

**APLL11**

**11<sup>th</sup> International Austronesian and Papuan  
Languages and Linguistics Conference**

*Leiden University  
Leiden, The Netherlands  
13–15 June, 2019*

**BOOKLET OF ABSTRACTS**



**Universiteit  
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The Netherlands



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CENTRE FOR  
LINGUISTICS

**11<sup>TH</sup> INTERNATIONAL AUSTRONESIAN AND PAPUAN LANGUAGES AND LINGUISTICS CONFERENCE**  
*13–15 June, 2019, Leiden University*

Leiden University and Leiden University Centre for Linguistics are delighted to host the *11<sup>th</sup> International Austronesian and Papuan Languages and Linguistics Conference (APLL11)* on 13–15 June, 2019.

This booklet contains the conference programme and the abstracts of all presentations, arranged alphabetically by the last name of the first author. Our programme includes two invited keynote addresses, two plenary talks by early career researchers, 52 thematic talks and four poster presentations. The thematic talks are organised in parallel sessions throughout the three days. We wish everyone a fruitful and enjoyable conference.

We gratefully appreciate the financial support from *The Netherlands Organisation for Scientific Research* (NWO) through the VICI project *Reconstructing the past through languages of the present: The Lesser Sunda Islands*, and *Leiden University Centre for Linguistics* (LUCL).

**Venue information:**

*Keynotes and thematic sessions:* Lipsius Building, Cleveringaplaats 1, 2311 BD Leiden

*Poster session:* Reuvenplaats 4, 2311 BE Leiden

*Lunch:* Reuvenplaats (on the 13<sup>th</sup> and 14<sup>th</sup>), Lipsius (on the 15<sup>th</sup>)

*Conference dinner:* Grand Café de Burcht, Burgsteeg 14, 2312 JS Leiden

**Website:**

<https://www.universiteitleiden.nl/en/events/2019/06/11th-international-austronesian-and-papuan-languages-and-linguistics-conference>

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- Marian Klamer
- Francesca Moro
- Gereon Kaiping
- Jiang Wu

# 11<sup>th</sup> International Austronesian and Papuan Languages and Linguistics Conference (APLL11)

THURSDAY 13 JUNE

8:00-9:00	Registration	
9:00-9:30	Welcome	
9:30-10:30	Keynote speaker: <i>Áshild NÆSS</i> . Nouns and verbs yet again: new questions in an old debate (Lipsius, room 0.03) CHAIR: GEORGE SAAD	
10:30-11:00	TEA/COFFEE	
	<b>Verbs</b> (Lipsius, room 2.27) CHAIR: NURENZIA YANNUAR	<b>Language change</b> (Lipsius, room 2.28) CHAIR: KIRSTEN CULHANE
11:00-11:30	<i>Anna MARGETTS, Nikolaus HIMMELMANN et al.</i> BRING and TAKE: Caused accompanied motion events in Austronesian languages	<i>Eline VISSER</i> . Kalamang <i>opa</i> : from time adverbial to attention-managing demonstrative
11:30-12:00	<i>Giovanni ROVERSI</i> . A complex verb complex: templatic morphology and affix order in Äiwoo	<i>Valentina ALFARANO</i> . Evolution of three applicative markers in Nalögo
12:00-12:30	<i>Lidia Federica MAZZITELLI</i> . Verb classes in Lakurumau (New Ireland): transitivity pairs	<i>Francesca MORO &amp; Hanna FRICKE</i> . Give constructions in Lamaholot and Alorese: evidence of structural borrowing from Alor-Pantar languages
12:30-14:00	LUNCH (Reuvenplaats 4, room 2.01a)	
	<b>Verbs</b> (Lipsius, room 2.27) CHAIR: HANNA FRICKE	<b>Language change</b> (Lipsius, room 2.28) CHAIR: OWEN EDWARDS
14:00-14:30	<i>Daniel KRAUZE &amp; Bill PALMER</i> . Resultative functions and serialized roots in Vurès	<i>Daniel FINER &amp; Hasan BASRI</i> . Clausal restructuring in South Sulawesi
14:30-15:00	<i>Caroline HENDY &amp; Don DANIELS</i> . The Wiru noun-modifying clause construction	<i>Peter SLOMANSON</i> . On the development of an infinitival construction in contact Malay
15:00-15:30	<i>Don DANIELS</i> . Orientation serial verbs and the Proto-Sogeram verb phrase	<i>Emily GASSER</i> . SHWNG Noun Phrases, and How They Got That Way
15:30-16:00	TEA/COFFEE	
	<b>Verbs</b> (Lipsius, room 2.27) CHAIR: YUNUS SULISTYONO	<b>Voice</b> (Lipsius, room 2.28) CHAIR: JIANG WU
16:00-16:30	<i>Eline VISSER, Eva VAN LIER et al.</i> The semantics and frequency of incorporating verbs in Kalamang	<i>René VAN DEN BERG</i> . Passive <i>ni</i> and three other <i>ni</i> 's in Bola (Oceanic): synchrony and diachrony
16:30-17:00	<i>Dineke SCHOKKIN</i> . The multifaceted expression of number on the Idi verb	<i>Isabelle BRIL</i> . The morphosyntax and semantics of undergoer voice and passive voice in Amis
17:00-17:30	<i>Jean ROHLEDER</i> . Aspect in Vamale – The example of <i>balan</i>	<i>Maria BARDAJÍ I FARRÉ, Sonja RIESBERG et al.</i> Potentive and stative voice alternations in western Austronesian languages
19:00	Conference dinner at <i>Grand Café de Burcht</i>	

**FRIDAY 14 JUNE**

<b>9:00-10:00</b>	Keynote speaker: <i>Harald HAMMARSTRÖM</i> . Prospects for a (Semi-)Automated Papuan Comparative Linguistics and Reconstruction (Lipsius, room 0.03) CHAIR: FRANCESCA MORO	
<b>10:00-10:30</b>	TEA/COFFEE	
	<b>Traces of contact in the lexicon</b> (Lipsius, room 1.47) CHAIR: HANNA FRICKE	<b>Phonology and prosody</b> (Lipsius, room 1.48) CHAIR: OWEN EDWARDS
<b>10:30-11:00</b>	<i>Doris STOLBERG</i> . German contributions to the Tok Pisin lexicon	<i>Jiang WU</i> . Nasality as a conditioning factor: splitting diphthongisation in Inland Terengganu Malay
<b>11:00-11:30</b>	<i>Ekaterina BAKLANOVA</i> . The impact of Spanish and English hybrids on contemporary Tagalog	<i>Leah PAPPAS</i> . “Just barely contrastive”: Mid-vowel contrasts in Ampenan Sasak
<b>11:30-12:00</b>	<i>Maria Kristina GALLEGRO</i> . Complex loanwords and morphological transfer in Ibatan	<i>Kirsten CULHANE</i> . Medial-final alternations in eastern Indonesia
<b>12:00-14:00</b>	LUNCH & POSTERS (see page 4 for the list of posters) (Reuvenplaats 4, room 2.01a)	
	<b>Traces of contact in the lexicon</b> (Lipsius, room 1.47) CHAIR: CHRISTIAN DÖHLER	<b>Phonology and prosody</b> (Lipsius, room 1.48) CHAIR: GREGORY VONDIZIANO
<b>14:00-14:30</b>	<i>Juliette HUBER &amp; Antoinette SCHAPPER</i> . The Austronesian-Papuan contact history of eastern Timor: What lexical borrowing can tell us	<i>Yi-Yang CHENG</i> . Kananavu word-level prosody in typological perspective
<b>14:30-15:00</b>	<i>Owen EDWARDS</i> . Is Rote-Meto Austronesian? Only just.	<i>Tihomir RANGELOV &amp; Julie BARBOUR</i> . On the origins of bilabial trills in the languages of Malekula, Vanuatu
<b>15:00-15:30</b>	<i>Francesca MORO, Gereon KAIPING et al.</i> Detecting Papuan loanwords in Alorese: combining quantitative and qualitative methods	<i>Sören E. TEBAY</i> . Multiple Feature Mutation in Papuanesia: A typological survey
<b>15:30-16:00</b>	TEA/COFFEE	
	<b>Traces of contact in the lexicon</b> (Lipsius, room 1.47) CHAIR: JULIETTE HUBER	(Lipsius, room 1.48) CHAIR: GIOVANNI ROVERSI
<b>16:00-16:30</b>	<i>Yunus SULISTYONO</i> . What is in the Alorese lexicon	<i>Valérie GUÉRIN</i> . Optional subject marking in an Accusative language
<b>16:30-17:00</b>	<i>Lourens DE VRIES</i> . Meeting in the swamps: lexical traces of TNG migration into the Digul Basin	<i>Kirsten CULHANE &amp; Owen EDWARDS</i> . The Structure of Meto Poetry
<b>17:00-17:30</b>	<i>Claudia GERSTNER-LINK</i> . Loans into and from Kilmeri as indicators of the people’s migration route	<i>Christian DÖHLER</i> . A synchronic and diachronic view on animacy in Komnzo
<b>18:00</b>	Conference excursion	

**SATURDAY 15 JUNE**

9:00-9:45	Early career speaker 1: <i>Renger VAN DASSELAAR</i> . Tone in Binumarien (Trans-New Guinea): mora-based melodies (Lipsius, room 0.03) CHAIR: MARIAN KLAMER	
9:45-10:15	TEA/COFFEE	
10:15-11:00	Early career speaker 2: <i>Hanna FRICKE</i> . The mixed lexicon of Lamaholot (Lipsius, room 0.03) CHAIR: MARIAN KLAMER	
	<b>Spatial orientation</b> (Lipsius, room 1.47) CHAIR: EMILY GASSER	(Lipsius 1.48) CHAIR: GEREON KAIPING
11:00-11:30	<i>Gary HOLTON &amp; Leah PAPPAS</i> . A typology of spatial orientation systems in the Malayo-Polynesian languages outside Oceanic	<i>Charlotte HEMMINGS</i> . Word order and information structure in Kelabit
11:30-12:00	<i>Laura ARNOLD</i> . Strata of contact: Typologising the expression of geocentric spatial orientation in the northern Moluccas and west New Guinea	<i>Julie BARBOUR, Tihomir RANGELOV et al.</i> Common, Local and Personal Noun Formation in the Languages of Malekula
12:00-13:30	LUNCH (Lipsius canteen)	
	<b>New methods in field data collection and analysis</b> (Lipsius, room 1.47) CHAIR: LAURA ARNOLD	<b>Modality</b> (Lipsius 1.48) CHAIR: ELINE VISSER
13:30-14:00	<i>Alexander ELIAS</i> . The Central Flores Linkage	<i>Ellen SMITH-DENNIS</i> . <i>Don't be fearful, lest it be undesirable</i> : prohibitives and precautions in Papapana
14:00-14.30	<i>Gereon KAIPING &amp; Marian KLAMER</i> . How different methods lead to different trees for the Timor-Alor-Pantar languages	<i>Jozina VANDER KLOK &amp; Vera HOHAUS</i> . The composition of weak necessity modality: The view from Javanese
14.30-15:00	<i>George SAAD</i> . Semantic variation in a bilingual Abui/Malay community	<i>Gregory VONDIZIANO</i> . Interactions of Modality and Negation in Yami
15:00-15:30	TEA/COFFEE	
	<b>New methods in field data collection and analysis</b> (Lipsius, room 1.47) CHAIR: ALEXANDER ELIAS	(Lipsius 1.48) CHAIR: JIANG WU
15:30-16:00	<i>Jeroen WILLEMSSEN</i> . Phonaesthetic minimal pairs in Reta	<i>Manfred KRIFKA &amp; Ekaterina LEVINA</i> . Recapitulative linkage in Daakie (Ambrym, Vanuatu)
16:00-16:30	<i>Catherine SCANLON</i> . Iconicity and Repetition in Ende	<i>Agnès HENRI</i> . It's weird and weird: a particular kind of intensification construction in Vanuatu languages
16:30-17:00	<i>Ana KRAJINOVIĆ</i> . Empirical methods for describing aspect: a case study of perfect in Nafsan	<i>Bambang KARTONO, Eric REULAND et al.</i> Introducing <i>Diri</i> : Is It an Argument or Something Else?
17:00-17:05	Closing	

## List of posters

*Alexander ZÄHRER*

First data of Moyu, a lowland Ok language of New Guinea

*David GIL*

Why Malayic Simplified

*David MOELIADI*

A Computational Grammar for Indonesian: Indonesian Resource Grammar (INDRA)

*Kilu VON PRINCE, Manfred KRIFKA et al.*

It would not be good...: Canonical apprehensive structures in Vanuatu languages

## Nouns and verbs yet again: new questions in an old debate

Åshild Næss, University of Oslo

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Much ink has been spilt over the question of whether there are languages which do not distinguish a lexical class of nouns from one of verbs, and what sort of evidence would be required to confidently establish such a situation (e.g. Evans and Osada 2005 and commentaries on this paper in *Linguistic Typology* 9:3). Austronesian languages have figured heavily in this debate (e.g. Himmelmann 1991, 2004, Gil 1994, 1995, 2001, Mosel and Hovdhaugen 1992, Broschart 1997, and a recent (2017) special issue of *Studies in Language* on ‘Lexical flexibility in Oceanic languages’, among others).

Part of the issue is that «most theories about word classes take for granted a one-to-one correlation between lexical categories and syntactic categories» (Bisang 2011: 293). Himmelmann (2008) notes that the terms ‘noun’ and ‘verb’ can be applied to different levels of analysis: the ontological (e.g. roots referring to objects vs roots referring to actions), the morpho-lexical (classes of words defined by their morphological potential), and the syntactic (the function of an item in syntax as e.g. the head of an argument phrase, a predicate phrase, or a modifier). Because these levels tend to align in European languages, such alignment has been taken as the default for word classes in general. However, as Bisang (2011) and others have pointed out, this is not a necessary situation; for example, Himmelmann (2008: 249) notes that the three levels «are not at all commensurate in a language like Tagalog».

Recognising this allows us to take the discussion beyond the question of which criteria can or should be used to distinguish nouns from verbs, and into an area of more general interest both for the understanding of the grammar of individual languages and for linguistic typology and theory: How do these levels of classification interact in the grammar of a language where they do not overlap? For example, how does morphology - inflectional and derivational - relate to lexical classes on the one hand and syntactic categories on the other, when the latter two are not commensurate? And what grammatical means do languages use to identify basic syntactic functions such as predicate and argument when they lack a direct correspondence between such functions and lexical classes?

In this talk, I will compare two Austronesian languages - Tagalog, as described in Himmelmann (2008), and the Oceanic language Äiwoo, based on my own descriptive work - and show that these questions have very different answers for the two languages. This illustrates the potential for typological variation in this domain, and points to an area where the study of Austronesian languages can contribute to new insights into the organisation of grammatical structure in the world’s languages.

### References

- Bisang, Walter. 2011. Word classes. In Jae Jung Song (ed.), *The Oxford Handbook of Linguistic Typology*, 280-302. Oxford: Oxford University press.
- Broschart, Jürgen. 1997. Why Tongan does it differently. *Linguistic Typology* 1: 123-165.
- Evans, Nicholas, and Toshiki Osada. 2005. Mundari: The myth of a language without word classes. *Linguistic Typology* 9:3, 351-390.
- Gil, David. 1994. The structure of Riau Indonesian. *Nordic Journal of Linguistics* 17:179-200.

- Gil, David. 1995. Parts of speech in Tagalog. In Mark Alves (ed.), *Papers from the Third Annual Meeting of the Southeast Asian Linguistics Society*, 67-90. Tempe, Arizona.
- Gil, David. 2001. Escaping Eurocentrism: fieldwork as a process of unlearning. In Paul Newman and Martha Ratliff (eds.), *Linguistic fieldwork*, 102-132. Cambridge: Cambridge University Press.
- Himmelman, Nikolaus P. 1991. The Philippine challenge to Universal Grammar. *Arbeitspapiere des Instituts für Sprachwissenschaft der Universität zu Köln*, Neue Folge 15.
- Himmelman, Nikolaus P. 2004. The Austronesian languages of Asia and Madagascar: typological characteristics. In Alexander Adelaar and Nikolaus P. Himmelman (eds.), *The Austronesian languages of Asia and Madagascar*, 110-181. London: Routledge.
- Himmelman, Nikolaus P. 2008. Lexical categories and voices in Tagalog. In Peter Austin and Simon Musgrave (eds.), *Voice and grammatical relations in Austronesian languages*, 247-293. Stanford: CSLI.
- Mosel, Ulrike, and Even Hovdhaugen. 1992. *Samoan reference grammar*. Oslo: Scandinavian University Press.



## **Prospects for a (Semi-)Automated Papuan Comparative Linguistics and Reconstruction**

Harald Hammarström, *Uppsala University*

In our current understanding, the Papuan languages fall into over 100 different top-level families/isolates and perhaps twice as many “microgroups”(depending on how this terms is defined). For all of these one would like to see a subgrouping, phonological history and lexical reconstruction (if documentation permits, also a morphosyntactic reconstruction). Although Swadesh-type wordlists are available for almost all Papuan languages, such reconstructions are available only for a small minority of (sub-)groups. Using rough counts from Glottolog ([glottolog.org](http://glottolog.org)), indeed, the amount of work on comparative linguistics in Papua pales in comparison to other regions with comparable linguistic or genealogical diversity such as Africa and the Amazon.

If linguists do not find the time, computational work on the same topic becomes increasingly attractive, especially if the intermediate results can be inspected, understood, and improved on by human linguists. Toward this aim, we will present completely automatic reconstruction system. Using only standard meaning-index wordlists as input it proceeds similar to the application of the comparative method. First, it identifies (shallow) cognates. Based on the cognates, it identifies the most recent subgroup. The most recent subgroup is then reconstructed by playing back sound changes gauged for this subgroup from the identified cognates. The procedure is then repeated (until the bottom of the tree) with the reconstructed proto-language in place of the modern languages of the identified subgroup. The procedure is entirely transparent and each step is intelligible and inspectable for a human. Application to a small Trans New Guinea subgroup, a mid-size non-TNG family (Torricelli), an Austronesian subgroup on the New Guinea territory and a deeper level subset of alleged Trans New Guinea subgroups will be demonstrated.

## Tone in Binumarien (Trans-New Guinea): mora-based melodies

Renger van Dasselaaar

Not much has changed since Donohue (1997) observed that tone languages in New Guinea are “poorly known”. With this paper I add data from Binumarien (bjr; Kainantu, Trans-New Guinea languages), based on recent fieldwork. Donohue (1997) proposes a continuum of tonal variation to classify tonal information from languages in New Guinea. On one end of the continuum are complex syllable-tone type languages like Iau (Lake Plains family, Irian Jaya) (Donohue 1997). These languages assign a separate tone to each syllab

le in a word, like many of the languages of East and Southeast Asia. On the other side are languages with a ‘simple’ pitch-accent system, such as Una (Mek languages, Irian Jaya) (Donohue 1997). Polysyllabic words in Una must have one and only one syllable with high pitch. Donohue states that many languages in New Guinea are ‘intermediate’ on the continuum, displaying features of both extremes, as is the case in Binumarien.

In Binumarien, tonal contour is assigned to the word as a whole, much like pitch-accent languages. However, the tonal contour is further specified on the level of morae. Morae are tone-bearing units (TBUs) in Binumarien and can be either low (L) or high (H). On the word-level, Binumarien has four tonal melodies at the surface: H, HL, LH and LHL. As is clear from the melodies, Binumarien words must have one and only one high tone per melody. In this respect, Binumarien is like pitch-accent languages.

Unlike typical pitch-accent languages, however, Binumarien words can have more than one TBU with high tone. For example, trimoraic words could be LLH or LHH within the tonal melody of LH, which provides a meaningful distinction as shown in (1) (examples are personal field notes).

- (1) eeqa LLH ‘banana’          eeqa LHH ‘I myself’

The tonal melody is the same in both words on word-level as shown in example (2) below, but on the level of morae the melody is further specified by means of an attachment point. In *eeqa* ‘I myself’ the high tone is attached to the second mora, whereas in *eeqa* ‘banana’ the high tone is attached to the third mora (the point of attachment is represented by ‘). The high tone spreads rightward. The analysis of the attachment point can be accounted for when we compare (3) and (4). *Aaku* ‘rain’ has no attachment point, so the (obligatory) high tone attaches by default to the last syllable in isolation (3). But when the word hosts the toneless suffix *-faqa* ‘with’, then the high tone attaches to the suffix (4). *Doona* ‘mud’ has the same tonal melody in isolation, but its point of high tone attachment is on the last syllable (3). This means the high tone will stay on this syllable, regardless of suffix marking, as shown in (4).

- |     |                       |     |                   |     |                         |
|-----|-----------------------|-----|-------------------|-----|-------------------------|
| (2) | L H    L H            | (3) | L H    L H        | (4) | L H    L H              |
|     | \        /            |     | \        \        |     | \ \   \      \   \ \    |
|     | u u 'u    u 'u u      |     | u u u    u u 'u   |     | u u u u u    u u 'u u u |
|     | eeqa      eeqa        |     | aaku      doona   |     | aaku-faqa    doona-faqa |
|     | ‘banana’   ‘I myself’ |     | ‘rain’      ‘mud’ |     | ‘rain and mud’          |

By presenting new data on a previously understudied tone language of Papua New Guinea, this talk will add to our understanding of Binumarien in both a Papuan and a global typology of tone.

Donohue, M. (1997). Tone systems in New Guinea. *Linguistic Typology* 1, 347-386.

## The mixed lexicon of Lamaholot

Hanna Fricke (Leiden University)

In the Austronesian language cluster Lamaholot, spoken in Eastern Indonesia, around half of the basic vocabulary cannot be reconstructed to an Austronesian (AN) ancestor language and thus most likely came from other sources. In this talk, I propose that Lamaholot can be classified as a “bilingual mixed language” (Thomason 2001: 198). The language probably developed in a bilingual community with speakers fluent in more than one language over several generations and using vocabulary from more than one source language freely and even randomly within a common structural frame. This is exactly the pattern characterizing “congruent lexicalization”, a specific type of code-switching, a mixed code of bilinguals which is observed in bilingual situations where speakers are equally proficient in two languages (Muysken 1997). In the development of Lamaholot, such a mixed code probably became the main way of communication in the community. After a few generations, this way of speaking became more standardized and finally the only language of the community.

The non-Austronesian (non-AN) component of the Lamaholot vocabulary is largely of unknown origin, but a minority ( $\leq 20\%$  of the non-AN items) has cognates in the neighboring non-AN Alor-Pantar (AP) languages and a few items are also attested in other AN languages in the region, i.e. the islands of Timor, Flores and Sumba.

Most non-AN lexical items are unique to Lamaholot, such as Central Lamaholot *soro* / Western Lamaholot *horonj* ‘hide’, or they have cognates with irregular sound correspondences in the closest relatives of Lamaholot within the Flores-Lembata family, i.e. Kedang and Sika. Examples are the word for ‘fall from above’ which is *lodonj* in Sika, *lodo* in all known Lamaholot varieties and *lodunj* in Kedang. These cognates show irregular correspondence because intervocalic PFL \*d (< PMP \*d/\*j/\*z) is usually reflected as /r/ in Sika and Western Lamaholot, as /dʒ/ in Central Lamaholot and as /r/ or /j/ in Kedang. This irregularity suggests that these words became only part of the individual languages after they had split off from Proto-Flores-Lembata. Examples of lexical items that are shared with AP languages are Central Lamaholot *lame* ‘man’ which is cognate with Kamang (AP) *lami* ‘man’ or Central Lamaholot *anadz* ‘soil’ which is cognate with Abui (AP) *anai* ‘soil’. Those non-AN items that are also found in a wider regional area entered Lamaholot mostly before the break-up of Proto-Lamaholot, as cognates with regular sound correspondences are also found in Kedang and Sika. Examples for the regionally wide spread non-AN words are Proto-Flores-Lembata (PFL) \*waki ‘body’, PFL \*muku ‘banana’ or PFL \*wodak ‘fat’.

These findings suggest that the composition of the Lamaholot basic lexicon is an equal mix of lexical items from an Austronesian language and items from unknown non-Austronesian languages, some of them possibly related to the Alor-Pantar languages, as a small but not insubstantial amount of AP cognates is found in the basic non-AN vocabulary of several Lamaholot varieties. This is in line with previous research on structural features of Lamaholot, which appear to be mixed as well. Several non-AN structural features, such as clause-final negation and an alienability distinction, have been attested in Lamaholot (Klamer 2012; Fricke 2017).

### References:

- Fricke, Hanna. 2017. The rise of clause-final negation in Flores-Lembata, Eastern Indonesia. *Linguistics in the Netherlands* 34. 47–62. doi:10.1075/avt.34.04fri.
- Klamer, Marian. 2012. Papuan-Austronesian language contact: Alorrese from an areal perspective. In Marian Klamer & Nicholas Evans (eds.), *Melanesian languages on the Edge of Asia: Challenges for the 21st Century*. Honolulu: University of Hawai'i Press.
- Muysken, Pieter. 1997. Code-switching processes: Alternation, insertion, congruent lexicalization. In Martin Pütz (ed.), *Language choice: Conditions, constraints, and consequences*, 362–380. Amsterdam: John Benjamins.
- Thomason, Sarah. 2001. *Language contact*. Edinburgh: Edinburgh University Press.

## Evolution of three applicative markers in Nalögo

Valentina Alfarano (INALCO; LACITO-CNRS)

The goal of this presentation is to describe the evolution of the applicative markers *-ulë*, *=ba*, and *=ngö* in Nalögo. Nalögo is an Oceanic language spoken in Temotu province (Solomon Islands), which along with Äiwoo, Natügu and Engdewu, forms the Reefs-Santa Cruz subgroup, a division of the Temotu group (Ross & Næss 2007). Applicative markers work as valency-changing devices, whose main function is to allow “the coding of a thematically peripheral argument or adjunct as a core-object argument” (Peterson 2007: 1). In Nalögo, the applicative markers *-ulë*, *=ba*, and *=ngö* add a direction/goal argument (1), a recipient/addressee argument (2), and a cause/stimulus/concern argument (3), respectively. While the applicative markers *-ulë* and *=ngö* are applied to intransitive verbs, *=ba* is applied to both intransitive and transitive verbs.

- |                                   |                          |
|-----------------------------------|--------------------------|
| 1. s-öp-wale-ulë=le               | ni                       |
| RL.N3AUG-laugh-APPL=3MIN.SUBJ     | 1MIN.OBJ                 |
| ‘She is laughing at me.’          |                          |
| <br>                              |                          |
| 2. tü-lâ=ne=ba=nga                | obwe ne=nu               |
| RL.N3AUG-talk=DISP=APPL=1MIN.SUBJ | child POSS.GEN=1MIN.POSS |
| ‘I am talking to my child.’       |                          |
| <br>                              |                          |
| 3. i-ngya=ngö                     | dötwö=de ni              |
| N3AUG-be.angry=APPL               | neck=3MIN.POSS 1MIN.OBJ  |
| ‘She is angry because of me.’     |                          |

Historically, the source of the applicative marker *-ulë* is the verb *ulë* ‘throw’ through verb serialization, a common source of applicative markers (Peterson 2007: 130-133; Durie 1988; Lichtenberk 1985). Likely sources of Nalögo applicative markers *=ba* and *=ngö* are the prepositions *ba* ‘to’, and *ngö* ‘from, about’, respectively. Synchronically, such prepositions have the tendency to become encliticized to verbs. From a comparative perspective, the closely related languages display a different situation. In Äiwoo, for instance, there is a suffix *-ive* which is functionally similar to the Nalögo *-ulë*, but its origin is unknown (Ross & Næss 2007). In Natügu, there is a morpheme *ba-* which occurs as a dative base in the formation of ‘indirect object pronouns’ expressing roles such as beneficiary/recipient (van den Berg & Boerger 2011). However, its use is substantially different from Nalögo applicative *=ba*. Finally, in Natügu and Engdewu, there are two applicative markers, *-ngö* and *-(C)ö*, which are clearly related to the Nalögo *=ngö* in form and function. Such applicative markers are thought to be reflexes of the Proto-Malayo-Polynesian *\*-an* (Vaa 2013: 189). In particular, in Natügu, the applicative marker *-ngö* is homophonous with a nominalizer that combines with the prefix *në-* to form action nominalizations (van den Berg & Boerger 2011). In Nalögo, the applicative marker *=ngö* is also homophonous with a nominalizer, but they probably display different origins.

## References

- Durie, M. 1988. Verb serialization and “verbal-prepositions” in Oceanic languages. *Oceanic linguistics* 27: 1-23.
- Lichtenberk, F. 1985. Syntactic-category change in Oceanic languages. *Oceanic Linguistics* 24(1/2):1-84.
- Peterson, D. A. 2007. *Applicative constructions*. Oxford: OUP.
- Ross, M., and Åshild Næss. 2007. An Oceanic origin for Äiwoo, the language of the Reef Islands? *Oceanic Linguistics* 46:456-498.
- Vaa, A. 2013. *A grammar of Engdewu*. PhD thesis, University of Oslo.
- van den Berg, René, and Brenda H. Boerger. A Proto-Oceanic passive? Evidence from Bola and Natügu. *Oceanic Linguistics* 50:221-46.

# Strata of contact: Typologising the expression of geocentric spatial orientation in the northern Moluccas and west New Guinea

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Many of the Austronesian and Papuan languages of the northern Moluccas and west New Guinea use geocentric systems of spatial orientation: absolute systems of reference that take their coordinates from concrete geographical or topographical phenomena (such ‘seawards’ vs. ‘landwards’, or the elevation of a slope; see e.g. François 2004 on geocentricity in Oceanic languages). However, there is diversity across the region with regards to how geocentricity is expressed linguistically. This presentation represents the first attempt to typologise the expression of geocentric spatial orientation in the languages of the northern Moluccas and west New Guinea. Based on a sample of 16 Austronesian and 20 Papuan languages, I will show that geocentric expression of the area can be categorised into one of three types:

1. **Geocentricity expressed lexically.** This is the default type throughout the area. While the Austronesian languages in the sample tend to express geocentricity with nouns (for example Wamesa, e.g. *rau* ‘sea(wards)’; Gasser 2014), the Papuan languages tend to use adverbs (for example Abun, e.g. *ju* ‘upstream’; Berry & Berry 1999).
2. **Demonstrative system includes geocentric elevationals; otherwise, geocentricity expressed lexically.** For example, the Meyah demonstrative system includes two terms for elevation (*imba* ‘that below’, *inda* ‘that above’), alongside four geocentric nouns (e.g. *agosu* ‘seawards direction’; Gravelle 2004). This type is attested in four Papuan languages in the sample, all spoken on the Bird’s Head: Meyah, Moskona, Sougb (East Bird’s Head family), and Hatam (isolate); and the Austronesian language Wooi, spoken on Yapen.
3. **Geocentricity highly integrated into the demonstrative system.** An example of this type is Ambel, in which geocentric prefixes (e.g. *li-* ‘land’, *lu-* ‘sea’) attach to non-geocentric demonstrative roots (e.g. *ne* ‘PROX’, *pa* ‘MID’) in a paradigm that makes 28 geocentric distinctions (Arnold 2018). This type is attested in all of the Austronesian and Papuan languages of the northern Moluccas; at least two Austronesian languages of Raja Ampat, Ma’ya and Ambel; and the Austronesian Biak, spoken in Cenderawasih Bay.

Note that the latter two types are areally restricted: Type 2 systems are only found on and to the east of the Bird’s Head peninsula, and Type 3 systems are concentrated in the northern Moluccas, with three outliers in Raja Ampat and Cenderawasih Bay. I will argue that these distributions reflect zones of contact at two different time periods. The first, witnessed by Type 2 systems, is an ancient area of contact between the languages spoken on and around the Bird’s Head (see also Reesink 1998). The second, witnessed by Type 3 systems, originated in the Papuan languages of the northern Moluccas (see Holton 2017), and spread into the three Austronesian outliers through the influence of the Tidore empire in recent centuries.

## References

Arnold, L. (2018). A grammar of Ambel. PhD thesis, University of Edinburgh. Berry, K. & C. Berry (1999). *A description of Abun, a West Papuan language of Irian Jaya*. Canberra: Pacific Linguistics. François, A. (2004). Reconstructing the geocentric system of Proto Oceanic. *Oceanic Linguistics* 43:1-32. Gasser, E. (2014). *Wamesa Morphophonology*. PhD dissertation, Yale University. Gravelle, G. (2004). *Meyah: An East Bird’s Head language of Papua, Indonesia*. PhD thesis, Vrije Universiteit Amsterdam. Holton, G. (2017). A unified system of spatial orientation in the Austronesian and non-Austronesian languages of Halmahera. *NUSA* 62:157-89. Reesink, G. (1998). ‘The Bird’s Head as Sprachbund’. In J. Miedema, C. Odé, and R.A.C. Dam (eds.), *Perspectives on the Bird’s Head of Irian Jaya, Indonesia*. Amsterdam & Atlanta: Rodopi. Yoshida, S. (1980). ‘Folk orientation in Halmahera with special reference to insular Southeast Asia’. In N. Ishige (ed.), *The Galela of Halmahera: A Preliminary Survey*. Osaka: Museum of Ethnology, 19-88.

## The impact of Spanish and English hybrids on contemporary Tagalog

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The Tagalog (Tag) heavy borrowing from Spanish (Sp) through the 16<sup>th</sup>-early 20<sup>th</sup> cent. has resulted in: **(1)** borrowing of Sp affixes and creation of *Tag-Sp hybrids*; **(2)** *hispanization of English (Eng) loanwords* as a mode of their assimilation (e.g. Wolff 1973). Presently the intense Tag-Eng code-switching provides for **(3)** *Eng nonce borrowings in the Tag derivational frame* (“inserted stems with native affixes”, in Muysken’s terms). In an attempt to assess the impact of such Sp and Eng hybrids on the Tag system, pieces of random Tag news and non-/fiction published in 2005-2015 (135000 words, 37500 unique) have been analyzed. The approximate ratio of Sp and Eng borrowings of different types in modern Tag basing on my data is:

Type of borrowing	% of the total corpus
Sp assimilated loanwords	20 %
Sp loanwords with donor orthography	0,25 %
Sp-Tag / Eng-Tag hybrids	0,1 %
Eng assimilated loans	1,45 %
Eng nonce borrowings	5,8 %
Eng nonce borrowings in the Tag derivational frame	0,2 %

**(1)** The indirect borrowing (in F. Seifart’s term) of Sp grammatical morphemes from many simplex-complex pairs of Sp loanwords (esp. Sp *-ado/-a*, *-ero/-a* and *de-*) has resulted in their hybridization with Tag stems (incl. loans): *ihó/ihá* “son/ daughter” [< Sp *hijo/hija*] – *ihado/-a* “godson/goddaughter”; *talakay* “subject of talk, discussion” – *talakero/-a* “male/female who disputes much”; Eng *zipper* – *de-zipper* “with zipper”. For an actor noun the Sp suffix *-ero/-a* may be used instead of the native prefixes *mang-*, *taga(pag)-*: *butáng* “beating a person mercilessly” – *butangero* “bandit” (cf. *mambubutáng*), *balitá* “news” – *balitero* “reporter” (cf. *tagapagbalitá*). The quasi-prefix *de-* makes an alternative to the native prefixes *naka-*, *ma-* denoting “possession of an object/quality” (*de-kahoy* “wooden”); and adverbial *pa-* denoting “mode of action” (*de-padyák* “stamping, trampling”).

**(2)** Sp items are taken as patterns for the adaptation of recent Eng borrowings, e.g.: Eng *-o* > Tag *-o*: *odo(u)r* > *odoro* (cf Sp *olor*); Eng *-ed* > Tag *-ado*: *supported (fig)* > *suportado* (cf Sp *apuyado*); Eng *-er* > Tag *-ero*: *abuser* > *abusero* (cf Sp *abusador*); Eng *-ous* > Tag *-oso*: *glamorous* > *glamoroso*, etc. The gender-marked Sp suffixes in such Tag hybrids foster the development of *marginal gender* in Tag (Stolz 2012; Baklanova 2016), with human nouns as controllers and words with Sp gender-sensitive affixes as targets, incl. possessed nouns: *Graciosang umupo ang babae* – “The woman sat gracefully-FEM”; but “<...>*grasyosong imbita ni Keith* – “amiably-MASC invited [Sir] Keith”.

**(3)** A heavy Tag-Eng code-switching accounts for the growing number of Eng *nonce borrowings* in the daily discourse. Their insertion into the Tag verbal frame starts to *violate the phonotactics constraint* attested e.g. by Bautista (1974) as “derivation of English lexica through prefixation only”. Thus, of the total 472 *nonce borrowings with Tag affixes* in my data 8,5% are derived with *infixation*, e.g.: *hinahandle* “is handled”, *idinonate* “is donated”, *tumatarget* “is targeting”, etc.

Bautista Ma. L. (1974). The Filipino bilingual’s competence: A model based on analysis of Tagalog-English code-switching. Manila.

Baklanova E. (2016). On marginal gender in Tagalog: A case study. Proceedings on the XII LESEWA, 16-17 Nov. 2016, Moscow. - Pp. 25-33.

Stolz T. (2012). Survival in a niche. On gender-copy in Chamorro (and sundry languages) / M.Vanhove, T.Stolz, A.Urdze, eds. Morphologies in Contact. Berlin, Boston. - Pp. 93 – 140.

Wolff J. (1973). The character of borrowings from Spanish and English in the languages of the Philippines // Journal of Philippine Linguistics. – Manila, No 4. - Pp.72-81.

Common, Local and Personal Noun Formation in the Languages of Malekula

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Languages in the Oceanic family routinely present a three-way split between Common, Local and Personal Nouns, which has been reconstructed for POc (e.g. Ross, Pawley & Osmond 2003: 232-33; Ross, Lynch & Crowley 2002). In the languages of Malekula Island in Vanuatu, the same three-way division occurs, with common nouns often carrying reflexes of the POc article *\*na/\*a*. Additionally, grammatical analyses of Malekula languages, as well as new field data indicate that a reflex of *\*na* can derive common nouns from verb roots, and that these deverbal nouns often carry a second suffix *-(i)en* or *-(i)an*. The same languages provide evidence of local and personal noun formation with a prefix that takes the form *IV-*.

Alongside a survey of common noun formation and derivation, in this paper, we consider synchronic evidence for local and personal noun formation, with a focus on *IV-*. We speculate that the prefix *IV-* has two diachronic sources. The prefix *IV-<sub>1</sub>* derives place names, along with other subtypes of local nouns including some temporal nouns. It is likely a reflex of the locative base *\*lalo* (Pawley 1972: 33, 114) and its shorter variants *\*lo* and *\*la* (e.g. Ross, Pawley & Osmond 2003: 288-89). Reflexes of the locative base are widely attested as a locative preposition in Malekula languages and include the prepositional *lon* in Neverver and *len* in Uluveu. The prefix *IV-<sub>2</sub>* is attested in multiple languages as deriving female proper names. As the most widespread function, we speculate that *IV-<sub>2</sub>* was present in the ancestral Malekula language as *\*IV-*, a feminine proper noun marker. This is consistent with Lynch's (2001: 229, 232) reconstruction of a Proto Oceanic feminine article *\*dri* based on scattered evidence from New Ireland, North-Central Vanuatu, and Southern Vanuatu. Beyond women's names, on Malekula the *IV-* sequence occurs in the common noun class with nouns that share the feature of animacy, including for example birds, sea creatures, and land animals. We speculate that the ancestral *\*IV-* prefix has generalised in its function in some languages, from coding women's names to coding a broader class of animate entities.

## References

Lynch, John. 2001. Article accretion and article creation in Southern Oceanic. *Oceanic Linguistics*, 40(2). 224-246.

Ross, Malcolm, Andrew Pawley & Meredith Osmond. 2003. *The lexicon of Proto Oceanic. The culture and environment of ancestral Oceanic society. 2 The physical environment*, 545. Canberra: Pacific Linguistics.

Ross, Malcolm, John Lynch & Terry Crowley. 2002. *The Oceanic languages*. Richmond, England: Curzon.

Pawley, Andrew. 1972. On the internal relationships of Eastern Oceanic languages, 1-142. In R.C. Green & M. Kelly (eds.), *Studies in Oceanic culture history, volume 3*. Honolulu: Pacific Anthropological Records, Department of Anthropology, Bernice Pauahi Bishop Museum.

## Potentive and stative voice alternations in western Austronesian languages

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Many western Austronesian languages make a distinction between dynamic and non-dynamic (i.e. stative) predicates and, within the dynamic class, a further distinction between potentive and non-potentive predicates. While potentive and stative predicates clearly differ both semantically and syntactically, they are morphologically closely related and often overlap. In Totoli, for example, stative and potentive predicates are formally identical in the actor voice (AV):

- |     |             |                   |                          |     |            |                 |                                |
|-----|-------------|-------------------|--------------------------|-----|------------|-----------------|--------------------------------|
| (1) | <i>isia</i> | <i>nokoondong</i> | <i>inangku</i>           | (2) | <i>aku</i> | <i>nokoinum</i> | <i>rasun</i>                   |
|     | isia        | <b>no- ko-</b>    | ondong inang =ku         |     | aku        | <b>no- ko-</b>  | inum rasun                     |
|     | 3s          | AV.RLS- ST-       | sad mother =1s.GEN       |     | 1s         | AV.RLS- POT-    | drink poison                   |
|     |             |                   | ‘He made my mother sad.’ |     |            |                 | ‘I accidentally drank poison.’ |

In contrast, the undergoer voices (UV) are clearly distinct. Stative UV forms are intransitive and are marked by *mo-/no-* (3), whereas most potentive UV forms are transitive and are marked by *ko- -i/ni-ko- -an* as in (4):

- |     |                     |                     |               |                               |
|-----|---------------------|---------------------|---------------|-------------------------------|
| (3) | <i>aku</i>          | <i>mangasa</i>      | <i>dei</i>    | <i>isia</i>                   |
|     | aku                 | <b>mo-</b>          | ngasa         | dei isia                      |
|     | 1s                  | ST-                 | angry         | LOC 3s                        |
|     |                     |                     |               | ‘I am angry with her.’        |
| (4) | <i>nikolipaanna</i> |                     | <i>noboli</i> | <i>sagin</i>                  |
|     | <b>ni- ko-</b>      | lipa -an =na        | no- boli      | sagin                         |
|     | RLS-POT-            | forget -APPL=3s.GEN | AV.RLS-       | buy banana                    |
|     |                     |                     |               | ‘S/he forgot to buy bananas.’ |

This paper investigates the considerable variation that occurs in this domain across northern Sulawesi and Philippine languages, guided by the following two questions:

1. To what extent does the morphological paradigm for potentives differ from the one for statives?
2. Which voice alternations are permitted with potentive and stative predicates?

As for the first question, we will show that the possibilities range from almost no difference between the two paradigms (e.g. Toratán), to partial overlap (e.g. Totoli), to almost complete formal separation (e.g. Tagalog). Importantly, however, in almost all languages both paradigms include a form prefixed with *mV-/nV-* which also tends to be the most frequently used form.

As for the second question, there is a general tendency for potentive and stative voice alternations to be less productive than those for non-potentive dynamic predicates. This is particularly clear in the case of stative voice alternations.

The findings we present allow us to draw conclusions about the meaning of potentive formations (highlighting their culminative character in contrast to dynamic formations), the history of stative/potentive morphology (parallel developments rather than shared innovations) and the special status of perception predicates in the grammar of many western Austronesian languages.



## The morphosyntax and semantics of undergoer voice and passive voice in Amis

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Many western Austronesian languages display symmetrical voice alternations in addition to an asymmetrical passive voice. Amis is one such case. Its passive form is marked by the suffix *-en* (also reconstructed as passive by Wolff 1973), while the undergoer voice UV *ma-* is one of the basic affixes that belong to the symmetrical voice system. Chen (1987) analyses UV *ma-* constructions as ergative transitive constructions, in opposition to the antipassive Actor Voice AV *mi-* constructions. Their alternations are conditioned by a variety of factors including telicity, full affectation and definiteness of the patient for the UV *ma-* voice. For instance, not all AV *mi-*verbs allow a UV *ma-* alternation; UV *ma-* is restricted to transitive verbs denoting some achievement done by an agent, with an implied resulting state on the patient. Due to such restrictions of verb classes and usage, UV *ma-* voice is thus not analysed as a passive voice. On the other hand, UV passive *-en* has no such restrictions, it derives all types of verb stems into undergoer-oriented/passive verbs. There are additional constraints on the genitive agents of passive *-en*, which must be human and intentional, whereas *ma-* is neutral for both features. One last distinctive feature between UV *ma-* and passive *-en* appears in their imperative and hortative mood forms ; UV is marked by imperative *-a* and by hortative *-aw*, while the passive form (*-en*) is identical in all moods.

The differences between standard passive *-en* and the UV *ma-* construction expressing a resulting state are shown in (1a-b).

- (1) a. *lluh-en n-uhni k-u lutuk.*  
 burn-PASS GEN-3PL NOM-NM mountain  
 'they set the mountain on fire.'  
 (lit. the mountain was set on fire by them)
- b. *ma-iluh k-u lumaq n-umaku*  
 UV-burn NOM-NM house GEN-1SG  
 'my house was burnt.'

Complex verbs denoting manner of action are also expressed by the passive *-en* construction with ergative pattern. In (2b), it occurs on a verb stem derived from an entity-denoting root (often body-parts or tools).

- (2) a. *Kalat-en a mi-puciq k-u tebus.*  
 bite-PASS COMP AV- peel NOM-NM sugar-cane  
 '(you) must peel the sugar-cane by biting it.' (lit. the sugar-cane is bitten to peel (it))
- b. *Kamay-en=aku a k<em>aen k-u hemay.*  
 hand- PASS=GEN.1SG COMP <AV>eat NOM-NM rice  
 'I eat rice with my hands.'

While standard passive constructions (ex.1) align ergatively, passive of experience with *-en* (3) align antipassively. Passive of experience constructions occur with intransitive, Non-Actor Voice *ma-* verbs that denote perception or emotional experience, or with stative, property verb stems like *Ø-adada* 'be hurt' and *adada-en* 'get hurt'. They have antipassive alignment. The presence of *ma-* and *-en* on the root in (3) is proof of their distinct status.

- (3) *Ma-canar-en k-u tuul t-u suni n-u tatakulaq.*  
 NAV-noisy-PASS NOM-NM owl OBL-NM sound GEN-NM frog  
 'The owl is disturbed because of the noise of the frogs.'

A passive of experience does not promote a patient to subject function, but treats the experiencer subject as undergoing a change of state, with contextual effects, as in *signaw-en k-aku* 'I'm getting cold' (i.e. can you turn down the air conditioner ?).

Chen Teresa. 1987. *Verbal constructions and verbal classifications in Nataoran-Amis*. Canberra: Pacific Linguistics (1987).

Wolff, John. 1973. *Verbal inflection in Proto-Austronesian*. Quezon: Linguistic Society of the Philippines.

Wu, Joy. 2006. *Verb classification, case-marking and grammatical relations in Amis*. Buffalo: PhD dissertation.

## KANAKANAVU WORD-LEVEL PROSODY IN TYPOLOGICAL PERSPECTIVE

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Kanakanavu is a critically endangered Formosan language spoken in Kaohsiung, southern Taiwan. Although the language remains underdocumented considering its endangered status, recent descriptions and theoretical investigations of its word-level prosodic system has pointed to the essential role that pitch plays in the realization of word prominence (S. Chen 2016, H. Chen 2016, Cheng 2018). Building on the foundations laid by previous studies, the present paper aims to make further contributions to this area of research from a typological perspective in assessing the overall features exhibited by the language's word-level prosodic system. In particular, a *property-driven approach* (Hyman 2009) is adopted, where four parameters are considered: CULMINATIVITY, OBLIGATORINESS, PRIVATIVITY, and METRICALITY.

To begin with, the Kanakanavu word-level prosodic system exhibits CULMINATIVITY. Although there are two types of prosodic prominence that have been identified so far, each characterized by a specific pitch realization (a H pitch target observed in the majority of collected words, or a HL pitch contour which is idiosyncratically observed in a small number of words), only one realization of prominence is allowed at the word-level at most. Although words with more than one prosodic prominence has been observed in spontaneous speech, they are argued to be attributed to information-structure-induced intonational effects (e.g. intonational pitch-accent related to unexpected new information), which are consistently lacking in the prominence patterns of words in isolation.

Counter to expectation from the Formosan context, OBLIGATORINESS is only marginally exhibited in Kanakanavu. Although most words in the language can be characterized as H- or HL-bearing, there are content words that have been identified to show no prosodic prominence at all. While these words may be attributed to diachronic processes of radical reduction (e.g. acé=cu [leave=COS] > acu, makâsi [say.like.this] > masi), at the synchronic level Kanakanavu should only be marginally considered to fall under the same category as a language such as Tanimuca (Keller 1999, cited from Hyman 2009:220), in which every word has to include at least one H feature.

PRIVATIVITY is found to be exhibited by the Kanakanavu word-prosodic system. On the one hand, all the remaining non-prominent syllables (those not bearing H or HL) in a word appear to be unspecified for prosodic features, as phonetically speaking they are observed to be either realized as a low falling pitch contour or subsumed under the overall pitch shape. In contrast, H and HL prominence types are actively targeted by different phonological and/or morphological processes: both are found to be regularly assigned to the penultimate mora of the word, with the former being further sensitive to morphological representations of complex words, where morphemes may attract or compel prominence, leading to non-regular (final and antepenultimate) prominence positions.

Finally, word-level prosody in Kanakanavu does not exhibit METRICALITY as prominence associated with footing and rhythm is not observed, and because no robust evidence for identifying metrical assignment of prominence in the language has been found so far. While the assignment of both prominence types (H and HL) appear to be sensitive to the right word-edge (i.e. assigned to the penultimate mora), the overall system still differs significantly from, for example, that in Seneca, where H tone assignment is associated with word-level trochaic footing (Hyman 2009:228).

CHEN, HSUAN-JU. 2016. *A study of Kanakanavu phonology: Selected topics*. MA thesis, National Chi Nan University.

CHEN, SALLY. 2016. A first glimpse of Kanakanavu word prominence. *Speech Prosody 2016*, 683-686.

CHENG, YI-YANG. 2018. More on Kanakanavu word-level prosody: cyclic and post-cyclic processes. Paper presented at AFLA 25, May 11 2018, Academia Sinica, Taipei.

HYMAN, LARRY M. 2009. How (not) to do phonological typology: the case of pitch-accent. *Language Sciences* 31: 213-238.

## Medial- final alternations in eastern Indonesia

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Alternating phrase-medial and phrase-final forms of nouns are a feature of languages in eastern Indonesia/Timor-Leste, both Austronesian and non-Austronesian. This paper is a study of this feature, which has not yet been examined as a typological areal phenomenon of this region. Examples of medial and final forms of nouns in Kula (Timor-Alor-Pantar, Alor) are given in (1).

1)	Medial	Final	Gloss	
	<i>alek</i>	<i>aleki</i>	'mud'	
	<i>pin</i>	<i>pini</i>	'nose'	
	<i>ler</i>	<i>leri</i>	'king'	Williams (2016:64)

The syntactic function of medial-final alternations is strikingly similar between languages of this region, while the forms of these processes are highly diverse. Examples of attributive modification in three different languages of the region are given in (2); Dela from Rote island, Amarasi from Timor, and Buru from central Maluku. (Data from Tamelan (in preparation), Edwards (2016:243), and Grimes (1991:195).)

2a)	Dela	<i>hie</i> <b>k</b>	'goat'	+	<i>monae?</i>	'big'	→	<i>hie monae?</i>	'big goat'
b)		<i>?ana?</i>	'child'	+	<i>naru?</i>	'tall'	→	<i>?ana naru?</i>	'tall child'
c)	Amarasi	<i>fatu</i>	'stone'	+	<i>muti?</i>	'white'	→	<i>faut muti?</i>	'white stone'
d)		<i>afu</i>	'earth'	+	<i>me?e</i>	'red'	→	<i>auf me?e</i>	'red earth'
e)	Buru	<i>fafu</i>	'pig'	+	<i>fena</i>	'village'	→	<i>faf fena</i>	'village pig'
f)		<i>fatu</i>	'rock'	+	<i>mite</i>	'black'	→	<i>fat mite</i>	'black rock'

In (2) the same syntactic function — attributive modification — is marked by the medial form which is derived through different morphophonological processes in each language. In Dela (2a, b) the presence of an attributive modifier triggers deletion of the final consonant of the modified nominal, e.g. *hie***k** → *hie* 'goat'. In Amarasi (2c, d) the presence of an attributive modifier triggers CV → VC metathesis of the modified noun, such as *fatu* → *faut* 'stone'. While in Buru (2e,f) attributive modifiers trigger deletion of the final vowel of the modified noun, such as *fatu* → *fat* 'stone'.

In this paper, I propose that the extent to which this feature is found in the region along with the functional similarities indicates that it spread through contact. That it is found in both Austronesian and non-Austronesian indicates that this feature has not been inherited from a common ancestor. This is further evidence of contact and multilingualism in the development of the languages of this region. Additional evidence for this feature being spread by contact comes from the diversity of forms; language specific morphophonological processes have been used to obtain the same structure; distinct final and non-final forms.

In this paper, I describe the forms and functions of this phenomenon in a sample of languages. I also examine the typological distribution of this process and discuss the role of language contact in its distribution across eastern Indonesia.

### References

- Edwards, Owen. 2016. Metathesis and unmetathesis: Parallelism and complementarity in Amarasi, Timor. Doctoral Dissertation, The Australian National University.
- Grimes, Charles E. 1991. The Buru Language of Eastern Indonesia. Doctoral Dissertation, The Australian National University.
- Tamelan, Thersia. In preparation. A grammar of Dela, a language of Rote, Eastern Indonesia. Doctoral Dissertation, The Australian National University.
- Williams, Nicholas Jay. 2016. Place reference and location formulation in Kula conversation. Doctoral Dissertation, University of Colorado.

## The Structure of Meto Poetry

We analyse the structure of poetry in the Austronesian Meto language/dialect cluster of western Timor. We focus on a specific form of poetry, the ritual greeting. A ritual greeting is performed by a leader accompanied by a group. The leader recites each verse, followed by a response from the group. Two verses with responses from the beginning of a ritual greeting from the Amarasi dialect of Meto are given in (1) and (2) below to exemplify.

- (1) Leader: *hai* mbaiseun *ma* mronaen *meu sonaf tetus in* uisn *am in* tuan *am nee*  
 1PL honour and greet DAT palace bless 3SG lord and 3SG owner and PAUSE  
 ‘We honour and greet the lord and owner of the palace of blessings.’ [i.e. God]

Group: *RO* ***TUAN***  
 indeed owner

- (2) Leader: *meu* a?naet *am* atuta? *nbi* mepu *kninu? ma* reon *aa kniun?* *am nee*  
 DAT great and high LOC work holy and plan DEF holy\MET and PAUSE  
 ‘To those who are great and high in God’s holy work and holy plan.’ [God’s servants]

Group: *RO* ***KNINU?***  
 indeed holy\UNMET

While a classical English poem is organised around phonological features such as metre and rhyme, the central organising feature of Meto poetry is parallelism; the pairing of two similar and related words and/or structures.

Semantic parallelism, the pairing of two semantically related words, has been extensively studied in Indonesia/Timor-Leste, particularly on the island of Rote which immediately neighbours the Meto cluster (Fox 2014; 2016). The kind of semantic parallelism in this region is known as *canonical parallelism* (Jakobson 1966), in which acceptable parallel pairs are pre-defined and poets are not free to innovate new pairs. Grimes (in press) provides an initial catalogue of Meto parallel pairs.

The Meto ritual greeting has a highly constrained structure built around parallelism. Each verse must contain at least one semantically parallel pair, though on average they contain between two or three pairs. Semantically parallel pairs in (1) and (2) are indicated by linking lines.

However, in addition to semantic parallelism, many other kinds of parallelism are found in Meto poetry. Verses often express parallel concepts, such as the alternation between God and his servants seen between (1) and (2). This inter-verse parallelism is further mirrored by intonation with verses alternating between high-falling and flat pitch.

What kinds of words form appropriate responses is also constrained. In the Amarasi dialect of Meto the response is usually a repetition of part of the verse with alternate metathesis when possible, as seen in (1) and (2), while in the Amfo'an dialect the response is usually a semantically parallel word.

Parallelism in Meto poetry is diverse. We find semantic parallelism, intonational parallelism, parallelism in metathesis, and inter-verse parallelism, all of which further corresponds to the parallelism between the call and response structure of the ritual greeting.

In our paper we build upon the rich body of work on semantic parallelism in this region and show that many other linguistic structures — not just semantics — are best explained with parallelism. Parallel structures also occur in everyday language in Meto, thus Meto poetry is best understood as a highly refined and structured instantiation of the parallelism which pervades the language.

### References

- Fox, James J. 2014. *Explorations in semantic parallelism*. Canberra: ANU Press.  
 Fox, James J. 2016. *Master poets, ritual masters the art of oral composition among the Rotenese of eastern Indonesia*. Canberra: ANU Press.  
 Grimes, Barbara Dix. in press. The poetics and politics of contemporary Meto verbal art in west Timor.  
 Jakobson, Roman. 1966. Grammatical parallelism and its Russian facet. *Language* 42:398–429.

# Orientation serial verbs and the Proto-Sogeram verb phrase

Don Daniels

Work on syntactic reconstruction has been gaining steam in recent years, as scholars from both formal and functional traditions have tried their hand at it (Barðdal 2014; Daniels 2017; Walkden 2014; Willis 2011). This paper takes construction-based methodology developed in work by Barðdal, Daniels, and others and applies it to serial verbs in the Sogeram languages of Papua New Guinea. In doing so, it also elaborates the methodology further.

The particular construction at issue is the orientation serial verb construction (SVC), in which a single intransitive verb occurs to the left of any objects or adjuncts, which are then followed by another verb. The first verb, which is usually a verb of posture or motion, serves to orient the subject with respect to the action expressed by the subsequent verb. A Gants example of a transitive clause with an orientation serial verb is given in (1).

- (1) *Aŋa asiko miŋa-m-ek.*  
go ginger get-FAR.PAST-3SG  
'He went and got ginger.'

A successful reconstruction of orientation SVCs to Proto-Sogeram requires evidence from a number of domains; in this paper I focus on phonology, semantic scope, and prosody. The phonological evidence comes in the form of special stem formatives that occurred on serialized verbs, and which can be shown to be cognate.

In modern languages, the orientation verb and the subsequent verb can have different values for negation and illocutionary force. This indicates that they form separate constituents within the clause, which I analyze as coordinated verb phrases. This shared structural fact is also suggestive of cognacy.

Finally, there is evidence to suggest that orientation verbs occurred at the right edge of a prosodic constituent. A Proto-West Sogeram sound change took place at the right edge of prosodic units, and Manat has retained evidence that orientation SVCs underwent that sound change. Assuming that prosodic structure aligns at least partially with syntactic structure, we can interpret this as evidence for the antiquity of the coordinated-verb-phrase structure of orientation SVCs.

These factors all support a reconstruction of orientation SVCs to Proto-Sogeram, and do so in a way that is consistent with currently accepted methodologies. However, there is a confounding factor, which current methodological discussions have largely ignored: the issue of arbitrariness. The paper concludes with a discussion of how considerations of arbitrariness should impact on our reconstruction of this SVC to Proto-Sogeram.

If we accept that there can be iconicity in syntax (Haiman 2008), we must acknowledge that it can influence the way that syntax is transmitted diachronically. In the case of Proto-Sogeram, other SVCs all involved verbs serialized to the right of the arguments (Daniels 2015). It is therefore possible that orientation SVCs began in the same position but were moved leftward to create a more iconic structure in which the intransitive verb is next to its subject, and the transitive verb and its object are also adjacent. I therefore conclude with two methodological proposals which can ameliorate, but not completely solve, the problem of arbitrariness in syntactic reconstruction.

## References

- Barðdal, Jóhanna. 2014. Syntax and syntactic reconstruction. In Bowerman & Evans (eds.), *The Routledge handbook of historical linguistics*, 343–373. New York: Routledge.
- Daniels, Don. 2015. A reconstruction of Proto-Sogeram: Phonology, lexicon, and morphosyntax. University of California, Santa Barbara Ph.D. dissertation.
- Daniels, Don. 2017. A method for mitigating the problem of borrowing in syntactic reconstruction. *Studies in Language* 41(3). 577–614.
- Haiman, John. 2008. In defence of iconicity. *Cognitive Linguistics* 19(1). 35–48.
- Walkden, George. 2014. *Syntactic reconstruction and Proto-Germanic*. Oxford: OUP.
- Willis, David. 2011. Reconstructing last week's weather: Syntactic reconstruction and Brythonic free relatives. *Journal of Linguistics* 47(2). 407–446.

*Abstract for Thematic Session Lexical Traces of Contact*

*Meeting in the swamps: lexical traces of TNG migration into the Digul Basin*

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The Digul Basin was formed in the course of the last 6,000 years after sea levels fell and rivers originating in the mountains brought sediments (Chappell 2005: 531). This means that the ancestors of TNG groups that settled on the southern plains of New Guinea must have moved relatively recently into their coastal home lands. My paper discusses the migration and contact history of one such a TNG group, the speakers of the languages of the Greater Awyu family presently living on and around the Digul River and its tributaries, from the headwaters all the way down to the mouth of the Digul (de Vries 2019 f.c).

I will argue that the Greater Awyu settled first upriver in the foothill area, and that they did so long enough for the development of multiple separate Greater Awyu languages in the foothills. The Greater Awyu groups that subsequently migrated further downriver met with swamp dwellers who spoke Marindic languages and who had settled there before the arrival of the Greater Awyu newcomers. These Marindic speakers were already fully adapted to the delta ecology of the mosquito-infested swamps and rainforests of the southern plains, with numerous waterways and with a rich vocabulary reflecting that ecology.

It turns out that the Marindic languages indeed supplied Greater Awyu speakers with words for things at the very heart of life on the southern plains that are not found in the mountains: words related to swamps, to animals living only in the lowlands, to travel via waterways and to the two coastal palms with huge significance, ecologically, culturally and ritually: coconut and sago. The word for coconut in the Awyu languages Shiagha, Yenimu and Aghu is *peyo*. It is *biyo* in Kombai, *mbiyon* in Korowai and *mbiyan* in Mandobo and Digul Wambon. The word for coconut in the Marindic language Jaqai is *payo*. How do we know that the Greater Awyu languages borrowed the term for coconut rather than giving it to Jaqai? Given the (independently argued) TNG origin of Greater Awyu speakers in the central New Guinea mountains, it is more likely that they borrowed the noun for coconut from Jaqai, their immediate Marindic neighbors, since coconut palms do not grow in the mountains. This is confirmed by independent observations of Healey (1970: 1000) and Wester (2014: 25) that the initial /p/ in words of the Awyu subgroup reflects a history of borrowing since proto Awyu-Dumut initial \*p is reflected by initial /f/ in the Awyu subgroup and the Awyu words that begin with /p/ cannot be reconstructed to a proto Awyu-Dumut form with an initial \*p. Similar evidence comes from Marindic words for sago (*da*, *dow*), mosquito (*nangit*), oar (*kavi* in Boazi and *kavia* in the Eastern dialect of Marind, corresponding to Shiagha *kafe*, Yenimu *kefi*, Pisa *kafi* and Aghu *kefi*) and canoe (*javun* in three Marindic varieties according to Drabbe (Easter dialect, Kumb-dialect, Mbian-dialect) and *jahun* in the Western and Atih dialects. In Pisa and Aghu we find *yefü* and *yofü*, in Mandobo *yoün* and in Kombai *yafu*.

There are weak (and disputed) traces of TNG descent in Marindic vocabulary and pronouns. If the ancestors of Marindic languages did indeed arrive in the coastal zone from the mountains (rather than by boat travelling along the south coast), they must have lived there a long time because phylogenetic research (Reesink, Singer and Dunn 2009) that squarely places Korowai (de Vries and Van Enk 1997) of the Greater Awyu family in the TNG group, concludes that the Marindic family is non-TNG and forms one group with languages of the South Bird's Head family such as Inanwatan, confirming the earlier hypothesis of de Vries (2004) that Marindic and SBH languages are genealogically related.

Chappell, J. 'Geographic changes of coastal lowlands in the Papuan past'. In Pawley et al.

- (eds.) 2005, 525-541.
- Reesink, G.P., R. Singer and M. Dunn. 2009. 'Explaining the linguistic diversity of Sahul using population models'. *PloS Biology* 7 (11): e10000241.
- de Vries, L. and G.J. van Enk. *The Korowai of Irian Jaya. Their language in its cultural context.* Oxford University Press.
- de Vries, L. (2004). *A short grammar of Inanwatan, an endangered language of the Bird's Head of Papua, Indonesia.* Pacific Linguistics, 560. Canberra: A.N.U. Press.
- de Vries, L. (2019, forthcoming). *The Greater Awyu languages of West Papua.* De Gruyter Mouton.

## A synchronic and diachronic view on animacy in Komnzo

In this paper I argue that the two separate forms to mark possessive and dative case have developed from one form that encoded animacy in Komnzo. Komnzo is spoken by around 250 people in the village of Rouku in Southern New Guinea. In the first part of the paper, I will describe the heterogenous strategies to mark animacy. The most obvious difference between animate and inanimate referents is that only for animate referents there is a number distinction available in the case enclitics (singular vs. non-singular). This is shown in (1a-c). For the locative, there is one enclitic for inanimates (=en), and two for animates: singular (=dben) versus non-singular (=medben). For other cases, like the possessive, there is one enclitic for inanimate and animate singular (=ane), while the animate non-singular is different (=aneme).

- (1) a. *mnz=en*  
house=LOC  
'in the house' or 'in the houses'
- b. *mizi=dben*  
pastor=ANIM.LOC.SG  
'at the pastor's place' or 'with the pastor'
- c. *mizi=medben*  
pastor=ANIM.LOC.NSG  
'at the pastors' place' or 'with the pastors'

In some aspects, animacy is a covert category in Komnzo. For example, the characteristic case - which covers a variety of semantic roles including source, reason, purpose, and aboutness - can attach directly to inanimates (2). But it can only attach to animates, after the noun has been marked for the possessive case (3). This can be used for different interpretations of place names. Example (2) is the opening statement of a story about the place *Masu*, while (3) is the closing statement of the same story. In the second example, we see that the story is about "the *Masu* ones".

- (2) *trika-si kwa w\thkär/wé* *masu=ma*  
tell-NMLZ FUT 1SG:SBJ>3SG.FEM:OBJ:NPST:IPFV/start masu=CHAR  
'I will start the story about Masu.'<sub>(tci20120922-08 DAK #1)</sub>
- (3) *watik trika-si masu=ane=ma nima zf \rä/*  
then tell-NMLZ masu=POSS=CHAR like.this IMM 3SG.FEM:SBJ:NPST:IPFV/be  
*b=\rä/*  
MED=3SG.FEM:SBJ:NPST:IPFV/be  
'Well, that was the story about the Masu people right here.'<sub>(tci20120922-08 DAK #86)</sub>

In the second part of the paper, I will develop a historical argument out of the synchronic description. I will argue that the possessive and the dative case enclitics are related. There used to be one form, which has undergone phonological and grammatical change to fulfil two separate functions. The main evidence comes from the formal similarity of possessive (POSS.NSG =*aneme*) and dative (DAT.NSG=*nm*) and the possessive prefixes, which pattern formally with dative rather than the possessive pronouns. Further evidence comes from the way in which related languages, like Ngkolmpu, encode the two grammatical categories in one form. I will argue that this was the same in Komnzo at an earlier stage of the language. Moreover, I will argue that the function was to mark animacy.



## Is Rote-Meto Austronesian? Only just.

I analyse and examine the composition of the lexicon of the Rote-Meto languages of western Timor in order to discern what kind(s) of pre-historic contact these languages may have experienced as they arrived in and spread through western Timor. This examination is based on a database of 1,077 Proto-Rote-Meto reconstructions.

I propose that the binary distinction between ‘Austronesian’ and ‘non-Austronesian / Papuan’ is not appropriate and that these languages must be classified proportionally on the basis of the quantity and quality of their different components.

On the basis of sound correspondences in the lexicon, I identify two AN strata, as well as two strata of unknown origin. The strata and their representation in the lexicon of Proto-Rote-Meto are summarized below.

- Austronesian = 44% (reconstruct to Proto-Malayo-Polynesian)
  - stratum 1 = 37%
  - stratum 2 = 7% (different correspondences to first stratum)
- Non-Austronesian = 56% (not reconstructed to Proto-Malayo-Polynesian)
  - regional = 27% (in Rote-Meto and other languages of greater Timor)
  - western Timor = 29% (in Rote-Meto and optionally Helong)

Slightly over half of the Rote-Meto lexicon is not known to reconstruct to Proto-Malayo-Polynesian. Based on this, we could propose that Rote-Meto is lexically an AN language which has undergone heavy non-AN contact, or a non-AN language which has undergone heavy AN contact.

To decide between each hypothesis I examine these strata from three perspectives: regularity of sound correspondences, representation in basic vocabulary, and representation in different semantic spheres.

Firstly, I examine the regularity of sound correspondences/changes in each stratum. Strata which show many irregular sound correspondences are likely to contain many borrowings. The strata are equally (ir)regular and none stands out as being particularly more likely to be inherited or borrowed than any other, with the exception of the second AN stratum which shows some weak indications of being borrowed,

Secondly, I examine each stratum according to its representation in basic vocabulary. About 63% of basic vocabulary is AN, 12% is regional, and 25% is from western Timor. Given that basic vocabulary is most resistant to borrowing, the fact that the regional stratum is poorly represented in basic vocabulary indicates that this entire stratum contains many loans. Examination of the basic vocabulary does not point to either the AN strata or west Timor stratum being borrowed.

Thirdly, I examine the different strata according to semantic fields. This shows that the western Timor stratum does not have a markedly different character to the AN stratum. Each is well represented in semantic spheres which are resistant to borrowing and neither is skewed towards any particular semantic domain. The regional stratum, however, is slightly skewed towards highly borrowable semantic domains such as tools.

The results of these three perspectives on the Proto-Rote-Meto lexicon show that while the regional stratum may contain many borrowings, the main AN stratum and the western Timor stratum are not particularly different. Thus, I conclude that they have a similar history and that both are inherited: the AN stratum is inherited from PMP while the western Timor stratum is inherited from at least one substrate non-AN language.

With a non-binary classification based on the quality and quantity of its different components, Rote-Meto is just over half Austronesian with a substantial west Timorese component and a more minor east Indonesian/Timor-Leste component.

This non-binary approach should be extended to other languages of the region. Once the elements of known *and* unknown providence are taken into account, we will be able to see how/if these other elements are linked and arrive at a more complete understanding of the linguistic history of Island South East Asia.

The Central Flores Linkage  
Alexander Elias, *Leiden University*

In this talk, I present the first reconstruction of the historical relations between the Austronesian languages Lio, Ende, Nga'o, Nage, Kéo, Ngadha and Rongga spoken in C(entral) Flores, eastern Indonesia. First, I demonstrate that the C. Flores languages form a valid innovation-defined subgroup and reconstruct aspects of Proto-C. Flores based on a bottom-up comparison of the modern C. Flores languages. Then, I present the results of my analysis of the internal subgrouping of the C. Flores languages in the framework of Historical Glottometry (Kalyan and François 2018), showing that they form a good example of a "linkage" (Ross 1988).

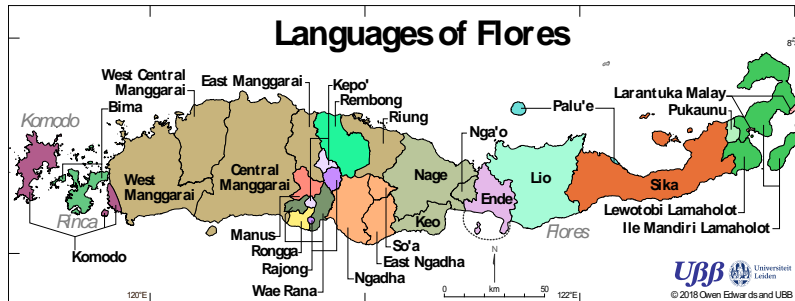


Figure 1: Linguistic map of Flores (courtesy of Owen Edwards)

Modern grammars are available for Kéo (Baird 2002) and Rongga (Arka 2016), and there are dictionaries for Lio (Arndt 1933), Ende (Aoki and Nakagawa 1993) and Ngadha (Arndt 1961). During fieldwork in C. Flores in July-August 2017, I collected additional data on Lio, Nage, Nga'o and Ngadha. The previously available

sources and my additional field data form the basis for the comparative analysis of the Central Flores languages presented here.

In my talk I discuss the evidence that the C. Flores languages form a valid subgroup and argue that reconstruction at the level of Proto-C. Flores is justified, since it appears there was indeed an event of splitting which led to the formation of a well-defined speech community ancestral to all modern C. Flores languages. However, it is not possible to establish well-supported and nested subgroups within the C. Flores group. I propose that this is a result of the linkage-like nature of the C. Flores languages: they did not differentiate into the modern C. Flores languages through a process of abrupt splitting and isolation, but rather through the gradual accumulation of innovations while maintaining contact and some degree of mutual intelligibility. This scenario does not lend itself to modelling with the tree model, but calls for a wave model approach to account for the patterns of overlapping innovation observed, which are better represented as the glottometric diagram in Fig. 2.

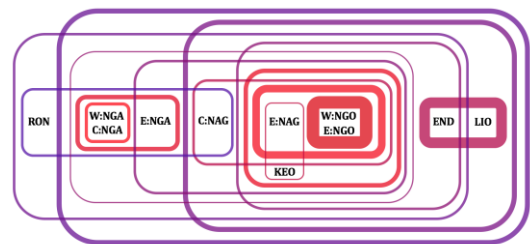


Figure 2: Glottometric diagram of Central Flores Linkage

Bibliography

- Aoki, Eriko & Satoshi Nakagawa. 1993. *Ende-English dictionary*. Unpublished, available in electronic format.
- Arka, I Wayan. 2016. *Bahasa Rongga: Deskripsi, Tipologi dan Teori*. Jakarta: Atma Jaya University Press.
- Arndt, Paul. 1933. *Li'onesisch-Deutsches Wörterbuch*. Ende: Arnoldus-Druckerei.
- Arndt, Paul. 1961. "Wörterbuch der Ngadhasprache". in *Studia Instituti Anthropos*, 15. Ende: Arnoldus Druckerei.
- Baird, Louise. 2002. *A Grammar of Kéo: An Austronesian languages of East Nusantara*. Canberra: ANU (Doctoral dissertation).
- Kalyan, Siva & Alexandre François. 2018. "Freeing the Comparative Method from the tree model: A framework for Historical Glottometry" in R. Kikusawa and L. Reid (eds.): *Let's talk about trees: Tackling problems in representing phylogenetic relationships among languages*. Osaka: National Museum of Ethnology. 59-89.
- Ross, Malcolm. 1988. *Proto-Oceanic and the Austronesian languages of Western Melanesia*. Canberra: Pacific Linguistics.

## Clausal restructuring in South Sulawesi

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This paper investigates a syntactic pattern from three South Sulawesi languages (Makassar (MK), Selayarese (SL), and Bugis (BG)) that superficially resembles the familiar raising-to-object construction (RTO) from English and other languages. But there are some differences. The differences, we argue, can be traced back to the fact that these languages have an ergative agreement pattern. The way that the case-related agreement relations play out are responsible for the ways in which this construction diverges from the familiar English-type pattern seen in (1).

1. a. John expects that Mary will buy that book.      b. John expects Mary to buy that book.

The ergative agreement pattern is illustrated below for MK (facts from SL and BG are similar). The preverbal marker in (2a) agrees with the transitive subject, and the postverbal clitic agrees with the direct object, or the intransitive subject as in (2b) (examples not otherwise attributed are from Authors n.d.).

2. a. ku-cinik=i i Baco                                      b. A'-jappa=i Balandayya (Jukes 2015)                                      **Makassar**  
*1S.ERG-see=3ABS cl Baco*                                      aC- jappa =i balanda -a  
'I saw Baco'    *INTR- walk =3ABS Dutch -DEF*  
'The Dutchman is walking'

Clausal complementation, along the lines of (1a), is shown in (3a) for BG (facts are similar in MK and SL), and the RTO-like construction is shown in (3b). Note that the absolutive clitic on the upper verb in this example links to the absolutive argument of the lower verb in the absence of the complementizer. The absolutive argument thus "raises", rather than the ergative one.

3. a. u-isse=i makkadae na-ita=ko i-Baso?                                      b. u-issek=ko na-ita i-Baso?                                      **Bugis**  
*1ERG-know-3ABS that 3ERG-see-2ABS cl-Baso?*                                      *1ERG-know-2ABS 3ERG-see cl-Baso?*  
'I know that Baso? saw you.'    'I know Baso? saw you.'

We argue that the clause structure of MK, SL, and BG involves two functional projections that are responsible for the appearance of the agreement markers on the verb, with the Absolutive superordinate to the Ergative (in (1), Nominative is above Accusative).

4. [<sub>ABS</sub> ... [<sub>VP-ERG</sub> DP<sub>i</sub> [<sub>VP</sub> V DP<sub>j</sub>]]]]

Ergative Case is locally determined on the subject, DP<sub>i</sub>, and so Case valuation for Abs can skip to the direct object, DP<sub>j</sub>. We further suggest that in the RTO-like structure in (3b), the complement clause is truncated (cf. Wurmbrand 2001); it lacks the higher Abs projection (as the English complement clause in (1b) lacks a projection that values Nominative).

5. [<sub>ABS</sub> ... [<sub>VP-ERG</sub> DP<sub>k</sub> [<sub>VP</sub> know ... [<sub>VP-ERG</sub> DP<sub>i</sub> [<sub>VP</sub> see DP<sub>j</sub>]]] j]]]

Ergative case-valuation proceeds in the complement and main clauses of (3b) as above, but since the Abs projection is lacking in the lower clause, the upper Abs values Absolutive Case on the remaining argument, DP<sub>j</sub>, in the lower clause. This is analogous to the way in which Accusative Case is valued on the lower subject of the RTO example in (1b) in the absence of a closer element that values Nominative. A similar analysis can be proposed for clausal nominalizations in these languages. Here the Abs projection is lacking in the nominalized clause (only *vP* is recruited for this construction), and so Genitive, associated with higher nominal structure, is valued on the absolutive argument. (6) is from SL.

6. a. ηarraŋ=i pa mu-lappa?-na (\*-i) (Maki and Basri 2015)                                      **Selayarese**  
*cry-3ABS because 2ERG-slap-3GEN(\*3ABS)*  
'He cried because you slapped him' ('He cried because of your slapping him')

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**references** Authors, n.d. "Notes on Bugis, Makassar, and Selayarese" Maki, H. and Hasan Basri 2015, "The absolutive/genitive alternation in Selayarese, *English Linguistics* 32.2:327-345. Jukes, A. 2015 Focus and argument indexing in Makassar. *Proceedings of the second international workshop on information structure of Austronesian languages*. Tokyo Institute of Foreign Studies, pp. 53-63. Wurmbrand, S. 2001 *Infinitives: Restructuring and clause structure*. Berlin: Mouton

## Complex loanwords and morphological transfer in Ibatan

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This study traces the history and current status of some borrowed affixes in Ibatan, an Austronesian (Batanic, Malayo-Polynesian) language spoken on the island of Babuyan Claro, Philippines. The community is multilingual, with speakers also proficient in Ilokano, the regional lingua franca, and Filipino, the national language of the Philippines. The intensity of contact between Ibatan and Ilokano in particular, has resulted in contact-induced language change in Ibatan, which can be seen not only in the lexicon but also in more structured aspects of the language such as phonology and morphology. Consider (1) (Maree 2007:39-40):

(1a) Native reduplication (CV-stem)				(1b) Borrowed reduplication (CVC-stem)			
<i>siraw</i>	<b>ka~</b> kaanakan	<i>sa=aw</i>	<i>ni Pidel</i>	<i>myan</i>	<i>asa poho</i>	<i>a</i>	<b>bab~</b> balasang
3PL	PL=nephew	3PL=A	DET Pidel	EXT	ten	LKR	PL~woman
‘Those nephews of Pidel...’				‘There are ten women...’			

As a general rule in Ibatan, non-native affixes appear with non-native stems (1b), in contrast with (1a) which follows the native Batanic pluralization of human nouns. While it is acknowledged that the transfer of structural materials is typically dispreferred (Matras and Sakel 2007, Gardani et al. 2015), suggesting that the borrowed reduplication in (1b) was transferred alongside the stem (forming complex loanwords) rather than an authentic transfer of morphological material, there are also cases in which borrowed affixes occur with native stems, in addition to native affixes occurring with borrowed stems, as in the voice affixes *may-/mag-* (2).

(2a) Native affix <i>may-</i> with borrowed stem:			(2b) Borrowed affix <i>mag-</i> with native stem:		
<i>may-bilag</i>	<i>so</i>	<i>benyebeh</i>	<i>mag-bwang</i>	<i>si</i>	<i>maraan</i>
AV-dry.under.the.sun	DET	banana	AV-bald	DET	uncle
‘to dry the banana under the sun’			‘Uncle is going bald.’		

Finally, there are also cases in which both native and borrowed affixes can occur with a similar stem, as in the ordinal number prefixes *cha-* and *maika-* (3):

(3a) Native (Batanic)	(3b) Borrowed (Ilokano)
<i>cha-dadwa</i>	<i>maika-dadwa</i>
ORD-two	ORD -two
‘second’	‘second’

The examples in (2) and (3) illustrate competing forms in Ibatan, suggesting the possibility of morphological transfer in progress. Whether or not these are cases of complex loanwords or actual morphological transfers can be determined by looking at standardized as well as actual usage both by dominant and non-dominant speakers of Ibatan. Moreover, we argue that the transfer of otherwise highly structured materials such as morphology can be promoted given certain conditions, such as high typological similarity between the two languages in contact as well as the speaker’s linguistic dominance (van Coetsem 2000). Exploring such questions contributes to a better understanding of the different mechanisms governing language contact.

### References:

- Gardani, Francesco, Peter Arkadiev and Nino Amiridze (eds.) 2015. *Borrowed morphology (Language Contact and Bilingualism 8)*. Berlin: De Gruyter Mouton.
- Maree, Rundell. 2007. *Ibatan: A grammatical sketch of the language of Babuyan Claro Island*. Manila: Linguistic Society of the Philippines.
- Matras, Yaron and Jeanette Sakel (eds.) 2007. *Grammatical borrowing in cross-linguistic perspective*. Berlin: De Gruyter Mouton.
- Van Coetsem, Frans. 2000. A general and unified theory of the transmission process in language contact. Heidelberg: Winter.

# SHWNG Noun Phrases, and How They Got That Way

Emily Gasser, *Swarthmore College*

In his Universal 20, Greenberg (1966) claims that “When any or all of the items (demonstrative, numeral, and descriptive adjective) precede the noun, they are always found in that order. If they follow, the order is either the same or its exact opposite.” Though this formulation seems to ban the order Noun Adjective Demonstrative(/Determiner) Numeral(/Quantifier), or NADQ, it is in fact attested in the world’s languages, though rarely. Cinque (2005) finds only nine clear examples in his survey of the typological literature, and gives a syntactic analysis to account for the pattern’s derivation as well as its rarity. Cinque’s inventory an areal NADQ hotspot in Melanesia and Micronesia (Port Sandwich – OceanicVanuatu; Koiari – Trans New Guinea, PNG; and the less clear-cut case of Woleian – Oceanic, Micronesia).

This talk adds two additional New Guinea languages to the list, and accounts for how such a dispreferred word order arose in these cases. Wamesa, a South Halmahera-West New Guinea (Austronesian) language of West Papua, Indonesia, and its cousin Dusner, both show NADQ ordering in their noun phrases. In Wamesa (Gasser 2014), the pattern is clear:

- (1) *anggadi pimasa=pa toru*  
coconut big=DET three  
‘the three big coconuts’

Dusner is highly underdocumented, with only a 55-page sketch grammar by Dalrymple & Mofu (2012), and only ~3 elderly speakers remaining. No examples in exist in that sketch of an NP with all three modifying components present, but taken together, the examples in (2) (NDQ) and (3) (NAD) suggest that NADQ order is present in this language as well.

- (2) *manvetatu ya nuru*  
bird.of.paradise DET.3SG two  
‘two birds of paradise’
- (3) *nap=a romansar ya*  
dog=fill big DET.3SG  
‘the big dog’

Wamesa and Dusner do not share this word order by common descent. Wamesa belongs to the Yapen subgroup while Dusner is Biakic; each is the only (known) NADQ language in their group, and there is no evidence of NADQ in a common ancestor. In Wamesa, NADQ appears to have arisen from reanalysis of number agreement marked as a suffix on the determiner. When no overt numeral is present in a Wamesa NP, the determiner agrees with the noun in number and animacy; when a numeral is present, agreement may not occur. The number agreement suffix resembled a numeral, particularly in the dual and trial, and was reanalyzed as such, yielding the present pattern. Evidence from closely related NAQD languages, such as Ambai (Silzer 1983), shows what I claim was the earlier state. (4) uses a numeral and no agreement, while (5) uses determiner agreement without a numeral.

- (4) *wara-keka damirai bo-ru fo-∅*  
hand-digit painful INAN-TWO DET  
‘his two sore fingers’
- (5) *Wiwin fo-suru uminoki.*  
woman DET-DUAL 3DU.sit  
‘The two women sat down.’

Dusner, however, cannot have inherited its word order in this way; as evidenced in part by the co-occurrence of determiner agreement with numerals. Instead, Dusner appears to have borrowed the pattern from Wamesa. The traditional Dusner-speaking territory is surrounded by Wamesa area, and bilingualism was common; extensive lexical borrowing between the two languages – usually Wamesa to Dusner – has been documented. This then is a case of grammatical change via intense long-term language contact.

**Theme session: Traces of contact in the lexicon**  
**Loans into and from Kilmeri as indicators of the people's migration route**  
**Claudia Gerstner-Link, University of Munich**

Kilmeri [K] is a Papuan language belonging to the Border [B] family, Bewani subgroup; today it is spoken north of the Bewani mountains in the Puwani-Pual river basin. The historic center of the language family is said to be located south of the Bewani mountains and east of the Border mountains; then what has been called the “Bewani expansion” (Donohue & Crowther 2005:171-172) took place about 200-250 years ago. This time scale matches the oral history of the Kilmeri (Gerstner-Link 2004:17-19). Yet the migration route of the Kilmeri should be a matter of debate: (i) they may have crossed the Bewani mountains or (ii) they may have taken a route westward toward the Tami river basin and only then moved eastward to their current location. It should also be mentioned that the Imonda [I] and Waris [W] people, now located south of the Bewani mountains, remember their ancestors as having come from the Northwest (Seiler 1985:1; Brown 1990:8). Thus, it cannot be excluded that the historic center of the Border people is located west of the Border mountains.

In fact, traces of language contact in the lexicon of K provide evidence for the second migration route mentioned above. A number of words appear not to belong to the (old) B lexicon, but to be borrowed from languages to the (North)West: from the Nimboran (family) [N] and from Sentani [S]. Likewise, N and S did borrow from K and/or the B family. Remarkably, there are at least 23 lexemes including verbs that speak for contact between K and N; in ten cases K (B) can be shown to be the donor language, in another ten cases K is the recipient language, and three cases are (still) unclear. Note the symmetrical relationship of mutual borrowing. Contact with Sentani is reflected in at least 15 lexemes. Here K is primarily the recipient language, the ratio being 10:5. Note in particular that K seems to have borrowed two verbal grammatical morphemes from S: the completive suffix *-wole* and the 3SG recipient object suffix *-ne*. If the latter is indeed related to Sentani, then it found its way into Waris, Imonda and Amanab as well. Thus one could also argue for a common origin within the B languages and posit an accidental similarity with the Sentani 3SG indirect object affix. But note also the formal resemblances of the 3-way distinctive indirect object affixes in Nimboran (May 1997:86). Furthermore, K distinguishes 1/2/3SG and nonSG for recipient object marking, a system that could be the simplified result of the S system of object marking, in which we find homophonous and phonologically similar dual and plural forms (Cowan 1965:31-53; Foley 2018:444). The W languages, by contrast, have only 3SG vs. 3nonSG beneficiary marking. Finally, there are also clear examples of one-way lexical borrowing from K (B) into Skou, though lesser in number.

Needless to say, the question remains whether the similar lexical forms of K (B), N and S may hint at a common origin. We would then have putative cognates, and the language families would have been related in the past. However, their grammatical systems are very different, and there doesn't seem to be a *reliable set* of possible morphological cognates, which are regarded as most indicative of a genetic relationship.

Selected references:

- Brown, B. 1986: *Waris grammar sketch*. SIL Ukarumpa.  
Cowan, H.K.J. 1965: *Grammar of the Sentani language*. S'Gravenhage, Martinus Nijhoff.  
Donohue, M. & M. Crowther 2005: Meeting in the middle: Interaction in North-Central New Guinea. In: A. Pawley et al. (eds.): *Papuan Pasts*.  
Foley, W.A. 2018: The languages of Northwest New Guinea. In: B. Palmer (ed.): *The languages and linguistics of the New Guinea area*. De Gruyter Mouton.  
Gerstner-Link, C. 2018: *A grammar of Kilmeri*. De Gruyter Mouton: PL vol 654.  
Matras, Y. 2009: *Language Contact*. CUP.  
May, K.R. 1997: *A Study of the Nimboran Language*. MA thesis La Trobe University.  
Seiler, W. 1985: *Imonda, a Papuan Language*. PL B - 93, ANU.

# Why Malayic Simplified

David Gil

Malay/Indonesian is the elephant in the Austronesian room, spoken, in one form or another, by more than 250 million persons, well over half of the total number of speakers of Austronesian languages. Anthony Burgess describes Malay as "a bath of pure logic [in which] everything is pared to a minimum" (Burgess 1975:183). In more technical terms, Gil (2005) describes colloquial Indonesian, exemplified by the Riau dialect, as instantiating IMA language, with *Isolating* word structure, *Monocategorical* syntax, and *Associational* semantics. The apparent simplicity of Malay/Indonesian grammar has informed theoretical debates on topics ranging from the architecture of grammar to the evolution of language itself (Hurford 2011, Everett 2017, Jackendoff and Wittenberg 2017).

How did Malay and Indonesian come to be this way? In response to earlier descriptions, McWhorter (2001) argues that Riau Indonesian is a *creole* language, though this is disputed in Gil (2001). In subsequent writings McWhorter (2011) suggests that Riau Indonesian and other similar varieties might be more appropriately considered as *Non-Hybrid Conventionalized Second Languages* (NCSLs). Common to McWhorter's various proposals is the idea that Malay/Indonesian has undergone simplification due to its role as a contact language with concomitant second-language acquisition.

This paper offers a broader perspective on the simplicity of Malay/Indonesian, viewed in the context of the *Mekong-Mamberamo* linguistic area (Gil 2015), encompassing mainland Southeast Asia, the Indonesian archipelago and western New Guinea, and characterized by, among others, isolating word structure. This talk sketches a historical timeline for the presence of isolating word structure in Malay/Indonesian and its ancestors, recent and distant, and examines some of the factors that may have played a role in this history. Taking Riau Indonesian as its point of departure, a comparative empirical study of the complexity of word structure and associated morphosyntactic processes is presented making reference to six enveloping "circles" of languages of mostly increasing size: (a) *Malay/Indonesian contact varieties*; (b) *Malay/Indonesian varieties*; (c) *Malayic languages*; (d) *Malayo-Polynesian languages of Indonesia and western New Guinea*; (e) *Mekong-Mamberamo languages*; (f) *Austronesian languages*. The picture that emerges is that Riau Indonesian is comparable in its degree of complexity of word structure and associated morphosyntactic processes to most of the languages in groups (a) - (e). The big difference in complexity is between all of the above-mentioned languages on the one hand, and the Austronesian languages of Taiwan and the Philippines on the other.

The above observations are accounted for in terms of a diachronic scenario involving two waves of simplification. In the first, beginning approximately 3500 years ago, the Austronesian languages spreading into the Indonesian archipelago underwent simplification, due to (i) assimilation to the simple grammatical profile of the non-Austronesian languages they encountered, and in some cases also (ii) radical restructuring resulting from second-language acquisition and creolization. In the second wave, beginning approximately 2000 years ago, Malayic languages diversified in accordance with two mirror-image processes: (i) complexification characteristic of small, typically rural dialects (Trudgill 2011); and (ii) simplification typical of large NCSL languages associated with second-language acquisition (McWhorter 2011).

Malayic may thus be viewed as an Austronesian language representing the outcome of simplification that took place largely during the original intrusion of Austronesian languages into the Indonesian archipelago. Alternatively, however, Malayic might also be seen as a Mekong-Mamberamo language that inherited its simple grammatical profile from its Mekong-Mamberamo ancestors going back in time as far as we can see.

## Optional subject marking in an Accusative language

Valérie Guérin

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Recent studies on differential argument marking (e.g., de Hoop and de Swart 2008; Malchukov 2008; McGregor 2010; Handschuh 2014) have revealed that it is typologically rare to use zero-coding for the P(atient) or A(gent) while overtly marking the S(ubject) of an intransitive. The conditions triggering the overt marking of S/A can be semantic or grammatical, but an “intriguing” fact according to Handschuh (2014:238) is that the conditioning environments can also be pragmatic. Particularly in some languages in the Pacific area, marked-S/A patterns only appear in certain discourse contexts. Studies of these discourse contexts exist for ergative languages (e.g., McGregor and Verstraete 2010’s editorial) but very few accusative languages exhibiting marked-S/A are reported in the literature (to name a few: Tariana, Aikhenvald 2003; Burmese, Jenny and Tun 2013; Ma Manda, Pennington 2013; and Azhee, Gerner 2016). In this talk, I present data from Tayatuk, a synchronically nominative-accusative language of Papua New Guinea, which uses a particle homophonous (or polysemous) with the ablative case marker *dî* to mark the grammatical role of subject (S and A). I show that the presence of *dî* is optional, in the sense of McGregor (2013): it is not triggered by any particular syntactic context, verb semantics, clause type, or position on Silverstein’s 1976 nominal hierarchy but by the discourse status of the referent in the S or A slot. A NP marked by *dî* is either contrastively focused (in the sense of Dik et al. 1981) or it needs to be distinguished from the P. I conclude by comparing other accusative languages with marked-S/A patterns to isolate the features that trigger optional S/A marking in these languages.

### References

- Aikhenvald, Alexandra Y. 2003. *A grammar of Tariana, from Northwest Amazonia*. Cambridge: Cambridge University Press.
- de Hoop, Helen, and de Swart, Peter. 2008. Cross-linguistic variation in differential subject marking. In *Differential subject marking*, eds. Helen de Hoop and Peter de Swart, 1-16. Dordrecht: Springer.
- Dik, Simon C., Hoffmann, Maria E., deLong, Jan R., Djiang, Sie Ing, Stroomer, Harry, and de Vries, Lourens. 1981. On the typology of focus phenomena. In *Perspectives on Functional Grammar*, eds. Teun Hoekstra, Harry van der Hulst and Michael Moortgat, 41-74. Dordrecht: Foris.
- Gerner, Matthias. 2016. Differential subject marking in Azhee. *Folia Linguistica* 50(1): 137–173.
- Handschuh, Corinna. 2014. *A typology of marked-S languages*. Berlin: Language Science Press.
- Jenny, Mathias, and Tun, San San Hnin. 2013. Differential subject marking without ergativity: The case of colloquial Burmese. *Studies in Language* 37:693-735.
- Malchukov, Andrej L. 2008. Animacy and asymmetries in differential case marking. *Lingua* 118:203-221.
- McGregor, William B. 2010. Optional ergative case marking systems in a typological-semiotic perspective. *Lingua* 120:1610-1636.
- McGregor, William B. 2013. Optionality in grammar and language use. *Linguistics* 51:1147-1204.
- McGregor, William B. and Jean-Christophe Verstraete. 2010. Optional ergative marking and its implications for linguistic theory. *Lingua* 120:1607-1609.
- Pennington, Ryan. 2013. Topic as evidence for nominative case in Ma Manda. *Language and Linguistics in Melanesia* 31:1-26.
- Silverstein, Michael. 1976. Hierarchy of features and ergativity. In *Grammatical categories in Australian languages*, ed. R M W Dixon, 112-171. Canberra: Australian Institute of Aboriginal Studies.



## Word Order and Information Structure in Kelabit

Charlotte Hemmings, University of Oxford

This paper explores the connection between word order, voice and information structure in Kelabit, a Western Austronesian (WAn) language spoken in Northern Sarawak. Kelabit has symmetrical voice – or alternations in the mapping of arguments to functions without detransitivisation. One of the syntactic effects of the voice system is to constrain word order, since only subjects can appear in pre-verbal position. Objects follow the verb and subjects can also appear following the object. This leads to two questions: (a) why choose a particular voice construction? (b) why choose a particular word order?

In this paper, I explore the role of information structure in motivating these choices through elicited grammaticality judgements and naturalistic corpus data. I argue that word order is (at least in part) motivated by information structure. In particular, focus-initial order is a strategy that marks both argument focus and predicate focus (Lambrecht 1994). This can be seen through negative contrast data where focus information precedes the particle *teh*, as in (1):

- (1) **Context: ‘Did Andy hit John yesterday?’ No...**
- a. [Paul]<sub>focus</sub>     *teh*     [suk    nemupu’     ieh]<sub>topic</sub>  
Paul                    PT    REL    PFV.AV.hit     3SG.NOM  
‘It was Paul who hit him (John)’
- b. [Paul]<sub>focus</sub>     *teh*     [suk    pinupu’     neh]<sub>topic</sub>  
Paul                    PT    REL    PFV.UV.hit     3SG.GEN  
‘It was Paul that he (Andy) hit’
- c. [nemepag     Paul]<sub>focus</sub>     *teh*=[ieh]<sub>topic</sub>  
AV.PFV.slap    Paul                    PT=3SG  
‘He (Andy) slapped Paul’

The initial AV subject (a), UV subject (b) and VP (c) have a focus reading - ordering the topic before the focus, in contrast, is strange. Consequently, word order reflects information status.

The complication is that non-subject arguments can also receive an argument focus interpretation in-situ, as shown in (2). In this case, the focus is neither initial, nor a subject:

- (2) **Context: ‘Did Andy hit John yesterday?’ No...**
- nemupu’     [Paul]<sub>focus</sub>     *teh*=[ieh]<sub>topic</sub>  
AV.PFV.hit    Paul                    PT=3SG.NOM  
‘He hit Paul’

As a result, there is no one-to-one link between information-structure role, word order and grammatical function, though voice construction (and the word order options it makes available) can be used as a strategy for marking information structure. Consequently, information structure plays a role in syntactic choices in Kelabit, but it is important to view the voice system as interacting but ultimately independent from it.

### References

Lambrecht, Knud. 1994. *Information Structure and Sentence Form: Topic, Focus, and the Mental Representations of Discourse Referents*. Cambridge: Cambridge University Press.

## The Wiru Noun-Modifying Clause Construction

Caroline Hendy & Don Daniels

Linguists have been growing increasingly aware of general noun-modifying clause constructions, or GNMCCs, in recent years. These constructions were first identified in Japanese (Matsumoto 1988; 1997) and later in other Eurasian languages (Comrie 1998; Matsumoto, Comrie & Sells 2017). A GNMCC is a construction in which a subordinate clause modifies a head noun attributively, much like a relative clause. What distinguishes them from relative clauses is the fact that in GNMCCs, the same structure marks a broader range of semantic relationships between the head noun and the subordinate clause, such as fact-S interpretations (*the fact that John arrived*) and *where*-interpretations (*the episode where John died*).

To date there has been no in-depth discussion of a GNMCC in a Papuan language. We present an analysis of noun-modifying clauses in Wiru, an isolate spoken in Southern Highlands Province, Papua New Guinea. The Wiru GNMCC is unique in several respects, but we focus on two: its agreement properties and its potential for occurring without an overt nominal head.

Wiru GNMCCs consist of a finite clause preceding a head noun, as in (1), where the finite clause *Kenbra namolo noko* ‘we came to Canberra earlier’ modifies the head noun *ko* ‘story’.

- (1) [*Kenbra namolo no-k-o*] *ko*  
Canberra first come-PST-1PL story  
‘the story about the first time we came to Canberra’

Under certain circumstances, the subordinate clause may contain a noun that is coreferential with the head noun, and in fact this is obligatory if the GNMCC has a first person referent, as in (2).

- (2) [*No skuul wene meka mu-k-u*] *aroa skuul ke pu-k-u*.  
1SG school thought wear NEG-PRS-1SG woman school LOC go-PRS-1SG  
‘I, who don’t like school, am going to school.’

Notice that in this construction the matrix verb *puku* ‘I am going’ obligatorily takes a 1SG suffix, agreeing with the semantic referent of the GNMCC but not its structural head *aroa* ‘woman’.

The head noun of a GNMCC can also be completely omitted under certain circumstances. GNMCCs with future time reference are marked with the optative paradigm, not the future. Such GNMCCs, if their referent is pragmatically accessible, can be headless, as (3) illustrates.

- (3) [*Anume ko oa-rik-u*]  $\emptyset$  *wene meka-k-u*.  
1SG.AGT story say-OPT-2SG thought wear-PRS-1SG  
‘I like the story that I will be telling.’

Here the referent of the GNMCC is the story, which is referred to by the noun *ko* inside the GNMCC. As such, the head noun can optionally be omitted.

This paper contributes to our understanding of GNMCCs by providing the first extensive analysis of a Papuan GNMCC. It also increases our understanding of semantically based agreement systems and headedness, two topics of broader typological interest.

### References

- Comrie, Bernard. 1998. Attributive clauses in Asian languages: Towards an areal typology. In W. Boeder et al. (eds.), *Sprache in Raum und Zeit*, 2, 51–60. Tübingen: Gunter Narr.
- Matsumoto, Yoshiko. 1988. Semantics and pragmatics of noun-modifying constructions in Japanese. *Proceedings of the Fourteenth Annual Meeting of the Berkeley Linguistics Society*, 166–175.
- Matsumoto, Yoshiko. 1997. *Noun-modifying constructions in Japanese: A frame semantic approach* (Studies in Language Companion Series 35). Amsterdam: John Benjamins.
- Matsumoto, Yoshiko, Bernard Comrie & Peter Sells (eds.). 2017. *Noun-modifying clause constructions in languages of Eurasia*. Amsterdam: John Benjamins.

# It's weird and weird: a particular kind of intensification construction in Vanuatu languages

(Agnès Henri - INALCO/LACITO, Paris, France)

This paper will focus on an intensification construction affecting predicates in a few languages of Vanuatu, more specifically intensification through the means of repetition. Simple repetition is of course a very common (if not universal) way of conveying intensity, but the construction that we'll present here is more original, as it involves the insertion of a morpheme between both instances of the iterated predicate : <Pred X Pred>. It is found in different languages of Vanuatu (in parallel with more "classic" adverbial constructions such as <very Pred>), which shouldn't be surprising to those who know the tendency of these languages towards isomorphy. The five languages we'll present are Mwerlap, Mwotlap, South Efate, Sungwadia and Bislama (the pidgin spoken in Vanuatu). What is of particular interest to us here is that, although the construction appears globally similar in all of these languages, the morphemes being inserted in the center of the construction belong to very different categories. In sentences 1 to 3 here, for example, we find an aspectual marker (Sungwadia *ti*), a backgrounding particle (Mwerlap *lan*), and a relativizer (Bislama *we*), none of which have an obvious relation to the intensification process *per se*.

## SUNGWADIA (North Maewo)

1. Ia= ti= maturu, ka= ti= roŋo mo= wia ti= wia.  
S3Sg Aor sleep Coord Aor feel Rel good Aor good  
"He fell asleep, he felt really good."

## MWERLAP (Merelava)

2. Nu= wea lan nu= wea!  
Impft good Bckgd Impft good  
"Very good!"

## BISLAMA

- 3 Nao kav [.. i stro we stro bakegen  
. ia a .] ng ng  
now kav Pred stron Rel stron again  
a Op g g  
"Now, kava has come back very strongly again"

We'll start by presenting the different inserted morphemes we found in <Pred X Pred> intensive constructions in Vanuatu languages, and by showing that they're not just randomly chosen to fill a syntactic slot, in a construction that may have been borrowed by vernacular languages from Bislama (the vehicular language in the country). The inserted morphemes exert morphosyntactic constraints on the construction (constraints on the type of predicate it concerns, on the elements repeated along with the predicate itself, such as TAM markers, negation marker, etc.), and these constraints are linked to their original grammatical category. The "family resemblance" between the whole structures is, however, too obvious to be the product of chance.

We argue that all of the morphemes chosen to fill the central syntactic slot in these constructions have a common point: each of them is involved in either clause-coordination or subordination.

### Abbreviations:

Aor: aorist marker; Bckgd: backgrounding particle; Coord: coordinator; Impft: imperfective marker; PredOp: predicative operator; Pred: predicate; Rel: Relativizer; S: subject pronoun; Sg: singular

## **A typology of spatial orientation systems in the Malayo-Polynesian languages outside Oceanic**

*Session: Traces of contact in the lexicon*

Gary Holton & Leah Pappas  
*University of Hawai‘i at Mānoa*

This paper presents the results of a survey of spatial orientation systems across the Malayo-Polynesian languages outside the Oceanic branch. Although spatial orientation has been studied extensively in Oceanic languages, relatively less attention has been paid to orientation in the non-Oceanic languages. Drawing on recent surveys (e.g., Gallego 2018), reference grammars, and original field work, we delineate three broad types of spatial orientation systems: cardinal, elevation-based, and water-based.

Elevation-based systems are more commonly found in the non-Austronesian languages of the region but can be found also in some Central Malayo-Polynesian languages. Water-based systems in turn include two types: coastal systems which contrast a seaward-landward axis with an orthogonal axis parallel to the coast; and riverine systems which contrast an upriver-downriver axis with an orthogonal toward vs. away from river axis. In the coastal systems the seaward-landward axis is determined by local geography, but the coastal axis is essentially fixed, as in Oceanic (cf. François 2004). In contrast, in the riverine systems both axes are geographically determined; neither is fixed. In particular, the orientation of the upstream-downstream axis is readily determined by the direction of current flow, obviating the need to appeal to post-hoc social explanation for the orientation of the up-down axis (cf. Holton 2017). Cardinal systems—in which two orthogonal axes are essentially fixed—predominate in the west, reflecting a general tendency towards more cardinal systems as one proceeds east to west through the archipelago.

In a number of languages the coastal and riverine systems coincide, suggesting that such coastal systems may have their origins in originally riverine systems. Moreover, such languages are broadly distributed both geographically (Borneo, Maluku, Philippines, New Guinea) and genetically (Greater North Borneo, Greater Central Philippines, South Sulawesi, South Halmahera-West New Guinea, Trans-New Guinea, West Papuan) across the region, suggesting a wider pattern of riverine directionals which may predate the Austronesian expansion (as previously suggested for Halmahera in Palmer 2002: 149).

### References

- François, Alexandre. 2004. Reconstructing the geocentric system of Proto-Oceanic. *Oceanic Linguistics* 43(1).1-31.
- Gallego, Maria Kristina S. 2018. Directional systems in Philippine languages. *Oceanic Linguistics* 57(1).63-100.
- Holton, Gary. 2017. A unified system of spatial orientation in the Austronesian and non-Austronesian languages of Halmahera. *NUSA* 62.157-89.
- Palmer, Bill. 2002. Absolute spatial reference and the grammaticalisation of perceptually salient phenomena. *Representing Space in Oceania: Culture in language and mind*, ed. by G. Bennardo, 107–57. Canberra: Australian National University.

## The Austronesian-Papuan contact history of eastern Timor: What lexical borrowing can tell us

Juliette Huber (University of Zurich) and Antoinette Schapper (LACITO CNRS, Paris)

Abstract for “Traces of contact in the lexicon” thematic session

Speakers of Austronesian and Papuan languages have lived in close proximity on the island of Timor for at least 3000 years (see Klamer & Ewing 2010 and references therein). In this talk, I use evidence from loanwords to further our understanding of the nature and timing of contact between these two groups, focusing on the eastern tip of Timor.

Three Papuan languages are spoken today in that area: Makasae, Makalero and Fataluku. Together with Oirata on the adjacent Indonesian island of Kisar, they form a well-defined subgroup within the Papuan Timor-Alor-Pantar (TAP) family, i.e. the Eastern Timor (ET) subgroup. Isolated from the other members of the TAP family, these four languages show considerable linguistic and cultural influence from the surrounding Austronesian languages. The two subgroups of Austronesian languages they are in contact with are (i) Kawaiimina languages (Kairui, Waima’a Midiki and Naueti), and (ii) Kisar-Luangic languages (Kisar/Meher, Leti, Luang, possibly also Makuva).

Several interesting observations emerge from a preliminary study of a list of Austronesian etyma found in ET languages: firstly, a large number of Austronesian etyma does not show the expected sound correspondences. Secondly, there is a significant number of Austronesian etyma in ET that do not appear to have a reflex in the modern Austronesian languages of the region. This suggests that ET may have been in contact with one (or more) Austronesian language(s) that is (are) no longer extant today. Thirdly, there are many ‘regional’ etyma, which are widespread in both the Papuan and the Austronesian languages, but are not reconstructed to Austronesian at large. The direction of borrowing is not clear in those cases.

The goals of this talk are to

- Identify layers of borrowings from Austronesian languages either directly into PET or subsequently into its daughter languages
- Trace borrowings back to Austronesian languages, in particular Kawaiimina languages on Timor or Kisar-Luang languages in Southwest Maluku
- Inform our understanding of the historical interactions of Austronesian- and Papuan-speaking groups in the Timor area

### References

- Klamer, Marian & Michael Ewing. 2010. The languages of East Nusantara: An introduction. In: Michael Ewing and Marian Klamer (eds.), *Typological and areal analyses: Contributions from East Nusantara*, 1-25. Canberra: Pacific Linguistics.
- Blust, Robert & Stephen Trussel. 2016. *Austronesian Comparative Dictionary* (web edition). <http://www.trussel2.com/ACD/>.

## How different methods lead to different trees for the Timor-Alor-Pantar languages

Gereon Kaiping and Marian Klamer, Leiden University

Recent work has demonstrated that the Papuan languages of Timor, Alor and Pantar (TAP) comprises two major branches: the Timor branch and the Alor Pantar (AP) branch (Holton et al. 2012; Schapper et al. 2017). However, the internal structure of the latter AP branch has proven to be a challenging issue, leading to different subgroupings suggesting different speaker groups to be early split-offs, see Fig. 1. Early split-offs are often taken to reflect the greatest age, so that the location of such a split may point to an area where the proto-language began to diversify, c.f. Sapir 1916's "centre of gravity principle".

(A) Holton et al. (2012) do not delineate a Pantar subgroup, thus considering all Pantar languages as direct split-offs from proto-AP, and they have both Blagar (spoken in the Straits between Alor and Pantar) as well as the East Alor languages fairly deeply embedded in the tree. (B) Robinson and Holton (2012) do delineate a Pantar subgroup, pose Blagar as an early split-off rather than embedded in the tree, and have the East Alor languages still embedded. (C) In our own suite of Bayesian analyses, the East Alor group robustly surfaces as an early split-off from all other AP languages, which in turn have a Pantar-Straits subgroup which includes Blagar. Like B, our analyses C use Bayesian inference with lexical replacement as the historical signal, so it is striking that B and C imply vastly different locations for the AP 'homeland', see Fig. 2.

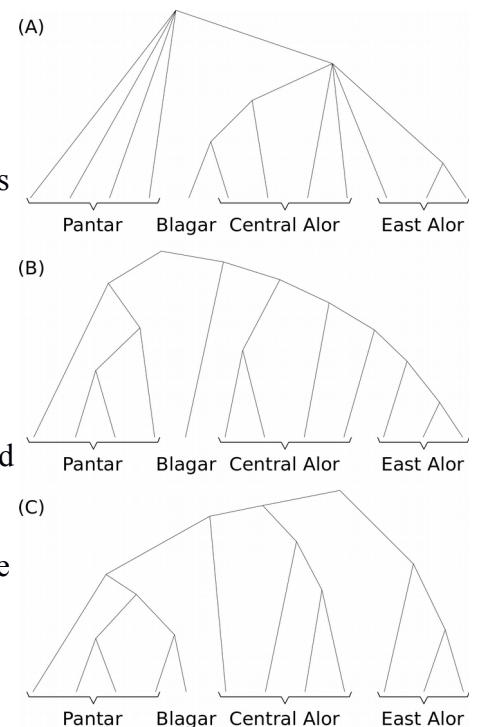


Fig. 1: Alor-Pantar subgroupings in approach A–C, summarising the languages shared by all three analyses.

The most striking difference between A & B vs. C is the level of granularity of the language sample (12 vs. 41 varieties), and the amount of human intuition and expertise involved in the comparison (manual application of the comparative method for A and B vs. automatic inference under systematic variation of parameters for C).

In this talk we compare the three approaches, addressing the question how the variability in proposed early subgroups can be explained by differences in (i) the type of change investigated (sound change vs. lexical change), (ii) the level of granularity of the sample, or (iii) the methodology used. We examine different data subsets of different sizes, intermediate models and new methods from computer-aided language comparison to investigate which of these factors have the greatest effect on the inferred highest-level splits.

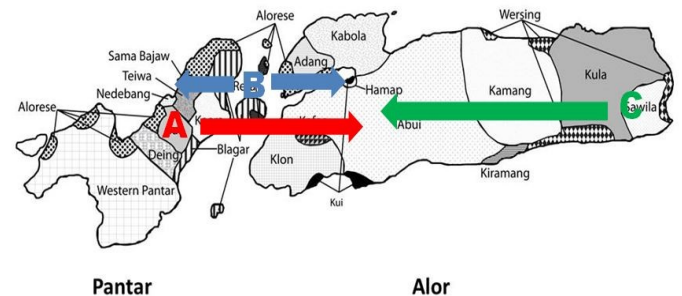


Fig. 2. The languages of Pantar and Alor, together with the hypothetical 'homeland' of proto-AP speakers according to (A)-(C)

We conclude that the genealogies of historical connections inferred for (Papuan) languages depend on both the granularity of data and the methodological choices of the researchers. In particular the weighting of conflicting sound change evidence for classical methods and the choice of rooting methodology in Bayesian inference have determining effects in the resulting subgrouping. This must be taken into account when language family trees are used as step-off point for exploring how linguistic analyses can be combined with evidence of the non-linguistic past.

**References:** Holton, G, M. Klamer, F. Kratochvíl, L. C. Robinson, and A. Schapper. 2012. "The Historical Relations of the Papuan Languages of Alor and Pantar." *Oceanic Linguistics* 51 (1): 86–122.  
 Robinson, L. C., and G. Holton. 2012. "Internal Classification of the Alor-Pantar Language Family Using Computational Methods Applied to the Lexicon." *Language Dynamics and Change* 2 (2): 123–49.  
 Sapir, E. 1916. "Time Perspective in Aboriginal American Culture: A Study in Method." 90.  
 Schapper, A., J. Huber, A. van Engelenhoven. 2017. "The Relatedness of Timor-Kisar and Alor-Pantar Languages: A Preliminary Demonstration." In *The Alor-Pantar Languages: History and Typology (2nd Ed.)*, ed. by M. Klamer, 99–154. Berlin: Language Science Press.

## Introducing *Diri*: Is It an Argument or Something Else?

As discussed in, for instance, Kartono (2013), Schadler (2014), Reuland (2017), Indonesian, like many other languages, employs a number of different strategies to express reflexivity. One strategy involves the use of the complex reflexive *dirinya sendiri*, which must be bound in its local domain (roughly the co-argument domain), another involves the ‘half reflexive’ *dirinya* which may be locally bound or non-locally bound, see also *dirinya* in Malay (Cole 2005) and *awake deen* in Peranakan Javanese (Cole et al. 2008). However, Indonesian has another strategy to express reflexivity based on the element *diri*. Combining a verb with the element *diri* ‘body’/‘self’ results in a reflexive interpretation. Unlike the true reflexive *dirinya sendiri* or the half reflexive *dirinya*, *diri* can only combine with a restricted class of verbs. In this it is similar to a simplex anaphor like Dutch *zich*, or an affix like *-sja* in Russian. *Diri* is restricted to a subset of the class of agent-theme verbs, like *menjaga* ‘to defend’, *melukai* ‘to injure’, *membasuh* ‘to wash’, and *berhias* ‘to primp’ as in (1). By contrast, verbs such as *mencintai* ‘to love’, *membenci* ‘to hate’, *mengagumi* ‘to admire’, *menyukai* ‘to like’ and *melihat* ‘to see’ cannot be combined with *diri*, as illustrated in (2).

- |  |   |
|--|---|
| 1. a. Dia menjaga diri dari serangan itu.<br>3sg <i>meN</i> -defend self from attack that<br>‘He defends himself from the attack.’ | b. Anna berhias diri di depan kaca.<br>Anna <i>ber</i> -primp self in front mirror<br>‘Anna primps (herself) in front of the mirror.’ |
| 2. a. *Anton membenci diri.<br>Anton <i>meN</i> -hate self<br>‘Anton hates himself.’   | b. *Anton mencintai diri.<br>Anton <i>meN</i> -love-i self<br>‘Anton loves himself.’  |

Interestingly, the bare *diri* is not only well-formed with verbs carrying the prefix *meN*- which normally mark transitive verbs as in (1a), but is also possible with verbs carrying the prefix *ber*- as in (1b), although it is traditionally assumed that *ber*- marks intransitive verbs in Indonesian. If so, how can combining *diri* with the verb *berhias* in (1b) be well-formed? What is its role? This use of *diri* in (1b) also raises the question of what precisely its role is in (1a). So, what we can say about *diri*? Is it an anaphor in argument position, or is it something else? Reinhart and Siloni (2005) provide a detailed study of reflexivization. They argue that cross-linguistically, one of the operations involved in reflexivization is a lexical process of bundling and detransitivization, where the agent role and a theme role of a predicate are bundled into a complex [agent-theme] role which is assigned to the remaining argument. In this approach elements like Dutch *zich* or the Russian suffix *-sja* are not arguments, but just check a residual case of the bundling operation. I argue that the role of the bare *diri* in constructions as in (1) is also that of an element that licenses the bundling operation by checking a residual accusative case, and is not a thematic argument. I show this by systematically applying a number of tests. As in expressions like English *John washed* or Dutch *Jan waste zich*: i. Verbs with *diri* do not allow a statue reading (Jackendoff, 1992). ii. Under VP ellipsis only sloppy readings are available. iii. Also object comparison (Dimitriadis and Everaert (2014) is not possible - *John membasuh diri lebih sering daripada George* ‘John washed himself better than George’, does not have the reading that John washed himself better than John washed George. That is, the bare *diri* cannot enter the comparison. This leads to the conclusion that *diri* does not qualify as a real argument. In support of the claim that in cases like (1) we have bundling rather than just detransitivization, I will show that the agent and patient/theme roles are still present by applying adverbs that target both agents and patients/themes (Dimitriadis and Everaert (2014). In (1b) *diri* plays a similar role, namely licensing an operation on argument structure. In this construction *diri* licenses the bundling operation by checking the residual accusative case. Since *diri* is not a real argument, it is well-formed with the intransitive *ber*- in (1b). However, unlike the Dutch SE-anaphor *zich*, *diri* cannot be separated from the verb by other elements in the structure. Time permitting I will present results showing that elements similar to *diri* can also be found in two dialects of Jambi, as well as in Palembangnese and Lampungnese.

**References:** Cole, P, G Hermon. 2005. The typology of Malay Reflexives. *Lingua* 115 627-644. Cole, P, G Hermon, Y Tjung, C Sim and C Kim. 2008. A Binding Theory Exempt Anaphor. In *Reciprocals and Reflexives: Theoretical and Typological Explorations*. Mouton de Gruyter. New York. Dimitriadis, A & Everaert, M. 2014. How many theta roles in a reflexive verb?. *Acta Linguistica Hungarica*, 61(3), 247-269. Jackendoff, R. 1992. Mme. Tussaud meets the binding theory. *Natural Language & Linguistic Theory*, 10 1-31. Kartono, B. 2013. A Puzzle in Binding: Half Reflexives and Locally Bound Pronouns A Comparative Study of Anaphoric Systems in Indonesian, Javanese, Palembangnese, City Jambi and Village Jambi. *MA Thesis*, Utrecht University. Reinhart, T and T Siloni. 2005. Thematic Arity Operations and Parametric Variations. *Linguistic Inquiry* 36, 389-436. Reuland, E. 2017. Why is reflexivity so special? Understanding the world of reflexives. *Studia Linguistica*, 71 (1-2),12-59. Schadler, D. 2014. Reflexivity: Licensing or enforcing. Utrecht: LOT International Dissertation Series.

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# Empirical methods for describing aspect: a case study of perfect in Nafsan

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The definition of perfect aspect as a typologically valid category is often debated, and in description it might be particularly hard to determine whether a given marker is in fact perfect aspect or some other TAM category. In this paper I propose several empirical steps that need to be taken in describing perfect and related temporal and aspectual categories, based on the case study of perfect aspect in Nafsan (South Efate, Vanuatu). I argue that corpus work, storyboards (Burton & Matthewson, 2015) and translation-based questionnaires accompanied by meta-linguistic discussions offer different kinds of evidence that are all necessary for a successful description of a given category.

Firstly, I studied the corpus data (Thieberger, 1995–2018) and the grammar of Nafsan (Thieberger, 2006), where the marker *pe* in Nafsan has been labeled as perfect aspect. I identified functions of *pe* found in the corpus and I hypothesized about which functions would be expected from a typical perfect. My hypotheses about possible categorizations of *pe* were the following TAM categories: change-of-state (CoS), anterior, perfect [with resultative, anterior, experiential, universal functions, incompatible with temporal adverbs in present perfect (cf. Klein, 1994)], or iamitive [with functions of expectedness, CoS, resultative, compatible with temporal adverbs (cf. Olsson, 2013)]. These functions are represented in Table 1, with perfect functions marked in red and iamitive functions in blue.

Table 1: Occurrence of different functions of *pe* in 3 empirical methods

Method	Expected	CoS	Resultative	Anterior	Experiential	Universal	Temp. adverbs
Corpus	?	+	+	+	?	?	+
Storyboards	-	-/+	+	+	+	+	-/+
Questionnaires	-	-/+	+	+	+	+	-/+

In comparison to the corpus data, the storyboards and translation-based questionnaires for the perfect (Dahl, 2000) and the iamitive category (Olsson, 2013) offered a) a positive (“+” in Table 1) or negative evidence (“-”) for functions lacking in the corpus (“?”), and b) they clarified restrictions on certain functions (“-/+”). I will illustrate the latter with the case of temporal adverbs.

The meaning of present perfect is incompatible with temporal adverbs (e.g Klein, 1994). In the corpus, we find co-occurrences of temporal adverbs with *pe*, but the questionnaire and storyboard data revealed that this is possible only when *pe* expresses anteriority, equivalent to the English past perfect. This is illustrated in (1). Since Nafsan is a tenseless language, both present and past perfect meanings are expressed by the same form.

- (1) Context: If your alarm is set for 5 a.m., but by chance you woke up at 4 a.m..

*Kai=pe pilo 4 oklok fulpog.*

1SG.PRF=PRF wake.up 4 o'clock morning

I had woken up at 4 o'clock in the morning.

In my talk, I will discuss the different types of evidence that were provided by corpus data, storyboards and elicitations and highlight how my findings offer new insight into the meaning of perfect aspect.

## References

- Burton, Strang & Lisa Matthewson. 2015. Targeted construction storyboards in semantic fieldwork. In M. Ryan Bochnak & Lisa Matthewson (eds.), *Methodologies in Semantic Fieldwork*, 135–156. New York: Oxford University Press. doi:10.1093/acprof:oso/9780190212339.001.0001.
- Dahl, Östen (ed.). 2000. *Tense and aspect in the languages of Europe*. Berlin: Mouton de Gruyter.
- Klein, Wolfgang. 1994. *Time in language*. London: Routledge.
- Olsson, Bruno. 2013. *Iamitives: Perfects in Southeast Asia and beyond*. Stockholm University. MA thesis.
- Thieberger, Nicholas. 2006. *A grammar of South Efate: An Oceanic language of Vanuatu*. Honolulu: University of Hawai'i Press.
- Thieberger, Nick. 1995–2018. Guide to the Nafsan, South Efate collection. <http://www.nthieberger.net/sefate.html>. Accessed on Mar 14, 2018.

## Resultative functions and serialized roots in Vurës

Daniel Krauß (University of Newcastle), Bill Palmer (University of Newcastle)

A serial verb construction (SVC) is a monoclausal structure in which two or more independent verbs occur without overt coordination and share at least one argument, with no predicate-argument relationship between the verbs (Aikhenvald & Dixon 2006; Foley & Olson 1985; Haspelmath 2016). However, close investigation reveals that in some languages an apparent series of verbs may turn out to not qualify as an SVC (see e.g. Koro (Cleary-Kemp 2015)). Developing Haspelmath's (2016:302-304) criterion of SVCs involving independent verbs, we argue that two principles apply to a true serialized verb: the root must have 1) the same form as when occurring as a sole main verb; and 2) the same semantics as when occurring as a sole main verb. We argue that a root that fails to satisfy either principle is not functioning as a verb. Applying these principles, we test certain apparent SVCs in Vurës (Oceanic, Vanuatu; Malau 2016), demonstrating that many apparent sequence-final verbs in the language turn out to not be constituents in an SVC.

Vurës has true SVCs (2). However, many sequence-final forms express result states and are dedicated resultative forms, because they are formally derived (1a), or, though formally identical to a main verb, contribute to the overall semantics of the sequence a meaning which is not identical to their meaning as a main verb (3). In (1a) reduplication productively derives a resultative which cannot occur as a main verb (1b), and the verb *miat* cannot occur in this position (1a). *Tēqēl* 'go down' and *kal* 'go up' may function as a verb on their own, or in an SVC in which they share the subject of the preceding verb (2). However, in combination with a transitive verb, *tēqēl* and *kal* refer to the resultative path of the main verb (3). In such resultative constructions, the meaning is fundamentally different from when they occur on their own. Traditionally, (1a), (2) and (3) would be analyzed as SVCs. We argue that the arguments in resultative constructions like (1) and (3) are aligned in an absolutive manner whereas arguments in a standard SVC as in (2) are in a nominative alignment. This observation raises the question whether or not the term SVC is an appropriate label for resultative constructions in Vurës. Likewise, *kēl* in (2a) is a verb with its motion meaning, while in (3b) it is an adverb with a distinct meaning not available when in isolation. We demonstrate that directional roots function as adverbs when they follow a non-motion verb or another adverb because they lack their original path semantics.

- (1) a. *No gö* [*vus mi~miat* /\**miat*] *nēk iŋko!*    b. *Nē mē miat* /\**mimiat*.  
1SG IPFV kill ADVZ~be.dead 2SG now            3SG PFV be.dead  
'I will kill you now!'                                'He is dead.'
- (2) a. *O bol ni* [*tiwil tēqēl kēl*].    b. *Dere-n rōrō ni* [*sial kal*] *den o bē*.  
ART ball 3SG roll go.down return            Blood-CNST 3DU 3SG float go.up ABL ART water  
'The ball is rolling back down.'                'Their blood floated up from inside the water.'
- (3) a. *Nē mō=wōt tēqēl o ga*.    b. *Nē me=le kal o plēt*.  
3SG PRF=throw go.down ART rope            3SG PRF=take go.up ART plate  
'He threw the rope down.'                        'She takes up the plate.'

## References

- Aikhenvald, A. Y., & Dixon, R. M. W. (Eds.). (2006). *Serial Verb Constructions: A Cross-linguistic Typology*. Oxford: Oxford University Press.
- Cleary-Kemp, J. (2015). *Serial Verb Constructions Revisited: A Case Study from Koro* (PhD Thesis). University of California, Berkeley.
- Foley, W. A., & Olson, M. (1985). Clausehood and verb serialization. In J. Nichols & A. C. Woodbury (Eds.), *Grammar inside and outside the clause: Some approaches to theory from the field* (pp. 17–60). Cambridge et al.: Cambridge University Press.
- Haspelmath, M. (2016). The Serial Verb Construction: Comparative Concept and Cross-linguistic Generalizations. *Language and Linguistics*, 17(3), 291–319.
- Malau, C. (2016). *A Grammar of Vurës, Vanuatu*. Boston, Berlin: De Gruyter Mouton.

## Recapitulative linkage in Daakie (Ambrym, Vanuatu)

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Recapitulative linkage (RL), also known as tail-head linkage or backgrounding repetition, is a rhetoric device in the discourse organization of oral narratives well-known in Papuan, Australian and Austronesian languages (cf. de Vries, 2005, 2006, Aiton, 2015 for Papuan), but also in South-American languages (cf. Guillaume, 2011). We will discuss RL in the Northern Vanuatu language Daakie (aka Port Vato; Ambrym) based on ongoing field work., with a focus on the prosodic realization and as a rhetoric strategy. RL can involve literal repetition as in (1) or reduced repetition.

- (1) *na-m lehe buluumbuu woró syee, na-m lehe buluumbu woró syee na-m téé-van*  
 1S-RE see hole number three 1S-RE see hole number three 1S-RE look=go  
 |-----S1-----||-----S2-----| |-----S3-----|  
 ‘I saw three holes; I saw three holes, I looked into them’ (Abel3.083-4)

RL is a thematizing strategy: S1 introduces a new event; in S2, this forms the background for the interpretation of S3. Hence, RL is well suited for the report of subsequent events in narratives or procedural texts, the genres it typically occurs in. RL can also be seen as a highlighting device for S3: Repeating information of S1 in S2 is a retarding strategy that may be used to create suspense by putting S3 into stark relief.

Our expectations derived from the information-structural function of S2. (1) S2 picks up the same content as S1. As S2 is anaphoric, we expect that (1a) it typically will be more concise than S1; (1b) the F0 frequency of the main accent in S2 should be lower than the F0 frequency of the main accent in S1; (1c) the overall intensity of S2 should be lower than of S1. (2) The head clause S2 constitutes the background of S3. Therefore (2a) S2 should end in a final rise, in contrast to final fall in S1; (2b) the F0 range of S1 should be greater than that of S2 due to the higher sentence accent and the final fall of S1. These predictions can be derived from the Frequency Code, the Production Code, and the Effort Code (Gussenhoven, 2004).

Looking at 50 instances of RL from 16 texts by 4 speakers, we found that S1 was slightly longer than S2 (1:20s vs. 1:00s). This contradicts de Vries’ expectation that S2 is realized more slowly than S1. It is consonant with our expectation that S2, as an anaphoric clause should be realized in a reduced way. We found that S2 is uttered with greater speed than S1, measured in morae per second. This contradicts the expectation of de Vries, but corresponds our own: If S2 is anaphoric clause, it should be uttered more quickly. We found that the peak of S2 is slightly higher than the peak of S1, contradicting our own prediction. We found that the F0 range of S1 is slightly greater than of S2, following our predictions. We also found a final fall in S1 and a final rise in S2 leading to S3; the final rise of S2 is plausibly the reason why the We also found that S2 has a F0 range of S2 is greater than expected.

We will discuss the results of our findings and relate them to the anaphoric and highlighting function of RL. We will also attempt to determine the rhetorical function of RL as a device used to express narrative sequences and narrative highlighting.

Aiton, G. 2015. Repetition and anaphora as a cohesive device in Eibela discourse. *Language & Linguistics in Melanesia* 33: 35-44. • de Vries, L. 2005. Towards a typology of head-tail linkage in Papuan languages. *Studies in Language* 29: 363-384. • 2006. Areal pragmatics of New Guinea: Thematization, distribution and recapitulative linkage in Papuan narratives. *Journal of Pragmatics* 38: 811-828. • Guillaume, A. 2011. Subordinate clauses, switch reference, and tail-head linkage in Cavineña narratives. In: Van Gijn e.a. (eds), *Subordination in Native South American Languages*. Amsterdam: John Benjamins, 109-139. • Gussenhoven, C. 2004. *The phonology of tone and intonation*. Cambridge: Cambridge University Press.

# BRING and TAKE: Caused accompanied motion events in Austronesian languages

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The verbs BRING and TAKE have been described as expressing “continuous causation of accompanied motion in a deictically-specific direction” (Gropen, Pinker, Hollander, Goldberg, & Wilson, 1989). They differ from other caused motion verbs like CARRY in that they include directionality of motion and in that they are manner-neutral (Levin, 1993, p. 135). In this presentation we investigate the semantic domain of caused accompanied motion (CAM) across a sample of five Austronesian languages, one from Indonesia, two from PNG and two from Vanuatu. We explore the expression of these types of events on the basis of corpus data by investigating the context of use of different verbs and their frequency.

There are shared patterns in the expression of CAM events across the five languages but they also show a high level of diversity in their lexicalisation patterns. The five languages have in common that, in contrast to languages like English or Dutch, CAM events in a direction tend not to be lexicalised by simple verbs. Concepts like BRING and TAKE are invariably morphologically and/or syntactically compositional, with the direction component (or path, Talmy, 1985, 1991) expressed by separate, bound or free morphemes. Also unlike English or Dutch, the basic expression of CAM events in a direction are not always manner-neutral.

In some of the languages of our sample CAM events are expressed by verbs that lexicalise both caused motion and accompaniment (i.e. the agent causes the theme to move and moves itself along the same path). Examples are verbs like CARRY (which also express manner of caused motion), as in (1):

- (1)        *Ka-bahe-i-di*    *ka-lao-ma*  
          1EXCL.SUBJ-**carry**-TR-3PL.OBJ      1EXCL.SUBJ-go-to.SPKR  
          ‘We bring them home’ (Fishing\_01BQ\_0131 – Saliba-Logea)

Other patterns show verbs which lexicalise only one of these two components, caused motion or accompaniment, but not both. Expressions which entail caused motion but do not lexicalise accompaniment include verb like MOVE (tr.). In (2) the semantics of the verbs does not specify whether the agent accompanies the theme in the caused motion event and this is evoked pragmatically.

- (2)        [...]    =*ēm*    *le*        *ma=n*        *qi'i*        *m̄alm̄ala*    *ē*  
              =PRF    **move**    hither=ART    head     girl        DEM3  
              ‘[He paid them for that they went and] brought the head of that girl.’ (ASMS.153 – Vera’a)

Verbs which lexicalise accompaniment but do not entail causation of motion include ACCOMPANY. In these cases the verb semantics does not specify whether the agent causes the theme to move. In (3) this is evoked pragmatically by the fact that the theme is inanimate and unlikely to move by itself.

- (3)        *mangana*    *nog-untud-an=ko*    *songgona*    *itu*  
          child        AV.RLS-**go.with**-APPL1=AND    hat        DIST  
          ‘the child brings (him) the hat’ (pearstory\_1.160 – Totoli)

The semantic domain of caused accompanied motion shows typological patterns in the five languages we investigate which we suggest are typical for the Austronesian language family. These patterns are distinct from those in better-studied European languages in several respects, including that the path component is expressed separately and that certain meaning components are regularly evoked pragmatically rather than being entailed by the lexical semantics of the verb.

## References

- Gropen, J., Pinker, S., Hollander, M., Goldberg, R., & Wilson, R. (1989). The learnability and acquisition of the dative alternation in English. *Language*, 203–257.  
Levin, B. (1993). *English verb classes and alternations: a preliminary investigation*. Chicago: University of Chicago Press.  
Talmy, L. (1985). Lexicalization patterns: Semantic structure in lexical forms. In T. Shopen (Ed.), *Language typology and syntactic description* (Vol. 3: Grammatical categories and the lexicon, pp. 57–149). Cambridge: Cambridge University Press.  
Talmy, L. (1991). Path to Realization: A Typology of Event Conflation. *Annual Meeting of the Berkeley Linguistics Society*, 17(1), 480–519.

**Abbreviations:** AND = andative; APPL = applicative; ART = article; AV = actor voice; DEM = demonstrative; DIST = distal; EXCL = exclusive; OBJ = object; PL = plural; RLS = realis; SG = singular; SPKR = speaker; SUBJ = subject; TR = transitivizer

## Verb classes in Lakurumau (New Ireland): transitivity pairs

Lidia Federica Mazzitelli (University of Cologne)

Lakurumau is a still undescribed Western Oceanic language, spoken by ca. 800 people in New Ireland (Papua New Guinea), and a member of the Lavongai/Nalik language chain (LN), defined in Ross (1988:291). This study is based on data from Volker (1998) and on my own fieldwork data (2016, 2017, 2018) on Lakurumau, Nalik, Kara and Tiang.

My talk addresses the morphophonological processes underlying the formation of “transitivity pairs”, ie. semantically transitive predicates used transitively (with overt object) or intransitively (with no object or with an incorporated object). My data show that Lakurumau verbs can be divided into six classes (Table 1; 1b).

	Class 1. Suppletion	Class 2. Reduplication	Class 3. Morphophonetic alternations	Class 4. -i	Class 5. No change	Class 6. -in/-aai
TR	<i>yaan</i> ‘eat’	<i>bom</i> ‘break’	<i>xabong</i> ‘help’	<i>vaazu</i> ‘plant’	<i>tuk</i> ‘shoot’	<i>tap=in</i> ‘throw’
INTR	<i>vangan</i>	<i>bo=bom</i>	<i>kaabang</i>	<i>vazu=i</i>	<i>tuk</i>	<i>tap=aai</i>

Table 1.

- (1a) *Maandi sik tap=in a maani* vs (1b) *Maandi sik tap=aai maani*  
 1PL.EX get throw=TR ART money vs 1PL.EX get throw=INTR money  
 ‘We donated the money’ vs ‘We donated some money’

Class 1. is restricted to the ‘eat’ couple. Membership in the other classes is determined by phonological as well as by semantic criteria. Verbs ending in a vowel belong always into Class 4., independently from their semantics; verbs belonging to Class 2 and class 5. are all monosyllabic and usually select Patients as their object, while those in Class 6. usually select Themes. No such classes have yet been mentioned for any other of the LN languages, though this might be due to insufficient description.

I will present the main phonological and semantic features of each verb class, with particular attention to the constraints on reduplication, blocked in in Class 5., and on lenition of initial consonants, blocked in Class 2,3 and 5. Fast (1990:24) briefly mentions similar lenition-related alternations in Lavongai, and I could recognize in some verbal pairs in Nalik the same distinctive stress and ablaut patterns as in Lakurumau Class 3 verbs.

The transitivizing suffix *-an* has been recognized as a distinctive feature of LN languages, and quite recently its origin has been traced back to POC applicative *\*-ani* (Ross un.ms.). However, Ross states to have found evidence of *\*ani* only in two LN languages, Kara and Tigak. I will show that other LN languages, namely Nalik, Tiang and Lakurumau also give evidence to the presence of *\*ani*, namely in the form of Nalik *-ing*, Lakurumau *-in (-en)* and Tiang *-an*. Lakurumau forms clearly testify to a southern development of *\*ani > -i(e)n(g)*. The Lakurumau data may thus prove crucial to identify patterns in the whole LN network that have so far gone unnoticed.

### References

- Fast, Lesley. 1990. Tungak grammar essentials. In John R. Roberts (ed.) *Data Papers on Papua New Guinea Languages* 37. Ukarumpa: SIL
- Ross, Malcom (unpublished manuscript). ‘Just how different was Proto Oceanic from Proto Malayo-Polynesian? Did Proto Oceanic have a passive?’
- Ross, Malcom. 1988. *Proto Oceanic and the Austronesian languages of Western Melanesia*. Canberra: Pacific Linguistics C-98.
- Volker, Craig Alan. 1998. *The Nalik language of New Ireland, Papua New Guinea*. New York/Bern/Berlin: Peter Lang.

# A Computational Grammar for Indonesian: Indonesian Resource Grammar (INDRA)

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A computational grammar is a grammar (a set of syntactic and semantic production rules for strings in a formal language) written explicitly enough to be interpreted by a computer. In linguistics, it can be used to ensure the consistency of grammatical analysis, to test linguistic hypotheses, and to develop a detailed model of syntax and semantics of a particular language. In computational linguistics, it can be employed to make applications such as text parsing and generation system, machine translation, and computer-assisted language learning. It is developed in a process called grammar engineering, which is similar to language documentation but focuses on syntax and semantics. It uses computer to check the model for consistency and to test against a broader range of examples and thus it combines linguistic analysis and computational implementation (Bender and Fokkens 2010).

The Indonesian Resource Grammar (INDRA) (Moeljadi et al. 2015) is the first open-source, broadcoverage computational grammar for Indonesian, built within the framework of Head-Driven Phrase Structure Grammar (HPSG) (Pollard and Sag 1994, Sag et al. 2003) and Minimal Recursion Semantics (MRS) (Copestake et al. 2005), using computational tools and resources developed by the DEep Linguistic Processing with HPSG-INitiative (DELPH-IN) research consortium. The linguistic analysis in INDRA is mainly based on reference grammars, especially Sneddon et al. (2010). As a resource grammar, INDRA has been used in building an open-source treebank (a syntactically and semantically annotated corpus), called JATI (Moeljadi 2017). Previous work on Indonesian computational grammar is mainly done in the framework of Lexical-Functional Grammar (LFG) (Kaplan and Bresnan 1982, Dalrymple 2001). A computational grammar called IndoGram (Arka 2012) was developed within the LFG-based Parallel Grammar (ParGram) framework. At the present stage, INDRA can parse and generate constructions such as noun phrases with clitics, numerals, classifiers, and defining relative clause; verb phrases with voice markers; copula constructions; coordination; and subordination. Compared with IndoGram, INDRA has more precision in the semantic analyses for some phenomena and has fifteen times more sentences in the open-source treebank. In addition, it has a linguistic type database which contains useful linguistic information on types or detailed subcategories of parts-of-speech such as nouns (e.g. animate and inanimate nouns, countable and uncountable nouns) and verbs (e.g. intransitive, monotransitive, and ditransitive verbs) together with their linguistic documentation, usage examples and frequencies in the treebank, as well as the syntactic trees and semantic representations. The recent development of INDRA is to include the lexicon and syntactic analysis of informal/colloquial Indonesian from a 13-million lines of chat data.

## References

- Arka, I Wayan. 2012. Developing a Deep Grammar of Indonesian within the ParGram Framework: Theoretical and Implementational Challenges. In 26th Pacific Asia Conference on Language, Information and Computation, pp. 19–38.
- Bender, Emily M. and Antske Sibelle Fokkens. 2010. The LinGO Grammar Matrix: Rapid Grammar Development for Hypothesis Testing. In <http://www.delph-in.net/matrix/hpsg2010/hpsg-tutorial.pdf>.
- Copestake, Ann, Dan Flickinger, Carl Pollard and Ivan A. Sag. 2005. Minimal Recursion Semantics: An Introduction. *Research on Language and Computation* 3(4), pp. 281–332.
- Dalrymple, Mary. 2001. *Lexical-Functional Grammar*. *Syntax and Semantics* 34. Academic Press.
- Kaplan, Ronald and Joan Bresnan. 1982. *Lexical Functional Grammar: A formal system for grammatical representation*. In *The Mental Representation of Grammatical Relations*, pp. 173–281. Cambridge: the MIT Press.
- Moeljadi, David, Francis Bond and Sanghoun Song. 2015. Building an HPSG-based Indonesian Resource Grammar (INDRA). In *Proceedings of the Grammar Engineering Across Frameworks (GEAF) Workshop, 53rd Annual Meeting of the ACL and 7th IJCNLP*, pp. 9–16.
- Moeljadi, David. 2017. Building JATI: A Treebank for Indonesian. In *Proceedings of The 4th Atma Jaya Conference on Corpus Studies (ConCorps 4)*, pp. 1–9. Jakarta.
- Pollard, Carl and Ivan A Sag. 1994. *Head-driven phrase structure grammar*. University of Chicago Press.
- Sag, Ivan A., Thomas Wasow and Emily M. Bender. 2003. *Syntactic Theory: A Formal Introduction*. Stanford: CSLI Publications 2nd edn.
- Sneddon, James Neil, Alexander Adelaar, Dwi Noverini Djenar and Michael C. Ewing. 2010. *Indonesian Reference Grammar*. New South Wales: Allen & Unwin 2nd edn.

## Detecting Papuan loanwords in Alorese: combining quantitative and qualitative methods

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Alorese is the only indigenous Austronesian language spoken on the islands of Alor and Pantar, and on two small islets in the strait, in eastern Indonesia. The other languages spoken on those islands are Papuan languages, which belong to the Alor-Pantar family (henceforth AP), such as Blagar, Teiwa, Kaera and Adang. For about 600 years, Alorese has been in contact with the local Papuan languages. It was and still is learned as a second language by a considerable amount of speakers with a Papuan language as their first language (L1). This long-term contact has profoundly affected the Alorese grammar, resulting in morphological simplification and a few structural borrowings (Klamer, 2011; Moro, 2018). Interestingly, the Alorese lexicon seems to be less affected by contact than the grammar. Klamer (2011:105) estimates that the percentage of AP loanwords in Alorese is 5.2% (14 in a 270-item list), while Robinson (2015:21) only counts 2.2% (4 in a 185-item list). This number is surprisingly small, considering the length and intensity of contact.

In this paper, we investigate this further by extending the Alorese dataset. We asked the following questions: What is the number of AP loanwords in Alorese? Which AP language is the main donor? And, which Alorese variety is more prone to borrowing? To answer these questions, we performed systematic lexical comparisons using word lists of 579 concepts each (e.g., sun, dolphin) from 13 Alorese varieties (data collected by the authors). First, we automatically cognate-coded the Alorese forms together with the entries of LexiRumah (Kaiping & Klamer, 2018) using LexStat (List, 2012). This gave us a set of 167 concepts with similar forms in Alorese and at least one AP language, but no similar forms in other Austronesian languages. We, then, manually checked each of the 167 concepts to assess whether the forms were indeed related, and if so, whether we could discern the direction of borrowing.

Preliminary results confirm that the presence of AP loanwords in all varieties of Alorese is indeed small, about 5%. One example of a newly detected loanword is *kudza* ‘dolphin’: Blagar *kudza* ‘dolphin’ > Alorese *kudza* ‘dolphin’ (also in Teiwa *kuja?*, Kaera *xuja*, Adang *usaha*). The main donor language seems to be Blagar, but only by a small margin, and the Alorese variety with most borrowings appears to be Munaseli, spoken in the north-eastern part of Pantar.

One explanation that has been put forward for the non-borrowing under contact situations is shows that speakers may deliberately avoid lexical borrowings to maintain their ethnic identity (Thomason, 2007). This is usually accompanied by heavy structural borrowing, which we do not observe. In our case, a more likely explanation is that several L1’s interfere with each other. Similarly to creoles with a single lexifier and no L1 transfer (cf. Muysken 2013), the many different L1’s might have prevented heavy lexical borrowing from one specific AP language.

Kaiping, G. A., & Klamer, M. (2018). LexiRumah: An online lexical database of the Lesser Sunda Islands. *PLOS ONE*, 13(10), e0205250.

Klamer, M. 2011. *A short grammar of Alorese (Austronesian)*. Munich, Germany: Lincom Europe.

List, J.-M. (2012). LexStat: Automatic detection of cognates in multilingual wordlists. In *Proceedings of the EACL 2012 Joint Workshop* (pp. 117–125). Stroudsburg, PA, USA: Association for Computational Linguistics.

Moro, F. 2018. The Plural Word hire in Alorese: Contact-Induced Change from Neighboring Alor-Pantar Languages. *Oceanic Linguistics*, 57(1), 177-198.

Muysken, P. (2013). Language contact outcomes as the result of bilingual optimization strategies. *Bilingualism: Language and cognition*, 16(4), 709-730.

Robinson, L. C. (2015). The Alor-Pantar (Papuan) languages and Austronesian contact in East Nusantara. In *Language change in Austronesian languages*, ed. by M. Ross and I Wayan Arka (pp. 19-33). Canberra, Australia: Pacific Linguistics.

Thomason, S. G. (2007). Language contact and deliberate change. *Journal of language contact*, 1(1), 41-62.

## ***Give* constructions in Lamaholot and Alorese: evidence of structural borrowing from Alor-Pantar languages**

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In this paper, we describe and compare *give* constructions in two closely related Austronesian languages of eastern Indonesia, with the aim of detecting structural borrowing. Lamaholot is spoken on east Flores and its offshore islands surrounded by Austronesian languages, while Alorese is spoken on Alor and Pantar surrounded by Papuan languages of the Alor-Pantar (AP) family. About 600 years ago, Alorese people migrated from the Lamaholot speaking area and settled in the Alor archipelago. Since then they have been in contact with speakers of AP languages, such as Adang. Previous studies have shown that this long-term contact has profoundly affected the Alorese grammar, resulting in morphological simplification and the borrowing of the plural word *hire* (Klamer 2011; Moro 2018).

By comparing the Alorese *give* constructions to Lamaholot on the one hand, and to Adang and other AP languages on the other hand, we present evidence of structural borrowing from AP into Alorese. In order to carry out a cross-linguistic comparison, we collected utterances from Lamaholot, Alorese, and Adang using eight video clips showing *give* events. The use of video clips for elicitation enabled us to generate comparable data of semi-spontaneous speech.

The data show that Lamaholot uses monoverbal constructions with a prepositional recipient to express simple *give* events (1), while Alorese mostly uses serial verb constructions (2), as also attested in the AP languages (Klamer & Schapper 2012).

- (1) *bine tu noto bunga la bine tune*  
female one give flower LOC<sup>1</sup> female one  
'A woman gives flowers to a woman.' (Lamaholot)
- (2) *beka kafe jilbab ha sorong bunga neng ina kafe tou ha*  
child girl hijab PROX pass flower give mother girl one PROX  
'The girl with the hijab gives flowers to that woman.' (Alorese)

In Lamaholot, SVC *give* constructions are also attested, however these SVCs appear to be iconic as they only occur when there is the additional subevent of “taking the object” before giving it. In Alorese and in AP languages, SVCs are more grammaticalized and they occur across the board.

Since structural borrowing is typically found in communities characterized by child bilingualism (Ross 2013), our findings suggest that the borrowing of *give* SVCs must have occurred in a relatively small community with children speaking Alorese and one or more AP languages. This scenario is compatible with the early stages of the Alorese history, when the borrowing of the plural word *hire* took place.

Klamer, Marian. 2011. *A short grammar of Alorese (Austronesian)*. Munich, Germany: Lincom Europe.

Klamer, Marian & Antoinette Schapper. 2012. ‘Give’ Constructions in the Papuan Languages of Timor-Alor-Pantar. *Linguistic Discovery* 10(3).

Moro, Francesca. 2018. The Plural Word *hire* in Alorese: Contact-Induced Change from Neighboring Alor-Pantar Languages. *Oceanic Linguistics*, 57(1), 177-198.

Ross, Malcom. 2013. Diagnosing contact processes from their outcomes: The importance of life stages. *Journal of Language Contact*, 6(1), 5-47.

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<sup>1</sup> Abbreviations: LOC= locative, PROX= proximal demonstrative



## **“Just barely contrastive”: Mid-vowel contrasts in Ampenan Sasak** **Leah Pappas**

Phonological studies on the Austronesian language of Sasak tend to agree that Sasak has a six-vowel system /i, u, e, o, ə, a/ (Archangeli et al., n.d.; Chahal, 1998; Jacq, 1998). However, in Ampenan Sasak, a dialect of the Sasak spoken in the provincial capital of Mataram, it is difficult to attribute vowel quality differences of tense mid-vowels [e, o] and lax mid-vowels [ɛ, ɔ] to allophonic variation of underlying phonemes /e, o/. While lax mid-vowels tend to appear in heavy syllables and tense mid-vowels appear in light syllables (see also Archangeli et al., n.d.), there appear to be exceptions (e.g., /bareh/ ‘late,’ /əmbong/ ‘reservoir’) and several minimal pairs among back mid-vowels (e.g. /bərəmbok/ ‘discuss,’ /bərəmbok̄/ ‘breathe;’ /koboʔ/ ‘evening,’ /koboʔ/ ‘play with water’). Further, speakers’ intuitions about these distinctions are unreliable.

In order to understand this relationship, I elicited two wordlists across 13 female speakers of Ampenan Sasak aged 18 to 48. Wordlists were balanced for syllable weight, coda segment, syllable position, and the height of other vowels occurring in the word. The resulting data was subjected to acoustic analysis. Results show that despite the existence of minimal pairs, the quality of the vowel is highly affected by the weight of the syllable. This suggests that mid-vowels in Ampenan Sasak are “just barely contrastive;” they are largely predictable with a few exceptions (Goldsmith 1995: 10).

Exceptions may reveal cultural or historical influence on the language. Further, this work contributes to discussion around the dialectal distinctions of Sasak. Traditionally, researchers working on Sasak have assumed five dialects, distinguished by their terms for “like this” and “like that” (Austin 2012). However, these distinctions have also been challenged due to the variation seen within each dialect (Jacq 1998). This work shows that Ampenan Sasak, a variety of the larger Ngeno-ngene dialect group, differs phonologically from other varieties of Ngeno-ngene.

### **References**

- Austin, P. K. (2013). Too many nasal verbs: dialect variation in the voice system of Sasak. *NUSA: Linguistic studies of languages in and around Indonesia*, 54, 29-46.
- Archangeli, D., Tanashur, P., & Yip, J. (ms.). Illustration of IPA: Sasak, Meno-Mené dialect.
- Chahal, D. (1998). An acoustic phonetic analysis of Sasak vowels. *Working Papers in Sasak. Melbourne: University of Melbourne*, 5–22.
- Goldsmith, J. (1995). Phonological theory. *The Handbook of Phonological Theory*, 1–23.
- Jacq, P. (1998). How many dialects are there. *Working Papers in Sasak*, 1, 67–90.
- Ladd, R. D. (2006). Distinctive phones in surface representation. *Laboratory Phonology*, 8, 3–26.

## On the origins of bilabial trills in the languages of Malekula, Vanuatu

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Malekula Island in Vanuatu is one of the world's "bilabial trill hotspots". Over a dozen languages present evidence of a prenasalised (voiced) bilabial trill [ᵐb], and a smaller number of languages also feature a plain (voiceless) bilabial trill [β]. In some languages one or both of the sounds appear to be phonemic. In this paper, we look at the possible origins of these two sounds based on reconstructions for Proto North Central Vanuatu (PNCV) (Clark 2009) and Proto Oceanic (POc) (e.g. Ross, Pawley & Osmond 2011).

Considering firstly the prenasalised trill, we present evidence from legacy materials and new field data for a number of Malekula languages. We find that most instances of the prenasalised bilabial trill develop from the sequence [mbu], supporting Maddieson's (1989) hypothesis of the emergence of the sound. Examples (1) and (2) are illustrative:

- (1) PNCV *\*bukasi* 'pig' > Ahamb, Avok: /na-ᵐBwas/; Avava: /a-ᵐBUah/ 'bore' (Crowley 2006); Nahavaq: /ni-ᵐB<sup>w</sup>uwes/ (Dimock 2009); Neverver: /ni-ᵐBUas/; Unua: /ᵐBUE/ (Pearce 2015)
- (2) PNCV *\*kabu* 'fire' > Ahamb: /n-xaᵐB/; Avava /a:ᵐB/ (Crowley 2006); Neverver /na-yaᵐB/; Unua: /no-ɣoᵐB/ (Pearce 2015)

The plain bilabial trill is rare in the data. Based on historical and typological data, Olson (2015) recently speculated that the plain trill was an intermediate step in the development of a synchronic labial fricative from POc *\*p*. Our new field data refutes this hypothesis, suggesting instead that the synchronic [β] developed from PNCV *\*vu* (POc *\*p* > PNCV *\*v* [β]) in morpheme-initial position as in (3) and (4):

- (3) PNCV *\*vura-i* 'spit' > Ahamb: /βure/; Avava: /βura/ (Crowley 2006); Avok: /βule/
- (4) PNCV *\*vunu-ti* 'coconut husk fibre' > Ahamb: /βur/ 'coconut flesh'; Neverver: /βut/ 'dry (coconut)'

Alongside these two basic environments where the bilabial trills have developed, there are a few examples of prenasalised trills where one might expect a plain trill, and vice versa. There is also evidence of bilabial trills emerging in a limited number of other environments, possibly as a result of feature spreading and/or language contact.

### References:

- Clark, Ross. 2009. *Leo Tuai: A comparative lexical study of North and Central Vanuatu languages*. Canberra: Pacific Linguistics.
- Crowley, Terry. 2006. *The Avava Language of Central Malakula (Vanuatu)*. Canberra: Pacific Linguistics.
- Dimock, Laura Gail. 2009. *A Grammar of Nahavaq (Malakula, Vanuatu)*. Victoria University of Wellington.
- Maddieson, Ian. 1989. Aerodynamic Constraints on Sound Change: The case of Bilabial Trills. In: *UCLA Working Papers in Phonetics* 72: 91-115.
- Olson, Kenneth S. 2015. The bilabial trills in Port Sandwich (Vanuatu) in 1774. *Diachronica* 32(1):105–114.
- Pearce, Elizabeth. 2015. *A Grammar of Unua*. Berlin: De Gruyter Mouton.

Malcolm Ross, Andrew Pawley and Meredith Osmond (ed.), *The lexicon of Proto Oceanic: the culture and environment of ancestral Oceanic society, Volume 4: Animals*. Canberra: Pacific Linguistics.

### Aspect in Vamale – The example of *balan*

Aspect in Kanak languages is expressed with morphemes which often combine aspectual, modal, and temporal meanings. Overall, Vamale aspect closely resembles its counterparts in its northern sisters Nêlêmwa, Caac, and Bwato. The differences between them, however, may shed some light on the development of aspectual systems in the region. For example, *bwa* ‘IPFV’, is found in various forms across the North, the irrealis or virtual marker (*b*)*o/ro* as well, and Vamale *balan* ‘CONT’ could have a cognate in *bara*, the Nêlêmwa adversative. Others are unique to Vamale. Based on original fieldwork, this talk outlines the aspectual system of Vamale and addresses the „continuative” marker *balan* (< *balan* ‚piece of long object’) in some detail. *Balan* is interesting because while it can be used alone, it is used with many other aspectual markers and illustrates the interplay of aspect and *aktionsart*. The talk will pay special attention to the following:

- Wordhood: Aspectual markers (Bril calls them „morphemes“ (e.g. Bril 2002:195), as does Cauchard (2015:58)) are the only elements that can be inserted between a person marker and a verb but cannot separate an article from the nominal predicate it modifies. This raises the question whether they are best seen as particles, clitics, or affixes. This paper argues for a particle status, on the basis of syntactic arguments.
- Position: Although most markers occur between the person marker and the predicate (nominal or verbal), repetitive *mwa* is a post-predicate particle.
- Combinability: Combinations are possible, in some cases preferred to the lone form, and may be non-compositional. They only occur in the canonical position (i.e. between the person marker and the predicate), which increases the appeal of a syntactic analysis of such elements.

e-    *bwa*    *balan*    *thapoke*    *i*    *vaaya*  
1SG   IPFV   CONT   begin    ART   work  
,I am beginning the work, I have just begun the work‘

e-    *ja*     *balan*    *thapoke*    *i*    *vaaya*  
1SG   ACC    CONT   begin    ART   work  
,I am finally about to begin the work, I have finally begun the work‘

- Function: The meaning of aspectual markers depends on their position and the *aktionsart* of the verb phrase. Whether *bwa* ‚IPFV’ occurs before or after the person marker subtly distinguishes between related meanings (e.g. *bwa cip-e xaleke* “I still don’t see” vs. *cip-e bwa xaleke* “I’m not still seeing”), as does the order of markers in combinations. This flexibility is not common to all markers, however.

#### References:

- Bril, Isabelle. *Le Nêlêmwa (Nouvelle Calédonie). Analyse Syntaxique et Sémantique*. Langues et Cultures Du Pacifique 16. Paris: Peeters, 2002.
- Cauchard, Aurélie. *A Study of Space in Caac, an Oceanic Language Spoken in the North of New Caledonia*. PhD dissertation, University of Manchester, 2014.
- Rivierre, Jean-Claude, and Sabine Ehrhardt. *Le Bwato et les dialectes de la région de Koné (Nouvelle-Calédonie)*. Selaf 435. Paris, Louvain, Dudley: Peeters, 2006.

## A complex verb complex: templatic morphology and affix order in Äiwoo

Giovanni Roversi

**The main topic:** this work explores the morphosyntactic properties of the verb complex in Äiwoo (Oceanic). A case is made for the presence of discontinuous dependencies, i.e. non-adjacent morphemes depending on each other, against the predictions of morphological theory.

**Theoretical background:** a number of current morphological theories assume that words are built “from the inside out”, by adding one morpheme at the time in a layered, hierarchical fashion (Wolf 2013 and references therein). This predicts that in a word with the structure  $[[[[[\sqrt{\alpha}]-\beta]-\gamma]-\delta]-\varepsilon]$  ( $\alpha$  = root),  $\delta$  cannot be sensitive to  $\varepsilon$  (outward sensitivity, or “look ahead”), nor to  $\beta$  (non-adjacent inward sensitivity); dependencies between morphemes are supposed to be strictly local.

**The puzzle:** in Äiwoo, verb forms can be quite complex, with attested examples of up to 10 morphemes. I examine three cases of possible non-local, discontinuous dependencies: the circumstantial voice marker =Cä, the 3AUG person prefix *li-*, and the unit-augmented number marker *-le*. Äiwoo has a symmetrical voice system; the S/A argument is marked by prefixes in actor voice (and intransitives) and by suffixes in undergoer voice. The circumstantial voice marker =Cä can attach to all verb types, and with its addition the A argument ends up being marked by suffixes regardless of the base (Næss 2015). The intransitive verb *mei* ‘sleep’ takes normally a person prefix, as in (1a); in (1b), on the contrary, there is a person suffix. Crucially, this suffix has to be added before =Cä is added. This is an example of an inner morpheme depending on an outer one, i.e. a “look ahead”.

(1) a. ki-**li**-mei=to=wâ

IPFV-3AUG-sleep=CS=DEIC:DIST

“They slept”

b. opo nugono lâ i-mei-**i-le**=to=wä=nâ

house betel.leaf DEIC:DIST PFV-sleep-3AUG-UA=CS=CV=DEIC:DIST

“A shelter of betel leaves they (two) would sleep in”

The position of the 3AUG person prefix *li-* is unexpected as well. All person prefixes occur before the aspect marker, as shown in (2); only *li-* occurs after it, cf. (1a) above. Moreover, the unit-augmented number marker *-le* is always suffixed, and therefore far away from person prefixes.

(2) **me-ku-woli-le**

1AUG-IPFV-go.down-UA

“We (two) went down”

**The analysis:** Simpson & Withgott (1986) propose a distinction between the layered, hierarchical morphological systems described above and templatic morphological systems, which have a flat structure (a linear array of slots), and can violate the non-adjacency constraints. In templatic systems, affix order does not have any independent explanation based on syntax, phonology or semantics, and it must be stipulated linearly (which, however, is theoretically unsatisfying, cf. Stump 2006). I argue that the Äiwoo verb complex shows templatic behaviour in certain areas, and layered behaviour in others (verb root serialization in the stem area, not illustrated here).

**Conclusion:** I analyse the verb complex in Äiwoo and argue that the outer parts of it do not show hierarchic structures, rather templatic ones. The affix order is shown not to be derivable from phonological, semantic or syntactic factors. I hypothesize that Äiwoo may be in a long-time transition between two more stable, less marked systems (symmetric voice of Western Austronesian and transitivity opposition of Oceanic), now passing through the current highly marked and atypical system (Kiparsky’s (2015) metaphor of the “bumpy ride”).

**References:** • Kiparsky, P. 2015. New perspectives in historical linguistics. • Næss, Å. 2015. Voice at the Crossroads: Symmetric Clause Alternations in Äiwoo, Reef Islands, Solomon Islands. *Oceanic Linguistics* 54(1), 270–307. • Simpson, J. & M. Withgott. 1986. Pronominal clitic clusters and templates. • Stump, G. T. 2006. Template Morphology. • Wolf, M. 2013. Candidate chains, unfaithful spell-out, and outwards-looking phonologically conditioned allomorphy. *Morphology*, 23(2), 145–178.

## Semantic variation in a bilingual Abui/Malay community

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*Generalization* is a semantic change in which a word with specific semantics becomes more generic (Traugott and Dasher 2001). In Abui (Timor-Alor-Pantar), generalization is taking place due to contact with the language of wider communication, Alor Malay (Austronesian). There is currently much variation in how speakers use particular verbs, with older speakers (age 40+) using very specific semantics, and younger ones applying generic semantics. In this paper, I argue, as put forth by (Ross 2013), that by studying semantic variation in Abui among four age-groups, we can get a crucial window into incipient semantic change as well as the processes behind it.

In this case study, I investigate among which group of speakers semantic generalization a) is most widespread and b) first emerged. Understanding the distribution of this variation in conjunction with sociolinguistic data allows us to make a more articulated model of how exactly these processes have helped shape an on-going change. What is interesting about the Abui situation is that children are raised mostly in Malay but acquire passive knowledge of Abui. They only become active speakers of Abui after adolescence – an under-described socialization process that is argued to be widespread in Indonesia (e.g. Bowden 2002). This bilingualism setting appears to strongly favour generalization.

Comparing the lexical semantics of the two languages in question, there are a number of Abui verbs in certain semantic domains that do not have direct translation equivalents in Alor Malay. For example, in the domain of ‘visual perception’, Abui uses a narrow system, distinguishing between *wahai* ‘look at’ and *-ien-* ‘see’. Alor Malay uses a wide system, consisting of one generic verb *lihat* ‘visually perceive’. Typically, when speakers of a language with a wide system (such as Malay) learn languages with a narrow system (such as Abui), they have problems learning both verbs because they have not established the language specific mental representations and rely on the conceptualizations of the L1 (Jarvis and Pavlenko 2008). Since many younger speakers are more dominant in Malay, we expect them to generalize one of the verbs at the expense of the other, on the model of Malay.

This is indeed what we find when examining both production and comprehension data. We observe extensive generalization in Group A (9-16 years) and to a lesser extent in Group B (17-25 years). We see a few tokens of generalization in Group C (26-34 years) and none in the control group of Abui L1 speakers (40-75 years). This data suggests that a) generalization is most highly distributed among Group A (9-16 years) and b) the innovations initially emerged in what is now Group C (26-34 years). Factoring in the sociolinguistic data about speakers only becoming active speakers of Abui around adolescence, it is likely that group C probably initiated this innovation in their adolescence, some 20-25 years ago. In line with Ross (2013), both findings point to (pre-)adolescents as being the agents of change.

This study concludes by arguing that a) this language socialization process is having a rapid effect on semantic change, b) throughout Indonesia, a similar language socialization process is widespread, yet heavily under-described, c) detailed variationist sociolinguistic studies offer insights in the field of language change by shedding light on how changes emerge and spread.

Bowden, John. 2002. “The Impact of Malay on Taba a Type of Incipient Language Death or Incipient Death of a Language Type.” In *Language Endangerment and Language Maintenance*, edited by David Bradley and Bradley Maya. London; New York: Routledge Curzon.

Jarvis, Scott, and Aneta Pavlenko. 2008. *Crosslinguistic Influence in Language and Cognition*. New York: Routledge.

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>.

Traugott, Elizabeth Closs, and Richard B. Dasher. 2001. *Regularity in Semantic Change*. Cambridge: Cambridge University Press.

## Iconicity and Repetition in Ende

Iconicity is a topic of growing interest in linguistics. Once dismissed as an exceptional phenomenon, relevant only to a few onomatopoeic items in the lexicon, iconicity is increasingly being recognized as a major structuring property of language (Perniss et al., 2010). This talk focuses on reduplication and other forms of repetition in Ende. Using narrative and spontaneous conversation from Lindsey's (2017) corpus and from my own fieldwork, I demonstrate how repetition serves a diverse range of iconic functions in morphosyntax as well as discourse, and I explore the relationship between repetition and prosodic iconicity.

Ende is an under-described language of the Pahoturi River family, spoken by about 700 people across three villages in Western Province, Papua New Guinea. It is characterized by complex verbal morphology and relatively simple nominal morphology. Whereas previous work on Ende reduplication has focused on its phonology (Lindsey 2017, 2018), I consider its functions and contexts of use. Reduplication is common throughout the grammar and serves distinct iconic functions for different word classes. Although Ende nouns are not obligatorily marked for number, reduplication of nouns may be used to indicate a group or collection of objects. Relatedly, certain adjectives reduplicate when modifying a plural referent. For verbs, reduplication of the root can indicate progressive aspect (Lindsey, 2017). I expand on these uses of reduplication and consider their relation to other, less obviously iconic functions of reduplication in Ende, such as diminutive and adverbial uses.

Iconic repetition in Ende is not limited to morphology. It is a prevalent discourse strategy, and words of many classes may be repeated in their entirety. Particularly common is the use of repeated verbs to indicate activities of long duration. Although this is sometimes limited to a simple doubling of the verb, longer strings are also common, and sequences of up eight repetitions are attested in the corpus of spontaneous speech. Such constructions are typically accompanied by prosody that iconically evokes a sense of prolonged effort as well. For example, speakers often produce these long strings of repeated verbs in a single breath and employ creaky voice. By analyzing the uses of and relationships between reduplication, full-word repetition, and prosody in Ende, I demonstrate how iconicity can be a major organizing factor at multiple levels of linguistic structure, even as it interacts and competes with non-iconic patterns.

### References:

- Lindsey, Kate L. (2017). *Language Corpus of Ende and other Pahoturi River Languages* (LSNG08). Digital collection managed by PARADISEC. [Open Access]. <http://catalog.paradisec.org.au/collections/LSNG08>
- Lindsey, Kate L. (2017, May). *Verbal Reduplication in Ende*. Paper presented at the 3rd annual Northwest Phonetics and Phonology Conference, Vancouver, BC, Canada.
- Lindsey, Kate L. (2018, October). *Phonotactic Reduplication in Ende*. Poster presented at the Annual Meeting on Phonology, San Diego, CA, USA.
- Perniss, P., Thompson, R. L., & Vigliocco, G. (2010). Iconicity as a general property of language: evidence from spoken and signed languages. *Frontiers in psychology, 1*, 227. doi:10.3389/fpsyg.2010.00227

## The multifaceted expression of number on the Idi verb

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Idi (Pahoturi River) is a non-TNG Papuan language spoken in Western Province, Papua New Guinea. This paper will zoom in on one aspect of its rich verbal inflectional system: number. It will show that dual number has no dedicated morpheme but only emerges from combining elements from bipartite subsystems, and that there is an additional four-way contrast between singular, dual, plural and greater plural for a subset of verbs, marked by an unexpected combination of morphemes.

Both nominal and verbal number are expressed by multiple exponents, based on different subsystems. Nominal number (i.e., agreement) is shown on the U(ndergoer)-prefix and A(ctor)-suffix, operating fundamentally according to a bipartite system distinguishing singular (SG) from non-singular (NSG). Many verb roots are argument-numbered (Wood 2007): they show suppletion or other morphological alternations, sensitive to the absolutive argument. Verb roots, and participant/event number suffixes immediately following them, follow a bipartite system distinguishing non-plural (NPL), i.e. 1 or 2, from plural (PL).

Verbal number permeates the lexicon: over 60 verb root pairs or triplets can be distinguished (out of about 470 roots in total). This in itself is a noteworthy feature, as it appears to be rare in the world's languages (Corbett 2000: 257). Verbal and nominal number interact with regard to dual number assignment. This is illustrated with the root pair  $\sqrt{spl}$  'throw, fall (NPL U)' vs.  $\sqrt{spel(i)}$  'throw, fall (PL U)'. When a non-plural root combines with a non-singular A-suffix, the resultant net value is dual. When a plural root is combined with a non-singular A-suffix, further specification needs to be made by a verbal number suffix *-g(e)* 'NPL A acting on PL U' or *-m* 'PL A'. Dual reference to the A argument only follows from a combination of a NPL root with a NSG agreement suffix in (1a), and from a NPL verbal number suffix combined with a NSG agreement suffix in (1b).

- |  |   |
|--|---|
| (1a) $n\dot{a}\backslash spl/ala$<br>TAM\throw.NPL/1NSG.A<br>'We (2) threw one or two things.' | (b) $n\dot{a}\backseli/*(g)-ala$<br>TAM\throw.PL/NPL.A>PL.U-1NSG.A<br>'We (2) threw many things.' |
|--|---|

Intransitive verbs such as  $\sqrt{s}$  'return' show a surprising combination of morphemes to express greater plural. When the (non-argument-numbered) root is combined with a non-singular A-suffix, this yields dual reference (3b). As expected, adding a plural verbal number suffix *-m* has the result of plural A reference (3c). However, in order to get a greater plural, the same plural verbal number suffix is combined with a *singular* A-suffix (1d), in addition to another verbal number suffix *-mla*, found elsewhere adding distributive event number.

- |   |   |
|---|---|
| (3a) $w\backslash s/en$<br>INTR\return/3SG.A<br>'He returned.'              | (b) $w\backsel/eo$<br>INTR\return/3NSG.A<br>'They (2) returned.'                    |
| (c) $w\backsel/m-eo$<br>INTR\return/PL.A-3NSG.A<br>'They (a few) returned.' | (d) $w\backsel/mla-m-en$<br>INTR\return/DISTR-PL.A-3SG.A<br>'They (many) returned.' |

These examples show that, like other languages of the region, Idi exhibits multiplex patterns of distributed exponence (Carroll 2017) and distributed deponency (Evans 2018). A similar phenomenon, where a fourth number value is created by multiple ways of recombining existing morphemes, is attested in neighbouring Nen (Evans 2018), with which Idi is in close and stable contact. Idi and Nen belong to two currently unrelatable families (Evans et al. 2018). This paper thus contributes to a typology of distributed exponence and deponency, and to an investigation of their potential borrowability.

**References:** Carroll, M. 2017. *The Ngkolmpu Language, with special reference to distributed exponence*. PhD Thesis, The Australian National University, Canberra. Corbett, G. G. 2000. *Number*. Cambridge: Cambridge University Press. Evans, N. 2018. Could a language evolve triple articulation – the case of Nen number. CoEDL-ANU Linguistics Seminar, 23/02/2018. Evans, N. et al. 2018. The languages of Southern New Guinea. In: Bill Palmer (Ed.), *The Languages and Linguistics of the New Guinea Area*, pp. 641-774. Berlin: Mouton de Gruyter. Wood, E. J. 2007. *The Semantic Typology of Pluractionality*. PhD Thesis, University of California, Berkeley.



# On the development of an infinitival construction in contact Malay

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Infinitival clauses are unattested in the majority of Malay varieties. Infinitival complementation is a local development in Sri Lankan Malay (SLM), due to contact with varieties of Tamil and Sinhala that share this feature. This fact tells us little about the development of SLM infinitives, however, that differ in a significant way from Tamil, Sinhala, and contact Portuguese varieties in Sri Lanka.

In this paper, based on corpus data collected in a majority Malay-dominant Sri Lankan village, we will see that SLM infinitival markers happen to reflect a developmental trajectory that has been associated with English, not due to any contact with English, but as an available path in the development of a new infinitival construction, by regrammaticalizing closed-class material in an older grammar. I will claim that the key contrast with the way infinitival status is morphologized in the other Sri Lankan languages is the marking of infinitives in SLM with a phonologically-reduced form of the etymologically volitive form *mau*, which has functioned as a type of irrealis marker, rather than as simply a marker of infinitival status. In addition to the functional status of this form, it is significant that it co-occurs with another infinitive marker that has *not* conveyed irrealis meaning, whereas in other Sri Lankan languages, as I will show, infinitival status is singly marked. That SLM infinitive marker is historically an adposition, and strikingly, the only closed-class form in the language borrowed from Javanese: *nang*, which is frequently reduced to *na*.

## SRI LANKAN MALAY

- (1) *Miflal mera nasi me-makan-na si-liyat.*  
Miflal red rice INF-eat-INF PST-try  
'Miflal tried to eat red rice.'

Observing the presence of *nang* as a (now post-verbal) marker on infinitival verbs, we might conclude that the modern SLM construction involves the equivalent of *to*-infinitives seemingly based on adpositional phrases containing a dative verb, as had been assumed about Old English: specifically *to* + dative verb in Old English and dative verb + *nang* in SLM (in which *nang* is also a dative marker of NPs, as *to* also was in Old English). There is no evidence however that these verbs were ever nominalized in SLM. Los (2005) has argued that the apparently dative verb forms we find in Old English belie the fact that their syntactic status was verbal and the constituents containing them clausal. The historically irrealis status of the SLM infinitival prefix parallels the functional status of the subjunctives that the English *to*-infinitive progressively replaced. One of the ways in which the parallel is illustrated follows from the fact that case relationships in SLM, as in Old English, are morphologized (also at odds with other Malay varieties). Verbs marked with *nang* assign morphological accusative case to their patient complements, as do tense-marked finite verbs.

In SLM, the properties that we associate with the historical infinitive marker *to* in English have been creatively shared between a pre-verbal and a post-verbal marker. We have the functional analog of Old English *to*- in the phonologically-reduced irrealis marker *me*- (derived from *mau*, rather than from Malay transitivizing *meN*-), as well as an additional infinitival marker that is homophonous with the allative adposition *nang*. This non-dative *nang*, homophonous with the actual dative marker/postposition, is the functional element with counterparts in the other Sri Lankan languages.

Los, Bettelou. 2005. *The Rise of the To-Infinitive*. Oxford: Oxford University Press.

## ***Don't be fearful, lest it be undesirable: prohibitives and precautions in Papapana***

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Apprehensives convey that a situation is possible but undesirable and best avoided, and they have received little attention in typological literature, despite being widespread cross-linguistically. Lichtenberk (1995) recognises three functions of apprehensives: one involves a precautioning morpheme in an “apprehension-causing” clause encoding the high probability and undesirability of an event. This clause is associated with a “precaution” main clause expressing preventative action. Based on the author’s fieldwork data, this paper analyses the morpheme *te*, used in both precautioning and prohibitive clauses in Papapana, an Oceanic (Austronesian) language of Papua New Guinea. Precautioning morphemes have received even less attention than other apprehensives, and associations with prohibitive morphemes are not widely attested/reported.

In Papapana, the apprehensive mood marker *te* is used in conjunction with the irrealis mood enclitic =*i* in a subordinate “apprehension-causing” clause (1). The preceding juxtaposed main “precaution” clause is usually an imperative, or prohibitive (1). Prohibitives are marked by verbal reduplication, and either the preverbal negative *ae* or preverbal apprehensive *te*: the difference between *ae* and *te* is related to whether the prohibited event has commenced or not.

- (1) O=**te**                      **vae**~**vaene**,      o=**te**                      pu=**i**  
2SG.SBJ=PROH          RD~climb          2SG.SBJ=APPR          fall=IRR  
'Don't climb, lest you fall'

In both functions, *te* marks the event as undesirable: in prohibitives, the addressee is directed to avoid the event, while in precautioning sentences, the addressee is warned of the possible event. Despite the overlapping semantics, such polysemy is infrequently attested/discussed in Austronesian languages: it is found in Hoava where the modal negative *maki* denotes ‘lest, don’t’ (Davis 2003), in Tukang Besi, the conjunction *bara* ‘lest’ means ‘don’t’ in main clauses (Donohue 1999), and in Maori, the monitory particle *kei* can express negative imperatives (Bauer 1993). In their typological survey, Pakendorf&Schalley (2007) find that use of affirmative epistemic and apprehensive forms to express prohibitives is rare and propose the grammaticalisation path: possibility → apprehension → warning → prohibition. This supposedly goes against the assumed unidirectional development of deontic to epistemic modality (Bybee&Pagliuca 1985).

This paper investigates the polysemy of Papapana *te* from cross-linguistic and diachronic perspectives, exploring whether the prohibitive function developed from the apprehensive, or vice-versa. I also consider whether the diachronic source for *te* lies in the positive purpose clause subordinator *tenava* ‘so that’ and whether the polysemy has arisen due to contact with the Papuan language Rotokas, in which *teapi* denotes ‘lest, don’t’ (Robinson 2011). Moreover, this paper considers the extent to which Papapana data supports Pakendorf&Schalley’s (2007) proposed pathway and whether that challenges theoretical assumptions about grammaticalisation pathways.

### **References**

- Bauer, W. (1993). *Maori*. London: Routledge.
- Bybee, J. and W. Pagliuca (1985). Cross-linguistic comparison and the development of grammatical meaning. In J. Fisiak (ed.), *Historical Semantics: Historical Word-Formation*, 59–83. Berlin: Mouton de Gruyter.
- Davis, K. (2003). *A grammar of the Hoava language*. Canberra: Pacific Linguistics.
- Donohue, M. (1999). *A Grammar of Tukang Besi*. Berlin: Mouton de Gruyter.
- Lichtenberk, F. (1995). Apprehensional Epistemics. In J. Bybee and S. Fleischman (eds.) *Modality in Grammar and Discourse*, 293–327. Typological Studies in Language. Amsterdam/Philadelphia: John Benjamins.
- Pakendorf, B. and E. Schalley (2007). From possibility to prohibition: A rare grammaticalization pathway. *Linguistic Typology*, 11: 515-540.
- Robinson, S. (2011). *Split intransitivity in Rotokas, a Papuan language of Bougainville*. Nijmegen: Max Planck Institute for Psycholinguistics.

## Thematic session: Traces of contact in the lexicon.

### **German contributions to the Tok Pisin lexicon**

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Tok Pisin, one of the most widespread languages of Papua New Guinea, combines items from a variety of languages in its lexicon. While the main part of the vocabulary is English-based, various Austronesian languages as well as a number of European languages besides English contributed to it (cf. Ross 1992). Contact with the latter languages usually dates from the colonial period during the 19th and 20th century.

German is among the European languages that were in contact with Tok Pisin during the colonial period. New Guinea was under German colonial rule between 1884 and 1919; during this time, attempts were made to spread German among the population, e.g. in administration, education, work and missionary contexts. Tok Pisin, being in its formative phase (cf. Mühlhäusler et al. 2003), integrated a number of lexical items from German. Estimates are that the number of German words in Tok Pisin amounted to 150 to 200 during and shortly after this period (Romaine 2001).

A much smaller number of German-origin words is still in use today. In an ongoing project, Tok Pisin words that (seem to) have originated in German are compiled in an online dictionary (cf. Engelberg/Stolberg 2017). The data base consists of historical and current word lists, dictionaries, and similar sources of Tok Pisin lexical items. Several of them include information on the etymological origin of a lexeme. A number of words of presumed German origin show a clear relationship to a German item (e.g., *rausim* ‘take out (etc.)’, cf. German *raus* ‘out’ [directional]). In other cases, German influence is likely or possible but German is not the only or primary source of an item (e.g., *ananas* ‘pineapple’, Dutch/German *Ananas*). Finally, there are lexical items for which a German origin has been suggested but probably wrongly so (e.g., *maski* ‘never mind’, often assumed to be based on German *macht nichts* ‘it doesn’t matter’).

In this paper, I focus on items that have received different interpretations regarding their German origin. This includes items with a wrongly assigned German origin as well as those that seem to be of German origin but have gone unnoticed so far. The aim of this paper is (a) to come to a clearer picture regarding these cases, and (b) to contribute to a better understanding of a contact-based part of the Tok Pisin lexicon that has received less attention so far.

#### *References:*

Engelberg, Stefan & Doris Stolberg. 2017. The influence of German on the lexicon of Tok Pisin. *Language and Linguistics in Melanesia*. Language contact in the German colonies: Papua New Guinea and beyond (Special Issue, eds. Péter Maitz & Craig A. Volker). 27-64.

Mühlhäusler, Peter, Thomas E. Dutton & Suzanne Romaine (eds.). 2003. *Tok Pisin Texts. From the Beginning to the Present*. Amsterdam & Philadelphia: Benjamins.

Romaine, Suzanne. 2001. Tok Pisin. In: Garry, Jane & Carl Rubino (eds.), *Facts about the World's Major Languages: An Encyclopedia of the World's Major Languages, Past and present*. New York: The H.W. Wilson Company. Chapter 169. 752-756.

Ross, Malcolm. 1992. The sources of Austronesian lexical items in Tok Pisin. In: Dutton, Thomas E., Malcolm Ross & Darrell T. Tryon (eds.), *The language game: Papers in memory of Donald C.*

*Laycock*. Canberra, Australia: Dept. of Linguistics, Research School of Pacific Studies, Australian National University. 361-384.

## What is in the Alorese lexicon

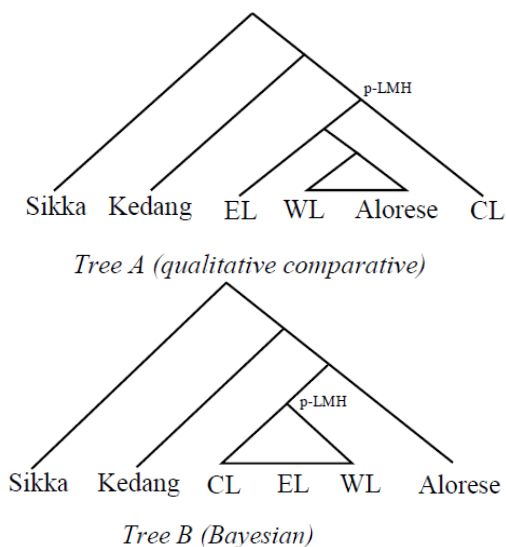
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Phylogenetic subgrouping of Alorese (East Indonesia) by using both qualitative comparative approach and quantitative Bayesian model have been applied to lexical data yet have yielded different trees. This talk aims to explain how this method came to different conclusions and to illustrate the value of

supplementing both approaches with one another. Tree A is based on regular sound changes (Elias 2017) and shared grammatical innovation, e.g. clause-final negation (Fricke 2017), which places Alorese together with Western Lamaholot (WL). Meanwhile, tree B by Kaiping (2018) is based on lexical similarities, placing Alorese as a sister language to proto-Lamaholot (p-LMH). There are three possible reasons that can explain why tree B appeared: dialect levelling in Lamaholot, Alorese retention, and lexical borrowing.



The first reason for Alorese diverged from WL is dialect leveling in Lamaholot. As indicated in the table below, the cognate set *to fall* contains the intervocalic /r/, which in Eastern Lamaholot (EL) regularly corresponds to zero or glottal stop in Alorese and WL. Thus, Alorese *mou* ‘to fall’ has exactly the

form that would be expected for WL. This suggests that Alorese *mou* is inherited from proto-Lamaholot and that WL and Central Lamaholot (CL) have undergone lexical innovation since Alorese split off. In this sense, the divergence is due to dialect levelling where prominent stereotypical features of differences between dialects have been or are almost eliminated. The second reason is that Alorese appears to have retained forms from its far ancestor PMP, such as \*Rumaq while other Lamaholot varieties have undergone lexical innovations (except CL *una*). The third reason is lexical borrowing due to contact between Alorese and the neighboring AN language, Kedang. For instance, the cognate set [buleŋ] ‘to squeeze’ and [obaŋ] ‘to push’ are only found in Kedang and Alorese, but not in Lamaholot. These perceived similarities are interpreted by the Bayesian model as a sign of inheritance. These types of retentions and innovations contribute to the placement of Alorese in tree B.

English	PMP	Sikka	Kedang	Lamaholot			Alorese					
				WL	CL	EL	WPT	WP	NPC	NPH	PS	
‘to fall’	*nabuq	goru	moru?	goka	gokal	moru	mou					
‘house’	*Rumaq	ləpo	weta?	laŋə	una		uma	uma	uma	uma	uma	uma
‘to push’	*qanup	rusik	obaŋ	odo	uduka	udu	tobaŋ	tobaŋ	tobaŋ	tobaŋ	tobaŋ	tobaŋ
‘to squeeze’	*picit	pəra	buleŋ	piʔuk	piʔuka	piu			bule			pule

The fact that tree B can point out lexical changes within Alorese and Lamaholot shows that both qualitative and quantitative approaches are useful but serve different purposes. The qualitative approach appears to be more appropriate for genetic classification (tree A). Nevertheless, the quantitative approach can indicate changes in both the Alorese and the WL lexicons after these two lects became geographically separated. The combination of both approaches, focusing on two different language modules, allows us to infer facts about language history that one approach by itself would not permit.

Elias, Alexander. 2017. Subgrouping the Flores-Lembata languages using historical glottometry. Presentation on the 9th international Austronesian and Papuan languages and linguistics conference (APLL9) 21-23 June 2017, Paris.

Fricke, Hanna. 2017. The rise of clause-final negation in Flores-Lembata, Eastern Indonesia. *Linguistics in the Netherlands* 34 (1). 47–62. doi:10.1075/avt.34.04fri.

Kaiping, Gereon. 2018. Comparing Bayesian and traditional subgrouping of Lamaholot: ancestral state reconstruction in dialog with historical linguistics. Conference presentation presented at the Trees and what to do with them: phylogenetics and other statistical approaches to linguistic diversity, Tübingen.

## Multiple Feature Mutation in Papuanesia: A typological survey

Sören E. Tebay (Universität Leipzig)

**Claim:** Vowel and Consonant Mutations are ubiquitous in the languages of Papuanesia (Lynch 1975, Blust 2004, Foley 2017). Based on a survey of 46 mutation patterns in 31 languages, I argue that these mutations show the same tendencies for lexical category and edge-orientation as concatenative morphology. Significant preferences of consonant mutation for the left edge can be explained by universal phonotactic tendencies.

**Method:** The survey encompassed 46 mutation patterns in 31 languages. Areally, the survey is restricted to languages from Papuanesia, as defined in Hammarström & Donohue (2014). The sample is however not genealogically controlled, since all mutation patterns from accessible grammars were incorporated. Therefore 5 languages are Papuan and 26 Austronesian, more specifically 15 Oceanic and 11 Non-Oceanic Austronesian. A pattern was included if a stem segment in two morphologically related forms differed in more than one segmental feature in a way that could not be explained by regular phonology. Each pattern found in a grammatical description was coded for target (consonant, vowel), edge (left, right, n.a.), lexical category (Noun, Verb, Noun&Verb, other) and the presence of other affixal segmental material (yes, no). For example, Chamorro definite nouns show left edge vowel mutation with segmental material present, cf. (1), (2).

(1) gúma? ‘house’      (2) i-gíma? ‘the house’      (Kaplan 2008:1)

**Results:** As can be seen in table (3) the majority of mutation occur at the left edge. About a third of the patterns involve right edge mutation and only a minority show some other location. Table (4) additionally shows that the majority of mutation patterns involve verbs, approximately a fourth occur on nouns and the rest on either both or neither. There is also a significant interaction ( $p < 0.001$ ) between the target and the edge of mutation, cf. table (5), with only one sole instance of right edge consonant mutation.

Edge	#	%	Lex. Cat.	#	%	Edge\Target	C	V	Σ
(3) Left	27	58.7%	Noun	12	26.1%	(5)	19	9	28
Right	17	37.0%	(4) Verb	30	65.2%		1	17	18
n.a.	2	4.3%	Noun&Verb	3	6.5%		Σ	20	26
			Other	1	2.2%				

**Discussion:** With regard to the edge affected by mutation, the data mirror the absence of an otherwise common strong preference for suffixation in Papuanesia in concatenative morphology (Dryer 2013a). Similarly, the preference for verbal mutation is parallel to a general preference in Papuanesian languages for TAM and agreement marking on verbs (Nichols & Bickel 2013, Dahl & Velupillai 2013, van der Auwera & Ammann 2013) and against case and plural marking on nouns (Dryer 2013b, Haspelmath 2013). The tendency against right edge consonant mutation can be accounted for under the assumption that consonant mutation tends to be local, i.e. mostly affects targets at the very edge of a stem. Since CV syllables are crosslinguistically most common, there are much more potential targets available at the left edge of a word. Consonant final words are considerably rarer.

**Conclusion:** This survey provides evidence for treating mutation analogous to segmental affixation. This could be accomplished in a synchronic perspective on grammar (Bermúdez-Otero 2012). Alternatively, this similarity might be rooted in local regular phonological processes triggered by affixes as the diachronic source of mutation.

**Selected References:** Blust, R. 2004. Austronesian nasal substitution: a survey. *Oceanic Linguistics* 43(1). 73–148. •Donohue, M. & T. Denham. 2008. The language of Lapita: Vanuatu and an early Papuan presence in the Pacific. *Oceanic Linguistics* 47(2). 433–444. •Hammarström, H. & M. Donohue. 2014. Some principles on the use of macro-areas in typological comparison. *Language Dynamics and Change* 4(1). 167–187. •Kaplan, A. 2011. Harmonic improvement without candidate chains in Chamorro. *Linguistic Inquiry* 42(4). 631–650. •Lynch, J. 1975. Oral/nasal alternation and the realis/irrealis distinction in Oceanic languages. *Oceanic Linguistics* 14(2). 87–99.

# A laboratory phonological study of synchronic phrasing phenomena in Drehu

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Drehu, a language from the Southern Melanesian linkage, spoken in New Caledonia, former French Colony is currently being acquired by children simultaneously together with French [1]. This study investigates acoustic cues related to prominence marking and phrasing of prosodic constituents in Drehu. Methods known from Laboratory Phonology were adapted and the realization of boundary marking was empirically examined. Results show evidence for a preference to phonetically mark the right edge of constituents, through modulation of fundamental frequency (F0) and duration, and provide evidence for phrasal prominence marking in Drehu.

First descriptions of Drehu claim there is word initial stress, that is fixed, and shows no weight sensitivity [2, 3]. The language has a 14 vowels system, with a contrastive length distinction, and a syllabic structure that allows for V, CV, VC, CVC, VV, CVV, VVC, CVVC combinations [4]. Current phonetic research on adult speakers shows that the French Accentual Phrase (AP) of the bilinguals is tonally comparable to the AP in Metropolitan French [5]. Further, a phonetic study investigating prominence marking in Drehu reveals that when in informational focus, the right edge of words is consistently marked through modifications of F0 and duration [6] which partially stands in contradiction with the initially reported word initial stress pattern.

Twelve teenage bilingual speakers (6 females) responded to a sociolinguistic questionnaire and were recorded performing a controlled reading task. A total of 26 utterances containing target tokens with 1 to 4 syllables were read aloud at a self-selected normal and fast speech rate (N=624). Sound files were manually transcribed and force aligned in WebMAUS, using a language independent grapheme to phoneme conversion based on SAMPA [7]. Phoneme alignment was manually corrected, and all target tokens were labelled in Praat [8]. A hierarchical data base was constructed using the EMU Speech Database Management System. Acoustic and durational measurements were queried using the emuR package in R [9, 10]. Values were fitted into two different linear mixed effects models in order to investigate effects on F0 and duration. Results show there is final syllable lengthening and an F0 rising movement towards the right edge.

This study makes use of new methods in field data collection and analysis, and emphasizes the importance of implementing laboratory phonological methods in the field. New knowledge on an under-described language like Drehu contributes to the understanding of variation found in the languages of the world and human cognition in general. It also provides evidence for phrasal prominence marking in Drehu which leads to the question if there has been prosodic transfer from French into the indigenous language of Lifou. Future research will examine the realization of contrastive focus in the two languages of the bilinguals to further investigate this hypothesis.

## References

- [1] Vernaudoon, J. (2015). Linguistic Ideologies: Teaching Oceanic Languages in French Polynesia and New Caledonia. *The Contemporary Pacific*, 27(2), 433-462.
- [2] Tryon, D. T. (1968). Drehu grammar.
- [3] Lenormand, M. H. (1954). La phonologie du mot en lifou (îles Loyalty). *Journal de la Société des Océanistes*, 10(10), 91-109.
- [4] Moysse-Faurie, C. (1983). Le drehu, langue de Lifou (Îles Loyauté). Phonologie, morphologie, syntaxe. *Langues et Cultures du Pacifique Ivry*, (3), 1-212.
- [5] Torres, C., Fletcher, J., & Wigglesworth, G. (2018). Acoustic correlates of the French Accentual Phrase in Lifou (New Caledonia). In *Proc. 9th International Conference on Speech Prosody 2018* (pp. 636-640).
- [6] Torres, C., Fletcher, J., & Wigglesworth, G. (2018). Investigating word prominence in Drehu. In *Proc. 17th Speech Science and Technology Conference 2018*.
- [7] Reichel, U. D. (2012). PerMA and Balloon: Tools for string alignment and text processing. In *Proc. Interspeech*.
- [8] Boersma, P., & Weenink, D. (2009). Praat: doing phonetics by computer (Version 5.1. 05)[Computer program]. Retrieved May 1, 2009.
- [9] Winkelmann, R., Harrington, J., & Jänsch, K. (2017). EMU-SDMS: Advanced speech database management and analysis in R. *Computer Speech & Language*, 45, 392-410.
- [10] Team, R. C. (2014). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. 2013.

## Passive *ni* and three other *ni*'s in Bola (Oceanic): synchrony and diachrony

René van den Berg, APLL Leiden 2019

It is a well-known fact in descriptive linguistics that the shortest morphemes in a language can be the most elusive to describe. This presentation deals with the morpheme *ni* in Bola, a poorly documented Western Oceanic language spoken in West New Britain, Papua New Guinea.

*Ni* has at least four functions in Bola: (1) A passive proclitic. (2) A nominalising prefix.

(3) A subordinating conjunction introducing complement clauses. (4) A linking particle introducing a qualitative relative clause. These are illustrated in the following four examples.

(1) *Ni=habi a madaro na kabu iea.*

PASS=give ART peace.offering OBL clan DEM

'A peace offering is given to that clan.'

(2) *A ni-hae na ruma a leho dagi hateka.*

ART NMLZ-build OBL house ART work big very

'Building a house is a very big job.'

(3) *Iau a=marikoi ni leho.*

1S.F 1S=not.like COMP work

'I don't want to work. / I don't feel like working.'

(4) *A bakovi [ni vaka-bebe a balus] i=taki iau a=made tura-na muga.*

ART man QUAL CAUS-fly ART plane 3S=say 1S.F 1S=sit with-3s front

'The pilot (lit. the man flying the plane) told me to sit in front with him.'

The following questions will be addressed in the presentation.

1. Are these actually four distinct functions? In other words, is this a case of a single polysemous morpheme or are we dealing with homophony? Based on structural criteria, I will argue for a synchronic analysis of four homophonous morphemes, with some degree of structural ambiguity in particular cases.

2. What is the history of these morphemes? I will argue that the four forms have two sources. The passive and the nominalising functions reflect Proto-Oceanic *\*-in-/ni-*, an agentless passive which also had a nominalising function (van den Berg and Boerger 2011), ultimately derived from PMP *\*-in-/ni-* (Ross 2002). Both the conjunction and the linking particle are probably extensions of the Proto-Oceanic possessive preposition *\*ni*, used for non-specific possessors (Ross 1998), though the exact mechanism of this extension raises several new questions.

### References

Ross, Malcolm. 1998. Possessive-like attributive constructions in the Oceanic languages of Northwest Melanesia. *Oceanic Linguistics* 37:234-276.

Ross, Malcolm. 2002. The history and transitivity of western Austronesian voice and voice marking. In F. Wouk and Malcolm D. Ross (eds) *The history and typology of Western Austronesian voice systems*, 17-62. Canberra: Pacific Linguistics.

van den Berg, René and Brenda H. Boerger. 2011. A Proto-Oceanic passive? Evidence from Bola and Natügu. *Oceanic Linguistics* 50:226-251.



## The composition of weak necessity modality: The view from Javanese

Jozina Vander Klok (University of Oslo) & Vera Hohaus (University of Manchester)

**Background.** Modality in natural language expresses at least two main dimensions, MODAL FORCE (*possibility* and *necessity*) and MODAL FLAVOUR (such as, *epistemic* based on what the speaker or agent knows or *deontic*, based on a body of rules or regulations) (e.g., Kratzer 1977; Palmer 1986; Portner 2009). A third, relatively understudied dimension is MODAL STRENGTH, which expresses stronger or weaker statements than possibility or necessity (e.g., Horn 1972; Kratzer 1991; von Fintel & Iatridou 2008; Rubinstein 2012). For instance, *ought to* expresses ‘weak necessity’ as compared to the necessity claim with *must* in English, as in (1).

- (1) Employees **must** wash their hands. Non-employees really **ought to**, too.  
(von Fintel & Iatridou 2008:115; based on New Yorker cartoon by Carolita Johnson in 2006)

**Weak necessity in Javanese.** Our work draws mainly on data from an East Javanese dialect spoken in Paciran village (Western Malayo-Polynesian; Indonesia). Based on fieldwork results using a variety of methods including elicitation, storyboards, and recordings of natural conversation, we show that Javanese exhibits a new cross-linguistic pattern: Weak necessity strength is compositionally derived from the necessity modal plus the morpheme *-NE*, as with *mesti-ne* for epistemic modality in (2) and *kudu-ne* with root modality (not shown here). This pattern is both unlike lexically specific markers like *ought to* or *should* in English (e.g. (1)) and unlike with counterfactual morphology as in many Indo-European languages, e.g. *devrait* ‘should’ in French (von Fintel & Iatridou 2008). We show that *-NE* specifically does not express counterfactuality.

(2) Context: *You see there is a light on at Yu Dur’s house, and her sandals are there too. You think that Yu Dur must be at home now. But then you remember that Yu Zum has the same sandals, and she often stays over at Yu Dur’s place. You think...*

Yu Dur mesti-ne nek omah tapi **gak mesti**. (#mesti)  
sister Dur EPIS.NEC-NE at house but NEG EPIS.NEC  
‘Dur should be at home, but it’s not certain.’

Using carefully controlled contexts, we also provide evidence that Javanese *-NE* does not change the modal flavour and does not attach to possibility modals. Vander Klok (2013) shows that Paciran Javanese necessity modals *mesti* ‘EPIS.NEC’ lexically specifies for epistemic modality, while *kudu* ‘ROOT.NEC’ lexically specifies for root modality (including deontic, circumstantial, and teleological (goal-oriented) modality). With *-NE*, *mesti-ne* remains only compatible in epistemic contexts, as in (2), and *kudu-ne* is not accepted.

We further show that the derived weak necessity modals in Javanese conform to Rubinstein’s (*to appear*) definition, where: A modal word  $\alpha$  is a weak necessity modal if (i) to (iii) hold, for any proposition  $p$ .

- (i) The conjunction of  $\alpha(p)$  and  $\alpha(\neg p)$  is a contradiction.
- (ii) There is a necessity modal  $\beta$  such that  $\beta(p)$  entails  $\alpha(p)$ .
- (iii) There is a possibility modal  $\gamma$  such that  $\alpha(p)$  entails  $\gamma(p)$ .

**Analysis.** We propose analysis whereby *-NE* is a scalar modifier that asserts that the proposition is true in a subset of the set of worlds that would make the actual quantification true. In other words, *-NE* almost expresses universal quantification over the favored worlds. Crucially, it is not possible for a proposition to hold true in almost some accessible worlds, as would be the case with a possibility modal and captures the fact that *-NE* does not attach to possibility modals (Vander Klok 2012). This analysis can be likened to the nominal domain, where *Almost all students came* is possible, but *\*Almost some students came* is not. This project is part of a larger on-going enterprise in the field to bring new data from underrepresented languages to better understand the building blocks of modality.

**Selected References.** von Fintel, Kai & Sabine Iatridou (2008). “How to Say Ought in Foreign: The Composition of Weak Necessity Modals.” In: *Time and Modality*. Ed. by Jacqueline Guéron & Jacqueline Lecarme. Berlin: Springer, 115–141. Rubinstein, Aynat (to appear). “Weak Necessity.” In: *Companion to Semantics*. Ed. by Lisa Matthewson, Cécile Meier, Hotze Rullmann & Thomas Ede Zimmermann. Oxford: Wiley-Blackwell.

Eline Visser - Kalamang *opa*: from time adverbial to attention-managing demonstrative

Kalamang, a Papuan language of East Indonesia, has a demonstrative *opa*, which is derived from a time adverbial meaning 'earlier'. Consider example (1), which illustrates the time adverbial *opa* 'earlier', and example (2), which illustrates the demonstrative *opa*. Note the different slot: the time adverbial can be clause-initial, the demonstrative is always adnominal.

- (1) **opa** ka kareng-at kona  
earlier 2SG frog-ACC see  
'Did you see the frog earlier?'
- (2) ma canam **opa** me koluk  
3SG man DEM TOP meet  
'She meets that man (that I've mentioned before).'

The semantics and pragmatics of *opa* are complex. First and foremost, it has an attention-managing function. By using *opa*, the speaker indicates that the addressee should now focus on a referent from the common ground. Although typically used for referents mentioned earlier in the discourse, it can also be used for referents that have not been mentioned. In those cases, the speaker indicates to the addressee that (s)he has engaged with the referent in real life. *Opa* thus shrinks the pool of possible referents to those that are accessible to the speaker. The use of *opa* requires a sophisticated assessment by the speaker of what the addressee knows, and an equally sophisticated assessment by the addressee of what the speaker thinks (s)he knows. This is sometimes quite explicit in Kalamang discourse, for example in (3), where the speaker double-checks with the addressee that they are talking about the same referent.

- (3) inier **opa**, Hadi **opa** to, an mat pouk  
1EX.DU DEM H. DEM right 1SG 3SG.ACC carry  
'The two of us, (me and) Hadi whom you know, right? I carried him.'

Because *opa* is not only used for discourse-internal reference (but also to single out referents from the common ground, as in (3)), an analysis as anaphoric demonstrative does not seem to do it justice. It is also not a topic marker, as it can co-occur with topic marker *me*.

Apart from describing the functions of Kalamang *opa*, this talk shows a possible new grammaticalisation path from time adverbial to demonstrative, which has not been identified in grammaticalisation literature (e.g. Heine & Kuteva 2004). I will also show that more languages in East-Indonesia have a demonstrative with a similar function to *opa*, among which the Alor-languages Teiwa and Kaera (Klamer, 2010; 2014) and the West-Bomberai language Mbaham (Flassy et al. 1983), as well as Indonesian (Sneddon et al. 2010). All Kalamang data is from the author's fieldwork, including a 46000 words annotated corpus.

Flassy, D.A.L. et al. 1983. *Struktur Mbahaam Maaq [the structure of Mbahaam]*. Departmen Pendidikan dan Kebudayaan.

Heine, B. and T. Kuteva. 2004. *World lexicon of grammaticalisation*. Cambridge UP.

Klamer, M. 2010. *A Grammar of Teiwa*. Mouton de Gruyter.

Klamer, M. 2014. Kaera. In Schapper, A. (ed.), *Papuan languages of Timor-Alor-Pantar: Sketch grammars Volume I*, 76-114. Mouton de Gruyter.

Sneddon, J.N. et al. 2010. *Indonesian: A comprehensive grammar*. Routledge.

Caballero et al. (2008) speculate that there are restrictions on which verbs incorporate nouns and which do not. Previous studies have also suggested verb-based restrictions on noun incorporation: according to Baker (1988), transitive and unaccusative intransitive verbs can incorporate; Mithun (1984) suggests that semantically general verbs are more likely to incorporate than semantically specific ones. However, an in-depth cross-linguistic study taking into account verb semantics and frequency of incorporation is lacking. In an exploratory study Olthof & Van Lier (2018) listed all incorporating verbs they found in examples cited in descriptive materials for fifty languages. To contribute to this cross-linguistic comparison (the authors, forthcoming) we will focus in this talk on Kalamang incorporation. We look at the entire Kalamang corpus (46000 words) plus supplementary elicitation data to answer two questions: which verbs can incorporate in Kalamang, and how frequently are they used in incorporation?

Incorporated nouns in Kalamang do not carry accusative case marking and form one phonological word together with the verb. Consider the contrast between (1a) (incorporation) and (1b) (no incorporation).

- |        |                    |    |                              |
|--------|--------------------|----|------------------------------|
| (1) a. | <i>ma muawaruo</i> | b. | <i>ma muawat paruo</i>       |
|        | ma muap-paruo      |    | ma muap-at paruo             |
|        | 3SG food-make      |    | 3SG food-ACC make            |
|        | ‘She is cooking.’  |    | ‘She is making (some) food.’ |

We found 155 incorporations with 53 different verbs. The general verb *na* ‘consume’ (covering ‘eat’ and ‘drink’) is by far the most commonly incorporating verb, followed by *jie* ‘get’, *kajie* ‘pick’ and *paruo* ‘make’. This confirms the suggestion that very general and transitive verbs are good candidates for incorporation. No unaccusative intransitive verbs were found to be incorporating in the corpus. Some semantically specific verbs were found (*bitko* ‘carry on shoulder’, *rur* ‘skewer’), which can be ascribed to cultural saliency.

To understand whether Kalamang speakers use the opportunity to incorporate more frequently with some verbs than with others, for every verb the number of instances of incorporation was compared with the number of instances where incorporation could have taken place (from a structural point of view) but did not. Our analysis shows that the productivity of incorporating verbs is lexically determined.

While the Kalamang data partly confirmed the cross-linguistic tendencies of easily incorporating verbs in Olthof & Van Lier (2018), we also attested language-specific patterns. Some of Kalamang’s most frequently incorporating verbs (‘consume’ and ‘make’) are amongst Olthof & Van Lier’s most frequently incorporating verbs, but they also list several that do not incorporate in the Kalamang corpus at all. On the other hand, frequently incorporating verbs in Kalamang (such as ‘cook’, ‘cut’, ‘get’ and ‘pick’) are not among Olthof & Van Lier’s top ten.

Baker, M.C. 1988. *Incorporation: A theory of grammatical function changing*. CUP.

Caballero, G., et al. 2008. Nonsyntactic ordering effects in noun incorporation. *Linguistic Typology* 12(3). 383–421.

Mithun, M.. 1984. The evolution of noun incorporation. *Language* 60(4). 847–894.  
*Verb-based restrictions on incorporation*. SWL8, Paris.

## Interactions of Modality and Negation in Yami

### Greg Vondiziano - National Taiwan University

Traditionally, two main semantic distinctions are made when discussing modality: epistemic and deontic. The former is understood as the status of the speaker's understanding or knowledge, or their (lack) of commitment to the truth of a proposition. The latter is understood as expressing permission or obligation - concerned primarily with action by both the speaker and the hearer. Modality is a complex, often incoherent system that finds expression via various syntactic, lexical, even phonetic means within a single language (Palmer 2001). Modality is also scalar. A speaker's epistemic or deontic assertion can be weaker or stronger, and this distinction can be specially marked. Weaker assertions are marked by past tense modal verbs in English, for example, or by the subjunctive mood in the Latin languages.

This paper investigates the interaction of modality and negation in Yami, a Malayo-Polynesian language belonging to the Batanic group of Philippine languages and spoken on Orchid Island, Taiwan. Like most languages, Yami has an ad hoc combination of strategies for expressing modality. While not the most structurally complex system, Yami actively employs a realis/irrealis mood distinction, a set of modal verbs, lexical verbs, even word order variation. Of particular interest is how negative marker *ji* functions as a marker of strong modal assertion and interacts with other modal and negative constituents.

To negate the basic declarative, the auxiliary *ji* is inserted immediately to the left of the main verb (1). This form is ambiguous, however, as *ji* is also an affirmative marker of strong modal assertion and can be used by the speaker to assert their belief as to the status of a situation, often contrary to what the interlocutor has just said. Consequently, there are two possible readings of (1): one negative, one affirmative.

Modal auxiliary *apia* 'may' is a structurally high element in the verb phrase, solidly positioned before all other pre-verbal elements and resisting the placement of elements to its left - yet modal *ji* can occupy this position, resulting in strong assertion deontic permission (2). In concert with the negative existential verb *abo*, *ji* can generate strong assertion epistemic judgements (3), amongst others. Furthermore, we have not excluded the possibilities of *ji* combining with other negative elements, like nominal negator *beken*, sentence proposition negator *ta*, or the use of double negatives to express a range of other modalities.

- 1) **ji** N-yan si kaka do vahay namen  
 3SG.NOM **NEG** AF-at NOM o.sibling LOC house 1EPL.GEN  
 "My brother is not home." or "My brother is definitely at home (contrary to what you thought)"
- 2) **ji apia** k-angay mo a  
**MOD may** NML-go 2SG.GEN FP  
 "Of course you may go!"
- 3) **ji abo** k-apia na jimo a m-angay  
**MOD exist.NEG** NML-good 3SG.GEN 2SG.LOC LK AF-go  
 do ilaod ni ina mo a  
 LOC Taiwan GEN mom 2SG.GEN FP  
 "Your mom definitely won't let you go to Taiwan."

PALMER, F.R. 2001. *Mood and Modality*. Cambridge Cambridge University Press.

RAU, D. VICTORIA. 2005. Iconicity and TAM morphology in Yami. *Concentric: Literary and Cultural Studies*. 31(1).65-94.

RAU, D. VICTORIA & MAA-NEU DONG. 2016. *達悟語語法概論*. 新北市: 原住民族委員會.  
Chinese

# *It would not be good...: Canonical apprehensive structures in Vanuatu languages*

Kilu von Prince, Manfred Krifka, Ana Krajinović, Valérie Guérin, Michael Franjeh

APLL 2019, Leiden

Apprehensive markers are quite common in Oceanic languages and have traditionally been described as *timitives* in the region (Lichtenberk, 2016). They are typically to be found in warnings (“Watch out, you TIMITIVE stumble”), or in clauses translated with *lest* (“Take an umbrella, it TIMITIVE rain”).

The semantic category might be even more prevalent in Oceanic than previously realized, including in languages that do not have a single dedicated lexeme to encode it.

In our talk, we will present data from several languages of Vanuatu (Daakaka, Nafsan, North Ambrym and Mavea) showing that some prototypically apprehensive contexts are marked consistently across speakers and languages with a certain canonical structure. In each language, this structure can be paraphrased as *it would not be good that/ if...* The example below is from Daakaka:

- (1) a. Context: Bill’s colleague asks him why he brought an umbrella to work yesterday. Bill replies:  
b. *Tevy-an na to vu ne ka na=n me te os mwe*  
side.of-3SG COMP REAL.NEG good TRANS ASR 1SG=NEG.POT come DISC rain REAL  
*kin.*  
rain  
“Because it wouldn’t have been good if I came and it rained.” (From the storyboard by Vander Klok, 2013)

While we have unelicited corpus data for each language, the stability of this pattern only emerged as a result of storyboard-based elicitations that were run in each language with several speakers per language. In our talk, we would like to ...

- describe the elicitation methods that were crucial in determining the relevant patterns.
- discuss the structural properties of these expressions in each language
- explore the semantic properties of complex timitives expressions as in (1) and contrast them with the single-lexeme timitive *madai* from the Oceanic language Saliba-Logea.

Lichtenberk, Frantisek. 2016. Modality and mood in Oceanic. *Chap. 14, pages 330–361 of: Nuyts, Jan, & van der Auwera, Johan (eds), The Oxford Handbook of Mood and Modality.* Oxford: Oxford University Press.

Vander Klok, Jozina. 2013. Bill vs. the weather. *Totem field storyboards.*

While phonaesthemes themselves are common (Wichmann, Holman & Brown 2010; Elsen 2017), minimal pairs between them are extremely poorly attested, if at all. In Reta, the phonemes /r/ and /l/, besides a regular phonemic contrast, display a phonaesthetic type of contrast in which members of a minimal pair have the same meaning but an augmented, harsher and often negative connotation. In these phonaesthetic minimal pairs, words containing /r/ are either insulting, less nuanced, or emphasise a quality (e.g. *bela* 'not good' vs. *bera* 'bad, terrible', *bugul* 'small hole' vs. *bugur* 'big hole', and *dagili* 'strong' vs. *dagiri* 'very strong'). This presentation deals with (i) to what extent this distinction is productive, and (ii) how it emerged.

Some 50 minimal pairs between /r/ and /l/ have been attested in a lexicon of just under 4000 words, around 50% of which are phonaesthetic. This suggests that the phonaesthetic distinction might be somewhat productive. To test this, a wug test (see Berko 1958) consisting of 9 pairs of pictures was devised, in which the semantic distinctions between actual phonaesthetic minimal pairs was captured. It was carried out with 10 Reta speakers of two different age groups (12-16 and 40 and over), with nonce-words as well as existing words. When nonce-words were used, no speaker responded with a phonaesthetic minimal pair, though when real Reta words were used (and the semantic distinction between the pictures conformed to an actual known phonaesthetic distinction), speakers did respond with a phonaesthetic minimal pair. This suggests that the distinction is real but non-productive.

I argue that the emergence of phonaesthetic minimal pairs is due to a historical loss of /r/ in Reta and subsequent re-borrowing. The presence of /r/ is outweighed by /l/ by a factor of some 3-to-1 in the Reta lexicon, most instances of /r/ being loanwords. Furthermore, all proto-Alor-Pantar (see Holton et al. 2012; Kaiping & Klamer 2017) instances of /r/ contain /l/ in Reta (Willemsen, under review). Moreover, Blagar, Reta's closest neighbour in both geographical and linguistic terms, displays cognates that only differ from their Reta counterpart in displaying /r/ rather than /l/. The prevalence of /r/ in Blagar is often considered unpleasant by Reta speakers, and these cognates were likely borrowed into Reta language as phonaesthetic, 'harsher' variants of already-existing lexemes.

## REFERENCES

- Berko, J. 1958. The Child's Learning of English Morphology. In *WORD* 14(2-3). 150-177.
- Elsen, H. 2017. The Two Meanings of Sound Symbolism. In *Open Linguistics* 3(1). 491-499.
- Holton, G., Klamer, M., Kratochvíl, F., Robinson, L. C. & Schapper, A. 2012. The historical relations of the Papuan languages of Alor and Pantar. In *Oceanic Linguistics* 51(1). 86-122.
- Wichmann, S., Holman, E.W. & Brown, C.H. 2010. Sound Symbolism in Basic Vocabulary. In *Entropy* 12. 844-858.
- Willemsen, J. under review. Reta. In Schapper, A. (ed.) (forthcoming). *Papuan Languages of Timor, Alor and Pantar: Sketch Grammars, Volume 3*. Berlin: Mouton de Gruyter.

## Nasality as a conditioning factor: Splitting diphthongisation in Inland Terengganu Malay

Jiang Wu, Leiden University Centre for Linguistics

Inland Terengganu Malay (henceforth ITM), or Ulu Terengganu, is a Malayic variety spoken in Ulu Terengganu district in Peninsular Malaysia. It has been demonstrated that historical high vowels \*i and \*u in final syllables underwent diphthongisation in ITM (Collins 1983, 1996). In this talk, I show that a number of phonetically distinctive diphthongs are present in ITM, and their distribution is not only conditioned by coda consonants, but also by the nasality of preceding consonants. While nasals often affect the *preceding* vowels by nasalising them (Greenberg 1966), data from ITM show that nasals can also affect the height of *following* diphthongs by centralising them.

Data in this study were collected in a four-week field trip to Ulu Terengganu from September to October 2018, primarily in Kampung Dusun. Table 1 below presents the development of final-syllable high vowels from Proto Malayic (PM) to ITM (Dusun). Standard Malay data are included as comparables since PM data are incomplete. As the table illustrates, PM final-syllable \*i and \*u are diphthongised in open syllables and closed syllables with coda \*h, \*k and \*ŋ in ITM. The direction of diphthongisation is different in open vs. closed syllables, but in each of these environments, the nasality of preceding consonants also affects the result of diphthongisation.

Context		Proto Malayic (Adelaar 1992)	Standard Malay	ITM (Dusun)	English
Open syllables	Following non-nasals	*hati	hati	atʒi	liver
		*batu	batu	bateʊ	stone
	Following nasals	*bini	bini	binɛŋ	wife
			təmu	təmɔŋ	to meet
Closed syllables with coda *h, *k and *ŋ	Following non-nasals	*putih	putih	putæh	white
		*cucuk	cucuk	cucɔʔ	to skewer
		*buruŋ	buyuŋ	buyɔŋ	bird
	Following nasals	*bənih	bənih	bənɛh	seed
		*gəmək	gəmuʔ	gəmɔʔ	fat
			təŋʔ	tiŋɔʔ	to see

Table 1. Development of final-syllable \*i and \*u from Proto Malayic to ITM (Dusun)

In open syllables, \*i and \*u are diphthongised to [ɜi] and [eʊ] when following non-nasals, and to lowered [ɛɛ] and [ɔɔ] when following nasals, with excrescence of coda velar nasals. A clearer contrast is seen in closed syllables with coda \*h, \*k and \*ŋ: \*i and \*u are diphthongised to [æɛ] and [ɔɔ] when following non-nasals, as in PM \*putih > ITM putæh ‘white’, PM \*cucuk > ITM cucɔʔ ‘to skewer’, but to [ɛɛ] and [ɔɔ] again when following nasals, as in PM \*bənih > ITM bənɛh ‘seed’, PM \*gəmək > ITM gəmɔʔ ‘fat’. In other words, preceding nasal consonants yield higher diphthongs in this environment. All in all, the data suggest that the nasality of preceding consonants tends to centralise all following diphthongs, and the result of diphthongisation in the respective coda environment is split.

This study offers new empirical data and insights in the research of historical phonology of Malayic varieties. It also contributes to the general typology of phonological changes by demonstrating a phonological pattern that has been rarely reported.

### Reference:

- Adelaar, K. Alexander. 1992. *Proto Malayic: The reconstruction of its phonology and parts of its lexicon and morphology*. Canberra: Department of Linguistics, The Australian National University.
- Collins, James T. 1983. *Dialek Ulu Terengganu*. Kuala Lumpur: Penerbit Universiti Kebangsaan Malaysia.
- Collins, James T. 1996. Diftong dan diftongisasi Dialek Ulu Terengganu. *Khazanah Dialek Melayu*. Bangi: Penerbit Universiti Kebangsaan Malaysia.
- Greenberg, Joseph H. 1966. Synchronic and diachronic universals in phonology. *Language* 42(2). 508–517.



# First data of Moyu, a lowland Ok language of New Guinea

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Moyu is an underdocumented lowland Ok language (Trans New Guinea) spoken by perhaps 22.000 people in the Boven Digoel Regency of Papua, Indonesia. Its dialectal subdivision is somewhat unclear yet. While available resources based on wordlists (see Voorhoeve 1975, Healey 1964) suggest two different varieties, North Muyu and South Muyu, speakers are aware of a continuum of 9 mutually intelligible dialects including two that have been previously considered separate languages (Yonggom, Ninggerum).

During a first field trip in July-August 2018, I was able to make audio recordings of texts from the genres of personal biography and myths. From these texts 36 minutes were fully transcribed, translated and annotated with the help of a field assistant. Additionally, I have access to a yet unfinished dictionary Moyu-Indonesian of approximately 2.500 entries which is compiled by a very devoted member of the language community. In this talk, I will present first data on Moyu collected in the field as a part of my PhD project.

In several respects, Moyu exhibits typical features of TNG languages: SOV as unmarked word order, clear distinction between nouns and verbs, little or no morphology on the noun, complex verb morphology. Unlike other well studied Ok languages like Mian (Fedden 2011) and Telefol (Healey 1964), no evidence for the existence of tone has been found yet. Grammatical gender is attested via subject agreement with at least masculine and feminine while additional genders are likely to be found. Concord on determiners or adjectives is missing.

Moyu is a head-marking language. Grammatical relations are exclusively marked with affixes on the verb. The verb agrees with the subject at least in number, person, and in 3P also gender (e.g. *ne ena go ta-un* 'my mother died', *ne emba go ta-en* 'my father died'). There is evidence for object agreement via prefixes at least in number and gender for the 3P (e.g. *an-bani* 'to hit him' / *wen-bani* 'to hit her' / *yen-bani* 'to hit them'). First observations point to a well differentiated tense-aspect system for which further evidence has to be gathered.

Pronouns do not switch forms between subject, object or possessive uses (sg. *ne*, *kep*, *ye*(M)/*yu*(F); pl. *nup*, *kip*, *yi*). These forms are clear reflections of pTNG pronouns as reconstructed by Ross (2005).

NP word order is (*possessive*)-*head noun*-(*adjective*)-(determiner). Furthermore, Moyu makes exclusive use of postpositions although there seems to be some code mixing with Indonesian prepositions.

## Literature

- Fedden, Sebastian. 2011. *A Grammar of Mian*. Vol. 55. Walter de Gruyter.
- Healey, Alan. 1964. *The Ok Language Family in New Guinea*. ANU Diss.
- Ross, Malcolm. 2005. *Pronouns as a preliminary diagnostic for grouping Papuan languages*. In: Pawley et al. (eds.), *Papuan Pasts: Cultural, Linguistic and Biological Histories of Papuan-speaking Peoples*. Canberra: Pacific Linguistics, 15-65.
- Voorhoeve, Clemens Lambertus. 1975. *Languages of Irian Jaya: checklist. Preliminary classification, language maps, wordlists*. Canberra: Pacific Linguistics.