

## Reconciling hierarchy with order in Kĩtharaka DPs

Work based on the typology of the relative order of demonstratives (DEM), numerals (NUM), adjectives (A), and nouns (N) across languages (the domain of Greenberg's Universal 20) converges on the conclusion that a common hierarchy underpins the order in all languages (e.g. Cinque 2005, Abels & Neeleman 2012, Steedman 2020). While this conclusion is easy to maintain in languages where the standard assumptions about constituent structure (in particular the non-tangling condition on trees) allow a transparent mapping between order and hierarchy (e.g. [Dem [Num [A N]]] for English, [[[N A ] Num] Dem] for Thai, [Dem [Num [N A]]] for French, etc.), the position is more difficult to maintain when it comes to languages like the Bantu language Kĩtharaka (E54), where the surface order is N Dem Num A (Abels & Muriungi 2006, Kanampiu & Muriungi 2019), which does not suggest that N and A form a constituent at least on the surface. Similarly, noun, adjective, and numeral do not appear to form a surface constituent.

In this talk, I discuss evidence that Kĩtharaka nevertheless obeys the universal hierarchy and that speakers assume it to hold of other languages. Evidence for this claim comes on the one hand from an artificial language learning experiment with mono-lingual speakers of Kĩtharaka and on the other from a detailed investigation of scope and ellipsis in the Kĩtharaka DP. The experimental evidence shows that speakers of the language approach the artificial language learning task with a strong bias favouring the universal hierarchy (as well as non-tangling trees). The scope and ellipsis data suggest that the Kĩtharaka order is directly associated with the hierarchical structure without the intermediation of movement (contra Cinque 2005, Abels & Neeleman 2012 and *mutatis mutandis* Steedman 2020). I adopt the proposal in Medeiros (2018) to account for the word order. Medeiros's proposal is designed to directly associate both non-tangling and some tangling surface orders with hierarchical structure without losing the restrictiveness of Cinque's (2005) proposal.