

Arguments for arguments in the complement zone of the Hungarian nominal head*

Gábor Alberti¹, Judit Farkas² and Veronika Szabó^{1,2}

¹Department of Linguistics, Pécs / ²Research Institute for Linguistics, HAS

This paper argues that a Hungarian nominal head may have a phonetically non-empty complement zone — if certain “felicity conditions” are satisfied. Our approach relies on the introduction of two new constituency tests (based on certain properties of the contrastive topic and on the order of certain functional heads), instead of the earlier ones. Another crucial element to our solution is the reinterpretation of É. Kiss’s Constraint on Case Assignment as a Behaghel-type phonetic rule, which prevails in a graded way, instead of providing a black and white picture. Our approach can also be put into the cross-linguistic discussion of branchingness. It is claimed on the basis of our data that branchingness in Hungarian can be accounted for by a generalized version of Hinterhölzl’s (“Germanic”) weight condition; and the differences between Hungarian and, for instance, German in branchingness can simply be attributed to differences between these languages in the prosodic sensitivity of phases.

1. Introduction

This paper argues that a Hungarian nominal head may have a (phonetically non-empty) complement zone containing (different kinds of) arguments of this head, including the possessor.¹ This stance contrasts with such seminal (“canonical”) approaches as those of Szabolcsi & Laczkó (1992) and É. Kiss’s (1998).

We claim, thus, that there is nothing special about N-complements in Hungarian. Why and how, then, has the existence of a complement to an N head

* We are grateful to OTKA NK 100804 (*Comprehensive Resource Grammars: Hungarian*) for their financial support.

1. The possessor is regarded as a distinguished argument in Hungarian in that it shows agreement in person and number with the head (Lehmann 1988).

been debatable in Hungarian but not in other languages, including English (1a), German (1b), French (1c)?

(1) N-COMPLEMENTS ACROSS LANGUAGES

- a. [*the destruction*_N of Rome by the Barbarians]
- b. [*die Überreichung*_N der Oscars in L.A. letzten Sommer]
the presenting of_the Oscar.PL in L.A. last summer
'the presenting of the Oscars in L.A. last summer' (Hinterhölzl 2010: 38)
- c. [*la destruction*_N de Rome par les Barbares]
the destruction of Rome by the Barbarians
'the destruction of Rome by the Barbarians' (Abeillé & Godard 2000: 27)

We try to give an answer to this question in this introductory section. This requires a sketchy introduction to the properties of Hungarian **information structure** (e.g., É. Kiss 1992, 1998, Alberti & Medve 2000), illustrated in (2a–b') below.

(2) ITERABLE TOPICS AND ONE FOCUS POSITION BEFORE THE VERB STEM

- a. [*Péter*]_{Topic} [*Mari*]_{Topic} *hazaküldte*.
Péter Mari.ACC home_sent.DEFOBJ.3SG
'Péter sent Mari home.'
- b. * [*Csak Péter*]_{Focus} [*csak Mari*]_{Focus} *küldte haza*.
only Péter only Mari.ACC sent.DEFOBJ.3SG home
Intended meaning: 'It was only Péter who sent home only Mari.'
- b'. [*Csak Péter*]_{Focus} *küldte haza* [*csak Mari*]_{Focus}.
only Péter sent.DEFOBJ.3SG home only Mari.ACC
'It was only Péter who sent home only Mari.'
- c. * [*Az elpusztítása*_N *Rómának*]_{Focus} *volt a mai téma*.
the destruction.POSS.3SG Rome.DAT was the today.ADJ topic
Intended meaning: 'It is the destruction of Rome that served as today's topic.'
- c'. [*Az elpusztítása*_N]_{Topic} [*Rómának*]_{Topic} *a tegnapi téma volt*.
the destruction.POSS.3SG Rome.DAT the yesterday.ADJ topic was
'The destruction of Rome was yesterday's topic.'
- c''. [*Rómának az elpusztítása*_N]_{Focus} *volt a mai téma*.
Rome.DAT the destruction.POSS.3SG was the today.ADJ topic
'It is the destruction of Rome that served as today's topic.'

The point is that the surface position of the verb (stem) can be preceded by more than one topics (2a) but only by one focalized phrase (2b). A second focalized constituent could follow the surface position of the verb stem (2b'). It is this difference in iterability between **topic** and **focus** that seems to predestine focus to serve as a constituency test (Szabolcsi & Laczkó 1992: 291), on the basis of which the potential noun phrase construction with a non-empty complement zone, shown

in (2c) above, proved to be ungrammatical. Having excluded the “one-constituent” analysis, it seems then that the expression in question — with the noun head followed by the possessor — is to be analyzed, for instance, as a combination of two topics (2c′). It also seems that the noun head and the possessor can form a non-split construction only if the noun head is the rightmost element in the noun phrase (2c″).

However, it will turn out in Sections 2 and 3, after reviewing the competing approaches in the Hungarian literature, that neither the focus construction nor other constructions proposed so far are suitable for serving as a constituency test. In Subsection 3.4 and in Section 5, we offer two new constituency tests. Another crucial element to our solution is the reinterpretation of É. Kiss’s (1998) Constraint on Case Assignment (see Subsection 2.2) as a phonetic rule, similar to the Behaghel Law, which prevails in a graded way (4.1), instead of providing a black and white picture.

Up to that point, our contribution might seem to be (exclusively) Hungarian-specific. It is argued in Section 6, however, that É. Kiss’s (1998) Constraint on Case Assignment (2.2) belongs to head-final effects (Williams 1982). Moreover, the examples which are shown in (2c–c″) above and will be discussed from Subsection 2.3 to Section 5 practically all have to do with head-final effects, too. It will also be demonstrated that these data can be accounted for by a generalized version of Hinterhölzl’s weight condition (2010: 44, 47), provided Hungarian nominal heads are “permitted” to have a (phonetically non-empty) complement zone, as was proposed in the first paragraph. Otherwise, Hungarian must be considered to be a language that does not pattern (in respect of branchingness) with any of the languages classified by Hinterhölzl (2010: 46–47), the basics of whose approach will also be sketched in Section 6.

The paper is concluded with a summary and a short discussion of some empirical and theoretical research questions left open (Section 7).

2. Approaches to N-complements

2.1 The Argument (Inheritance) Principle

Let our starting point be the “default” standpoint concerning the DP, formulated in (3a) below by Broekhuis *et al.* (2012: page xvi), applied to the Dutch DP: “Although this is often less conspicuous with nouns, adjectives and prepositions, it is possible to describe examples like (3b) ... [as follows]. The phrases between straight brackets can be seen as predicates that are predicated of the noun phrase *Jan*, which we may therefore call their logical subject (...). Furthermore, ... the

noun *vriend* [‘friend’] may combine with a PP-complement that explicates with whom the subject *Jan* is in a relation of friendship...”

- (3) APPROACHES TO THE COMPLEMENT OF THE NOUN HEAD
- a. Dutch: [_{DP} ... D ... [_{NP} ... N XP...]]
 - b. *Jan is [een vriend van Peter]*
Jan is a friend of Peter
‘Jan is a friend of Peter.’
 - c. Hungarian (Approach I): [_{DP} ... D [_{NP} (DP) ... N]]

As (3c) above shows, however, the “canonical” Hungarian generative literature (Kiefer 1992) accepts no postnominal complement domain (Szabolcsi & Laczkó 1992: 291).

2.2 The complement zone of N in Hungarian: Is there any at all?

Below we demonstrate three positions taken in the literature (I–III) concerning the question of whether the Hungarian N head can have a complement (zone).

I. No complement. As was mentioned in connection with (3c) above, Szabolcsi & Laczkó (1992) can be regarded as representatives of a negative answer to the question in the title of this subsection. The reason for their stance lies with their practice of using the focus construction in Hungarian as a *Constituency Test* (Broekhuis *et al.* 2012: 1121). We will prove by means of independent phenomena (8) that the Hungarian focus construction is not suitable for this task, that is, for the task of identifying the *full extent* of the parts of a sentence.

II. Yes and no, at the same time. According to this stance, it is not excluded that an N head can be associated with lexically-semantically determined arguments, which appear in its complement in some kind of “deep structure” (4a). At surface structure, however, this complement must be empty, because of the tension between morphological and syntactic requirements formulated in (4b.i) and (4b.ii), respectively.

- (4) AN IN-BETWEEN APPROACH TO THE COMPLEMENT OF THE NOUN HEAD (APPROACH II)
- a. [_{DP} NP_i D [_{predNP} N+I Ø_i]] where NP_i is an obligatorily moved “long” possessor, see É. Kiss (1998: 86, (54))
 - b. **Constraint on Case Assignment** (É. Kiss 1998: 77, 2002: 174):
 - i. The case marker of an NP appears at the right edge of this NP.
 - ii. The case marker cliticizes onto the head of the NP (or, in the case of an empty head, it cliticizes on the constituent preceding the head).

III. Yes. The third stance, demonstrated in (5a) below, solidly relies on the lexical-semantic necessity according to which any kind of lexical-semantic dependent of a lexical element must appear in the complement zone of the head that hosts the lexical element. If the N head is a deverbal nominal, for instance, the thematic arguments of the input verb are inherited and (are to be) hosted in the complement zone of N. Non-deverbal nouns may have other types of lexical-semantic dependents, which can be called *conceptual arguments* (Laczkó 2000) or *quasi-arguments* or *thematic adjuncts* (Rákosi 2009).

(5) APPROACH III TO THE COMPLEMENT ZONE OF THE NOUN HEAD

- a. $[_{DP} \dots D [_{NP} \dots [_{N'} N \dots]]]$ (Alberti & Medve 2002/2005: 141–142)
- b. Argument (Inheritance) Principle:
 - i. Lexical-semantic dependents of heads must appear in X' (as sisters of X).
 - ii. They can remain *in situ* (under certain circumstances).

Representatives of Approach III should explain why it is rather rare that post-N complement zones are non-empty (5b.ii). We will argue that the (potential) felicity conditions for non-empty N-complements are practically ignored in the literature; however, if certain grammatical constellations coincide, this choice does yield acceptable and sometimes even optimal sentence variants.

Our first task, thus, is to reveal these “felicity conditions”. One of them requires, for instance, that a noun phrase in the complement zone of N be downright heavy phonetically. This explains why examples satisfying this criterion are rare in the literature: editors of linguistics research papers hate very long example sentences (stretching over two lines).

Another problem is that a noun phrase occurring at the right periphery of the Hungarian sentence can either be regarded as a complement belonging to a preceding N head, if one is present, or to the preceding verb head that the N head belongs to. Here, an appropriate constituency test is required (which reliably identifies the *full extent* of noun phrases).

2.3 Constituency tests in Hungarian

As was mentioned in Subsection 2.2 above, Approach I (“no N-complement”) uses the focus construction in Hungarian as a *constituency test* (Broekhuis *et al.* 2012: 1121):

(6) THE APPLICATION OF THE FOCUS TEST TO THE HUNGARIAN NP

- a. * $[A \text{ kalapja}_N \text{ Péternek}]_{\text{Focus}} \text{ veszett el.}$
 the hat.POSS.3SG Péter.DAT lost away
 Intended meaning: ‘It is Péter’s hat that has been lost.’

- b. *² *Minket* [*a vita*_N *Péterrel*]_{Focus} *fárasztott el ennyire*.²
 we.ACC the debate Péter.INS exhausted away so_much
 Intended meaning: ‘It is the debate with Péter that has exhausted us so much.’
- c. * *Mi* [*a vitától*_N *Péterrel*]_{Focus} / [*a vita*_N *Péterreltől*]_{Focus}
 we the debate.ABL Péter.INS / the debate Péter.INS.ABL
vagyunk ennyire fáradtak.
 be.1PL so_much tired.PL
 Intended meaning: ‘It is the debate with Péter that has made us so tired.’

The focus construction, however, is not suitable for serving as a constituency test which can be applied to any kind of expression, because it does not allow any sort of “right branching” from the head.³ Before showing this, however, we would like to help the non-Hungarian readers by giving in (7) some acceptable versions of the examples in (6). These variants do not violate the aforementioned constraint ruling out “right branching”. There are, thus, two evasive strategies to avoid “right branching”: to place the complements in question in the pre-head zone or to extract them, as is shown in the primeless and the primed examples in (7), respectively. Note that the latter strategy is somewhat marked.

- (7) EVASIVE STRATEGIES TO AVOID “RIGHT BRANCHING”
- a. [*Péternek a* [_N *kalapja*]] *veszett el*.
 Péter.DAT the hat.POSS.3SG lost away
 ‘It is Péter’s hat that has been lost.’
- a’.^(?) [*A* [_N “*kalapja*”]] *°veszett °el* “*Péternek*”.⁴
 the hat.POSS.3SG lost away Peter.DAT
 ‘It is Péter’s hat that has been lost.’

2. See Bartos (2000: 689–692).

3. It will be relevant in the light of (12) in 2.4 that Bartos (2000) attributes slightly different grammaticality judgements to the noun phrase with a nominative case-marked (practically unmarked) head (6b) and the one with an ablative case-marked head (6c). This difference suggests that the phonetic weight of the case marker of the N head is a factor that *counts*, and hence should be accounted for in all the three approaches (I–III).

4. We have exhibited the “mirror-focus” (É. Kiss 1992, Alberti & Medve 2000) stress pattern used in the primed examples by marking the obligatorily focus-stressed (“”) and obligatorily unstressed (“°”) words. Note in passing that if the extracted complement is unstressed in (7a’, b’, c’), the resulting sentences are well-formed but have another meaning, compared to what is taken to be the basic meaning here, in the case of, say, (7a’): ‘It has been known that something has been lost. And the new piece of information is that it is Péter’s hat that has been lost.’ The aforementioned alternative to (7a’) (with the extracted complement *Péternek* ‘Péter.Dat’ unstressed) would express the following meaning: ‘It has been known that some possession of Péter’s has been lost — which is his hat.’

- b. *Minket [a Péterrel való [_N vita]] fárasztott el ennyire.*
 we.ACC the Péter.INS be.PART debate exhausted away so_much
 ‘It is the debate with Péter that has exhausted us so much.’
- b'. ?*Minket [a [_N "vita]] °fárasztott °el °ennyire ["Péterrel].*
 we.ACC the debate exhausted away so_much Péter.INS
 ‘It is the debate with Péter that has exhausted us so much.’
- c. *Mi [a Péterrel való [_N vitától]] vagyunk ennyire fáradtak.*
 we the Péter.INS be.PART debate.ABL be.1PL so_much tired.PL
 ‘It is the debate with Péter that has made us so tired.’
- c'. ?*Mi [a [_N "vitától]] °vagyunk °ennyire °fáradtak ["Péterrel].*
 we the debate.ABL be.1PL so_much tired.PL Péter.INS
 ‘It is the debate with Péter that has made us so tired.’

As was mentioned above, the focus construction does not allow any sort of “right branching” from the head (8). This fact is exhibited in the case of noun phrases containing relative clauses (8a), and converbial (8b) and infinitival (8c) phrases with post-head complements. Note that the same two “evasive strategies” can be applied as those shown in (7) above (see the primed examples in (8)).

(8) APPLICATION OF THE **FOCUS TEST** TO RIGHT BRANCHING PHRASES

Relative Clause in a DP: [... N CP]

- a. *Ki hívott meg? *_[Foc] [Az a lány, akivel tegnap
 who invited perf that the girl who.INS yesterday
 találkozottunk], hívott meg.*
 met.1PL invited perf
- a'. *Ki hívott meg? _[Foc] [Az a lány] hívott meg,
 who invited perf that the girl invited perf
 akivel tegnap találkozottunk.*
 who.INS yesterday met.1PL
 ‘Who invited you? I was invited by the girl we met yesterday.’

ConvP: [... Conv DP]

- b. *Hogy találták meg Pétert?*
 how found.3PL perf Péter.ACC

It must be noted for the sake of completeness that the word-order variant demonstrated in (7a) is multiply ambiguous, depending on non-trivial intonational factors. One of its meanings coincides with that of (7a’), in which the complete noun phrase is focalized even “semantically”. Another of its potential meanings coincides with that of the above-discussed alternative, in which only the possessee is focalized “semantically”. It is also possible to assign the word-order variant demonstrated in (7a) the third possible reading, according to which only the possessor is focalized “semantically”, yielding the following meaning: ‘It has been known that someone’s hat has been lost — which is Péter’s.’

- *?_[Foc] *Berúgva a bortól*] találták meg.
 drunk the wine.ABL found.3PL perf
- b'. *Hogy találták meg Pétert?*
 how found.3PL perf Péter.ACC
_[Foc] *A bortól berúgva*] találták meg.
 the wine.ABL drunk found.3PL perf
 'How was Péter found? He was found drunk from the wine.'
- InfP: [... Inf DP]
- c. *Miért mentél át Boglárra?*
 what.CAU went.2SG across Boglár.SUB
- *_[Foc] *Átúszni a Balatont*] mentem át Boglárra.
 swim_across.INF the Balaton.ACC went.1SG across Boglár.SUB
- c'. *Miért mentél át Boglárra?*
 what.CAU went.2SG across Boglár.SUB
_[Foc] *A Balatont átúszni*] mentem át Boglárra.
 the Balaton.ACC swim_across.INF went.1SG across Boglár.SUB
 'Why did you go over to Boglár? I went over to Boglár in order to swim across Lake Balaton.'

There is another constituency test in the literature, which is proposed by É. Kiss (2000): the *még ... is* 'even' construction. A potential advantage of this test is that the two words *még* 'still' and *is* 'also' explicitly signal the two edges of the constituents to be tested. The application of this test to the same noun phrases demonstrated in (6) is shown in (9) below. The results are also the same, as is demonstrated by the grammaticality judgements associated with the primeless examples, compared to the primed and doubly primed examples, constructed through the "evasive strategies" as those demonstrated in (7).

- (9) APPLICATION OF THE **MÉG ... IS 'EVEN' TEST** TO THE HUNGARIAN NP
- a. *_[Foc] [Még [_N *kalapja*] Péternek] is] *elveszett*.
even the hat.POSS.3SG Péter.DAT *also* lost
 Intended meaning: 'Even Péter's hat has been lost.'
- a'. [Még [*Péternek* a [_N *kalapja*]] is] *elveszett*.
even Péter.DAT the hat.POSS.3SG *also* lost
 'Even Péter's hat has been lost.'
- a''. [Még [_N [*a* [_N *'kalapja*]] is] *elveszett* 'Péternek'.⁵
even the hat.POSS.3SG *also* lost Péter.DAT
 'Even Péter's hat has been lost.'

5. The symbol "'" marks a stress which is weaker than the focus stress marked by the symbol "" in the primed examples in (7). We consider the pairing of similar stresses (see (7a',b',c') and (9a'',b'',c'')), in the case of the expressions under discussion, to be another argument for their split state of an originally "being-together-in-one-noun-phrase" state.

- b. **Minket* [még [a [_N *vita*] *Péterrel*] *is*] *elfárasztott*.
 we.ACC *even* the debate Péter.INS *also* exhausted
 Intended meaning: ‘Even the debate with Péter has exhausted us.’
- b'. *Minket* [még [a *Péterrel való* [_N *vita*]] *is*] *elfárasztott*.
 we.ACC *even* the Péter.INS be.PRESPRT debate *also* exhausted
 ‘Even the debate with Péter has exhausted us.’
- b''. ?*Minket* [még [a [_N '*vita*]] *is*] *elfárasztott* '*Péterrel*.
 we.ACC *even* the debate *also* exhausted Péter.INS
 ‘Even the debate with Péter has exhausted us.’
- c. **Mi* [még [a [_N *vitától*] *Péterrel*]/[a [_N *vita*] *Péterreltől*] *is*]
 we *even* the debate.ABL Péter.INS/ the debate Péter.INS.ABL *also*
fáradtak leszünk.
 tired.PL will_be.1PL
 Intended meaning: ‘Even the debate with Péter makes us tired.’
- c'. *Mi* [még [a *Péterrel való* [_N *vitától*]] *is*]
 we *even* the Péter.INS be.PRESPRT debate.ABL *also*
fáradtak leszünk.
 tired.PL will_be.1PL
 ‘Even the debate with Péter makes us tired.’
- c''. ?*Mi* [még [a [_N '*vitától*]] *is*] *fáradtak leszünk* '*Péterrel*.
 we *even* the debate.ABL *also* tired.PL will_be.1PL Péter.INS
 ‘Even the debate with Péter makes us tired.’

This test is problematic, too, because it also rules out any sort of “right branching” from the head. The common reason presumably lies with the following facts. First, *is* ‘also’ is an unstressed element which should cliticize to the left-adjacent stressed expression, similar to the unstressed verb stem in the focus construction. Second, both the particle *is* ‘also’ and the verb stem insist on the head of the stressed expression, instead of its right-branching right periphery (cf. the second variant of (6c)), essentially in the spirit of the constraint mentioned in (4b) in 2.2/II. This does not mean, nevertheless, that a noun head cannot have a right-branching periphery. It only means that neither test proposed in the literature is suitable for the task of deciding whether a noun head can have a right-branching periphery in the surface structure.

(10) APPLICATION OF THE MÉG ... IS ‘EVEN’ TEST TO RIGHT BRANCHING PHRASES

Relative Clause in a DP: [... N CP]

- a. *?*Még* [az a [_N *lány*] [_{CP} *akivel találkoztunk*]] *is meghívott*.
even that the girl who.INS met.1PL *also* invited
 Intended meaning: ‘Even the girl we met invited me.’
- a'. *Még* [az a *lány*] *is meghívott*, [_{CP} *akivel találkoztunk*].
even that the girl *also* invited who.INS met.1PL
 ‘Even the girl we met invited me.’

ConvP: [... Conv DP]

b. *²Még [_{Conv} *berúgva*] *a bortól*] is *jobban teniszezek nálad*.
even drunk the wine.ABL also better play_tennis.1SG ADE.2SG
 Intended meaning: ‘Even (when I’m) drunk from the wine, I can play tennis better than you.’

b’. Még [*a bortól* [_{Conv} *berúgva*]] is *jobban teniszezek nálad*.
even the wine.ABL drunk also better play_tennis.1SG ADE.2SG
 ‘Even drunk from the wine, I can play tennis better than you.’

InfP: [... Inf DP]

c. *²Még [_{Inf} *átúszni*] *a Balatont*] is *hajlandó érted*.
even swim_across.INF the Balaton.ACC also willing CAU.2SG
 Intended meaning: ‘For your sake, he is even willing to swim across Lake Balaton.’

c’. Még [*a Balatont* [_{Inf} *átúszni*]] is *hajlandó érted*.
even the Balaton.ACC swim_across.INF also willing CAU.2SG
 ‘For your sake, he is even willing to swim across Lake Balaton.’

As is shown in the primed examples above, the same two “evasive strategies” can be applied again as those shown in (7): the relative clause must be extracted (10a’) while the optimal position of the complements of the converb (10b’) and the infinitive (10c’) is a pre-head position inside the corresponding non-finite phrases.

It is worth noting that the constraints discussed in this subsection excluding **right branching** from the head belong to the universal group of **head final effects**, discussed by Williams (1982), among others.⁶ As Hinterhölzl (2010: 40) pointed out, head final effects should be treated as prosodic in nature and should be interpreted over intonational domains, which perfectly holds for all of the above-discussed Hungarian phenomena.⁷

Section 6 will be devoted to the discussion of the hot topic of universal and Hungarian-specific conditions on head-final effects. It will be demonstrated that the relevant Hungarian data can be accounted for by a generalized version of Hinterhölzl’s **weight condition** (2010: 44).

6. We would like to thank one of the anonymous reviewers of the first version of this paper for bringing this to our attention and Katalin É. Kiss for stimulating us to elaborate our stance on HF-effects (Section 6).

7. This latter remark is relevant because Williams’s (1982) original proposal contained reference to the modifier *versus* specifier status of the expressions involved in head final effects, which would raise intricate questions concerning the syntactic analysis of the Hungarian constructions discussed in this subsection. Making this difference between modifiers and specifiers, however, is obsolete and should be dropped, partly due to the fact that in certain current approaches this difference is already not defined at all and in other approaches adjuncts are (too) easy to reanalyze as specifiers of special heads (Hinterhölzl 2010: 39).

2.4 When the “ill-formed” is quite well-formed (according to the literature)

In spite of their Approach I (“no N-complement”), Szabolcsi & Laczkó (1992: 257–258) accept many examples, shown in (11–13) below, which seem to support the possibility for the presence of N-complements (Approach III). Moreover, they begin to investigate the factors affecting their acceptability. It is to be noted for the sake of “objectivity”, that they do not associate syntactic structures with their examples mentioned in this subsection. It cannot be established, thus, how they would analyze these examples and the obvious semantic relations inside the relevant expressions, which are bracketed⁸ in (11–12), and the differences in grammaticality judgements demonstrated below.

The noun phrase is claimed to be better, for instance, if its post-head complement zone contains an **argument** of the head, and not an **adjunct**-like (or conceptual-argument-like) satellite (11).

(11) ARGUMENTS / ADJUNCTS AFTER THE N HEAD

- a. [János megérkezése Pestre /²Máriával] ma is beszédtema.
 János arrival.POSS.3SG Pest.SUB / Mária.INS today also topic
 ‘János’s arrival in Pest / with Mária is still a hot topic today.’
- b. [A fiúk találkozása Máriával /²Pesten] ma is beszédtema.
 the boy.PL meeting.POSS.3SG Mária.INS / Pest.SUB today also topic
 ‘The boys’ meeting with Mária / in Pest is still a hot topic today.’

The **phonetic weight** of the case marker both on the noun head and on the post-head argument could be observed to count. The weight of the former should be as little as possible; hence, the phonetically null nominative case marker on the nominal head in (11) yields perfect variants, and a **case suffix** is more acceptable than a heavier postposition (see the contrast between (12a–b) and (12c–d)).

(12) COMPARISON OF THE CASE MARKER OF THE N HEAD WITH THAT OF ITS ARGUMENT

- a. *Sokat gondolkodtam*
 a_lot.ACC thought.1SG
 [a biztonsági emberek összeesküvéséről a király ellen].
 the security people conspiracy.POSS.3SG.DEL the king against
 ‘I have been thinking a lot about the conspiracy of the security staff against the king.’

8. Thus the bracketed “expressions” are regarded or not regarded as constituents depending on the syntactic approach. “At the moment”, they are only “sequences of words to be investigated”, but our test proposed in 3.4 will prove that they all form constituents.

- b. [?] *Sokat gondolkodtam*
 a_lot.ACC thought.1SG
 [*Mária találkozásáról Péterrel*].
 Mária meeting.POSS.3SG.DEL Péter.INS
 ‘I have been thinking a lot about Mária’s meeting with Péter.’
- c. ^{??} *Sokan érdeklődtek*
 many interested_in.PAST.3PL
 [*Mária találkozása felől Péterrel*].
 Mária meeting.POSS.3SG about Péter.INS
 ‘Many were interested in Mária’s meeting with Péter.’
- d. ^{*??} *Sokan érdeklődtek*
 many interested_in.PAST.3PL
 [*a biztonsági emberek összeesküvése felől a király ellen*].
 the security people conspiracy.POSS.3SG about the king against
 ‘Many were interested in the conspiracy of the security staff against the king.’

Szabolcsi & Laczkó (1992) qualify example (12d) as practically unacceptable (*?), which suggests that the sum of the weight of the case marker on the noun head and on the post-head argument must not be too great, either. The ratio between the two weights matters as well: the former case marker should be lighter than the latter. That is why (12a) is better than (12c). Note that the three authors of this paper assign a grammaticality judgment (‘?’) to sentence (12d) different from of Szabolcsi & Laczkó’s (1992) original judgment (‘*?’). According to our competence, thus, only the ratio between the two **phonetic weights** matters, while according to Szabolcsi & Laczkó’s (1992) competence, the sum of these weights is also relevant.

We conclude this subsection with an example from Szabolcsi & Laczkó’s (1992: 265) paper. Here the authors compare variants of the unit of a noun head and its two dependents. They find that the most acceptable variant, shown in (13f) below, is the one with the argument of the noun head in the post-head **complement zone**. This is presumably due to some principle on the phonetic balance between the constituents hosted in the pre-head zone and those hosted in the post-head zone.

- (13) PREFERRED VERSION WITH A CONSTITUENT AFTER THE N HEAD
- a. * *az este hatkor való⁹ Máriával való találkozás*
 the evening at_six be.PRESPRT Mária.INS be.PRESPRT meeting

9. The function of the participial form of the copula has to do with the fact that oblique case-marked noun phrases and phrases of an essentially adverbial character are not hosted “immediately” in the prenominal zone of Hungarian noun phrases. This zone can host attributive, that is, adjective-like phrases, which the participial *való*-construction is. As the participle *való*

- b. **a Máriával való este hatkor való találkozás*
 the Mária.INS be.PRESPRT evening at_six be.PRESPRT meeting
- c. **a Máriával este hatkor való találkozás*
 the Mária.INS evening at_six be.PRESPRT meeting
- d. ?*az este hatkor Máriával való találkozás*
 the evening at_six Mária.INS be.PRESPRT meeting
- e. ?*a Máriával való találkozás este hatkor*
 the Mária.INS be.PRESPRT meeting evening at_six
- f. *az este hatkor való találkozás Máriával*
 the evening at_six be.PRESPRT meeting Mária.INS
 ‘the meeting with Mária at 6 p. m.’

3. Further potential tests concerning the constituent status of noun phrases with a non-empty complement zone

3.1 Right periphery

As the two labeled syntactic structures in (14a–b) show below, it cannot be decided on the basis of the right periphery of the sentence whether a constituent can be found in the complement zone of a noun head (14a), as is predicted by Approach III (“potentially explicit N-complement(s)”), or in the complement zone of the verb that the phrase of the noun head belongs to (14b), owing to the fact that the two structures yield the same word order. Structure (14b) is predicted by Approach II (“potentially implicit N-complement(s)”), and can be regarded as a result of extraposition to VP (É. Kiss 1998): the verb takes every constituent that (originally/semantically) belonged to the complement of any other constituent.

Might there be any way of making a distinction between the two structures with the same surface word order?

Yes, a potential test can be based on Behaghel’s Law, often used by É. Kiss herself (e.g. 2009). This law predicts that the optimal order of the satellites of V at

‘be.PresPrt’ itself has no meaning (at least in this construction), the *való*-construction is the optimal one to host the aforementioned noun phrases and adverbial phrases, making it possible for them to appear in the prenominal zone of Hungarian noun phrases. Theoretically, it seems to be possible to apply the *való*-construction multiply (in order to “adjectivalize” more dependents separately), but (13a–c) show that the language prefers the single occurrence of the *való*-construction in the prenominal zone of the noun phrase (13d). The syntactic structure of this variant (13d), however, is an open issue. It seems that the function (of the single occurrence) of *való* is to make it possible to place in the prenominal zone (one or more) such dependents of the nominal head which are not suitable, because of their categories, for “immediately” entering this zone.

the right periphery of the Hungarian sentence is as follows: heavy phrases tend to come last.

Let us consider the long but fully acceptable sentence in (14c) below. If we assume, in harmony with Approach III (14a), that there are two basic constituents in the complement zone of the verb — a long one and an even longer one — then Behaghel's Law is satisfied. If we assume, however, in harmony with Approach II (14b) that there are four noun phrases in the complement zone of the verb, then we should face a violation of Behaghel's Law, as is exhibited in (14d) below, where, for instance, the last complement would be the second least heavy phrase, instead of the heaviest one.

(14) "BEHAGHEL TEST" ON THE CONSTITUENT STATUS OF NOUN PHRASES WITH NON-EMPTY COMPLEMENT ZONE

- a. Approach III: [VP ... V ... DP ... [DP ... N ... DP_i ... DP_k ...]]
 b. Approach II: [VP ... V ... DP ... [DP ... N ... Ø_i ... Ø_k ...] ... DP_i ... DP_k ...]

- c. *Elmondattad végül*
 recite.CAUS.PAST.DEFOBJ.2SG finally
 [a két kis cserfes hódmezővásárhelyi unokahúgoddal]
 the two little talky Hódmezővásárhely.ADJ niece.POSS.2SG.INS
 [a gyerekkorunkból ismert tréfás kis verset]
 the childhood.POSS.1PL.ELA known funny little poem.ACC
Móricztól a három dühös tehénről?
 Móricz.ABL the three angry cow.DEL
 'Did you finally make your two little talkative nieces from
 Hódmezővásárhely recite the funny little poem, known from our
 childhood, from Móricz about the three angry cows?'

- d. *Elmondattad végül* d'. **Elmondattad végül*
 [a két kis cserfes hódmezővásárhelyi unokahúgoddal] [Móricztól]
 [a gyerekkorunkból ismert tréfás kis verset] [a három tehénről]
 [Móricztól] [a gyerekkorunkból ismert tréfás kis verset]
 [a három dühös tehénről]? [a két kis cserfes hódmezővásárhelyi unokahúgoddal]?

Example (14d') above exhibits the same problem from another angle — that is why we have arranged (14d) and (14d') as visual complements of each other in the same rows. We arranged the four complements proposed by Approach II in the order that Behaghel's Law would predict, and we obtained an unacceptable word order. We have also applied in (15a–b) the same method to the acceptable sentences in (12a–b) in Subsection 2.4: thus we have arranged the *assumed* separate noun phrases according to Behaghel's Law.¹⁰ Again, we have obtained fully unacceptable word orders.

10. The idea is due to Katalin É. Kiss herself (p.c., December 5, 2013).

(15) “BEHAGHEL TEST” ON THE CONSTITUENT STATUS OF NOUN PHRASES WITH A NON-EMPTY COMPLEMENT ZONE II

- a. **Sokat gondolkodtam*
 a_lot.ACC thought.1SG
 [a király ellen]_i [a biztonsági emberek összeesküvéséről \emptyset_i].
 the king against the security people conspiracy.POSS.3SG.DEL
 Intended meaning: ‘I have been thinking a lot about the conspiracy of the security staff against the king.’
- b. **Sokat gondolkodtam*
 a_lot.ACC thought.1SG
 [Péterrel]_i [Mária találkozásáról \emptyset_i].
 Péter.INS Mária meeting.POSS.3SG.DEL
 Intended meaning: ‘I have been thinking a lot about Mária’s meeting with Péter.’

Our **Behaghel Test**, thus, provides evidence in favor of the syntactic structure predicted by Approach III.

3.2 Noun phrases in **short answers**

One might think that if a question pertains to a thing which is typically to be referred to with a noun phrase, then the corresponding short answer will form a constituent, and hence short answers should be suitable for basing a **constituency test** on; see (16a–a’).

(16) A POTENTIAL TEST ON **RIGHT BRANCHING** NOUN PHRASES BASED ON SHORT ANSWERS

- a. *Melyik verset mondod el?*
 which poem.ACC tell.DEFOBJ.2SG away
 ‘Which poem will you recite?’
- a’. *Azt a tréfás kis [N gyerekverset]*
 that.ACC the funny little nursery_rhyme.ACC
 [_{DP} Móricztól] [_{DP} a különböző színű tehenekről].
 Móricz.ABL the different colored cow.PL.DEL
 ‘That funny little nursery rhyme by Móricz about the differently colored cows.’
- a”. *Azt a tréfás kis gyerekverset mondom el*
 that.ACC the funny little nursery_rhyme.ACC tell.DEFOBJ.1SG away
 Móricztól a különböző színű tehenekről.
 Móricz.ABL the different colored cow.PL.DEL
 ‘I will recite that funny little nursery rhyme by Móricz about the differently colored cows.’

- b. $[_{FP} [_{DP} \dots N \emptyset_k \emptyset_m]_i \forall_t + F [_{V'} \emptyset_t \dots \emptyset_i \dots] \dots DP_k DP_m \dots]$

It would not be easy, however, to argue against the claim that the structure of the **short answer** is the elliptical variant of some discontinuous constituent (16a''); that of the (mirror) **focus** construction of the corresponding complete answer, for instance, demonstrated in (16b) above (see also Lipták 2011).¹¹

All in all, we argue against using either complete answers or short answers as **constituency tests** in Hungarian in spite of the fact that the syntactic category of the answer seems to be predicted in advance on the basis of the category of the interrogative pronoun. The former method is problematic because answers are focus constructions in Hungarian, and the focus construction rejects **right branching** (2.3). The problem with the latter method lies with the obvious difficulties in revealing the syntactic structure of elliptical constructions, where we only have meager phonetic material to base our syntactic decisions upon.

3.3 Noun phrases used as **titles**

The difference between noun phrases used as titles (17a–b) and those used as short answers (16) is that in the former case there is no matrix verb which may be claimed to potentially serve as the head that the given noun phrase belongs to as a complement (cf. (14b) in 3.1). It is undoubtable, thus, that the **adjunct** in (17a) and the **argument** in (17a') belong to the corresponding noun head as its complement.

(17) RIGHT-BRANCHING NOUN PHRASES AS TITLES

- a. *Halál Velencé-ben*
 death Venice-INE
 'Death in Venice' (a short story by Thomas Mann)
- a'. *Találkozás egy fiatalember-rel*
 meeting a young_man-INS
 'Meeting with a young man' (a short story by Frigyes Karinthy)
- b. *Elolvastam* [a *Találkozás egy fiatalember-rel-t*] /
 read.PAST.DEFOBJ.ISG the meeting a young_man-INS-ACC
 *[a *Találkozás-t egy fiatalember-rel*].
 the meeting-ACC a young_man-INS
 'I read the short novel *Találkozás egy fiatalember-rel*. ('Meeting with a young man')
- b'. *Nagyon várom* *[a *találkozás egy rajongóm-mal-t*]/
 very waiting.DEFOBJ.ISG the meeting a fan.POSS.ISG-INS-ACC

11. Note that Hungarian *wh*-questions are quite different from the English ones, for instance, in that the *wh*-phrase is not in SpecCP.

˘[a *találkozás-t egy rajongóm-mal*].
the meeting-ACC a fan.POSS.1SG-INS
 ‘I’m very much looking forward to the meeting with a fan of mine.’

As is exhibited in (17b) above, titles can “conserve” right-branching noun phrases in their fixed, “frozen”, form. The (accusative) case suffix that belongs to the entire noun phrase appears at its right edge ((4b.i) in 2.2), and here the disturbing effect of **right branching** does not emerge (4b.ii), as is demonstrated in a comparison between (17b’) and (17b).

The existence of the discussed type of titles, thus, serves as an argument for Approach III (“potentially explicit N-complement(s)”). Their special character, nevertheless, makes it questionable whether it is possible to base a perfect constituency test upon them.

3.4 Answers without Focus

This subsection contains our proposal for the optimal Hungarian **constituency test** of noun phrases, which we consider the most important contribution of the paper. Let us go through the merits of the tests discussed so far.

It is worth basing a constituency test on answers because the syntactic category of **answers** (and the fact that this syntactic category represents a constituent) can be predicted on the basis of the corresponding questions. Complete answers are better since short answers are elliptical constructions with a non-transparent syntactic structure. Focus constructions, however, should be avoided because the Hungarian focus construction does not tolerate right branching from the head. The same problem pertains to the *még ... is* ‘even’ test (2.3), which also has the advantage that the two words *még* ‘still’ and *is* ‘also’ clearly signal the beginning and the end of the potential constituents.

All these advantageous properties can be satisfied by the non-exhaustive “*For example...*” type of answers, illustrated here in (18) below (cf. (6b) in 2.3) and richly illustrated later in Section 4. It is a type of answer which can appear in a contrastive topic position. The **contrastive topic** construction readily tolerates **right branching**, and can be completed with a resumptive pronoun (such as *az* ‘that’), which signals the end of the tested nominal constituent.

- (18) THE APPLICATION OF THE “FOR EXAMPLE...” TEST TO THE HUNGARIAN NP
 (*Mi bosszant?*) *Na például*
 what annoy.3SG well for_instance
 [*az örökös vita Péterrel*], *az nagyon bosszant*.
 the eternal debate Péter.INS that very annoy.3SG
 ‘(What annoys you?) Well for instance, as for the eternal debate with Péter,
that annoys me very much.’

4. Factors tending to influence the judgments of noun phrases with non-empty complement zones

4.1 The weight of the case-marking suffix on the N head

As was mentioned in connection with (6b–b′) in 2.3, the phonetic weight of the case-marking suffix on the N head is likely to be a factor which can determine the acceptability of right-branching noun phrases. É. Kiss’s (1998) Constraint on Case Assignment (see (4b) in 2.2) can also be retained in Approach III (“potentially explicit N-complement zone”), but must be interpreted in another way. It is to be regarded as a phonetic rule, similar to Behaghel’s Law (see Subsection 3.1), which prevails in a graded way, instead of providing a black and white picture with respect to grammaticality judgments.

According to a plausible hypothesis, case suffixes can be classified into five classes in respect of their phonetic weight, with the unmarked Nominative case and the class of postpositions as the two extreme points. Phonetically marked cases can be divided into three classes: The Accusative case (*-t*) is to be regarded as lighter than the Superessive (*-(V)n*) since, in the course of suffixation, the former one more rarely forms a separate syllable than the latter one. All other cases are to be regarded as heavier than the Accusative and the Superessive since they inevitably form separate syllables.

We checked this hypothesis under different circumstances, and we found that our intuition *does* function according to these classes of weights, at least as far as the six-grade scale of grammaticality judgements employed by Broekhuis *et al.* (2012) can be applied at all.

What are the “different circumstances”? First, the order of complements proves to be relevant: not surprisingly, the preferred first complement, right-adjacent to the noun head, is the possessor, with which the noun head is to agree in person and number. Columns I and II show this ideal order of complements in Table 1 below. Second, Behaghel’s Law also prevails NP-internally. What is definitely preferred is the constellation of a complement followed by a significantly heavier other complement (the heaviness of a complement is indicated by bold letters in the heading of the Table). Columns I and III show the preferred cases in this respect in Table 1.

We can present here only three test sentences due to space limitations (19a–c).¹² The grades of gray in Table 1 show that the phonetic weight of the case

12. The complete series of examples is available here: <http://lingua.btk.pte.hu/gelexi.asp?path=&file=Story3%7E1%7E1%7E1NComplementation120831%2Epdf>. It will be published in a comprehensive resource grammar of Hungarian that the authors of this paper are working on.

Table 1. Dependence on the weight of the inflection on N: a summary

	I: [N POSS OBL]	II: [N POSS OBL]	III: [N OBL POSS]	IV: [N OBL POSS]
–	✓ _(19a)	✓	✓	✓
-t ACC	✓	✓	(?)	?
-n SUP	(?)	(?)	?	??
OBL	?	?? _(19b)	??	*?
PP	??	*?	*	* _(19c)

suffix on the N head is a relevant factor, which is independent of the other two aforementioned factors, of which the factor of agreement is ordered higher than the Behaghel factor.

(19) DEPENDENCE ON THE WEIGHT OF THE INFLECTION ON N

- a. (*Mi bosszant?*) *Na például*
 what annoy.3SG well for_instance
 [az előzetes egyeztetés nélküli meghívása Ilinek
 the previous agreement without.ADJ invitation.POSS.3SG Ili.DAT
 arra az éjjelig tartó koncertre], az nagyon bosszant.
 that.SUB the midnight.TER lasting concert.SUB that very annoy.3SG
 ‘(What annoys you?) Well for instance, as for Ili’s invitation to that
 concert lasting until midnight, without any previous agreement, *that*
 annoys me very much.’
- b. ?? (*Mibe nem törődsz bele?*) *Na például*
 what.ILL not accept.2SG into well for_instance
 [a meghívásába Ilinek a koncertre],
 the invitation.POSS.3SG.ILL Ili.DAT the concert.SUB
 abba nem törődöm bele.
 that.ILL not accept.1SG into
 ‘(What are you not going to accept?) Well for instance, as for Ili’s
 invitation to the concert, I am not going to accept *that*.’
- c. * (*Mi miatt vagy dühös?*)
 what because_of be.2SG angry
Na például [a meghívása miatt a koncertre
 well for_instance the invitation.POSS.3SG because_of the concert.SUB
 a húgodnak], amiatt nagyon dühös vagyok.
 the sister.POSS.2SG.DAT because_of very angry am
 Intended meaning: ‘(What are you angry about?) Well for instance, as
 for your sister’s invitation to the concert, I am very angry about *that*.’

Nonetheless, we would like to formulate the following conjecture: the discussed three factors rely on particular values of our internal **linguistic parameters**, and

native speakers of Hungarian can show differences primarily in the preferred order of these parameters, which may lead to differences in the grammaticality judgments of our test sentences. The same holds for almost all grammaticality judgments provided in this paper: it seems to us that we are revealing and investigating such minor **linguistic parameters** of Hungarian that are likely to prevail and/or be ordered differently in the case of different speakers (owing to their “minor” role in determining our language competence).

There is another factor which seems to influence the order of arguments in the complement zone of the N head.¹³ The difference between the grammaticality judgments in (20b'-b''), for instance, obviously cannot be attributed to either of the previously reviewed factors. The difference, thus, seems to depend on (some kind of hierarchy of) the **thematic roles** of the arguments rather than on phonetic, morphological or word-order factors. As a first approximation, we propose the generalizations in (20b,c,d) on the basis of the data presented in the primed examples (and alternative permutations which are not here because of space limitations).

(20) DEPENDENCE ON THEMATIC ROLES:

- a. *Mi bosszant? Na például [...] az nagyon bosszant.*
 what annoy.3SG well for_instance that very annoy.3SG
 ‘What annoys you? Well for instance, [26b'/26b''/26c'/26d'] that annoys me very much.’
- b. CO-AGENT > THEME
 b'.^(?)...[*az örökös vita Péterrel Mariról*]...
 the eternal debate Péter.INS Mari.DEL
 ‘...the eternal debate with Péter on Mari...’
 b''.^{??}...[*az örökös vita Mariról Péterrel*]...
 the eternal debate Mari.DEL Péter.INS
 ‘...the eternal debate with Péter on Mari...’
- c. (FORCED) AGENT > SOURCE > GOAL > INSTRUMENT
 c'. ...[*a bőrönd átcipeltetése (Péterrel)*
 the suitcase transport.CAUS.POSS.3SG Péter.INS
 (*a lakásból*) *a sufniba, (a talicskával)*]
 the flat.ELA the shed.ILL the wheelbarrow.INS
 ‘...having the suitcase transported (from the flat) to the shed (by Péter) (with the wheelbarrow), ...’
- d. CO-THEME ~ BENEFICIARY (‘~’: not ordered)
 d'. ...[*a lakás eladása húszmillióért két németnek*] /
 the flat sale.POSS.3SG twenty_million.CAU two German.DAT

13. We would like to thank Zoltán Bánréti (p.c., December 5, 2013) for this observation.

[*a lakás eladása két németnek húszmillióért*], ...
 the flat sale.POSS.3SG two German.DAT twenty_million.CAU
 ‘...the sale of the flats to two Germans for 20 millions...’

4.2 Phonetic balance

Some kind of “phonetic balance” seems to be required within noun phrases. The examples below illustrate two potential formulations of this requirement.

The grammaticality judgements provided in (21a–b) below suggest that if a heavy complement zone is chosen in a noun phrase, the pre-head zone must not be light. In other words, a heavy complement zone is to be legitimized by a heavy pre-head zone. A disproportionately heavy pre-head zone, however, is not preferred either, as is shown by the comparison of (21c) and (21b).

(21) THE BALANCE OF **PHONETIC WEIGHT** WITHIN NOUN PHRASES

‘What are you interested in nowadays?’

- a. *[?]*Na például [a versei iránt Adynak well for_instance the poem.POSS.3SG.PL towards Ady.DAT a halálról], azok iránt egyre jobban érdeklődöm.*
 the death.DEL that.PL towards ever more interested_in.1SG
 Intended meaning: ‘Well for instance, as for Ady’s poems about death, I am getting more and more interested in *those*.’
- b. [?]*Na például [az utolsó évekből származó, mostanában népszerűvé váló versei iránt well for_instance the last year.PL.ELA coming_from nowadays popular.TRE becoming poem.POSS.3SG.PL towards Adynak a halálról], azok iránt egyre jobban érdeklődöm.*
 Ady.DAT the death.DEL that.PL towards ever more interested_in.1SG
 ‘Well for instance, as for Ady’s poems from the last years about death, which nowadays are becoming more and more popular, I am getting more and more interested in *those*.’
- c. ^{??}*Na például [Adynak az utolsó évekből származó, mostanában népszerűvé váló, a halálról szóló well for_instance Ady.DAT the last year.PL.ELA coming_from nowadays popular.TRE becoming the death.DEL concerning versei iránt], poem.POSS.3SG.PL towards azok iránt egyre jobban érdeklődöm.*
 that.PL towards ever more interested_in.1SG
 ‘Well for instance, as for Ady’s poems from the last years about death, which nowadays are becoming more and more popular, I am getting more and more interested in *those*.’

5. Another argument in favor of Approach III

We conclude this paper by returning to the left periphery of Hungarian sentence structure, illustrated in (2) in Section 1. The relevant statement there was that the topic position cannot serve as a **constituency test** due to its iterability. However, the *mind*-quantifier ('every'-quantifier) position may be of some use to us.

As is demonstrated in (22a), a *mind*-**quantifier** can be followed by another quantifier — by an *is*-quantifier ('also/even'-quantifier), for instance — but it cannot be followed by a topic. Examples (22b–c) show that we can utilize this latter fact to obtain another argument for Approach III (and to base another constituency test upon it). In this approach, the left periphery of the sentences in question consists of a single *mind*-quantifier, with the delative and/or dative case-marked noun phrases inside them. In Approaches I and II, however, these noun phrases are post-quantifier topics, on the basis of which the examples in question should be ungrammatical — which is in conflict with the grammaticality judgements associated with them in (22b–c).

(22) NPS WITH NON-EMPTY **COMPLEMENT ZONES** AS *MIND*-QUANTIFIERS

- a. *Mindkét cikk a kötetbe* *?('is) *bekerült*.
 both paper the volume.ILL also got_into.3SG
 'Both papers got into the volume (too).'
- b. ^(?)*Mindkét cikk a főnevekről* *bekerült* *a kötetbe*.
 both paper the noun.PL.DEL got_into.3SG the volume.ILL
 'Both papers on nouns got into the volume.'
- c. ^(?)*Mindkét cikke Péternek (a főnevekről)*
 both paper.POSS.3SG Péter.DAT the noun.PL.DEL
bekerült a kötetbe.
 got_into.3SG the volume.ILL
 'Both papers of Péter's (on nouns) got into the volume.'
- d. *Mindkét cikke Péternek nagyon tetszik*.
 both paper.POSS.3SG Péter.DAT very like.3SG
^(?)meaning1 [w₁w₂w₃#w₄w₅]: 'I like both of Péter's papers very much.'
 *?meaning2 [w₁w₂#w₃#w₄w₅]: 'Péter likes both of her papers very much.'

The example in (22d) above demonstrates another way of utilizing the ungrammatical status of the quantifier->**topic** order. Meaning1 is elicited if there is a pause after the third word, which signals that the dative case-marked noun phrase belongs to the internal structure of the *mind*-quantifier, as is predicted by Approach III — instead of serving as a separate topic. Meaning2 is not available in (22d), which, too, shows the impossibility of an (also phonetically) separate position for the dative-marked noun phrase.

6. Head-Final effects in Hungarian and in other languages (or the strange algebra of prosody, in which $1+2=1+3$, $1+2\neq 2+1$, and $1+1=1$)

Putting our discussion in a cross-linguistic universal perspective, both É. Kiss's (1998) Constraint on Case Assignment (2.2) and all the Hungarian data discussed up to this point have to do with head-final (HF) effects (Williams 1982). We argue that they can be accounted for by a generalized version of Hinterhölzl's weight condition (2010:44), which is compatible with the cartographic tradition of Hungarian generative syntax (e.g., É. Kiss 1998, 2002). We will show in (24) that in this "generalized version", Hungarian precisely follows all the calculations belonging to the "Germanic" parametric option "B" (23) proposed by Hinterhölzl (2010:46–47).

Hinterhölzl's (2010) approach relies on the stance that HF-effects¹⁴ can be derived from the workings of a phase-based condition on the mapping between syntactic structure and prosodic structure, but phases require a more fine-grained definition than the one proposed by Chomsky (2001):

- (23) HINTERHÖLZL'S (2010:44, 46–47) WEIGHT CONDITION:
- a. In *weight-sensitive phases*, a Specifier that constitutes a *heavy* syntactic constituent must appear on the right branch with respect to the selecting / modified head [...]
 - b. Parametric option A (*Romance*): A syntactic phrase XP counts as *heavy* if it is branching.
 - c. Parametric option B (Germanic):
 - i. A syntactic phrase XP counts as *heavy* if both its head X and the complement of X contain lexical material.
 - ii. The lexical filling of the Specifier of XP is immaterial for computing its weight.

In the "Germanic" and "Romance" columns of (24a–e) below we demonstrate the practical consequences of this condition on word-order calculations, which essentially depend on three degrees of prosodic weight — if we attempt to capture its content in terms of an algebra of the summation of weight in the course of Merge

14. Head-complement (directionality) parameters and *adjacency filters* are also claimed to be derivable from *phase*-based conditions on the syntax–prosody interface — and hence it is claimed that they can be dispensed with — if prosodic conditions can apply to syntactic structures at various points in the derivation. They are claimed to fall out as natural extensions of metrical properties of syllable structure onto syntactic structure. The discussion of these topics in Hinterhölzl's (2010) paper, however, is quite sketchy, compared to the explanation of HF-effects, so we restrict ourselves to relying only on the part concerning HF-effects (practically Section 2).

(see the heading of (24)). One crucial notice is that constituents of both weight 2 and weight 3 can appear to the right of the head, and the resulting constituent will invariably be of weight 3 (24a–b). This holds for both language types under discussion. As for the appearance of constituents left to the head, neither language type permits weight 3 (24d), and only the Germanic type permits weight 2 (24c). It is a very interesting notice, captured in (23c.II) and in (23a) above, that the combination of weight 2 and weight 1, in this order, yields weight 2 (24c), while their reverse order yields weight 3 (24a).

- (24) THE WEIGHT AND VOLUME OF ACCEPTABLE AND UNACCEPTABLE CONSTITUENT STRUCTURES IN DIFFERENT LANGUAGES (WHERE THE DEGREES OF WEIGHT/VOLUME: 1: HEAD OR NON-BRANCHING PHRASE, 2: ONLY-LEFT-BRANCHING PHRASE, 3: RIGHT-BRANCHING PHRASE):

	IN HUNGARIAN	IN GERMANIC	IN ROMANCE
a.	$[X^1 [\dots Y]^2]^3$	$[X^1 [\dots Y]^2]^3$	$[X^1 [\dots Y]^2]^3$
b.	$[X^1 [\dots Y\dots]^3]^3$	$[X^1 [\dots Y\dots]^3]^3$	$[X^1 [\dots Y\dots]^3]^3$
c.	$[[\dots Y]^2 X^1]^2$	$[[\dots Y]^2 X^1]^2$	* $[[\dots Y]^2 X^1]$
d.	* $[[\dots Y\dots]^3 X^1]$	* $[[\dots Y\dots]^3 X^1]$	* $[[\dots Y\dots]^3 X^1]$
e.	$[[Y]^1 X^1]^1$	$[[Y]^1 X^1]^1$	$[[Y]^1 X^1]^1$
f.	Strong constraint on prosodic volumes: $x \leq y$		

↓

x^y	$y=1$	$y=2$	$y=3$	x^y	$y=1$	$y=2$	$y=3$
$x=1$	1	3	3	$x=1$	1	3	3
$x=2$	2	–	–	$x=2$	*	–	–
$x=3$	*	–	–	$x=3$	*	–	–

- g. Weak constraint on prosodic volumes: $x \leq y+1$

The summation of weights, thus, provides a partial non-commutative algebra over the three (natural) degrees of prosodic weight, shown in (24f–g). We can formulate Hinterhölzl's constraint concerning the Romance type (23b) as the simple inequality given in (24f) above, which expresses the obvious condition that the heavier constituent must occupy the stressed right branch. Or more precisely, it is also permitted that the stressed branch be "as heavy as" the unstressed one (24e). The inequality given in (24g), which is claimed to capture the Germanic constraint on right branching, can be regarded as a weaker variant of this condition on the close connection between weight and stress. Informally speaking, it is permitted even that the stressed branch be "heavier or almost heavier" than the unstressed one. What is practically excluded is the potential case, demonstrated in (24d) above, where the unstressed branch is "much heavier" than the stressed one.

How can this theory be applied to Hungarian, which, on the one hand, seems to pattern with German in the respect of right-branching possibilities, while, on the other hand, is held to be a language with prosodically strong left branches (Szendrői 2003)?

We are claiming that the hypothesis on the Germanic type as formulated in (24g) above can be successfully applied to Hungarian if we distinguish some kind of “prosodic volume” from prosodic weight — in the same way as in the physical world objects can be characterized separately by their weight and by their volume. Although there is a straightforward positive correlation between these two properties (big objects tend to be heavier than smaller objects), the reverse correlation is not excluded at all either: a huge balloon, for instance, can be lighter than a tiny bullet made of lead. The cornerstone of our proposal is that we should generalize Hinterhölzl’s condition in a way that it pertain to prosodic volumes instead of prosodic weights. Note that in this way we retain the essence of Hinterhölzl’s approach, according to which the relevant observations should be accounted for in the syntax–prosody interface, since our concept of “volume” is to be regarded as a prosodic parameter.

Let us consider, thus, the volume condition below to be the universal basis (25). If in a language a straightforward positive correlation between volume and weight holds, the volume condition in (25) simply implies the weight condition in (24). If a language, however, works in the opposite way, the volume condition in (25) can predict the same word-order possibilities, with a consistent correlation between small volume and great weight in basic units as well as in more and more complex units upwards.

- (25) A VOLUME CONDITION AS AN ALTERNATIVE TO THE WEIGHT CONDITION:
- a. In volume-sensitive phases, a *big* syntactic constituent cannot appear in the prehead zone.
 - b. Parametric option A (Romance): A syntactic phrase XP counts as *big* if it is branching.
 - c. Parametric option B (Germanic/Hungarian):
 - i. A syntactic phrase XP counts as *big* if both its head X and the complement of X contain lexical material.
 - ii. The lexical filling of the prehead zone of XP is immaterial for computing its size.

Two comments should be made at this point.

First, the problem of branchingness is independent of the question why certain languages prefer the association of small volume with great weight, which seems to be counterintuitive at first glance. Nevertheless, we give the following tentative answer to this general question: This “strange” parametric choice can be

regarded as a “semantic” alternative to the straightforward “material” parametric choice since the former may express the semantic superiority of the small heads to the potentially huge complements, the latter being lexical-semantic dependents of the former. É. Kiss (p.c.) offers the following alternative explanation to the aforementioned “strange parametric choice”: **prosodic weight** is usually manifested as a pitch accent, a sudden high fall, the protraction of which is dispreferred in this language type.

Second, let us notice that both **parametric options** can lead to a violation of the principle requiring that the stressed branch be occupied by the bigger constituent (of the greater weight in the **Germanic** type). The basic [head+complement] word-order option (24a–b) violates this principle in Hungarian while it satisfies it in the Germanic type. In the Germanic type, it is the important word-order option shown in (24c) that violates this principle, while satisfying it in Hungarian. Therefore, both parametric options can satisfy the principle claiming a straightforward connection between volume and stress only partially. Moreover, it is questionable whether the [head+complement] order is inevitably to be regarded as superior to the head-final order.

Having sketched the theoretical background, let us consider the basic Germanic data that served as motivation for Hinterhölzl (2010), and then let us review the parallel Hungarian data.

Hinterhölzl (2010: 37) demonstrates by means of the difference between (26a–a’) below that we cannot simply resort to the branchingness of a constituent, but what counts is that the head (in bold letters below) must not have material to its right (in VO-languages). Furthermore (Hinterhölzl 2010:40), HF-effects should be treated as prosodic in nature because HF-effects in **English** (26b) disappear if the adjunct is epenthetic, constituting a separate **intonational domain**, as is indicated by the **comma intonation** in (26b’).

- (26) ENGLISH DATA TO MOTIVATE THE **WEIGHT CONDITION**:
- a. *John [very **carefully**] read the book.*
 - a’. **John [**with care**] read the book.*
 - b. **John more **often** than Peter visited Mary.*
 - b’. *John, more **often** than Peter, visited Mary.*
 - c. [***Students** [of linguistics]] read Chomsky a lot.*
 - c’. [***On** [Tuesday evening]] I will take out Mary for dinner.*
 - c”. [***In** [which city]] did John meet Mary?*

Nevertheless, as is shown in (26c–c’’) above (Hinterhölzl 2010:38, 50), the HF-filter only applies to specifiers if they happen to occupy a **phase** in which the mapping between syntax and prosody is **weight-sensitive**. Certain specifiers thus are exempted. The observation that the HF-effects are ameliorated if the adjunct and

the verb are mapped into separate intonational phrases clearly speaks in favor of a condition that applies in the formation of prosodic constituents. HF-effects, hence, are **phase**- (23a) and language-dependent, and it is exactly by these differences that differences between languages in respect of branchingness can be accounted for. In **English**, for instance, the HF-filter does not apply to subjects (26c), intonationally detached DP and PP frames (26c'), and specifiers of operator heads (26c'').

We have claimed that branchingness in Hungarian can be described according to the **"Germanic"** option (25c) of the generalized version (25) of Hinterhölzl's theory (23). The lexical insertion of specifiers is immaterial for computing volume (25c.II), as is illustrated in (27a) below by a multiply recursive construction (see also the recursive summation $2^1=2$ of **prosodic volumes** in (24c)). The lexical insertion of complements (25c.I), however, results in ungrammaticality (24d) in such **volume-sensitive phases** as an attributive construction (27b), which is **weight-sensitive** in English (27a') and **German** (27a''), or a focus construction (27c). We regard the Hungarian focus construction as analogous to the English construction shown in (26b) above, at least in respect of prosody, compared to the construction shown in (26b'). The noun phrase in (27c) counts as *big* (25c.I) owing to its phonetically non-empty postpositional-phrase complement (27c'), and big constituents are not permitted to appear (25a,c.I) in the specifier of the Focus head (27c'') (assuming the "cartographic" approach proposed by É. Kiss (2002: 86)).

(27) LEXICAL FILLING OF SPECIFIERS AND COMPLEMENTS IN HUNGARIAN:

- a. ^(?) *Fejezd be*
 finish.SUBJ.2SG into
 [*a* [[[[[[*Mari fivérének*] *a barátnőjénél*]]]]]]
 the Mari brother.POSS.3SG.DAT the girlfriend.POSS.3SG.ADE
is] szebb] lányok] után] való] koslatást]!
 also more_beautiful girl.PL after be.PART tracking.ACC
 'You have to finish tracking girls who are more beautiful than even the
 girlfriend of Mari's brother.'
- a'. **the [proud of his children] father*
 a''. **der [stolze auf seine Kinder] Vater*
 the proud on his children father
- b. **Fejezd be*
 finish.SUBJ.2SG into
a [szebb Marinál] lányok után való koslatást!
 the more_beautiful Mari.ADE girl.PL after be.PART tracking.ACC
 Intended meaning: 'You have to finish tracking girls who are more
 beautiful than Mari.'

- c. * $[_{DP} A \text{ koslatást}_N \text{ } [_{PP} a \text{ lányok után}]] \text{ fejeztem be.}$
 the tracking.ACC the girl.PL after finished.1SG into
 Intended meaning: 'I have finished TRACKING THE GIRLS.'
- c'. $[_{DP} \dots N \text{ PP}]$: big constituent
- c''. * $[_{FP} [\text{big constituent}] F [\dots]]$

The series of examples in (28) below provides a survey of the **volume-insensitive phases** in Hungarian. The analogies with the three basic types of weight/volume-insensitive phases, demonstrated in (26c–c'') above, are quite straightforward, as will be demonstrated below.

The HF-filter does not apply to subjects (26c) (if they function as topics), and to other **topics** in Hungarian, either (28a–a'). Free **adjuncts** (cf. (26c')) also appear in weight/volume-insensitive phases (28b–b'). Certain operator constructions (cf. (26c'')) also form volume-insensitive phases (28c–c'').

- (28) HUNGARIAN **PHASES** IN WHICH THE HF-FILTER DOES NOT APPLY
- a. $[Az \text{ első cikke} \quad Szilczlnek \text{ (a főnevekről)}]$
 the first paper.POSS.3SG Szilczl.DAT the noun.PL.DEL
mindenkinek nagyon tetszik.
 everyone.DAT very like.3SG
 'Everyone likes Szilczl's first paper (on nouns) very much.'
- a'. ? $[Az \text{ első cikkére} \quad Szilczlnek \text{ (a főnevekről)}]$
 the first paper.POSS.3SG.SUB Szilczl.DAT the noun.PL.DEL
senki nem emlékszik.
 noone.DAT not remember.3SG
 'Noone remembers Szilczl's first paper (on nouns).'
- b. ? $[Az \text{ egyik korai cikkében} \quad Szilczlnek \text{ (a főnevekről)}] a \text{ megszorítás másképp van definiálva.}$
 the one early paper.POSS.3SG.INE Szilczl.DAT
 the noun.PL.DEL the restriction another_way is defined
 'In one of Szilczl's first papers (on nouns) the restriction is defined in another way.'
- b'. ? $[Az \text{ egyik őszi keddjén} \quad annak \text{ az évnek}]$
 the one fall.ADJ Tuesday.POSS.3SG.SUP that.DAT the year.DAT
elvittem Marit vacsorázni.
 took.1SG Mari.ACC have_dinner.INF
 'In one of the fall Tuesdays of that year I took Mari to have dinner.'
- c. $[Mindkét cikke \quad Péternek \text{ (a főnevekről)}]$
 both paper.POSS.3SG Péter.DAT the noun.PL.DEL
végül bekerült a kötetbe.
 finally got_into.3SG the volume.ILL
 'Both papers of Péter's (on nouns) finally got into the volume.'

- c'. [Az a furcsa *cikke* Péternek (a főnevekről),
that the strange **paper.POSS.3SG** Péter.DAT the noun.PL.DEL
végül éppen az került be a kötetbe.
finally exactly that got_into.3SG into the volume.ILL
'As for that strange paper of Péter's (on nouns), finally it is exactly that
which got into the volume.'
- c''. ?[Az a furcsa *cikke* is Péternek
that the strange **paper.POSS.3SG** also Péter.DAT
(a főnevekről)] *bekerült végül a kötetbe.*
the noun.PL.DEL got_into.3SG finally the volume.ILL
'Finally even that strange paper of Péter's (on nouns) got into the
volume.'

Example (28c) shows a *mind*-**quantifier**. Example (28c') contains a special construction in which an argument is semantically focalized but its complete noun phrase appears as an intonationally detached, left-dislocated constituent. Finally, an *is*-quantifier is investigated in (28c''). The unstressed particle *is* 'also' behaves like a case marker (4b.ii) in that it cliticizes to the head of the NP; and it also patterns with **case markers** in that its **phonetic weight** (i.e. 'volume', from now on) makes the construction marginally acceptable (28c'').

The **Constraint on Case Assignment** (É. Kiss 1998:77, 2002:174), formulated in (4b) in Subsection 2.2, can also be regarded as a HF-effect — if the case marker is taken to occupy a syntactic head position (K) with the noun phrase in its specifier (29a). This is the potential variant shown to be ill-formed in (17b') in Subsection 3.3.

- (29) THE CONSTRAINT ON CASE ASSIGNMENT AS A HF-EFFECT
- a. * $[_{KP} [_{DP} \dots N \dots XP \dots]_i K \dots \emptyset_i \dots]$
- b. ? $[_{KP} [_{DP} \dots N \dots \emptyset_j \dots]_i K \dots \emptyset_i \dots XP_j \dots]$

As K is a suffix, the noun phrase that belongs to it cannot appear to its right (25a). We can have recourse to **remnant movement** (Koopman and Szabolcsi 1998, Alberti 2004), which produces the structure shown in (29b) above (cf. 25c.II). The acceptability of this structure depends on the **prosodic volume** of the K head, as was illustrated in (19) in Subsection 4.1, presumably owing to the difficulty caused by the phonetic insertion of the material of K between N and its satellites. Note that this "output" structure in (29b) can also serve as an input to the HF-filter since the material originally to the right of the N head (29a) is now to the right of the K head (or some kind of [N+K] unit).

We conclude this section with the tentative hypothesis according to which one and the same language can have volume-insensitive, weakly volume-sensitive (24g) and strictly volume-sensitive (24f) **phases**, that is, it is not necessarily

true that **volume-sensitive phases** in a language are all uniformly either weakly or strictly volume sensitive. In Hungarian, for instance, where we have demonstrated volume-insensitive and **weakly volume-sensitive phases** so far, the preverbal position typically occupied by **preverbs** can host only word-size constituents (including trivial phrases). This suggests that the Hungarian grammar must contain **strictly volume-sensitive phases** as well. The example in (30) below (Alberti 2004: 253, 273) illustrates the summation of **weights** 1, given in (24e): in the extraordinary algebra of weight summation, 1 plus 1 makes 1, that is, two word-size expressions result in a word-size expression again, recursively.

- (30) “FULL **ROLL-UP**” IN HUNGARIAN FOCALIZED SENTENCES
Ili fogja [[[szét-]¹ szedni¹]¹ kezdeni¹]¹ akarni¹]¹ a rádiót.
 Ili will.3SG apart take.INF begin.INF want.INF the radio.ACC
 ‘It is Ili that will want to begin to take apart the radio.’

7. Summary and loose ends

We have claimed that a Hungarian nominal head may have a phonetically non-empty **complement zone** (2.2/III) if certain “felicity conditions” (see Section 4) are satisfied. Our approach relies on the introduction of two new **constituency tests** (Sections 3 and 5), instead of the earlier ones (2.3). Another crucial element to our solution is the reinterpretation of É. Kiss’s (1998) **Constraint on Case Assignment** (2.2/II) as a phonetic rule, similar to **Behaghel’s Law**, which prevails in a graded way (4.1), instead of providing a black and white picture.

Section 6 puts our approach in the cross-linguistic discussion of branchingness. É. Kiss’s (1998) Constraint on Case Assignment (2.2/II) is itself claimed to belong to **head-final effects** (Williams 1982). The examples discussed up to Section 5 practically all have to do with head-final effects, too. We claim on the basis of these data that branchingness in Hungarian can be accounted for by a generalized version of Hinterhölzl’s (“Germanic”) **weight condition** (2010: 44, 47); and the differences in branchingness between Hungarian, on the one hand, and **English** and **German**, on the other, can be attributed to differences between these languages in the prosodic sensitivity of phases and in the way of the association of stress with constituents of different **“prosodic volumes”**.

As for future research, the next step is to reveal the nature of the “inhabitants” of the **complement zone** of the Hungarian noun phrase, that is, the dependents of the N head. Are they thematic arguments? What kind of anaphoric or pronominal properties do they have inside the noun phrase? Can they function there as “internal” operators? And how do they cooperate with the **operator zone** of the matrix

verb? As our first results sketched in Alberti & Farkas (2013: 383) suggest, all these questions can serve as starting points to much future research — owing to the approach in which dependents of noun heads are given special attention.

References

- Abeillé, Anne and Godard, Danièle. 2000 “French word order and lexical weight”. In *The Nature and Function of Syntactic Categories, Syntax and Semantics*, Robert Borsley (ed), 325–358. New York: Academic Press. DOI: 10.1016/S0092-4563(00)80027-6
- Alberti, Gábor. 1997. “Restrictions on the Degree of Referentiality of Arguments in Hungarian Sentences”. *Acta Linguistica Hungarica* 44 (3-4): 341–362.
- Alberti, Gábor. 2004. “Climbing for Aspect – with no Rucksack.” In *Verb Clusters; A study of Hungarian, German and Dutch*. Linguistics Today 69, Katalin É. Kiss and Henk van Riemsdijk (eds), 253–289. Amsterdam / Philadelphia: John Benjamins. DOI: 10.1075/la.69.16alb
- Alberti, Gábor, and Farkas, Judit. 2013. “Book review: Syntax of Dutch, Nouns and Noun Phrases”. *Lingua* 133: 375–384. DOI: 10.1016/j.lingua.2013.04.004
- Alberti Gábor and Medve Anna. 2000. “Focus Constructions and the “Scope–Inversion Puzzle” in Hungarian”. *Approaches to Hungarian 7*, Gábor Alberti and István Kenesei (eds), 93–118. Szeged: JATE Press.
- Alberti Gábor and Medve Anna. 2002/2005. *Generatív grammatikai gyakorlókönyv*. Budapest: Janus/Books / Gondolat.
- Bartos Huba. 2000 “Az inflexiók jelenségek szintaktikai háttere.” In *Strukturális magyar nyelvtan. I. Mondattan*, Kiefer Ferenc (ed), 653–762. Budapest: Akadémiai Kiadó.
- Broekhuis, Hans and Keizer, Evelien and den Dikken, Marcel. 2012. *Syntax of Dutch – Nouns and Noun Phrases*, Vol I-II. Amsterdam: Amsterdam University Press.
- Chomsky, Noam. 2001 “Derivation by phase.” In *Ken Hale: a life in language*, Michael Kenstowicz (ed), 1–52. Cambridge, MA: MIT Press.
- É. Kiss Katalin. 1992 “Az egyszerű mondat szerkezete” [The structure of the simple sentence]. In *Strukturális magyar nyelvtan. I. Mondattan*, Kiefer Ferenc (ed), 79–179. Budapest: Akadémiai Kiadó.
- É. Kiss Katalin. 1998 “Mondattan” [Syntax]. In *Új magyar nyelvtan*, É. Kiss Katalin and Kiefer Ferenc and Siptár Péter (eds), 15–184. Budapest: Osiris.
- É. Kiss, Katalin. 2000. “The Hungarian Noun Phrase is like the English Noun Phrase”. *Approaches to Hungarian 7*, Gábor Alberti and István Kenesei (eds), 119–149. Szeged: JATE Press.
- É. Kiss, Katalin. 2002. *The Syntax of Hungarian*. Cambridge: Cambridge University Press, 119–149.
- É. Kiss, Katalin. 2009 “Is free postverbal order in Hungarian a syntactic or a PF phenomenon?” In: *The Sound Pattern of Syntax*, Nomi Erteschik-Shir and Lisa Rochman (eds), 53–71. Oxford and New York: Oxford University Press.
- Hinterhölzl, Roland. 2010. “Collapsing the Head Final Filter and the Head Complement Parameter”. *Working Papers in Linguistics* 20: 35–65. Venice: University of Venice.
- Koopman, Hilda and Szabolcsi, Anna. 1998. *Verbal complexes*. Cambridge, MA: MIT Press.

- Laczkó Tibor. 2000 "Az ige argumentumszerkezetét megőrző főnévképzés." In *Strukturális magyar nyelvtan. III. Morfológia*, Kiefer Ferenc (ed), 293–452. Budapest: Akadémiai Kiadó.
- Lehmann, Christian. 1988 "On the Function of Agreement". In *Agreement in Natural Languages. Approaches, Theories, Descriptions*, M. Barlow and Charles A. Ferguson (eds.), 55–65. Stanford, CA: CSLI.
- Lipták, Anikó K. 2011. "A fragmentumok mondattana a magyarban." *Általános Nyelvészeti Tanulmányok XXIII*, Bartos Huba (ed), 317–349.
- Rákosi, György. 2009. "Ablative causes in Hungarian". *Approaches to Hungarian 11*, Marcel den Dikken and Robert M. Vago (eds.), 167–196. Amsterdam/Philadelphia: Benjamins. DOI: 10.1075/atoh.11.08rak
- Szabolcsi, Anna. 1986 "From the Definiteness Effect to lexical integrity". In *Topic, Focus, and Configurationality*, Abraham Werner and Sjaak de Mey (eds), 321–348. Amsterdam: Benjamins. DOI: 10.1075/la.4.15sza
- Szabolcsi, Anna and Laczkó, Tibor. 1992 "A főnévi csoport szerkezete". In *Strukturális magyar nyelvtan. I. Mondattan*, Kiefer Ferenc (ed), 179–298. Budapest: Akadémiai Kiadó.
- Szendrói, Kriszta. 2003. "A stress-based approach to the syntax of Hungarian focus". *The Linguistic Review* 20. 37–78. DOI: 10.1515/tlir.2003.002
- Williams, Edwin. 1982. "Another argument that passive is transformational". *Linguistic Inquiry* 13: 160–163.