# Toward a cognitive dependency grammar of Hungarian

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### Abstract

The paper presents the key tenets of a novel approach to the structure of Hungarian clauses that combines aspects of cognitive linguistics and dependency grammar. Clauses are given a multigraph description (as in XDG), with separate semantic graphs dedicated to frame semantic relations (S1), speech function (S2) and contextualization (S3). These stand in symbolic association with formal dimensions pertaining to morphology (F1), word order (F2) and prosody (F3). It is shown that the finite verb, or a catena of elements including the verb, is central for both S1 and S2, functioning as a 'clause within the clause'. Further, the clause is shown to manifest modularity, whereby a single node in one dimension may correspond to a catena of interconnected elements in another.

### 1 Introduction

The goal of this paper is to present the broad outlines of a novel approach to the structure of Hungarian clauses. This approach is inspired by two major sources, cognitive linguistics (CL) and dependency grammar (DG). In line with CL, syntax is regarded as the study of learned pairings of meaning and form in the sentence, with a lexicon-syntax continuum hosting signs (constructions) of varying degrees of complexity and schematicity (cf. Goldberg, 1995; Langacker, 1987, 2005, 2008; Diessel, 2015). In line with DG, the internal structure of multiword constructions is described by reference to syntagmatic rather than part/whole relations.

This combination of ideas entails a focus on form-meaning correspondences that hold between semantic relations and associated formal devices. In fact, under a Langackerian interpretation of cognitive linguistics, familiar concepts of DG such as subject and object can no longer be regarded as theoretical primitives. Rather, they must be reduced to symbolic associations between phonologically relevant properties (e.g. word order or case morphology) and aspects of clausal meaning.<sup>1</sup> Crucially, meaning from a CL perspective is taken to comprise all facets of conceptualization (mental processing), including such factors of construal as perspective, focusing, and specificity (cf. Langacker, 2008).

Work along these lines has produced a comprehensive description of Hungarian clause structure (Imrényi, 2017a) and the rudiments of a theory, or research program, that may be called cognitive dependency grammar (CDG).<sup>2</sup> In this paper, I focus on the following aspects of the novel account: i. the nature of the three semantic dimensions (S1, S2, S3), and the rationale for positing them (Section 2), ii. the dual role of the clausal core (a catena that serves as 'clause within the clause') in S1 and S2 (3.1), iii. contextualizing relations (S3) and iv. cross-dimensional mappings (3.2).

The proposal stems from an intention to describe Hungarian in its own right, and focuses on basic conceptual matters. Thus, (in-depth) cross-linguistic application and practical implementation are beyond the scope of the paper. In terms of the theoretical landscape, my aim is to show that insights from cognitive and functional approaches (including Halliday's Systemic-Functional Grammar) can be fruitfully integrated into DG-oriented theorizing. In a Hungarian context, I seek to develop an alternative to mainstream generative accounts (e.g. É. Kiss, 2002), offering a new set of conceptually defined categories as well as a new way of raising the basic questions about sentence structure.<sup>3</sup> However, the proposal is at an early stage of its development, to be seen as a new beginning rather than a full-fledged framework.

<sup>&</sup>lt;sup>1</sup>As Langacker (2008: 6) puts it, "all valid grammatical constructs are symbolic, hence reducible to form-meaning pairings".

<sup>&</sup>lt;sup>2</sup> CDG is different from Hudson's Word Grammar (WG) (Hudson, 1990, 2007, 2010), which is also CL-oriented and dependency-based, by more closely following a Langackerian conception of cognitive linguistics (Langacker, 1987, 2008).

 $<sup>^{3}</sup>$  For example, instead of the notion of "focus", I work with the concept of "overriding" (see Section 3.1), and "topic" is treated as a subtype of "contextualizers" (3.2). Instead of asking questions such as what position a constituent "occupies" or "moves into", both the function and the form (e.g. linearization) of elements are defined in relational terms, with respect to other elements in the syntagmatic chain.

# 2 Beyond Tesnière's drama metaphor: three dimensions of clausal meaning

As Tesnière famously states, "the verbal node [...] is a theatrical performance. Like a drama, it obligatorily involves a process and most often actors and circumstances" (Tesnière, 2015 [1966]: 97). Under these assumptions, the sentence *Alfred gives the book to Charles* can be semantically analysed by saying that the verb designates the process of giving, with the three dependents expressing the actors (or participants) associated with it. Although many practitioners of DG make a strict separation between syntax and semantics, it is hard to escape the view that the drama metaphor underlies all DG analyses in which a finite lexical verb serves as the root node of the sentence. Concomitantly, at least in prototypical cases, an analysis in terms of subject, object, etc. closely corresponds to a semantic account that treats the referents as participants of the designated process.

Like all metaphors, however, the drama metaphor also has limitations; it does not capture all aspects of clausal meaning. One issue can be illustrated by a sentence such as *What does Alfred give to Charles?*, in which *what* has a dual role to play: on the one hand, it pertains to a participant (the thing which is given), and on the other, it endows the sentence with the function of a wh-question. Therefore, a DG representation that only treats it as direct object misses something important about its function and behaviour. Additionally, adverbs such as *unfortunately* or *probably* do not designate any participant or circumstance of the onstage process (the theatrical performance); rather, they indicate the speaker's evaluation/assessment of the foregrounded information.

In my research on Hungarian, I have found it useful to distinguish between three semantic dimensions, in a way that is consonant with Halliday's (1994: 35) notions of 'clause as representation', 'clause as exchange' and 'clause as message' (see also Langacker, 2001, 2015). The dimensions, represented as semantic graphs, address the following questions.

S1: What grounded process is designated by the clause?<sup>4</sup> What are its participants and circumstances?

S2: What is the speech function of the clause? Is the speaker stating the existence (occurrence) of the grounded process, or does the clause serve a different purpose?

S3: How does the speaker contextualize the message to facilitate its efficient processing and intended interpretation?

Under these assumptions, the dual role of *what* can be captured by analysing it in both S1 and S2, whereas elements like *unfortunately* and *probably* are assigned exclusively to S3.

In contrast with Halliday, I use dependency structures (semantic graphs) to represent these complementary aspects of meaning, and link them to dimensions of linguistic form (grounded in phonological space) including morphology/segmental content (F1), word order (F2) and prosody (F3). Thus, the proposal is very close to the formalist framework of Extensible Dependency Grammar (XDG), whose key tenet is the following:

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)

However, my approach departs from XDG by having a CL-orientation and also by lifting the constraint that all graphs must share the same set of nodes. In the next section, I give a brief illustrative discussion of the proposal.

## **3** The CDG approach to Hungarian

#### 3.1 The clausal core and its dual function. The analysis of S1 and S2

A finite lexical verb has two basic roles in clausal semantics. Firstly, it designates a grounded instance of a process type (e.g. an instance of buying), which is at the centre of the theatrical performance.<sup>5</sup> By virtue of this, it can and often must be accompanied by dependents designating participants and circumstances. Secondly, the finite verb, whether a lexical or auxiliary verb, also marks the illocutionary force and polarity (in short, the speech function) of the sentence, at least by default.<sup>6</sup> Here are two formulations of this insight.

<sup>&</sup>lt;sup>4</sup> The notion of grounded process is taken over from Langacker (2008). 'Process' is understood highly generally to encompass actions, states, etc., the key criterion being that they unfold in time and are processed by sequential scanning (Langacker, 2008: 111). 'Grounding' is interpreted as the operation whereby an instance of a type (here, a process type) is situated with respect to the ground, defined by Langacker as involving "the speech event, its participants (speaker and hearer), their interaction, and the immediate circumstances (notably, the time and place of speaking)" (Langacker, 2008: 259).

<sup>&</sup>lt;sup>5</sup> Note that additional elements may also crucially contribute to the function of designating the grounded process (e.g. in the case of idioms and light verb constructions), and elements other than the verb may also serve in this capacity in languages like Hungarian.

<sup>&</sup>lt;sup>6</sup> For proposals treating illocutionary force and polarity together, as aspects of an integrated system, see Croft (1994: 466) and Langacker (2009: 232).

I said that the main use of the Verb is to convey affirmation, because we will see below that it is also used to convey other movements of our soul; such as *to desire, to pray, to command*, etc. (Arnault and Nicole, 1662: 90; quoted by Kahane, to appear).

[The meaning of finite verbs] includes what is called an illocutionary force which guides the listener; so if I say to you *Bill has died*, you know that this is a new property of Bill that I am inviting you to add to your memory. [...] Similarly, the finite verbs in *Has Bill died*? and *Remember me*! each carry the illocutionary force for a question and a command. (Hudson, 2010: 264)

Illocutionary force is generally assumed to characterize entire clauses (or indeed utterances) rather than the finite verb itself. However, its linking to the finite verb is highly motivated in Hungarian, which even allows this unit to serve as a full-fledged positive declarative sentence under appropriate circumstances (with sufficient contextual support).

(1)	a.	A Disney	meg-vette	a 21 <sup>st</sup> Century Foxot.
		the Disney.NOM	PREV-bought.3SG.DEF	the 21 <sup>st</sup> Century Fox.ACC
		<sup>6</sup> Disney bought 21 <sup>s</sup>	<sup>t</sup> Century Fox.'	-
	b.	A: A Disney megve	ette a 21 <sup>st</sup> Century Foxot?	'Did Disney buy 21 <sup>st</sup> Century Fox?'
		B: Igen, megvette.	'Yes, they [lit. he/she/it] b	ought it.'

In (1a), the finite verb *megvette* 'PREV.bought.3SG.DEF' evokes the frame of a commercial transaction (cf. Fillmore 1982), necessarily involving a Buyer and some Purchased Goods.<sup>7</sup> Owing to this frame-evoking role, the finite verb is central for the organization of S1. However, its function is more complex than this: it also expresses a statement that an instance of buying took place, which makes it central for S2 as well. Since Hungarian finite verbs have a way of marking not only the person and number of the subject but also the definiteness (contextual recoverability) of the object referent (marked by DEF in the glosses), speaker B employs *megvette* 'he/she bought it' without any dependents in her reduced answer in (1b). In this context, the verb is sufficient to convey the same message as the elaborate clause in (1a).

I use the term **clausal core** to refer to a minimal unit in the clause which expresses the same grounded process (e.g. a grounded instance of buying) as the clause as a whole.<sup>8</sup> In Hungarian, the clausal core need not be coextensive with the finite verb; rather, it may also be a multiword catena of elements.<sup>9</sup> This is the case with routinized, more or less idiomatic expressions such as *feleségül vesz* 'marry [a woman]' (lit. 'take as wife') and *figyelembe vesz* 'take into consideration', where the frame is evoked by a multiword unit. Additionally, there are constructions (e.g. those involving auxiliaries) where the evoking of a process type and the grounding of an instance of that type are effected by separate words.

The clausal core of a neutral positive declarative clause such as (1a) is characterized more specifically as a **proto-statement**. A proto-statement has the dual function of 1) designating the grounded process that is also expressed by the clause as a whole and 2) expressing a statement to the effect that this process exists (existed, will exist) at some time and in some mental space. It is thus a schematic clause, and (1a) includes the proto-statement *megvette* as a 'clause within the clause'. The notion of mental space (cf. Fauconnier, 1985) is necessary because of auxiliaries such as *kell* 'must', *lehet* 'may' and *akar* 'want', which may also appear inside a clausal core along with the infinitival form of a main verb (e.g. *meg akarja venni* 'he/she wants to buy it'). Auxiliaries allow speakers to talk about the existence of a process in the world of necessary or possible actions, somebody's intentions, etc. rather than the Reality Space (the world of actual occurrences). I assume that the proto-statement function is linked to the clausal core as an unmarked default value.

Having discussed the three semantic dimensions and the dual role of the clausal core, let us turn to the analysis of example (2).

(2)	Ki	vette	meg	a 21 <sup>st</sup> Century Foxot?
	who.NOM	bought.3SG.DEF	PREV	the 21 <sup>st</sup> Century Fox.ACC
	'Who boug	ht 21 <sup>st</sup> Century Fox?		

<sup>&</sup>lt;sup>7</sup> Preverb+verb combinations are lexicalized units (much like English phrasal verbs) that often have a partially or fully idiomatic meaning. A preverb (glossed as PREV) such as *meg* immediately precedes the verb stem by default; however, we will see later that in certain constructions, this default order gets reversed.

<sup>&</sup>lt;sup>8</sup> Cf. the notion of existential core in Langacker (2012).

<sup>&</sup>lt;sup>9</sup> For the notion of catenae, see Osborne and Gross (2012).

In (2), the clausal core is *vette meg*, which evokes the frame of buying, and designates the same grounded process as the clause as a whole. S1 is a graph consisting of the frame semantic (thematic) relations Agent and Patient (more specifically, Buyer and Purchased Goods). S1 is symbolically associated with an F1 dimension which highlights relevant morphological properties. In particular, the nominative case of ki 'who.NOM' and the accusative case -(V)t of  $21^{st}$  Century Foxot '21<sup>st</sup> Century Fox.ACC' make it clear which company acted as the Buyer and which one assumed the role of Purchased Goods.<sup>10</sup> In the diagram, the semantic and formal representations are separated by a horizontal line. Dotted lines are used to mark correspondences between elements of the two.

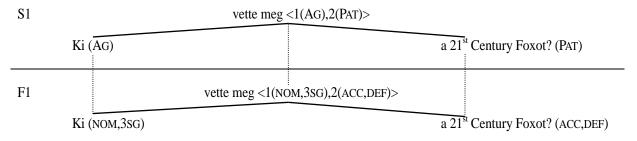


Figure 1. An illustration of S1 and F1.

In the description of Hungarian, I see no pressing need for making reference to grammatical functions (e.g. subject, object). For example, subjecthood can be reduced to a set of **construction-specific mappings** between thematic roles (e.g. Agent, Patient, depending on the construction) and morphological properties (nominative case, person-and-number agreement with the verb). This approach draws on Brassai's following insight:

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)

From the perspective of construction grammar, Brassai had no reason to be dissatisfied. Taking the position that constructions are basic and the categories and relations in them derivative (cf. Croft, 2001: 46), we can say that it is up to particular constructions to determine what role is associated with the nominative dependent. In active construals of a transitive event, this role will be the Agent/Experiencer, in passive constructions, the Patient/Theme, etc. More specifically, knowing the verb *megvesz* 'buy' involves knowing the fact that its nominative dependent is associated with the Agent thematic role. Needless to say, the notion of subject is harder to eliminate in an account of English, where e.g. weather verbs pose further challenges. However, no such issues arise in Hungarian, hence I follow Brassai's general approach.

The careful reader must have noted that while (1a) includes the verb *megvesz* 'buy' in its default preverb+verb order (*megvette*), the opposite linearization is found in (2) (*vette meg*). To account for this, we need to take a look at S2 and the formal dimensions with which it is symbolically associated, namely F2 (for word order) and F3 (for prosody).

Recall that the clausal core is also central for S2 owing to its ability to determine, at least by default, the speech function of the clause as a whole. For example, the declarative illocutionary force and positive polarity of (1a) are "projected" or "inherited" from the proto-statement *megvette*, which also serves to state the occurrence of an instance of buying.

The key step toward an S2 analysis of (2) is that a proto-statement (a positive declarative clausal core) is also materially present in it. In particular, it includes all of the segmental content (*meg* and *vette*) which is used by default, in preverb+verb order, to state that an instance of buying took place. What is special about (2) is that the default positive declarative function of the clausal core is not "projected to" or "inherited by" the clause as a whole, whose speech function is to inquire about the identity of a participant. This can be captured in S2 by saying that ki 'who.NOM' acts as an **overrider** (OVR) of the core's default speech function; it stands in a relation of overriding with the core. On the

<sup>&</sup>lt;sup>10</sup> More generally, the form of a word (in contrast with other forms in the same paradigm) has a cuing role for the recognition of its referent's function. In some paradigms such as that of nouns with a first or second person possessive marker, the usual -(V)t ending of accusatives can go missing (e.g. *A fiam szereti a lányod[at]* 'the son.my loves the daughter.your', 'My son loves your daughter'). In examples like this, we can say that the base form (e.g. *lányod*) is linked to both the nominative and the accusative slots of the case paradigm, and it is up to word order (preverbal dependents are more likely to denote agents/experiencers), world knowledge, etc. to provide disambiguation. In other words, case is more properly interpreted as a value within a paradigm rather than as something which is necessarily manifested in specific segmental content.

formal side, this is coded by the overriding of default linearization, i.e. inversion (F2) and the destressing of the clasual core (F3).

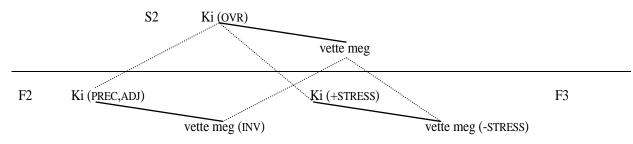


Figure 2. An illustration of S2, F2 and F3.

In S2, the dominant element is ki. As an overrider, it imposes its speech function on the structure as a whole. Since *a*  $21^{st}$  *Century Foxot* does not modify the type of speech function which is associated with the clause, it is absent from S2. In F2, it is signalled that the interrogative pronoun precedes (PREC) and is adjacent (ADJ) to *vette meg*, with the latter also displaying preverb-verb inversion (INV). Finally, F3 marks relationships of relative prosodic prominence. The label +STRESS and -STRESS are to be interpreted as 'more stressed' and 'less stressed', respectively.

The concept of overriding is useful for the description of immediately preverbal, inversion-triggering elements in Hungarian because it is suitable for capturing a seemingly highly heterogeneous set of elements displaying the formal properties just mentioned. In particular, preverb-verb inversion occurs not only after interrogative pronouns but also after the negative particle *nem* 'not' (e.g. *A Disney nem vette meg a 21<sup>st</sup> Century Foxot* 'Disney did not buy 21<sup>st</sup> Century Fox') and after so-called identificational foci (e.g. *A DISNEY vette meg a 21<sup>st</sup> Century Foxot* 'It was Disney who bought 21<sup>st</sup> Century Fox).<sup>11</sup> It holds for all of these constructions that the default speech function of the clausal core (that of stating the existence of a grounded process) cannot prevail, as the clause as a whole serves a fundamentally different function.

# 3.2 Contextualizing relations (S3). Cross-dimensional mappings

Finally, let us see an illustration of the third semantic dimension, which represents contextualizing relations. Someone supporting the independence of  $21^{st}$  Century Fox might opt for the following construal of the transaction.

(3)	A Disney	sajnos	állítólag	meg-vette	a 21 <sup>st</sup> Century Foxot.	
	the Disney.NOM	unfortunately	allegedly	PREV-bought.3SG.DEF	the 21 <sup>st</sup> C. Fox.ACC	
	'Disney unfortunately allegedly bought 21 <sup>st</sup> Century Fox.'					

Before we turn to the details of the analysis, it is worth discussing how it relates to previous proposals in the literature.

As a first approximation, S3 is meant to describe what other theories call topic/comment or theme/rheme articulation. In Halliday's approach, which goes back to the Prague School (Garvin, 1964; Firbas, 1992),

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 [...]. The remainder of the message, the part in which the Theme is developed, is called [...] the Rheme (Halliday, 2014: 89).

In the history of Hungarian linguistics, Sámuel Brassai had offered a similar account, and may be credited with the discovery of information structure, preceding Gabelentz (1868) by several years. Brassai used the term inchoative, derived from the Latin verb *inchoare* 'begin', to name sentence-initial elements preceding the main part of the sentence (conveying new information) for which the speaker wants to prepare the listener. He defined the function of inchoatives as follows: they "prepare the ground in the listener's mind for comprehending the meaning of the sentence, in other words they have an attention-directing, preparatory role, linking up the mental operations of the listener with those of the speaker" (Brassai, 2011 [1860]: 54, my translation).

<sup>&</sup>lt;sup>11</sup> For the notion of identificational focus, see É. Kiss (1998). The usual strategy of É. Kiss is to define the function associated with the socalled focus position (Spec-FP) based on identificational focus only (cf. É. Kiss, 2002: 78), even though other elements occupying the same position are not equally compatible with this definition. Overriding is proposed here as a more schematic notion that applies in the same way to varied types of preverbal, inversion-triggering elements. Additionally, it may also inform the description of English (cf. Imrényi, 2017b: 309).

Halliday notes that what other linguists call topic represents only one subtype of theme, the "topical theme" (Halliday, 2014: 89). (And in the same way, Brassai's category of inchoatives is much broader than that of topics.) However, given that *topic* and *theme* are synonyms in present-day English, this terminology seems rather confusing. Therefore, in line with Halliday's formulation that the theme "locates and orients the clause within its context", I work with the notion of **contextualization** instead. More precisely, the phenomenon is captured in CDG by the notion of contextualizing relations, constituting the third semantic dimension (S3).

In example (3), the "comment" or "rheme" is expressed by *megvette a 21<sup>st</sup> Century Foxot* 'bought 21<sup>st</sup> Century Fox'. This is the contextualized part of the clausal network, with which three elements (contextualizers) stand in a contextualizing relationship, namely *a Disney* 'Disney.NOM', *sajnos* 'unfortunately' and *állítólag* 'allegedly'.

Gumperz (1982: 131) defines contextualization as the process by which discourse participants "foreground or make relevant certain aspects of background knowledge and underplay others", using the term 'contextualization cue' to refer to linguistic signals for the situated understanding of socio-cultural meaning (see also Verschueren, 1999: 112). However, my understanding of contextualization is mostly informed by Halliday's following remark: "the message begins with »let me tell you how this fits in«, and/or »let me tell you what I think about this«" (Halliday, 2014: 109). Drawing on this insight, I suggest that the dual role of contextualizers is to facilitate the efficient processing of the foregrounded information and/or to signal the speaker's intended interpretation.

In (3), starting the sentence with *a Disney* 'Disney.NOM' is optimal as it is a fundamental aspect of our knowledge that processes are anchored to participants (for anchoring, see Langacker, 2012); this is how we memorize and retrieve them. I regard topic as a subtype of contextualizers that stands in an aboutness relation with the contextualized message. A topic offers a natural point of departure for the speaker to activate a body of knowledge and also gives an early signal to the listener as to where she can integrate the new information.

While topics primarily aid the efficiency of processing, the use of *sajnos* 'unfortunately' and *állítólag* 'allegedly' is motivated by the need for speakers to signal their intended interpretation of the message. Expressing an evaluative stance is often important because speakers tend to be engaged in attempts at influencing how their listeners perceive and interpret the world, they may want to express empathy, etc. *Sajnos* contributes significantly to the interpretative context of the contextualized part (the "rheme") in (3) by signalling the transaction's negative evaluation by the speaker. Finally, the use of *állítólag* 'allegedly' is motivated by the cooperative principle (Grice, 1975). Since the speaker of (3) is unable to assume full personal responsibility for the validity of the message, she avoids potentially misleading the listener by using an evidential expression to indicate the fact that her information comes from others.

One advantage of the concept of contextualization is that it readily accounts for cases when a contextualizer appears at the right periphery. For example, the linearization *A Disney sajnos megvette a 21<sup>st</sup> Century Foxot állítólag* is also grammatical in Hungarian. In this variant, *állítólag* 'allegedly' supplies retroactive contextualization (cf. Verschueren, 1999: 112). By the same token, left-dislocation and right-disloction of a referential expression (e.g. *Messi, he's a brilliant player* vs. *He's a brilliant player*, *Messi [is]*) can both by subsumed under the analysis.

In the remainder of this section, I offer a simplified representation of S3 in the context of cross-dimensional mappings. Ignoring the formal dimensions for the sake of simplicity, we can analyse example (3) as follows.

<b>S</b> 1	$\checkmark$				
	A Disney [AG]	sajnos	állítólag	megvette a 21 <sup>st</sup> Century Foxot [PAT].	
S3	A Disney [C]	sajnos	állítólag	megvette a 21 <sup>st</sup> Century Foxot.	
		[C]	[C]		
				<b>───</b> ^ ^ ^	

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

As the analysis shows, S3 contains three contextualizing relations (C) aiding the processing and intended interpretation of the foregrounded information.<sup>12</sup> In S1, *sajnos* and *állítólag* play no role, which is marked by grey colour. The fact that elements need not participate in all of the dimensions motivates the following formulation of the principle of **connectedness** (cf. Mel'čuk, 1988: 23): Each element must be linked to at least one other element, in at least one dimension.

Moreover, on the basis that *megvette a 21<sup>st</sup> Century Foxot* represents a single node in S3 but a combination of interconnected elements in S1, the following principle seems justified: A catena (connected subgraph) of one dimension may function as a single node in another. This may be seen as an example of **network modularity** (Newman, 2006).

<sup>&</sup>lt;sup>12</sup> In this paper, I cannot go into a detailed discussion of the various types of contextualizers. I only mention the following for orientation: a) anchoring to a person or thing (a subtype of which is the topic or aboutness function), b) situating a process in space or time, c) epistemic modality and evidentiality, d) attitude, e) inter-clausal relations (e.g. the marking of serial order). The ultimate source is Brassai (2011 [1860]: 52–54), listing and illustrating no fewer than 18 subtypes of inchoative.

This principle also holds for the mapping between S1 and S2. For example, *melyik cég* 'which firm.NOM' is a single node of S2 (as an overrider) in *Melyik cég vette meg a 21<sup>st</sup> Century Foxot?* 'Which firm bought 21<sup>st</sup> Century Fox?' but it is a combination of two connected elements, i.e. a multiword catena, in S1.

#### 4 Summary and conclusions

The goal of this paper has been to give a concise presentation of a new approach to Hungarian and the rudiments of a theory, or research program, that has emerged from it. Cognitive dependency grammar (CDG) is envisaged as the study of form-meaning correspondences in multiple dimensions, each of which takes the form of a graph. The idea of a multigraph description is shared with XDG; however, the content of the dimensions is closer to Halliday's System-ic Functional Grammar. Three semantic dimensions have been introduced for frame semantic relations (S1), speech function (S2) and contextualization (S3), linked to one or more of the formal representations F1 (morphology), F2 (word order) and F3 (prosody). Highlights of the proposal include the idea that subjecthood may be reduced in languages like Hungarian to a set of construction-specific mappings between thematic roles and morphological properties; the concept of overriding for describing a varied class of inversion-triggering elements; and the notion of contextualization subsuming topics along with other expressions aiding the efficient processing and/or intended interpretation of a message.

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