyagers of the Vitiaz Strait: A Study of a New Guinea Trade System*. Seattle.

HEES, F.

- 1915-16 "Ein Beitrag aus den Sagen und Erzählungen der Nakanai (Neupommern)", *Anthropos* 10-11.

KROLL, H.

- 1938 "Sagen und Märchen der Bola", *Zeitschrift für Ethnologie*, 70.

LANYON-ORGILL, P.A.

- 1942 "A Polynesian Settlement in New Britain", *Journal of the Polynesian Society*, 51.
- 1960 *A Dictionary of the Raluana Language*. Victoria.

LAUFER, C.

- 1946-9 "Rigenmucha, das Höchste Wesen der Baining (Neubritannien)", *Anthropos*, 41-44.
- 1950 "Die Taulil und Ihre Sprache auf Neubritannien", *Anthropos* 45.
- 1955 "Aus Geschichte und Religion der Sulka", *Anthropos* 50.
- 1956 "Die Verwandtschaftsverhältnisse innerhalb des Gunantuna-Stammes (Südsee)", *Anthropos* 51.

LOUKOTKA, C.

- 1957 *Classification des langues papoues*. Poznań.
- 1962 "Comment on Capell, 1962b", *Current Anthropology*, vol.3, No.4.

MEIER, J.

- 1914 "Review of F. Burger, 'Die Küsten- und Bergvölker der



Gazellehalbinsel'", *Anthropos* 9.

MILKE, W.

1965 "The Austronesian Languages of New Guinea", *Indo-Pacific Linguistic Studies*, vol.I, edited by G.B. Milner and E.J.A. Henderson, Amsterdam.

MÜLLER, H.

1907 "Grammatik der Mengen-Sprache", *Anthropos* 2.

O'NEILL, T.

1961 *And We, the People*. New York.

PARKINSON, R.

1907 *Dreissig Jahre in der Südsee*. Stuttgart.

POWELL, W.

1883 *Wanderings in A Wild Country, or Three Years among the Cannibals of New Britain*. London.

SCHMITZ, C.

1960 *Historische Probleme in Nordost Neuguinea*. Wiesbaden.

TODD, J.A.

1934 "Report on Research Work in South West New Britain, Territory of New Guinea", *Oceania*, vol.5, No.1.

VAN RIJSWIJCK, Olga

1966 "The Silanga Resettlement Project", *New Guinea Research Unit Bulletin* No.10. Canberra.

---

Supplement to the German Colonial Gazette 1908, Annual Report on the Development of the Protectorates in Africa and the South Seas in the Year 1906-7. Section F. German New Guinea. Translated by H.A. Thomson.

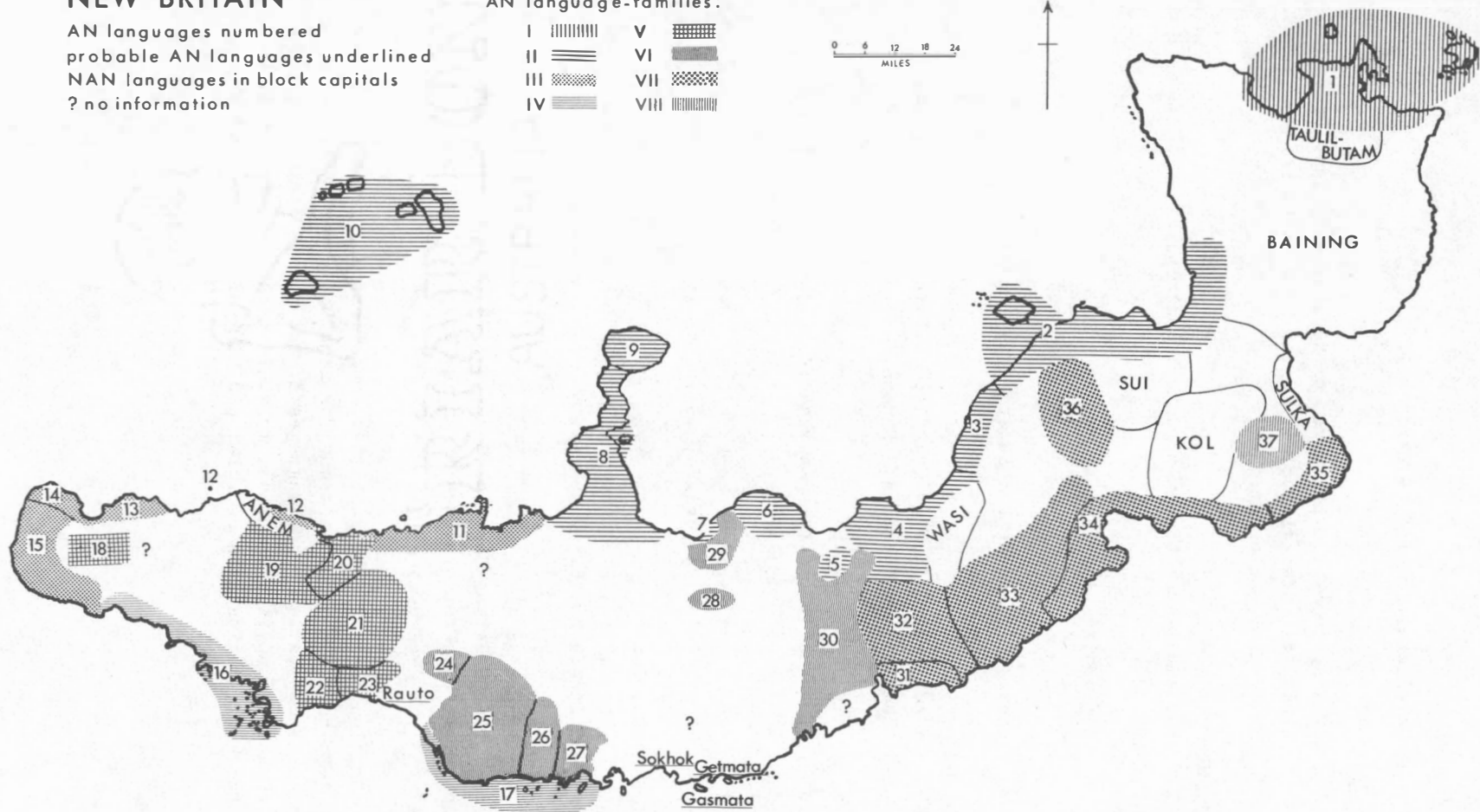
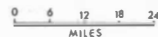
In addition, a number of published word lists and grammars not cited in the text have been consulted and form the basis for my comments about the resemblances between the languages of the Kove-Kilenge Family and some of those found in New Guinea, my evaluation of Stamm's statement about the similarities between Tolai and Nakanai grammar, and so on.

# NEW BRITAIN

AN languages numbered  
 probable AN languages underlined  
 NAN languages in block capitals  
 ? no information

AN language-families:

I		V	▨
II	====	VI	■
III	▨▨▨	VII	▩
IV	====	VIII	



KEY TO AUSTRONESIAN LANGUAGES AND DIALECTS ON MAP

- I. Blanche Bay Family  
1. Tolai
- II. Kimbe Family  
2. Meramera  
3. Maututu  
4. Vele  
5. Ubae  
6. Bileki  
7. Xarua  
8. Bola  
9. Bulu  
10. Bali-Vitu
- III. Bariai Family  
11. Kove  
12. Kaliai  
13. Bariai  
14. Kilenge  
15. Maleu
- IV. Arawe Family  
16. Arawe  
17. Moewehafen
- V. Lamogai  
18. Longa  
19. Mok  
20. Aria  
21. Lamogai  
22. Pulie  
23. Rauto
- VI. Whiteman Family  
24. Miu  
25. Kaulong  
26. Sengseng  
27. Karore  
28. Bao  
29. Kapore  
30. Mangseng
- VII. Mengen Family  
31. Uvol  
32. Kakuna  
33. Mamusi  
34. Poeng  
35. Orford  
36. Longeinga
- VIII. Tomoip Family  
37. Tomoip



# THE LINGUISTIC SITUATION IN THE REEF AND SANTA CRUZ ISLANDS

S.A. WURM

1. Introduction.
2. The Reef Islands-Santa Cruz Family.
3. Sample Word List.
4. Lexical Composition of the Reef Islands-Santa Cruz Family Languages and Dialects.
5. Structural and Typological Characteristics of the Reef Islands and Santa Cruz Languages and Dialects.
6. Austronesian and non-Austronesian Features of the Reef Islands-Santa Cruz Languages and Dialects.
7. Concluding Remarks.

## 1. INTRODUCTION

### 1.1. GENERAL REMARKS

The languages of the Reef and Santa Cruz Islands in the extreme south-eastern part of the British Solomon Islands Protectorate, about 250 miles east of San Cristobal, have for almost a century, constituted an enigma amongst the languages of Melanesia. Codrington provided grammar sketches and vocabularies of two of them (Codrington 1885), and Ray carried out an assessment of Codrington's materials (Ray 1926) - and both, in doing so, regarded these languages as in many ways aberrant when compared with other languages of Melanesia. Later students of the languages of these islands all adhered to the same view.

The present writer had his first opportunity of gaining first-hand

knowledge of one of these languages, i.e. the one spoken on the Reef Islands, in 1954 when he could work with a Reef Islander, James Natei, then a member of the crew of S.S. Southern Cross of the Melanesian Mission which was staying in Sydney Harbour for a week. Concern with other work prevented him for many years from a detailed study of the material, collected by him on this occasion, but a cursory assessment of the structural features of the language showed that it had a number of basically Austronesian structural characteristics - though most of them rather unusual in detail - but also some apparently non-Austronesian ones. Upon inspection, the vocabulary was found to contain a large number of undoubtedly Polynesian items - obviously loanwords from the neighbouring Polynesian languages, especially Pileni, and a rather small number of other recognisably Austronesian elements. The large remaining balance seemed to have no immediately apparent connection with Austronesian.

The preliminary results of this initial cursory study of his materials led the author to assume at first that the Reef Islands language which had erroneously been called Nifilole - i.e. by the Polynesian name of the northernmost major island of the Reef Islands which is inhabited by Polynesian speakers - by Codrington (1885), as a very aberrant Austronesian language (Wurm 1957). However, a later assessment of his own preliminary findings and the evaluation of the limited information at his hands, mostly in the form of Codrington's (1885) materials, on one of the Santa Cruz Island languages which appeared to be relatively closely related to the Reef Islands language, made him reach the tentative conclusion that these languages were basically non-Austronesian, i.e. Papuan, languages which had been under very strong Austronesian influence. This influence appeared to have led to an approximation of their structural features to those of Austronesian, and the incorporation of Austronesian elements into their vocabulary (Wurm 1971).

The same view was also adhered to by Capell (1962) and before him by Elbert (1958) and Fox (1958), and was also expressed by Davenport (1962). At the same time, Dyen did not include the languages of the Reef and Santa Cruz Islands in his lexico-statistical classification of the Austronesian languages (Dyen 1965) presumably in view of what appeared to be their very low percentages of that Austronesian vocabulary element which was not clearly attributable to loans.

In 1965, the present writer carried out six weeks' fieldwork in the Solomon Islands and could record sizable materials in the Reef Islands language (chief informants David Davea, Johnson Boni and Mathew Natei), the Malo dialect of the language spoken in northern Santa Cruz (chief informant John Mealue), and the Nangu dialect of the one located in south-eastern Santa Cruz (chief informant William Piaito). Furthermore,

extensive language materials written by Reef Islands pupils at Mission Schools were kindly made available to the author by the Melanesian Mission in the Solomon Islands, and these materials were subsequently recorded on tape with the help of Reef Islands informants. A. Capell also kindly put at the disposal of the present writer some written and recorded materials collected by him in the Reef Islands language. In addition, B. Hackman of the Geological Survey Department, Honiara, kindly made available to the author written and recorded materials in the Nemboi dialect of the language found in south-western Santa Cruz (chief informant Joshua Mendealue). Some information on other dialects, e.g. that of the village of Nooli near Cape Mendaña in southern Santa Cruz (informant John Melanoli), and on the distribution of languages and dialects on Santa Cruz, was also obtained by the present writer.

The author recently carried out a preliminary assessment of a portion of his new materials from several different points of view which attributed to a clarification of the linguistic picture in the Reef and Santa Cruz Islands, and led to greatly improved insights into the structures of the languages and their structural similarities and differences. At the same time, a preliminary comparative-historical study of approximately three hundred basic vocabulary items was undertaken. The rather surprising result of this particular study was the discovery that a much larger portion of the vocabularies of the languages, i.e. about half of the items assessed, appeared to be of Austronesian origin than had previously been assumed to be the case. The results of this preliminary study have been discussed in some detail elsewhere (Wurm 1970), and only a summary of its findings will be given in this paper. The problems of the internal classification of the Santa Cruz languages which remained unresolved, induced the author to undertake another short field trip to the Solomon Islands towards the middle of 1970. He was particularly interested in studying the position of the Cape Mendaña dialects on whose classificatory position his views (Wurm 1970, 1971) differed materially from those of Davenport (1962). To this end, extensive information was obtained by him on the dialect of Nooli (chief informant Ismail Menanopu) which resulted in the clarification of this problem (see below).

In the light of what has been said above, the present paper will be concerned with the problems of the internal classification of the Reef and Santa Cruz Islands languages and the history of these problems, and with general questions of their typological and structural features and their similarities and dissimilarities, with a view to drawing some comparisons between these languages and other Oceanic languages on these levels.

## 1.2. LIST OF ABBREVIATIONS

AN	proto-Austronesian, mostly from Dempwolff 1934-38
AN?	Vocabulary items in RSC languages for which regular sound correspondences with AN forms cannot be established, but which show a slight formal similarity to such forms
F	Ferguson Island (d'Entrecasteaux Islands)
Ind	Vocabulary items in RSC languages showing formal similarities with their equivalents in individual Austronesian languages of the south-western Pacific, but in the known sources of pO and/or AN forms, no such forms underlying the lexical items in the languages involved can be found
Ind?	Same as Ind, but the formal similarities are only slight
L	Loyalty Islands
M	Malo dialect of the Nambakaengö language
Me	Menjembelo dialect of the Nea language
N	Nemboi dialect of the Nea language
Na	Nanggu language
nA	Apparently not Austronesian
NB	New Britain (mostly kindly supplied by A. Chowning)
NC	New Caledonian (from Haudricourt 1971)
Nel	Nelua dialect of the Nambakaengö language
NH	New Hebrides
No	Nooli dialect of the Nea language, representing its eastern dialect
Other	Other languages
pO	proto-Oceanic (unless otherwise indicated, from Grace 1969)
pO?	Vocabulary items in RSC languages for which regular sound correspondences with pO forms cannot be established, but which show a slight formal similarity to such forms
R	Reef Islands language (Reefs)
RSC	Reef Islands-Santa Cruz
SC	Santa Cruz
Sol	South-eastern Solomon Islands
total	the total percentage of those words in a RSC language



which show considerable formal similarity to their equivalents in individual Austronesian languages of the south-western Pacific - this percentage figure excludes that listed against Ind?

## 2. THE REEF ISLANDS-SANTA CRUZ FAMILY

### 2.1. COMPOSITION OF THE REEF ISLANDS-SANTA CRUZ FAMILY

The first somewhat detailed classification of the languages of the Reef and Santa Cruz Islands to appear in print was provided by Davenport (1962). His classification is based largely on a lexico-statistical approach, and while recognising the fact that all the languages of the islands form a relatively closely interrelated group, he finds the Santa Cruz languages much more closely related to each other than any of them to the language of the Reef Islands which he calls Reef Island-Santa Cruz (RI-SC), and for which he gives a figure of 3100 speakers. On Santa Cruz itself, he distinguishes three languages. One of these is, according to him, spoken by 2004 speakers in ten distinct dialects in twenty-six villages located along the entire north and west coasts, as well as along a portion of the south coast as far east as the village of Nea. He calls this language North-West-Santa Cruz (NW-SC).

Davenport mentions a second language, with 341 speakers, as being spoken in the three villages located on Cape Medaña which protrudes from the south coast, and in their offshoot village on Tōmotu Noi. He refers to this language as South-Central-Santa Cruz (SC-SC), and points out that in his opinion, NW-SC and SC-SC form a single, multi-dialect speech community whose extreme dialects are not mutually intelligible, and that he therefore regards all these dialects as constituting two languages rather than one.

Davenport recognises a third language as spoken by 171 speakers in two villages located on the south-eastern coast. He uses the name South-East-Santa Cruz (SE-SC) for this language.

Davenport gives the following percentage figures of basic vocabulary cognates shared by the languages distinguished by him, giving figures for two dialects of NW-SC, i.e. the Mbanua dialect (NW<sup>1</sup>-SC) and the Nea dialect (NW<sup>2</sup>-SC):

RI-SC				
28	NW <sup>1</sup> -SC			
24	69	NW <sup>2</sup> -SC		
25	59	68	SC-SC	
27	55	53	56	SE-SC

When assessing his materials before his 1970 field trip, the present writer found himself in disagreement with Davenport over the classification of the Reef Island-Santa Cruz languages. In his classification, he took into account both lexical and structural criteria, and while he agreed with Davenport in including all the languages into one family, the Reef Island-Santa Cruz Family, and in distinguishing three languages on Santa Cruz itself as forming a sub-family within the family, his views were at variance with Davenport's concerning the geographical extent and location of these three languages. He felt that it might have been justifiable to regard the communalects spoken in northern and south-western Santa Cruz as constituting two distinct languages, though they were, as Davenport had observed, connected by a dialect chain, the Mbaengö dialects, along the west coast. The Malo dialect of the northern language for which the name Nambakaengö was adopted, and the Nemboi and Menjembelo dialects of the south-western language, which was called Nea, were found to differ quite considerably in structure though sharing about 69% and 62% basic vocabulary cognates. The boundary between the two languages could, rather arbitrarily, be assumed as being between the villages of Mbaengö and Nemba on the west coast (see map). Speakers of the Malo and Graciosa Bay dialects of Nambakaengö informed the present writer that they found the dialects of Vengö and Mbaengö on the west coast intelligible, but not those of Nemba and the villages further south. At the same time, speakers of the Nemboi and Menjembelo dialects of Nea found intelligibility to extend north along the west coast as far as Nemba, but to stop short of Mbaengö.

The location of the eastern boundary of Nea constituted a particularly difficult problem. As has been stated above, Davenport mentions the village of Nea as the easternmost village of his North-West-Santa Cruz language area, and regards the three villages on Cape Mendaña - Nooli, Nonia and Nembönö - as having a distinct language (South-Central-Santa Cruz). This leaves the language affiliation of the village of Mbonembo in doubt.

The present writer received the impression that there was in fact a language boundary east of Nea which he regarded as the eastern outpost of the Nea language. However, the language spoken to the west of that boundary seemed to be Nanggu, which in consequence, appeared to occupy all of the south-eastern portion of Santa Cruz, and could therefore be identified with Davenport's South-East-Santa Cruz whose extent seemed much greater than suggested by the latter. The present writer's Nanggu informants assured him that their language extended as far as Mbonembo and included the three villages on Cape Mendaña. This was borne out by the fact that the few notes taken by the present writer from his Nooli informant showed a language which was very similar to Nanggu. At the

time at which he completed the manuscripts for Wurm 1970 and 1971, the present writer was adhering to the views as outlined above, and the information comprised in those articles about the geographical distribution of the Santa Cruz languages reflects these views. At the same time, the fourteen Nooli words reported by Greenberg (1971) from Davenport's word lists appeared to be indicative of a language situation which was at variance with these findings, and also to some extent with Davenport's own statements concerning the linguistic status of Nooli. In two of the fourteen cases, the Nooli items showed formal relationship with their Nea equivalents, but not with their Nanggu ones, whereas the picture presented by the remaining twelve items in which formal relationship between all three was observable, was as follows: in eight cases, there was formal identity between the Nooli and Nea forms, or at least closer similarity between them than that existing between the Nooli and the related Nanggu forms. In three cases this situation was reversed and in one instance all three forms were formally identical. These facts, however meagre, seemed to be suggestive of a very close relationship between Nooli and Nea, very much closer than that between Nooli and Nanggu, and to militate against both the present writer's assumption that Nooli was a Nanggu dialect, and Davenport's assertion that Nooli, together with the dialects of the other two villages on Cape Mendaña, and their offshoot dialect on Tōmotu Noi, constituted a separate language.

The quite sizable Nooli materials collected by the present writer during his 1970 fieldtrip have shown conclusively that, at least on the lexical level, Nooli is a Nea dialect. At the same time, there are some quite marked structural differences between Nooli and Nea, but these are, in the present writer's opinion, not sufficiently far-reaching to override the lexical evidence and to make it possible for Nooli to be assigned the status of a separate language, though these differences may have prompted Davenport to come to such a conclusion. It also became evident that the present writer's earlier conclusion that Nooli was a Nanggu dialect had been erroneously arrived at as a result of Nea-Nanggu bi-lingualism prevailing amongst inhabitants of the Cape Mendaña area in view of which his informants' statements concerning the western extension of Nanggu were basically correct. This bi-lingualism also seemed to have prompted his previous Nooli informant to give him materials in Nanggu instead of in Nea, because at the time the present writer was in the company of Nanggu informants.

In mid 1970, the other two villages on Cape Mendaña had ceased to exist, though a few people were still believed to be living at the site of Nembōnō. Most of their populations had moved on to Tōmotu Noi where two new villages - Mbimba and Mwētngeni (the latter a double village) -

had been established.

In the light of the statements made above, the language situation in the Reef and Santa Cruz Islands is as follows:

On the Reef Islands - disregarding the Polynesian dialects spoken on Nifilole, Pileni, Sand, Nukapu, Matema and Nupani Islands - one language called *Reefs* is spoken with almost no dialectal differentiation, by approximately 3600 people.

On Santa Cruz one language, *Nambakaengö*, with a number of dialects, occupies the entire north coast of the island, the Graciosa Bay area, Tömotu Neo, and the northern half of the west coast as far south as Mbaengö. The number of its speakers can be estimated to be around 2200 in the light of present population figures, though more exact information on this will be forthcoming when the detailed results of the latest village census become available towards the end of 1970.

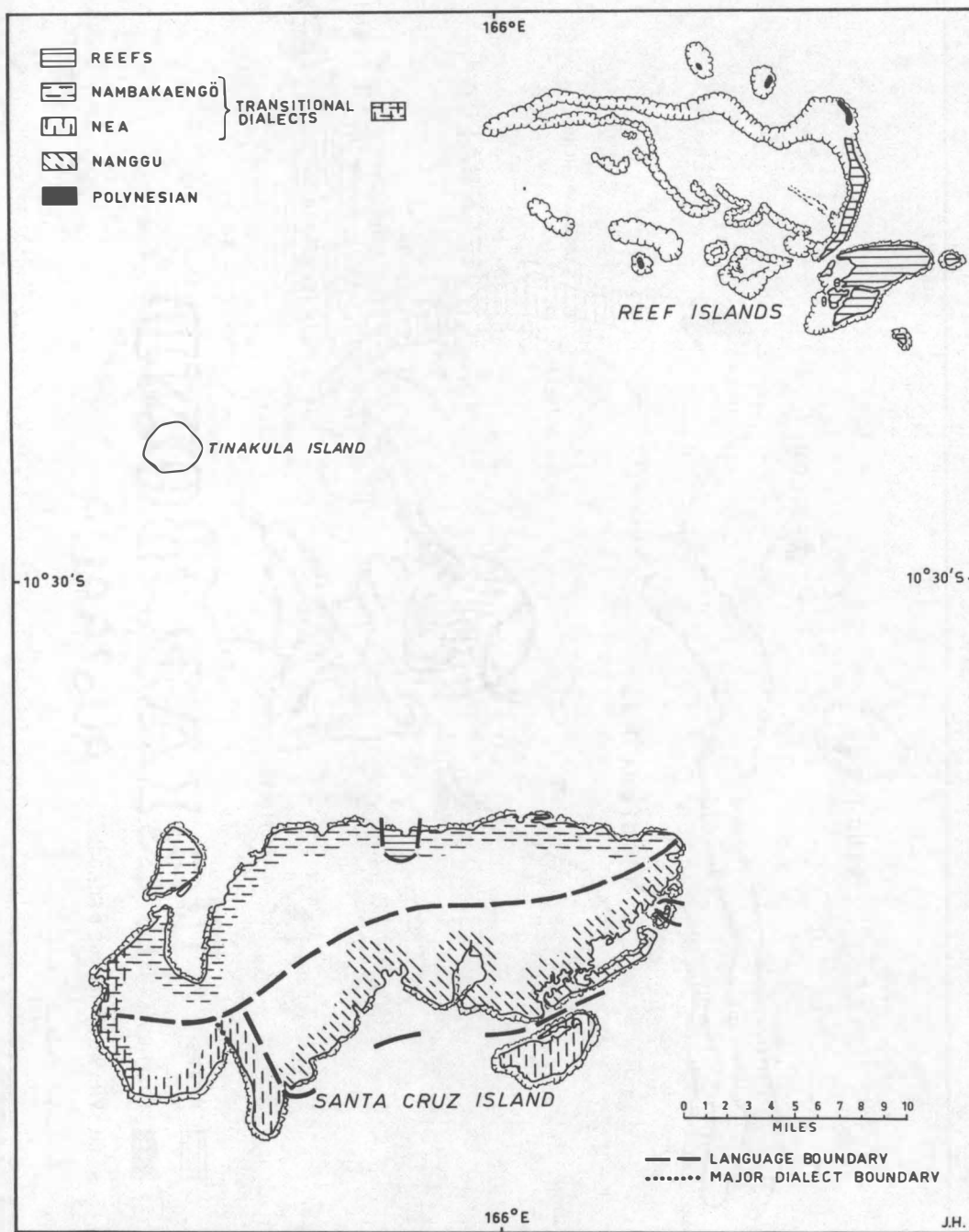
Another language, *Nea*, with two major dialects differing more on the structural than on the lexical level, is spoken on the southern half of the west coast of Santa Cruz (with Nemba as its northernmost representative), on the south coast west of Cape Mendaña, on Cape Mendaña itself, and on the island of Tömotu Noi. The boundary between the two dialects which could be called the western and eastern dialects, lies between the villages of Nea and Mbonembo. At the same time, the Nea and Nambakaengö languages are connected by a dialect chain running along the west coast from Vengö to Mbanjö - these dialects have been named the Mbaengö dialects. The total number of the speakers of the Nea language can be estimated to be in the vicinity of 1100, with about 800 speaking the western and about 300 the eastern dialect.

A third language, *Nanggu*, occupies the south and east coasts of Santa Cruz from the village of Mala (Nambalue) to that of Nggaito south of Cape Byron. It displays little dialectal differentiation, and has approximately 250 speakers.

In addition to these languages, two small enclaves of Reef speakers live on Santa Cruz at Nelua on the north coast and at Akamboi on the east coast. They appear to number about 30. As has already been indicated in 1.2., the following abbreviations have been employed in this paper to indicate the language and dialect names:

R	=	Reefs	
M	=	Malo	} Nambakaengö
Nel	=	Nelua	
Me	=	Menjembelo	} Nea
N	=	Nemboi	
No	=	Nooli	
Na	=	Nanggu	

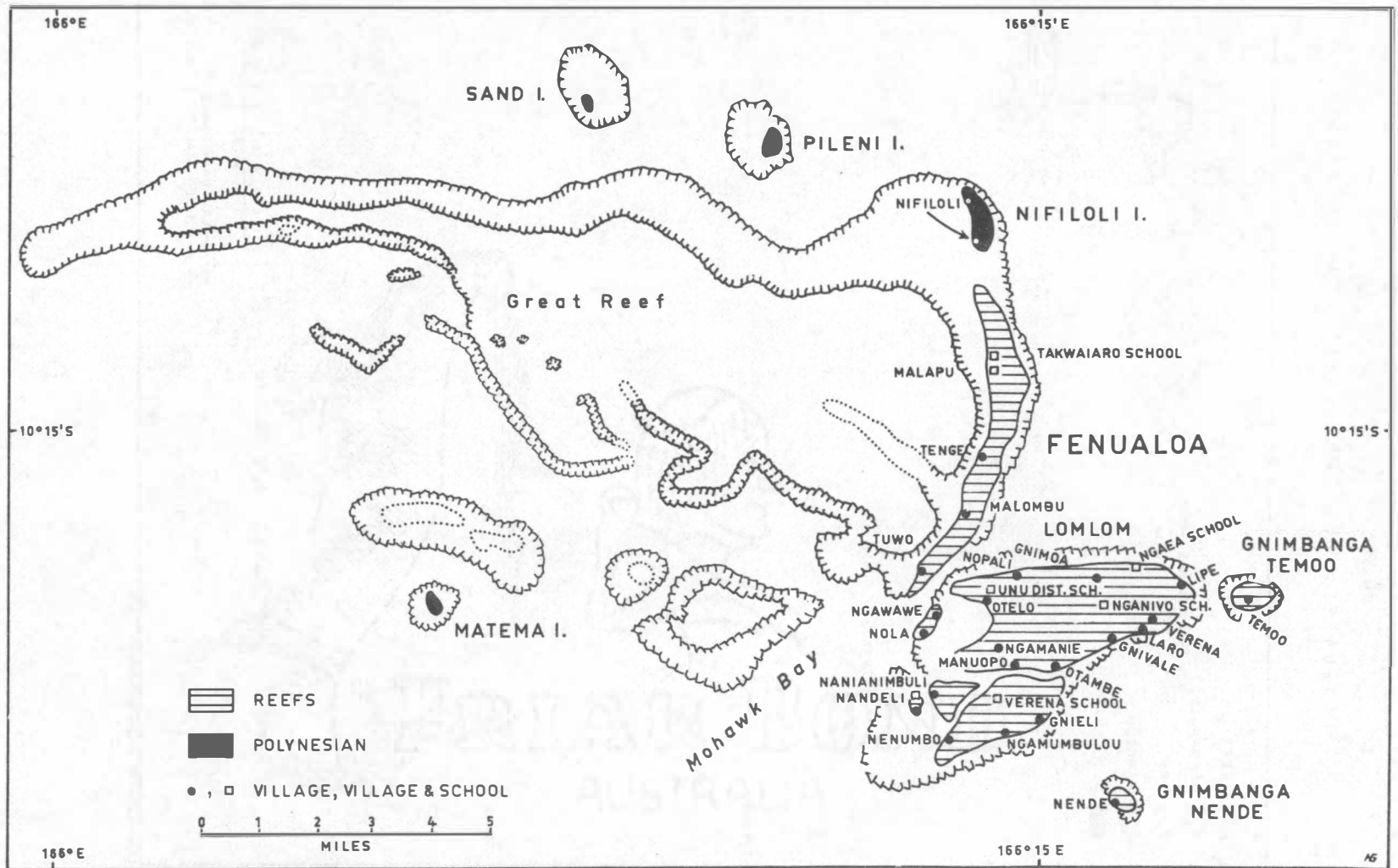
LANGUAGES, REEF AND SANTA CRUZ ISLANDS



DEPARTMENT OF HUMAN GEOGRAPHY, A.N.U.

MAP 1

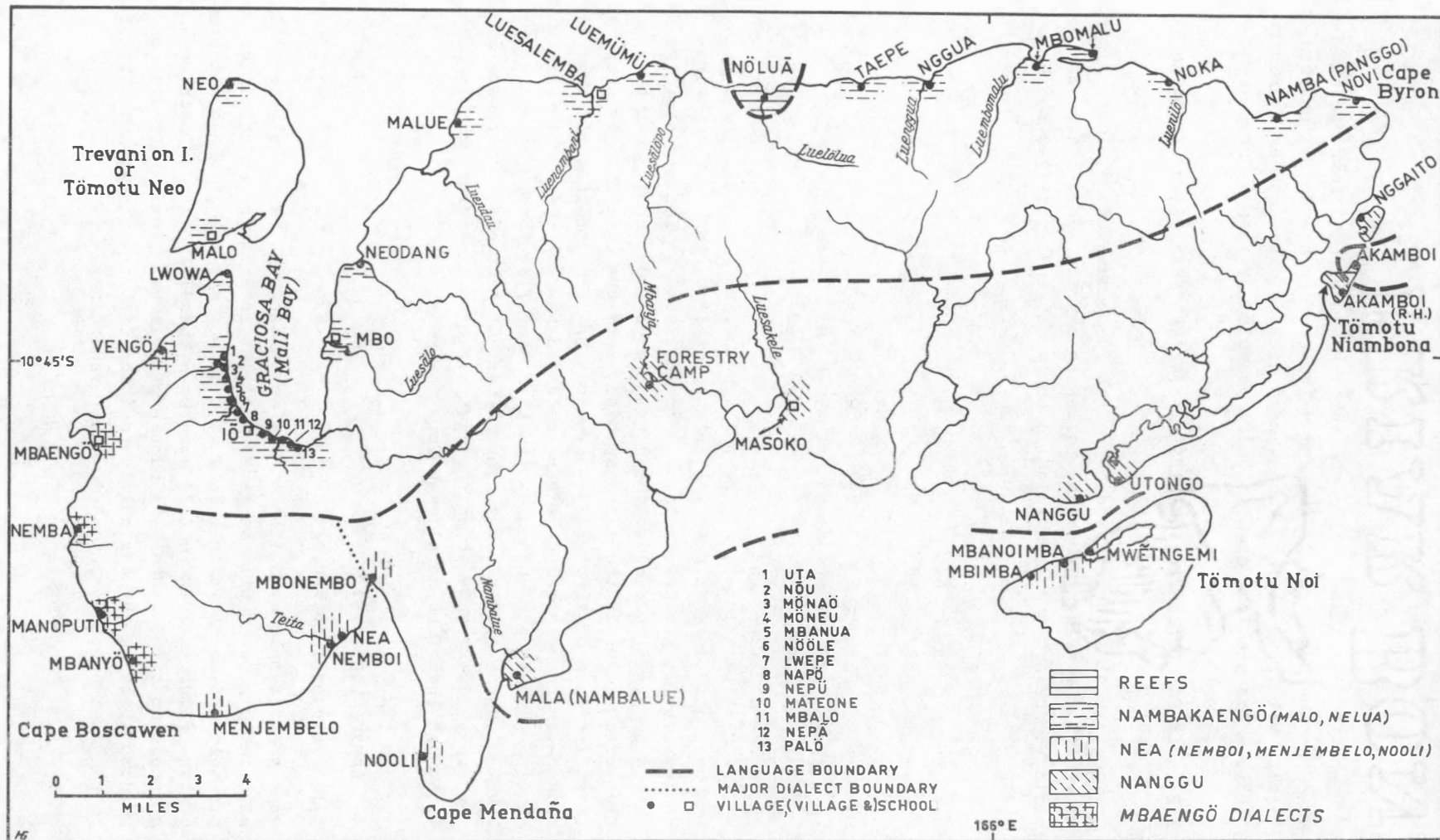
# LANGUAGES, REEF ISLANDS



DEPARTMENT OF HUMAN GEOGRAPHY, A.N.U.

MAP 2

# LANGUAGES, SANTA CRUZ ISLAND



DEPARTMENT OF HUMAN GEOGRAPHY, A.N.U.

MAP 3

In this, M and Nel will represent the Nambakaengö language and Me, N and No the Nea language (Me and N its western and No its eastern dialect). Nel is an extinct Nambakaengö dialect discussed by Codrington (1885) - its previous area is today occupied by R speakers.

## 2.2. LEXICAL INTERRELATIONSHIPS WITHIN THE REEF ISLANDS-SANTA CRUZ FAMILY

The lexical interrelationship of the languages and dialects listed above will be evident from the following chart of percentages of shared basic vocabulary cognates which is based on, and rectified to, a 220 items list:

R						
43	Nel					
39	77	M				
39	55	62	Me			
37	63	69	82	N		
37	60	65	79	81	No	
38	56	54	53	60	68	Na

The rectification of the word lists compared to a 220 items base list has been done according to the principles laid down by Thomas and Healey (1962), and applied by Voorhoeve (1968) to languages of the New Guinea area. According to these principles a descending numerical deviation of 10 items in the list employed, from the base list is proportional to an increase of about 2/3% - or about 3/5% in the case of large deviations - in the percentage figure obtained through the shorter list. To rectify the results obtained with the help of such a shorter list to the level of those obtained through the base list itself, a decrease of 2/3% for every 10 items by which the list employed is shorter than the base-list must therefore be allowed for.

## 3. SAMPLE WORD LIST

### 3.1. INTRODUCTORY REMARKS

A short sample word list of the seven languages and dialects dealt with in this paper will be given to illustrate their lexical interrelationship and composition. This list is not the one on which the percentage figures given in 2.2. have been based: it is much shorter and at the same time, contains a number of cultural items which are useful in demonstrating the lexical composition of the languages with regard to the Austronesian content in their vocabulary.



The Nelua and Menjembelo lists are fragmentary, especially the latter.

### 3.2. REMARKS ON THE PHONOLOGIES OF THE LANGUAGES AND DIALECTS

Before the wordlists themselves are given, a few brief remarks on the phonologies of the Reef Island-Santa Cruz languages and dialects dealt with in this paper may be in order.

Tentative phonologies have been established as a result of the preliminary assessment of the materials, but a number of problems remain unresolved, especially with regard to the phonological position of rising diphthongal sounds such as *ja*, *yo* etc. after stops and nasals in relation to palatalised and labialised stops and nasals, and stops and nasals followed by *y* and *w*. Further study is expected to affect the tentative findings to a considerable extent. Conditioned and free allophonic variation is very extensive in all the languages and morpho-phonemic changes are elaborate. The following are tentative phoneme charts:

#### 3.2.1. Reefs

p	t	k
		(kh)?
p <sup>w</sup>		k <sup>w</sup>
p <sup>y</sup> ?		
b	d	g
b <sup>w</sup>		g <sup>w</sup> ?
	d <sup>y</sup> ?	
m	n <sup>y</sup> ?	ŋ
m <sup>w</sup> <sup>1</sup>		ŋ <sup>w</sup>
v	s	
	l	
w	y	
i		u
e		o
ä		ɔ
	a	
e <sub>˘</sub> i		ou <sub>˘</sub>

<sup>1</sup>The labialisation of m<sup>w</sup> is often almost imperceptible. The sound represented by m<sup>w</sup> is phonetically a velarised, slightly labialised m with prolonged articulation.

Vowel length appears to be phonemic, and long vowels are frequent. They manifest themselves phonetically as repeated articulations of their short equivalents, with the first articulation more prominent than the second, and will be written here as double vowels, e.g. oo ['ɔ,ɔ]. Vowel length and stress appear to be connected in many instances. Stress is predictable in most cases, and some of the apparent exceptions can be explained on historical grounds. A small number of as yet unexplainable instances remains - stress may still prove to be phonologically relevant. A special form of close juncture manifesting itself phonetically as [ʷ] occurs between b+l. Voiced stops are prenasalised. The phonemic status of nʷ and dʷ is very much in doubt.

### 3.2.2. Malo

	p		t		k
	pʰ		tʰ		kʰ
	pʷ		tʷ		kʷ
	pʸ				kʸ
	b		d		g
	bʷ		dʷ		gʷ
	bʸ?				
	m	nʸ	n		ŋ
	mʷ <sup>1</sup>		nʷ		ŋʷ
	v	s ~	tʃ ~	tʸ	
			l		
	w	y			
<hr/>					
i	ü	u			ũ
e	ö	o		ě	õ
ä	a	ɔ		ã	õ
<hr/>					
	eĵ				

Vowel length appears to be phonemic, but long vowels are very rare. Phonetically they correspond to the long vowels in Reef (see 3.2.1.), and will be written as double vowels. Some features of the stress pattern are predictable, but others are apparently not, and stress may be phonemic. A special form of close juncture manifesting itself phonetically as [ʷ] occurs between bilabials + n or l, l+v, and ŋ and bilabials + y. Voiced stops are prenasalised.

<sup>1</sup>Malo mʷ corresponds to Reef's mʷ (see 3.2.1.).

## 3.2.3. Nelua

On the basis of Codrington's (1885) materials, the following tentative - and obviously incomplete - phonemic chart can be drawn up for Nelua:

p		t		k															
p <sup>w</sup>																			
b		d		g															
m	n <sup>y</sup>	n		ŋ															
m <sup>w1</sup>																			
v		t <sup>y</sup> (~s?)																	
		l																	
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px 10px;">i</td> <td style="padding: 2px 10px;"></td> <td style="padding: 2px 10px;">ü</td> <td style="padding: 2px 10px;"></td> <td style="padding: 2px 10px;">u</td> </tr> <tr> <td style="padding: 2px 10px;">e</td> <td style="padding: 2px 10px;">ö</td> <td style="padding: 2px 10px;">ə</td> <td style="padding: 2px 10px;"></td> <td style="padding: 2px 10px;">o</td> </tr> <tr> <td style="padding: 2px 10px;"></td> <td style="padding: 2px 10px;"></td> <td style="padding: 2px 10px;">a</td> <td style="padding: 2px 10px;"></td> <td style="padding: 2px 10px;"></td> </tr> </table>					i		ü		u	e	ö	ə		o			a		
i		ü		u															
e	ö	ə		o															
		a																	

Voiced stops are prenasalised.

## 3.2.4. Nemboi = Menjembelo

p		t		k
p <sup>h</sup>		t <sup>h</sup>		k <sup>h</sup>
p <sup>w</sup>		t <sup>w</sup>		k <sup>w?</sup>
p <sup>y</sup>				
b	d <sup>y</sup> ~d <sup>ʒ</sup>	d		g
b <sup>w</sup>		d <sup>w?</sup>		g <sup>w</sup>
m	n <sup>y</sup>	n		ŋ
m <sup>w2</sup>		n <sup>w</sup>		ŋ <sup>w?</sup>
v		s		
		l		
w	y			

<sup>1</sup>Codrington remarks about m<sup>w</sup>: "The m is more marked by suspended pronunciation than by the subsequent explosion of the breath. w is not suggested by the sound. Wadrokai says it is identical with Nengone 'm". Tryon (1967) describes this Nengone sound as a (voiced) syllabic m and writes it mm; Haudricourt (1971) disagrees with Tryon and regards it as an unaspirated voiceless m with double glottal and bilabial occlusion. Of these two descriptions, Tryon's is more appropriate for the sound heard by the present writer in languages of the Reef Islands-Santa Cruz Family, and written here as m<sup>w</sup>. From Codrington's description, it may seem that the Nelua sound which he represented by m is comparable to that rendered by m<sup>w</sup> in the other languages of the family, though his term "suspended pronunciation" is not absolutely clear.

<sup>2</sup>Corresponds to Reefs m<sup>w</sup> (see 3.2.1.).

i	ü	u		ü̃	ũ
e		o			
ɛ	ö	ə	ɔ	ö̃	ə̃
	a			ä̃	ã̃
<hr style="width: 50%; margin: 10px auto;"/>					
ã	ẽ	ɛ̃	ə̃	õ	ã

Vowel length is apparently phonemic, though long vowels are rare. Phonetically they correspond to the long vowels in Reefs (see 3.2.1.) and will be written as double vowels. Some of the features of the stress pattern are predictable, but some are as yet inexplicable, and stress may prove to be phonemic. Voiced stops are prenasalised in the majority of their observed instances of occurrence. The conditioning factors responsible for the presence or absence of prenasalisation with them are still under study.

### 3.2.5. Nooli

p		t		k
p <sup>h</sup>		t <sup>h</sup>		k <sup>h</sup>
p <sup>w</sup>		t <sup>w</sup>		k <sup>w</sup>
p <sup>y</sup>	t <sup>y</sup> ~s (~y?)			
b	d <sup>y</sup> ~dʒ	d		g
b <sup>w</sup>		d <sup>w</sup>		g <sup>w</sup>
m	n <sup>y</sup>	n		ŋ
m <sup>w</sup> <sup>1</sup>		n <sup>w</sup>		ŋ <sup>w</sup> ?
v				
		l		
w	y (~s?)			

i	ü	u		ü̃	ũ
e		o		ē	
ɛ	ö	ə	ɔ	ö̃	ə̃
ä				ö̃	ə̃
	a			ä̃	ã̃
<hr style="width: 50%; margin: 10px auto;"/>					
ã	ẽ	ɛ̃	ə̃	õ	ã

Vowel length is apparently phonemic, though long vowels are rare. Phonetically they correspond to the long vowels in Reefs (see 3.2.1.) and will be written as double vowels. Some of the features of the stress

<sup>1</sup>Corresponds to Reefs m<sup>w</sup> (see 3.2.1.).

pattern are predictable, but some are as yet inexplicable, and stress may prove to be phonemic. Voiced stops are prenasalised in the majority of their observed instances of occurrence. The conditioning factors responsible for the presence or absence of prenasalisation with them are still under study.

### 3.2.6. Nanggu

p	t	k
p <sup>h</sup>	t <sup>h</sup>	k <sup>h</sup>
p <sup>w</sup>	t <sup>w</sup>	k <sup>w</sup>
p <sup>y</sup> t <sup>y</sup> ~t <sup>s</sup> ~t <sup>ʃ</sup>		k <sup>y</sup>
b	d	g
b <sup>w</sup>	d <sup>w</sup>	g <sup>w</sup>
b <sup>y</sup> d <sup>y</sup> ~d <sup>ʒ</sup>		
m	n	ŋ
m <sup>w</sup> <sup>1</sup>		ŋ <sup>w</sup>
m <sup>y</sup> n <sup>y</sup>		
	l <sup>y</sup> l	
w	y	

In addition, t̚, (ŋ)ɖ, ŋ and l̚ are found in a number of words, but they seem to be allophonic variants. ʔ occurs, mainly in word-final position, and may perhaps prove to be phonemic, though in some instances it seems to be in free variation with -∅.

i	ü	u		ũ
e	ö	o		ẽ
	ə			ẽ
ä		ɔ		
	a			ã
-----				
a <sub>ː</sub>	e <sub>ː</sub>	o <sub>ː</sub>	a <sub>ː</sub>	ɔ <sub>ː</sub> ũ

Vowel length is phonemic, and long vowels are frequent. They manifest themselves phonetically as lengthened versions of the short vowels, and will be written here as V: . Some of the features of the stress pattern are predictable, but a few cannot yet be explained, and stress may be phonemic. Voiced stops are prenasalised in the majority of their observed instances of occurrence. The conditioning factors responsible for the presence or absence of prenasalisation with them are still under study.

<sup>1</sup>Corresponds to Reefs m<sup>w</sup> (see 3.2.1.).

## 3.3. WORD LIST

	REEFS	MALO	NELUA	MENJEMBELO	NEMBOI	NOOLI	NANGGU
<i>man</i>	'sime siŋi'le <sub>2</sub> i	'nɔblo	nɛpala	'nũŋɛ	'nũŋɛ	'nabɔɔ	'nɔũde lɔ'pile
<i>woman</i>	si'vaŋa si'ŋada	'olva	ovla	'ɔle	'ɔle	'ɔla	'ɔ:plɛ
<i>child</i>	'dɔɔlili	i'toto	ito	'obwɛ	'obwɛ	'ɔbwe	'ɔbwa
<i>father</i>	'tumwɔ	'tɔte	numwɛ	'tũte	'ibwũ	le	i'ye
<i>mother</i>	'iso	'læe	tʻya	'lale	'laule	'laole	i'se
<i>son</i>	'gino	'mola		'mɔle <sub>2</sub> i	'mole	'mäle	
<i>daughter</i>	si'peu	'inʻe			'ine	'opme	ɔp'ne <sub>2</sub> i
<i>I</i>	i <sub>2</sub> u	'niŋä	niŋe	niŋɛ	ni	'niŋa	ni
<i>you(sg.)</i>	'i <sub>2</sub> umu	nim	nimu	nim	nim	nim	nim
<i>he</i>	i'na(ŋa)	'nide	nide	'nide	'nide	'nide	'nide
<i>we(incl.)</i>	'i <sub>2</sub> ude	'nigu	nigu		'nigɔ	'nigɔ	ni'damwɛ
<i>you(pl.)</i>	'i <sub>2</sub> umi	'nimu	gamu		'nimwi	'nimu	'nimwɛ
<i>they</i>	'idʻi	'nidö	nide		'nigö	'nine	'niŋö
<i>one</i>	'nʻyigi	'esa	etʻya	'pöthe	(tũ)'öthe	'pathe	'töthi:
<i>two</i>	'lilu	li	ali	li	'(l)ali	'ali	'thüli:
<i>three</i>	'eve	tü	atü	'toluɛ	'atü	'atü	thü'tü:
<i>four</i>	'uve	pʻä	apue	pʻɛ	'apwɛ	'apwe	thu'pɔɔ:

	REEFS	MALO	NELUA	MENJEMBELO	NEMBOI	NOOLI	NANGGU
<i>five</i>	'vili	nəl'vün	navlunu	nau'lün	nəu'lün	'nɔlü	'mö:p(u)m
<i>six</i>	po'legi	e'səmə	etʷamə	pö'teŋimə	pö'teŋimə	'thima	'themũ:
<i>seven</i>	po'lälu	ö'lime	ölime	'thumutu	i'thumütü	thu'mätü	thũ'thü:
<i>eight</i>	po'le:	ö'tümə	ötumə	'thumuli	i'thumüli	thu'məli	'thumuli:
<i>nine</i>	po'louve	ö'pwəmə	öpuemə	thu'məthe	ithu'məthe	thu'məthe	'thumathe:
<i>ten</i>	nu'golu	'nəpnu	navlu	'nəpnu	'nəpnũ	'nɔpnu	'nɔ:d(u)n
<i>head</i>	nuo'tau	'naö	vö	'nao	'nawö	ba'nao	'naɔ
<i>hair</i>	ni'luu	'niŋi ('naö)	niŋi		'niŋi 'noplə	'naplö	'nöplü
<i>forehead</i>	'nau	'ötlö		'otulömʷə	'otölö	'pulemʷat(u)n	'pʷeleunɔ
<i>eye</i>	'nʷibe	mə		mʷə	'nümʷə	mʷǎ	pɔɔ
<i>nose</i>	'noto	'notü	no	'dɔthu	'dɔthu	'dɔthun	'dɔthum
<i>ear</i>	nu'goko	nöa'döthü	dole		nao'lötu	nab'löt(u)n	lɔ'dɔthɔ
<i>mouth</i>	'nupa	'nao	nao		'nao	'nabʷö	'nabʷa
<i>tooth</i>	nuo'teede	'niŋi	niŋe		'niŋu	'niŋu	'nũŋũ
<i>tongue</i>	nali'bilio	na'ləpü	lapu		nə'ləpə	'naləp(u)m	'nalapmʷə
<i>cheek</i>	nʷii'vau	'nöla ö 'naö			'nagʷa		'nagʷa
<i>jaw, chin</i>	napo'alu	bləŋö 'nao			bləm 'nagwə	blɛ'ŋimu	'bʷala
<i>shoulder</i>	nab'lo	'nabä	be		'nabʷɛ	ta'pəma	'nabʷe
<i>arm</i>	'nʷime	mü	mu		'nümü	mü	'nümü

## WORD LIST - continued

	REEFS	MALO	NELUA	NEMBOI	NOOLI	NANGGU
<i>finger</i>	na'gago	nöä'toki ö mü	tokiamu	'neŋi 'nümü	'naŋi mü	'nai <b>β</b> okε nümü
<i>nail</i>	na'bisu	to'kovi ö mü		bene'köpi ö nümü		'benakö
<i>breast (of woman)</i>	nʸi'gale	'näyö		'neyö	'neε	'nöthi
<i>belly</i>	nu'osa	'nöle	bole	be'leli <b>β</b> a	'bɔla	ta'polɔ
<i>back</i>	nu'mʷaŋu	'nibö		'nibö	'nibö	nɔ'tʷɔ:n(u)bö
<i>leg</i>	'nuku	'nanʸɔ		'nino	ne	nə
<i>knee</i>	nub'leeku	tö'puplü		'naɔpla		'naɔplöne
<i>skin</i>	'lage	be	be	'be <b>β</b> ŋə	bö	be'no <b>ɬ</b> u
<i>blood</i>	'dela	'mäpʸö	neŋia	'möpʸö	'mepʸö	'möpʸö
<i>fat</i>	ki'bepu	'toto		'tötɔ	'nʸɔli	'nötua <b>ɔ</b>
<i>bone</i>	'neve	'növö	glu	'naadu	'dʷadu	'ʔadu
<i>body</i>	nu'kola	'döthü	neke	nökə'dethü		
<i>sun</i>	'nale	'nepi	naŋa	'nepi	'lepi	'nö:pi
<i>moon</i>	'ne(e)pe	'temə	tema	'temʷə	'temʷä	'te:mʷə
<i>star</i>	'nʸiu	'vei	vei	'vəi	'bene'ŋaabo	'pipi
<i>sky</i>	topʷa'lua	bo'ŋäve		bɔ'kawə	bɔ'ŋawa	bɔ'ŋa:we
<i>cloud</i>	noo	'dɔbə		'dobe	'ɔbɔ	'dɔba



	REEFS	MALO	NELUA	NEMBOI	NOOLI	NANGGU	
<i>fog</i>	nʷi'gav(o)i na'pola	öka'möbö		ö'kap(u)bö		'mʷä:ŋü	
<i>rain</i>	te'uwa	'tewa	ua	'ipʷü	'ipü	'i:pmü	
<i>night</i>	bu	'nölɔ kä-'bü	vabu	'nobu	'nɔbu	'nɔ:bu	
<i>day</i>	'nubla	'nölɔ kä-'ŋölä		'nölɔ kɛ-'igle	'nalɔ kɛ-'igle	'ɔ:bu	
<i>morning</i>	'pewayo	'mai		'bɔlə	o'yapha	mʷa'dʷidʷi	
<i>evening</i>	mo'nala	mi'ləpü		mi'ləpʷu	'bʷena	'mʷi:lɔ	
<i>water</i>	nu'oi	'lue	luwe	'nüwe	'duwe	'lɔ:kʰ(u)m	
<i>ground</i>	'nubo	dö'thō		'mei <th>ə</th>	ə	'metnʷē	kɔ'tɔnɔ
<i>stone</i>	'nʷiivä	'(l)əplə		'oplə	'othə	'ɔ:pʷa	
<i>mountain</i>	'neyo	'newə		'nəwe	'lepe	'nōuwa	
<i>valley</i>	'numatea'nʷiio	näbə'lua		niŋu'lepe		'nabatoanuə	
<i>sea</i>	'nalo	'dɔpʷe	daopue	'dobʷe	'dɛpʷe	da'kawü	
<i>high tide</i>	'loolo	'nölö kä-'tu		'nölö	'nɛle	'nölö	
<i>low tide</i>	numa'lana	'nölö kä-'vəo		'mäpʷə	'mapʷa	'lumʷa	
<i>wind</i>	'nʷeenʷi	'nenü		'nɛnü	'nenü	'nuo	
<i>thunder</i>	topʷa'lua kubu'le	'blömei <sub>u</sub>		tɛ'kamɔ	ti'kila	'blöŋe tö'kila	
<i>fire</i>	'nʷee	nʷö	nʷie	nʷö	dʒə	'ʔa:khu	
<i>smoke</i>	nʷi'gase	esi'kapu	kanʷie	nə'kapə	ɔ'kapu	'ɔ:kɔ	

## WORD LIST - continued

	REEFS	MALO	NELUA	NEMBOI	NOOLI	NANGGU
<i>ashes</i>	nu'blese	bü	bu	'nübü	'nɔbu	'nübu
<i>path</i>	nuba'tage	lö'pəki	natʸi	'nōti	la'pəki	lä'pəki
<i>tree</i>	nʸe'na	nɔu'nɔ	no	'nüwo	nu'woɣ	'nuŋɔ
<i>root</i>	nʸii'kile	'döblö nɔ	nauno	'debö	'banʷɔ	'nabɔ
<i>leaf</i>	'nugo	'leu	leu	'leŋu	'laŋu	'lepu 'leu
<i>fruit</i>	'nua	'nöa	va	naa	'naanʷɔ	'nɔa
<i>flower</i>	'nuupʷa	'nöphü		'nöphü		
<i>bamboo</i>	'nembi	nɔ'blövi		'paö 'bive	läp(u)'mʷäle	ŋa'nibi
<i>grass</i>	ne'bo	'nabö		'nabö		'läp(u)m
<i>coconut</i>	'näänu	nəlu	nalu	'nəlu	'nap(u)bʷi	ŋö'nəp(u)bʷi
<i>food</i>	dä'kiliŋä	dakä'naŋ		dake'ləŋü	dakə'laŋ	dake'laŋö
<i>taro</i>	nu'bʷole	nʸa 'taki		'lökö	'lakö	'watö
<i>yam</i>	u'podʸi	'läkü		'leɣkö	'lekö	da'laku
<i>banana</i>	'nou	'böpi	bepi	'böpi	'böpi	ŋö'böt i
<i>sugar-cane</i>	'nau	'nəlü		'nəlü	'nəlu	'teɣʸa
<i>breadfruit</i>	nʸi'balo	'bia		'biə	'nibia	'tɔ:klu
<i>betelnut</i>	numa'tapi	'kalva		'ketü	'ketə	ŋö'khäthü

	REEFS	MALO	NELUA	NEMBOI	NOOLI	NANGGU
<i>betel leaf</i>		'päi		'puɛ	pwe	pwe̞i
<i>betel lime</i>	na	nö'aka		dɔ	dɔ	dɔ
<i>dog</i>	'kuli	'kuli	kuli	'kuli	'kuli	'kuli
<i>pig</i>	'poi	'poi	kp'oi	pɔ	pɔ	'pɔi
<i>tail</i>	napasi'gile	'niglü		'nüglü	'naglu	'nugütlu
<i>rat</i>	'lapu	'lökö	leke	'mɛlipɔ	'lopu	'dʏapmugu
<i>bird</i>	deku'luo	kio'ŋöwü	kio	'uto	'utɔŋ	'doke
<i>egg</i>	nuo'lie	'näimo	li	'tapiö	na'litna	'na:li ne̞i
<i>parrot</i>	'vili	'vili		kili'ülü	'kweli	'utlu
<i>snake</i>	nʏiŋi'dɔwe	mə		'nümʷə	'numʷɛ	'nümʷa
<i>crocodile</i>	kako'pili	kha'khɔpli		kha'khɔpli	kha'khɔpli	kha'khɔpli
<i>turtle</i>	to'ponu	'nəü				'nəpü
<i>fish</i>	sii	nɔ	no	nɔ	nɔ̞	'nəta
<i>fin</i>	navi'duŋa	'nöle ö 'nɔ		nö'lewö		'nöpɫen ŋö 'nəta
<i>shark</i>	nu'bʷa	bʷa		'nübʷa 'nügʷa	'maga	'nügʷa
<i>crab</i>	nu'lei	lo		'lɔbɔ		'lɔŋu
<i>fly</i>	'nula	mɔ	mo	'nümʷo	'numɔ	'mumʷɔ

## WORD LIST - continued

	REEFS	MALO	NELUA	MENJEMBELO	NEMBOI	NOOLI	NANGGU
<i>mosquito</i>	deku'mwəŋe 'namo	mɔ'nidü	mo		mʷɔ'kilələ	mɔ'nidye	mʷa'lälə
<i>butterfly</i>	numumu'lo	bö	bö		bö	bö	'mö:bö
<i>louse</i>	no'uu	tö'kutu			'nəwi	'newi	'nəwi
<i>house</i>	nu'opwä	mʷa	mʷa		'bəma	'mathu	'ma:thu
<i>village</i>	'nuumä	mə'tea			mə'talja	ma'telja	'nɛlʷa
<i>bow</i>	'dʷääpʷa	'pöpə			le'töü	lä'taŋ	'ä'tü:
<i>arrow</i>	ni'opʷa	'nipna			bɔ'təwi	'təwi	'batuki
<i>club</i>	'nʷaumaranʷ	bə			'ləkə		
<i>string</i>	nu'ale	'nüvi			'nüwi	dʒa	nəna:
<i>net</i>	'nupo	bö			'nübʷə	'bɛə	'nubʷɔ
<i>big</i>	e'olo	'etu	levu	i'löpə	'ipʷö	ima'butni	i'lö:phi
<i>small</i>	la'kʷayu	'thopʷə	topa	'ithɔ	'ithɔ	le'thapʷə	'u:tha
<i>good</i>	'päko	'mölə	mela		i'kəle	i'kɛle	ikho'thej
<i>bad</i>	'ää	'thöka	tʷia		i'thüka	ithi'ka	i'thua
<i>long</i>	eobu'lou	'boi			i'bɔi	i'bowe	i'buki
<i>short</i>	'mobo	'möbɔ			'ibo	i'botna	i'bɔtu
<i>red</i>	o'pulo	pɔ	poa		'ibla	i'bla	
<i>white</i>	'opʷa	'pöki	'peki		i'pöki	i'pəki	'upʷə

	REEFS	MALO	NELUA	NEMBOI	NOOLI	NANGGU
<i>black</i>	'oyo	bo	bo	'iblü	'ible	'ibɔ
<i>hot</i>	'vepe	pü	upu	'ipü	'upu	
<i>cold</i>	ba'lälo	'bao	abao	'pʷətə	i'mʷila	'ipʷə
<i>crooked</i>		'ŋalu		i'ŋalu	i'ŋalu	i'ŋa:lu
<i>dry</i>	'väpe	glö		glö		'ipla
<i>eat</i>	'väŋä	mu	mu	mʷə	mʷä	ŋa
<i>drink</i>	nu	ö-m'nü	ma	ə-m'nu	ŋ(a)'nü	gə
<i>sit down</i>	to'koli	'wäbu		'wɛbu	'wɛbu	'wena
<i>call out</i>	ŋa	kü	kia	lɔpə'bʷa	ku	'klejpu
<i>run</i>	ba'siki	vo	vo	gʷa	gʷa	ba, 'güə
<i>walk</i>	pu'wä	və		və	və	wö
<i>take</i>	lu'akä	'tuə(ma)	tuam	tuə	tɔ	'təya
<i>give</i>	lää	ka		ka	wɔ	'läe
<i>die</i>	'nubo	bə	ba	bʷə, gʷə	bʷa	bʷə
<i>hit</i>	'togulo	tə	ta	tə	tə	tə
<i>break (to)</i>	'baki	ö-p'lamej		'plaglo	'pəpule	ni'wɛj̥tö
<i>sleep</i>	mej̥	mʷi		mʷi	mʷi	mu
<i>see</i>	ä'molikä	'mplä	mope	'mɔla	'mʷalä	'mɔla
<i>hear</i>	'ŋökä	'ö-lä		vɛ-'lɛlɛ	ɔ'lalə	wö-'lɛ
<i>smell</i>	'kubo			'thüə, pʷö	u'luk(u)ŋa	wö-'thü

## WORD LIST - continued

	REEFS	MALO	NELUA	NEMBOI	NOOLI	NANGGU
<i>swim</i>	o'kɒu	ka, wö	wə	'kipʷü	'kipu	
<i>put down</i>	u'ate	'yölä-o	io	'ölu-ŋa	'yalu	'elu-ä
<i>shoot</i>		ö-'pnä	pnə	pnə	pmə	pmə
<i>bite</i>	'mʷaŋe	'makä	makepeli	ma'keli	'mʷake	
<i>tie</i>	'doa	ö-'pe		vle	vle	'lawi
<i>who</i>	'iie	'neke	ne	'nelö	'ilu	
<i>how much</i>	'oa	'tülvö	tule	lä'tülö	lä'tule	yö'kä:, -yε
<i>and</i>	'eä	ä	e	ε	e	e

#### 4. LEXICAL COMPOSITION OF THE REEF ISLANDS-SANTA CRUZ FAMILY LANGUAGES AND DIALECTS

##### 4.1. GENERAL REMARKS

A summary of some of the results of the present writer's preliminary comparative historical study (Wurm 1970) which was mentioned in 1.1. will be given here.

In that study, generally only R, M, Nel, N, and Na were taken into account, because the author's Menjembelo material was too restricted to give meaningful results in the statistical part of it (though it was used in the diachronic part), and his extensive Nooli material was only collected after the completion of the manuscript.

The main result of that study was the discovery that about half of the approximately 300 vocabulary items assessed in most of the languages and dialects were found to be of Austronesian origin, though in many instances extensive sound changes had to be taken into account in deriving them from proto-Oceanic and proto-Austronesian forms, and their Austronesian origins were not obvious or easily recognisable.

In the reflexes of proto-Oceanic (pO) and proto-Austronesian (AN) forms, different traditions were to some extent observable in the various languages, with the main contrasts appearing between R and the Santa Cruz (SC) languages and dialects on the one hand, and between Na and the remaining SC languages on the other. In particular, Austronesian vocabulary elements in Na reflect pO and AN proto-forms more closely than is the case in other languages.

##### 4.2. CLOSE FORMAL SIMILARITIES BETWEEN REEF ISLANDS-SANTA CRUZ VOCABULARY ITEMS AND THEIR EQUIVALENTS IN SOUTH-WESTERN PACIFIC AUSTRONESIAN LANGUAGES

In all the Reef Islands-Santa Cruz (RSC) languages, about 20% of the total vocabulary assessed shows closer formal similarity (amounting in cases to formal identity) with equivalents in individual Austronesian languages of the south-western Pacific, than with pO or AN forms, though in about two-thirds of these cases, the lexical items can be recognised as constituting reflexes of listed pO and/or AN forms. Such similarities with languages of central New Britain (including some islands to the south of it, especially Ferguson Island, d'Entrecasteaux Islands) and with languages of the New Caledonia area (including the Loyalty Islands) amount to approximately half of this 20%. When thinking of languages of other regions in Melanesia and elsewhere, the only other similarities of some numerical significance within this 20% are with languages of the south-eastern Solomons - the balance is made up of scattered and sporadic similarities with languages of various areas,

such as parts of the New Hebrides and the Banks and Torres Islands, Fiji, Polynesia and also Micronesia. Many of the probable Polynesian loanwords have been included in the percentage figure referring to the pO reflexes, and therefore do not constitute a prominent part of this 20%. At the same time, the great majority of the quite numerous Polynesian loanwords which are especially frequent in R, denote cultural objects, many of them associated with the sea and with dwellings, as well as animals, mostly from the sea or flying. A few of them indicate natural phenomena associated with the sea, and some very few refer to body parts. In view of their semantic range, Polynesian loanwords do not figure nearly as extensively in the basic vocabulary-type lists assessed in Wurm 1970 as in the overall vocabulary of the RSC languages. It has been indicated above that in approximately one-third of the cases making up this 20% of the vocabularies of the RSC languages, no pO and/or AN forms underlying the lexical items in the languages involved can be found in the sources listed in 1.2., and other established sources. They have nevertheless been regarded as potentially Austronesian, because their formal equivalents occur in recognised Austronesian languages.

It must be mentioned that in the RSC languages, the pO and AN reflexes have often changed from the proto-forms beyond easy recognition, and only the presence of regular sound-correspondences betrays their origin. At the same time, there is a considerable number of instances amounting to almost another 20% of the total assessed vocabularies in the SC languages, and to rather less in R, in which regular sound correspondences with pO and AN forms cannot be established, but a slight formal similarity to such forms exists. Such lexical items may perhaps prove to be of Austronesian origin when more extensive diachronic studies have been carried out - at this stage, they can only be regarded, with every considerable doubt, as perhaps of Austronesian origin, and will be referred to by pO? and AN?. Similarly, there are quite a few lexical items which show only some slight formal resemblance to their equivalents in Austronesian languages of the Melanesian area while at the same time, they and their other-language equivalents do not seem to constitute reflexes of any pO and/or AN forms listed in the sources consulted. Such lexical items may also ultimately prove to be of Austronesian origin - but this is even more doubtful than is the case with the pO? and AN? items mentioned above.

The table given on page 75 demonstrates the distribution of the percentages of those vocabulary elements in the RSC languages which show considerable formal similarity with their equivalents in Austronesian languages of Melanesia, irrespective of whether the words involved can



be regarded as pO or AN reflexes or not. For an explanation of the abbreviations used see 1.2.

Table 1

	R	M	Nel	N	Na
Total	19.5	23.2	32.2	19.9	21.5
Ind?	2.4	1.6	2.9	2.3	4.7
NB (+F)	6.5	6.6	8.4	5.7	5.1
NC (+L)	3.4	5.0	5.7	4.1	6.5
SoI	3.8	3.7	2.9	4.7	2.8
NH	1.7	3.3	6.4	2.1	3.3
Other	4.1	4.6	8.8	3.3	3.8

Before proceeding, it may be mentioned that the distribution of the three petrified article forms nV-, tV- and lV- (see 5.2.1.) in the RSC languages which can be loosely associated with different semantic areas, may be of interest to diachronic studies in perhaps reflecting regional and chronological diversities in a part of the Austronesian lexical element present in the RSC languages: nouns with tV- (generally of Polynesian origin) denote predominantly cultural objects, many of them associated with the sea and dwellings, as well as animals, mostly from the sea or flying (see page 74). A few of them indicate natural phenomena associated with the sea, and some body parts. Nouns with lV- refer predominantly to natural objects found on land, including some plants and parts of them, and to some land animals. The semantic range of nouns with nV- is not so clearly definable, except that most nouns referring to body parts take nV-.

#### 4.3. THE NON-AUSTRONESIAN LEXICAL ELEMENT

All the RSC languages contain a lexical element, amounting in the Santa Cruz languages to about 25%, and in R to about 34%, which cannot at this stage be connected with Austronesian in any way. Comparisons of this element with vocabulary lists of Papuan languages of the Solomon Islands, as carried out by the present writer, have yielded very meagre results: only in four instances can some perhaps significant formal similarity be found.

#### 4.4. PERCENTAGES SHOWING THE LEXICAL COMPOSITION OF REEF ISLANDS-SANTA CRUZ LANGUAGES AND DIALECTS

## 4.4.1.

Table 2

(For an explanation of the abbreviations see 1.2.)

	R	M	Nel	N	Na
pO	34.1	33.7	42.8	26.4	28.5
pO?	8.2	11.3	9.5	13.2	13.6
AN	9.9	14.6	15.2	17.5	15.4
AN?	4.4	6.3	4.7	7.1	6.0
Ind	7.2	7.3	8.5	6.8	5.6
Ind?	2.4	1.6	2.9	2.3	4.7
nA	33.8	25.2	16.4	26.7	26.2

*Note:* the figures for Nel, especially those for pO, Ind and Na, appear to be rather aberrant when compared with those given in the other columns. This is attributable to the fact that the assessed material in the Nelua dialect was of necessity, restricted to Codrington's (1885) limited materials which consist more predominantly of nouns and adjectives than the materials assessed in the other languages and dialects. In all RSC languages, the pO and Ind element is considerably higher in nouns and adjectives than in verbs and the remaining word classes. In addition, Codrington's materials show a higher number of words which are very similar to words in Austronesian languages of Melanesia, especially of the New Hebrides, than is the case with the other languages and dialects. The use of Mota, a Banks Islands language, as the Mission language in the Nelua area, may explain this phenomenon: the informants used for obtaining Codrington's materials were Mission school pupils.

4.4.2. The information given above in 4.4.1. in Table 2 can be interpreted, presented and summarised in various ways. This has been discussed in detail in Wurm 1970, and it may be sufficient for the purpose of this article to give the following summarising table:

Table 3

	R	M	Nel	N	Na
probably Austronesian	51.2	55.6	66.5	50.7	49.5
of doubtful status	15.0	19.2	17.1	22.6	24.3
probably not Austronesian	33.8	25.2	16.4	26.7	26.2

## 5. STRUCTURAL AND TYPOLOGICAL CHARACTERISTICS OF THE REEF ISLANDS AND SANTA CRUZ LANGUAGES AND DIALECTS

### 5.1. INTRODUCTION

In this chapter, a general discussion of some of the most prominent structural and typological features of the RSC language and dialects as a whole, and of the individual languages and dialects will be given. Similarities and dissimilarities between individual languages and dialects will be pointed out. Examples will be kept to a minimum, and much of the discussion will be in terms of unillustrated descriptions of features only.

### 5.2. GENERAL CHARACTERISTICS

#### 5.2.1. General Discussion

All RSC languages and dialects have basically similar structures, with R standing somewhat apart from the SC languages, but there are considerable differences in detail. A summary of the most general characteristics may be given first:

All the languages and dialects show quite complex morphophonemic features, R being the least elaborate.

All display almost completely petrified prefixed articles in the forms nV-, tV- and lV- which have very little functional load. They appear in a wide range of allomorphic forms which are largely phonologically conditioned by the phonemic structure of the noun to which they appear prefixed, though diachronic factors also play a part in the appearance of a particular allomorphic form. In addition, different allomorphs of the same article, as well as absence versus presence of an article, serve to distinguish homophones, e.g. R nu-op<sup>w</sup>ä = 'house', ni-op<sup>w</sup>ä (n<sup>v</sup>i-op<sup>w</sup>ä) = 'earth oven', vili = 'parrot', na-vili = 'eel'. Only an extremely limited number of nouns can appear with or without an article, its absence marking general denotation, and its presence particularisation.

The personal pronouns are formed by the addition of possessive suffixes to invariable pronominal bases, ju- (~i-) in R, and ni- in the other languages and dialects. All the languages and dialects have an inclusive-exclusive contrast in the first person non-singular, and all distinguish one extra number in the first person non-singular inclusive.

The indication of possession with nouns takes place through the addition of possessive suffixes to the nouns themselves in the case of terms of relationship, parts of the body, and a few other nouns. Two sets of these suffixes exist in M, N, Me, and No. With all other nouns, possession is indicated by separate possessive markers which follow the

noun, and to which possessive suffixes are added. In all the languages, the number of distinct possessive markers is quite considerable.

These possessive markers also serve to denote possessive relation between nouns, in R with the possessive suffix of the third person singular added to them, and in the other languages and dialects without such suffixes.

In all the languages and dialects, a number of semantic classes are observable with a portion of the nouns. These semantic classes are different from, and cross-cutting with, any possible classes to which individual nouns could be assigned on the basis of the presence or absence of an article with them, the nature of such an article, and the nature of the possessive marker or possessive suffix appearing with them. These semantic classes are marked by special affixes, and their use as prefixes (preceding the article, if one is present) to nouns is most extensive in Nanggu, in which seven probable semantic classes have so far been established, though there are probably more. Apart from Nanggu, the use of such affixes as noun prefixes appears to be restricted to Nea, whereas in other languages and dialects they occur mainly prefixed to numerals and demonstratives referring to given nouns, and, with limitations, apparently also as verbal subject and object markers.

An adjective introducer denoting adjectival qualitative noun adjuncts is universally present in the form *mi-* in R and *ka-*, *kä-*, *ke-* in the other languages and dialects. The adjuncts follow the noun which they determine. In addition to, and following the adjective introducer, such adjuncts carry the obligatory prefix *i-* (*-u-*) in Nea and Na. Only in N, this prefix appears also with numerals.

The verb morphology of the SC languages and dialects is of very considerable complexity. In R it is somewhat simpler, and in some respects quite different from that met with in the SC languages and dialects.

In the verb, numerous aspects are distinguished and are indicated by prefixes, suffixes and discontinuous morphemes. Tenses are few, and are denoted predominantly by suffixes. The direction of the action, and its location in relation to the speaker, is marked by suffixes and prefixes, though the use of such markers is rare in R. Negation, prohibition and other features are indicated by discontinuous morphemes consisting of prefix and suffix systems. The causative is indicated by a prefix. The use of verbal nouns is common, especially in Na, and sentence-medial verbal forms, i.e. special verb forms characterising non-final verbs, occur, especially in M. With many verbs, the benefactive is obligatorily marked by special suffixes. The subject is indicated by suffixes, except that with intransitive verbs in R it is denoted by preposed particles, though its number is shown by suffixes. Especially in R, suffixes referring to the object follow the subject

suffixes, and the number of the object - singularity versus non-singularity - is frequently marked with the verb in the SC languages and dialects, especially in Na.

Many verbs in the SC languages and dialects are provided with a transitivity prefix if they can have an object.

A few examples will be given to demonstrate the structure of verbs in the RSC languages and dialects.

R: la-ba-iämo-li-wa-ne-mi-le-gu-ŋaa = 'as (or: when) I did not see you two' : progression of action (la- + -ŋaa) - negation (ba- + -gu) - completed action (i-) - see a non-first person (ämo-li) - benefactive second person (-wa) - subject first person singular (-ne < -no) - object second person (-mi) - dual (-le) - negation (ba- + -gu) - progression of action (la- + -ŋaa).

M: nike tö-kö-ö-taŋə-w-ö-n-am-u = 'why do you not find (some)?' : why (nike + -ö) negation (tö- + -w) - negative narrative (kö-) - transitivity (ö-) - find (taŋə) - negation (tö- + -w) - interrogation of reason (nike + -ö) - second person subject introducer (-n) - second person plural subject (-am) - emphasis (-u). kä-tö-kö-ö-ka-pe-pwə-le - 'when he did not give them' : condition (kä-) - negation (tö- + -w in -pwə) - negative narrative (kö-) - transitivity (ö-) - give (ka) - completed action (-pe) - benefactive non-first person subject to non-first person beneficiary (-bə), combined with negation suffix -w > -pwə - third person singular subject (-le).

NO: dzɔ-na-miɔ-tni-mbʷ-a-lə = 'I shall pay you back' : present-future (dzɔ- + na-: indefinite future) - pay (miɔ) - reversed action (-tni) - benefactive first person subject to non-first person beneficiary (-mbʷ(ə)) - first person singular subject (-a) - definite future (-lə).

Na: i-ŋi-tö-i-piyaki-pʷ-ε-di = 'I cannot cut it' : completed action (i-) - definitive (ŋi-) - negation (tö- + -pʷ) - completed action (i-) - cut (piyaki) - negation (tö- + -pʷ) - first person singular subject (-ε) - singularity of object (-di).

The word order is frequently O-V-S in R, though S-V-O is also often in evidence. In the SC languages and dialects, the order S-V-O is more common than in R, though O-V-S also occurs.

### 5.2.2. Tabular Representation of some Features

Some of the features mentioned above will now be presented in tabular form for individual RSC languages and dialects.

## 5.2.2.1. Personal Pronouns and Possessive Suffixes

sg.	R	M	Nel	Me	N	No	Na
1	iu	ni-ŋä	ni-ŋe	ni-ŋə	ni	ni-ŋa	ni
2	iu-mu	ni-m	ni-mu	ni-m	ni-m	ni-m	ni-m
3	i-na	ni-de	ni-de	ni-de	ni-de	ni-de	ni-de

dl.	R	M	Nel	N	No	Na
1 incl.	iu-dʸi	ni-gi	?	ni-gi	ni-gi	ni-da
1 excl.	iu-ŋole	-	-	-	-	-
2	iu-mile	-	-	-	-	-
3	iu-dʸile	-	-	-	-	-

tl.

1 incl.	iu-dele	} absent from the SC languages and dialects.
1 excl.	-	
2	-	
3	-	

pl.

1 incl.	iu-de	ni-gu	ni-gu	ni-gɔ	ni-gɔ	ni-damʷe
1 excl.	iu-ŋo	ni-gö	ni-go	ni-gɔmu	ni-gö	ni-gɔ
2	iu-mi	ni-mu	gamu	ni-mʷi	ni-mu	ni-mʷe
3	iu-dʸi	ni-dö	ni-də	ni-gö	ni-ne	ni-ŋö

Note:

a) The possessive suffix of 1sg. appearing in R with nouns and possession markers is  $\emptyset \sim u$  and 3sg. is  $-V > -ä-\emptyset$ , e.g. tumʷo = 'my father', tumʷä = 'his father'; nuotau = 'my head', nuotä = 'his head'.

b) The possessive suffix of 3sg. appearing in Nooli with nouns and possession markers is in some cases dze, and 3pl. in some -nʷe.

c) The possessive suffix of 1sg. in N is -nu. In Na, it is  $\emptyset$  with nouns to which the possessive suffixes are directly added and  $\emptyset \sim -nu$  with possessive markers.

d) As has been mentioned in 5.2.1., there are two sets of possessive suffixes in M, Me, N and No. With some of those nouns to which possessive suffixes are directly added, these suffixes appear in forms which are different from those listed above:

sg.	M	Me	N	No
1	-ka	-kə	-lu~-tu	-da~-ta
2	-p	-pm	-pʷi	-p
3	-te	-te	-te	-te

dl.

1 incl.	-ki	?	-ki	-ki
---------	-----	---	-----	-----

pl.	M	Me	N	No
1 incl.	-ku	?	-kɔ	-kɔ
1 excl.	-kō	?	-kɔmu	-kō
2	-pu	?	-pʷi~ηəmʷi	-pu
3	-tō	?	-kō	-de

#### 5.2.2.2. Possessive Markers

The possessive markers are subject to considerable morphophonemic changes upon the addition of possessive suffixes to them, especially in R and Na. For comparative purposes, the forms appearing in conjunction with possessive suffixes of the third person singular, or, as in R, denoting possession by the third person singular by themselves, seem to be most suitable.

In some instances, special possessive suffix forms which are additional to those given in 5.2.2.1., are met in connection with some possessive markers, e.g. the possessive suffix of the first person singular is -mʷa with the food class possessive marker ne in No.

First, a list of those possessive markers which are representative of particular possessive classes occurring in at least two of the RSC languages and dialects will be given. Only general indications of the semantic nature of the classes will be given here.

	R	M	N	No	Na
a)	no	nä	ne	ne	nej~ne
b)	na	nä	na	ne	na
c)	nogo	kō	gō	gō	tɛlɔ
d)	numʷä	pü	mu	mu	{gɔ kɔ
e)	tä~tɔ	nʷö	-	-	nʷɔ
f)	da	ma	-	ma	-
g)	-	ηō	ηō	ηō	-
h)	-	ö	ö	-?	-
i)	-	mnö	mʷilö	-	mɔlɔ

#### Explanation:

- General possession and (non-food) animal class.
- Food class. In M, nä indicates both general possession including non-food animals, and specific foodstuffs. (The marker for food in general is tä.)
- Utensils class.
- Potables class (including sugar-cane). In Na, kɔ is used only for water and gɔ for other potables.
- Location and immovable objects class.

f) Betelnut and related objects (lime, lime gourd, lime spatula etc.) class.

g) Contents class, denoting contents coming into being when container comes into being (e.g. bones contained in body).

h) Contents class, denoting contents pre-existing the container (e.g. posts in a house which pre-exists the house in the form of trees).

i) Fire and related objects and hot objects (e.g. firewood, smoke, light, blanket, mosquito bite, etc.) class.

As will be seen from the list of forms given above, there is considerable formal similarity between related class markers in the individual languages and dialects. Only d) M pü and Na gɔ, kɔ, and c) Na tɛɔ are quite aberrant.

In addition to the possessive class markers listed, a varied number of other such class markers are met with in the individual languages and dialects, for instance:

#### R

deno - Flower and fruit class.

nika ~ nako - Toe class.

#### M

sɔ Class of objects that can be held in one's hand.

nö Class of objects serving a purpose.

tä Class for food in general (see b)).

nɔ Garden utensils class.

ne Natural phenomena class.

#### N

nɛɔ Spouse class.

#### Na

nau Louse class.

aŋu Canoe class.

In addition to these markers, some nouns and prepositions function like class markers in connection with certain nouns denoting objects possessed, e.g.

#### R

ŋago Wound class: this is basically the preposition ŋag- signalling the indirect object with verbs.

nisä ~ nisi - Skin and bone class.

This is one of the words for 'body' which functions as a class marker.

#### M

nʷɔ Parts of lower leg class.

This class marker is derived from nanʷɔ = 'leg' through the omission of the otherwise obligatory petrified article na- (see 5.2.1.).



The largest number of class markers is met with in M (fourteen), with R and Na showing rather less (ten and nine), but more than the dialects of Nea. It seems clear that the comparative paucity of possessive class markers (N eight, No six) and classes in the Nea dialects is not only due to the limited amount of materials assessed. Some important classes met with in the other languages and dialects such as the location and immovable objects class, are absent from them.

### 5.2.2.3. Verbal Subject Suffixes

In the SC languages, especially in Nea and Na, several sets of verbal subject markers occur in the singular number in particular, according to the class and the aspects of the verb to which they are added, and to whether the verb is in the affirmative or negative. In the list below, the most common verbal subject suffixes will be given. No materials from Nel and Me will be included in the list.

<i>sg.</i>	R	M	N	No	Na
1	-no	-ä	-ŋə~-a	-a	-i~-ε~-u
2	-mu	-ü	-ŋü~-e	-m~-ə~-ü	-a~-i
3	-gu	-u~-le	-ø~-le	-ø~-le~-ŋ	-ø~-ə
<i>dl.</i>					
1 incl.	-d <sup>v</sup> i	-ki	-ki~-gi	-ki~-i	-da
1 excl.	-ŋole	-	-	-	-
2	-mile	-	-	-	-
3	-guile	-	-	-	-
<i>tl.</i>					
1 incl.	-dele	-	-	-	-
<i>pl.</i>					
1 incl.	-de	-ku	-kə~-go	-kə~-o	-dam <sup>w</sup> e
1 excl.	-ŋo	-kö	-kəmu~-gomu	-kö~-ö	-go
2	-mi	-am	-ŋə <sup>w</sup> i~-am <sup>w</sup> i	-am	-am
3	-gui	-lö~-ŋü	la- + -ŋü	la- + -le~- (ŋ)ü	la- + - (ŋ)ö

#### Note:

a) From the fragmentary information available it appears that Nel *1sg.* = -ŋe, *1pl.incl.* = -ku, and *1pl.excl.* = -kö.

b) In a number of aspects and special verb forms, the ordinary possessive suffixes (see 5.2.2.1.) appear in M instead of the subject suffixes listed above.

c) It will be noticed that there is considerable formal similarity between some of the non-singular subject suffixes and the second set of

possessive suffixes given for M and Nea in 5.2.2.1., d).

d) Most of the non-singular subject markers in R and Na (and the 2sg. subject marker in R) are identical with the possessive suffixes given in 5.2.2.1.

e) From what has been said in b)-d), it is clear that in a formal grammatical description not concerned with typological comparison, the possessive suffixes and subject markers can be treated under a single heading of "person markers".

f) Intransitive verbs in R, and some very few intransitive verb forms in N and No, do not appear with the subject suffixes listed above. In R, person is indicated with such verbs, for the majority of the persons, through the preposing of the subject (or possessive) suffixes in particle or prefix function before the aspects and tense prefixes. However, in the dual and trial, the number of the subject is indicated through the suffixing of -le to the verb. In the first singular, and the third person in all numbers, the preposed particle i appears.

In those instances in N and No in which the subject suffixes do not appear, the person and number of the subject are indicated by the personal pronouns preposed to the verbs.

#### 5.2.2.4. *Formation of the Negative with Verbs*

As has been stated in 5.2.1., the negative with verbs is expressed through discontinuous morphemes in all RSC languages and dialects, but the form and arrangement of these morphemes is different in all of them.

##### *Reefs*

ba-...ordinary subject suffixes ± object suffixes + -gu.

##### *Malo*

tö-...-w + ordinary subject suffixes. Nelua appears to have the same usage.

##### *Nemboi*

te-...special subject suffixes differing in part from those appearing in the affirmative + -lü.

##### *Nooli*

te-...-lu + special subject suffixes differing from those appearing in the affirmative, in some cases through the omission of the initial consonant of the suffixes.

##### *Nangu*

tö-...p<sup>w</sup> + special subject suffixes differing in part from those appearing in the affirmative.

### 5.3. SPECIAL FEATURES OF INDIVIDUAL REEF ISLANDS-SANTA CRUZ LANGUAGES AND DIALECTS

Apart from the features of individual RSC languages and dialects as presented in 5.2.2., and the general characteristics discussed in 5.2.1., all of them display a number of typological and structural features which are not generally shared by the RSC languages and dialects.

Many of these features will be touched upon in the comparisons given below in 5.4., and it seems superfluous to list a large number of them here which could lead to excessive repetition, though a considerable amount of repetition has been resorted to in this study on purpose to lay stress on various phenomena and to avoid too much cross-referencing. It may be sufficient to list here only the most outstanding characteristics of individual RSC languages and dialects.

#### 5.3.1. Reefs

a) The phonology is comparatively simple, only seven vowel phonemes are present, and no nasal vowels occur. Morphophonemic changes are relatively few.

b) Four numbers, singular, dual, trial and plural, are distinguished.

c) Intransitive verbs have no subject suffixes, and the person of the subject is indicated through the preposing or prefixing of the subject (or possessive) suffixes, and its number (in the dual and trial) through a suffix.

d) The person (and number) of the object are indicated by suffixes added to the subject suffixes.

e) Three benefactive suffixes are present, denoting a first, second and third person beneficiary.

#### 5.3.2. Malo

a) A very large number of possessive classes is present.

b) Possessive suffixes function as subject suffixes in a number of verbal forms.

c) The location of an action in relation to the speaker is often indicated.

d) Sentence-medial verbal forms occur with some frequency.

#### 5.3.3. Nemboi

a) The number of possessive classes is comparatively small.

b) The *1pl.excl.* subject suffix consists of the *1pl.incl.* subject marker -ko + -mu which links with the *2sg.* possessive suffix. Typologically, the presence, in this suffix, of a formal reference to a person addressed indicates his exclusion.

- c) A present-future prefix *dʒo-* is found.
- d) A particle *ko* is present which follows the sentence headword in many instances.

#### 5.3.4. Nooli

- a) Three e-type phonemes are distinguished: *e*, *ɛ* and *ä*, and the number of nasal vowel phonemes is considerable (6).
- b) A suffixed definiteness marker appears with nouns.
- c) The number of possessive classes is even smaller than in Nemboi.
- d) In the negative and some other verbal forms, subject suffixes with initial consonant tend to lose the consonant and become vocalic.
- e) Aspect and tense suffixes added to subject suffixes occur frequently.
- f) A present-future prefix *dʒo-* occurs as in Nemboi.

#### 5.3.5. Nanggu

- a) The phonology is fairly complex. The number of consonant phonemes is large (32), and retroflexed consonants are met with, but only as allophones. Long vowels are frequent, and morphophonemic changes are numerous and extensive.
- b) At least seven distinct semantic classes, marked by prefixes added to nouns, have been observed.
- c) The *1pl.incl.* subject, and possessive, suffix consists of the *1dl.incl.* subject, and possessive, suffix *-da* + the *2pl.* possessive suffix *-mwe*. Typologically, the appearance of a formal reference to persons addressed indicates their inclusion which is a contrast to the Nemboi suffix mentioned in 5.3.3., b).
- d) The number of the object, i.e. singularity versus plurality, are more frequently marked with verbs than in other RSC languages.
- e) Verbal nouns occur frequently.

### 5.4. TYPOLOGICAL FEATURES SHARED BY TWO OR MORE REEF ISLANDS-SANTA CRUZ LANGUAGES OR DIALECTS IN CONTRAST TO OTHERS

#### 5.4.1. The Santa Cruz Languages in Contrast to Reefs

The SC languages and dialects have a number of typological features in common which are absent from, or different in, R. Some of these are:

- a) The number of distinct phonemes is much greater in SC (28-31 C, 14-18 V) than in R (23 C, 7 V).
- b) In SC, aspirated stop phonemes occur in contrast with unaspirated ones. In R, this contrast seems to be lacking.
- c) Nasal vowel phonemes are met with in SC, but are absent from R.

d) In SC, a much greater number of consonant clusters occurs than in R.

e) Vowel harmony is present in SC to some extent, but is absent from R.

f) Morphophonemic changes appearing in connection with the addition of possessive suffixes to nouns and possession markers, and of subject and other affixes to verbs are much more extensive in SC than in R.

g) The petrified article *IV-* appears much more frequently in SC than in R which shows a much higher incidence of the petrified article *tV-* than SC (this reflects the greater Polynesian lexical element in R).

h) The adjective introducer in SC is *ka-*, *kä-*, *ke-*, whereas in R it is *mi-*.

i) The numerals 6-9 are formed in R on the basis of 5+1, 5+2, 5+3 and 5+4, whereas in SC they are formed in different ways (see 5.4.2.2., e)).

j) The base for the formation of personal pronouns is *ni-* in SC, but *iu-* ~ *i-* in R.

k) The numerical system underlying person marking in SC is *sg.1,2,3; dl.1 incl.; pl.1 incl., 1 excl.,2,3*, whereas in R it is *sg.1,2,3; dl.1 incl., 1 excl.,2,3; tl.1 incl.; pl.1 incl., 1 excl.,2,3*.

l) In SC, possessive relation between nouns is indicated by the possessive markers only, without possessive suffixes added to them, but in R, the possessive suffixes are added to them.

m) In SC, more than one set of subject suffixes is in evidence with verbs. In R, only one set is used.

n) No subject suffixes are used with most intransitive verbs in R, only suffixes denoting the number of the subject in the dual and trial. In SC, intransitive verbs have subject suffixes, except for a very small number of intransitive verb forms in N and No (see 5.2.2.3., f)).

o) In SC, the person of the object is denoted by the personal pronouns placed after the verb, whereas in R, bound person markers are often suffixed to the subject suffixes to denote the person (and number) of the object.

p) The number of the object - singularity versus non-singularity - is often marked by suffixes with the verb in SC, and only rarely in R unless an object person marker is suffixed to the subject marker in it (see o)).

q) The indication of the benefactive in R is through three distinct suffixes, one denoting a first, one a second and one a third person beneficiary. In SC, only two suffixes are generally used to distinguish first and non-first person beneficiaries. Only in No, traces of a distinction between second and third person beneficiaries seem to be present.

r) Many verbs in SC have a transitivity prefix (usually (w)ö-) if they can have an object. No such marker is present in R.

s) The first part of the discontinuous morpheme indicating negative with verbs in RSC is tö-, te-, te- in SC, and ba- in R.

t) The continuing aspect prefix is thü-, thu- in SC, and ki- ~ ku- in R.

u) In SC, suffixes added to the verb stem are frequently used to denote aspects. In addition, aspect suffixes following the subject suffixes are met with. In R, only the latter variety is commonly found.

v) In SC, a large number of suffixes are present, and frequently used, to denote the direction of an action. Also, prefixes denote the location of an action in relation to the speaker. In R, only a few suffixes indicating the direction of an action are used rather infrequently, and prefixes denoting the location of an action in relation to the speaker are almost non-existent.

w) The order of words in R is frequently O-V-S, less commonly S-V-O. In SC the reverse is the case.

#### 5.4.2. Santa Cruz Languages and Dialects in Contrast to each other

##### 5.4.2.1. *Introductory Remarks*

In spite of their considerable typological unity when compared with R, the individual SC languages and dialects display a number of typological differences when compared with each other. Instances in which two of the three languages agree with each other in contrast to the third will be reviewed below.

At the same time, typological contrasts between Nea (N and No) and M are of particular interest in view of the differing prevailing opinions concerning their status as members of the same or of two different languages (see 2.1.). To achieve a correct perspective, the extent of the contrasts between M and Nea will have to be measured against the magnitude of contrasts between M and Na, and between Nea and Na.

It is also important to assess the extent of the typological similarities and contrasts between N and No which on the basis of the lexical evidence appear to constitute dialects of the same language, while at the same time, the view has been expressed that they could be regarded as belonging to two separate languages (see 2.1.-2.).

For hierarchical reasons, it may seem most appropriate to begin with a comparison of N and No so that they may enter the further comparison of the SC languages as one or two languages according to the outcome of their comparison. However, such a comparison would only be meaningful if the magnitude of the similarities and contrasts observed as existing between N and No could be measured against a background of information

on the differences between other SC languages in relation to each other and to N and No.

It seems therefore more appropriate to give a comparison of features of the SC languages and dialects first, at the same time presupposing that N and No constitute dialects of one language which has already been stated in 2.1. as a definite conclusion, arrived at previously by the author on both lexical and typological grounds. The comparison of N and No features and the assessment of the results will then follow to provide evidence for the conclusion given in 2.1., and for the assumption underlying the comparison of SC languages and dialects in 5.2.2.2.-4.

#### 5.4.2.2. *Nea and Nanggu in contrast to Malo*

Nea and Na, or at least N and Na, have a considerable number of features in common which are absent from M. At the same time, M possesses some important typological features which are lacking from Nea (or at least N) and Na. Such instances will be reviewed below. Cases in which M differs from Nea and Na, but Nea and Na also differ from each other, will not be included here.

a) Nea and Na show a phonological contrast between *o* and *ɔ*. M has only one *o* phoneme, but has an *ɔ* phoneme which is absent from Nea and Na.

b) In M, a special form of close juncture manifesting itself phonetically as [<sup>u</sup>] occurs between certain consonants in clusters. This juncture is absent from Nea and Na.

c) Vowel harmony is more strongly in evidence in Nea and Na than in M.

d) In Nea and Na, the adjective introducer *kɛ-* (see 5.2.1.) is followed by the obligatory prefix *i-* which is absent from M. In N, this prefix *i-* appears also with the numerals 7-9 and precedes the continuing aspect prefix *thɯ-* which appears with these numerals (see below, f)).

e) In M, the numerals 6-9 are formed on the basis of 1+5, 2+5, 3+5 and 4+5. In Nea and Na, they are based on 1+5 = 6, 5+3 = 7, 5+2 = 8, 5+1 = 9, apparently with the notion of subtraction (from ten) underlying the forms for 7-9.

f) In Nea and Na, the continuing aspect prefix *thɯ-* ~ *thü-* appears with the numerals 7-9. In M, this prefix is not used with numerals.

g) In M, the personal pronominal base *ni-* (see 5.2.1. and 5.2.2.1.) carries the possessive suffix *-ŋä* in 1*sg.* In N and Na, the base has no suffix in 1*sg.*, though in No, the possessive suffix *-ŋa* appears with it.

h) In M, the 1*sg.* possessive suffix added to nouns and possessive markers is *-ŋä*, whereas in N it is *-nu*, and in Na *-nu* ~ *-∅*. However, No has *-ŋa*.

i) The initial C of the 3*pl.* possessive suffix in M is dental (*-dö*),

whereas in N and Na it is velar (-gö, -ŋö). In No, it is dental as well, but different from M (-ne).

j) The 2pl. possessive suffix in N (-m<sup>w</sup>i) and Na (-m<sup>w</sup>e) contains m<sup>w</sup>-, whereas in M (mu) it contains m- (the same is the case in the No form -mu).

k) The number of possessive classes and markers in M is considerably greater than in Nea and Na (see 5.2.2.2.).

l) In M, possessive class markers occur which are, or are derived from, nouns functioning as possessive class markers. In Nea and Na, this has not been observed.

m) In M, the ordinary possessive suffixes function as subject suffixes in a considerable number of aspects and special verbal forms. In Nea and Na, this is rare.

n) In M, the 3pl. subject marker is only a suffix whereas in Nea and Na it is a discontinuous morpheme consisting of a prefix and a suffix (see 5.2.2.3.).

o) One of the forms of the 3sg. subject suffix in Nea and Na is Ø. In M, the corresponding form is -u.

p) The number of the object - singularity versus non-singularity - is much less frequently indicated with the verb in M than is the case in Nea and Na.

q) The use of the prefix thü-, thu- denoting the continuing aspect is much more common in Nea and Na than in M.

r) In M, the use of special prefixes indicating the location of the action in relation to the speaker is more common than in Nea and Na.

s) The use of verbal nouns is more in evidence in Nea and especially Na, than in M.

t) Sentence-medial verbal forms, i.e. special verb forms characterising non-final verbs, occur more frequently in M than in Nea and Na.

#### 5.4.2.3. *Malo and Nea in contrast to Nanggu*

Features which are shared by M and Nea (or at least N) in contrast to Na, and important typological features which are present in Na, but absent from both M and Nea, are fewer than those shared by Nea and Na in contrast to M.

a) The number of separate consonant phonemes in Na (31) is greater than in M (28) and Nea (29).

b) Retroflexed consonants (ɟ, ɠ, ŋ, ɳ) are met with in a number of words in Na, though they seem to be non-phonemic. In M and Nea, no such consonants have been observed.

c) Long vowels are frequent in Na, and manifest themselves phonetically as lengthened versions of the short vowels. In M and Nea, long



vowels are rare, and they manifest themselves phonetically as repeated articulations of their short equivalents, with the first articulation more prominent than the second.

d) Morphophonemic changes appearing in connection with the affixing of possessive suffixes to nouns and possessive markers, and of subject markers to verb forms are considerably more elaborate and complex in Na than in M and Nea.

e) In M and Nea, two different sets of possessive suffixes are present. Na has only one set.

f) In Na, the potables possessive class contains two markers, one (kɔ) used only for water, and the other (gɔ) for other potables. M and Nea have only one possessive marker each for all potables.

g) The utensils class possessive marker in Na (tɛɔ) is formally different from its M (kō) and Nea (gō) equivalents.

h) Possessive relation of the equivalent of 'who' is expressed in Na through possessed noun + adjective introducer ke- + the possessive marker of the appropriate class in the form denoting possession by the first person singular + 'who', e.g. watō ke-na-nu-ye = 'whose taro' : taro, adjective introducer (ke-) - food class possessive marker (na-) - possessive suffix 1sg. (-nu) - bound form of 'who' (-ye). In M and Nea, possessive relation of the equivalent of 'who' is expressed through possessed noun + possessive class marker + 'who' which is the manner in which possessive relation between nouns is expressed in all SC languages (see 5.2.1.).

i) The possessive suffix *1dl.incl.* in M and Nea is -gi, whereas it is -da in Na. The same contrast is observable with regard to the subject suffix *1dl.incl.* as added to verbs: M and Nea have -ki, and Na -da.

j) The possessive suffix *1pl.incl.* in M (-gu) and Nea (-gɔ) is g- + rounded vowel, whereas in Na it is -dam<sup>w</sup>e. The same difference is present with the subject suffixes *1pl.incl.*: M -ku, Nea -kɔ, Na -dam<sup>w</sup>e. This is both a formal and typological difference, because the M and Nea suffixes are non-analyzable simple forms, whereas the Na suffix is composed of the *1dl.incl.* suffix -da + the *2pl.* suffix -m<sup>w</sup>e.

k) The non-nasal singular subject suffixes (see 5.2.2.3.) of M and Nea can be formally grouped together and contrast with the Na suffixes:

	M-Nea	Na
1	-ä, -a	-i~-ε~-u
2	-ü, -e, -ə	-a~-i
3	-u, -le, -∅	-∅~-ə

l) The continuing aspect prefix *thu-* ~ *thü-* is obligatorily added to the numerals 1-4 in Na. In M and Nea this is not the case, though in Nea, in common with Na (but not with M), *thu-* is prefixed to the numerals 7-9.

#### 5.4.2.4. *Malo and Nanggu in contrast to Nea*

Instances in which features are shared by M and Na in contrast to Nea (or at least N), or in which important typological features are present in Nea (or at least N), but absent from both M and Na, are even fewer than those reviewed above in 5.4.2.3.

a) Nea has a significantly smaller number of possessive class markers than M and Na, and the location and immovable object class which is present in M and Na, is absent from Nea (see 5.2.2.2.).

b) In M and Na, all verbs carry subject suffixes. In Nea, however, a few intransitive verb forms have no subject suffixes, and the subject is indicated by the personal pronouns preposed to the verbs.

c) In N, the *1sg.* subject suffix is -ŋə ~ -a. In M and Na, the *1sg.* subject markers are vocalic only (M -ä, Na -i ~ -ε ~ -u). At the same time, -ŋä is used as the *1sg.* possessive suffix in M, and in No and Me the forms -ŋa and -ŋə appear in this function.

d) The *2pl.* subject marker in M is -am, and in Na -a:m. The M form is shared by No, but N has -ŋəm<sup>w</sup>i ~ -am<sup>w</sup>i.

e) The *1pl.excl.* subject marker in M (-kō) and Na (-gɔ) (and also in No: -kō ~ -ö) is a non-analyzable simple form. The N form (-kɔmu ~ -gɔmu), however, consists of the *1pl.incl.* subject suffix (-kɔ ~ -gɔ) plus a suffix which is recognisably related to the *2sg.* possessive suffix (-m). The N form is formally and typologically different from the M, Na (and No) forms.

f) Nea has a present-future prefix dʒɔ- which is absent from both M and Na.

g) In N, a sentence headword marker kɔ is frequently used. This has not been observed in M and Na (and also not in No).

#### 5.4.2.5. *Comparison of Nemboi and Nooli*

According to the lexical evidence, N and No constitute dialects of one language (see 2.1.-2.). At the same time, Davenport (1962) has expressed the view that N and No are members of two distinct languages (see 2.1.). It remains to discuss the structural and typological similarities and differences between N and No with a view to demonstrating the correctness of the assumption, mentioned in 2.1., that the differences between them, though quite marked, may not be sufficient to override the conclusion which can be reached on the basis of lexical comparison only, that N and No constitute dialects of one language.

In the comparisons made above, in 5.4.2.2.-4., some of the differences between N and No have been mentioned. At the same time, the comparative paucity of those instances in which M and Na agree in contrast to Nea (see 5.4.2.4.) has resulted in only a few of the unique features

of Nea (and N) being highlighted. A few of the unique features of N and No have, however, been listed in 5.3.3.-4.

The procedure adopted here has been to establish a number of unique features of N and No - "unique" to be understood as referring to features which N or No do not share with other SC languages or dialects, disregarding No in the case of N, and N in the case of No. Once a list of such features had been established, it was checked with a view to establishing which and how many of these unique features of N were shared, or not shared, by No, and vice versa. The following is a list of the N features (+ = shared, - = not shared).

N	No	REMARKS
a) i- prefixed to the numerals 7-9	-	
b) Presence of comparatively few possessive classes and markers	+	
c) Absence of a location and immovable objects class	+	
d) In the second set of possessive suffixes (see 5.2.2.1.), the 1sg. suffix is -tV	+	
e) A few intransitive verb forms have no subject suffixes	+	
f) One of the forms of the 1sg. subject suffix is -ŋə	-	
g) One of the forms of the 2sg. subject suffix is -ŋü	-	
h) One of the forms of the 3sg. subject suffix is -∅	+	This feature is shared with Na to some extent.
i) One form of the 1sg. subject suffix is -a	+	
j) One form of the 2sg. subject suffix is -e	(+)	The No form is -ə which is phonetically closer to the N than the M (-ü) and Na (-a ~ -i) forms.
k) The 1pl.excl. subject marker is -kɔmu ~ -gɔmu	-	

N	No	REMARKS
l) The prefix part of the discontinuous morpheme indicating the negative with verbs is tɛ-	+	The No form is te- which is phonetically closer to the N form than the M and Na (both tö-) forms.
m) The suffix part of the discontinuous morpheme indicating the negative with verbs is -lu	+	However, in N, the suffix -lü follows the subject suffixes, whereas in No it precedes them.
n) A present-future prefix dʒɔ-	+	is present
o) A sentence headword marker kɔ	-	is present

Next follows a list of the No features:

No	N	REMARKS
a) Three distinct e- phonemes: e, ɛ and ä, occur	-	
b) A larger number (6) of nasal vowels than in the other SC languages (M 5, Na 4) is found	-	
c) A suffixed definiteness marker (-u ~ -o ~ -e) is added to nouns	-	In N, only demonstrative suffixes occur with nouns. These are also present in No.
d) The 3pl. possessive suffix is -ne	-	
e) The subject suffixes following the negative suffix -lu are vocalic, i.e. the initial consonant of those which have such a consonant is omitted	-	
f) Vocalic subject suffixes occur after a ligative -n-	-	
g) One of the forms of the 3sg. subject suffix is -ŋ	-	
h) There is a possibility of three benefactive suffixes occurring instead of the two	-?	

No	N	REMARKS
met with in the other SC languages		
i) Aspect and tense suffixes added to subject suffixes are frequently in evidence	-?	There may be a possibility that this feature is at least rudimentarily present in N.

*Conclusions:*

Of the nine unique features of No listed above, none is shared by N. Of the nine features, two, i.e. c) and i), can be regarded as typologically very important.

Of the fifteen unique features of N listed, ten are shared by No. Of these ten shared features, five, i.e. b), c), e), m) and n), can be regarded as typologically very important. Of the five features of N which are not shared by No, two, i.e. f) and o) can be looked upon as typologically very important.

It is evident that of nine typologically very important features included in the above comparisons, five are shared by N and No, and four are not. At the same time, it appears that the shared features are perhaps of greater importance than the ones which are not shared: of the two No features which are not shared by N (c) and i)), the possibility of the presence of a feature akin to i) in N seems to exist, and the occurrence of demonstrative suffixes with nouns in N is typologically similar to the presence of a suffixed definiteness marker which is the feature of No mentioned under c).

On balance, it appears that typological and structural differences between N and No are not inconsiderable, but of a much lesser magnitude than those existing between N and M, and N and Na (see 5.4.2.2.-4.), especially if it is taken into account that of the fifteen unique features of N, and the nine unique features of No listed above, none are shared by M or Na. A few of these features have been included above in 5.4.2.4.

It seems therefore, that on typological grounds, N and Nea can be given the status of strongly diverging dialects of one language (Nea), but their divergences are outweighed by their uniquely shared similarities, and the lexical evidence is also strongly favouring their inclusion into one language as two dialects.

It may, in this, perhaps be of interest to note that No has a few features which N lacks, and which are shared either by Na or M. For instance, in No, singularity versus non-singularity of the object is very frequently indicated by suffixes to the verb which is a predominantly Na characteristic though this feature is not absent from N, and

the No suffixes are formally identical with the corresponding Na suffixes. At the same time, the No 1sg. possessive suffix -ŋa compares well with the equivalent M suffix -ŋä, and contrasts with N -nu and Na -Ø ~ -nu (see 5.4.2.2., h)).

#### 5.4.2.6. *Conclusions concerning the Features of the Santa Cruz Languages and Dialects*

The demonstration, on the basis of lexical and typological (see 5.4.2.5.) evidence, of the correctness of the assumption that N and No are dialects of one language, Nea, makes it possible to draw conclusions from the facts presented in 5.4.2.2.-4. which were given in a form presupposing the status of N and No as dialects of one language, Nea.

It is evident from what has been said in 5.4.2.2.-4. that Nea and Na share a large number of features in contrast to M, that M and Nea share a smaller number of characteristics in contrast to Na, and that the features shared by M and Na in contrast to Nea are comparatively few only.

The conclusion from this is obviously that Nea and Na have more typological features in common, and are therefore typologically more similar than Nea and M, and that Nea, while being typologically intermediate between M and Na, is typologically closer to the latter<sup>1</sup>. This is of considerable importance when considering that views regarding M and Nea as dialects of one language have been held (see 2.1.), that N and M share 69% basic vocabulary cognates (the average sharing of the three recorded Nea dialects Me, N and No with M is 65%), and that M (i.e. Nambakaengö) and Nea are connected with each other through a dialect chain on the west coast. The view which the present writer has stated as his own in 2.1., according to which M and N should be regarded as belonging to two distinct languages, Nambakaengö and Nea, seems amply justified when taking the typological evidence into account. It may be pointed out that no doubt has been expressed by anybody in the status of Na as a language distinct from all other SC languages (see 2.1.).

## 6. AUSTRONESIAN AND NON-AUSTRONESIAN FEATURES OF THE REEF ISLANDS-SANTA CRUZ LANGUAGES AND DIALECTS

### 6.1. INTRODUCTORY REMARKS

When assessing the typological and structural features of the RSC languages from the point of view of their nature in comparison with those of other Oceanic languages, it becomes immediately apparent that some of them are, at least in principle, similar to those met with in many Austronesian languages of the south-western Pacific, whereas others

<sup>1</sup>See note on page 102.

are apparently non-Austronesian in nature. Other features again are reminiscent of Austronesian features in form, though not in function.

## 6.2. NON-AUSTRONESIAN FEATURES

A typical non-Austronesian feature is the appearance of subject suffixes with verbs. Some of these suffixes, especially those denoting non-singular numbers, are Austronesian in form, others, in particular singular subject suffixes, are non-Austronesian in form. It is interesting to see that there is formal similarity between some of the SC subject suffixes with those of the recognisedly non-Austronesian (Papuan) Buin language of south-eastern Bougainville Island (oral communication by D.C. Laycock):

*Buin*

<i>sg.1</i>	-u	(Na -u)
2	-e--i	(Na -i)
3	-u	(M -u)
<i>dl.1</i>	-ge	(M, No -ki, N -ki--gi; <i>incl.</i> )
<i>pl.1</i>	-gi	(M -ku, N -kɔ--gɔ, No -kɔ; <i>incl.</i> )
2	-ŋ	(N -ŋəmʷi)

The complexity of the verb forms (see 5.2.1.) is another non-Austronesian characteristic, though some of the features of the verb-forms are Austronesian in nature. The use of suffixes denoting aspects and tense is largely non-Austronesian, and the extensive use of discontinuous morphemes is characteristic of many Papuan languages, though not entirely lacking from Austronesian languages, especially some spoken on the New Guinea mainland in the neighbourhood of Papuan languages.

The indication of the number of the object, i.e. its singularity versus non-singularity, through suffixes to the verb is also non-Austronesian. So too is the appearance of a prefix to the verb in the SC languages to indicate transitivity.

The marking of the benefactive with verbs is a feature widespread in Papuan languages, but is not absent from Austronesian. The same applies to the indication of the direction of an action through special affixes, but the denotation of the location of an action in relation to the speaker is not very common in Austronesian languages.

The use of verbal nouns and sentence-medial verb forms is a non-Austronesian characteristic.

Apart from the verb, the formation of the personal pronouns through the ordinary possessive suffixes being added to an unchangeable base is unusual. It is not a feature observed in Papuan languages, or usually met with in Austronesian ones in this form.

The existence of a semantic class system with prefixed class markers, and cross-cutting with the possessive class system, can perhaps also be regarded as a non-Austronesian feature.

### 6.3. AUSTRONESIAN FEATURES

#### 6.3.1. General Austronesian Features and Features reminiscent of those of Austronesian Languages of Melanesia

The possessive class system is typically south-western Pacific Austronesian in its basic nature, and in the forms of some of the possessive suffixes, but the multiplicity of distinct classes is not common in the languages of Melanesia, though met with in some of the aberrant languages there. It is a feature of Micronesian languages.

The articles in the RSC languages are Austronesian in form, though their petrified nature and their absence from many nouns are not usually both met with in Austronesian languages of Melanesia.

Most of the numerals are of Austronesian origin, and much of their formation compares well with what can be observed in Austronesian languages in Melanesia.

The presence of an adjective introducer is not common in Melanesia, but the feature is Austronesian.

The indication of aspects and tenses through prefixes to verbs in RSC compares well with the appearance of preposed particles and prefixes in this function in Austronesian languages of Melanesia, and some of the RSC prefixes show formal similarity to such particles and prefixes in Austronesian languages. The same applies to the indication of the causative.

The preposing of the subject (or possessive) suffixes, in particle or prefix function, before the tense and aspect prefixes as observed with intransitive verbs in R and a similar phenomenon met with in connection with a few intransitive verb forms in N and No (see 5.2.2.3., f)), are strongly reminiscent of a feature of Austronesian languages of Melanesia, though the preposed subject markers in them usually differ from the possessive suffixes occurring in them. At the same time, the indication of the number of the subject with such verbs through suffixes in R is not an Austronesian feature.

The word order in the RSC languages and dialects is Austronesian, both in the placing of qualitative and quantitative adjuncts after the noun which they determine, and in the preferred order S-V-O. It is less so in the order O-S-V observed in them.

#### 6.3.2. Polynesian Features

A word order V-S-O which is sometimes found in R, and is occasionally



also met with in SC languages and dialects, is a Polynesian characteristic.

Also, the frequent appearance of the petrified article *tV-*, especially in R, is a Polynesian feature.

### 6.3.3. Micronesian Features

The multiplicity of possessive classes in RSC languages and dialects is reminiscent of Micronesian, as is the indication of semantic classes with numerals, especially in R, though there are differences in principle and detail.

It may be mentioned that the *1sg.* (*i*) and *1pl.incl.* (*di*) preposed subject particles in the Micronesian Sonsorol (Capell 1969) are formally almost identical with the *1sg.* (*i*) and *1dl.* (*dvi*) *incl.* preposed subject markers in R, and that the *3pl.* preposed subject marker *le*, *la* in Sonsorol is almost the same in form as the prefix part (*la-*) of the discontinuous morpheme indicating the *3pl.* subject in N, No and Na.

### 6.4. CONCLUSION

It has been demonstrated above in 6.2.-3. that the RSC languages and dialects, while showing a number of typological characteristics commonly met with in Austronesian languages, contain several non-Austronesian features which are basic in nature and unlikely to be subject to easy borrowing. Features of the verb structure are good examples of this. It also seems that several of the Austronesian features in RSC languages and dialects, while typologically Austronesian in principle, show some peculiarities in detail which are at variance with what is generally characteristic of Austronesian languages of Melanesia. It may therefore be justifiable to suggest that of the two different sets of typological characteristics of the RSC languages and dialects, the non-Austronesian ones are more basic and original, and the Austronesian ones constitute a secondary, borrowed element. Most of the Austronesian features in the RSC languages and dialects are surface features which may be subject to relatively easy borrowing.

These observations, together with the fact that approximately half of the vocabulary of individual RSC languages has been found to be of Austronesian origin (see 4.4.) makes it apparent that the RSC languages and dialects belong to a particular category of hybrid Oceanic languages of which there are a number in the New Guinea area such as Mailu (Saville 1912), Maisin (Ray 1911, Strong 1911) and others. In such languages, some or many of the basic or deep features of their structures and some of their surface features show characteristics typical of Papuan

languages, and atypical of Austronesian ones. The majority of their surface features may show a varied number of typically Austronesian characteristics, in addition to traits which are atypical of Austronesian, while their vocabulary is strongly or even predominantly of Austronesian origin.

## 7. CONCLUDING REMARKS

General comments on the nature of the lexical composition of the RSC languages and dialects have been made in Wurm 1970. Those comments may well be repeated here:

"As far as the Austronesian lexical element is concerned, much of it does not appear to be closely linked with Eastern Oceanic (Pawley 1969a), but to show connections with aberrant Oceanic Austronesian elements present in the New Britain and the New Caledonia areas. At the same time, a strong element linking more directly with western Austronesian than with Oceanic Austronesian is present in the RSC languages, and the Eastern Oceanic lexical element manifests itself predominantly in the forms in which it is encountered in areas neighbouring the RSC language area - it may therefore be attributable to language contacts and loans of a comparatively recent date, in the area itself.

A small Micronesian lexical element can be observed in the RSC languages, apparently in forms encountered far to the north-west of the RSC area, and a strong Polynesian lexical element, in forms reminiscent of those met with in Polynesian languages located immediately to the north of the RSC area, completes the picture. It is obviously due to rather recent language contacts in the area itself."

These comments, together with what has been stated above in 6, may make it possible to propose some hypotheses which may go some way towards explaining, from a historical point of view, the various facts reviewed. These hypotheses have been presented in Wurm 1970, and it seems appropriate to repeat them here:

"It seems, to some extent, now established that the Austro-nesians, and their language in a proto-Oceanic form, reached the area east and south-east of New Guinea before the advent of a melanid population element speaking Papuan languages, or an aberrant type of Oceanic Austronesian resulting from language contact (Wurm 1967). In the light of this, it seems possible to suggest that the ancestors of the present-day RSC

speakers were Papuan speakers who, probably under Austronesian cultural impact enabling them to build seaworthy craft, migrated eastwards from the Papuan homeland in the New Guinea area. They seem to have been subjected to a strong influence by speakers of an Austronesian language type which was different from the Eastern Oceanic one which appears to have established itself first in the greater part of Melanesia (Pawley 1969a and b), and which made itself felt quite strongly in the New Britain and New Caledonia areas. Whether this influence can be assumed to have taken place in the present RSC area, or elsewhere, is not easy to conjecture on at this stage, but it may have to be taken into account that the eastward migration of the RSC speakers into their present area may well post-date the occupation of the eastern Solomons by Austronesian speakers of Eastern Oceanic who, according to Pawley 1969b, may well have spread out from the Central New Hebrides.

To explain this non-Eastern Oceanic Austronesian element in the RSC languages, it seems tempting to postulate a migration of aberrant Oceanic Austronesian speakers from the assumed original proto-Oceanic - and in consequence, Oceanic-Papuan contact - area in the north-eastern part of the New Guinea area which includes the New Britain region (Grace 1964) to the RSC and New Caledonia (and some other?) areas, with subsequent establishment there, at the same time largely by-passing the other areas in Melanesia which at that time may already have been occupied by Austronesian speakers of Eastern Oceanic. The lexical similarities between RSC languages and non-Eastern Oceanic languages of the New Britain and especially the New Caledonia areas are certainly quite striking.

The reason for the specific direction of the migration of the ancestors of the RSC speakers may perhaps be sought in the fact that, being originally Papuan speakers, they followed the direction of the drift of the Papuan speakers eastwards into the Solomon Islands chain, going far beyond the point at which their nearest western Papuan neighbours, the Savosavo on Savo Island off north-western Guadalcanal, seem to have come to a halt.

The strong proto-Austronesian element in the RSC languages may be attributable to some influence direct from Western Austronesia such as has been postulated by Milke

(1958) for Austronesian languages of the New Guinea area.

Once the ancestors of the RSC speakers had established themselves in their present area, linguistic contacts with their Eastern Oceanic speaking neighbours in the west and south appear to have taken place, especially with the former, resulting in the incorporation in the RSC languages, of lexical elements from these Eastern Oceanic languages.

The small, but conspicuous, Micronesian element in the RSC languages may perhaps be explained as resulting from a linguistic contact between RSC speakers and Micronesians during the north-western migration of the latter from the New Hebrides area (Grace 1964).

Whether or not the Polynesian neighbours of the RSC speakers were in the area at the time of the arrival of the latter, the RSC speakers have borrowed a large amount of vocabulary from them, most of it referring to concepts associated with the sea and with dwellings, as well as to animals, mostly from the sea or flying. These loans can in all probability be regarded as the most recent Austronesian element which has entered the RSC languages."

#### NOTES

<sup>1</sup>(p.96, 5.4.2.6., third paragraph)

In Wurm 1970 (in 4.32.3.2.), the erroneous view has been expressed by the author on the basis of inadequate materials, that N is typologically and structurally closer to M than to Na.

## REFERENCES

- CAPELL, A.  
 1962 "Oceanic Linguistics Today". *Current Anthropology* 3: 371-428.  
 1969 "Grammar and Vocabulary of the Language of Sonsorol-Tobi". *Oceanic Linguistics Monographs*, 12. Sydney.
- CODRINGTON, R.H.  
 1885 *The Melanesian Languages*. Oxford, Clarendon Press.
- DAVENPORT, W.  
 1962 "Comments on Capell, A. Oceanic Linguistics Today". *Current Anthropology* 3/4. 400-2.
- DYEN, I.  
 1965 *Lexicostatistical Classification of the Austronesian Languages*. Indiana University Publications in Anthropology and Linguistics. *International Journal of American Linguistics*. Memoir 19.
- ELBERT, S.H.  
 1958 Oral communication, quoted by W. Davenport (1962).
- FOX, C.E.  
 1958 *Lord of the Southern Isles*. London, A.R. Mowbray.
- GRACE, George W.  
 1964 "The Linguistic Evidence". In: *Movement of the Malayo-Polynesians: 1500 B.C. to A.D. 500*, by Kwang-Chih Chang, George W. Grace, and Wilhelm G. Solheim II. *Current Anthropology*, 5: 359-406.  
 1969 "A Proto-Oceanic Finder List". Revised edition, in *Working*

*Papers in Linguistics*, 2, 1969. 39-84. Department of Linguistics, University of Hawaii.

GREENBERG, J.H.

- 1971 "The Indo-Pacific Hypothesis". In: *Current Trends in Linguistics*, T. Sebeok, general ed., vol.8: *Linguistics in Oceania*. The Hague, Mouton and Co. In the press.

HAUDRICOURT, A.G.

- 1971 "Languages of New Caledonia and the Loyalty Islands". In: *Current Trends in Linguistics*, T. Sebeok, general ed., vol.8: *Linguistics in Oceania*. The Hague, Mouton and Co. In the press.

MILKE, W.

- 1958 "Zur inneren Gliederung und geschichtlichen Stellung der ozeanisch-austronesischen Sprachen". *Zeitschrift für Ethnologie* 83. 58-62.

PAWLEY, A.

- 1969a *On the Internal Relationship of Eastern Oceanic Languages*. Paper presented at the Conference on Oceanic Prehistory in Fiji, August 1969. Mimeographed.
- 1969b *Map of movements of Eastern Oceanic Languages*. Mimeographed.

RAY, S.H.

- 1911 "Comparative Notes on Maisin and other Languages of Eastern Papua". *Journal of the Royal Anthropological Institute of Great Britain and Ireland*, 41. 397-407.
- 1926 *A Comparative Study of the Melanesian Island Languages*. Cambridge, University Press.

SAVILLE, W. Jr.

- 1912 "A Grammar of the Mailu Language, Papua". *Journal of the Royal Anthropological Institute of Great Britain and Ireland*, 42. 397-436.

STRONG, W.M.

- 1911 "The Maisin Language". *Journal of the Royal Anthropological Institute of Great Britain and Ireland*, 41. 381-96.

THOMAS, D. and HEALEY, A.

- 1962 "Some Philippine Language Subgroupings: A Lexicostatistical Study". *Anthropological Linguistics* 4(9): 21-33.

TRYON, D.T.

- 1967 "Nengone Grammar". *Pacific Linguistics*, Series B.6.

VOORHOEVE, C.L.

- 1968 "The Central and South New Guinea Phylum. A report on the Language Situation in South New Guinea". *Papers in New Guinea Linguistics* No.8. *Pacific Linguistics*, Series A.16. 1-17.

WURM, S.A.

- 1967 "Linguistics and the Pre-history of the South-Western Pacific". *The Journal of Pacific History* 2. 25-39.
- 1970 "Austronesian and the Vocabulary of Languages of the Reef and Santa Cruz Islands - a preliminary approach". In: *Pacific Linguistic Studies in Honour of Arthur Capell*. S.A. Wurm and D.C. Laycock, eds. *Pacific Linguistics*, C.13. 467-555.
- 1971 "The Papuan Linguistic Situation". *Current Trends in Linguistics*, T. Sebeok, general ed., vol.8: *Linguistics in Oceania*. The Hague, Mouton and Co. In the press.

