

From Lamaholot to Alorese

Morphological loss in adult language contact

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Alorese is a prime example of a morphologically isolating language. This paper traces the process of morphological simplification it has undergone by addressing the following questions: (i) What was the morphological profile of its ancestor, pre-Alorese? (ii) When did Alorese start to lose its morphology? (iii) Which factors caused this loss? By comparing the morphological profile of current Alorese with its sister language, Lewoingu-Lamaholot, I conclude that the morphology of pre-Alorese was at least as complex as current Lewoingu-Lamaholot. Pre-Alorese underwent a process of drastic and swift morphological loss after its speakers migrated to Pantar island around 1300 AD. Pre-Alorese must have had a significant proportion of adult second language speakers who acquired it imperfectly, thus causing its morphology to be lost. Thus, this is a good example of morphological simplification due to imperfect adult learning in a scale language variety.

Keywords: morphological loss, adult language contact, Alorese, Lamaholot, morphological reconstruction

1. Introduction

Many Austronesian languages are morphologically ‘agglutinative-synthetic’ with “a relative abundance of affixes” and “morpheme boundaries [that] are usually clear” (Blust 2009a: 343). Of the Austronesian languages that are morphologically impoverished, some extreme cases are found in western and central Flores (Blust 2009a: 347–48). Here I present data on an isolating Austronesian language spoken some hundred kilometres east of Flores, on the islands of Pantar and Alor; see Figure 1.

Alorese (locally referred to as *Bahasa Alor*) has some 25,000 speakers living along the northern coast of the island of Pantar, on the south coast of the Alor peninsula, and on the islets in the vicinity (Grimes, Therik & Grimes 1997; Lewis, Simons & Fennig 2017). Klamer (2011) is a short grammar of the language. Different dialects

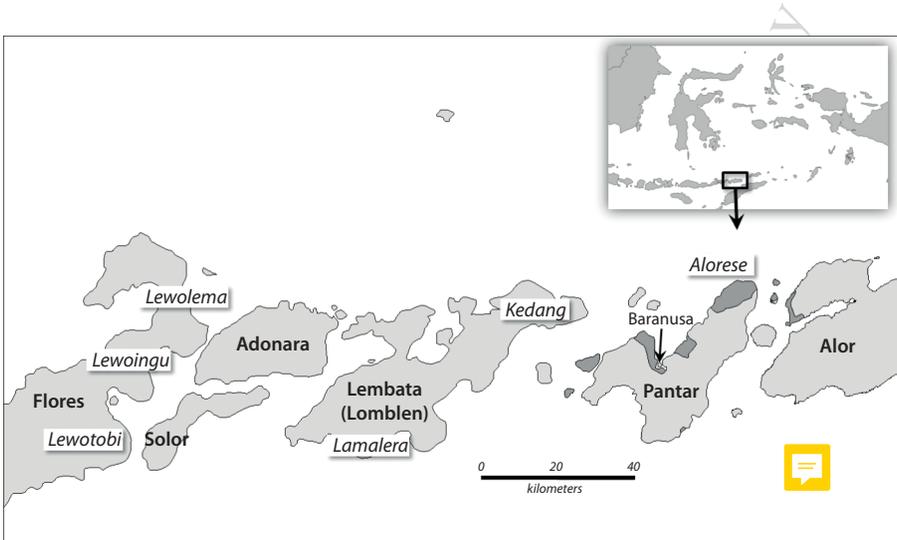


Figure 1. Alorese in its regional context. The lect names starting with *Le/La* on the western islands are Lamaholot dialects; Alorese is spoken in the dark grey areas

of Alorese are spoken, located in Munaseli, Pandai, and Baranusa on Pantar, and Alor Besar and Alor Kecil on Alor; see Figure 2. While these dialects have considerable lexical differences, their morphological and syntactic profiles are very similar. The grammatical data used in this paper is mainly from Alor Kecil; the lexical data are mostly from Baranusa (see Klamer 2011 for more information).

Alorese is a variety of the Lamaholot language/dialect chain spoken by some 325,000 people (Fricke 2019: 157–160) living on the eastern tip of Flores and neighbouring islands, including Solor, Lembata and Adonara; see Figure 1. Lamaholot dialects that have been described to some extent include the dialect of Lewoingu (Nishiyama & Kelen 2007), Lamalera (Keraf 1978), Lewolema (Pampus 1999), Lewotobi (Nagaya 2011), Solor (Arndt 1937; Bouman 1943; Kroon 2016), and Central Lembata (Fricke 2017a, 2017b, 2019). On the basis of lexicostatistic work in dozens of Lamaholot varieties, Keraf (1978) divides Lamaholot into three major subgroups: Western, Central and Eastern Lamaholot. Elias (2017) used Keraf's (1978) lexical data of 33 Lamaholot dialects as compiled in *LexiRumah* (Kaiping & Klamer 2019) to examine regular sound changes in the dialect chain. His findings largely align with Keraf's earlier lexicostatistic work, whereby he confirms the three subgroups Western, Central and Eastern Lamaholot. These three Lamaholot subgroups are joined at the level of Proto-Flores-Lembata, which then also includes the neighbouring languages of Sika and Kedang; see Figure 3 (Fricke 2019: 226–228). Fricke (2019) finds insufficient evidence for an innovation-defined subgroup joining these three Lamaholot groups on a more recent level.

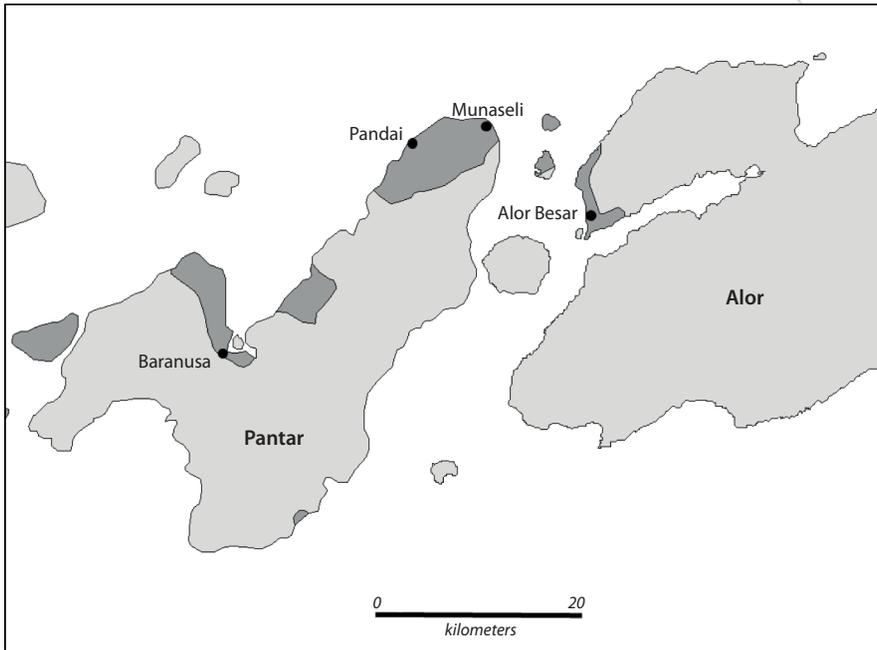


Figure 2. Locations where Alorese is spoken

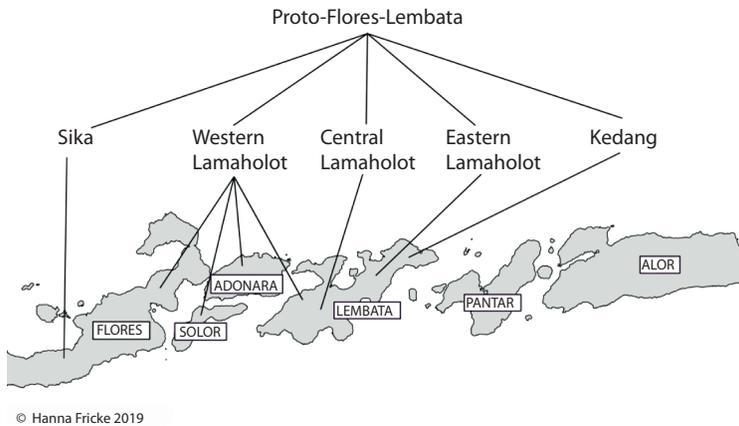


Figure 3. Geographic spread of Lamaholot varieties and their subgrouping based on regular sound changes in basic vocabulary (Elias 2017, Fricke 2019) and lexicostatistics (Keraf 1978)

Alorese appears to be most closely affiliated with the Western Lamaholot subgroup, sharing at least three innovations with it: the regular sound change *r > ʔ, a sound change in the numeral ‘six’ (Proto-Malayo Polynesian *enem ‘six’ > Proto-Flores-Lembata *ənəm > Central Lamaholot Kalikasa /ənəm/, Lerek /ənam/; Eastern Lamaholot: no data; proto-Western Lamaholot *nəmu (Adonara /namu/, Lewoingu /nəmuŋ/, Munaseli-Alorese /nəmu/, Pandai-Alorese and Baranusa-Alorese /nam:u/, Alor Besar-Alorese /namuŋ/)), and the innovation of a clause-final negator (Proto-Malayo Polynesian *salaq ‘wrong’ > Proto-Western Lamaholot *hala ‘NEG’ (Lamalera /hala/, Lewoingu /halaʔ/, Alorese /lahe/)) (Elias 2017; Elias p.c. February 2018; Fricke 2019: 224).

The Western Lamaholot subgroup to which Alorese belongs comprises several Lamaholot varieties. I take the Lewoingu variety described in Nishiyama and Kelen (2007) (henceforth N&K 2007) as the sister language with which I compare Alorese in this paper.¹

This paper argues (in Section 3) that the ancestors of current Alorese speakers migrated from the region on or near Flores, where Western Lamaholot varieties are spoken, to settle on Pantar and Alor. In the process they lost contact with these Western Lamaholot varieties. The language of the ancestors of current Alorese will be referred to as ‘pre-Alorese’ in this paper.

In the following section (Section 2) I reconstruct the morphological profile of pre-Alorese by comparing the synchronic morphology of current Alorese and its sister Lewoingu-Lamaholot. Both languages differ greatly in terms of morphological complexity: where Lewoingu has a reasonable amount of inflectional and derivational morphology, most of which reflect proto-Malayo Polynesian forms, Alorese has virtually no morphology at all. I argue that the morphology of pre-Alorese was at least as complex as current Lewoingu, and that pre-Alorese underwent a process of morphological loss after its speakers had migrated. Then, in Section 3, I investigate when the pre-Alorese migrated away from the region where other Western Lamaholot languages are spoken. The pre-Alorese migration can be dated using evidence gleaned from accounts of oral traditions and ethnographic observations. In Section 4, I argue that the drastic and swift morphological loss observed between pre-Alorese and Alorese indicates that pre-Alorese must have gone through a stage where it had a large proportion of adult speakers who acquired it imperfectly as their second language, using Alorese as a language of trade and interethnic communication. The hypothesis that Alorese became simplified as the result of adult second language contact is based on studies of morphological simplification elsewhere in

1. The morphological information in provided in Nagaya (2011) is too scanty to be used in this paper, and Kroon (2016) appeared after the current paper was written.

the world. Note that these studies typically discuss language change in relatively large speaker groups in industrial, literate societies, which is not the situation we attest for Alorese. However, recent research by Moro (2018, 2019) on second language (L2) speakers of Alorese shows that similar factors play a role in the simplification of languages spoken in small, pre-industrial societies such as Alorese. Her work indicates that the very last vestige of Alorese morphology – the subject agreement on a small number of frequent verbs – is currently also eroding. It is proposed here that similar processes of morphological simplification by adult L2 speakers caused the erosion of morphology of pre-Alorese in the past.

2. The morphological profile of pre-Alorese

2.1 Lewoingu-Lamaholot and Alorese inflectional morphology

2.1.1 *Marking of arguments in Lewoingu-Lamaholot*

Lamaholot-Lewoingu has inflectional morphemes marking agreement of subjects on verbs, adverbs and the conjunctive element *oʔn* ‘and, with’, while adjectives and numerals agree with the (pro)noun they modify. Lamaholot-Lewoingu pronouns and pronominal affixes are given in (1). Free pronouns are used to encode transitive (A) and intransitive (S) subjects as well as objects (P). The prefix only encodes transitive subjects (A), while the suffix encodes intransitive subjects (S). Note that this suffix also encodes nominal agreement on adjectives and numerals.

(1) Lewoingu-Lamaholot pronouns and pronominal prefixes.

	S, A, P pronoun	A prefix	S marking suffix
1SG	<i>go</i>	<i>k-</i>	<i>-kən</i>
2SG	<i>mo</i>	<i>m-</i>	<i>-ko, -no</i>
3SG	<i>(ro)na</i>	<i>n-</i>	<i>-na, -nən</i>
1PL.EXCL	<i>kame</i>	<i>m-</i>	<i>-kən</i>
1PL.INCL	<i>tite</i>	<i>t-</i>	<i>-te</i>
2PL	<i>mio</i>	<i>m-</i>	<i>-ke</i>
3PL	<i>ra</i>	<i>r-</i>	<i>-ka</i>

(N&K 2007: 13, 31)

The A prefix obligatorily marks the subject of vowel-initial transitive verbs (N&K 2007: 98). Examples include the verbs *-aʔn* ‘make’, *-anan* ‘plait’, *-ahuʔ wai* ‘get water’, *-alaʔ-əlaʔ* ‘pass’, *-awa* ‘stay’, *-əwan* ‘harvest, pick up, can’, *-ian* ‘wait’, *-itə* ‘sleep with’, *-iu* ‘hunt’, *-odi* ‘will’, *-oi(ro)* ‘know, can’, *-olin* ‘improve’, *-urən* ‘dream’ (N&K: 32). An illustrative paradigm is given in (2). Observe that the paradigm contains three homophonous prefixes *m-*.

(2) Lewoingu-Lamaholot verb *-ian* 'wait' with A prefix

1SG	<i>k-ian</i>
2SG	<i>m-ian</i>
3SG	<i>n-ian</i>
1PL.EXCL	<i>m-ian</i>
1PL.INCL	<i>t-ian</i>
2PL	<i>m-ian</i>
3PL	<i>r-ian</i>

However, there are also vowel-initial verbs which do not take an agreement prefix, such as *ipu* 'sit with legs crossed', or *opən* 'tell a lie' (N&K 2007: 98), which suggests that the agreement pattern is not purely phonologically triggered, and may be eroding.

Some verbs hosting subject prefixes can function as adverbial expressions or prepositions, and appear with a 3SG default agreement *n-* prefix (N&K 2007: 103). For example, Lewoingu-Lamaholot has A-agreement on the conjunctive word *-oòn* [oʔon] 'and, with'. In the sketch this word is variously referred to as a 'conjunction', a 'preposition' and a 'comitative' (N&K 2007: 105–108), but it is likely a verbal element 'be with' just as its cognate in Alorese is verbal. When *-oòn* is used as a comitative predicate, the agreement prefix marks person and number of A, as in (3a). However, such contexts also allow the use of the default third person singular prefix, as in (3b). When it functions to conjoin non-nominal elements, a default 3SG prefix must be used, as in (4). For more details on the agreement marking of *-oòn*, see N&K (2007: 10).

- (3) a. *Go səga k-oòn mo*
 1SG come 1SG-with 2SG
 'I came with you' (N&K 2007: 105)
- b. *Go səga n-oòn mo*
 1SG come 3SG-with 2SG
 'I came with you' (N&K 2007: 105)
- (4) *Mo belə n-oòn ba'a*
 2SG big 3SG-with heavy
 'You're big and heavy' (N&K 2007: 103)

An intransitive argument (S) can be marked on verbs that have a 'choice of transitivity' (N&K 2007: 77). If such a verb is used intransitively, it has a suffix to encode S, and this suffix cannot appear if the verb is 'transitive'. Some examples of such optionally (in)transitive verbs are given in (5).

- (5) Some Lewoingu-Lamaholot verbs taking S agreement suffixes

<i>balik</i>	'return'	<i>hode</i>	'burn; be angry'
<i>bəsuk</i>	'be born'	<i>horon</i>	'hide'
<i>də'in</i>	'stand'	<i>kirin</i>	'talk'
<i>deka</i>	'sink'	<i>mori</i>	'live'
<i>gelu</i>	'change'	<i>peku</i>	'turn'
<i>həbo</i>	'bathe'	<i>tannin</i>	'cry'
<i>gasik</i>	'count'	<i>lodo</i>	'go down'

An illustration is *hebo* 'bathe', used transitively in (6), and intransitively in (7). In (7a) S is marked with a pronoun and cross-referenced with an S-marking suffix. It can also be encoded with only a pronoun, as (7b) illustrates.

- (6) *Go həbo na*
 1SG bathe 3SG
 'I bathe her' (N&K 2007: 77)
- (7) a. *Go həbo-kən*
 1SG bathe-1SG
 'I bathe' (N&K 2007: 77)
- b. *Go həbo*
 1SG bathe
 'I bathe' (N&K 2007: 77)

The S suffix cannot be used to mark a transitive agent (A), as shown in (8), and neither can the suffix denote a transitive object (P), compare (9a–b):

- (8) **Go həbo-kən na*
 1SG bathe-1SG 3SG
 *'I bathe her' (N&K 2007: 77)
- (9) a. **Go həbo-na*
 1SG bathe-3SG
 Not good for: 'I bathe her'
- b. *Go həbo na*
 1SG bathe 3SG
 'I bathe her' (N&K 2007: 77)

The pronominal suffix can optionally occur on adjectives in attributive function, as in *inaməlake belə / inaməlake belə-na* lit. 'man big / man big-3SG'. The two constructions do not differ in meaning (N&K 2007: 43).

Adjectives in a predicative or adverbial function can also take an S suffix; in these cases, the adjective has an excessive interpretation (N&K 2007: 98–99), as illustrated in (10) and (11):

- (10) *Na bəlola-na*
 3SG tall-3SG
 ‘He is too tall’ (N&K 2007: 98)
- (11) *Mo pana lela-ko*
 2SG walk slow-2SG
 ‘You walk too slowly’ (N&K 2007: 98)

In addition to adjectives in adverbial function, as *lela* ‘slow’ in (11), Lewoingu also has “pure adverbs” that “have no adjectival usage” (N&K 2007: 99). Such adverbs agree with the subject of the clause. Some require a prefix, for example *olo* ‘earlier’ in (12); others require a suffix, for example *meha* ‘alone’ in (13). When applicable, the agreement on the main verb can co-occur with the agreement on adverbials such as *meha*, as in (14).

- (12) *Go səga k-olo*
 1SG come 1SG-earlier
 ‘I came earlier / first’ (N&K 2007: 99)
- (13) *Go səga meha'-kən*
 1SG come alone-1SG
 ‘I came alone’ (N&K 2007: 99)
- (14) *Ra r-enun meha'-ka*
 3PL 3PL-drink alone-3PL
 ‘They drink alone’ (N&K 2007: 100)

Numerals in modifying function agree with the modified noun or pronoun in person and number using a pronominal suffix, as illustrated in (15).

- (15) *Ra təlō-ka səga*
 3PL three-3PL come
 ‘They three came’ (N&K 2007: 39)

When the modified noun is a lexical noun rather than a pronoun, the suffix on the numeral is optional and only occurs when the NP is definite, compare grammatical (16a) (definite, with suffix) with ungrammatical (16b) (indefinite, with suffix) and grammatical (16c) (indefinite, no suffix).

- (16) a. *Inawae t̄alo-ka me'enən bərin inaməlake rua-ka me'enən*
 woman three-3PL the hit man two-3PL the
 'The three women hit the two men' (N&K 2007: 39)
- b. **Inawae t̄alo-ka t̄ɔʔi inaməlake rua-ka*
 woman three-3PL hit man two-3PL
 Not good for: 'Three women hit two men' (N&K 2007: 39)
- c. *Inawae t̄alo bərin inaməlake rua*
 woman three hit man two
 'Three women hit two men' (N&K 2007: 39)

Finally, Lewoingu-Lamaholot marks the addressee of imperative or hortative verbs with a suffix, as in (17):

- (17) *M-a'i -ko!*
 2SG-go-2SG
 'Go!'
Pala'e -te.
 run-1PL.INCL
 'Let's run' (N&K 2007: 75)

The agreement affixes and patterns attested in Lewoingu-Lamaholot are inheritances rather than innovations. The evidence for this is that similar forms and patterns are found in its sister language Lewotobi-Lamaholot (Nagaya 2011: 103 ff.), as well as in other languages related to Lamaholot, such as Kedang (Samely 1991: 70) and Hewa, a variety of Sika (Fricke 2014: 29).

2.1.2 Marking of possessives in Lewoingu-Lamaholot

In Lewoingu-Lamaholot possessive constructions, pronouns and suffixes may be used, see (18).

- (18) Lewoingu-Lamaholot pronominal possessors
- | | pronoun (N&K 2007: 15) | suffix (N&K 2007: 13, 23, 24, 26) |
|----------|------------------------|-----------------------------------|
| 1SG | <i>go'en</i> | <i>-kən</i> |
| 2SG | <i>mo'en</i> | <i>-ko</i> |
| 3SG | <i>na'en</i> | <i>-nən</i> |
| 1PL.EXCL | <i>kame'en</i> | <i>-kən</i> |
| 1PL.INCL | <i>tite'en</i> | <i>-te</i> |
| 2PL | <i>mion</i> | <i>-ke</i> |
| 3PL | <i>ra'en</i> | <i>-ka</i> |

Illustrations with a possessor pronoun and a possessive suffix are given in (19a–b). The pronoun and suffix cannot co-occur, as shown in (19c–d). A possessor noun follows the possessed noun, in which case there is no suffix; an example is the possessor noun *guru* ‘teacher’ in (19e). If the possessor noun precedes the possessed noun, it must co-occur with a possessor suffix, as illustrated in (20).

- (19) a. *Lango go'en*
house 1SG.POSS
'My house' (N&K 2007: 23)
- b. *Lango-h*  *oss*
house-1SG.POSS
'My house' (N&K 2007: 23)
- c. **Lango-kən go'en*
house-1SG.POSS 1SG.POSS
Not good for: 'My house'
- d. **Go'en lango-kən*
1SG.POSS house-1SG.POSS
Not good for: 'My house'
- e. *Lango guru*
house teacher
'A teacher's house' (N&K 2007: 24)
- (20) a. *Guru lango-nən*
teacher house-3SG.POSS
'A teacher's house' (N&K 2007: 23)
- b. *Guru lango-ka*
teacher house-3PL.POSS
'The teachers' house' (or 'faculty residence') (N&K 2007: 26)

Of the two available possessor marking strategies, the free possessor pronoun strategy (19a) is more regular and productive, while the possessor suffixing strategy (19b) is losing ground. However, the possessor suffix still exists in Lewoingu-Lamaholot, and in cases such as (20a–b), it is obligatory. The possessor patterns and forms in Lewoingu-Lamaholot were inherited from an ancestor language: similar forms and patterns are found across the Austronesian family.

2.1.3 Marking of arguments and possessors in Alorese

In contrast to Lewoingu-Lamaholot, Alorese has no suffixes marking subjects, possessors or any other type of agreement. It does however have prefixes marking subjects of intransitive (S) and transitive (A) verbs. The Alorese pronouns and prefix paradigms are given in (23). Note that the prefixes for 2SG, 1PL.EXCL and 2PL are homophonous, as in Lewoingu-Lamaholot.

(21) Alorese subject, object and possessor pronouns and prefixes

(Klamer 2011: 52; 60)

	Possessor pronoun	S/A prefix	S, A and P pronoun
1SG	<i>go</i>	<i>k-</i>	<i>go</i>
2SG	<i>mo</i>	<i>m-</i>	<i>mo</i>
3SG	ALIEN: <i>ni / ne</i> INAL: <i>no</i>	<i>n-</i>	<i>no</i>
1PL.EXCL	<i>kame</i>	<i>m-</i>	<i>kame</i>
1PL.INCL	<i>ite</i>	<i>t-</i>	<i>ite</i>
2PL		<i>m-</i>	<i>mi</i>
3PL		<i>r-</i>	<i>fe</i>

Alorese subject (S/A) prefixes are used on a small set of frequently used verbs; examples from my corpus (cf. Klamer 2011) are *-aka/-Vng* ‘to eat’, *-ei* ‘to go’, *-enung* ‘to drink’, *-oing* ‘to know’, and *-ong* ‘to be with’. The prefixes occur only on **vowel initial** verbs (see also Moro 2019). Often the subject of such inflected verbs is also expressed with an additional pronoun, which is given in brackets in (22).

(22) Two Alorese verbs with a subject agreement prefix

	<i>-enung</i> ‘drink’	<i>-oing</i> ‘know’
1SG	(<i>go</i>) <i>k-enung</i>	(<i>go</i>) <i>k-oing</i>
2SG	(<i>mo</i>) <i>m-enung</i>	(<i>mo</i>) <i>m-oing</i>
3SG	(<i>no</i>) <i>n-enung</i>	(<i>no</i>) <i>n-oing</i>
1PL.EXCL	(<i>kame</i>) <i>m-enung</i>	(<i>kame</i>) <i>m-oing</i>
1PL.INCL	(<i>ite</i>) <i>t-enung</i>	(<i>ite</i>) <i>t-oing</i>
2PL	(<i>mi</i>) <i>m-enung</i>	(<i>mi</i>) <i>m-oing</i>
3PL	(<i>fe</i>) <i>r-enung</i>	(<i>fe</i>) <i>r-oing</i>

Apart from this small set of verbs with subject inflections, Alorese has no other verbal agreement morphology. Indeed, this last ‘vestige’ of its morphology is currently also eroding, as will be discussed in Section 3.

Unlike in Lewoingu-Lamaholot, no productive possessor suffixes are attested in Alorese. Illustrations of Alorese (alienable) possessive constructions are given in (23).

- (23) a. *Ni uma*
 3SG.ALIEN house
 ‘his house’ (Alorese)
- b. *Bapa John ni uma being*
 father John 3SG.ALIEN house big
 ‘Bapa John’s house is big’ (Alorese)

Alorese uses a different pronoun *no* to encode an inalienable 3rd singular possessor; see (21). In addition, both Lewoingu-Lamaholot and Alorese have a further distinction between inalienable and alienable nouns, marked on the noun itself by the presence of a (fossilised) final velar nasal suffix that attaches to inalienable body part nouns. In Alorese, the fossilised suffix is a root-final consonant [-ŋ]. In Lewoingu-Lamaholot, it is [-n] on vowel-final roots, and it is [-ʔVn] on consonant-final roots, with the V being copied from the final root vowel. In (24), some examples are given of cognate body part nouns with fossilised possessive suffixes in both varieties, with their Proto-Malayo-Polynesian forms. In Lewoingu-Lamaholot the nature of the possessor marker varies between a clitic or suffix; it is optional (indicated by parentheses) in the forms in (24a), while for the forms in (24b) it is obligatory, and in the forms in (24c) it is absent. In Lewoingu-Lamaholot, there are also words that allow the possessor morpheme *-ng* to be replaced by a modern possessor suffix from the possessor paradigm in (18). In Alorese, however, the (originally inalienable) suffix *-ng* has become completely fossilised as a final root consonant and it has become an obligatory part of the nominal root form; it cannot be omitted or replaced. (For more discussion, see Klamer 2011, 2012).

(24)	Alorese	Lewoingu-Lamaholot	PMP (Blust and Trussel n.d.)	Meaning
	(Baranusa lect)	(N&K 2007: 174)		
a.	<i>limang</i>	<i>lima(n)</i>	*qalima	'hand/arm'
	<i>fofang</i>	<i>wəwa(n)</i>	*baqbaq	'mouth'
	<i>ratang</i>	<i>rata(n)</i>	unrelated *buhək	'hair'
	<i>fuling</i>	<i>wuli(n)</i>	unrelated *liqəR	'neck'
b.	<i>kotung</i>	<i>kotən</i>	unrelated *qulu	'head'
	<i>aleng</i>	<i>kola'an</i>	unrelated *likud	'back'
	<i>leing</i>	<i>lejn</i>	unrelated *qaqay	'foot, leg'
c.	<i>matang</i>	<i>mata</i>	*mata	'eye'
	<i>fefeleng</i>	<i>wewel</i>	unrelated *dilaq	'tongue'

In sum, pre-Alorese must have contained various inflectional paradigms of the type that are currently still present in Lewoingu-Lamaholot: affixes encoding transitive (A) or intransitive (S) subjects, possessors, as well as agreement on adjectives and numerals. In contrast, today's Alorese has only retained reflexes of the subject agreement prefix on a small number of verbs, using it to encode A and S. The velar nasal suffix/enclitic that is still recognisable as a morpheme encoding inalienable possession in Lewoingu-Lamaholot has completely fossilised into a nominal root consonant in Alorese.

2.2 Lewoingu-Lamaholot and Alorese derivational morphology

Lewoingu-Lamaholot has seven derivational affixes. Some of these are rather regular and productive, others are less regular, but in all derivations there is still a transparent semantic link between the base and its derivation. In this section I first present a brief summary of the various derivations, and contrast them with the derivational morphology attested in Alorese. For a fuller account and additional examples of Lewoingu-Lamaholot morphology, I refer to N&K (2007).

Prefix bə(C)-

N&K (2007: 50–51) present some forty examples of a derivation which they describe as involving the prefix *bəN-*. It is a productive derivational process. The prefix is realised as *be-* before a consonant, and as *b-*, *beʔ*, *ben*, or *ber-* before a vowel, which is why I analyse it as *bə(C)-*. The prefix *bə(C)-* derives words of various categories from nouns; and actor, action, patient and instrument nouns from verbs. Some examples are given in (25). While no current reconstruction appears to regularly account for this prefix, apparent cognates, such as Malay *ber-*, indicate that Lewoingu *bə(C)-* is derived from an Austronesian source.

(25)	N base	<i>rawuk</i>	'hair'	<i>bə-rawuk</i>	'have hairs'
		<i>lolon</i>	'top part'	<i>bə-lolon</i>	'high'
		<i>wai</i>	'water'	<i>bə-wai</i>	'watery'
		<i>wola</i>	'fat (N)'	<i>bə-wolan</i>	'fat (Adj)'
	V base	<i>pasak</i>	'shoot'	<i>bə-pasak</i>	'shooter'
		<i>doru</i>	'rub'	<i>bə-doru</i>	'tool for rubbing, skin scraper'
		<i>ewik</i>	'to slice'	<i>b-ewik</i>	'slice (N)'
		<i>lidun</i>	'close'	<i>bə-lidun</i>	'door'

Prefix pə-

N&K (2007: 51) provide seventeen examples of prefixing *pə-*; examples are in (26). Sometimes, the prefix co-occurs with suffix *-k*. The base of the derivation can be a noun or a verb, and the prefix derives verbs meaning 'be like the base N', and activity nouns meaning 'actor of V'. Etymologically it may be related to PMP **pa-ka-* 'treat like X' (Blust 2009a: 359) and/or PMP **paR-* 'deverbal noun' (Blust 2009a: 359).

(26)	N base	<i>tuā</i>	'palm wine'	<i>pə-tuak</i>	'taste like palm wine'
		<i>tana</i>	'land'	<i>pə-tanak</i>	'feel like soil'
		<i>kawu</i>	'dust'	<i>pə-kawuk</i>	'grey'
		<i>wua</i>	'fruit'	<i>pə-wua</i>	'trees about to bear fruit'
		<i>kua</i>	'dregs, waste'	<i>pə-kua</i>	'feel like dregs'
	V base	<i>tutu</i>	'speak'	<i>pə-tutu</i>	'speaker, speaking'
		<i>leta</i>	'ask'	<i>pə-leta</i>	'asking, beggar'
		<i>hegak</i>	'replace'	<i>pə-negak</i>	'replacement'

Prefix kə-

N&K (2007: 52–53) present some thirty examples of the prefix *kə-*. Derived forms are nouns denoting a result of an event or a tool used in the event, but they also include derivations more vaguely related to the base word, see (27). Etymologically the prefix may be related to PMP *ka- ‘formative for abstract nouns’ (Blust 2009a: 359, 362).

(27)	V base	<i>sakok</i>	‘whisper’	<i>kə-sakok</i>	‘a whisper’
		<i>pasa</i>	‘swear’	<i>kə-pasa</i>	‘oath’
		<i>betok</i>	‘emerge’	<i>kə-betok</i>	‘jump’
	Irregular	<i>pati</i>	‘pile’	<i>kə-mati</i>	‘things piled’
		<i>kiyuk</i>	‘close eyes’	<i>kə-niyuk</i>	‘not able to open eyes’
		<i>gate</i>	‘to hook’	<i>kə-nate</i>	‘hooker’
		<i>golo</i>	‘roll (cigarette)’	<i>kə-nolo</i>	‘rolled thing (cigarette)’
		<i>gasik</i>	‘count’	<i>kə-nasik</i>	‘sum’

Infix -ən-

N&K (2007: 53–54) list some twenty examples of derivations with the infix *-ən-*. It derives nouns from verbal bases starting with a coronal consonant (i.e. /t, s, n/). The nouns denote an actor, action, state, result or tool, see (28). This prefix may be etymologically related to PAN *-in- ‘perfective, nominaliser’ (Blust 2009a: 372).

(28)	<i>tali</i>	‘add’	<i>t-ən-ali</i>	‘added thing’
	<i>teho</i>	‘wipe clean’	<i>t-ən-eho</i>	‘wiping cloth’
	<i>tubak</i>	‘stab’	<i>t-ən-ubak</i>	‘stabbing tool’
	<i>napa</i>	‘spread’	<i>n-ən-apa</i>	‘things spread’
	<i>saga</i>	‘drop from above’	<i>s-ən-aga</i>	‘tool to receive a falling object’
	<i>seok</i>	‘fry’	<i>s-ən-eok</i>	‘tool for frying; fried food’

Prefix mən-

N&K (2007: 54) give seventeen examples of this derivation. The final nasal of the prefix *mən-* always replaces the initial consonant of the base. The derivation may involve an extra final consonant (N&K 2007: 54), for example *bəkə* ‘angry’ > *mən-əkən* ‘being angry’. It derives stative verbs, or nouns (actor, action, result) or nouns referring to people with the property of the base, see (29). Etymologically it may be related to PAN *ma- ‘stative’ (Blust 2009a: 363–364).

(29)	<i>bəʼat</i>	‘heavy’	<i>mən-aʼat</i>	‘something heavy’
	<i>bəkə</i>	‘angry’	<i>mən-əkən</i>	‘angry man, being angry’
	<i>dira</i>	‘use a fan’	<i>mən-ira, nira</i>	‘fan’
	<i>wikak</i>	‘break in pieces’	<i>mən-ikaʼ</i>	‘piece, fraction’
	<i>ungar</i>	‘to wound’	<i>mən-ungar</i>	‘a wound’
	<i>nange</i>	‘swim’	<i>mən-ange</i>	‘swimmer’
	<i>bohuʼ</i>	‘full (stomach)’	<i>mən-ohun</i>	‘state of being full’

Prefix gə(C)-

N&K (2007: 49) list ten examples of derivations with this prefix. They list this prefix as *gəN-* perhaps because the final consonant in the prefix may historically have been a nasal, as it changed root-initial /p/ into /m/, and /h/ into /n/. However, this process of consonant replacement no longer regularly involves replacement with a nasal, as root initial /b/ undergoes lenition to /w/, and no consonant occurs before roots with an initial liquid (r/l). According to N&K (2007) the derived words include action, actor or result nouns; not all of the derivations involve a category change from verb to noun, see (30). Etymologically the prefix may reflect PMP *ka- ‘manner in which an action is carried out’ or *ka- ‘achieved state’ (Blust 2009a: 362–363).

(30)	<i>pòok</i>	‘cut’	<i>gəm-òok</i>	‘taking all’
	<i>hiko</i>	‘go past’	<i>gən-iko</i>	‘going past’
	<i>balik</i>	‘return’	<i>gə-walik</i>	‘return (n)’
	<i>lupa</i>	‘forget’	<i>gə-lupa</i>	‘forget’
	<i>redo</i>	‘shake (V, N)’	<i>gə-redo</i>	‘shaking’

Consonant replacement

N&K (2007: 48–49) present some thirty examples of this derivation, which involves replacing the initial consonant of a root with a homorganic nasal. In most examples, the base is an activity verb, and the derivation denotes an item that is related to the activity, such as its result or location, or the instrument that is used with the activity, see (31). Etymologically this derivation may be related to PAN *ma- ‘stative’ (Blust 2009a: 363–364).

(31)	<i>pet</i>	‘bind’	<i>met</i>	‘belt’
	<i>bowak</i>	‘weave cloth’	<i>mowak</i>	‘patterns of cloth’
	<i>take</i>	‘cover roofs with thatch’	<i>nake</i>	‘thatch’
	<i>hapen</i>	‘hang’	<i>napen</i>	‘hanger’
	<i>ilu’</i>	‘saliva’	<i>nilu’</i>	‘taste’
	<i>haman</i>	‘dance’	<i>naan</i>	‘dancing place’
	<i>huro</i>	‘eat, serve, use a spoon’	<i>nuro</i>	‘spoon’

In sum, in the seven types of derivational morphemes of Lewoingu-Lamaholot we can still see a semantic relation between the independently used base form and the word forms derived from them, although the relation has often become opaque. All seven affixes seem to be inherited Malayo-Polynesian/Austronesian forms. That is, they are reflexes of ancient derivational morphemes that have been around in some form or other in the ancestor language(s) of Lamaholot.

In contrast, the only word formation process attested in Alorese is reduplication. Alorese verbs and adverbs undergo full reduplication to indicate iterative or intensive activity, as shown in (32). Nominal reduplication denotes plural diversity, as in (33a–b). There are also reduplicative forms for which no root forms exist, as in (34a–b).

- (32) *Akhirnya, no gena-gena dapat lahe*
 finally 3SG RDP-search find NEG
 'Finally he searched and searched [but] did not find him. (Klamer 2011: 92)
- (33) a. *gambe-gambe*
 RDP-grandfather
 'grandfathers'
- b. *ina-ina*
 RDP-mother
 'mothers' (Klamer 2011: 39)
- (34) a. *kapu-kapu (*kapu)*,
 'firefly'
- b. *uli-uli (*uli)*
 'fable' (Klamer 2011: 39)

Full reduplications with similar functions are also attested in Lewoingu-Lamaholot, so in terms of their reduplication strategies there is no salient contrast between the two varieties.² The fact that reduplication occurs in both Lewoingu and in Alorese is taken here to indicate that reduplication was a part of pre-Alorese that was maintained in Alorese. But then the question can be asked, why didn't Alorese reduplication get lost like the other derivational morphology? My suggestion is that this may be due to the unique character of reduplication as a word forming process. Unlike derivational affixes, full reduplication has an iconic relation between form and meaning, and as such is also attested in improvised language behaviour, as a universal combinatory principle to derive new words (Muysken 2013: 716). This is why, for example, reduplication can spontaneously emerge in contact varieties such as creoles (Bakker and Parkvall 2005). So, if a language with derivational affixes and reduplication (like pre-Alorese) undergoes morphological loss due to language contact, we expect the affixes to be most affected. Reduplication will be affected less or not at all, as it is one of the basic strategies universally employed by imperfect language speakers to create new forms.

Unlike Lewoingu-Lamaholot, Alorese has little derivational morphology. Virtually all the morphologically complex Lewoingu-Lamaholot forms discussed above are simple forms in Alorese. In my Alorese (Baranusa lect) lexicon of approx. 600 items, I found only five words that contained a possibly fossilised affix;

2. In Nishiyama and Kelen's (2007: 60) description, reduplication is described as "[...] not very productive, [but] occasionally observed." However, this quote seems to refer to reduplication of non-nominal forms; the reduplication of nouns to encode 'plural', discussed elsewhere in the sketch (p. 44) appears to be regular and productive.

they are listed in (35). The first column gives the Alorese word, the second column its meaning, the third column its cognate in Lewoingu-Lamaholot. Column four presents the PMP proto-form where known, suggesting that the current reflex in Alorese is indeed historically a morphologically complex word. The last column presents some cognate forms in other languages of the region for comparison (see Kaiping and Klammer 2017 for additional forms and references).

- (35) Alorese (Baranusa dialect) words with fossilised affixes
in a set of approx. 600 items

Alorese	Meaning	Lewoingu-Lamaholot	PMP (Blust and Trussell n.d.)	Example cognates in languages of the region
<i>palae</i>	'run'	<i>pelaʔe</i> 'run'	PMP *laRiw	Hewa/Sika <i>p-lari</i> , Tetun Terik <i>ha-lai</i>
<i>kalake</i>	'man, husband'	<i>lake</i> 'husband'	PMP *laki 'male, masculine, man'	Hewa & Sika <i>laʔi</i> , Tokodede <i>laki</i> , many Lamaholot varieties have either simple <i>lake</i> or complex <i>kelake</i>
<i>kafae</i>	'wife'	<i>kewae</i> 'wife'	PMP *bahi	Many other Lamaholot varieties also have <i>kewae</i>
<i>kapuhor</i>	'navel'	<i>kepuhur</i> 'navel'	PMP *pusej	Hewa/Sika <i>puher</i> , Alorese dialects on Pantar have <i>puhor</i> , some Lamaholot varieties have <i>kepuher</i> or <i>kepuher</i>
<i>kenamu</i>	'fly'	<i>kenamuk</i> 'fly'	PMP *ñamuk 'mosquito'	Indonesian <i>nyamuk</i> 'mosquito', Sika <i>əmu</i> 'mosquito'

Apart from these fossilised forms, I have not attested other morphologically complex words in Alorese. In other words, except for full reduplication, Alorese did or does not have productive derivational processes. And with a few exceptions, the derivational morphology that is still attested in its sister Lewoingu-Lamaholot has been lost completely in Alorese. The only derivational prefix of which a few remnants have been retained is *kə-*.

2.3 Summary: The morphology of pre-Alorese

Table 1 and Table 2 summarise the inflectional and derivational features of today's Lewoingu-Lamaholot and Alorese.

Table 1. Summary of inflectional features in Lewoingu-Lamaholot and Alorese

	Lamaholot	Alorese
consonantal subject prefix on vowel-initial verbs	yes	few frequently used verbs
suffix to mark S on verbs	yes	no
agreement on adjectives and adverbs	yes	no
agreement on numerals	yes	no
agreement on the conjunctive element <i>-oʔn</i> 'and, with'	yes	no
possessor suffix	yes	no
inalienable possessor suffix/enclitic	yes	fossilised
	Lamaholot	Alorese
Consonant replacement	yes	no
Prefix <i>bə(C)-</i>	yes	no
Prefix <i>pə-</i>	yes	no
Prefix <i>kə-</i>	yes	no
Infix <i>-ən-</i>	yes	no
Prefix <i>mən-</i>	yes	no
Prefix <i>gə(C)-</i>	yes	no
Reduplication	yes	yes

As argued in Section 2, the morphology attested in Lewoingu-Lamaholot is clearly of Malayo-Polynesian origin. Pre-Alorese probably had at least as much morphology as today's Lewoingu-Lamaholot: possessor suffixes, inalienable suffixes, distinct pronominal prefixes for transitive and intransitive subjects, suffixes for intransitive subjects and nominal agreement, and at least seven derivational prefixes.

In pre-Alorese, the variable order in possessor marking structures was regularised to a construction where possessors can only precede possessed nouns; and the final nasal morpheme on inalienable nouns became reinterpreted as a final consonant of the root noun (Klamer 2012). Of all the morphology in pre-Alorese, today's Alorese only retained a few frequent verbs with subject inflection, a tiny number of words containing remnants of derivational prefixes, in particular *kə-*, and reduplication. The rest of its morphology has been lost.

3. When, why, and how pre-Alorese became isolating

Morphological loss that is as radical and fast as observed in the passage from pre-Alorese to Alorese suggests that the language went through a stage of imperfect second language learning. In this section I date the pre-Alorese migration from where the Western Lamaholot group was originally located (Section 3.1), investigate under what social circumstances the language could have lost its morphology (Section 3.2), and argue that adult second language speakers were the agents of the change (Section 3.3).

3.1 Dating the migration of pre-Alorese to Pantar Island

Sometime in the past, speakers of pre-Alorese moved away from the region where Western Lamaholot languages were/are spoken, on or near the eastern part of Flores Island (see Section 1). Using historical sources and oral traditions, this migration can be dated to have occurred 600–700 years ago. The evidence for this is presented in Klamer (2011, 2012) and is summarised here for convenience.

In an early Dutch geographic journal article (Anonymous 1914: 75–78)³ the “non-indigenous” coastal populations of Pantar and Alor are distinguished from indigenous mountain populations. The only non-indigenous coastal people on the islands are the Alorese. The anonymous report also recalls a local legend that the coast of northwest Pantar (where Pandai is located, see Figure 2) was the first to be populated by these coastal people. The legend has it that a “colony of Javanese” settled there “5 to 600 years ago” [in 1914] (Anonymous: 77). However, the same source includes a footnote (p. 89) which explains that the notion *orang djawa* (lit. ‘Javanese people’) applies to everyone who comes from other parts of the archipelago. In other words, the so-called “Javanese” coastal settlers mentioned in the legend were people from “overseas”, but not from Java.⁴ The coastal communities in Pandai, Munaseli, Baranusa and Alor Besar are all Alorese speaking,⁵ and do not

3. This article was written by one or more unknown editors of the journal it was published in. A footnote explains that the two major sources for the article were the “Military Memories” written to report on military expeditions on the islands in 1910 and 1911, and an earlier report of a geological expedition by R. D. M. Verbeek in 1899, published as “Molukken Verslag” in *Jaarboek van het Mijnwezen in Ned. Oost-Indie, jaargang 1908*.

4. Compare Kambera (a language of Sumba) *tau Jawa* ‘stranger’ (lit. ‘Javanese person’) and *tau Jawa bara* ‘westerner’ (lit. ‘white Javanese person’), where *Jawa* also denotes ‘stranger’ (Onvlee 1984: 115).

5. The Alorese spoken in Munaseli is referred to as *Bahasa Muna* or *Kadire Senaing* by Rodemeier (2006).

show a trace of Javanese linguistic or cultural influence. Instead, the close linguistic and cultural ties between today's Alorese and Lamaholot suggest that the colony of *orang djawa* that settled on Pandai according to the legend were in fact pre-Alorese speakers originating from (the vicinity of) east Flores, where Western Lamaholot languages are spoken.

The legend about the founding of Pandai is also the first of two legends reported in Lemoine (1969) and cited in Barnes (1973: 86, 2001: 280) and Rodemeier (2006). Today, it is still part of the oral history of the Alorese: in 2016, Francesca Moro recorded a story in Pandai in which the current king of Pandai, Rajab Suleiman Abu Bakar, tells the same legend about a Javanese king who came to Pantar and founded the village of Pandai, dating his arrival at 1,310 AD (Moro 2018). The legend recounts that two Javanese brothers, Aki Ai and his younger brother Mojopahit, sailed to Pantar, where Aki Ai treacherously abandoned Mojopahit. Mojopahit's descendants eventually colonised Pandai, Baranusa, and Alor Besar. The second legend in Lemoine (1969) tells of Javanese immigrants killing the king of Munaseli (another kingdom located further eastwards on the north coast of Pantar, see Figure 2) and destroying the Munaseli kingdom sometime between 1,300–1,400 AD. These Javanese immigrants were allied to the kingdom of Pandai. The defeated Munaseli population fled to Alor. In short, ethnographic observations report oral traditions which all agree that the Pandai and Munaseli kingdoms were in place around 1,300 AD in Pantar, and that they were established by non-indigenous groups who also colonised Baranusa and Alor Besar. From linguistic and cultural evidence, it can be inferred that these groups spoke pre-Alorese, a Western Lamaholot language.

To conclude, pre-Alorese speaking groups migrated away from the Western-Lamaholot-speaking area in the east Flores region 600–700 years ago,⁶ and have been present in north Pantar at least from the 14th century. After initially settling on Pantar, they also settled in the westernmost coastal parts of Alor Island.

3.2 Alorese as a language of trade and interethnic communication

In known cases where language contact has led to loss of morphological complexity it involves adults as L2 learners who simplify non-native morphological structures, as in Afrikaans (den Besten 1989), Old English (Trudgill 2016) and in adult second language Dutch (Blom, Polišenská & Weerman 2006). While morphological loss *can* be an independent development, the relatively quick and drastic reduction

6. The notion “east Flores region” is intentionally left vague. If the homeland of Lamaholot was Lembata (as argued in Fricke 2019), then it is also possible that the Western Lamaholot group started out in Lembata, with some of the Western Lamaholot languages going west, to Flores, and some, like pre-Alorese, going east.

of all morphology in Alorese suggests that the language went through a stage of imperfect language learning, by adult speakers who acquired it as a second language. This converges with what we know about the social circumstances in which Alorese was used.

The ethnicity of today's speakers of Alorese is rather mixed. Barnes (1973: 86, following Anonymous 1914: 77, 89) mentions that "the Coastal Alorese speaking coast-dwellers of Alor and Pantar [...] have slowly formed from a mixture of Selayarese (Macassarese-Buginese), Solorese and Javanese and people of the former Muna (on the northern tip of Pantar)⁷ and, on Pantar, also from people from Ternate." This ethnic mixing with people from overseas is to be expected, as in pre-colonial times (at least from the 12th century onwards), busy trade relations existed between the Moluccas, groups from Java, Sulawesi, possibly China, Vietnam, and northern India; and Pantar and Alor were part of these trading routes. In colonial times, Portuguese and other ships sailed the narrow but extremely deep gulf between Pantar and Alor on their way from the Moluccas and Makassar in the north, to the islands of Timor and Sumba in the south, in order to buy wax and sandalwood. When sailing this narrow gulf they had both Alor and Pantar within sight. Traders and soldiers must have frequented the islands in the 16th century when travelling between Larantuka (on Flores) and Dili (on Timor), as Alor and Pantar are located in between these two Portuguese settlements. (See Hägerdal 2010 and Klamer 2010 for more historical details and references.) In other words, after the pre-Alorese speakers settled on the coasts of Pantar and Alor some 600–700 years ago, they may very well have intermarried with members of overseas groups, as suggested by Anonymous (1914: 77). In addition, the (pre-)Alorese coastal populations also had intensive trade relations with the inland non-Austronesian populations of Alor and Pantar, exchanging e.g. fish and woven cloth for local food crops grown in the mountains (cf. Anonymous 1914: 76, 81–82). The Alorese speaking groups on the coasts of Pantar and Alor were initially relatively small and scattered (for example, Anonymous 1914: 89–90 mentions groups of 200, 300, and 600 people). As newcomer clans inhabiting coastal locations geographically remote from each other, many Alorese clans must have been outnumbered by their non-Austronesian neighbours, so it is expected that they also exchanged women with the non-Austronesian mountain clans in their immediate vicinity. Today, the Alorese on Pantar mix and intermarry with speakers of non-Austronesian languages such as Teiwa, Blagar, Kaera, Western Pantar, and Kroku; and on Alor the Alorese mix with speakers of non-Austronesian Adang and Kabola. Wellfelt (2016) presents evidence that such intensive cultural contacts also existed in the past.

7. The 'Muna' referred to here is an abbreviation of 'Munaseli', the mythical kingdom located in north Pantar.

Moreover, it seems that until not so long ago, exchange of slaves was also common in at least some parts of Alor and Pantar. For example, speakers of Teiwa (non-Austronesian, northwest Pantar) noted that in former days, they would sell, send, or give away people that were “useless to the clan” to the Alorese people living in Baranusa (Klamer 2010: 41 footnote 2).

It is likely that pre-Alorese was used as a language of trade and interethnic communication. Several sources mention that Alorese was used as a language of wider communication in the Alor-Pantar region till at least the mid 1970’s (Stokhof 1975: 8; Grimes, Therik & Grimes 1997: 57); though note that Alorese is named ‘Lamaholot’ in these sources). Local speakers of Teiwa mentioned to me in 2004 that Alorese was used as a lingua franca in their area until well into the 1950s after which it was gradually replaced by Indonesian.

In sum, the pre-Alorese immigrants who had settled on the coast of Pantar around 1,300 AD had trade relations, cultural contacts, and exchanges of people through bilingual marriages and slavery; both with individuals from overseas and with neighbouring non-Austronesian clans. As a result of these contacts, there must have been significant numbers of adults who learned pre-Alorese as a second language. Their learners’ omissions became part of a morphologically simplified variety that is Alorese today.

The situation of the pre-Lewoingu-Lamaholot speakers must have been very different. Unlike the (pre-)Alorese, the Lewoingu-Lamaholot speakers are not scattered in small groups along long stretches of coast, separated from each other by non-Austronesian speakers. Rather, the Lamaholot varieties cover a large area in the Flores-Lembata region, with bigger, contiguous groups of speakers living next to each other. The (pre-)Lewoingu-Lamaholot speakers did (and do) not have any long-term intensive contact with non-Austronesian speakers: in the last 600–700 years there were no longer any non-Austronesian languages spoken in the east Flores-Lembata region.⁸ Finally, unlike Alorese, Lewoingu-Lamaholot has not been used a lingua franca. Indeed, in the period under consideration the entire Flores-Lembata region was monolingual Lamaholot, so that a lingua franca was not needed. The different sociolinguistic situations of (pre-)Lewoingu-Lamaholot and (pre-)Alorese thus explain why the former retained its morphology, and the latter lost it.

8. Klamer (2012) presents evidence that once there were non-Austronesian languages spoken in the Flores-Lembata region on the basis of various non-Austronesian features found in all Lamaholot varieties. She argues that these features must have entered the languages at an ancient, prehistorical stage. In Fricke (2019) more detailed arguments are presented showing that the non-Austronesian features of the Lamaholot varieties were already part of their ancestor language.

3.3 Alorese was acquired by adult speakers

The loss of inflectional and derivational morphological categories in Alorese can be seen as an instance of simplification that occurred as a result of language contact, where non-native adults learned the language imperfectly (Trudgill 2010: 310–13).

Morphology is a complex, embedded part of grammatical structure with a relatively small functional load. Inflectional morphology is known to be seriously problematic for post-adolescent second language learners who have passed the ‘critical threshold’ (Lenneberg 1967) for language acquisition (Kusters 2003: 21, 48). And derivational morphology that is partly lexicalised, irregular and semantically opaque, represents arbitrary grammatical patterns that must be learned without a transparent relation between form and function, which is equally difficult for post-threshold adult language learners. Morphological features of a second language that are not part of a speaker’s first language are more likely to be simplified or generalised (Jarvis & Odlin 2000: 552–553).

The morphological profile of the non-Austronesian languages surrounding Alorese is quite different from Alorese. The non-Austronesian languages generally lack verbal subject agreement prefixes and instead use verbal prefixes to mark objects; while possessors are marked as prefixes rather than suffixes. Overall, they have little derivational morphology on nouns or verbs (cf. the overviews in Klamer 2017 and Holton & Klamer 2017). The morphological discrepancies between Alorese and the non-Austronesian first languages of the adult speakers that acquired Alorese likely accelerated the loss of pre-Alorese morphology. In the process of learning a second language, adult learners apply principles that reduce the amount of morphology and increase the one-to-one relationship between form and meaning (Kusters 2003). In order for the simplified patterns to stabilise and carry on through the generations, the contact must have involved a community of bilinguals with a large number of L2 speakers – if there had been only a few L2 speakers, their morphologically reduced language would not have had much impact on the community language. While the simplifying L2 may initially have been used as a trade language or lingua franca, for the changes to become entrenched and passed on to the next generations as part of their L1, it must have been used as an L2 in a variety of wider communicative contexts apart from trade alone. In sum, the contact must have been long-term, intense, and multi-purpose (Kusters 2003; Trudgill 2011).

Sociolinguistic and census data collected through fieldwork by Moro (2018a) reveals that today’s Alorese as spoken on Alor has *as many* L2 speakers as it has L1 speakers, and that both types of speakers are interacting with each other in various cultural domains on a regular basis. In an experimental study focusing on the loss of the last remnants of Alorese morphology (the subject agreement prefixes on vowel initial verbs, see Section 2.1), Moro compares the production of subject prefixes

in a group of 6 female Alorese L1 speakers and a group of 12 female Alorese L2 speakers who all have the non-Austronesian language Adang as their L1. The results show that the L2 speakers not only make significantly more agreement errors than the L1 speakers, but also that they tend to use only a single ‘default’ subject agreement marker. In other words, the last vestige of Alorese morphology, subject agreement on verbs, is currently disappearing. Moro identifies the large proportion of L2 speakers in the community and the regular, multi-faceted contact between speakers of L1 Adang and L2 Alorese as the two driving forces that are crucial for this process of simplification.

Assuming that the contact situation between Alorese and Adang speakers today is not fundamentally different from the contact situation that existed between Alorese and other non-Austronesian speaker groups in the past, I suggest that Alorese was spoken in bilingual communities with large numbers of L2 speakers for at least several centuries. In a situation where half of a community consists of L2 speakers, the bilingual nature of the community is very stable, and as long as these demographics do not change, such a community can continue to exist for centuries without shifting to either of the languages. Such an ongoing long-term stable bilingual situation would have led to the erosion of Alorese morphology and the isolating nature of the language today.

The fact that Alorese simplified so much suggests that the change was caused by adults, not children. A long-term stable bilingual situation involving adult-second language learning usually leads to grammatical simplification. While such a situation can also induce morphological complexification, when it does it involves (pre-adolescent) childhood bilingualism (Kusters 2003; Trudgill 2011; Ross 2013).⁹ Bilingual children are able to create new morphological forms by dissociating grammatical features from their original forms and remapping them on new forms (Sánchez 2006) while adult L2 speakers are less able to do so.

If the language contact was so intense that it resulted in morphological loss in Alorese, we might expect other levels of linguistic structure to also be affected (Thomason 2001). If (pre-) Alorese is (or was) segmentally or phonotactically more complex than the languages it is (was) in contact with, we would expect some of that complexity to be lost in adult L2 speakers.¹⁰ However, if its segment inventory

9. Moro (2018) revealed that the plural word *hire* in Alorese emerged through contact with non-Austronesian languages, constituting a complexification of Alorese grammar with bilingual children as agents (2018: 194).

10. Long-term contact involving adult language contact may produce smaller inventories through imperfect learning, pidginisation, and simplification, while child bilingualism may produce large inventories through borrowing (Trudgill 2004: 314).

is (was) similar, and its phonotactics equally or less complex than the L1 of these speakers, we expect no contact-induced changes. This is indeed what we find: current Alorese and Lewoingu-Lamaholot, as well as the other Lamaholot varieties are all similar in terms of segment inventory and phonotactics; there is no reason to assume that (pre-)Alorese was phonologically more complex in the past and became phonologically simplified by non-Austronesian L2 speakers. (Nor did it become more complex under non-Austronesian influence.) Lexically, we expect to find non-Austronesian loans in the Alorese lexicon which set it apart from its Western Lamaholot relatives. One example is the fact that the Alorese decimals (e.g., *kar-to* ‘ten’, *kar-ua* ‘twenty’) contain reflexes of Proto-(Timor) Alor Pantar *qar- ‘ten’, unlike all the other Lamaholot varieties (Kaiping, Edwards & Klamer 2019). A few more examples of loans from non-Austronesian neighbouring languages are given in (36). Note that the dialect of Alor Besar and the dialect of Pandai borrowed different words for ‘mud’, from different sources.

(36) Some non-Austronesian loans attested in Alorese dialects

Alorese	Dialect	Meaning	Source	Language	Lewoingu-Lamaholot	PMP (Blust and Trussel n.d.)
<i>klita(?)</i> , <i>kalita</i>	Pandai, Munaseli, Baranusa, Alor Besar	‘dirty’	<i>klita?</i> <i>klitak</i> <i>kəlitah</i>	Teiwa Blagar-Bakalang Blagar-Kulijahi	<i>milan</i>	unknown
<i>laminj</i>	Pandai, Munaseli, Baranusa	‘to wash’	<i>laminj</i>	Western Pantar	<i>baha</i> , <i>puhu</i>	*basəq
<i>para</i>	Alor Besar	‘mud’	<i>para</i> <i>parah</i>	Kabola Adang	<i>walanj</i>	*pitek
<i>buta</i>	Pandai	‘mud’	<i>buta</i> <i>buta</i>	Blagar-Bakalang Blagar-Bama	<i>walanj</i>	*pitek

In conclusion, the loss of inflectional and derivational morphological categories in pre-Alorese is an instance of simplification that occurred during the past 600–700 years, as the result of a long-term, stable situation of bilingualism where a large group of adult non-native speakers learned the language imperfectly.

4. Conclusions

The ancestor of today's Alorese, pre-Alorese, had morphology of Malayo-Polynesian origin, including possessor suffixes, inalienable suffixes, pronominal prefixes for transitive subjects, pronominal suffixes for intransitive subjects and nominal agreement, as well as at least seven derivational prefixes. Of these, Alorese retained the subject prefix on a small set of frequent verbs, using it to encode both transitive and intransitive subjects. The final nasal morpheme on inalienable nouns was reinterpreted as a root-final consonant segment. In a tiny number of words remnants of derivational prefixes, in particular *kə-*, can be found. The rest of the derivational prefixes and inflectional paradigms were completely lost.

This morphological loss happened after the pre-Alorese speaking group migrated from the Lamaholot area at least 600–700 years ago, settled in north Pantar in the early 14th century, and from there moved on to Alor. The pre-Alorese immigrants who settled on the coastal regions of Pantar and Alor were in contact with different speakers from overseas as well as with non-Austronesian speakers in the mountains. Contacts involved barter trade, and included exogamy resulting in bilingual marriages, as well as slavery. As a result of these contacts, adults who originally spoke a non-Austronesian language acquired Alorese as a second language. Their learners' omissions became part of a morphologically simplified variety that developed into today's isolating Alorese.

Acknowledgements

I would like to thank Owen Edwards, Hanna Fricke, Francesca Moro and two anonymous reviewers for their insightful feedback and comments on earlier drafts of this paper. All errors are my own.

Funding

The first draft of this paper was written and submitted in 2010, as part of the EuroCORES-EuroBABEL-project: 'Alor Pantar languages: Origin and theoretical impact' funded by the European Science Foundation. The revision was written in 2018, as part of the VICI research project 'Reconstructing the past through languages of the present: The Lesser Sunda Islands' at Leiden University, funded by the Netherlands Organisation for Scientific Research NWO, project number 277–70–012.

References

- Anonymous. 1914. De eilanden Alor en Pantar, residentie Timor en Onderhoorigheden (The islands of Alor and Pantar, Residence Timor and Dependencies). *Tijdschrift van Het Koninklijk Nederlandsch Aardrijkskundig Genootschap* 31: 70–102.
- Arndt, Paul S. V. D. 1937. *Grammatik der Solor-Sprache*. Ende, Flores: Arnoldus Drukkerij.
- Bakker, Peter & Parkvall, Mikael. 2005. Reduplication in pidgins and creoles. In *Studies on Reduplication*, Bernard Hurch & Veronika Mattes (eds), 511–531. Berlin: Mouton de Gruyter. <https://doi.org/10.1515/9783110911466.511>
- Barnes, Robert H. 1973. Two terminologies of symmetric prescriptive alliance from Pantar and Alor in Eastern Indonesia. *Sociologus Zeitschrift Für Empirische Ethnosoziologie Und Ethnopsychologie* 23(1): 71–88.
- Barnes, Robert H. 2001. 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. <https://doi.org/10.1163/22134379-90003810>
- den Besten, Hans. 1989. From Khoekhoe foreignertalk via Hottentot Dutch to Afrikaans: The creation of a novel grammar. In *Wheels within Wheels; Papers of the Duisburg Symposium on Pidgin and Creole Languages*, 207–249. Frankfurt: Peter Lang.
- Blom, Elma, Polišká, Daniela & Weerman, Fred. 2006. Effects of age on the acquisition of agreement inflection. *Morphology* 16: 313–336. <https://doi.org/10.1007/s11525-007-9110-1>
- Blust, Robert A. 2009a. *The Austronesian Languages*. Canberra: Pacific Linguistics.
- Blust, Robert A. & Trussell, Stephen. n.d. *The Austronesian Comparative Dictionary*. <<http://www.trussell2.com/ACD/>> (1 June 2020).
- Bouman, Maarten A. 1943. De Aloreesche dansplaats. *Bijdragen Tot de Taal-, Land- En Volkenkunde* 102: 481–500. <https://doi.org/10.1163/22134379-90001235>
- Elias, Alexander. 2017. *The internal diversity of Lamaholot*. Ms, Leiden University.
- Fricke, Hanna. 2014. *Topics in the Grammar of Hewa: A Variety of Sika in Eastern Flores, Indonesia*. Munich: Lincom.
- Fricke, Hanna. 2017a. Nouns and pronouns in Central Lembata Lamaholot (Austronesian, Indonesia). *Wacana* 18(3): 746–771. <https://doi.org/10.17510/wacana.v18i3.635>
- Fricke, Hanna. 2017b. The rise of clause-final negation in Flores-Lembata, Eastern Indonesia. *Linguistics in the Netherlands*, 47–62. <https://doi.org/10.1075/avt.34.04fri>
- Fricke, Hanna. 2019. *Traces of Language Contact. The Flores-Lembata Languages in Eastern Indonesia*. PhD dissertation, Leiden University. Utrecht: LOT Publications. <<https://www.lotpublications.nl/traces-of-language-contact>> (1 June 2020).
- Grimes, Charles E., Therik, Tom & Grimes, Barbara D. 1997. *A Guide to the People and Languages of Nusa Tenggara*. Kupang, Indonesia: Artha Wacana Press.
- Hägerdal, Hans. 2010. Cannibals and pedlars. *Indonesia and the Malay World* 38(111): 217–246. <https://doi.org/10.1080/13639811.2010.489356>
- Holton, Gary & Klamer, Marian. 2017. The Papuan languages of East Nusantara and the Bird's Head. In *The Languages and Linguistics of the New Guinea Area*, Bill Palmer (ed.), 569–640. Berlin: Mouton de Gruyter. <https://doi.org/10.1515/9783110295252-005>
- Jarvis, Scott & Odlin, Terence. 2000. Morphological type, spatial reference, and language transfer. *Studies in Second Language Acquisition* 22: 535–556. <https://doi.org/10.1017/S0272263100004034>

- Kaiping, Gereon, Edwards, Owen & Klamer, Marian (eds). 2019. *LexiRumah 3.0.0*. Leiden: Leiden University, Centre for Linguistics. <<https://lexirumah.model-ling.eu/lexirumah/>> (12 November 2019).
- Keraf, Gregorius. 1978. *Morfologi dialek Lamalera (Morphology of the Lamalera dialect)*. PhD dissertation, Universitas Indonesia, Jakarta.
- Klamer, Marian. 2010. *A Grammar of Teiwa*. Berlin: Mouton de Gruyter. <https://doi.org/10.1515/9783110226072>
- Klamer, Marian. 2011. *A Short Grammar of Alorese (Austronesian)* [Languages of the World Materials 486] Munich: Lincom.
- Klamer, Marian. 2012. Papuan-Austronesian language contact: Alorese from an areal perspective. In *Melanesian Languages on the Edge of Asia: Challenges for the 21st Century* [Language Documentation & Conservation Special Publication 5], Nicholas Evans & Marian Klamer (eds), 72–108. Honolulu HI: University of Hawai'i Press. <<http://scholarspace.manoa.hawaii.edu/handle/10125/4561>> (1 June, 2020).
- Klamer, Marian. 2017. The Alor-Pantar languages: Linguistic context, history and typology. In *The Alor-Pantar Languages: History and Typology*, 2nd edn, Marian Klamer (ed.), 1–48. Berlin: Language Science Press. <https://doi.org/10.5281/zenodo.437098>
- Kroon, Yosep Bisara. 2016. *A Grammar of Solor-Lamaholot: A Language of Flores, Eastern Indonesia*. PhD dissertation, University of Adelaide. <<http://hdl.handle.net/2440/102380>> (1 June 2020).
- Kusters, Christiaan Wouter. 2003. *Linguistic Complexity: The Influence of Social Change on Verbal Inflection*. PhD dissertation, Leiden University. Utrecht: LOT Publications.
- Lemoine, Annie. 1969. Histoires de Pantar. *L'Homme* 9(4): 5–32.
- Lenneberg, Eric. 1967. *Biological Foundations of Language*. New York NY: Wiley. <https://doi.org/10.1080/21548331.1967.11707799>
- Lewis, M. Paul, Simons, Gary F. & Fennig, Charles D. (eds). 2017. *Ethnologue: Languages of the World*, 20th edn. Dallas, Texas: SIL International. <<http://www.ethnologue.com>> (1 June 2020).
- Moro, Francesca. 2019. Loss of morphology in Alorese (Austronesian): Simplification in adult language contact. *Journal of Language Contact* 12:  <https://doi.org/10.1163/19552629-01202005>
- Moro, Francesca. 2018. The plural word *hire* in Alorese: Contact-induced change from neighboring Alor-Pantar languages. *Oceanic Linguistics* 57(1): 177–198. <https://doi.org/10.1353/ol.2018.0006>
- Muysken, Pieter. 2013. Language contact outcomes as the result of bilingual optimization strategies. *Bilingualism: Language and Cognition* 16(4): 709–730. <https://doi.org/10.1017/S1366728912000727>
- Nagaya, Naonori. 2011. *The Lamaholot Language of Eastern Indonesia*. PhD dissertation, Rice University. <<http://hdl.handle.net/1911/70366>> (1 June 2020).
- Nishiyama, Kunio & Kelen, Herman. 2007. *A Grammar of Lamaholot, Eastern Indonesia: The Morphology and Syntax of the Lewoingu Dialect* [Languages of the World/Materials 467]. Munich: Lincom.
- Onvlee, Louis. 1984. *Kambaraas (Oost-Sumbaas)-Nederlands Woordenboek*. Dordrecht: Foris.
- Pampus, Karl-Heinz. 1999. *Koda Kiwa: Dreisprachiges Wörterbuch Des Lamaholot (Dialekt von Lewolema)* [Vol. 4. Abhandlungen Für Die Kunde Des Morgenlandes 52] Stuttgart: Steiner.

- Rodemeier, Susanne. 2006. *Tutu Kadire in Pandai-Munaseli – Erzählen Und Erinnern Auf Der Vergessenen Insel Pantar (Ostindonesien)* [Passauer Beiträge Zur Südostasienskunde 12]. Berlin: LIT Verlag.
- Ross, Malcolm. 2013. Diagnosing contact processes from their outcomes: The importance of life stages. *Journal of Language Contact* 6(1): 5–47. <https://doi.org/10.1163/19552629-006001002>
- Samely, Ursula. 1991. *Kedang (Eastern Indonesia): Some Aspects of Its Grammar* [Forum Phonetikum 46]. Hamburg: Helmut Buske.
- Sánchez, Liliana. 2006. Bilingual grammars and creoles: Similarities between functional convergence and morphological elaboration. In *L2 Acquisition and Creole Genesis* [Language Acquisition and Language Disorders 42], Claire Lefebvre, Lydia White & Christine Jourdan (eds), 277–294. Amsterdam: John Benjamins. <https://doi.org/10.1075/lald.42.17san>
- Stokhof, Wim A. L. 1975. *Preliminary Notes on the Alor and Pantar Languages (East Indonesia)*. Canberra: Pacific Linguistics.
- Trudgill, Peter. 2004. Linguistic and social typology: The Austronesian migrations and phoneme inventories. *Linguistic Typology* 8: 305–320. <https://doi.org/10.1515/lity.2004.8.3.305>
- Trudgill, Peter. 2010. Contact and sociolinguistic typology. In *The Handbook of Language Contact*, Raymond Hickey (ed.), 299–319. Malden MA: Wiley-Blackwell. <https://doi.org/10.1002/9781444318159.ch15>
- Trudgill, Peter. 2011. *Sociolinguistic Typology: Social Determinants of Linguistic Complexity*. Oxford: OUP.
- Trudgill, Peter. 2016. Contact-related processes of change in the early history of English. In *The Cambridge Handbook of English Historical Linguistics*, Merja Kytö & Paiva Pahta (eds), 318–334. Cambridge: CUP. <https://doi.org/10.1017/CBO9781139600231.020>
- Wellfelt, Emilie. 2016. *Historyscapes in Alor. Approaching Indigenous Histories in Eastern Indonesia*. PhD dissertation, Linnaeus University, Växjö, Sweden.

