ESSENTIALS OF AN LFG ANALYSIS OF HUNGARIAN FINITE SENTENCES

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Abstract

In this paper I present an LFG (and XLE-implementable) analysis of the preverbal portion of Hungarian finite clauses. The structural representation is largely motivated by É. Kiss (1992) and Laczkó & Rákosi (2008-2014). I argue for S and against IP (and I also postulate CP). I employ a hierarchical, binary branching, adjunction structure for the topic field, in addition to a similar setup in the quantifier field. I handle all the question phrases other than the question phrase immediately adjacent to the verb in multiple constituent questions as occupying VP-adjoined positions in the quantifier field. I assume that focussed constituents, verbal modifiers and the (verb-adjacent) question phrase are in complementary distribution in [Spec,VP]. On the basis of the analysis proposed in this paper, I suggest that LFG's parametric space that is potentially available to c-structure—function associations should be augmented along the following lines. (i) The [Spec,VP] position should be allowed to host the FOCUS discourse function. (ii) The XP in [$_S$ XP VP] can also be a topic, in addition to a subject. (iii) A VP constituent can also contain a subject.

1 Introduction

So far relatively few works have discussed (relatively few aspects of) Hungarian syntax from an LFG perspective. The aim of this paper is twofold. (A) I will present the essential ingredients of the first most comprehensive LFG analysis of Hungarian finite clauses[1] (designed to be XLE-implementable). (B) I will discuss what certain aspects of my approach can contribute to augmenting LFG's parametric space potentially available to c-structure—grammatical-or-discourse-function associations.

The structure of the paper is as follows. In section 2, I briefly discuss É. Kiss' (1992) GB approach (2.1) and some aspects of salient LFG accounts of certain relevant phenomena (2.2.). In section 3, first I argue for assuming an S (as opposed to IP) constituent (3.1), then I develop my analysis (3.2), and finally I point out the significance of some traits of this analysis for standard LFG assumptions about c-structure—function correspondences (3.3). In section 4, I make some concluding remarks.

2 On some previous approaches

Consider the sentences in (1)-(3), illustrating the most salient word order properties of Hungarian finite clauses, schematically presented in Table 1.[2]

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[1] For details of the treatment of constituents in [Spec,VP], see Laczkó (2014b). For an analysis of negation, see Laczkó (2014c). The details of an account of quantifiers and constituent questions are left for future work.

[2] Focussed constituents are indicated by SMALLCAPS in the examples, see (2) and (3). VM stands for verbal modifier. This is a standardly used cover term for a range of

(1) *János*   *szerencsére minden könyv-et   oda   adott*
    John.NOM   luckily   every book-ACC VM   gave

    Mari-nak   a   könyvtár-ban.
    Mary-DAT   the   library-in
    'Luckily, John gave every book to Mary in the library.'

(2) *Szerencsére   János   minden könyv-et   MARI-NAK adott*
    luckily   John.NOM every   book-ACC Mary-DAT gave

    (oda)   a   könyvtár-ban (oda).
    VM   the   library-in   VM
    'Luckily, it was to Mary that John gave every book in the library.'

(3) **Szerencsére János   minden könyv-et   (oda) MARI-NAK*
    luckily   John.NOM every   book-ACC   VM Mary-DAT

    (oda)   adott a   könyvtár-ban.
    VM   gave   the   library-in
    'Luckily, it was to Mary that John gave every book in the library.'

TOPIC	PREDICATE			
(A) (contrastive) topic, sentence adverb	(B) quantifier	(C) focus/VM		(D) verb	(E) postverbal constituents
		(Ca) focus	(Cb) VM		

Table 1

The examples in (1)-(3) and Table 1 illustrate the following well-known facts and basic empirical generalizations about Hungarian sentence structure.

(i)   The fundamental sentence articulation is topic-predicate, see Table 1.
(ii) In the topic field, the ordering of topics and sentence adverbs is free, see (1) and (2).[3]

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radically different categories sharing the syntactic property of occupying the immediately preverbal position in neutral sentences. The standard description of a neutral sentence is that it does not contain negation or focus, it is not a 'wh' question, and it has level prosody. Particles (aka preverbs or coverbs), bare nouns, designated XP arguments, etc. are assumed to be VMs. In (1)-(3) the VM is a particle: *oda* 'there'. In (2) and (3), it must occupy one of the two positions in which it is in parentheses.
[3] For the purposes of this paper, I use the terms *topic* and *focus* in the following way. In general, I consider both of them discourse functional categories to be consistently represented at the level of LFG's d-structure (discourse functional structure) or i-structure (information structure), depending on the actual LFG architecture. In the case of topics (and contrastive topics), in my analysis there are no (exclusively)

(iii) Basically, the word order of postverbal elements is also free, see (2).[4]

(iv) If a preverbal quantifier is present in the sentence, it follows the topic field and it is the initial constituent in the predicate domain, see (1)-(3).[5]

(v) The VM and the focus are in complementary distribution preverbally, see (3).

As regards capturing the complementarity of the focus and the VM, the two salient solutions are illustrated in the split (C) sections. The intuitively more appealing solution, shown in the upper row in the (C) column, is to assume a single preverbal syntactic position for which the focus and the VM compete, the former being the stronger element. In other words, the VM only has a chance to occupy this designated position if there is no focussed constituent in the sentence. Such an account is proposed, for instance, in É. Kiss (1992, 1994). In her GB framework, the designated position is [Spec,VP]. The other logical possibility is to assume two different positions in two distinct projections (see the lower row in the (C) column). A classic example of this approach was proposed by Bródy (1990). The essence of the solution is that in a focussed sentence, a functional projection (FP) is generated above the VP, the projection dominating the VM + V sequence. The VM occupies its customary position within the VP, then the V head is moved into the F head position, and the focussed constituent lands in Spec,FP. Thus, the preverbal complementarity effect is captured by postulating two designated positions and V-to-F head movement, which also takes care of the postverbal occurrence of the VM in the presence of a focussed constituent.[6] In the

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designated syntactic positions for them, because they intermingle with sentence adverbs in the "topic field". In the case of foci, here I only concentrate on the encoding of the famous preverbal focus, which is generally assumed to belong to the contrastive and exhaustive type.

There can be several topics in a sentence, and they can have a whole range of grammatical functions. It is also noteworthy that in some highly influential earlier GB analyses contrastive topics (with a special intonation pattern and a distinctive (narrow) scope interpretation) were treated as left-dislocated constituents separated from the rest of sentence structure, see É. Kiss (1992), for instance. The current general view (with strong empirical support) is that ordinary topics and contrastive topics freely intermingle; thus, they and sentence adverbs populate the same topic field.

[4] Although constituents that typically have reduced stress (e.g. particles and pronouns) tend to occur closer to the verb than other constituents.

[5] There can be several constituents in the quantifier field as well, and the order of the three basic quantifier types is strictly constrained. For details, see Kálmán (2001).

[6] Although the fact that in non-neutral sentences the VM does not necessarily follow the verb immediately is a challenge for this approach.

GB/MP tradition, it is now the standard view that focussed constituents and VMs occupy distinct syntactic positions in distinct (functional) projections.[7]

In this section, first I summarize the relevant traits of É. Kiss' (1992, 1994) unorthodox GB account, on which my LFG treatment capitalizes to a great extent (subsection 2.1), and then I briefly discuss a few aspects of some LFG(-friendly) analyses of Hungarian sentence structure (subsection 2.2).

2.1 On É. Kiss (1992, 1994, 2002)

In her influential GB approach, É. Kiss (1992, 1994) treats (preverbal) quantifiers as constituents adjoined to VP, which is, basically, a Hungarian style, overt manifestation of GB's famous Q-Raising operation. (If there is more than one preverbal quantifier in the sentence, they are iteratively adjoined to VP.) Later on, more in the spirit of MP, it was generally assumed that quantifiers, too, have their own functional projections, see, for instance Szabolcsi (1997) and Bródy & Szabolcsi (2000). É. Kiss (2002) also subscribes to this view, and, motivated by Szabolcsi (1997), she assumes that quantifiers sit in the specifier position of the DistP functional projection (Dist is short for 'distributive', and the rationale behind this label is that quantifiers occurring in this position obligatorily have a distributive interpretation).

As regards the treatment of topics, contrastive topics and sentence adverbials, É. Kiss (1992) assumes that topics and sentence adverbials are in a flat structural field dominated by an S node, while contrastive topics are left-dislocated elements outside the S domain, dominated by an E(xpression) node (and they are base-generated there), and this entire E constituent is, in turn, dominated by CP.
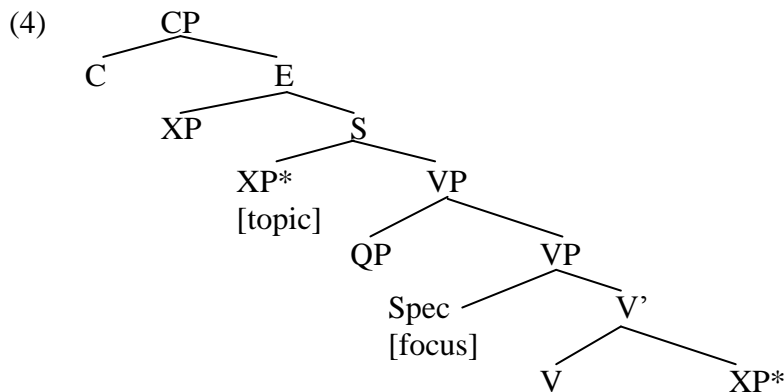
(4)

Fundamentally, É. Kiss (1994) adopts this approach with two significant modifications that are relevant from our present perspective. (A) She replaces the exocentric S node with TP (Tense Phrase). (B) She assumes that if the sentence contains only one topic then this constituent occupies the Spec,TP position, and if there is more than one topic, the additional topics are iteratively adjoined to TP. É. Kiss (2002), in accordance with the mainstream MP view, assumes that both topics and sentence adverbials have their own functional projections: TopP and EvalP, respectively. In addition, despite their differential prosodic, categorial and scopal properties, É. Kiss claims that what are called "contrastive topics" simply belong to the general class of ordinary topics.

The reason why I have discussed the most crucial aspects of É. Kiss' (1992) seminal GB account here to this extent is that it strongly motivated important parts of our implemented Hungarian grammar, Laczkó & Rákosi (2008-2014), on which my approach presented here heavily relies. It is noteworthy that É. Kiss' (1992) analysis has the following important unorthodox aspects to it from the standard GB perspective.

a) It postulates an exocentric sentence structure, dominated by S.[8,9]
b) There are flat (non-binary-branching) parts of the structure, dominated by S and V'.
c) It does not employ an FP projection (focus or functional phrase).

Needless to say, all these marked features can be accommodated in an LFG framework in a natural and principled fashion.

There is, an insurmountable problem with É. Kiss' (1992) approach (insufficiently and incompletely addressed in that work): she is forced by her system to assume that *all* constituents moved into [Spec,VP] are focussed constituents, because their movement from their postverbal base-generated positions below V' is triggered by their need (either inherently or driven by discourse requirements) to acquire the focus [+F] feature from the verb in [Spec,VP]. It is easy to see that this makes the treatment of ordinary VMs in neutral sentences empirically and intuitively implausible.[10] In this context it is noteworthy that É. Kiss (2002), on MP's solid cartographic grounds, argues against collapsing focussed and VM constituents,[11] because this would make it impossible to associate an invariant interpretation with a single syntactic position (2002:83). Again, needless to say, it is one of the strengths

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[8] The postulation of an additional exocentric E node is unorthodox even in generative frameworks outside the Chomskyan mainstream.

[9] É. Kiss (1994) is one degree less unorthodox in that instead of S it uses the endocentric TP projection.

[10] In Laczkó (2014b) I discuss various types of VMs which can unquestionably occur in neutral sentences without any focus stress and interpretation.

[11] Thus, she also argues against her previous analysis in É. Kiss (1992) implicitly.

of LFG's architecture and assumptions that this can be carried out in a principled manner.

2.2   On some previous LFG(-compatible) analyses

In this paper, in Laczkó (2014b) and in Laczkó (2014c), both in this volume, I give an overview of various aspects of previous LFG analyses in complementary distribution as much as possible.

(A) Börjars et al. (1999) offer some programmatic considerations against functional projections like TopP and FocP (à la GB/MP) for languages like Hungarian and some hints at a possible LFG alternative with an extended verbal projection in which word order regularities are capturable by dint of Optimality Theory (OT) style constraints. They claim that the assumption that discourse functions are not necessarily associated with the specifier positions of functional projections allows an analysis of Hungarian in which quantifier phrases and topics are positioned within an extended verbal projection, avoiding the postulation of functional projections without heads.

(B) Capitalizing on the basic representational assumptions and claims of Börjars et al. (1999), but entirely on the grounds of Optimality Theory, Payne & Chisarik (2000) outline an analysis of constituents in the preverbal domain of Hungarian finite clauses: in particular, they concentrate on the complementarity of constituent question expressions, focussed phrases, the negative particle and verbal modifiers. Since their account also addresses negation phenomena, I discuss it in Laczkó (2014c), this volume.

(C) Mycock (2006) develops a detailed and comprehensive typological analysis of constituent questions (CQs) in her LFG framework. She analyzes Hungarian as a representative of the multiple syntactic focusing type. She only postulates those aspects of an LFG style syntax of Hungarian which are directly relevant to her account of 'wh'-questions in this language. Below I discuss her basic hypotheses that are important from our syntactic perspective.

(i) She adopts some central ingredients of É. Kiss' (1981, 2002) empirical generalizations. For instance, the topic-predicate articulation of sentences, the quantifier field in the left periphery of the predicate phrase.

(ii) Relying on É. Kiss (1981), she also assumes that a VM and the verb make up a word both morphologically and phonologically, and they also constitute a single unit semantically. She does not go into any details about VMs. In Laczkó (2014b), I argue against this view of VMs, including the preverb.

(iii) In the spirit of É. Kiss (1981), and also in accordance with É. Kiss (1992, 1994), and contrary to É. Kiss (2002), Mycock assumes that a preverbal focussed constituent occupies the [Spec,VP] position, and she does not adopt a F(oc)P view, which is also in line with general LFG assumptions about functional projections, see the discussion of Börjars et al. (1999) above.

(iv) She points out that several GB/MP analyses of Hungarian assume that only the question phrase adjacent to the verb is in [Spec,VP], and all the other question phrases function as universal quantifiers adjoined to VP, see É. Kiss (1994, 2002), Horvath (1998), Lipták (2001) and Puskás (2000). However, by referring to Surányi (2006), Mycock claims that this universal quantifier analysis is to be rejected, and she proposes that *all* 'wh'-phrases should be assumed to occupy the [Spec,VP] position (on a multiple specifier view). It is also noteworthy in this connection that Gazdik (2012) claims that non-verb-adjacent 'wh'-phrases need to be treated as topics.

Let me make the following remarks on this multiple CQ issue.

- In the account I am outlining in this paper, I subscribe to (and model) the single-CQ-in-[Spec,VP] view.
- I will investigate the empirical, theory-neutral and theory-specific (as well as analysis-specific) aspects of the behaviour of multiple questions in Hungarian in future work. I will compare the VP-adjunction analysis with both Mycock's (2006) multiple [Spec,VP] account and Gazdik's (2012) topic approach.
- Given the architecture and the fundamental assumptions of LFG, if there are stronger arguments in favour of the multiple-specifier analysis or the topic analysis, that can be easily accommodated in my model.

(D) Gazdik (2012), capitalizing on Gazdik & Komlósy (2011), outlines an LFG analysis of Hungarian finite sentence structure, fundamentally motivated by discourse functional assumptions and considerations. Given that its crucial syntactic aspects involve the treatment of VMs and focussed constituents, I discuss it in a detailed fashion in Laczkó (2014b), this volume.

(E) In Laczkó & Rákosi (2008-2014), our implemented grammar, we employ a modified version of É. Kiss' (1992) sentence structure. The most important features of this grammar implementation from the perspective of the present paper are as follows.

- Not only quantifiers but also sentence adverbs, ordinary topics and contrastive topics follow the adjunction pattern, and the adjunctions of these three different categories in the topic field can freely intermingle.
- As regards the treatment of the [Spec,VP] position, the current version of our grammar is rather limited. As is well-known and as has also been pointed out above, this position can be occupied by a whole range of different types of VMs (see the discussion above) and, at least in several approaches (including É. Kiss (1992, 1994) and ours), by focussed constituents, and by 'wh'-expressions (in complementary distribution); however, our grammar posits only a focussed constituent or a particle belonging to VMs (no question expressions and no other types of VMs). We assume that the preverb (having the syntactic category PRT) is a non-projecting word (in the sense of Toivonen (2001)). From the

complementarity of the two categories it also follows that a PRT can never be focussed in our approach.

- The current version of our implemented grammar is far from being complete for several reasons, one of them is that it does not systematically cover some crucial aspects of simple finite clauses (e.g. (multiple) wh-questions, various VM types, etc.). My fundamental aim in this paper, in combination with Laczkó (2014b) and Laczkó (2014c), is to develop a much more comprehensive LFG-theoretical analysis of finite clauses in Hungarian. Hopefully, this will have two significant contributions to our XLE grammar as well. On the one hand, it will establish solid LFG theoretical foundations for the implemented grammar, and, on the other hand, it will contribute to improving and advancing this implemented grammar by proposing important XLE-specific details of the analysis.

3 Towards an LFG analysis

In subsection 3.1, I present arguments, from an LFG perspective, for assuming S and against assuming IP in Hungarian. In subsection 3.2, I outline the most important aspects of an analysis of the preverbal domain of Hungarian finite clauses. In subsection 3.3, I discuss the cross-linguistic and parametric relevance of the account to LFG's space for structure-function associations.

3.1 Against IP in Hungarian

Let me begin by pointing out that the postulation of a CP in Hungarian is well justified. On the one hand, there are complementizers in Hungarian, too, (e.g. *hogy* 'that'), and, on the other hand, it is reasonable to assume that relative clauses are CPs and relative pronouns occupy the [Spec,CP] position, see Kenesei (1992), for instance, and the S is the complement of the C head. Thus, all the three positions are empirically and theoretically motivated even from an LFG perspective. As regards the postulation of an IP, the situation is radically different.

In Laczkó (2014a), I discuss the traits of elements that can be assumed to belong to the category of auxiliaries in Hungarian. My main claim is that despite the fact that LFG uses the functional category I for auxiliaries in languages like English and Russian, for example, and the fact that there are verbal elements in Hungarian that unquestionably meet all the basic requirements of auxiliarihood, they should not be taken to be Is, instead, they should be treated as Vs. This proposal is motivated by the following considerations. Although the relevant elements could, even according to the principles of LFG, provide justification for the postulation of I (as in English or Russian), the fact that these elements and other (clearly) lexical verbs

exhibit uniform syntactic behaviour with respect to designated positions in Hungarian sentence structure seriously undermines the tenability of introducing the category I(P).[12] Thus, genuine Hungarian auxiliaries and other (more or less) auxiliary-like elements, as well as certain ordinary lexical verbs, are best treated as belonging to special subclasses of verbs. Their special properties need to be encoded in their lexical representations. This is in line with Kenesei's (2000) proposal from a GB/MP perspective.

Kenesei (2000) convincingly argues that there are at least three verbal elements in Hungarian that spectacularly satisfy all criteria of auxiliarihood: *fog* 'will', *szokott* (literally: 'was accustomed (to)', meaning: general present habituality despite the past tense morphology), and *talál* (literally: 'find' meaning: 'happen to').[13] Consider (5), containing *fog* 'will'.[14]

(5) *Éva   el   fog   me-nni   mozi-ba.*
     Eve.NOM PV   will   go-INF   cinema-into
     'Eve will go to the cinema.'

Thus, even in LFG, the "headedness" criterion for postulating an IP would be sufficiently justified; however, its specifier position would pose serious problems. For instance, in English, [Spec,IP] encodes the subject (grammatical) function, see Bresnan (2001), and in Russian, it hosts a constituent with a (topic or focus) discourse function, see King (1995). Now, it is widely assumed that there is no empirical evidence for a designated subject position in Hungarian. By contrast, the Russian discourse functional pattern could be taken to lend rather strong support to employing an IP as the LFG counterpart of Brody's (1990) FP (Functional Projection) and more recent accounts' F(oc)P (Focus Phrase), see, for instance, É. Kiss (2002). However, in Laczkó (2014a) I argue that even this discourse-functionally based use of the IP has no empirical support, and, therefore, it has to be rejected. The essence of the argumentation is this. The IP approach to Hungarian sentence structure, if it followed the Russian pattern, could, in theory, assume that [Spec,IP] hosts focussed constituents, and only focussed constituents, barring ordinary (non-focussed) VMs. In addition, it would have to be assumed that (finite) auxiliaries and finite verbs can occupy the I head position, just like in Russian. In Laczkó (2014a), I point out that there would be at least three serious problems with this scenario. Here I can briefly mention two.

(A) There is empirical evidence that a whole range of clearly unfocussed VMs can also immediately precede an auxiliary (on this account: they can

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[12] The postulation of C(P) in Hungarian is fully justified, see the discussion above.

[13] Kenesei (2008) adds two more auxiliaries.

[14] In the gloss in (5), PV stands for "preverb" and INF stands for "infinitival suffix". In this example the auxiliary intervenes between the infinitival verb and its preverb.

also occupy the [Spec,IP] position). Obviously, these elements are the VMs of the infinitival complements of the auxiliary. Consider the examples in (6), containing an idiom chunk VM. In these examples the idiom chunk is a special use of the hyperchoristic form (*Pali*) of the last name *Pál* 'Paul'.

(6)   a.   *János*   *pali-ra*   *ve-tte*   *Évá-t.*
            John.NOM   Paul-onto   take-PAST.3SG   Eve-ACC
            'John made a dupe of Eve.'

       b.   *János*   *pali-ra*   *fog-ja*   *ve-nni*   *Évá-t.*
            John.NOM   Paul-onto   will-3SG   take-INF   Eve-ACC
            'John will make a dupe of Eve.'

Needless to say, an idiom chunk cannot receive focus stress and focus interpretation in its own right. Still it can occupy the alleged [Spec,IP] position.[15]

    (B) There are several finite lexical verbs, taking infinitival complements, that share the above behaviour with auxiliaries, i.e. in neutral sentences they must be preceded by the VM of their infinitival complement. However, a great number of other finite verbs, also taking infinitival complements, reject this pattern, and they require their infinitival complements to be preceded by their own VMs. Compare the following (idiom chunk) examples.

(7)   *János*   *pali-ra*   *akar-ja*   *ve-nni*   *Évá-t.*
         John.NOM   Paul-onto   want-PRES.3SG   take-INF   Eve-ACC
         'John wants to make a dupe of Eve.'

(8) a.   **János*   *pali-ra*   *imád-ja*   *ve-nni*   *Évá-t.*
          John.NOM   Paul-onto   love-PRES.3SG   take-INF   Eve-ACC
         'John loves to make a dupe of Eve.'

       b.   *János*   *imád-ja*   *pali-ra*   *ve-nni*   *Évá-t.*
           John.NOM   love-PRES.3SG   Paul-onto   take-INF   Eve-ACC
          'John loves to make a dupe of Eve.'

Thus, the problem is that there is a split between two groups of finite verbs. One of them patterns with the auxiliaries, while the other does not. This is

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[15] Occasionally the idiom chunk in both (6a) and (6b) can receive heavy focus stress; however, this can only encode verum focus: 'John DID/WILL make a dupe of Eve.' It is to be noted in this connection that if there is no VM-like preverbal element in a sentence, the verb itself can receive heavy stress to encode verum focus. This lends independent support to assuming that stressing an idiom chunk serves the purpose of expressing verum focus: if there is no VM the verb is stressed; otherwise a VM of any kind (which constitutes a phonological word with the verb) has to receive this heavy stress (because the verb, as the second element of this phonological word is, by definition, unstressed).

rather strange, because we do not find such a split either in English or in Russian: all auxiliaries and all finite verb forms share the same general properties as heads of IPs. In English [Spec,IP] is the designated position for SUBJ (which is the only discourse-oriented GF), in Russian [Spec,VP] is the designated SUBJ position and [Spec,IP] is reserved for DFs. By contrast, in Hungarian, both [Spec,VP] and the hypothesized [Spec,IP] can host exactly the same (varied) range of constituents: FOC and all kinds of VMs (including elements without any relevant semantic content: idiom chunks and non-compositional particles). From the perspective of [Spec,IP], hosting non-discourse (what is more, semantically "empty") constituents is rather unexpected. This contradicts Bresnan's (2001) standardly accepted generalization about the nature of SPEC in functional projections. Consequently, on the one hand, the postulation of I(P) would not contribute anything meaningful to capturing (additional) empirical facts that an I(P)-less V(P)-only approach cannot capture, and, on the other hand, it would require seriously weakening Bresnan's (2001) [Spec,FunctionalP] generalization.

It is also to be noted that the [Spec,VP] position in my VP-only approach is equally problematic for a different reason: from the perspective of [Spec,VP], the FOCUS (DF) option is marked in the light of the standard LFG assumptions, see, again, Bresnan (2001). That is why I propose in section 3.3 that the classical assumptions about [Spec,VP] should be modified. The crucial point here is that some modification of the standard assumptions is definitely needed, and I claim that the I(P)-less solution is more economical in this respect, because otherwise both the [Spec,IP] and the [Spec,VP] generalizations would have to be touched, and nothing would be gained either empirically or in any other relevant respect.

3.2 The fundamental aspects of the analysis

In the spirit of our implementational grammar, Laczkó & Rákosi (2008-2014), partially inspired by É. Kiss (1992), I assume the skeletal sentence structure in (9). This follows É. Kiss' (1992) GB structure, shown in (4) in subsection 2.1, with some differences.

    a) I do not assume an E (=expression) node for hosting left-dislocated contrastive topics.[16]

    b) Instead of a flat topic/sentence field, I assume a binary branching left-adjoined structure, which É. Kiss (1992) also does in the quantifier field.[17]

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[16] As I pointed out in subsection 2.1, more recent empirical evidence testifies that contrastive topics, ordinary topics and sentence adverbs can intermingle; thus, the structural separation of contrastive topics is no longer tenable.

[17] In (9), S* and VP* encode this binary branching, left adjoined structural organization of the topic and quantifier domains.

c) Naturally, in my structure, the nodes are associated with customary LFG functional annotations. In (9), I schematically represent the most crucial ones to be discussed in a detailed fashion below (T, Q, Sp).

(9)

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                    CP
           ┌────────┴────────┐
           C                 S*
                      ┌───────┴───────┐
                   XP (T)             S
                              ┌───────┴───────┐
                           XP (T)            VP*
                                      ┌───────┴───────┐
                                   XP (Q)            VP
                                             ┌────────┴────────┐
                                          XP (Sp)             V'
                                                        ┌──────┴──────┐
                                                        V            XP*
```
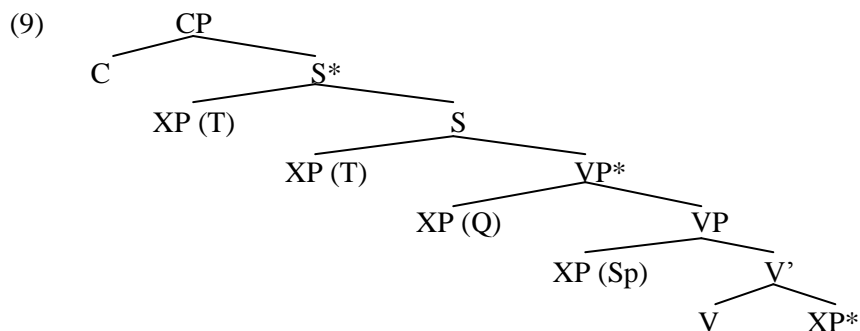
This overall structure is fully in the spirit of the fundamental aspects of the structural approach in Laczkó & Rákosi's (2008-2014) HunGram, except that in that implemented grammar, following the standard XLE practice in order to enhance parsing and generation efficiency, we employ a whole range of specific c-structure node labels.[18]

Table 2 gives an overview of the essential features of the disjunctive annotations associated with the topic field, the quantifier zone and the [Spec,VP] position, schematically represented in (9).[19]

T: { (c-)topic | sent.adv. }	Q: { quantifier | WH }	Sp: { focus | WH | VM }
{ (↑GF)=↓ 　{↓ ∈ (↑ TOPIC) 　|↓ ∈ (↑ CONTR-TOPIC)} |↓ ∈ (↑ ADJUNCT) 　(↓ADV-TYPE)=c SENT }	(↑GF)=↓ { (↓CHECK _QP)=c + |(↑CHECK _VM-INTER)=c + 　(↓CHECK _QP-INTER)=c + 　(↓SPECIFIC)=c + }	{ (↑GF)=↓ 　(↑FOCUS)=↓ |(↑GF)=↓ 　(↓CHECK _VM-INTER)=c + 　((↑CHECK _VM-INTER)= +) |{ (↑GF)=↓ 　|↑=↓ } 　(↓CHECK _VM)=c + }

Table 2

Let me now discuss the most crucial details of the analysis.

(A) As I have mentioned above, I assume a binary branching, left-adjoined structure in the topic field as well, contrary to É. Kiss' (1992) flat structure. My main motivation for this is that in this way we can capture instances of coordination with shared topic and/or sentence adverbial

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[18] Here are some examples: Sfinctopic = a finite sentential node dominating a contrastive topic, Sfintopic = a finite sentential node dominating an ordinary topic, CPembed = a finite clausal argument, CPcond = a finite conditional clause.

[19] The annotations associated with the quantifier field and the [Spec,VP] position are part of my new proposal, and it is left for future research to test their implementability in our HunGram grammar and to efficiently implement them.

constituents, illustrated in (10), in a more intuitive and a much more implementable way. The first (right-most) topic or sentence adverb occurs in the clause-initial position dominated by S, and all the others are iteratively left-adjoined to S, see (9). This is similar to King's (1995) treatment of multiple topics in Russian: the first topic is in [Spec,IP], and all the others are left-adjoined to IP.[20]

(10) | *Pali* | *tegnap* | *a könyvet* | *oda* | *adta* | *Évának,* |
|---|---|---|---|---|---|
| Paul.NOM | yesterday | the book.ACC | VM | gave | Eve.to |
| | *és* | *a fotót* | *el* | *küldte* | *Katinak.* |
| | and | the photo.ACC | VM | sent | Kate.to |

'Yesterday Paul gave the book to Eve and sent the photo to Kate.'

The annotations in the topic field are rather straightforward. The first main disjunct encodes the following: the relevant constituent bears a particular grammatical function, and, in addition, it has one of the two topic functions. The second main disjunct is for sentence adverbs. The first line states that it always has an adjunct function, and the constraining equation in the second line only admits adverbs of the sentential type (so specified in their lexical forms).

Let me now comment on the annotations I propose for the quantifier field.

- As I pointed out in subsection 2.2, there are two major ways of treating multiple constituent questions. The wider-spread view is that it is always a single question phrase (the one closest to the verb) that occupies the [Spec,VP] position, and all other question phrases are VP-adjoined in the quantifier field. The alternative stance is that all question phrases are in [Spec,VP].[21] In the analysis I propose here, I subscribe to the former view.

- A constituent in this field bears a grammatical function, and (following from the previous point) it is either a quantifier or a question phrase. This is encoded by the disjunction.

- In the two disjuncts, I use the XLE-style CHECK featural device. Its essence is that these CHECK features come in pairs: there is a defining equation and it has a constraining equation counterpart. These CHECK feature pairs can ensure that two elements will occur together in a

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[20] É. Kiss (1992: 89-91) points out that either the iteratively binary branching solution or her flat structure can capture the relevant coordination phenomena. She does not particularly argue for choosing the latter, and she only mentions that in that approach the shared (non-repeated) topics or sentence adverbs have to be assumed to be gapped. Interestingly, É. Kiss (1994) uses the other strategy. One of the motivations for this could be the fact that in this work she postulates a TP (TenseP) instead of S. Thus, her TP based solution is similar in spirit to King's (1995) IP treatment.

[21] For a discussion and references, see subsection 2.2.

particular configuration,[22] or that a particular element will occur in a designated position. It is this latter property that I utilize here.

- In the first disjunct, the constraining CHECK feature equation requires a constituent containing an element that is (inherently) specified as a quantifier.[23] The defining CHECK feature equation counterpart is included in the lexical entries of the quantifier elements involved, see the generalized lexical form representation in (11).

(11)   L (quantifier) …
$$(CHECK\ \_QP\ (GF^*\uparrow))= +$$

- The reason why this CHECK feature is expressed in an inside-out functional uncertainty relation is that a quantifier can be (multiply) embedded in a constituent, and it will still turn the entire constituent into a quantified phrase which is required to occupy the designated quantifier position.[24]

- The second disjunct regulates the occurrence of additional question phrases in multiple constituent questions. The combination of the $(\uparrow CHECK\ \_VM\text{-}INTER)=c\ +$ and the $(\downarrow CHECK\ \_QP\text{-}INTER)=c\ +$ constraining equations guarantees that this position can be occupied by an interrogative expression (second equation) iff the [Spec,VP] position is already occupied by another interrogative expression (first equation).[25] I have included the $(\downarrow SPECIFIC)=c\ +$ constraining equation to capture É. Kiss' (1992) empirical generalization to the effect that in multiple constituent questions specific interrogative expressions target the quantifier field. Question words are assumed to have the generalized lexical form shown in (12). The annotations encode the following properties respectively.

    o   These elements are interrogative pronouns.
    o   They occur in constituent questions.

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[22] For an example of this, see Laczkó & Rákosi's (2011) treatment of Hungarian particle verb constructions, in which the simplex verb and the particle are marked by corresponding CHECK features in their respective lexical forms.

[23] _QP is mnemonic of this category.

[24] It is for the very same general reason that in the generalized lexical form of question words in (12) the inside-out functional uncertainty notation is employed.

[25] The defining equation counterpart of the first equation is associated with the [Spec,VP] position, see below, while the defining counterpart of the second equation is included in the lexical forms of question words, see (12).

      o   They occur in sentences that do not contain a focussed constituent.[26,27]

      o   They are constrained to occur in the [Spec,VP] or the (VP-adjoined) quantifier positions.

(12)   L (wh-word) …[28]
        ($\uparrow$ PRON-TYPE)= interrogative
        (STMT-TYPE (GF* $\uparrow$))= wh-interrogative
        ~(FOCUS (GF* $\uparrow$))
        { (CHECK _VM-INTER (GF* $\uparrow$))= +
        | (CHECK _QP-INTER (GF* $\uparrow$))= + }

And now I turn to the annotations I associate with the [Spec,VP] position.

- The three main disjuncts encode the complementary distribution of focussed constituents, question phrases and VMs, respectively.
- The first disjunct is straightforward.[29]
- In the second disjunct, the first (constraining) CHECK feature equation requires the presence of a question phrase in this designated position. Its defining counterpart is included in the lexical forms of question words, see (12).
- In the second disjunct, the second, optional, defining CHECK feature equation serves as the licensor of the occurrence of question phrases in the quantifier field.[30] When it is not present in the structure, no question

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[26] This captures the fact that, on the one hand, question phrases and ordinary focussed constituents are in complementary distribution, aspiring to the same [Spec,VP] position, and, on the other hand, even when one or several of them do not occur in [Spec,VP] that position has to be occupied by another question expression (and not a focussed constituent).

[27] It is a widely discussed exception that the question word *miért* 'why' behaves differently: it can occur in a VP-adjoined position when [Spec,VP] is occupied by a focussed constituent. This calls for a special treatment which I will include in my detailed analysis of (multiple) constituent questions in future work. However, it is obvious already that the ~(FOCUS (GF* $\uparrow$)) negative existential constraint will have to be removed from the lexical form of this particular question word, and in the annotations associated with the VP-adjoined position the simultaneous presence of an ordinary focussed constituent will have to be optionally encoded, but all this will have to be appropriately constrained to questions containing *miért* 'why'.

[28] (GF* $\uparrow$) in these annotations has to refer to the same path, so a local variable needs to be used to anchor it.

[29] However, a reminder is in order. Although I subscribe to the very strong recent view in LFG that discourse functions are to be uniformly represented in i-structure, for a useful discussion of the relevant literature, see Gazdik (2012), for the sake of simplicity of exposition here I apply the classical LFG representation of TOPIC and FOCUS in f-structure.

[30] Its constraining counterpart is associated with the VP-adjoined position.

phrase can occur in the quantifier position. When it is present, it requires the presence of one or more question phrases. From the perspective of question phrases in the quantifier position: they can only occur there if the [Spec,VP] position is filled by a question phrase.

- The third disjunct handles VMs. The defining counterpart of its constraining CHECK feature equation is included in the lexical forms of the elements that can occupy this position in neutral sentences (in non-focussed sentences and non-constituent-question sentences). The functional head annotation (↑=↓) in the disjunction is for particles, while the (↑GF)= ↓ annotation is for all the other types of VMs.

- In Laczkó (2014b), I present a detailed analysis of various types of VMs.

3.3   On c-structure positions and functional annotations

My proposed analysis of Hungarian finite clauses poses three problems for standard LFG assumptions about c-structure—function associations. However, in this subsection, I claim that the relevant Hungarian phenomena and my analysis can be seen as providing evidence for augmenting the cross-linguistic, parametric space for these structure-function correspondences.

(A) Consider the following quotes.

- "Functional categories are specialized subclasses of lexical categories which have a syncategorematic role in the grammar (such as marking subordination, clause type, or **finiteness**)" (Bresnan 2001: 101).

- "Specifiers of functional categories (IP or CP) play special roles, mapping to the syntacticized discourse functions SUBJ, TOPIC or FOCUS" (Bresnan 2001: 102).

- "Modifier phrases fill the specifier of a lexical category" (Dalrymple 2001: 71).

In subsection 3.1, I argued extensively against postulating I(P) in Hungarian. However, there is evidence for a designated preverbal position which can be occupied by a focussed constituent (in complementary distribution with other constituent types), and this position is best analyzed as [Spec,VP]. On the one hand, it is clearly a highly distinguished position, and, on the other hand, the postulation of a VP (and a specifier within it) makes the treatment of quantifiers as VP-adjoined constituents feasible. In addition, coordination facts can also be straightforwardly captured by dint of the [Spec,VP] analysis.[31] The problem then is that the designated focus position is not in the specifier of either a CP or an IP (cf. the second quote from Bresnan 2001); moreover, the assumption that it is in [Spec,VP] goes against the generalization expressed in the quote from Dalrymple (2001) above.

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[31] The entire "post-focus" portion of a sentence can be conjoined. This can be neatly treated by assuming that the relevant portion of the sentence is a V' constituent, and we are dealing with V'-coordination.

I think this problem can be solved in the following way. Both CP and IP are regarded as extended functional projections of the verb. We can assume that it is fundamentally the specifier positions of the projections of the verb (whether lexical: VP or functional: CP, IP) that can (optionally) host constituents with discourse functions. For a discussion of extended heads from an LFG perspective (as compared to the GB view), see section 10.3 of King (1995).

It is noteworthy in this respect that this is not the first instance in which a basic structure-function generalization needs to be augmented. Bresnan (2001: 109) discusses a similar case. The original assumption was this. "Complements of lexical categories are the nondiscourse argument functions." However, for the appropriate treatment of English examples like *Mary will not be running*, the following needed to be added: "… or f-structure coheads". This made it possible to assume that progressive *be* and the *-ing* VP it subcategorizes for (i.e. its complement) can be made functional coheads. My claim is that if a generalization about the complements of lexical categories can be augmented on solid empirical grounds, then this, in principle, can be an option in the case of the specifiers of lexical categories – under similar circumstances.[32]

(B) Consider the following quote. "The daughters of S may be subject and predicate" (Bresnan 2001: 112). I propose, on the basis of my analysis, that this generalization should be modified in the following way.

(13)   The daughters of S may be subject/topic and predicate.

This modification receives independent support from the following rule from Bresnan & Mchombo (1987).[33]

(14)   S   → $\begin{bmatrix} \text{NP} \\ (\uparrow\text{SUBJ})=\downarrow \end{bmatrix}$, $\begin{bmatrix} \text{NP} \\ (\uparrow\text{TOPIC})=\downarrow \end{bmatrix}$, $\begin{bmatrix} \text{VP} \\ \uparrow=\downarrow \end{bmatrix}$

(C) Gazdik (2012) rejects the postulation of a VP in Hungarian by referring to Dalrymple's (2001) generalization: a VP is justified if it does not contain the subject. In the light of point (B) above, I think it is reasonable to modify this generalization. The modified version could run as follows: a VP can contain a subject if the XP in [s XP VP] is a topic. This would require all other occurrences of VP to be subjectless.[34]

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[32] Eventually, it may turn out that it is only verbs (VPs) that call for, or admit, this augmentation cross-linguistically.

[33] On the basis of (14), *subject and/or topic* seems even more appropriate than *subject/topic* in (13).

[34] On this scenario, the following three parametric options seem to emerge across languages: (i) strictly VP-external subject (English) (ii) VP-internal subject in a

4   Conclusion

1) In this paper I have presented the crucial aspects of an LFG (and XLE-implementable) analysis of the preverbal portion of Hungarian finite clauses.
2) The structural representation was largely motivated by É. Kiss (1992) and Laczkó & Rákosi (2008-2014).
3) I argued for S and against IP (and also postulated CP).
4) I employ a hierarchical, binary branching, adjunction structure for the topic field, in addition to a similar setup in the quantifier field.
5) In this analysis I handle all the question phrases other than the question phrase immediately adjacent to the verb in multiple constituent questions as occupying VP-adjoined positions in the quantifier field, and I leave comparing this treatment to alternative approaches.
6) It is also a future research task to develop a detailed analysis of the three major quantifier types when they occur in the preverbal quantifier zone.
7) I assume that focussed constituents, verbal modifiers and the (verb-adjacent) question phrase are in complementary distribution in [Spec,VP].
8) On the basis of the analysis proposed in this paper, I suggest that LFG's parametric space that is potentially available to c-structure—function associations should be augmented along the following lines.
    a) The [Spec,VP] position should be allowed to host the FOCUS discourse function. In general terms, this amounts to assuming that the specifier of a lexical category can be either a modifier or a DF.
    b) The XP in [$_S$ XP VP] can also be a topic, in addition to a subject.
    c) In cases like b), the VP can also contain a subject.

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designated position (Russian) (iii) VP-internal subject without a designated position (Hungarian).

References

Bresnan, Joan. 2001. *Lexical-Functional Syntax*. Oxford: Blackwell.

Bresnan, Joan & Mchombo, Sam A. 1987. Topic, pronoun, and agreement in Chichewa. *Language* 63 (4), 741-782.

Brody, Michael. 1990. Remarks on the order of elements in the Hungarian focus field. In: Kenesei, István. ed. *Approaches to Hungarian. Volume 3. Structures and Arguments*. Szeged: JATE, 95-122.

Bródy, Michael & Szabolcsi, Anna. 2003. Overt scope in Hungarian. *Syntax* 6: 19-51.

Börjars, Kersti, Payne, John & Chisarik, Erika. 1999. On the justification for functional categories in LFG. In: Butt, Miriam & King, Tracy. H. eds. *Proceedings of the LFG99 Conference*. University of Manchester. Stanford: CSLI Publications.

Dalrymple, Mary. 2001. *Lexical Functional Grammar. Syntax and Semantics 34*. New York: Academic Press.

É. Kiss, Katalin. 1981. Structural relations in Hungarian, a "free" word order language. *Linguistic Inquiry* 12: 185-213.

É. Kiss, Katalin. 1987. *Configurationality in Hungarian*. Dordrecht: Reidel.

É. Kiss, Katalin. 1992. Az egyszerű mondat szerkezete [The structure of the simple sentence]. In: Kiefer, Ferenc. ed. *Strukturális magyar nyelvtan 1. Mondattan.* [Structural Hungarian grammar 1. Syntax]. Budapest: Akadémiai Kiadó, 79-177.

É. Kiss, Katalin. 1994. Sentence structure and word order. In: Kiefer, Ferenc & É. Kiss, Katalin. eds. *The Syntactic Structure of Hungarian*. New York: Academic Press, 1-90.

É. Kiss, Katalin. 2002. *The Syntax of Hungarian. Cambridge Syntax Guides*. Cambridge: Cambridge University Press.

Gazdik, Anna. 2012. Towards an LFG analysis of discourse functions in Hungarian. In: Kiefer, Ferenc & Bánréti, Zoltán. eds. *Twenty Years of Theoretical Linguistics in Budapest*. Budapest: RIL HAS & Tinta Könyvkiadó, 59-92.

Gazdik, Anna. & Komlósy, András. 2011. On the syntax-discourse interface in Hungarian. In: Butt, Miriam & King, Tracy. H. eds. *Proceedings of the LFG11 Conference*. Hong Kong: Hong Kong University. Stanford: CSLI Publications, 215-235.

Horvath, Julia. 1998. Multiple *wh*-phrases and the *wh*-scope-marker strategy in Hungarian interrogatives. *Acta Linguistica Hungarica* 45: 31-60.

Kálmán, László. 1985. Word order in neutral sentences. In Kenesei, István. ed. *Approaches to Hungarian. Vol. 1. Data and Descriptions*. Szeged: JATE. 13-23.

Kálmán, László. 2001. ed. *Magyar leíró nyelvtan. Mondattan 1* [Hungarian descriptive grammar. Syntax 1]. Budapest: Tinta Könyvkiadó.

Kenesei, István. 2000. Szavak, szófajok, toldalékok [Words, parts of speech, suffixes]. In: Kiefer, Ferenc. ed. *Strukturális magyar nyelvtan 3. Morfológia* [Structural Hungarian grammar 3. Morphology]. Budapest: Akadémiai Kiadó, 75-136.

Kenesei, István. 1992. Az alárendelt mondatok szerkezete [The structure of subordinate clauses]. In: Kiefer, Ferenc. ed. *Strukturális magyar nyelvtan 1. Mondattan.* [Structural Hungarian grammar 1. Syntax]. Budapest: Akadémiai Kiadó, 529-713.

Kenesei, István. 2008. Funkcionális kategóriák [Functional categories]. In: Kiefer, Ferenc. ed. *Strukturális magyar nyelvtan 4. A szótár szerkezete* [Structural Hungarian grammar 4. The structure of the lexicon]. Budapest: Akadémiai Kiadó, 601-637.

King, Tracy H. 1995. *Configuring Topic and Focus in Russian*. Stanford: CSLI Publications.

Komlósy, András. 1985. Predicate complementation. In Kenesei, István. ed. *Approaches to Hungarian. Vol. 1. Data and Descriptions*. Szeged: JATE. 53-78.

Laczkó, Tibor. 2014a. On verbs, auxiliaries and Hungarian sentence structure in LFG. *Argumentum* 10. Debreceni Egyetemi Kiadó, 421-438.

Laczkó, Tibor. 2014b. An LFG analysis of verbal modifiers in Hungarian. *This volume.*

Laczkó, Tibor. 2014c. Outlines of an LFG-XLE account of negation in Hungarian sentences. *This volume.*

Laczkó, Tibor & Rákosi, György. 2008-2014. *HunGram. An XLE Implementation.* University of Debrecen.

Laczkó, Tibor & Rákosi, György. 2011. On particularly predicative particles in Hungarian. In Butt, Miriam & King, Tracy H. eds. *Proceedings of the LFG '11Conference*. Stanford: CSLI Publications, 299-319.

Lipták, Anikó. 2001. *On the Syntax of Wh-items in Hungarian*. Utrecht: LOT.

Mycock, Louise. 2006. *A New Typology of Wh-Questions*. Ph.D. dissertation, University of Manchester.

Payne, John & Chisarik, Erika. 2000. Negation and focus in Hungarian: An Optimality Theory account. In: *Transactions of the Philological Society* 98: 185-230.

Puskás, Genoveva. 2000. *Word Order in Hungarian: The Syntax of Ā-Positions*. Amsterdam: John Benjamins.

Surányi, Balázs. 2006. Mechanisms of *wh*-saturation and interpretation in multiple *wh*-movement. In: Cheng, Lisa et al. eds. *Wh-movement: Moving On*. Cambridge MA: MIT Press, 289-318.

Szabolcsi, Anna. 1997. Strategies for scope taking. In: Szabolcsi, Anna. ed. *Ways of Scope Taking*. Dordrecht: Kluwer, 109-154.

Toivonen, Ida. 2001. *The Phrase Structure of Non-Projecting Words*. Ph.D. dissertation, Stanford University.