

REEFS-SANTA CRUZ: AUSTRONESIAN, BUT...!

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NOTE

The language examples in this paper are given in the practical alphabet currently used in the Reefs-Santa Cruz Islands. The following explanations may be needed for the consonant symbols:

b, d, g

Prenasalised in most dialects
of the Santa Cruz languages,
and in the northern dialect(s)
of Reefs

ng

phonetically ŋ

w after consonants

labialisation

y after consonants

palatalisation

lv in Santa Cruz

co-articulated voiced lateral
and bilabial fricative

Vowels Practical Alphabet

i

e

ä

a

ā

ë

ö

u

o

u

~

doubled vowel symbols

Phonetic Value

i

e

æ

a

ɔ, ɒ

ʌ

œ, ə

ɛ

o

u

nasal vowel (e.g. ǣ)

vowel length

1. INTRODUCTORY REMARKS

The languages of the Reef and Santa Cruz Islands in the Santa Cruz Archipelago, in the Eastern Outer Islands of the Solomon Islands have constituted something of an enigma with regard to their status, as Austronesian or otherwise, since two of them became superficially known through Codrington's (1885) work.

It has been established that the languages of the Reef and Santa Cruz Islands constitute a family consisting of two subfamilies, one with one member (Reefs), and the other with three of which two are connected by a dialect chain, with communalects at the two ends of the chain not mutually intelligible (Wurm 1969). It may therefore be possible to speak of, in practical terms, three, or linguistically more correctly, two languages on Santa Cruz (Simons 1977). At the same time, passive bilingualism is widespread on Santa Cruz which makes accurate assessment of the mutual intelligibility of communalects a difficult problem.

Superficially the languages, which are quite complex, look like highly aberrant Austronesian languages. They have complex phonologies, with at least the Malo dialect of the Northern Santa Cruzan languages (for which the name Lödäi has been suggested by some local speakers), and probably others, containing twenty vowel phonemes. At the same time, the phonological system of Malo for instance shows parallellisms with that of Yele of Rossel Island which has been included in the so-called East Papuan Phylum of Papuan languages (Wurm 1975a). This includes the appearance in both languages, of a co-articulated lateral and bilabial fricative which is unique in the Pacific area - in Malo, this phoneme appears also in some lexemes which reflect POC forms, e.g. *lva* 'to fly' < POC *Ropo.

As much as perhaps 50% of the vocabularies of the Reef and Santa Cruz languages may well be of Austronesian origin, but there are great difficulties in establishing regular sound correspondences with POC and PAN (Wurm 1970, 1972b, Lincoln, personal communication). Many of the numerous morphological elements in the languages, and much of their structure, show Austronesian connections and characteristics, though often in unusual and aberrant ways. At the same time, some morphological elements and structural features in the languages are not Austronesian, and show connections with those found in Papuan languages further west which have been included in the East Papuan Phylum (Wurm 1975a) (which is also the case with a small portion of the vocabulary of the Reefs-Santa Cruz languages). Some of these problems have been touched upon before on the basis of comparatively little, and in many ways inadequate,

information on the structure of the languages (Wurm 1969, 1976). Very much has been added to our knowledge of the languages through first-hand work carried out in them by the author in 1977.

The non-Austronesian or Papuan structural elements mentioned above belong mostly to the basic core of the verb structure, and to a gender system in one of the languages (Reefs). This fact and the manner in which some of the systems in the languages operate have made the author assume that these elements are not borrowed elements, but belong to the original form of the languages. This in turn has led him to believe that the Reef-Santa Cruzans originally spoke a non-Austronesian language or languages and that they have incompletely taken over an Austronesian language, and it appears that the present-day languages show evidence of this fact. This view is supported on the interdisciplinary level, by the non-Austronesian nature of the social structure of the people as Davenport (1964, 1969) pointed out and the aberrant, probably non-Austronesian, nature of the arboriculture on Santa Cruz which Yen (1974, 1976) described.

The difficulties encountered in trying to establish regular sound correspondences for the apparently Austronesian lexical content of the languages, could be thought of as being attributable to the languages reflecting several Oceanic traditions. This is certainly not unlikely if one looks at the composition of the Austronesian vocabulary of these languages which reflects links with the New Caledonian languages on one hand, the New Hebridean and the South-eastern Solomon Islands languages on the other, Polynesian languages, Micronesian languages, and also connections with archaic forms which are more reminiscent of western Austronesian than Oceanic (Wurm 1970, 1972b). However, one could also argue that the reason for this difficulty with sound correspondences may also be attributable to non-Austronesian speakers taking over an Austronesian language - this would refer to one of the Austronesian strata in the language, obviously not to the Polynesian one or the one which shows clear connections with neighbouring languages in the northern New Hebrides and south-eastern Solomons.

Such language takeovers are by no means very uncommon. Dutton (1978) has pointed out that relexification of Pidgin is one of the possible hypotheses to account for the development of Hiri Motu (formerly called Police Motu), given the socio-linguistic factors involved. This would have led to the development of a language which reflected the structure of one language and the vocabulary of another. It can well be argued that New Guinea Pidgin is a similar case. It seems to be not at all uncommon for a language to embody elements which, comparatively speaking, come from different sources and which operate within a novel system

which reflects features of the original sources, but which viewed on the synchronic level is a system in its own right. Instances of this are for example met with in Papuan languages of the New Guinea mainland. Les Bruce (personal communication) has come across such phenomena in his work in the Sepik Hill languages, and the Abaga language in the Kamano language area in the Eastern Highlands of Papua New Guinea is a typical instance (the Kamano language belongs to the East New Guinea Highlands Stock (Wurm 1975b)). Preliminary work by McElhanon and the author has shown that this language is originally a Finisterre Stock language, but at first sight appears to be almost a Kamano dialect with much of the vocabulary and of the noun morphology linking closely with Kamano, but with some features of the verb structure betraying its Finisterre origin - the situation seems to be reminiscent of the Reefs-Santa Cruz case to some extent. Similar things are taking place at present in Australia with the language of German speakers (and with other languages of immigrants) which is embodying elements and systems from English, with this language learnt by the children and being something which is neither German nor English, but should perhaps rather be classified as German though, as in the case of Santa Cruz with Austronesian, it tends to be predominantly English in its elements, and in much of its structure. More of this below in 3.2.1.-2.

2. SOME FEATURES OF THE REEFS-SANTA CRUZ LANGUAGES

A few of the salient features of languages of the Reefs-Santa Cruz Islands may be touched upon text:

2.1. POSSESSIVES

The languages have a complex system of indicating possession which seems to be largely Austronesian, though with some unusual features. Nouns denoting inalienable possession tend to take possessive suffixes directly, with half or more of these suffixes apparently Austronesian in form, and some of the others showing connections with forms in East Papuan Phylum languages (e.g. the 1 pl.excl. suffix *-ngo* in Reefs and *-go* [ŋɡo] in Nanggu (the South-eastern Santa Cruz language) which seems to link with the Yele (of Rossel Island) 1 pl. *nm*, with Savo and Bilua (both Central Solomons) showing *ko* and *enge* respectively. Yele *nm* corresponds to *ng-* [ŋ] in Reefs-Santa Cruz languages in several observed instances).

There are several sub-classes of nouns denoting inalienable possession in Reefs-Santa Cruzan which take formally somewhat differing possessive suffixes.

With nouns denoting alienable possession, possession is indicated through a quite extensive range of different possessive verbs which allow the nouns to be assigned to a considerable number of different possessive classes, with some nouns potentially belonging to two or more classes. The possessive verbs appear in a verbal noun form, with possessive suffixes added to them (the possessive verbs exist independently as inflected verbs in the languages). Several of the possessive verbs have differing forms to denote realis and irrealis. For instance, the possessive verb appearing with nouns denoting drinkables (and foods with liquid content) in Malo is realis pü and irrealis mü, e.g. ka-bo ba-mü nölü pü-ngä '*I give you my sugarcane*' (lit. *give* (ka), static event focus reference to a second or third person with benefaction involved (-b), first person singular subject (-o), verb denoting destination and recipient of action, for... (ba), second person singular possessive suffix (-mü), *sugarcane* (nölü), possessive verb indicating possession of drinkables and foods with liquid content, in realis form (pü), first person singular possessive suffix (-ngä) (püngä as a verbal noun meaning '*the fact of my really possessing drinkables*')); na-ngi mü-ngä-du lue '*some (of the) water should be mine*' (lit. irrealis aspect (na-), *to be* (ngi), possessive verb indicating possession of drinkables and foods with liquid content, in irrealis form (mü), first person singular possessive suffix (-ngä) (müngä as a verbal noun meaning '*the fact of my potentially possessing drinkables*'), partitive verb suffix (-du), *water* (lue)). Similarly, the possessive verb appearing with nouns indicating fire and hot things in the Lvepe dialect of the Northern Santa Cruz language is realis plö and irrealis mnö, etc.

2.2. INDEPENDENT PERSON MARKERS

There are no true independent personal pronouns in the languages. What constitute independent person markers are verbal nouns from the verb '*to exist*' which is ni in the Santa Cruz languages and occurs as an independent inflected verb, e.g. na-ngi ni-tä-pw-o '*it could (or should) be (that) I definitely exist continuously, i.e. always exist as*' (lit. irrealis aspect (na-), *to be* (ngi), *to exist* (ni), intensive (-tä), continuous aspect (-pw < -pwä), first person singular subject (-o)). The verbal nouns functioning as independent person markers are formed according to the principles valid for the formation of one of the quite numerous categories of verbal nouns in the languages, and consist of the verb stem + the possessive suffixes. '*We (excl.)*' for instance is nigö (lit. *the fact of our (excl.) existing*). In Reefs, the verb '*to exist*' is i ~ y, and the formation of the verbal nouns

functioning as independent person markers parallels that found in the Santa Cruz languages. 'I' is *y-u* (lit. *the fact of my existing*). In the other persons, the possessive suffixes are added to the possessive suffix *-u* of the 1st sg., e.g. *y-u-ngo* '*we (excl.)*'. The addition of possessive and other person suffixes denoting non-1st sg. persons (except 3rd sg.) to the 1st sg. person suffixes is a characteristic feature of Reefs. The 3rd sg. free person marker is unusual in being *i-na*, with the obviously Austronesian possessive suffix *-na* appearing uniquely in this instance in Reefs. Possession by a 3rd sg. person is, in cases of inalienable possession, mostly expressed through the 1st sg. possessive suffix being replaced by *-ä*, e.g. *nyib-e* '*my eye*', *nyib-e-ngo* '*our (excl.) (eye(s))*', *nyib-ä* '*his eye*'.

2.3. NATURE OF THE LEXEMES

The basic lexemes in the Santa Cruz languages show a very pronounced tendency towards monosyllabicity. The numerous bi- and multisyllabic lexemes in the languages can in a very large number of instances be recognised as compounds or as forms derived from shorter forms through the addition of bound morphemes. In Reefs, the basic lexemes are more commonly bi- and multisyllabic, but the incidence of compounding and derivation in lexemes is just as high as in the Santa Cruz languages.

A frequently encountered morphological device in all the languages is vowel variation distinguishing semantically closely related lexemes, e.g. Malo: *pa* '*to cut coarsely*', *pä* '*to cut finely*'; *ngü* '*to eat solid food*', *ngë* '*to eat food with liquid content (e.g. pawpaw)*'; *pö* '*to move vertically*', *pu* '*to come up (and spread out) ponderously or slowly*'; *dötä* '*sand*', *dötä* '*soil, ground*'; *mala* '*to be sharp (of point)*', *malo* '*to be sharp (of blade)*'; Reefs: *putaa* '*to search*', *potaa* '*to find*'; etc.

The meaning of quite a few of the lexemes in the languages tend to be rather unusual, e.g. Malo: *ya* '*to move one's arm(s) rhythmically to and fro*'; *lvä* '*to pivot, swing on a hinge*'; *pwi* '*to show itself pointed through removal of covering*'; Lvepe dialect of Northern Santa Cruz: *öpläki* '*to affect one's mouth through fattiness or greasy taste*' (Malo *öpnaki*); etc.

2.4. NUMERALS

The numerals in the language are verbs capable of complex inflection. Their forms are in part Austronesian, in part non-Austronesian and the similarity of Reefs *eve* '*to be three*' with Buin *pai* '*three*' is of interest. (Buin is a Papuan language, in the south-western part of

Bougainville Island, which has been included in the East Papuan Phylum). The languages have separate numeral verbs from 1-5, but 6-9 are compounds, and a separate numeral verb exists for 10. In this, it is interesting that the numeral verbs 7, 8 and 9 in Nemboi and Nooli (two south-western dialects of the Northern Santa Cruz language, or according to another possible classification - see 1. - dialects of a separate Santa Cruzan language) and in Nanggu (the south-eastern Santa Cruzan language) constitute a subtractive system. In the above-mentioned Buin language of Bougainville Island, the system is also subtractive for numerals such as 7, 8, even though the system operates somewhat differently from that found in Santa Cruz. However, the presence of a subtractive numeral system as such, which is quite unusual in Austronesian languages, in some Santa Cruz communalects and the Papuan Buin languages is, in principle, of considerable interest in view of the existence of other apparent links between Buin and the Reefs-Santa Cruzan languages, and also of interdisciplinary evidence linking the Buin area with the Santa Cruz area (see below 2.7.).

In Reefs, nouns belong to a small number of adjunct classes such as persons, things in general, etc. These are cross-cutting with the possessive classes of nouns (see 2.1.), and with the semantic classes of them (see 2.5.), and, in a concordance system, are indicated through prefixes appearing with the adjuncts which include numeral verbs.

2.5. NOUNS

Many of the nouns in the Reefs-Santa Cruz languages belong to one of a range of semantic classes (thirteen have so far been found in Malo and there may be under a dozen in Reefs) which are marked by the first syllable of the nouns. Most of these consist of *n* + *v*. Examples from Malo:

- ni-* indicates that the noun denotes a pointed, stinging, or sharp object, or an object that sticks out sharply, e.g. *nidü* '*sting (proboscis) of a mosquito*', *niglü* '*tail*', *ningi* '*hair*', *nipna* '*fighting arrow*', etc.
- nö-* indicates that the noun denotes a part of a whole, with the part not very obvious when looking at the whole, e.g. *nöwö* '*flesh (part of a body)*', *növö* '*bone (part of a body)*', *nöpü* '*blossom (part of a shrub)*', *nöplö* '*feather (part of a bird's plumage)*', *nöa* '*wave (part of the sea)*', etc.
- no-* indicates that the noun denotes something that protrudes roundly, e.g. *notü* '*nose*', *nonae* '*roof*', *note* '*point of land*', *nongo* '*nape of neck*', *noakä* '*lime gourd*', etc.

- nü- indicates that the noun denotes a stringy, ropey or complex and interwoven thing, e.g. nüvi '*thread, rope*', nüni₁ '*mat*', nüni₂ '*squid*', nüglüwi '*a meshed case drier used for drying breadfruit*', nümü '*a custom*', etc.
etc.

Examples from Reefs:

- ne- indicates that the noun denotes a part of a whole which is sharply set off from that whole, e.g. neyo '*mountain*' (part of the landscape), nenu '*coconut*', nepä '*betelnut*' (both parts of a palm), nesi '*dolphin*' (part of the sea), etc.
- no- indicates that the noun denotes a part of a whole which is diffusely and not sharply set off from that whole, e.g. noo '*cloud*' (part of the sky), nopungä '*(its) gill*' (part of a fish), nou₁ '*banana*' (part of a bunch), nou₂ '*house*' (part of hair), etc.
- nu- indicates that the noun denotes something which is dependent on something else for its existence, belongs to something or serves something, e.g. nubalase '*piece of firewood*', nubaläga '*spittle, saliva*', nugaa '*steam*', numobo '*hole*', nupo '*net*'
- nyi- indicates that the noun denotes a pointed object, or an object that sticks out or protrudes, e.g. nyigile '*tail*', nyiläde '*coral*', nyinaa '*wave*', nyipe '*scale of a fish*', etc.
etc.

In addition, Reefs shows a gender system, and an adjunct class system. One difference between the gender system and the semantic class system is the fact that in the former, the same noun can appear with different gender prefixes, whereas in the latter each noun appears only with one specific semantic class prefix which is generally inseparable.

With nouns which are not verbal nouns and which denote persons, a masculine-feminine contrast is present, with gi- marking masculine and si- feminine (also person in general in some very few words), e.g. gibu '*(my) nephew*', sibu '*(my) niece*'; gisi '*(my) brother*' (male speaking), sisi '*(my) sister*' (female speaking).

With verbal nouns of stative and active verbs, four genders, masculine, feminine, neutral-collective, and animal (including birds) are distinguished and the markers are gi- masculine, si- feminine, me- neutral-collective, vä- animal, e.g. va '*to be immature, to be baby*', giva '*male baby*', siva '*female baby*', meva '*baby irrespective of sex, babies*', väva '*animal (or bird) young*'; laki '*to be small*', gilaki

'small boy', silaki 'small girl', melaki 'small children', vālaki 'small (i.e. young) animal'; gikimei 'one (male) who sleeps, tends to sleep, sleeps always', sikimei 'one (female) who sleeps, tends to sleep, sleeps always', mekimei 'sleepers, sleeping persons', vākimei 'an animal (e.g. a chicken) that has the habit of sleeping a lot'.

These gender markers constitute an important link with East Papuan Phylum languages of the Central Solomons and South Bougainville. Functionally and formally comparable markers appear in Savosavo, Bilua and Baniata of the Central Solomon Family of that Phylum (Todd 1975) though the forms and gender references show alterations in their gender referents:

	Baniata	Reefs
m.	zo	gi
f.	vo	si
neutral	ŋo	vā
animal	-	
plural	mo	me (coll.)

Regarding the altered gender referents forms in comparing languages, it may be noted that Bilua and Baniata, both members of the Solomon language Family (Todd 1975) show a similar alteration of referents when compared with each other, i.e. Bilua vo is masculine whereas Baniata vo is feminine. Such a phenomenon is common between related Papuan languages (e.g. with the pronouns in Sepik-Ramu Phylum languages, Laycock 1975).

	Savosavo	Reefs
m.	le	gi
f.	ke	si
pl.	me	me (coll.)

In Buin of South Bougainville, functionally and formally comparable markers appear with relationship terms in non-singular numbers, as suffixes, and the forms have the same gender referents as in Reefs:

	Buin	Reefs
m.	ko, ki, (ga)gi	gi
f.	(i)to	si

No trace of this gender system has so far been found in the third person free person markers in the dialects of Reefs studied to date. This may perhaps be explained through the fact that the language has no true pronouns (see above 2.2.) and that in any event the possessive

suffix appearing in the third person singular free person marker is a straight Austronesian suffix which does not occur elsewhere in the language. The possessive suffix contained in the third person plural free person marker is also apparently of Austronesian origin, i.e. *-dyi*. At the same time, such discrepancies are met with in Papuan languages of the New Guinea area. For instance, in the Bine language of the Trans-Fly area of Papua New Guinea (which, incidentally, is a very long way away from the Austronesian language area nearest to it), a rudimentary two-gender system is present in the verb system, but it does not appear in the pronoun system (Wurm 1971).

The adjunct class system comprises at least three classes, marked by prefixes, which are *mi-* neutral-general (includes inanimate, animate and human), *de-* inanimate, *pe-* persons. Their exact functions and roles still require further study.

2.6. WORD ORDER

The word order in the Santa Cruz languages is usually SVO, but in archaic, formal and special language, and in proverbs, (S)OV is encountered, e.g. *kabo bamü ëplë* 'I give you a stone' (*ëplë* = 'stone'), but *ëplë kabo bamü* 'I give you troubles' (*ëplë* = 'troubles' < 'stone'). In Reefs, SOV occurs not infrequently, and VOS is fairly common.

2.7. VERBS

The verb system in the Reefs-Santa Cruz languages is complex, especially so in the Santa Cruzan languages. In Malo, thirty-two potential morpheme positions or slots, excluding the stem slot, have so far been found to occur in a strict order in the verb phrase, with eight of these preceding the stem, and twenty-four following it. Close to one hundred and fifty bound morphemes (and/or clitics) have been identified to date as functioning in the verb phrase, and there are many more whose precise functions are not yet clear.

Some of the salient features of the verb in Malo are: the presence of an (indefinite) object prefix, the indication of the subject by one of several possible sets of suffixes, the distinction between dynamic forms (object focus forms) and static forms (event focus forms), the presence of a large range of mode of action markers, of aspect systems indicated by prefixes and suffixes, of markers indicating the instrument (and reason) of an action, the appearance of a very large range of adverbial insertions, the distinction between discourse medial and discourse final verb forms with third person subjects, the indication of negative forms through discontinuous prefix + suffix morphemes, the

marking of interrogative forms through suffixes, the indication of the location of an action, the direction of an action, and the direction of an action in relation to the actor or other persons in focus, the presence of over a dozen different types of verbal nouns and a pronounced tendency to nominalisation of verb forms, the distinction between stative and active verbs which show morphological differences, etc. A number of the affixes and clitics have formal resemblances to Austronesian elements, others have not.

The verb in Reefs is considerably simpler than the Santa Cruzan verbs, and lacks a number of the morphological features listed above for Malo, or shows a much lower elaboration of them. At the same time, some of the Reefs verbs have subject prefixes, and others a somewhat different set of subject suffixes. This dichotomy corresponds to a considerable extent to an intransitive-transitive dichotomy. Some of the transitive verbs show a system of the indication of the direction of an action towards the first, second or third person, with the marker for the first person clearly Austronesian (-mä), and those for the second and third person -wä and -kä. At the same time, a four-gender system is present with verbal nouns which are derived from stative verbs and also from active intransitive verbs, as has already been mentioned and illustrated above in 2.4., and its significance as a link with East Papuan Phylum languages demonstrated there. There are indications that the four-gender system is also present with verbal nouns of active transitive verbs, but this requires further study.

Some of the features of the verb in Malo will be briefly discussed below. First, forms may be mentioned which show links between Malo, as representing Santa Cruzan languages, and East Papuan Phylum languages, especially Buin of South-eastern Bougainville Island. (Other languages of the East Bougainville Stock to which Buin belongs, e.g. Siwai of the Buin Family, and Nasioi (E. Todd, personal communication) of the Nasioi Family, show some phenomena comparable to those encountered in Buin).

A striking similarity is the near-identity of one of the sets of 1st, 2nd and 3rd sg. subject suffixes in Malo with the same subject suffixes found in Buin. The conditions under which this particular set of subject suffixes occurs in Malo are fully known, and these conditions show close parallels with comparable features in Buin.

In the verb in Buin (D.C. Laycock, personal communication), a distinction is made between dynamic forms (object focus forms) and static forms (event focus forms). Of immediate interest in this connection is that the verb marker in the dynamic and object focus forms, if a

third person is involved, is p, and the static and event focus form could conceivably have been originally b - there is no /b/ in present-day Buin. The relevant first person marker is m. These forms have close parallels in Malo in which the dynamic and object focus forms involving a third person object (with movement as far as reaching and touching the third person object) is p, whereas b is a static and event focus form, referring to the third (or also second) person with benefaction and little attention to the object. At the same time, m is the dynamic and object focus form referring to a first person object with movement towards and reaching the first person. (At the same time, m is also used to indicate direction to and focus on the actor (or another person in focus) and dynamic movement towards a place at which that person is expected to be when the action directed towards that place and involving the person has come to an end.) All these markers in Santa Cruz require the appearance of the subject markers first person o (or variants such as ɔ) second person e and third person ü which are almost identical with the corresponding subject markers o, e and u in Buin. In the author's opinion, it seems therefore justified to relate these two systems which are quite similar in the two languages, and at the same time to suggest that it is unlikely that a complex system like this (and there is more, see below) may be a borrowed feature in Malo. It appears more likely to be a functional system constituting an original feature of the language spoken by a people who have taken over much from the systems and forms of an Austronesian language, but were unable to replace systems such as this one by Austronesian systems because there was nothing equivalent to it in the Austronesian language.

To elaborate further: in Buin, the markers occurring with inanimate objects can take various forms, and there seems to be a semantic grouping of verbs according to the marker selected. Verbs with k (dynamic, object focus) and g (static, event focus) are mostly those in which the object is strongly and violently affected, e.g. deeply cut, broken, hit, destroyed, etc. Those with t (dynamic, object focus) and r/n (static, event focus) tend to be those in which the object is basically unaltered by the action denoted by the verb, e.g. lose, find, cross a river, catch, etc. There are of course many exceptions, e.g. nko 'I see', piato 'chop with an axe', etc. The Buin markers k and t have clear parallels in the Malo dynamic and object focus markers ki and ti which have the same functions (except that -ti may also refer to animate objects, especially if a plurality of such objects is involved, which may betray Austronesian influence (see 3.2.3.)). For

instance, vëki indicates stamping on the ground, leaving deep marks and breaking objects such as branches which lie in the way, whereas vëti indicates walking over the ground in an ordinary fashion leaving no strong footprints or even none, i.e. not appreciably affecting the ground. The form corresponding to Buin g in Malo is ngi, and the one corresponding to Buin r ~ n may conceivably be the n which appears before subject suffixes if it is indicated by special suffixes on the verb that the action involves an instrument or a reason for the action, or an obligation on the part of the actor to carry out the action, or a focus on the action itself (or the instrument involved) rather than on the object, and that the object is only loosely involved.

Here again there are formal and functional parallels between the elaborate structures of Buin and Malo - far too much to be regarded as sheer coincidence, and again not something which is likely to have been borrowed by Malo in all its complexity - rather, it seems to be a still viable surviving system belonging to the original languages spoken by the Reefs-Santa Cruzans.

A tabular representation of what has been discussed so far may be useful to illustrate the similarities mentioned:

Dynamic, Object Focus		Static, Event Focus		
Inanimate Object				
Buin	Malo	Buin	Malo	
k	ki	g	ngi object strongly altered or changed or violently affected	
t	ti (also pl. animate obj.)	r~n	n? object basically unaltered by action	
Person Object		Subject Suffixes (sg.)		
p	p	(*b?)		
r~n	-	b	3rd	
m	m		2nd	
			1st	
			Buin	Malo
			u	ü
			e	e
			o	o~o

It may be mentioned that it could be argued that the Buin -m suffix which indicates the dynamic and object focus reference to the first person is Austronesian. It may well be that this element is formally

Austronesian and has been adopted in this form to fulfil this function, but it is deeply embedded in the verbal system of Buin which in itself is quite un-Austronesian. It may be added that, from the point of view of looking only at individual elements found in languages, much of what is encountered in Buin and Yele could be regarded as Austronesian - they undoubtedly have a large proportion of Austronesian elements in them. However this does not make them Austronesian.

In what has been said above in the comparison of Buin and Malo forms, it may be borne in mind that according to Roger Green (personal communication), there is prehistoric evidence suggesting the possibility of connections between Santa Cruz and the south-eastern part of Bougainville where Buin is spoken.

Some more examples may be given to illustrate the points mentioned above:

töpwe na-lva-tö-p-ë(-ü) kalömai = *'the ocean-going canoe is expected to reach h i m tomorrow'* (lit. *the ocean-going canoe* (töpwe), *irrealis* (na-), *something to move along its longitudinal axis* (lva), *movement into* (-tö), *dynamic object focus involving a third person object* (-p), *movement or application of action directed away from the actor or person in focus (i.e. the observer)* (-ë), *third person singular subject* (-ü) (usually dropped after -ë));

ngü-tä-pe-b-ë-le = *'he a t e i t away from him (on his behalf, i.e. instead of him) and ...'* (lit. *eat solid food* (ngü), *intensive*, *causing suffering to patient* (-tä), *perfective* (-pe), *static event focus reference to a third person with benefaction involved* (-b), *application of action directed away from the actor* (-ë), *third person singular discourse medial subject* (-le));

yamnä-pe-m-ü = *'he has already spoken to m e'* (lit. *speak* (yamnä), *perfective* (-pe), *dynamic and object focus action involving a first person object with movement towards (and reaching) the first person* (-m), *third person singular subject* (-ü));

kädü kä-na-tu-o-pe-m-ü-ka mē dötä = *'someone who steps on sand...'* (lit. *someone* (kädü), *that who* (kä-), *irreal, hypothetical* (na-), *stand* (tu-), *direction downwards* (-o), *perfective* (-pe), *dynamic movement towards the place at which the actor is expected to be when the action directed towards that place and involving the actor has come to an end* (-m) (i.e. *someone stepping on quicksand will definitely (perfective) go down until he comes to a rest at the bottom of the quicksand*), *third person singular subject* (-ü), *reference to a previously known or mentioned person, thing or fact* (-ka) (i.e. *it*

is well known that a person stepping on quicksand will go down),
on (më), sand (dötä);

ta-o-pe-m-e = 'you (one) fell down (from height)' (lit. fall (ta-),
direction downwards (-o), perfective (-pe), dynamic and object focus
action involving a first person object with movement towards and
reaching the first person (if the person addressed fell down towards
and on the first person), or: dynamic movement towards the place at
which the actor is expected to be when the action directed towards
that place and involving the actor has come to an end (if the person
did not fall down towards and on the first person) (-m), second per-
son singular subject (-e));

ta-o-pe-m-a = 'I fell down (from height)' (lit. as with ta-o-pe-m-e,
with -m having the second meaning only, and first person singular
subject (-a < -o));

mwä = 'to be fishing (with tackle)', ömwäti = 'to catch fish'; mwälö =
'to be afraid', mwälötiä bwa = 'I am afraid of sharks'; më = 'to be
bitter', mëki = 'to affect the tongue strongly through its bitterness';
ya = 'to move one's arm rhythmically to and fro', yangi = 'to comb
one's hair'; pla = 'to do something between one's hands', plaki =
'to break, destroy, something between one's hands';

ö-ta-ngö-n-ä ëplë = 'I throw a stone (at)...' (lit. indefinite object
(ö-), throw (ta), involvement of an instrument in the action with
the focus on the instrument (-ngö), stative and event focus with
only loose involvement of the object (-n), first person singular
subject (-ä), stone (ëplë)).

It may be added to what has been said above about the close simi-
larities between the Buin and Malo subject suffixes, that there are
also considerable similarities between dual and plural subject suffixes
in the two languages:

Buin		Malo	
1 dl.	-o-ge		-ë-ki (~o-ki)
1 pl.	-o-gi	{ incl.	-ë-ku (~o-ku)
		{ excl.	-ë-kö (~o-kö)
2 pl. }	-ang		-amu (Austronesian)
3 pl. }			-ë-ngü

It may be mentioned in passing that there are some formal similarities involving person markers, also between Santa Cruzan languages and Savosavo for instance, e.g.

	Malo, etc.	Savosavo
1 sg.	nga, nge	nye (Buin ne/nne, Yele nna)
3 sg.	le	lo (masc.)
1 dl.	gi	ge
2 pl.	mu	me

Some of these forms may be Austronesian.

Some of the other features of the verb structure of Malo which have been listed above, may be illustrated below:

1) As has been mentioned, location and direction of action may be indicated in the verb simultaneously in three separate ways: a) the location of the action in relation to the actor by prefixes, b) the direction of the action itself by suffixes, c) the direction of the action in relation to the speaker, actor, or another person in focus, by suffixes, e.g. *la-tü-vë-o-pe-m-e* = '*you there (la- + -e), are really (tü-), coming (vë-), down (-o), towards me (-m)*' (-pe indicates that the action has begun and is carried through to its conclusion); *ka-male-tö-p-o müde* = '*I touch his arm*' (lit. *I (-o), here (ka-), hold (male-) moving into (-tö), reaching and affecting, focussing on the object (-p), his arm (müde)*).

2) The verb shows an elaborate aspect system marked by prefixes and suffixes such as *na-* (irrealis aspect), *tü-* (realis aspect, action in progress (negative *kö-*)), *-pe* (perfective), *-pwë* (attracting the subject suffix set *-o, -e, -u*, etc. in most cases) (imperfective, also 'always', i.e. not yet ended), *-pnë* (completive, with some time elapsed since the completion), *-pë* punctiliar. Some examples:

ya-pë pipë në-ta-kö-ngä = '*(At that moment), I almost fell down*' (lit. *lie, be available, be left over (ya), at that moment (punctiliar) (-pë), a little (pipë), action of falling (nä-ta-kö-, verbal noun), my (-ngä)*);

kä-mu-pwë-le esë = '*which always happens like this*' (lit. *that which (kä-), happens to be (mu), unfinished, always (-pwë), it (-le), being one = the same (esë)*);

ka-tü-mu-ä = '*I (-ä), am (tü-), eating (mu), here (ka-)*';

ka-tö-kö-mu-w-ä = '*I (-ä), am not (tö-kö- + -w < -u), eat(ing) (mu), here (ka-)*';

na-vë-pe-ki-äna na-ö-tangë-pe-ki nagi da känëngü = 'let us two go and let us two look for food for us two' (lit. irreality (na-), go (vë-), perfective (-pe), we two (-ki), action done before another action (-äna), irreality (na-), indefinite object (ö-), look for (tangë-), perfective (-pe), we two (-ki), our (nagi), food (da känëngü)). The combination of na- = irreal and -pe = perfective indicates an action which has not taken place, but is to be completed, i.e. an intention to be carried through.

3) The negative is indicated by discontinuous morphemes such as tö- + -u 'not', tö- + -ka 'not yet'. The realis aspect marker tū- changes to kö- in the negative. An example has been given above under 2). tö is verbal in nature: it occurs as an independent verb in the language, with inflections, with the meaning 'to be not', 'to not exist'.

It is interesting to see that the form tö- is paralleled by the corresponding morpheme tou in Buin and doo in Yele. All the morphemes tö, tou and doo may be formally of Austronesian origin. Neither Buin or Yele have a discontinuous negative marker, though in Yele the verb itself undergoes some changes in the negative.

4) As has been mentioned, a large range of mode of action markers is present in the Malo verb. These markers are suffixed immediately to the verb stem, and quite a few of them are derived from verbs which occur independently in the language - others do not occur independently in the present-day language. There may be some justification in regarding verbs with mode of action markers as concatenated verbs. Examples:

la 'to chop', la-wi 'to chop in half' (wi 'to saw (in half)'), e.g. la-wi-o-tä-ngö-n-ä-le I (-ä), had to (tä-), chop (la, -wi = 'in half'), it (-le), down (-o), (because...) (-ngö refers to the reason for the action, it is obligatorily followed by -n);

ka 'to give; to swim', wi 'to saw (in half)', ka-wi 'to cross something', ö-ka-wi 'to pass by' (ö- independent object prefix), ka-wi-a 'to lay a tree trunk or plank across a creek to cross over' (-a direction of action suffix indicating action across something);

lva '(something) to move along its longitudinal axis', lva-pu 'to grow' (pu 'to come up (and spread out) ponderously and slowly');

yö 'to be connected with the ground or bottom', yö-le 'to flow' (-le?), yö-bu 'to be full' (bu 'to fold over'), yö-bü 'to lie, to be prone' (-bü?), etc.

5) With the 3rd sg. and pl. subject markers with verbs, discourse final (Ø, -ngü) and discourse medial (-le, -lö) forms are distinguished, e.g.

doa nablo li nē-yēpü-nöë-pe-ngü kä-nē-yēpü-pe-lö yä... 'two boys were playing. When they had finished playing (and)...' (lit. child (doa), male (nablo), being two (li), they (nē- + -ngü), play (yēpü), happened (-nöë), (-pe = perfective), when (kä-), they (nē- + -lö), play (yēpü), finished (-pe), and = then (yä)...).

Verbs in isolation appear either with the discourse medial markers or discourse final markers according to their meaning which makes it either likely, or not, that the action is followed by another one, e.g. mu = 'he eats' (discourse final), mule = 'he thinks (that...)' (discourse medial). In connected texts, one or the other marker appears in accordance with discourse mediality or finality, though this is only a trend in many cases.

6) As has already been mentioned above, it is often indicated in verb forms that an instrument (or a reason) is involved in the carrying out of the action denoted by the verb, and distinct markers appear to denote focus on the instrument or reason (-ngö), or focus on the action which involves the use of the instrument or the reason (-ö). When either of these markers precedes the subject suffix, without another suffix intervening, the suffix -n denoting stative and event focus with only loose involvement of the object, follows the -ngö or -ö, and the initial consonant of the subject suffix is dropped, e.g.

mia-ngö-n-ä 'I (-ä), missed (mia-) (i.e. with (-ngö-n) an arrow)',
mia-ö-n-ä 'I (-ä), missed (mia-) (an arrow was involved, by the way (-ö-n))'.

7) Partitive reference to the object is common, i.e. 'some', e.g. na-ka-b-o-du ba-mü namü nēlu = 'I may give you some coconuts to eat (lit. irrealis (na-), give (ka), static and event focus reference to third (or second) person with benefaction involved (-b), I (-o), some of the object (-du), for, destined to (ba-), you one (-mü), your (edible class) (namü), coconut (nēlu);
na-a-dua-lë-m-ü-du lue = 'one should pour some water in' (lit. irrealis (na-), to cause (a-), jump (dua), direction upwards (-lë) (i.e. the water level will rise towards the person pouring in the water), movement towards the actor in focus (-m) (i.e. the water level will rise towards the person pouring in the water who is expected to look into the rising water level), 3 sg. subject (-ü) some of the the object (-du), water (lue)).

8) Adverbial markers included in the verb phrase are extremely numerous. Some of these do not occur outside verb phrases, but others can occur independently, e.g. *angidö* which is a verbal noun meaning '*the fact of their doing*' (a-*ngi*-*dö* = lit. causative (a-), be (in equations) (*ngi*), *their* (-*dö*)). As an adverbial inclusion in a verb phrase, it means '*correctly, properly*', e.g.

tö-kö-mu-a-*ngi*-*dö*-pe-kë-w-ü = '*you (one)*(-u), *are not* (tö-kö- + -w < -ü), *eat(ing)* (mu), *properly* (a-*ngi*-*dö*), *also* (-kë), (pe = perfective, i.e. this is an accomplished fact)'

9) A few more examples of verbs may be added for illustration:
tū-lva-pu-lë-a_a-pwë-ü (> pwü) = '*it* (i.e. a tree) *was growing up instead (of the other one)*' (lit. realis aspect, action in progress (tū-), (something) to move along its longitudinal axis (lva-), upward and outward movement, slow and ponderous (-pu), direction upwards (-lë), instead (-a_a), imperfective aspect (-pwë), it (-ü));

nike tö-kö-ö-tangë-ti-w-ö-n-amu namu da = '*why are you not picking out food for yourselves?*' (lit. what (nike), not (tö- + -w < -u), realis aspect, action in progress, negative form (-kö), indefinite object (ö-), look for (tangë), dynamic and object focus without affecting the object much (-ti) (= focussing '*look for*' dynamically on the object > '*pick out (things)*'), reason (i.e. + nike what = why) (and focus on the action itself) (-ö), stative and event focus with loose involvement of the object (obligatory after -ö) (-n), 2 pl. subject (-amu), yours (pl.) (edible class) (namu), thing (da));

...laë-dö kä-tö-kö-ö-ka-pe-b-ë-u (> pwë)-le da = '*when their mother did not give them a thing*' (lit. mother (laë), their (-dö), when (kä-), not (tö- + -u), realis aspect, action in progress, negative form (-kö), indefinite object (ö-), give (ka), perfective (-pe), static and event focus reference to third person with benefaction involved (-b), application of action directed away from the actor (-ë), discourse medial 3 sg. subject (-le)).

A quite large number of morphemes can enter into the composition of an individual verb phrase. For instance, the following verb form was observed by the author in a conversation between two Malo speakers who were talking about work on a wood carving:

sa-na-ö-a-vë-ti-o-pä-a-*ngi*-*dö*-pe-ä-du-äna = '*I intend to cause a part of one* (i.e. of the figures to be carved) *to be affected slightly (and beneficially)* (i.e. to become modelled in carving) in the proper

manner at an indefinite (near) place and time in a downward and outward direction (i.e. referring to the direction of the blows with the carving adze) - this action will precede another one...' = '...before I do that, I intend to start proper carving work on one of the (figures)...' (lit. beginning somewhere near here and at some time, to continue for some time (sa-), intention (na- + -pe), indefinite object (ö-), causative (a-), go (vë), dynamic and object focus without affecting the object much (-ti; vë-ti = 'to affect slightly'), direction downwards (o-), direction outwards (-pä), properly (a-ngi-dö, see above under 8)), I (-ä), partitive (-du), action carried out before another one (-äna)).

An example of a short sentence containing various types of verbal nouns may be given:

tëelungö taki öde nëwëngö kënëöklëngö (talking about turmeric) 'what is to be used for daubing (from) its tuber is the result of the work of someone who knows (how to make it)' (lit. something what gets into the state of being daubed (tëelungö, from elu 'to daub'), tuber (taki), its (öde), (is) something that is made, is the making (of) (nëwëngö, from wë 'to produce, to make'), something that constitutes the action of knowing (kënëöklëngö, from klë 'to know').

3. POSSIBLE CAUSES OF AND EXPLANATION FOR THE REEFS-SANTA CRUZ LANGUAGE SITUATION

3.1. INTRODUCTORY REMARKS

From the few examples given in 2. which illustrate some of the features of the Reefs-Santa Cruz languages, it is apparent that their structures are in many ways Austronesian, but seem to give an alien impression from the Austronesian point of view in a number of instances. If it is assumed, as a hypothesis, that the languages in their present form are the result of the taking over of an Austronesian language by speakers of a non-Austronesian language or languages, two questions present themselves:

1. Why, and what reasons would there be for such an event, and
2. How would this procedure come about and affect the original language.

It seems that some of the linguistic evidence, and prehistoric and other interdisciplinary evidence makes it possible to suggest the following picture to answer the first of the two questions:

There is evidence for a strong drift possibility from the south-eastern end of Papua New Guinea to the area of the central and northern

Solomons, as for instance demonstrated by the presence of the Kiwai canoe from the Trans-Fly (Torres Strait) area (J. Golson, personal communication) and the Kiwai word for 'pig' on Nissan Island (*suade*, in Nissan *suat*), and the close connection of the Yele language of Rossel Island with the Papuan languages of the Central Solomons (Todd 1975) - all these in turn link with the languages of South Bougainville. It may therefore be suggested that people speaking a language akin to the present-day Yele language, may have proceeded to the central Solomons at some stage in the past. The prevailing winds and drift patterns appear to make this more likely than the assumption that people from the Central Solomons moved down to Rossel Island, and traces of a substratum influence of a Rossel Island-type language in mainland areas to the west of Rossel Island may allow us to suggest that the ancestors of the Rossel Island people had been living on the mainland of New Guinea from where they were driven out by other people (Wurm, Laycock, Voorhoeve and Dutton 1975).

Prehistoric evidence (Green 1976a,b,c and personal communication) shows the presence of an obsidian trade route extending from New Britain to Santa Cruz across the Solomon Islands, and there is prehistoric evidence suggesting a possible connection between South Bougainville and the Santa Cruz area (Green, personal communication). It can therefore be assumed that movements of people along this trade-route may have brought people speaking non-Austronesian languages of the South Bougainville and Yele type to the Reefs-Santa Cruz area, along with Austronesian people speaking an Oceanic Austronesian language of an archaic type - the latter (Green 1976a) may well have antedated the former by a considerable span of time. In the light of prehistoric evidence, it seems that at some point in time, this movement along this trade-route ceased, resulting in a relative isolation of the Reefs-Santa Cruz for a considerable time. This would have allowed the speakers of the diverse languages to interact, with resulting consequences to their languages. Later influences from Micronesia, from Austronesian languages surrounding the Reefs-Santa Cruz area, and from Polynesian languages completed the picture.

This is a very crude picture requiring much thinking in detail, but if it is assumed that this constitutes the scenario, it is possible to turn to the second question as to how such influencing of languages might take place.

Experience in the New Guinea area and the south-western Pacific (e.g. Lincoln 1976) appears to indicate that in contact situations involving a non-Austronesian and an Austronesian language, the Austronesian language seems to be always dominant, be it because of its

relative simplicity or for social and cultural reasons. Influence of Papuan languages upon Austronesian languages seems to be rare, except for the take-over of non-Austronesian lexical items into Austronesian languages (Dutton 1976), and perhaps in matters of word order, and not much documented.

3.2. INFLUENCE OF A DOMINANT LANGUAGE UPON ANOTHER LANGUAGE

3.2.1. Migrants' German Influenced by English in Australia

At this point, it might be useful to look at the question as to what happens to the language of a people who are in close contact with speakers of another language, with the speakers of the latter language dominant for reasons of their political, economic, cultural, etc. superiority, and their language prestigious. Australia offers an excellent ground for observations of such situations. It has already been mentioned above in 1. that relevant observations had been made by the author involving speakers of German (and other languages such as Hungarian) on what has been happening to these languages under the influence of English which the speakers have learnt to speak quite well, with these influenced languages being passed on to the children of the people involved. To concentrate on German, it seems that the changes observable in this modified or influenced German can be quantified quite well, add some general conclusions arrived at as to what happens to a language in such a situation. Some examples are given below, with the examples from the influenced language presented first, the correct German version underneath, and the English version (which constitutes the target form) last. The numbers refer to the main headings 1-4 mentioned below in 3.2.2. and explanations are added in some cases where this is believed necessary or useful. Underlinings indicate the obvious directions of influence from English (and German).

NOTE: 'Innovation' = a feature not present in English or German in the form observed in the influenced language.

Explanations

1 4 1 4 4 1
Put de book an de table
Lege das Buch auf den Tisch
Put the book on the table

German *an* = *at*; use of *an* for *auf* (=on) resulting from formal pressure of English *on*
 Loss of gender distinction in the article under pressure from English *the*

Explanations

1 4 1 4 4 1

Put de book nicht an de tablelege das Buch nicht auf den TischDo not put the book on the table

German an = at; use of an for auf
 (= on) resulting from formal pressure
 of English on
 Loss of gender distinction in the
 article under pressure from English
 the

1 4

Da was an Löffel3 Ein Löffel war daThere was a spoon

ein > an through formal pressure from
 English a(n)

3 3 2
Sie haben eine Nummer davon gemintet ~
 3 3
Sie haben gemintet eine Nummer davon

Man hat eine Anzahl davon geprägtThey have minted a number of them

Word-order affected in the second
 alternative

2 4

Sie feeden sich an HagebuttenSie nähren sich von HagebuttenThey feed on rosehips

German an = at; use of an for auf
 (= on) resulting from formal pressure
 of English on

3
Das fällt auch schon zu Stücke

Das zerfällt schonThis falls also to bits alreadyIch brauche ein broom-BesenIch brauche einen BesenI need a broom

einen > ein through formal pressure
 from English an.
 The noun in the influenced language
 is a compound consisting of the English
 and the German nouns, with the English
 noun first.

4

4

Es stand nicht dafür bis auf de haut gesaugt zu werden

Es stand nicht dafür bis auf die Haut durchnässt zu werden

It was not worth it to be soaked to the skin

Explanations

Innovation

4

Wir fallen alle über uns drüber um dich zu helfen

Wir erschlagen uns um dir zu helfen

We fall over backwards to help you

dich for correct *dir* under pressure of English *you* which combines the functions of *dir* and *dich* in one form

3

3

3

1

Wir haben ausgelaufen von loan-slips

3

Die Lehnscheine sind uns ausgegangen

We have run out of loan-slips

2

3

Das stickt dazu

Das klebt daran

That sticks to it

4

Es sind zwei Rüme darin

Es sind zwei Räume darin

There are two rooms in it

German *Raum*, pl. *Räume*
room /ru:m/, influenced language pl. with Umlaut *rü:me*

nach wo? Innovation (3)

wohin?

where to?

2

Er hat gewundet sich selbst

3

Er hat sich selbst verletzt

He has wounded himself

word-order affected; -et in *ge-...-et* reflects normal German inflection, but *ge-wundet* can be explained as 1 < *wounded*, + 2 : *ge-* prefixed.

3 - 4 4 1
Ich habe gesaged de word

3
 Ich habe das Wort gesagt
 I have said the word

Word-order affected
 Use of English bound morpheme in a fused form
 Loss of gender distinction in the article under pressure from English
the

4 1
 Das ist heiling mud
 Das ist heilender Schlamm (or Heilschlamm)
 This is healing mud

Use of English bound morpheme in a fused form

Words in the influenced language consisting of parts of the English and German words, with the English part mostly coming first:

4	4	4	4
<u>Kagen</u>	<u>Schdusten</u>	<u>Schutlinge</u>	<u>Frobst</u>
<u>Wagen</u>	<u>Stauben</u>	<u>Schösslinge</u>	<u>Obst</u>
<u>car</u>	<u>dust</u>	<u>shoots</u> (of a tree)	<u>fruit</u>

4	3 1 4
<u>colte</u> Luft	<u>level</u> <u>Kreuzing</u>
<u>kalte</u> luft	<u>Bahnübergang</u> (<u>Kreuz</u> = cross)
<u>cold</u> air	<u>level</u> <u>crossing</u> (Wegkreuzung = crossroads)

3.2.2. Conclusions Drawn From the German-English Situation

It seems that the changes observable in the English-influenced German fall essentially under the following four main headings which have been referred to in the examples by the numbers 1-4:

1. Simple take-over of vocabulary items from English which fit straight into the German sentences.
2. English words are taken over and inflected in accordance with German morphology as if they were German words.
3. There is loan translation (calques) involving individual words, phrases and idiomatic expressions.
4. Fusion phenomena are met with which involve forms and features of both languages and produce new forms which reflect features of both languages, but which are essentially different from forms met with in both sources.

From this, and the general nature of the materials observed, the following general conclusions can be drawn:

1. Bound morphemes can be taken over from the foreign language into the speaker's own language or re-interpreted in language-own categories. In the German materials this can be seen for instance in the use of -lich, and -ed.

2. The order of bound morphemes appears to remain largely unaffected. This is evident from the examples.

3. The free morpheme order can be strongly affected. This can also be seen from the examples.

4. Transparent grammatical categories are easily adopted. This is shown for instance in the take-over of the English progressive tense in *er war sprechend* and *er war spreking*.

5. Loanwords with language-own inflection are common, and of course loanwords as such are easily adopted in overwhelming numbers.

6. Fusions and innovations result from such a language contact - the examples give some evidence of that.

7. Idioms and semantic principles can be taken over easily from the foreign language and exist side by side or in combination with language-own idioms and semantics.

8. Some of the grammatical categories of the speakers' own language which are absent from the foreign language (such as e.g. gender distinction in articles in German) show a tendency to disappear.

In summary, the striking points seem to be that syntax and idiom, including word order, undergo changes, the order of bound morphemes remains largely unaffected, forms of expressions and grammatical categories (for instance, *put* instead of the three distinct words constituting the German equivalents and gender distinction in the article in German) undergo changes, transparent grammatical categories are taken over and forms similar in form and function in the two languages tend to coalesce into one new form which combines formal and functional characteristics of the two original forms.

3.2.3. Application of the Findings From the German-English Situation to the Reefs-Santa Cruz Situation

It appears that the conclusions arrived at in 3.2.2. may have some bearing on hypotheses concerning the possible development of the Reefs-Santa Cruz situation. The argument may be raised that the circumstances

surrounding the two situations are quite different, especially in terms of the permanence, or lasting nature, of the dove-tailed languages resulting from the observed and the assumed language contact and influence. In the author's opinion, such objections are not valid. What matters, seems to be the nature of the changes undergone by the language of people who live as foreign-language speakers within a dominant community speaking a prestigious language, strongly interact with the speakers of this prestigious language, which they learn quite well while not putting up a conscious, active resistance to the penetration of the prestigious language into their own in informal speech situations. It is not of importance in this whether the resulting influenced language is short-lived or long-lived. The life-span of such an influenced language is determined by social factors: it is clear that under the continuing pressure of English, the influenced German presented in 3.2.1. is doomed to become extinct within a comparatively short span of time. However, the situation may be assumed to have been different in this respect in the Reefs-Santa Cruz area: with the prehistorically documented cessation of outside contacts (see above 3.1.) and the probable loss of the dominance of the previously seemingly prestigious Austronesian language resulting from this, the pressure from the Austronesian language was apparently removed, followed by the falling into disuse of the original languages involved in the contact situation (see below 3.2.4.).

When one bears all this in mind, two questions seem to present themselves:

I. If we assume that the Reefs-Santa Cruz languages are the result of the take-over of an Austronesian language by the speakers of originally Papuan languages, would what we observe in these languages be consistent with such an assumption?

II. If we assume that, in the Reefs-Santa Cruz situation, we are dealing with an originally Austronesian language or languages which have taken over Papuan elements, would what we observe be consistent with such an assumption?

When viewing the situation from the point of view of Question I (i.e. speakers of Papuan languages have taken over an Austronesian language) the following becomes apparent:

The confused situation in the historical phonological traditions may well reflect such an event, though separate linguistic traditions within the Austronesian element may also be responsible for it, either in addition or by itself.

Of the main headings 1 to 4 mentioned above in 3.2.2., all seem to be observable:

1. **Loanwords:** Potentially Austronesian lexical items are numerous in these languages and may in fact constitute the majority of their lexicons.
2. **Foreign words with language-own inflection:** Austronesian words, especially verbs, appear with affixes and inflectional features which are not readily identifiable as Austronesian and may belong to the non-Austronesian element.
3. **Calques:** Words not readily identifiable as Austronesian follow grammatical patterns which appear to be Austronesian, in numerous instances.
4. **Fusion phenomena:** The suffix *m* in Santa Cruzan, specifically in Malo, shows both Austronesian grammatical properties in indicating direction or movement towards the first person, i.e. the speaker (which is however also consistent with the evidence presented by the Papuan Buin), but also serves other functions such as movement towards the actor or another person in focus who need not be the speaker. It is entirely possible that the Malo verbal suffix *-m* combines in itself the functions of two originally functionally different suffixes which belong to two different languages.

Another example is provided by the subject suffix of the third person singular with transitive verbs in Reefs which is *-gu*. This suffix only appears if the object (which remains covert) is the first person. So for instance, '*he hit me*' is *ivägulo-gu*. From the Austronesian point of view, this suffix *-gu* looks much like the first person singular object marker in Austronesian languages. However, '*he hits you (one)*' is *ivängulo-gu-mu*. In this verb form, *-gu* functions solely as a third person singular subject marker, and one is reminded of the 3rd sg. person marker *wu* in Yele. Again it appears that a fusion of the functions of two originally distinct suffixes underlies this situation.

At the same time, it may be noted that (as has already been indicated above in 2.2.), it is a characteristic feature of Reefs that non-1st person suffixes tend to be added to 1st person suffixes in nouns and verb forms.

A further example is the suffix *-ngö* which appears with verbal nouns in Santa Cruzan languages, specifically Malo. In Malo, there are two verbal suffixes, *-ngö* and *-ö*, which indicate that an instrument (or a reason) is involved in the action. The first of these denotes that the instrument used is intrinsically connected with the particular action,

with the focus on the instrument rather than the object (for instance shooting somebody with an *arrow*), and the second one refers to an instrument which is not intrinsically connected with the action, with the focus on the action. It is a feature of Malo that a suffix denoting an instrument is added to a verbal noun which has the meaning of '*the action of -ing*'. Both the suffixes -ngö and -ö occur on verbal nouns in the meanings given above, for instance nē-mu-ngö = '*the action of eating which involves things which are normally and intrinsically related to the action of eating, such as food*'. However in nō-akiti-ö = '*the action of scattering*', the instrument suffix -ö is used because anything can be scattered, and there is no instrument intrinsically related to the act of scattering. That the verbal noun suffix -ngö is an instrument suffix is evidenced by the fact that it operates within the semantic system comprising both -ngö and -ö as described above and also for instance by the fact that reference to the actor in connection with a verbal noun requires the suffix -ngö to change to -kö which is reminiscent in form of the possession marker -kö of the instrument possessive class. For instance, '*my action of eating*' is nē-mu-kö-ngä. The omission of these instrument suffixes from verbal nouns produces abstract or concrete nouns, for instance nēota = '*a fight*', nōwē = '*work*' (as a noun).

The formal similarity between POC *aṇa 'nominalising suffix' and the instrument suffix -ngö described above seems to be another instance in which a fusion of the functions of two suffixes belonging originally to entirely different languages appears to have occurred: there is another, rarer verbal noun suffix in Malo which is apparently derived from *aṇa, also has the form -ngö and functions as a nominaliser of verb forms which are qualitative adjuncts to nouns. However, it remains unchanged when reference to the person of the actor is made with the help of a possessive suffix added to this suffix -ngö, e.g., kä-ö-pwä-ngö-dö nēlu = '*(a place...) at which they find coconuts*' (lit. (at) which (kä), indefinite object (ö-), be there (pwä), qualitative adjunct nominaliser (-ngö), their (-dö), coconut (nēlu)). (It may be mentioned that there is some evidence that this -ngö may in fact be derived from a third ngö which is the marker of dependent relationship in constructs. At the same time, all three ngö mentioned have some common features, and it is possible that they are all derived from a single original form which would however not be *aṇa).

Again another example is provided by the verbal suffix -ti. In 2.7., it has been mentioned that the verb suffix -ti constitutes a dynamic and object focus marker indicating that an inanimate object is only

loosely and indirectly involved in the action, without being affected much by the action. However, in some cases, -ti appears to have the additional function of indicating plurality of third person objects which in such cases can be animate. This is reminiscent of Austronesian, e.g. na-a-mu-ti-pe-ä nablo-ngü 'I intend to feed the men' (lit. irrealis (na-), causative (a-), eat in general, partake in food (mu), dynamic and object focus, with the object only loosely and indirectly involved without being much affected by the action, and being in the plural and animate (-ti), perfective (-pe) (na- + -pe = intention), I (-ä), man (nablo), plural (-ngü)).

In the case of all four of these suffixes, their functions and meanings which correspond to Austronesian usage (i.e. -m = direction towards the speaker, -ngö = nominaliser, -gu = 1 sg. object, -ti plurality of object) are the simpler and more straightforward ones, and to some extent subsidiary to their other functions and meanings - it may therefore be suggested that these other functions and meanings may be primary, and the Austronesian ones adopted.

A further case is the negative in the Santa Cruz languages which is indicated by a discontinuous morpheme apparently resulting from the combination of a possibly Austronesian and a possibly non-Austronesian element.

The complex system of semantic classes of nouns and their marking is a feature which appears to be non-Austronesian, but the shape of the prefix markers, though they are originally probably independent nouns, may well have been influenced by the existence of a formally similar article in the Austronesian language. This would also constitute a fusion situation in which features of two formally similar, but functionally different, elements in two different languages are combined into one element in the present-day languages.

The gender system found in Reefs is apparently non-Austronesian, and its gender markers show formal agreements with gender markers met with in East Papuan Phylum languages of the Central Solomons and South Bougainville. However, some Austronesianists may perhaps feel that one or the other of the gender markers, e.g. si 'feminine' may be formally Austronesian.

The word order of the Reefs-Santa Cruz languages is predominantly Austronesian and in Santa Cruz the SVO order predominates by far, though the SOV order also occurs, especially in formal language. In the Reef language, the OV order is quite common and accounts for over one-third of the cases in a particular corpus assessed. The order of the bound morphemes in the verb complex seems to reflect non-Austronesian

features: the presence of subject suffixes and of an object prefix would come under that heading.

The systems which operate in the languages and contain formally Austronesian elements are sometimes not Austronesian, sometimes Austro-nesian: for instance, the function of the prefix *na-* is not that of the future which it usually indicates in Austronesian, but that of an irrealis which can refer to a hypothetical past event as the following example shows: *namu na-wë-ti-pnë-ä nabäbë namu tö-ngü-pnë-u poi dä nyëngä* = '*if (namu), I (-ä), had (na- + -pnë), built (wë-ti), a fence (nabäbë), the pigs (poi), would (namu), not (tö- + -u) have eaten (ngü-pnë), my (nyëngä), garden vegetables (dä)*'.

In addition, transparent grammatical categories and systems, especially if they may not contradict underlying principles of what may have been present in the original Reefs-Santa Cruz languages, seem to have been taken over: the Austronesian possessive system seems to be a typical instance of this. Given the complex systems of semantic noun classes in these languages (and in Reefs, also of other class systems with nouns and adjuncts), the notion of a complex system of possessive classes may not have been very alien to Reefs-Santa Cruz people speaking a non-Austronesian language or languages. Perhaps the very complexity of the possessive system reflects features of semantic classifications present in the original languages of these people and the distinction between realis and irrealis forms in some of the possessive verbs in Northern Santa Cruzan dialects comes to mind in this (see above 2.1.).

From the point of view of Question II (i.e. the language is originally Austronesian and contains Papuan elements as loans) the following may be said:

In the first place, there appears to be not much evidence of such events (except for straight lexical borrowings) taking place in contacts between Austronesian and Papuan languages as has been said above in 3.1. In any event, what would be expected from such a situation, would be the comparatively strong presence of straight loans on the lexical level (e.g. Dutton 1976) from a non-Austronesian source, rather than the borrowing of bound morphemes which in addition appear set into complex systems which are non-Austronesian. The taking over of such systems by themselves as borrowed elements seems quite unlikely, and even if this happened it would certainly be accompanied by massive borrowing of more transparent items such as lexical items and simple surface systems. Also, the explanation of the unresolved historical phonological situation in the Austronesian language would have to fall

back exclusively on the assumption of several different Austronesian traditions - this is not impossible of course, though for instance the explanation of the presence of the co-articulated consonant *lv* in both Yele and Santa Cruzan languages exclusively as a reflex of POC consonant sequences may encounter some difficulties.

Reviewing the four main headings mentioned above, the following seems evident in the light of what has just been said:

1. **Loanwords:** There is a comparatively small number of Papuan or non-Austronesian words in the language, some of which link with lexical items in the non-Austronesian languages to the west of the Reefs-Santa Cruz area. However, the number of the latter is limited.
2. **Foreign words with language-own inflection:** There are words which are not identifiably Austronesian and which have affixes or inflectional features which are Austronesian.
3. and 4. **Calques and Fusions:** There is little that can be put under these headings. It seems that in the case of the suffixes mentioned above under Question I.4., the explanation offered for them there appears more plausible than one that an Austronesian language containing these suffixes would have added the other (quite incongruous from the Austronesian point of view, and highly complex) meanings and functions through innovation, unless there was strong pressure from another model. In this it may be argued that it may have been very difficult for Austronesian speakers to understand the complex underlying systems as they are observable in the present-day Reefs-Santa Cruz languages, because they are in part directly contradictory to the Austronesian system (as with *-m*, *-ngö*, *-gu* and *-ti* as described) and the pressure from the simpler systems in their own language would have been too great, one would assume, for them to fully absorb them and allow them to exist side by side with the Austronesian systems.

In the light of the observations made concerning the German-English material in 3.2.2., it appears unlikely that changes in the order of bound morphemes such as the occurrence of subject suffixes and object prefix would have resulted from a contact of an Austronesian language with a Papuan one leading to borrowing by the Austronesian language from the Papuan. As has already been said above, the complex nature of some of the non-Austronesian systems present in Reefs-Santa Cruz (the system of semantic noun classification in the Reefs-Santa Cruzan languages and the complex semantic system involved in it, and the gender system found in Reefs, may also be drawn attention to in this) makes it seem unlikely that these systems would have been borrowed by Austronesian speakers from a Papuan language.

On balance, it appears that of the two possibilities mentioned above as Questions I and II, what has been said under I provides the more satisfactory answers. It appears that speakers of originally non-Austronesian languages have taken over an Austronesian language, changing their own language in the process to a very great extent with the resulting adoption of much of the Austronesian language, but preserving, at the same time, features of their own languages much as it is the case with German in the German-English situation mentioned in 3.2.1.-2.

In favouring the possibility presented in Question I, it may be mentioned again that the evidence from anthropology and other interdisciplinary approaches, such as the non-Austronesian nature of the social system of the Reefs-Santa Cruzans, their aberrant, probably non-Austronesian, arboriculture, and the prehistoric evidence, also seems to favour this view (see 1., 3.1.).

3.2.4. Innovation, and Interference in Language Learning and Adoption

Innovation can be regarded as an important source of language change. However, in saying this, it is assumed that innovations would be moderate changes of existing forms, systems and structures and not the introduction, into a language, of quite new systems and principles which contradict basic principles present in the language (unless of course they are purposefully invented or introduced as in the case with play languages (Laycock 1969, 1972)). In other words, far-reaching and deep-going innovations seem likely to reflect the influence of alien models, more precisely the application of such alien models by speakers of languages which contain such models, to another language which, as a result, shows such innovations.

This is now viewing the problem from the opposite end in terms of what happens to a language when it is learnt, or adopted, by speakers of a different language. In practice, the effects are comparable to those mentioned above in 3.2.2.-3. in connection with what happens to the speakers' own language under the influence of another - the adoption process can be thought of as an advanced stage of this first process which may eventually lead to the complete replacement of the speakers' original language by the second language. The adoption process appears to have progressed quite a long way in the Reefs-Santa Cruz situation, and about half-way in the German-English situation mentioned above in 3.2.1.-2., but such a process would come to a natural halt if the second, target or source, language were no longer present to exert further standardising pressure - this seems to have happened in the Reefs-Santa

Cruz situation when a certain stage in the language take-over was reached. The prehistoric sequence observed may well hold the explanation of the reason for this.

It seems that in the Reefs-Santa Cruz situation, the superficial take-over had gone on a long way in terms of the headings 1-3 mentioned above in 3.2.2. in connection with the German-English situation observed. Some features coming under the heading 4 are also present. Matters such as the partial replacement of the non-Austronesian OV word order by the Austronesian VO word order, the take-over of transparent grammatical categories such as the possessive system and in Reefs, even the abandonment of the subject-suffix system in intransitive verbs and its replacement by the Austronesian preposed subject particle or prefix system are also in evidence. Some of the more complex and less transparent systems of the assumed original languages of the Reefs-Santa Cruz people appear to have been preserved - this is the point at which the language adoption process seems to have come to a halt. Some features and elements in the verb phrase which are relatively easily identifiable in their functions by the speakers, such as direction of action markers, are open to replacement, in their respective positions in the verb phrase, by Austronesian elements of similar meanings - but with complicated systems and forms this seems not to be the case to that extent, even if they are peripheral in their positions in the verb phrase, such as the complex morpheme system denoting the location of an action in Malo and Reefs, and the gender system still, even if incompletely, preserved in Reefs.

When looking at the situation from the point of view of what may be expected to have happened to an Austronesian language which has been learnt by non-Austronesian speakers under the circumstances assumed, it seems that the picture presented by the Reefs-Santa Cruz situation is consistent with the type of interferences which one would expect, in terms of the following:

The presence of non-Austronesian phonological features such as similarities between the Santa Cruz and Yele phonological systems, as well as the appearance of the unique co-articulated *lv* in both;

Evidence of a non-Austronesian order of some bound morphemes in the verb complex (object prefix, subject suffixes, negative suffix, etc.);

The presence of both the non-Austronesian OV and the Austronesian VO word order;

The presence of somewhat watered-down, non-Austronesian systems, especially in the verb phrase, with elements of these systems showing formal agreements with elements of comparable systems in non-Austronesian

languages of the area (see -o, -e, -ü and other subject suffixes; -p, -b, -m, -ki, -ti, -ngi, -n in the verb structure, as discussed above in 2.7.);

The presence of a special class system with adjuncts in Reefs;

The appearance of a special non-Austronesian numeral system which shows parallels with the system found in at least one non-Austronesian language of the area;

The non-Austronesian - Austronesian contrast in the principles involved in the subject marking with transitive and intransitive verbs in Reefs;

The use of the causative prefix ni- with a number of verbs in Malo, instead of the Austronesian causative prefix a- found with other verbs;

The fusion of diverse functions of morphemes which under a single form seem to reflect different features from Austronesian and non-Austronesian sources (see what has been said about -m, -gu, -ngö, -ti in 3.2.3.);

The presence of suppletion forms of some morphemes under not phonologically conditioned circumstances;

The loss of a gender distinction in the Santa Cruzan languages, and its partial preservation in Reefs. In this, it may be pointed out that it is possible that one of the non-Austronesian languages assumed to have played a role in the shaping of the Reefs-Santa Cruz situation may not have had a gender distinction: Yele has no gender distinction. The possible suggestion that two apparently related languages of which one has gender distinction and the other one has not, may therefore be unrelated to each other, seems to have no validity: there are a number of quite obviously closely related language pairs in the world of which one shows gender distinction and the other one does not: Modern Persian, which has no gender distinction, and any one of the other closely related Iranian languages which has, are a case in point;

The presence of semantic characteristics of lexical items which are unusual in Austronesian languages, but are met with in non-Austronesian languages of the area;

The frequent use of a considerable range of nominalised verb forms, which reflects a characteristic of non-Austronesian languages of the area;

The presence of some contrast between medial and final verb forms; etc.

Such a learning process could be expected for the prehistoric Reefs-Santa Cruz area in a social situation involving inter-action and inter-marriage between speakers of non-Austronesian and Austronesian languages.

As is evident from direct observations involving such situations in the New Guinea area, the Austronesian speakers would (barring exceptional circumstances) generally not (refuse to or seem unable to, even if they try) have learned the non-Austronesian language. The non-Austronesians, men and women alike, would have learned the Austronesian language with interference phenomena in it. Their knowledge of the Austronesian language would have affected their usage of their own language as is observable in the German-English situation referred to above in 3.2.1.-2, with the eventual merging of this modified form of their own language, the form of Austronesian spoken by the non-Austronesians, and the original form of the Austronesian language into one or several new stabilised forms in the relatively small speech communities in the area once isolation resulting from the prehistorically observed cessation of the trade-route had set in.

This explanation appears to fit the observed situation best.

As an alternative, it could be assumed that the Reefs-Santa Cruz languages were pure Austronesian languages which underwent numerous innovations as a result of long isolation, and were also exposed to different Austronesian traditions at different times. If this had been the case, why did other comparable situations involving Austronesian languages such as the established presence of different Austronesian traditions in Rotuman (Biggs 1965) not produce results comparable to those found in the Reefs-Santa Cruz languages? How is the presence of not normally Austronesian features in the Reefs-Santa Cruz languages to be explained solely through long isolation, if such features show formal, functional and systemic parallels with comparable phenomena in non-Austronesian languages of the area?

4. LEXICAL AGREEMENTS BETWEEN REEFS-SANTA CRUZ LANGUAGES AND NON-AUSTRONESIAN LANGUAGES TO THE WEST

In this paper, the author has purposefully refrained from comparing lexical elements of the Reefs-Santa Cruz languages and of non-Austronesian languages to the west. There are such agreements, but the author feels that detailed work on them is something for later when more is known about the lexicon of all the languages involved. The danger of comparing recognised or unrecognised Austronesian loans in them is too great - that is what happened to Greenberg in his attempt to compare these languages, as the author pointed out himself (Wurm 1970). A very few suggestive similarities some of which may perhaps conceivably prove to be Austronesian loans, may be given here (in phonetic script):
 Malo mu = 'black mud', Buin mu = 'black'; Malo mela, Buin mera(-gu) =

'to be good'; Malo -tʷ, Yele tuu = 'smell'; Malo -kʷ, Yele kuv = 'unripe' (-ʷ after an initial vl stop in Malo regularly corresponds to uu, preceded by the same vl stop as in Malo); Malo mɔ, Yele (pæʔə-) maa = 'fly(n)'; Reef pe, Yele pi, (Savo mapa) = 'person'; Malo ndæ, Yele nte = 'food'; Malo temo, Yele tɔ = 'moon'; Nooli ndʒə, Yele ndə, Nasioi nta, Savo kenda = 'fire'; Malo kəlu, Nanggu iklu, Baniata kulio = 'many'; Nemboi i-pwə, Nooli pə, Yele poi, Nasioi apo = 'rain'; Malo mbo-, Nemboi, Nooli, Nanggu mbo-, Reefs to-pwa-, Yele mbe, Nasioi pa-, Savo pa- = 'sky'; Malo mu, Nemboi mwə, Nooli mwə, Yele ma, Nasioi maa = 'eat'; Malo wəmbu, Bilua papi, Baniata fofu = 'sit'; Malo (m)beo, Baniata baɔ = 'cold'; Malo po-, Savo pau 'to (tell a) lie'; etc.

5. CONCLUDING REMARKS

From what has been said in this paper, it seems that the Reefs-Santa Cruz languages may present a special problem which may not be amenable to a solution through traditional comparative linguistic methods. As has been mentioned before in this paper in 1., the Reefs-Santa Cruz situation may perhaps bear some comparison with what is one of the possible hypotheses of the origin of Hiri Motu (i.e. the former Police Motu) which includes a possible relexification of Pidgin in its development. Similarly, Pidgin itself comes to mind as a kindred problem: as Mühlhäusler (1976) has demonstrated, it is quite unlike English, though from the comparative linguist's point of view, it is English; also Magori which superficially seems Papuan but is Austronesian (Dutton 1976) may again be mentioned in this connection.

In the light of what has been said, the author presumes that the original language or languages of the Reefs-Santa Cruz people were Papuan and belonged to the same group to which the non-Austronesian languages to the west of the Reefs-Santa Cruz area belong, and which has been tentatively established as the East Papuan Phylum (Wurm 1975a). This seems evident from the present-day Reefs-Santa Cruz languages. The author therefore feels that it is justifiable to classify these languages as originally members of this Papuan group which have been very largely destroyed in their nature through the far-reaching takeover of an Austronesian language. In the author's opinion, these languages represent the easternmost extension in the south-western Pacific of an identifiable non-Austronesian element. This classification is concerned with the origin of these languages which, in the author's view, is the prime issue surrounding them in the light of the study of the prehistory of the area, which has been in progress for some time.

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