

What moves, why and how: the contribution of Austronesian

Introduction: van Urk (2015) characterizes the distinction between A/ \bar{A} -movement not by landing site (e.g. Spec, TP vs. Spec, CP) but rather through the properties of the features that trigger the movement. We argue that Austronesian data can be used to both confirm and extend this feature-based movement typology.

The system: van Urk proposes a movement typology that is categorized by the type of feature in the probe that triggers movement, where the particular characteristics of this feature determine the properties of the movement itself. \bar{A} -movement features (e.g. WH and focus) are *optionally* attached to a *variety* of constituents, accounting for why various elements may undergo \bar{A} -movement and why there is apparent non-locality. In (1) below, any of the *a-d* elements may be extracted through WH-movement. Further, if, for example, *d* has extracted, it has moved out of *c*, and over *a* and *b*. This non-locality is possible because the (optional) WH feature will only appear on the constituent to be moved. When *d* has moved, there will be no closer constituent (whether by dominance or c-command) that will have the relevant WH feature.

- (1) a. [_a The children] hid [_b the books] [_c under [_d the table]]

In contrast, an A-movement feature such as φ is an obligatory feature on all DPs explaining why A-movement targets only DPs and why it can only target the most local DP. An intervening DP will necessarily have this feature and would be targeted for the movement.

Spinal \bar{A} and A-movement: While the A/ \bar{A} distinction has generally been discussed with respect to the limbs of the clausal projection (arguments and modifiers), we apply it to XPs along the spine of the extended projection – for us, VP movement. We distinguish VP movement in English, for example, from the VP movement proposed for Austronesian languages such as Niuean in terms of \bar{A} and A-movement – where the former is \bar{A} -movement, driven by a feature that is related to information structure (discourse) and appears only optionally, and the latter follows from an intrinsic PRED feature (as in Massam and Smallwood 1997), explaining its obligatory and local nature. Below we see a Swedish case of long-distance \bar{A} VP movement in (2a), followed by an example of local A VP fronting in Niuean in (2b).

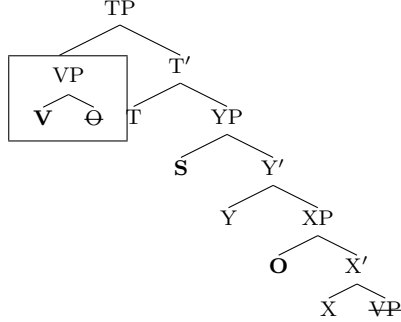
- (2) a. [_{VP} Läste boken] sa John [_{CP} VP att han gjorde VP]
 read.PST book.DEF said John that he göra.PST
‘Read the book, John said that he did.’ SWEDISH
- b. [_{VP} Takafaga ika tūmau nī] a ia VP
 hunt fish always EMPH ABS he
‘He is always fishing.’ NIUEAN

Crucially, VP movement in Niuean behaves neither like VP movement (to Spec, CP) in a language like Swedish nor DP movement (to Spec, TP) in a language like English – both of which can occur iteratively. Massam (2001) and Massam and Smallwood (1997) have proposed Pred fronting to Spec, TP, much along the lines of A-movement of DP in a language like English, but this movement cannot undergo further raising parallel to subject raising in English. Descriptively, this might seem problematic, but with feature triggered movement, this difference in behaviour is explained. The A-movement feature for English is φ , intrinsic to DPs, targeting the closest DP (in the Spec, TP). The A-movement feature for Niuean is PRED, intrinsic to *v*Ps, targeting the closest *v*P (the matrix predicate).

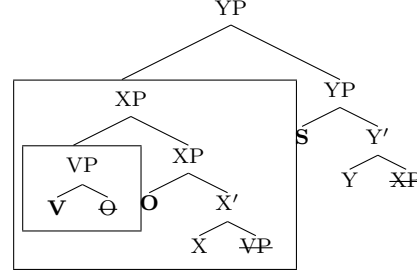
C-movement: Next we explore characteristics of roll-up movement of the type found in Malagasy (Pearson 2000, Rackowski 1998, Rackowski and Travis 2000) and determine that it is an example of a third type of movement triggered by the categorial feature shared

by the heads of an extended projection (Grimshaw 2000). This C(ategorical)-movement is predictably even more local than A-movement since every head on the spine will inherently have this feature. We demonstrate the distinction between A-movement and C-movement of the VP by comparing the VSO_{def} order of Niuean and the $VO_{def}S$ order of Malagasy. In Niuean, the remnant VP has moved over both the subject and the moved definite object, while in Malagasy, more local movement has moved the remnant VP to a position between the S and O, followed by subsequent movement of the VP+Object over the Subject.

(3) a. Niuean (Spinal A-movement)



b. Malagasy (Spinal C-movement)



Spinal C-movement feeds Spinal A-movement: A closer look at Niuean reveals that Niuean in fact has both spinal C-movement and spinal A-movement, the former feeding the latter. First we note that post-verbal modifying elements appear in the reverse order to their structural hierarchy (as in Cinque 1999) – see (4) (*well and properly* > *always*).

- (4) [ke mahua [**mitaki mo e tonu**] **tumau**] e haana a fekafekau
 SBJV work well and C properly always ABS his LNK servant
 ‘for his servant to always work well and properly.’ (Seiter 1980 (61b) p. 23)

Massam (2010) adopts the roll-up analysis (in our terms, C-movement) used by Pearson (2000), Rackowski (1998), Rackowski and Travis (2000) for inverse order in Malagasy to explain post-verbal modifiers in Niuean. Unlike in Malagasy, however, Niuean spinal C-movement only occurs within the predicate. The predicate itself undergoes spinal A-movement to the Spec, TP – the C-movement feeding the A-movement. This ordering is not unexpected given that the more local A-movement feeds the less local \bar{A} -movement.

Conclusion: We finish the paper by looking at the overall movement typology to examine the larger contribution of C-movement and spinal movement, and the role of Austronesian data, to our understanding of movement.

References: Cinque, G. (1999). Adverbs and functional heads: a cross-linguistic perspective. OUP. Grimshaw, J. (2000). Locality and extended projection. In Coopmans, P., Everaert, M., and Grimshaw, J., eds., *Lexical Specification and Insertion*, 115–134. John Benjamins. Massam, D. (2010). Deriving inverse order: The issue of arguments. In Mercado, R., Potsdam, E., and Travis, L., eds., *Austronesian and Theoretical Linguistics*. John Benjamins. Massam, D. and Smallwood, C. (1997). Essential features of predication in English and Niuean. In Kusumoto, K., editor, *Proceedings of NELS*, 263–272. Pearson, M. (2000). Two types of VO languages. In Svenonius, P., ed., *The Derivation of VO and OV*, 327–363. John Benjamins. Rackowski, A. (1998). Malagasy adverbs. In Paul, I., ed., *The Structure of Malagasy*, vol. II: *UCLA Occasional Papers in Linguistics* 20, 11–33. Rackowski, A. and Travis, L. (2000). V-initial languages: X or XP movement and adverbial placement. In Carnie, A. and Guilfoyle, E., eds., *The Syntax of Verb Initial Languages*, pages 117–142. OUP. Seiter, W. J. (1980). *Studies in Niuean Syntax*. Garland Press, New York. Van Urk, C. (2015). *A uniform syntax for phrasal movement: A case study of Dinka Bor*. PhD thesis, MIT.