Toward a cognitive dependency grammar of Hungarian

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Research goal

- describe Hungarian in its own right
- integrating cognitive linguistics (CL) and DG
- basic idea: CxG and DG are compatible (cf. Holmes and Hudson 2005, Osborne and Gross 2012)
- however, I lean toward a Langackerian approach to CL

The structure of the presentation

- 1. Theoretical assumptions (Saussure, Langacker, XDG)
- 2. A multi-dimensional description of Hungarian
 - the clause designating a process (S1)
 - the clause expressing some speech function (S2)
 - the clause as a message embedded in context (S3)
- 3. Summary

1. Theoretical assumptions

- Clausal meaning and form involve multiple *dimensions*, each of which is a graph.
- These are parallel *channels* or *threads* of processing, which are symbolically associated,
- producing **form-meaning** pairs (signs, constructions).

Saussure (1916)



Langacker (2001)



• Each dimension is a graph:

"An XDG grammar allows the characterisation of linguistic structure along several *dimensions* of description. Each dimension contains a separate graph, but all these graphs share the same set of nodes. Lexicon entries synchronise dimensions by specifying the properties of a node on all dimensions at once." (Debusmann et al. 2004: 2)

 Proposal → semantic graphs (S1, S2, S3) paired up with formal graphs (F1, F2, F3).

2. A multi-dimensional description of Hungarian

- Overview of dimensions
- Illustration

 NB. The proposed semantic dimensions are close to Halliday's (2014) 'clause as representation', 'clause as exchange' and 'clause as message'.

S1: grounded process + participants and circumstances

S2: speech function (illocutionary force and polarity)

S3: contextualization (fluency & accuracy of processing)

S1: grounded process + participants and circumstances

S2: speech function (illocutionary force and polarity)

S3: contextualization (fluency & accuracy of processing)

- For S1, cf. Tesnière's (1959) drama metaphor, and Fillmore's (1982) Frame Semantics.
- For the integrated treatment of illocutionary force and polarity (S2), see Croft (1994: 466), Langacker (2009: 232).
- Contextualization (S3) is an alternative to the notion of Theme (Prague School / Halliday), and subsumes Topic.

F1: segmental content (e.g. case suffixes and adpositions)

F2: word order (precedence, adjacency)

F3: prosody (in terms of relative prominence)

"Suppose we want to represent the SyntS of the sentence *Leo knows that Alan is in love with Helen*. There are exactly four types of linguistic means that this sentence uses to express its meaning: lexemes, order of lexemes (i.e., word order), prosody, and inflection." (Mel'čuk 2009: 23)

S1: grounded process + participants and circumstances

S2: speech function (illocutionary force and polarity)

S3: contextualization (fluency & accuracy of processing)

F1: segmental content (e.g. case suffixes and adpositions)

F2: word order (precedence, adjacency)

F3: prosody (in terms of relative prominence)

- The dimensions (threads) of meaning and form are symbolically associated.
- In Hungarian, more or less like this:

S1: grounded process + participants and circumstances

F1: segmental content (e.g. case suffixes and adpositions)

S2: speech function (illocutionary force and polarity)

F2: word order (precedence, adjacency)

F3: prosody (in terms of relative prominence)

S3: contextualization (fluency & accuracy of processing)

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Illustration

- (1) a. A Disney meg-vette a 21st Century Foxot. the Disney.NOM PREV-bought.3sG.DEF the 21st Century Fox.ACC *Disney bought 21st Century Fox.*'
 - b. A: A Disney megvette a 21st Century Foxot? 'Did Disney buy 21st Century Fox?' B: Igen, megvette. 'Yes, they [lit. he/she/it] bought it.'
 - The dual role of a finite lexical verb:
 - designates the process which is at the centre of the theatrical performance, and evokes the frame of Buying (S1)
 - expresses illocutionary force and polarity (S2) (cf. Hudson 2010: 264; Kahane, to appear).
 - *megvette* 'he/she bought it' is a **proto-statement** (a schematic clause stating the existence of a process)

(2) Ki vette meg a 21st Century Foxot? who.NOM bought.3sg.DEF PREV the 21st Century Fox.ACC 'Who bought 21st Century Fox?'

• Frame semantic relations (S1) coded by morphology (F1).



Figure 1. An illustration of S1 and F1.

- No reference to GF's (subject, object, etc.).
- Subjecthood reduced to a set of construction-specific mappings, e.g. the nominative dependent of megvesz 'buy' invariably expresses the Buyer.

"the thing denoted by the nominative is the actor in the plot of active verbs, the sufferer in that of passive verbs, and it is in a particular state in the plot of middle verbs. The generalization cannot be taken any further, hence the true [semantic] interpretation cannot be considered completely successful." (Brassai 2011 [1864]: 199, my translation)

- *Megvette* 'he/she bought it' is used to **state** that an instance of buying occurred.
- In S2, this default function is **overridden** by *ki* 'who.NOM'.
- The overriding relation (OVR) is symbolized by word order (F2) and prosody (F3).



Figure 2. An illustration of S2, F2 and F3.

- S3 (contextualization)
- (3) A Disney sajnos állítólag meg-vette a 21st Century Foxot. the Disney.NOM unfortunately allegedly PREV-bought.3sG.DEF the 21st C. Fox.ACC 'Disney unfortunately allegedly bought 21st Century Fox.'

"The Theme is the element that serves as the point of departure of the message; it is that which locates and orients the clause within its context. The speaker chooses the Theme as his or her point of departure to guide the addressee in developing an interpretation of the message [...]." (Halliday 2014: 89)

• Why call it Theme?

- S3 consists of **contextualizing relations**.
- A contextualizer aids the efficient processing and/or intended interpretation of the speaker's message.
- Cf. Halliday (2014: 109): "the message begins with »let me tell you how this fits in«, and/or »let me tell you what I think about this«".
- Subtypes include
 - topic (aboutness)
 - situating the process in space or time
 - situating the message in its discursive context
 - epistemic modality and evidentiality
 - evaluative attitude.
- Coded by word order (peripheral position) and prosody.

(3) A Disney sajnos állítólag meg-vette a 21st Century Foxot. the Disney.NOM unfortunately allegedly PREV-bought.3sG.DEF the 21st C. Fox.ACC *Disney unfortunately allegedly bought 21st Century Fox.*'



Figure 3. An analysis of (3) in S1 and S3.

- An element need not participate in all dimensions.
- A single node of one dimension may correspond to a catena of interconnected elements in another.

• A note on psycholinguistic plausibility:

"Cognitive neuroscientists now view cognitive functions as arising out of the dynamic interactions of distributed brain areas organized in networks [...]. A given brain region can participate in more than one network, and some regions participate in many." (Coulson 2017: 526)

3. Summary

- Clausal meaning and form involve multiple dimensions, each of which is a graph.
- Symbolic associations produce signs/constructions.
- In Hungarian,
 - segmental content (F1) is used to differentiate between types of participants and circumstances (S1)
 - word order (F2) and prosody (F3) code speech function (S2) and contextualization (S3).

Thank you for your attention.

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