What can synchronic data tell us about the past?: Contact-induced change in Eastern Indonesia

Marian Klamer, Francesca Moro & Hanna Fricke
LUCL Colloquium, Leiden, 21 April 2017
Introduction

“Reconstructing the past through languages of the present: the Lesser Sunda islands”

2014-2019

www.vici.marianklammer.org
Area of study

INDONESIA
Two families in contact
Reconstructing the past

• TAP family *assumed* to be related to language groups in New Guinea
• No supporting evidence
• Evidence of Austronesian loans in proto-TAP
• Austronesian arrival in the area 3,500 BP
• For most of the area
  – No archaeological data
  – No written historical sources
Key: Study linguistic similarities

- Inherited from ancestor
- Diffused through contact
- Reflect universal patterns of language structure and evolution
Aims

Study synchronic language data to discover:

• History & dispersal of Papuan and Austronesian groups
• Patterns of Borrowing and Inheritance
• Their role in the evolution of language
Three lines of inquiry
Lines of inquiry (I)

Regional Survey:
Study lexical, typological & cultural traces of inheritance and contact

Marian Klamer
East Timor & East Flores
Pura, Pantar, Lembata, Alor
Lines of inquiry (II)

Quantitative study of inheritance & contact in lexicon & grammar, exploring phylogenetic models

Gereon Kaiping (Postdoc)
Cross-Linguistic Linked Database: Connected to *Glottolog* and *Concepticon*

[lessersunda.ullet.net](http://lessersunda.ullet.net)
Lines of inquiry (III)

Case studies of Papuan-Austronesian contact-induced change

George Saad (PhD)
Lines of inquiry (III)

Case studies of contact-induced change

Francesca Moro (Postdoc)
Lines of inquiry (III)

Case studies of contact-induced change

Hanna Fricke (PhD)
Simplification in Alorese (Austronesian)

Francesca Moro
Alorese: geographical context

Flores
Adonara
Lembrata
Lamaholot

Pantar
Blagar
Alorese
Adang
Alor

40 km

Austronesian
Papuan
Alorese: origin

(Klamer 2011, 2012; Wellfelt 2016)
Alorese and Lamaholot

- Sister languages

- Lamaholot is morphologically more complex

- Morphology almost completely lost in Alorese
  (Klamer 2012:72)
Example: subject agreement

<table>
<thead>
<tr>
<th></th>
<th>Lamaholot (Lewoingu)</th>
<th>Alorese</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A/S subject prefix</td>
<td>S subject suffix</td>
<td>A/S subject prefix</td>
</tr>
<tr>
<td>1SG</td>
<td>$k$-</td>
<td>-$kən$</td>
<td>$k$-</td>
</tr>
<tr>
<td>2SG</td>
<td>$m$-</td>
<td>-$ko$, -$no$</td>
<td>$m$-</td>
</tr>
<tr>
<td>3SG</td>
<td>$n$-</td>
<td>-$na$, -$nən$</td>
<td>$n$-</td>
</tr>
<tr>
<td>1PL.EXCL</td>
<td>$m$-</td>
<td>-$kən$</td>
<td>$m$-</td>
</tr>
<tr>
<td>1PL.INCL</td>
<td>$t$-</td>
<td>-$te$</td>
<td>$t$-</td>
</tr>
<tr>
<td>2PL</td>
<td>$m$-</td>
<td>-$ke/-ne$</td>
<td>$m$-</td>
</tr>
<tr>
<td>3PL</td>
<td>$r$-</td>
<td>-$ka$</td>
<td>$r$-</td>
</tr>
</tbody>
</table>

(Nishiyama & Kelen, 2007: 32; Klamer 2012)
Research Questions

• How has Alorese simplified its inflectional morphology?

➢ L2 speakers

(Kusters, 2003; Trudgill 2011)
Case study: Alorese L1 and L2 speakers

- Alorese: coast, sea-oriented, Muslim
- Adang: interior, land-oriented, Christians or animists
Alorese and Adang communities

- Exchange women
- Exchange goods
- Alorese intermediary with Chinese-Muslim traders
- Alorese intermediary with colonial government
- Political alliance (The ‘10-3-7’ alliance)
- Shared traditions

(Wellfelt 2016)
The Alorese speech community

• L2 > L1

• Trade language

• Other societal domains

• Exchange practical information

• Communicative function

(Kusters, 2003)
## Case study: subject agreement among Alorese L1 and L2 speakers

<table>
<thead>
<tr>
<th>Pronoun</th>
<th>-ate</th>
<th>-enung</th>
<th>-ang/-aka</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>(go)</td>
<td>k-ate</td>
<td>k-enung</td>
</tr>
<tr>
<td>2SG</td>
<td>(mo)</td>
<td>m-ate</td>
<td>m-enung</td>
</tr>
<tr>
<td>3SG</td>
<td>(no)</td>
<td>n-ate</td>
<td>n-enung</td>
</tr>
<tr>
<td>1PL.EXCL</td>
<td>(kame)</td>
<td>m-ate</td>
<td>m-enung</td>
</tr>
<tr>
<td>1PL.INCL</td>
<td>(ite)</td>
<td>t-ate</td>
<td>t-enung</td>
</tr>
<tr>
<td>2PL</td>
<td>(mi)</td>
<td>m-ate</td>
<td>m-enung</td>
</tr>
<tr>
<td>3PL</td>
<td>(fe)</td>
<td>r-ate</td>
<td>r-enung</td>
</tr>
</tbody>
</table>
Case study: subject agreement among Alorese L1 and L2 speakers

• Participants

6 Alorese L1 speakers (all female, age 27-64 years)

12 Alorese L2 speakers (all female, age 25-46 years, all L1 Adang)
Case study: subject agreement among Alorese L1 and L2 speakers

- **Stimuli** (40-50 min. speech per participant)
  - Free narrative (a fairytale or a personal experience)
  - Frog story
  - Surrey elicitation list (42 video clips)
  - H&F elicitation list (46 video clips)
Surrey stimuli

Gambe tou te bele tide golu kajo pukong tou gua

‘A man is standing hugging a tree’
Case study: subject agreement among Alorese L1 and L2 speakers

- **Results** (Mann–Whitney two-tailed t-test ($p < 0.001$))

<table>
<thead>
<tr>
<th></th>
<th>L1 speakers</th>
<th>L2 speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct match</td>
<td>307</td>
<td>243</td>
</tr>
<tr>
<td></td>
<td>97.4%</td>
<td>70.6%</td>
</tr>
<tr>
<td>Agreement mismatch</td>
<td>7</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td>2.2%</td>
<td>27.3%</td>
</tr>
</tbody>
</table>

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>Ina</td>
<td>kafae</td>
<td>kali</td>
<td><strong>n-ate</strong></td>
<td>bunga</td>
<td>mene</td>
</tr>
<tr>
<td></td>
<td>mother</td>
<td>girl</td>
<td>DEM</td>
<td>3SG-carry</td>
<td>flower</td>
<td>come</td>
</tr>
<tr>
<td></td>
<td>‘A young woman brings some flowers.’ (L1 speaker)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(2)</td>
<td>Ina</td>
<td>kafae</td>
<td><strong>m-ate</strong></td>
<td>bunga</td>
<td>beta…</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mother</td>
<td>girl</td>
<td>2SG/1PL.EXCL/2PL-carry</td>
<td>flower</td>
<td>arrive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘A young woman brings some flowers…’ (L2 speaker)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Case study: subject agreement among Alorese L1 and L2 speakers

<table>
<thead>
<tr>
<th>L2 speaker</th>
<th>Group 1</th>
<th>Error rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ina</td>
<td>Bilingual Adang-Alor (27 years)</td>
<td>0.13</td>
</tr>
<tr>
<td>Ida</td>
<td>Bilingual Adang-Alor (20 years)</td>
<td>0.34</td>
</tr>
<tr>
<td>Ida M.</td>
<td>Bilingual Adang-Alor (19 years)</td>
<td>0.21</td>
</tr>
<tr>
<td>Hawa</td>
<td>Bilingual Adang-Alor (17 years)</td>
<td>0.25</td>
</tr>
<tr>
<td>Group average</td>
<td></td>
<td>0.24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L2 speaker</th>
<th>Group 2</th>
<th>Error rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rahma</td>
<td>Bilingual Adang-Alor (8 years)</td>
<td>0.14</td>
</tr>
<tr>
<td>Rahma M.</td>
<td>Bilingual Adang-Alor (6 years)</td>
<td>0.07</td>
</tr>
<tr>
<td>Mona</td>
<td>Bilingual Adang-Alor (6 years)</td>
<td>0.32</td>
</tr>
<tr>
<td>Isma</td>
<td>Bilingual Adang-Alor (5 years)</td>
<td>0.32</td>
</tr>
<tr>
<td>Saleha</td>
<td>Bilingual Adang-Alor (5 years)</td>
<td>0.22</td>
</tr>
<tr>
<td>Group average</td>
<td></td>
<td>0.23</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L2 speaker</th>
<th>Group 3</th>
<th>Error rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loni</td>
<td>Bilingual Adang-Alor (2 year)</td>
<td>0.33</td>
</tr>
<tr>
<td>Wia</td>
<td>Bilingual Adang-Alor (1 year)</td>
<td>1.00</td>
</tr>
<tr>
<td>Sula</td>
<td>Bilingual Adang-Alor (7 months)</td>
<td>0.36</td>
</tr>
<tr>
<td>Group average</td>
<td></td>
<td>0.58</td>
</tr>
</tbody>
</table>
Case study: subject agreement among Alorese L1 and L2 speakers

<table>
<thead>
<tr>
<th>Verb meaning</th>
<th>Inaccurate verb form</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ate ‘to carry’</td>
<td>m- ‘2SG/2PL/1PL.EXCL.’ &gt; m-ate</td>
<td>64%</td>
</tr>
<tr>
<td></td>
<td>r- ‘3PL’ &gt;</td>
<td>35%</td>
</tr>
<tr>
<td>-ei ‘to go’</td>
<td>m- ‘2SG/2PL/1PL.EXCL.’ &gt; m-ei</td>
<td>58%</td>
</tr>
<tr>
<td></td>
<td>r- ‘3PL’ &gt;</td>
<td>37%</td>
</tr>
<tr>
<td>-enung ‘to drink’</td>
<td>m- ‘2SG/2PL/1PL.EXCL.’ &gt; m-enung</td>
<td>61%</td>
</tr>
<tr>
<td></td>
<td>r- ‘3PL’ &gt;</td>
<td>23%</td>
</tr>
<tr>
<td>-ang/-aka ‘to eat’</td>
<td>r- ‘3PL’ &gt;</td>
<td>76%</td>
</tr>
</tbody>
</table>
Case study: subject agreement among Alorese L1 and L2 speakers

• L2 speakers: variable production of agreement

• Error rate does not correlate to length of exposure

• Error with Subject prefixes
  - extension of one prefix \((m-, r-)\)
  - \(m\)- represents default agreement
  - syllable structure (vowel-initial verbs 😞)
Conclusions

How has Alorese simplified its inflectional morphology?

• L2 acquisition by Adang speakers
• Speech community: L2 > L1
• Simplification of agreement (on-going change)
• A/S prefixes > extension of one prefix
• Loss of S suffixes (completed change)
• S suffixes > omission (vowel-final verbs 🙂)
Clause-final negation in Flores-Lembata languages (Austronesian)

Hanna Fricke
Outline

1. Flores-Lembata languages
2. Theoretic background: Jespersen Cycle
3. Negation patterns in F-L languages
4. Diachronic development
5. Conclusions
1. Flores-Lembata Languages (Austronesian)
Flores-Lembata Languages
(Austronesian)
2. Jespersen Cycle
(Jespersen 1917; Dahl 1979:88)

Main steps of a Jespersen Cycle
1. Pre-predicate negation
2. Double negation
3. Post-predicate negation

Why does a Jespersen Cycle start?
– Spontaneous innovation to gain emphatic negation (Vossen 2016: 24)
– Contact-induced change (Vossen 2016: 202)
– Contact-induced change to gain emphatic negation

French
1. ne ...
2. ne ... pas
3. ... pas
3. Negation patterns

Austronesian languages
  – pre-predicate single negation (Vossen 2016:4)

Papuan languages
  – clause-final negation (OV word order)

Cases of diffusion in contact areas:
  => Austronesian languages with clause-final negation (Vossen 2016:119-121,202; Reesink 2002:246)
Distribution of negation patterns in Flores-Lembata languages

© Hanna Fricke 2017
Negation patterns in Flores-Lembata languages

(1) Sika

A?u ene ra?intan. 1SG NEG know

‘I don’t know.’

(Arndt 1931:42)

(2) Hewa

Dedi? anak e?on puas iva. child little NEG satisfied NEG

‘The little child is not satisfied.’

(Fricke 2014:9)
Negation patterns in Flores-Lembata languages

(3) LH-Lewotobi

Go kə̃ ikə̃ hua həla?.
1SG 1SG.eat fish fish.sp NEG

‘I don’t eat hua fish.’

(Nagaya 2011:392)

(4) LH-Lewoingu

Go bərín na həla?.
1SG hit 3SG NEG

‘I did not hit him.’

(Nishiyama and Kelen 2007:69)
Negation patterns in Flores-Lembata languages

(5) LH-Solor

Ema déna wata la. NEG
mother cook rice NEG

‘Mom is not cooking rice.’

Clause-final negation

(Kroon 2016:158)

(6) LH-Lamalera

T-ai fulâ pé tana di taku tegel hala. NEG NEG
1IN-go market DIST land also see NEG

‘When we went to the market, we could not see the island.’ (Keraf 1978:232)

Double negation
Negation patterns in Flores-Lembata languages

(7) LH-Central Lembata

\[ \text{Ta-na} \quad \text{NEG-3SG} \quad \text{mojip} \quad \text{si.} \quad \text{NEG} \]

‘It does not live.’

Double negation

(C1:163)

(8) Kedang

\[ \text{Wèi} \quad \text{ohaq} \quad \text{in}=\text{u.} \quad \text{NEG} \quad \text{water drink.1s}=\text{pp.1s} \]

‘I don’t drink water.’

Pre-predicate negation

(Samely 1991:74)
Negation patterns in Flores-Lembata languages

(9) Alorese

No n-oing [lahe.]
3SG 3SG-know NEG

‘He doesn’t know.’

Clause-final negation

(Moro 2016)
## Jespersen Cycle for Flores-Lembata

<table>
<thead>
<tr>
<th>Jespersen Stage</th>
<th>Pattern</th>
<th>Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NEG …</td>
<td>Sika Kedang</td>
</tr>
<tr>
<td>2</td>
<td>NEG … NEG</td>
<td>Hewa LH-Central Lembata LH-Lamalera</td>
</tr>
<tr>
<td>3</td>
<td>… NEG</td>
<td>LH-Lewotobi LH-Lewoingu LH-Solor Alorese</td>
</tr>
</tbody>
</table>
4. Diachronic development

Proto-Flores-Lembata

pre-predicate negation

Contact to a Papuan language

Sika and Kedang

\[ \rightarrow \text{pre-predicate negation} \]

Hewa and Lamaholot

\[ \rightarrow \text{clause-final negation particle} \]
Option 1: **Proto-Flores-Lembata**

- **Proto-Sika**
  - **Sika**
  - **Hewa**
    - Contact to (different) Papuan language(s)

- **Proto-Lamaholot Kedang**
  - **LH-Lamalera**
  - **LH-Lewotobi**
  - **LH-Lowoingu**
  - **LH-Solor**
  - **Alorese**

© Hanna Fricke 2017
Option 2: **Proto-Flores-Lembata**

- **Proto-Sika**
  - **Contact to Lamaholot**
  - **Sika**
  - **Hewa**

- **Contact to an unknown Papuan language**
  - **Proto-Lamaholot**
  - **Kedang**

- **Proto-Lamaholot**
  - **LH-Lamalera**
  - **LH-Lewotobi**
  - **LH-Lewoingu**
  - **LH-Solor**
  - **Alorese**

- **LH-Central Lembata**

© Hanna Fricke 2017
Why contact-induced?

- Area characterized by contact between Austronesian and Papuan languages → diffusion of features (Ewing and Klamer 2010; Klamer et al. 2008:10;136)

- Lamaholot: non-Austronesian substrate has been suggested (several “Papuan” features) (Klamer 2012)

- Clause-final negation in Austronesian languages is (so far) ONLY found in areas close to languages of other families (Vossen 2016:88,120)
Clause-final negators

- Pre-predicate negation
- Embracing negation
- Clause-final negation

© Hanna Fricke 2017
# Clause-final negators

<table>
<thead>
<tr>
<th>Variety</th>
<th>Clause-final negator</th>
<th>Cognate sets</th>
<th>Subgrouping</th>
</tr>
</thead>
<tbody>
<tr>
<td>LH-Lewotobi</td>
<td>ʰəlaʔ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LH-Lewoingu</td>
<td>ʰəlaʔ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LH-Solor</td>
<td>la</td>
<td>HALA</td>
<td>Western Lamaholot</td>
</tr>
<tr>
<td>Alorese</td>
<td>lahe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LH-Lamalera</td>
<td>ʰəla</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LH-Central Lembata</td>
<td>si(ne)</td>
<td>SI</td>
<td>Central Lamaholot</td>
</tr>
<tr>
<td>Hewa</td>
<td>iva</td>
<td>IWA</td>
<td>Hewa</td>
</tr>
</tbody>
</table>
## Clause-final negators

<table>
<thead>
<tr>
<th>Variety</th>
<th>Clause-final negator</th>
<th>Cognate sets</th>
<th>Subgrouping</th>
</tr>
</thead>
<tbody>
<tr>
<td>LH-Lewotobi</td>
<td><em>həla</em>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LH-Lewoingu</td>
<td><em>hala</em>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LH-Solor</td>
<td><em>la</em></td>
<td>HALA</td>
<td>Western Lamaholot</td>
</tr>
<tr>
<td>Alorese</td>
<td><em>lahe</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LH-Lamalera</td>
<td><em>hala</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LH-Central Lembata</td>
<td><em>si(ne)</em></td>
<td>SI</td>
<td>Central Lamaholot</td>
</tr>
<tr>
<td>Hewa</td>
<td><em>iva</em></td>
<td>IWA</td>
<td>Hewa</td>
</tr>
</tbody>
</table>

**Clause-final negation**

**Embracing negation**
Conclusions (1)

• Negators group according to genetic affiliation not according to negation patterns
  – > Double negation has developed in several varieties partly independently
• Most Western Lamaholot varieties have lost the pre-predicate negator by now
## Etymology of clause-final negators

<table>
<thead>
<tr>
<th>Variety</th>
<th>Clause-final negator</th>
<th>Cognate sets</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>LH-Lewotobi</td>
<td>ʰəlaʔ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LH-Lewoingu</td>
<td>həlaʔ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LH-Solor</td>
<td>la</td>
<td>HALA</td>
<td>PMP *salaq ‘wrong, mistake’</td>
</tr>
<tr>
<td>Alorese</td>
<td>lahe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LH-Lamalera</td>
<td>həla</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LH-Central Lembata</td>
<td>si(ne)</td>
<td>SI</td>
<td>LH-Central Lembata si(ne) ‘a bit’</td>
</tr>
<tr>
<td>Hewa</td>
<td>iva</td>
<td>IWA</td>
<td>unknown</td>
</tr>
</tbody>
</table>

→ Lamaholot: Grammaticalization of inherited words  
→ Hewa: innovation
Conclusions (2)

• The “new” clause-final negators are NOT borrowed from a Papuan language but grammaticalized language-internal material

⇒ Contact-induced grammaticalization
⇒ Structural borrowing
⇒ Indication for long-term bilingualism of a mixed population
Further research

• Examine other features of the language that show Papuan influence in the same way
  – Possessive constructions
    • Word order of possessor and possessed
    • Alienability distinction
  – Locative constructions
  – Focus particle

• Answer the questions:
  – When and where did contact take place?
  – What were the circumstances of the contact scenarios?
Conclusions

• What do synchronic data say about the past?

• In Eastern Indonesia, Austronesian languages changed their structure due to contact with Papuan speakers
  – Alorese simplified morphology
  – Flores-Lembata adopted final negators

• What kind of speakers, which type of contact?
Conclusions:
Morphological simplification

• Today’s Alorese has many L2 speakers

• Compared to Alorese L1 speakers, L2 speakers with a Papuan L1 show significantly reduced agreement morphology

• **Morphological simplification** is expected to occur in speech communities with a language that is used in trade and in various other communicative domains, and where L2 speakers form the larger segment of the population.

• Alorese loss of morphology is due to the large proportion of Papuan L2 speakers in Alorese communities
Conclusions: Structural borrowing

- Structural borrowings like the adoption of final negations typically occur in communities of mixed populations with long-term bilingualism.
- The final negation structures developed independently in two sub-branches of the AN family (Proto-Lamaholot; Hewa), so there must have been at least two independent contact situations.
- While today no Papuan languages are spoken in Flores-Lembata, in the past several mixed communities with bilingual speakers of AN and Papuan must have lived there.
- As only AN languages survived, the Papuan language(s) must have had lower status in these communities.
Thank you!


