

Information-structurally driven syntactic configurations

Kata Balogh

Heinrich-Heine-Universität Düsseldorf

We propose an analysis of the syntax-information structure interface in discourse-configurational languages, without imposing functional positions in the syntax. The analysis is based on a formalized Role and Reference Grammar (RRG; Van Valin 2005, Osswald & Kallmeyer 2018), extended with frame-semantic representations (Kallmeyer & Osswald 2013, Löbner 2015).

Hungarian is a well-known *discourse-configurational* language (É. Kiss 1995, Surányi 2015) with flexible word order. As such, it is a challenging language for any formal analysis on the syntax-semantics-pragmatics interface. Hungarian has a rich morphology (with extended case marking and verbal inflection) and these morphological devices, rather than syntactic configurations, code most grammatical information. However, it is not the case that in Hungarian, the word order can be changed freely without consequences for the sentence interpretation. In Hungarian, the surface order in the preverbal field is directly linked to the information structure of the sentence. The postverbal field has free word order, the relative order of the arguments after the verb does not encode grammatical differences, the postverbal word order variations are all associated with the same semantic content. On the other hand, the word order in the preverbal field is fixed and determined by the discourse-semantic functions *topic* and *focus*. Topicalized elements occupy a clause initial position (1), and the narrow identificational focus is placed in the immediate preverbal position and triggers inverse order of the verbal particle [VPRT] and the verb (2).

(1) *What about Mary?*

Mari-nak oda-adta Péter az almá-t.

Mary-DAT VPRT-gave Peter the apple-ACC

‘Peter gave Mary the apple.’ (≈ To Mary, Peter gave the apple.)

(2) *What did Peter give to Mary?*

Péter az almá-t adta oda Mari-nak

Peter the apple-ACC gave VPRT Mary-DAT

‘Peter gave Mary the APPLE.’ (≈ It is the apple that Peter gave to Mary.)

As shown above, the topic-focus structure of the utterance determines the surface structure and the order of the preverbal elements in Hungarian, motivating the distinction between topic and focus positions in the syntactic representation, as proposed by different generativist accounts (e.g. É. Kiss 2004). These positions are reserved for restricted semantic-pragmatic functions as aboutness topic, understood in terms of Gundel (1988) and Lambrecht (1994), and narrow identificational focus (É. Kiss 1998). On the other hand, the notion of pragmatic focus (Lambrecht 1994) is also highly relevant in Hungarian. Consider, for example, the additive particle *is* ‘also, too’ that does not associate with the structural focus, but still considered as focus sensitive, as argued by Balogh (to appear) based on context and by Balogh & Langer (unpublished) based on prosody.

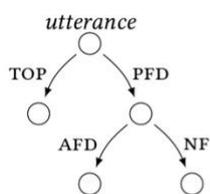
Contrary to the generativist accounts, we capture the syntax-information structure interface without syntactic functional positions, worked out in the framework of RRG (Foley & Van Valin 1984, Van Valin 2005). RRG is a highly suitable grammatical theory to capture various interface phenomena, given that the interaction of syntax, semantics and pragmatics plays a primary role in its formal architecture and theoretical principles. The main advantage of the RRG framework for the analysis of our data is that the necessary pragmatic mechanisms are

already present in the theory. Therefore, it offers a straightforward implementation, as opposed to generativist accounts that require the development of a pragmatic mechanism on top of the syntax. The main goal of this work is twofold. Firstly, we intend to propose an analysis of the Hungarian data and secondly, we propose an extension of RRG to account for discourse-configurationality across languages.

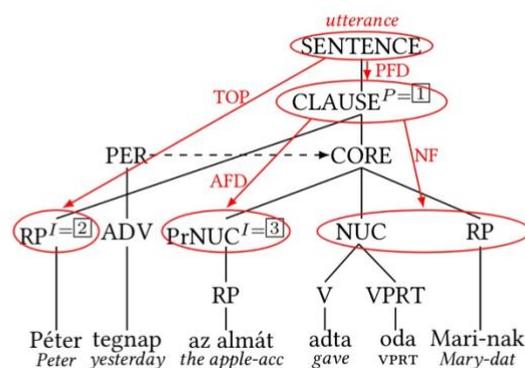
We argue that the structure-building aspect of information structure is distinct from its (semantic-)pragmatic interpretation aspect. In discourse-configurational languages, information structure has a structure-building effect. In these languages, certain information structural functions (topic and/or focus) are marked structurally via designated syntactic positions, as illustrated before in Hungarian, where the constituent in the clause initial position expresses *aboutness topic* (1) and the constituent in the immediate preverbal position expresses *identificational focus* (2). For a frame-based analysis of such structure building effects of information structure, we propose an information structure frame [IS-frame] as an overlay on the syntactic structure (3b). The overlay is understood as a direct linking of IS-functions and syntactic positions. This linking is determined by constructional schemas and replace the focus projection (Van Valin 2005).

The essence of the analysis of the Hungarian preverbal field is illustrated in (3). The generalized abstract IS-frame (3a) represents general notions of information structure: (a) the potential focus domain [PFD], the syntactic domain where the focus of the utterance can occur, (b) the actual focus domain [AFD], the syntactic domain that corresponds to the focus (domain) in Lambrecht's terms and (c) the sentence topic [TOP], often associated with aboutness. The syntactic domains AFD and PFD correspond to one or more information units, the minimal phrasal units in the syntactic representation (Lambrecht 1994). The (non-topical) part of the utterance that is inside the PFD but outside of the AFD is represented as non-focus [NF], corresponding to the notion of tail in Vallduví's (2016) terms. The constructional schema (3c) determines the linking between syntax, information structure and semantics (3b). Hereby the interface variables (represented by boxed numbers) are of great importance. The interface features appear on the syntactic nodes as well as in the representations of the semantic content and the information structure of the sentence. As illustrated in the constructional schema of the Hungarian preverbal field below, the linking is determined as: (a) the referent of the constituent in the sentence initial RP is considered as the topic and interpreted in terms of aboutness and (b) the referent of the constituent in the PrNUC position is considered as the focus and interpreted in terms of identification (also deriving exhaustivity). We argue that the IS-overlay analysis is cross-linguistically applicable, to represent both universal notions and language specific configurations.

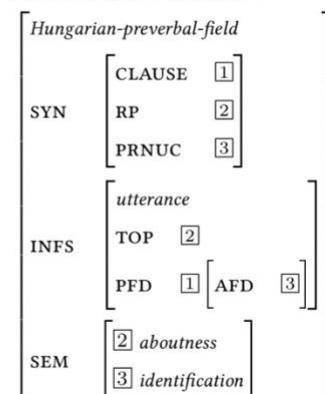
(3) a. generalized IS-frame



b. IS-overlay



c. constructional schema



References

- Balogh, K. to appear. Focus sensitivity in Role and Reference Grammar. In Van Hooste et al. (eds). *Proceedings of the 2015 RRG Conference*.
- Balogh, K. & C. Langer. unpublished. *Additive particles: syntax-prosody interface and interpretation*. Talk at the 14th International Conference on the Structure of Hungarian. June 11-12, 2019. Potsdam, Germany.
- É. Kiss, K. (ed). 1995. *Discourse Configurational Languages*. Oxford: University Press.
- É. Kiss, K. 1998. Identificational focus versus information focus. *Language* 74.
- É. Kiss, K. 2004. *The Syntax of Hungarian*. Cambridge: University Press.
- Foley, W. A. & R.D. Van Valin, Jr. 1984. *Functional Syntax and Universal Grammar*. Cambridge: University Press.
- Gundel, J. 1988. Universals of topic-comment structure. In Hammond et al. (eds). *Studies in Syntactic Typology*. Amsterdam: John Benjamins.
- Kallmeyer, L. & R. Osswald. 2013. Syntax-Driven Semantic Frame Composition in Lexicalized Tree Adjoining Grammars. *Journal of Language Modelling*. 1(2).
- Lambrecht, K. 1994. *Information Structure and Sentence Form*. Cambridge: University Press.
- Löbner, S. 2015. Functional Concepts and Frames. In Gamerschlag et al. (eds). *Meaning, Frames, and Conceptual Representation*. Düsseldorf University Press.
- Osswald, R. & L. Kallmeyer. 2018. Towards a formalization of Role and Reference Grammar. In Kailuweit et al. (eds). *Applying and expanding Role and Reference Grammar*. Freiburg: Albert-Ludwigs-Universität, Universitätsbibliothek.
- Surányi, B. 2015. Discourse-configurationality. In Féry & Ishihara (eds). *The Oxford Handbook of Information Structure*. Oxford: University Press.
- Vallduví, E. 2016. Information structure. In Aloni & Dekker (eds). *The Cambridge Handbook of Formal Semantics*. Cambridge: University Press.
- Van Valin, Jr., R. D. 2005. *Exploring the syntax-semantics interface*. Cambridge: University Press.