Obligatory vs. Optional Tense-Aspect-Mood Marking in Austronesian Languages

David Gil (Max Planck Institute for Evolutionary Anthropology)

This paper presents an ongoing cross-linguistic study of the grammatical marking of Tense, Aspect and Mood (TAM), focussing on languages of the Austronesian family. Languages are assigned one of the following two feature values:

- (1) (a) *Obligatory* TAM marking, if all basic declarative affirmative main clauses contain a grammatical expression of at least one of the three TAM categories;
 - (b) *Optional* TAM marking, if there are some basic declarative affirmative main clauses with no grammatical expression of any TAM categories.

Within the Austronesian family, obligatory TAM marking languages include Tsou, Takia and Paamese, while optional TAM languages include Atayal, Malay and Hawai'ian. At the time of writing, almost 500 languages had been examined worldwide, including some 160 of the Austronesian family.

The distribution of obligatory and optional TAM marking displays striking continent-scale geographical patterning. One large area of near-exclusive obligatory TAM marking covers North and East Africa, Europe, and West, Central and South Asia, while another such area comprises all of Australia. Conversely, a single large contiguous area of near-exclusive optional TAM marking spans eastern China, mainland Southeast Asia, most of the Indonesian archipelago, and western New Guinea. Elsewhere, both language types occur interspersed, with no large-scale geographical patterns evident.

Within the Austronesian family, the distribution of obligatory and optional TAM marking presents a rather complicated picture. Optional TAM marking appears to be more widespread, with obligatory TAM marking mostly occurring in three geographical regions: (a) Formosa and the Philippines, extending into parts of Borneo and Sulawesi; (b) Eastern New Guinea; and (c) Vanuatu. Whereas the latter two regions clearly represent separate independent developments from a prior stage of optional TAM marking, the former region would seem, prima facie, to suggest that the presence of obligatory TAM marking might be of ancient provenance within Austronesian, having subsequently been lost as the Austronesian languages spread south from the Philippines into the Indonesian archipelago. Nevertheless, alternative arguments, internal to Austronesian as well as of a broader geographical nature, suggest that the presence of obligatory TAM marking in the languages of Formosa and the Philippines might also have developed subsequent to the initial break-up of proto-Austronesian, which would accordingly be reconstructed as a language with optional TAM marking.

Cross-linguistically, the presence of obligatory TAM marking correlates with another general and logically-independent morphosyntactic property, namely the grammatical encoding of thematic-role assignment and the relationship of government between a verb and its full nominal arguments. This correlation is supported empirically by three separate studies, demonstrating specific correlations between the presence of obligatory TAM marking and (a) the presence of case marking, as per Dryer (2005); (b) the presence of dependent marking, as per Nichols and Bickel (2005); and (c) the unavailability of associational interpretations (interpretations underspecified with respect to thematic roles), in accordance with the cross-linguistic experimental study described in Gil (2008). Given the presence of large-scale areal patterns governing the distribution of the above features, the observed correlations may in principle be attributable to universal grammar, or alternatively to geography and parallel patterns of contact and diffusion. These possibilities may be teased apart through the pairwise examination of geographically and genealogically proximate languages differing with respect to the distribution of TAM marking. Several such pairwise examinations, within Austonesian and elsewhere, suggest that although geography may also play a role, the correlation between TAM marking and the encoding of thematic-role assignment does indeed reflect a real property of the architecture of grammar.

Why should this be so? In conclusion, it is suggested that obligatory TAM marking and the grammatical encoding of thematic-role assignment are both consequences of a single deeper property, namely the presence of *predication*, defined as an emergent property entailing the clustering of grammatical features pertaining, among others, to TAM marking and thematic-role assignment. Specifically, whereas languages with strongly grammaticalized predication exhibit obligatory TAM marking and grammatical encoding of thematic-role assignment, languages with weak or no grammaticalization of predication are characterized by optional TAM marking and little or no grammatical encoding of thematic-role assignment.

- Dryer, Matthew S. (2005) "Position of Case Affixes", in M. Haspelmath, M. Dryer, D. Gil and B. Comrie eds., *The World Atlas of Language Structures*, Oxford University Press, Oxford.
- Gil, David (2008) "How Complex Are Isolating Languages?" in F. Karlsson, M. Miestamo and K. Sinnemäki eds., *Language Complexity: Typology, Contact, Change,* John Benjamins, Amsterdam, 109-131.
- Nichols, Johanna and Balthasar Bickel (2005) "Locus of Marking in the Clause", in M. Haspelmath, M. Dryer, D. Gil and B. Comrie eds., *The World Atlas of Language Structures*, Oxford University Press, Oxford,.