Preface

Welcome to AFLA 2018! This event includes four keynote speeches, 20 plenary talks, and 8 posters. The presenters come from more than 10 countries and cover a wide range of topics. I thank all of the presenters and session chairs for their academic contributions. I thank ILAS for its generous financial and administrative support and the LST for its professional assistance. In particular, I thank the conference assistant Tiffany Jia-wen Liu for her efficient efforts of various kinds. I am also grateful to the organizing committee, which consists of the following Austronesianists (alphabetically ordered):

Henry Y. Chang (Academia Sinica, chair)
Hui-chuan J. Huang (Academia Sinica)
Li-May Sung (National Taiwan University)
Chih-Chen Jane Tang (Academia Sinica)
Wei-tien Dylan Tsai (National Tsing Hua University)
Ting-chi Wei (National Kaohsiung Normal University)
Hsiao-hung Iris Wu (National Taiwan Normal University)

I am equally thankful to the reviewers of the submitted abstracts, as listed below:

<table>
<thead>
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<th>Edith Aldridge</th>
<th>Anders Holmberg</th>
<th>Matt Pearson</th>
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<tr>
<td>I Wayan Arka</td>
<td>Arthur Holmer</td>
<td>Eric Potsdam</td>
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<td>Daniel Kaufman</td>
<td>Li-May Sung</td>
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<td>Henry Y. Chang</td>
<td>Paul Kroeger</td>
<td>Lisa Travis</td>
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<td>Cheng-Fu Chen</td>
<td>Jonathan Kuo</td>
<td>Wei-Tien Dylan Tsai</td>
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<td>Sandra Chung</td>
<td>Julie Legate</td>
<td>Arka Wayan</td>
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<td>Theodore Levin</td>
<td>Tingchi Wei</td>
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<td>Laura Downing</td>
<td>Hsiu-chuan Liao</td>
<td>Hsiao-Hung Iris Wu</td>
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<td>Michael Yoshitaka</td>
<td>Diane Massam</td>
<td>Hedde Zeijlstra</td>
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<td>Erlewine</td>
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<td>Carlos Gussenhoven</td>
<td>Toshiyuki Ogihara</td>
<td>Elizabeth Zeitoun</td>
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<td>Gabriella Hermon</td>
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<td>Vera Hohaus</td>
<td>Ileana Paul</td>
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Let’s enjoy the feast made possible by the above-mentioned collective endeavor!

Henry Y. Chang
13 April 2018
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Conference Guidelines

1. 每篇論文發表時間為 30 分鐘（包含 20 分鐘演講及 10 分鐘討論時間），請您務必配合，於限定時間內結束。特邀演講時間為60分鐘（包含50分鐘演講及10分鐘討論時間）

Each paper is allotted 30 minutes for presentation and discussion (divided into 20 minutes for paper presentation and 10 minutes for discussion). Invited talk is 60 minutes (Suggestion: 50 minutes oral presentation and 10 minutes discussion).

2. 會場工作人員將於發表時間結束前五分、兩分鐘與時間到時，舉牌提示講者，請各位講者務必配合，謝謝。

Speakers will be shown reminder signs three times, as follows:
A 5 minutes left sign
A 2 minutes left sign
A Time’s up sign

3. 會議室內除飲用水外，禁止攜帶其他飲料或食物。

No food or drinks (except water) should be brought in the conference room.

4. 會議進行時請記得將手機關機或靜音。

Cellphones should be switched off or put in silent mode in the conference room.

5. 會議提供 3 天的會議便當，會議期間請所有與會者務必攜帶名牌，以便工作人員辨識，謝謝。

Lunch is provided to registered participants, please be sure to wear your nametag during the conference.
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<td>09:00-09:30</td>
<td>Registration</td>
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<tr>
<td>09:30-09:40</td>
<td>Opening ceremony (ILAS Director Jo-wang Lin)</td>
</tr>
<tr>
<td>09:40-10:40</td>
<td><strong>Invited Speech</strong></td>
</tr>
<tr>
<td></td>
<td>Sandra Chung (UC, Santa Cruz) &amp; Matthew Wagers (UC, Santa Cruz)</td>
</tr>
<tr>
<td></td>
<td><em>Resumptive Pronouns Inside and Outside Grammar: Evidence From Chamorro and Palauan</em></td>
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<tr>
<td></td>
<td>Chair: Wei-tien Dylan Tsai (National Tsing Hua University)</td>
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<tr>
<td>10:40-11:00</td>
<td>Coffee Break</td>
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</tbody>
</table>

Session 1

Chair: Ting-chi Wei (National Kaohsiung Normal University)

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>11:00-11:30</td>
<td>Jed Sam Pizarro-Guevara &amp; Matthew Wagers (University of California, Santa Cruz)</td>
</tr>
<tr>
<td></td>
<td>Agent extraction under patient voice in Tagalog is acceptable: Evidence from acceptability ratings in various A-bar dependencies</td>
</tr>
<tr>
<td>11:30-12:00</td>
<td>Cheryl Lim &amp; Michael Yoshitaka Erlewine (National University of Singapore)</td>
</tr>
<tr>
<td></td>
<td>Agent extraction and topicalization in Bikol</td>
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<tr>
<td>12:00-13:30</td>
<td>Lunch</td>
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Session 2

Chair: Li-may Sung (National Taiwan University)

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>13:30-14:00</td>
<td>Rowena Garcia (IDEALAB, University of Potsdam), Jens Roesor (Nottingham Trent University) &amp; Barbara Höhle (University of Potsdam)</td>
</tr>
<tr>
<td></td>
<td>Children’s production and comprehension of Tagalog transitive sentences</td>
</tr>
<tr>
<td>14:00-14:30</td>
<td>Ivan Paul Bondoc (University of Hawaii at Manoa), Kamil Deen (University of Hawaii at Manoa) &amp; Elsie Marie Or (University of the Philippines Diliman)</td>
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<tr>
<td></td>
<td>Reflexives in Adult and Child Tagalog</td>
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<tr>
<td>14:30-15:00</td>
<td>Michaela Socolof &amp; Junko Shimoyama (McGill University)</td>
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<tr>
<td></td>
<td>The Distribution of the Māori Genitive Relative Construction</td>
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<tr>
<td>15:00-15:20</td>
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Session 3

Chair: Jonathan Kuo (National Taipei University of Technology)

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<th>Time</th>
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<tbody>
<tr>
<td>15:20-15:50</td>
<td>Victoria Chen (Victoria University of Wellington) &amp; Robert Blust (University of Hawaii at Manoa)</td>
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<td></td>
<td>Austronesian “nominalizer-voice affix homophony”: Another look</td>
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<table>
<thead>
<tr>
<th>Time</th>
<th>Session 4</th>
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<tbody>
<tr>
<td>15:50-16:20</td>
<td>Tingchun Chen (Massachusetts Institute of Technology)</td>
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<tr>
<td></td>
<td><em>Multiple case assignment and case-stacking in Amis</em></td>
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<tr>
<td>16:20-16:50</td>
<td>Sihwei Chen (The University of British Columbia) &amp; Haowen Jiang (Peking University)</td>
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<td>Ways of talking about the past: The semantics of -in- and =in in Bunun</td>
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<tr>
<td>16:50-17:20</td>
<td>Ting-Chi Wei &amp; Ken Chen (National Kaohsiung Normal University)</td>
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<td><em>How to answer a yes-no question in Mulivelivek Pinuyumayan</em></td>
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<td>17:20-17:40</td>
<td>Photo Taking</td>
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### Day 2

**May 11, 2018 (Friday)**

**Time** | **Invited Speech** | **Speaker** | **Location** |
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<tr>
<td>09:00-10:00</td>
<td></td>
<td>Eric Potsdam (University of Florida)</td>
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<td><em>Island (In)sensitivity in Malagasy Ellipsis</em></td>
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<td>Chair: One-soon Her (National Cheng-chi University)</td>
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**Session 5**

Chair: Yi-Ting Chen (Wenzao Ursuline College of Languages)

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<tbody>
<tr>
<td>10:00-10:30</td>
<td>Mike Berger (University of Leipzig)</td>
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<td><em>Indonesian Crossed Control: Expanding the typology of Restructuring</em></td>
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<tr>
<td>10:30-11:00</td>
<td>Jake Vincent (University of California, Santa Cruz)</td>
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<td><em>Sentential negation and negative concord licensing in Chamorro</em></td>
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<tr>
<td>11:00-11:20</td>
<td>Coffee Break</td>
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</table>

**Session 6**

Chair: Paul J.-K Li (Academia Sinica)

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<tr>
<th>Time</th>
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<th>Location</th>
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<tbody>
<tr>
<td>11:20-11:50</td>
<td>Alexander Smith (University of Hawaii at Manoa)</td>
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<td></td>
<td><em>Proto-Austronesian schwa: phonotactic restrictions and weight phenomena throughout Austronesian</em></td>
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<tr>
<td>11:50-12:20</td>
<td>Andrew Pick (University of Hawaii at Manoa)</td>
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<tr>
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<td>*Proto-Batanic <em>L: a clue to the linguistic prehistory of the Philippines</em></td>
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<tr>
<td>12:20-13:20</td>
<td>Lunch Break</td>
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<tr>
<td>13:20-14:20</td>
<td>Poster Presentation (4F Poster Hall)</td>
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<tr>
<td>14:20-15:20</td>
<td>Invited Speech</td>
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<td>Kie Zuraw (University of California, Los Angeles)</td>
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<td><em>Frequency and Predictability: How and Why do They Influence Phonological Rules</em></td>
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<td>Chair: Hui-chuan J. Huang (Academia Sinica)</td>
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**Session 7**

Chair: Amy P.-J Lee (National Dong-Hwa University)

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<tr>
<th>Time</th>
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<th>Location</th>
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<tbody>
<tr>
<td>15:20-15:50</td>
<td>Hsin-Yi Chen, Yueh-Chin Chang &amp; Feng-Fan Hsieh (National Tsing Hua University)</td>
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<td></td>
<td><em>Emphatically lengthened segments in Siwkolan Amis: An information-based approach</em></td>
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### The 25th Meeting of the Austronesian Formal Linguistics Association (AFLA25)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 8</th>
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<tbody>
<tr>
<td>15:50-16:20</td>
<td>Meng Yang &amp; Deborah Jia Ming Wong (University of California, Los Angeles)</td>
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<tr>
<td></td>
<td>Malay verbal reduplication with the məŋ- prefix</td>
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<tr>
<td>16:20-16:40</td>
<td>Coffee Break</td>
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#### Session 8

**Chair: Chiu-yu Tseng** (Academia Sinica)

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>16:40-17:10</td>
<td>Kristine Yu (University of Massachusetts Amherst)</td>
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<tr>
<td></td>
<td>Distinct kinds of tones in Samoan from spell-out and prosodic phrasing</td>
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<tr>
<td>17:10-17:40</td>
<td>Yi-Yang Cheng (University of California, Santa Barbara)</td>
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<td>More on Kanakanava Word-level Prosody: Cyclic and Postcyclic Processes</td>
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<tr>
<td>17:40-17:50</td>
<td>Break</td>
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<tr>
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<tr>
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<td>Banquet (4F)</td>
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<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>09:00-10:00</td>
<td>Invited Speech</td>
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<tr>
<td></td>
<td>Maria Polinsky (University of Maryland)</td>
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<td>On the Right Edge: Deriving the VOS Order in Tongan</td>
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<td>Chair: Wei-wen Roger Liao (Academia Sinica)</td>
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</tbody>
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#### Session 9

**Chair: Elizabeth Zeitoun** (Academia Sinica)

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>10:00-10:30</td>
<td>Michael Barrie &amp; Gyumin Kim (Sogang University)</td>
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<td></td>
<td>Pseudo Noun Incorporation in Tagalog: Prosody and Structure</td>
</tr>
<tr>
<td>10:30-11:00</td>
<td>Carol-Rose Little &amp; Ekarina Winarto (Cornell University)</td>
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<td>Kinds, classifiers and definiteness in Indonesian: Two grammars in one</td>
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<tr>
<td>11:00-11:30</td>
<td>Carly J. Sommerlot (University of Texas at Arlington)</td>
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<td></td>
<td>A presentational construction in Indonesian</td>
</tr>
<tr>
<td>11:30-11:50</td>
<td>Concluding Remarks &amp; Closing Ceremony</td>
</tr>
<tr>
<td>11:50-12:50</td>
<td>Lunch</td>
</tr>
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</table>
## Poster Session

**Day 2 (13:20-14:20)**

**Venue: 4th Floor Poster Hall**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Richard Bibbs</strong> (University of California, Santa Cruz)</td>
<td>Chamorro Agentive Reduplication</td>
</tr>
<tr>
<td><strong>Chunming Wu</strong> (Minnan Normal University)</td>
<td>Two Types of Prepositional Expression in Northern Paiwan: Noun Incorporation vs. Non-Noun-Incorporation</td>
</tr>
<tr>
<td><strong>Yining Nie</strong> (New York University)</td>
<td>Possessor raising and adversity in Tagalog</td>
</tr>
<tr>
<td><strong>Ivan Paul Bondoc</strong> (University of Hawaii at Manoa), <strong>William O'Grady</strong> (University of Hawaii at Manoa), <strong>Kamil Deen</strong> (University of Hawaii at Manoa) and <strong>Nozomi Tanaka</strong> (Indiana University Bloomington)</td>
<td>Ambiguity effects on case interpretation among Tagalog children</td>
</tr>
<tr>
<td><strong>Russell Tanenbaum</strong> (Stony Brook University)</td>
<td>Untangling the Tagalog Clitic Cluster</td>
</tr>
<tr>
<td><strong>Christine Marquardt</strong> (University of Leipzig)</td>
<td>A Comparative Study on Extraction Asymmetries in Austronesian Languages</td>
</tr>
<tr>
<td><strong>Mike Berger and Christine Marquardt</strong> (University of Leipzig)</td>
<td>Theoretical explorations of three intriguing cases of incorporation</td>
</tr>
<tr>
<td><strong>Hui-Shan Lin</strong> (National Taiwan Normal University)</td>
<td>Triplication in Isbukun Bunun</td>
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</table>
Abstract:

The voluminous literature on resumptive pronouns (RPs) has given rise to a rich taxonomy of the phenomenon. Despite the fact that RPs invariably have the morphosyntactic form of ordinary pronouns (McCloskey 2006), they vary widely in distribution and function. RPs in some languages, notably English, are not licensed by the grammar, but instead are ‘intrusive’, to use Sells’ (1984) term. RPs in other languages are licensed by the grammar; depending on the language and the syntactic context, they might or might not realize traces (Engdahl 1982, Koopman 1982), compete with gaps (Sichel 2014), exhibit reconstruction effects (Aoun, Choueri, & Hornstein 2001), and so on. An idea that is currently gaining ground is that some or all types of RPs are ungrammatical—they lie outside the grammar (McCloskey 2017, Morgan & Wagers, to appear). Morgan & Wagers propose that in English, intrusive RPs are ungrammatical products of the performance system, that is, productions that satisfy local well-formedness but not global well-formedness, in the sense of Asudeh (2004).

If we take this idea seriously and assume that the performance system does not differ across languages, we would expect the grammars of individual languages to differ in whether and in what contexts they license RPs, but we would also expect RPs produced outside the grammar to be found in every language. Here we test this prediction against evidence from Chamorro and Palauan, two language isolates within the Western Malayo-Polynesian family. Both languages have A-bar dependencies that display the hallmarks of wh-movement: they are sensitive to (certain) islands, exhibit strong crossover effects, and are flagged morphosyntactically by wh-agreement. Previous accounts have maintained that Chamorro does not have RPs (Chung 1998) and Palauan has only RPs, meaning that its A-bar dependencies involve not wh-movement but rather syntactic binding of an RP (Georgopoulos 1985, 1991). On the basis of new Chamorro evidence and a re-examination of the Palauan evidence, we argue that both languages have wh-movement and grammatically-licensed RPs, as well as RPs produced outside the grammar. Their grammatically-licensed RPs differ in form and distribution. At least in Chamorro, the distribution of RPs produced outside the grammar is similar to that of intrusive RPs in English.

In Chamorro, speakers’ judgements reveal that the grammar does not license overt RPs. However, null RPs are licensed in exactly one context: when the gap is the possessor of a direct object or intransitive subject. We show that the gap in this type of extraction differs from the gaps in all other Chamorro A-bar dependencies in that it counts as a pronoun for the language’s person-animacy hierarchy. Further, despite the fact that traces in specifier position...
routinely trigger wh-agreement on a higher verb, a possessor gap cannot do so. These contrasts are evidence that the possessor gap is not a trace, but instead an RP. (The RP is null because the possessor gap is signaled by person agreement on the possessed noun, and in Chamorro, pronouns cross-referenced by person agreement are always null.)

Speakers’ judgements are firm concerning the extremely narrow distribution of grammatically-licensed RPs in Chamorro. However, an interestingly different picture emerges from corpora and from an elicited production experiment we conducted in the CNMI. In these naturally-occurring data, overt and null RPs are attested infrequently but unmistakably as subjects, direct objects, obliques, and possessors, with the distributional profile classically associated with (intrusive) resumption. They are found as tails of relative clause dependencies, especially in nonrestrictive relative clauses, or when the dependency crosses an island or otherwise involves greater syntactic ‘distance’, or when the RP is focused. The RP is not required, but can be replaced by a full DP with descriptive content. These similarities to intrusive RPs in English suggest that these types of Chamorro RPs lie outside the grammar.

In Georgopoulos’ account of Palauan, the grammar licenses an RP in the tail of every A-bar dependency: the RP is overt if it is the object of a preposition, and null otherwise. The evidence for the RP analysis is that A-bar dependencies can penetrate islands—specifically, relative clauses and sentential subjects. However, Georgopoulos also shows that A-bar dependencies in Palauan respect adjunct islands and coordinate structure islands; in addition, they exhibit strong crossover effects and activate wh-agreement, so the diagnostic situation is not clear-cut. Our reanalysis begins by observing that sentential subjects generally are not islands in verb-first languages, and there are languages in which certain types of relative clauses are not islands (Sichel 2014). We propose that Palauan A-bar dependencies do involve wh-movement, and this wh-movement does respect the language’s islands (i.e. adjunct clauses and coordinate structures). On this view, the grammar does not license null RPs, and it licenses overt RPs in exactly one context: when the gap is the object of a preposition.

Wh-movement in Palauan is invariably signaled by overt wh-agreement, so it is important that Georgopoulos cites several examples in which extraction of an embedded subject is not flagged morphosyntactically in this way. (Wh-agreement with the subject entails the absence of ordinary subject-verb agreement, but the embedded verb in these examples shows ordinary subject-verb agreement.) We suggest that these examples involve null RPs that are produced outside the grammar. These RPs, which are some distance from the dependency’s head, are null because in Palauan, pronouns cross-referenced by subject-verb agreement must be null.

In short, the Chamorro evidence argues that a language’s RPs can arise in two ways, via licensing by the grammar or—separately—produced outside the grammar. Though the Palauan evidence is more fragmentary, it is consistent with this overall picture.

**Keywords:** resumptive pronouns, production, Chamorro, Palauan, islands, wh-agreement
Agent extraction under patient voice in Tagalog is acceptable: Evidence from acceptability ratings in various A-bar dependencies

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Abstract:
In Tagalog, only ang-marked arguments can be extracted (Aldridge, 2012; Rackowski & Richards, 2005): if the verb exhibits AGENT VOICE (AV), only the agent is extractable; if the verb exhibits PATIENT VOICE (PV), only the patient is extractable. These facts have been used as evidence to support a phase-based theory of extraction (Chomsky, 2001). For an XP to be extracted out of a phase, it must be located at the edge of that phase—either by merging into that position or by moving there. The schematization in (1) shows how this restriction is a natural consequence of the system in phase-based approaches to extraction:

\[(a) \quad \left[ [\text{FVP}] \right. \left. \ldots \left[ vP \right. \ldots \left. \left[ \text{DPAgent} \right. \ldots \left. \left[ \text{VP} \right. \ldots \left. \left[ v \right. \ldots \left. \left[ \text{DP}_{\text{agent}} \right. \ldots \text{v} \ldots \left. \left[ \text{DP}_{\text{patient}} \right. \ldots \text{v} \ldots \left. \left[ \text{VP} \right. \ldots \left. \left[ \text{DPPatient} \right. \ldots \left. \left[ \text{X} \ldots \left. \left[ \text{X} \ldots \left. \right] \ldots \left] \ldots \left] \ldots \left] \ldots \left] \ldots \left] \ldots \right] \ldots \right] \ldots \right] \ldots \right] \ldots \right] \ldots \right] \ldots \right] \ldots \right] \ldots \right] \ldots \right] \ldots \right) \right] \right) \right) \right) \right) \right) \right) \right) \right) \right) \right) \right) \right)
\]

In AV (1a), the agent is the only DP at the edge of vP. As the theory predicts, only the agent is extractable. Meanwhile, in PV (1b), v enters into an AGREE-relation with the patient to satisfy [EPP] for independent reasons. This relation moves the DP to the outermost specifier of vP as a result. The theory then predicts that only the patient is the extractable argument.

Counter to previous work, Ceña and Nolasco (2011) and Tanaka (2016) observed that this restriction is asymmetrical. When the verb exhibits AV, agent extractions are allowed and patient extractions are not. However, when the verb exhibits PV, while patient extractions are allowed, speakers show variability with agent extractions. In the present study, we present a large-scale acceptability judgment study \((n = 64)\) providing more evidence for the asymmetry. This may pose a challenge to a phase-based theory of extraction.

The present study. We have two goals. First, we seek to determine the extent to which non-ang arguments are extractable. Second, if they are, we ask whether this permissibility is a general property of A-bar dependencies or a construction-specific one. To determine whether non-ang marked arguments could be extracted, we designed an acceptability judgment task with a 2×2×2 factorial design, crossing voice morphology on the verb (VOICE: AV, PV), whether voice matches with the extracted argument (MATCH: Match, Mismatch), and MOOD (Realis, Irrealis). We realized this design in 3 sub-experiments, which differed by what A-bar contexts were used: wh-questions, relative clauses, or ay-inversion. A schematization of a sample item involving ay-inversion is provided below in (2). The three experiments were administered as one survey, and balanced by 32 fillers using simple declaratives. Conditions were uniformly distributed across 8 lists via a Latin Square design. Thus, each participant saw all of the conditions 4 times each but with different words and in different constructions.
The 25th Meeting of the Austronesian Formal Linguistics Association (AFLA25)

Predictions. If only ang-marked arguments may be extracted, we predict (2a) and (2c) to be rated high, and (2b) and (2d) to be rated low. In other words, we expect a main effect of MATCH and crucially, no interaction with VOICE. However, if the restriction is violable, we expect (2c) to at least have higher than (2b). Thus, we expect an interaction between MATCH and VOICE.

Results. Provided in the figure below are the mean ratings by A-bar type, faceting voice. Consistent with previous descriptions, we found that agent extraction under AV and patient extraction under PV were both given high ratings (in blue), and that patient extraction under PV was rated low across 3 A-bar contexts (in yellow, left panel). However, we also found that agent extraction under PV (in yellow, right panel) was rated more acceptable than patient extraction under AV. MATCH-VOICE interactions were statistically significant in linear mixed effects models—RC: $\chi^2(1) = 9.44, p = .002$; AY: $\chi^2(1) = 23.87, p < .001$; WHQ: $\chi^2(1) = 3.93, p = .04$.

We also found that the magnitude of acceptability was modulated by the A-bar type. RCs were the most permissive, as indicated the smallest difference between patient- and agent extraction under PV (blue–yellow in the right panel). Ay-inversion were relatively less permissive, as indicated by the larger difference between blue and yellow. Finally, wh-questions are the most conservative, as indicated by the largest difference between blue and yellow.

Discussion. Phase-based theories of extraction afford us the acceptability of canonical extractions and the unacceptability of patient extraction under AV. However, our results pose a new challenge. We consider one hypothesis to make these amenable to existing theories. By hypothesis, there are three types of grammars in Tagalog: conservative (type 1), relatively permissive (type 2), and permissive (type 3). In the more permissive grammars (types 2 and 3), the agent DP in a structural configuration like (1b) obviates minimality requirements because multiple specifiers of the same projections are rendered structurally equidistant in probe-goal relations à la Hornstein (2009). However, extraction of this sort in type 2 grammars, while licit, might still incur a cost, as reflected in lower acceptability ratings.

Keywords: Tagalog, extraction asymmetry, acceptability judgment, experimental syntax

Agent extraction and topicalization in Bikol
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Abstract:
The theoretical status of “subject” in Austronesian languages and “subject-only” restrictions on A’-extraction have been central questions in the study of Austronesian syntax. In this talk, we discuss two apparent exceptions to the subject-orientation of long distance chain formation in the central Philippine language Bikol. Although Bikol shows the familiar subject-only restriction on wh-movement, we show that it allows extraction of passive agents. We also discuss the availability of subject- and non-subject agent-oriented topics.

Voice in Bikol: In Philippine voice system languages, a single argument of each clause is chosen as the “subject” (or elsewhere, “pivot”/“topic”). The subject bears a particular case, which we call nominative, and “voice” morphology on the verb reflects the choice of subject argument. Here we discuss two voices in Bikol, active nag- vs passive tig-, although additional voices will be discussed in the talk. Passive agents are genitive (corresponding to ergative under some analyses) and active themes are genitive or dative, depending on animacy/specificity.

Voice system languages often exhibit a “subject-only” requirement on A’-extractions (e.g. Keenan & Comrie 1977). (1–2) show that this restriction holds for Bikol wh-questions:

(1) Agent wh-question ‘Who ate an/the apple?’ must be subject extraction from active clause:
   a. Sisay an nag-kaon ki apol?
      who AN ACT-eat GEN apple
   b. * Sisay (an) tig-kaon su apol?
      who AN PASS-eat NOM apple

(2) Theme wh-question ‘What did Alan eat?’ must be subject extraction from passive clause:
   a. Ano an tig-kaon ni Alan?
      what AN PASS-eat GEN apple
   b. * Ano (an) nag-kaon si Alan?
      what AN ACT-eat NOM Alan

Relativization of passive agents: As expected, agent relativization can involve extraction of an active subject, (3a). However, Bikol also allows relativization of passive agents: in (3b), the agent is relativized out of a passive clause with a nominative theme, su apol. Both relatives in (3) must be gap relatives, disallowing overt pronouns corresponding to the relativized argument. In contrast, themes cannot be relativized out of active clauses (not shown).

(3) Agent relative ‘the man that ate an/the apple’ with active and passive voices:
   a. su lelaki [RC na nag-kaon (*siya) ki apol]
      NOM man RC ACT-eat 3sg.NOM GEN apple
   b. su lelaki [RC na tig-kaon (*niya) su apol]
      NOM man RC PASS-eat 3sg.GEN NOM apple

The availability of passive agent relativization as in (3b) is unexpected. For example, Reid & Liao 2004 (p. 482) note: “To our knowledge, there is no Philippine language which unambiguously allows relativization of the Genitive Agent of a transitive sentence.” Nonetheless, this pattern has been robust in our elicitation.

Proposal: We adopt from Aldridge 2004 that the subject (nominative) is always the highest specifier of vP, which is a phase. In passive clauses, the theme subject is moved to an outer specifier above the agent.
In languages such as English, relativization and wh-movement involve probing by C for specialized A'-features such as [REL] or [WH], which will skip intervening arguments which lack these features; see (4a) below. In contrast, we might think of Austronesian languages with the subject-only restriction as having a C that simply probes for DPs, [uD] in (4b); see similar suggestions in Legate 2014 and Aldridge 2016. The only argument that can be targeted for movement by C, then, is necessarily the highest DP, which is assumed to be the subject.

We propose that in Bikol, relativization involves probing for a dedicated A'-feature, [REL], but wh-movement still involves probing for [D]. This explains the differential behavior of wh-movement, which is strictly subject-only, and relativization, which allows subject extraction as well as agent extraction, skipping the subject. (See also Deal to appear for similar patterns.)

\[
\begin{array}{ll}
(4) & \text{a. English-type: } C_{REL} = [uREL] \quad C_{WH} = [uWH] \\
    & \text{b. Subject-only AN: } C_{REL} = [uD] \quad C_{WH} = [uD] \\
    & \text{c. Bikol: } C_{REL} = [uREL] \quad C_{WH} = [uD]
\end{array}
\]

Even with probing relativized to [REL], relativization cannot target other positions such as active themes. This is due to phase impenetrability: only the specifiers of the vP phase (subject and agent) are accessible for probing by C in the higher phase.

**Implications:** Our discussion of agent relativization in Bikol and its analysis have three important theoretical implications: (a) Even closely-related Austronesian languages vary in the probe features involved in different A'-constructions. (b) Probing by C for extraction cannot be one-to-one with nominative case licensing, contra Aldridge 2016. (c) Wh-fronting constructions in Bikol cannot simply be thought of as involving relativization, contra wh-pseudocleft analyses.

**Topics in Bikol:** We additionally discuss the distribution of topics in Bikol. Topics can be interpreted as the subject (5a) or passive agent (5b), but not as an active theme (5c). A corresponding clitic pronoun is optional, in contrast to relativization in (3). Note that topics are in nominative case, leading to a clause with two nominative DPs in (5b). We propose that these topics are base-generated high and receive nominative case as a default. (Similar facts are discussed for Kapampangan in Sells 2000 and for Tagalog in Latrouite 2011.)

\[
\begin{array}{ll}
(5) & \text{a. Si A. nag-kaon (siya) ki apol. } \text{b. Si A. tig-kaon (niya) su apol.} \\
    & \text{NOM A. ACT-eat 3sg NOM GEN apple} \quad \text{NOM A. PASS-eat 3sg GEN NOM apple} \\
    & \text{‘Alan, he ate an apple.’} \quad \text{‘Alan, the apple was eaten by him.’} \\
    & \text{c. * Su apol nag-kaon si Alan.} \\
    & \text{NOM apple ACT-eat NOM Alan Intended: ‘The apple, he ate.’}
\end{array}
\]

We explain the asymmetry in (5) through a locality condition on topic linking: a topic must be base-generated at a CP edge but in the same phase as its corresponding pronouns. Recall that only subjects and agents are accessible from the CP phase. The derivation of left dislocation in Greek is subject to a similar requirement (Iatridou 1995).

**Keywords:** syntax, Bikol, A'-extraction, relativization, topicalization, phases

Abstract:
We investigated whether children use the reliable but complex Tagalog morphosyntactic marker system for thematic role assignment, or if they rely on heuristics such as a word order strategy. In this verb-initial language, the agent voice (AV) verb infix –um– marks the ang-phrase as the agent (1, 2), while the patient voice (PV) verb infix –in– marks the ang-phrase as the patient (3, 4) (Himmelmann, 2004). The order of post-verbal arguments is relatively free and the canonical order of arguments in Tagalog remains to be a matter of debate.

In Study 1, we explored the input frequency of voice and word order in Tagalog child-directed speech. We analyzed Marzan’s (2013) corpus of child-directed speech to 3 Tagalog-speaking children (ages 2;4-2;7). Among utterances with causative transitive verbs and at least one noun, 53% were inflected for PV, 21% for AV, and 26% were uninflected. Utterances in both voices were predominantly agent-initial or contained only an agent (AV: 95%, PV: 91%). To further investigate this observed agent-initial preference from the corpus data, we gave a production task to five- and seven-year-old children and adults (Study 2). They were asked to describe pictures of reversible actions between two animals, e.g., a cow pulling a pig, by completing sentences which start with voice-marked verbs. Children mentioned the agent as the NP1 regardless of voice (five-year-olds – AV: 88% agent-initial productions, PV: 81%; seven-year-old – both voices: 91%), while the adults preferred agent-initial constructions only in PV (AV: 53%, PV: 98%). Based on these results, we predicted that if children would rely on word order in comprehension, they would interpret the NP1 as the agent.

In Study 3, we tested whether children’s agent-initial preference in production is also found in comprehension. Five- and seven-year-old children and adults were asked to choose which of two pictures (e.g., a cow pulling a pig, and a pig pulling a cow) corresponded to a sentence they heard (1-4). Adults scored high in all conditions, while children were more accurate in PV compared to AV in the patient-initial condition (Figure 1). In AV, five-year-olds scored below chance level in the patient-initial condition, implying that they interpreted the first mentioned noun as the agent. Children’s above chance level performance in both word orders in PV show that they can better use the markings on the verb and the noun in PV than in AV. We attribute the PV advantage in comprehension to the higher frequency of PV in the input, providing children with more exposure to the mapping of the PV marker to the ang-phrase.

These results revealed that even at age 7, Tagalog-speaking children do not consistently use the morphosyntactic markers for thematic role assignment but rely on word order heuristics. Processing strategies for thematic role assignment in children were found to be largely dependent on frequency patterns in their linguistic input.
Sample experimental sentences for the verb *hila* ‘pull.’

1. H<um>iha **ang** baka tuwing umaga ng baboy sa maputik na bukid
   <AV>pull cow every pig in muddy LIN field
   Agent voice Agent-initial

‘The cow is pulling a pig every morning in the muddy field.’

2. H<um>iha ng baboy tuwing **ang** baka sa maputik na bukid
   <PV>pull pig every cow in muddy LIN field
   Patient voice Agent-initial

‘The/A pig is pulling the cow every morning in the muddy field.’

Figure 1. Mean accuracy with 95% confidence intervals for each condition per age group in Study 3.

**Keywords:** Tagalog, child language acquisition, voice, word order, comprehension, production

Reflexives in Adult and Child Tagalog
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Abstract:
We explore the relative effect of voice, case, and word order cues in the interpretation of Tagalog sentences involving reflexives by Tagalog speaking adults and children. We focus on whether children can correctly identify acceptable sentences with reflexives, and whether they exhibit a preference for using one cue over another. We predict that while Tagalog adults are strongly dependent on voice and case cues, children may rely more on word order cues, which may lead them to incorrectly accept ungrammatical sentences with reflexives.

We administered a sentence completion task and a felicity judgement task (adults and children), testing the 8 patterns in (1). These patterns cross voice (PV/AV), word order (lexical agent-reflexive and reflexive-lexical agent) and case marking (pivot/non-pivot).

(a) AV an-Agentₐ, naŋ-Reflexiveₐ
Nag-kamot an lalaki naŋ sarili niya.
PV
3SG.NPIV
‘The boy scratched himself.’

(b) AV naŋ-Reflexiveₐ an-Agentₐ

(c) * AV naŋ-Agentₐ anŋ-Reflexiveₐ

(d) * AV anŋ-Reflexiveₐ an-Agentₐ

(e) PV an-Agentₐ anŋ-Reflexiveₐ
K<in>amot anŋ lalaki anŋ sarili niya.
PV
3SG.NPIV
‘The boy scratched himself.’

(f) PV anŋ-Reflexiveₐ an-Agentₐ

(g) *PV anŋ-Reflexiveₐ an-Agentₐ

(h) *PV an-Agentₐ anŋ-Reflexiveₐ

Extant research on Tagalog acquisition has shown children to manifest a word order bias, rather than to rely on the more dependable voice and case cues (Tanaka, 2016; Garcia, Dery, Roeser, & Höhle, 2016): in transitive (non-reflexive) sentences, children generally prefer Verb-Agent-Patient word order. However, when it comes to reflexives, using word order cues may lead to incorrectly accepting sentences like c and h, since these patterns match the preferred word order. We conducted two experiments to determine preferences for patterns (a)-(h).

Experiment 1: Sentence Completion Task (Twenty-eight normal adults, age 22-80, mean = 49; and 15 children, age 3;10-6;10, mean = 5;4): Participants were shown pictures depicting reflexive actions (e.g., a girl spraying herself with water), were provided with the verb (in either AV or PV, counterbalanced and semi-randomized) and were asked to complete the sentences. Each critical item set (reflexives) and control item set (non-reflexive transitives) consisted of five verbs in AV and five in PV, totaling 20 items. The results reveal: (i) adults and children rarely produce ungrammatical patterns, vastly preferring (a), (b), (e), and (f); (ii) a strong preference for the verb-agent-reflexive pattern in adults and children; (iii) few errors by adults, and more by children, but none that resulted in the ungrammatical patterns from (a)-(h) (Table 1).

¹GLOSS: 3SG = third person singular, AV = agent voice, NPIV = non-pivot, PIV = pivot, PV = patient voice
Table 1. Production variations among sentences with reflexives in the sentence completion task.

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Agent Voice</th>
<th>Patient Voice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adults</td>
<td>Children</td>
</tr>
<tr>
<td>(a)</td>
<td>76.27%</td>
<td>38.10%</td>
</tr>
<tr>
<td>(b)</td>
<td>13.56%</td>
<td>0.00%</td>
</tr>
<tr>
<td>others</td>
<td>6.78%</td>
<td>23.81%</td>
</tr>
<tr>
<td>errors</td>
<td>3.39%</td>
<td>38.10%</td>
</tr>
</tbody>
</table>

Experiment 2: Felicity Judgment Task (Twenty-four Tagalog speaking adults aged 22-80, mean = 48.71; and 11 children, aged 3;10-6;10, mean = 5;5): Participants were provided with two sentences and were asked to select the sentence they preferred. Key sentence comparisons were made by controlling word order (e.g., pattern a compared to b), voice (e.g., a vs e), and case distinctions (e.g., a vs c) (Table 2). Both adults and children preferred grammatical sentences (e.g., a over c, and e over h). As for word order, adults did show a preference for verb-agent-reflexive word order, but only in the patient voice. Children showed a strong preference for verb-agent-reflexive, as indicated by preference of (a) and (e) over (b) and (f), respectively. In terms of voice, adults showed a strong preference for the patient voice only in the (a) vs (e) comparison. Children, on the other hand, did not appear to have strong voice preference, (a-e and b-f comparisons).

Table 2. Preferences among sentences with reflexives in the Felicity Judgment Task.

<table>
<thead>
<tr>
<th>Difference</th>
<th>Constant</th>
<th>Pattern Comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Case Marking</td>
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<td>Word Order + Voice</td>
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<td></td>
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<td>Adults</td>
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<td>Children</td>
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<td>Word Order</td>
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<tr>
<td></td>
<td></td>
<td>Voice + Case</td>
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<td></td>
<td></td>
<td>Adults</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Children</td>
</tr>
</tbody>
</table>

In sum, Tagalog adults strongly prefer (e): PV with lexical-agent before reflexive, while children (i) strongly prefer PV, (ii) in all voices, prefer the lexical-agent preceding the reflexive argument. We interpret this to mean that children have an isomorphic preference: they prefer patterns in which the surface word order matches the underlying structural properties of a sentence.

Keywords: Philippine-type voice, case, word order, acquisition

References:
1. Introduction

The genitive relative construction (GRC) is a type of relative clause found in Māori and other Polynesian languages. The GRC has two gaps – in addition to the expected gap for the relativized position, it has a gap for the subject position. The subject appears to be realized at the left edge of the relative clause, marked with the genitive case, (2). A simple transitive sentence is provided in (1) for reference.

(1) I kohuru a Hone i te tangata.
   T/A murder PERS John DO the man
   ‘John murdered the man.’

(2) Ka mohio ahau ki te tangata a Hone [i kohuru ai ∅,∅].
   T/A know 1SG to the man of John T/A murder PART
   ‘I knew the man that John murdered’ (Bauer 2003)

While special case-marking properties found in relative clause constructions in Altaic languages have attracted attention, the GRC in Polynesian is an understudied construction that raises interesting syntactic and semantic puzzles. Some of the first attempts to provide a detailed formal syntactic analysis were Herd et al. (2004), Herd et al. (2011), and Otsuka (2010), which discuss several properties of the construction.

2. Purpose

Herd et al. (2011) proposes that, next to passivization and the Māori actor-emphatic construction, the GRC in Polynesian is yet another rescue strategy to get around the well-known extraction restriction on relative clause formation in Polynesian languages, i.e., the impossibility of relativizing directly upon the direct object position. Let us call this type of analysis an ‘accessibility-based analysis’ of the GRC. In this analysis, the GRC, like the passive, involves the object moving to a derived subject position. The purpose of this paper is (i) to show that the GRC in Māori is not amenable to the strict accessibility-based analysis put forth in Herd et al. (2011), and (ii) to demonstrate that the distribution of the GRC receives a natural characterization if we adopt Pucilowski (2006)’s analysis of Māori as a split-ergative language.

3. Challenges for the accessibility-based analysis

Herd et al. (2011) focuses on the GRC in relativization on direct objects, and forms an analysis based on these facts; however, as we will show below, the GRC is not used exclusively to relativize on the direct object position.

Oblique DPs can be recognized as those that do not act as a direct object and are marked with a preposition. They can be relativized using strategies other than the GRC, so the accessibility-based analysis (where the GRC is a rescue strategy) is not sufficient to explain its availability here. In the following example from Bauer et al. (2003), the GRC is used in relativization on an oblique DP position rather than a direct object position (the verb in the relative clause is not even transitive).

(3) I hoe mai hoki te waka rā i muri i te kōtiro rā i te wā ōna [i rere]
   TAM paddle hither also the canoe DEIX at behind at the girl DEIX at the time her TAM jump
   rā ki te wai].
   DEIX to the water
   ‘The canoe had also rowed up behind the girl at the same time when she had jumped into the water.’

Like oblique DPs, the objects of experience (or "middle") verbs do not have the same extraction restrictions as the objects of canonical transitives. Yet, the objects of experience verbs can also be relativized using the GRC. The GRC is thus not restricted to relativization on the direct object position. In other words, we see the GRC used in a way that cannot be characterized as a rescue strategy.

And finally, the GRC can be used on at least some passive constructions (here, of an experience verb), as seen in (4) from Grey (1885: 174).

(4) Ko tōna ngākau kihai i wareware ki tana mea [i kite-a ai] hei taonga mō-na.
   EQ his heart NEG T/A forget DO his thing T/A see-PASS particle PREP treasure for-3SG
   ‘His heart did not forget his thing that he had seen that would be a treasure for him.’
Such examples are not directly predicted in an accessibility-based analysis. Since passivization itself is a rescue strategy involving a derived subject position, there is no accessibility issue here, and we lose the hypothesized motivation for GRC. Furthermore, in a passive sentence like this, the genitive-marked DP appears to be associated with an oblique phrase, making this sentence an exceptional instance of the GRC.

4. Split-ergativity in Māori

Māori has traditionally been described as a nominative-accusative language with an active and a passive construction, as shown in (5) and (6).

(5) e kai ana ngā tamariki i ngā āporo
   TAM eat TAM the.PL children DO the.PL apple
   ‘the children are eating the apples’ (Bauer 1997: 40)

(6) i patua te kuri e te tamaiti
   TAM hit.Cia the dog AGT the child
   ‘the dog was hit by the child’ (Bauer 1997: 42)

However, it has been argued that Māori is in fact an ergative language (e.g. Sinclair 1976, Modini 1985). Under this analysis, what we have been calling the passive is actually an active sentence with ergative marking. Pucilowski (2006) unites the two sides by proposing that Māori is a split-ergative language that splits based on the transitivity of a clause (see also Otsuka 2011 for a similar analysis). Under this view, constructions traditionally called ‘active’ have nominative-accusative alignment and are used in sentences with low transitivity, and constructions traditionally called ‘passive’ have ergative-absolutive alignment and are used in high transitivity sentences. In order to prevent confusion we will adopt Pucilowski’s convention of calling sentences like those in (5) ‘pattern I’ and sentences like those in (6) ‘pattern II’.

5. The GRC under a split-ergative analysis

We show that the distribution of the GRC receives a natural characterization under the split-ergative analysis, thereby providing evidence in favor of the analysis.

Pucilowski (2006)’s split-ergative proposal draws on evidence from topicalization, question formation, and relative clauses, all of which make use of the GRC (topicalization and question formation have been analyzed as being pseudo-clefts or having relative clause-like structure in Māori (see Potsdam and Polinsky 2011 for discussion)). According to Pucilowski, highly transitive clauses have ergative-absolutive alignment, while in clauses with low transitivity, Māori has nominative-accusative alignment. The facts quite straightforwardly support this account: pattern II (high transitivity) clauses use the gap strategy on S and O, but this strategy is unavailable for A, which uses a construction called the actor-emphatic; pattern I (low transitivity) clauses use the gap strategy on S and A, and the GRC on O, where the gap strategy is unavailable. Nothing about this analysis requires the GRC to be solely a rescue strategy; although the GRC is indeed used to relativize direct objects, we saw above that it has a wider distribution than that.

Now, if we analyze pattern II sentences as ergative-absolutive constructions rather than passives, then sentences like (4), which posed a puzzle to the accessibility-based analysis, are less surprising. Just like in a pattern I GRC, the genitive-marked DP in (4) is associated with the subject of the relative clause, and a non-subject position is relativized. If (4) were a passive, then as stated above, the genitive-marked DP would be associated with an oblique phrase, which would make this sentence an exceptional instance of the GRC. Adopting the split-ergative analysis gives a more consistent account of the GRC’s distribution, which in turn provides evidence for that analysis.

Keywords: genitive relative construction, relative clauses, genitive subjects, Polynesian, Māori, syntax

References

**Austronesian “nominalizer-voice affix homophony”: Another look**

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**The phenomenon.** In many Philippine-type Austronesian languages, the affixal morphology present in three types of structure that involve relativization—head external relative clause (RC) (1a), pseudo cleft (1b), and headless RC (1c)—is homophonous with Philippine-type voice morphology present in root clauses (1d). This phenomenon is known as “nominalizer-voice affix homophony” (N-V homophony) (e.g., Starosta, Pawley, & Reid 1982; Kaufman 2009; Ross 2009, 2012).

(1)  

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<tr>
<td>taro (RED-eat-TM.NMZ GEN child)</td>
<td>what PIVOT (RED-eat-TM.NMZ GEN child)</td>
<td>RED-eat-TM.NMZ&quot;</td>
<td>RED-eat-PV GEN child PIVOT taro</td>
</tr>
<tr>
<td>‘(the) taro that the child will eat’</td>
<td>‘What is the thing that the child will eat?’</td>
<td>‘thing that will be eaten, food’</td>
<td>‘The child will eat the taro.’</td>
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**Previous accounts.** Starosta, Pawley, & Reid (1982), Ross (2009), and Aldridge (2016) argue that the homophony between Philippine-type voice affixes (e.g., the patient voice affix -un in (1d)) and the so-called “nominalizers” (e.g., the affixal morphology -un present in the relative clauses (1a-c)) derives from an archaic innovation of “Nominalization-into-Verb” (Nom-into-V), which reanalyzed three nominalizers (2a-c) into their functionally equivalent indicative voice affixes. Kaufman (2009), on the other hand, argues that the homophony is due to Philippine-type languages’ lack of categorial distinction of verbs from nouns, according to which (1a-d) are all instances of nominalization.

(2)  

| a. Theme nominalizer **-en | Patient voice (PV) affix *-en |
| b. Locative nominalizer **-an | Locative voice affix (LV) *-an |
| c. Instrumental nominalizer **Si-/Sa- | Circumstantial voice affix (CV) *Si-/Sa- |

**Main claims.** In this paper, we argue based on novel data from Seediq, Tagalog, and Thao that the apparent homophony between voice affixes and the purported “nominalizers” is essentially an illusion created by the terminological distinction between Philippine-type voice morphology present in root clauses (“voice affixes”) and those present in finite relative clauses (“nominalizers”) (3):

(3)  

| a. Relative clauses in Philippine-type languages do not involve an instance of nominalization. They are finite CPs embedded under a D-shell—as argued by the standard analyses of RCs in these languages. Phrases like (1c) have the structure of a reduced headless finite relative clause. |
| b. The so-called “nominalizers” are essentially voice affixes present in finite RCs (4b). |
| c. Philippine-type voice affixes are topic-indicating agreement morphology hosted at C (4a-b) (Pearson 2005; Rackowski & Richards 2005; Chen 2017), rather than transitivity/applicative affixes hosted within vP (e.g., Starosta et al. 1982; Aldridge 2004; Ross 2009; Kaufman 2009). |

(4)  

| a. root-clause environments: \( C_{[\text{Top}]} T/\text{Asp} \, v \, V \, DP_1 \, DP_2_{[\text{Top}]} \)  
| agreement morphology (so-called “voice affix”) |
| b. finite relative clauses: \( DP_1_{[\text{RC}]} C_{[\text{Top}]} T/\text{Asp} \, v \, V \, DP_1 \, OP_{[\text{Top}]} \)  
| agreement morphology (so-called “nominalizer” when embedded under a D) |

**The Nom-into-V Hypothesis** is built on the assumption that Philippine-type voice affixes are transitivity/applicative markers hosted within vP (i.e., reflexes of \( v^0/\text{Appl}^0 \)), which were reanalyzed from \( n^0 \) through a re-labeling process ([SPR 1982]; Aldridge 2014, Kaufman 2009, 2017). This analysis yields...
two implications (Aldridge 2014, 2016; Kaufman 2009, 2017). First, the ban on extracting the external argument (EA) in Philippine-type PV/LV/CV clauses resulted from the EAs being derived from an (inherently Case-licensed) possessor. Second, Philippine-type AV clauses were excluded from the alleged Nom-into-V reanalysis and reflect the old transitive pattern prior to the reanalysis. In this paper, we argue against this line of analysis based on the following evidence:

**Argument 1.** The assumption that the synchronic PV affix was derived from a Theme nominalizer (2a) fails to account for a shared constraint in Philippine-type languages, that a Theme-like DP selected by an intransitive verb cannot combine with a PV affix either in root clauses (5d) or in the so-called “nominalized environment” (i.e., in relative clauses) (5a-c). If the affix in (5a-c) is indeed a Theme nominalizer, its incompatibility with a Theme-like head noun is unexpected.

(5)  a. laqi [m<n>huqil/*n-huqil(=na)]
    child [AV<PRF>die/*“TM.NMZ”-die(=3S.GEN)]
    ‘the child who died’

This constraint, we argue, follows from the current topic-agreement approach to Philippine-type voice affixes (3), according to which the presence of a PV affix indicates an Agree relation between Topic0 and the object of the clause. As unaccusative verbs take no object, a PV affix is predicted to be felicitous.

**Argument 2.** The claim that the synchronic CV affix was derived from an Instrumental nominalizer (3c) is difficult to account for a shared pattern in Philippine-type languages, that a CV affix is obligatorily used in the relativization of the Theme of the caused event in productive causatives (e.g., (6a-b)):

(6)  a. sino [s-p-imah  Imi-∅] [Seediq]
    alcohol [CV-CAU-drink Imi-ACC]
    ‘(the) alcohol that I made Imi drink’

This suggests that the CV affix cannot be simply associated with DPs of a specific thematic role (e.g., Instrument) or a certain structural position, indicating that the affix may not be the reflex of a specific type of functional head (a specific type of n0 or Appl0) as assumed by the Nom-into-V hypothesis.

**Argument 3.** The present proposal (3a) that apparent instances of participant nominalization (e.g., (1c)) are essentially a reduced finite headless RC is evidenced by the fact that the affixal morphology present in such phrases may show Mood inflection (e.g., indicative vs. optative). This suggests that such affixes are not reflexes of n0/φ0/Appl0, and indicates that they are associated with the presence of a C-shell.

(7)  a. s-keret (sagas-∅)
    CV.IND-cut (melon-ACC)
    ‘(the) thing that one cut (melon) with’

**Argument 4.** The conventional assumption that PV/LV/CV-marked RCs are nominalized constructions (e.g., SPR 1982; Kaufman 2009; Aldridge 2016) is incompatible with the standard analyses that RCs in various Philippine-type languages are finite CPs (e.g., Malagasy: Paul 2005; Potsdam 2006; Tagalog/Seediq: Aldridge 2004, 2017; Kroeger 2009; Amis/Kavalan: Lin 2013, inter alia). In Seediq, Thao, and Tagalog, RCs show no morphosyntactic asymmetry with root clauses in hosting aspect markers, voice alternation, negation, nominal clitics, mood inflection, and/or reflexivization. Given their finite CP status, the traditional assumption that the affixal morphology present in these clauses are “nominalizers” is in fact difficult to maintain.

**Argument 5.** Finally, the assumption that the Philippine-type “Pivot-only” restriction in relativization was derived from a ban on extracting the former possessors fails to account for the fact that the internal argument in AV clauses is banned from A’-extraction, either. Given the conventional view that Philippine-type AV clauses reflect the archaic NOM-ACC alignment prior to the purported reanalysis (SPR 1982; Kaufman 2009; Aldridge 2016), their asymmetry in subject/object extraction is unexpected.
Multiple case assignment and case-stacking in Amis

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This paper proposes an analysis of Amis (Formosan; VSO) case-stacking, in which nominals may receive case multiple times (Richards 2013, Pesetsky 2014, a.o.). I show that case-stacking tracks the derivation independent of movement (cf. Levin 2017), supporting the derivational nature of external merge. I first argue that a lower level of case assignment where unmarked case is realized as genitive (GEN) underlies main clauses and gerunds. I then show that another level of case assignment where unmarked case is nominative (NOM), which often replaces the case assigned on the lower level, derives the case patterns of main clauses and gerunds. Finally, I show that when a nominal is a contrastive topic, the cases assigned on the two levels of case assignment are realized simultaneously.

Bare root DP: I posit that the case assignment in bare root DPs (1-2), DPs headed by an unaffixed verb, is also present as a lower level of case assignment in main clauses (3) and gerunds (7). I discuss properties of Amis roots which suggest that event roots, e.g. cefos ‘spray,’ and entity roots, e.g. tefos ‘sugarcane,’ belong to the same category, given parallel behavior regarding selection and case marking. This offers evidence for nominalized roots and a lower case assignment where the unmarked case is GEN. First, a variety of affixes treat both types of roots as a group, e.g. plural reduplication cefos<cefo>s ‘spray repeatedly,’ tefos<tefo>s ‘sugarcanes.’ Second, nominals in bare root DPs (1) receive case in the same way, regardless of the root type. The higher nominal (agent of ‘spray’ or possessor of ‘book’) receives GEN and the lower nominal receives accusative (ACC). (2) in addition shows that the sole argument of an unaccusative root must receive GEN.

1. BareRootDP O cefos/codad no wawa to epah] ko sakafaheka ako.
   ‘The child’s spraying wine/ the child’s book about wine is why I am surprised.’

2. O leneng no/*to tamina’ (3) Mi-cefos ci Kolas to epah.
   ‘(a) boat(s)’ sinking’
   ‘The child is spraying wine.’

GEN/NOM as unmarked case: Amis bare roots (1) function as nominals and contrast with inflected roots, which are verbal. Bare roots and inflected roots in an imperfective clause (3) differ, among other things, in the case the highest argument receives: GEN in (1) and NOM in (3). I put aside perfectives, which show differential subject marking. I will assume, for lack of space for detailed discussion, that Amis roots uniformly lack category in the lexicon. Once saturated with arguments, a root is first nominalized by n0, and may be verbalized if voice morphology, e.g. Actor Voice (AV) mi-/pi- in (3/7), is merged in v0. (4) shows schematically the structure of a transitive root. The case patterns are captured if we treat ACC as the dependent case and GEN and NOM as two realizations of the unmarked case, conditioned by the category of the Spell-Out domain.

4. [sP [x0 mi-] [n0 [0] [VoiceF AGENT ... [RootP √cefos ‘spray’ PATIENT ]]]]

Case assignment rules: I propose that Spell-Out applies each time a phase head (v0, C0, D0) is merged and the category of a Spell-Out domain (nominal or verbal) is determined by the highest category head (n0 or v0) in the current domain. I posit that Amis assigns case by the ordered rules in (5). Results of multiple case assignment are constrained by One Case Rule: delete all but the outermost case.

5. a. If there are two DPs in the same phase such that DP1 asymmetrically c-commands DP2 and if DP1 is caseless, assign ACC to DP2.

b. If a DP does not receive dependent case, assign GEN to the DP if the current Spell-Out domain is nominal, and assign NOM if the domain is verbal.
Case derivation: I illustrate the rules first with a transitive imperfective clause (3). First, merger of $v^0$ triggers Spell-Out of nP (see (4)). (5a) assigns ACC to the patient and (5b) assigns GEN to the agent given that $n^0$ is the highest category head in this domain. Next, in a main clause, merger of $C^0$ triggers another Spell-Out (of $vP$). (5a) again assigns ACC to the patient, but this time, (5b) assigns NOM to the agent given that $v^0$ is the highest category head in this domain. (6a-b) summarize these two levels of case assignment. By the One Case Rule, only the cases assigned in (6b) are pronounced.

<table>
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<tr>
<th>Domain \ IMPV clause</th>
<th>Domain \ Gerund</th>
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<tr>
<td>a. $vP$</td>
<td>GEN.agent ACC.PATIENT</td>
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<tr>
<td>b. CP</td>
<td>NOM.agent ACC.PATIENT</td>
</tr>
<tr>
<td>c. $vP$</td>
<td>GEN.agent ACC.PATIENT</td>
</tr>
<tr>
<td>d. DP</td>
<td>GEN.agent ACC.PATIENT</td>
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Gerunds: Gerunds (7) have the external syntax of a DP in Amis: they receive case and can be headed by a demonstrative. I posit that gerunds are derived by nominalizing the verbalized structure in (4) by another $n^0$. The first Spell-Out in a gerund is identical to the one in a main clause. Both are triggered by merger of $v^0$. Next, in a gerund, merger of $D^0$ triggers Spell-Out of the higher nP. (5a) assigns ACC to the patient and (5b) assigns another GEN to the agent, given $n^0$ is still the highest category head in this domain. (6c-d) summarize the two assignments. The One Case Rule applies vacuously in (7).

Case-stacking: When a nominal is a contrastive topic (CT), the cases assigned in the two Spell-Outs in (6) are realized simultaneously. In (8), the CT-marked agent of an imperfective clause surfaces with NOM external to GEN, the two cases assigned to the agent in (6a-b). In (9a), the CT-marked agent of a gerund surfaces with stacked GEN-GEN, the two cases assigned to it in (6c-d). Moreover, this agent can raise into the matrix clause and receive ACC when the matrix clause is imperfective. (9b) shows that when this raised agent is CT-marked, triple case-stacking (ACC-GEN-GEN) is licensed.

Case-stacking in Amis resists marking exhaustive answers and non-referential quantified nominals, e.g. few doctors, both of which are hallmarks of CT (Constant 2014). This correlation between case-stacking and information structure is also found in other languages, e.g. Korean (Schütze 2001). I propose CT Case Preservation Constraint: a case attached to a CT-marked nominal cannot be deleted. This constraint is ranked higher than the One Case Rule. Thus, when a nominal is CT-marked, all cases assigned to it will surface. Note that case-stacked nominals in Amis may remain in situ and the stacking patterns track a nominal’s derivational path that does not necessarily involve movement (8-9a). Although case-stacked nominals tend to scope above negation whereas non-stacked nominals are ambiguous, this can be explained by their CT status. Last, the data above show that GEN and NOM have two allomorphs in Amis: $ni/\text{ci}$ before a personal name and $no/\text{ko}$ elsewhere. In a case-stacked nominal, only the inner case undergoes this allomorphy. I propose that this is a result of morphological locality: the allomorphy applies only when a case is attached directly to a nominal.

Keywords: case-stacking, dependent case, root, external merge, Formosan
Ways of talking about the past: The semantics of -in- and =in in Bunun

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Overview. This paper assesses the semantics of two homophonous markers, -in- and =in in Isbukun Bunun (Formosan). The former is an infix that itself can be reduplicated and has an allomorphemic variant -i-, while the latter is an invariant enclitic attachable to various lexical words. The infix -in- has been described or analyzed differently as marking past tense (Zeng 1986; Jeng 1999), experiential aspect (Lin 1997; Huang & Shi 2016), perfective aspect (Zeitoun et al. 1996), or telicity (Lin 2010). The enclitic =in is predominately described as a perfect aspect marker (Huang 1997; Jeng 1999; a.o.). By presenting new empirical evidence, we offer an alternative analysis for -in- and =in. We argue that -in- is an existential past tense marker, which is in line with Jeng (1999) but differs in important details, and =in is an inchoative marker, in contrast to the dominant view. The two markers differ in how they express 'anteriority' readings: while the past tense -in- lexically specifies past existence of events, the anteriority effect with the inchoative aspect =in arises pragmatically. Our finding shows that Bunun -in- and =in possess decomposable semantic features common to temporal operators in other Austronesian languages, thus bearing implications for cross-linguistic studies on the semantics of tense/aspect.

-in- as a past tense. Jeng (1999) argues that -in- is a past tense rather than a perfective aspect. His evidence consists of a restriction to past reference time, shown by the incompatibility of -in- with present/future-time adverbs and the proclitic na= (required for the future), and the compatibility of -in- with viewpoint aspects including imperfective. Our data confirm these claims; e.g., (1) shows that the co-occurrence of -in- and Ça-reduplication yields a past progressive reading; this wouldn't be possible if -in- were a perfective aspect. Another property which -in- shares with past tense is that when marking stative predicates it induces an inference that the described state ceases to hold in the present (2). (2) also supports that -in- is not a telic or perfective marker, which would instead yield an inchoative reading.

(1) ma<n>-da~damu saikin haludun. (2) m<in>=asmuh=a saia habas.  
AF^PST>-IPFV~catch 1SG.NOM cricket AF.fat^PST>=NOM 3SG.NOM before
'I was catching crickets.'  'he was fat before (and is not fat now).'

Yet -in- has a dominant experiential reading, as in (3), and for this reason it was considered to be an experiential (perfect) aspect. The experiential reading, however, does not arise with a past-time adverb. We argue that both experiential and simple past readings of -in- can be unified by analyzing -in- as encoding existential quantification over past times. Supporting evidence comes from (i) interaction of -in- and negation in (4), which gives rise to non-existence of the described event in the past, and (ii) the infelicitous use of -in- in deictic and anaphoric contexts: -in- cannot refer to a salient contextual past time (5), or move a narrative forward; instead it back-shifts the event time (6). The fact shown by (5-6) falsifies Jeng’s claim that -in- sentences form a free variant with bare sentences; the past tense -in- is purely existential (see Ogihara 1996, Mucha 2017, Chen et al. 2017 for other languages).

(3) m<in>=uhalhal saikin (takna) sia lukis. (4) nii=tu m<in>aun=mas pinit’um’um.
AV.fall^PST> 1SG.NOM (yesterday) LOC tree NEG=LNK AF.eat^PST>=OBL breakfast
'I have once fallen from a tree.' (w/t takna)  'I have never had breakfast.'
'I fell from a tree yesterday.' (with takna)

(5) Context: Driving on the highway after leaving the house, you realize (from Partee 1973):

aa,  nii=tu  { sukud-an / *s<in>=ukud-an }=ku gasu.
INTJ NEG=LNK turn.off-LF / turn.off^PST>-LF=1SG.GEN gas
'Oh! I didn’t turn off the gas.'
(6) malabut saia ismuut=at ma<3>suul saia hana.  
AF.remove 3SG.NOM grass=at and AF.water<3.PST> 3SG.NOM flower  
# ‘(S)he weeded, and watered flowers.’ / √ ‘Having watered flowers, (s)he weeded.’

**=in as an inchoative marker.** Evidence against =in marking tense is that it is compatible with any reference time. With a past RT (introduced by masa-clause), the matrix event may precede or occur at same time with (but not follow) the RT (7). With a future RT (marked by na=), =in commonly receives an imminent future reading (8).

(7) masa tauna-lumah saikin hai, mudaan=in saia.  
when reach-house 1SG.NOM TOP AF.go=PRF 3SG.NOM  
‘When I reached home, (s)he was leaving.’ / √ ‘When I reached home, (s)he had left.’

(8) mais tauna-lumah saikin hai, na=mudaan=in saia.  
when reach-house 1SG.NOM TOP FUT=AF.go=PRF 3SG.NOM  
‘When I reach home, (s)he will be leaving.’ / # ‘When I reach home, (s)he will have left.’

In out-of-the-blue contexts (the RT is now), the reading of =in varies with types of predicate (Huang 1997, Jeng 1999, H&S 2016): completion readings with achievements, inceptive readings with activities, and change-of-state readings with statives. We add accomplishments, which give inceptive readings with =in (without culmination), patterning like activities (9).

(9) ka-lumah=in saikin tu dusa, ka-nii=ang ka-nahtung-an.  
do-house=PRF 1SG.NOM PRT two do-NEG=still do-finish-LF  
‘I built two houses, but I haven’t finished it yet.

We argue that -in- induces an initial change of state (COS), based on the inceptive and imminent future readings, and the COS is lexicalized in the semantics of =in: statives without =in are only interpreted as individual-level (10), and can have a universal perfect reading (11); with =in, these readings are not possible.

(10) ma-dia\(v(*=\text{in})\)=a bunbun=a.  (11) mais-kauma’ikit saia masmuh(*=\text{in}).  
AF-yellow=PRF= NOM banana=DIST.NOM AF.from-little 3SG.NOM AF.fat=PRF  
‘Those bananas are yellow.’ / √ ‘He has been fat since he was young.’

# ‘Those bananas became yellow.’ (OK with =in)

We propose that =in specifies that the initial COS of the event of predicate coincides with the reference time. When RT denotes an instantaneous time interval (e.g., the utterance time or a punctual RT), the COS, despite spanning a very short time, inevitably includes the RT; hence an anterior reading. Specifically, since the semantics of =in only concerns the initial status of events, process events naturally continue at RT, whereas achievements are themselves instantaneous so the entire event must be no later than the instantaneous RT, thus yielding a completion reading. The temporal component of =in explains the absence of universal perfect readings (which requires homogeneous states/processes), and the fact that =in cannot freely refer to a past event without recency or current relevance. We discuss in the paper how this analysis correctly predicts combination of in and other aspectual/temporal markers. Bunun =in is hence strikingly similar to the Samoan ‘uo’ (Hohaus 2016), and is comparable to the Niuean kua (Matthewson et al. 2015) without utilizing perfect semantics.

**Keywords:** past tense, perfect aspect, inchoativity, Isbukun Bunun, existential past

How to answer a yes-no question in Mulivelivek Pinuyumayan
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National Kaohsiung Normal University

Abstract:

The purposes of this paper are two-fold: (i) the answering system of Mulivelivek Pinuyumayan (hereafter, Pinuyumayan), a Formosan language, belongs to the truth-based system, resembling Mandarin Chinese and Taiwanese, dissimilar to the polarity-based system in languages such as English and Finnish (Holmberg 2016, Holmberg and Wu 2016) and (ii) the short affirmative particle answers and verb-echo answers in both languages are derived from fully-fledged sentences via deletion. The verb-echo answers further undergo verb raising to C-domain (focus) prior to deletion.

Most literature is devoted to the analysis of questions in Formosan languages; very few pay attention to the answering system of the languages. With this, we present evidence from Puyuma to show that its answering 'azi ‘no’ to a negative yes-no question in (1Q) is to disconfirm the negative alternative as in (1A1) and answering hai ‘yes’ to a negative yes-no question is to confirm the negative alternative as in (1A2). We also find that the bare 'azi answer is prohibited in (1A1), whereas the bare hai is allowed in (1A2). The phenomenon can be approached by Merchant’s deletion condition and Holmberg and Wu’s (2016) treatment on Taiwanese answering system.

(1) Q: ‘azi m-ekan za maderu i Siang? NEG AF-eat OBL rice NOM Siang
   ‘Has Siang not eaten rice?’
      NEG AF-eat PERF OBL rice NOM Siang
      ‘Yes, he has.’
   A2: hai, (’azi m-ekan za aderu i Siang).
      yes NEG AF-eat OBL rice NOM
      ‘No, he hasn’t.’

In addition, Puyuma can be categorized as a language allowing verb-echo answers, similar to Mandarin Chinese and Taiwanese. To answer the yea-no question in (1Q), affirmative verb-echo answer (2A1) is used to disconfirm the negative proposition ‘Siang has not eaten rice.’ The negative verb-echo answer (2A2) is used to confirm the negative proposition.

(2) A1: m-ekan lra.
      AF-eat PERF
      ‘Yes. (He has eaten rice.)’
   A2: ‘azi m-ekan.
      NEG AF-eat
The 25th Meeting of the Austronesian Formal Linguistics Association (AFLA25)

‘No. (He has not eaten rice).’

We propose that Wu’s (2016) and Holmberg and Wu’s (2016) polarity analysis on Taiwanese can apply to the answers of yes-no questions in Puyuma. A yes-no question contains an unvalued polarity at CP, either [+Pol] or [-Pol], denoting an affirmative or negative proposition, respectively, and merging in front of an IP, which has its own valued polarity, for example, [-Pol] in (3).

(3) Q: [CP [+/- IP ‘azi[+Pol] m-ekan za maderu i Siang]]
   NEG  AF-eat  OBL  rice NOM  Siang

‘Has Siang not eaten rice?’

To answer (3), the IP part of the question is copied and merged with a valued polarity feature at FocP. When the focused polarity feature is positive, as in (4), the polarity value of the IP is preserved. Meanwhile, the IP of the answer can be elided because it is mutually entailed with the IP of the question in (3) (Merchant 2001, 2004). In contrast, when the focused polarity feature is negative, the polarity value of the IP will be changed as in (5). A priori, the IP of the answer cannot be elided due to the fact that the IP of (5) does not mutually entail the IP of (3).

(4) A2: [FocP hai[+Pol] [IP ‘azi[+Pol] m-ekan za aderu i Siang]].

The aforementioned discussion shows that the truth-based system of answering in Puyuma adheres to Merchant’s deletion analysis and also implies that the short answer particle is derived from an unpronounced structure under semantic and syntactic identity.

Further, we propose that the verb-echo answer in (6A1) is derived in two steps: (i) the verb undergoes V-raising from a full clause to FocP (Holmberg 2007, 2016) and set the focused polarity feature as [-Pol] and (ii) then the remnant of the IP is elided. This movement and deletion analysis is evidenced by the presence of the focus m- and the perfective marker lra in the verbal short answer, proving that the verb-echo answer comes from a structure identical to its antecedent question. Negative verb-echo answer seems to pose an analytical problem to verb-raising analysis. We assume that although the negative verb ‘azi is responsible for confirming the negative alternative of (3) as [+Pol], it cannot stand alone and needs to merge with the verb m-ekan at FocP.

(6) A1: [FocP m-ekan[-Pol] lra [m------]]
   A2: [FocP ‘azi[+Pol] m-ekan [m------]]

This study concludes that answers to a yes-no question in Puyuma obey the truth-based system and supports the deletion and movement analysis (Holmberg 2016). Cross-linguistic evidence from another Formosan language, Isbukun Bunun, supports this result.

Keywords: polarity, truth, yes-no question, short answer, verb-echo answer, ellipsis, negation

References
Island (In)sensitivity in Malagasy Ellipsis

Eric Potsdam
University of Florida

This talk uses data from Malagasy to investigate the source of island (in)sensitivity under ellipsis. *Wh*-movement cannot violate islands; however, when the complement clause is deleted under sluicing, island violations famously become acceptable (Ross 1969, Merchant 2001), (1). The exceptive construction, in contrast, shows the opposite behavior. It is island sensitive (Reinhart 1991) and ellipsis does not save the derivation, (2).

(1) Nalahelo tamin’ ny lahy lasy nody Rabe fa tsy fantatro hoe lahy iza
was.sad PREP DET son left Rabe but NEG know.1SG COMP son who
‘Rabe was sad when a son left, but I don’t know which son.’

(2) *Nalahelo tamin’ ny rehetra nande aho afa-tsy Rakoto
was.sad PREP DET all went 1SG.NOM except Rakoto
(‘I was sad when everyone left, except Rakoto.’)

I first show that exceptives in Malagasy, as in (3), are an ellipsis construction in which the exception (Rasoa in (3)) is the result of clausal ellipsis, as shown. They are thus relevant to ellipsis theorizing. Evidence comes from a variety of sources including unreduced exceptives, parallels with clefts, coordination, implicit antecedents, multiple exceptions, and non-DP exceptions.

(3) Tonga ny vahiny rehetra omaly, afa-tsy Rasoa no tsy tonga omaly
arrived DET guest all yesterday except Rasoa FOC NEG arrive yesterday
‘All the guests arrived yesterday, except Rasoa.’

I next consider and reject an account of the island sensitivity in exceptives that appeals to Quantifier Raising (QR) of the antecedent (*ny vahiny rehetra ‘all the guests’ in (3)). QR is constrained by islands, which could explain the island sensitivity in (2). Evidence against this alternative includes distinct locality restrictions on QR versus exceptives and various antecedents that do not undergo QR.

I propose that the difference in island sensitivity between (1) and (2) arises as a result of contrastiveness. Griffiths & Liptak 2014 argues that only remnants that are in a contrastive relationship with their antecedent induce island sensitivity. Intuitively, there is a contrast in exceptives like (3) between the antecedent *ny vahiny rehetra ‘all the guests’ and the exception Rasoa. The talk concludes with a refinement to their proposal that crucially brings exceptives into the picture.
Keywords: Malagasy, ellipsis, exceptives, sluicing

References

Griffiths, James, and Anikó Lipták. 2014. Contrast and island sensitivity in clausal ellipsis. *Syntax* 17, 189-


Indonesian Crossed Control: expanding the typology of Restructuring

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Certain Indonesian verbs taking a passive complement give rise to an ambiguity between a normal (NC) and a ‘crossed’ control (CC) reading (Sneddon 1996 et seq.). In NC, the controller is the matrix DP; in CC, it is the (oblique) DP in the complement. The complement’s thematic relation is the same in NC and CC - what changes is the controller of the matrix C(rossed) C(ontrol) P(redicate):

(1) Siti mau / coba / berhasil [di-cium oleh Ali]
   Siti want / try / succeed PASS-kiss by Ali
   a) ’Siti wants / tries / succeeds to be kissed by Ali’       NC: CCP(Siti, kiss(Ali, Siti))
   b) ’Ali wants / tries / succeeds to kiss Siti’           CC: CCP(Ali, kiss(Ali, Siti))

Proposal: NC clauses involve standard control. By contrast, CC clauses embed vPs from which Patients move long-distance into matrix Spec,TP, and whose Agent is identified with that of the matrix CCP. I employ a ‘reverse’ version of Wurmbrand’s (2016) Restructuring.

Indonesian voice: Indonesian has an Agent voice (2), a passive for 3rd-person Agents (3), and a (zero-marked) Patient voice for 1st/2nd-person Agents (4). The passive demotes the Agent to adjunct (3), while the Patient voice retains the Agent (4). Voskuil (2000) et al. show that (i) Indonesian T has an EPP, and that (ii) the Patient in the Patient voice is a true subject in Spec,TP.

(2) Ali membaca buku
   Ali AV-read book
   ’Ali is reading a book’

(3) Buku itu di-baca (oleh Ali)
   book that I / you PV-read
   ’I / you read the book’ / ’The book was read by me / you’

CC in the Patient voice: Nomoto (2008) notes that CC also arises with the Patient Voice (5):

(5) Kucing mau / coba / berhasil [aku ∅-pegang]
   cat want / try / succeed I PV-touch
   ’The cat wants / tries / succeeds to be touched by me’       NC: CCP(cat, touch(I, cat))
   ’I want / try / succeed to touch the cat’                  CC: CCP(I, touch(I, cat))

In CC, the matrix DP has moved: The (optional) Agent voice prefix meN- is banned on DP movement paths (Cole & Hermon 1998). As soon as any verb bears meN-, CC vanishes, indicating that in CC, the matrix DP has moved from the lower clause into matrix Spec,TP. Conversely in NC, all DPs remain clause-internal, since meN- is allowed on the matrix CCP (6,7) and the lower Agent-Voic verb ((6); Indonesian has pro-drop).

(6) Kucing, men-coba [aku me-megang]
   cat AV-try I AV-touch
   ’The cat tries to be touched by me’       NC
   *’I try to touch the cat’                  CC

The Agent in the Patient Voice: Unlike the Agent Voice, verbs in the Patient Voice require a non-phrasal, left-adjacent D⁰ Agent (Sneddon 2010; (8)). It must be a 1st/2nd-person pronoun, and cannot extract ((9); Cole & Hermon 1998). I therefore assume the zero Patient voice head
v_{PV} requires a D^0 Agent in Spec,vP to incorporate into v_{PV} (Levin 2015); this explains the Patient’s movement to Spec,TP despite the structurally closer Agent.

(8) *Buku itu kami (‘semua’) ∅-baca

*Siapa, buku itu t_1 ∅-baca?

book that we all PV-read who book that PV-read

’We (all) read the book’ ‘Who read the book?’

CC clause size: Due to tense / aspect restrictions and the unavailability of a complementizer in the lower clause, Polinsky & Potsdam (2008) assume that CC lack CP and TP.

Summary: CC arises with complements in the passive or Patient voice. In CC, the matrix DP moves from the lower clause into matrix Spec,TP; in NC, the matrix DP is merged clause-internally. While the lower verb bears voice marking, the CCP does not. Clauses are ambiguous between NC and CC only when certain conditions obtain: the absence of meN- and a lower COMP. Analysis: Tests (e.g. strict vs sloppy reading) show that NC involves standard control (e.g. Landau 2014). For CC, I adopt a version of Wurmbrand’s (2016) Restructuring: a Restructuring voice head v_R, which doesn’t license an Agent or assign ACC, is born with unvalued voice and φ-features; these are valued by a matrix v via feature-sharing (10a). In Wurmbrand’s typology, there is no Restructuring case where the Agent, if present, is in the matrix clause, and where the matrix verb is not voice-marked - CC is just such a case. I thus propose that a null matrix v_R bearing only unvalued φ is valued by a lower v_{PV}/v_{Pass} (10b). Matrix v_R must lack voice, since the CCP is not voice-marked. This seems related to the fact that most CCPs can never be voice-marked, or passivize (the prefix ber- derives intransitive verbs from non-verbs, not mark voice - e.g. berhasil ‘succeed’ from hasil ‘result’; cf. (1)).

(10) a) v[F:val1] ... v_R[F:_,_] ⇒ v[F:val1] ... v_R[F:val1] Restructuring

b) v_R[F:_,_] ... v[F:val1] ⇒ v_{Pass} v_F[_,_] Restructuring

v_{PV} (∅-) is born as [v:PV, φ:__], v_{Pass} (di-) as [v:PASS, φ:x], and v_R(∅-) as [φ:__] (due to their passive-like nature, I assume v_{PV} and v_{Pass} are not phases - assuming they are poses no problem). In the Patient voice (11), after v_{PV} has merged with VP, the D^0 Agent merges, values v_{PV}’s φ-features, then incorporates into v_{PV}. The CCP and v_R are merged, and v_R has its φ-features valued by v_{PV}. Because v_{PV} (and v_{Pass}) cannot assign ACC (Cole et al. 2008), the Patient must move to Spec,TP to receive case and satisfy T’s EPP. The derivation of the passive (12) proceeds similarly, except that the implicit Agent may optionally be specified.

(11) [v_{PV} I_{[F:1SG]} [v_{PV} [v:PV, ϕ:__[v touch cat]]] ⇒ [v_{PV} I + v_{PV} [v:PV, ϕ:1SG]] [v touch cat]]

⇒ [v_{PV} v_R [F:__] [v try] [v_{PV} I + v_{PV} [v:PV, ϕ:1SG]] [v touch cat]]

⇒ [CP [TP cat1] [v_{PV} v_R [F:1SG]] v try [v_{PV} I + v_{PV} [v:PV, ϕ:1SG]] [v touch t_1] ...]

(12) [CP [TP Siti] [v_{PV} v_R [F:X]] v try [v_{Pass} v_{Pass} [v:PASS, ϕ:X]] [v kiss t_1] ([PP by Ali ])...]

Conclusion: The analysis derives two crucial properties of CC: (i) the controller of the matrix CCP is merged in the lower clause - its φ-features are inherited by v_R; (ii) the matrix DP originates as an object to the lower verb, but moves to matrix Spec,TP to get case. Others have used optional Raising (P&P 2008) or optional Agree (Nomoto 2008), and Sato’s (2012) cross-clausal head-movement mispredicts that negating the lower clause is impossible. Here, there is no possibility, and since there is no cross-clausal verb movement, negating only the lower clause should be fine - which is correct. I also discuss properties of CCPs, and why Agent-Voice complements don’t yield CC. Importantly, Indonesian CC seems to constitute a novel pattern in Wurmbrand’s Restructuring typology.

Keywords: Restructuring, voice, control, crossed control, passive, Indonesian

Sentential negation and negative concord licensing in Chamorro

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Abstract: This study investigates sentential negation and negative concord licensing in Chamorro, a predicate-initial Austronesian (Malayo-Polynesian) language from the Mariana Islands. It is argued that in negative sentences, negation can occur as an independent syntactic feature on T or C, and that when this feature is present, T and C act as probes that search for and license negative features. Support for this stance is provided by scope relations between subjects and overt sentential negation and the ability for focused negative subject DPs to signal sentential negation.

Negative sentences in Chamorro can be formed in multiple ways: by placing the morpheme ti before tense/modals (1a) or by focusing a negative DP (1b). Combining these methods results in a doubly-negated sentence (truth-conditionally identical to the corresponding affirmative sentence).

(1) a. Ti u fàttu i istudiàntí gi klas...
   NEG FUT 3SG.IRR.AGR arrive the student LOC class
   ‘The student will not come to class.’

   (BPS: 265)

   b. [Ni háfa na premiu] hu risibi.
   NEG any LK award 1SG.R.AGR receive
   ‘I didn’t receive any award at all.’ / ‘I received no award at all.’
   (CD: ni háfa)

Negative concord items (NCIs) occur only in negative sentences and are formed by attaching the negative morpheme ni to the left edge of an indefinite DP (see the negative DP in (1b)). They can be a number of different argument types (e.g. oblique (2a)), but can never be subjects (2b).

(2) a. Ti ma pàtti si Kiko’ [ni un grànu na guihan].
   NEG 3PL.R.AGR share.with UNM Kiko’ not a bit LK fish
   ‘They didn’t give Kiko’ even one bit of fish.
   (CD: ni un grànu)

   b. *Ti ha åkka’ yu’ [ni háfafa ha’].
   NEG 3SG.R.AGR bite me not anything EMP
   ‘Nothing bit me.’
   (Chung in preparation, p. 11, ch. 17)

On the view that NCIs are licensed only when c-commanded by an instance of sentential negation, the ungrammaticality of (2b) can be argued to arise from the subject being in a rightward Spec, TP, and the negative morpheme ti being left-adjointed to T (as argued in Chung 1998). This places the subject outside the c-command domain of sentential negation (see (3)), leaving it unlicensed.

A contradiction becomes apparent when this conclusion is appreciated beside another fact. When sentential negation is supplied by a focused negative phrase, that phrase can be interpreted as the subject (4). Assuming that focused phrases interpreted as subjects surface in the clause-initial position as a result of movement out of Spec, TP (Chung 1998) and that focused negative phrases

1. Examples from elicitation are shown with the speaker’s initials and a numeric ID corresponding to the database entry. Naturally occurring data from the Chamorro Dictionary Project are marked CD and are followed by the dictionary entry from which the example is sourced. Examples from elsewhere are cited normally. Abbreviations: AGR=agreement, EMP=emphatic, IRR=irrealis mood, LK=linker, NEG=negation, NOM=nominative, PL=plural, R=realis mood, SG=singular, UNM=unmarked case, WH=wh-inflection.
2. Even when all other conditions are met for a subject to be indefinite (Chung 1998; 2008; in preparation).
must also be licensed by a c-commanding negation (just like NCIs), we arrive at the contradictory conclusion that subjects are both outside and inside the c-command domain of sentential negation.

(3) CP
   C
   TP
   T'
   SUBJ
   T
   NEG

(4) [Ni h’ g(um)uaiya hit.

not anyone (WH[NOM]AGR)like us

‘Nobody (even) likes us.’ (EDR: 544)

These patterns are explained by an analysis in which interpretable negation features can occur in two places in the extended projection: on T (in which case the vocabulary item ti is left-adjointed to T), or on C. In Chamorro, there happen to be no vocabulary items that realize the negative feature on C (all realizations of C are lexically ambiguous for polarity features), which presents an interpretability problem. In actual use, this problem is solved by assuming affirmative polarity features on C by default unless evidence suggests otherwise. One such case is when a negative DP has been focused. Focused negative phrases are capable of signaling sentential negation because the only way they could have been licensed is if Chamorro contains a high, abstract negative C that could have licensed the negative DP (which I assume occurs as an Agree relation between the negative C (bearing \( \neg \))EG) and the negative DP (bearing \( \neg \)EG, which must be checked), as in Zeijlstra (2008)). Support for the possibility of two independent expressions of sentential negation is provided by the possibility for doubly-negated sentences (5).

(5) Ni un tåtoao ti k(um)åti.
not a person NEG (WH[NOM]AGR)cry

‘Not a one didn’t cry.’ (Chung in preparation, p. 6, ch. 17)

High, abstract polarity features have been proposed for a number of other languages, including those with similar patterns of negative concord (Klima 1964; Ladusaw 1992), and to my knowledge, the possibility of such features existing alongside lower, overt negation in Austronesian languages has not been discussed. The current proposal presents an opportunity for current theories of sentential negation and negative concord licensing to be supported and expanded by findings from an Austronesian language.

**Keywords:** Chamorro, sentential negation, negative concord, agreement, high negation


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3. The assumption that focused negative phrases have the same licensing requirements as NCIs is not an innocent assumption, but their surface-identicality to NCIs and the inability of NCIs to occur in semantically non-negative sentences suggests that focused negative phrases are licensed by some form of sentential negation, even though sentential negation is not overt.
Proto-Austronesian schwa: phonotactic restrictions and weight phenomena throughout Austronesian

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Abstract:
Proto-Austronesian (PAN) vowels are typically referred to as a side note in studies on the reconstruction of PAN and Proto-Malayo-Polynesian (PMP) phonology. As Blust (2013:590) puts it, “The PAN vowels require little discussion. There is universal agreement regarding *i, *u, *e (schwa) and *a”. However, the phonotactic distribution of the four PAN vowels is unequal. While *i, *u, and *a are unrestricted in their distribution, *e (henceforth *ə) was constrained by a number of unique restrictions: 1) *ə was banned from word final position. 2) *ə was banned from initial position in prepenultimate syllables. 3) *ə was underrepresented in initial position of two syllable words. 4) *ə was not used in prefixing or infixing morphology. Such restrictions are expected, as schwa is cross-linguistically subject to phonotactic and rhythmic constraints not found in other vowels (van Oostendorp 2003). Thus, rather than attributing these restrictions to some unknown peculiarity of PAN, this presentation gives a novel explanation for the distribution of PAN schwa as a consequence of its moraic value. It is proposed that *ə had no weight, which had several phonological consequences in both PAN and its various daughter languages, including the emergence of moraic onsets in PMP. Data from a range of Austronesian languages will be provided as supporting evidence of the claims in this presentation. A brief overview follows below.

In final syllables with schwa, the requirement that the syllable be closed is evidence of context-dependent coda weight (as per Rosenthal and van der Hulst 1999) at the PAN or pre-PAN level. An example of final consonants contributing to syllable weight is found in Merap, where schwa in final syllables strengthens codas against phonological change where CODA CONDITION affected word-final consonants (merging them with glottal stop) after *a *u, and *i but not *ə. Another example is Thao, where schwa was deleted unless in a closed syllable (Blust 2013).

Schwa, being weightless, was unable to bear stress, and where schwa appeared in the penultimate syllable, it is argued that regular penultimate stress shifted to the final syllable in both PAN and PMP. Lexical stress, a feature of many languages of the Philippines (Zorc 1972, 1983), is considered an innovation, not a retention from PMP or PAN (following Blust 1997). Rightward stress-shift occurred in the history of multiple Austronesian languages, including standard Malay, Tagalog (as a historical process), Kenyah, Batak, and numerous others. Penultimate Schwa deletion occurred in Thao, Amis, and Chamorro, but not in final syllables, which also suggests stress-shift in PAN and PMP.
PMP exhibited an additional schwa-dependent phenomenon: gemination of the onset of final (stressed) syllables where the penultimate syllable contained schwa. Reconstructing gemination to PMP is supported by diverse evidence in a range of MP languages, including at least Ilokano, Maranao, Bugis, Makassarese, Tae, Mapun, Yakan, Kambera and the majority of the languages of Borneo (Blust and Trussel ongoing, Smith 2017). It is argued that gemination arose through underlying moraic onsets (see Davis 1999, Topintzi 2008, 2010) in the final syllable, which repaired degenerate feet. This claim is supported by the fact that PAN and PMP lacked monosyllabic content words of the shape CV and CVC, which violate both a two-syllable word minimum and a two-mora foot minimum. Words of the shape CəCμVμ however, satisfy both. The significance of moraic onsets for minimal word requirements has been documented in Micronesian languages (Tipintzi 2008 and citations therein), but is also present in western Malayo-Polynesian languages like Kiput where onsets automatically geminate to maintain a two-mora word: ˈləy ‘dry season’ vs əˈləy ‘male’ (Blust 2002:388).

Keywords: Proto-Austronesian, Proto-Malayo-Polynesian, schwa, mora, onsets

References:
Proto-Batanic *L: a clue to the linguistic prehistory of the Philippines
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Abstract:

The Batanic languages are a small group of closely related Malayo-Polynesian languages spoken on several islands in the northern Philippines and southern Taiwan. A top-down comparison of lexical items shows regular sound correspondences between Proto-Malayo-Polynesian (PMP) and the Batanic languages, while a bottom-up reconstruction of Proto-Batanic (PB) phonology reveals that the phonemes inherited directly from PMP do not account for the entire phoneme inventory of PB. Specifically, it is necessary to reconstruct a PB phoneme *L which has no counterpart in PMP.

I compare lexical data from Shigeru, Yamada and Moriguchi (1987), a 600+-item wordlist from four Batanic languages, and identify the correspondence of an alveolar trill /r/ in Yami and Itbayaten with a lateral approximant /l/ in Ivatan and Ibatan. At least 60 lexical items contain this correspondence, including basic vocabulary items such as body parts (‘neck’, ‘chest’, ‘heart’, ‘ribs’, ‘calf’), common adjectives (‘old’, ‘skinny’, ‘dirty’, ‘rough’), basic verbs (‘speak’, ‘pull’, ‘cut’, etc), and nature terms (‘wind’, ‘horn’, ‘tick’, ‘low tide’) (see Table 1). Through straightforward application of the comparative method, I reconstruct a PB phoneme (*L) for this correspondence.

<table>
<thead>
<tr>
<th>PB (author’s reconstructions)</th>
<th>Yami /r/</th>
<th>Itbayaten /r/</th>
<th>Ivatan /l/</th>
<th>Ibatan /l/</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Lagaw ‘neck’</td>
<td>ragaw</td>
<td>ragaw</td>
<td>lagaw</td>
<td>lagaw</td>
</tr>
<tr>
<td>*Lasa ‘cut down’</td>
<td>rasa</td>
<td>rasa</td>
<td>lasa</td>
<td>lasa</td>
</tr>
<tr>
<td>*paLaŋ ‘pull’</td>
<td>paraŋ</td>
<td>paraŋ</td>
<td>palanŋ</td>
<td>palanŋ</td>
</tr>
<tr>
<td>*saLaw saw ‘wind’</td>
<td>sarawsaw</td>
<td>sarawsaw</td>
<td>salawsaw</td>
<td>salawsaw</td>
</tr>
<tr>
<td>*oLoŋ ‘horn’</td>
<td>oroŋ</td>
<td>oroŋ</td>
<td>oloŋ</td>
<td>oloŋ</td>
</tr>
<tr>
<td>*tagLaŋ ‘front’</td>
<td>tagraŋ</td>
<td>tagraŋ</td>
<td>taglaŋ</td>
<td>taglaŋ</td>
</tr>
<tr>
<td>*aLtek ‘calf (of leg)’</td>
<td>artek</td>
<td>artek</td>
<td>altek</td>
<td>altek</td>
</tr>
<tr>
<td>*tawoL ‘heart’</td>
<td>tawor</td>
<td>tawor</td>
<td>tawol</td>
<td>tawol</td>
</tr>
</tbody>
</table>
Although some of these PB reconstructions bear a striking similarity to PMP forms (such as ‘ribs’; PB *tagLaŋ, PMP *tageRaŋ), PB *L does not consistently correspond with any one PMP phoneme. Moreover, the majority of PB forms containing *L do not resemble any PMP reconstructions. Nor is the sound correspondence used to reconstruct PB *L regularly found as a reflex of any PMP phoneme. Table 2 shows that the PMP phonemes which might most plausibly be assumed to be related to PB *L in fact have distinct reflexes from *L in each language.

Table 2: Reflexes of some PMP phonemes in Batanic

<table>
<thead>
<tr>
<th>PMP</th>
<th>Position in word</th>
<th>Yami</th>
<th>Itbayaten</th>
<th>Ivatan</th>
<th>Babuyan</th>
<th>PB</th>
</tr>
</thead>
<tbody>
<tr>
<td>*d, *z, *j, *r</td>
<td>#, C % elsewhere</td>
<td>d</td>
<td>d</td>
<td>d</td>
<td>d</td>
<td>*d</td>
</tr>
<tr>
<td>*R, *y</td>
<td>a a elsewhere</td>
<td>l</td>
<td>y</td>
<td>y</td>
<td>y</td>
<td>*y</td>
</tr>
<tr>
<td>*l</td>
<td>/i %, /C elsewhere</td>
<td>l</td>
<td>l</td>
<td>d</td>
<td>d</td>
<td>*l</td>
</tr>
<tr>
<td>N/A</td>
<td>all</td>
<td>r</td>
<td>r</td>
<td>l</td>
<td>l</td>
<td>*L</td>
</tr>
</tbody>
</table>

It is clear that PB *L must have some source other than direct inheritance from PMP. The most plausible source of PB *L is that it was borrowed into Proto-Batanic from another language. Although the identity of the source language(s) is not clear, the resemblance between some PB reconstructions containing *L and PMP terms with the same meaning suggests an Austronesian source. This hypothesis is congruent with Blust’s (2005) work suggesting that the Philippines has undergone multiple episodes of language extinction since the spread of Austronesian out of Taiwan. The level of linguistic diversity in the Philippines is not as high as would be expected for the length of time that the region has been occupied by speakers of Austronesian languages. This is doubly true of the Batanes, since these islands were likely the gateway out of Taiwan, yet the resident languages are all closely related. Therefore, working towards indentifying the source of PB *L will improve our understanding of the forces that shaped the early history of Malayo-Polynesian.

**Keywords:** comparative method, Philippine languages, historical linguistics

**References:**
Frequency and predictability: how and why do they influence phonological rules?
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University of California, Santa Cruz

Abstract:
It is well established that distributional factors, like frequency and predictability, affect a word's gross phonetic properties. For example, more-frequent words have shorter duration. A variety of mechanisms have been proposed, in production and perception.

Distributional factors are also correlated with whether phonological rules apply or not. This talk presents old and new data on frequency and predictability in Tagalog word-internal and phrasal tapping, and considers what mechanisms are consistent with the data. When it comes to word-sized units, the findings are consistent with a dual-route lexical access model (e.g., Hay 2003), and are not explainable as simple reduction. When it comes to longer units, factors that facilitate speech planning promote rule application (e.g., Wagner 2011).
Emphatically lengthened segments in Siwkolan Amis: An information-based approach

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Abstract:
Background: Amis (a.k.a. Pangcah) is an Austronesian language spoken on the east coast of Taiwan. The aims of this study are to investigate the acoustic properties of the emphatically lengthened segments in the variety of Siwkolan (or, Hsiukuluan in Mandarin Chinese) and to highlight some unique features of the phenomenon in question from cross-linguistic perspectives. Amis is a fixed stress language with no phonemic length distinction in vowels and consonants. Stress regularly falls on the final syllable and is primarily cued by a pitch peak, but stative verbs (roughly equivalent to adjectives in other languages (e.g., Wu 2003); normally prefixed with ma– and suffixed with –aj) bear penultimate stress.

Emphatic lengthening: Stative verbs may undergo emphatic lengthening to express at least two degrees of intensification (i.e., Level 0 (no emphatic), Level 1 (emphatic) and Level 2 (very emphatic)). Emphatic lengthening is primarily expressed via lengthening either the onset or the vowel of the penultimate (stressed) syllable, as in (1) (acute accent = stress).

(1) a. atəkəkaj → atəkkəkaj ‘hard, stiff’ → very hard’ (Consonant lengthening)
   b. tiŋalawaj → tiŋaláawaj ‘clear’ → very clear’ (Vowel lengthening)

In Level 2, it is further observed that these “very emphatic” forms may accompany (i) falsetto (as well as a higher pitch peak), (ii) creaky voice and/or (iii) glottal/epiglottal stop insertion on the penultimate (stress) syllable, too. Due to space limit, detailed demonstrations of the above-mentioned acoustic properties will be provided in conference presentation.

Puzzle: It may not be uncommon to see that (non-lexical) emphatic forms are expressed via lengthening in languages of the world (e.g., Braver et al. 2014, Kawahara and Braver 2014, among others). As a first approximation, the emphatic lengthening phenomenon can be analyzed as a floating mora, to be realized on the penultimate (stressed) syllable. Nevertheless, it is important to note that the contrast in (1) is, typologically speaking, unique in the following respects. Firstly, we found that vowel lengthening plus a F0 peak is used when the target word has a “positive” connotation, e.g., “new”, “bright”, “wide”, “light (as of weight)”, “short”, “cool, breezy”, etc. By contrast, consonant lengthening is used when the target word has a “negative” connotation, e.g., “old”, “dark”, “narrow”, “heavy”, “tall”, “hot”, etc. Given that the length distinction is not phonemic in both vowels and consonants in Amis, it is not so obvious why vowels tend not to undergo lengthening in emphatic forms because in terms of “minimization of articulatory efforts” and “perceptual saliency”, atəkəkaj ‘hard, stiff’, for example, would have been rendered as *atəkəkəkaj, rather than the real emphatic form atəkkəkaj. To some extent, the Amis data in (1a) can be regarded as an instance of “Markedness Reversal”, whereby vowels...
are surprisingly disfavored even though they are more easily lengthened and admittedly more salient in perception. Secondly, cross-linguistically speaking, it is well-known that emphatic forms may be cued by a higher pitch, longer duration, and/or greater loudness. However, one of the novel findings in the present study is that the “very emphatic” forms (Level 2) can also be “enhanced” by falsetto, creaky voice and/or epiglottal stop insertion, suggesting that (relatively marked) non-modal phonation and the like can be invoked to express emphasis. Finally, it is equally remarkable that results of a pilot study show that duration is the major and most reliable cue for different levels of emphasis.

Discussion: The choice between vowel lengthening (1b) and consonant lengthening (1a) may be interpreted as Hume et al.’s (2016) messaged-based approach to markedness in phonology. We can entertain the possibility that since it is phonetically easier to lengthen a vowel, using vowel lengthening for emphasis will result in lower “surprisal” (or Shannon’s information in context, broadly construed). In other words, vowel lengthening is the “default” strategy for emphasis. More importantly, lower surprisal may go hand in hand with positive connotation and regular emphasis (i.e., “not unexpected”). By contrast, it is admittedly more difficult to lengthen a consonant (recall in (1a) that stops can be lengthened as well), so using consonant lengthening for emphasis will result in higher “surprisal.” It is not impossible that higher surprisal is closely related to negative connotation or “utter unexpectedness.”

Conclusion: The Siwkolan Amis data suggest that different semantic categories (i.e., “positive” vs. “negative”) may be emphasized distinctly in phonetic implementation. Aside from F0 peaks, non-modal phonation and/or epiglottal stop insertion, our principal finding is that the choice between consonant vs. vowel lengthening is mediated via (i) phonetic naturalness and (ii) “surprisal” in the signal.

Keywords: Emphatic lengthening, Amis, markedness, phonetic naturalness

References:
Malay verbal reduplication with the \textit{məŋ-} prefix

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Abstract:

Malay is known for having both full reduplication (e.g. \textit{buŋa} ‘flower’, \textit{buŋa-buŋa} ‘flowers’) and nasal substitution when a nasal is followed by a voiceless obstruent (e.g. \textit{məŋ+tari} \rightarrow \textit{mənari} ‘dance’). These two processes interact in verbal reduplication where the \textit{məŋ-} prefix attaches either to the first component of the reduplicated verb, giving it a continuous meaning, or to the second component of the reduplicated verb, giving it a reciprocal meaning. When \textit{məŋ-} attaches to the first component, the copy that doesn’t bear the prefix surfaces with a nasal homorganic to the underlying voiceless stop (e.g. \textit{mənari+nari} ‘dance (continuous)’). When the \textit{məŋ-} attaches to the second component, the copy that doesn’t bear the prefix surfaces faithfully with the underlying voiceless stop (e.g. \textit{tari+mənari} ‘dance (reciprocal)’).

This pattern is difficult to account for under any derivational account that must consider the order of reduplication and \textit{məŋ-} prefixation, and therefore the order of reduplication and nasal substitution. If reduplication happens first, then the non-prefix-ed component always surfaces with the underlying voiceless obstruent, regardless of whether it occurs first or second. If \textit{məŋ-} prefixation happens first, then the non-prefix-ed component surfaces with the homorganic nasal, regardless of whether it occurs first or second. It would seem that resolving this ordering paradox requires an arbitrarily separation of the two prefixations into different operations with different orderings. However, we pursue a simple phonological analysis by involving constraints that are already at play in the language, as shown below.

We propose that the interaction between verbal reduplication and \textit{məŋ-} prefixation is best accounted for in Parallel OT, which takes as its input a morphologically complete form and evaluates the overall phonological well-formedness of candidates over a set of ranked constraints. For our analysis, we adopt a set of constraints for nasal substitution, which we collapse here into a single constraint NASALSUB (see Pater 2001 for full analysis). Additionally, we include two constraints that are necessary to get the correct output for the non-prefix-ed component of the reduplicant; both are independently motivated. These are defined in (1).

(1) Additional constraints (not including constraints for nasal substitution)
   a. IDENT(nasal)-BR: Corresponding segments in the base and reduplicant of the output must have the same [nasal] value
   b. *N[word-initial]: No nasals word-initially
   c. PRESERVE(nasal)-IO: Nasals in the input must be nasals in the output
**IDENT**(nasal)-BR is part of a family of base-reduplicant faithfulness constraints (see McCarthy & Prince 1995 and subsequent works) that is based on the intuition that speakers generally prefer the reduplicant to be faithful to the base from which it was copied; these constraints are commonly invoked to account for other reduplication phenomena. The markedness constraint *N_{[word-initial]}* reflects the observation that Austronesian languages of Southeast Asia have restrictions against nasals in word-initial position (Blust 2013, p.214; Zuraw 2010 for Tagalog).

In our analysis, *N_{[word-initial]}* out-ranks **IDENT**(nasal)-BR such that a correspondence between base and reduplicant is preferred unless it results in a word-initial nasal. **PRESERVE**(nasal)-IO out-ranks *N_{[word-initial]}* to protect nasals that were in the input. This ranking produces the correct output whether *məŋ* occurred on the first or the second reduplicated component, as shown in (2).

(2) Parallel OT analysis of reduplication with *məŋ*-prefix

<table>
<thead>
<tr>
<th></th>
<th>/məŋ1+təari- təari/</th>
<th>PRES(n)-IO</th>
<th>NASALSUB</th>
<th><em>N_{[word-initial]}</em></th>
<th><strong>Id</strong>(n)-BR</th>
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<td>d.</td>
<td>bən1əari-nəari</td>
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<th>/təari-məŋ1+təari/</th>
<th>PRES(n)-IO</th>
<th>NASALSUB</th>
<th><em>N_{[word-initial]}</em></th>
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**Keywords**: Malay, reduplication, *məŋ*-prefix

**References:**
Distinct kinds of tones in Samoan from spell-out and prosodic phrasing

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Keywords: syntax-prosody interface, phonology, prosody, syntax, Samoan

Abstract: It has been empirically observed that a high edge tone (H-) systematically appears at the right edge of the phonological material preceding an absolutive argument in Samoan (Yu 2011, Calhoun 2014). What has remained a puzzle is why this should be, since all other case markers in Samoan are segmental. Yu and Özylıdz (2016) provides evidence that the absolutive high may be related to and come from a poorly understood, “optional” absolutive particle ia, which has a distribution that tracks with the absolutive high. Other recent work has found it illuminating to analyze the absolutive high in the context of the distribution of other edge tones in Samoan (Calhoun 2017, Yu and Stabler 2017). This paper builds on and engages with this work in proposing that: (i) the absolutive high is one among a number of syntactically determined H-s in Samoan inserted in the spell-out of specific, distinct configurations (and not tones that mark prosodic domains), and (ii) there is another distinct class of high (and low) edge tones that come into the syntax-phonology interface not in spell-out, but in marking prosodic constituent domains.

It has been observed that H-’s systematically and invariably occur in Samoan in distinct syntactic configurations: at the right edge of phonological material preceding the absolutive argument and the conjunct in coordination, as well as at the right edge of a fronted argument (Yu 2011, Calhoun 2014, Yu and Stabler 2017). At first glance, what might appear to be the obvious analysis is that these syntactic environments map to the same prosodic domains, e.g., φ-phrases, and a high edge tone marks those prosodic domains. But it is unclear that any reasonable category-free, general syntactic configuration can unify the absolutive, fronting, and coordination configurations where H-’s reliably appear, which would be necessary for a ‘direct syntax’ approach of syntax-prosody mapping. An ‘indirect’ approach fares no better. Under a VP-fronting account of Samoan (Collins 2016), the constituency is [\textsc{vp} V t] S O in default word and Stabler (2017), an H- precedes the subject in pseudo-noun incorporation: [\textsc{vp} V O] H- S. But it’s not the case that an H- reliably appears before the ergative subject, i.e., *[\textsc{vp} V t] H- S O. This basic asymmetry in the distribution of syntactically-conditioned H-’s doesn’t fit the predictions of an indirect theory where H-’s are associated to φ-phrases.¹

Since an account of the H-s via prosodic domain marking is untenable, Calhoun (2017) proposes instead an information structural account: that H-s “mark an information as

¹ Calhoun (2017) makes a similar point for default VSO and scrambled VOS transitive clauses.
incomplete. Typically, this marks the end of a rheme with a following theme. However, H-tones can also mark coordinated information units (p. 37). At the same time, Calhoun (2017) rejects an account where an H- is syntactically conditioned by an absolutive due to two empirical findings: (i) H-s are not (usually) found before post-verbal absolutives in na’o ‘only’ constructions, and (ii) low edge tones (L-s) can also occur in places where H-s occur.

However, I show that these findings in fact, provide favorable evidence for syntactically-determined H-s. An account where an H- is inserted in the spell-out of absolutive case would indeed predict that an H- should always, rather than occasionally, appear preceding an absolutive argument. But in fact, Yu and Özyıldız (2016) show that no case markers can occur under na’o whether segmental or tonal, as shown in (1). This shows that the absolutive H-patterns with absolutive ia and other segmental case markers. But then, why would an H-sometimes appear before post-verbal absolutives under na’o? And why can L-s appear where H-s appear? I propose that the H-s that sometimes appear under na’o, and that alternate with L-s are distinct from syntactically-determined H-s like the absolutive H-: these edge tones mark higher-level prosodic domains such as intonational phrases. The appearance of L-s (and H-s that alternate with them) is sporadic, not predictable by syntactic environment, and accompanied by pauses, as shown throughout pitch tracks in Calhoun (2017) and discussed in Yu and Stabler (2017, Sec. 6). My proposal highlights two related points for the syntax-prosody interface that I’ll discuss further in giving the paper: (i) a tone that is phonetically realized at an edge (e.g., the absolutive H-) doesn’t necessarily mark a prosodic domain edge, and (ii) spell-out is a core aspect of the syntax-prosody interface, too—not all syntax-prosody phenomena are domain-mapping phenomena, see Selkirk (2011, p. 435).

(1) From Yu and Özyıldız (2016): Case marking cannot co-occur with na’o

a. Na’o in ABS subject. Context: Were Melina and Melani bad to the lion?
   na leŋa *H- naʔo *H- Melina i le liona.
   PAST bad ABS only ABS Melina DET SPEC lion
   ‘Only Melina was bad to the lion.’

b. Na’o in ABS object. Context: Did Melina hear the lion and the bird?
   na leŋa Melina *H- naʔo *H- le liona.
   PAST hear ERG Melina ABS only ABS DET SPEC lion
   ‘Melina heard only the lion.’

c. Na’o in ERG subject. Context: Did Melina and Melani hear the lion?
   na leŋa *e naʔo *e Melina H- le liona.
   PAST hear *ERG only *ERG Melina ABS DET SPEC lion
   ‘Only Melina heard the lion.’

d. Na’o in OBL PP. Context: Was Melina bad to the lion and the bird?
   na leŋa H- Melina *i naʔo *i le liona.
   PAST bad ABS Melina *OBL only *OBL DET SPEC lion
   ‘Melina was bad to only the lion.’

More on Kanakanavu Word-level Prosody: Cyclic and Postcyclic Processes
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Abstract:
Since the monumental research on the basic phonology of Kanakanavu in Tsuchida (1976, 2003), there have been studies in recent years aiming at investigating the properties of word-level prosodic prominence in the language. Taking a phonetic glimpse of word prominence in disyllabic, trisyllabic, and quadrisyllabic words, S. Chen and Sung (2016) find that Kanakanavu word-level prosodic prominence is realized phonetically as a normal H-target, which is most productively found on the penultimate syllable, but may occur on the antepenultimate and final syllables as well. They demonstrate that (maximal) $F_0$ serves as the most robust cue in the realization of prosodic prominence in the language, although vowel duration also plays an important role. Taking a phonological perspective on Kanakanavu word-level prosody, H. Chen (2016) characterizes word prominence in the language as “stress”, which is demonstrated to be systematically assigned to the penultimate mora of a word. She proposes an analysis to account for non-penultimate (i.e. antepenultimate and final) prominence patterns, drawing on factors including (i) extrametricality of final echo vowels, (ii) long vowels resulting from monophthongization, (iii) vowel deletion, and (vi) heavy (CVV, CVN) final syllables.

Building on the foundations of previous findings, the present study aims to provide two further contributions to our understanding of Kanakanavu word-level prosodic prominence. On the one hand, the productive patterns observed by S. Chen and Sung (2016) and H. Chen (2016) can be subsumed under a revised analysis that further brings morphology into the picture. Referred to as H-prominence here, word-level prominence realized phonetically as a H-target is systematically assigned to the penultimate mora, but may have non-penultimate surface realizations due to some prominence-sensitive properties of the morphemes involved:

(1) a. prominence-attracting morphemes (e.g. MILD IMPERATIVE ACTOR VOICE -an)
   poʔócipi ‘cook’ (poʔocip- + <i>)
   poʔocipán ‘Try cooking!’ (poʔocip- + -an)

   b. prominence-repelling morphemes (e.g. -kari ‘words/speech’)
   pókari ‘call at’ (po- ‘utter’ + <-kari> ‘words/speech’)
   mákari ‘talk to’ (ACTOR VOICE ma- + <-kari> ‘words/speech’)

Assignment of H-prominence is a cyclic process, which can be evidenced in morphologically related complex words such as kári ‘words/speech’, pókari ‘call at’ (a complex word involving prominence-repelling -kari), and pokarikari ‘speak/utter (words)’ (a complex word involving prominence-repelling -kari and prominence-repelling reduplicant ~kari):
(2) Cycle 1
input: kari > kári > output: kári
Cycle 2
input: po-+ <-kari> > pó-<kari> > output: pókari
Cycle 3
input: pokari+ <-kari> > pokari<-kári> > output: pokaríkari

On the other hand, an additional (but less productive) type of word prominence, referred to as **HL-prominence** here, is proposed. HL-prominence is realized on syllables bearing a phonetically salient HL pitch contour, but does not tap into the underlying morpho-phonological representation of words. Assignment of HL-prominence is analyzed as a postcyclic process, as HL-bearing words are lexically specified regardless of the status or complexity of the morphemes involved. A HL-bearing word (such as umára ‘take (AV)’, for example) may contrast with morphologically related words that nevertheless bear default H-prominence (e.g. si-ára ‘insnmlz-take’, ?ap-ára ‘cau-take’). The status of HL-prominence as a unit of prosodic prominence is supported by two pieces of evidence. First, there are near minimal pairs showing the H vs. HL contrast: makási ‘(say) like this’ vs. makásua ‘(do) like that’; umára ‘take (AV)’ vs. umáva ‘carry (AV)’. Second, rightward prominence shift, a process widely observed in spontaneous speech, is found to affect both H-prominence and HL-prominence as single prosodic units. As can be seen in (3) below, cliticized words may (optionally) trigger prominence shift that moves prosodic prominence to the final syllable of the word, regardless of the type of prominence involved.

(3) a. ivat-á=pa siáni (come-AV,IMP=CONT here) (non-shifted: iváta=pa)
   ‘Please come here!’ (*Snake Hazard, Mu’u Ka’angena*)
   b. kaisísi=cí (river.ceremony=COS) (non-shifted: kaisísi)
   ‘(Time to) perform the river ceremony!’ (*Ceremony Cooking, Paic* Kana*panena*)

**Keywords:** Kanakanavu, word-level prosody, prosodic prominence

**Selected references:**
On the relationship between VSO and VOS word orders

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This paper has two related goals: to analyze the relationship between two verb-initial orders, VSO and VOS, and to compare several ways of deriving extended right periphery of a clause in a verb-initial language.

With respect to the first goal, this paper starts by examining the relationship between two verb-initial orders, VSO and VOS, in the Polynesian language Tongan, as shown below:

(1) Na’e kaukau’i ‘e he ta’ahine ‘a e kulī. \hspace{0.5cm} VSO
    \hspace{0.5cm} PST wash ERG DET girl ABS DET dog
    ‘The girl washed the dog.’

(2) Na’e kaukau’i ‘a e kulī ‘e he ta’ahine. \hspace{0.5cm} VOS
    \hspace{0.5cm} PST wash ABS DET dog ERG DET girl
    ‘The girl washed the dog.’

In comparing two possible derivations of VOS, the paper shows that the analysis of VOS as derived from VSO via A-scrambling (as proposed in Otsuka 2005) is untenable. Instead, it argues for an alternative analysis according to which Tongan VOS is a structure with a base-generated righthand topic. In principle such a derivation can be achieved by different mechanisms; the paper compares several analyses leading to the appearance of a righthand topic and demonstrates that the analysis in terms of distributed (scattered) deletion (Fanselow & Cavar 2001) is best in capturing the facts of Tongan.

On a theoretical level, this paper offers new arguments against rightward movement as a possible operation in syntax, thus promoting a more restrictive syntactic model (cf. Abels & Neeleman 2012). It then compares several mechanisms of topicalization in the left periphery and topicalization on the right periphery of a clause; the two types of topics demonstrate recurrent cross-linguistic differences in terms of independence, case connectivity, and prosodic prominence (Tongan instantiates these differences quite clearly). The paper suggests that these differences follow from differences in the underlying syntax and semantics.

On a methodological level, this paper relies on the combination of segmental and prosodic evidence in support of a particular account and considers new ways of adducing prosodic facts in support of syntactic analyses.
Pseudo Noun Incorporation in Tagalog: Prosody and Structure
Michael Barrie and Gyumin Kim
Sogang University

Abstract:
Nutshell: We present prosodic evidence for reduced structure in Tagalog pseudo noun incorporation (PNI). Following Starr (2015), we observe that Tagalog has PNI constructions similar to those described for Niuean by Massam (2001). We depart from Starr, however, in that we have also observed instances of PNI that include adjectives. Furthermore, we have adopted Richards’ (2017) analysis for the prosody of Tagalog declaratives. We show that instances of PNI do not involve pitch reset, whereas full DPs typically do involve pitch reset. We propose that nominals that have undergone PNI have a reduced structure, despite the presence of Case. Specifically, we propose that PNI nominals lack a DP and NumP. Semantically, the lack of NumP gives rise to the general number reading discussed by Starr. We propose also, following Kratzer and Selkirk (2007) and Kahнемуйипур (2009) that phase structure correlates with prosodic structure. Specifically for the Tagalog data, we propose that the lack of the DP phase correlates with the lack of pitch reset. The conclusions here impinge on Match Theory in general (Selkirk 2009; Selkirk 2011), in that the prosodic properties of PNI in Tagalog are isomorphic with syntactic structure. Our results also broadly agree generally with those of Starr in that PNI, even within Austronesian, is not a unitary phenomenon.

Background: Starr (2015) reports that a construction similar to PNI in Niuean is found in Tagalog. She reports that ng-marked objects can receive a general number reading, while ang-marked objects cannot. (Ng- and ang- are considered Case markers in Tagalog.) The following examples will inform the discussion. In the first two examples, with the ng-marked object, the object can be either plural or singular. We found, contra Starr, that the presence of the adjective did not prevent the general number reading from holding, although there was some speaker variation on this point. In line with Starr, however, we found that the ang-marked object did not have a general number reading.

(1) Bumili ng libro ang babae
   NOM.bought NG book ANG woman
   ‘The woman bought a book/some books.’

(2) Bumili ng pula-ng libro ang babae
   NOM.bought NG red-LNK book ANG woman
   ‘The woman bought a red book/some red books.’

(3) Binili ang libro ng babae
   ACC.bought ANG book NG woman
   ‘The woman bought a book/*some books.’

In light of Starr’s original observations, along with Clemens’ (2014) discussion of the prosody
of Niuean PNI and Richards’ (2017) analysis of Tagalog prosody, we undertook an exploratory experiment to examine the prosodic properties of PNI in Tagalog.

**Methodology:** Seven native speakers from Tagalog from Manila, living in Seoul, were asked to read a list of 36 sentences (12 test sentences plus 24 fillers, randomly ordered). The data were collected using Praat in a sound-proof room. Full aspects of the methodology will be provided in the presentation, but PNI was tested for Case and the presence or absence of adjectives, as described above. After the sentences were recorded we conducted a follow-up question to test for general number. For each test sentence, we showed a picture of someone buying a single book or red book and a picture of someone buying several books or red books. The speakers were asked if either picture matches the test sentence or if only one of the two pictures matches the test sentence.

**Results:** We found that a general number reading was available for ng-marked objects regardless of the presence of an adjective, with some speaker variation as mentioned above. We found the intonation pattern corresponded generally with that that Richards (2017) found. Interestingly, we noticed that pitch reset was not found in the onset for object with general number (ng-marked objects).

**Discussion:** We adopt the general discussion of Starr and Richards for PNI and prosody in Tagalog, with the small differences noted above. We propose that PNI nominals in Tagalog are structurally deficient and project only as far as nP. As an nP, the nominal is still phrasal, and has the same prosodic properties of a phrase as discussed by Richards. Namely, it still has a L* H pitch accent. Since the DP phase is absent, however, we propose that this correlates with the lack of pitch reset at the beginning of the nominal. We conclude that phasal structure plays a role in determining the intonational contours of Tagalog PNI and non-PNI constructions and in human language more generally.

**Keywords:** pseudo noun incorporation, prosody, Match Theory, Tagalog

**References:**
KINDS, CLASSIFIERS AND DEFINITENESS IN INDONESIAN: TWO GRAMMARS IN ONE

Carol-Rose Little & Ekarina Winarto

It is usually thought that languages with numeral classifiers do not have overt definite articles (e.g., Chierchia (1998)). However, Indonesian provides us with a counter example: it is a classifier language and it has a definite article -nya, exemplified in (1).

(1) \textit{Anjing-}nya menggonggong.

\textit{dog-DEF bark}

(i) ‘The dog(s) are barking.’

(ii) Not: ‘Dogs are barking.’

Indonesian exhibits properties from two systems: it has a definite article on the one hand (like English), but and numeral classifiers on the other (like Mandarin). In Indonesian, numeral classifiers are ungrammatical with the definite article, but bare nouns can still have a definite interpretation. We add to the novel empirical findings from Winarto (2016) on definiteness in Indonesian, and provide new data on argument formation in Indonesian. This data pushes us to rethink the Blocking Principle from Chierchia (1998), which favors overt type shifting operators (like a definite article) over covert ones. In Indonesian, at least, overt or covert type shifting is optional.

**Background.** Much research has concentrated on the existence of numeral classifiers in a language and its subsequent lack of definite articles. Mandarin, the classic example, has numeral classifiers but no overt exponent of ‘the’. Unlike in English where individual entities need the definite article ‘the’, Mandarin allows bare nouns to serve as arguments. However, recent work by Jiang (2017) on Nuosu Yi provides a counterexample to this generalization. Nuosu Yi is a classifier language with an overt definite article \textit{su}. In Nuosu Yi, the overt definite article cannot combine directly with a noun. Instead, bare nouns in Nuosu Yi must first combine with a classifier before combining with the definite article.

While Indonesian, like Nuosu Yi, has both numeral classifiers and a definite article -nya, it exhibits a striking typological difference: the definite article in Indonesian must combine directly with nouns. This is unlike in Nuosu Yi where the noun must combine with a classifier before combining with the definite article. In Indonesian, when the definite article -nya is present, it is ungrammatical for a numeral classifier to occur.

The definite article -nya. The NP plus the article -nya pattern in the same manner we would expect of individual terms. Based on diagnostics from Löbner (1985), where a definite term is associated with a presupposition of uniqueness, we would expect if \( P \) is true for a term \( t \), then \( \neg P \) cannot be true for the term \( t \). Indeed, \textit{anjing-nya} ‘the dog’ creates a unique individual (2a), but \textit{anjing itu} ‘that dog’ does not (2b), paralleling the acceptability of the English translations in (2).

(2) a. \# \textit{Rina suka anjing-nya, tapi tidak suka anjing-nya}.

\ Rina like dog-DEF, but NEG like dog-DEF

\# ‘Rina likes the dog but doesn’t like the dog.’

b. \textit{Rina suka anjing itu, tapi tidak suka anjing itu}.

\ Rina like dog that, but NEG like dog that

‘Rina likes that dog but doesn’t like that dog.’

Furthermore, -nya is used in bridging contexts, like the product-producer one in (3).

(3) \textit{Budi baru membeli sepasang sepatu. Designer-nya terkenal di Paris}.

\ Budi just buy pair shoes designer-DEF famous in Paris

‘Budi just bought a pair of shoes. The designer is famous in Paris.’ (Winarto 2016; 227)
Based on evidence like in (2a) and (3), we take -nya be a definite article.

**Bare nouns.** Like in Mandarin and Nuosu Yi, bare nouns in Indonesian can get a kind interpretation (4a), generic interpretation (4b), indefinite and definite interpretation (4c).

(4)  

<table>
<thead>
<tr>
<th>a.</th>
<th>b.</th>
<th>c.</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Kucing sudah punah.</em></td>
<td><em>Anjing menggonggong.</em></td>
<td><em>Saya melihat mobi.</em></td>
</tr>
<tr>
<td>cat</td>
<td>dog</td>
<td>I</td>
</tr>
<tr>
<td>PRFV</td>
<td>bark</td>
<td>see</td>
</tr>
<tr>
<td>‘The cat is extinct.’</td>
<td>‘Dogs bark.’</td>
<td>(i) ‘I saw a car/cars.’</td>
</tr>
<tr>
<td>(ii) ‘I saw the car(s).’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Furthermore, bare nouns in Indonesian exhibit expected scopal properties with negation taking wide scope over the existential operation (5).

(5)  

*Saya tidak melihat mobil.*  
I  NEG  see  car 
(i) ‘I didn’t see cars.’  
(ii) Not: ‘I didn’t see certain cars.’ 

**Classifiers in Indonesian.** Like Mandarin, Indonesian has a set of numeral classifiers. Classifiers are often omitted in colloquial speech, but frequently appear with the numeral ‘one’ (Winarto 2016). However, prenominal classifiers may never occur with -nya, as shown by the ungrammaticality of the human classifier *orang* with -nya in (6).

(6)  

*Dua (*orang) presiden-nya baru mendarat di Soekarno-Hatta.*  
two (*CL) president-DEF just landed PREP Soekarno-Hatta.  
‘The two presidents just landed at Soekarno-Hatta (airport).’  
(Winarto 2016; 232)

**A new typology.** Before recent work by Jiang (2017), it was thought classifier languages could not have definite articles. However, with new work on Nuosu Yi, and now Indonesian, we know this is not the case: classifier languages can have overt definite articles. Indonesian provides the missing gap in classifier languages: it has a definite determiner that can combine directly with a noun.

**Theoretical implications.** The data from Indonesian call into question whether Chierchia (1998)’s Blocking Principle plays a role in this language. Roughly, the Blocking Principle states that if there is a overt definite article in a language, it must be used to type shift predicates to object-level individuals (like in English). But if no overt definite article exists, covert type shifting operations are allowed (like in Mandarin where bare nouns can be definite). Indonesian has two mechanisms at work: bare nouns can be definite, and nouns can be definite with the overt definite article -nya. In essence, there is optionality for argument formation in Indonesian. To our knowledge, there is no indication as to which option is preferred: covert typeshifting (as in the bare noun cases) or overt type shifting (with -nya). Thus, Indonesian presents empirical challenges for the Blocking Principle as it exhibits both overt and covert type shifters. We explore a possible analysis for Indonesian where nouns are underspecified for type and via type shifting operations can freely combine with classifiers or the definite article.

We conclude with some remarks on how the definite article -nya developed syntactically from its historical origins as the third person possessive.

A presentational construction in Indonesian

Carly J. Sommerlot
University of Texas at Arlington

Abstract:

Introduction. One productive and increasingly more frequent suffix in Indonesian is -nya. This suffix can attach to nouns, verbs, and adjectives, providing a variety of different syntactic functions, which include functioning as a third person pronoun, a definite marker, a nominalizer, and marking evidentiality (Englebretson 2003, Grangé 2015, Yap 2011, and Arka 2011). In addition to these functions, -nya also occurs with intransitive verbs that are prefixed with the (intransitive) prefix ber-. Interestingly, in these the verb must occur sentence-initially:

(1) Ber-kelahi-nya mereka di sekolah
    BER-fight-NYA 3PL in school
    ‘They fight at school’

(2) *Mereka ber-kelahi-nya di sekolah
    3PL BER-fight-NYA in school
    ‘They fight at school’

This co-occurrence of ber- and -nya has not been previously discussed in the literature. In this talk, I argue that sentences like (1) are analogues in Indonesian of the presentational-there construction in English described by Aissen (1975).

(3) There ran out of the bushes a grizzly bear.

Data. Aissen identifies certain properties associated with presentational-there constructions: (i) The subject is demoted to a post-verbal position; (ii) The construction is compatible with certain auxiliaries, but incompatible with negation; (iii) The construction is not generally possible in embedded clauses; and (iv) the constructions requires not just a subject and verb, but additional information in the form of a locative or temporal phrase. Each of these properties are attested for the verb initial ber-V-nya constructions like (1). Property (i) is exemplified by comparing examples (1) and (2). Properties (ii)-(iv) are illustrated by the following data:

(ii) Compatibility with auxiliaries, but not with negation:

(4) a. Sedang/Sudah berlarinya saya ke hutan.
    PROG PERF run.NYA 1SG in forest
    ‘I am running/have run through the forest’

b. *Tidak berlarinya saya ke hutan.
    NEG run.NYA 1SG in forest
    ‘I did not run through the forest’

(iii) Impossible in embedded contexts:

(5) *Saya [vp kira [cp/tp berhentinya mereka di rest area]].
    1SG think stop.NYA 3PL at rest area
    ‘I think that they stopped at a rest area’

(iv) Require “additional information”, in the form of an adjunct phrase:

(6) a. Berhentinya kami beberapa kali.
    stop.NYA 1PL some time
    ‘We stopped several times’

b. *Berhentinya kami.
    stop.NYA 1PL
    ‘We stop’
**Analysis.** These observations suggest that verb initial *ber-V-nya* sentences in Indonesian functions analogously to the presentational-*there* construction in English. Given these parallels, I propose that the verb initial *ber-V-nya* sentences are also syntactically parallel to presentational-*there* sentences in that they involve an expletive subject (null, in Indonesian) and a VP with in-situ arguments and adjuncts:

(7) \[ TP \ \text{Exp} \ [v \ [vP \ \text{ber-V-nya} \ \text{DP}] \ [XP]] \]

According to this analysis, the verb initial order of sentences like (1) follows from the proposed presence of a null expletive subject. This analysis of verb-initial word order differs in important ways from Chung (2008)’s analysis of verb-initial word order, as in (8), attested in some dialects of Indonesian. Chung’s analysis of the word order in (8) posits a derivation involving fronting of a VP to a position to the left of a subject in [Spec, TP].

(8) a. \[ \text{FP} \ \text{Sudah} \ [vP \ \text{menyewa} \ \text{kamar} \ [TP \ [\text{DP} \ \text{Mas Jon…}]]] \]

‘John has rented a room by now’

I argue that, while likely a valid analysis of VP-initial sentences like (8), verb-initial *ber-V-nya* sentences like (1) are not derived by VP-fronting, but rather are the result of a null expletive subject, as sentences like (8) are specific to only some dialects of Indonesian and these may not be the same as those that accept verb-initial *ber-V-nya* constructions such as (1).

**Conclusion.** These novel verb-initial *ber-V-nya* sentences offer insight into not only a previously undiscussed function of -*nya*, but the co-occurrence of *ber-* and -*nya*, two poorly understood affixes. Furthermore, the required fronting in these constructions necessitate a new analysis for verb-initial sentences in Indonesian, of which I have argued for a null expletive. This data has implications for analyses of clause structure in Indonesian and suggests that morphology may play a role in triggering non-canonical word order.

**Keywords:** morphology, syntax, Indonesian, presentational, clause structure, verb-initial

**References:**


Poster Session

Day 2 (13:20-14:20)
Venue: 4th Floor Poster Hall
Overview • Chamorro (Austronesian, Marianas) exhibits a nominalizing process of reduplication forming the agentive forms of verbs (Topping & Dungca, 1973). Contrary to other reduplicative processes of Chamorro, agentive reduplication appears to have a static vowel in the reduplicant that does not reflect a ‘pure copy’ tendency exhibited by the progressive (1).

\[(1) \quad \text{verb} \quad \text{agentive} \quad \text{gloss} \quad \text{verb} \quad \text{progressive} \quad \text{gloss} \]
\[
\begin{array}{ccc}
[b\acute{e}ndi] & [b\acute{e}\acute{b}endi] & \text{‘seller’} \\
[t\acute{u}\grave{gi}?] & [t\acute{u}\grave{u}\grave{gi}?] & \text{‘writer’} \\
\end{array}
\]

\[(2) \quad \text{verb} \quad \text{agentive} \quad \text{gloss} \]
\[
\begin{array}{ccc}
t\acute{o}\grave{ktsa}? & [t\acute{t}\grave{o}\acute{ktsa}?] & \text{‘stinger’} \\
g\acute{w}\acute{o}\grave{l}\grave{u} & [g\acute{w}\acute{w}\acute{g}\acute{w}\grave{a}\grave{l}\grave{u}] & \text{‘(good) farmer’} \\
\end{array}
\]

Descriptively, the agentive reduplicant is a coda-less syllable (maximally CCV) which copies the initial onset of the word, with the vowel of the reduplicant exhibiting fixed segmentism. The vowel is [i] if the following vowel is mid or high, and [a] if the following vowel is low (low vowels neutralize to [a] outside of primary stressed syllables (Chung, In Progress)) (2).

Based on data from the database for the revised Chamorro-English Dictionary, I argue that the fixed segmentism in the reduplicant is the result of The Emergence of the Unmarked (TETU) consistent with phonotactic restrictions on vowels in Chamorro (McCarthy & Prince, 1994). I consider, but ultimately dismiss, two other hypotheses: (i) epenthesis of a static vowel in the reduplicant (based on typological evidence from Alderete et al. (1999)), and (ii) the vowel as an independent morpheme with a C reduplicant (based on argumentation by Zukoff (2017)). The vowel phonotactics and morphology of Chamorro help rule out these alternatives.

Background • Crucial to this analysis is the vowel inventory and distribution in Chamorro. Chamorro has six phonemic vowels with no central vowels: \{i, u, e, o, a, n\}. Mid vowels only occur in closed stressed syllables in the majority of indigenous roots; loan words are an exception to this (Chung, In Progress). Back vowels are the only [+round] vowels in the language, suggesting an aversion to round vowels more generally (Kaun, 1995). These facts suggest that the distribution of /i/ and /a/ in Chamorro is clearly more expansive than other vowels.

Analysis • General markedness constraints coupled with Input-Output and Base-Reduplicant faithfulness produce a TETU effect which accounts for the vowel quality in the reduplicant (7).

\[(3) \quad \text{NOROUND - Assign one violation for every vowel with the feature [+round]} \]
\[(4) \quad \text{NOMID - Assign one violation for every mid ([-high,-low]) vowel} \]
\[(5) \quad \text{IDENT-IO-V - Assign one violation for every difference in feature values between a segment in the Output and its corresponding segment in the Input} \]
\[(6) \quad \text{IDENT-BR-V - Assign one violation for every difference in feature values between a segment in the reduplicant and its corresponding segment in the Base}\]

\[(3) \text{ de Lacy, 2006; (4) Beckman, 1997; (5) and (6) McCarthy & Prince, 1994} \]

\[\text{1 All data transcribed in IPA by author and retrieved from the revised Chamorro-English Dictionary database.}\]
A TETU effect may be observed in the emergence of [i] in the stressed open syllable of the reduplicant. This effect is achieved through the ranking of NOMID >> IDENT-BR-V and NOROUND >> IDENT-BR-V. Changing material in the stem to remove violations of markedness and BR-faithfulness is ruled out through the undominated constraint IDENT-IO-V. Forms with low vowels surface as [a] (rather than [i]) in the reduplicant due to BR faithfulness (8). This analysis is both consistent with the standard schema for TETU effects in reduplication, and is in line with the restrictions on the occurrence of mid vowels in Chamorro.

**Alternatives** · The alternative of an epenthetic segment in the reduplicant relies on the theory that a default epenthetic vowel is inserted, and then harmonizes with the following vowel in the stem. Unfortunately, this alternative relies on the gratuitous epenthesis of a vowel when there is already the mechanism of Base-Reduplicant identity that accounts for the vowel and the consonant in the reduplicant. In this way, the epenthetic segment theory would require additional unnecessary machinery to account for the reduplicant. The independent morpheme hypothesis fails to be parsimonious with the already present CV reduplication in the language. This hypothesis also requires either allomorphy or vowel harmony to account for the presence of both [i] and [a] in the prefix. Allomorphy would appear to overcomplicate the generalization, and vowel harmony would require a very suspect notion of ‘partial underspecification’ of the vowel in the prefix.

**Implications** · While superficially agentive reduplication shows evidence of fixed segmentism, I argue that the vowel is determined by a TETU effect consistent with the phonotactics of Chamorro. The differing forms of the agentive and progressive reduplicants suggest a derivational versus inflectional contrast, providing a possible theory behind the difference in forms. This phenomenon both parallels and contrasts attested patterns of fixed segmentism in reduplication (Alderete et al. 1999), and provides more evidence in support of BR correspondence more generally.

**Keywords**: reduplication, TETU, fixed segmentism, OT, Chamorro

wo Types of Prepositional Expression in Northern Paiwan: Noun Incorporation vs. Non-Noun-Incorporation
Chunming Wu
Minnan Normal University

Abstract:

It is shown in the literature that expressions interpreted as prepositions or prepositional phrases in English mostly surface as verbs or verb phrases in Northern Paiwan, an Austronesian language spoken in Southern Taiwan (Wu 2004). Based on the previous findings, this study probes into the syntactic structures and operations of prepositional expressions in Northern Paiwan. It shows that prepositional expressions in Northern Paiwan mainly involve two types of morpho-syntactic construction: Noun Incorporation (NI) vs. Non-Noun-Incorporation (Non-NI). Spatial (motion/location/path) verbs are associated with both lexical, as in (1a-b) and syntactic noun incorporations, as in (1c-d). In the lexical type, a bare noun combines with the host verb, giving rise to a complex verb which can be inflected for voice/aspect, be causativized and attract pronominal clitics as in (1a-b) (cf. Mithun 1984). In the syntactic type, a bare noun along with its ‘case marker’ can all be incorporated into the verb, yielding an agglutinating-style scenario, as in (1c-d) (Wu and Chang 2005, cf. Baker et al. 2005, Barrie and Mathieu 2016).

(1) a. na-i-suimun=anga=(a)ken
   PRF-be.in/at.INTR-Suimun=COS=1S.ABS
   ‘I have already been in Suimun.’

b. uri=ku-p-i-tapav-en  a  ku-kava
   IRR=1S.ERG-CAUS-be.in/at-barn.house-TR  ABS  1S.GEN-clothes
   ‘I will put my clothes in the barn house.’

c. na=s<em>a-tjay-palang=anga=(a)ken
   PRF=be.towrds<INTR>-OBL-Palang=COS=1S.ABS
   ‘I have been to Palang’s place.’

d. uri=ku-pa-sa-tjay-palang-en  a  ’acilay
   IRR=1S.ERG-CAUS-be.towards-OBL-Palang-TR  ABS  stone
   ‘I will move the stone to Palang’s place.’

On the other hand, prepositional verbs like masa ‘be for’ and patjara ‘be about’ do not incorporate bare nouns or case-marked nouns to form NI verb complexes, as in (2a-b).

(2) a. *na-masa-kakeDian=(a)ken
   PERF-be.for.INTR-children=1S.ABS
   Intended: ‘I was for children.’

b. *patjara-tua-cawcaw=anan
   be.about.INTR-OBL-people=DUR
   Intended: ‘It is still all about the people.’

Moreover, NI differs from Non-NI in the following two aspects. First, pied-piping is attested in
NI construction rather than Non-NI construction. The NI phrase in second predicate position and the main predicate mangtjez can swap positions without affecting grammaticality and meaning, as in (3a-b). However, permutation is not allowed for Non-NI construction as in (4a-b).

(3) a. mangtjez a k<em>asi-tua-pana timadju
    come.INTR LNK be.from<INTR>-OBL-river 3S.ABS
    ‘He came from the river.’

b. k<em>asi-tua-pana a mangtjez timadju
    be.from<INTR>-OBL-river LNK come.INTR 3S.ABS
    ‘He came from the river.’/Lit. ‘From the river he came.’

(4) a. masengeseng a masa tua kakeDian timadju
    Work.INTR LNK be.for.INTR OBL children 3S.ABS
    He worked for the sake of the children.

b. *masa-tua-kakeDian a masengeseng timadju
    be.for.INTR -OBL-children LNK work.INTR 3S.ABS

Second, the incorporated noun cannot undergo wh-extraction from NI construction, as shown in (5a-b), where the wh-element must stay in-situ in NI construction. By contrast, the wh-extraction is feasible in Non-NI construction, as in (6b).

(5) a. vaik=(e)sun a s<em>a-tjay-ima
    go.INTR=2S.ABS LNK be.towards<INTR>-OBL-who
    ‘Whose place did you go to?’

b. *timai a [DP[CP_{t} [TP[vP_{t} t_{i} su-v<in>aik-an a [VP_{intr} s<em>a t_{i} ]]]]]
    who ABS 2S.ERG-go<PRF>-LA LNK be.towards<INTR>

(6) a. mare-aivu=amen a patjara tjay ima
    REC-talk.INTR=1PL.ABS LNK be.about.INTR OBL who
    ‘Who did we talk about to each other?’

b. timai a [DP[CP_{t} [TP[vP_{t} t_{i} tja-pare-aivu-en a [VP_{intr} patjara t_{i} ]]]]]
    who ABS 1PL.ERG-REC-talk-TRLNK be.about.INTR
    ‘Who did we talk about to each other?’

**Keywords:** Northern Paiwan, noun incorporation, incorporated noun


Possessor raising and adversity in Tagalog
Yining Nie
New York University

Abstract: This paper relates external possession and adversity constructions in Tagalog, both of which involve a possession relation between an affected pivot argument and the theme argument of a Locative Voice-marked (LV) verb. I propose that in external possession and adversatives, the possessor raises from a DP-internal position to the specifier of a low applicative head, spelled out by LV (Rackowski 2002; Aldridge 2004). I also point out the incompatibility of adversity readings with agents in Tagalog and provide an analysis based on the licensing properties of Voice heads.

External possession. In Tagalog internal possession (1a), the possessor bata ‘child’ and possessee buhok ‘hair’ form a single theme pivot argument of the Patient Voice (PV) verb, behaving as a constituent for e.g. topicalisation, and the possessor ‘child’ is marked ng (=genitive). In external possession (1b), the possessor and possessee do not form a constituent, and the possessor is the ang-marked (=nominative) pivot argument of a LV verb. External possessors are interpreted as ‘affected’ in some way that internal possessors are not (Ramos 1974). External possession are thus akin to double object constructions (DOCs), which also employ LV and convey transfer of possession of the theme to the pivot argument. This evidence is consistent with analyses of external possession and DOCs as involving low applicatives, which relates one DP to another via possession (Pylkkänen 2008; Myler 2016; Wood & Marantz 2017). I assume that while the possessor is marked the pivot in (1b), the agent is nonetheless the structural subject of the clause.

(1) a. G<in>upit ko [ang buhok ng bata].
   <PV.PERF>snip 1SG.NG ANG hair NG child
   ‘I cut the child’s hair.’
   Internal possession

b. G<in>upit-an ko [ng buhok] (kahapon) [ang bata].
   <PV.PERF>snip-LV 1SG.NG NG hair yesterday ANG child
   ‘I cut the child’s hair (yesterday).’
   External possession

Adversity constructions. A parallel contrast is found between (2a), where the possessor remains internal to the theme pivot DP, and (2b), where the possessor is syntactically external to the theme and functions as the pivot argument on its own. (2b) additionally conveys the meaning that the speaker is adversely affected by their car breaking down. The affected argument is both the pivot and structural subject of the clause. As in Japanese (Pylkkänen 2008; Wood & Marantz 2017), the adversity construction in Tagalog is only available for verbs that exhibit transitivity alternations.

(2) a. Na-sira [ang kotse ko].
   AIA-break ANG car 1SG.NG
   ‘My car broke down.’
   Internal possession

b. Na-sira-an [ako] [ng kotse].
   AIA-break-LV 1SG.ANG NG car
   ‘My car break down on me (and I suffered).’
   External possession + Adversity

Surprisingly then, given its use of the AIA prefix, adversity constructions cannot take agents; compare the adversity
reading of (3a) with the AIA reading of (3b), which also loses the external possession interpretation. Thus the presence of an AIA agent disrupts both external possession and the adversity reading, suggesting that the adversity interpretation is dependent on external possession.

(3) a. Na-putul-an ng lubid ang bata.
   AIA-cut-LV NG rope ANG child
   ‘The child’s rope snapped on him (and he suffered).’ External possession + Adversity

b. Na-putul-an ko ng lubid ang bata.
   AIA-cut-LV 1SG.NG NG rope ANG child
   ‘I managed to/accidentally cut some rope for the child.’

Proposal. I propose that external possessors first merge internally to the theme DP and raise to the specifier of a low applicative head (LowAppl) where they receive an affected interpretation (Ramos 1974), as shown in (4a). The possessor is licensed and assigned case (shown with dashed line) in this position by PV Voice. LowAppl licenses the theme and is spelled out by the LV suffix. Crucially, the affectedness of the external possessor constitutes not-at-issue meaning (Bosse et al. 2012; Bruening & Tran 2015), suggesting that no additional thematic role is assigned in the syntax; this supports an analysis of possessor raising to LowAppl rather than HighAppl (e.g. Deal 2013). My proposal also relates external possession and other LowAppl constructions, e.g. DOCs.

Adversity constructions also involve possessor raising (4b). However, adversity constructions require the AIA affix instead of PV. I propose that AIA Voice cannot license the raised possessor; instead, T licenses the possessor. Recall that the presence of an AIA agent is incompatible with external possession and the adversity reading (3b). An agent merged in Spec-VoiceP would be more local to T than the possessor is and would thus intervene, blocking the licensing relation between T and the possessor. Assuming that all nominals must be licensed, the unlicensed possessor would lead the derivation to crash. This approach correctly predicts that in the presence of an AIA agent, neither external possession nor the adversity reading survives. My approach lends support to the possessor raising analysis of external possession (Keenan 1972; Landau 1999; Deal 2013) and provides further insight into verbal morphology and nominal licensing in Tagalog and adversity constructions cross-linguistically (Pylkkänen 2008; Bosse et al. 2012; Deal 2016).

(4) a. External possession (1b)  

b. Adversity construction (3a)
Ambiguity effects on case interpretation among Tagalog children
Ivan Paul Bondoc¹, William O’Grady¹, Kamil Deen¹, Nozomi Tanaka²
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Abstract:
The case marking system of Tagalog carries quite different types of information for pronouns compared to nouns. In particular, whereas certain instances of pronominal case directly indicate thematic roles in basic transitive clauses, nominal case typically does not work this way. Drawing on experimental data, we show that this difference directly impacts children’s ability to interpret transitive sentences.

Tagalog has a system of verbal affixation that selects one argument, often called the pivot, as prominent. In simple transitive sentences, the agent voice (AV) selects the Agent as the pivot, while the patient voice (PV) selects the Patient as the pivot. This system of voice marking is supplemented by case marking, with a two-way distinction for common nouns in transitive clauses.

Table 1. Nominal case markers in Tagalog

<table>
<thead>
<tr>
<th>Voice</th>
<th>Case on agent argument</th>
<th>Case on patient argument</th>
</tr>
</thead>
<tbody>
<tr>
<td>AV</td>
<td>aŋ [pivot]</td>
<td>naŋ</td>
</tr>
<tr>
<td>PV</td>
<td>naŋ</td>
<td>aŋ [pivot]</td>
</tr>
</tbody>
</table>

A key feature of this system is that the case markers cannot identify thematic relations on their own: either case prefix can appear on an agent or a patient, depending on the choice of verbal suffix.

The case marking system for pronouns works somewhat differently, as illustrated below.

Table 2. Third person singular personal pronouns in Tagalog.

<table>
<thead>
<tr>
<th>Voice</th>
<th>Agent argument</th>
<th>Patient argument (animate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AV</td>
<td>siya [pivot]</td>
<td>sa kanya</td>
</tr>
<tr>
<td>PV</td>
<td>niya</td>
<td>siya [pivot]</td>
</tr>
</tbody>
</table>

A crucial feature of this system is that the pronouns *niya* and *sa kanya* are unambiguous with respect to thematic role association: the former unequivocally signals an agent and the latter a patient.

In order to see whether this difference is relevant to the acquisition of Tagalog as a first language, we conducted a picture selection task with 14 children (age range 3;10-6;10). The task had two stimuli sets: a pronoun set in which sentences included one pronominal argument and one nominal argument, and a lexical NP set in which sentences contained two nominal arguments. Figs 1 and 2 illustrate an example from the pronoun set, with Fig 1 introducing the character: “Here is a girl. The next pictures are about her.” This was followed by the test sentence, as indicated in the caption (Fig 2). Fig 3 shows an example of an item in the lexical NP set.
Five transitive verbs were used for each set, and were crossed in terms of voice and word order. The pronoun set was administered before the lexical NP set. Table 3 summarizes our results.

Table 3. Accuracy rates for children in the two tasks.

<table>
<thead>
<tr>
<th>Pronominal Pattern</th>
<th>Nominal Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>AV - siya - naŋ Patient</td>
<td>AV - aŋ Agent - naŋ Patient</td>
</tr>
<tr>
<td>AV - sa kanya - aŋ Agent</td>
<td>AV - naŋ Patient - aŋ Agent</td>
</tr>
<tr>
<td>PV - niya - aŋ Patient</td>
<td>PV - naŋ Agent - aŋ Patient</td>
</tr>
<tr>
<td>PV - siya - naŋ Agent</td>
<td>PV - aŋ Patient - naŋ Agent</td>
</tr>
</tbody>
</table>

The results reveal that the children performed significantly better on two of the pronominal patterns compared to their nominal counterparts—the *sa kanya* pattern and the *niya* pattern. Crucially, these two patterns contain pronouns that are unambiguously associated with a particular thematic role (agent and theme, respectively). In contrast, the two patterns that contain the pronoun *siya*, whose association with a thematic role requires mediation by voice marking, shows no advantage over the corresponding nominal patterns. These findings provide preliminary evidence on the effects of cue ambiguity on sentence interpretation among Tagalog children.

**Keywords:** pronouns, lexical NPs, Tagalog, Philippine-type voice, voice
Untangling the Tagalog Clitic Cluster
Russell Tanenbaum
Stony Brook University

Abstract:
The Tagalog clitic cluster, located without exception in second-position, exhibits a number of curious properties. First, the cluster includes both pronominal and non-pronominal clitics. As a rule, monosyllabic pronominals come first in the cluster, followed by the set of non-pronominals, followed in turn by the disyllabic pronominals. Second, in sentences that contain two disyllabic pronominals, the subject clitic precedes the object clitic\(^1\). Third, among non-pronominal clitics, the observed clitic order is the reverse of that of the base positions of the functional heads that these clitics are presumed to instantiate (as noted in Kauffman 2010). Fourth, certain adverbial clitics (e.g., \textit{ba}, \textit{po}) may split a fronted nominal, while others (e.g., \textit{na}, \textit{pa}) may not. These properties are illustrated below with examples based on data from Billings 2005 (1-2) and Schachter and Otanes 1972 (3-4).

\begin{enumerate}
\item \textbf{Order of clitics (overview):} \textit{1syl. pronominals > non-pronominals > 2syl. pronominals}
\begin{verbatim}
Nakita ka ba niya
PERF.see.ACC 2sg.OBJ Q 3sg.SUB
\end{verbatim}
‘Did he see you?’

\item \textbf{Order of disyllabic pronominal clitics: Subject > Object}
\begin{verbatim}
Nakita niya ako
PERF.see.ACC 3sg.SUB 1sg.OBJ
\end{verbatim}
‘He saw me’

\item \textbf{“Mirror” order of non-pronominal clitics}
\begin{verbatim}
na ‘now’ (Deik°) > lang ‘only’ (Focus°) > po ‘sir’ (Addr°) > ba ‘Q’ (Force°)
\end{verbatim}

\item \textbf{Limited splitibility of fronted nominals}
\begin{verbatim}
Bukas (ba/po/*lang/*na) ng gabi sasayaw sila ng pandango
tomorrow (Q/sir/*only/*now) GEN night dance NOM.they ERG fandango
'Tomorrow night they will (*now) (*only) dance a fandango, (will they?) (sir)'
\end{verbatim}
\end{enumerate}

I submit that the facts in (1-4) can be captured under a head-raising analysis, wherein the Tagalog verb obligatory undergoes roll-up-style V-to-C movement, roughly as in (5):

\begin{enumerate}
\item \textbf{Order of clitics (overview):} \textit{1syl. pronominals > non-pronominals > 2syl. pronominals}
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tomorrow (Q/sir/*only/*now) GEN night dance NOM.they ERG fandango
'Tomorrow night they will (*now) (*only) dance a fandango, (will they?) (sir)'
\end{verbatim}
\end{enumerate}

---

1 By the terms \textit{subject} and \textit{object}, I refer to the \textit{external} and \textit{internal} argument, respectively.
This approach derives in one fell swoop why the clitics are in second position, why they appear in “mirror” order, and why the Tagalog sentence is by default verb initial. The pronominal data can be subsumed under this head-raising analysis as well, provided we assume that the actual linear position of the pronouns, as derived by narrow syntax, is before the nonpronominals, and that disyllabic pronouns “sink” to the end of the cluster by virtue of their prosodic weight.

Following Wurmbrand (2013), I take Tagalog clitics to be not arguments themselves but functional heads, into whose specifiers null arguments, known as proCLs, have raised. What we see as the clitic is the spellout of agreement on the head of a Clitic Phrase (CIP), located between CP and TP, as schematized in (6) for a sentence with the third-person singular pronoun siya:

(6) CP(Fin, Top, Foc, Force)  
   C ...  
   CP_{CL}  
   pro_{CL}  
   C'_{CL}  
   pro_{CL}  
   CL  
   siya  
   TP  

However, unlike Wurmbrand, I understand the movement of Tagalog pronouns as a reflex of pure locality, rather than as the result of one of the two CIPs being an A position and the other an A’ one. In brief, when deriving a sentence like the one in (2), the linear order of the proCL correspondents of the clitics begins as SUB > OBJ (via standard assumptions of theta role assignment). The order is then reversed to OBJ > SUB at an intermediate stage, when the lower CIP necessarily attracts the higher pronoun. Subsequent head movement then reverses the order once again to SUB > OBJ, deriving the example, and the generalization, in (2).

Finally, the limited splitibility fact in (4) can be explained by qualifying the analysis in (5) with the caveat that the snowballing verb can rise only so far in the expanded left periphery - perhaps to Focus°. The fact that Q-marking ba appears at the end of the cluster is then another instance of PF movement, as syntactically it is in first position. In general, the propensity for Q clitics to be the odd-man-out appears to be quite widespread: close to home, in Seediq, the Q clitic ye is sentence-initial, while the rest of the non-pronominal clitics are sentence-final; far from home, in Slavic, the Q clitic li can optionally split fronted nominals, just as ba can in Tagalog. And like ba, li need not carry any partial focus interpretation. Moreover, this caveat is desirable in that it facilitates an account where V-to-C movement is obligatory, while still allowing room for non-verbal elements (topic, NEGs, wh-words) in sentence-initial position.

**Keywords:** Syntax, Tagalog, Clitics, Head-Movement


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2 In line with this account, Billings (2005) shows that the pronouns niya and ninyo, if pronounced as n’ya and n’yə, are marginally acceptable at the start of the cluster.
The 25th Meeting of the Austronesian Formal Linguistics Association (AFLA25)

A comparative study on Extraction Asymmetries in Austronesian Languages
Christine Marquardt • University of Leipzig

Outline
Many Austronesian languages exhibit what has been called a "voice system": a particular pattern of alternations in word order, case marking, and verbal morphology, which also interacts with A'-extraction. The ban on extraction of non-pivot arguments has been topic if much debate. It has been attributed to different realizations of \( v_0 /\text{Voice}_0 \) (Aldridge 2004, 2008; Legate 2008, 2012, 2014), as well as to head-head-adjacency and local dislocation (Levin 2015). A closer look at data from different languages reveals that the patterns are much more complex, and that neither (Levin 2015) nor (Aldridge 2004, Legate 2008) can account for the full range of extraction asymmetries. In this small typological study I will show that (i) the extraction asymmetry within a language may differ depending on the type of A'-movement, and (ii) contrary to the pattern presented in (Levin 2015) some languages do allow the extraction of the A-Arguments in OV-Constructions.

Theoretical Background
Previous studies have shown that extraction in Austronesian languages is often limited to the pivot argument, which is cross-referenced by a voice marker on the verb. In (Aldridge 2004, 2008, Legate 2008, 2012), this has been attributed to certain characteristics of \( v_0 \); different arguments within vP (or VoiceP) may be targeted for EPP-driven movement to the phase edge; the highest argument is subsequently targeted for promotion to Pivot, capturing the syntactic privilege of the argument cross-referenced by Voice. (Levin 2015) observes that in some languages, extraction is not limited to the pivot argument. Specifically, the patient/object of an AV construction is accessible for A'-movement, whereas the agent/subject of an OV construction (which he calls in-situ subjects) is blocked from it. Based on data from Balinese and Malagasy, Levin argues that the ban on extraction of in-situ subjects follows from the absence of the functional head \( K_0 \) in the nominal projection of those arguments, as shown in (1a). He proposes a version of the case filter according to which all noun phrases must be KPs. Lacking a KP layer, the nominal cannot satisfy the proposed Case Filter, and adjoins to \( v \) via local dislocation, as in (1b), which renders the smaller-than-KP nominal part of the verbal projection and invisible for proposed Case Filter evaluation. A'-Movement of an in-situ subject disrupts the linear adjacency necessary to feed local dislocation and is thus ungrammatical.

(1) a. \([CP [\text{C} [\text{TP} [T [v_1 + T [v_2 \text{DP}_{\text{ext}} [v_2 t_1 [v_2 V KP_{\text{int}}]]]])]]]\)
   b. \([CP [\text{C} [\text{TP} [T [v_1 + T+\text{DP}_{\text{ext}} [v_2 t_1 [v_2 V KP_{\text{int}}]]]])]]]\)

A comparative study on extraction asymmetries
Levin (2015) bases his theoretical assumptions on two languages (Balinese and Malagasy) and their extraction patterns in two contexts of A'-Movement (Wh-movement and Topicalization). The following typological study aims to extend the investigation, examining eight Austronesian languages regarding their accesability of arguments in six different contexts of A'-movement: Fronting (Focus study aims to extend the investigation, examining eight Austronesian languages regarding contexts of A'-Movement (Wh-movement and Topicalization). The following typological assumptions on two languages (Balinese and Malagasy) and their extraction patterns in two

<table>
<thead>
<tr>
<th>Language</th>
<th>AgentVoice(AV)</th>
<th>ObjVoice(OV)</th>
<th>AV</th>
<th>OV</th>
<th>AV</th>
<th>OV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balinese</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Puyuma</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Indonesian</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Madurese</td>
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<td>✓</td>
</tr>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Tagalog</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>WC Bajau</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 1: Accessibility of Arguments in Topicalization, Wh-Movement, Relativization
Table 2: Accessibility of Arguments in Control, Raising and Floating Quantifiers

Observations The data collected and summarized in tables 1 and 2 show that the picture of extraction asymmetries is actually much more complex than it is displayed in (Levin 2015, Aldridge 2004, 2008, Legate 2008). The behaviour of languages regarding extraction can be grouped into five different patterns:

<table>
<thead>
<tr>
<th>Pattern</th>
<th>AV</th>
<th>OV</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>B</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>C</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>D</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>E</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Only the nominative/Pivot is accessible
Patient of OV is accessible
Agent of OV is accessible
All arguments are accessible
Only intransitive subjects are accessible

Table 3: Patterns of extraction

Table 4 summarizes how the different languages pattern in which construction.

<table>
<thead>
<tr>
<th>Language</th>
<th>Pattern</th>
<th>Fronting</th>
<th>Wh-Movement</th>
<th>Relativization</th>
<th>Control</th>
<th>Raising</th>
<th>FQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balinese</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>Puyuma</td>
<td>C</td>
<td>C</td>
<td>other</td>
<td>E</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesian</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>Madurese</td>
<td>A</td>
<td>A</td>
<td>C</td>
<td>A</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seediq</td>
<td>A</td>
<td>A</td>
<td>E</td>
<td>A</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amis</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tagalog</td>
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<td>A</td>
<td>C</td>
<td>A</td>
<td>A</td>
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<tr>
<td>WC Bajau</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>other</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Table 4: Distribution of Extraction Patterns

Table 3 shows that languages may pattern differently in different contexts of A’-movement. Languages exhibit up to three different extraction patterns in different constructions. In Balinese and Indonesian, for example, the restrictions on floating quantifiers seem to be less stringent: all arguments independent of their syntactic status may be modified. Control may pose an intransitivity restriction on the embedded clause, which can be observed in Seediq and Puyuma. Theoretical Implications The fact that different constructions can pose different constraints on extraction of arguments is problematic for all (Levin 2015), (Aldridge 2004, 2008) and Legate (2008, 2012). Levin’s (2015) approach of local dislocation of in-situ subjects can only capture pattern B, whereas the EPP-hypothesis in (Aldridge 2004, Legate 2008) can only account for Pattern A. Looking at the distribution of patterns, it becomes clear that the situation is actually much more complex. More factors have to be taken into account in order to explain the observed extraction patterns. Conclusion I have presented a small cross-linguistic study of extraction asymmetries in Austronesian languages, showing that the extraction patterns in voice-type languages are much more diverse as it is displayed in the literature. Extraction is not always limited to pivot arguments (Aldridge 2004, 2008, Legate 2008, 2012), and neither are in-situ subjects in an OV construction always blocked from extraction, as claimed in (Levin 2015). Crucially, languages may show different extraction patterns with different types of A’-movement. To propose a full account of extraction in voice-type languages, further research on more languages in more contexts of extraction has to be conducted.
The 25th Meeting of the Austronesian Formal Linguistics Association (AFLA25)

Theoretical explorations of three intriguing cases of incorporation

Mike Berger & Christine Marquardt
Universität Leipzig

N(oun) I(ncorporation) and P(seudo)-N(oun)-I(ncorporation) in various guises are recurring within Austronesian. We present three interesting cases and explore how these might be treated.

Definitions: We take canonical NI to mean an N⁰, and PNI to mean an NP or DP which has a stronger-than-usual bond with the verb. Approaches: There are lexical, syntactic and semantic approaches to (P)NI (e.g. Baker 1988, Rosen 1989, Chung & Ladusaw 2004). For our purposes, we draw attention to a post-syntactic approach to PNI by Levin (2015): All nominals have the extended projection <NP, DP, KP>, and are licensed only as KPs. Non-KPs are licensed alternatively by M(orphological) Merger under adjacency into v/VP, where they cease to be visible to the Case Filter. Lexical heads (e.g. V) can c-select non-KP nominals, but functional heads (e.g. v) cannot. PF, seeing only labels, cannot handle statements like <KP,KP> within one phase. One KP must thus be stripped of its KP and M-merge into v/VP, obviating the Case Filter. So non-KPs may be base-merged lexically, or derived from KP functional arguments.

Malagasy: In E(xternal) P(ossession) (or possessor raising), the possessor is a nominative subject, and the possessum is headed by a covert D⁰ (Paul 2004, 2009; (1)). In non-EP, the possessor is a genitive phrase in the subject headed by the possessum (2). In EP, the possessum is PNIed: it must be right-adjacent to the predicate, and may be phrasal (3). When EP occurs under a verb with non-Agent-Focus, V and the PNIed possessum are broken up by the non-pivot Agent (d in dRabe is phonologically conditioned; (4)). The possessum crucially remains PNIed.

(1) Rovi bodyPssm ny haronaPssr torn bottom DET basket
    'The bottom of the basket is torn’ EP ‘The bottom of the basket is torn’ non-EP

(2) Rovitra ny vodinPssm ny haronaPssr torn DET bottom DET basket

(3) Maty (*ny) zanaka hendry / izay lehibe / aman-vady]Pssm-NP RabePssr dead DET child wise / REL big / with-spouse Rabe
    'Rabe suffers the death of his well-behaved child / child who was big / child and wife’

(4) Hetezan-dRabe voloPssm ny zananyPssr PF.cut-Rabe hair DET his child
    'His child has his hair cut by Rabe’

Non-pivot Agents must always be right-adjacent to the verb (Pearson 2005), and are PNIed (Levin 2015). We explore how apparent double incorporation can be modelled as such with Levin’s (2015) M-merger (5). A verb like hetezan 'cut’ c-selects an object DP consisting of two KPs, the possessor and the possessum. A KP Agent is merged in Spec,vP, and the possessor KP raises to an outer Spec,vP due to an EEP on v. After spell-out, because the Agent and possessor KPs are in the same phase, the Agent is stripped of its KP and M-merges into v+V. The remnant object DP then also M-merges into v+V to be licensed, next to the now-DP Agent. The possessor ends up in Spec,TP because the Patient Focus v cannot assign ACC. We need only assume that M-merger proceeds top-down, targeting the Agent ex-KP before the object DP. Note that this sketch is also consistent with a binding analysis, where the possessor is base-merged high (cf. Deal 2013).

(5) [vPF his child2 [ RabeKP [ vPF + cut1 [vP t1 [DP [KP_Pssr t2 [KP_Pssm hairKP]...]]]]] ⇒ [CP [TP his child2 [vPF p t2 [ t3 [[vPF+ cut1] + RabeKPdP,3+[DP t2 hairKP]4] [vP t1 t4]]...]]}
**Nahavaq:** Incorporated objects are bare nouns with non-specific reference; verbs which incorporate objects obligatorily reduplicate (Dimock 2009; (6)). Reduplication never marks de-transitivization, but multiple subjects/objects, or - importantly - durative and habitual action. Incorporative (6), durative (7) and habitual (8) reduplication are formally identical.

(6) \text{Wa-s-vene-ven-men tartar veq mbey siley} \\
\quad 2DU.R.NEG-DUP-shoot-bird always NEG too far \\
\quad 'You two mustn’t go bird-hunting so far away’

(7) \text{I-tu-tus tey gceyip} \\
\quad 3SG.R-DUP-write FOC yet \\
\quad 'He is still writing it’

(8) \text{En vene-n ti-qey ru-ko-koh qin ni-vilam nin...} \\
\quad and sister-3SG POSS-3SG 3DU-DUP-be with NV-girl DEM \\
\quad 'And his sister used to stay with the girl...’

Taking the durative and habitual to express one imperfective category, we assume that reduplication is a reflex of the incorporated noun’s lack of DP-level material which would license a perfective and specific reading. Given Dayal’s (2015) insight that incorporated nouns are functionally richer than non-incorporated bare nouns, we propose a feature-sharing (Pesetsky & Torrego 2007) relation between [-spec] and [-ref] on N and an aspectual head above VP - akin to Kratzer’s (2002) telicity via Agree of \textit{iACC} and \textit{uACC}.

**Paiwan:** In type I NI (9), motion verbs may incorporate bare nouns (Wu & Chang 2005). The verb takes progressive, Patient-Focus, imperative, change-of-state, and perfective marking. In type II NI (10), special verbs must incorporate nouns with a class or OBL marker. The verb takes only perfective, Patient-Focus, and imperative marking. In PNI (11), special verbs must incorporate oblique NPs; these take only perfective marking. In type II NI and PNI, unlike in type I NI, the nominals can be specific, definite and referential.

(9) \text{K<em>asi-gade-aken be.from<AF>-mountain-1S.NOM} \\
\quad \text{a mangtjez LNK come.back(AF)} \\
\quad 'I come back from mountains’

(10) \text{Masa-ti-kina-aken do.for(AF)-NCL-mother-1S.NOM} \\
\quad \text{a ma-sengseng LNK AF-do} \\
\quad 'I work for my mother’

(11) \text{Aya-[tua-alak-ni-palang]NP-aken be.because-OBL-child-GEN-P.-1S.NOM} \\
\quad 'Because I am the child of Palang’

The larger the incorporate, the fewer categories the complex takes. The full-lexical status of type I NI is explained if NI is lexical, such that the complex behaves just like a regular verb. In all types, c-selection plays a role since particular verbs are involved. We relate c-selection to the morphosyntactic defectivity of type II NI and PNI verbs, since incorporation is obligatory and some of these verbs plausibly resist categories like imperative or aspect, e.g. \textit{aya} ’be because of’. These verbs seem to be becoming prepositions - many involve motion or location. Following den Dikken (2010), we assume that lack of certain functional structure forces incorporation of the complement, and that there is a cline of prepositional functional structure from PNI to type I NI verbs, such that the formers’ complements are larger than the latters’.

**Conclusion:** We have considered three cases of incorporation, exploring how what seems to by cyclic incorporation (Malagasy), an aspectual reflex (Nahavaq), and an inverse relation between the incorporate’s size and V vs P status (Paiwan) might be handled theoretically. Sel. refs: Chang & Wu (2005): \textit{Noun (Phrase) Incorporation in Paiwan}; den Dikken (2010): \textit{On the functional structure of locative and directional PPs}; Kratzer (2002): \textit{Telicity and the Meaning of Objective Case}; Levin (2015): Licensing without Case; Paul (2009): \textit{External Possession Meets Bare Nouns in Malagasy}
Triplication in Isbukun Bunun
Hui-shan Lin
National Taiwan Normal University

Abstract:
Isbukun Bunun, the southern dialect of the Formosan language of Bunun, is reported to have four types of reduplication, (i) lexicalized reduplication (e.g., [χuðaŋχuðaŋ] ‘move’, *[χuðaŋ]), (ii) Ca- reduplication (e.g., [pitu tu ɣədəm] ‘seven birds’ > [pa~pitu tu ʔuvað] ‘seven children’), (iii) CV reduplication (e.g., [ma-patað] ‘kill (AF)’ > [ma-pa~patað] ‘keep on killing (AF)’), and (iv) full/foot reduplication (e.g., [ma-daŋχas] ‘red’ > [ma-daŋχas~daŋχas] ‘light/dark red’) (Li 1997; L. Huang 1997; Yeh 2000, Zeitoun 2000; Lin et al. 2001; Zeitoun & Wu 2006; Huang & Shih 2016; and H. Lin 2008, to appear; among others). This paper presents first-hand data and generalization to a reduplication pattern in Isbukun Bunun which is left unnoticed in previous studies.

The reduplication pattern, termed triplication here, copies a string from the root and copies it twice. The copied string can be a duplicate of a root, as in (1), or just the copy of the last syllable of a multisyllabic root, as in (2). Though it appears as if triplication simply involves the copying of the root final syllable, it is not the case since not every root final syllable can be triplicated, as illustrated in (3).

(1) (Root is in boldface, reduplicant is underlined)
   a. [ma-i:p] > [ma-i:p~i:p~i:p] ‘blow/blow several times’
   b. [ma-χaws] > [ma-χaws~χaws~χaws] ‘peel/peel several times’
   c. [mawn] > [mat-mawn~mawn~mawn] ‘eat/eat while walking’

(2)
   a. [k-usbaj] > [k-us-baj~baj~baj] ‘fly away/fly back and forth several times’
   b. [sayçjal] > [sayçjal~çjal~çjal] ‘slip and fall/slip and fall several times’
   c. [m-uχajv] > [m-u-χajv~χajv~χajv] ‘tramp over hill/tramp over hill several times’

(3)
   a. [tei-daŋkul] > *[tei-daŋ-kul~kul~kul] ‘jump/*jump several times’
   b. [tein-χuða] > *[tein-χu~ða~ða~ða] ‘scared/*scared several times’
   c. [uduli] > *[udu-li~li~li] ‘dance/*dance several times’

I will show that triplication in Isbukun Bunun involves the copying of the stress foot. Stress foot in Isbukun Bunun is composed of a quantity sensitive trochee, ranging from a heavy monosyllable (σ′µ; e.g., [saµχajvµµ]) ‘slip and fall’) to a light-light (σµ,σµ; e.g., [uµ.dùµ.liµ] ‘dance’) or a heavy-light (σµµ,σµ; e.g., [ma.pjµµ.χajµ] ‘crippled’) disyllable; all glides are derived and moraic while codas are non-moraic (e.g., [saµχajvµµ] ‘slip and fall’) (H. Huang 2005). Thus, the reason the final syllables in (1) and (2) undergo triplication but those in (3) are not is clear: the final syllables in the former, but not the latter, constitute stress feet. I will also show that while heavy monosyllabic trochees may undergo triplication (ref. 1 & 2)
disyllabic trochees never do (e.g., [tei<sub>µ</sub>-da<sub>µ</sub>n]<sub>ku</sub><sub>µ</sub>I > *[tei<sub>µ</sub>-da<sub>µ</sub>n]<sub>ku</sub><sub>µ</sub>I-
>da<sub>µ</sub>n]<sub>ku</sub><sub>µ</sub>I] ‘jump/ *jump several times’, [ma<sub>µ</sub>-pj<sub><x>µ</sub>a]<sub>χa</sub><sub>µ</sub>] > *[ma<sub>µ</sub>-pj<sub><x>µ</sub>a]<sub>χa</sub><sub>µ</sub>-pj<sub><x>µ</sub>a]<sub>χa</sub><sub>µ</sub>-pj<sub><x>µ</sub>a]<sub>χa</sub><sub>µ</sub>] ‘crippled/ *crippled several times’). The restriction on the reduplicant is due to a universal tendency for
tripllication to avoid multisyllabic reduplicants (Lu 2002). Semantically, the meaning denoted
by triplication is generally an intensified version of the meaning denoted by full/ foot
reduplication. For instance, while full/ foot reduplication denotes the meaning of repetition on
active verbs, triplication of the same verb conveys a higher degree of repetition (e.g., [saχɕjal]
‘slip and fall’ > [saχ-ɕjal-ɕjal] ‘slip and fall a few times’ vs. [saχ-ɕjal-ɕjal-ɕjal] ‘slip and fall
several times’). The meaning dependency of triplication on full/ foot reduplication leads to the
general tendency that only words undergoing full/ foot reduplication may undergo triplication.

**Keywords:** Isbukun Bunun, triplication, stress foot, reduplicant size

**References:**


City: Council of Indigenous Peoples.

Huang, Lillian M. 1997. Isbukun Bunun in Kaohsiung County. *Formosan Languages in
Kaohsiung County*, ed. by Paul Jen-Kuei, *Li*, 351-410. Kaohsiung County Documents
Series No. 7. Kaohsiung: Kaohsiung County Government.

Li, Paul Jen-kuei. 1997. Isbukun Bunun in Hsinyi Township, Nantou County. *Formosan
Languages in Kaohsiung County*, ed. by Paul Jen-Kuei, *Li*, 300-350. Kaohsiung County


Journal of Linguistics*.


Linguistics (NCL 2002)*, 156-170. Taiwan: Department of English Language, Literature,
and Linguistics, Providence University.

Center of Human Education and Research, National Taiwan Normal University.

Zeitoun, Elizabeth, Chen-huei Wu. 2006. Reduplication in Formosan languages. *Streams
converging into an Ocean: Festschrift in Honor of Prof. Paul Jen-kuei Li on His 70th
Birthday*, In Chang, Yung-li, Lillian M. Huang and Dah-an Ho (eds.), pp. 97-142 . Taipei:
Academia Sinica.
