Summary of PhD thesis

Traces of language contact

The Flores-Lembata languages in eastern Indonesia

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INTRODUCTION¹

The overall aim of this dissertation is to reconstruct the history of the Flores-Lembata languages including traces of contact-induced change. The Flores-Lembata languages are a lower-level subgroup within the Austronesian language family spoken in eastern Indonesia. The Flores-Lembata group can be divided into five linguistically defined subgroups. These are: Sika, Western Lamaholot, Central Lamaholot, Eastern Lamaholot, and Kedang, as shown on Map 1. Each of these subgroups includes one or more languages. Proposed language boundaries are indicated as lines on the map.

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Map 1. The five subgroups of the Flores-Lembata languages.

GRAMMATICAL DESCRIPTION OF CENTRAL LEMBATA

Part I of this dissertation fills a gap in the documentation of the Flores-Lembata languages by providing a descriptive grammar of the language Central Lembata (ISO 639-3: *lvu*; also: *Atadei Demon*).² A thematic dictionary of Central Lembata has been published as Fricke (2019b). The description in this dissertation is the first extensive description of a language belonging to the Central Lamaholot subgroup of Flores-Lembata. Fricke (2017a) is an earlier description of the nouns and pronouns in this language. In order to be able to carry out the comparative work on the Flores-Lembata family in Part II and Part III of this dissertation, it was essential to add to the description of the Flores-Lembata languages and describe a variety of the Central Lamaholot subgroup.

The language Central Lembata is phonologically conservative but innovative in its morphology. Table 1 lists the phonological retentions characterizing Central Lembata as phonologically more conservative than varieties of the other subgroups of Flores-Lembata. Some of these phonological conservative features are also attested in other Flores-Lembata subgroups but none of them has the complete set of phonological retentions listed here.

² The data on which Part I of this thesis is based are archived at: <https://hdl.handle.net/1839/66e36373-6dec-437d-8d2c-569ee7f9d726>.

Type	PMP	Central Lembata
Final consonants	*-p; -t; -k	-p; -t; -k
	*-m; -n; -ŋ	-m; -n; -ŋ
	*-l; -r	-l; -r
	*-w; -y / a_#	-v; -dʒ ~ -Ø
Schwa in all positions	*e [ə]	ə
Fricatives ³	*s	PFL *s/*h > s/Ø

PMP=Proto-Malayo-Polynesian; PFL=Proto-Flores-Lembata.

Table 1. Phonological retentions in Central Lembata.

Morphological innovations unique to the Central Lamaholot subgroup are illustrated with examples from Central Lembata. Central Lembata innovated the plural suffix *-dʒa* going back to the third person plural pronoun *da*, the specificity suffix *-u* of unknown origin, both for alienable nouns; and a large set of coda alternating nouns. Coda alternating nouns have two synchronic realizations of the same lexeme. One form is consonant-final, such as for example *aor* ‘dog’ or *busər* ‘cotton bow’, and the other form is shorter and vowel-final, such as *au* ‘dog’, or consonant-final but with only one vowel which is phonetically long, such as *buus* [bu:s] ‘cotton bow’. Coda alternating nouns are a lexical subtype of alienable nouns which, in addition, also contain simple nouns with only one form per lexeme. The division into simple and coda alternating nouns, such as shown in Table 2, is lexically determined. However, historically the phonological structure of the stem plays an important role in determining whether a noun is simple or coda alternating.

Simple nouns		Coda alternating nouns (long/short)	
<i>manuk</i> ⁴	‘chicken’	<i>aor/au</i>	‘dog’
<i>kebol</i>	‘sugar palm’	<i>viter/viti</i>	‘goat’
<i>taum</i>	‘indigo plant’	<i>lisor/liso</i>	‘rice plant’
<i>gərəp</i>	‘young woman’	<i>busər/buus</i>	‘cotton bow’
<i>snae</i>	‘shawl’	<i>piriŋ/piri</i>	‘plate’
<i>əmut</i>	‘dust’	<i>kopoŋ/kopo</i>	‘child; young person’

Table 2. Subtypes of alienable nouns in Central Lembata.

³ All other Flores-Lembata subgroups undergo PFL *s/*h > h.

⁴ For transcriptions and reconstructions in this paper IPA symbols are used, except for the glide [j] which is represented as <y> in the transcriptions. However, PMP reconstructions are taken from Blust and Trussel (2010) as they are, only <e> [ə] is retranscribed as <ə>. Glosses in this paper are: 1 = first person, 2 = second person, 3 = third person, DISC = discourse particle, DIST = distance, EXCL = exclusive, L = long form of coda alternating noun, NAME = personal name, NEG = negator, PL = plural, S = short form of coda alternating noun, SG = singular.

The two shapes of a coda alternating noun are used in different syntactic contexts. The distribution rules listed below apply for the two shapes of coda alternating nouns in a noun phrase (NP) and nouns as part of a verb phrase (VP).

Noun Phrase: In non-final position, coda alternating nouns occur as short forms, marked by \s in the glosses (1). In final position, coda alternating nouns occur as long forms, marked by \L in the glosses (2).

Verb phrase: object nouns (which are always in final position of the VP) occur as short forms (3). Long forms cannot occur within the VP.

- (1) *Kopo anak vo ro kərka-ŋa.*
 child\s small DIST DISC startle-3SG
 ‘That child got frightened.’

- (2) *Kopon gəle-a.*
 child\L lie.down-3SG
 ‘The child sleeps.’

- (3) *Kam=parav kopo.*
 1PL.EXCL=feed child\s
 ‘We bring up (our) children.’

Another morphological innovation is the Central Lembata paradigm of S/A [Subject/ Agent] proclitic pronouns which is functionally not homogeneous. A subset of the proclitic pronouns listed in Table 3 can only appear in irrealis contexts.

	Proclitic	Context
1SG	<i>ka=</i>	Irrealis
2SG	<i>ma=</i>	Irrealis
3SG	<i>na=</i>	Realis and Irrealis
1PL.INCL	<i>ta=</i>	Irrealis
1PL.EXCL	<i>kam=</i>	Realis and Irrealis
2PL	<i>ma=</i>	Irrealis
3PL	<i>da=</i>	Realis and Irrealis

Table 3. S/A proclitic pronouns.

In Central Lembata, three irrealis contexts are attested: the expression of intentions or future events (4), negated sentences (5), and imperatives (6).

- (4) *Ma ka=tutu re bo tentaŋ Jon no Meri.*
 want 1SG=tell now DISC about NAME and NAME
 ‘I want to tell now about John and Mary.’
- (5) *Ta ka=k-etən-a si*
 1SG=1SG-know-3SG NEG
 ‘I don’t know.’
- (6) *Ma=gute-Ø ve ka=lou-ŋi*
 2SG=take-3PL so.that 1SG=rinse-3PL
 ‘Take them [washed cloths], so that I can rinse them.’

HISTORICAL PHONOLOGY AND LEXICAL INNOVATIONS

Part II of this dissertation concerns the history of the phonology and the lexicon of the Flores-Lembata languages with the aim of providing evidence, on the one hand, for inherited Austronesian vocabulary in the Flores-Lembata languages, and on the other hand, for the presence of a non-Austronesian lexical substrate. Data used in this part of the dissertation is taken from the online database LexiRumah (Kaiping and Klamer 2018; Kaiping, Edwards, and Klamer 2019).

I show that the Flores-Lembata languages form an innovation-defined subgroup together with their western neighbours on Flores, as well as further Austronesian languages on the islands of Sumba and the language Bima on Sumbawa. I propose that this set of languages goes back to a common ancestor Proto-Bima-Lembata (PBL) based on the lenition of initial PMP *b- > PBL *w- in a specific set of lexical items, see Table 4. These lexical items do not show this lenition in other Austronesian languages of the region, exemplified by the Proto-Rote-Meto (PRM) reconstructions (Edwards in prep) which have reflexes in a large group of languages in western Timor and on the island of Rote. In the table, reflexes in a representative set of the Bima-Lembata languages are provided, for instances, Bima, Kambara on Sumba, Proto-Central Flores (PCF) (Elias 2018), and Proto-Flores-Lembata (PFL).

PMP	PBL	Bima-Lembata languages				PRM
		Bima	Kambera	PCF	PFL	
*babuy 'pig'	*wawi	<i>vavi</i>	<i>wei</i>	*wawi	*vavi	*bafi
*batu 'stone'	*watu	<i>vadu</i>	<i>watu</i>	-	*vatu	*batu
*buaq 'fruit'	*wua	<i>vua</i>	<i>wua</i>	-	*vua	*bua-k
*bulan 'moon'	*wulan	<i>vura</i>	<i>wulan</i>	*wula	*vulan	*bulan
*bahi 'woman'	*wai	-	-	*fai	*vai	*fee
*bujəq 'foam'	*wu[d?]a	-	<i>wura</i>	*woda	*vuda	*fudʒə

Table 4. Examples of lexical items that show PMP *b > PBL *w.

The Flores-Lembata subgroup can be based on three exclusively shared sound changes: (i) PMP *ŋ/*n > PFL *n- in initial position (see Table 5), (ii) PMP *z/*d/*j > PFL *d in initial and intervocalic position (see Table 6), and (iii) PMP *s > PFL *s/*h in initial and intervocalic position (see Table 7).

PMP	PFL	Gloss	Sound change
*niuR	*niur	'coconut'	
*ŋusu	*nusu	'mouth'	*ŋ- > *n-

Table 5. Examples of initial PMP *n-/*ŋ- > PFL *n-.

PMP	PFL	Gloss	Sound change
*zaqit	*daʔit	'sew'	*z- > *d-
*quzan	*udan	'rain'	*-z- > *-d-
*ŋajan	*nadan	'name'	*-j- > *-d-
*dəŋəR	*dəŋər	'hear'	
*budaq	*budaʔ	'white'	

Table 6. Examples of PMP *z/*j/*d > PFL *d.

PMP	PFL	Gloss	Sound change
*siwa	*siva	'nine'	
*tasak	*m-tasak	'ripe'	
*sakay	*hakay	'climb'	*s > *h
*asu	*ahu	'dog'	*s > *h

Table 7. Examples of PMP *s > PFL *s/*h.

Flores-Lembata can be subdivided into five individual subgroups, four of which – Sika, Western Lamaholot, Central Lamaholot, and Kedang – are defined by the exclusively shared sound changes listed in Table 8. The fifth group, Eastern Lamaholot, does not undergo any exclusive sound change which is not shared with any of the other groups.

	Subgroup-defining changes	Other changes
Sika	PFL *d > r PFL *-ŋ- > -n- / V_V PFL *mp- > b / _# PFL *mt- > d- / _#	PFL *k > ʔ PFL *s > h
Western Lamaholot	PFL *r > PWL *ʔ / V_V; _#	PFL *-d- > r PFL *dʒ- > r / #_ PFL *s > h PWL *v > f (some varieties) PWL *y > dʒ (some varieties)
Central Lamaholot	PFL *-d- > PCL *-dʒ- / V_V PFL *h > PCL Ø PFL *ʔ > PCL Ø	PCL *s > h (some varieties) PCL *y > dʒ (some varieties) PCL *dʒ > y (some varieties, sporadic) PCL *v > f (some varieties)
Eastern Lamaholot	-	PFL *-d- > r PFL *dʒ- > r / #_ PFL *s > h PFL *k > ʔ
Kedang	PFL *g > k PFL *-d- > (**dʒ) > -y-/Ø	PFL *k > ʔ PFL *s > h

Table 8. Attested sound changes in the Flores-Lembata subgroups.

The lexicon of the individual Flores-Lembata subgroups contains a considerable component of vocabulary which is of unknown origin and cannot be reconstructed to an Austronesian ancestor (up to 50% in individual languages). I tentatively consider all lexical items which cannot be matched with a widely attested Proto-Malayo-Polynesian (PMP) form (for example as reconstructed by Blust and Trussells (2010)) as potentially non-Austronesian. I propose that most of this non-Austronesian vocabulary entered the languages due to contact with now extinct non-Austronesian languages. However, there is always the possibility that a lack of documentation, historical-comparative research or loss of lexical items has so far prevented the reconstruction of particular forms to PMP. In addition, I do not rule out, of course, that individual items could have been invented by the communities due to different reasons. But I consider the pure invention of all new vocabulary, without external influence, very unlikely.

In the study of the Flores-Lembata lexicon and its origins, two types of non-Austronesian vocabulary are differentiated: (i) lexical items which can be reconstructed to Proto-Flores-Lembata and (ii) lexical items which occur in more than one subgroup of Flores-Lembata, show regular sound correspondences, but cannot be reconstructed to PFL with certainty because they are not attested in the subgroups that are furthest apart, namely Sika and Kedang.

The amount of PFL forms of unknown origin is rather small. In my data, only 37 out of the 210 PFL reconstructions I made are not of PMP origin. Some of these are also attested in other languages of the area but the majority is only attested in Flores-Lembata. Examples of PFL reconstruction without a known PMP source which, according to my data, only have attested reflexes in the Flores-Lembata languages are PFL *təmisi ‘ant’, *tena ‘canoe’, *osan ‘mat’, *vura ‘sand’, *(k)rəvun ‘sweat’, *səru-k ‘sweet’, *hogo ‘wake up’, and *(l)oyor ‘wave; sea’.

Much more numerous, with 185 sets in my data, are forms of unknown origin which cannot be reconstructed to PFL but which are attested with regular sound correspondences in more than one subgroup of Flores-Lembata. Again some of these lexemes are also attested in other languages of the area but the majority is only attested in a subset of Flores-Lembata languages. As the sound correspondences in these lexeme sets are regular among the subgroups, I provide potential reconstructions for them, marked with a hashtag (#) instead of an asterisks (*). These lexeme sets can be divided into three groups: (i) lexeme sets which are attested in Sika and at least one Lamaholot subgroup (around 40 sets), (ii) lexeme sets which are attested in Kedang and at least one Lamaholot subgroup (around 70 sets), and (iii) lexeme sets which are only attested in Lamaholot but at least in two of the three subgroups (around 70 sets). Examples for category (i) – Sika-Lamaholot – are #(sə)mei ‘blood’, #-ai ‘go’, #lusir ‘needle’, #kəmekot ‘scorpion’, and #buʔu ‘short’. Examples for category (ii) – Kedang-Lamaholot – are #bovon ‘bark’, #həbu ‘bathe’, #kovab ‘cloud; fog’, #korok ‘chest’, and #tapu ‘coconut’. Examples for category (iii) – only Lamaholot – are #svaol ‘all’, #knaru ‘back’, #navak ‘body’, #madu ‘grasshopper’, #latar ‘hair’, and #kote ‘head’.

Notably, the sets attested in category (i) – Sika-Lamaholot – are much fewer in number than the sets attested in category (ii) and (iii) – Kedang-Lamaholot and Lamaholot only. From this, it can be concluded that since PFL times, the Lamaholot subgroups underwent the biggest increase in lexical replacement, followed by Kedang and then Sika

MORPHO-SYNTACTIC INNOVATIONS

Typologically, especially concerning morpho-syntax, the Flores-Lembata languages are mixed. In addition to inherited Austronesian features, these languages also share features with their eastern neighbours of the non-Austronesian Timor-Alor-Pantar (TAP) family. Part III of this dissertation examines eight morpho-syntactic features of the Flores-Lembata languages

which are atypical for Austronesian languages and evaluates their potential of being the result of contact with non-Austronesian languages of the area. Table 9 lists these eight features and the family tree in Figure 1 shows to which levels the eight innovated features can be reconstructed. Some of the features have been innovated more than once in different parts of the tree. The tree structure is based on the current subgrouping knowledge of the Austronesian languages of the Indonesian province of Nusa Tenggara Timur and the country of Timor-Leste.

Features	Domain
Property nouns	nominal
Clause-final deictic motion verbs	verbal
Possessor-Noun word order	nominal
Noun-Locative word order	nominal
Noun-Numeral word order	nominal
Negation with clause-final negator	verbal
Alienability distinction in the possessive construction	nominal
Plural marking on nouns	nominal

Table 9. Contact-induced structural features discussed in this dissertation.

In particular, the nominal domain appears to be most affected by potential contact. On the one hand, the word order in the noun phrase, concerning the position of the nominal possessor, the numeral and the locative noun, differs from typical Austronesian languages. On the other hand, new semantic distinctions, such as an alienability distinction in possessive constructions or the plural number marking on nouns, become grammaticalized in a subset of the Flores-Lembata languages. Also the clausal syntax has undergone changes. In contrast to the inherited pre-predicate negation and SVO word order, some of the Flores-Lembata languages have innovated clause-final negation (Fricke 2017b) and all Flores-Lembata languages have innovated a set of clause-final deictic motion verbs. The word order features of the noun phrase and two of the deictic motion verbs can be reconstructed to Proto-Flores-Lembata. All other innovated features appear to have entered the languages after the split of Flores-Lembata into subgroups.

Figure 1. Morpho-syntactic innovations in the Flores-Lembata languages.⁵

CONTACT SCENARIOS

Analysing the outcome of languages contact, such as the innovated features of the Flores-Lembata languages discussed in this dissertation, a possible contact scenario can be reconstructed. The contact outcomes in case of the Flores-Lembata languages are new vocabulary, morpho-syntactic changes and grammaticalization of new semantic categories. Convergence in word order and new morpho-syntactic categories based on semantic distinctions have been described as a result of prolonged bilingualism over several generations, involving all age groups in the society (Muysken 2010: 272).

Some Flores-Lembata subgroups have gained more non-Austronesian features than others. In PFL only syntactic changes are attested but no other additional grammatical features. The same holds for Sika. In Kedang and the Lamaholot varieties, features were added and this means an increase in complexity (Ross 2013: 32). PFL and its descendants have all added new vocabulary. However, the increase of new lexical items in PFL and Sika is lower than in Kedang and the Lamaholot varieties. The large amount of new vocabulary could be a remnant of code-switching by highly proficient bilinguals. The new vocabulary is basic as well as special vocabulary. No

⁵ At the time of compiling this dissertation, the only non-lexical information available on Eastern Lamaholot is on negation patterns. It is possible that with more data, it will be discovered that Eastern Lamaholot also has innovated some of the other features.

specific semantic domain is favoured. A social situation that can lead to such an unsystematic mixing of vocabulary is a community where all speakers are bilinguals and where code-switching is the most common form of communication. This concerns, in particular, congruent lexicalization, a form of code-switching by fluent bilinguals where lexical items from two or more sources are randomly inserted into a common frame (Muysken 2008). The “fossilization” of such type of code-switching can lead to a so-called bilingual mixed language (Thomason 2001: 198, 215). The new structural features, as well as the additional vocabulary, point to bilingual communities with more than one contact scenario of a similar kind. PFL is most likely the result of bilingual mixing, as are Kedang and the Lamaholot subgroups. For Sika, this is less clear. The case of Sika points to simplification rather than complexification over time. This could be a sign of rapid language shift (Ross 2013: 30, 37). Only a short period of bilingualism with more adult learners than children may have preceded language shift. This situation did not allow for the addition of new features because additional grammatical features are usually the result of prolonged bilingualism involving children and adolescents as stated above.

In terms of location, all points to Lembata as a place of more intense language contact. As the island also holds the highest genealogical diversity within the Flores-Lembata family, it is likely to be the homeland of Proto-Flores-Lembata. It can be proposed that PFL gained its non-Austronesian features on the island of Lembata and subsequently, the subgroups that stayed on the island, the three Lamaholot subgroups and Kedang, gained further non-Austronesian features after the split of the family.

CONCLUSIONS

Combining lexical and typological evidence, I propose that the Flores-Lembata languages have been in contact with languages typologically similar to the Timor-Alor-Pantar languages since the time of Proto-Flores-Lembata until after the split of the family into subgroups. This contact scenario was characterized by long-term bilingual communities with fluent bilinguals of all age groups. As a result of this language contact, PFL and its descendants gained new grammatical features and lexical items. These speakers either finally shifted to the Flores-Lembata languages or their bilingual code became the “new” language. Slightly different scenarios can be detected for PFL and the proto-languages of the lower-level subgroups. Proto-Sika is possibly the result of more rapid language shift, while subgroups with more non-Austronesian features, such as Central Lamaholot, may have had a longer period of bilingualism with the result of being a bilingual mixed language.

REFERENCES

- Blust, Robert and Stephen Trussel. 2010. *The Austronesian Comparative Dictionary: Web Edition*. [Retrieved from: <http://www.trussel2.com/acd/>; accessed on 15 November 2016].
- Edwards, Owen. in prep. "Rote-Meto comparative dictionary". [Draft#3.]
- Elias, Alexander. 2018. *Lio and the Central Flores languages*. MA thesis, Leiden University.
- Fricke, Hanna. 2017a. "Nouns and pronouns in Central Lembata Lamaholot (Austronesian, Indonesia)", *Wacana* 18(3): 746-771. [DOI: 10.17510/wacana.v18i3.635.]
- Fricke, Hanna. 2017b. "The rise of clause-final negation in Flores-Lembata, Eastern Indonesia", *Linguistics in the Netherlands* 34: 47-62. [DOI: 10.1075/avt.34.04fri.]
- Fricke, Hanna. 2019a. *Traces of language contact; The Flores-Lembata languages in eastern Indonesia*. PhD thesis, Leiden University.
- Fricke, Hanna. 2019b. *Kamus tiga bahasa; Atadei Demon - Indonesia - Inggris*. Kupang: Unit Bahasa dan Budaya (UBB).
- Kaiping, Gereon, Owen Edwards, and Marian Klamer. 2019. "LexiRumah 3.0.0". Leiden: Leiden University Centre for Linguistics. [https://lexirumah.model-ling.eu/lexirumah/; DOI: 10.5281/zenodo.1164782.]
- Kaiping, Gereon and Marian Klamer. 2018. "LexiRumah; An online lexical database of the Lesser Sunda Islands", *PLoS ONE* 13(10): e0205250.
- Muysken, Pieter. 2008. *Functional Categories*. Cambridge: Cambridge University Press. [http://ebooks.cambridge.org/ref/id/CBO9780511755026; DOI: 10.1017/CBO9780511755026.]
- Muysken, Pieter. 2010. "Scenarios for language contact", in: Raymond Hickey (ed.), *The Handbook of Language Contact*, pp. 263-281. Malden: Wiley-Blackwell.
- Ross, Malcolm. 2013. "Diagnosing contact processes from their outcomes; The importance of life stages", *Journal of Language Contact* 6(1): 5-47. [DOI: 10.1163/19552629-006001002.]
- Thomason, Sarah. 2001. *Language contact*. Edinburgh: Edinburgh University Press.