

Proposed presentation for workshop on Dynamic Syntax, SOAS, April 2017.

"An incremental approach to parsing information structure."

This presentation describes a proposed methodology which developed out of a study of the relationship between word order and information structure (IS) in Swahili (Edelsten, et. al. 2013). This presentation will, however, concentrate on the methodology which is not language-specific.

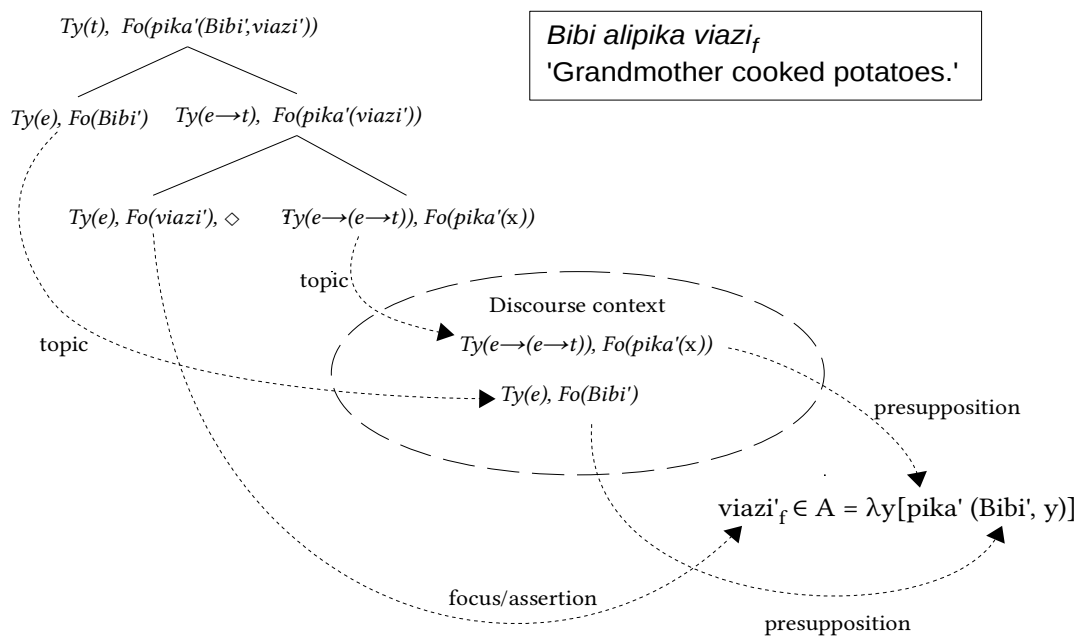
We start by defining focus as:

- (1) focus = $x_f \in \mathbf{A}$
 where \mathbf{A} = the set of alternative entities capable of satisfying the relationship between presupposition and assertion: λx [Presupp(x)] (Jackendoff, 1972)

The focus set \mathbf{A} starts as the universal set and is incrementally refined by parsing presupposed information until at the end of the parse we are left with a solution to \mathbf{A} . This process may be modelled as incrementally parsing links to the discourse context \mathbf{D} (Cann, 1993:175)

- (2) $\mathbf{D} = \{(Ty(e), Fo(x_i)); i=1..n\}$
 = a collection of nodes from the DS tree representing "topics"

The process may be represented diagrammatically as an extension to the DR tree with (a) a holder for the discourse context \mathbf{D} and (b) the λ expression e.g.:



It is hoped that the presentation may generate discussion about how IS may be integrated into the DS framework as suggested in discussion about left and right dislocation (Kempson et. al. 2006) and quantifiers (Kempson et. al. 2001, chapter 7). For example: can nodes of the discourse context be marked on the DS tree? What about external, maybe unstated, information? Could the λ expression be expressed in Montague semantic notation?

Cann, R., 1993. *Formal Semantics*. CUP, Cambridge.

Edelsten, Peter, Lutz Marten and Chiku Lijongwa, 2013. *Information Structure Constraints to Swahili Word Order*. presented at: 5th International Conference on Bantu Languages, Paris, June 2013.

Jackendoff, R. S., 1972. *Semantic interpretation in generative grammar*. MIT Press, Cambridge, Massachusetts.

Kempson, R., R. Cann and J Kiar (2006). "Topic, Focus and the Structural Dynamics of Language." In: V. Molnár and S. Windler (eds.): *The Architecture of Focus*. Mouton de Gruyter, Berlin.

Kempson, R., W. Meyer-Viol and D. Gabbay, 2001. *Dynamic Syntax, The Flow of Language Understanding*. Blackwell, Oxford.