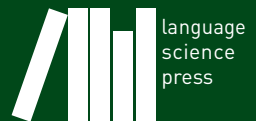


The Alor-Pantar languages

History and typology

Marian Klamer (ed.)



Series information: ./LSP/lsp-seriesinfo/dummyseries-info.tex not found!

The Alor-Pantar languages

History and typology

Marian Klamer (ed.)

Language Science Press
Berlin

Language Science Press
Habelschwerdter Allee 45
14195 Berlin, Germany

langsci-press.org

This title can be downloaded at:

<http://langsci-press.org/catalog/book/22>

© 2014, Marian Klammer (ed.)

Published under the Creative Commons Attribution 4.0 Licence (CC BY 4.0):

<http://creativecommons.org/licenses/by/4.0/>

ISBN: 978-3-944675-48-0

Cover and concept of design: Ulrike Harbort

Typesetting: Sebastian Nordhoff; Timm Lichte

Proofreading: Change proofreaders in `localmetadata.sty`

Storage and cataloguing done by FU Berlin



Language Science Press has no responsibility for the persistence or accuracy of URLs for external or third-party Internet websites referred to in this publication, and does not guarantee that any content on such websites is, or will remain, accurate or appropriate. Information regarding prices, travel timetables and other factual information given in this work are correct at the time of first publication but Language Science Press does not guarantee the accuracy of such information thereafter.

This volume is dedicated to the memory of Mr. Anderias Malaikosa (1964-2011), whose love for the peoples and languages of his native Alor was an inspiration to linguists both within Alor and abroad.

Contents

1 The internal history of the Alor-Pantar language family Gary Holton & Laura C. Robinson	1
Language Index	51
Name Index	56
Subject Index	56

Chapter 1

The internal history of the Alor-Pantar language family

Gary Holton & Laura C. Robinson

This chapter demonstrates that the languages of Alor and Pantar share a common origin by applying the comparative method to primary lexical data from twelve languages sampled across the islands of the Alor-Pantar archipelago. More than one hundred proto-Alor-Pantar lexical items are reconstructed. An internal subgrouping based on shared phonological innovations is proposed and is compared to that derived using computational phylogenetic methods. It is argued that the Alor-Pantar group originally came from the region of the Pantar Strait.

1 Introduction

In this chapter we review the reconstruction of proto-Alor-Pantar (pAP) based on the comparative method. We then examine the internal relationships of the Alor-Pantar family and discuss several approaches to subgrouping. In the literature, the Alor-Pantar languages are usually considered to belong to the larger Timor-Alor-Pantar (TAP) group, which includes the Papuan languages of neighboring Timor and Kisar. The Alor-Pantar languages form a well-defined subgroup within TAP and share a common history independent of the Timor languages. The relationship between Alor-Pantar and the Timor languages is discussed in the following chapter; the wider historical relationships with languages beyond Timor-Alor-Pantar are discussed in chapter 4.

The AP languages form one of only two large pockets of non-Austronesian languages in East Nusantara outside New Guinea (the other being North Halmahera, to which AP languages are not related—see chapter 4). In contrast to neighboring Timor, all but one of the two dozen or so indigenous languages of the Alor-



Pantar archipelago are non-Austronesian.¹ The single Austronesian language, Alorese, clearly has a more recent origin and today occupies only a few coastal outposts in the archipelago (Klamer 2011, 2012). Early reports noted a clear cultural distinction between the “non-indigenous” coastal Alorese speakers and the “indigenous” mountain populations of Alor and Pantar (Anonymous 1914: 75-8). The non-Austronesian character of the languages (as opposed to the cultures) was first recognized for Oirata, a language spoken on Kisar Island, just east of Timor Josselin de Jong (1937), and shortly thereafter a connection was made to Abui, a language of Alor (Nicolspeyer 1940). The first evidence for the genealogical unity of the AP languages is found in Stokhof (1975), who compiled 117-item comparative wordlists for 34 language varieties. Stokhof proposed a preliminary lexicostatistical classification based on similarity judgments applied to these lexical data, emphasizing that this classification should be considered “very preliminary” (1975: 13). Holton et al. (2012) employed a much larger lexical dataset to identify regular sound correspondences and establish a reconstruction of pAP using the comparative method.

While the results of the comparative method definitively show that the AP languages form a genealogical unit, the identified phonological innovations are typologically common and do not delineate neat subgroups. After reviewing the subgrouping implications of the phonological innovations, we apply computational methods to the same data and are on this basis able to identify internal groupings. Crucially, the lexical data are coded for cognacy based on identified phonological innovations. The resulting tree of AP languages is consistent with an historical scenario whereby AP languages originate in the Pantar Strait. We begin in the following section by reviewing the recent reconstruction of pAP.²

¹ We exclude here the Austronesian language Sama-Bajo, which is spoken by recent migrants in a single community on the coast of northern Pantar.

² The data and reconstructions in § 2 and in the Appendix largely follow Holton et al. (2012), except in the following ways. First, we have followed Robinson & Holton (2012) in correcting some minor typos. Some of these corrections result in changes to our analyses as well. For example, retranscription of Teiwa *kiʔin* ‘mosquito’ leads us to reconstruct *kin rather than *qin. Second, while the data in Holton et al. (2012) are primarily phonetic, here we have tried to use phonological forms where they are known. Third, we have used different dialects of Adang and Blagar (Pitungbang and Dolabang dialects, respectively) to more closely match existing publications for those languages (e.g., the sketch grammars to appear in *Schappertasketchgrammars*). Fourth, we have consulted new evidence from Timor languages (see chapter 3) to add new reconstructions or to update the pAP reconstructions based on external evidence. That new evidence has caused us to question the reconstructability of *b and *d in final position, as discussed below. Finally, we have removed pAP reconstructions for ‘axe’ and ‘comb’ because we now have evidence that these may be Austronesian loanwords that postdate the breakup of pAP.

2 Sound correspondences and reconstruction

The surge in documentary field work over the past decade (see chapter 1) has provided a robust lexical dataset on which to base the reconstruction of pAP. The primary data source used in this chapter is a set of 400-item vocabulary lists collected for twelve different language varieties with broad geographic representation across the archipelago: Teiwa (Tw), Nede bang (Nd), Kaera (Ke), Western Pantar (WP), Blagar (Bl), Adang (Ad), Klon (Kl), Kui (Ki), Abui (Ab), Kamang (Km), Sawila (Sw), and Wersing (We). (See Figure ?? Chapter 1.) The vocabulary list was tailored specifically to this task, taking into account three specific goals. First, the list contains basic vocabulary such as that found on a Swadesh list, tailored to include items relevant to the East Nusantara cultural and ecological region. Second, the list includes some non-basic vocabulary which may be diagnostic of shared cultural traits. For example, it includes a number of terms relating to agriculture. Our ability or inability to reconstruct these terms provides insight into the culture history of the pAP speakers and thus sheds light on AP prehistory and migration. Third, the list includes items motivated by a need to find further examples of specific sound correspondences, such as ‘village’ and ‘crocodile’, which both contain pharyngeal fricatives in Teiwa. These lists were supplemented by data from published sources and from ongoing field work by members of the EuroBABEL project. In some cases, the data present uncertainties regarding the phonemic status of particular segments, orthographic conventions, and morpheme boundaries. For example, in elicited word lists, verbs can occur with yet unanalyzed aspectual and/or modal suffixes. In this paper we only compare root forms, with affixes being identified on the basis of grammatical descriptions and recurrent endings within the lexical data. In the cognate sets presented here, material identified as fused or fossilized morphology is bracketed with ‘()’, while roots that obligatorily occur with affixes are marked with a hyphen, ‘-’.

Identification of regular consonant correspondences supports the reconstruction of a pAP inventory containing 14 consonants, as shown in Table 1. Each of these consonant reconstructions is supported by correspondence sets for each position (initial, medial, and final) in which that consonant occurs.

While we can identify regular correspondence sets supporting *r, this phoneme occurs in complementary distribution with *j. In fact, *r is the only consonant which does not occur in initial position (see Table 3 below). In contrast, glides *j and *w occur only in initial position; final glides in the modern languages derive from original vowels. The complementary distribution of *r and *j raises the possibility that *r is actually an allophone of *j in pAP. However, the /r/ ~

Table 1: Reconstructed pAP consonant inventory

	Labial	Apical	Palatal	Velar	Uvular	Glottal
Stop	p b	t d		k g	q	
Fricative		s				h
Nasal	m	n				
Glide	w		j			
Liquid		l (r)				

/l/ distinction is found in all of the modern AP languages (see Table 2 below), and at least two liquids must be reconstructed to proto-Timor-Alor-Pantar, the immediate parent of pAP (see chapter 3).

Although a uvular stop is found in only two of the modern AP languages, the reconstruction of pAP *q is well-supported by a number of correspondence sets. In addition to Teiwa and Nidebang, which maintain *q as /q/, in Kaera the reflex of *q is /x/, which is distinct from the reflex of *k as /k/. Western Pantar collapses *q and *k as /k/ in initial position but maintains the distinction in medial position, as only the reflex of *k is geminate. Outside these four Pantar languages, the *q/*k distinction is lost. From a typological perspective the presence of the uvular stop is highly unusual. Only 2.4% of the languages in Maddieson’s (2005) survey of consonant inventories contain uvular stops, though two of those languages are Trans-New Guinea (Kunimaipa and Hamtai). This figure is consistent with Hajek’s (2010) survey of the phonological systems of 71 languages of East Nusantara. Hajek identifies only one language other than Teiwa which contrasts velar and uvular stops; this is the West Papuan language Tehit.

The inventory of pAP consonants is very similar to that found in many of the modern Alor-Pantar languages, and its size is typical for the East Nusantara region (Hajek 2010). Most modern AP languages differ in having a velar nasal, which is not reconstructed for pAP. As noted above most AP languages also distinguish /r/ and /l/. The consonant inventory for pAP can be compared with that for the modern language Western Pantar in Table 2.

The Western Pantar inventory exhibits several features typical of phonological developments in the modern languages. First, the uvular stop has merged with the velar stop. Second, Western Pantar has developed a velar nasal in final position. Third, Western Pantar has developed a phonemic glottal stop.

The distributional restrictions on pAP consonants are summarized in Table 3.

1 *The internal history of the Alor-Pantar language family*

Table 2: Western Pantar consonant inventory

	Labial	Alveolar	Palatal	Velar	Glottal
Stop	p b	t d		k g	ʔ
Fricative		s			h
Nasal	m	n		ŋ	
Glide	w		j		
Liquid		l r			

Table 3: Distributional restrictions on pAP consonants

	Initial	Medial	Final
b	+	+	(+)
d	+	+	(+)
g	+	+	-
p	+	+	-
t	+	+	+
k	+	+	+
q	+	+	-
s	+	+	+
h	+	-	-
m	+	+	+
n	+	+	+
l	+	+	+
(r)	-	+	+
j	+	-	-
w	+	-	-

It should be noted that while *g does occur in initial position, it occurs there only in pronominal forms.

In Holton et al. (2012), we reconstruct the voiced stops *b and *d for all positions, but after revising the reconstructions based on external data from Timor (see chapter 3), many reconstructions which formerly ended in a voiced stop have now been revised to include further segments (i.e., ‘fire’, ‘fish’, ‘sugarcane’, ‘sun’, ‘throw’). The voiced stops *b and *d are now only weakly attested in final position in our data, and it is possible that with further evidence, those few reconstructions with final *b and *d may need to be revised as well. Note that we also do not reconstruct *g in final position, so pAP may have had a restriction on final voiced stops, though these do occur in modern AP languages (e.g., Teiwa *lia:g* and Kaera *le:g* ‘rattan’).

The lack of final *p is robustly evidenced in our data. All instances of final *p* in the modern languages can be traced to either an original medial *p or to *b, as in Teiwa *tap* < *tapai ‘pierce’, or Western Pantar *hap* < *habi ‘fish’.

Drawing from a comparative lexical database consisting of approximately 400 items we identify 129 cognate sets reflecting regular sound correspondences (see Appendix). There are only 127 distinct meanings, as two of the meanings, ‘dog’ and ‘walk’, are found in more than one cognate set. These forms show predominantly regular sound correspondences, as described below. However, it is important to note that several of the cognate sets cannot be reconstructed to pAP, since they are found only in a geographically restricted area. That is, in some cases lexemes appear to have been innovated. This is particularly obvious for those meanings for which we have two correspondence sets (distinguished below with subscript numerals). The supporting data for each of these sets is provided in the course of demonstrating the correspondences in the following subsections. The complete set of correspondences can be found in the Appendix.

In this section we describe the 35 consonant correspondences which we have identified in our sample of AP languages. In most cases the correspondences are conditioned by environment; we thus provide examples of the correspondences in word-initial, word-medial, and word-final position. The tables below set out the consonant correspondences, as well as the reconstructed pAP phoneme for each correspondence set. The environment (ENV) column indicates whether the correspondence applies in initial (#__), medial (V__V), or final (__#) position. A zero (Ø) in a column indicates that the pAP sound in question is lost in that language. A dash (-) in a column indicates that we lack sufficient data to posit a reflex for that language. A slash (/) indicates that more than one reflex is found in that language.

Transcription follows IPA conventions.³ Geminate consonants and long vowels are indicated with a length mark (:). Word stress is transcribed here only where relevant to the correspondence in question (e.g., ‘dog₁’). In most of the modern languages stress is on the penultimate syllable; however, stress may also be attracted to heavy syllables, as in Teiwa *ji’var* ‘dog’. In addition, stress may be phonemically contrastive in some languages, as in Western Pantar *ba’wa* ‘conch shell’ vs. *bawa* ‘drum’.

In the tables the languages are arranged in order roughly from west to east with the western-most languages on the left and the eastern-most languages on the right. This arrangement is maintained throughout all the tables in the paper.

In the following subsections we discuss the correspondences in word-initial, word-medial, and word-final position separately for each consonant. By examining the correspondences in each position separately we are able to tease out apparent or false cognates which show the expected form in initial position but an unexpected reflex in medial or final position. Nevertheless, such irregular forms are included in correspondence sets for the sake of completeness. In these cases, the irregular forms are denoted with a preceding double dagger (‡) in the Appendix. For some of these forms, we can identify the form as borrowed from a particular source language, but for many, the reason for the irregularity has not yet been identified. Finally, we reconstruct pAP forms only when we have broad geographic evidence. That is, reflexes must be found in minimally one language of Pantar (Teiwa, Nede bang, Kaera, Western Pantar), one language of West Alor and the Pantar Strait (Blagar, Adang, Klon, Kui), and one language of East Alor (Abui, Kamang, Sawila, Wersing). Where reflexes are found only in a restricted region such as Pantar or Eastern Alor, we do not reconstruct a pAP lexeme.

2.1 Voiced stops

We reconstruct three voiced stops in labial, apical, and velar positions. Labial and apical voiced stops are well attested in initial and medial positions, and only weakly attested in final position. The evidence for a voiced velar stop in initial position is based entirely on third person pronominal forms, and there is no support for a velar stop in final position.

Initial pAP *b is retained everywhere except Abui, where it weakens to /f/, and the Eastern Alor languages Kamang, Sawila, and Wersing, where it is devoiced as /p/. This correspondence is found in ‘pig’, ‘betel nut’, ‘axe’, ‘maize’,

³ The IPA transcriptions used in this paper differ from the Indonesian-based orthographies of Alor-Pantar languages we use in other publications. Important differences include IPA /j/ = orthographic *y*, /tʃ/ = *c*, /dʒ/ = *j*.

Table 4: Alor-Pantar voiced stop correspondences

pAP	Env	Tw	Nd	Ke	WP	Bl	Ad	Kl	Ki	Ab	Km	Sw	We
*b	#_	b	b	b	b	b	b	b	b	f	p	p	p
*b	V_V	ɸ/v	f/v	b	b:	b	b	b	b	f	f	p	p
*b	_#	ɸ/v	f/v	b	p	b	b	b	b	Ø	p	p	p
*d	#_	d	d	d	d	d	d	d	d	r	t	d	d
*d	V_V	d	d	d	d:	d	d	d	d	r	t	d	d
*d	_#	r	r	d	r	d	d	d	r	r	t	d	d
*g	#_	g	g	g	g	?	?	g	g	h	g	g	g
*g	V_V	h	x	g	g:	Ø/?	?	g	g	h	Ø	j	l

Table 5: Alor-Pantar voiceless stop correspondences

pAP	Env	Tw	Nd	Ke	WP	Bl	Ad	Kl	Ki	Ab	Km	Sw	We
*p	#_	p	p	p	p	p	p	p	p	p	f	p	p
*p	V_V	p	p/f	p	p:	p	p	-	p	p	f	-	Ø
*t	#_	t	t	t	t	t	t	t	t	t	t	t	t
*t	V_V	t	t	t	t:	t	t	t	t	t	t	t	t
*t	_#	t	t	t	t	t	Ø	t	t	t	t	t	t
*k	#_	k	k	k	k	k	?	k	k	k	k	k	k
*k	V_V	-	k	k	k:	k	?	k	k	k	k	k	k
*k	_#	k	k	k	k	Ø	Ø	k	k	k	k	-	Ø
*q	#_	q	q	x	k	k/?	?	k	k	k	k	k	k
*q	V_V	q	q	x	k	k	Ø	k	k	k	k	k	k

Table 6: Alor-Pantar fricative correspondences

pAP	Env	Tw	Nd	Ke	WP	Bl	Ad	Kl	Ki	Ab	Km	Sw	We
*s	#_	s	s	s	s	h	h	h	s	t	s	t	t
*s	V_V	s	s/tʃ	s	s	s	h	h	s	t	s	t	t
*s	_#	s	s	s	s	h	h	h	s	t	h	t	t
*h	#_	h/h	Ø	Ø	h	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø

Table 7: Alor-Pantar nasal correspondences

pAP	Env	Tw	Nd	Ke	WP	Bl	Ad	Kl	Ki	Ab	Km	Sw	We
*m	#_	m	m	m	m	m	m	m	m	m	m	m	m
*m	V_V	m	m	m	m:	m	m	m	m	m	m	m	m
*m	_#	m	Ø	m	Ø	ŋ	ŋ	n	n	m	m	m	m
*n	#_	n	n	n	n	n	n	n	n	n	n	n	n
*n	V_V	-	n	n	n:	n	n	n	n	n	n	n	n
*n	_#	n	ŋ	ŋ	ŋ	ŋ	ŋ	n	n	ŋ	ŋ	ŋ	ŋ

Table 8: Alor-Pantar liquid correspondences

pAP	Env	Tw	Nd	Ke	WP	Bl	Ad	Kl	Ki	Ab	Km	Sw	We
*l	#_	l	l	l	l	l	l	l	l	l	l	l	l
*l	V_V	l	l	l	l	l	l	l	l	l	l/Ø	l	l
*l	_#	i	Ø	i	Ø	l	l/i	l	l	l	i	l	l
*r	V_V	r	l	r	l	r	l	r	r	j	l	r	r
*r	_#	r	Ø	r	Ø	r	l/i	r	r	i	i	r	r

Table 9: Alor-Pantar glide correspondences

pAP	Env	Tw	Nd	Ke	WP	Bl	Ad	Kl	Ki	Ab	Km	Sw	We
*w	#_	w	w	w	w	v	f	w	w	w	w	w	w
*j	#_	j	j	j	j	d ₃	s	Ø	j	j	j	j	j

and ‘crocodile’. Thus, Abui *fe*, Kamang *pe*, Sawila *pi*, Wersing *pei* < pAP *baj ‘pig’. While the correspondence sets for initial *b are extremely regular, they are not without problems, since they may reflect borrowings. The clearest instance of this problem occurs with ‘maize’, which was first introduced into the region by the Dutch in the 15-16th century. AP lexemes for ‘maize’ represent indirect borrowings of Old Malay *batari* ‘sorghum’ which diffused across the languages as the crop spread. Since the historical record indicates that maize was first introduced into agriculture into western Timor, it is most likely that Austronesian languages of Timor were the proximate source for ‘maize’ lexemes in AP (e.g., Tetun *batar* ‘maize’). We do not reconstruct a word for ‘maize’ to pAP, but the cognate set is included here because its consonant correspondences follow the established patterns. That is, the phonological innovations affecting pAP initial *b and final *r must postdate the introduction of the lexical item to Alor-Pantar.

Similar issues of borrowing surround the reconstruction of ‘betel nut’ in pAP. The betel or areca palm (*Areca catechu*) is known to have been domesticated in mainland Southeast Asia (Yen1977). However, there is no archaeological evidence as to when the domesticated palm would have reached the Alor archipelago. There is linguistic and archaeological evidence that Proto-Austronesians in Taiwan had betel (i.e., ‘betel’ is reconstructable to proto-Austronesian) and that Austronesians transported betel at some points in their dispersal (Lichtenberk1998). The similarity of the AP lexemes for ‘betel’ and those in surrounding Austronesian languages (e.g., Tetun *bua* ‘betel’, Tokodede *buo* ‘betel’) suggests that AP ‘betel’ lexemes may in fact be borrowings from Austronesian. Given this lexical likeness and the uncertainty of the timing of the arrival of betel in the region, we tentatively reconstruct a pAP (loan) lexeme for ‘betel nut’.

Medial reflexes of *b are found in ‘village’, ‘dog₁’, ‘spear’, ‘star’, ‘fish’, ‘tongue’, ‘sugarcane’, ‘shark’, ‘leg’, and ‘new’. These follow the same pattern as initial *b except in Teiwa, Nede bang, Western Pantar, and Abui. In Teiwa and Nede bang *b weakens to a fricative; thus, Teiwa *haʔan*, Nede bang *aʔan* < pAP *haban ‘village’. In Western Pantar *b geminates in medial position, thus, Western Pantar *hab:aŋ* ‘village’. If the final vowel is lost, *b is reflected as /p/ in Western Pantar and is lost in Abui (e.g., Western Pantar *hap* < pAP *habi ‘fish’).

Medial gemination is a characteristic feature of Western Pantar; most pAP stops (including nasal stops) are geminated in medial position in Western Pantar (transcribed here as long consonants *bː*, *dː*, etc.). We infer that modern non-geminate medial stops in Western Pantar reflect either borrowing or innovation that took place after the gemination process. In modern Western Pantar there is a robust phonemic contrast between geminate and non-geminate consonants,

as between *duba* ‘slippery’ and *dub:a* ‘push.’ Phonetic geminates do occur in some other AP languages, notably Ndebang and Sawila; however, there is little evidence that geminates have phonemic status in those languages. Furthermore, only in Western Pantar do we find geminates as a regular reflex of pAP medial stops; elsewhere they occur only sporadically.

Evidence for *b in final position is based only on a single reconstruction for ‘wave’. In Holton et al. (2012), ‘fish’, ‘tongue’, ‘sugarcane’, and ‘wave’ were all reconstructed with a final *b, but with many of the cognates containing final vowels which we assumed were epenthetic. External evidence from Timor languages (see chapter 3 and SchapperEtAl2012) has forced us to reconstruct those final vowels for ‘fish’, ‘tongue’, and ‘sugarcane’. It is possible that ‘wave’ also had a final vowel in pAP, though we have insufficient evidence to reconstruct that at this time.

The variation in Teiwa and Ndebang between voiced and voiceless reflexes of non-initial *b appears to be unconditioned. Ndebang *bova* ‘wave’ has a voiced fricative, while *a:fi* ‘fish’ has a voiceless fricative. Klammer (2010a:38) notes that while /ɸ/ and /v/ are distinct phonemes in Teiwa, the voiced variant is quite rare. The sporadic voicing seen in these correspondence sets may reflect a recent phonemicization of /v/.

In initial and medial positions *d is reflected as /r/ in Abui and as /t/ in Kamang. The other languages retain /d/, with the exception of Western Pantar which has a geminate in medial position, as expected. When the final vowel is lost, Teiwa, Ndebang, Western Pantar, and Kui reflect *d > r.

Initial *d correspondences are found in ‘rat’, ‘sing’, ‘bird’, and ‘slippery’. Thus, Teiwa *dur*, Western Pantar *di*, Abui *rui*, Kamang *tui* < pAP *dur ‘rat’. Medial *d correspondences are found in ‘to plant’, ‘bat’, ‘right (side)’, ‘throw’, ‘fire’, ‘sun’, and ‘body hair’. Thus, Teiwa *mədi*, Western Pantar *mad:e*, Abui *marel*, Kamang *matei* < pAP *madel ‘bat’. The unexpected Kaera form *wer* ‘sun’ is likely a borrowing from neighboring Teiwa or Ndebang, as *d is more regularly reflected as /d/ in final position, as in *od* ‘throw’ and *ad* ‘fire’. On the other hand, Ndebang *mara* and Kaera *merai* ‘bat’ unexpectedly have /r/ in medial position. These forms may reflect a borrowing (from Abui); alternatively, these forms may have a more complex history in which final syllables were originally lost, leading these forms to be treated as final.

Evidence for *d in final position is based on a single correspondence set for ‘garden’, which is not even reconstructed to pAP. As with *b, evidence for final *d was considerably weakened in light of external evidence from Timor. The forms ‘throw’, ‘fire’, and ‘sun’ have all been revised to contain final vowels.

Initial *g is reflected as a glottal stop in Blagar and Adang, and as a glottal fricative in Abui. However, the reconstruction of initial *g hinges entirely on the correspondence of third person prefixal forms in pAP. These forms exhibit vowel grading which distinguishes singular, plural, genitive, and locative. In particular, all instances of initial /g/ in modern AP languages can be traced to third person pronouns. Only the third-singular bound pronoun *ga has reflexes in all languages. The third plural is attested in a few languages and can be tentatively reconstructed as *gi-. It is absent in the modern AP languages Adang, Klon, Kamang, and Abui, which have generalized their reflexes of the pAP third person singular prefix to both singular and plural contexts. A third reflex of initial *g is found in the third person genitive marker *ge(-) which indexes alienable possessors (in contrast to *ga-, which indexes inalienable possessors). The reconstruction of genitive *ge(-) is supported by the presence of reflexes in a robust geographical spread of AP languages. A final correspondence set supporting *g is found in the third person locative prefix in several languages of Alor. There is no evidence for this prefix in the languages of Pantar (Teiwa, Nedebang, Kaera, Western Pantar, Blagar), and we do not reconstruct it to pAP. Note that Kamang has a regular change of initial *g to /w/ before back vowels, hence the form wo-.

With some possible exceptions, these forms are bound, occurring as prefixes with either nominal or verbal roots. Exceptions include Adang ?e and Klon ge 3GEN.⁴ At this stage, we remain agnostic as to whether the pAP genitive was a free or bound form. Other free pronouns vary in their form across the modern AP languages and cannot be reconstructed to pAP (KratochvilEtAl2011).

The reflexes of medial *g are much more varied, but they are robustly attested in ‘yellow’, ‘yawn’, ‘banana’, ‘garden’, ‘crocodile’, and ‘hear’. Only in Kaera, Klon, and Kui is *g retained unchanged in medial position. In Western Pantar we find the expected geminate in all forms except *bagai* ‘crocodile’, which may be a borrowing from Kaera. In Teiwa medial *g is reflected as a pharyngeal fricative, while in Abui it is reflected as a glottal fricative. Other languages reflect either a glottal stop, a liquid, a fricative, or zero. However, medial reflexes in Sawila and Wersing are supported by only one lexical item each.

The evidence for *g in final position is extremely weak. In the modern languages final g occurs only in the Pantar languages Teiwa and Kaera (as well as Sar, not in our sample). In our 400-item wordlist, final g is found in only eleven distinct Teiwa word forms. None of these has cognates in a central or eastern

⁴ The Klon form is analyzed by Baird (2008) as a free form based on its ability to occur following an NP. Yet it is equally possible that Klon has homophonous bound and free genitive forms differing in distributional restrictions, analogous to WP *gai-* (bound) and *ga'ai* (free).

Alor language. Cognates with Pantar and western Alor languages do exist; however, in many cases the correspondence is between medial *g* and final *g*. For example, Teiwa *mia:g*, Nede bang *mia:gi*, Kaera *miag* ‘yesterday’; and Teiwa *bog*, Nede bang *boga*, Western Pantar *bog:a* ‘young’. Hence, it seems plausible to conclude that Teiwa and Kaera final *g* actually derive from medial **g* and that pAP **g* was not found in final position.

2.2 Voiceless stops

We reconstruct three voiceless stops in labial, apical, and velar positions. While all the modern languages have glottal stops, as in Adang *?ahap* ‘to cry’ versus *ahap* ‘jungle’, we do not find sufficient evidence at this time to reconstruct glottal stop to pAP. In initial and medial positions pAP **p* remains unchanged in all the languages except Kamang, where it weakens to /f/; Western Pantar, where it predictably geminates in medial position; and Wersing, where evidence from a single correspondence (‘pierce’) suggests that **p* was lost in medial position. Correspondence sets reflecting **p* include ‘hold’, 1pl.incl, ‘scorpion’, ‘pierce’, and ‘search’. Thus, pAP **p*{i,u}nV > Teiwa *pin*, Blagar *pina*, Adang *puin*, Abui *pun*, Kamang *fun*, Sawila *puni* ‘hold’. The devoicing of **b* in Sawila and Wersing results in merger of **b* and **p*. Note that Western Pantar *par* ‘scorpion’ must be a loan from a language which preserves final **r*. We find no evidence to support reconstruction of **p* in final position. Rather, final /p/ in modern languages results from loss of final vowels (e.g., **tapai* > Teiwa *tap* ‘pierce’, **habi* > Western Pantar *hap* ‘fish’).

In initial and medial positions **t* remains unchanged in all languages, with the exception of Western Pantar, which has a geminate medially as expected. The reconstruction of initial **t* is supported by correspondence sets for ‘recline’, ‘saltwater’, ‘short’, ‘stand’, ‘ripe’, ‘far’ and ‘tree’. Reconstruction of medial **t* is supported by correspondence sets for ‘dry’, ‘maize’, ‘hearth’, and ‘hand/arm’. Reflexes of ‘dry’ and ‘hearth’ are not sufficiently widely distributed to justify reconstruction at the level of pAP. The set for ‘dry’ is found only in the Pantar Strait and Central Alor languages, while the form for ‘hearth’ is found only in the Pantar languages. As stated earlier, we don’t reconstruct pAP ‘maize’ since it is known to be a late borrowing from Austronesian. The resemblance between pAP *-tan ‘hand/arm’ and Malay *tayan* ‘hand’ is superficial only and cannot be taken to indicate that the AP lexemes are Austronesian borrowings. The form *tan an* for ‘hand’ is a lexical innovation of Malayic and cannot be reconstructed to higher levels of the Austronesian family: proto-Malayo-Polynesian (and proto-Austronesian) reconstructions are **lima* for ‘hand’ and **baRa* for ‘arm’, and it

is reflexes of these proto-lexemes for ‘hand’ and ‘arm’ which are found in the Austronesian languages surrounding the AP languages. Malay has only been present in the region since the historical period, and Malay influence on the AP languages might have started as late as the beginning of the twentieth century.⁵ As such, we unproblematically reconstruct pAP *tan ‘hand/arm’.

Final *t is preserved in all languages except Adang, where it is lost. The reconstruction of final *t is supported by cognate sets for ‘leg’, ‘flea’, ‘betel vine’, and ‘wound’. However, only in Teiwa, Kaera, Blagar, and Kui does the reflex of *t still occur finally. This leads to some uncertainty as to whether these forms may have been originally medial. The correspondence set for ‘betel vine’, for example, as it is reflected as medial *t* in more than half of the modern languages. We tentatively reconstruct this form with final *t based on two pieces of evidence. First, the Western Pantar form *meta* does not reflect gemination, which would be expected as a reflex of medial *t. Second, several of the languages have a long vowel or diphthong. We thus reconstruct *mait and presume a process of palatalization following a high front vowel. Thus, *t > tʃ/Vi_ in Adang, *t > h/Vi_ in Klon (presumably via *s*), and *t > s/ Vi_ in Kui, Kamang, Sawila, and Wersing.⁶ In the Appendix we list only the original reflex, not the secondary development reflected in ‘betel vine’. However, we note that betel vine may be introduced; see also the case of ‘betel nut’ in section 2.1 above.

Initially and medially, *k remains unchanged in all languages except Adang, where it is reflected as a glottal stop, and Western Pantar, where it is predictably geminated in medial position. Correspondence sets supporting initial *k include ‘bone’, ‘dog₂’, ‘fingernail’, and ‘mosquito’. Note that the medial correspondence for Abui *kusɿŋ* ‘fingernail’ is irregular.

Medial *k is supported by correspondence sets for ‘crouch’, ‘short’, ‘good’, and ‘lizard’. Thus, Nedebang *tuku*, Western Pantar *tuk:a*, Adang *toʔaŋ*, Klon, Kui, Wersing, Teiwa *tuk* < pAP *tukV ‘short’. The lexeme ‘lizard’ is likely an Austronesian borrowing (cf. Alorese *take*), perhaps explaining the anomalous reflexes

⁵ It is likely that Malay was only introduced to the Papuan speakers on Alor and Pantar through the Dutch schools that were opened in early 20th century. For example, DuBois1944 notes that among the Abui people with whom she lived in the 1930s, Malay was only known by school children. The first Dutch schools were opened on Alor in 1906; on Pantar in the 1920s (Klamer 2010a: 14). In the Dutch schools, the language of education was Malay, as elsewhere in the Dutch East Indies.

⁶ The alternation between alveolars and palatals in Adang reflects a phonemic split by which *d, *t, and *n have been palatalized following a vowel sequence ending in a high front vowel, as in ‘betel vine’ (Robinson & Haan 2014). Klon has non-phonemic palatalization in the same environment, while the closely related language Kabola (not in our sample) does not undergo palatalization.

Adang *tekə* and Kamang *tak:e*, the latter of which has an unexpected geminate. However, this form is geminated as expected in Western Pantar *tak:e*.

Final *k is retained in all languages except Blagar, Adang, Sawila, and Wersing, where it is lost entirely. Only two correspondence sets, ‘one’ and ‘horn’, support this reconstruction. Neither set has cognates in Sawila; however, final *k* is rare in our Sawila data set, occurring in only two forms: *werpa:k* ‘frog’ and *kispa:k* ‘earthworm’ (both lexical innovations shared with Wersing). The correspondences for final *k can be difficult to tease apart from those for medial *k, since many languages reflect later vowel epenthesis or apocope. We take the presence of a geminate in Western Pantar to be diagnostic in this regard, since Western Pantar geminates do not occur word-finally. This criterion is admittedly problematic, since it is entirely possible that vowel epenthesis preceded gemination in Western Pantar. Furthermore, Western Pantar sometimes lacks cognates for relevant lexical items, as with ‘horn’.

The reconstruction of *q is supported by the presence of a post-coronal voiceless obstruent phoneme distinct from the velar stop in three Pantar languages. In Teiwa and Nidebang this is a uvular stop; in Kaera a velar fricative. Elsewhere, initial *q is reflected as /k/, with the exception of Adang, which has glottal stop, and Blagar, which shows both glottal stop and velar stop reflexes. Initial *q is found in correspondence sets for ‘spear’, ‘itchy’, and ‘tens’. Blagar shows alternation between a velar and glottal reflex of *q. Note that the *r* in ‘tens’ behaves as a medial consonant since this numeral formative only occurs in compounds with following numeral, e.g., Teiwa *qar nuk* ‘ten’.

The medial reflexes of *q are similar to those in initial position, except that Adang shows loss of medial *q. Correspondence sets supporting medial *q include ‘two’, ‘itchy’, ‘white’, and ‘black’. Adang *kak* ‘itchy’ is anomalous, as it retains the medial consonant. Blagar *madzaka* ‘white’ is in fact cognate due to a regular process of glide insertion between the vowels /i/ and /a/, followed by glide fortition: *miaqa > *miaka* > *mijaka* > *madzaka*. The most interesting reflex of medial *q is found in Western Pantar. Unlike the other voiceless stops, the uvular stop is not reflected as a geminate in Western Pantar but instead as a non-geminate velar stop. In this regard Western Pantar patterns with the other Pantar languages in distinguishing reflexes of *q and *k.

In particular, *q provides an additional source for non-geminate intervocalic voiceless velar stops in Western Pantar. This in turn may inform reconstruction of final vowels in pAP. Since *q does not geminate in Western Pantar, Western Pantar *alaku* ‘two’ can readily be derived from *raq, supporting reconstruction of the final vowel. On the other hand, Western Pantar *anuku* ‘one’ corresponds

to Tw and Nd forms with velar stops, hence the reconstruction of pAP ‘one’ must contain a velar, not a uvular. The fact that Western Pantar *anuku* does not contain a geminate means that either it has been borrowed or that the vowel has been added following the gemination process. In the absence of any evidence for borrowing we reconstruct *nuk ‘one’ without a final vowel.

The evidence for *q in final position is extremely limited. One possible example is ‘smoke’, whose correspondences are similar to those for medial *q (Kaera *banax* and Wersing *punak*). However, the Teiwa, Nedebang, and Western Pantar reflexes are zero. Another candidate correspondence is ‘rice’: Western Pantar *ala* and Klon, Kui, Wersing *arak*, which compares to Teiwa *qar*, Nedebang *qara*, and Kaera (*na*)*xar*. If the Teiwa, Nedebang, and Kaera forms are interpreted as a result of metathesis of *r and *q, then this correspondence could also support *q in final position, namely, *araq. However, we find insufficient evidence to support reconstruction of *q in final position.

2.3 Fricatives

We reconstruct two fricatives to pAP, *s and *h. While *s occurs freely in all positions, the glottal fricative *h is restricted to initial position. Correspondence sets for *s are relatively straightforward. In initial position *s weakens to *h* in Adang, and Klon, and strengthens to *t* in Abui, Sawila, and Wersing. In the remaining languages, which include all four Pantar languages in addition to Kui and Kamang, *s is retained as *s*. Only in Blagar does the reflex of *s exhibit significant variation by position. In initial and final position Blagar has *h* < *s, as in Adang and Klon, while in medial position Blagar retains *s* < *s. Thus, pAP *siba > Blagar *hiba* ‘new’; *jasi > Blagar *dʒasi* ‘bad’; *bis > Blagar *bihi* ‘mat’, with an epenthetic final vowel which was added after the weakening of *s. In medial position Nedebang sometimes has *as* affricate. Thus, *jiwesin > Nedebang *jisin* ‘five’, but *jasi > Nedebang *jetʃi* ‘bad’.

Initial correspondence sets for *s are found in ‘new’, ‘wind’, and ‘shark’. Thus, Western Pantar *sab:a*, Blagar *hiba*, Adang *habar*, Klon *həba*, Kui *saba*, Abui *tifa*, Kamang *supa(ka)*, Sawila *tipea*, Wersing *təpa* < *siba ‘new’. Medial correspondence sets are found in ‘bad’, ‘fingernail’, ‘tooth’, and ‘five’. Final correspondence sets are found in ‘sit’, ‘stand’, and ‘mat’.

The reconstruction of *h is supported by its presence in Western Pantar and Teiwa. The remaining languages lose original *h, though Blagar, Adang, and Klon have *h* < *s, and Abui has *h* < *g. Proto-Alor-Pantar *h did not occur in non-initial position. While *h is consistently retained in Western Pantar, Teiwa actually has two reflexes of *h, the glottal fricative *h* and the pharyngeal fricative *ħ*. This is due

to a phonemic split in Teiwa, resulting from an original conditioned distribution where *ħ* occurred only before back vowels, and *h* occurred elsewhere. Modern Teiwa still tends this way, with the pharyngeal fricative generally occurring before back vowels and the glottal fricative preceding front vowels. Klammer (2010a) lists only one example of a pharyngeal fricative preceding a front vowel, namely *ħer* ‘yell, shout, chant, cry aloud’. This form is cognate with Western Pantar *ho-_{raŋ}*, suggesting that the original form may have contained a back vowel, thus conditioning the Teiwa pharyngeal. This distinction breaks down, however, before low vowels, where a clear synchronic phonemic distinction has developed in Teiwa, as in *ha_ɸan* ‘village’ (< *haban) vs. *ħa_ɸ* ‘fish’ (< *habi).

2.4 Nasals

There is a regular and unchanging correspondence of initial and medial /m/ across all the AP languages. As with the stops, *m is reflected as a geminate in medial position in Western Pantar. Correspondence sets reflecting initial and medial *m include ‘come’, ‘betel vine’, ‘sit’, ‘(be) in/on’, ‘fat’, ‘bedbug’, ‘horn’, ‘thatch’, ‘thick’, ‘walk₁’, and ‘breast’. The reconstruction of pAP initial *m is thus secure and supported by multiple cognate sets. In medial position subsequent developments may result in nasal-final forms which obey language-specific constraints. For example, Western Pantar does not admit final nasals other than velars, hence Western Pantar *haŋ* ‘breast’ results from later apocope, namely, pAP **hami* > *ham:i* > *ham:* > *ham* > *haŋ*.

Final *m is retained as *m* in six of the twelve languages, but only in Teiwa and Kaera does it occur in final position. Blagar and Adang have a velar nasal reflex, while Klon and Kui have an alveolar nasal reflex (Kui *talama* ‘six’ is likely a borrowing from Abui). For many of the languages, forms reflecting final *m have an epenthetic final vowel, so that the reflex of original final *m is no longer in final position. Thus, Abui *tala:ma* < **talam* ‘six’, *tama* < **tam* ‘saltwater’. Correspondence sets reflecting final *m include ‘father’, ‘nose’, ‘six’, and ‘saltwater’. Evidence from ‘saltwater’ weakly supports positing the loss of final *m in Nede-bang.

The behavior of the alveolar nasal mirrors that of the labial nasal in initial and medial position. Proto-Alor-Pantar *n is retained in all languages and is geminated in medial position in Western Pantar. Correspondence sets supporting initial and medial *n include ‘one’, 1sg, ‘eat/drink’, ‘smoke’, ‘black’ ‘hold’, ‘give’, ‘die’, ‘ripe’, and ‘name’. Thus, pAP **nai* ‘eat/drink’ > Teiwa, Kaera, Western Pantar, Blagar, Adang *na*, Nede-bang *ina*, Klon *na:ʔ*, Kui, Wersing *nai*, Abui, Sawila *ne*, Kamang *ne*.

Final *n is reflected as a velar nasal in all languages except Teiwa, Klon, and Kui, where it is retained as *n*. The correspondence sets ‘five’, ‘hand/arm’, ‘thatch’, and ‘fingernail’ show irregularities in reflexes of final *n, perhaps due to borrowing. Nidebang *jisin* ‘five’ has a final alveolar rather than the expected velar and is likely borrowed from neighboring Teiwa *jusan*, while Kaera has *isim* ‘five’ with a final labial nasal, possibly due to influence from the following *tiam* ‘six’ when counting. The correspondence set for ‘fingernail’ is more problematic. Abui *kusiŋ* has the velar nasal as expected but shows an irregular reflex of medial *s. Western Pantar *kusi* and Klon *kuh* show irregular loss of the final nasal.

2.5 Liquids

We reconstruct two liquids *l and *r in pAP, though *r and *j may have been allophones of a single phoneme in pAP (see Section 2 above). For expository purposes we treat *r as if it were a phoneme in the present section. There is a relatively regular and unchanging correspondence of initial and medial *l* in the modern languages from which the existence of pAP *l can be posited. However, few forms are distributed widely across the languages, making it difficult to reconstruct words with initial *l. Correspondences supporting initial *l include ‘rattan’, ‘crouch’, ‘bark’, ‘walk’, and ‘far’.

Medial *l is supported by correspondence sets ‘axe’, ‘bathe’, ‘tongue’, and ‘sky’. A few languages show evidence of sporadic *l > i in medial position, for example, Wersing *jebur* ‘tongue’ < *lebur. The Pantar languages Teiwa, Nidebang, and Kaera, show irregular loss of medial *l in ‘six’. Kamang regularly loses *l between non-front vowels (see chapter 3), and thus *talam > Kamang *ta:ma* is expected.

In final position, however, Teiwa, Kaera, and Kamang reflect *l > i. This final vowel may be realized phonetically as a glide in the modern languages; however, we analyze these phonemically as vowels and assume the same analysis for pAP. Adang reflects both *l* and *i* in final position. Synchronically, Adang is losing final *l* among younger speakers and certain dialects, though this only occurs following a sequence of two vowels in final position *Vil > Vi/___# (Robinson & Haan 2014). Further, Nidebang and Western Pantar lose final *l altogether. Thus, Teiwa *muhui*, Kaera *mogoi*, Western Pantar *mag:i*, Adang *mɔʔɔi*, Klon *məgol*, Kamang *mo:i*, Wersing *mulul* < pAP *mogol ‘banana’. Other correspondence sets supporting final *l include ‘child’, ‘bird’, and ‘bat’.

We find insufficient evidence to reconstruct *r in initial position. In non-initial position pAP clearly distinguished two liquids, and this distinction is preserved in most of the languages. In medial position Nidebang, Western Pantar, and Adang collapse *l and *r as *l* (the reflexes in Kamang are less consistent). Abui

reflects $*r > j$, represented synchronically as a vowel in final position. The other languages preserve $*r$ as such. This leaves no direct historical source for r in Nede bang, Western Pantar, and Adang, and we assume that r in these languages has been innovated or diffused from neighboring languages. In modern Western Pantar forms with r are infrequent and do not correspond regularly to other languages. In most cases they reflect lexical innovation, as in Western Pantar *re* ‘bird’ (compare pAP $*(a)dVl$). Correspondence sets supporting medial $*r$ include ‘two’, ‘water’, ‘sing’, ‘bone’, ‘ear’, ‘tail’, and ‘laugh’.

The correspondences for final $*r$ are similar to those in medial position, except $*r > j$ (represented here synchronically as a vowel) in Kamang and $*r > \emptyset$ in Nede bang and Western Pantar.⁷ Adang reflexes of final $*r$ reflect both l and i , as do its reflexes for final $*l$. Correspondence sets supporting final $*r$ include ‘stone’, ‘scorpion’, ‘lime’, ‘maize’, ‘tongue’, and ‘moon’.

2.6 Glides

We reconstruct the two glides $*w$ and $*j$ to pAP. In most languages $*w$ is preserved as w in all positions. In initial position only Blagar v and Adang $f < *w$ reflect a change; other languages preserve $*w$. Correspondence sets supporting initial $*w$ include ‘sun’, ‘blood’, ‘stone’, and ‘bathe’. The form ‘blood’ is illustrative, as it has a reflex in every language: Teiwa *wai*, Nede bang *we*, Kaera *we*, Western Pantar *wai*, Blagar *ve*, Adang *foi*, Klon *we?*, Kui *we*, Abui *wea*, Kamang *we:*, Sawila *wi:*, Wersing *wei*.

We find insufficient evidence to reconstruct $*w$ in non-initial position. Potential correspondences representing non-initial $*w$ are likely either to be underlying vowels or to reflect original initial $*w$. For example, the root-initial consonant in the word for ‘ear’ is usually analyzed as a glide: Klon *-wer*, Kui *wel*, Abui *wei*, Kamang *wai*, Sawila *-wari*, and Wersing *weri*. However, regardless of the synchronic analyses these forms are likely to reflect an original vocalic form and we reconstruct pAP $*uari$. Apparent medial $*w$ is also found in the word for ‘lime’, Kaera *awar*, Western Pantar *hauwe*, Blagar *avar*, Adang *?afai*, Abui *awai*, Kamang *awoi*. This correspondence matches that for initial $*w$ and even supports reconstruction of pAP $*hawar$ ‘lime’. However, this form is likely to be an original compound; compare $*war$ ‘stone’. Another example of a potential compound containing medial $*w$ is found in the word for ‘five’, reconstructed as $*jiwesin$.

⁷ Some dialects of Western Pantar have $*r > l$ in both medial and final position, e.g., Lamma dialect *bat:al* ‘maize’. However, in no dialect of Western Pantar is $*r$ preserved as r , so forms such as *par* ‘scorpion’ must be borrowings.

Similarly, apparent reflexes of final *w are better analyzed as reflecting original vowels. For example, Western Pantar *lau*, Adang *lou*, Abui *lou*, Sawila *lu*, and Wersing *aloi* ‘bark’ (v.). Without additional supporting evidence we do not reconstruct *w in final position.

The initial reflexes of the palatal glide *j are relatively straightforward once a few simple rules are taken into account. In Kaera, Blagar, Adang, Kui, Kamang, Sawila, and Wersing the reflex of *j is lost before a high front vowel [i]. In Western Pantar, it becomes *h* in the same environment. Thus, Teiwa *jas*, Kaera *jas-*, Western Pantar *jasa* < pAP *jasi ‘bad, broken’; but before a high front vowel Teiwa *jir*, Kaera *ir*, Kamang *ili* < *jira ‘water’. Correspondence sets supporting initial *j include ‘water’, ‘bad’, ‘dog₁’, ‘five’, ‘star’, and ‘laugh’.

In Kui *e:r* ‘water’ subsequent vowel quality changes have obliterated the environment which triggered loss of *j. Nedebang and Adang lose the initial syllable of ‘dog₁’ because the form had final stress and in those languages the initial unstressed syllable was lost. Wersing *wetiŋ* ‘five’ irregularly begins with *w* instead of *j*.

We do not reconstruct *j in non-initial position. Where non-initial *j* is found in modern languages we assume this is a reflex of a vowel. Examples include Nedebang *buja* ‘betel nut’ < *bui.

2.7 Reconstructed proto-Alor-Pantar vocabulary

Since the focus of our reconstruction is on the consonants, the vowels in the reconstructed vocabulary should be interpreted with caution. We do not make any strong claim regarding the nature of the pAP vowel system.

Having reconstructed the consonant system we can proceed with a reconstruction of pAP vocabulary. Although we identify 129 distinct lexical correspondences in our data set, not all correspondences are widely attested across the full range of languages. We reconstruct vocabulary items only when reflexes can

⁸ A capital V stands for a vowel, where it is unclear which vowel should be reconstructed.

⁹ Several AP languages show medial /g/ or reflexes of medial *g in ‘laugh’, leading Schapper, Huber & van Engelenhoven (this volume) to reconstruct pAP *jagir. We find that the correspondences for this medial consonant are highly irregular, and therefore appear to indicate borrowing rather than inheritance. On the other hand, a number of languages unproblematically reflect *jari, so we reconstruct pAP *jari as opposed to *jagir. See the Appendix for a full list of words.

¹⁰ Schapper, Huber & van Engelenhoven (this volume) reconstruct ‘new’ as *siba(r) with an optional final *r. In the Timor languages, the final /r/ is found in Makalero. In the modern AP languages, only Adang has a final /r/, but the Adang reflex of pAP *r is either /l/ or /i/, so we find insufficient evidence to reconstruct ‘new’ with a final *r at this time.

Table 10: Reconstructed pAP vocabulary

* <i>(a)dVl</i> ⁸ ‘bird’	* <i>jari</i> ⁹ ‘laugh’	* <i>por</i> ‘dry in sun’
* <i>en(i,u)</i> ‘name’	* <i>jasi</i> ‘bad, broken’	* <i>p{i,u}nV</i> ‘hold’
* <i>aman</i> ‘thatch’	* <i>jibV</i> ‘star’	* <i>pi-</i> ‘1PL.INCL’
* <i>aqana</i> ‘black’	* <i>jibar</i> ‘dog’	* <i>purVn</i> ‘spit’
* <i>-ar</i> ‘vagina’	* <i>jira</i> ‘water’	* <i>pVr</i> ‘scorpion’
* <i>araqu</i> ‘two’	* <i>jira(n)</i> ‘fly’ (v.)	* <i>rVsi</i> ‘goanna’
* <i>-asi</i> ‘bite’	* <i>jiwesin</i> ‘five’	* <i>qaba(k)</i> ‘spear’
* <i>bagai</i> ‘crocodile’	* <i>kin</i> ‘mosquito’	* <i>qar-</i> ‘tens’
* <i>bagori</i> ‘yellow’	* <i>kusin</i> ‘fingernail’	* <i>siba</i> ¹⁰ ‘new’
* <i>baj</i> ‘pig’	* <i>kVt</i> ‘flea’	* <i>sib(a,i)r</i> ‘shark’
* <i>-bat</i> ‘leg’	* <i>lam(ar)</i> ‘walk’	* <i>talam</i> ‘six’
* <i>bis</i> ‘mat’	* <i>-lebur</i> ‘tongue’	* <i>tam</i> ‘saltwater’
* <i>bob</i> ‘wave’	* <i>lete</i> ‘far’	* <i>tama</i> ‘fat’
* <i>bui</i> ‘betel nut’	* <i>luk(V)</i> ‘crouch’	* <i>-tan</i> ‘hand/arm’
* <i>bukan</i> ‘guard’	* <i>IVu</i> ‘bark’(v.)	* <i>tapai</i> ‘pierce’
* <i>bunaq</i> ‘smoke’	* <i>madel</i> ‘bat’	* <i>tas</i> ‘stand’
* <i>dar(a)</i> ‘sing’	* <i>magi</i> ‘hear’	* <i>tei</i> ‘tree’
* <i>dul(a)</i> ‘slippery’	* <i>mai</i> ‘come’	* <i>temek</i> ‘bedbug’
* <i>dumV</i> ‘thick’	* <i>mait</i> ‘betel vine’	* <i>tena</i> ‘ripe’
* <i>dur</i> ‘rat’	* <i>-mam</i> ‘father’	* <i>-ten</i> ‘wake s.o.’
* <i>ede</i> ‘burn’	* <i>mari</i> ‘bamboo’	* <i>tia</i> ‘recline’
* <i>-ena</i> ‘give’	* <i>mi</i> ‘(be) in/on’	* <i>tiara</i> ‘expel’
* <i>ga-</i> ‘3SG’	* <i>mid</i> ‘climb’	* <i>-tiari(n)</i> ‘close’ (v.)
* <i>ge-</i> ‘3GEN’	* <i>-mim</i> ‘nose’	* <i>-tok</i> ‘stomach’
* <i>gi-</i> ‘3PL’	* <i>min(a)</i> ‘die’	* <i>tukV</i> ‘short’
* <i>ha-</i> ‘2SG’	* <i>mis</i> ‘sit’	* <i>-uaqal</i> ‘child’
* <i>habi</i> ‘fish’	* <i>mogol</i> ‘banana’	* <i>-uari</i> ‘ear’
* <i>haban</i> ‘village’	* <i>mudi</i> ‘body hair’	* <i>uasin</i> ‘tooth’
* <i>hada</i> ‘fire, firewood’	* <i>mudin</i> ‘plant’ (v.)	* <i>uku</i> ‘knee’
* <i>hagur</i> ‘yawn’	* <i>-muk</i> ‘horn’	* <i>-wa</i> ‘mouth’
* <i>hami</i> ‘breast’	* <i>mVn</i> ‘rotten’	* <i>wadi</i> ‘sun’
* <i>has</i> ‘excrement’	* <i>na-</i> ‘1SG’	* <i>wai</i> ‘blood’
* <i>hasak</i> ‘empty’	* <i>nai</i> ‘eat/drink’	* <i>wai</i> ‘roof’
* <i>hawar</i> ‘lime’	* <i>nan(a)</i> ‘sibling (older)’	* <i>war</i> ‘stone’
* <i>hipar</i> ‘dream’	* <i>nuk</i> ‘one’	* <i>wata</i> ‘coconut’
* <i>hu:ba</i> ‘sugarcane’	* <i>oda</i> ‘throw’	* <i>weli</i> ‘bathe’
* <i>is(i)</i> ‘fruit’	* <i>-ora</i> ‘tail’	* <i>wur</i> ‘moon’

be found in at least one language of Pantar (Teiwa, Nedebang, Kaera, Western Pantar), one language of West Alor and the Pantar Strait (Blagar, Adang, Klon, Kui), and one language of East Alor (Abui, Kamang, Sawila, Wersing). We exclude from reconstruction very obvious recent borrowings, such as ‘maize’, but we include some forms which are older Austronesian borrowings, such as ‘pig’, ‘betel nut’, and ‘betel vine’. We know that these items/animals were introductions that roughly coincide with the arrival of the Austronesian (AN) languages in the area.¹¹

Table 10 lists 117 vocabulary items which can be reconstructed at the level of pAP on the basis of the correspondence sets above. A full list of the correspondence sets with modern reflexes can be found in the Appendix.

Based on what we know of the phonotactics of the daughter languages, and on the reconstructed pAP vocabulary, we posit a (C)V(C) syllable structure for pAP, with (C)VC or CV(C) as the minimal structure for a single word. In particular, while many of the daughter languages permit words consisting of a single vowel (e.g., Western Pantar *a* ‘tuber’), the reconstructed pAP vocabulary does not contain such forms, although syllables consisting of a single vowel may occur in polysyllabic words. Similarly, while some of the modern languages admit consonant clusters in word-initial onsets, which involve a second liquid second consonant (e.g., Teiwa *bluking* ‘arrow’, Western Pantar *bro* ‘dust’), no consonant clusters are reconstructed for pAP. Underived words in pAP are typically no more than three syllables in length.

3 Internal subgrouping

In this section we consider two approaches to explaining the internal relationships of the Alor-Pantar languages. The first is based on the traditional concept of shared phonological innovations. This method robustly identifies shared history, but because the innovations cross-cut one another this method requires subjective weighting of the various innovations. We thus consider also a second less traditional approach based on computational phylogenetics applied to the lexical dataset. Here we apply two methods: split decomposition and Bayesian statistical

¹¹ The fact that these loans can be reconstructed and show regular sound correspondences can be taken as evidence for the claim that the breakup of pAP followed the arrival of AN in the region (perhaps as recently as 3,800-3,000 BP; Spriggs (2011: 511); Pawley (2005: 100)). However, it is equally likely for later diffusions to exhibit patterns very much like regular sound correspondences. Settling this matter requires independent evidence dating pAP relative to AN.

techniques. Both methods have been applied successfully to questions of wider family relationships but have only recently been used to explore internal relationships of small language families (DunnEtAl2011). In both the traditional and computational approaches we rely on the prior application of the comparative method to establish cognate classes based on regular sound correspondences. That is, we apply these methods to true cognates rather than lexical look-alikes identified based on subjective similarity judgments.

3.1 Subgrouping based on shared phonological innovations

The sound correspondences which support reconstruction of the pAP consonant inventory allow us to identify sound changes which have occurred in the daughter languages. While there are many changes which are unique to particular languages, we can identify seventeen sound changes which are each shared by at least two languages (Table 11). Many of these changes are cross-linguistically common, and hence may be of marginal value for subgrouping, for they may have occurred independently in the languages concerned.

Additionally, many of the changes cross-cut each other, further complicating internal subgrouping. For example, the change $*s > h$ groups Adang with Blagar and Klon, while the change $*r > l$ groups Adang with Nedebang, Western Pantar, and Abui. This forces a somewhat subjective choice as to which sound change should be given greater weight for the purposes of subgrouping.

The most widespread of these changes is $*h > \emptyset$, which occurs in all languages except Teiwa and Western Pantar. However, this change is typologically common and may have occurred independently in several languages. We choose not to base subgrouping on this change. The second most widespread of these changes is $*q > k$, which occurs in all languages except the Pantar languages Teiwa, Nedebang, and Kaera. This change results in a merger of $*k$ and $*q$ in most daughter languages, while Teiwa, Nedebang, and Kaera keep these phonemes distinct. However, closer examination reveals that Western Pantar also distinguishes reflexes of $*k$ and $*q$, though not in all positions. Western Pantar, as noted previously, geminates original stops in medial position, with the exception of $*q$. Thus, in medial position the Western Pantar reflexes of $*k$ and $*q$ are distinguished as $k:$ and k , respectively. Using this evidence to support Western Pantar as maintaining the distinction between $*k$ and $*q$ we can then identify a large group of languages which merge these phonemes. The eight languages so identified are precisely the languages of Alor and the Pantar Strait, namely, Blagar, Adang, Klon, Kui, Abui, Kamang, Sawila, and Wersing. We take this change to define a subgroup labeled “Alor.”

Table 11: Sound changes found in at least two languages

Change	Languages
*b>f	Teiwa, Nedebang, Abui (in Teiwa and Nedebang only non-initially)
*b>p	Kamang, Sawila, Wersing
*d>r	Abui, Kui (in Kui only finally)
*g>ʔ	Blagar, Adang
*k>Ø/_#	Blagar, Adang
*q>k	Western Pantar, Blagar, Adang (ʔ < k < *q), Klon, Kui, Abui, Kamang, Sawila, Wersing
*s>h	Blagar, Adang, Klon
*s>t	Abui, Sawila, Wersing
*h>Ø	everywhere but Teiwa and Western Pantar
*m>ŋ/_#	Western Pantar, Blagar, Adang
*n>ŋ/_#	Nedebang, Kaera, Western Pantar, Blagar, Adang, Abui, Kamang, Sawila, Wersing
*l>i/_#	Teiwa, Kaera, Adang, Kamang
*l>Ø/_#	Nedebang, Western Pantar, Abui
*r>l/V_V	Nedebang, Western Pantar, Adang, Kamang
*r>Ø/_#	Teiwa, Kaera, Western Pantar
*r>i/_#	Blagar, Kui, Abui

Within the Alor group we can distinguish two lower level subgroups. In the east the languages Sawila and Wersing share the innovations $*b > p$ and $*s > t$. The former change is also shared with Kamang; the latter with Abui. So while it is tempting to expand this group, only Sawila and Wersing share both of these innovations, defining a subgroup we refer to as East Alor. In the west the languages Blagar and Adang share innovations $*k > \emptyset$, $*g > ?$, and $*s > h$, defining the Pantar Strait group (labeled “Straits” in the tree). The latter change is also shared with Klon, providing weak support for an intermediate grouping which we label West Alor. The remaining changes cross-cut these and do not provide additional subgrouping information.

The tree based on shared phonological innovations (Figure 1) differs in several ways from previous classifications based on lexicostatistics. In particular, while the eastern languages Sawila and Wersing form a subgroup, they do not constitute primary branches of pAP, as has been suggested in several previous classifications (cf. Wurm1982 Lewis 2009). This tree has obvious geographic correlates, as shown in Figure 2 below.

The Alor subgroup defined by the merger of pAP velar and uvular stops includes all of the languages of Alor island and the intervening Pantar Straits. The languages of Pantar, with the exception of Blagar which is spoken on both Pantar and in the Straits, do not subgroup together. Within the Alor group are found two primary subgroups: East Alor at the eastern tip of the island, and West Alor comprising the western tip, the Bird’s Head in the Northwest, and the Straits.

3.2 Subgrouping based on lexical characters

A second approach to subgrouping delineates subgroups according to shared cognates. For each lexical correspondence set in our data we partitioned the languages into discrete cognate classes. As with the phonological innovations discussed above, the lexical correspondence sets in our data do not all pick out the same subgroups. That is, the cognate sets delineated by some lexical items overlap with those delineated by other lexical items. These overlapping groupings can be visualized in a split graph which represents the distance between the characters in terms of numbers of splits (Figure 3). Details specific to our application of the method are laid out in Robinson & Holton (2012).

Three primary regions can be identified in the graph, each separated by significant reticulation at the center of the graph. An East Alor region groups Kamang, Wersing, and Sawila; a Central Alor region groups Kui, Klon, and Adang; and a Pantar region groups Kaera, Nede bang, Teiwa, and to a lesser extent Western Pantar. The high degree of reticulation within this latter group indicates a strong

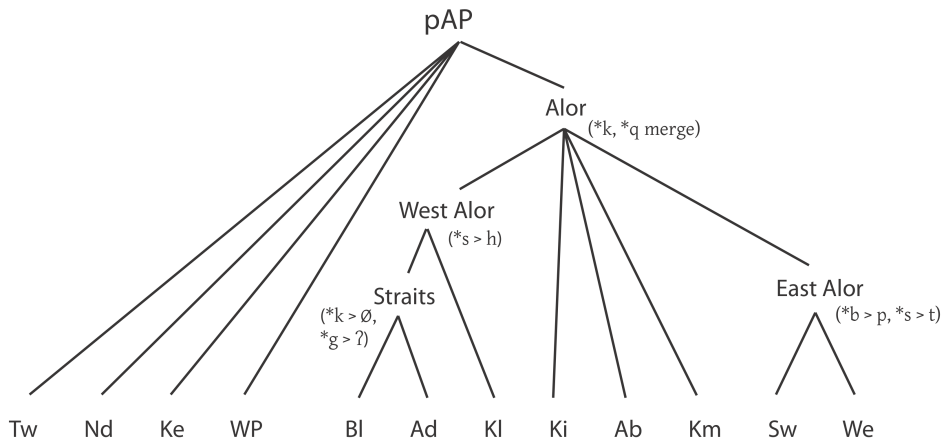


Figure 1: Subgrouping of Alor-Pantar based on shared phonological innovations

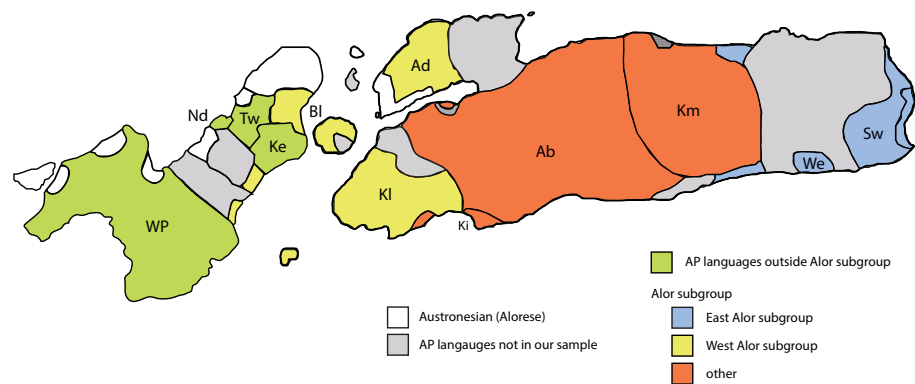


Figure 2: Distribution of subgroups defined based on shared phonological innovations

1 The internal history of the Alor-Pantar language family

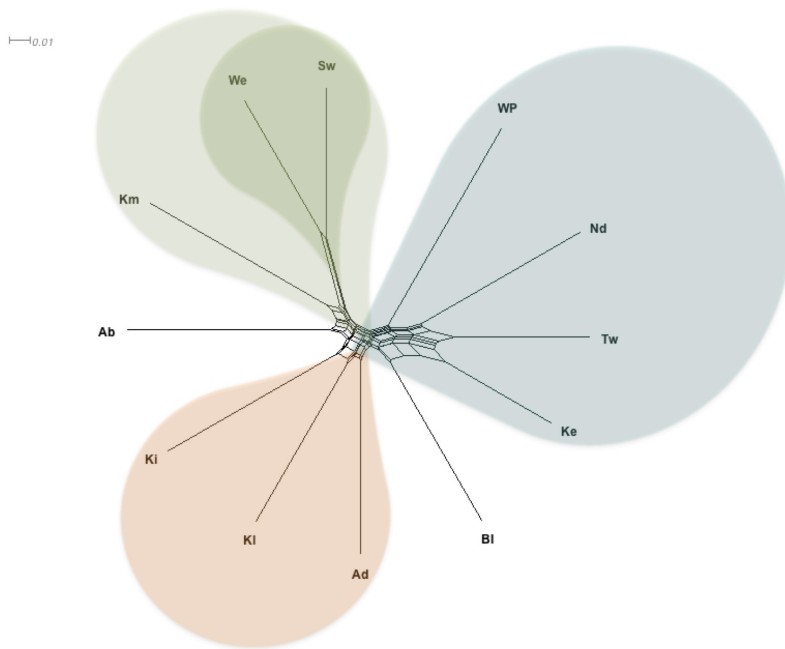


Figure 3: Split graph of lexical character coded into cognate classes, generated using NeighborNet algorithm (HusonEtAl2006). pAP node omitted for clarity.

conflicting signal within this region. That is, of these three regions, the Pantar group is particularly non-tree-like, suggesting a pattern of wave-like innovations in this region. In other words, although we found no shared phonological innovations to subgroup these languages together in a traditional tree based on the comparative method, these languages have borrowed a great deal from one another.

A greater degree of reticulation in the graph represents a less tree-like signal in the data. The degree of tree-like signal can be quantified using the delta score metric (WichmannEtAl2011, HollandEtAl2002). The average delta score for our dataset is a moderately high $\delta = 0.29$, reflecting the fact that while some groupings do emerge in Figure 3, there is significant reticulation between those groups. The most tree-like values are found in the East Alor grouping of Kamang, Wersing, and Sawila. The Pantar group of Teiwa, Kaera, and Nedebang has delta scores similar to the mean for the entire dataset; however, the value for Western Pantar is significantly higher, suggesting that similarities between Western Pantar and the remainder of the Pantar languages may be due more to borrowing than to shared descent. An unexpected result in the graph in Figure 3 is the position of Blagar as a relative isolate within the family. In contrast to the subgrouping based on the comparative method, Blagar groups not with Adang and Klon but rather with the Pantar languages—and then only weakly so.

A second method of subgrouping based on lexical characters uses Bayesian statistical techniques to search for trees which are most compatible with the cognate classes coded in our data.¹² The results are summarized in Figure 4 as a maximum clade credibility tree. The clade credibility values listed below each node indicate the percentage of sampled trees which are compatible with that node. These values are for the most part either at or near one hundred percent (1.00), indicating that this consensus tree is compatible with almost all of the trees sampled in the analysis. Lower figures appear at exactly those nodes already shown to be problematic via the other subgrouping methods, namely Western

¹² We employ a Markov Chain Monte Carlo (MCMC) method to search through the probability space of all possible trees, using a relaxed Dollo model. Details of this implementation can be found in Robinson & Holton (2012), which compares the results of several different models, using both MrBayes 3.2.1 (RonquistEtAl2003) and BEAST 1.7.2 (DrummondEtAl2012), running each model for at least 10 million iterations with a sample rate of 1000 and a burn-in of 25 percent. Each model converged after approximately 1.5 million iterations, and the best performing model (i.e., that with the highest likelihood) was found to be the relaxed Dollo model implemented in BEAST. This model has been argued to be particularly appropriate to linguistic data, since it assumes that innovations may arise only once but may be lost multiple times independently (Pagel2009).

1 The internal history of the Alor-Pantar language family

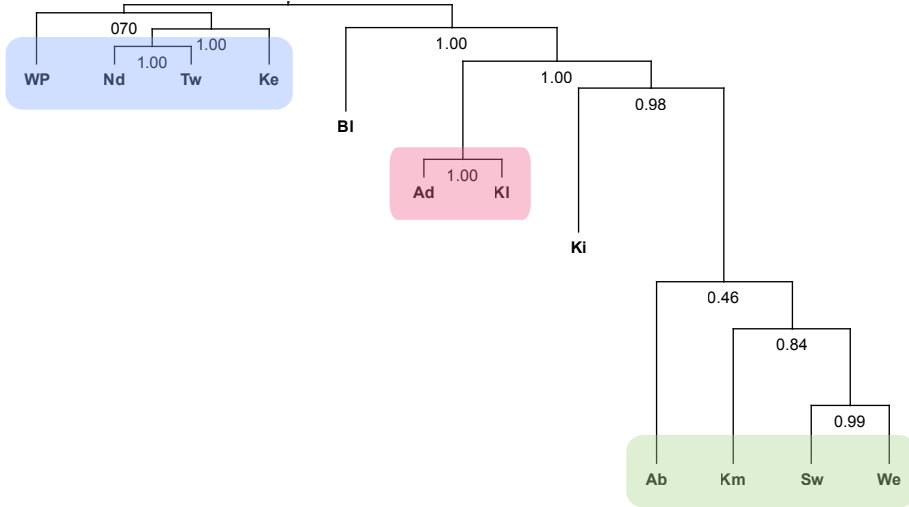


Figure 4: Bayesian MCMC maximum clade credibility tree for lexical data (relaxed Dollo model), with clade credibility values indicated. pAP node omitted

Pantar, Abui, and Kamang.

To a large extent the groupings in the Bayesian tree are compatible with those in the split graph. First, Sawila (Sw) and Wersing (We) are shown to be closely related, a grouping which was also present in the classification based on the comparative method (Figure 1). Second, there is a Pantar grouping of Kaera (Ke), Teiwa (Tw), Nede bang (Nd), and Western Pantar (WP). Third, the position of Blagar (Bl) at the highest node coordinate to the Alor languages is consistent with its position in the split graph, though, as noted above, this differs significantly from its position in the tree based on the traditional application of the comparative method (Figure). On the other hand, there are also some incompatibilities between the Bayesian tree and the split graph. For example, in the tree based on lexical characters Adang (Ad) and Klon (KI) are shown forming a group without Kui (Ki), contra both the splits graph and the tree calculated using the comparative method.

Though not immediately apparent based on visual inspection of the maximum clade credibility tree in Figure 4, the subgrouping based on lexical characters is also largely compatible with that based on phonological innovations. To demonstrate this we repeated the Bayesian analysis with the constraint that all sampled

trees be compatible with the subgroups identified by the comparative method, keeping all other parameters constant.¹³ We then applied a marginal likelihood analysis to the results of each model, which yielded a Bayes factor of 1.1726, only slightly favoring the constrained model over the unconstrained one.¹⁴ The model based on lexical characters independently identifies the same subgroups found using a completely different methodology based on phonological characters, providing additional support for the robustness of the model. This lends support for those subgroups identified in the model based on lexical characters which are not found in the subgrouping based on phonological innovations. In particular, we have some evidence for the existence of an East Alor subgroup comprised of Abui (Ab), Kamang (Km), Sawila (Sw) and Wersing (We), even though this subgroup is not identified in the tree based on phonological characters.

4 Discussion

The examination of sound correspondences across the Papuan languages of Alor and Pantar robustly supports the identification and reconstruction of an Alor-Pantar family. Our comparative work also allows us to propose internal subgroups within Alor-Pantar, but the overall linguistic picture is extremely complex, defying a model based solely on inheritance. Widespread multilingualism is the norm in the region, and borrowings from neighboring languages—such as Western Pantar *bagis* ‘whine’ from Deing *bagis* ‘cry’—are extremely common.¹⁵ Additionally, genetic studies indicate that East Nusantara, and the Alor-Pantar region in particular, is a melting pot with a long history of admixture (MonaEtAl2009), and it may well be that an analogous situation holds for languages, reflecting extensive borrowing and metatypy. Thus it is not surprising that different methods reveal different trees for the family.

The family tree based on phonological innovations identified by the comparative method (Figure 1) shows the highest level of diversity on Pantar, suggesting the languages originated in Pantar, spreading east. The tree based on the lexical characters suggests that the languages of Alor originated in the Pantar Strait (around the area where Blagar is spoken today) with subsequent migration eastward. These two trees reveal different aspects of the prehistory of the AP languages. Phonological innovations show the greatest degree of diversity

¹³ The authors thank Michael Dunn for suggesting this innovative approach.

¹⁴ Marginal likelihood was estimated using Tracer 1.5 (RambautEtAl2007).

¹⁵ Geographically, Deing lies between Western Pantar and Teiwa. It appears to be closely related to Teiwa.

on Pantar, suggesting a long history of settlement there. Lexical innovations are compatible with an original settlement in the Pantar Strait. We propose that the original settlement was indeed in the area of the Pantar Strait with a very early split towards Pantar. That early settlement of Pantar led to the diversity we see there in terms of phonological innovations. The lexical innovations show less diversity on Pantar due to subsequent diffusion (as indicated by the significant reticulation for the languages of Pantar in Figure 3). As languages spread eastward from the Pantar Strait into Alor, new lexical innovations were restricted to smaller and smaller subgroups in the east, leading to the embedded structure in the tree based on lexical characters (Figure 4). However, the Pantar Strait languages (particularly Blagar and Adang) constitute a more recent linguistic area across which phonological innovations have been shared, leading to their close subgrouping in the tree based on phonological innovations (Figure 1).

While this picture is fairly complex in terms of layers of history, it is not unexpected in a region of significant warfare and shifting alliances overlaid by several periods of contact from different outside groups (first the ancestors of today's Muslim speakers of Alorese, then the Dutch, and now Indonesian). A more complete picture of the prehistory of the region must await evidence from other disciplines, particularly archaeology and genetics.

Appendix

Cognate sets

Here we list 129 cognate sets reflecting regular sound correspondences. There are only 127 distinct meanings, as two of the meanings, 'dog' and 'walk', are found in more than one cognate set; these are indicated with subscripts following the gloss. In the table the correspondence sets are listed alphabetically by English gloss. Languages are arranged in order roughly from west to east with the western-most languages on the left and the eastern-most languages on the right. Correspondence sets may include irregular forms when they serve to demonstrate the correspondence under discussion. In these cases the irregular forms are denoted with a preceding double dagger (‡). We reconstruct pAP forms only when we have broad geographic support in minimally one language of Pantar (Teiwa, Nedebang, Kaera, Western Pantar), one language of West Alor and the Pantar Strait (Blagar, Adang, Klon, Kui), and one language of East Alor (Abui, Kamang, Sawila, Wersing). Of these 129 correspondences, 117 reconstruct to the level of pAP.

Gloss	pAP	Tw	Nd	Ke	WP	Bl	Ad	Kl	Ki	Ab	Km	Sw	We
'axe' ¹					<i>balin</i>		<i>balin</i>			<i>falin</i>	<i>palin</i>		
'bad, broken'	*jasi	<i>jas</i>	<i>jetfi</i>	<i>jas-</i>	<i>jas</i>	<i>dqasi</i>	<i>sah</i>	<i>ja:h</i>				<i>jati</i>	
'bamboo'	*mari				<i>mali</i>	<i>mari</i>	<i>mah</i>	(du)mar					
'banana'	*mogol	<i>muhui</i>	<i>ʔmaj</i>	<i>mogoi</i>	<i>mag:i</i>	<i>ʔmɔl</i>	<i>mɔʔoi</i>	<i>məgol</i>		<i>mai</i>	<i>mai</i>		
'bark' (v.)	*IVu				<i>lau</i>	<i>ʔorow</i>	<i>lou</i>				<i>moi</i>		<i>mulul</i>
'bat'	*madel	<i>mədi</i>	<i>ʔmara</i>	<i>ʔmerei</i>	<i>mad:e</i>	<i>demeɫ</i>	<i>ʔmadirun</i>	<i>mədel</i>	<i>madel</i>	<i>marel</i>	<i>matei</i>	<i>ʔmadi:(ku)</i>	<i>ʔmudu(k)</i>
'bathe'	*weli	<i>wei</i>		<i>wei</i>		<i>vela</i>	<i>foil</i>	<i>wel</i>	<i>weli</i>	<i>-wel</i>	<i>-wei</i>	<i>wile</i>	<i>-weli</i>
'bedbug'	*temek			<i>temek</i>		<i>teme</i>	<i>ʔtame?</i>	<i>tamek</i>		<i>tameki</i>			<i>mekitʃ</i>
'betel nut'	*bui	<i>bui</i>	<i>buija</i>	<i>bui</i>	<i>bu</i>	<i>bu</i>	<i>bu</i>	<i>bui</i>		<i>fu</i>		<i>pu</i>	<i>pui</i>
'betel vine'	*mait	<i>met</i>	<i>mata</i>	<i>mat</i>	<i>meta</i>	<i>mat</i>	<i>metf</i>	<i>meh</i>	<i>mesin</i>	<i>me:tiŋ</i>	<i>maisi</i>	<i>masi</i>	<i>mas</i>
'bite'	*(a)dVl	<i>dai</i>	<i>ʔdaja</i>		<i>ʔduŋ</i>				<i>adol</i>	<i>ruwolʔ</i>	<i>atoi</i>	<i>adala</i>	<i>adol</i>
'black'	*asi	<i>si</i>	<i>tʃia</i>	<i>si:</i>	<i>sia</i>		<i>-eh</i>	<i>eh</i>	<i>-es</i>	<i>-eh</i>			
'blood'	*aqana	<i>qaʔan</i>	<i>qana</i>	<i>xan</i>	<i>ʔana</i>	<i>kaʔana</i>	(l)aʔan	<i>akan</i>	<i>akana</i>	<i>akan</i>		<i>akana</i>	<i>akeŋ</i>
'body hair'	*wai	<i>wai</i>	<i>we</i>	<i>wei</i>	<i>wai</i>	<i>ve</i>	<i>foi</i>	<i>we?</i>	<i>we</i>	<i>wea</i>	<i>we:</i>	<i>wi:</i>	<i>wei</i>
'bone'	*mudi	<i>mud</i>	<i>mudi</i>	<i>-mudu</i>	<i>-mudi</i>			<i>amudi</i>		<i>amur</i>		<i>madi</i>	<i>mudi</i>
'breast'	*hami	<i>kir</i>	<i>kili</i>	<i>kiri</i>	<i>kira</i>						<i>ami</i>	<i>-a-mi</i>	<i>ami</i>
'burn'	*ede	<i>de?</i>		<i>de</i>	<i>-han</i>	<i>ʔede</i>				<i>ʔdiei</i>			
'child'	*uaqal	<i>-oqai</i>	<i>uaqa</i>	<i>-uax</i>	<i>wak-e</i>	<i>-oal</i>	<i>ʔai</i>	<i>ʔul</i>	<i>ʔol</i>			<i>mada</i>	<i>ʔol</i>
'climb'	*mid	<i>mir</i>			<i>mid-aŋ</i>		<i>mid</i>	<i>mid</i>					
'close' (v.)	*tiari(n)			<i>teriŋ</i>	<i>ʔtiariŋ</i>	<i>teriŋ</i>	<i>tel</i>	(u)ter	(u)teri			<i>-ti:ra</i>	(le)ter
'coconut'	*wata	<i>wat</i>	<i>wata</i>	<i>wat</i>	<i>wata</i>	<i>vet</i>	<i>fa</i>	<i>ʔata</i>	<i>ʔbat</i>	<i>wata</i>	<i>wate</i>	<i>wata</i>	<i>wata</i>
'come'	*mai ⁵	<i>ma</i>	<i>ma</i>	<i>ma</i>	<i>ma</i>	<i>ma</i>	<i>ma</i>	<i>ma</i>	<i>mai</i>	<i>mɛ</i>	<i>me:</i>	<i>me</i>	<i>amai</i>
'crocodile'	*bagai	<i>bahai</i>		<i>bagai</i>	<i>ʔbagai</i>		<i>baʔai</i>	<i>bəgai</i>	<i>ʔbuai</i>	<i>fahai</i>	<i>pie:</i>		
'crouch'	*luk(V)				<i>luk:ŋ</i>			<i>luk</i>	<i>luk</i>	<i>luk⁶</i>	<i>luk⁷</i>		<i>luku(k)</i>
'die'	*min(a)	<i>min</i>	<i>mina</i>	<i>nimin</i>	<i>ʔhin:a</i>	<i>mina</i>	<i>min</i>	<i>min</i>	<i>min</i>	<i>mon</i>			
'dog'	*jibar ⁸	<i>ji'var</i>	<i>ʔbar</i>	<i>i'bar</i>	<i>ja'be</i>	<i>dʒa'bar</i>	<i>bel</i>						

Gloss	pAP	Tw	Nd	Ke	WP	Bl	Ad	Kl	Ki	Ab	Km	Sw	We
'dog ₂ '								<i>kur</i>	<i>kur</i>	<i>kari</i>	<i>kui</i>		
'dream'	*hipar			<i>ipar</i>	<i>hip-e</i>	<i>ipar</i>	<i>apai</i>	<i>eper</i>		<i>piei</i>	<i>-foi</i>		
'dry in sun'	*por			<i>poriŋ</i>	<i>ɕpuar-iŋ</i>	<i>poriŋ</i>	<i>poiŋ</i>	<i>upur</i>				<i>po:por⁹</i>	
'dry'						<i>ɕtaʔata</i>	<i>taʔat</i>	<i>takat</i>	<i>takata</i>	<i>takat</i>			
'ear'	*uari	<i>uar</i>	<i>ow</i>	<i>uar</i>	<i>uwe</i>	<i>veri</i>	<i>-fel</i>	<i>wer</i>	<i>ɕwel</i>	<i>wei</i>	<i>wai</i>	<i>-wari</i>	<i>weri</i>
'eat/drink' ¹⁰	*nai	<i>na</i>	<i>ina</i>	<i>na</i>	<i>na</i>	<i>na</i>	<i>na</i>	<i>na:ʔ</i>	<i>nai</i>	<i>ne:</i>	<i>ne</i>	<i>ne:</i>	<i>nai</i>
'empty'	*hasak	<i>hasak</i>		<i>isik</i>	<i>hak:as¹¹</i>					<i>taka</i>	<i>saka</i>		
'excrement'	*has	<i>has</i>			<i>has</i>		<i>ɕa:s</i>	<i>ah</i>	<i>es</i>	<i>ɕasi</i>	<i>asi</i>	<i>atu</i>	<i>atu</i>
'expel'	*tiara	<i>-tiar</i>	<i>-tiala</i>	<i>ter</i>		<i>-teri</i>	<i>(ate)ɕel</i>	<i>ihi</i>				<i>tira</i>	<i>-(pan)ter</i>
'far'	*lete ¹²						<i>let</i>	<i>let</i>			<i>letei</i>		
'fat'	*tama	<i>tama?</i>		<i>tama</i>		<i>tama</i>	<i>tama(r) tama(d)</i>	<i>tama</i>	<i>tama</i>	<i>tama(da)</i>			
'father'	*mam			<i>-mam</i>		<i>-man</i>	<i>-man</i>	<i>-man</i>	<i>ɕ-ma</i>	<i>ma:ma</i>			
'fingernail'	*kusin		<i>kufiŋ</i>	<i>kusiŋ</i>	<i>ɕ-kusi</i>	<i>ɕkusil</i>	<i>ʔuhuŋ</i>	<i>ɕkuh</i>	<i>kusin</i>	<i>ɕ-kusiŋ</i>	<i>kusiŋ</i>		
'fire'	*hada	<i>har</i>	<i>ar</i>	<i>ad</i>	<i>had:i¹³</i>	<i>ʔad</i>	<i>ɕa</i>	<i>ada?</i>	<i>ar</i>	<i>ara</i>	<i>ati</i>	<i>ada</i>	<i>ada</i>
'fish'	*habi	<i>haɕ</i>	<i>a:fi</i>	<i>ab</i>	<i>hap</i>	<i>a:b</i>	<i>ab</i>	<i>ibi?</i>	<i>eb</i>	<i>afu</i>	<i>api</i>	<i>api</i>	<i>api</i>
'five'	*jiwesin	<i>jusan</i>	<i>ɕjisin</i>	<i>isim</i>	<i>jasin</i>	<i>ɕisin</i>	<i>ifihiŋ</i>	<i>eweh</i>	<i>jesan</i>	<i>jetin</i>	<i>iwesin</i>	<i>jotiŋ</i>	<i>wetiŋ</i>
'flea'	*kVt	<i>ɕhat</i>			<i>kati</i>		<i>ɕʔut</i>	<i>kot</i>					<i>tokoʔ¹⁴</i>
'fly' (v.)	*jira(n)	<i>jir-an</i>	<i>jila</i>	<i>ir</i>	<i>hikan</i>							<i>irin</i>	<i>ire</i>
'fruit'	*is(i) ¹⁵	<i>jis</i>	<i>it/i</i>	<i>isi</i>	<i>ɕhis:a</i>	<i>(ʔ)ihi</i>		<i>ih</i>			<i>ih</i>	<i>ɕ-si</i>	<i>ɕ-is¹⁶</i>
'garden'		<i>mahar</i>	<i>maxara</i>		<i>mag:ar</i>		<i>maʔad</i>						
'give'	*-enV	<i>-an</i>	<i>-ena</i>	<i>-en</i>	<i>-nia</i>	<i>-enan</i>	<i>-en</i>	<i>-en</i>	<i>-ana</i>	<i>-n</i>	<i>-n</i>		<i>-en(i(r))</i>
'good'							<i>no?</i>	<i>nok</i>	<i>noka</i>				
'guard'	*bukan	<i>ɕbohon</i>		<i>bukan</i>	<i>baukan</i>			<i>buk</i>			<i>-pukan</i>		
'hand/arm'	*-tan	<i>-tan</i>	<i>-tan</i>	<i>tan</i>	<i>tan</i>	<i>tan</i>	<i>tan</i>	<i>tan</i>	<i>tan</i>	<i>tan</i>	<i>tan</i>	<i>tan</i>	<i>ten</i>

Gloss	pAP	Tw	Nd	Ke	WP	Bl	Ad	Kl	Ki	Ab	Km	Sw	We
'hear'	*magi ¹⁷	tuta(h)	tutu-	tutu(k)	tutu	meʔe	maʔeh	məgi	mahi	mai			
'hearth'		pin	pini	pin	pini	pina	puin	puna	pun	fun		majin	
'hold' ¹⁸	*p(i,u)nV			muk		mu	mu	muk	muk	‡mu:		puni ¹⁹	poiŋ ²⁰
'horn'	*muk					mi	mi	mi	mi	mi		ma	
'(be) in/on'	*mi	meʔ			me	mi	mi	mi	mi	mi			
'itchy'		qa-q	qaqa	xaxaw	kaka	kaka	‡kak						
'knee'	*uku	ku:ʔ	uku	uku	uk-a(n)	(k)uku		uk	uk				
'laugh'	*jari	‡jahar	‡gela	‡qgar	jali	asal	‡ʔəgar	jari		‡jei		(tasur)uku (seseb)uk	jer
'leg'	*-bat ²¹	-ʔat		-bat	-uta	-(-ʔ)ʔa						jara	
'lime'	*hawar	hor	wa	awar	hawwe	avar	ʔafai	əwər	or	awoi			or
'lizard'		takok	taka(rə:b)	tek	tak-e	teke	‡teko	takok	takok	‡tak-e:		tako	
'maize'		batar	batə	batar	bat-e	batar	bate	bat	batar	fat	patei	patara	peter
'mat'	*bis	bis	‡bi:	bis	bis	bihi	buh	bus	bus	fat		‡busi	‡bitiʔ
'moon'	*wur	wur	hula	ur	ur	uru	ul	ur	ur		wui		ura(k)
'mosquito'	*kin	kiʔin	kim(balu)	kiŋ	ki ²²	kini	ʔin	ikin	kin	kiŋ(ba)	ka(we:n)	ku(buŋ)	
'mouth' ²³	*-wa	-aw	-wa	-ua	-wa(r)	-va	-(ar)ʔah			-wa:	-wa	-wa	
'name'	*-en(i,u)		-einu	-en	-in-u	-ene	-ni	-neʔ	-enei	-ne	-ni		
'new'	*siba	‡sib	sava(ʔa)	sib	sab-a ²⁴	hiba	haba(r)	həba	saba	tifa	supa(ka)	tipea	təpa
'nose'	*-mim			-mim	‡-mi	-miŋ	-miŋ	-mim	-min	-miŋ	-miŋ		-muitŋ
'one'	*nuk	nuk	nuku	nuk	nuk	anuku	nu	nuk	nuku	nuku	nok	no	
'pierce' ²⁵	*tapai	tap	tapa	tap	tap-a(n)	tapa	tap-a(n)	tap-a(n)	tapai	tapei	tape	ta	
'pig'	*baj	bai	bei	bei	bai	bə	boi	bəʔ	bei	fe	pe	pi	pei
'plant' (v.)	*mudin	midan	mudi	mudin	midin	mudin	midin	mdin	medi	murui	mit	madin	mədi
'rat'	*dur	dur	dur	dur	di	duru	‡dur	dur	rui	tui		daru	dur(ki)
'rattan'		liag		leg		ʔilia	le	le	le				
'recline'	*tia	ti:ʔ	taʔa	te	tiʔaŋ	tia	ta:	ta	ta:	ta:	ta: ²⁶	-te	taj
'right'		jidān	jedin		jad:in								

Gloss	pAP	Tw	Nd	Ke	WP	Bl	Ad	Kl	Ki	Ab	Km	Sw	We
'ripe'	*tena			ten	wai	tena	ten	eten	tain		iten	itina	
'roof'	*wai	wai	waja			vai	fa	wei	wai	wai	iwa:h ²⁷		
'rotten'	*mVn	mucn	-mini	mino		min(isa)	mul	muin		-mun			
'saltwater'	*tam	ta?	ta	tam	tawa	taŋ	taŋ	tan	tan	tama	tama	tama	tama?
'scorpion'	*pVr	par		par	par	pep	pail	par	per	pe-i	pefal	per(buk)	
'search'			lafi	rap		rapin	lap		-rap				
'shark'	*sib(a.i)r ²⁸	siqar	sifi	sibar	sib-u	hibir	tabei		sobor				
'short'	*tukV	tuk	tuku	tuk	tuk-a	tuka(n)	to'a(n)	tuk	tuk	tuku ²⁹	tuk ³⁰	tuku(da)	tuk
'sibling (older)'	*nan(a)		-nan	da-ro ³²	dali	dar	dal		dar	na:na		-na:na	-nan
'sing'	*dar(a)	dar	da:la ³¹							jai ³³		dara	dara
'sit'	*mis	mis	mis	mis-	mis(in)	mihi	mih	mih	misa	mit	mit	miti	amit
'six'	*talam	ti:am	ti:tama	ti:tiam		taliŋ	talan	talan	talama	tala:ma	tama		
'sky'		bulan		buluŋ		buran							
'slippery'	*dul(a)			duj-	duba	dula	dul	dul	dula	rula	tula(ka)	dalo:(ka)	dol(ok)
'smoke'	*bunaq	bu:n	bun	banax	bu:n-a	benaka	banoo?	-bon	bonok		puna	punaka	punak
'spear'	*qaba(k)	qab	qaba	xabi	kabi	aba	aba	kəbak	kabak	kafak	kapa		
'spit'	*purVn	puran	(mali)plum	puran		purun	pui	pəruin	purin	puina	(su)pui		
'stand'	*tas	tas	tasi	tas-		tahi	toh	(mə)teh		(na)tet			-tati
'star'	*jibV	jib	ifa(xoja)	ti:ip(alaq)	hib-i	ti:d	ib(in)		ib(ra)				
'stomach'	*-tok	to?	to'fo	-toki		-tow	-to?						
'stone'	*war	war	wala	war	var	var	fci	wor	wor	wi	-tok	wara	-toko
'sugarcane'	*huba	hub ³⁴	u:fa	u:b	habua	ub	sob	aba	u:b		woi	upa	wor
'sun'	*wadi	war(get)	weri	wer	war ³⁵	wed	fed		ber	war	wati	wadi	upa
'tail'	*ora	-or	ola	-or	-ora	-ora	ol	-or	-or	-wai	(w)ui	(w)ora	widi
'tooth'	*uasin	usan	usin	uasin	wasin	ti:vein	fhiŋ	-weh	-wes	-weti	-weh	(w)ori	(w)ori
'tens' ³⁶	*qar-	qar-	qa-	xar	ke-	ar-	er-	kar-	kar-	kar-		kar-	kar-

Gloss	pAP	Tw	Nd	Ke	WP	Bl	Ad	Kl	Ki	Ab	Km	Sw	We
‘thatch’	*amen	man	man	man	dum:a	menin	men	en:em ³⁷	amen	amen		aman	amen
‘thick’	*dumV	ʔtuʔum										dumu	dum
‘throw’	*oda			od		oda	od	o:d	or	ʔwot	wota ³⁸		
‘tongue’	*-lebur	-livi	lefu	-leb	-lebu	ʔlebul	-libu(ŋ)	-le:b	liber	lifi	ʔ-opui -li(m)puru	ʔjebur	
‘tree’	*tei	tei	tei	tei		te	ti	(e)ɛ?	(a)tei	(ba)taa			
‘two’	*araku	raq	ʔraqu	rax	alaku	ʔaru	alo	orok	oruku	ajoku	ʔok	ʔjoku	
‘vagina’	*-ar	-ar				-ar	-al	-ar	-ar	-oi	-ai	ʔ-la	
‘village’	*haban	haʔan	aʔan	aban	hab:aŋ	aban	ban	eben	aban	aʔeŋ			
‘wake s.o.’	*-ten		-tani	-ten				-teŋ			-tan		-teŋ
‘walk ₁ ’	*lam(ar) ³⁹	lam(an) ⁴⁰		ʔamar	lama	ʔlamal	lamε	lam					
‘walk ₂ ’													
‘water’	*jira	jir	jila	ir	hila	dʒar	sei	ara:	er	ja	lo:	lola	lailol
‘wave’	*bob	boʔ	bova	bo:b	ʔbo		bob	bo:b		ʔi	ili	iria	ira
‘white’		miaq	miaqa	miex	miaka	madʒaka							
‘wind’ ⁴¹							hamoi						
‘wound’		bat	bata	ibat		bata	ʔbah	ʔabad	bata		timoi	sumui	tamuro
‘yawn’	*hagur	haʔar		agur					ʔagu	ahau			
‘yellow’	*bagori ⁴²	baʔari	ʔbaxori	bagari	bug:u	boʔori	ʔbaʔoil	bəgor	bagura				
1PL.INCL	*pi-	pi-	pi-	pi-	pi-	pi-	pi-	pi-	pi-	pi-		pi-	
1SG	*na-	na-	na-	na-	na-	na-	na-	na-	na-	na-		na-	ne-
2SG	*ha-	ha-		a-	ha-	a-	a-	a-	a-	a-		a-	a-
3GEN	*ge-			ga-	gai-	ʔe-	ʔe ⁴³	ge-	he-	he-		ge-	
3LOC						ʔo-	ʔo-	go-	ho-	wo-			
3PL	*gi-	gi-		gi-	gi-	ʔi-	ʔa-	g-	ga-	ga-		gi-	gi-
3SG	*ga-	ga-	ga-	gV ⁴⁴	ga-	ʔa-	ʔa-	g-	ga-	ha-		ga-	gV-

Notes to tables

¹ A form *balin ‘axe’ was reconstructed to pAP in Holton et al. (2012), but we now recognize that this is an Austronesian loan, probably from Alorese *baling*.

² This form has metathesized.

³ This form has metathesized.

⁴ Denotes ‘chicken’.

⁵ This reconstruction is strikingly similar to the Austronesian (proto-Malayo-Polynesian) form *maRi ‘come’, which is irregularly reflected as *ma* or *mai* in many Austronesian languages in the region (cf. Mambai (Timor) *ma*, Kambera (Sumba) *mai*). However, similar reflexes are not found in Lamaholot or Alorese, the immediate Austronesian neighbors of the Alor-Pantar languages.

⁶ Denotes ‘traditional dance’.

⁷ Denotes ‘bow, bend’.

⁸ This form was not reconstructed to pAP in Holton et al. (2012) because it is not attested in Alor languages. However, based on its presence in Timor languages (see chapter 3), we now reconstruct it to pAP.

⁹ Denotes ‘not quite dry’.

¹⁰ Denotes ‘eat’ in Tw, Nd, WP, Ab, Km, ‘eat/drink’ in Ke, Bl, Sw, and ‘drink’ in Ad, Kl, Ki, We.

¹¹ This form exhibits metathesis.

¹² This form was not reconstructed to pAP in Holton et al. (2012) because of its limited distribution. However, based on its presence in Timor languages (see chapter 3), we now reconstruct it to pAP.

¹³ Denotes ‘burn, of land’.

¹⁴ Denotes ‘clothing louse’, with metathesis.

¹⁵ Note similarity with proto-Austronesian *isi? ‘contents’, indicating that this may be a loan.

¹⁶ Denotes ‘meat’.

¹⁷ This form was not reconstructed to pAP in Holton et al. (2012) because it is not attested in any Pantar language. However, based on its presence in Timor languages (see chapter 3), we now reconstruct it to pAP.

¹⁸ Reflexes of *p{i,u}nV typically encompass the meanings ‘hold’ and ‘grab’ with the difference depending on the prefixation of the verb.

¹⁹ Sw has *wuni* ‘hold’ and *puni* ‘hit’.

²⁰ We has *woiŋ* ‘hold’ and *poiŋ* ‘hit’.

²¹ This form was not reconstructed to pAP in Holton et al. (2012) due to its limited distribution. However, based on its presence in Timor languages (see chapter 3), we now reconstruct it to pAP.

²² Denotes ‘maggot’.

²³ This form is generally part of a compound when meaning ‘chin’. It seems to have historically meant ‘mouth’. It is retained with that meaning in Ke, Ki, Ab, and Km. In Tw, Nd, WP, Bl, Ad, Sw, and We, the form is only retained as part of a compound meaning ‘chin’.

²⁴ Denotes ‘new sprout’.

²⁵ Reflexes of *tapai encompass the meanings ‘pierce’, ‘stab’ ‘sew’, ‘plant in the ground’, and ‘pound rice’.

²⁶ Denotes ‘on top’.

²⁷ Denotes ‘thatch’.

²⁸ This form was not reconstructed to pAP in Holton et al. (2012) because it is not attested in the eastern languages. However, based on its presence in Timor languages (see chapter 3), we now reconstruct it to pAP.

²⁹ Denotes ‘piece, chunk’.

³⁰ Denotes ‘short piece, cutting’.

³¹ Denotes ‘dance’.

³² Denotes ‘dance’.

³³ This form has lost the initial syllable.

³⁴ Denotes ‘sweet’.

³⁵ Denotes ‘shine, burn’ (cf. *was* ‘sun’).

³⁶ Given that the Abui reflex is irregular, strictly speaking this set does not meet the distributional criteria for reconstruction, since there is no regular reflex in Eastern Alor.

³⁷ This form has metathesized.

³⁸ Denotes ‘beat, strike (drum)’.

³⁹ This form was not reconstructed to pAP in Holton et al. (2012) because it is not attested in the eastern languages. However, based on its presence in Timor languages (see chapter 3), we now reconstruct it to pAP.

⁴⁰ Tw *laman* ‘follow, walk along (e.g. a path)’. WP *lama* shares this sense and is likely a borrowing from Tw, which explains the lack of gemination in the WP form.

⁴¹ This may be an Austronesian loan. Note proto-Malayo-Polynesian *timuR ‘south-east monsoon’ (BlustEtAl2010).

⁴² This form was not reconstructed to pAP in Holton et al. (2012) because it is not attested in any eastern language. However, based on its presence in Timor languages (see chapter 3), we now reconstruct it to pAP.

⁴³ In Adang *?e* has been restricted to marking possessors in contrastive focus.

⁴⁴ Prefix vowel harmonizes with stem vowel.

Acknowledgements

This paper draws on the work of Holton et al. (2012) and Robinson & Holton (2012). We are particularly grateful to our co-authors of the former paper for sharing data and insights regarding the reconstruction of Proto-Alor-Pantar. Those authors are not to be blamed for errors of fact or interpretation resulting from the revisions found in the current chapter.

Abbreviations

1	1st person
2	2nd person
3	3rd person
AB	Abui
AD	Adang
AN	Austronesian languages
AP	Alor-Pantar
BL	Blagar
GEN	Genitive
INCL	Inclusive
KE	Kaera
KI	Kui
KL	Klon
KM	Kamang
LOC	Locative
ND	Nedebang
pAP	proto-Alor-Pantar
PL	Plural
SG	Singular
SW	Sawila
TAP	Timor-Alor-Pantar
Tw	Teiwa
v	verb
WE	Wersing
WP	Western Pantar

References

- Aikhenvald, Alexandra Y. *Classifiers: a typology of noun categorization devices*. Vol. Studies in typology and linguistic theory (Oxford Studies in Typology and Linguistic Theory). Oxford: Oxford University Press.
- Aikhenvald, Alexandra Y. & Tonya N. Stebbins. Languages of New Guinea. In Osahito Miyaoka, Osamu Sakiyama & Micheal E. Krauss (eds.), *The vanishing languages of the Pacific Rim*, 239–266. Oxford: Oxford University Press.
- Anonymous. De eilanden Alor en Pantar, residentie Timor en Onderhoorigheden. *Tijdschrift van het Koninklijk Nederlandsch Aardrijkskundig Genootschap* 31. 70–102.
- Badan Pusat Statistik. *Penduduk kabupaten Alor 2005 (Hasil Registrasi)*. Kalabahi, Indonesia: Badan Pusat Statistik Kabupaten Alor.
- Baird, Louise. Doing the split-s in Klon. *Linguistics in the Netherlands* 22. Doetjes, J. & J. van der Weijer (eds.). 1–22.
- Baird, Louise. *A grammar of Klon: a non-Austronesian language of Alor, Indonesia*. Vol. 596 (Pacific Linguistics). Canberra: Pacific Linguistics, Research School of Pacific & Asian Studies, The Australian National University. ISBN: 9780858835948.
- Baird, Louise. Grammaticalisation of asymmetrical serial verb constructions in Klon. In Michael Ewing & Marian Klammer (eds.), *Typological and areal analyses: contributions from East Nusantara*, 189–206.
- Baird, Louise. Kafoa. In Antoinette Schapper (ed.), *The Papuan languages of Timor, Alor and Pantar: sketch grammars* (Pacific Linguistics). Berlin & New York: Mouton de Gruyter.
- Baird, Louise, Marian Klammer & František Kratochvíl. *Alor Malay: A grammar sketch*. Manuscript, Leiden University/NTU Singapore.
- Barnes, Robert. *Kédang: a study of the collective thought of an Eastern Indonesian people*. Oxford: Clarendon Press.
- Barnes, Robert H. The Majapahit dependency Galiyao. *Bijdragen tot de Taal-, Land- en Volkenkunde* 138. 407–412.
- Barnes, Robert H. *Sea hunters of Indonesia. fishers and weavers of Lamalera*. Oxford: Clarendon Press.
- Barnes, Robert H. Alliance and warfare in an Eastern Indonesian principality - Kédang in the last half of the nineteenth century. *Bijdragen tot de Taal-, Land- en Volkenkunde* 157(2). 271–311.
- Bellwood, Peter. *The prehistory of the Indo-Pacific archipelago*. 2nd. Honolulu: University of Hawaii Press.

- Blust, Robert. *The Austronesian languages*. Revised edition. Canberra: Pacific Linguistics.
- Blust, Robert A. *The Austronesian languages*. Vol. 602 (Pacific Linguistics). Canberra: Research School of Pacific & Asian Studies, Australian National University. ISBN: 9780858836020.
- Chung, Siaw-Fong. Numeral classifier buah in Malay: a corpus-based study. *Language and Linguistics* 11(3). 553–577.
- Comrie, Bernard. *Language universals and linguistic typology*. Oxford: Blackwell.
- Coolhaas, W. Ph. *Generale missiven van gouverneurs-generaal en raden aan heren xvii der verenigde oostindische compagnie*. Vol. VII. s Gravenhage: Martinus.
- Dietrich, Stefan. A note on Galiyao and the early history of the Solor-Alor islands. *Bijdragen tot de Taal-, Land- en Volkenkunde* 140. 317–326.
- Donohue, Mark. Inverse in Tanglapui. *Language and Linguistics in Melanesia* 27(2). 101–118.
- Dryer, Matthew S. Primary objects, secondary objects and antidative. *Language* 62(4). 808–845.
- Dryer, Matthew S. Plural words. *Linguistics* 27. 865–895.
- Dryer, Matthew S. Coding of nominal plurality. In Matthew S. Dryer & Martin Haspelmath (eds.), *The world atlas of language structures online*, chap. 33. Munich: Max Planck Digital Library. <http://wals.info/chapter/33>.
- Du Bois, Cora. *The people of Alor*. [1944]. New York: Harper Torchbooks.
- van Engelenhoven, Aone Th. P. G. On derivational processes in Fataluku, a non-Austronesian language in East-Timor. In W. L. Wetzels (ed.), *The linguistics of endangered languages, contributions to morphology and morpho-syntax*, 331–362. Utrecht: Netherlands Graduate School of Linguistics.
- van Engelenhoven, Aone Th. P. G. Verb serialisation in Fataluku. the case of take. In A. Azeb, S. Völlmin, Ch. Rapold & S. Zaug-Coretti (eds.), *Converbs, medial verbs, clause chaining and related issues*, 185–211. Köln: Rüdiger Köppe Verlag.
- Fedden, Sebastian & Dunstan Brown. Participant marking: corpus study and video elicitation. In Marian Klamer (ed.), *The Alor-Pantar languages*. Berlin: Language Science Press.
- Fedden, Sebastian, Dunstan Brown, Greville G. Corbett, Marian Klamer, Gary Holton, Laura C. Robinson & Antoinette Schapper. Conditions on pronominal marking in the Alor-Pantar languages. *Linguistics* 51(1). 33–74.
- Fedden, Sebastian, Dunstan Brown, František Kratochvíl, Laura C. Robinson & Antoinette Schapper. Variation in pronominal indexing: lexical stipulation vs. referential properties in the Alor-Pantar languages. *Studies in Language* 38. 44–79.

- Foley, William. *The Papuan languages of New Guinea* (Cambridge language surveys). Cambridge: Cambridge University Press. ISBN: 9780521286213.
- Foley, William A. The languages of New Guinea. *Annual Review of Anthropology* 29(1). 357–404.
- van Gaalen, G. A. M. Memorie van overgave van den fundgeerend controleur van Alor G. A. M. van Galen. manuscript.
- Grimes, Charles E., Tom Therik, Barbara D. Grimes & Max Jacob. *A guide to the people and languages of Nusa Tenggara*. Vol. 1 (Paradigma: Series B). Kupang: Artha Wacana Press.
- Haan, Johnson Welem. *The grammar of Adang: a Papuan language spoken on the island of Alor East nusa tenggara - Indonesia*. Sydney: University of Sydney PhD thesis. <http://www-personal.arts.usyd.edu.au/jansimps/haan/>.
- Hägerdal, Hans. Cannibals and pedlars. *Indonesia and the Malay World* 38(111). 217–246.
- Hägerdal, Hans. Van Galens memorandum on the Alor islands in 1946. an annotated translation with an introduction. part 1. *HumaNetten* 25. 14–44.
- Hägerdal, Hans. Van Galens memorandum on the Alor islands in 1946. an annotated translation with an introduction. part 2. *HumaNetten* 27. 53–96.
- Hägerdal, Hans. *Lords of the land, lords of the sea: conflict and adaptation in early colonial Timor, 1600-1800*. Leiden: KITLV Press.
- Hajek, John. Towards a phonological overview of the vowel and consonant systems of East Nusantara. In Michael C. Ewing & Marian Klammer (eds.), *East Nusantara: typological and areal analyses*, vol. 618 (Pacific Linguistics), 25–46. Canberra: Research School of Pacific & Asian Studies, Australian National University.
- Haspelmath, Martin. On S, A, P, T, and R as comparative concepts for alignment typology. *Linguistic Typology* 15. 535–567.
- Holton, Gary. The rise and fall of semantic alignment in North Halmahera, Indonesia. In M. Donohue & S. Wichmann (eds.), *The typology of semantic alignment*, 252–276. Oxford: Oxford University Press.
- Holton, Gary. An etymology for Galiyao. University of Fairbanks.
- Holton, Gary. Person-marking, verb classes and the notion of grammatical alignment in Western Pantar (Lamma). In Michael Ewing & Marian Klammer (eds.), *Typological and areal analyses: contributions from east Nusantara*, 97–117. Canberra: Pacific Linguistics.
- Holton, Gary. Landscape in Western Pantar, a Papuan outlier of southern Indonesia. In David M. Mark, Andrew G. Turk, Niclas Burenhult & David Stea (eds.), *Landscape in language*, 143–166. Amsterdam: John Benjamins.

- Holton, Gary. Western Pantar. In Antoinette Schapper (ed.), *The Papuan languages of Timor, Alor and Pantar: sketch grammars*, 23–96. Berlin: De Gruyter Mouton.
- Holton, Gary. Kinship in the Alor-Pantar languages. In Marian Klamer (ed.), *The Alor-Pantar languages*. Berlin: Language Science Press.
- Holton, Gary. Numeral classifiers and number in two Papuan outliers of East Nusantara. In Marian Klamer & František Kratochvíl (eds.), *Number and quantity in East Nusantara*. Proceedings of the panel at the International Conference of Austronesian Languages, Bali, 2012. Canberra: Pacific Linguistics.
- Holton, Gary & Marian Klamer. The Papuan languages of East Nusantara. In Bill Palmer (ed.), *Oceania*. Berlin & New York: Mouton de Gruyter.
- Holton, Gary & Mahalalel Lamma Koly. *Kamus pengantar Bahasa Pantar Barat: Tubbe - Mauta - Lamma*. Kupang, Indonesia: UBB-GMIT.
- Holton, Gary & Laura C. Robinson. The internal history of the Alor-Pantar language family. In Marian Klamer (ed.), *The Alor-Pantar languages*. Berlin: Language Science Press.
- Holton, Gary & Laura C. Robinson. The linguistic position of the Timor-Alor-Pantar languages. In Marian Klamer (ed.), *The Alor-Pantar languages*. Berlin: Language Science Press.
- Holton, Gary, Marian Klamer, František Kratochvíl, Laura C. Robinson & Antoinette Schapper. The historical relations of the Papuan languages of Alor and Pantar. *Oceanic Linguistics* 51(1). 86–122.
- Hopper, Paul J. Some discourse functions of classifiers in Malay. In Colette G. Craig (ed.), *Noun classes and categorization*, 309–325. Amsterdam: John Benjamins.
- Huber, Juliette. *First steps towards a grammar of Makasae: a language of East Timor*. Vol. 195 (Languages of the World/Materials). München: Lincom. ISBN: 9783895861406.
- Huber, Juliette. *A grammar of Makalero: a Papuan language of East Timor*. Amsterdam: Vrije Universiteit Amsterdam PhD thesis.
- Jacob, June & Charles E. Grimes. *Kamus pengantar Bahasa Kupang–Bahasa Indonesia (dengan daftar Indonesia–Kupang)*. Kupang: Artha Wacana Press.
- Josselin de Jong, Jan Petrus Benjamin de. *Studies in Indonesian culture i: Oirata, a Timorese settlement on Kisar*. Amsterdam: Noord-Hollandsche Uitgevers-Maatschappij.
- Klamer, Marian. *A grammar of Teiwa*. Vol. 49 (Mouton Grammar Library). Berlin: Mouton de Gruyter.

- Klamer, Marian. Ditransitive constructions in Teiwa. In Andrej Malchukov, Martin Haspelmath & Bernard Comrie (eds.), *Studies in ditransitive constructions*, 427–455. Berlin: Mouton.
- Klamer, Marian. One item, many faces: ‘come’ in Teiwa and Kaera. In Michael Ewing & Marian Klamer (eds.), *East Nusantara: typological and areal analyses*, 203–226. Canberra: Pacific Linguistics.
- Klamer, Marian. *A short grammar of Alorese (Austronesian)*. Vol. 486 (Languages of the World/Materials). München: Lincom GmbH.
- Klamer, Marian. Papuan-Austronesian language contact: Alorese from an areal perspective. In Nicholas Evans & Marian Klamer (eds.), *Melanesian languages on the edge of asia: challenges for the 21st century*, vol. 5 (Language Documentation & Conservation Special Publication), 72–108. Honolulu: University of Hawaii Press.
- Klamer, Marian. Kaera. In Antoinette Schapper (ed.), *The Papuan languages of Timor, Alor and Pantar: sketch grammars*, 97–146. Berlin & New York: Mouton de Gruyter.
- Klamer, Marian. Numeral classifiers in Papuan Alor Pantar: a comparative perspective. In Marian Klamer & František Kratochvíl (eds.), *Number and quantity in East Nusantara*. Proceedings of the panel at the International Conference of Austronesian Languages, Bali, 2012. Canberra: Pacific Linguistics.
- Klamer, Marian. The history of numeral classifiers in Teiwa (Papuan). In Gerrit J. Dimmendaal & Anne Storch (eds.), *Number: constructions and semantics. case studies from Africa, India, Amazonia & Oceania*, chap. 6, 135–166. Amsterdam: Benjamins.
- Klamer, Marian & Michael C. Ewing. The languages of East Nusantara: an introduction. In Michael C. Ewing & Marian Klamer (eds.), *East Nusantara: typological and areal analyses*, vol. 618 (Pacific Linguistics), 1–24. Canberra: Research School of Pacific & Asian Studies, Australian National University.
- Klamer, Marian & František Kratochvíl. The role of animacy in Teiwa and Abui (Papuan). In *Proceedings of BLS 32*. Berkeley Linguistic Society. Berkeley.
- Klamer, Marian, Ger Reesink & Miriam van Staden. East Nusantara as a linguistic area. In Pieter Muysken (ed.), *From linguistic areas to areal linguistics*, vol. 90 (Studies in Language Companion Series), 95–149. Amsterdam: John Benjamins.
- Klamer, Marian & Antoinette Schapper. The development of give constructions in the Papuan languages of Timor-Alor-Pantar. *Linguistic Discovery* 10(3). 174–207.

- Klamer, Marian, Antoinette Schapper & Greville Corbett. Plural number words in the Alor-Pantar languages. In Marian Klamer (ed.), *The Alor-Pantar languages*. Berlin: Language Science Press.
- Klamer, Marian, Antoinette Schapper, Greville Corbett, Gary Holton, František Kratochvíl & Laura C. Robinson. Numeral words and arithmetic operations in the Alor-Pantar languages. In Marian Klamer (ed.), *The Alor-Pantar languages*. Berlin: Language Science Press.
- Kratochvíl, František. *A grammar of Abui: a Papuan language of Alor*. Utrecht: LOT.
- Kratochvíl, František. Discourse-structuring functions of Abui demonstratives. In Foong Ha Yap & Janick Wronae (eds.), *Nominalization in Asian languages: diachronic and typological perspectives. volume 2: Korean, Japanese and Austronesian languages*, 761–792. Amsterdam: John Benjamins.
- Kratochvíl, František. Transitivity in Abui. *Studies in Language* 35 (3). 589–636.
- Kratochvíl, František. Sawila. In Antoinette Schapper (ed.), *The Papuan languages of Timor, Alor and Pantar: sketch grammars*, 351–438. Berlin/New York: Mouton de Gruyter.
- Kratochvíl, František & Benediktus Delpada. *Kamus pengantar Bahasa Abui (Abui-Indonesian-English dictionary)*. Kupang: Unit Bahasa dan Budaya (UBB).
- Kratochvíl, František & Benediktus Delpada. *Netanga neananra dei lohu naha. Abui tanga haetteng ananra. [Cerita-cerita dalam Bahasa Abui dari Takalelang. Abui stories from Takalelang.]* Kupang: Unit Bahasa dan Budaya (UBB).
- Lansing, Stephen J., Murray P. Cox, Therese A. de Vet, Sean S. Downey, Brian Hallmark & Herawati Sudoyo. An ongoing Austronesian expansion in island Southeast Asia. *Journal of Anthropological Archaeology* 30. 262–272.
- Le Roux, C. C. F. M. De Elcanos tocht door den Timorarchipel met Magalhães schip Victoria. In *Feestbundel, uitgegeven door het koninklijk bataviaasch genootschap van kunsten en wetenschappen bij gelegenheid van zijn 150 jarig bestaan: 1778-1928*, 1–99. Weltevreden: Kolff.
- Lemoine, Annie. Histoires de Pantar. *L'Homme* 9(4). 5–32.
- Lewis, Paul M. *Ethnologue: languages of the world*. Paul M. Lewis (ed.). 16th edn. 16th ed. Dallas: SIL International. ISBN: 9781556712166. <http://www.ethnologue.com/web.asp>.
- Lewis, Paul M., Gary F. Simons & Charles D. Fennig. *Ethnologue: languages of the world*. 17th edn. Dallas: SIL International. <http://www.ethnologue.com>.
- Maddieson, Ian. Consonant inventories. In M. Haspelmath, M. S. Dryer, David Gil & B. Comrie (eds.), *The world atlas of language structures*, 10–13. Oxford: Oxford University Press.

- Mahirta. The prehistory of Austronesian dispersal to the southern islands of eastern Indonesia. In Truman Simanjuntak, Ingrid H. E. Pojoh & Mohammad Hisyam (eds.), *Austronesian diaspora and the ethnogeneses of people in Indonesian archipelago*, 129–145. Jakarta: LIPI Press.
- Martis, Non, Wati Kurnatiawati, Buha Aritonang, Hidayatul Astar & Ferr Feirizal. *Monografi kosakata dasar Swadesh di Kabupaten Alor*. Jakarta: Pusat Bahasa, Departemen Pendidikan Nasional.
- McWilliam, Andrew. Austronesians in linguistic disguise: Fataluku cultural fusion in East Timor. *Journal of Southeast Asian Studies* 38(2). 355–375.
- Morwood, Mike J., R. P. Soejono, R. G. Roberts, T. Sutikna, C. S. M. Turney, K. E. Westaway, W. J. Rink, J.-X. Zhao, G. D. van den Bergh, Rokus Awe Due, Hobbs D. R., M. W. Moore, M. I. Bird & L. K. Fifield. Archaeology and age of a new hominin from Flores in eastern Indonesia. *Nature* (431). 1087–1091.
- Nicolspeyer, Martha Margaretha. *De sociale structuur van een Aloreesche bevolkingsgroep*. Rijswijk: Rijksuniversiteit te Leiden PhD thesis.
- O'Connor, Sue. Nine new painted rock art sites from East Timor in the context of the Western Pacific region. *Asian Perspectives* 42(1). 96–128.
- O'Connor, Sue. New evidence from East Timor contributes to our understanding of earliest modern human colonisation east of the Sunda shelf. *Antiquity* 81. 523–535.
- Pawley, Andrew. The chequered career of the trans New Guinea hypothesis: recent research and its implications. In Andrew Pawley, Robert Attenborough, Jack Golson & Robin Hide (eds.), *Papuan pasts: studies in the cultural, linguistic and biological history of the Papuan-speaking peoples*, vol. 572 (Pacific Linguistics), 67–108. Canberra: Research School of Pacific & Asian Studies, Australian National University.
- Robinson, Laura C. The Alor-Pantar (Papuan) languages and Austronesian contact in East Nusantara. In Malcom Ross (ed.), *Language contact and Austronesian historical linguistics*. Canberra: Pacific Linguistics.
- Robinson, Laura C. & John Haan. Adang. In Antoinette Schapper (ed.), *The Papuan languages of Timor, Alor and Pantar: sketch grammars*, 221–284. Berlin & New York: Mouton de Gruyter.
- Robinson, Laura C. & Gary Holton. Internal classification of the Alor-Pantar language family using computational methods applied to the lexicon. *Language Dynamics and Change* 2(2). 123–149.
- Rodemeier, Susanne. Local tradition on Alor and Pantar: an attempt at localizing Galiyao. *Bijdragen tot de Taal-, Land- en Volkenkunde* 151(3). 438–442.

- Rodemeier, Susanne. *Tutu kadire in Pandai-Munaseli*. Vol. 12 (Passauer Beiträge zur Südostasienkunde). Berlin: LIT Verlag.
- de Roever, Arend. *De jacht op sandelhout: de VOC en de tweedeling van Timor in de zeventiende eeuw*. Zutphen: Leiden U. PhD thesis.
- Ross, Malcolm. Pronouns as preliminary diagnostic for grouping Papuan languages. In Andrew Pawley, Robert Attemborough, Jack Golson & Robin Hide (eds.), *Papuan pasts: cultural, linguistic and biological histories of Papuan-speaking peoples*, 15–65. Canberra: Pacific Linguistics.
- Schapper, Antoinette. *Bunaq: a Papuan language of central Timor*. Canberra: Australian National University PhD thesis.
- Schapper, Antoinette. *Elevation and scale in two Papuan languages*. Talk presented at EuroBabel Final Conference, Leiden, 23–26 August 2012.
- Schapper, Antoinette. Kamang. In Antoinette Schapper (ed.), *The Papuan languages of Timor, Alor and Pantar: sketch grammars*, 285–350. Berlin & New York: Mouton de Gruyter.
- Schapper, Antoinette & Rachel Hendery. Wersing. In Antoinette Schapper (ed.), *Papuan languages of Timor-Alor-Pantar: sketch grammars*. 439–504. Berlin: Mouton de Gruyter.
- Schapper, Antoinette, Juliette Huber & Aone van Engelenhoven. The relatedness of Timor-kisar and Alor-Pantar languages: a preliminary demonstration. In Marian Klamer (ed.), *The Alor-Pantar languages*. Berlin: Language Science Press.
- Schapper, Antoinette & Marian Klamer. Numeral systems in the Alor-Pantar languages. In Marian Klamer (ed.), *The Alor-Pantar languages*. Berlin: Language Science Press.
- Siewierska, Anna. Verbal person marking. In Matthew S. Dryer & Martin Haspelmath (eds.), *The world atlas of language structures online*, chapter 102. (accessed 29 March 2014). Munich: Max Planck Digital Library. <http://wals.info/chapter/102>.
- Spriggs, Matthew. Archaeology and the Austronesian expansion: where are we now? *Antiquity* 85. 510–528.
- Steenbrink, Karel. *Catholics in Indonesia 1808–1942. a documented history*. Leiden: KITLV Press.
- Steinhauer, Hein. ‘Going’ and ‘coming’ in the Blagar of Dolap (Pura, Alor, Indonesia). *NUSA: Miscellaneous Studies in Indonesian and Languages in Indonesia* 3. 38–48.

- Steinhauer, Hein. Demonstratives in the Blagar language of Dolap (Pura, Alor, Indonesia). In Tom Dutton (ed.), *Papers in Papuan linguistics*, 177–221. Canberra: Pacific Linguistics.
- Steinhauer, Hein. Sisters and potential wives: where linguists and anthropologists meet: notes on kinship in blagar (Alor). In P. Haenen (ed.), *Vrienden en verwanten, liber amicorum Alex van der Leeden*, 147–168. Leiden & Jakarta: DSALCUL/IRIS.
- Steinhauer, Hein. Two varieties of the Blagar language (Alor, Indonesia). In Connie Baak, Mary Bakker & Dick van der Meij (eds.), *Tales from a concave world: liber amicorum Bert Voorhoeve*, 269–296. Leiden: Projects Division, Department of Languages, Cultures of South-East Asia & Oceania.
- Steinhauer, Hein. Bahasa Blagar Selayang Pandang. In Bambang Kaswanti Purwo (ed.), *Panorama bahasa Nusantara*, 71–102. Jakarta: Universitas Cenderawasih & Summer Institute of Linguistics.
- Steinhauer, Hein. Pura when we were younger than today. In Artem Fedorchuk & Svetlana Chlenova (eds.), *Studia antropologica. a Festschrift in honour of Michael Chlenov*, 261–283. Jerusalem: Mosty Kul'tury Gescharim.
- Steinhauer, Hein. Deictic categories in three languages of Eastern Indonesia. In Bahren Umar Siregar, P. Ari Subagyo & Yassir Nasanius (eds.), *Dari menapak jejak kata sampai menyigi tata bahasa. persembahan untuk prof. dr. bambang kaswanti purwo dalam rangka ulang tahunnya yang ke-60*, 115–147. Jakarta: Pusat Kajian Bahasa dan Budaya Universitas Katolik Indonesia Atma Jaya.
- Steinhauer, Hein. Blagar. In Antoinette Schapper (ed.), *The Papuan languages of Timor-Alor-Pantar: sketch grammars*, vol. 1 (Asia-Pacific Linguistics), 147–220. Berlin & New York: Mouton de Gruyter.
- Stokhof, W. Annotations to a text in the Abui language (Alor). *Bijdragen tot de Taal-, Land- en Volkenkunde* 140(1). 106–162.
- Stokhof, W. A. L. *Preliminary notes on the Alor and Pantar languages (East Indonesia)*. Vol. 43 (Pacific Linguistics: Series B). Canberra: Research School of Pacific & Asian Studies, Australian National University. ISBN: 9780858831247.
- Stokhof, W. A. L. *Woisika i: an ethnographic introduction*. Vol. 19 (Pacific Linguistics: Series D). Canberra: Research School of Pacific & Asian Studies, Australian National University.
- Stokhof, W. A. L. *Woisika text. Miscellaneous Studies in Indonesian and Languages in Indonesia* 5. 34–57.
- Stokhof, W. A. L. *Woisika ii: phonemics*. Canberra: Pacific Linguistics.

- Stokhof, W. A. L. *Woisika riddles*. Vol. 41 (Pacific linguistics : Series D, Special publications). Bibliography: p. 67-74.. Materials in languages of Indonesia. Materials in languages of Indonesia ; 9. Canberra: ANU. ISBN: 9780858832572.
- Stokhof, W. A. L. Names and naming in Ateita and environments (Woisika, Alor). *Lingua* 61(2/3). 179–207.
- Stokhof, W. A. L. A short Kabola text (Alor, East Indonesia). In Donald C. Laycock & Werner Winter (eds.), *A world of language: papers presented to professor stephen a. wurm on his 65th birthday*, vol. 100 (Pacific Linguistics: Series C), 631–648. Canberra: Research School of Pacific & Asian Studies, Australian National University.
- Summerhayes, Glenn R. Island Melanesian pasts: a view from archeology. In Jonathan S. Friedlaender (ed.), *Genes, language and culture history in the Southwest Pacific*, 10–35. Oxford: Oxford University Press.
- Verheijen, Jilis A. J. *The Sama/Bajau language in the Lesser Sunda Islands*. Vol. 70 (Pacific Linguistics: Series D). Canberra: Research School of Pacific & Asian Studies, Australian National University. ISBN: 9780858833357.
- Wellfelt, Emilie & Antoinette Schapper. *Memories of migration and contact: East Timor origins in Alor*. Paper read at the Eighth International Convention of Asia Scholars, June 24–27, Macao.
- Williams, Nick & Mark Donohue. Kula. In Antoinette Schapper (ed.), *The Papuan languages of Timor, Alor and Pantar: sketch grammars* (Pacific Linguistics). Berlin & New York: Mouton de Gruyter.
- Wurm, Stephen A., C. L. Voorhoeve & Kenneth A. McElhanon. The trans-New Guinea phylum in general. In Stephen A. Wurm (ed.), *New Guinea area languages and language study vol 1: Papuan languages and the New Guinea linguistic scene*, vol. 38 (Pacific Linguistics: Series C), 299–322. Canberra: Research School of Pacific & Asian Studies, Australian National University.
- Xu, Shuhua, Irina Pugach, Mark Stoneking, Manfred Kayser, Li Jin & The HUGO Pan-Asian Consortium. Genetic dating indicates that the asian-Papuan admixture through Eastern Indonesia corresponds to the Austronesian expansion. *PNAS* 109(12). 4574–4579.
- Zubin, David A. & Mitsuaki Shimojo. How general are general classifiers? with special reference to ko and tsu in japanese. In *Proceedings of the nineteenth annual meeting of the berkeley linguistics society: general session and parasession on semantic typology and semantic universals*, 490–502.

Language index

- Abau, 32*
- Abui, 2, 5, 9, 14, 17–19, 21–23, 25, 27, 36, 37, 50, 51, 55–62, 64–67, 70–72, 77–86, 120, 122–124, 126–135, 149, 154, 155, 166, 170, 172, 209–212, 219–223, 225, 226, 227*, 230–235, 246*, 246, 247, 260–262, 264*, 264, 267, 268, 274, 275, 285*, 286, 288, 291, 300, 302, 304, 316, 317, 319–321, 334, 335, 336*, 336, 339, 340, 343–346, 349–351, 353, 354, 357, 359, 370, 371, 375, 385*, 385–388, 391–394, 396–404, 407–410, 412–415, 419–426, 432, 438, 439, 451
- Adang, 5, 9, 14, 20, 26, 27, 32, 36, 50*, 51, 55–57, 60, 61, 62*, 62–67, 70–73, 77, 79–86, 102, 120–124, 126–135, 159, 160, 164, 166, 170, 172, 176, 206–209, 219–223, 225, 226, 230–233, 235, 241, 250–255, 260–262, 264*, 264–268, 273–275, 286, 288, 294, 300, 302, 304, 314, 316, 317, 319–322, 334, 335, 338, 340, 342, 344, 349, 350, 352, 354, 356, 358, 371, 373, 374, 451
- Alorese, 2, 4, 7, 9, 11, 50, 62, 79, 85, 231, 233–235, 287, 310, 312, 317, 323, 324
- Amarasi, 317, 325, 326
- Angave, 32*
- Apui, 8
- Atauro, 303, 317, 325, 326
- Austronesian language(s), 1, 2, 4, 6, 7, 10, 11, 13, 31, 33, 34, 50*, 50, 58, 61, 62, 70, 85, 86, 92, 132, 135, 140, 148, 162, 171, 174, 175, 177, 228, 231, 233–235, 280, 282, 285*, 285, 287, 290, 296, 297, 299, 302, 303, 305–312, 317, 318, 323, 325
- Awará, 33*
- Baham, 178–180, 182
- Bajau, 7
- Barai, 158
- Bird's Head language(s), 149, 150
- Blagar, 5, 9, 14, 15, 20, 23, 27, 36, 51, 55–57, 60–65, 67, 70–73, 76, 77, 79–86, 102, 120–124, 126–135, 166, 170–172, 179, 192, 193, 199, 200, 202*, 202–204, 219–224, 226, 227*, 228, 229*, 231, 234, 235, 247, 248*, 248–250, 255, 260–262, 264*, 264–267, 271, 273–275, 285*, 286, 288, 294, 300, 302, 304, 314, 316, 317, 319–322, 327, 334, 338, 354, 452

- Bomberai language(s), 149, 150, 173,
178, 179, 182–184
- Bunaq, 6, 31, 91–112, 114–117, 121, 123,
124, 136–140, 154, 160, 165,
166, 170, 171, 296, 317
- Chambri, 32*
- Chenapian, 32*
- Dadu'a, 317, 325, 326
- Dani language(s), 149, 150, 173, 175,
177, 178
- Deing, 5, 14, 36, 78, 124, 126–135, 286,
288, 291, 300, 304, 316, 317,
319–322, 389
- Dhao, 317, 325, 326
- Dutch, 281
- Dyirbal, 239
- East Caucasian language(s), 239
- Ekari, 176–178
- Ende, 307, 310, 311, 317, 323, 324
- Enga, 157
- Fataluku, 6, 91, 93–107, 109–112, 114–
117, 124, 136–140, 166, 170,
171, 172*, 172
- Finisterre-Huon language(s), 156
- Folopa, 33*
- Fore, 156, 158
- Galela, 166
- Guarjío, 239
- Hamap, 5, 36, 124, 126–135, 172, 176,
286, 288, 294, 300, 304, 314,
316, 317, 319–322
- Hamtai, 52
- Hindi, 409
- Idate, 317
- Iha, 178, 179, 181, 182
- Ilongot, 281, 282, 317
- Inanwatan, 158, 173, 174, 178
- Indonesian, 2, 8, 9, 13, 30, 33, 55*, 79,
333, 346, 350, 353, 354, 365
- Iwam, 32*
- Kéo, 307, 310, 317, 323, 324
- Kabola, 5, 9, 36, 62*, 124, 126–135,
171, 172, 176, 233, 286, 288,
294, 300, 304, 314, 316, 317,
319–322
- Kaera, 5, 8, 9, 15, 16, 20, 23, 26, 28, 36,
37, 51, 52, 54–57, 59–67, 70–
73, 76, 77, 79–86, 120, 122–
124, 126–135, 166, 170, 177,
181, 263, 264*, 264–267, 274,
275, 286, 288, 291, 292, 300,
302, 304, 316, 317, 319–322,
336*, 338, 354, 356, 370
- Kafoa, 5, 9, 36, 124, 126–135
- Kamang, 2, 5, 9, 14, 19, 21, 23, 25,
27, 28, 32, 36, 37, 51, 55–67,
70–73, 76–86, 120–124, 126–
135, 170, 172, 192, 211, 213,
214*, 214, 215, 219–223, 225,
226, 227*, 228, 230–235, 241,
258–262, 264*, 264, 265, 267,
268, 270, 271, 273–275, 283,
284, 285*, 286–289, 291, 299–
302, 304, 316, 317, 319–322,
334, 336*, 337, 339, 340, 343–
346, 349–351, 353, 354, 357,
359, 364, 370, 371, 375, 381–
383, 384*, 384, 385, 389, 390*,
390–393, 396–399, 401–403,
407–412, 414, 415, 418, 423,
425, 427–432, 438, 439, 453
- Kambera, 85, 296

- Karas, 178, 182, 183
Kedang, 228, 287, 296, 307, 310, 311, 317, 323, 324
Kemak, 303, 310, 317, 325, 326
Keo, 311
Kirman, 5, 203, 205, 206, 219–223, 225, 226, 228, 230, 232, 235
Klon, 5, 9, 14, 17, 19, 20, 22, 23, 27, 32, 36, 37, 51, 55–57, 60, 62*, 62, 64–67, 70–73, 77, 79–85, 120, 122–124, 126–135, 166, 170, 172, 176, 177, 227*, 263, 264*, 264, 265, 267, 274, 284, 286, 288, 294, 298, 300–302, 304, 314, 316, 317, 319–322, 370–372, 376*, 404
Kokoda, 173–175
Komodo, 317, 323, 324
Kui, 5, 12, 36, 51, 55–57, 59, 60, 62, 64, 65, 67, 70–73, 77, 79–86, 120, 124, 126–135, 149, 166, 170, 172, 176, 177, 263, 264*, 265, 267, 274, 275, 286, 288, 293, 294, 297, 299, 300, 303, 304, 311–314, 316, 317, 319–322
Kula, 5, 9, 36, 122, 124, 126–135, 270*, 286–289, 291, 300–304, 310, 316, 318–322, 335, 337, 339, 354, 370, 371, 376*
Kunimaipa, 52
Lakalei, 318, 325, 326
Lamaholot, 7, 85, 303, 311, 312, 318, 323, 324
Lio, 307, 310, 311, 318, 323, 324
Lower Grand Valley Dani, 175
Makalero, 6, 31, 91, 93, 95–103, 105–107, 109–112, 114–117, 122–124, 136–140, 165, 166, 170, 172*, 172, 274
Makasae, 6, 91, 93, 95–103, 105–107, 109–112, 114–117, 124, 136–140, 166, 170, 172*, 172, 227*, 274
Malay, 2, 8, 9, 13, 33, 61, 62, 132, 234, 285*, 285, 287*, 287, 303, 350, 353, 360–364
Mambai, 85, 171, 290, 296, 303, 307, 310, 318, 325, 326
Manggarai, 171, 318, 323, 324
Marind, 156, 161
Mian, 157, 160
Miskitu, 403
Nage, 290, 307, 310, 318, 323, 324
Naueti, 307
Nedebang, 5, 36, 51, 52, 55–68, 70–73, 76, 77, 79–86, 120, 124, 126–135, 166, 181, 219
New Guinea language(s), 239
Ngadha, 307, 310, 311, 318, 323, 324
North Halmahera language(s), 160
North Halmaheran language(s), 149, 151, 152, 154–156, 158, 159, 161, 162, 164–167, 169, 183
Oirata, 6, 50, 91, 93, 95–103, 105–107, 109–112, 114–117, 124, 136–140, 166, 170, 171, 172*, 172
Old Malay, 58
Palu'e, 318, 323, 324
Portuguese, 13
pronouns, 178
proto-Alor, 166, 172, 176
proto-Alor-Pantar, 15, 17, 22, 23, 28, 30–32, 50–61, 64–71, 73, 77,

- 79–87, 92–107, 108*, 108–122,
125–135, 141–143, 162–164, 166,
167, 169*, 170–172, 174–183,
219, 223, 226, 231, 234, 235,
240, 263, 264*, 264–268, 270,
271, 275, 280, 283, 285*, 285–
289, 292*, 293, 295–297, 299,
301, 302, 306, 312–316, 336*,
338, 370, 375, 386, 403, 404
proto-Austronesian, 58, 61, 85, 192,
287, 295, 299, 303*, 303, 307,
309, 311, 312, 323–326
proto-Bomberai, 184
proto-Central East Alor, 299, 314*,
315, 316
proto-Central East Pantar, 292
proto-Central Pantar, 292, 316
proto-East Alor, 266*, 314*, 315, 316
proto-East Alor Montane, 314*, 315,
316
proto-Eastern Timor, 92, 95, 136
proto-Malay, 312
proto-Malayo Polynesian, 171
proto-Malayo-Polynesian, 33, 61, 85,
86, 132, 135, 140
proto-North-Halmahera, 152, 153, 162–
164, 167, 168
proto-Pantar, 292, 293, 314*, 315, 316
proto-Straits-West-Alor, 293–299, 312,
314*, 314, 315
proto-Straits-West-Pantar, 316
proto-Timor, 30, 92–107, 108*, 108–
118, 120, 125, 126, 136–143,
170, 172, 175*, 177, 181
proto-Timor Alor Pantar, 30, 52, 91–
98, 100–105, 107–114, 116, 118–
120, 125, 126, 141–143, 148*,
152, 165–168, 169*, 169, 171,
172, 174–179, 181–183, 306
proto-Trans-New-Guinea, 150, 152*,
152, 156, 162, 163, 169–173,
176–179, 182
proto-West Malayo-Polynesian, 285*
proto-Western Pantar, 298, 299

Rembong, 318, 323, 324
Reta, 5, 124, 126–135
Retta, 171, 172, 285, 286, 288, 294, 300,
304, 314, 316, 318–322
Rongga, 307, 310, 311, 318, 323, 324
Russian, 285*

Sama-Bajo, 50*
Sar, 5, 36, 60, 122, 124, 126–135, 286,
288, 291, 292, 300, 304, 316,
318–322
Sawila, 5, 9, 13, 27, 28, 36, 37*, 37,
51, 55–65, 67, 70–73, 76–86,
120–124, 126–135, 166, 171,
172, 263, 264*, 264–269, 270*,
273–275, 284, 286–289, 291,
300, 302–304, 310, 316, 319–
322, 337, 339, 354, 358, 370,
371, 376*, 399
Sika, 318, 323, 324
South Bird's Head language(s), 150,
173, 174

Tabaru, 166
Tambora, 148*
Tanae, 32*
Tehit, 52
Teiwa, 5, 8, 9, 14, 16–18, 20, 22–27,
32, 36, 37, 50*, 51, 52, 54–
67, 70–73, 76, 77, 78*, 79–86,
120–124, 126–135, 149, 153,
166, 170, 178, 179, 181, 192,

- 193, 197, 199–201, 202*, 202,
217, 219–224, 226, 227*, 228,
231, 234, 235, 245, 246, 260–
262, 264*, 265–267, 274, 275,
286, 288, 291, 292*, 292, 300,
302, 304, 306, 316, 318–322,
334–336, 338, 340, 342–344,
348–350, 352, 354, 355, 358,
370–375, 377–380, 381*, 381,
386, 388, 389, 391–398, 400–
403, 407–411, 413–415, 423,
432–440, 455
- Tetun, 58, 303
- Tetun Fehan, 287, 296, 318, 325, 326
- Thao, 285*
- Tibeto-Burman language(s), 239
- Tobelo, 155, 157, 159–161, 164
- Tokodede, 58, 290, 302, 303, 307, 310,
311, 318, 325, 326
- Trans-New Guinea language(s), 10,
34, 52, 148–152, 154, 156–159,
161–165, 169, 183
- Uab Meto, 318, 325, 326
- Ujir, 281
- Uto-Aztecan language(s), 239
- Waima'a, 318, 325, 326
- Wantoat, 33*
- Wersing, 5, 36, 37, 51, 55–58, 60–67,
70–73, 76–86, 120, 122–124,
126–135, 149, 166, 216–223,
225, 226, 228, 231, 232, 235,
241, 244–246, 260–262, 264*,
264, 265, 266*, 266, 267, 274,
275, 286–289, 291, 300, 302–
305, 310, 316, 318–322, 370–
373, 375, 388, 389, 390*, 390–
399, 401, 403, 455
- West Papuan language(s), 150, 151, 173
- Western Dani, 175, 176
- Western Pantar, 5, 8, 9, 12*, 14, 15, 20,
21, 23, 24, 28, 32, 36, 51–53,
55–67, 70–73, 76–86, 119–135,
155–158, 160, 166, 172, 178,
192–200, 219–224, 226, 228,
229, 231, 232, 234, 235, 241,
244, 255–258, 260–262, 264*,
264–268, 271, 273–275, 285–
287, 289, 290, 293, 294, 297–
300, 302–304, 311, 313, 314,
316, 318–321, 335, 336*, 338,
340, 343, 344, 348–350, 352,
354, 355, 358, 370, 371, 373,
375, 376*, 376, 377, 379, 388,
391–393, 396, 397*, 397, 398,
400, 401, 403, 404, 414, 455
- Wissel Lakes language(s), 149, 150,
173, 176
- Wogamusin, 32*

Subject index

- actor, 413, 414
- additive numeral, 280, 283, 290, 291, 297, 299, 301*, 301–303, 307, 311, 313
- adposition, 16, 26, 29, 160, 161, 245, 247, 301
- affectedness, 407–410, 412, 413, 418, 421–423, 431, 438, 439
- agreement, 438
- alienability, 22, 23, 29, 60, 100, 104, 120, 125, 157–159, 195, 338, 348
- alignment, 19, 20, 25, 35, 154, 410
- animacy, 18, 334, 372, 395, 401, 402, 408–411, 413, 416, 419, 423, 425, 431–435, 437–440
- apocope, 63, 65, 93, 96
- aspect, 24, 25, 28, 160
- borrowing, 13, 14, 31, 33, 50*, 58–62, 64–66, 67, 68*, 70, 76, 78, 85, 86, 92, 119, 132, 135, 140, 163, 167, 174, 175*, 175, 177, 183, 231, 280, 285*, 285, 287, 290, 295–297, 299, 302, 303, 310–312, 314, 317, 333, 337, 360
- cardinal numeral(s), 280, 281, 289, 293, 301, 305, 310, 313, 314, 319, 334–337, 340–343, 344*, 344–346, 349, 350, 353, 360, 362–365, 367
- clause-chaining, 29, 30, 161
- conjunction, 16, 24, 29, 404
- conventionalization, 439, 440
- definiteness, 417
- deixis, 35, 95, 125, 239–244, 248*, 255, 257, 258, 268, 271, 273, 275
- demonstrative, 241, 243*, 243, 246*, 247, 248*, 248–251, 253–255, 257, 260, 264, 275, 375, 377–379, 381, 386, 404
- derivation, 7
- determiner, 16
- dialect chain, 150
- differential object marking, 409
- differential subject marking, 409
- direction, 24, 241, 250–253, 258, 260, 264, 268, 271, 273
- distributive, 162
- distributive numerals, 334, 341–343, 344*, 344–346, 349, 353, 355, 358, 359
- elevation, 95, 239, 240*, 240–245, 246*, 246–263, 264*, 264–269, 270*, 270–274
- epenthesis, 59, 63–65, 119
- free pronoun, 408, 410, 412, 423, 424
- gender, 30
- inflection, 7

- inflection classes, 419, 427, 430
- innovation, 31, 32, 50, 58, 61, 63, 67, 70, 71, 73, 74, 76*, 76–79, 92, 95, 150, 151, 234, 270, 271, 273, 289, 293, 298, 307, 310, 314, 316, 370, 375, 403
- isolate language(s), 149, 151, 183
- kinship, 34, 35, 99, 191, 193, 195, 198, 200, 201, 202*, 203, 205, 206, 208, 212, 213, 215, 218–222, 226, 228, 231, 233–235, 400
- lexical stipulation, 408, 419, 432, 439
- manner, 24
- metathesis, 64, 85, 86, 93, 96, 98, 101, 103, 113, 126, 136–138, 151, 178
- metatypy, 78
- mood, 28
- motion, 240, 241, 244–252, 255, 257–261, 263, 268*, 268–273
- multiplicative numeral, 280, 283, 297, 298, 307, 311, 312
- negation, 16, 29, 160
- nominalisation, 95, 381
- numeral classifier, 31–33, 307, 309, 323, 324, 334, 365, 366, 374, 375, 377, 379, 380, 382, 404
- Nusa Tenggara Timor, 8
- object, 411, 413, 432–435, 437
- ordinal numeral(s), 301, 303, 334, 337–341, 353, 355–358, 360, 361, 364, 365
- palatalisation, 62*, 62
- person, 410, 414*, 414, 437
- plural (number) word, 369–372, 373*, 373–379, 381*, 382–389, 390*, 390–404
- plurality, 23, 35, 60, 100, 125, 162, 163, 173, 175, 183, 366
- possession, 7, 22, 23, 26, 28, 29, 60, 100, 104, 120, 125, 153, 157–159, 180, 194, 195, 197, 207, 210, 275, 334, 337–339, 341, 353, 366, 374, 376, 392, 400, 404
- prefix alternation, 420, 421, 428, 434, 437
- productivity, 433
- pronominal indexing, 407–410, 421, 439
- pronoun, 7, 8, 16, 29, 30, 148–150, 153–155, 158, 159, 161–164, 173, 175–177, 179, 180, 183, 194, 197, 207, 336, 337, 341, 366, 372*, 375, 378, 379, 381*, 383, 384*, 384, 385, 387, 389, 390*, 390, 392, 394, 398, 401–403
- reduplication, 101, 290, 298, 334, 341–346, 353, 364, 404
- referential properties, 407, 439
- right-headed, 15, 159
- secundative alignment, 438*
- semantic alignment, 408, 410–412, 416, 423–425, 439
- serial verb construction(s), 24, 25, 27, 29, 346
- simplex numeral, 281, 287, 289, 290, 306*, 306, 312–314
- sound change, 280, 283, 284, 285*, 314
- specificity, 409, 417

Subject Index

- subject, 413, 439
- subtractive numeral, 280, 283, 290,
293, 295–299, 306, 307, 312–
314
- switch reference, 29, 30
- syntactic alignment, 408, 410, 432

- telicity, 416
- tense, 28

- undergoer, 413, 414

- valency, 27
- verb classes, 408, 419, 425, 432, 434,
435, 440
- verb-final, 15, 159
- video stimuli, 416
- volitionality, 154, 407–410, 412, 413,
416, 418, 423–425, 438, 439
- vowel harmony, 86

The Alor-Pantar languages

The Alor-Pantar family constitutes the westernmost outlier group of Papuan (Non-Austronesian) languages. Its twenty or so languages are spoken on the islands of Alor and Pantar, located just north of Timor, in eastern Indonesia. Together with the Papuan languages of Timor, they make up the Timor-Alor-Pantar family. The languages average 5,000 speakers and are under pressure from the local Malay variety as well as the national language, Indonesian. Together with the Papuan languages of Timor, they make up the Timor-Alor-Pantar family.

This volume studies the internal and external linguistic history of this interesting group, and showcases some of its unique typological features, such as the preference to index the transitive patient-like argument on the verb but not the agent-like one; the extreme variety in morphological alignment patterns; the use of plural number words; the existence of quinary numeral systems; the elaborate spatial deictic systems involving an elevation component; and the great variation exhibited in their kinship systems.

Unlike many other Papuan languages, Alor-Pantar languages do not exhibit clause-chaining, do not have switch reference systems, never suffix subject indexes to verbs, do not mark gender, but do encode clusivity in their pronominal systems. Indeed, apart from a broadly similar head-final syntactic profile, there is little else that the Alor-Pantar languages share with Papuan languages spoken in other regions. While all of them show some traces of contact with Austronesian languages, in general, borrowing from Austronesian has not been intense, and contact with Malay and Indonesian is a relatively recent phenomenon in most of the Alor-Pantar region.