

BOUND PRONOMINALS IN THE WEST PAPUAN LANGUAGES¹

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1. *Introduction*

The West Papuan languages are a genetic grouping of languages found in the east of Indonesia. Languages belonging to this family are spoken in the north of Halmahera and in the western Bird's Head at the far western edge of New Guinea. As originally established (eg., Cowan 1953, 1957, 1958, and later 1960, summarised in Capell 1975), the family also included the languages of the eastern and southern Bird's Head, those of central Yapen island to the east, and the non-Austronesian languages of Timor, Alor and Pantar in the south of Indonesia. Voorhoeve (1975a, b), upon a more careful examination of the data, concluded that the Timor-Alor-Pantar languages were members of the Trans New Guinea (TNG) family, and that the Yapen languages belonged to the East Geelvink Bay family, a grouping that included the languages of the interior of East Geelvink (= Cenderawasih) Bay.²

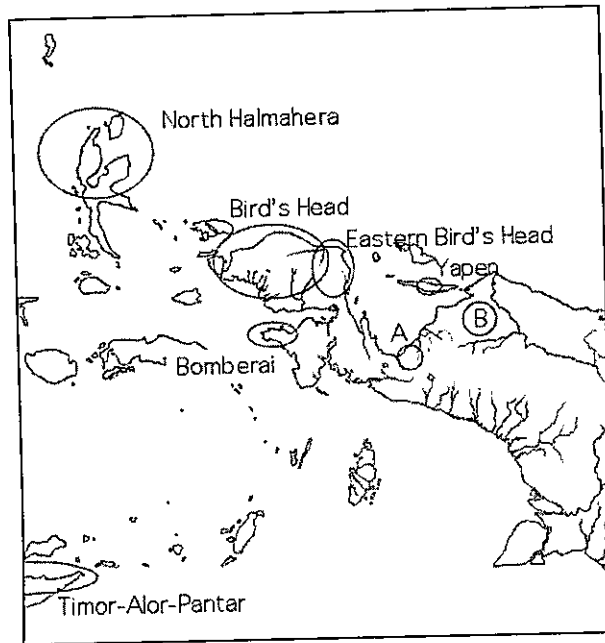
In this paper I shall demonstrate that, based on the evidence of bound pronominal morphemes, the languages of Yapen have to be treated as members of the West Papuan family, as originally suggested (see Nichols 1996 for methodological considerations). The evidence for this claim comes from an examination of the bound pronominal prefixes that are a feature of this part of the north coast of New Guinea, including these languages. The reason for using bound morphology is simply that it is more likely to reflect older pronominal elements than younger ones. New Guinea has long been regarded as an area in which independent pronominals are subject to widespread borrowing (eg., Foley 1986) or widespread restructuring, and so these independent words are less reliable than bound forms as indicators of genetic relationships.³ Bound pronominal elements have been compared because this is the only type of morphology consistently found across all the languages in the survey. The locations of the languages and language groups in question are shown in Map 1.

¹ I would like to thank this volume's editors and referees for valuable comments on this paper.

² There are both Austronesian and non-Austronesian languages on Yapen island. In this paper shall use the term 'Yapen language' only to refer to the non-Austronesian languages.

³ For instance, in the languages examined for this study the free pronominals and bound pronominals show remarkable phonological agreement in the North Halmahera languages, and an almost total lack of correspondence in the Yapen languages, making the free forms nearly useless for comparative purposes.

In the remainder of this paper I shall examine bound pronominal elements from the languages of Yapen, Halmahera and the western Bird's Head, making local reconstructions and then integrating the results. We shall see that there is extraordinarily little evidence for the inclusion of the Yapen languages in a Geelvink Bay unit, but that they fit well into a revised West Papuan family.



Map 1: Halmahera, the Bird's Head and Yapen

2. Yapen

As can be seen in Map 1, Yapen island is found in the middle of Cenderawasih Bay in western New Guinea. While the west and east of the island are home to Austronesian languages, the centre of the island contains two Non-Austronesian languages, Yawa and Saweru. While Saweru is a small language spoken on a single 4.5km long island off the south coast of Yapen, there are many varieties of Yawa spoken by upwards of 6,000 people. These two languages are, as we shall see closely related. These languages distinguish three different bound pronominal sets, which can be described as 'nominative' (or 'subject'), 'genitive' = 'accusative' (or 'object'), and 'dative'. Since the dative affixes are transparently derived from the fusion of the genitive prefixes with the dative postposition/enclitic, they shall not be considered further here. The nominative and genitive agreement markers are part of a system of semantic alignment (Donohue & Wichmann 2008; also referred to as 'split-intransitive',

'stative/active', and other terms), such that in addition to being used to mark transitive subjects and objects can also be used to encode the distinctions found between semantically distinct predicates; some of the possibilities are shown in (1) - (3) for Saweru, and similar data could be presented for Yawa as well (see Jones 1986a) (glosses follow Donohue 2001). In (1) we can see the basic marking of As and Ps in bivalent predicates, while (2) shows that the A-marking clitics from (1a) are also used to mark some agentive Ss, and that the P-marking prefixes from (1b) are also used to mark some non-agentive Ss. (3) demonstrates the fact that a full description of agreement in Saweru involves further complications, in that not all As are marked with the proclitics, and not all Ps with the prefixes (see Donohue 2001, 2004 for further discussion).⁴

Saweru bivalent

- | | | |
|-----|--|--|
| (1) | a. <i>Mo=na-ba-i.</i>
3SG.F.NOM=2SG.GEN-hit-TNS
"She hit you." | b. <i>No=ra-ba-i.</i>
2SG.NOM=3SG.F.GEN-hit-TNS
"You hit her." |
|-----|--|--|

monovalent

- | | | |
|-----|--|--|
| (2) | a. <i>Mo=rayan-i.</i>
3SG.F.NOM=swim-TNS
"She swam." | b. <i>Ra-teson-i.</i>
3SG.F.GEN-diarrhoea-TNS
"She has diarrhoea." |
|-----|--|--|

non-accusative bivalent

- | | | |
|-----|---|---|
| (3) | a. <i>Mo=komi-nai.</i>
3SG.F.NOM=search.for-2SG.DAT
"She searched for you." | b. <i>Ra-meme-nai.</i>
3SG.F.GEN-think-2SG.DAT
"She thinks of you." |
|-----|---|---|

The basic bound pronominals for Sarawandori Yawa (the variety reported in Jones 1986a, from the south-west of the language area), Yapanani Yawa (the most south-eastern Yawa variety, which shows considerable reduction in contrasts) and Saweru are shown in Table 1, together with some non-controversial reconstructions for proto-Yapen. The correspondences, shown here, such as $j:s\emptyset$ and $p:\phi:\phi$ are regularly attested in lexical items as well as in these affixes.

Examining the reconstructions in Table 1, we can clearly analyse various morphological formatives. The reconstructions in Table 1 can in most cases be split segment-by-segment into the separate morphemes, or morpheme formatives, described in Table 2. Table 3 presents the pronominal roots that are

⁴ In addition to the conventions of the Leipzig glossing rules, the following abbreviations have been used: AUG: augmented, EX: exclusive, F: feminine, IN: inclusive, M: masculine, MIN: minimal, NH: non-human, P-: Proto-, TAP: Timor-Alor-Pantar (family?), TNG: Trans New Guinea (family), TNS: tense, WBH: Western Bird's Head (family), WP: West Papuan (family).

found in addition to these formatives. Note that this analysis depends on the assumption that *m* is found in the formation of many prefixes, but is semantically empty.

	Yawa (Sarawandori)		Yawa (Yapanani)		Saweru		proto-Yapen	
	'subject'	'object'	'subject'	'object'	'subject'	'object'	'subject'	'object'
1SG	fo(-)	in-	so-	ny-	o=	ina-	*fo	*in
2SG	no(-)	n-	no-	t-	no=	na-	*no	*n
3SG.M	po(-)	∅-	fo-	t-	fo=	a-	*po	*a
3SG.F	mo(-)	r-	mo-	t-	mo=	ra-	*mo	*r
1DU	ririmo(-)	ririns-	nimo-	nint-	imo=	isa-	*(r)imo	*(r)ins
2DU	ipo(-)	is-	jo-	y-	i=	ya-	*i((p)o)	*is
3DU	yo(-)	y-	jo-	y-	yo=	ya-	*yo	*y
1PLEX	reamo(-)	reans-	nea-	mant-	amo=	asa-	*(r)amo	*(r)ans
1PL.IN	wamo(-)	wans-	nea-	mant-	amo=	asa-	*(w)amo	*(w)ans
2PL	wapo(-)	was-	wao-	mant-	wa=	wa-	*wap(o)	*wans
3PL	wo(-)	m-	wao-	mant-	wo=	ya-	*wo	*m

Table 1: *Yapen agreement prefixes*

Formative	Appears with	Gloss
o	(all 'subject' forms)	NOMINATIVE
ns	*ins, *(r)ans, *(w)ans, *wans	NSG.LOCAL.ACCUSATIVE
r	*(r)imo, *(r)amo, *(r)ans	1NSG
w	*(w)amo, *(w)ans, *wa(o), *wans, *wo	2/3PL
i/y	*(r)imo, *ins, *i((p)o), *is, *yo, *y	DUAL
p	*i((p)o), *wap(o)	2NSG.NOM
a	*(r)amo, *(r)ans, *(w)amo, *(w)ans, *wap(o), *wans	PL.LOCAL
'm'	(many)	-

Note: 'Local' refers to local person: first or second person.

Table 2: *Proto-Yapen formatives*

	'subject'	'object'
1SG	*f	*in
2SG	*n	*n
3SG.M	*p	
3SG.F		*r

Table 3: *Proto-Yapen pronominal roots*

As we shall see later, the reconstruction of these pronominal forms is a strong argument against the theory that links Yawa (and by implication Saweru) with the languages of the eastern interior of Geelvink Bay.

Examining the forms shown in Table 1, we can apply principles of internal reconstruction to arrive a more regularised pre-*proto-Yapen* stage, shown in Table 4. Many of the uncertainties in the reconstructions from Table 1 have been removed here, though, as we shall see in Table 10, the irregularities do not reconstruct to a higher level, and may represent multiple innovations within the Yapen group.

NOM:	SG	DU	PL	ACC:	SG	DU	PL
1	*fo	*rimo	*ramo		*in	*rins	*rans
12			*wamo				*wans
2	*no	*ipo	*wapo		*n	*ins	*wans
3M	*po	*yo	*wo		*a	*y	*w
3F	*mo				*r		

Table 4: *Pre-*proto-Yapen* pronominal prefixes*

3. North Halmahera data

The languages of North Halmahera have been described by a range of authors, and have received comparative attention by van der Veen (1915) and Voorhoeve (1988). The morphological alignment of the majority of these languages is very similar to that shown in (1) and (2) for Saweru, showing a semantically-aligned contrast (Holton 2008 discusses this system in detail). In some languages the 'object' prefix has become specialised as a possessive agreement prefix (see the use of the same prefixes in Yapen languages for both genitive and accusative functions)

Voorhoeve reconstructed the pronominal forms shown in Table 5. Table 6 presents data from four languages of North Halmahera (drawn from Voorhoeve's work, and also van Staden 2000, Visser and Voorhoeve 1987, Wimbish 1991), and Table 7 presents reconstructions for Halmahera based on the data in this table. There is very little disagreement between Voorhoeve's reconstructions and mine, except that I give more weight to the irregular West Makian forms, since West Makian is assumed to be a first-order subgroup in the North Halmahera family (Voorhoeve 1988). I reconstruct two sets of prefixes rather than Voorhoeve's single set, though it is quite easy to isolate an *-i* formative that indicates the possessor-object-nonagent function, just as an *-o* 'nominative' formant is readily identified in the singular pronominals (see Wimbish 1991). The other main differences between my reconstructions and Voorhoeve's are simply the result of more deliberation on my part, since I wish to preserve any uncertainties for higher-level comparison.⁵ Many of the irregular developments from the forms in Table 7 to the primary data in Table 6 can be accounted for by analogy; the Tidore *mo-* 1PLEX prefix has acquired the *o* vowel that characterises the nominative prefixes. Similarly, the lack of a reflex of **r* for the 1SG OBJECT/NON-AGENT form in Pagu and West Makian is the result of two separate instances of analogic levelling with the 1SG SUBJECT form (in West Makian) or the developing less specified 1/2NONAGENT form that has spread in Pagu.

⁵ While the comparisons in the Yapen datasets in section 2 involve sound correspondences that are testably regular between the two languages, the lack of as-yet uncovered lexical cognates means that comparison between areas is not yet supported by the presence of similar sound correspondences in the lexicon.

	SG	PL
1	*to	*mi
12		
2	*no	*[p/f/w]o
3M	*wo / *o	*ni
3F	*mo	*yo (*di/dú)

Table 5: Voorhoeve's proto-North Halmahera pronominal prefixes

	Tidore 'subject' '(poss'r)		Sahu 'subject' 'object'		Pagu 'agent' 'nonagent'		West Makian 'subject' '(poss'r)'	
1SG	to-	ri-	to-	ri-	to-	ni-	tV-	ti
2SG	no-	na-	no-	ni-	no-	ni-	nV-	ni
3SG.M	wo-	i- ~ wi-	o-	u-	wo-	wi-	i-	mV
3SG.F	mo-	mi-	mo-	mi-	mo-	mi-	i-	mV
3SG.N	yo-	ma-	i-	a-	yo-	(∅)	i-	dV
H								
1PLEX	mo-	mi-	mi-	mu?u-	mi-	ni-	a-	mi
1PL.IN	fo-	ni	wo-	na	wo-	ni-	mV-	nV
2PL	no-	ni	ni-	nu	ni-	ni-	fV-	fi
3PL	yo-	na- / ma-	ad[i/u]-	a?u-	yo-	ki-	dV-	di

Table 6: Halmahera agreement prefixes (representative)

	'subject'	'object'		'subject'	'object'
1SG	*to	*r (/n)	1PLEX	*mi	*mi
2SG	*no	*ni	1PL.IN	*[w/m]o	*na
3SG.M	*wo	*wi	2PL	*fo (~ *ni)	*fi (~ *ni)
3SG.F	*mo	*mi	3PL	*di ~ *yo	? *di
3SG.NH	*yo	*Ca			

Table 7: Proto North Halmahera agreement prefixes

4. Bird's Head

The languages of the Bird's Head are more problematic for historical linguists than those of Yapen or Halmahera, probably reflecting the influence of various unrelated languages in the area. While the languages of the north-west of the peninsula are, as I shall show, related to the Yapen and Halmahera languages, those of the east (Meyah, Sougb, Hatam and Mansim) and the north-east (Mpur) are not so obviously related to these groups. In Table 8 the three languages on the left, Tehit, Moi and Mai Brat, are the languages of interest for this study.

The Bird's Head languages show fewer forms, with only one set of nominative ('subject') prefixes, and, as can be seen, show much more erratic correspondences. Table 9 presents reconstructions for putative proto-language ancestral to Tehit, Moi and Mai Brat (data from Flassy 1991, Hesse 1983, Stokhof & Flassy 1985, Brown 1999, Dol 1999, Reesink 1999, 2002).

	Tehit	Moi	Mai Brat	Mpur	Meyah	Sougb	Hatam	Mansim
1SG	t-	t-	t-	(i)n-	di-	d-	d- / di-	d-
2SG	n-	n-	n-	(a)n-	bi-	b-	a-	n- / mb-
3SG.M	o- / w-	w- / p-	y-	a-	∅	∅	ni-; ∅	∅
3SG.F	m-	m-	m-	n-	∅	∅	∅	∅
1DU.EX		aam-		o-	ma-	na-		
1DU.IN		aaw-		o-	na-	am(a)-	s-	
2DU		aan-		n-	ge-	ya-		k-
3DU		aan-/aay-		do-	ge-	la-		k-
1PLEX	m- / m-	m- / p-	p-	e-	me-	ma-	n-	ŋ-
1PL.IN	∅- / f-	w- / p-	p-	e-	mi-	m-	i-	ŋ-
2PL	∅ / n-	n-	n-	n-	i-	y-	j-	s-
3PL	i- / y-	w- / l- / j- / n-	m-	de-	ri-	l-	si- / i-	s-

Table 8: Bird's Head agreement prefixes

	SG	PL
1	*t	*m / *p
12		*[p/f]
2	*n	*n
3M	*w / *p	*[c/y]
3F	*m	

Table 9: Tentative proto-Western Bird's Head reconstructions

In addition to the languages shown in Table 8 there are also a number of languages of the Southern Bird's Head which do not, following Voorhoeve (1975), appear to be related to the more northern languages at all (see also De Vries 1998), and cannot be considered part of a genetic grouping that includes the northern languages.

5. Combined picture

Putting together the reconstructions seen earlier in Tables 4, 7 and 9, we can reconstruct the Proto-West Papuan pronominal forms shown in Table 10.

	A-type								
	1SG	2SG	3SG.M	3SG.F	3SG.N	1PL	12PL	2PL	3PL
PWP	*to/*tio	*no	*po	*mo		*mo	*wo	*po	*yo
PYapen	*fo	*no	*po	*mo		*ramo	*wamo	*wapo	*wo
(DUAL:						*rimo		*ipo	*yo)
P-	*to	*no	*wo	*mo	*yo	*mi	*wo/*mo	*fo/*ni	*di /
Halmahera									*yo
PWBH	*t	*n	*w/*p	*m		*m/*p	*p/*f	*n	*c/y

	P-type								
	1SG	2SG	3SG.M	3SG.F	3SG.N	1PL	12PL	2PL	3PL
PWP	*in	*ni	*wi	*mi		*ri	*wa	*(y)i	*di
PYapen	*in	*n	*a	*r		*rans	*wans	*wans	*w
(DUAL:						*rins		*ins	*y)
P-	*r/*n	*ni	*wi	*mi	*Ca	*mi	*na	*fi/*ni	*di
Halmahera									
PWBH	(*t	*n	*w/*p	*m		*m/*p	*p/*f	*n	*C/y)

Table 10: Proto-West Papuan reconstructions and their descendants

The following changes are assumed to have taken place between proto-West Papuan and (pre-)proto-Yapen:

- the 1SG A-form *tio became *jo, presumably via **tjio and **tjo; the other singular A-forms are retained without change
- while the plural A-forms *mo and *po are carried through into Yapen in their original functions, *yo shifts to a dual function, pulled into this new specialisation through its similarities to the proto-Yapen *i/y dual formative.
- in a similar elaboration of NSG pronominal forms, *-r- develops as a first person nonsingular formative, derived from a generalisation of the 1PL P-form.
- *-a- appears as a first or second person plural formative.
- *mo and *po are also used with dual functions, distinguished from the plural form by the addition of *i (thus resulting in *rimo, *ipo), and the development of the proto-West Papuan *w(o) '12PL' as a non-first person plural formative (yielding the plural forms *ramo, *wamo and *wapo).
- a replacement 3PL form *wo- is innovated, based on this plural formative and the nominative o.
- for the P forms, the 1SG and 2SG are retained, with the loss of the vowel in the 2SG form presumably as a device to maximise contrast with the 1SG.
- a new morpheme *-ns- develops as a marker of (local, nonsingular) accusative, presumably because the old *-i- accusative declined as a result of the development of *-i- as a dual formative.
- the same formatives that we saw developed in the A-forms are also used in the P-forms, but with the *-ns- formative, and not an of the nominative forms.
- the old 3PL P-form shifted to mark (feminine) singular, stripped of the now obsolete accusative formative
- a new, essentially morphologically unmarked, 3SG.M P-form develops.

Similarly, the bound pronominal system of North Halmahera can be derived with the following set of changes:

- the 3SG.M A-form lenites from *po > *wo; the other singular forms survive unchanged (potentially *tio > *to), and the 3PL prefix extends its range to mark 3SG.NONHUMAN as well as being retained as a marker of 3PL.
 - The plural forms are irregularly distinguished by using a plural formative *-i-, possibly related to the Yapen dual *-i-, and if so reflecting an aspect of the morphology of proto-West Papuan.
 - the 1PL.EX A-form reflects this plural formative, while the 1PL.IN is either replaced by the unspecified 'pronominal' formative *m (see discussion surrounding Table 2), or else is replaced by the proto-West Papuan 2PL form.
 - the 2PL *po lenites to *fo and in some cases to *wo, and additionally extends reference to 1PL.IN (=12PL) in most North Halmaheran languages. This ambiguity allows an innovated form *ni to extend into the 2PL position.
- The development of *ni- as an A-form probably postdates the breakup of proto-North Halmahera, since West Makian does not reflect *ni- in the 2PL, though we already see *ni in proto-North Halmahera.
- The loss of distinction between SG and PL, and so the spread of the 2SG *n into the plural, is initiated by the development of the singular nonhuman forms that are formally identical to the 3PL.
- the a '1PL.EX' form in West Makian suggests that the reconstructed *-a- for proto-Yapen should be reconstructed to a higher level as well (data below from the 1PL.IN P-form, and from the related Bird's Head languages, provide further support for this hypothesis). In West Makian this form replaced the inherited *mo, while the underspecified *m form became used for the 1PL.IN.
 - the *di '3PL' form presumably reflects crossover from the P-forms.
 - the P-forms show the wide spread of the *-i- 'accusative' formative, and the reconstruction of many P-forms based on the A-forms. In the PL the Halmahera A-forms dominate, with only the *na- 1PL.IN being distinct; the *-a- has been discussed above, and the *-n- probably reflects the consonant of the West Papuan 1SG.P or the North Halmahera 2PL.A form.
 - the *in '1SG.P' loses this function; the Pagu forms probably reflect a spread of the above innovative 1PL.P form, marked for accusative or plural with *-i-. West Makian shows a 1SG.P based on the A-form, while the other languages reflect *r.

When we examine the changes required from proto-West Papuan in Table 10 to the reconstructions for proto-Western Bird's Head in Table 9, we find remarkably few inclusive changes in the forms themselves, though the collapse of the two sets into one makes for a complex modern picture.

- the 2PL *po has replaced the 1PL.IN form; in some daughter languages the reflex of *po has extended to the 1PL.EX as well.
- the West Papuan 2PL has been replaced by a form with *n*, presumably formed by analogy from the *n* in the 2SG. The reconstructions for all of the West Bird's Head prefixes are single segments, but there is some unusual behaviour associated with the 2PL (and 1PL) prefixes. (4), showing inflectional paradigms from Mai Brat (Brown 1999) demonstrate, from left to right, the use of epenthetic schwas with C-initial roots; the uncomplicated prefixation of inflection on V-initial roots; and the irregular behaviour of 1PL and 2PL forms with a-initial roots or VG-initial roots. As can be seen, the 1PL and 2PL prefixes appear to 'absorb' an initial low vowel, so that *p-aws* > *p-ws* (absorption) > [pu:s] (resyllabification). This might reflect an earlier vowel position in the syllable template, differentiating *n- '2SG' from *nV- '2PL'.⁶ Recall that proto-Yapen showed a 1PL/2PL formative of the shape *-a- (Table 2).

	-C	-V	-a	-aw	-ay
(4) 1SG	tǎpo	tisi	tamo	taws	taym
2SG	nǎpo	nisi	namo	naws	naym
3SG.M	yǎpo	yisi	yamo	yaws	yaym
1PL	pǎpo	pisi	pǎmo	pu:s	pi:m
2PL	nǎpo	nisi	nǎmo	nu:s	ni:m
3PL / 3F	mǎpo	misi	mamo	maws	maym
	'agree'	'agree'	'go'	'urinate'	'cook'

- there is considerable reanalysis of the 3PL position, none of it reconstructable to a proto-West Bird's Head stage, but involving extension of either the unmarked *m- form, or extension of the (semantically unmarked) 3SG.M form. In Mai Brat we can see the opposite, the replacement of the 3SG.M with the 3PL *y*-

Based on the development of the proto West Papuan 2PL form as a marker of 1PL.IN and the subsequent innovation of *n(i) as a 2PL marker we might suppose a closer connection between the Bird's Head languages and the Halmahera

⁶ Data from other Western Bird's Head languages are, of course, desirable in order to confirm whether this can be taken as an argument for the other languages in the Bird's Head as well as for Mai Brat.

languages. The fact that the Halmahera *ni 2PL postdates the breakup of these languages, however, means that this cannot be used to group the Halmahera and the Bird's Head languages together. Similarly, the fact that West Makian does not reflect *po as a 1PL.IN (or EX) form means that this cannot be used to subgroup the two groups together. The Yapen languages potentially share the development of the *-i- DUAL with the Halmahera *-i- PLURAL, but this is the only possibly shared innovation, and we will have to leave subgrouping for further consideration.

In sum, the pronominal data strongly supports the relatedness of the three language groups discussed here, though we have not seen any strong evidence for any of these two groups being more closely related to each other than to the other one. This implies that the Yapen languages do belong to a (revised) West Papuan family.

6. Revising the 'West Papuan Phylum': the Geelvink Bay hypothesis

We should consider the alternative hypothesis, that the Yapen languages are members of the Geelvink Bay phylum, related to the languages of the Waropen coast hinterland. This classification was proposed by Voorhoeve (1975b), based solely on lexical comparisons; Voorhoeve (1975b: 875-876) lists the lexical forms presented in Table 7 (Baropasi and Bauri [= Bauzi] were also compared, but only Tarunggere forms were given for comparison; in this table Yava = Yawa).

	Yava	Tarunggere	Yava	Tarunggere
'come'	<i>nde, re</i>	<i>nere</i>	'tail'	<i>ateva</i>
'eat'	<i>rai(s)</i>	<i>ghayo</i>	'water'	<i>karu</i> (moisture)
'fly'	<i>bariri</i>	<i>bunana</i>	'wind'	<i>obar</i>
'foot'	<i>najo</i>	<i>nal</i>	'you (sg)'	<i>uein</i>
'give'	<i>ra</i>	<i>nore</i>	'you (pl)'	<i>wea</i>
'I'	<i>nei, rei</i>	<i>ei</i>		<i>wi</i>

Table 11: Voorhoeve's Yapen: Geelvink Bay correspondences

Examining these lexical items, the following cautions apply: Yawa *rai(s)* is morphologically *ra-* '3SG.F.GEN/ACC' plus *i* 'eat (transitive)' (I cannot explain the bracketed '(s)', except to note that it is not heard in Yawa or Saweru these days). The 'probable cognate' is then reduced to an *ighayo* 'correspondence'. Yapen *bariri*: Tarunggere *bunana* evidences only one out of six phonemes as cognate, unless an *rn* correspondence can be established, and so this remains tentative. Yapen *najo* is morphologically *na-* '2SG.GEN' plus *yo* 'foot, leg', yielding no correspondences at all with Tarunggere, and only a single vowel with Baropasi *naro*. A single consonant defines Yawa *-ra* and Tarunggere *nore* 'give', and the putative *rr* correspondence would nullify the value of 'fly' earlier. However, Saweru *awe* 'give' means that *-ra* cannot be reconstructed for proto-Yapen in any case. Yapen *inei*: Tarunggere *ei* relies solely on vocalic correspondences, as does 'you (singular)' and 'you (plural)'. Yawa *obar*: Tarunggere *bwa* is possible,

and would confirm the *b:b* seen in 'fly'. The set Yapen *re*: Tarunggere *nere* 'come', and *ateva*: Tarunggere *otapara*, in which *a-* is the 3SG.NFEM.GEN prefix for the Yapen forms, seem plausible, as is Yawa *karu*: Tarunggere *waro*, but these are then only three possible cognates, with no regular sound correspondences beyond two very tentative *b:b* sets, not enough to base a genetic relationship on.

We can examine the pronominal data from the one East Geelvink Bay family language for which we have adequate data, Bauzi (Briley 1997). The pronominal bases are shown in Table 12.⁷ Significantly, there is no verbal agreement, a point of structural disagreement.

1SG	<i>e-</i>	1PL	<i>i-</i>
2SG	<i>o-</i>	2PL	<i>u-</i>
3SG	<i>a-</i>		

Table 12: *Bauzi pronominal forms*

Establishing any sort of correspondence between these monovocalic *free* pronominal forms and the bound morphology discussed in section 4 would be speculative, and establishing a connection between the forms seen in Table 12, and those in Table 10, would be highly speculative. In short, there do not appear to be any compelling reasons to accept a Geelvink Bay phylum hypothesis that includes the Yapen languages, just as there are no reasons to exclude the Yapen languages from a West Papuan group.

7. *The rest of the old West Papuan Phylum: connections with Timor-Alor-Pantar languages?*

The West Papuan Phylum, as summarised in Capell (1975), included not only the Yapen languages which were removed by Voorhoeve, but also the languages of the eastern Bird's Head, the southern Bird's Head and of the Timor-Alor-Pantar (TAP) region.

The eastern Bird's Head languages appear to be a diverse group of languages with typological similarities, but little in the way of formal resemblance. Reesink (2002) discusses the difficulties of grouping these languages, and while he arrives at no firm conclusions (see Donohue 2005), it is clear that they cannot be unproblematically grouped with any of the languages described here, certainly not on the basis of pronominal evidence (see the right-hand side of Table 8).

⁷ There is no 3PL pronominal form in Bauzi, and all the pronominal bases in this table must be suffixed for case in order to be used in grammatical clauses; case-inflected pronouns such as these are not a feature of the other languages we have been considering. The case choices are *-ho* ergative, *-m* absolutive, and *-ba* dative, as well as some pragmatically, and not syntactically, determined choices. Notice that, in addition to the fact of case-marking on free pronouns itself, the alignment marked in Bauzi matches neither the nominative-accusative pattern of the Bird's Head, nor the stative-active systems of Halmahera and Yapen

The southern Bird's Head languages, such as Inanwatan, have been shown to share little if any structural or lexical material with the Bird's Head languages that have been considered here. Voorhoeve suggests that they should be classified as members of the wide-faring TNG phylum, and De Vries (1998) suggests, on the basis of unusual structural features, that they are most closely related to the Marind languages of the far south coast.

The languages of the Timor-Alor-Pantar region have also been grouped as TNG languages (Stokhof 1975), albeit with very different structural profiles (see Stokhof 1987, Steinhauer 1995, Donohue 1996). These languages show many lexical (and bound pronominal) similarities with the 'average TNG' languages of mainland New Guinea, but also show some elements that cannot be traced to current TNG reconstructions. Table 13 presents reconstructions of the TAP bound pronominals (Donohue & Schapper 2007) and of the TNG pronoun system. Given the similarities in the first person forms, much of the rest of the TAP material can be related to the TNG forms, if one assumes a swap of second and third person; even the association of plural with high front vowels is present, and (not shown here) the dual **-li* formative (Suter 1997) from mainland New Guinea also appears in Timor languages such as Buna' (Berthe 1961).

The TAP 12AUG form cannot be related to TNG reconstructions, but is similar to the Bomberai form *mbi*, which has exclusive, not inclusive, meaning. The fact that many lexemes from the TAP languages have correspondences in the Bomberai peninsula, and not elsewhere in New Guinea, makes this pronominal connection enticing. There is no evidence of the Bomberai languages having prenasalised correspondences for plain voiceless stops, however, and no explanation for the inclusive/exclusive cross-over. An equally plausible history for TAP **pi* matches the Bird's Head and Halmahera story, in which a 2PL form acquired 12PL reference. But this would require us to assume a West Papuan influence – is there any independent evidence of this? The Bomberai peninsula is located immediately south of the Bird's Head, making some early influence plausible. When we examine the rest of the TAP pronominal reconstructions, we find that the 12MIN form ('you and I') is also not related to any proto-TNG reconstructions. It can, however, plausibly be related to the West Papuan **to* '1SG', with the addition of a second person referent as well. This does not appear to argue for a genetic connection with the West Papuan languages, but a possible borrowing relationship. Table 14 presents representative lexical data from the TAP languages (from Donohue 2007a), the Bomberai languages (principally *iha*), and the languages of the West Papuan family. While some words show apparent cognacy over a wide area, the Bomberai correspondences are clearly closer for the TAP languages than are any of the other columns. In the Bird's Head we find some forms apparently cognate between the (western) Bird's Head languages discussed here and the TAP languages, in which case the lexeme is also shared with the Halmahera group, and some isolated lexemes in

the unrelated languages of the eastern Bird's Head (such as Hatam) or the Southern Bird's Head. This suggests that we can legitimately discuss a contact area which might have given rise to borrowings between a West Papuan source, previously spoken over a wider area than is currently the case, and a pre-TAP language in the Bomberai/South Bird's Head area (see also Donohue 2007b, 2007c).

	Timor-Alor-Pantar		Trans New Guinea		Iha (Bomberai)	
	minimal	augmented	SG	PL	SG	PL
1	*n	*ni	*na	*ni ~ *nu	on (ni)	mbi
12	*ta	*pi				in
2	*Ø / *a-	*i	*ga	*gi ~ *ja	ko (ki)	ki
3	*g	*gi	*[y]a ~ *ua	*[y]i	mi (ndo)	mi

Table 13: Three pronominal sets reconstructions

	TAP	Bomberai	Bird's Head	Halmahera	Yapen
'tree'	*aDa	adop	ara	*gota	-
'water'	*yar	kar(y)a	*kala	*gala	karo (strait)
'hand'	*tan	tan	(Hatam: nda)	-	-
'dog'	*yapal	yamb(i)a[r/l]	-	-	-
'sit'	*miti	mese	-	-	-
'stomach'	*atok	tokar	(SBH: atoko)	-	karawe (faeces)

Table 14: Possible correspondences between TAP languages and WP languages

We have seen how the evidence from bound pronominals clearly argues for the inclusion of the Yapen languages into a re-assessed West Papuan phylum, but that the other members of the family, removed by Voorhoeve in 1975, must remain outside its bounds, though within the scope of plausible (and detectable) historical influence. A considered evaluation of the bound pronominal evidence, based on the well-established principles of the comparative method and supported by a careful investigation of the morphophonological peculiarities of the languages concerned, allows us to establish with confidence the new boundaries of the West Papuan family.

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ALAWA AND ITS NEIGHBOURS ENIGMA VARIATIONS 1 AND 2

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1. Introduction

This paper grew out of, or should I say, shrank from a paper originally given at an International Conference on Historical Linguistics some years back to a minimal-sized audience. It is appropriate that the enigmatic relationships of Alawa and its neighbours be further explored, and that a start be made in a volume in honour of Harold Koch. Many a time I have stayed with Harold and Grace, and been stimulated by the contact and conversations on both historical linguistics, Aboriginal and other music, and archiving. I was also invited by them — and took up the offer — to house-sit for them while they and I were on study leave and I was beginning to focus more strongly on historical linguistics.

The similarities and differences in Alawa and nearby languages put me in mind of Elgar's *Enigma Variations*. Elgar composed variations on a theme, but the underlying theme was never made overt. Alawa and its neighbours considered here have a lot of similarities, but the connections between them are enigmatic.

The three non-Pama-Nyungan languages Alawa, Mara and Warndarang have been generally considered to form a subgroup (Sharpe 1972, Heath 1978). On the basis of shared features with Alawa, Merlan (1989) has argued for Mangarayi being added to this group. However Baker (2006) has called into question the evidence for such a group, or at least whether these languages belong in one family, drawing attention to the differences between Alawa and the other languages in finite verbs. I will summarise what we can say at the present time, before I focus on two small aspects which can be handled in a short article.

- Structurally all these languages are very similar, in that syntax is similar and translation from one to another mostly involves a linear replacement of morphemes (extract one, drop in another). The structures for marking of tense, aspect, mood and case categories are very similar; however, *the forms can be quite different*. One should bear in mind that it was common for traditionally-living people in this area to be multilingual; these similarities could be partially a result of multilingualism.
- All have closely similar systems of an invariant coverb linked to a finite verb.
- The languages share certain phonological processes, such as 'hardening' of initial semivowels or addition of a stop to an initial vowel of a finite verb