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A dependency-based account of Hungarian structural focus

The paper combines aspects of dependency grammar and cognitive grammar to propose a new model of Hungarian clausal structure (in a rudimentary form), with special regard to structural focus and negation. Under the assumptions of the model, the core of Hungarian syntax can be described in terms of various types of symbolic relations (formally encoded semantic relations) between the predicate and its dependents. Supplementing the traditional set of relational categories {subject, object, adverbial}, which are relevant for Hungarian morphology, I introduce a second dimension of description with the relational categories {elaborator, extender, restrictor}, bearing on word order and prosody. This opens the way for a new approach to Hungarian structural foci and the sentential negator, interpreted as instantiating a particular type of symbolic relation to the predicate.

Key words: structural focus; negation; symbolic relations; elaboration; extension; restriction.

1. Introduction

Until recently, Hungarian syntactic structure has been generally analysed in either of two ways. One school of thought, represented by 'traditional grammarians', would use a ***dependency tree*** to account for the structure of a sentence in terms of the relational notions subject, object, etc. However, as Hungarian word

order could not be insightfully captured in these terms, they tended to ignore the issue, or treat it tangentially at best. The generativist alternative, popular since the late 1970's, has taken a completely different route. It would provide a ***phrase structural*** model of the clause, well-suited to handle word order, in which the discourse functions topic and focus (assigned logical interpretations by É. Kiss 2008) are linked to fixed hierarchical positions in the left periphery of the sentence.

The goal of the present paper is to show that a central phenomenon of Hungarian word order, known as 'structural focus' in the generative literature, can also receive a dependency-based analysis which may have certain advantages of its own. The key idea will be that in addition to the set of relational notions {subject, object, adverbial}, which are relevant for the ***case morphology*** of the language, there is motivation for another set {elaborator, extender, restrictor}, cross-cutting the former and pertaining to the analysis of ***word order***. Under these assumptions, structural foci may be seen as attesting a particular type of relation to the (verbal) predicate, just as subjects and objects are in dependency grammar. The two sets will be said to belong to two different ***dimensions*** of description, following Debusmann et al. (2004).

The paper is structured as follows. In section 2, I introduce the traditional model of the Hungarian clause and comment on why it cannot naturally handle word order phenomena. In section 3, I discuss two currently popular generative treatments of structural focus and highlight what I perceive as their weaknesses. Finally, in section 4, I present my own approach to the problem, and offer a dependency-based account of Hungarian structural focus (as well as related issues of word order).

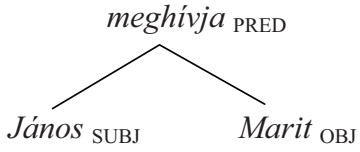
Theoretically speaking, the new account adopts the perspective of functional cognitive linguistics. On the one hand, I share Langacker's commitment to the symbolicity of language (i.e., the rejection of the autonomy of syntax, and an emphasis on the semantic motivation of linguistic categories); on the other, I endorse the idea (expressed by Bybee 1985, 2001, 2007; Hudson 2001; and Lamb 2005, among others) that linguistic knowledge takes the form of a network of relations.

2. The traditional approach to the structure of Hungarian

Hungarian traditional grammar, popularized at all levels of education, analyses a simple sentence such as (1) in terms of the dependency tree in (2).

(1) *János* *meghívja* *Marit.*
John VM-calls-DEF.OBJ Mary-ACC
'John invites Mary'

(2)



The predicate *meghívja* 'invites-DEF.OBJ' is made up of the verbal modifier *meg-* (generally expressing aspectual meaning) and the verbal stem *hívja* 'calls-DEF.OBJ.' As the glosses suggest, their construction has a strong idiosyncratic element, attesting partial compositionality. Note that by default, the order of the two elements is verbal modifier + verb, a very frequent pattern for Hungarian verbal predicates. Observe also that the two dependents are formally distinguished by case morphology, with the object *Marit* featuring the accusative suffix *-t* which contrasts it with the subject *János* in the nominative (with a 'zero suffix').

In the traditional framework, the structure of (1) is conceived as a network of binary asymmetrical relations, with the predicate serving as the root node on which the subject and object arguments depend. However, (2) as a syntactic representation does not stand in a one-to-one correspondence with (1); rather, it also displays the abstract syntactic structure inherent in the word order variations (3a–e), all of which are grammatical in the language. (The sentences have a so-called 'level prosody', with approximately the same degree of stress falling on the first syllable of each word.)

(3) a. *Meghívja János Marit*.

b. *Meghívja Marit János*.

c. *Marit meghívja János.*

d. *János Marit meghívja*.

e. *Marit János meghívja.*

Given that there are only subtle semantic differences among the examples in (3), the basic 'propositional content' being the same, one might jump to the conclusion that Hungarian word order is basically free, and there is nothing further to

be said about it. However, far from being true, this conclusion flies in the face of the following empirical data.

(4) Intended meaning: 'Whom does John invite?'

a. *KIT hív meg János?*[1]
whom calls VM John

b. **KIT meghív János?*

c. **János meghív KIT?*

(5) Intended meaning: 'It is Mary that John invites'

a. *MARIT hívja meg János*.
MARY-ACC calls-DEF.OBJ VM John

b. **MARIT meghívja János*.

c. **János meghívja MARIT*.

(6) Intended meaning: 'John rarely invites Mary'

a. *RITKÁN hívja meg János Marit*.
rarely calls-DEF.OBJ VM John Mary-ACC

b. **RITKÁN meghívja János Marit*.

c. **János meghívja Marit RITKÁN*.

As (4) illustrates, interrogative pronouns are not allowed to take any position in the clause; rather, they must come immediately before the predicate, and trigger the inversion of verbal modifier and verb. Similarly, the sentence in reply can only have the corresponding referential argument in immediately preverbal position, cf. (5a), again followed by the inverted pattern. Finally, elements with a negative or restrictive meaning such as *ritkán* 'rarely' also show the same distribution, as demonstrated by (6). Significantly, each of the highlighted expressions is prosodically prominent, owing not only to its own pitch accent but also to the destressing of the predicate (and possibly further elements) in its wake.

[1] Following standard practice in Hungarian linguistics, the elements requiring preverbal placement and inducing the inversion of verbal modifier and verb are capitalized in the examples.

Clearly, the word order restrictions just mentioned cannot be properly understood in terms of the relational notions subject, object, etc. For example, an interrogative pronoun may serve as subject, object, or adverbial in a given sentence but it is not its grammatical function that marks it out for special syntactic behaviour. Puzzled by these facts, and bound by their conventional terminology, Hungarian traditional grammarians have increasingly ignored word order (to the point of having no chapter on word order in Keszler 2000), especially as another group of linguists have taken up the cause with unprecedented vigour.

3. The generative approach to the structure of Hungarian

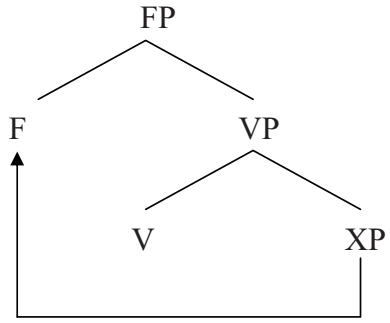
To be able to generate 'all and only' the grammatical sentences of a language, a generative model has as its key priority to determine which word orders are possible and which are impossible. Hence, regardless of the controversy surrounding Chomskyan dogmas, the application of generative principles and methods to the description of Hungarian has had the welcome consequence of initiating a new phase of in-depth word order research.

In sharp contrast to the (simplified) dependency formalism of traditional grammar, generative models rely on constituency to account for the structural properties of a sentence. Their phrase structures are used to represent how words are 'put together' to form progressively larger constituents, and each constituent is said to 'occupy' a particular position, or slot, in the structure. Under these assumptions, (4–6a) may be analysed as having in its structural description a designated 'structural focus' position (absent from or left empty in the phrase structures for (1) and (3a–e)) which hosts interrogative, identificational, or restrictive expressions. Technically, these elements end up in this position via transformation. As arguments or adjuncts, they are base-generated lower down in the tree, and subsequently move to their surface position to satisfy some syntactic requirement whose violation would cause the sentence to be ungrammatical.

Simplifying matters to a considerable degree (leaving aside a number of model-internal details[2]), let us schematically illustrate all this by the representation in (7) below. Here, F stands for the 'structural focus' position occupied by elements like *kit* 'whom,' *ritkán* 'rarely,' etc. in Hungarian sentences. The constituent that moves into this position may be an NP (DP in more recent terms) or an AdvP, etc. Hence the use of the category variable XP.

[2] For a more in-depth analysis, see Chapter 4 in É. Kiss (2002).

(7)



Since there is only one structural focus position per sentence, the examples in (8) are ungrammatical (with the prosodic pattern that such double focus would entail).

(8) a. **KIT JÁNOS hív meg?*

b. **MARIT JÁNOS hívja meg*.

c. **RITKÁN MARIT hívja meg János*.

Now, the reader may have already begun to wonder why these and only these types of expression (viz., interrogative, identificational, and negative/restrictive elements) show this peculiar distribution in a language otherwise characterized by flexible word order. Since i. structural focus is associated with a prominent pitch accent (besides the property of inducing the inversion of verbal modifier and verb), and ii. a recent trend in generative grammar has been the explanation of linguistic phenomena by 'output requirements' obtaining at Logical Form or Phonetic Form (interfacing with the conceptual and motor/articulatory systems, respectively, cf. Chomsky 1995), a reasonable suggestion in generative quarters has been that focussing is triggered by a mechanism located at the syntax–phonology interface (Szendrői 2003). Specifically, just as certain types of movement are said to be Case-motivated in Government and Binding Theory (e.g. in passive constructions, the NP raises to subject position to get nominative Case, cf. Haegeman and Guéron 1999: 205–208), so it might also be possible for a constituent to move in order to arrive in a position where it is able to receive the main stress of the clause (as defined by a leftward oriented nuclear stress rule for Hungarian).

Although they are technically interesting, these assumptions run into a potentially serious empirical problem. Consider the following data:

(9) a. *KIT hív meg János?*
whom calls VM John
'Whom does John invite?'

b. ***Mindenkit*** *meghív János. (*Mindenkit hív meg János.)*
everybody-ACC VM-calls John
'John invites everybody'

(10) a. *MENNYIEN jöttek el?*
in-what-number came-3PL VM
'How many people have come?'

b. ***Mennyien*** *eljöttek!*
Look how many people have come!'

(11) a. *MARIT hívja meg János.*
MARY-ACC calls-DEF.OBJ VM John
'It is Mary whom John invites'

b. ***Marit is*** *meghívja János.*
Mary-ACC also VM-calls-DEF.OBJ John
'John invites Mary, also'

The highlighted expressions in (9–11b) bear the main stress in each sentence (followed by stressless elements) and appear in a prominent left peripheral position, just as the corresponding expressions in (9–11a). Furthermore, *mindenkit* 'everybody-ACC' in (9b) represents the constituent being questioned when the sentence is interpreted as a reply to (9a); hence, it counts as focus under Szendrői's definition of the term.[3] If main stress were all that focussing was about, there would be little empirical motivation for treating the two groups differently.[4] However, the elements in (9–11b) systematically fail to trigger inversion, and consequently cannot be analysed as structural foci. This difference in the

[3] "I take a felicitous question-answer pair to indicate that the *focus* of the answer is the constituent that is questioned." (Szendrői 2003: 37).

[4] Szendrői circumnavigates this problem by claiming that quantifiers such as *mindenkit* 'everybody-ACC' move to the left periphery for logico-semantic rather than phonological reasons; hence, they are beyond the scope of her analysis, cf. Szendrői (2003: 42). However, it seems problematic to propose such diverse motivations for what appear to be empirically so similar phenomena (the assignment of main stress to either a quantifier or a focus, depending on which is the first element of the 'predicate phrase', i.e., the comment part of the clause, cf. É. Kiss 2002: 11). For further problems with Szendrői's proposal, see É. Kiss (2009).

distribution of the elements concerned can hardly receive an explanation from a purely phonological perspective, which therefore leaves an important facet of focussing unaccounted for.

The natural alternative has been to attempt to associate Hungarian structural focus with a particular semantic reading. This route is in fact historically more popular, and I fully agree with its proponents (including Szabolcsi 1981; Kenesei 1986; É. Kiss 2002, 2009, etc.) that without a proper description of the semantic side, no account of structural focus can be complete. I find it problematic, however, that the proposals just mentioned are chiefly concerned with the logical structure and truth-conditional interpretation of Hungarian sentences, which results in a bias toward identificational foci (cf. (5a)) at the expense of ignoring or under-representing the other two types of focussed expression, viz. interrogative and negative.

É. Kiss (2002: 78), for example, defines the function of focus as follows:

> *The function of focus*
> The focus represents a proper subset of the set of contextually or situationally given referents for which the predicate phrase can potentially hold; it is identified as the exhaustive subset of this set for which the predicate phrase holds.

On a positive note, the above may serve as a useful characterization of the truth conditional effects of identificational focus, with *MARIT* in (5a) representing, out of all possible "invitees," the exhaustive subset of people whom John actually invites. Furthermore, the definition also does well to explain why elements like *mindenkit* 'everybody-ACC' (incapable of denoting a proper subset with respect to a set) cannot appear in the structural focus position, cf. (9b).

It would seem, however, that the above characterization does not do full justice to the task of defining what the focus function is. Rather, it only answers the question of what function may be associated with ***identificational foci***, which account for only a subset of the range of focussed elements. Analogously, one might think of providing a semantic description of 'nominal case.' Clearly, such an effort would benefit from explicit accounts of inessive, adessive, etc. cases, but the task would also crucially involve abstracting away from these specific cases in order to reach a general description at a more schematic level.

Some might object that this is a futile effort: the class of focussed expressions is simply too heterogeneous to make a unified approach viable. Note, however, that virtually all other categories posited by generative grammar in its description of Hungarian (topics, distributive quantifiers, etc.) do receive a fairly unified semantic treatment. This suggests that it is at least worth trying to develop a

definition of the focus function that covers all three element types. What follows is a new proposal (combining aspects of dependency grammar and functional cognitive linguistics) on how this could be achieved.

4. A dependency-based account of structural focus

4.1. *The clause as a multi-dimensional network of symbolic relations*

Recall from section 2 that Hungarian traditional grammar analyses syntactic structure in terms of a dependency tree, with the relational notions subject, object, etc. In this section, I will take this as a point of departure for laying out some of the fundamental assumptions behind my analysis of Hungarian word order. Two points of clarification will be made: firstly, that I interpret subject, object etc. as being symbolic as well as relational categories. This, I believe, is fully in line with some central tenets of functional cognitive linguistics, and leads to a view of the sentence as a network of symbolic relations. Secondly, I will suggest, drawing on Debusmann et al. (2004), that this network is multi-dimensional, i.e., that in addition to the dimension D1 with the node labels {subject, object, adverbial}, there may be another dimension D2 for describing the same set of nodes in a different way.

Apart from the most ardent believers in constituency and the supremacy of English, most linguists would accept that 'subject' is essentially a ***relational*** notion rather than denoting a phrase structural ***position***. Traditionally at least, the terms *subject* and *object* denote particular types of relations to a (typically verbal) predicate, in a way marked in various languages by word order, morphology, or both. From a functional cognitive perspective, it may be added to this view that subject, object, etc. are also ***symbolic*** categories of grammar, rather than serving merely as syntactic labels devoid of any (conceptual) semantic import (cf. Langacker 1987: 12, 2001: 17, etc.). The specific semantic proposal Langacker makes is that "subjects and objects are nominal expressions which respectively elaborate the trajector and (if there is one) the landmark of a profiled relationship" (2001: 28). To put it in a different way, they are "the primary and secondary focal participants" (ibid.) of the process (event) denoted by the predicate.

When subject, object, etc. are seen as both symbolic and relational categories of grammar, a picture of the sentence emerges whereby its structure takes the form of a network of symbolic relations.[5] In the intended sense, a ***symbolic rela-***

[5] As Lamb suggests, when in a network "[the] relationships are fully plotted, the units as such disappear, as they have no separate existence apart from their relationships" (2005: 159).

tion is understood as a semantic relation standing in correspondence to its formal expression (typically word order or morphology, cf. the encoding of the subject–predicate relation in English and Hungarian).[6] From this perspective, case morphology, precedence and adjacency relations, etc. may be seen as serving the purpose of encoding (distinguishing, making intersubjectively recognizable) particular types of semantic relations, with conceptual differences mapped onto differences in form.

The second point concerns the question whether the clause has a single layer, or ***dimension***, of symbolic relations, or possibly more than one. As I have hinted above, Hungarian traditional grammar only posits a single dependency tree; whatever cannot be described in its terms (such as word order) tends not to be described at all. This, however, is not the only option within dependency grammar; in particular, the Extensible Dependency Grammar (XDG) framework by Debusmann et al. (2004) expands on the formalism in the following way.

> 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)

The possibility that the Hungarian clause could be modelled as a multi-dimensional network of symbolic relations allows us to formulate a specific hypothesis about how word order may be accounted for. In particular, it might be that distributional differences between *Marit* 'Mary-ACC' (as used in (1)) and *kit* 'whom' (as in (4a)) encode semantic differences in the way these expressions relate to the verbal predicate, just as morphological differences between *János* (nominative) and *Marit* (accusative) encode semantic differences along another dimension. Under these assumptions, structural foci may receive a unified treatment when they are shown to share a particular type of symbolic relation to the verbal predicate.

However, before we can explore the nature of this relation type, some more basic relation types will have to be assessed; and even before that, we need to take a closer look at the verbal predicate's interpretation. After all, it is only in relation to the predicate that other nodes may be eventually characterized.

When all the nodes represent symbolic and relational categories, this is equivalent to having a network of symbolic relations.

[6] Cf. Langacker (1987: 81): "A linguistic symbol is bipolar, defined by a semantic structure standing in correspondence to a phonological structure."

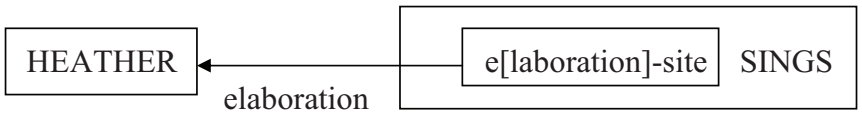
4.2. *The verbal predicate as a proto-statement: Elaborators*

In syntactic models working with constituent structure and granting English a privileged status, the inflected verb is typically regarded as a part of the clause that needs to be combined with other elements for a complete sentence to be formed. By contrast, dependency grammar and functional cognitive linguistics are very much at ease with treating the verbal predicate (in certain languages at least) as a schematic but potentially fully functional clause in itself. For example, Mel'čuk's presentation of dependency grammar introduces the notion of the root by the following remarks.

> [A] syntactic structure must contain exactly one node that does not depend on another node; this unique non-governed node is called the top node, or root. […] This condition follows from the fact that, in principle, a natural sentence can be reduced to just one word (this is not true of any sentence in any language). In English this is only possible with imperatives (*Go!*), but in many languages (Russian, Spanish, Japanese, to name a few) a one-word complete sentence is a regular phenomenon. (Mel'čuk 1988: 23)

In Langacker's (1987, 1991) cognitive grammar, valency relations are modelled by having the arguments correspond to, and 'elaborate', a schematic substructure of the predicate. For example, Croftand Cruse (2004: 281) represent the semantic structure for *Heather sings* in the following way, based on Langacker's (1987: 304) ideas:

(12)



(12) expresses that "the semantic structure for *sings* includes a schematic singer as a substructure" (Croft and Cruse 2004: 281). What the subject argument *Heather* does is ***elaborate*** this substructure, "characteriz[ing] it with greater specificity (i.e. finer precision and detail)," cf. Langacker (1991: 548). Now this seems to mean that *sings* is no longer in a simple part–whole relationship with the clause but rather includes (in a schematic, embryonic way) all the information that is more precisely specified by the full sentence, *Heather sings*. Although Langacker tends to put the emphasis on how the predicate and its arguments (the "component structures") are combined into larger "composite structures" based on their correspondences, and even regards the noun as something semantically autonomous (because its concept does not presuppose other concepts), a more radical interpretation is also possible. Under this view, the noun actually "owes" its existence and semantic role in the clause to the fact that it can elaborate a substructure of a holistic verbal concept/schematic clause. That

this interpretation is not unfaithful to Langacker's intentions is shown by the following passage: "One way to think of correspondences [...] is to view them as a record of the distortions engendered by dissociating an integrated scene into separately symbolized chunks of conceptual content" (Langacker 1987: 279). This clearly presupposes the notion of an integrated scene which is presumably the semantic structure associated with the predicate.

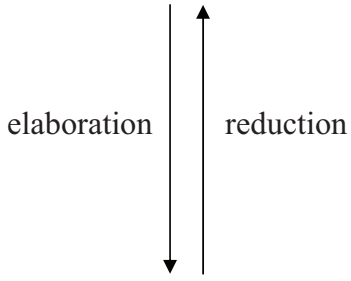
The terms *reduction* (as in Mel'čuk's passage) and *elaboration* (as in Langacker's cognitive grammar) seem to refer to the same phenomenon from two different perspectives. Reduction to the root is possible in various languages because the predicate is capable of functioning as a schematic clause; conversely, elaboration may be necessary in cases where a higher degree of specificity is needed than the predicate's schematic structure affords. Both notions imply that the predicate is not simply a part of the clause (to be concatenated with other parts in a building-block fashion) but rather a schematic clause in itself.[7]

This view can be fruitfully applied to Hungarian, where e.g. in *János meghívja Marit* the arguments serve as elaborators of the verbal predicate *meghívja*, and the latter can be plausibly treated as a schematic clause to which the former pattern may be reduced under appropriate circumstances. This is illustrated by (13) below.

(13) a. *Meghívja*.
'He/she invites him/her'

b. *Meghívja Marit*.
'He/she invites Mary'

c. *János meghívja Marit*.
'John invites Mary



To capture the fact that *meghívja* can serve as a schematic but fully functional positive declarative clause in itself (cf. (13a)), I regard it as a ***proto-statement***. Furthermore, since declaratives may be seen as instantiating the most well-entrenched pattern, I also take this to be the default function associated with the predicate. A more elaborate declarative clause such as (13c) may then be ana-

[7] The fact that English requires the obligatory elaboration of the subject in finite declarative clauses does not in itself contradict this claim. Given the impoverished nature of English verbal morphology, the verb in itself would typically fail to reach the threshold of specificity that communication generally demands. It is a schematic clause that is just too far on the schematic side to function on its own, except when the marking of person/number distinctions can be dispensed with (i.e., in imperatives).

lysed as having the same proto-statement as its functional core, determining such central properties of the overall pattern as polarity and illocutionary force. In fact it is plausible to claim that what is being predicated in (13c) is the proto-statement *meghívja*; the elaborators *János* and *Marit* do no more than specify aspects of information which are schematically present in the proto-statement.

Degree of elaboration is inversely proportional to the amount of contextually available information. When the interlocutors are fully aware that they are talking about John and Mary (as primary and secondary focal participants, respectively), the arguments need not be analytically expressed. More generally, the phenomenon reflects the conflicting motives in communication for 'signal simplicity' and 'perceptual optimality' (Langacker 1977: 103–110).

To summarize, ordinary referential arguments such as *János* and *Marit* may be regarded as ***elaborators*** of the verbal predicate, analysed here as a proto-statement by default. This is what I consider to be the most fundamental type of symbolic relation as far as Hungarian word order is concerned. Since elaborators only specify aspects of information which are schematically present in the proto-statement, they do not cause any major change in the predicate's context for interpretation. Hence, the predicate "retains" its default word order (verbal modifier + verb) and stress pattern. (Recall that in a simple declarative sentence such as *János meghívja Marit*, all elements bear approximately the same degree of stress, located on the first syllable in each word.) A subset of elaborators may be chosen as the topic(s) of the sentence, and assume preverbal position, while ordinary elaborators are postverbal.

4.3. *Extenders*

Suppose that in a given context, the proto-statement *meghívja* is known to have been elaborated by the arguments *János* and *Marit*, as far as its PARTICIPANTS substructures are concerned. One of the interlocutors may then treat this as part of the common ground, and provide some extra information to her addressee to the effect that further participants are involved in the invitational event. For example, if John invites Ann, too, then this may be expressed by the following sentence in Hungarian:

(14) ***Annát*** ***is*** *meghívja* *János*.
Ann-ACC also VM-calls-DEF.OBJ John
'John invites Ann, too'

Interestingly, while the unmarked word order of the predicate is preserved here, it is clear that *Annát is* is both funtionally and formally different from an ordinary elaborator. On the function side, the expression does not simply elaborate a substructure of the predicate but rather extends the proto-statement's contextual applicability to a higher level than previously known or expected with respect to the substructure in question.[8] I call this type of expression an ***extender***. To qualify as a ***symbolic*** relation, however, the semantic relation between an extender and the proto-statement must be shown to bear on linguistic form. This can indeed be demonstrated in Hungarian, as i. extenders typically (although not always) appear to the left of the predicate, ii. they are associated with a prominent pitch accent ('main stress'), and iii. in their context, the proto-statement has its word-initial stress reduced or eliminated, presumably as a result of being contextualized as part of the background.

Of course, the set of "invitees" can be extended further to the point of including everybody in the current discourse space. The universal quantifier *mindenkit* 'everybody' is therefore an extender par excellence, as (9b) above, repeated in (15) below, illustrates.

(15) ***Mindenkit*** *meghív* *János*.
everybody-ACC VM-calls John
'John invites everybody'

Finally, two interesting points of comparison can be made between extenders and non-extenders that may convince the reader about the relevance of the category. The first concerns the distributional difference between *ritkán* 'rarely' and its positive counterpart, *gyakran* 'often' (noted as early as Arany 1873). Whereas the former invariably triggers the inversion of verbal modifier and verb (in generative terms, it is "obligatorily focussed"), the latter is also compatible with the VM + V order we find after elements like *Annát is*, *mindenkit*, etc., even when it is heavily accented. The likely reason is that *gyakran* may function as an extender of the proto-statement with respect to existing knowledge or expectations regarding frequency, which is out of the question for *ritkán*.

(16) a. *RITKÁN hívja meg János Marit*.

b. **RITKÁN meghívja János Marit*.

[8] In a similar vein, Kicska (1891) argues that by using the relevant type of expression, "I add something to a smaller extent, manner, number or amount; just as much as required for the extent to be complete" (quoted by É. Kiss 2006a: 444; my translation).

(17) ***Gyakran*** *meghívja* *János Marit*.
often VM-calls-DEF.OBJ John Mary-ACC
'John often invites Mary'

Secondly, note that while *mennyien* 'in what number' triggers inversion in (10a) above, i.e., when it is used as a genuine interrogative pronoun, it fails to do so in exclamations, cf. (10b). This seems to follow naturally from the fact that in the latter case, but not the former, its function is to extend the proto-statement's contextual applicability to a higher level (with the speaker voicing her suprise that more people have come than expected).

To conclude this section, we have now discovered and characterized two symbolic and relational categories which appear to be central to Hungarian word order (and prosody). Having described elaborators and extenders in detail, we are ready to revisit the phenomena in (4–6) above, i.e., the problem of "structural focus" as it is often called in the literature.

4.4. *Structural foci as restrictors*

For ease of exposition, the sample sentences illustrating the three types of focussed expression are repeated in (18) below.

(18) a. *KIT* *hív* *meg* *János?*
whom calls VM John
'Whom does John invite?'

b. *MARIT* *hívja* *meg* *János*.
MARY-ACC calls-DEF.OBJ VM John
'It is Mary whom John invites'

c. *RITKÁN* *hívja* *meg* *János* *Marit*.
rarely calls-DEF.OBJ. VM John Mary-ACC
'John rarely invites Mary'

If we were encountering these examples for the first time, we would be hard-pressed to offer a unified semantic account of the element types involved. The task is made much easier when the analysis investigates relations rather than individual elements, and when the class of already established relations provides a clue for proceeding further. Having reviewed the relation types elaborator-of and extender-of, we can safely begin by the following negative definition of the

semantic relation of structural foci to the verbal predicate, with the proviso that further substantial characterization needs to be made in more positive terms:

(19) What interrogative, identificational and restrictive expressions have in common in their function is that they are ***neither elaborators nor extenders*** of the proto-statement.[9]

As regards the interrogative pronoun, it is not elaborational because it is precisely the absence of elaboration that it marks. By uttering the sentence, the speaker prototypically expresses that some piece of information is crucially missing from her knowledge, and requires the listener to supply it. Concomitantly, the sentence also deviates from the unmarked declarative pattern in terms of illocution, and in this respect, the *wh*-word may be seen as a ***restrictor*** of the proto-statement. Whereas an elaborate declarative clause such as *János meghívja Marit* preserves the verbal predicate's status as profile determinant[10] for the full clause (schematically representing it, and determining its polarity and illocutionary force), the interrogative element overwrites an important aspect of the proto-statement's default specifications. Contextualized by *kit*, *meghívja* loses its grip on the construction as a whole (it is no longer able to represent it schematically); in this sense, its function is restricted.[11]

A second path of deviation from elaboration and extension is shown by (18b) above. This sentence can be best analysed in comparison with the following examples.

(20) a. *Meghívja Marit*.
'He/she invites Mary'

b. ***Marit is*** *meghívja*.
'He/she invites Mary, too'

[9] Remember that we are only concerned here with dependents of the predicate characterizable in terms of the relation types subject-of, object-of, and adverbial-of. It seems likely that once we remove subjects, objects, and adverbials readily assignable to the class of either elaborators or extenders, the subset that is left closely approximates the range of focussed expressions.

[10] Cf. Langacker (1999: 17–18): "In a typical construction, one component is schematic with respect to the composite structure as a whole: they construe the scene in the same fashion, particularly in regard to profiling, and differ only in the composite structure's greater specificity. The component structure with this property is called the construction's *profile determinant*, since it has the same profile as the composite whole."

[11] For a more detailed discussion of illocutionary force and its relevance for Hungarian word order (with regard to yes-no questions, imperatives, etc.), see Imrényi (2009: 365–367).

c. *MARIT hívja meg*.
'It is Mary that he/she invites'

In (20a), *Marit* simply elaborates a schematic substructure of the proto-statement *meghívja*. In (20b), *Marit is* is used to extend the proto-statement's range of contextual applicability to a higher level than previously known or expected. The sentence presupposes that the PARTICIPANTS substructure of *meghívja* already includes a contextually recoverable set of referents and adds Mary to that set. By contrast, (20c) amounts to the restriction of a contextually relevant set (e.g. one evoked by a *wh*-question): it identifies Mary as the relevant person John invites and by doing so, implies the exclusion of other conceivable options. Relatedly, *MARIT* is also restrictive for a similar reason as *kit* 'whom' has been argued to be. As É. Kiss (2006b, 2008, 2009) suggests, identificational foci serve as derived main predicates, with the semantic structure of a sentence like (20c) being basically identical to that of (21) below (cf. É. Kiss 2006b: 39).

(21) *Akit meghív, az Mari*.
whom VM-calls that Mary
'Whom he/she invites is Mary'

Given that *MARIT hívja meg* no longer predicates the proto-statement but rather performs an act of identification, the verbal predicate again ceases to be the profile determinant of the clause. Although the full sentence is declarative, which is in line with the verbal predicate's default specifications, it is not the invitational event's realization in time that is being stated in it but rather the identity of a participant.

Finally, *ritkán* 'rarely' exemplifies the third type of restrictor (neither elaborator nor extender) which literally restricts the proto-statement's validity/applicability by virtue of its negative meaning. At this juncture, it may be useful to point out that it is not the low frequency expressed by *ritkán* that is crucial to its behavior but rather the negative evaluation of this low frequency by the speaker. In particular, note the following contrast:

(22) a. *Néha meghívja János Marit*.
sometimes VM-calls-DEF.OBJ John Mary-ACC
'Sometimes, John invites Mary'

b. *RITKÁN hívja meg János Marit*.
'John rarely invites Mary'/'Rarely does John invite Mary'

From an objectivist, "God's eye" perspective (cf. Lakoff 1987), both (22a) and (22b) express the same thing: that the event of John inviting Mary occurs at a low level of frequency. The functional difference between the two reflects how the speaker construes/evaluates the situation: while (22a) suggests that *p* does happen (if only *n* times), (22b) restricts the validity of the proto-statement (*p* only happens *n* times). As a result, while (22a) is in principle reducible to *Meghívja János Marit* and further to *Meghívja* without significantly distorting the intended message, (22b) is not.

More generally, the reduction test readily applies to all three types of sentences under consideration. Clauses containing a focussed expression cannot be reduced to the proto-statement, which is presumably what inversion is supposed to mark.

From a functional cognitive perspective, inversion may be seen as an ***iconic*** device for expressing functional restriction, especially when one considers the connotation commonly associated with expressions such as *upside down*, *put the cart before the horse*, etc. In particular, it seems that humans typically perceive and conceive of entities, actions, etc. in the world as having a normal/natural realization, which guarantees their proper functioning, successful accomplishment, etc. By contrast, when something is turned upside down, its chances of functioning as it normally would are severely degraded. Similarly, the inversion of the elements of a prototypical Hungarian predicate may signal that it is not to be interpreted in the usual way (as a schematic positive declarative clause) because of the overriding effects of context.

To conclude this section, I have suggested that the three types of focussed expression represent a type of semantic relation to the verbal predicate (encoded by word order and prosody on the formal side of the symbolic relation) that is best definable in contrast with elaboration and extension.[12] Supplementing the negative definition provided in (19) above, I have also frequently referred to them as restrictors, as they contextualize the predicate in such a way that it cannot function as a profile determinant for the full clause any more, at least as far as illocution and polarity are concerned.

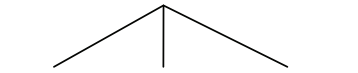
[12] Very similar in spirit to the analysis presented here is Goldberg's (2006: 166–182) treatment of English subject-auxiliary inversion (SAI). Looking for a coherent functional account of SAI, she finally concludes that "it is possible to reconstrue the category of SAI as a halo of constructions that stand in ***contrast*** to prototypical sentences. The systematic difference in form (subject–auxiliary inversion) signals a systematic difference in function (a distinction from prototypical sentences)" (178, highlight in the original). One slight difference between our approaches is that her notion of contrast is a relationship between constructions (as Gestalts), while mine pertains to types of symbolic dependency relations (cf. (19)). However, the two are easy to reconcile, as different sets of dependency relations define different types of constructions.

4.5. *Illustrations*

Under the new account, the immediate dependents of a verbal predicate like *meghívja* are characterized on two dimensions of description. On D1, they can be subjects, objects or adverbials; on D2, elaborators, extenders or restrictors. The two dimensions are independent in the sense that all theoretically possible combinations are attested. The next question to be addressed is how we could go about assigning dependency tree representations to the sentences under consideration.

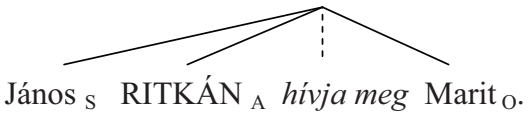
As a first option, we might want to keep the original dependency tree used by traditional grammar, and add to it a second structural description reflecting semantic relations marked by word order and prosody. For example, the sentence *János ritkán hívja meg Marit* 'John rarely invites Mary' could be represented as follows (P = 'predicate', S = 'subject', A = 'adverbial', O = 'object'; *proto-statement,* elaborator, ***extender***, RESTRICTOR).[13]

(23) D1 hívja meg $_{P}$ D2



However, as the two graphs are isomorphous, it seems straightforward to synthesize them by simply adding the node labels of D1 (except for P, which is rather superfluous) to the representation in D2.

(24)



From (24), it can be read off that *János* relates to the (restricted) proto-statement *hívja meg* as a subject and as an elaborator, *ritkán* as an adverbial and as a restrictor, while *Marit* as an object and as an elaborator. Each dependent could have dependents of its own but such more complex cases are beyond the scope of the present paper, as are many more intricacies of Hungarian word order (multiple restrictors, complex predicates with auxiliaries, etc.).

[13] Note that the dotted line in D2 does not connect two separate nodes; it simply marks which node of the dependency graph a given expression belongs to (allowing the words to be written in one horizontal line). For similar representations, see Eroms (2000), Debusmann et al. (2004), etc.

5. Conclusions

In this paper, Hungarian structural focus has been analysed in a framework taking the clause to be a multi-dimensional network of symbolic relations, defined as semantic relations standing in correspondence to their formal expressions. The main objective was to arrive at a unified treatment of the three types of focussed expression (interrogative, identificational, and negative/restrictive), something that current generative models did not seem to offer.

The first dimension has already been extensively explored in traditional grammar, and features the symbolic and relational categories {subject, object, etc.}. Semantically, these were analysed in terms of Langacker's cognitive grammar, under the assumptions of which subjects and objects were, respectively, the primary and secondary focal participants of the process (event) denoted by the predicate. Formally, the relation types concerned were shown to be distinguished by case morphology in Hungarian (the accusative suffix *-t* standing in opposition with the nominative with a 'zero suffix').

My own contribution concerned the second dimension, which described the same set of nodes in their relation to the predicate from a different perspective. Drawing on the concepts and results of dependency grammar and functional cognitive linguistics, I introduced a second set of symbolic and relational categories {elaborator, extender, restrictor}, relevant for Hungarian word order and prosody. Whereas elaborators and extenders were readily definable in positive terms, restrictors appeared to be a more heterogeneous class that could be best analysed in contrast with the first two categories. They were shown to pertain to either the illocution or the polarity of the clause, and contextually overwrite corresponding specifications of the verbal predicate, which had been treated as a proto-statement (i.e., a schematic positive declarative clause) by default.

Needless to say, this is not yet a complete syntax of Hungarian, although I hope to have laid the foundations for a reasonable alternative to currently popular generative accounts, with the promise of making the language more accessible to foreigners. Tasks for the future include i. the refinement of the analysis by increasing its theoretical depth and empirical scope, ii. the application of the model's concepts to languages other than Hungarian to see whether, and to what extent, they are relevant cross-linguistically, and iii. the presentation of results in a book form for both a professional audience and a wider readership.

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MODEL GRAMATIKE OVISNOSTI U PRISTUPU MAĐARSKOM STRUKTURNOM FOKUSU

U članku se kombinirajući elemente gramatike ovisnosti i kognitivne gramatike predlaže (u rudimentarnom obliku) novi model rečenične strukture u mađarskom, s posebnim osvrtom na strukturni fokus i negaciju. U okviru ovog modela, jezgro sintakse mađarskog jezika se opisuje pomoću različitih tipova simboličkih relacija (formalno kodiranih semantičkih relacija) između predikata i njegovih dopuna. Dopunjujući tradicionalni skup relacijskih kategorija {subjekt, objekt, priloška oznaka} koje su relevantne u mađarskome, uvodi se druga dimenzija opisa s relacijskim kategorijama {elaborator, proširivač, restriktor} koje se odnose na red rije-

či i prozodiju. Time se otvara mogućnost novog pristupa strukturnim fokusima i rečeničnom negatoru u mađarskome koje se interpretira kao poseban tip simboličke relacije predikata.

Ključne riječi: strukturni fokus; negacija; simboličke relacije; elaboracija; ekstenzija; restrikcija.