Journal of the Linguistic Society of Papua New Guinea

ISSN: 0023-1959

Vol. 33 No. 1, 2015

The loss of clusivity and the rise of gender in West Oceanic pronominals

René van den Berg
SIL International
r. vandenberg@sil.org.pg

Abstract

While a distinction between first person inclusive and exclusive among pronouns is widespread in Oceanic languages, gender is only rarely encountered in pronominal systems. This article takes a look at 120 languages in the western part of the large Oceanic family and examines in some detail languages where clusivity is missing (partially or completely), as well as languages where pronominal gender has developed. By looking at both the locus of these features within the pronominal system and the mechanisms of language change which account for these developments, this paper attempts to contribute to the synchronic and diachronic typology of pronominal systems.

1. Introduction

This article is part of a larger research project that looks at the synchrony and diachrony of pronouns and pronominal systems in various subgroups of west Oceanic languages.[1] Following Lichtenberk (2005:261), I will use the term pronominals to cover both free-word pronouns, as well as pronominal affixes and clitics. Since pronominals form a closed subsystem within every language, they constitute a

[1] Many thanks go to colleagues and field workers who provided help in collecting the relevant data. These include Wayne Baker (Aiklep), David Bosma and Freddy Boswell (Cheke Holo), Steve Henley (Sengseng), Iljae Jung (Aighon), Julie Martin (Akolet), John Nystrom (Arop, Sera), Malcolm Ross (Torricelli and Skou pronouns), Edgar Suter (Finisterre-Huon languages), Lenore Tillitson (Miu), Aaron Weatherl (providing NTM contact information), and Luke and Laura Warrington (Sissano). Earlier versions of this paper (which included sections on other aspects of pronominals, such as number and paradigms) were presented at an SIL synergy meeting in Ukarumpa (June 2011), at the Workshop 'The Roots of Linguistic Diversity' at James Cook University in Cairns (June 2011), at the 12th Austronesian Conference on Austronesian linguistics in Bali (July 2012) and at another seminar at James Cook University (September 2014), when I was there for two months as a visiting scholar. I wish to thank the audience at each of these venues for helpful feedback and Prof. Alexandra Aikhenvald for facilitating my stay in Cairns. Valérie Guérin provided helpful critical comments on an earlier written draft, my wife Lydia read and commented on several pre-publication drafts, Phil King gave helpful feedback on the final version, and comments from three reviewers for LLM led to further improvements.

The following abbreviations are used in this paper: ART, article; ASP, aspect marker; COMP, completive; CONJ, conjunction; DU, dual; EX, exclusive; FEM, feminine; IN, inclusive; IRR, irrealis; LOC, locative; MASC, masculine; NEG, negator; PL, plural; PURP, purpose; RE, realis; TR, trial.

very fruitful area for comparative and typological research (see Ingram 1978, Cysouw 2003, Bhat 2004, Dixon 2010). Questions can be asked regarding the limits of variation. Are there languages without pronouns? What gender systems are found among pronouns? What is the relationship between pronouns and number? What pronominal grammatical alignment systems occur in the world's languages? What is the minimum and maximum number of pronominal paradigms?

Within a well-defined language family (or sub-family) for which a proto-language has been reconstructed with a considerable degree of certainty (e.g. Indo-European, Semitic, Altaic, Austronesian and its subgroup Oceanic), research into pronominal systems presents a golden opportunity to trace developments in time among a closed subsystem of form and function. For example, which pronominal categories (such as gender, dual number, clusivity, grammatical case) of the proto-language have been retained in all languages? Which categories have merged? Which new categories have emerged among daughter languages, and how did that happen? How have categories changed in function? How can these developments be accounted for? Which pronouns are formally the most stable? Are there examples of borrowed pronouns?[2]

This paper aims to look at just two semantic parameters of the pronominal system of west Oceanic languages, namely clusivity and gender. After a brief look at Oceanic subgroups and the pronominal system of Proto-Oceanic (§2), the loss of clusivity in a variety of languages is examined (§3), followed by a discussion of languages that have developed pronominal gender (§4). The conclusion (§5) presents a summary of the findings.

2. West Oceanic and Proto-Oceanic

For the purposes of this study, west Oceanic is defined as comprising all the Oceanic languages which do not belong to the Central-Eastern Oceanic grouping as defined by Lynch, Ross and Crowley (2002). Geographically, this means the area of investigation covers all of the Oceanic languages spoken in Papua New Guinea, plus a few in Indonesian Papua (the small Sarmi-Jayapura cluster), one in Micronesia (Yapese) and two dozen in the Solomons Islands (part of the northwest Solomonic linkage). In terms of subgrouping, most of these languages belong to the three large clusters that make up Western Oceanic (North New Guinea, Papuan Tip, Meso-Melanesian), with a few additional groups (Admiralties, St Matthias, Sarmi-Jayapura and Yapese). The various subgroups are listed below, following

[2] Another perspective on pronouns, not further pursued in this paper, is translation. Translating pronouns between two languages with very diverse systems can be challenging and generate fresh questions for the source text. The presence of a dual or a clusivity contrast in the target language, for example, will cause many a translator to pause and think about the best translation equivalent. This is especially true for translators of literary, political and religious texts. For instance, is 'we' in "We hold these truths to be self-evident" (from the US Declaration of Independence), inclusive or exclusive? See Chen (2006) for an interesting discussion from a legal perspective. And does the inclusive 'us' and 'our' in God's declaration "Let us make man in our image" (Genesis 1:26 NIV) have a singular, trial, or plural reference?

Lynch, Ross and Crowley (2002), with the number of languages from that source, as well as the numbers from the 17th edition of the *Ethnologue* (Lewis et al. 2014).[3]

	Lynch et al.	*Ethnologue* 17	This study
St Matthias family	2	2	1
Yapese	1	1	1
Admiralties family	30	31	11
Sarmi-Jayapura family	6	14	2
Western Oceanic:			
North New Guinea cluster	86	92	46
Papuan Tip cluster	54	64	24
Meso-Melanesian cluster	64	71	35
Total	**253**	**275**	**120**

Solid grammatical data exist for about one third of these languages. I have not made an effort to be exhaustive, but have focussed instead on reliable information available from published grammars and unpublished reports (mostly written by SIL linguists), supplemented by personal correspondence with field workers and missionaries, altogether covering some 120 languages.

A word of warning is in order here regarding the reliability of data. A few times I was struck by the fact that different sources can give quite different forms, they may list forms which later turn out to be non-existent, or simply miss forms altogether. For example, for 1SG in Tumleo (Schouten chain), Klaffl (1905) gives *geau*, but Evans (1996), based on fieldnotes collected by Malcolm Ross, has *jau*. Admittedly we could be dealing with different dialects, different transcription systems, and the language may even have changed in the intervening near-century. For 3SG the forms given are *wui* and *u(a)* respectively, again not very similar. Another issue is that preliminary wordlists or a superficial acquaintance with a language, mediated through a single speaker, sometimes produce forms that later turn out to be ghost pronouns. A case in point is the trial pronouns *tatolu* and *mitolu* reported for Bali in Johnston (1980) and similar forms (*amitol, asitol, gisitol*) for Bariai in Goulden (1996). These forms have not been confirmed for Bali by Ross (2002a) and were explicitly disconfirmed for Bariai by Gallagher and Baehr (2005:32).

Our starting point is the reconstructed Proto-Oceanic pronoun system, shown in Table 1 (from Lynch, Ross and Crowley 2002).

[3] The exact number of languages is, of course, a matter of debate and somewhat arbitrary. The 17th edition of the *Ethnologue* has added several languages, by splitting both Arop-Sissano (in the Schouten linkage) and Tangga (in the New Ireland / Northwest-Solomonic linkage) into three languages each, as a result of speaker attitude and language development efforts. It also adds a further eight languages to the Sarmi-Jayapura family (which it subsumes under the North New Guinea cluster). Numbers in the 18th edition of the Ethnologue (available online) have not changed. As more languages become better known and more language development takes place, it seems likely that the number of officially recognised languages will continue to grow, even though - ironically - language shift and language loss proceed unabated.

TABLE 1. PROTO-OCEANIC PRONOMINALS

	Free	**Possessor**	**Subject**	**Object**
1SG	*[i]au*	*-gu*	*ku=, au=*	*=au*
2SG	*[i]ko[e]*	*-mu*	*mu=, ko=*	*=ko*
3SG	*ia*	*-ña*	*(y)a=, ña=, i=*	*=a*
1PL IN	*kita*	*-da*	*Ø, ta=*	*Ø*
1PL EX	*ka[m]i, kamami*	*-ma[m]i*	*Ø*	*Ø*
2PL	*ka[m]u, kamiu*	*-m[i]u*	*Ø*	*Ø*
3PL	*[k]ira*	*-dra*	*Ø, ra=*	*=ra*

Notice the following points about the POc pronouns.

- An inclusive-exclusive distinction exists for 1st person plural.
- There is no gender distinction among pronouns.
- There are four distinct paradigmatic sets: free, possessor, object and subject. The subject agreement forms are complex and their reconstruction is not entirely clear. At least three competing sets have been proposed; see Lynch et al. (2002:67-69) for details, also Ross (1988), Evans (1996), Blust (2009).
- The object paradigm is defective (only 4 forms), the gaps were filled by the free forms.
- The numerals **rua* 'two' and **tolu* 'three' (and possibly **vat[i]* 'four') were cliticised to the plural forms of the free and the possessor forms to mark dual, trial and paucal number. E.g. **kita=rua* 'the two of us', **=dra=tolu* 'of them three'.

Given this Proto-Oceanic system as a baseline, we are now ready to look at west Oceanic languages in the light of the following questions.

- Is the inclusive-exclusive opposition universal in west Oceanic languages? If not, what is the locus of the clusivity merger? That is, in which part (or parts) of the pronominal paradigm has the merger occurred? Which form has been retained in such cases, the inclusive or the exclusive? Is anything known about the causes of these mergers?
- In the few cases where gendered pronouns are found, to what degree has this become an integral part of the system? Can anything be said about the origin of these forms, as well as the triggers for the development of a gender contrast?

Since Proto-Oceanic had a defective object paradigm (no forms are reconstructed for 1PL and 2PL), and many Oceanic languages do not have an object paradigm at all, object suffixes and clitics in scattered languages will only play a marginal role in this study.

3. Clusivity

3.1 Preliminaries

Clusivity is a fairly recent cover term (Filimonova 2005), coined to refer to the presence of a contrast between inclusive and exclusive reference in the forms of a pronominal system. The locus of clusivity is typically the first person non-singular pronoun 'we', where an exclusive form refers to the speaker(s) and other people, but not to the person or people that are being addressed. Inclusive 'we', on the other hand, does include the addressee(s).

In this section on clusivity, I will be chiefly concerned with the absence or presence of clusivity in languages, and not with its function. Many interesting observations can be made about the pragmatics of the clusivity contrast, and indeed on the non-typical usages of 'we' in general. As reported by Lichtenberk (2005) for Oceanic languages and confirmed by other descriptions, inclusive 'we' is often used in various non-canonical ways. For example, inclusive 'we' can have a politeness function and substitute for 'you' as an integrative device in order to save face. This can be seen in requests: "Is there any food in our (inclusive) house?" spoken to a neighbour. It can also be found in polite statements: "This is our (inclusive) village", spoken to a visitor. Inclusives, especially dual inclusives, are also used rhetorically in admonitions, imperatives, and in sermons. An example from Wuvulu (James Hafford, pers. comm.) is "These are the bad things we (dual inclusive) should not do". The use of the dual here creates a personal bond between the speaker and each individual member of the audience, and also serves as a face-saving device for the listeners. Olson (2014) reports a similar usage for the inclusive in Gumawana. In addition, inclusives are often used for general statements, corresponding to English 'they', 'people' or even a passive in translation. Fascinating as these pragmatic aspects are, they are not the focus of our present investigation.

As has been observed many times in the literature on Austronesian (Lichtenberk 2005, Blust 2009), the exclusive-inclusive opposition is almost universally present among pronominal systems in the 1200+ languages of this family. It features in the reconstructed system for Proto-Austronesian and is only found missing in a smattering of widely scattered languages, possibly not more than a few dozen in total. One could almost say that clusivity is part of the DNA of an Austronesian language. In the western Austronesian world, the opposition is missing in only a handful of languages, including Papuan Malay: *kitorang* and its short variant forms *kita* and *kitong* are simply 1PL forms; see Kluge (2014). Outside of west Oceanic, Kiribati (Micronesia) has also lost the contrast and simply has a general *ti* '1PL' (Groves et al. 1985). In each case, it is the original inclusive member of the pair which has been retained.

Within our area of investigation, clusivity is indeed present virtually everywhere. In fact, clusivity is such an integral part of the Oceanic linguistic scene that the two creole languages which have developed in the New Guinea area (Tok Pisin and Unserdeutsch), also display a clusivity contrast in their pronominal systems. Both languages have to various degrees been influenced by the grammar of Oceanic languages, albeit with different lexifier languages: English for Tok Pisin and German for Unserdeutsch. In spite of their different lexical pedigrees and their opposite sociolinguistic status in modern Papua New Guinea, the structural similarity between the two languages remains very striking, at least on this point. We will briefly look at each one in turn.

3.2 Tok Pisin and Unserdeutsch

Tok Pisin [tpi], also known as Pidgin English or Neo-Melanesian Pidgin, is widely spoken in Papua New Guinea as the de facto national language and described in Mihalic (1971), Verhaar (1995) and Volker (2008). Tok Pisin has the 1st person plural pronouns *yumi* 'we (inclusive)' and *mipela* 'we (exclusive)', plus additional dual forms (*yumitupela, mitupela*) and in some varieties even trial forms (*yumitripela, mitripela*). Both plural pronouns are complex forms: *yumi* is a compound of *yu* 'you' and *mi* 'I', while *mipela* is a combination of 1SG *mi* and the pluralizing suffix *-pela* (compare *yu-pela* 'you [pl]'). The suffix *-pela* is also used in non-pluralizing functions with some adjectives (*bik-pela* 'big'), demonstratives (*dis-pela* 'this') and numerals (*wan-pela* 'one'). Baker (1997) provides information on the origin and spread of the element *-pela* (which originates from English 'fellow'). As Romaine (1992) points out and as every linguist who works in Papua New Guinea can confirm, the 'classical' contrast between *yumi* and *mipela* is not maintained by all speakers of Tok Pisin, and especially not by those who have as their first language a Papuan language which does not make a clusivity distinction. Such speakers often use *yumi* where the reference is clearly exclusive. An example from a speaker with a non-Austronesian background is (1), where *yumi* is employed in an exclusive sense.

(1) *Hia yumi no save wokim dispela kain haus ia.*
'Here we do not build that kind of house.' (Romaine 1992:9)

The second example of a creole that has developed clusivity is **Unserdeutsch** [uln], also known as Rabaul German Creole, a moribund language with possibly a few speakers left in Rabaul and in Queensland. It uses *uns* for 'we (inclusive)' and *wir* for 'we (exclusive)'. Examples are from Volker (1996).

(2) *Uns bis neben Salzwasser.*
'We (ex) are next to the ocean.'

(3) *Wir all geht Rabaul.*
'We're all going to Rabaul.'

It is interesting to observe the unique path that Unserdeutsch has taken to create the clusivity distinction: the object form of the original German pronoun (accusative *uns*) for the exclusive and the subject form (nominative *wir*) for the inclusive.

Whereas these two creole languages have created a new clusivity distinction, there are around 20 or so languages in the western part of the Oceanic area where the inclusive-exclusive distinction is partly or completely absent from the pronominal system. The areas where partial loss has occurred are scattered across New Guinea, though mostly confined to the mainland. The area of complete loss of clusivity is the north coast of the New Guinea mainland around Aitape in the Sandaun and Sepik provinces, where the seven languages of the poorly described Siau subfamily are spoken. Here it appears that clusivity has vanished completely from the pronominal system. Languages for which descriptive information is available are discussed below, but this brief survey does not claim to be exhaustive and it is likely that I have missed several languages. Excluded from this discussion are cases of syncretism (complete formal overlap) between one member of the clusivity pair and another person-number category. For example, in Nehan 1PL.EX and 2PL both have *-miu* as the (shortened) inalienable possessor suffix. Interesting as they are, they fall outside the scope of the current study.

3.3 Partial loss

1. **Bugawac** [buk], also known as Bukawa and described in Eckermann (2007), is a North New Guinea language spoken on the northern shores of the Huon peninsula, not far from the town of Lae in Morobe province. Bugawac has both dual and plural pronouns, but the inclusive-exclusive distinction is marked on dual pronouns only, not in the plural. Table 2 shows the free pronouns, as well as the possessive suffixes and subject prefixes, given here for realis only, and (to keep matters simple) only for class 1 and 2 of the five verb classes.[4] Here and in subsequent tables 1PL forms not marked for clusivity are bolded.

TABLE 2. BUGAWAC PRONOMINALS

<table>
<tr><th></th><th></th><th>Free</th><th>Possessor</th><th>Subject (realis)</th></tr>
<tr><td rowspan="3">SG</td><td>1</td><td>aö</td><td>-ŋ</td><td>ga-</td></tr>
<tr><td>2</td><td>am</td><td>-m</td><td>Ø, gê-</td></tr>
<tr><td>3</td><td>iŋ</td><td>Ø</td><td>Ø, gê-</td></tr>
<tr><td rowspan="4">DU</td><td>1 IN</td><td>hêclu ~ yêclu</td><td rowspan="2">-ŋ</td><td>da-</td></tr>
<tr><td>1 EX</td><td>alu</td><td rowspan="2">a-</td></tr>
<tr><td>2</td><td>amlu</td><td>-m</td></tr>
<tr><td>3</td><td>iŋlu ~ lu</td><td>Ø</td><td>sê-</td></tr>
<tr><td rowspan="4">PL</td><td>1 IN</td><td rowspan="2">yac</td><td rowspan="2">-ŋ</td><td>da-</td></tr>
<tr><td>1 EX</td><td rowspan="2">a-</td></tr>
<tr><td>2</td><td>mac ~ mwac</td><td>-m</td></tr>
<tr><td>3</td><td>ŋac</td><td>Ø</td><td>sê-</td></tr>
</table>

The table shows that 1PL *yac* 'we' is underdifferentiated for clusivity, and it is only through the subject prefixes (*da-* and *a-*) that speakers can disambiguate the referents. Interestingly, the first person dual *does* make the inclusive-exclusive distinction: *alu* 'we two exclusive' versus *hêclu ~ yêclu* 'we two inclusive'. Another striking fact about the Bugawac pronominal system is that the possessive suffixes, which are used for inalienable possession, only distinguish person, not number: *ahwa-ŋ* 'my/our mouth(s), *ahwa-m* 'your mouth(s)', *ahwa* 'mouth, his/her/its/their mouth(s)'. We will see this in other Oceanic languages.

2. Yabem [jae], also known as Jabêm (Bradshaw and Czobor 2005, based on Dempwolff's work), is another North New Guinea language, closely related to Bugawac and spoken to its east, on the tip of the Huon peninsula around the town of Finschhafen. Sociolinguistically, Yabem occupies a special place in the history of Oceanic languages in Papua New Guinea, as it was chosen as one of the two lingua francas promoted by the German Lutheran missionaries who started their activities around Finschhafen in the

[4] Phonetically *c* is [ʔ], *ê* is [ɪ] and *ö* is [ø]. Unusually for an Oceanic language, Bugawac is tonal, but the two tones are normally not marked in the orthography.

mid 1880s. Missionary work in communities speaking Austronesian languages (then generally termed 'Melanesian languages') was conducted in Yabem, whereas the lingua franca among people groups speaking Papuan languages was Kâte, a Finisterre-Huon language spoken north of Finschhafen. As a result, knowledge of Yabem (and Kâte) spread via education and church-related activities throughout the area which is now Morobe province, parts of Madang province and even into the Highlands. For details see Osmers (1981).

Like Bugawac, Yabem has dual and plural free pronouns, but as Table 3 shows, neither of these shows an inclusive-exclusive distinction: *aêàgêc* simply means 'we (dual)', while *aêàc* means 'we (plural)'.[5] The presence of just two general first-person pronouns, distinguished by number, means that Yabem has lost all traces of clusivity among its free pronouns, and also among its possessive suffixes.[6] However, subject prefixes *do* show the distinction (only realis is shown in the table), as well as the free possessives: *nêŋ* versus *ma.* As in Bugawac, there is syncretism between 1DU/PL.EX and 2DU/PL; in both languages the prefix is *a-*. Notice that only free pronouns make a dual-plural contrast; the opposition is absent from subject prefixes and possessives.

TABLE 3. YABEM PRONOMINALS

<table>
<tr><th></th><th></th><th>Free</th><th>Subject (realis)</th><th>Possessor</th><th>Free possessive</th></tr>
<tr><td rowspan="3">SG</td><td>1</td><td>aê</td><td>ka-</td><td>-c</td><td>ŋoc</td></tr>
<tr><td>2</td><td>aôm</td><td>kô-</td><td>-m</td><td>nêm</td></tr>
<tr><td>3</td><td>eŋ</td><td>kê-</td><td>Ø</td><td>nê</td></tr>
<tr><td rowspan="4">DU</td><td>1 IN</td><td rowspan="2">aêàgêc</td><td colspan="3" rowspan="3"></td></tr>
<tr><td>1 EX</td></tr>
<tr><td>2</td><td>amàgêc</td></tr>
<tr><td>3</td><td>êsêàgêc</td><td colspan="3"></td></tr>
<tr><td rowspan="4">PL</td><td>1 IN</td><td rowspan="2">aêàc</td><td>ta-</td><td rowspan="2">-ŋi</td><td>nêŋ</td></tr>
<tr><td>1 EX</td><td rowspan="2">a-</td><td>ma</td></tr>
<tr><td>2</td><td>amàc</td><td>-mi</td><td>nêm</td></tr>
<tr><td>3</td><td>êsêàc</td><td>sê-</td><td>-ŋi</td><td>nêŋ</td></tr>
</table>

In conclusion, both languages show a loss of the inclusive-exclusive distinction in the pronominal systems, but it is a relatively minor loss, as only free pronouns and possessive suffixes are affected, while the opposition is maintained in the subject prefixes and in the free possessives.

[5] As in Bugawac, *c* symbolizes [ʔ], *ê* is [ɪ]; additionally *ô* is [ʊ]. Yabem is also tonal; low tone is marked with a grave accent over the vowel.

[6] It is possible that a single form with an exclusive possessive pronoun was retained in Yabem after the merger. The word *tame-mai* 'our (ex) father', is mentioned by Bradshaw and Czobor (2005:23, footnote 10), originating from Streicher's (1982) dictionary. Was this retention related to the fact that this word was presumably used in the Lord's prayer for liturgical purposes? Or was the form artificially introduced?

According to Lichtenberk (2005:263), whenever the clusivity contrast is lost and one member of the original opposition acquires a general first-person plural meaning, "it is always the inclusive pronominal that assumes the new function, and it is always the exclusive one that disappears." Yabem and Bugawac appear to be counter-examples to this statement. In his discussion of Yabem, Ross (1988:147) gives the form *ai-aʔ* 'we exclusive' (*aêàc* in Dempwolff's orthography; the meaning 'we exclusive' should simply be 'we'), with *ai* reflecting POc **kami* 'we exclusive' and *-aʔ* reflecting an erstwhile quadral/paucal suffix (from Proto-Huon Gulf **-vat* < Proto-Oceanic **vat[i]* 'four'). The dual form *aêàgêc* is similary built upon *aê* (from *kai), with a numeral element *-àgêc* (or *gêc*) meaning 'two'. Bugawac *yac* 'we' probably also reflects this Proto Huon-Gulf **kai* 'we', possibly through an earlier **ai-ac.* The fact that it is the exclusive member of the pair which has survived is typologically striking, and a ready explanation is not at hand. The origin of the Yabem possessor suffix *-ŋi* (used for both 1PL and 3PL) is not immediately clear.

An important question that needs to be addressed is the cause of the loss of clusivity in these two languages. If clusivity is indeed part of the DNA of being Austronesian, how did it disappear? Influence from neighbouring Papuan languages seems a likely candidate for the cause of loss in this case. Both Yabem and Bugawac show various un-Austronesian features such as tone, limited numerals (only basic numbers such as 'one', 'two' and 'five'), clause-final negation, generic verbs, but not SOV word order or postpositions. In such a scenario, earlier speakers of Yabem and Bugawac would have been bilingual (or multilingual) in their own languages and in one or more neighbouring Papuan languages of the Huon Peninsula family, where the clusivity opposition did not exist. Due to conformity pressure of competing grammatical systems within the mind of a single person, the opposition was then gradually lost, with Yabem further down the slope than Bugawac, where the clusivity contrast was maintained for the dual. While this scenario is probably correct and makes good typological sense, it is not without problems. While it is indeed true that most of the Huon languages do not make a clusivity distinction, and Proto-Huon Peninsula is reconstructed without an inclusive-exclusive distinction, the languages spoken closest to Yabem and Bugawac *do* make this distinction. This is surprising and demands an explanation.

Consider the free pronouns of neighbouring Kâte (from Pilhofer 1933) in Table 4.[7]

TABLE 4. KÂTE FREE PRONOUNS

	SG	DU	PL
1 IN	-	*nâhac*	*nâŋac*
1 EX	*no*	*nâhe*	*nâŋe*
2	*go*	*ŋohe*	*ŋoŋe*
3	*e*	*jahe*	*jaŋe*

According to Edgar Suter (pers. comm.), the exclusive forms are the original general 1PL pronouns, whereas the inclusive pronouns find their origin in the second element of emphatic pronouns.

> The first singular emphatic form is *no nahac* 'I myself' where *no* is the simple pronoun 'I' and *nahac* is a special emphatic reinforcement that does not occur on its own. The first dual form is *nâhe nâhâc* 'we (dual) ourselves' and the first plural form is *nâŋe*

[7] The symbol <â> is phonetically [ɔ], while <o> is [o].

> *nâŋâc* 'we ourselves'. There is no inclusive-exclusive distinction in this paradigm. Now the second part of these emphatic pronouns was put to use as inclusive pronouns, resulting in *nâhe* 'I and he' (dual exclusive) and *nâhâc* 'I and you' (dual inclusive) in the dual, and *nâŋe* 'we exclusive' and *nâŋâc* 'we inclusive' in the plural. These subtracted inclusive forms were added to the paradigm of basic personal pronouns. This paradigm is the only one in the language where an exclusive-inclusive distinction is made. There is nothing in the verb inflections showing the distinction. (Edgard Suter, pers. comm., slightly edited.)

According to Suter, similar situations exist in other Huon Peninsula languages such as Hube (Kube), Dedua, Mape and possibly in Sene, Momare and Migabac. All of these have a clusivity distinction in the free pronouns, but not in the verbal pronominal affixes, suggesting that the clusivity distinction among the free pronouns is of more recent origin. It is also interesting to observe that these languages do not belong to the same subgroup of Huon Peninsula languages, arguing against genetic inheritance. The most reasonable hypothesis to account for this odd distribution of the clusivity contrast seems therefore to be that pervasive language contact in this area has led to structural convergence for this feature. Specifically, under the influence of the Huon Peninsula languages the two Austronesian languages lost (or partially lost) the clusivity distinction in the free pronouns (though it was retained in the subject prefixes and in the possessive suffixes). Likewise, under the influence of the two Austronesian languages, some Huon Peninsula languages introduced a clusivity opposition, but only in the free pronouns, making use of indigenous morphological material. Verbal affixation was again not influenced. As no borrowing of forms took place, this case can almost be considered a textbook example of bi-directional diffusion.

Notice that on both sides it was the subsystem of free pronouns which was the most susceptible to change, while the verbal and nominal morphology remained resistant to change. This scenario nicely illustrates Bickel and Nicholls' (2005:65) claim that "[i]nclusive-exclusive oppositions are prone to areal diffusion, and what diffuses is often the opposition itself, not the specific pronominal forms that code it in the donor language."

3. Markham languages. The Markham languages, spoken in the Markham valley and in the valleys of the foothills and mountains adjoining this broad grassland area, represent the deepest inland penetration of any Oceanic group in the whole Pacific. The 15 or so Markham languages, part of the North New Guinea cluster, form the topic of an important comparative study (Holzknecht 1989), but apart from Adzera, Duwet and Labu, most of these languages remain poorly described. From Holzknecht's study it is clear that the Markham communities have been in intense contact with Papuan-speaking populations for centuries and it is not surprising to encounter many un-Oceanic features, especially in the lexicon, but also in the phonology. Such phonological features include final palatals and final prenasalised consonant clusters, e.g. Duwet *lima-ngg* 'my hand'.

From a pronominal perspective, the emergence of a second set of inalienable possessive suffixes is noteworthy and possibly unique within Oceanic. This set is mostly used by females for a limited set of female kin possessed through a male, such as 'my sister-in-law', 'my paternal aunt' and 'my co-wife'. In Duwet, for example, the 2nd person possessive suffix is *-m* (for the first, regular set of kinship terms) and

-p for the second set, illustrated by *yam lasi-m* 'your (PL) sisters' and *yam wawo-p* 'your (PL) paternal aunts' (*yam* is 2PL).

Loss of clusivity is sporadic among the Markham languages, and shows up in the following loci.

- Wampar has a single dual free pronoun *abid abid* '1DU'[8], but clusivity is retained in the plural pronouns: *yaga* 'we exclusive', *yaer* 'we inclusive'. Among plural free pronouns the clusivity opposition is maintained in each language of this subgroup.
- In possessive suffixes clusivity is lost in the seven Lower Markham languages (Wampar, Musom, Duwet, Nafi, Aribwaungg, Aribwatsa) as well as the five Upper Markham languages (Adzera, Mari, Wampur, Sukurum, Sarasira). The contrast is retained in the three Watut languages, as well as in Labu (Siegel 1984). All of the Lower and Upper Markham languages have lost the number and clusivity contrast on possessive pronominal suffixes, just having a three-way contrast: first, second and third person.
- In subject prefixes, clusivity is lost in the same set of 12 languages that has merged clusivity in the possessive suffixes.

Only two paradigms are presented for the Markham languages (Duwet and Wampar), as they are illustrative for all the 12 Markham languages that show clusivity mergers.

The **Duwet** [gve] pronominal forms (from Holzknecht 2001) are presented in Table 5. Duals have not been included as they are essentially combinations of the plural pronominals and the numeral *seik* 'two'. Subject forms are given for non-past only. Note that clusivity is only retained in the Duwet free forms.

TABLE 5. DUWET PRONOMINALS

<table>
<tr><th></th><th></th><th>Free</th><th>Possessor (type 1)</th><th>Possessor (type 2)</th><th>Subject (non-past)</th><th>Object</th><th>Free Possessive</th></tr>
<tr><td>SG</td><td>1</td><td>ahei? ~ ahi?</td><td>-ng ~ -?</td><td>-k</td><td>nga-</td><td>ni</td><td>laɣ ahi?</td></tr>
<tr><td></td><td>2</td><td>au</td><td>-m</td><td>-p</td><td>ngu-</td><td>nou</td><td>la yaɣ au</td></tr>
<tr><td></td><td>3</td><td>ei</td><td>-n</td><td>-s</td><td>ngi-</td><td>ei</td><td>laɣ ie</td></tr>
<tr><td>PL</td><td>1 IN</td><td>aind ~ ai?</td><td rowspan="2">-ng ~ -?</td><td rowspan="2">-k</td><td rowspan="3">maŋga-</td><td>aind</td><td>la ai? yaɣain</td></tr>
<tr><td></td><td>1 EX</td><td>yaɣa</td><td>yaɣa</td><td>la yaɣain</td></tr>
<tr><td></td><td>2</td><td>yam</td><td>-m</td><td>-p</td><td>yam ~ guam</td><td>la yaɣuam</td></tr>
<tr><td></td><td>3</td><td>eis ~ eih</td><td>-n</td><td>-s</td><td>ngi-</td><td>eis ~ eih</td><td>laɣ eis ies</td></tr>
</table>

[8] Table 5.2 in Holzknecht (1989:98) mistakenly places two of the dual free pronoun forms in the wrong columns, e.g., *yai ri ongan* '2DU' (lit. 'you with another') is in the first person inclusive column. The subsequent discussion makes the author's intention clear.

The **Wampar** [lbq] pronominals are presented in Table 6. The contrast between *-g* and *-d* in the 1st person possessive is that *-d* is the unmarked form which occurs on most inalienable nouns, while the suffix *-g* is only found with a closed set of four nouns (Holzknecht 1989:108).

TABLE 6. WAMPAR PRONOMINALS

		Free	**Subject**	**Possessor (type 1)**	**Possessor (type 2)**
SG	1	*eja*	*a-*	*-d, -g*	*Ø*
	2	*yai*	*o-, u-*	*-m*	*-p*
	3	*gea*	*e-, i-*	*-n*	*-c*
DU	1 IN	***abid abid***	***a-***	***-d, -g***	***Ø***
	1 EX				
	2	*yai ri ongan*	*o-, u-*	*-m*	*-p*
	3	*gea ri ongan*	*e-, i-*	*-n*	*-c*
PL	1 IN	*yaer*	***a-***	***-d, -g***	***Ø***
	1 EX	*yaga*			
	2	*nuum*	*o-, u-*	*-m*	*-p*
	3	*ges*	*e-, i-*	*-n*	*-c*

As for the origin of the retained forms, the merged first person subject *a-* and the possessive forms *-g* and *-ng* are originally singular forms which have expanded their semantic territory. Holzknecht (1989: 111-112) reconstructs Proto-Lower Markham and Proto-Upper Markham **-ŋg* for 1st person possessive (covering singular and plural), as well as **-k,* for the second set of kin terms mentioned above. Both originate from Proto-Oceanic **-gu*. The origin of the Duwet 1SG alternant *-ʔ* is not clear, and neither is the origin of the subject prefix *maŋga-* '1PL/2PL', possibly a combination of a (pluralizing?) prefix *ma-* and 1SG *nga-*. The Wampar alternant *-d* (which is, somewhat surprisingly, the unmarked form) goes back to Proto-Markham **-nd*, '1PL.IN'. For the subject prefix, first person**a-* is reconstructed for the same subgroups.

The Wampar form *abid abid* 'we (dual)', according to Holzknecht (1989: 99-100), consists of an epenthetic *a*, a verbal root *-bi* meaning 'again, do again, repeat' and the first person possessive suffix *-d* 'my, our'. It therefore appears to have originated as a reduplicated nominalization meaning something like 'our repeating (it)'. Until further examples become available, this pronoun must be regarded as one of the most bizarre origins of a dual pronoun.

It is clear that neighbouring Papuan languages have exerted a strong influence on the Markham languages (and vice versa in some cases), but many of the details remain shrouded in mystery.

4. Kairiru [kxa] is one of the Schouten languages (part of the North New Guinea cluster) spoken on the island of Kairiru opposite the town of Wewak in the East Sepik Province. In this language, described in Wivell (1981), the locus and status of the clusivity contrast is quite different again. Kairiru has lost

clusivity among subject prefixes, object suffixes and the possessive suffixes, but the contrast is maintained in the free pronouns, as can be seen in Table 7. The contrast is also present in the plural pronouns of the independent possessor set, but not in the dual. There is some evidence that this set is likely a relatively recent development. Firstly, an independent possessor set is not reconstructed for Proto-Oceanic. Secondly, many forms in this set look like compound or affixed forms, some of which are built on the basis of free pronouns.

TABLE 7. KAIRIRU PRONOMINALS

		Free	**Possessor**	**Subject**	**Object**	**Independent Possessive**
SG	1	*kyau*	*-k*	*u-*	*-au, -am*	*okyau*
	2	*yieq*	*-m*	*qo-*	*-ieq*	*yieqayieq*
	3	*ei*	*-ny*	*a-*	*-i, -ny*	*yaqai*
DU	1 IN	*tuyieq*	***-tu***	***tu-***	***-tu***	***taqatu***
	1 EX	*tu*				
	2	*qum*	*-qum*	*qu-*	*-qum*	*moqum*
	3	*rru*	*-rru*	*rru-*	*-rru*	*rraqarru*
PL	1 IN	*taqam*	***-qait***	***ta-***	***-qait***	*tamoit*
	1 EX	*qait*				*taqait*
	2	*qam*	*-qam, -miu*	*qa-*	*-qam*	*maqam*
	3	*rri*	*-rri*	*rra-*	*-rri*	*rraqarri*

The 1SG subject prefixes *tu-* (dual) and *ta-* (plural) each contain a *t*, suggesting that it is the inclusive member of the pair which has been retained (from POC **ta=*), and which has widened its meaning to also encompass the exclusive.

The free dual pronouns are interesting. The form *tuyieq* '1DU.IN' is clearly a compound, based on *tu* '1DU.EX' and *yieq*, the 2SG free pronoun, a situation which is reminiscent of Tok Pisin *yumi* 'we inclusive'. (A more literal equivalent of Kairiru *tuyieq* would be *yu-mitupela*). Given the transparent nature of this compound, it seems reasonable to assume that Kairiru lost the clusivity distinction in *all* the first person dual pronominal forms, and that the contrast between *tu* and *tuyieq* is a recent 'repair mechanism' to reintroduce clusivity. There are two pieces of evidence which support this hypothesis. In the first place there is the fact of the single independent dual possessor form *taqatu*. If these independent possessive pronouns were indeed formed on the basis of free pronouns (as argued above), the absence of a clusivity contrast in this set would not be surprising, given a single first person dual pronoun *tu*. I further hypothesize that *tu* retains the *t* from the plural inclusive subject prefix *ta-*, and that the *u* harks back to a numeral element containing *u* (cf. the numeral *wuru* 'two').

The second piece of evidence comes from Kairiru dialects. The forms of the first person dual and plural pronouns are shown in Tables 8A and 8B. Nowhere in the pronominal system is the dialectal variation bigger than for the 1st person dual pronouns. Note that Wivell's (1981) description of Kairiru is

based on the Koragur dialect, shown in the first column of Table 8A (the full set of Koragur pronominals are displayed in Table 7). In at least one Kairiru dialect, You, clusivity is absent in the dual free forms: a single form *tu* suffices. For two other dialects (Serasin and Wom), data is missing, presumably because these forms were hard to elicit and speakers were confused. It is actually quite possible that these dialects have no clusivity contrast. In several dialects the forms *tumoi* '1PL.IN' and *tuwoi* '1PL.EX' are found, where *moi* and *woi* are possibly deictic elements. All this points to an earlier form general 1st person dual form *tu*, which was expanded in various ways, probably optionally at first, to reclaim the clusivity contrast. Not enough is known about the Sup forms *anas* and *anasa-kei*, except that *an* is a demonstrative 'this'. (These words also show up in the plural forms, and may well be optional deictic or quantifying elements). The Wom form *tarriny* '1DU.EX' is puzzling.

TABLE 8A. 1DU AND 1PL FREE PRONOUNS IN KAIRIRU DIALECTS

		Koragur	**Shagur**	**Rumlal**	**Serasin**	**Shem**
DU	1 IN	*tuyieq*	*tumoi*	*tuyieq*	…	*tuyieq*
	1 EX	*tu*	*tuwoi*	*tuwoi*	*tuwoi*	*tuwoi*
PL	1 IN	*taqam*	*taqam*	***taqam***	…	*taqam*
	1 EX	*qait*	*qait*	***taqam***	*taqam*	*qait*

TABLE 8B. 1DU AND 1PL FREE PRONOUNS IN KAIRIRU DIALECTS

		Yiwum	**Sup**	**Marai**	**You**	**Wom**
DU	1 IN	*tuyieq*	*tuyieq anas*	*tuyieq*	***tu***	…
	1 EX	*tu*	*tu anasa-kei*	*tuqum*	***tu***	*tarriny*
PL	1 IN	*taqam*	*taqam ansa-nyakei*	*taqam*	*taqam*	…
	1 EX	*qait*	*qait anas*	*qait*	*qait*	*taqam*

For the first person plural, it appears that the original clusivity contrast has been maintained in most dialects, with the exception of Rumlal, where the inclusive form *taqam* functions as a general first person plural pronoun. The lack of data for Serasin and Wom may again point to confusion on the part of the speakers and could well indicate a loss of clusivity. But this remains to be verified.

A remaining puzzle in Kairiru is the apparent meaning reversal of the exclusive-inclusive plural pronouns. Since the inclusive form *taqam* contains an *m*, it seems reasonable to see this as a reflex of the POc exclusive form **ka[m]i ~ kamami*. The exclusive form *qait* with a *t*, on the other hand, appears to go back to POc inclusive **kita.* If these are true reflexes, how did such a reversal take place? I am not aware of parallels in other Austronesian languages.[9] This is unlikely to be an elicitation or transcription

[9] Vitu (Meso-Melanesian, West New Britain) is only partly similar. Vitu *hita* 'we exclusive' is clearly a reflex of POc inclusive **kita* and also shows clusivity reversal. The Vitu inclusive form *tolu* is derived from POc **tolu* 'three', probably via a longer trial form of which the first part (the actual pronoun) was lost.

error, as Wivell spent a year studying the language for a master's degree, and his grammar contains various consistently glossed examples of these pronouns.

In summary, Kairiru is a case of an unstable clusivity contrast, with especially the dual pronouns a contested battleground. What makes Kairiru interesting is that it is geographically close to the Siau languages, to be discussed below, where clusivity has completely disappeared. Although Kairiru is not a member of the Siau group, some of the same influences from neighbouring Papuan languages must have been at work here.

5. **Hote** [hot], described by Muzzey (1979), is one of the nine or so South Huon languages (part of the North New Guinea cluster), spoken in the coastal and inland areas south of the town of Lae. Its pronominal forms are presented in Table 9. As can be seen, a clusivity contrast is maintained in the dual and plural free pronouns, but as in Yabem and Bugawac, clusivity is absent in subject prefixes. It is also absent from the possessive suffixes, which, like Bugawac and Wampar, do not distinguish number, only person.

TABLE 9. HOTE PRONOMINALS

		Free	**Subject**	**Possessor**
SG	1	*ya*	*yaha-*	*-ŋ*
	2	*o*	*ho-, o-, hu-, u-*	*-m*
	3	*yani ~ yeni*	*ha-, e-, i-*	*Ø, -ŋ*
DU	1 IN	*alayi*	***a-***	***-ŋ***
	1 EX	*yayi*		
	2	*mau*	*o-, u-*	*-m*
	3	*thayi*	*e-, i-*	*Ø, -ŋ*
PL	1 IN	*alalu*	***na-, a-***	***-ŋ***
	1 EX	*yilu*		
	2	*molu*	*no-, o-, nu-, u-*	*-m*
	3	*thilu*	*ni-, i-, ne-, e-*	*Ø, -ŋ*

The 1PL possessive suffix *-ŋ* is an expansion of the 1SG *-ŋ*, as number is not differentiated among these suffixes. The same has probably happened in the subject prefixes, although the details are less clear here. If 1PL *a-* originated from a former singular form, then a new singular form *yaha-* has emerged, presumably a combination of the free form *ya* and the old *a-*.

It is not clear which languages have exerted an influence on Hote, or whether this merger constitutes a spontaneous local development.

6. Mato [met] is a North New Guinea language spoken on the north coast of Morobe Province, near the provincial border with Madang Province. The pronominal system of Mato, taken from Stober (2013),

is presented in Table 10. Notice that duals and trials are only distinguished for free pronouns; for subject prefixes and possessive suffixes the plural set covers duals and trials.

TABLE 10. MATO PRONOMINALS

		Free	**Possessor**	**Subject**
SG	1	*nga*	*-gua ~ -gu*	*nga-*
	2	*ung*	*-ma ~ -m*	*u- ~ gu-*
	3	*ina*	*-noa ~ -na*	*Ø ~ i-*
DU	1 IN	*(ki)**tam***		
	1 EX	*(am)**tam***		
	2	*(ang)tang*		
	3	*(ding)tang*		
TR	1 IN	*(ki)**tum***		
	1 EX	*(am)**tum***		
	2	*(ang)tung*		
	3	*(ding)tung*		
PL	1 IN	*kira*	*-roa ~ -ra*	*ta-*
	1 EX	*am*	*-mama ~ -mam*	*ga- ~ a-*
	2	*ang*	*-ima ~ -im*	*a- ~ ga-*
	3	*ding*	*-dinga ~ -ding*	*di-*

According to Stober (2013:24), long free forms such as *kitam* and *amtam* are heard infrequently. They are most often used in isolation, for example, as single words in answer to a question. In addition, they may be used for comparison or contrast. Notice that in the short forms the clusivity contrast is lost for the duals and trials, *tam* being a general 1DU and *tum* a general 1TR. In addition, the short dual and trial forms neutralize the distinction between 2nd and 3rd person. Both distinctions are maintained in the plural pronouns, as well as on the subject prefixes and possessive suffixes.

The question which form has been retained in this clusivity merger in Mato is not easy to answer, as the short pronouns *tam* 'we (dual)' and *tum* 'we (trial)' do not directly reflect Proto-Oceanic pronouns, but rather constitute elements of obscure origin, possibly derived from deictics and numerals. In each case it is the longer form which retain the original pronominal element: *ki-* from POc **kita* 'we (inclusive)' and *am-* from POc **ka[m]i* 'we (exclusive)'. Mato therefore represents an unusual case of merger whereby a third element has taken over the semantic space occupied by a pair of contrasting items.

Mato has had a longstanding relationship with the Papuan language Yau [yuw], spoken in the mountains to the south of Mato and belonging to the Huon-Finisterre group. Stober (2013:6) observes: "According to Mato folklore, Mato and Yau […] were brothers from unknown origins who arrived on the beach near Bualu. The two agreed that Mato should rule the beach and foothill area and Yau would rule

the hinterland. To this day, relationships are strong between the Mato and Yau people, and several intermixed marriages strengthen this relationship." Since Yau does not make a clusivity contrast anywhere in its pronominal system (Lauver and Wegmann 1990), it seems reasonable to assume that the loss of clusivity in Mato can be attributed to influence from Yau. Note, however, that the loss in Mato is restricted to the free dual and trial pronouns, and is still in progress. (The optional merger of 2DU and 3DU, as well as 2PL and 3PL in the Mato free pronouns, can also be attributed to Yau, though in Yau it is the subject-marking suffixes on the verb which lack a second vs third person non-singular contrast. In the free pronouns, the contrast is present.)

7. Mekeo [mek] is a Papuan Tip language, fairly closely related to Motu, and spoken in a large area northwest of Port Moresby, the capital of Papua New Guinea. Mekeo has considerable dialect variation and represents the most westward expansion of the Oceanic languages on the south coast of New Guinea. The pronominal system of Mekeo, more specifically of the East Mekeo dialect, is shown in Table 11, which is based on Chung (1991) and Jones (1998). The apostrophe symbolised a glottal stop.

TABLE 11. MEKEO PRONOMINALS

		Free	**Possessor**	**Subject**	**Object**
SG	1	*lau*	*-u*	*la-*	*-au*
	2	*oi*	*-mu*	*lo-*	*-o*
	3	*isa*	*-a, -ŋa*	*e-, i-*	*-a*
PL	1 IN	*i'a ~ isa*	*-'a*	***a-***	*-'a*
	1 EX	*iai*	*-mai*		*-mai*
	2	*oi*	*-mi*	*o-*	*-mi*
	3	*isa*	*-'i, -i*	*ke-*	*-'i, -i*

Mekeo shows clusivity merger in just the subject pronouns; all the other pronominal paradigms retain the clusivity contrast. As with Hote 1PL *a-*, it is not completely clear which form has been retained. It is likely that *a-* reflects POc inclusive **ta-,* as POc **t* is regularly reflected as glottal or zero in Mekeo (Ross 1988:205). Alternatively, *a-* goes back to a singular subject prefix (retained in other Mekeo dialects, which have *a-* '1SG' and *ŋa-* '1PL'), which later acquired an excrescent *l-* in the singular, just as 2SG did.

It seems reasonable to assume that Papuan languages such as Kunimaipa to the north and Toaripi to the west have had a degree of influence on Mekeo (including the loss of clusivity discussed), but this remains to be investigated in detail.

In all these languages discussed (and there are almost certainly more to be discovered), we encounter partial loss of clusivity in just one or two components of the pronominal system. Let us now look at an example of complete loss.

3.4 Complete loss

Siau subfamily. In the Siau subfamily (part of the Schouten linkage within the North New Guinea cluster), the situation is markedly different. Here, and only here in west Oceanic, do we find a complete absence of clusivity among the pronominals in a group of closely related languages. It therefore seems safe to assume that the contrast was already lost in Proto-Siau. Traditionally this subgroup consists of five languages, listed here from east to west: Ulau-Suain [svb], Tumleo [tmq], Ali [ykm], Sissano [aps], and Sera [sry] (Laycock 1973, Ross 1988, Lynch, Ross and Crowley 2002). In more recent listings, e.g., the 16th and 17th editions of the *Ethnologue*, Ali has been renamed Yakamul (after one of the mainland villages) with two dialects (Yakamul and Ali), while Sissano has been split into Arop-Sissano [aps] (hereafter just Arop), Malol [mbk] and Sissano [sso], as they were deemed distinct enough to warrant separate language development programmes.

Sources for language data are as follows. All Siau languages: Evans (1996), based on field notes by Malcolm Ross; Ulau-Suain, Yakamul and Tumleo: Klaffl (1905); Tumleo: Schulze (1911); Malol: L. van den Berg, Rokus and Wirimai (in prep.); Sissano: Luke Warrington (pers. comm.); Arop: Whitacre (1986), John Nystrom (pers. comm), Wigboldus et al. (n.d.); Sera: John Nystrom (pers. comm.).

Table 12 gives the free pronouns for these languages, taken from various sources. (Where sources differ, more than one form is given; K: Klaff; R: Ross; S: Schulze.)

TABLE 12. FREE PRONOUNS IN THE SIAU LANGUAGES[10]

		Ulau-Suain	**Yakamul (Ali dialect)**	**Yakamul (Yakamul dialect)**	**Tumleo**	**Malol**	**Sissano**	**Arop**	**Sera**
SG	1	K: *geau* (almost *keau*) R: *jau*	K: *eo* R: *eu*	*eo*	S: *aueo* R: *awiau ~ (y)au*	*yia*	*juəke*	*ya* R: *ya ~ yia*	*ya*
	2	K: *yi* R: *i*	K: *yi* R: *i*	*yi*	S: *yiyi* R: *yiyi ~ yi*	*e*	*ʔe*	*e*	*ei*
	3	K: *wui* R: *u[a]*	*eŋ*	*yeŋ*	S: *yeiyei* R: *yei*	*i*	*'jiko*	*i ~ yi*	*i*
DU	1	-	K: *trit ~ tit*	*ati*	-	*otʃ*	*ʔuətʃəke*	*lot*	*ou*

[10] In Ulau-Suain the symbol *î* represents a high vowel with (probably) a schwa or weak *a*-like offglide: [iᵊ]. ("Bei den Vokalen bezeichnet ˆ das Nachschlagen eines ganz leichten a." Klaffl et al. 1905:49). The spelling for the Yakamul forms has been lightly modified, e.g. original 3SG *eṅ > eŋ*. The spelling of the Tumleo forms has also been modified (e.g. original 2SG *jijí > yiyi*). Only long (reduplicated) forms are given in the chart. Short Tumleo forms, typically used as objects, are 1SG *eau* (with weakly articulated *au*, often realised as *o*), 2SG *ye*, 3SG *ye* (the homonymy favouring the use of the longer forms), 1PL *ed*, 2PL *em*, 3PL *re ~ rei*.

	2	-	K: *treŋ ~ teŋ*	-	-	*otʃ*	*ʔuətʃəkɑ*	*lo*	*brou*
	3	-	K: *treŋ ~ teŋ*	-	-	*rutʃ*	*ruitʃəko*	*ro*	*rou*
PL	1	K: *yit* (not *yît*) R: *it*	K: *yît* R: *iat*	*yûk*	S: *eded* R: *atet ~ et*	*et*	*ʔitəke*	*et*	*uik*
	2	R: *am*	*am*	*am*	S: *emem* R: *amiem ~ iem*	*om*	*ʔomɑkɑ*	*om*	*buruik*
	3	R: *adi*	*re*	*ri*	S: *rerei* R: *reri ~ rei*	*re*	*riko*	*re*	*rei*

A few notes about this chart are in place. First, dual pronouns are absent from Ulau-Suain and Tumleo, and only one dual form *ati* (1DU) is given for the Yakamul dialect of Yakamul. Secondly, duals show various syncretisms. In Malol *otʃ* combines 1DU and 2DU, in the Ali dialect of Yakamul *treŋ ~ teŋ* combines 2DU and 3DU. In Sissano, the dual base *ʔuətʃə-* is modified by demonstratives to differentiate person (see more below).

Clusivity is also absent from other pronominal paradigms. None of the possessor suffixes makes a clusivity distinction, and neither do subject prefixes (which are missing in several Siau languages). Table 13 shows the full Arop pronominal paradigm (adapted from Whitacre 1986), which is illustrative for the other Siau languages.

TABLE 13. AROP PRONOMINALS

		Free	**Possessor**	**Emphatic**
SG	1	*ya*	*-k*	*ya-ne*
	2	*e*	*-m*	*e-na*
	3	*yi*	*-n*	*yi-no, yi-ne*
DU	1	*lot*	*-k-lot*	*lot-ne*
	2	*lo*	*-lo*	*lo-na*
	3	*ro*	*-ro*	*ro-no*
PL	1	*et*	*-k-et*	*et-ne, et-na*
	2	*om*	*-n-om*	*om-na*
	3	*re*	*-re*	*re-no*

The emphatic set in Arop combines free forms with deictic elements, and is used for emphatic or discourse-information reasons. Normally the 'person' of the pronoun agrees with the distance of the demonstrative. That is, 1st person takes proximal *-ne*, 2nd person takes medial *-na* and third person goes with distal *-no*. The resulting emphatic forms are *ya-ne* 'I here', *e-na* 'you there (near you)', *yi-no* 'he/she

over there' etc. However, 'disharmonious' forms are also found, e.g. *yi-ne* 'he/she here' and *et-na* 'we there (near you)', with the medial *-na* on the general 1PL *et*. Interestingly, the form *et-ne* 'we here' is used as a dedicated 1PL exclusive form, illustrated in the following example, from Wigboldus et al (n.d). A Warapu woman was asking questions to her sick stepson, with several people listening. Only those who knew Warapu could understand the questions. The speaker from Arop then explains:

(4) *Na* ***et-ne*** *Orop elin,* ***et*** *niy* ***et*** *elin tat-lon* *aij* *Warapu,*
CONJ 1PL-this Arop NEG 1PL person 1PL NEG 1PL.IRR-hear talk Warapu

et *elin to-lon.*
1PL NEG 1PL.RE-hear.

'But not us Arops. We (lit. we people, we) can't understand Warapu, so we didn't understand (what she said).' (David 099)

Notice the marked form *et-ne* 'we (exclusive)' occurring once at the beginning of the sentence, followed by three occurrences of the unmarked *et* 'we'. In other words, although clusivity is not marked on free pronouns, an exclusive pronoun can be formed if the situation requires it. This is at least true for Arop, and possibly also for Malol, Sissano and Sera; information for the other languages is lacking. This 'rescue mechanism', however, is optional and limited. It would seem reasonable to assume that *et-na* 'we there (near you)' has acquired an inclusive meaning, but this appears not to be the case. The form *et-na* is marked and rather rare; the few textual examples are all from translated materials and appear to deal with known information in relative clauses. Clusivity does not appear to be a factor.

In **Malol**, demonstratives appear to have similar, but not identical functions, though the details (mostly in translated materials) are not entirely clear. In this language the demonstratives primarily function as emphatic elements on pronouns, but they can also disambiguate person. The reason for this extra function is that the Malol dual pronoun *oʧ* (spelled *oj*) is ambiguous between 'we two' or 'you two'. In order to make it clear which two people are referred to, a demonstrative can be added following the pronoun. In combination with *ene* 'this (near the speaker)', *oj* means 'we two'. In combination with *aka* 'that (near the listener)', *oj* means 'you two'. A similar situation is found in **Sissano**, where the dual *ʔuəʧə-* is disambiguated between 1DU and 2DU reference by the demonstrative elements *-ne* 'this' and *-na* 'that (near you)'. Malol does not make a distinction between inclusive and exclusive reference for first person pronouns: *et* 'we (plural)' and *oj ene* 'we (dual)' can have either inclusive or exclusive reference. However, here too the demonstrative *ene* 'this' can help, at least in the plural case. As in Arop, the combination *et ene* results in an exclusive meaning of the plural. The combination *et aka* does not occur.

The other languages in this group are poorly described, in spite of over a century of contact and mission work, but it seems likely that demonstratives will turn out to have similar functions in the other speech varieties within this group.

When clusivity is completely lost, as in these languages, which form has been retained? Most of the forms for the general 1PL pronoun (*it, iat, et* etc.) all reflect POc **kita.* Sera *uik* and Yakumul *yûk* appear non-cognate, but probably arose through an excrescent initial glide *u-*, in combination with a change **t > k* and metathesis: **u-it > *uik > yuk*. It is the inclusive member of the pair which has been retained. The exclusive form has disappeared without leaving a trace. For the possessive suffix, it is the first

person singular suffix *-k* which has been generalised as a 1st person possessor, covering singular, as well as dual and plural, irrespective of clusivity.

An intriguing question can now be asked. What or who can be made responsible for the wholesale loss of clusivity in the Siau subgroup? Neighbouring non-Austronesian languages must surely have played a major role, but which ones? The languages currently bordering the mainland Siau languages are (from east to west) Bukiyip, Aruek, Valman, Olo, One in its various varieties (currently split up into six languages) and Warapu. The first five of these belong to the Torricelli family, while Warapu is a Skou language. Of the Torricelli languages Bukiyip, Olo and Valman do not have a clusivity contrast (no information is available on Aruek), and indeed Ross (n.d.) reconstructs Proto-Torricelli with a single generic 1pl **ku-m* (and an alternant **əpə*). However, at least two One varieties do show clusivity (Molmo One and RomBar). Warapu, like most Skou languages, also lacks clusivity, but since this language came from the west recently and has only been in contact with the westernmost Siau languages (Sera, Arop, Sissano, Malol), its influence on the Siau group has probably been limited. Still, all the data point to a rather strong clusivity-free environment in which speakers of the Siau languages find themselves, and this was presumably true for speakers of proto-Siau. The proto-Siau homeland was probably on the eastern edge of their current location (see Ross 1991) and one can easily imagine a scenario of cautious initial trade between speakers of proto-Siau who settled in the area and speakers of one or more Torricelli languages already present. Initial contact was followed by further exchanges as peaceful interaction was beneficial to both parties. Periods of friendly communication and exchange were no doubt punctuated by occasional bursts of warfare (which seems typical for all of New Guinea), but the end result must have been far-reaching mutual influence due to the exchange of women, artistic designs, songs, beliefs, and, of course, language. That this area of the north coast has been a zone of centuries-long contact and influence is clear from Wronska-Friend (1993) and Donohue and Crowther (2005). It therefore seems safe to assume that Proto-Siau lost the clusivity contrast under the influence of its Torricelli neighbours with whom there must have been in intensive contact. Laycock (1973:5) makes an interesting comment on Sissano: “The main villages are Sissano, Malol and Arop - the two former being divided into many hamlets. [...] Some dialect divergence between villages, and in the case of Tainyapin hamlet (Malol), it appears that the divergence is due to the migration into Malol of an originally One-speaking group. Kirschbaum (1910) observes that Malol shows more non-Melanesian elements than surrounding languages.” No further details are given as to what these elements are, but further comparisons between Malol and One varieties may bring these elements to light.

How Molmo and RomBar One (and several Skou languages as well) developed clusivity is beyond the scope of this paper, but it seems safe to assume that the Siau languages did not play a role in this development.

A final comment is worth making in the light of the next section. Both the Torricelli languages and the Skou languages make heavy use of grammatical gender in the pronominal system. It would not have been surprising if one or more of the Siau languages had developed gender, but this is apparently not the case.

3.5 Summary

Table 14 summarises the loss of clusivity in west Oceanic, highlighted by the grey cells. A hyphen indicates that the category does not occur in the language (e.g. trial free pronouns). Three dots (…) indicate a lack of data.

TABLE 14. CLUSIVITY LOSS IN WEST OCEANIC

Is there a clusivity contrast for first person non-singular?	**dual free pronouns**	**trial free pronouns**	**plural free pronouns**	**subject prefixes**	**possessor suffixes**
Bugawac	yes	-	no	yes	no
Yabem	no	-	no	yes	no
Duwet	-	-	yes	no	no
Wampar	no	-	yes	no	no
Kairiru (Koragur dialect)	yes	-	yes	yes	no
Kairiru (You dialect)	no	-	yes	…	…
Kairiru (Rumlal dialect)	yes	-	no	…	…
Hote	yes	-	yes	no	no
Mato	optional	optional	yes	yes	yes
Mekeo	-	-	yes	no	yes
Siau languages (7)	no	-	no	-	no

Table 15 summarizes our findings about which member (if any) of the clusivity opposition was retained in cases of clusivity merger. In quite a few cases, not enough is known about the history of the language to make convincing etymological claims. Duwet is representative of another ten Markham languages.

TABLE 15. RETENTION IN CLUSIVITY MERGER

language	**locus of clusivity merger**	**form of merged pronominal**	**origin**
Bugawac	plural free	*yac*	exclusive (probably)
	possessor	*-ŋ*	1SG

Yabem	dual free	*aêàgêc*	exclusive
	plural free	*aêàc*	exclusive
	possessor	*-ŋi*	unclear
Duwet	subject	*a-*	1SG
	possessor	*-ngg, -k*	1SG
Wampar	dual free	*abid abid*	reduplicated nominalized verb
	subject	*manga-*	*ma-* + 1SG (possibly)
	possessor	*-d* (unmarked) *-g* (four nouns)	inclusive 1SG
Kairiru (Koragur dialect)	possessor	*-qait*	exclusive (after clusivity reversal?)
Kairiru (You dialect)	dual free	*tu*	inclusive (probably)
Kairiru (Rumlal dialect)	plural free	*taqam*	inclusive (after clusivity reversal?)
Hote	subject	*a-*, *na-*	1SG (probably)
	possessor	*-ŋ*	1SG
Mato	dual free	*tam*	unclear
	trial free	*tum*	unclear
Mekeo	subject	*a-*	inclusive (probably)

Table 16 does the same for the seven Siau languages.

TABLE 16. RETENTION IN CLUSIVITY MERGER (SIAU LANGUAGES)

language	**locus of clusivity merger**	**form of merged pronominal**	**origin**
Ulau-Suain	plural free	*yit ~ it*	inclusive
Yakamul (Ali dialect)	dual free	*trit ~ tit*	inclusive
	plural free	*yît, iat*	inclusive
Yakamul (Yakamul dialect)	dual free	*ati*	inclusive
	plural free	*yûk*	inclusive (probably)
Tumleo	plural free	*eded; atet ~ et*	inclusive
Malol	dual free	*otʃ*	unclear
	plural free	*et*	inclusive
Sissano	dual free	*ʔuətʃəke*	unclear + demonstrative

	plural free	*ʔitəke*	inclusive + demonstrative
Arop	dual free	*lot*	numeral + inclusive
	plural free	*et*	inclusive
Sera	dual free	*ou*	unclear
	plural free	*uik*	inclusive (probably)

The following summary statements can be made about the loss of clusivity in west Oceanic.

- The vast majority of west Oceanic languages maintain a clusivity contrast for first person non-singular throughout the pronominal system. Partial or complete loss of clusivity, however, is not uncommon and present in 26 languages of the 120 examined, amounting to some 22%.
- Loss of clusivity is most often limited to one or more subsets of the pronominal system, as shown in Tables 15 and 16. There does not appear to be a natural entry point for clusivity merger; the evidence accumulated so far suggest that clusivity merger can happen anywhere in the system.
- Total loss of clusivity is limited to the seven languages of the Siau group around Aitape.
- When clusivity is lost (either partially or completely), it is usually the inclusive member which is retained. Exceptions to this pattern (as in Yabem and Kairiru) suggest that this is not a robust rule. In several cases an originally 1SG pronominal affix has expanded its range of meaning. Since 1SG is necessarily exclusive, this could be considered an example of exclusive expanding to take over the whole semantic space of first person. In a few cases the origin of the merged form is obscure.
- Loss of clusivity can in a few cases be reasonably attributed to the influence of neighbouring Papuan languages. This is particularly evident for Yabem and Bukawa (Finisterre-Huon languages), Mato (influence from Yau), as well as the Siau group (seven languages with complete lack of clusivity), where one or more Torricelli languages must have exerted pressure on Proto-Siau. In other cases, such as the Lower Markham languages, Hote, and Mekeo, such influence appears likely, but remains speculative.
- Most of the languages with loss of clusivity are spoken on the New Guinea mainland, with the exception of Kairiru. This is hardly surprising, as this is where we expect the most intense interaction between speakers of Austronesian and Papuan languages to have occurred. Loss of clusivity appears to be absent from the followings subgroups: Sarmi-Jayapura, St Matthias, Manus, and Meso-Melanesian. It is also rare in the Papuan Tip subgroup (with Mekeo being the exception).
- It is remarkable that various heavily Papuanised Oceanic languages have retained the clusivity contrast, in spite of major structural adaptations to their Papuan neighbours. Examples include Manam, Takia and Dami/Marik (North New Guinea cluster), all showing SOV constituent order, postpositions and some verb chaining, languages belonging to the Papuan Tip (especially Maisin and the Ouma family), as well as languages in the Pasismanua linkage (Kaulong, Miu, Sengseng,

Aighon), many of which have some of the lowest cognate retention rates within the Austronesian family (Blust 2013:692). Assuming that these languages were predominantly influenced by Papuan languages without clusivity, they have succesfully resisted the Papuan pressure to lose this typical Austronesian feature.

4. Gender

Just as the clusivity contrast is part and parcel of the DNA of Austronesian languages, albeit with minor exceptions as outlined above, gender is almost universally absent from Austronesian languages (Blust 2009). This is not only true for gender in pronominal systems, such that a single unisex 3rd person pronoun covers both 'he' and 'she', but it also applies to nouns. Mostly absent from west Oceanic (and Austronesian in general) are the familiar systems with two or three grammatical noun genders (masculine, feminine, neuter) which are typically shown by agreement features on articles, demonstratives and adjectives, as found in e.g. French, German and Russian (see Corbett 1991 for a detailed study of gender). Exceptions to this rule are a few languages around Bougainville which display a gender-like system of noun classification (e.g. Siar, Taiof, Nehan), typically expressed by different articles. However, the relationship with natural gender is often not transparent, and such systems are, following Kroeger (2005), possibly better described as having noun classes (see Frowein 2011 for Siar).

A rare case of natural gender marking is reported for Yabem (Csobor and Bradshaw 2005:29) where "the suffix *-ò* on nouns denoting individuals marks their natural gender as feminine, as in *ŋapalê* 'boy' [or 'youth'], *ŋapalêò* 'girl', *lau* 'people, *lauò* 'women'." A similar case is reported for Aiklep (Wayne Baker, pers. comm.) where "some human names have a *-yo* suffix for the male or a *-me* suffix for the female." Such occurrences of derivational natural gender marking do not fall under grammatical gender as defined by Corbett (1991) and should not obscure the fact that, apart from its occurrence in pronousn, grammatical gender is nouns is extremely rare or possibly even absent in west Oceanic.

However, just as the clusivity contrast is occasionally absent in west Oceanic pronouns, gender is occasionally present. Let us look at the few languages that have developed gender in their pronominal system: 1) Kilivila; 2) several languages in the Arawe-Pasismanua linkage (New Britain) and 3) two languages in the Ysabel linkage (Solomon Islands).

4.1 Gender in some individual languages

Kilivila. Kilivila [kij] (also known as Kiriwina), is a Papuan Tip language spoken on the Trobriand Islands in Milne Bay Province. The language and culture of the Trobriand Islands has become well-known in academic circles (and beyond) through the work of the anthropologist Bronislaw Malinowski carried out in the 1920s and 1930s. More recently, Gunter Senft has published extensively on Kilivila, see e.g. Senft (1986, 1996). Lawton (1993) is another important source on the language. The pronominal forms of Kilivila are shown in Table 17.

Table 17. Kilivila pronominals

		Free	**Possessor**	**Subject**
SG	1	*yegu*	*-gu*	*a-*
	2	*yokwa ~ yoku*	*-mu*	*ku-*
	3 MASC	*mtona ~ mtowena*	*-la*	*i- ~ e-*
	3 FEM	*minana ~ minwena*		
DU	1 IN	*yakida*	*-da*	*ta-*
	1 EX	*yakama*	*-ma*	*ka-*
PL	1 IN	*yakadasi*	*-dasi*	*ta-…-si*
	1 EX	*yakamesi*	*-masi*	*ka-… -si*
	2	*yokwami*	*-mi*	*ku-…-si*
	3	*mtosina ~ minasina*	*-si*	*i- ~ e-... -si*

As Senft (1986:47) points out, the 3rd person pronouns *mtona* 'he' and *minana* 'she' are actually demonstrative pronouns. Historically, it appears that they were formed on the basis of the classifiers (or 'classificatory particles') *to* 'man, male' and *na* 'woman, female'. The first of these presumably goes back to the Proto-Oceanic root **tau* 'body, person', with vowel coalescence and semantic narrowing resulting in the form *to* 'man (in classifiers)'. (The current word for 'man' is still *tau* in Kilivila). The origin of the feminine root *na* is unclear ('woman' is *vivila* and appears to be unrelated; it is possible that *na* reflects Proto-Oceanic **ina* 'mother'[11]). The origin of these pronouns as demonstratives with classifiers is hardly surprising, as Kilivila is very rich in classifiers; Senft (1986) lists no less than 170 of them. The elements *m-* in *m-to-na* (and its variant *mi-* in *mi-na-na*) as well as the suffix *-na* are deictic elements specifying the location of the noun; all of them mean 'this'. The longer forms *mtowena* and *minawena*[12], which are rarely used, contain a distal deictic element *-we-* 'that'. These gender-based pronouns probably originated therefore as adnominal demonstratives, agreeing with their head noun. In time, they came to be used independently and acquired pronominal features, presumably pushing out an earlier 3rd singular unisex pronoun. Historically the development probably went as follows:

m-to-na tau 'that man' > *mtona* 'that one (male); he'

mi-na-na vivila 'that woman' > *minana* 'that one (female); she'

It should be noted that the gender distinction shows a weak degree of integration in Kilivila, as it is neither present in the possessive system, nor in the subject prefixes. The simple 3SG possessive suffix *-la* 'his, her', reflecting Proto-Oceanic **-ña*, serves for both genders. The same is true for the subject prefix *i- ~ e-*.

[11] This suggestion was made by a reviewer.

[12] Senft (1986) gives *mtovena* and *minavena* with *v* (on page 47), but *mtowena* and *minawena* with *w* (on page 65).

Nothing is known about a possible trigger for the development of gender in Kilivila and the language is not currently in contact with any Papuan language. Could the rise of gender have been caused by, for instance, the presence of a gender distinction in the pronominal system of a non-Austronesian language spoken by an earlier population on the Trobriand Islands, as Blust (2013:320) suggests? Could that lost language also be responsible for the complex system of classifiers, so unusual for a Papuan Tip language? That is a possible scenario, though in the absence of any concrete evidence this must be considered speculative. It is clear that the population of the Trobriands and other islands in the region genetically represents an admixture (see van Oven et al. 2014). Still, I am inclined to view the rise of gender as a spontaneous local development that grew out of the pervasive classifier system. What started out as masculine and feminine adnominal demonstratives eventually turned into 3rd person pronouns, a process that is fairly well-known (see Bhat 2004).

Arawe-Pasismanua. The languages to be discussed next are spoken in the western half of the island of New Britain. Several members of this linkage have developed gender distinctions among their free pronouns, sometimes even involving further distinctions. Lynch, Ross and Crowley (2002) list 12 languages belonging to the Arawe-Pasismanua linkage (part of the North New Guinea cluster), but unfortunately information on many of them is very limited. Table 18 gives the 3SG free pronouns for those languages for which information is available. Data sources are as follows.

- **Kaulong** [pss]: Ross (2002b), Throop (1992), Blust (2013);
- **Miu** [mpo]: Lenore Tillitson (pers. comm.);
- **Sengseng** [ssz]: Chowning (1985), Steve Henley (pers. comm.);
- **Aighon** [aix]: Il-Jae Jung (pers. comm.);
- **Akolet** [akt]: Julie Martin (pers. comm.);
- **Bebeli** [bek]: Spencer, Van Cott and MacKenzie (2013).

For the following languages no information could be obtained: Arove, Apalik, Avau, and Atui (all from the Arawe linkage). Two of the languages from the Arawe linkage for which information *is* available, Aiklep (Wayne Baker, pers. comm.) and Mangseng (Milligan 1992), do not show a gender distinction: the 3SG free pronoun is *i* in Mangseng and absent in Aiklep (a full noun phrase is used instead). The remaining gendered pronouns are displayed in Table 18 (where B is Blust, C Chowning and H Henley).

TABLE 18. 3SG FREE PRONOUNS IN VARIOUS NEW BRITAIN LANGUAGES

	Kaulong	**Miu**	**Sengseng**	**Aighon**	**Akolet**	**Bebeli**
3SG MASC	*hiang* B: *yang*	*hyang*	C: *ve* H: *wi*	*vee* 'married' *tee* 'unmarried'	*som* 'married' *pa* 'unmarried'	*pu* ~ *p^{h}u*
3SG FEM	*vut* B: *wut*	*etang*	*et*	*ee* 'married' *too* 'unmarried'	*eng* 'married' *et* 'unmarried'	*t^{h}i*
3SG NON-HUMAN	*li*	*li*	*i*	*i*	-	…
3SG OTHER	*sun* 'switch subject'	*sun* 'switch subject'	…	…	-	…
3PL	*po*	*ho*	*po*	*po*	*nuk* 'they (married males)' *min* 'they (married females)' *wol* 'they (unmaried males or females)'	…

Some comments on each of these languages is in order. **Kaulong** is spoken on the south coast of West New Britain, around the town of Kandrian. Rather than having one simple 3SG free pronoun, Kaulong distinguishes four 3SG pronouns. The first three are somewhat reminiscent of Germanic languages: *hiang* 'he', *vut* 'she' and *li* 'it'. However, the usage of the pronoun *li* differs considerably from Germanic: *li* is not a neuter pronoun referring to objects (or persons who are grammatically neuter), but rather it is the pronoun for referring to non-human higher animates. The list of such animates includes large animals, bush spirits, ghosts, as well as – somewhat surprisingly – Europeans. (The connection between white-skinned people and ghosts is common in Papua New Guinea; traditionally white people were seen as ancestors who had returned from the dead.) In addition, Kaulong has an additional term *sun* 'he', which is analysed by Ross (2002b) as a 'switch-subject' pronoun, indicating that the referent is different from an earlier 3rd person in the same sentence. The following example illustrates this: 'He$_a$ (*hiang*) took his thing and he$_b$ (*sun*) left'.

Kaulong is one of the lexically most innovative languages in Melanesia, with a retention rate of barely 5% (Blust 2013:314), and hence little is known about the etymology of many lexical and grammatical items. It is likely, however, that *li* continues an original Proto-Oceanic pronoun **ia* (although the origin of the initial *l* is unclear; possibly it is an accreted verb-final consonant), while the

words for 'he' and 'she' originated as nouns and can still function as such. One piece of evidence for this claim is that these two words can still be modified by the indefinite article *ta* or by an adjective: *vut ta* (3SG.FEM INDEF:SG) 'a female person'; *hiang hiangan ta* (3SG.MASC old INDEF:SG) 'an old man'. Given that *hiang-an* is a derived adjective meaning 'old' (compare *sa-an* 'wooden' from *sa* 'tree'), it seems likely that the masculine pronoun *hiyang* 'he' originates from a noun meaning 'old man'. Nothing is known about the origin of the feminine *vut* 'she'.

As in Kilivila, the gender distinction in Kaulong is not present in the inalienable possessive system. The simple 3SG possessive suffix *-n* 'his, her, its' covers all three genders.

Miu is a small inland Pasismanua language, spoken to the northwest of Kaulong. The gender-based forms look very similar to Kaulong. Miu presents another piece of evidence that these gendered pronouns derive from nouns, and syntactically probably still are nouns. Compare the following combinations of the inalienable noun *mihi* 'head' with possessors:

(5) a. *mihi ngo* 'my head'

b. *mihi-p* 'your head'

c. *hyang mihi-n* 'his head'

d. *yu mihi-n* 'a pig's head'

In (5a), the 1SG free pronoun *ngo* 'I' simply follows the noun. In the case of 2SG we find the typical Oceanic pattern for inalienable possession: a unique possessive suffix *-p* (almost certainly going back to an earlier **-m* < **-mu* through sporadic denasalization). For 3SG.MASC the 'pronoun' *hyang* does not follow the noun (as would be expected from a pronoun), but rather behaves like a regular noun such as *yu* 'pig' in (5d) which precedes the head (!) noun. The head noun in turn is suffixed with the 3SG possessive marker *-n*.

Sengseng or Asengseng is spoken to the east of Kaulong and makes the same three distinctions among its pronouns. Nothing is known about the use or the origin of the masculine forms *ve* ~ *wi* or the feminine form *et*.

Aighon, spoken across a broad swath of land from near the south coast to close to the north coast of central New Britain, is unique among this group in that it not only signals gender in 3rd person pronouns (masculine, feminine and non-human), but also marital status among the first two. The further distinction made here is between a 'gamic' and an 'agamic'[13] set: *vee* 'he (married)' versus *tee* 'he (unmarried)', and *ee* 'she (married)' versus *too* 'she (unmarried)', where <ee> represents [ɪ], and <oo> is [ʊ]. Again, none of these distinctions is present in the 3SG possessive suffix, which is just a single suffix *-n* 'his, her, its'. The origin of this unique system is unclear, though from Sengseng *ve* 'he', it appears that the agamic set is an innovation. It must be stressed, however, that the data for Aighon is limited and the analysis is still tentative. There is, for instance, no information about the pronominal and nominal features of these forms.

[13] The terms 'gamic' and 'agamic' were originally suggested by Ian Tupper in 2008 during discussions in Ukarumpa.

Akolet, spoken south of Aighon west of the town of Gasmata, is a member of the Arawe linkage and, like Aighon, also shows both a gender and a gamic contrast. In this case, more is known about the pragmatics of the gamic forms. First, for widows and widowers, reference reverts back to the agamic form. In the case of divorce, the gamic forms continue to be used. Secondly, it appears that the agamic forms are unmarked. One can refer to a married woman as either *et* or *eng*. This can happen by the same speaker or even within the same conversation. The same is true for the masculine forms *som* and *pa*, though here the rules are possibly somewhat tighter. In each case the agamic form is the unmarked member of the pair (and can therefore also refer to a married person), though the exact rules surrounding the usage remain to be worked out.

In Akolet the gender contrast is maintained in the plural, but only for married people. The unmarried plural term *wol* is unmarked for gender. Nothing is known about the origin of the singular or plural pronouns.

Data for **Bebeli**, an endangered language spoken to the north of Aighon between the towns of Hoskins and Kimbe, is very limited, but appears to confirm at least a two-fold gender distinction.

The presence of gender in this area is almost certainly due to Papuan influence, as all the Papuan languages still spoken in New Britain (Anêm, Ata, Kol, Sulka, the Baining languages) make a gender distinction in the pronoun system (see Reesink 2005 for details). However, none of these Papuan languages are particularly close geographically to those members of the Arawe-Pasismanua group that have developed gender, with the exception of Bebeli. So, which Papuan languages are responsible for this innovation? The most plausible hypothesis for the current distribution of gender-based pronouns is to assume the former presence of other Papuan languages in the interior of New Britain, languages that have disappeared or amalgamated with the incoming Austronesian population after leaving a very distinct imprint, both lexically and structurally. Suggestions of this kind have been done by various scholars, including Chowning (1996), Ross (2002b) and Blust (2013). New Britain is home to several Oceanic subgroups and various Papuan isolates, reflecting a tumultuous history of waves upon waves of population movements, resulting in trade relations, intermarriage and gene flow, interspersed with strife and warfare. These complexities were compounded by demographic disruptions due to volcanic eruptions (a constant factor in the history of the island from prehistoric times to the present), in addition to droughts, famine and flooding. Some of these events are vividly remembered by current populations. Chowning (1996) paints a persuasive picture of how these various factors have played out in language contact and influence. Although the actual contact details between these Papuan groups and the Arawe-Pasismanua linkage may well be beyond retrieval, there can be little doubt that the development of such a unique feature as gender needs to be attributed to intensive language contact.

A third language area in west Oceanic where pronominal gender is found is the island of Ysabel in the Solomon Islands. The languages with gender are Cheke Holo and, to a lesser degree, Kokota. Both belong to the New Ireland/Northwest Solomonic linkage of the Meso-Melanesian cluster.

Cheke Hole [mrn], also known as Maringe, has a gender contrast in the third person, as shown in Table 19 (data from White et al. 1999, Boswell 2009 and David Bosma, pers. comm.).[14]

[14] The symbol <g> stands for the fricative /ɣ/, while <g̃> represents the stop /g/; <gn> is the palatal nasal /ɲ/.

TABLE 19. CHEKE-HOLO PRONOMINALS

		Free	**Possessor**	**Object**
1 IN	SG	-	-	-
	DU	*tapa*	*=da*	*=gita*
	TR	*tatilo*		
	PL	*tahati*		
1EX	SG	*iara*	*=ḡu*	*=gau*
	DU	*gepa*	*=mi*	*=gami*
	TR	*getilo*		
	PL	*gehati*		
2	SG	*iago*	*=mu*	*=nigo*
	DU	*gopa*	*=mi*	*=gami*
	PL	*gotilo*		
3	SG MASC	*mana*	*=gna*	*=ni*
	SG FEM	*na'a*		
	DU	*phiamare*	*=di*	*=di*
	DU FEM	*repa*		
	TR	*thilomare*		
	TR FEM	*retilo*		
	PL	*(hati)mare*		
	PL FEM	*rehati, re'e*		

The gender system of this language is unusual on two accounts. In the first place gender is not limited to third person singular, but is also present in the third person dual, trial and plural forms. Notice that the possessive and direct object forms are completely unmarked for gender in third person, showing a simple singular versus non-singular contrast. Secondly, the features 'masculine' and 'feminine' do not map simply onto the pronominal forms, but follow an unusual semantic pattern. The masculine pronoun *mana* 'he' refers to a male when men are speaking, and usually when women are speaking. The feminine pronoun *na'a* 'she' refers to a female when men are speaking, and usually when women are speaking. However, when a woman is speaking to another woman (or a group of women), the gender reference can be reversed. In such cases, *mana* can have female reference and *na'a* male. This 'referential gender reversal' happens only when both the speaker(s) and the addressee(s) are exclusively women. An example (taken from the Cheke-Holo translation of the Bible) is (6), where Martha speaks to her sister Mary about the arrival of Jesus in their village.

(6) *Meri, mae velepuhi na la mei=hi.*
M. man teacher ART.SG ASP come=COMP

Na'a	*neke*	*gusna*	*nigo*	*iago*	*mala*	*tei*	*ka*	***na'a****.*
3SG.FEM	PAST	ask	2SG.OBJ	2SG	PURP	go	LOC	3SG.FEM

'Mary, the teacher has come. He asked you to go to him.' (John 11:28)

In this case the 'feminine' pronoun *na'a* unambiguously has masculine reference. The semantics of such a system is intriguing, as it combines features of a referent-based system (well-known from European languages), a speaker-based system (described for a few other Austronesian languages, see Blust 2013:320-321), but in addition an addressee-based orientation, which is typologically very unusual.

In the large group of 3rd person non-singular forms it is apparently the feminine forms which are marked. Thus, *repa* 'they two' is only used to refer to two women, while *phiamare* 'they two' can refer to either two men or to a man and a woman. Notice that for the non-singular pronouns, gender appears to be exclusively referent-oriented.[15]

The origin of these 3SG pronouns is not entirely clear. The feminine form *na'a* is probably a lengthened form of an older *na* (compare the long 3PL.FEM form *re'e* with the short form *re* in *re-hati*), while the masculine *mana* is probably historically a noun, related to *mae* 'man', which also acts as a 'male classifier', as in (6): *mae velepuhi* 'the (male) teacher'. Neighbouring Kokota *mane* 'man' further supports this etymology.

As for the origin of the non-singular pronouns, it is surprisingly the marked feminine forms which are retentions. The feminine forms are simply based on the Proto-Oceanic pattern of a free pronoun (*re*) followed by a numeral (*phia* 'two', *thilo* 'three', *hati* 'four'). The old quadrals with *-hati* have developed into unmarked plurals. The origin of the element *-mare* in the unmarked non-singular forms is not entirely clear; *-re* is almost certainly 3PL and *-ma-* is possibly a linking element 'and'.

Kokota [kkt], spoken to the north of Cheke Holo on the same island in the Solomon Islands, has a residual gender contrast between *manei* 'he, she' and *nai* 'she'. According to Palmer (2009:69), *nai* is rarely used, and only by older speakers. The unmarked term is *manei* for both genders. As *manei* appears to be related to the noun *mane* 'man' (with *-i* from either a reduced demonstrative *ine* or a pragmatic particle *hi*), it must originally have had masculine reference. Interestingly, it is this term which is now pushing out the original *nai,* which almost certainly was gender-neutral at an earlier stage of the language. Combining information from Cheke Holo and Proto-Oceanic, the following diachronic developments can be proposed for Kokota.

(7)	Stage 1	--	*nai* 'he, she'
	Stage 2	*manei* 'he'	*nai* 'he, she'
	Stage 3	*manei* 'he'	*nai* 'she'
	Stage 4	*manei* 'he, she'	*nai* 'she'

[15] White et al. (1988), a dictionary of Cheke Holo, disagrees with Boswell on the semantics of the non-singulars. According to White et al. *phia mare* means 'they dual masc (male speaking)'; while *repa* 'they two (female speaking) or male speaking of non-male'. In other words, the dual system is like the singular in that it combines referent and speaker-orientation for gender. More research into this intriguing system is obviously needed.

Stage 5 *manei* 'he, she' --

Stage 1 reflects the typical Oceanic position, with a single pronoun covering both genders (though the shape of the pronoun *nai* is of course conjectural). At stage 2 the male pronoun is the marked member of the opposition, with *nai* still having double gender reference. At this point it is unclear whether Kokota also combined referent-orientation, speaker-orientation and addressee-orientation in the actual usage of these pronouns, as Cheke Hole does. Stage 3 is a probable intermediate stage (though speculative), with an unambiguous referent-based system. This in turn led to Stage 4, which is the current speech of older speakers, where the female pronoun is the marked one. Stage 5, finally, represents the speech of younger and middle-aged speakers, without any gender distinction. If the speech of older people had not been recorded, and the language was to be studied many years from now, we would be probably at a loss accounting for the single 3SG pronominal form *manei.*

4.2 Summary

The following conclusions can be drawn regarding pronominal gender in west Oceanic.

- Gender is very rare in west Oceanic, found in only nine of a sample of 120 languages (7.5%), one of which (Kokota) has only a vestigial example.
- In seven of these languages, gender is limited to 3SG; only two languages (Akolet and Cheke-Holo) show gender also among non-singular third person pronouns.
- Gender is limited to free pronouns and therefore poorly integrated in the pronominal system as a whole.
- Gendered pronouns in west Oceanic show interesting semantic and pragmatic features, including a speaker and addressee-based system in Cheke Holo, and a further gamic-agamic contrast in a few Pasismanua languages.
- In the case of the Pasismanua languages of West New Britain, it seems reasonable to assume that (currently extinct) Papuan languages have had a major impact on the incoming Austronesian population. The development of gender in the other three examples (Kilivila, Cheke Holo and Kokota), appears to be a spontaneous local development. Influence from Papuan languages cannot be ruled out, but must be considered speculative at this point.
- For the few cases where information is known, gendered pronouns appear to originate as nouns meaning 'man' or 'old man' (there are no unambiguous cases of a noun meaning 'woman' becoming a pronoun), or, as in the case of Kilivila, a classifier.
- No cases have been encountered where clusivity was lost and gender developed within the same pronominal system.
- It is somewhat surprising that various west Oceanic languages which have been in longstanding contact with Papuan languages with gendered pronouns, have not developed gender

themselves. This is especially remarkable for the Siau languages, surrounded as they are by neighbouring Torricelli and Skou languages where pronominal gender figures prominently.[16]

5. Conclusion

This study has shown how complex and multifaceted the 'simple' loss and addition of a semantic feature to a pronominal system can be. In cases where we are faced with the final result, such as the complete absence of clusivity, we can be sure that this is the end point of a long and gradual process. All the data suggest that when clusivity merger starts in a language, paradigms are not affected wholesale, but rather sporadically and probably also through stages of optionality, as illustrated in Mato.

Further study is needed in several areas. First, the database needs to be broadened to encompass all the west Oceanic languages for which information is available. Secondly, the pragmatics of gendered pronouns needs very careful research; the simple presence of a gender contrast can hide intriguing usage patterns, as shown by Akolet and Cheke Holo. Finally, more detailed studies need to be carried out about the direction of contact-induced language change in pronominal systems between Papuan and Austronesian groups. What kind of cultural and linguistic scenarios underlie bidirectional diffusion, as with the loss and spread of clusivity in the Huon Peninsula? What has contributed to the rise of gender in the Pasismanua langages? Why was clusivity lost but gender did not arise in the Siau languages? What makes a certain linguistic feature susceptible to diffusion in a given setting? It is questions such as these that will occupy linguists in the New Guinea area for many more years.

[16] A reviewer pointed out that from a global perspective, the failure to develop gender in a gender-rich areal environment is actually quite common. The Uralic languages and Basque, for instance, have not developed gender in 3SG pronouns, despite intense contact with Indo-European languages.

References

Bhat, D.N.S. 2004. *Pronouns*. Oxford: OUP.

Bickell, Balthasar and Johanna Nicholls. 2005. Inclusive-exclusive as person vs. number categories worldwide. In: Filiminova, ed., 49-72.

Blust, Robert. 2009 [revised edition 2013] *The Austronesian languages*. Canberra: Pacific Linguistics.

Boswell, Freddy. 2009. A grammatical description of Cheke Holo, an Oceanic language of Santa Isabel, Solomon Islands. Unpublished draft.

Bradshaw, Joel and Francisc Czobor. 2005. *Otto Dempwolff's grammar of the Jabêm language in New Guinea.* Oceanic Linguistics Special Publication No. 32. Honolulu: University of Hawai'i Press.

Chen, James Ming. 2006. First person plural. *Minnesota Legal Studies Research Paper No. 06-30.* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=916018

Chowning, Anne. 1985. Rapid language change and aberrant Melanesian languages: Sengseng and its neighbours. In: Andrew K. Pawley and Lois Carrington, eds, *Austronesian linguistics at the 15th Pacific Science Congress*, 169-198. Canberra: Pacific Linguistics.

Chowning, Anne. 1996. Relations among languages of West New Britain: an assessment of recent theories and evidence. In: Malcolm D. Ross, ed., *Studies in languages of New Britain and New Ireland*, vol. 1: 7-62. Canberra: Pacific Linguistics.

Chung, Je-Soon. 1991. Mekeo grammar essentials. Unpublished ms. Ukarumpa: SIL.

Corbett, Greville. 1991. *Gender*. Cambridge: CUP.

Cysouw, Michael. 2003. *The paradigmatic status of person marking*. Oxford: OUP.

Dixon, R.M.W. 2010. *Basic linguistic theory. Volume 2. Grammatical topics*. Oxford: OUP.

Donohue, Mark and Melissa Crowther. 2005. Meeting in the middle: interaction in North-Central New Guinea. In: Andrew Pawley, Robert Attenborough, Jack Golson and Robin Hide, eds, *Papuan pasts: cultural, linguistic and biological histories of Papuan-speaking peoples*, 167-184. Canberra: Pacific Linguistics.

Eckermann W. 2007. *A descriptive grammar of the Bukawa language of the Morobe Province of Papua New Guinea*. Canberra: Pacific Linguistics.

Evans, Bethwyn. 1995. Reconstructing object markers in Oceanic languages. BA Honours subthesis, Australian National University.

Filimonova, Elena, ed. 2005. *Clusivity. Typology and case studies of the inclusive-exclusive distinction*. Amsterdam/Philadelphia: John Benjamins.

Frowein, Friedel. 2011. A grammar of Siar, an Oceanic language of New Ireland Province, Papua New Guinea. PhD Dissertation, La Trobe University.

Gallagher, Steve and Peirce Baehr. 2005. *Bariai grammar sketch*. Data Papers on Papua New Guinea languages volume 49. Ukarumpa: SIL.

Goulden. Rick J. 1996. The Maleu and Bariai languages of West New Britain. In Malcolm D. Ross, ed., *Studies in languages of New Britain and New Ireland 1: Austronesian languages of the North New Guinea Cluster in Northwestern New Britain*, 66–144. Canberra: Pacific Linguistics.

Groves, T. R., Groves, G. W. & Jacobs, R. 1985. *Kiribatese: an outline description*. Canberra: Australian National University.

Holzknecht, Susanne. 1989. *The Markham languages of Papua New Guinea*. Canberra: Pacific Linguistics.

Holzknecht, Susanne. 2001. Number and person in the Duwet language of Papua New Guinea: the obsessive case of number. In Andrew Pawley, Malcolm Ross and Darrell Tryon, eds, *The boy from Bundaberg. Studies in Melanesian linguistics in honour of Tom Dutton,* 175–192. Canberra: Pacific Linguistics.

Ingram, David. 1978. Typology and universals of personal pronouns. In J.H. Greenberg, ed., *Universals of human language. Volume 3. Word structure*, 213-248. Stanford: Stanford University Press.

Johnston, Raymond L., ed. 1980. *Language, communication and development in New Britain*. Ukarumpa: SIL.

Jones. A. A. 1998. *Towards a lexicogrammar of Mekeo (an Austronesian language of western Central Papua)*. Canberra: Pacific Linguistics.

Kirschbaum, F. 1910. Klassification und Name des Stammes der “Malol”, Berlinhafen-Bezirk, Deutsch-Neuguinea. *Anthropos* 5: 251.

Klaffl, P. Joh. and P. Friedrich Vormann. 1905. Die Sprachen des Berlinhafen-Bezirks in Deutsch-Neuguinea. *Mitteilungen des Seminar für Orientalische Sprachen zu Berlin* 8: 1-138.

Kluge, Angela. 2014. *A grammar of Papuan Malay*. Utrecht: LOT.

Kroeger, Paul R. 2005. *Analyzing grammar. An introduction.* Cambridge: CUP.

Lauver, Doug and Urs Wegmann. 1990. Yau grammar essentials. Unpublished ms. Ukarumpa: SIL.

Lawton, Ralph. 1993. *Topics in the description of Kiriwina* (eds. Malcolm Ross and Janet Ezard). Canberra: Pacific Linguistics.

Laycock, Don. 1973. *Sepik languages - checklist and preliminary classification*. Canberra: Pacific Linguistics.

Lewis, M. Paul, Gary F. Simons, and Charles D. Fennig, eds. 2014. *Ethnologue: languages of the world, seventeenth edition.* Dallas, Texas: SIL International. Online version: http://www.ethnologue.com.

Lichtenberk, Frantisek. 2005. Inclusive-exclusive in Austronesian: an opposition of unequals. In: Filiminova, ed., 261-290.

Lynch, John, Malcolm D. Ross and Terry Crowley. 2002. *The Oceanic Languages*. London: Curzon.

Mihalic, F. 1971. *The Jacaranda dictionary and grammar of Melanesian Pidgin*. Milton: The Jacaranda Press.

Milligan, Lloyd Alan. 1992. A tentative description of the grammar of the Mangseng language. MA thesis. University of Texas at Arlington. http://www-01.sil.org/pacific/png/show_work.asp?id=92847459477

Muzzey, Margaret. 1979. Hote grammar essentials. Unpublished ms. Ukarumpa: SIL http://www-01.sil.org/pacific/png/show_work.asp?id=928474556481

Olson, Clif. 2014. *Participant referencing in Gumawana narrative*. Data Papers on Papua New Guinea languages volume 60. Ukarumpa: SIL.

Osmers, Dieter. 1981. Language and the Lutheran Church on the Papua New Guinea mainland: an overview and an evaluation. In: *Papers in New Guinea linguistics No. 21*, 71-164. Canberra: Pacific Linguistics.

Palmer, Bill. 2009. *Kokota grammar*. Oceanic Linguistics Special Publication No. 35. Honolulu: University of Hawai'i.

Pilhofer, G. 1933. *Grammatik der Kâte-Sprache in Neuguinea.* Vierzehntes Beihelf zur Zeitschrift für Eingeborenen-Sprachen. Berlin: Dietrich Reimer.

Reesink, Ger. 2005. Sulka of East New Britain: a mixture of Oceanic and Papuan traits. *Oceanic Linguistics* 44: 145–193.

Romaine, Susanne. 1992. The inclusive/exclusive distinction in Tok Pisin. *Language and Linguistics in Melanesia* 23:1-11.

Ross, Malcolm. 1988. *Proto Oceanic and the Austronesian languages of Western Melanesia*. Canberra: Pacific Linguistics.

Ross, Malcolm. 1991. How conservative are sedentary languages? Evidence from western Melanesia. In: Robert Blust, ed. *Currents in Pacific linguistics. Papers on Austronesian languages and ethnolinguistics in honour of Geroge W. Grace,* 433-451. Canberra: Pacific Linguistics/

Ross, Malcolm. 2002a. Bali-Vitu. In Lynch et al., 362-386.

Ross, Malcolm. 2002b. Kaulong. In Lynch et al., 387-409.

Ross, Malcolm. n.d. Pronouns as preliminary evidence for grouping Papuan languages. Unpublished typescript.

Schulze, Leonhard. 1911. *Zur Kenntnis der Tumleo Sprache von der Insel Tumleo*. Jena: Gustav Fisher.

Senft, Gunter. 1986. *Kilivila: the language of the Trobriand Islanders*. Berlin: Mouton de Gruyter.

Senft, Gunter. 1996*. Classificatory particles in Kilivila*. Oxford: OUP.

Siegel, Jeff. 1984. An introduction to the Labu language. *Papers in New Guinea linguistics No. 23*, 83-157. Canberra: Pacific Linguistics.

Spencer, Juliann, Sara Van Cott and Bonnie MacKenzie. 2013. *A sociolinguistic survey of Bebeli*. SIL Electronic Survey Report 2013-003. http://www-01.sil.org/silesr/abstract.asp?ref=2013-003

Stober, Scott. 2013. *Mato grammar sketch*. Data Papers on Papua New Guinea languages volume 59. Ukarumpa: SIL.

Streicher, Johannes F. 1982. *Jabêm–English dictionary.* Canberra: Pacific Linguistics.

Throop, Craig. 1992. Kaulong grammar essentials. Unpublished ms. Ukarumpa: SIL.

van den Berg, Lydia, Peter Rokus and John Wirimai. In preparation. Malol grammar sketch.

van Oven, Mannis, Silke Brauer, Ying Choi, Joe Ensing, Wulf Schiefenhövel, Mark Stoneking and Manfred Kayser. 2014. Human genetics of the Kula ring: Y-chromosome and mitochrondrial DNA variation in the Massim of Papua New Guinea. *European Journal of Human Genetics* 2014: 1-11.

Verhaar, John W.M. 1995. *Toward a reference grammar of Tok Pisin: an experiment in corpus linguistics*. Honolulu: University of Hawai'i Press. Oceanic Linguistics Special Publication No. 26

Volker, Craig. 1991. The birth and decline of Rabaul German Creole. *Language and Linguistics in Melanesia* 22: 143-156.

Volker, Craig, ed. 2008. *Papua New Guinea Tok Pisin English dictionary*. Melbourne: Oxford University Press.

Whitacre, Steve. 1986. Arop-Sissano grammar essentials. Unpublished ms. Ukarumpa: SIL. http://www-01.sil.org/pacific/png/show_work.asp?id=928474556320

White, Geoffrey M., Francis Koghonigita and Hugo Pulomana. 1988. *Cheke Holo dictionary*. Canberra: Pacific linguistics.

Wigboldus, Pieternel, Rachel Marsh and Zsofi Csongor. n.d. Notes on discourse features in Arop-Sissano. Unpublished drafts. Ukarumpa: SIL.

Wivell, Richard. 1981. Kairiru grammar. MA thesis, University of Auckland. http://www-01.sil.org/pacific/png/show_work.asp?id=928474543558

Wronska-Friend, Maria. 1993. Kultureller Wandel an der Lagune - Sissano im 20. Jahrhundert. In: Markus Schindlbeck, ed. *Von Kokos bis Plastik: Südseekulturen im Wandel*, 149-182. Berlin: Reimer.