## Clausal Constituency and Historical Austronesian Morphosyntax

The current paper approaches an important question in Austronesian historical linguistics through the synchronic syntax of two Formosan languages, Puyuma and Tsou. Ross (2009) posits a high-level Austronesian subgroup whose sole common innovation was the reanalysis of nominalizations as matrix predicates, as schematized in (1). The voice morphology typically found in matrix clause declaratives in other Formosan languages is restricted to relative clauses and nominalizations in Puyuma, Tsou and Rukai. Ross argues these three lineages represent sisters to a putative Proto-Nuclear Austronesian, the progenitor of all other Austronesian languages. A hitherto untested prediction of Ross's (2009) Nuclear Austronesian Hypothesis is that the VP of "first generation" clauses (i.e. matrix clauses in Puyuma, Tsou and Rukai) could have a significantly different constituency than matrix clauses with predicates bearing "second generation" morphology, as the latter are thought to derive historically from nominalized relative clauses.

Using constituency diagnostics, we find that Philippine-type languages treat the verb and Agent of a Non-Actor Voice (NAV) clause as a phrase which excludes the patient rather than a simple surface string derived by movement, agreeing with earlier analyses of Tagalog (Kroeger 1993), Toba Batak (Emmorey 1984) and Malagasy (Keenan 1974, 1995). While a minimal phrase consisting of the predicate head and an agent is highly unusual for verbal projections, it is not uncommon for nominalizations (as in the Semitic construct state).

We report here on recent fieldwork on Puyuma and Tsou which highlighted a key asymmetry between nominal and verbal predicates uncharacteristic of Nuclear An languages. Teng (2008) suggests an unmarked word order in Puyuma NAV clauses that is highly unusual for Formosan and Philippine languages: the pivot (or NOM argument) regularly precedes the transitive agent, as shown in (2). This was supported by experimental elicitation but, crucially, the unmarked Pred GenP NomP order of NAV clauses in Nuclear Austronesian languages also emerged in Puyuma in clauses with nominal predicates, as shown in (3). This can be interpreted to support the Nuclear An Hypothesis as it represents an additional syntactic parallelism between nominal predicates in extra-Nuclear An languages and the canonical declaratives of Nuclear An languages. We posit a derivation like that in (4) for the structure in (3). The nominal head moves around the possessor generated in Spec, nP without an intervening phrase boundary thus yielding a tight bond between the two elements. The entire complement of T then fronts to yield the predicate initial structure. Abstracting away from alignment type and case marking for the moment, we derive verbal constructions like (2) from a canonical structure in which the object forms a VP constituent with the verb, as in (5). Raising of the agent followed by predicate fronting yields the attested order, but other derivations are also possible.

Tsou offers additional support for a traditional VP in "first generation" clauses in that internal arguments form a constituent with the NAV verb that excludes the agent, as shown in (6), contrasting with conservative MP languages like Tagalog, as seen in (7).

NAV agents in Tsou and Puyuma thus do not bear any structural similarity to possessors, in distinction to NAV agents in Nuclear An languages. This raises an interesting problem for the claim that the Austronesian extraction restriction is really a ban on extracting possessors and other genitive marked arguments from NP (Kaufman 2009), as we find the same restriction holds for oblique phrases in the extra-Nuclear An languages. We conclude with several ideas for why the same restriction is seen to hold across verbal and nominal projections, comparing the nominalist approach to the pattern reduction hypothesis (Blust and Chen in press) and ergative approaches (Aldridge 2004, 2016).

- (1)  $_{TP}[\text{The book was }_{DP}[\text{Maria's }_{NP}[\text{writing}]]] \rightarrow \text{`Maria wrote the book'}$
- (2) Tu=pulrang-ay (?kan Senten) i Sawagu (kan Senten) 3s.AGT=help-APPL OBL Senten NOM Sawagu OBL Senten 'Senten helped Sawagu.'
- (3) Tinataw (kan Sawagu) i Senten (\*kan Sawagu) mother.3s.GEN OBL Sawagu NOM Senten OBL Sawagu 'Senten is Sawagu's mother.'
- (4)  $_{\text{TP}}[\text{DP}_{PIV \text{ T}'}[\text{ T}_{\text{PredP}}[_{nP}[\text{ N}+n_{\text{NP}}[\text{DP}_{POSS \text{ N}'}[\text{ -N- }]]]]]]) \rightarrow$   $_{\text{FP}}[_{\text{PredP}}[_{nP}[\text{ N}+n_{\text{NP}}[\text{DP}_{POSS \text{ N}'}[\text{ -N- }]]]_{i \text{ TP}}[\text{DP}_{PIV \text{ T}'}[\text{ T}_{t_{i}}]]]]$
- (5)  $TP[T'[T'] T_{PredP}[vP[DP_{AGT} v'[v_{VP}[V'[V]DP_{PAT}]]]]]]$
- (6) i-si fa-eni (\*to Pasuya) to Mo'o (to Pasuya) 'o tposʉ-si uv-3s give-cv obl Pasuya obl Mo'o obl Pasuya nom book-3s.gen 'Pasuya gave his book to Mo'o.' (adapted from Chang 2011:803)
- (7) I-b<in>igay (ni Juan) kay Dodong (?ni Juan) ang libro cv-cv-cv-prf>give Gen Juan Obl Dodong Gen Juan Nom book
  'Juan gave Jun the book.'

## References

Aldridge, Edith. 2004. Ergativity and word order in Austronesian languages. Doctoral Dissertation, Cornell University.

Aldridge, Edith. 2016. Ergativity from subjunctive in Austronesian languages. *Language and Linguistics* 17:27–62.

Blust, Robert, and Victoria Chen. in press. The pitfalls of negative evidence: 'Nuclear Austronesian', 'Ergative Austronesian', and their progeny. *Language and Linguistics*.

Chang, Henry Yung-li. 2011. Triadic encoding in Tsou. Language and Linguistics 12:799-843.

Emmorey, Karen. 1984. The intonation system of Toba Batak. In *Studies in the Structure of Toba Batak*, ed. Paul Schachter, 37–58. UCLA.

Kaufman, Daniel. 2009. Austronesian nominalism and its consequences: A Tagalog case study. *Theoretical Linguistics* 35:1–49.

Keenan, Edward. 1974. The functional principle: generalizing the notion of subject of. In *Papers from the 10th Regional Meeting of the Chicago Linguistics Society*, ed. Michael W. La Galy, Robert A. Fox, and Anthony Bruck, 298–309. Chicago, IL: Chicago Linguistic Society.

Keenan, Edward L. 1995. Predicate-argument structure in Malagasy. In *Grammatical Relations: Theoretical Approaches to Empirical Questions*, ed. Clifford S. Burgess, Katarzyna Dziwirek, and Donna B. Gerdts, 171–216. Stanford, CA: CSLI Publications.

Kroeger, Paul. 1993. *Phrase structure and grammatical relations in Tagalog*. Center for the Study of Language and Information, Stanford University.

Ross, Malcolm. 2009. Proto-Austronesian verbal morphology: A reappraisal. In *Austronesian Historical Linguistics and Culture History: A festschrift for Robert Blust*, ed. Alexander Adelaar and Andrew Pawley, 295–326. Canberra: Pacific Linguistics.

Teng, Stacy Fang-ching. 2008. A reference grammar of Puyuma, an Austronesian language of Taiwan. Canberra: Pacific Linguistics.