

Panel Description

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**Geographical typology as a window into the evolution of the
Austronesian family**

Panel organizers:

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Abstract 1: Clitic positioning patterns in western Austronesian languages

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Abstract 2: On the rise of applicatives in West Nusantara languages

Christina L. Truong, University of Hawai'i at Mānoa

Abstract 3: Distribution of lexical innovations in the Philippines

Isaac Stead, Max Planck Institute for Evolutionary Anthropology

**Abstract 4: Emergence of divergent phonotactics in Austronesian: a distributional
typological approach**

Shelece Easterday, University of Hawai'i at Mānoa;
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Abstract 5: Voice syncretism in western Austronesia

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Geographical typology as a window into the evolution of the Austronesian family

A fixation on the stammbaum representation of language families has led to a family-wide, decades-long, “treasure hunt” for subgroup-defining innovations in the attempt to better understand the history of Austronesian languages and their speakers. As a result of this focus, far less attention has been paid to the full geographic distribution of linguistic features across Austronesian. Exceptionally, eastern Nusantara and Oceania have been prominent sites for areal studies that challenge traditional family tree models (e.g. Ross 1988, Klamer et al. 2008, François 2014, Donohue 2007, Schapper 2020, inter alia). The lopsided attention to areal effects leads to the impression that eastern Austronesian is made up of linkages while the western region, including the Philippines and Formosan languages, displays more tree-like diversification, yet this impression could very likely be an artifact of technique and researcher bias rather than reflecting a real difference between east and west. Simultaneously, a recent slew of studies employing computational phylogeny has produced results that are largely geographical in nature, but without offering any deeper insight into geographical patterns, as the output still consists of classical stammbaum (albeit with similarity-based rather than innovation-based subgroups).

This panel promotes the return to isogloss exploration, the foundation of dialectology, using new mapping tools, and seeks to further justify the utility of geographical typology for larger-scale diachronic analyses. It comprises **five** typologically oriented studies representing different areas of linguistics, including lexical, phonological, and morphosyntactic domains, and various geographical areas, from the entire family to the western Austronesian area to Nusantara and the Philippines. The presenters will take a critical approach to features that have been employed for subgrouping purposes in previous studies, such as phonotactics and sound change and the distribution of innovatory lexemes, as well as those that have not yet been explored from a subgrouping perspective, such as clitic patterns), applicatives and voice syncretism.

Panel schedule:

- Introduction (5 mins)
- 1. Western Austronesian clitics
- 2. On the rise of applicatives in West Nusantara languages
- 3. Distribution of lexical innovations in the Philippines
- 4. Emergence of divergent phonotactics in Austronesian: a distributional typological approach
- 5. Voice syncretism in Formosan/Philippine languages
- Closing (5 mins)

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Abstract 1 Clitic positioning patterns in western Austronesian languages

Western Austronesian languages provide an enormous laboratory for understanding the diachrony and typology of clitics. Proto-Austronesian most likely had several sets of pronominal and adverbial clitics (Ross 2002, 2006, 2013) but reconstructing the positioning of clitics and their combinatorial possibilities remains unclear due to a diversity of patterning across different regions and subgroups. In the Philippines, despite much internal variation, the predominant pattern places genitive, nominative and adverbial clitics together in the second-position of the clause (i.e. as Wackernagel clitics) (Reid & Liao 2004, Billings & Kaufman 2004, *pace* Lee & Billings 2005). Outside of the Philippines, it is far more difficult to generalize over clitic patterns in Formosan languages and Austronesian languages of eastern Nusantara. Overall, we see two recurring developments: genitive clitics become head-adjacent (Wolff 1996), either proclitic or enclitic on verbs but typically enclitic on nouns, while nominative clitics are replaced by free forms, resulting in an overall reduction of second-position effects.

To make progress in this still poorly understood areal typology, we present a first attempt at mapping clitic patterns across western Austronesian languages of Taiwan, the Philippines, and Indonesia, focusing primarily on the position of bound person markers and aspect markers within the clause and restricting ourselves to the properties of (i) second-position versus verb/aux-adjacent for (historically) genitive and nominative pronominals and (ii) aspectual clitics. We also map the ability of genitive and nominative clitics to double full NP arguments to better understand the development of canonical agreement from pronominal arguments. Our preliminary findings include:

1. Genitive pronominals always precede nominative ones in becoming head-adjacent.
2. Head-adjacent genitive pronominals are common across the western Indo-Malaysian archipelago while head-adjacent nominative pronominals are only found in eastern pockets.
3. There is a strong correlation between head-adjacency and doubling a full NP argument.

Abstract 2 On the rise of applicatives in West Nusantara languages

This study examines the distribution of applicative constructions in Malayo-Polynesian languages of West Nusantara, and the relationships between applicatives, geographic location, genetic affiliation, and other typological features of language. Eighty-five languages were sampled across genetic groupings indigenous to West Nusantara (Malaysia, Singapore, Brunei, and Indonesia west of Lombok) by geographic subregion. Using existing descriptive, lexical, and pedagogical resources, each language was evaluated for the presence of applicative constructions in which morphological marking on the predicate coincides with selection of a peripheral semantic role as a core argument (Peterson 2007). Data on structural properties, including word order, alignment, voice system, and case marking, and semantic and syntactic properties of the applicative constructions were also compiled. Analysis was conducted using geospatial mapping, and statistical tests for non-random association (Pearson's exact tests) and evaluation of possible classification trees (Random Forest algorithm, see Breiman 2001).

The results indicate that applicative constructions distinct from major voice alternations are an areal feature of West Nusantara associated with the breakdown of Philippine-type voice. Furthermore, genetic affiliation and geographic subregion are strongly predictive of the presence or absence of applicatives, with contact-induced change being implicated for the lack of applicatives in most of Borneo and mainland Southeast Asia. The presence of applicatives otherwise cuts across types of voice system (e.g. symmetrical, asymmetrical), alignment (e.g. ergative, accusative, mixed), word order (e.g. verb-initial, verb-medial) and case marking (e.g. case marking particles, pronominal distinctions, no case marking). This casts doubts on the usefulness of a proposed Indonesian-type of western Austronesian languages associated with applicatives (see Himmelmann 2005). Some features of applicative constructions are quite stable, including the distribution of beneficiary/instrument/theme-selecting functions and locative/goal-selecting functions across separate morphemes. However, syntactic properties of the applied phrase show variance, especially for beneficiaries, likely due to animacy effects.

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Abstract 3 Distribution of lexical innovations in the Philippines

The Proto-Philippines hypothesis (Blust 2019, 2020) proposes that all languages of the Philippines are descended from a single protolanguage, Proto-Philippines (PPh). According to this hypothesis, the multiple primary branches of Malayo-Polynesian (MP) that would be expected in the Philippines as the area into which the MP languages first expanded ex-Taiwan were replaced by PPh. A key piece of evidence advanced in support of this proposal is a list of 1511 lexical items. Using a recently published phylogeny of Philippine languages (King et al. 2023) and the Austronesian Comparative Dictionary (Blust, Trussell & Smith 2023), I show using various metrics of phylogenetic signal (Fritz & Purvis 2010; Holland et al. 2002) that a large proportion of these cognate sets are not reconstructable to a common protolanguage and instead represent later innovations which diffused between Philippine subgroups. The geographical distribution of these cognate sets also calls into question their common origin, instead showing that they must have diffused between geographically adjacent subgroups after the diversification of Philippine languages. Some concordance is present between these results and the geographical axes proposed by Zorc (2021).

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Abstract 4 Emergence of divergent phonotactics in Austronesian: a distributional typological approach

Descriptions of the typological profile of the Austronesian language family and its subgroupings often comment on the “inconspicuous” (Adelaar & Himmelmann 2005: 115) nature of the phonology of these languages. Phonotactic patterns are characterized as clustering around a simple syllable structure permitting a single segment in onset and coda positions (Blust 2013; Adelaar & Himmelmann 2005; Lynch, Ross, & Crowley 2001). Blust (2013) illustrates outlying phonotactic patterns with a handful of language-specific and subgroup-specific examples. However, to date there is no reference quantifying the relative frequency of various phonotactic patterns within the family.

This study takes a distributional typological approach to understanding the diversity and emergence of phonotactic patterns in Austronesian. In a genetically diversified and geographically stratified sample of over 150 languages, we collected data on maximal syllable margin patterns, sonority contours in consonant clusters, properties of word-medial codas, sesquisyllabic patterns, properties of complex nuclei and vowel hiatus, and word stress properties.

This comprehensive data set yields a distributional typology of Austronesian phonotactics that elucidates the geographical patterning of various phonotactic features. We find that canonical (C)V(C) syllable patterns, as posited for Proto-Austronesian, are characteristic of a number of (historically conservative) languages in Taiwan, the Philippines, and Indonesia (see e.g. Blust 2013: 215-222). However, some regions of Austronesia exhibit phonotactic features which are divergent both within the family and crosslinguistically. Among other patterns, these include a concentration of languages with large, Sonority Sequencing Principle-defying consonant clusters in Vanuatu, and a tendency for languages to have unusually diverse complex vocalic nuclei and permissive vowel hiatus patterns in the Polynesian region.

In addition to illustrating the geographical patterning of phonotactic features in Austronesian, this study will use methods of diachronic typology (Greenberg 1969) to examine aspects of the emergence of some of the divergent and complex patterns we observe.

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Abstract 5 Voice syncretism in western Austronesia

Recent work has argued convincingly that the Malayo-Polynesian branch of Austronesian radiated rapidly from the northern Philippines across the Indonesian archipelago via successive migrations, splitting into at least nine distinct branches within a period of 500 years (Smith 2017). This proposal now shows that Malayo-Polynesian constitutes an ideal natural laboratory for examining the variation and change of the typologically unique voice system found in these languages, known in the literature as Austronesian-type voice. Through surveying the voice system of 60 languages under nine Malayo-Polynesian primary branches and all primary-level branches of Austronesian, we show that the decay of Austronesian-type voice systems patterns consistently with the degree of language contact between incoming Austronesian speakers and pre-Austronesian populations in each geographic region. This conclusion confirms and reinforces existing proposals that contact with non-Austronesian groups played a major role in the evolution of western Austronesian morphosyntax (Klamer 2019) suggesting future investigation of similar effects in other language families.

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