NOTES ON THE INDICATION OF POSSESSION WITH NOUNS IN REEF AND SANTA CRUZ ISLANDS LANGUAGES

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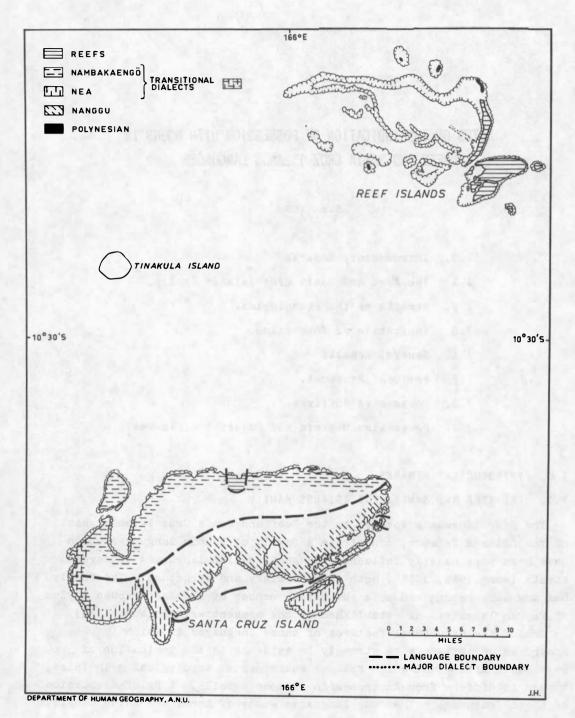
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1.0. INTRODUCTORY REMARKS

1.1. THE REEF AND SANTA CRUZ ISLANDS FAMILY

The four languages located in the Reef and Santa Cruz Islands, east of the Solomon Islands, constitute a family of Papuan languages which have been very heavily influenced by Austronesian languages of several strata (Wurm 1969, 1970), both in vocabulary and structure. The family has now been recognised as a sub-phylic member of the East Papuan Phylum of Papuan languages as established by the present writer (Wurm 1973).

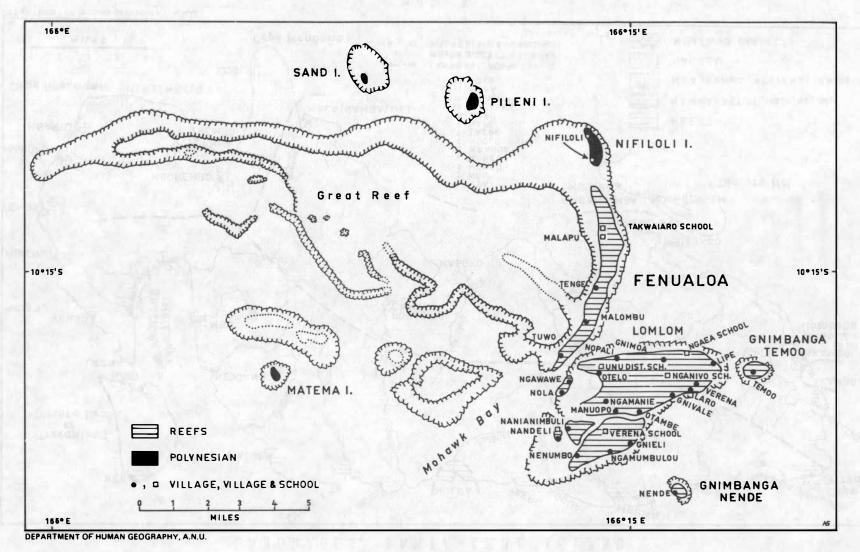
One of the structural features of these languages in which Austronesian influence is strongly in evidence is the indication of possession with nouns which follows Austronesian typological principles, though it differs from Austronesian in some details. A brief discussion of these features in the four languages - one of them, Nea which consists



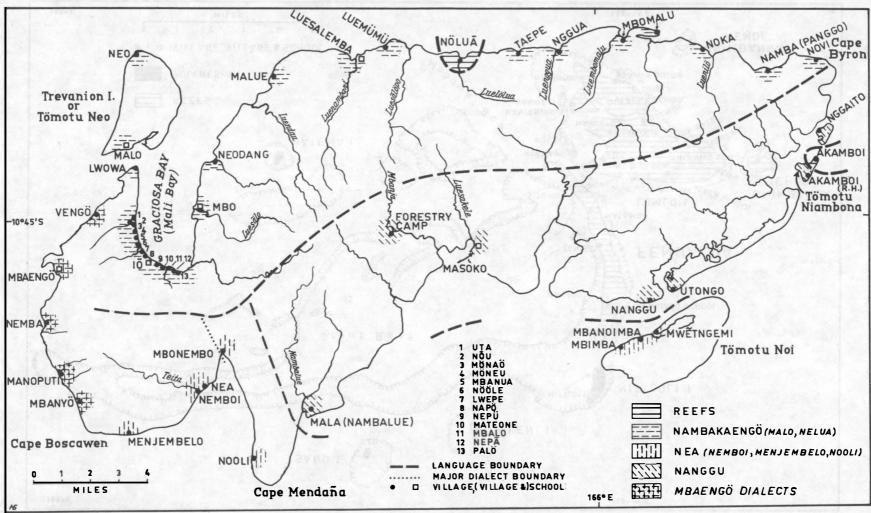
LANGUAGES, REEF AND SANTA CRUZ ISLANDS



LANGUAGES, REEF ISLANDS



MAP 2



LANGUAGES, SANTA CRUZ ISLAND

MAP 3

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of two highly aberrant dialects, represented by the two dialects - will be given below.

The Reef and Santa Cruz Islands Family (7150 speakers) shows the following internal composition:

Reefs Sub-Family (3600 speakers) Reefs (3600 speakers) Santa Cruz Sub-Family (3550 speakers) Nambakaengö (or Löndäi) (2200 speakers) Nea Western dialect (800 speakers)

Eastern dialect (300 speakers) Nanggu (250 speakers)

It has recently been established that the correct name for the Nambakaengö language as used by at least a portion of the local population is Löndäi. Nambakaengö is a geographical term, and has been in use for some time. The language consists of a number of closely related dialects of which, in this paper, the one of the village of Malo on Trevanion Island (or Tömotu Neo) will be used to represent the language.

The western main dialect of the Nea language will be represented here by the local dialect of the village of Nemboi, and the eastern main dialect by that of the village of Nooli.

Reefs and Nanggu show little dialect differentiation. The materials presented here have been collected from speakers from the villages of Tuwo and Nanggu respectively.

1.2. REMARKS ON THE PHONOLOGIES

All the languages have quite complex phonologies, with comparatively large numbers of consonant and even larger numbers of vowel phonemes (Wurm 1969, 1970). Reefs is phonologically markedly simpler than the Santa Cruz languages.

In the following, only a listing of the phonemes of the languages and dialects discussed here will be given. Doubtful phonemes are followed by ?

Reefs

Р	t	k	(kh)?	P۳	k۳	py?	ь	d	9	ьч	g ₩?
d٧?	m	n ^v ?	n	ŋ	m₩	ŋ٣	v	s	1	w	у
ī	е	ä	a	ס	Р	o	u				
eį	ou										

Malo Nambakaengö (Löndäi): k٣ tw k^h PW th Ph Ρ k t ЬΥ? gw **b**¥ ٩A Ь d g k۷ РУ s∿t Y ŋ٣ V nw m۷ 0 ПΥ n m W Y 1 a ĩ ö ü ə 0 u ä D е а i õ ũ õ ñ

ã

90

ei

Nea: Nemboi

P	t	k	рh	th	k ^h	P٣	tw	k₩?			
DY	Ь	dy~dz		d	g	Ь₩	dw?	g۳			
m	пУ	n	ŋ	m۷	n۷	ŋ¥?	V	S			
20 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -										~	~
i	е	3	а	Э	0	u	ü	ö	ə	a	Ŭ
ũ	õ	γ ε ə̃									
		εį									

Nea: Nooli

t Y∿s k٣ РУ tw k^h th PW ph k t Ρ ПΥ ŋ Π d۳ gw m Ь₩ dv~dz d g Ь Y 1 W nw ŋ 4 V mΨ

i	е	3	ä	а	Э	0	u	ü	ö	ə	é	ĕ	ã	
3	ũ	ĩ	õ	õ										
aj	ej	εj	эй	oŭ	ag									
Nango	gu					1. 19. 19.								
Ρ	t	k	ph	th	kh	РW	tw	k٣	РŸ	tΥ				
b	d	g	ЬΨ	٩w	g٣	ЬУ	d۷	m	n	ŋ				
mΨ	ŋ w	mУ	nУ] Y	1	W	У			(1)	and i	~	~	
i	е	ä	а	Э	0	u	ü	0	9	ē	a	u	ð	
ai	ei	ou	au	рс										

NOTES

1. Voiced stops are prenasalised in Reefs and Malo. In Nemboi, Nooli and Nanggu they 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.

2. Vowel length seems to be phonemic in all five communalects, but long vowels are rare in Malo, Nemboi and Nooli. In Reefs and Nanggu they are frequent. In all the languages and dialects treated here, exception Nanggu, they manifest themselves phonetically as repeated articulations of their short equivalents, and will be written as double vowels. In Nanggu, they appear phonetically as lengthened versions of the short vowels, and will be written as V:.

3. Stress may prove to be phonemic, though some of the features of the stress pattern are predictable.

4. To indicate the phonetic values of the monophthongal vowel symbols used, a maximal vowel diagram will be given below. ~ indicates nasality which is phonemic.

1		ü	u	ĩ		ũ	ũ
e			0	ẽ			õ
ε	ö	ə	Э		õ	õ	3
ä			D	ä			ñ
		а				ã	

2.0. INDICATION OF POSSESSION

2.1. GENERAL REMARKS

In all the languages and dialects under discussion, possession is indicated by the addition of possessive suffixes to nouns denoting most relationships and many parts of the body, as well as a few other things (e.g. *name*). In Malo, Nemboi and Nooli, i.e. in the Nambakaengö (or Löndäi) and Nea languages, these suffixes appear in two distinct sets with different nouns belonging to the above categories which allows the sub-division of these nouns into two classes in these languages (see 2.3.2.).

The possessive suffixes - in Malo, Nemboi and Nooli one of the two sets of possessive suffixes - are generally the same as those added to the personal pronominal bases (see 2.2., 2.3.). Many nouns in the Santa Cruz languages undergo more or less extensive morphophonemic changes and appear in two or several allomorphic forms, when possessive suffixes are added to them. This feature is more pronounced in Nanggu than in Malo, and only weakly in evidence in the Nea dialects. Most of the changes are morphologically conditioned.

With nouns denoting other objects, possession is expressed in all the languages by separate possession markers which follow the nouns, and to which the possessive suffixes are added. In Malo, Nemboi and Nooli these suffixes are generally those of the set appearing in the formation of the personal pronouns (see 2.2., 2.3.), though some special forms are present (see 2.3.1., 2.4.). In all the languages, the number of distinct possession markers is quite considerable, and in consequence, the nouns can be assigned to a range of possessive clauses which are different from, and cross-cutting with, the article classes and semantic classes which are also a feature of the languages of the Reef and Santa Cruz Islands Family (Wurm 1969). At the same time, individual nouns can, for semantic reasons, belong to several distinct classes, e.g. stone in Malo can be a member of the holding class, i.e. apla sp-nä = my stone (in my hand) if the emphasis is on the fact that it is a stone which is held in one's hand, or of the utensils class, i.e. apla kö-nä = my stone (for use as a tool) if it is used as a tool, or of the specific food class, i.e. apla na-nu = my stone (for use in the earth oven) if it is a cooking stone, etc. Similarly, taki na-nu = my taro (for eating), and taki nya-nä = my taro plant. However, in some cases, the membership of a noun to a particular class is not fully predictable: for instance, fighting arrows belongs to the utensils class, i.e. nip^hna kö- $\eta\ddot{a} = my$ (fighting) arrow, whereas fishing arrows are members of the holding class, i.e. töteo sp-gä = my (fishing) arrow. In this case, the class membership of tötao = fishing arrow reflects its origin from the Polynesian fishing spear (p0 + tao = spear) which is a hand-held utensil taken over by the Santa Cruz islanders from the Polynesians together with its name, but used as an arrow like the fighting arrow whose name is also of Austronesian origin (p0 *panag = arrow).

The possession markers are also placed between nouns to indicate possessive relations between them (e.g. *the man's dog*). In Reefs, they appear in the third person singular forms in this function, whereas in the Santa Cruz languages, they are almost exclusively used in their basic forms, without possessive suffixes added to them.

2.2. PERSONAL PRONOUNS

In all the languages of the family, the personal pronouns are formed by the addition of suffixes which are largely the same as those added to nouns and possession markers to denote possession, to an unchangeable base which is <u>ju-</u> (in the first and second persons) and i- (in the third person) in Reefs and ni- in the Santa Cruz languages. All the languages 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 Santa Cruz languages have singular and plural forms in all persons, and a dual form in the first person inclusive, Reefs has singular, dual and plural forms throughout, plus a trial form in the first person inclusive.

The personal pronouns are as follows:

	Reefs	Malo	Nemboi	Nooli	Nanggu
lsg.	iu	ni-ŋä	ni	ni-ŋa	ni
2sg.	ju-mu	ni-m	ni-m	ni-m	ni-m
3sg.	i-na	ni-de	ni-de	ni-de	ni-de
ldl. incl.	iu-dyi	ni-gi	ni-gi	ni-gi	ni-da
ldl. excl.	ju-ŋole	-	and the second		
2d1.	lu-mile	-	-		
3dl.	iu-d ^y ile	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1200
ltl. incl.	ju-dele)				
ltl. excl.	-	absent fro	m the Sant	a Cruz la	nguages.
2t1.	-				
3tl.	-)				
lpl. incl.	ju-de	ni-gu	ni-go	ni-go	ni-dam∀e
lpl. excl.	iu-go	ni-gö	ni-gomu	ni-gö	ni-go
2p1.	iu-mi	ni-mu	ni-m∀i	ni-mu	ni-m∀e
3p1.	iu-dyi	ni-dö	ni-gö	ni-ne	ni-ŋö

2.3. POSSESSIVE SUFFIXES

2.3.1. Basic Forms

The possessive suffixes appearing with nouns and possession markers differ from those entering into the formation of the personal pronouns

in the following respects, or call for the following comments:

Reefs

The basic lexical form of those nouns to which possessive suffixes are directly added, is at the same time the form denoting possession by the first person singular. Possessive suffixes of the other persons are added to this basic form, e.g. nime = hand = my hand; your (sg.) hand = nime-mu.

Instead of by the appearance of the suffix -na as found with the personal pronouns, possession by the third person singular is indicated by the change of the final vowel of the basic singular form to $-\ddot{a}$, e.g. nimä = his hand. To denote possession by the third person plural and dual, -i and -i-le are suffixed to this -ä, e.g. nimä-i = their hands, nimä-i-le = their two's hands.

Another example: nääŋu = name = my name, nääŋu-mu = your (sg.) name, nääŋa = his name, nääŋä-i = their name(s), nääŋä-i-le = their two's name(s).

If the basic form of a noun ends in -u with -a- preceding it, -u is dropped before a possessive suffix of a person other than the first singular, and possession by the third person singular is indicated by the -a of the basic form, with the stress remaining on -a if it carried it in the basic form, e.g. nuo'tau = head = my head, nuo'ta-mu = your (sg.) head, nuo'ta = his head, nuo'ta-i = their heads, nuo'ta-i-le = their two's heads.

The possessive suffix of the first person singular with possession markers is -u or θ , but some special forms occur in addition which is also the case with the third person singular forms of the possession markers.

Malo

The following special possessive suffixes appear with possession class markers in Malo: with the general food class marker (see 2.4.2., class 2.), the first person singular possessive suffix is $-\eta u$, e.g. dakanegü tä- $\eta u = my$ food; with the specific food class marker (see 2.4.2., class 3.) it is -nu, e.g. taki na-nu = my taro.

Nemboi

The suffix added to the personal pronominal base ni- in the first person singular is $-\theta$, but the appropriate possessive suffix of that person with nouns and possession markers is -nu, e.g. nawö = head,

nawö-nu = my head (for the second series of possessive suffixes see 2.3.2.), lökö na-nu = my taro. In the utensils class marker (see 2.4.3., class 4.), the first person possessive suffix is -tu, e.g. nüwi gö-tu = my string.

Nooli

The possessive suffix of the third person singular with nouns and possession markers is in some cases $-d^{\gamma}e$, and that of the third person plural in some $-n^{\gamma}e$, e.g. $le-d^{\gamma}e = his$ father, $laole-n^{\gamma}e = their$ mother. In the first person singular, the special possessive suffix $-m^{\nu}a$ appears with the food class marker (see 2.4.4., class 2.), e.g. böpi ne-m^{\u03be}a = my banana, and also as a suffix added to nouns denoting edibles which are not accompanied by the food class marker, e.g. datenai-m^{\u03be}a = my food. With the independent contents class marker (see 2.4.4., class 7.) the first person singular possessive suffix is -na, e.g. kaki ö-na = my wound.

Nanggu

The possessive suffix of the first person singular is $-\theta$, with special forms appearing with the possessive markers, but in nouns which have two or several allomorphic forms according to the person of the possessive suffix added to them (see 2.1.) the form denoting possession by the first person singular is either allomorphically unique, or the same as that appearing in conjunction with one or two other possessive suffixes, mostly of the first person in a non-singular number, e.g. breast (female): my = n"othi, your (sg.) = n\"oyö-m, her = n\"oye-de, our (excl.) = n\"oyo-go; mother: my = ise, with all other persons: iso - +possessive suffix; nose: my = dothum, your (sg.) = döthü-m, his = döthü-de, our two's (incl.) = dothu-da, our (incl.) = döthü-damwe, our (excl.) = dothu-go, your (pl.) = döthü-mwe, their = döthü-ŋö.

2.3.2. Two Sets of Possessive Suffixes in Malo, Nemboi and Nooli

As has been mentioned before (see 2.1.), possessive suffixes appearing with some of the nouns to which such suffixes are directly added in the three communalects listed above differ formally from those given and discussed in 2.2. and 2.3. for Malo, Nemboi and Nooli. This makes it possible to assign the nouns which, in these communalects, take possessive suffixes directly, to two distinct classes. In Nooli, this phenomonon is only weakly in evidence, and nouns appearing with the special possessive suffixes rarely display full ranges of them. Generally speaking, the second set of possessive suffixes differs from the first in having mostly voiceless initials in place of the voiced ones of the first set, but there are other differences as well. The second set is as follows:

	Malo	Nemboi	Nooli
lsg.	-kä	-lu∿-tu	-da∿-ta
2sg.	- p	-p¥i	-p
3sg.	-te	-te	-te
ldl. incl.	-ki	-ki	-ki
lpl. incl.	-ku	-ko	-ko
lpl. excl.	-kö	-komu	-kö
2p1.	-pu	-p∀i∿-ŋəm∀i	-pu
3pl.	-tö	-kö	-de

Examples: Malo: intestines = bə, my = bə-kä, your (sg.) = bə-p, his = bə-te, our two's (incl.) = bə-ki, etc.; Nemboi: eye = num ə, my = num ə-lu, your (sg.) = num əp i, his = num ə-te, our two's (incl.) = nüm ə-ki, our (incl.) = nüm ə-kə, etc.; Nooli: m a-da = my eye, m a-p = your (sg.) eye, pulem a-kö = our (excl.) forehead, etc.

2.4. POSSESSION MARKERS AND POSSESSIVE CLASSES

2.4.1. Reefs

In Reefs, ten different possession markers have been found to date, which gives a total of eleven possessive classes with the class of nouns to which possessive suffixes are added directly, unless those nouns of the latter category which end in -a-u are regarded as an additional class (see 2.3.1.) which would give a total of twelve. The possession markers (and possessive classes) are as follows (because of the presence of morphophonemic changes and some irregular suffixes, the full range of the singular and plural forms will be given with each marker, with the incl. form preceding the excl. in the plural. Most dual and trial forms are regularly derived from the plural forms through the addition of -le, and the first person dual incl. form in -dvi is modelled on the first person plural incl. form in -de):

 General possession class; marker: nou, nomu, no, noude, nouŋo, noumi, noi.

Nouns belonging to it denote objects which do not fall under the categories discussed below in connection with the other classes, and which are possessed in a general way.

Examples: n^yiivä nou = my stone, n^yena no = his tree, numumulo nod^yi = our two's (incl.) butterfly.

2. Food class; marker: nugo, namu, na, nade, nugono, nami, nai. Nouns of this class indicate articles of food and objects and utensils which are associated with food in some way, such as fishing spears, digging sticks, cooking stones for the earth oven, axes, knives, etc.

Examples: nub"ole nugo = my taro, n^yiivä na = his (cooking) stones, nawab^wi nai = their digging sticks, nuoli nugono = our knives.

 Drink class; marker: num^vo, num^vomu, num^vä, num^vode, num^voŋo, num^vomi, num^väi.

Nouns of this class denote potables, as well as sugarcane.

Examples: nuoi num"o = my water (for drinking), nau num"a = his sugarcane.

4. Betel class; marker: dano, damu, da, dade, daŋo, dami, dai.

Nouns of this class denote betel nuts and objects used in connection with chewing betel such as lime, lime gourds, lime spatulas, etc.

Examples: numatapi dano = my betelnut, nepa da = his lime spatula.

 Utensils class; marker: nugu, nugumu, nogo, nugude, nuguno, nugumi, nogoi.

Nouns belonging to this class refer to tools, utensils, and things used for achieving some purpose, unless they belong to the food class (see 2) above).

Examples: d'aäp "a nugu = my bow, siŋa nogo = his lie, lolop "a nuguŋo = our (excl.) story, n'äwo nogoi = their talk.

 Immovables and location class; marker: to, tomu, tä, tode, toŋo, tomi, täi.

Nouns belonging to this class indicate things which are located somewhere. Many of these are not readily moveable, such as houses, islands, valleys, etc.

Examples: $nuop \forall \ddot{a} \ to = my \ house$, temotu t $\ddot{a}i = their \ is land$, numobatono = our (excl.) valley.

7. Flower and fruit class; marker: denou, denomu, deno, donode, denoŋo, denomi, denoi.

Nouns denoting flowers and fruits (as far as the latter do not belong to the food class) and $nuup^ua = flower$ and nua = fruit constitute this class, e.g. $nuup^ua$ denou = my flower, nua deno = his fruit (not for eating).

 Toe class?; marker: nako, nakomu, nikä, nakode, nakono, nakomi, nikäi.

Only the word nagago = toe has so far been found to belong to this class; e.g. nagago nika = his toe. There has been uncertainty about this class marker and disagreement amongst the informants about it. Some of them used nuku = foot after nagago, adding the possessive suffixes to nuku, i.e. nagago nuku-mu = your (sg.) toe, and using the form nyikä for the third person singular. In this usage, nuku functions like a class marker and can be regarded as such.

9. Wound class; marker: ŋagu, ŋagumu, ŋago, ŋagude, ŋaguŋo, ŋagumi, ŋagoi.

This is basically not a real class marker, but the preposition $\eta ag(u)$ - signalling the indirect object of verbs. However, when placed after nouns it functions as a possession marker and can be included here.

Nouns denoting wounds belong to this class. Example: n^yeb^wali ŋagu = my wound.

 Skin and bone class; marker: nisi, nisimu, nisä, niside, nisiŋo, nisimi, nisäi.

This marker is one of the words for *body* which functions as a possession marker.

Nouns indicating bone, skin and skin blemishes belong to this class. Examples: neve nisi = my bone, lage nisä = his skin, topalu nisimu = your (sg.) sore.

2.4.2. Malo

In Malo, fourteen different possession markers have so far been found. Together with the two classes of nouns to which possessive suffixes are directly added (see 2.3.2.) this gives a total of sixteen possessive classes. The semantic distribution of the classes is somewhat comparable to that encountered in Reef, and there is formal similarity between a few of the class markers in the two languages.

The possession markers (and possessive classes) are as follows (only the basic forms of the markers will be given in most cases because the addition of the possessive suffixes - see 2.2. for their forms - to them is generally regular and most of the markers themselves are not subject to morphophonemic changes. The few irregularities occurring will be indicated):

General possession class; marker: na- ∿ ne-.

The allomorph ne- appears in 1, 2sg. and 2pl. When the noun to which the marker is added ends in -i or $-\ddot{u}$.

Nouns included in this class denote objects which do not belong to the categories referred to below in connection with the other classes. This includes nouns which may appear as members of other classes, but which are referred to as possessed in a way which differs from the possibilities discussed under the other class headings. For instance, a pigeon looked upon as a food bird belongs to the specific food class (see 2. below), i.e. bona na-nu = my pigeon (for eating), whereas a pigeon of the same kind kept as a pet belongs to the general possession class, i.e. bona nä-nä = my (pet) pigeon. In general, this class includes persons - except for relatives (see 2.1.) and affines (see below, class 11.) - animals, birds and fishes and things associated with them referred to without the purpose of eating in mind; reptiles and insects, natural phenomena and objects in nature such as the sun, moon, stars, clouds, wind, rain, etc., and others.

Examples: noblo nä-m = your (sg.) man, kuli ne-m = your (sg.) dog, kionöwü ne-nä = my (pet) bird, neimö toak^he nä-nä = my seagull's egg (for playing) (as opposed to neimö toak^he na-nu = my seagull's egg (for eating)), bep^hu nä-nä = my lizard, mo nä-nä = my fly, nepi ne-nä = my sun, vei ne-mu = your (pl.) stars.

2. General food class; marker: tä-.

The possessive suffix of the first person singular is $-\eta u$, not the usual $-\eta \ddot{a}$.

Only the noun dakänəŋu = food has so far been found to belong to this class, e.g. dakänəŋü tä-ŋu = my food, dakänəŋü tä-de = his food. However, this word can also be used with the possession marker na-nu etc. of the specific food class (see 3. below).

3. Specific food class; marker: lsg. na-nu, 3sg., 3pl. na- + possessive suffix, all others: nä- + possessive suffix.

This class marker overlaps in the majority of its forms with that of the general possession class (see above, 1.).

Nouns of this class denote specific foodstuffs, be it vegetable (excluding sugarcane which belongs to the drink class) or animal, and some utensils associated with cooking, eating, such as pots, plates, cooking stones, knives, axes and baskets. Some of the utensils associated with garden food such as knives, axes and baskets can also belong to the garden utensils clan (see below, 8.) if the focus is on their use as gardening tools. Examples: taki na-nu = my taro, taki nä-m = your (sg.) taro, nəlu na-nu = my coconut (for eating), mälüp^hə na-nu = my flying fox (for eating), əplə nä-gö = our (excl.) cooking stones, kənöbo na-nu = my axe.

4. Drink class; marker: pü-.

Nouns of this class indicate potables and also sugarcane.

Examples: lue pü-ŋä = my water (for drinking), nəlü pü-dö = their sugarcane.

5. Betel class; marker: ma-.

Nouns of this class denote betel nuts and objects used in conjunction with chewing betel such as betel lime, lime gourds, lime spatulas, etc.

Examples: kalva ma-ŋä = my betel nut, päi ma-m = your (sg.) betel leaf, nöakä ma-gö = our (excl.) betel lime.

6. Holding class; marker: sp-

Nouns belonging to this class refer to objects that can, and often or usually are, held in one's hand, e.g. a stone, bow, club, sand, soil, etc., and also fishing arrows and bird arrows.

Examples: ple sp-ga = my stone (in my hand), $dot^h \tilde{p} sp-de = his$ sand (or soil) (in his hand), $p\tilde{p}\tilde{p}\tilde{s}sp-m = your$ (sg.) bow, tobu sp-gu = our(incl.) (flat-ended) bird arrow.

7. Utensils class; marker: kö-.

Nouns of this class denote an array of utensils and similar objects such as canoes, paddles, fishing nets, fighting arrows, bags, articles of clothing, etc.

Examples: nöpmu kö-ŋä = my canoe, nöə kö-dö = their paddles, bö kö-m = your (sg.) fishing net, (see also classes 10., 11. and 13.) nääku kö-de = his clothing, nip^hna kö-gö = our (excl.) fighting arrows, bäki kö-gi = our two's (incl.) bags.

8. Garden untensils class; marker: np-.

Nouns of this class indicate a number of tools and objects which are linked with obtaining food from gardens, such as axes, knives, baskets and the like (see also the discussion of the specific food class in 3. above).

Examples: kənöbo no-ŋä = my axe, toki no-de = his knife, toplə no-m = your (sg.) basket (can also be a member of the utensils class (see 7. above).

Location class; marker: nya- ∿ nya- ∿ nyö- ∿ nyo-.

The allomorph nYa- appears when the noun preceding the marker ends in -u or -ü, nYö- after final -o, ö and -ə, nYo after final -a and -p, and nYa- after other finals, with nasal vowels apparently having the same influence as their non-nasal equivalents.

Nouns belonging to this class denote things which are located somewhere. Many of these are immovable or at least not readily movable.

Examples: tömotu n'a-gö = our (excl.) island, lplö n'ö-ŋä = my garden, döt^hõ n'o-m = your (sg.) ground, bü n'a-dö = their ashes, taki n'a-ŋä = my taro plant, dop^ue n'a-m = your (sg.) sea, esikapu n'a-ŋa = my smoke (sitting in the air) (see also the purpose and fire classes in 10. and ll. below).

10. Purpose class; marker: nö-.

Nouns belonging to this class indicate objects which serve a certain purpose.

Examples: nyö nö-ŋä = my fire (which serves a certain purpose), esikapu nö-mu = your (pl.) smoke (which serves a certain purpose) (see also the location and fire classes in 9. and 13.), bö nö-ŋä = a net for me (compare also bö nö monidü = mosquito net, i.e. net for mosquitoes).

11. Dependent contents class; marker: jo-.

This class contains nouns indicating objects which constitute contents of other things, on the understanding that the contents only came into existence when the container came into being, or normally cannot exist independently from their container. Alternatively, the contents and the container form an inseparable whole and represent a single concept. For instance, nouns of this class include names of body parts with which possession is not expressed by the simple addition of suffixes (see 2.1.), and also the words for *husband* and *wife*.

Examples: mäp vö ŋö-ŋä = my blood, toto ŋö-m = your (sg.) (body) fat, növö ŋö-gö = our (excl.) bones, nöwö ŋö-dö = their flesh, noblo ŋö-de = her husband, doka ŋö-de = his spirit (in the meaning of God in the Christian Missionary usage, the word dökã belongs to the general possession class discussed above under 1.). The word bö = net has also been found as a member of dependent contents class, in the meaning of a net full of fish, i.e. bö ŋö-ŋä = my full net.

12. Independent contents class; marker: ö-.

Nouns of this class indicate objects which are contents of other things, but which existed in some form or other before their present container came into being, or which can be, and often are, separated from their container and can exist independently from it.

Examples: näkü ö-ŋä = my (pre-European) clothing, näkü ö-m = your (sg.) (pre-European) clothing. The word for liver, sate, also belongs to this class, i.e. sate ö-ŋä = my liver - the reason appears to be mythological.

The contrast between the dependent contents class (11.) and this independent contents class can be seen very clearly in noun phrases involving two nouns in possessive relation (see 2.1.), e.g. notöpou gö $m^{\nu_a} n^{\nu_o} - \eta \ddot{a} = a \text{ post of my house}$, i.e. a post already built into it, notöpou ö $m^{\nu_a} n^{\nu_o} - \eta \ddot{a} = a \text{ post of my house}$, i.e. a post which is ready to be put into my house, but is not yet part of it, or alternatively, a post in my house referred to with the focus on the fact that the post pre-existed the house in the shape of a tree.

It is interesting to see that the names of some body parts which are denoted by noun phrases containing two nouns in possessive relation often involve the marker ö though the parts referred to by the two nouns can not in all cases move independently from each other, e.g. nöätoki ö mü = finger (of arm/hand), töpuplü ö mü = elbow (of arm/hand), tokovi ö mü = fingernail (of arm/hand) (analogy?).

13. Fire class; marker: mnö-.

This class contains nouns which denote things associated with fire and warmth such as fire itself, smoke (these can also be members of other classes, see 9. and 10. above), firewood, blankets, mats, lamps, light and also mosquito bites and other things associated with mosquito bites such as mosquito nets.

Examples: n Yö mnö-ŋä = my fire, esikapu mnö-gö = our (excl.) smoke, nanö mnö-de = his firewood, nüni mnö-gu = our (incl.) mats, bö mnö-ŋä = my mosquito net (in contrast to bö kö-ŋä = my fishing net – see 7. – see also 10.).

14. Parts of lower leg class; marker: nyp-.

Nouns of this class indicate parts of the lower leg such as calf, shin bone, foot, etc.

This possession marker is derived from $nan^{\gamma}D = leg$ through the omission of the article na-.

Examples: sate $n^{y}p$ - $\eta\ddot{a} = my$ calf (also sate \ddot{o} nan ^{y}p - $\eta\ddot{a} = liver$ of my leg), matövö $n^{y}p$ -m = your (sg.) shinbone.

2.4.3. Nemboi

In Nemboi, only eight possession markers have been found to date, and it seems clear that this comparative paucity of possession class markers and classes is a feature of the Nea language in which Nemboi belongs to the western major dialect, and not only due to the limited amount of the materials assessed. Some important classes met with in the other languages such as the location class, are absent from Nemboi. Together with the two classes of nouns to which possessive suffixes are directly added (see 2.3.2.), this gives a total of ten possessive classes.

The possessive class markers (and classes) are as follows (only the basic forms of the markers will be given in each case because the addition of the possessive suffixes - see 2.2. and 2.3.1. for their forms - is generally regular, and the markers themselves are not subject to morphophonemic changes. The few irregularities occurring will be mentioned):

General possession class; marker: nε-.

Nouns belonging to this class belong to a very wide range of categories: persons (excluding relatives - see 2.1. - and affines - see below, class 8.), inedible animals, birds, reptiles and fishes (or edible ones referred to without the purpose of eating in mind), things located somewhere and generally not readily movable such as the ground, islands, valleys, paths, villages, houses, trees, etc., not directly palpable objects and phenomena in nature such as the sun, moon, stars, sky, rain, etc., flowers, and others.

Examples: nüŋə nɛ-de = his man, obʷɛ nɛ-nu = my child, nö: lu nɛ-mu = your (sg.) stingray, nübʷa nɛ-gö = their shark (i.e. which they caught, without thinking of eating it) (as opposed to nübʷa na-gö = their shark (for eating)), uto nɛ-gɔmu = our (excl.) bird, bö nɛ-de = his butterfly (also bö na-de), meitʰə nɛ-mʷe = your (pl.) ground, mətalia nɛ-gɔ = our (incl.) village, bəma nɛ-gi = our two's (incl.) house, ipʷũ nɛ-mʷe = your (pl.) rain, tɛmʷə nɛ-gɔmu = our (excl.) moon, nöpʰū nɛ-gö = their flowers, etc.

2. Food class; marker: na-.

Nouns of this class include all sorts of food, both animal and vegetable - except sugarcane which belongs to the drink class - parts of fishes such as fins, scales, etc., and most insects even if they are not eaten today. Even those insects which usually belong to the general possessive class mentioned above under 1. can optionally belong to the food class. In contrast to the other languages of the family, nouns refering to utensils associated with food in some way do not belong to this class, but to the utensils class (see 4. below) except for cooking stones. At the same time, nouns referring to betel nuts and objects connected with the chewing of betel such as betel lime, lime gourds, etc., come under this class.

Examples: lökö na-nu = my taro, böpi na-de = his banana, lobo na-go = our (incl.) crabs, no na-gi = our two's (incl.) fish, nöləwö no na-nu = my fish scale, nəwi na-gö = their lice, myokilələ na-myi = your (pl.) mosquitoes, oplə na-gomu = our (excl.) cooking stones, kɛtü na-gomu = our (excl.) betel nuts, do na-nu = my betel lime, etc.

3. Drink class; marker: mu-.

Nouns of this class indicate potables, and also sugarcane.

Examples: nüwe mu-nu = my water (for drinking), nəlü mu-m = your (sg.) sugarcane.

4. Utensils class; marker: gö-.

The possessive suffix of the first person singular is -tu.

Nouns belonging to this class denote a range of things that can be used for achieving some purpose, and also morning, evening, and throat (i.e. a utensil used for producing voice and speech, etc.). In contrast to the other languages of the family - but not to Nooli which also belongs to the Nea language - tools and utensils associated with food in some way, also belong to this general utensils class.

Examples: lɛtöü go-m = your (sg.) bow, nüwi gö-tu = my string, nübʷə gö-gɔ = our (incl.) net, tɔki gö-de = his knife, tɛpɔla gö-mʷi = your baskets, oplə gö-gi = our two's (incl.) stone, bɔlə gö-gö = their morning, nabaleno gö-tu = my throat, etc.

5. Dependent contents class; marker: jo-.

Nouns belonging to this class denote things which are inseparable contents of a container, e.g. blood, fat and bones inside the human body (compare 2.4.2. Malo, class 11.).

Examples: möp^yö ŋö-nu = my blood, tötə ŋö-de = his fat, naadu ŋö-m = your (sg.) bone(s).

6. Independent contents class; marker: ö-.

Nouns of this class indicate objects which are contents of other things, but can exist separately from them or pre-exist them (compare 2.4.2. Malo, class 12.).

Example: talini ö-m = your (sg.) nose peg (can also be used as a member of the utensils class - see above 4. - i.e. talini gö-m).

7. Fire class; marker: mwilö-.

Nouns of this class refer to fire and things associated with it such as smoke, etc.

Examples: nyö myilö-de = his fire, nəkapə myilö-gö = their smoke.

8. Spouse class; marker: nelö-.

Nouns of this class denote spouses, i.e. husbands and wives. Examples: nüŋə nəlö-nu = my husband (nüŋə = man), ɔlə nəlö-m = your (sg.) wife (ɔlə = woman).

2.4.4. Nooli

Eight possessive classes have been found so far in Nooli which is an aberrant dialect of the Nea language to which both Nemboi and Nooli belong (see 1.1.). In contrast to Nemboi, Nooli has a separate betel class like Reefs and Malo (see 2.4.1. and 2.4.2.), but lacks a separate spouse class which Nemboi has (see 2.4.3.). Together with the two classes of nouns to which possessive suffixes are directly added (see 2.3.2.) this gives a total of ten possessive classes.

The possession markers (and possessive classes) are as follows (only the basic forms of the markers will be given in most instances because the addition of the possessive suffixes - see 2.2. for their forms to them is generally regular, and most of the markers themselves are not subject to morphophonemic changes. The few irregularities occurring will be mentioned):

1. General possession class; marker: nε-.

This class corresponds largely to the equivalent class in Nemboi (see 2.4.3., class 1.), i.e. it includes persons (except relatives - see 2.1. - and affines - see below, class 9.), inedible animals, birds, reptiles and fishes (or edible ones referred to without the purpose of eating in mind), insects, things located somewhere and generally not readily movable such as the ground, islands, valleys, paths, villages, houses, trees and also fire, but not things closely associated with it, etc., not directly palpable objects and phenomena in nature such as the sun, moon, stars, sky, rain, etc., and others.

Examples: $b \forall e \ ne-na = my \ child$, kuli $ne-gö = our \ (excl.) \ dog$, uton $ne-na = my \ bird$, $num \forall \tilde{e} \ ne-mu = your \ (pl.) \ snake$, $numo \ ne-m = your \ (sg.)$ fly, $mat^hu \ ne-gi = our \ two's \ (incl.) \ house$, $nuwou \ ne-de = his \ tree$, d^yə nε-ŋa = my fire, tem^yã nε-gö = our (excl.) moon, ipũ ni-mu = your (pl.) rain.

 Food class; marker: 1, 2sg. and 2pl. ne-, 3sg. and 3pl. na-, 1dl. incl., 1pl. incl. and 1pl. excl. nä-.

The possessive suffix of the first person singular is -mwa.

Nouns belonging to this class denote all kinds of food, both animal and vegetable, except sugarcane which belongs to the drink class. In contrast to Nemboi, insects do not come under this class, but as in Nemboi, utensils associated with food do also not belong to it, except for cooking stones.

Examples: lakö ne-m^ua = my taro, böpi na-de = his banana, nap(u)b^ui ne-m = your (sg.) coconut (for eating), klo ne-m^ua = my fowl (for eating), nõ nä-gö = our (excl.) fish, ot^hə nä-go = our (incl.) cooking stones.

3. Drink class; marker: mu-.

Nouns of this class indicate potables, including sugarcane. Examples: duwe mu-ga = my water (for drinking), map(u)ga mu-m = your (sg.) drinking-coconut, melu mu-de = his sugarcane.

4. Betel class; marker: ma-.

This class includes nouns indicating betel nuts and objects used in connection with chewing betel such as betel lime, lime gourds, lime spatulas, etc.

Examples: kete ma-ŋa = my betel nut, p∀ɛ ma-m = your (sg.) betel leaf, do ma-gö = our (excl.) betel lime.

5. Utensils class; marker: lpl. incl. go-, in the other persons: gö-. Nouns of this class denote utensils and other objects used to achieve some purpose. As in Nemboi, tools and utensils associated with food in some way also belong to this class (see above class 2.).

Examples: gö-ŋa = my firewood, lätaŋ gö-m = your (sg.) bow, tamata gö-de = his fish-hook, dYa go-go = our (incl.) string, otha gö-gö = our (excl.) stones.

6. Dependent contents class; marker: 1ö-.

This class includes nouns which are inseparable contents of a container such as the bones inside the human body, and as in Malo (see 2.4.2. class 11.) - and in contrast to Nemboi which has a separate spouse class (see 2.4.2., class 8.) - also includes spouses.

Examples: d^vadu 1ö-ŋa = my bones, n^voli 1ö-de = his (body) fat, məna 1ö-m = your (sg.) husband.

7. Independent contents class; marker: ö-.

The possessive suffix of the first person singular is -na.

Nouns of this class denote objects which are contents of other things, but can exist separately from them or pre-exist them (compare 2.4.2. Malo, class 12. and 2.4.3. Nemboi class 6.). It also contains the word for *sore*, *wound*.

Examples: kaki ö-na = my wound, kaki ö-gö = our (excl.) wounds.

8. Fire class; marker: əd yeögö-.

This class includes nouns denoting objects closely associated with fire, but not the word for *fire* itself (see above, class 1.).

Examples: $bapu = d^{\gamma}e\ddot{o}g\ddot{o}-\eta = my \ smoke$, $nbu = d^{\gamma}e\ddot{o}g\ddot{o}-de = his \ ashes$.

2.4.5. Nanggu

In Nanggu, the limited materials perused to date have yielded nine different possessive class markers, but it seems likely that there are more in the language. With the class of nouns to which possessive suffixes are directly added, this gives a total of ten possessive classes.

Most of the class markers are affected by morphophoemic changes when the possessive suffixes are added to them, and whenever necessary, a list of the forms of the markers + possessive suffixes will be given below.

1. General possession class; marker: lsg. nej, 2sg. and lpl. excl. nc-+ possessive suffixes, all others nej- + possessive suffix.

Nouns belonging to this class include mostly animals, birds, fishes, insects etc. which are not specially thought of as food. Many of them can optionally be used as members of this class and of the food class, but some are exclusively members of the food class (see 1. above).

Examples: kuli nei = my dog, poi ne-m = your (sg.) pig, kukwe ne-go = our (excl.) flying fox, nümwa nei-mwe = your (pl.) snake, kio nei-da = our two's (incl.) fowl (also kio na-da) nügwa nei = my shark (also nügwa na:-nu), mumwo nei-de = his fly.

2. Food class; marker: lsg. na:-nu, 2sg. na-m, all others: na- + possessive suffix.

Nouns of this class denote food and edible things which are thought of in connection with eating. Nouns referring to food animals appear optionally with the marker of this class or the general possession class (see 1. above) but some, especially marine animals, fishes and crustaceans, are always found with the food class marker. Also utensils connected with food and its acquisition such as axes, knives, paddles and the like generally belong to this class, and also lime gourd.

Examples: dakɛlaŋö na:-nu = my food, nəpubʷi na-m = your (sg.) coconut (for eating), nəbʷö nə-mʷe = your (pl.) pidgeon (also nəbʷö nei-mʷe), nəta na-da = our two's (incl.) fish, töpʷae na-de = his stingray, dʷö na-ŋö = their axes, pe:ki na-gɔ = our (excl.) knives, nö: na:-nu = my paddle, bejdɔ na-m = your (sg.) lime gourd.

3. Water class; marker: lsg. ko, 2, 3sg. and lpl. incl. ko- + possessive suffix, all others: ko:- + possessive suffix.

Only 10:k^hm = water has so far been found to belong to this class. Examples: 10:k^hm ko = my water (for drinking), 10:k^hm ko:-da = our two's (incl.) water.

4. Drink class; marker: lsg. go, 2, 3sg. and lpl. incl. go- + possessive suffix, all others: go:- + possessive suffix.

Nouns belonging to this class refer to potables, including coconuts for drinking and sugarcane (the latter can optionally also be used with the location class - see 6. below), and also things connected with the chewing of betel (except lime gourd which belongs to the food class see 2. above). The betel nut itself can optionally be used with the marker of this class, or with that of the location class.

Examples: nəpub^wi go-m = your (sg.) coconut (for drinking), tɛp^ya go:-ŋö = their sugarcane, do go = my betel lime, p^wei go-dam^we = our (incl.) betel leaf, k^hät^hü go-m = your (sg.) betel nut.

It seems possible to regard this class and the water class (see 3. above) as sub-classes of one general potables class.

 Utensils class; marker: lsg. tɛlɔ, all other forms: tɛlɔ- ∿ tlɔ- + possessive suffix.

Nouns of this class denote utensils and objects which are used to achieve a purpose or are simply held in one's hand. Also belts and clothing comes under this heading in Nanggu. As has been mentioned under the food class (see 1. above), utensils connected with food generally belong to that class.

Examples: $|\ddot{a}t\ddot{u}: t\varepsilon|_{2} = my \ bow, \ beli \ t(\varepsilon)|_{2}-m = your (sg.) \ basket,$ nena: $t(\varepsilon)|_{2}-\eta\ddot{o} = their \ string, \ n_{2}:k^{h}\ddot{o} \ t(\varepsilon)|_{2}-dam^{v}e = our \ (incl.) \ belts,$ newa $t(\varepsilon)|_{2}-da = our \ two's \ (incl.) \ clothing.$

 Location class; marker: lsg. n^yo, lpl. excl. n^yo-go, all others: n^yö- + possessive suffix.

Nouns of this class indicate objects which are located somewhere and usually not readily movable such as villages, houses, islands, valleys, as well as trees, palms, bamboo and other plants and also fruits of all descriptions - coconuts, bananas, betel-nuts, taro, yams, etc. - while growing and not thought of as food, even though they may have been plucked or pulled up from the ground.

Examples: nɛlYanYɔ-gɔ = our (excl.) village, ma:thu nYɔ = my house, tɔmɔtu nYö-mΨe = your (pl.) island, ŋanibi nYö-de = his bamboo, nuŋɔ nYö-da = our two's (incl.) tree, nɔa nYö-ŋö = their fruit, watö nYɔ = my taro, ŋöböti nYö-m = your (sg.) banana, tɛpYa nYɔ = my (growing) sugarcane, ŋökhäthü nYö-ŋö = their betelnut(s), etc.

7. Dependent contents class; marker: either: lsg. lo, 2sg. lpl. excl. and 2pl. lo- + possessive suffix, all others: lö- + possessive suffix, or: lsg. no, lpl. excl. no- + possessive suffix, all others: nö- + possessive suffix. The occurrence of either of these markers is morphologically conditioned. It appears that the alternative go may also exist in Nanggu.

This class includes nouns which are inseparable contents of a container such as the blood and the bones inside the human body. However, it does not include spouses as is the case in Malo (see 2.4.2., class 11.) and Nooli (see 2.4.4., class 6.): spouses are indicated by the addition of the possessive suffixes to the noun itself.

Examples: adu 10 = my bone, adu 10-go = our (excl.) bones, adu 1ö-de = his bones, möp Yö no = my blood, möp Yö no-go = our (excl.) blood, möp Yö nö-m = your (sg.) blood.

8. Independent contents class?; marker: lsg. ka:le, 2sg. ka:le + possessive suffix, lpl. excl. ka:le + possessive suffix, 3sg., ldl. incl. and lpl. incl. ka:lö + possessive suffix, 2pl. and 3pl. kili + possessive suffix.

The existence of this class in Nanggu is not quite certain, and nouns included in it have also been encountered in conjunction with the dependent class marker (see 7. above).

Nouns of this class denote objects which are contents of other things, but can exist separately from them or pre-exist them (compare 2.4.2. Malo, class 12. and 2.4.3. Nemboi, class 6.). As in Nooli (see 2.4.4., class 7.), this class also contains the word for *sore*, *wound* in Nanggu. Examples: nabwa ka:le-m = your (sg.) sore, nabwa ka:lö-de = his wound, nabwa kili-mwe = your (pl.) sores.

9. Fire class; marker: lsg. molo, 2sg. and lpl. incl. mola- + possessive suffix, all others: molo- + possessive suffix.

Nouns referring to fire and things associated with it belong to this class.

Examples: $a:k^{h}u$ molo = my fire, o:ko mola-m = your (sg.) smoke, $a:k^{h}u$ mola-damWe = our (incl.) fire, nübu molo-de = his ashes.

It is of interest to note that in Nanggu, the possessive interrogatives are formed by prefixing the appropriate possessive class marker in its first person singular form to yö = who?, e.g. na:nu-yö = whose? (referring to food), telo-yö = whose? (referring to a utensil), ano-yö = whose? (referring to a canoe), etc. If the noun indicating the object possessed is mentioned, the possessive interrogative follows it with the ligative prefix ka- preceding it, e.g. dakelanö ka-na:nu-yö = whose food?

10. Louse class; marker: lsg. nau, all others: nau- + possessive suffix. Only nawi = louse has so far been found to be a member of this class. Examples: nawi nau = my louse (or lice), nawi nau-de = his louse (or lice).

11. Canoe class; marker: lsg. ano, all others: anu- + possessive suffix. Only namübü = canoe has so far been found to belong to this class.

It can optionally also be a member of the utensils class (see 7. above). Examples: ŋamübü aŋo = my canoe (also ŋamübü tεlo), ŋamübü anu-m = your (sg.) canoe (also ŋamübü t(ε)lo-m).

2.4.6. Summary of Possession Markers and Classes

The possession markers and class systems in the languages of the Reef and Santa Cruz Islands Family show a good measure of similarity in spite of considerable differences in detail.

For comparative purposes, the forms appearing in conjunction with possessive suffixes of the third person singular, or, as in Reefs, denoting possession by the third person singular by themselves, seem to be most suitable.

The following possession class markers occur in at least three of the languages and dialects treated here:

Class:	Reefs	Malo	Nemboi	Nooli	Nanggu
General Possession	no	nä	nε	ne	neį
Food	na	na	na	na	na
Drink	num ^w ä	pü	mu	mu	go
Betel	da	ma	-	ma	"Films were written
Utensils	nogo	kö	gö	gö	telo
Location	tä (to)	nУə	-	-	nyo
Dependent Contents	-	ŋö	ŋö	1ö	lö ∿ nö (∿ŋö?)
Independent Contents	-	ö	ö	ö	ka:10?
Fire	-	mnö	m¥i1ö	əd Yeögö	nolo

As can be seen from the table above, there is considerable formal similarity between related markers in the individual languages and dialects. Only Malo $p\ddot{u}$ and Nanggu go in the drink class, Nanggu telo in the utensils class and Nooli əd Yeögö in the fire class are quite aberrant.

In addition to the possession class markers listed, a varied number of other such markers are met with in the individual languages and dialects, i.e.

Reefs:	deno Flower and fruit class
	nika∿nako Toe class
Malo:	tä General food class
	sp Holding class
	np Garden utensils class
	nö Purpose class
Nemboi:	nəlö Spouse class
Nanggu:	ko Water class
	nau Louse class
	aŋu Canoe class

In addition to these class markers, some nouns and prepositions function as possession class markers, e.g.

Reefs:	ηago Wound class: this is the preposition ηag(u)- signalling
	the indirect object with verbs.
	nisa \sim nisi Skin and bone class: this is one of the words for
	body.
Malo:	$n \nu_{D}$ Parts of lower leg class: this class marker is derived from

 $nan y_{D} = leg$ through the omission of the otherwise obligatory petrified article na-.

The largest number of class markers is met with in Malo (fourteen), with Nanggu having eleven and Reefs ten, whereas Nemboi and Nooli both have eight. A striking feature is the absence of the location class from the last two, whereas Reefs lacks the dependent and independent contents classes. The betel class is absent from Nemboi and Nanggu, and the fire class from Reefs.

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