

Traces of Contact in the Lexicon

Austronesian and Papuan Studies

Edited by

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Traces of Pre-modern Contacts between Timor-Alor-Pantar and Austronesian Speakers

Marian Klamer

Introduction

The Timor-Alor-Pantar (TAP) family are an outlier “Papuan” group, located some 1,000 kilometers west of the New Guinea mainland, see Figure 3.1 and Figure 3.2.¹ The TAP family constitutes of some 25 languages, and has two subgroups in Timor and one subgroup in Alor and Pantar, as indicated in Figure 3.1 below.



FIGURE 3.1 Location of the Timor-Alor-Pantar languages in Indonesia

1 The term Papuan is used here as a cover term for the hundreds of languages spoken in New Guinea and its vicinity that are not Austronesian (Ross 2005: 15), it says nothing about the genealogical ties between the Papuan families in that area.

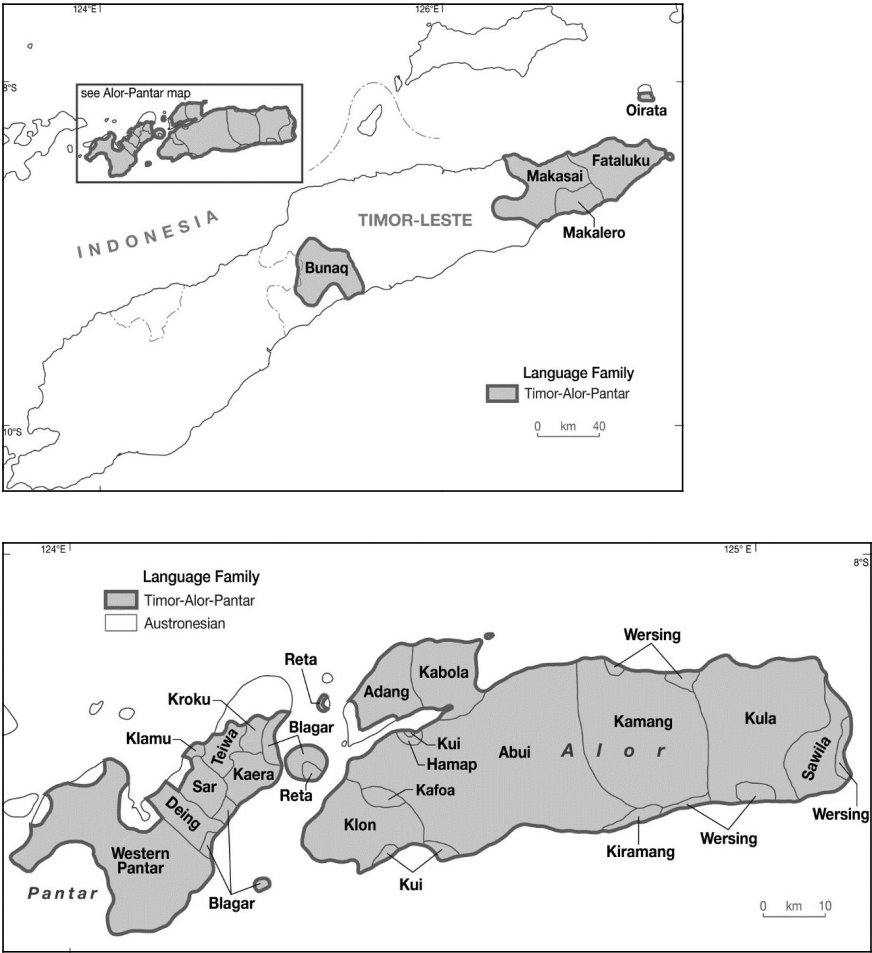


FIGURE 3.2 The Timor-Alor-Pantar languages

The origin and age of the TAP family is unclear. One hypothesis holds that they are descendants of immigrants from New Guinea who arrived in the Lesser Sundas 4,500–4,000 Before Present (BP) and genealogically affiliated with the Trans New Guinea family (cf. Wurm, Voorhoeve, McElhanon 1975, Ross 2005) but the lexical evidence is currently insufficient to support this affiliation (Holton & Robinson 2017b). However, Holton & Robinson (2017b: 183–184) suggest that it is possible that the TAP and the languages on the Bomberai peninsula, West Papua, are related either via a deep genealogical connection or via a more casual contact relationship. If it is a genealogical relationship, it is not yet clear whether they are both part of TNG or whether they share a relationship independent of that family.

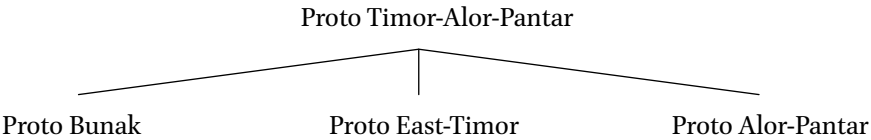


FIGURE 3.3 The three subbranches of the Timor-Alor-Pantar family
HOLTON ET AL. 2012; HOLTON AND ROBINSON 2017B; SCHAPPER ET AL., 2017

Ancient Malayo-Polynesian (MP)² loans found across the TAP family that show regular sound correspondences suggest that Proto TAP had been in contact with Austronesian languages before splitting up (see section 2 below). As speakers of one or more Austronesian languages are commonly assumed to have arrived in the East Timor area 3,800 BP, that would give the TAP family a maximum age of some 3,800 years. This is relatively young in light of the history of human presence on the islands, which dates back to 42,000 BP in East Timor (O'Connor, Ono & Clarkson 2011), and to 12,000 BP on Alor (O'Connor 2017).

Currently, Alorese is the only one indigenous Austronesian language spoken on the islands of Alor and Pantar. Alorese is closely related to Lamaholot, spoken in the Flores-Lembata region to the west of Pantar (Klamer 2012; Fricke 2019), and speakers of Alorese arrived in the area of Pantar and Alor in the 14th Century (Klamer 2011). On Timor, three TAP languages (Makalero, Makasae and Fataluku) are spoken in contiguous areas in the east of the island, one (Oirata) on Kisar island off the eastern tip of Timor, adjacent to an Austronesian language, and one (Bunak) in the centre of the island, surrounded by Austronesian languages.

The recent publication of the online database *LexiRumah* (Kaiping, Edwards & Klamer 2019) containing lexical data for 357 language varieties spoken in eastern Indonesia and Timor-Leste enables a comparison of lexical data that was previously impossible. In addition, recent years have seen publications of grammar descriptions and historical reconstructions of TAP languages (see the overviews in as well as reconstructions of Austronesian language groups of the Flores-Lembata region (Fricke 2019) and the Timor region (Edwards 2021)). Thus we are now in the position to examine the contact history in the region more closely. Is there lexical evidence that there was contact between speak-

2 In Island SE Asia, languages of the Malayo-Polynesian branch of the Austronesian language family are spoken. This paper refers to these languages interchangeably as 'Austronesian' or 'Malayo-Polynesian (MP)'. However, in the reconstructed forms, a distinction is made between Proto Austronesian (PAN) and Proto Malayo-Polynesian (PMP).

ers of TAP with Austronesian languages? Which languages or regions were the donors, and which were the recipients of lexical and grammatical features? Can we use the evidence to reconstruct stages or regions of contact?

In this chapter, I focus on traces of Austronesian words attested in the lexicon compiled for the TAP languages, as present in the online lexical database *LexiRumah* 3.0.0.; see also below. (TAP borrowings ending up in Austronesian languages of the region are discussed in the chapters by Moro et al. (this volume) and Schapper & Huber (this volume)). In addition, I only focus on ancient and pre-modern borrowings. Ancient loanwords that were inherited throughout the family help us to date the first contact with Austronesian and the age of the TAP family as a whole, as mentioned above. Pre-modern loans are examined because these provide a view on the history of TAP language communities in the period before Indonesian and local Malay became dominant—if we can couple the loans with what little is known about the history of TAP communities in general. For convenience sake, ‘pre-modern’ is defined here as the time between approx. a century ago (100 BP) and the ‘ancient’ period when Proto TAP may have existed, some time around 4000 BP. Over the last hundred years, Malay³ and Indonesian have been increasingly used as languages for interethnic communication in Indonesia; while in Timor Leste, Tetun and Indonesian have (had) that function. This ‘pre-modern’ period is an extremely long time, from which for the Timor-Alor-Pantar region very little is known beyond scattered colonial sources and local oral histories as compiled and analysed in sources such as Hägerdal (2010b; 2010a; 2011; 2012) and Wellfelt (2016). Loans that point to modern contact with Malay, Indonesian or Tetun are outside the scope of the present paper. Such loans, often denoting foreign or non-indigenous objects and concepts, have been adopted across all the TAP languages. Examples include forms similar to Indonesian *dapur* ‘kitchen’, *nangka* ‘jackfruit’, *lampu* ‘lamp’ (< Dutch *lamp*), *lilin* ‘candle’, *tali* ‘rope’, *pasar* ‘market’, *jendela* ‘window’ (< Portuguese *janela*), *gereja* ‘church’ < Portuguese *igreja* ‘church’.⁴

3 Note that on Alor and Pantar, in places like the capital Kalabahi, a local variety of Malay referred to as Alor Malay was already spoken before the advent of Indonesian. Malay has been the lingua franca in eastern Indonesia for centuries. Because of the lexical similarities between Malay and Indonesian, current speakers on Alor and Pantar consider Alor Malay as the colloquial variety of standard Indonesian, even though the two languages have very different histories.

4 Overall, the amount of Indonesian loanwords in word lists of TAP languages is limited. Klammer (2020) found 212 Indonesian loans out of a total of 23,247 words listed for the 42 TAP varieties in the LexiRumah database. The average number of words on TAP word list is 553, and the number of loans in each variety range from 1–20 loans, with an average of 3.6% loans.

Why study traces of contact that took place in the pre-modern period? Traditional historical comparison and phylogenetic inference (Kaiping and Klammer 2022) both converge on a pattern where Proto TAP (presumably located in Timor) underwent major splits, separating the AP branch that moved out towards Alor-Pantar, see Figure 3.3 above. The next major split was in the AP branch, with a possible homeland in or around the Straits in the West, separating Pantar from the rest of Alor and the languages of the Alor branch spreading east (Holton et al. 2012). Historical reconstruction thus provides a hypothesis on the homelands and internal dispersal of the TAP family. Studying the traces of pre-modern contact with Austronesian languages can provide a complementary angle on the history of the TAP speakers: with whom did they have contact, and what type of contact was it? The current paper seeks to address these questions.

The paper is structured as follows. Section 1 presents details on the lexical materials and the methodology used in the paper. Section 2 discusses three ancient loans, and section 3 ten pre-modern loans, both organised according to the semantic fields to which the loans belong. In section 4, a summary of the findings is presented, followed by a discussion and conclusions in section 5.

1 Present Study: Methods and Materials

Almost all the lexical data discussed in this paper has been drawn from primary sources compiled and referenced in the online lexical database *LexiRumah* 3.0.0 (Kaiping et al. 2019). Where other sources were used, these are provided in the text. This study investigated the vocabulary of 109 lects (i.e. language varieties or dialects) spoken on the islands of Timor, Alor, Pantar, Flores and Lembata: 54 lects belonging to the Timor-Alor-Pantar family and 55 lects belonging to the Malayo-Polynesian subgroup of Austronesian languages.

To find TAP lexeme sets that contained Austronesian borrowings, I first went on a fishing expedition in LexiRumah, considering lexeme sets for 75 pre-selected concepts in the semantic domains (taken from Haspelmath and Tadmor 2009): *Social and political relations*, *Agriculture and vegetation*, *The house*, *Clothing and grooming*, *Food and drink*, *Warfare and hunting*, *Animals*, *Kinship*, *The physical world*, and *The body*. Crosslinguistically, these concepts cover the spectrum from highly borrowable (*Social and political relations*) to borrowing resistant (*The body*) (Haspelmath & Tadmor 2009).

The results of the expedition were mixed. In many sets that contained loans, the loans were scattered or messy and did not allow interesting generalizations or observations. Sporadically observed loans occurring only in one or two TAP

languages were not considered, as such individual cases may be nonce borrowings and are not good evidence for reconstructing a historical context of contact between communities. Moreover, for most of these sporadic loans, the MP donor language cannot be established. Some sets contained no borrowings. Some sets (e.g. on kinship terminology, or concept for animals such as ‘turtle’) had noisy and unreliable data. Kinship terms are notoriously hard to elicit reliably through a lexical survey, and surveys may render different words for different species of animals, e.g. walking and swimming turtles. Finally, some lexeme sets contained suspected borrowings that were impossible to prove because of lack of reconstructed Austronesian forms to compare them with (more on this below).

For the present paper, I made a selection based on a manual inspection of the results of the initial fishing expedition. I focussed on lexeme sets containing demonstrably Austronesian loans and occurring in a sizeable number of TAP languages, so as to allow some generalizations about the scope, direction or source of the borrowing. I selected 13 concepts from the following semantic fields: *Social and political relations*: ‘king/ruler’, ‘slave’; *Agriculture and vegetation*: ‘maize’, ‘seed’; *Clothing and grooming*: ‘needle’, ‘to weave’, ‘sew’; *Food and drink*: ‘salt’; *Animals*: ‘pig’, ‘deer’; *Kinship* ‘bride price’; and *The body*: ‘navel’, ‘breast’, ‘skin’. The sets discussed in this paper are not an exhaustive listing of the borrowings attested; for reasons of space, some TAP lexeme sets with MP loans are left for future analysis.

To prove that a lexeme set was borrowed into TAP languages, it must be demonstrably Austronesian; that is, there must be a Proto Austronesian (PAN) or Proto Malayo-Polynesian (PMP) reconstructed form that has a similar form and meaning. For this evidence I drew on the etymological database by Blust and Trussel (n.d.), as well as recent historical reconstructions done on daughter stages of PMP that are relevant to the area of Alor Pantar and Timor: Proto Flores-Lembata (PFL) (Fricke 2019), located to the west of Pantar island, and Proto Rote-Meto⁵ (PRM) (Edwards 2021), on Timor.

Rote-Meto is a subgroup within a higher order Timor-Babar (TB) subgroup, see Figure 3.4. The Timor-Babar group comprises all the other languages of Timor and the southern Moluccas, and Proto Timor-Babar is a sister to Proto Central-Timor and Helong (Edwards 2018b; 2019; 2020; 2021). It is yet unknown how Proto Flores-Lembata is related to Proto Timor-Babar and Proto Central Timor, except that all of them are regional, low-level subgroupings within Malayo-Polynesian.

5 Meto = Uab Meto, also known as Dawan, Timorese, or Atoni, see Edwards (this volume).

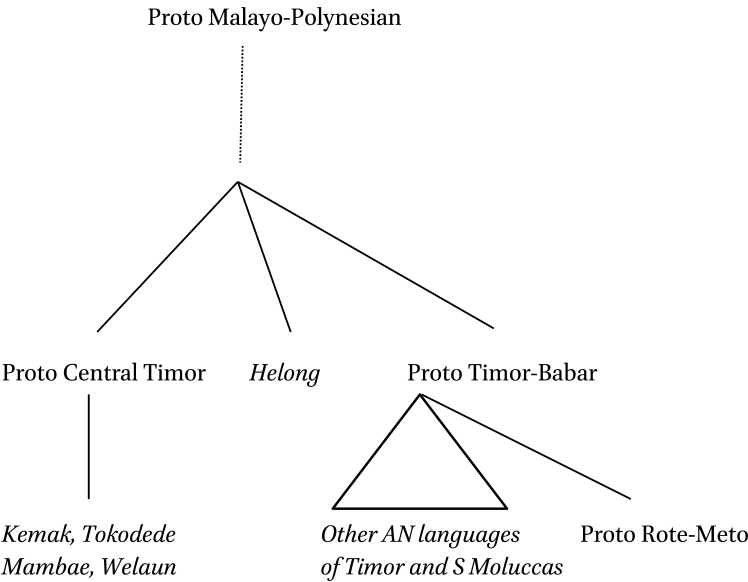


FIGURE 3.4 The MP subbranches of AN languages on Timor
EDWARDS 2018B; 2019; 2020, 2021

In many cases, the sources present reconstructed PMP forms, or they mention sets of related lexemes that cannot (yet) be reconstructed to a common proto form (indicated with a hashtag #).⁶ These two types of Proto Flores-Lembata and Proto Rote-Meto forms were used to compare the TAP data with. In addition, I occasionally considered lexical data from a group of AN languages in central and east Timor that are not grouped under Proto Rote-Meto, but are part of the higher order Timor-Babar subgroup (Edwards 2021), and for which no historical reconstructions are yet available. The diachronic ‘baseline’ form of the TAP languages was determined by considering reconstructed forms for proto TAP (Schapper et al. 2017; Holton et al. 2012; Holton and Robinson 2017a). In sum, I consider both established proto forms and data from low level groups of neighbouring languages to prove that a MP lexeme has entered the TAP languages.

The lexical data is presented below in tables that are organised as follows. The first table presents the available Austronesian data of a particular concept. It contains reconstructed forms from proto MP, Proto Flores-Lembata, and Proto Rote-Meto where available, or it gives representative forms of sets of

⁶ The unreconstructibility of these sets could be due to missing cognates, unexplained irregularities or borrowing.

related lexemes for which no reconstruction was possible (with a hashtag #), and it provides the actual forms of the Austronesian languages of East Timor. The second table contains the TAP data, with reconstructed forms at the top (if any), followed by words attested in the individual languages. In the TAP language table, the languages have been organised by their geographical region, going from west to east: first Pantar-Straits, then West Alor, Central Alor, South Alor, East Alor and ending with East Timor. The organisation of the tables is geographical and does not necessarily reflect genealogical subgroupings.

2 Ancient Loanwords⁷

2.1 *Animals*

2.1.1 'pig'

Pigs appear to have moved through Island SE Asia under human agency as husbanded animals, ultimately from a Southeast Asian source. With the exception of Sulawesi, none of the islands east of the Wallace line possessed endemic populations of pig (*Sus scrofa*, Groves 1981; Glover 1986). In fact, archeological investigations on Flores, Timor, and the northern Moluccas have demonstrated that the first appearance of pigs is associated with the arrival of the 'Neolithic cultural package' during the middle to late Holocene (7000–3500 BP) (Larson et al. 2007).

A form possibly related to PMP *babuy 'pig' is reconstructable as PTAP *baj 'pig' (where /j/ represents a glide), as shown in (1) and (2). The word is inherited across the TAP family with an initial plosive, and follows regular sound changes. This would suggest a very early contact with an Austronesian source at the stage when the TAP family had not yet diversified. If Austronesian groups arrived in

7 Earlier work (Holton et al. 2012:95) has tentatively reconstructed Proto Alor-Pantar (PAP) *bui 'betel nut' as an ancient loan reflecting (< PMP *buaq 'fruit; areca palm and nut', Blust and Trussel n.d.), pointing to the similarity between Alor Pantar lexemes for 'betel nut' and those in nearby Austronesian languages such as Tetun *bua* 'betel', and Tokodede *buo* 'betel'. Here, a discussion of this possible loan has been excluded, because the evidence for it is thin. None of the reflexes in AP languages examined here (except Klamu) has traces of the vowel /a/, instead, virtually all forms reflect /u/ and /i/ or /j/ / (*bui/buj) or reductions thereof (*bu*). In the surrounding Austronesian languages, reflexes include the vowel /a/, so that the formal similarity between AP and AN forms concerns *bu* only. However, Edwards (p.c.) points out that the language of the Babar islands have reflexes of *bui for 'fruit' (< PMP *buaq), and the languages of Aru (e.g. Batuley *bui* 'betel nut', Daigle 2015: 249) do attest an earlier form with a glide, which may constitute support that PAP *bui/buy was indeed an Austronesian borrowing.

the Timor area around 3800 BP (Pawley 2005; Spriggs 2011), that may have been the earliest time the borrowing could have occurred.

The PTAP form *baj reflects the PMP initial plosive /b/ in *babuy, and is a shortened form of the word. In contrast, the reflexes of PMP *babuy attested in the Flores-Lembata and Timor region are all disyllabic, see (1). Also, PFL *vavi or any of its descendants cannot be the donor of PTAP *baj because of the initial fricative. In the Timor region, the AN languages in the east are also unlikely donors because of their initial fricative, as shown in (1). Languages in the west of Timor show reflexes with initial *b, leading to the reconstruction of PRM *bafi. Thus, presently available evidence suggests a loan event involving an ancestor of the Timor languages that is at least as old as PRM, before the other Timor languages underwent lenition of initial *b.⁸ (PTAP did not borrow AN loans for other domestic animals like ‘dog’ and ‘chicken’.)

(1) MP lexeme sets for ‘pig’

PMP *babuy		
PFL *vavi	PRM *bafi	AN in East Timor
		Dadu’a <i>wawi</i>
		Galolen <i>hahi</i>
		Waima’a <i>wau</i>
		Tetun, Suai <i>fahi</i>
		NW Mambae, Barzatete ⁹ <i>hɛh a</i> ¹⁰
		C Mambae, Hatu-Builico <i>haih a</i>
		S Mambae, Hatu-Udo <i>hae</i>
		Naueti <i>wou</i>

(2) TAP lexeme sets for ‘pig’

PTAP *baj ‘pig’		
TAP Pantar-Straits	Deing	<i>bai</i>
	Klamu	<i>bei</i>
	Sar	<i>bai</i>
	Teiwa, Adiabang	<i>baj</i>

8

Lenition was possibly quite late: note that Tetun has initial *b > f and Waima’a has *b > w. These two languages are quite closely related, and Edwards (p.c.) reconstructs **b for their immediate ancestor (Proto Eastern Timor).

9

Mambae, Kemak, Welaun, and Tokodede are placed in a Central Timor subgroup which is (currently) coordinate to Timor-Babar, see figure 3.4.

10

A vertical line ‘|’ separates the non-etymological parts of a word from its etymological part. Accolades ‘{...}’ separate a non-etymological part of a compound from the etymological part.

	Kaera	<i>bej</i>
	Reta, Pura	<i>be:</i>
	Reta, Ternate	<i>bei</i>
	Blagar	<i>be</i>
TAP West Alor	Adang, Otvai	<i>bɔi</i>
	Adang, Lawahing	<i>bi</i>
	Hamap	<i>bi</i>
	Kabola, Monbang	<i>bi?</i>
	Klon, Bring	<i>be:?</i>
TAP Central Alor	Abui, Takalelang	<i>fe</i>
	Papuna	<i>fe</i>
TAP South Alor	Kiraman	<i>bei</i>
	Kui	<i>bei</i>
TAP East Alor	Kamang, Atoitaa	<i>pej</i>
	Suboo	<i>pe</i>
	Tiyei	<i>pe</i>
	Wersing	<i>pei</i>
	Sawila	<i>pi</i>
	Kula	<i>peja</i>
TAP East Timor	Makasae	<i>bai</i>
	Fataluku	<i>pai</i>

2.1.2 ‘deer’

Deer are ancient animals in eastern Indonesia. They appeared in Timor after 4500 BP (Bellwood 1997: 187), in Sulawesi after 3500 BP (Glover 1986) and in Flores after 2000 BP (Forth 2012: 457). Blust and Trussell (n.d.) give a cognate set of Proto West Malayo-Polynesian *uRsah ‘sambhur deer’ containing words from Philippine languages, Malay and Toba Batak. Words related to this form are found in Flores-Lembata and Timor, but they may have been borrowed from Malay *rusa* (Edwards 2021). Malay has likely been a regional lingua franca at least since the time of the Sri Wijaya empire (7th–9th Century), and has been used as a trade language in eastern Indonesia since before the colonial times. Antonio Pigafetta’s encounter in 1521 with traders from Malacca in Timor (Le Roux 1929: 31) and the Malay word list he collected in Tidore (North Moluccas) (Le Roux 1929: 72–99) is evidence that trade Malay was already used in the region in the early 16th Century.

In east Timor, the word *rusa* sometimes occurs in a compound with *bibi* (Proto Rote-Meto *bibi ‘goat’, Edwards 2021), or as synonym of *bibi*, see (3). This particular compound is also found in the TAP languages Bunak and Makasae, (4), which suggests that Bunak and Makasae picked it up from one of their neighbours; likely Tetun, the language of interethnic communication.

(3) MP lexeme sets for ‘deer’

PWMP *uRsah ‘deer’

FL #rusa	PRM #rusa	AN in East Timor
	Dadu’a	<i>rusa</i>
	Waima’a	<i>ruso, bibi ruso</i>
	Tetun, Suai	<i>bibi rusa</i>
	Naueti	<i>bibi rusa</i>

(4) TAP East Timor lexeme sets for ‘deer’

TAP East Timor	Bunak	<i>rusa, bibu</i>
	Makasae	<i>bibi rusa</i>

The Alor Pantar forms suggest a different history. On the basis of the lexeme set given in (5), we can reconstruct proto AP *arusa. Forms reflecting regular correspondences of the consonants are found in all major subgroups of AP: Tubbe r=l, Klamu s=tʃ, Reta r=l, s=h, Adang r=l, Abui r=j, s=t, Kaman r=l, l=zero, s=h.¹¹ On the one hand, this suggests that it is an ancient loan, though it is unclear what the donor language of PAP *arusa may have been. On the other hand, all groups also contain irregular forms, e.g. Teiwa *s>t (no change expected), Klon *s>t (expected *s>h), and Sawila and Wersing retained /s/ (expected *s>t). Irregular *s>t forms may suggest borrowing from a TAP language which underwent that change (e.g. Abui). Further confusing matters, the form could also have been a more recent loan from Malay *rusa*, as has been suggested for the forms attested in Flores-Lembata and Timor. There is no information about when deer appeared in Alor and Pantar.

(5) PAP lexeme set for ‘deer’

PAP *arusa ‘deer’

TAP Pantar-Straits	Tubbe	<i>lus</i>
	Klamu	<i>raʃʃi</i>
	Sar	<i>ru:t</i>
	Teiwa, Lebang	<i>ru:s</i>
	Teiwa, Nule	<i>ru:t</i>

11 Here the symbol ‘=’ is used to denote sound correspondences, not sound changes (which would be represented using ‘>’). This is done because in some cases it is not sure that the forms in the sets are actually cognates, and so, strictly speaking, we cannot say that a sound ‘change’ was involved, while a correspondence is obviously there. Some of the correspondences are regular, others are not, and for some correspondences we do not know whether they are regular or not.

	Kaera	<i>rusi</i>
	Reta, Pura	<i>aluha</i>
	Reta, Ternate	<i>aluha?</i>
	Blagar, Bama	<i>rusi</i>
	Blagar, Kulijahi	<i>ruhi, ruhiŋ</i>
	Blagar, Manatang	<i>ʔuruhiŋ</i>
	Blagar, Nule	<i>ruŋ</i>
	Blagar, Pura	<i>haruhiŋ</i>
	Blagar, Tuntuli	<i>rusi</i>
	Blagar, Warsalelang	<i>urusi</i>
TAP West Alor	Adang, Otvai	<i>aru</i>
	Adang, Lawahing	<i>a:lu</i>
	Klon, Hopter	<i>ʔə'rut</i>
TAP Central Alor	Abui, Takalelang	<i>ajut</i>
TAP South Alor	Kiraman	<i>arusi</i>
	Kui	<i>arus</i>
TAP East Alor	Kamang, Atoitaa	<i>au:h</i>
	Suboo	<i>o:h</i>
	Tiyei	<i>a:uh</i>
	Wersing, Maritaing	<i>arus pe</i>
	Sawila	<i>arusu pi</i>
	Kula, Lantoka	<i>aisua pe</i>

2.2 *Subsistence and Trade*

2.2.1 'salt'

Salt is a natural sea product used in barter trade between coastal and inland people in Timor and Alor (Hägerdal 2012: 68, Wellfelt 2016: 145). Across the TAP family, we find reflexes going back to PTAP *asir, a form related to PMP *qasiRa 'salt', compare (6) and (7). The form must be a rather ancient loan. Given the different shape of PFL *hira, this cannot be the donor for PTAP *asir. The languages of west Timor reconstruct to PRM *masi from PMP *ma-qasin 'salty' (Edwards 2019), though Helong in west Timor has *sila* 'salt', a reflex of *qasiRa. The borrowing event of PTAP *asir from an Austronesian source must thus have taken place at a stage preceding PFL *hira or PRM *masi. In east Timor, the Austronesian languages partly reflect *masi (< PMP *(ma-) qasin) (Dadu'a, Galolen, Tetun), and partly *asira (< PMP *qasiRa) with loss of the initial /a/ and the intervocalic /r/ (Tokodede, Kemak, Mambae). Waima'a, Midiki, Naueti either reflect PMP *(ma-)qasin, or they reflect *asira plus loss of the final syllable, as shown in (6). It is thus likely that a form *asiRa was present at the stage of Proto Timor-Babar, a subgroup which includes all AN languages on Timor except those of Central Timor (Welaun, Kemak, Tokodede, Mam-

bae); including west Timor Helong which has *sila*. The Proto Timor-Babar form *asiRa was borrowed as *asir into Proto Timor-Alor-Pantar.

(6) MP lexeme sets for ‘salt’

PMP *qasiRa ‘salt’, PMP *ma-qasin ‘salty’

PFL *hira	PRM *masi	AN in East Timor	
		Dadu’a	<i>masi</i>
		Galolen	<i>masin</i>
		Idate	<i>masi</i>
		Tetun Dili	<i>masin</i>
		Tetun, Suai	<i>masin</i>
		Waima’a	<i>asi</i>
		Tokodede	<i>sia</i>
		Kemak	<i>sia</i>
		Mambae	<i>sia</i>
		Midiki	<i>asi</i>
		Naueti	<i>asi</i>

In the Alor-Pantar subgroup, the Pantar-Straits languages show reflexes with metathesized vowels (*asir>isar), see (7). The cognates show regular sound correspondences in Adang, Kafoa and Klon (s=h), Abui (s=t), Kui, Kiraman, Kula and Wersing (s=s), Kamang s=s, r=i, Adang r=i.

(7) TAP lexeme sets for ‘salt’

PTAP *asir ‘salt’

TAP Pantar-Straits		
	Tubbe	<i>his:i</i>
	Klamu	<i>je:si</i>
	Sar	<i>hisar</i>
	Teiwa, Lebang	<i>hisar</i>
	Teiwa, Nule	<i>jisar</i>
	Kaera	<i>isar</i>
	Reta, Pura	<i>?ihal</i>
	Reta, Ternate	<i>ihal</i>
	Blagar, Bama	<i>isar</i>
	Blagar, Kulijahi	<i>sija</i>
	Blagar, Manatang	<i>sia</i>
	Blagar, Nule	<i>siah</i>
	Blagar, Pura	<i>sia</i>
	Blagar, Tuntuli	<i>isar</i>
	Blagar, Warsalelang	<i>isar</i>

TAP West Alor	Adang, Otvai	<i>ahei</i>
	Adang, Lawahing	<i>{taŋ}hiri</i>
	Kafoa	<i>ahel</i>
	Klon, Hopter	<i>?hi:r</i>
	Klon, Bring	<i>əhir</i>
TAP Central Alor	Abui, Takalelang	<i>ati</i>
	Papuna	<i>asi</i>
TAP South Alor	Kiraman	<i>ser</i>
	Kui	<i>ser</i>
TAP East Alor	Kamang, Atoitaa	<i>asi:</i>
	Suboo	<i>asi:</i>
	Tiyei	<i>asi:</i>
	Wersing, Maritaing	<i>asir</i>
	Sawila	<i>asira</i>
	Kula, Lantoka	<i>asi</i>
TAP East Timor	Fataluku	<i>asir</i>
	Oirata	<i>asir</i>
	Makasae	<i>gasi</i>

3 Pre-modern Loans

3.1 Textile Technology

3.1.1 ‘needle’

PMP *zaRum ‘needle’ is reflected in languages of east Timor as given in (8). It has monosyllabic reflexes where the intervocalic /r/ has been lost in Tetun, Kemak, and Nauti. This form was borrowed into Bunak, see (9). The form without the intervocalic /r/ is also the one attested in the east Alor languages Kula, Sawila and Wersing. Besides east Alor, the loan is not attested elsewhere on Alor or Pantar.

In Dadu’a, Galolen and Waima’a we find reflexes of #ruma, a form that may be connected irregularly to *zaRum. This form is also found in the lexemes in the east Timor TAP languages Makasae and Fataluku, which contain etymons related to both *daun and #ruma.

(8) MP lexeme set for ‘needle’

PMP *zaRum ‘needle’

PFL— PRM— AN in East Timor

Tetun	<i>daun</i> (Morris 1984:23)
Kemak	<i>daum</i>

Naueti	<i>dau</i>
Dadu'a	<i>la luma</i>
Galolen	<i>ruma</i>
Waima'a	<i>rumo</i>

(9) TAP lexeme set for 'needle'

TAP Timor	Bunak, Bobonaro	<i>daun</i>
	Bunak, Suai	<i>daun</i>
	Makasae	<i>dauruma</i>
	Fataluku	<i>t̃earuma</i>
TAP East Alor	Kula	<i>dam</i>
	Sawila	<i>da:mu</i>
	Wersing	<i>damu, damu?</i>

In the western part of Alor and Pantar, 'needle' is often expressed with a reflex of PMP *batuR 'weave', showing a semantic shift, compare (10)–(11). The form is likely borrowed from Kedang *batur* into Marica Alorese,¹² and from Alorese into the neighbouring Pantar-Straits and West Alor languages. The source language cannot have been Lamaholot or another Flores-Lembata language like Hewa, as these languages use a different form *lusir/luhi(r)* 'needle'.

(10) MP lexeme set for 'weave'

PMP *batuR 'weave'	AN in Flores-Lembata	
	Kedang	<i>batur</i>
	Alorese, Marica	<i>batur</i>
	Alorese, various dialects	<i>batul</i>
	Alorese, Alor Besar	<i>batu</i>

(11) TAP lexeme set for 'needle' reflecting MP 'weave'

TAP Pantar-Straits	Teiwa, Adiabang	<i>bital</i>
	Teiwa, Lebang	<i>bati</i>
	Teiwa, Nule	<i>bitaj</i>
	Sar	<i>bitai</i>
	Klamu	<i>batu</i>
	Kaera	<i>ba:ti</i>
	Blagar	<i>batul</i>

¹² The final /r/ in Marica *batur* is irregular (inherited words would have lost the final /r/). Marica island is also located closest to the Kedang speaking area of northeast Lembata. Other Alorese dialect change final r>l and some lose it altogether (Fricke, p.c. 2020).

TAP West Alor	Adang, Lawahing	<i>batuy</i>
	Adang, Otvai	<i>batin</i>
	Kabola, Monbang	<i>batan</i>
	Klon, Hopter	<i>bah</i>

3.1.2 ‘sew’

In the languages of the Flores-Lembata region, various etymons are used to express ‘sew’, leading to two PFL reconstructions **daru* (< PMP **zaRum* ‘needle’) and **daʔit* (< PMP **zaqit* ‘sew’). In addition, we find reflexes of the form ***sauR* ‘sew’ (Edwards 2021) in Lamaholot and Kedang, see (12). Reflexes of the regional form ***sauR* ‘sew’ are also found in the AN languages of Timor, as shown in (13). The TAP languages of east Alor are likely to have borrowed from (a) language(s) of the Central Timor subgroup, Kemak, Tokodede, or Mambae.

(12) Etymons to express ‘sew’

PMP * <i>zaRum</i> ‘needle’	PMP * <i>zaqit</i> ‘sew’	Regional form (pre-Rote Meto, Edwards 2021) * <i>sauR</i> ‘sew’ ¹³
PFL * <i>daru</i> ‘sew’	PFL * <i>daʔit</i> ‘sew’	Lamaholot, Kedang # <i>saur</i> ‘sew’

(13) Reflexes of regional **sauR* ‘sew’ in AN languages of east Timor

AN Timor	Galolen	<i>sor</i>
	Kemak	<i>sɔra</i>
	Tokodede	<i>sɔːr</i>
	Waima’a	<i>sau</i>
	Southern Mambae, Ainaro	<i>sɔːr</i>

(14) Reflexes of regional **sauR* ‘sew’ in TAP languages

TAP East Alor	Kula	<i>sua</i>
	Sawila	<i>surə</i>
	Wersing, Maritaing	<i>sɔr</i> { <i>burkin</i> }
	Wersing, Taramana	<i>sor</i> ‘to sew’, <i>suai</i> ‘to stick’

The words for ‘sew’ in the other TAP languages listed in (15) seem to be related to the regional form ***sədu(t)* ‘weave’, reflected in Tetun *sɔru* ‘weave’ (see (16) below) and Central Lembata *surit* ‘weaving sword’ (Fricke 2017: 88); as well as

13 Edwards (2021:244): “Blust and Trussel (n.d.) reconstruct PCMP **sora*, including Meto as one of their attestations. The cognates in Timor and Flores appear to be better explained by **sauR*, with no final vowel and **R* [r] instead of **r* [r].”

in PRM *seru ‘weaving sword’ (Edwards 2021). The form that was borrowed into the TAP languages had medial *d changed to /r/.¹⁴

(15) TAP lexeme set meaning ‘sew’, reflecting regional **sədu(t) ‘weave’

TAP Pantar-Straits	Teiwa, Adiabang	<i>rot</i>
	Kaera	<i>səroto</i>
	Reta, Pura	<i>haruata</i>
	Reta, Ternate	<i>arwat:a</i>
	Blagar, Bama	<i>torosi</i>
	Blagar, Kulijahi	<i>rota</i>
	Blagar, Manatang	<i>harota</i>
	Blagar, Nule	<i>rota?</i>
	Blagar, Pura	<i>harota</i>
	Blagar, Tuntuli	<i>torosi</i>
	Blagar, Warsalelang	<i>sorota</i>
TAP West Alor	Adang, Lawahing	<i>naroto?</i>
	Adang, Otvai	<i>harət</i>
	Hamap, Moru	<i>na harot</i>
	Kabola, Monbang	<i>na saroto</i>
	Kafoa	<i>hiota</i>
TAP South Alor	Klon, Bring	<i>{il} harət</i>
	Klon, Hopter	<i>{il} harət</i>
	Kui, Labaing	<i>serot</i>
	Kiraman	<i>surot</i>
TAP Central Alor	Papuna	<i>sərowat ɾ</i>
	Abui, Ulaga	<i>tiro:t</i>
	Suboo	<i>suiɾi</i>
	Tiyei	<i>səot</i>

3.1.3 ‘weave’

The forms for ‘weave’ in the Timor AN languages Tetun and Waima’a are reflexes of the regional protoform **sədu(t) ‘weave’ (Edwards 2021, see ‘sew’ above). Similar forms are attested in the Timor TAP languages Bunak and Makasae, see (16).

(16) Forms for ‘weave’ reflecting **sədu(t) ‘weave’ in AN and TAP languages of east Timor

¹⁴ Hawu *pehədiu* points to earlier medial *d, not *r (Edwards p.c.).

pre-RM **sədu(t) ‘weave’		
AN East Timor	Tetun, Suai	<i>seru</i>
	Waima’a	<i>seru</i>
TAP Timor	Bunak	<i>selu</i>
	Makasae	<i>seru</i>

The regional protoform **sədu(t) ‘weave’ also has reflexes in the TAP languages, but there the forms mean ‘sew’, see (15). In the TAP languages of Central and East Alor, the concept ‘weave’ is expressed by reflexes of borrowed PMP *tənun, *tinun ‘weave’, compare (17)–(18). (The t>s change is unexplained.) The forms could have originated from one or more AN language of Timor, compare Proto Rote-Meto *tenu. However, a direct source in east Timor cannot be established because, as mentioned, the modern AN languages of east Timor do not use reflexes of *tənun/*tinun ‘weave’, but forms of *sauR ‘sew’ instead to denote ‘weave’. It is also possible that the forms of the Central and East Alor languages are (adapted) loans from Malay or Indonesian *tenun*.

- (17) MP reconstructions for ‘weave’
PMP *tənun, *tinun ‘weave’
PFL PFL *tani PRM *tenu AN in East Timor
—

- (18) TAP lexeme set for ‘weave’
- | | | |
|------------------|------------------|----------------------------|
| TAP Central Alor | Abui, Takalelang | <i>tinei</i> ¹⁵ |
| | Suboo | <i>sine</i> : |
| | Tiyei | <i>sine</i> : |
| TAP East Alor | Kamang, Atoitaa | <i>sine</i> |
| | Kula, Lantoka | <i>sinə{na}</i> |

In Alor there are a few weaving communities along the coasts, but it is not known when the weaving technology was introduced. Oral traditions in Alor mention migrating groups who settled on the south coast as people bringing pottery (Wellfelt 2016, 63), and the same groups tend to be associated with weaving. Pottery and textiles were bartered with people in the interior, where there is a taboo on weaving.¹⁶

15 Abui *tinei* ‘weave (cloth)’ was likely the source for the internal derivation Abui *tinɿ* ‘needle’.
16 A similar taboo on weaving is found in some inland areas of Lembata island (Fricke 2019).

Weaving cloth has been considered as a typical Austronesian cultural feature (Blust 2013:24), but there is some evidence that the weaving tradition in Timor was introduced or disseminated only several hundred years ago (Hägerdal 2012). Pigafetta (1522) reported about a visit to Timor: “The chief with whom I went to speak only had women to serve him. [The women] all go naked, just like the other [women on the other islands]. In their ears they wear small golden earrings with hanging brushes at the side. On their arms they wear many bangles of gold and yellow copper until the elbow. The men go about like the women, apart from that they hang certain golden objects, round like a plate, around their necks, and that they wear bamboo combs in their hair, adorned with golden rings. Some of them wear dried pumpkin stems in their ears instead of golden rings.” (Le Roux 1929). Hägerdal (2012, 18) comments: “The alleged nudity of the women (and, apparently, the men) is more puzzling when regarding the long sarongs worn more recently, but it corroborates a Franciscan travel account from 1670. It is therefore possible that the well-known weaving traditions of Timor were introduced or disseminated at a fairly late stage.” Dutch illustrations of the seventeenth century show Timorese men wearing a kind of loincloth made of straps (Hägerdal 2012, 18). In southeast Alor and other places in Alor bark cloth was widely used for garments until the mid-20th century (Wellfelt 2016, 97).

Today, the (few) weaving centres in Alor produce textiles decorated with techniques that in Indonesian are summarised as *songket*. The textile traditions from the south and east coast of Alor show affinities with Timor, which is congruent with other historical sources, both oral and written, and with the borrowing of *t/sine* ‘weave’.

In West Alor, coastal groups produce textiles with clear affinities to the Solor islands, and with inspiration from Indian textiles called *patola*, produced in Gujarat in North West India from the 11th century onwards (Wellfelt 2016, 63). In the TAP languages of West Alor, Straits, and Pantar, no forms related to PMP *tenun are attested for ‘weave’; they use lexemes that are reconstructable to *degi ‘weave’, the source of which (MP or not) is yet unclear.

3.2 Societal Structures

3.2.1 ‘slave’

In the AN languages of Timor, reflexes of PMP *qaRta ‘outsider(s), alien person(s)’ are found to mean ‘slave’, see (19). Edwards (2021) referring to Mahdi (1994:464 ff.) suggests as the meaning of *qaRta ‘negrito, black person’. This is based on the semantics across a wide range of MP languages which points to the original meaning being ‘black/Negrito person’ which, depending on the race of the speakers, was applied either to themselves or a subjugated population. In

many languages of Sulawesi and Maluku reflexes of this etymon have the meaning ‘slave’. Of the TAP family, Bunak and Makalero borrowed a reflex of *qaRta ‘slave’, see (20), and both would be unproblematical borrowings from Tetun. In the Flores-Lembata subgroup, PMP *qaRta is reflected as PFL *ata ‘person’ (not ‘slave’). In the TAP languages not spoken on Timor, different etymons are used, see the forms in (21) and (22), further discussed below.

(19) MP lexeme sets for ‘slave’

PMP *qaRta ‘outsider(s), alien person(s)’		
PFL *ata ‘person’	PRM *ata ‘slave’	AN in East Timor
		Dadu’a <i>ata</i>
		Galolen <i>ata</i>
		Tokodede <i>a:t</i>
		Tetun Dili <i>ata n</i>
		Waima’a <i>ata</i>
		Kemak <i>ata r</i>
		Kemak, Lemia <i>ata</i>
		Idate <i>w ato</i>
		S Mambae, Ainaro <i>ata</i>
		NW Mambae <i>ata n</i>
		C Mambae <i>ata n</i>
		Naueti <i>ata</i>

(20) TAP lexeme set for ‘slave’

TAP East Timor	Bunak, Bobonaro	<i>ata n</i>
	Bunak, Suai	<i>ata n</i>
	Makalero	<i>ata n</i> ‘herder’ (Huber 2011: 542)

The pre-colonial political economy of Southeast Asia already included slave-raiding. Much of Southeast Asia was underpopulated until the 18th and 19th Centuries, and the key to political control was the control of labour power (Hoskins 1996, 3–4). The Makassarese from South Sulawesi played an important role in the pre-colonial and colonial slave trade, obtaining slaves from Alor, Manggarai and Ende in Flores, Timor, Tanimbar, Buton (Sulawesi), Mindanao (Philippines) and Brunei (Borneo) (Raben 2008, 132; Wellfelt 2016, 45). Most forms of slavery in Southeast Asia seem to have originated in debt bondage, but gradually diversified into complex “closed” systems of enduring social stratification and “open” ones of slaves captured primarily for external trade. As Hoskins (1996:4) writes: “Slaves were one of the most important “local products” exchanged from the hinterland for sale in entrepôts along the coasts,

and they were usually obtained by raiding inland communities.” In Timor as well as elsewhere in eastern Indonesia, slaves were an important trade commodity for the colonial Portuguese and Dutch VOC, alongside sandalwood and beeswax (Hägerdal 2012). Slave-raiders not only came from Sulawesi but also from the east. An unpublished grammar sketch of Iha, a Papuan language spoken on the Bomberai peninsula in Southwest Papua (Coenen 1953), mentions that in pre-contact times the Iha speakers went on slave expeditions all the way to the Kei and Tanimbar islands. In turn, there is a tradition in Fataluku (East Timor) that they came from the Kei islands (Voorhoeve 1989). This suggests that maritime contacts existed between the two ends of the chain Papua-East Timor, and a point in between, Kei; and that people movements took place along that chain.

On Alor, oral histories report about inland people such as the Abui being abducted and traded as slaves by coastal populations (Wellfelt 2016, 298, 300). An example are the Kolana (Sawila speakers) on the east coast of Alor. Kolana was allied with Liquiçá on the north coast of East Timor, with whom they traded wax, honey, cattle, and slaves, the latter acquired in wars or by kidnapping (Wellfelt 2016, 100). In 1851 van Lynden mentions Alor and Pantar as a former source of slaves to foreign traders, and the Oecusse enclave in north Timor is mentioned as a recipient of slaves from the Alor and Pantar: ‘In former days, Alor and Pantar provided many slaves and even now there are sometimes slaves being supplied to foreign traders, and to the Timorese (Oekoessie [Oecusse]) who are subject to Portugal [...]’ (Van Lynden 1851:332). According to a Dutch report from 1879, slaves from Alor were sold in Liquiçá via the regent in Lamahala on Adonara island—and the Portuguese commander received a head tax for each imported slave. The year after, in 1880, another report was highly critical of the rulers in Kui on the south coast of Alor and Kolana on the east coast. Both were accused of having brought mountain people from Alor to be sold as slaves in Liquiçá (Wellfelt 2016, 103).

Tetun *malae* refers to foreigners or traders who came from overseas. Reflexes of this word denote ‘slave’ in TAP languages of the Pantar Straits and West Alor, as well as in South and East Alor, and Bunak Maliana, see (21). The use a word similar to *Malay* to refer to a slave would suggest that slaves were associated with people who do not (originally) belong to one’s group.¹⁷ The centuries of slave trade from Alor Pantar to Timor, also involving the Solor islands, may have

17 In (Austronesian) Kemak Kutubaba the Indonesian/Malay word *matroos* ‘sailor’ (originally from Dutch *matroos* ‘sailor’) is used to denote ‘slave’. Just like the case of *malai*, the same word is used here to refer to both a non-indigenous person and a slave.

caused the borrowing of a form similar to the Tetun word *malae* ‘slave’ into languages across Alor and Pantar.

- (21) TAP lexeme sets for ‘slave’ reflecting Tetun ‘foreigner(s), trader(s) from overseas’

Tetun *malae* ‘foreigner(s) or trader(s) from overseas’

TAP Pantar-Straits	Reta, Pura	<i>mala:l</i>
TAP West Alor	Kafoa	<i>madal</i>
	Klon, Bring	<i>məlei</i>
TAP Central Alor	Papuna	<i>maja:</i>
TAP South Alor	Kui, Labaing	<i>mara</i>
TAP East Alor	Kamang	<i>mai</i>
	Sawila	<i>male</i>
	Wersing	<i>məlai</i>
TAP East Timor	Bunak, Maliana	<i>milah</i>

In the Pantar-Straits area, Kaera and Blagar-Tuntuli borrowed the Indonesian/Malay form *jongos* [dʒoŋos] ‘houseboy’ for the notion ‘slave’, as shown in (22). Originally, the word is from Dutch *jongen(s)* [joŋən(s)] ‘boy(s), houseboy(s)’. In Kaera, either the original Dutch form with initial [j] was borrowed (which seems unlikely, because there was no Dutch-speaking population on Pantar), or the initial affricate of the Malay form was simplified to [j] in Kaera because Kaera lacks a phonemic affricate /dʒ/ (Klamer 2014).

- (22) TAP lexeme set for ‘slave’ reflecting Malay/Indonesian [dʒ] *ongos* ‘houseboy’

Malay/Indonesian *jongos* ‘houseboy’

TAP Pantar-Straits	Kaera	<i>joŋos</i>
	Blagar Tuntuli	<i>dʒoŋos</i>

The question may arise why at least three different etymons were borrowed for the same notion. Obviously, part of the answer lies in the different contact histories of the various regions, as the regional differences discussed above indicate. An additional explanation might be that, for many of the word lists used in this paper, the word for ‘slave’ was elicited using the Indonesian prompt *budak*. In Indonesian, this word has various meanings including ‘lad, boy’, ‘servant, underling’, and ‘serf, slave’, and thus it appears to have elicited words of a similar semantic range in the target languages.

In western interpretations, the notion of ‘slave’ means a person who is the servant-property of another person, and who can be bought and sold as such.

In the regions where we did our surveys in Flores, Pantar and Alor, the translations of Indonesian *budak* include this meaning but may also refer to people who are temporary servants ('debt slaves'), or to people who are not, or no longer, part of a particular clan lineage; for instance, orphans, newcomers or strangers. An example of this latter type is reported in Wellfelt (2016, 46). In an Adang village (West Alor) a story tells of a young man from Welai (Abui territory in Central Alor) who was taken from his parents and sold by relatives to traders from Binongko, Sulawesi. The traders ran into a storm and were forced to seek shelter in West Alor. The boy was set free and ended up with an Adang-speaking community in the mountains where he became founder of a new lineage. The abduction and sale of the boy is said to have happened 13 generations (i.e., 300–400 years?, MK) ago. Orphans and newcomers can start their own lineage in a clan, but unless they are adopted into an existing lineage, their lineage will retain a different (often lower) status. For example, they will not be allowed to take part in the ritual negotiations relating to marriage exchanges, but will have practical duties in support of these negotiations, such as organising the food. People in such non-autochthonous lineages may in some ways be considered as servants to the community, but they are not 'owned' by an individual or by a particular autochthonous lineage.

Budak can also be used to refer to war prisoners that are incorporated into the group who captured them, e.g. to become their wives; or prisoners who are given away to another group as part of a peace treaty. In their new environment, such 'slaves' do not necessarily get a lower societal position, nor are they necessarily seen as servants. In fact, they can become normal members of their new group. For example, a captured woman can be treated like all the other women who marry into the clan, and captured children may be adopted by childless couples who bring them up as their own children.

3.2.2 'king, ruler'

The Tetun compound *liu rai* 'king, executive ruler' (lit. 'surpassing (the) earth/estate', cf. Hägerdal 2009, 49), commonly written as *liurai*, has been borrowed into a number of TAP languages on Timor, as well as in languages in South and East Alor that were in contact with Timor (cf. Wellfelt 2016), see (23).

(23) TAP lexeme set for 'king, ruler' reflecting Tetun *liurai*

Tetun *liurai* 'king, executive ruler'

TAP South Alor Klon, Hopter *lɛ:r*

TAP East Alor Kamang *le:i*

Kula, Lantoka *lɛ:r*

TAP East Timor	Sawila	<i>liri</i>
	Wersing	<i>lɛri</i>
	Bunak	<i>liurai</i>
	Makasae	<i>dai</i>

In TAP languages of Pantar, the concept ‘king’ is expressed with forms related to Malay/Indonesian *rad̥ʒa* ‘king’, possibly through the form that was borrowed into Adonara Lamaholot, as shown in (24), or else directly borrowed from Malay/Indonesian. In both Adonara and the TAP languages of Pantar, the affricate in *rad̥ʒa* has been simplified to [j], because none of these languages have a phonemic affricate [d̥ʒ]. The borrowing may be pre-modern or modern, but cannot be very recent, as currently, the *d̥ʒ* in Indonesian/Malay loans occurring in any of the these languages is not simplified to [j].

(24) MP and TAP lexeme set for ‘king’		
Mly/Ind <i>rad̥ʒa</i> ‘king’		
MP Flores-Lembata	Adonara Lamaholot	<i>raja</i> ‘king’
TAP Pantar	Tubbe	<i>raja</i> ‘king’
	Sar	<i>raja</i> ‘king’
	Teiwa, Lebang	<i>raj</i> ‘king’
	Kaera	<i>rai</i> ‘king’

3.3 *Body Parts*

3.3.1 ‘breast’
PMP **susu* is reflected in PFL *(t)*usu* and PRM **susu*. Reflexes of **susu* are also attested in the AN languages in the north of eastern Timor, see (25). Reflexes of a form with initial /s/ were borrowed into the TAP languages of Timor, see (26) (but Fataluku shows a reflex of PTAP **hami* ‘breast’).

(25) MP lexeme set for ‘breast’		
PMP * <i>susu</i>		
PFL *(t) <i>usu</i>	PRM * <i>susu</i>	AN in East Timor
		Dadu’a <i>susu</i>
		Galolen <i>susu n</i>
		Tokodede <i>susu</i>
		Tetun Dili <i>susu n</i>
		Waima’a <i>susu {wai}</i>
		Kemak <i>susu r</i>
		Idate <i>susu</i>
		S Mambae, Ainaro <i>susu</i>
		Naueti <i>susu</i>

(26) Lexeme set for ‘breast’ in TAP languages of East Timor

TAP East Timor	Bunak, Bobonaro	<i>su:</i>
	Bunak, Maliana	<i>su:</i>
	Bunak, Suai	<i>su:</i>
	Makasae	<i>dudu</i>
	Oirata	<i>susu</i>

The TAP languages Kui and Kiraman on the south coast of Alor borrowed a form with an initial fricative *su*, (27). The source of this borrowing event is also likely to be (the ancestor of) an AN language spoken on the northern Timor coast, as these all have forms starting with /s/. In the TAP languages of Pantar-Straits and West Alor a form with an initial plosive was borrowed, similar to PFL *(t)usu (but dropping the final vowel). The donor is likely to have been Alorese *tuho*. The other languages of Alor Pantar, including those in East Alor and Fataluku on Timor, show reflexes of PTAP *hami ‘breast’.

(27) Lexeme set for ‘breast’ in TAP languages of Alor Pantar

TAP Pantar-Straits	Kaera	<i>tu:</i>
	Blagar, Bama	<i>tu:</i>
	Blagar, Tuntuli	<i>-tu</i> ¹⁸
TAP West Alor	Adang, Lawahing	<i>to?</i>
	Adang, Otvai	<i>to</i>
	Kabola, Monbang	<i>oto?</i>
	Kafoa	<i>tot</i>
	Klon	<i>do:t</i>
TAP Central Alor	Abui, Ulaga	<i>-tuti</i>
TAP South Alor	Kiraman	<i>-su</i>
	Kui, Labaing	<i>-su</i>

3.3.2 ‘navel’

PMP *pusej is reflected in PFL *pusər (with an irregular final /r/). There are no reflexes of forms with a final glide attested in any of the TAP languages. Forms with an initial plosive /p/ and (reflexes of) a final liquid are found in Blagar and Reta in the Straits, and in Adang, and Kafoa in West Alor, compare (28)–(30). Forms without a medial /s/ in Blagar, Reta and Adang could be loans from an Alorese variety spoken on neighbouring Pantar island, as these varieties have *puhər* ‘navel’ (while most other Alorese varieties have forms with

18 The bound forms take obligatory inalienable possessor prefixes.

a prefix, as for example Alorese Marica), see (29). The forms with a medial /s/ point to a different source; they may have been borrowed directly from Malay.

The languages of Alor that are spoken further east have a different source. The form *kubu* in Wersing has an unexplained initial syllable that reflects the initial syllable of Tokodede *kupusa*, Alorese Marica *kəpuhɔr*, and is also found in other Western and Central Lamaholot languages (Fricke 2019). This suggests that there once was an older regional form with a prefix, which has modern reflexes in Timor as well as Flores-Lembata. The form in Wersing in particular probably originates from Tokodede on the north coast of Timor, given the geographical proximity and the contacts we know existed between groups in East Alor and North Timor (Schapper & Klamer 2017; Schapper & Wellfelt 2018). A shortened reflex *-bu(:)* is found in the sister languages of Wersing, Kamang and Tiyei.

(28) MP lexeme set for ‘navel’

PMP *pusej (Blust and Trussell n.d.); Malay <i>pusar</i> ‘navel’		
PFL *pusər	PRM *husə	AN in East Timor
	Tetun Dili	<i>husar</i>
	Tetun Suai	<i>husar</i>
	Tokodede	<i>ku pusa</i>
	Kemak	<i>pusrar</i>
	Waimaha	<i>huso</i>
	Idate	<i>usar</i>

(29) Lexeme set for ‘navel’ in Alorese varieties

PFL *pusər	PRM *husə	Alorese, Helandohi	<i>puhɔr</i>
		Alorese, Wailawar	<i>puhɔr</i>
		Alorese, Munaseli	<i>puhɔr</i>
		Alorese, Pandai	<i>puhor</i>
		Alorese, Marica	<i>kə puhɔr</i>

(30) TAP lexeme set for ‘navel’

TAP Pantar-Straits	Blagar, Warsalelang	<i>-pusal</i>
	Blagar, Bama	<i>-pusal</i>
	Blagar, Tuntuli	<i>-pusal</i>
	Blagar, Kulijahi	<i>puar</i>
	Blagar, Nule	<i>puar</i>
	Reta, Pura	<i>puhal</i>
	Reta, Ternate	<i>-pual</i>

TAP West Alor	Adang, Lawahing	<i>ʔa pojʔeŋ</i>
	Adang, Otvai	<i>ʔa puhei</i>
	Hamap, Moru	<i>-puhe</i>
	Kabola, Monbang	<i>-pusu</i>
	Kafoa	<i>-puhai</i>
	Klon, Bring	<i>-poɦə geŋ</i>
TAP East Alor	Klon, Hopter	<i>-puhi geŋ</i>
	Kamang, Atoitaa	<i>-bu</i>
	Tiyei	<i>-bu:</i>
	Wersing	<i>ku bu</i>

The wide-spread borrowing of an MP word for ‘navel’ across the Alor languages is probably due to its socio-political connotation of ‘centre, head quarters’. The variable patterns of the loans indicate at least three different donor languages: Alorese, Tokodede, and Malay, where borrowing from Malay is likely to have involved separate borrowing events across the island.

3.4 *Subsistence and Trade*

To this semantic domain belong ‘seed’, and ‘maize’, discussed below, but also ‘salt’ (section 2.2.1) and ‘slave’ (section 3.2.1). Including the concept ‘skin’ in this domain is motivated in the relevant section below.

3.4.1 ‘seed’

PMP *binəhiq ‘seed’ is reflected with forms like *fini*, *hini* or *wine* in the AN languages of Timor, see (31). In the TAP languages of Timor, only Bunak-Maliana has a form reflecting the original initial /b/, (33), so Bunak must have borrowed the word either before the sound change *b > w, f, h took place in Timor, or it borrowed the word from an unknown AN source that retained the original /b/. The original /b/ is also found in the loans of Abui, Kamang, Suboo and Tiyee, spoken in Central and East Alor, (33). This might suggest that the forms were borrowed from Bunak, but contact between Central and East Alor and the innerland Bunak seems unlikely. In the west Timor languages, the bilabial stop is also retained, cf. PRM *bini (Edwards 2021) so a predecessor of one of these west Timor languages could also have been the donor of the loans into the Alor languages. Alternatively, the borrowing into TAP may have occurred from an east Timor language before the initial /b/ of PMP *binəhiq started to vary in Timor. In the Flores-Lembata languages no reflexes of *binəhiq are found except in Sika (spoken in the Central Flores region), shown in (32). (Most of the Flores-Lembata languages use a form #kuluk (Fricke 2019), a form that has been borrowed as *kulu* (probably through Alorese) into the TAP languages Blagar Kulijahi and Blagar Nule. This form is not further discussed here.)

(31) MP lexeme set for ‘seed (rice)’

PMP *binəhiq ‘seed rice, rice set aside for the next planting’

LH-KD #kuluk	PRM *bini	AN in East Timor	
		Galolen	<i>hini</i>
		Tetun Dili	<i>fini</i>
		Tokodede	<i>hi:ni</i>
		Kemak	<i>hini</i>
		Waimaha	<i>wine</i>
		Idate	<i>hini</i>
		W Mambae, Barzatete	<i>hina</i>
		NW Mambae, Hatulia	<i>fini</i>
		S Mambae, Hatu-Udo	<i>hiin</i>
		S Mambae, Ainaro	{ <i>na:m</i> } <i>hiin</i>

(32) Reflexes of MP *binəhiq ‘seed’ in Flores-Lembata

AN Flores-Lembata	Sika-Hewa	<i>ihin</i>
	Sika Tana Ai	<i>βini</i>

(33) TAP lexeme sets for ‘seed’

TAP Central Alor	Abui	<i>bi: ka</i>
TAP East Alor	Kamang, Atoitaa	<i>bile; bini</i>
	Suboo	<i>bile</i>
	Tiyei	<i>bili:</i>
TAP East Timor	Bunak Maliana	<i>bin</i>

3.4.2 ‘maize’

Maize originates from South America and was taken to eastern Indonesia through the Iberian colonial trade network. Maize was first introduced in the Timor region in the period 1540–1650 (Hägerdal 2012:16). In the region under study, lexemes similar to PMP *batad (but with a final /r/) generally mean ‘maize’, as in the AN languages of Flores-Lembata (PFL *vatar ‘maize’) and the AN East Timor forms listed in (34).

PMP *batad ‘millet or sorghum sp. (unident.)’ is listed in Blust and Trussel (n.d.) on the limited evidence of three related forms from the Philippines, to which we can add Bugis *bata?* ‘sorghum’. It is unclear how old sorghum is in Southeast Asia. Lexical and ritual evidence presented in Fox (1991) indicates that it preceded maize as subsistence crop in eastern Indonesia. Makassar has *batara?* ‘millet’ (Cense 1979), and since the Makassarese were involved in inter-regional trade including eastern Indonesia since before the colonial times (see the discussion of ‘slave’ in section 3.2.1), Makassar *batara?* could be the source

of a regional form *batar*, which assimilated millet and/or sorghum and maize (Fox 1991).

A Dominican source mentions maize on Lembata and Pantar shortly after 1641 (Hägerdal 2010, 224). Maize was grown in westernmost Timor by 1658, but must have been known some time before, since by then it was already the main crop (Hägerdal 2012, 50). In contrast, in some parts of Alor, maize was only introduced in the 20th C (Wellfelt 2016, 101). While the food was introduced relatively recently in certain parts of the region, the word seems to have a long history in the AP subfamily, and it may originally have referred to an earlier crop like sorghum, as it did in Kambara on Sumba, where *wataru* means both ‘maize’ and ‘sorghum’ (Forth 1983: 62).

Reflexes of PMP *batad or regional #batar ‘maize’ are not found in the TAP languages of Timor. However, in Alor Pantar, the form is attested everywhere, see (35). This form is strikingly similar to the forms attested in the AN languages of east Timor, see (34), and it is likely to have been borrowed from there. The Flores-Lembata region is an unlikely region of origin, because of the initial fricative in PFL *vatar.

(34) MP lexeme sets for ‘sorghum species’, ‘millet species’, ‘maize’

PMP *batad ‘sorghum sp., <i>Andropogon sorghum</i> ’	
PMP *bətəŋ ‘millet species, probably foxtail millet, <i>Setaria italica</i> ’	
PFL *vatar ‘maize’	PRM *betə ‘millet’
AN in East Timor	
	Idate
	Tetun Dili
	Tetun, Suai
	Mambae
	<i>pata:r</i> ‘maize’
	<i>batar</i> ‘maize’
	<i>batar</i> ‘maize’
	<i>batar</i> ‘maize’

The initial /b/ of *batar shows regular sound correspondences across the AP languages, e.g.: b>f in Abui, b>p in Kula, Sawila and Wersing, see (35). The final /r/ regularly got lost in Abui. If the word was introduced into the AP languages together with the introduction of the new staple food maize since the 17th C, this means that these sound changes must have occurred later than 400 years ago. Alternatively, the word may be an older loan that originally referred to ‘sorghum’ which assimilated the meaning of ‘maize’ after that crop was introduced, as it did in Timor and Sumba (Fox 1991).

(35) TAP lexeme set for ‘maize’

PAP *batar	
TAP Pantar-Straits	Tubbe
	Klamu
	<i>bat:e</i>
	<i>bata</i>

	Sar	<i>batar</i>
	Teiwa, Lebang	<i>batar</i>
	Teiwa, Nule	<i>batar</i>
	Kaera	<i>batar</i>
	Reta, Pura	<i>batal</i>
	Blagar, Bama	<i>batar</i>
	Blagar, Kulijahi	<i>batar</i>
	Blagar, Manatang	<i>batar</i>
	Blagar, Nule	<i>batar</i>
	Blagar, Pura	<i>batar</i>
	Blagar, Tuntuli	<i>batar</i>
	Blagar, Warsalelang	<i>batar</i>
TAP West Alor	Adang, Otvai	<i>bate</i>
	Adang, Lawahing	<i>bati?</i>
	Klon, Hopter	<i>bat</i>
TAP Central Alor	Abui, Takalelang	<i>fat</i>
	Abui, Fuimelang	<i>fa:ti</i>
	Papuna	<i>ba:ti</i>
TAP South Alor	Kiraman	<i>bati</i>
	Kui	<i>batar</i>
TAP East Alor	Kamang, Atoitaa	<i>patei</i>
	Suboo	<i>pati:</i>
	Tiyei	<i>pati</i>
	Wersing, Maritaing	<i>peter</i>
	Sawila	<i>pata</i>
	Kula, Lantoka	<i>pte, p̄te</i>
TAP East Timor	–	

3.4.3 'skin'

PMP *kulit 'skin; bark' is reflected in the AN languages of Flores-Lembata and Timor, see (36), as well as in modern Malay/Indonesian *kulit*. A reflex of this form is found throughout the TAP languages, where almost all lexemes reflect #kuli, with the final /t/ consonant lost, as shown in (37). Some but not all of the TAP lexemes show regular sound changes: PAP *l>i in Kaera *koi*, PAP *l>i and *k>ʔ in Adang *ʔui*. None of the TAP loans have more than two consonants, except Blagar Kulijahi -*ʔulit*, which could be a modern loan from Indonesian *kulit*, and Wersing *klut*, which is similar to Tokodede *kulut*.

(36) MP lexeme set for ‘skin, bark’

PMP *kulit ‘skin; bark’

PFL *kulit	PRM—	AN in East Timor
	Dadu’a	<i>uli k</i>
	Midiki	<i>kuli ŋ</i>
	Kemak	<i>ulit ir</i>
	Tetun Dili	<i>kulit</i>
	Tokodede	<i>kulut a</i>
	Naueti	<i>kuli</i>

(37) TAP lexeme set for ‘skin, bark’

TAP Pantar-Straits	Tubbe	<i>kili</i>
	Kaera	<i>koi</i>
	Blagar, Warsalelang	<i>pi kol</i>
	Blagar, Bama	<i>pi kol</i>
	Blagar, Tuntuli	<i>qol</i>
	Blagar, Kulijahi	<i>pi ʔulit</i>
TAP West Alor	Adang, Lawahing	<i>ʔui</i>
	Adang, Otvai	<i>ʔuil</i>
	Hamap, Moru	<i>oil</i>
	Kabola, Monbang	<i>pi kul</i>
	Kafoa	<i>kɔ:l</i>
	Klon	<i>koi</i>
TAP Central Alor	Abui	<i>te kul</i>
TAP South Alor	Kui, Labaing	<i>ta kuil</i>
	Kiraman	<i>kuli</i>
TAP East Alor	Kamang, Atoitaa	<i>na kul</i>
	Suboo	<i>ne kul</i>
	Tiyei	<i>kul</i>
	Wersing	<i>klut</i>
TAP East Timor	Makasae	<i>uli</i>

In Alor, bark cloth was widely used for garments until the mid-20th century (Wellfelt 2016:63, 97), and the widely spread borrowing of the concept ‘skin’ could be related to this, because the skin of certain tree were stripped to make bark cloth. There is archaeological evidence that the introduction of bark cloth technology followed the spread of Neolithic culture from southern China into Island Southeast Asia where bark cloth was substituted for other kinds of fibre materials (cf. Wellfelt 2016, 97). This may suggest that the bark clothing was introduced with the Austronesian word for it.

3.5 *Marriage*

3.5.1 'bride price'

Loan forms denoting 'bride price' that are similar to PMP *bəli 'value, price, marriage prestations, brideprice, purchase' are found all over TAP, see (38) and (39). However, they do not show regular sound correspondences. For instance, we do not witness the expected regular correspondence between initial/medial PAP *b > f in Abui, and initial PAP *b > p in Kamang, see (39). Most TAP forms have lost the second syllable of PMP *bəli, with the exception of the disyllabic loans attested in the Pantar-Straits, and in Fataluku.

In the TAP languages, forms with initial *b are attested across the region. It is unclear where the loans originated from. If they came from Timor, the donor form must have had an initial stop. None of the modern AN languages of east Timor retained the initial stop, but PRM did have it, so borrowing could have happened at an earlier stage, before the initial consonant of PMP *bəli started to vary in the Timor region. In Flores-Lembata the initial stop of PMP *bəli was already changed into a fricative at the stage of PFL *veli, so if the donor was a language from the Flores-Lembata region, the borrowing occurred already before the stage of PFL.

Interestingly, in the region that is geographically closest to Flores-Lembata, the Pantar-Straits, no reflexes of PFL *veli are attested, but rather of *beli, see (39). The vowels and the syllable structure of these Pantar-Straits forms are different from the forms attested on Alor, and more similar to modern Malay/Indonesian *beli* 'buy' or *belis* 'bride price'. The word *belis* 'bride price' is generally used in the Malay/Indonesian variety spoken in the eastern province (NTT) of Indonesia (Jones, Hull & Mohamad 2011). It is quite common to hear speakers of local languages use the loanword *belis*, likely because marriages are also frequently arranged between communities with different languages. This may suggest that the forms in the Pantar-Straits represent a different (possibly more recent) borrowing event involving *belis*. In general, the irregular forms suggest that the borrowing of reflexes of PMP *bəli occurred multiple times and from different sources.

(38) MP sets for 'bride price'

PMP *bəli 'value, price, marriage prestations, brideprice, purchase'

PFL *veli¹⁹ PRM *beli AN in East Timor

East Tetun

*foli*_n²⁰

19 PFL *veli 'price; bride price; expensive; buy'.

20 East Tetun *folin* 'price, cost, value; objects for barter' (Morris 1984:35).

	Kemak	<i>heli r</i>
	NW Mambae, Hatulia	<i>heli n</i>
	Naueti	<i>weli</i>
(39) TAP lexeme sets for ‘bride price’		
TAP Pantar-Straits	Reta, Pura	<i>bili {pala}</i>
	Reta, Ternate	<i>ta bɛli</i>
	Blagar, Bama	<i>wili {pala}</i>
	Blagar Manatang	<i>?e bɪli</i>
	Blagar, Nule	<i>e bəli</i>
	Blagar, Tuntuli	<i>ge vili</i>
TAP West Alor	Adang, Otvai	<i>fali</i>
	Kabola, Monbang	<i>?o wol</i>
TAP Central Alor	Abui, Takalelang	<i>he bel</i>
TAP East Alor	Kamang, Atoitaa	<i>fa:l</i>
	Suboo	<i>bal</i>
	Tiyei	<i>bal</i>
	Bunak	<i>bɔl</i>
TAP East Timor	Fataluku	<i>wala {hana}</i>

The pairs in Reta Pura *bili pala* and Blagar Bama *wili pala* are probably borrowed from Alorese, which has the compound *feling palang* ‘dowry paid by the groom’s family to the bride’s family’.²¹

4 **Summary of the Findings**

The Austronesian lexical influence on the TAP languages as reflected by the loans discussed above can be characterized as involving animals (pig, deer), textile technology (needle, to weave, to sew); societal structures (slave, king/ ruler), body parts (breast, navel), subsistence and trade (salt, seed, maize, skin), and marriage (bride price). The widely spread MP word for the body part ‘navel’ probably relates to its socio-political connotation of ‘centre, head quarters’, while ‘skin, bark’ may have been a trade item as clothing in the region was often made from tree bark until the 19th C (Van Lijnden 1851: 332).

21 The second half of the compound *palang* does not appear to have an independent meaning in Alorese. Thanks to Yunus Sulistyono for checking this with native speakers in Alor and Pantar in July 2020.

The MP loans discussed above differ in their donor region; an overview is given in (40). For some loans the donor region cannot be established, (40a), or the loan may have various different regions of origin, (40b). The loan may also be either from Timor or from Flores-Lembata, or from both (40c). Timor is the region where most of the AN loans investigated in this paper come from (40d). Certain loans from Timor have spread over the entire TAP family ('pig', 'salt'), or all over Alor Pantar ('maize'), while others show more regional diffusion patterns, particularly in the languages of South and East Alor. Where a loan can be seen to originate in (only) the Flores-Lembata region, it has spread to the languages of Pantar, Straits and West/Central Alor, but not beyond to the languages of South and East Alor, (40e). Where an individual language can be identified as donor, it is often a language from Timor, although both Malay and Alorese in the Pantar-Straits region have also been identified as donors, see (40f).

(40) Overview of donor regions of loans discussed in the paper.²²

Concept	PMP or lower proto forms; sets of related forms	Recipient language(s)
a. <i>Unknown donor region</i>		
'deer'	PWMP *uRsah 'deer' FL #rusa PRM #rusa	PAP *arusa 'deer', across AP
'skin'	PMP *kulit 'skin; bark'	#kuli 'skin', across TAP
b. <i>Various donor regions</i>		
'bride price'	PMP *bəli	Across TAP
c. <i>Donor region in Flores-Lembata and/or Timor</i>		
'sew'	pre-Rote Meto **sauR 'sew' Lamaholot, Kedang #saur 'sew'	AP languages in East Alor
'sew'	pre-Rote Meto **sədu(t) 'weave', PRM *seru 'weaving sword'	All AP languages, except East Alor
'weave'	PMP *tenun, *tinun 'weave' PRM *tenu 'weave'	AP languages in Central and East Alor

22 A form with * represents a reconstructible proto form, a form with # represents sets of similar lexemes for which a proto form has not been reconstructed.

‘navel’	PMP *pusej	AP languages in Pantar, Straits, West Alor, East Alor
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d. *Timor donor region*

‘pig’	PMP *babuy	PTAP *baj, across TAP
‘salt’	PMP *qasiRa ‘salt’, PTB *asiRa	PTAP *asir, across TAP
‘slave’	PMP *qaRta ‘outsider(s), alien person(s)’	Bunak, Makalero
‘needle’	PMP *zaRum ‘needle’	TAP in Timor, AP languages in East Alor
‘weave’	pre-Rote Meto **sədu(t) ‘weave’	Bunak, Makasae
‘breast’	PMP *susu, PRM *susu	TAP in Timor, AP in South Alor
‘seed’	PMP *binehiq ‘seed rice, rice set aside for the next planting’	Bunak, AP in Central and East Alor
‘maize’	?PMP *batad ‘sorghum sp., <i>Andro- pogon sorghum</i> ’ Regional #batar (< Makassar <i>batara</i> ??)	AP languages across all of Alor and Pantar

e. *Flores-Lembata donor region*

‘needle’	PMP *batuR ‘weave’	AP languages in Pantar, Straits and West Alor
‘breast’	PMP *susu, PFL *(t)usu	AP languages in Pantar, Straits, West and Central Alor

f. *Individual donor language*

	Donor language	Recipient language
‘deer’	Tetun <i>bibi rusa</i>	Bunak, Makasae
‘king, ruler’	Tetun <i>liurai</i>	Bunak, Makasae
		AP languages in South and East Alor
‘slave’	Tetun <i>malae</i> ‘foreigner’ Malay/Ind (< Dutch) <i>jongos</i> ‘houseboy’	Across TAP Kaera, Blagar-Tuntuli
‘king, ruler’	Adonara Lamaholot <i>raja</i> ‘king’ or Indonesian/Malay <i>rad̥ʒa</i> ‘king’	AP languages in Pantar
‘skin’	Tokodede <i>kuluta</i> ‘skin’	Wersing <i>klut</i>
‘navel’	Tokodede <i>kupusa</i> ‘navel’ Alorese <i>puhɔr</i> ‘navel’	Wersing <i>kubu</i> Blagar <i>puar</i> , Reta <i>pual</i> , <i>puhal</i> , Adang <i>puhei</i>

A relatively high number of pre-modern MP loans appear in (i) Bunak, (ii) South and East Alor, and (iii) the Pantar-Straits. It is possible to identify a few individual donor languages in these regions: Tetun for Bunak, Tokodede and Tetun for languages in South and East Alor, Alorese and Malay for languages of the Pantar-Straits region, see (40f). However, in most cases, the donor language remains unknown.

The three regions can be considered different zones of contacts between TAP speakers and MP communities for two reasons: first, because different lexemes were borrowed in each of the regions, and second, if the same concept was borrowed, as in 'breast' and 'needle', the borrowing involved different forms. It is expected that the TAP languages were in contact with MP in different locations, because Pantar-Straits and South and East Alor as well as Bunak are geographically remote from each other, and there was likely little or no direct contact between them. At the same time, sea currents and sailing proximity allowed speakers in South and East Alor to have contact with communities on the northern coast of Timor island, while communities in the Pantar-Straits were oriented towards the islands Lembata, and Flores beyond it.²³ And the Bunak as inland people on Timor had yet a different set of MP communities as neighbours in central Timor.

5 Discussion and Conclusions

The social context in which the contact between groups takes place plays an important role in determining how linguistic changes caused by contact are shaped and constrained (Muysken 2010). Further, diagnosing contact-induced change may help to reconstruct the history of small-scale speech communities (Ross 2013). Bilingually-induced change is change which bilingual speakers introduce into one of their languages on the model of their other language (Ross 2013: 6). It typically leads to lexical calques (loan translations), grammatical calquing which copies grammatical forms but not their syntax, or syntactic restructuring, which copies both the grammatical forms and their syntax (Ross 2013: 27). Shift-induced change is change introduced by speakers who abandon

23 Numeral systems also present evidence for these regionally bound contacts between AP languages and MP languages in the west and the south: Kedang (Lembata island) has borrowed a unique quinary numeral from Pantar languages, and the north-central Timor languages Tokodede and Mambae have quinary numerals from 'six' through 'nine', a pattern that stands out against the typically conservative numeral systems of the Austronesian languages elsewhere on Timor (Schapper & Klammer 2017).

the community language in favour of another language in their repertoire, the language to which they are shifting. Shift-induced changes mentioned in the literature include phonological transfer, constructional transfer, and simplified (morpho)syntax (Ross 2013: 30). Limited and scattered lexical borrowing from MP into TAP, as discussed in this paper, points to contacts that neither involved bilingualism nor shift.

Recent studies of language contact in the Lesser Sunda region have shown that contact between MP and non-MP (TAP) languages led to different types of language change, and in what follows the findings of the current paper are placed in the context of the different contact situations attested in the region (see also Klamer, to appear).

The first type of contact situation is when there was a relatively *short* period involving a large group of speakers who were bilingual in an MP and non-MP language, followed by a shift to the AN language that was initially spoken as second language by the speakers. This is likely to have happened in the history of Sika (Elias 2018: 119), and in the history of Proto Central Flores (Fricke 2019). The outcome of this type of language contact has been a simplification of the morphology of the MP language they had shifted to, because the shift involved adults who learned the second language imperfectly. The effect of the non-MP substrate language on the MP language is the addition of some new vocabulary (19% in Sika since Proto Flores-Lembata times; Fricke 2019). No syntactic features without accompanying lexicon of the substrate non-AN language ended up in the MP language.

Second, there are several attested cases where there was a *prolonged* period of intense and intimate language contact in the form of bilingualism in a non-MP language and MP language over several generations, which was then followed by a shift to the MP language. This has happened in the history of Proto Flores-Lembata, and again in its descendants Kedang, and Lamaholot (Fricke 2019: 416–417). The effect of the non-MP substrate language on the shifted MP languages Kedang and Lamaholot was the addition of a significant amount of new vocabulary (34% in Western and Central Lamaholot and 24% in Kedang since the time of proto Flores Lembata). In addition, there was a change in the syntax of the MP languages, and some semantic features were added to it (cf. the overview in Fricke 2019: 411–413).

A similar contact situation happened in Timor in the history of Uab Meto in the Proto Rote Meto group. The effect of that contact has been that Meto now has two parallel lexicons, each with their own set of regular sound correspondences: one containing reflexes of Proto MP lexemes, the other containing lexemes for which no MP origin has been found (Edwards 2016; 2018a). The sheer size of the non-MP vocabulary (including basic vocabulary), and the fact

that it has restructured the phonological system of the language, points to a prolonged period of intimate contact between one or more incoming MP language(s), and one or more non-MP languages that were spoken in the region before their arrival, followed by a shift to the MP language.

On Timor, there are also situations where MP speakers are on their way of shifting to a TAP languages: MP Makuva speakers have almost entirely shifted to TAP Fataluku, and MP Naueti and Waima'a show serious Makasae influence. In the past, shifts must have happened in the history of Bunak. The modern lexicon of Bunak contains 30% of MP vocabulary including many items of core vocabulary (Schapper 2011: 37). Certain syntactic constructions in Bunak show a clearly Austronesian (verb-medial) word order (e.g. in the 'give' construction, Klammer and Schapper 2012: 196–197). In some of the loans from MP Tetun, the original Tetun morphology has been reanalysed to fit the Bunak patterns (e.g. the Tetun causative prefix *ha-* has been reanalysed as part of the Bunaq inflectional paradigm, Schapper 2011: 41–42). Large non-inherited vocabularies coupled with morpho-syntactic changes in the target language typically point to a history involving a prolonged or repeated periods of bilingualism.

The third situation is when the bilingualism is *stable* and can go on for centuries rather than generations, without ending in a shift. An example of this situation is MP Alorese, spoken in communities consisting of bilinguals whose first language is non-MP Adang and second language is Alorese as described by Moro (2021, 2018, 2019). After a short period of complexification which likely involved young speakers (Moro 2018; Moro & Fricke 2020), Alorese underwent severe simplification of morphology (Klammer 2011; 2012; 2020; To appear; Moro 2019), and these simplified patterns remained stable over many generations. This implies that the contact must be long-term, intense, and multi-purpose involving a community of bilinguals with a large number of second language speakers (Kusters 2003; Trudgill 2011; Moro 2018). The simplifying second language may (originally) have been used as a trade language or *lingua franca*, but for any changes to become entrenched in it, it must have been used as a second language in wider communicative contexts. This second language may be the language of a technologically, politically, or culturally dominant group that the speakers of other languages wish to communicate or associate with, but it may also be the language of a community that is incorporating many foreign adults (such as spouses or slaves) with different linguistic backgrounds. The latter is probably what characterizes the Alorese.

A language spoken as a second language can become a shifted language when the second language speakers are a minority and die out, while their offspring grows up speaking the community language as first language. This

is likely what happened in all the cases discussed above, except Alorese. The Alorese case shows that, if the number of second language speakers in a community is sufficiently large (e.g., constituting half or more of the population, Moro 2019), and if there is a constant influx of new second language speakers during many generations, then stable bi-lingual communities can exist for centuries without shifting to either of the languages spoken in the community.

A fourth type of contact situation is when there is relatively superficial contact in limited socio-cultural domains such as trade or marriage negotiations, which does not require a community to be bilingual. I suggest that the contact of AP communities with MP speakers was of this relatively superficial type. (The TAP languages of Timor (e.g. Bunak, discussed above, (Schapper 2011); and Fataluku (McWilliam 2007) had a different, more intense contact history with MP speaking populations.) The evidence for the superficial contact events in AP languages is that the number of MP loans attested in these languages are overall rather limited: (Robinson 2015) estimates that the percentage of Austronesian loanwords on a 200-word Swadesh list for twelve different Alor-Pantar languages is about 8 percent. Above we have seen that loanwords are scattered over various semantic domains. Further, only a few specific donor languages can be traced, and overall, the donor regions are rather diffuse entities, and in the lexeme sets, various levels of (ir)regularity in sound correspondences apply.

Non-lexical evidence of language contact, such as changes where a syntactic structure was borrowed, could consist evidence for an earlier stage that involved a bilingual community. To date, no evidence of MP grammatical structures having diffused into any of the AP languages has been reported. An illustration of a MP influence the syntactic domain would for instance be the change of word order in AP languages with subsequently different grammaticalizations of serial verb constructions. For example, the typical TAP head-final [Object V₁ V₂] serial verb configuration leads to the V₁ developing into a *postposition* as attested across the TAP family (Klamer 2018). In contrast, the typical MP head-initial [V₁ V₂ Object] configuration leads to V₂ becoming a *preposition*. To become fully schematic and entrenched, a new word order must become the most frequent order in a speech community. This type of change needs intense, continued, and long-term contact, typically involving several centuries of bilingualism (Backus, Seza Doğruöz & Heine 2011). While several proto TAP verbs appear to have grammaticalized from serial verbs into postpositions in a similar way across the TAP family, in none of the languages do we find traces of an alternative MP order in the serial verb domain. (In contrast, the MP language Tetun in Timor does reveal traces of non-MP structures in the serial verb domain, Klamer 2018.)

In sum, the lexical evidence presented in this paper suggest that contact between speakers of TAP languages on Alor and Pantar with speakers of MP languages was relatively superficial and limited, unlike the contact between the TAP languages of Timor and MP speakers there. The overall lack of grammatical structures in the AP languages that reflect MP influence suggest that there is no AP language with a history of prolonged bilingualism with an MP language. Neither is there evidence that there once was an MP speaking population that shifted to an AP language. Again, the situation with the TAP languages in Timor is more complex, and for Bunak in particular it must have involved a long and/or repeated history of bilingualism.

To conclude, with the exception of MP Alorese, which has been present in the Alor Pantar area since the 15th century and remains to be spoken in bilingual MP-AP communities until today, current evidence suggests that none of the modern languages of Alor and Pantar has a history involving bilingualism with, or shift from, an MP language. TAP communities have been in contact with MP speaking groups since the stage of proto TAP, thousands of years ago, but the contacts remained superficial, and limited to circumscribed domains involving the transfer of technology, goods and individual people.

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