# On oblique arguments and adjuncts of Hungarian event nominals – A comprehensive LFG account

**Tibor Laczkó**
**Department of English Linguistics**
**University of Debrecen**
**laczkot@dragon.klte.hu**

## 1. Introduction

The paper will offer a revised and comprehensive analysis, in an LFG framework, of all the three principal modes of realizing the oblique arguments of event nouns derived from verbs (of these three strategies, only two are available to adjuncts). The structure of the paper is as follows. First, I will demonstrate the basic facts and briefly discuss the most important previous accounts (sections 2.1–2.3). Then the modified or entirely new analyses will be presented (sections 3.1–3.3). Finally, I will summarize the most important points (section 4).

## 2. The basic facts and previous analyses

### 2.1. Adjectivalized constructions

The NP core of the Hungarian DP is fundamentally right-headed, that is, under normal circumstances all the oblique arguments and adjuncts (either with or without complements) must precede the NP head (whether a derived or non-derived noun). In the first, and by far the most productive, construction type, all these modifying elements must be either adjectival or participial in form. I will collectively call such phrases *adjectivalized* constituents.[1] Consider the following examples.[2]

(1) a. János (váratlan-ul) meg-érkez-ett Budapest-re.
John (unexpected-ly) PERF-arrive-past.3sg Budapest-onto
'John arrived in Budapest (unexpectedly).'

b. *János(nak a) (váratlan) Budapest-re meg-érkez-és-e
John(dat the) (unexpected) Budapest-onto PERF-arrive-NOM-his
'John's (unexpected) arrival in Budapest'

c. János(nak a) (váratlan) Budapest-re való meg-érkez-és-e
John(dat the) (unexpected) Budapest-onto BEING PERF-arrive-NOM-his
'John's (unexpected) arrival in Budapest'

(2) a. *Edit ebéd után levizsgáztat-ás-a
Edith lunch after examine-NOM-her
'the examination of Edith after lunch'

---

[1] As Szabolcsi (1994) points out, the adjectivalization requirement in Hungarian is rather poorly understood. The reason for this is that in a number of head-final languages the head can be preceded by unadjectivalized PPs, and in Hungarian, too, adjectivalization is not needed (or, rather, it is not allowed) when the argument or adjunct follows the head, cf. section 2.3. Thus, this requirement can only be stipulated. A neat way of capturing it has been suggested by Chris Pinón (p. c., 1992): we can impose a categorial restriction on the premodifying constituents combining with N' in the Hungarian NP to the effect that they must have the [+V] feature. This gives us APs and (participial) VPs and excludes PPs and case-marked NPs (or DPs).

[2] The following abbreviations are used in the glosses: AFF = adjectivizing suffix, NOM = nominalizing suffix, PERF = perfectivizing preverb.

b. Edit ebéd után-i levizsgáztat-ás-a
Edith lunch after-AFF examine-NOM-her
'the examination of Edith after lunch'

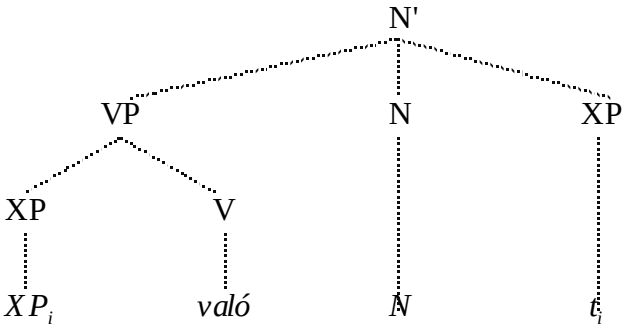
c. Edit ebéd után való levizsgáztat-ás-a
Edith lunch after BEING examine-NOM-her
'the examination of Edith after lunch'

The use of an adjective (*váratlan* 'unexpected') is exemplified in (1c). PPs and (oblique) case-marked DPs are adjectivalized by one of the present participial forms of the copula *van* 'be': *való*, glossed as BEING. This is illustrated in (1c) and (2c). In addition, certain kinds of PPs can also be adjectivalized by the PP head taking the general adjectivizing suffix *-i*, as demonstrated by (2b). If no adjectivalization takes place, the nominal construction is ungrammatical, cf. (1b) and (2a). The adjectivalized constituents corresponding to oblique arguments of the input verbs are true arguments of the derived nominals, because they are as obligatory as the input verbs' arguments. The analysis of PP constituents adjectivalized by *-i* is unproblematic. They are AP arguments of the nominals. The PP and (oblique) case-marked DP constituents combined with *való* 'being' pose a special problem. Should the participial form be analysed as an argument-taking predicate or should it be regarded as a mere formative element without any semantic content?

So far there has not been any satisfactory analysis proposed in either GB or MP. Szabolcsi (1990), working in a GB framework, briefly points out that *való* cannot be taken to be an ordinary (that is, argument-taking) predicate. She writes: "Although *való* is formally a participle, phrases like *a Péter-rel való találkozás* 'the Peter-with being meeting' cannot be said to contain a participial modifier since, in contrast to English for instance, the corresponding clause would almost always be ungrammatical: **A találkozás Péterrel volt* 'The meeting was with Peter'. In categorial grammar terms I would say *való* is a type-lifter" (1990: 153, Footnote 3). Type-lifting, however, is not legitimate in GB; moreover, this kind of account is hardly feasible when *való* adjectivalizes an adjunct (cf. Szabolcsi 1994: 260–261).

É. Kiss (to appear) offers an MP analysis of the Hungarian DP. She assumes that all arguments and adjuncts of the nominal head in the NP core are generated in a post-head position and then, with the exception of some marginally acceptable construction types, these post-head constituents have to be moved to a pre-head position and they have to be adjectivalized by *való*, some other (more meaningful) participles or the *-i* adjectivizing suffix attaching to postpositions. É. Kiss is not very explicit about the details of these processes. However, it is obvious even from her sketchy presentation of this aspect of her approach that there are at least three significant problems with it. First, she lumps *való* and the other "true" participles together without any justification despite the fact that Szabolcsi (1990) and especially Laczkó (1995b) explicitly argue against treating *való* as an ordinary participle. Second, although É. Kiss (to appear) does not discuss the internal structure of the NP core of the Hungarian DP that she postulates, it is apparent that the movement of a constituent from a post-head position into a pre-head VP will violate the ECP, no matter what internal structure is assumed. For instance, if we posit a flat structure for the relevant part of the NP, as É. Kiss (1998) does, we cannot avoid the ECP violation. Consider:

(3)



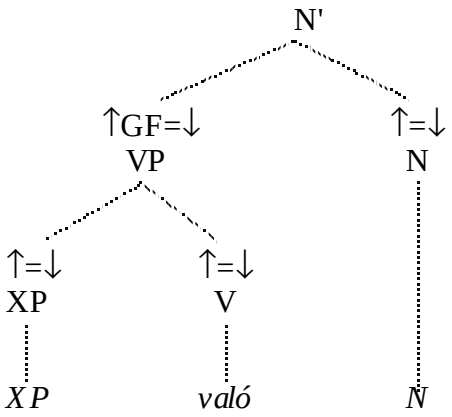

The violation remains even if the pre-head VP is assumed to be higher up in the structure because the moved constituent will still fail to c-command (or m-command) its trace. Third, É. Kiss (to appear) suggests that the movement of the post-head constituent is forced by her Case Constraint:

(4) a. The case suffix must cliticize to the right edge of the noun phrase.
b. The case suffix cannot cliticize to a case marked stem.

This condition, however, only partially justifies the transformation. Although it is compatible with the generation of arguments and adjuncts in a post-head position and motivates the movement of the constituents from that position, it says nothing about why the landing site is within a pre-head VP, that is what triggers the movement into that particular position. É. Kiss does not discuss this aspect of the transformation at all.

In Laczkó (1995a, 1995b) I argue against regarding *való* as a true (argument-taking) participial predicate in a detailed fashion. The essence of my argumentation is as follows. Just like Szabolcsi (1994), I point out that the relevant DPs containing *való* do not have sentential counterparts with the copula *van* 'be' as the predicate (cf. the citation from Szabolcsi above). Then I go on to show that even if we disregard this problem, we cannot attribute any plausible argument structure to *való* as an argument-taking predicate, because the type and form of the constituent combined with it is always exclusively determined by the nominal head and not *való*. Instead, I propose an LFG analysis (inspired by Ackerman's (1987) account of the finite use of the Hungarian copula), which assumes that the *való* form is of category V and it functions as the "structural head" of a VP constituent, and the PP/DP as well as the V are the "functional co-heads" of this VP; however, it is only the (head of the) PP/DP that also has a PRED feature. I annotate the entire VP with either an OBL or an ADJ function, depending on the status of the VP, and both the PP/DP and the V with the functional head equation. Consider:

(5)




The only problematic aspect of this analysis, which I was not aware of at the time, is that there can be more than one element within a *való* constituent and they can carry any mixture of OBL and ADJ functions. Consider:

(6) a. János-nak az Edit-tel Budapest-re való meg-érkez-és-e
John-dat the Edith-with Budapest-onto BEING PERF-arrive-NOM-his
'John's arrival, with Edith, in Budapest'
b. János-nak a Budapest-re Edit-tel való meg-érkez-és-e
John-dat the Budapest-onto Edith-with BEING PERF-arrive-NOM-his
'John's arrival in Budapest with Edith'

*Budapest-re* 'in Budapest' is an oblique argument and *Edit-tel* 'with Edith' is an adjunct. As (6a) and (6b) show, an adjunct and an argument can follow or precede each other. Laczkó (1995b) only counts with one element within a *való* constituent; therefore, that analysis cannot cover the data in (6). In section 3.1 I will offer a solution to this problem.

### 2.2. The unadjectivalized type

In this construction type, the nominal head is preceded by an oblique argument which is not adjectivalized. Consider the following examples and compare them with those in (1).

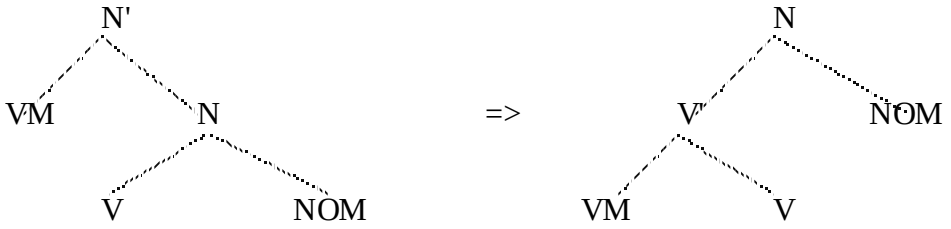
(7) a. János Budapest-re érkez-ett.
John Budapest-onto arrive-past.3sg
'John arrived in Budapest.'

b. János Budapest-re érkez-és-e
John Budapest-onto arrive-NOM-his
'John's arrival in Budapest'

This type is restricted to the designated oblique argument of a nominal predicate which has been derived from a verb that constitutes a special complex predicate with that designated argument. Here the theoretical challenge is to capture, in a principled manner, the fact that the designated argument can avoid being adjectivalized. So far two major analyses of such structures have been proposed: one by Szabolcsi (1994) and the other by Laczkó (1995a).

Szabolcsi (1994), in a GB framework, inspired by Pesetsky (1985), assumes that the oblique argument and the derived nominal form a syntactic complex predicate and then, at LF, the nominalizing suffix raises to have scope over the oblique argument + verb complex. Consider:

(8)




This proposal is not compatible with some basic principles of LFG: in this theory there is no LF and bound morphemes are incapable of syntactic movement.

In Laczkó (1995a), in an LFG framework, I suggest that the verb incorporates its oblique argument and they form a complex predicate in the lexicon, which is also nominalized in the lexicon. Consider:

(8) a. érkez-
b. Budapest-re érkez-
c. Budapest-re érkez-és

I concentrate on incorporated arguments expressed by oblique case-marked NPs and demonstrate that these NPs can never be preceded by an article in such a way that it is analysed as belonging to the incorporated constituent and not to the entire (matrix NP) headed by the derived nominal. Thus, I conclude that it is never a maximal projection that is incorporated in the lexicon, which is an important and generally accepted condition on these processes. However, if we extend the examination of the relevant data to incorporated arguments realized by PPs (postpositional phrases) it turns out that the correct generalization is not a restriction against maximal projections but rather a prohibition against the use of a constituent containing an article. Consider:

(9) a repülőgép-nek a közvetlen-ül London fölé érkez-és-e
the airplane-dat the direct-ly London above arrive-NOM-its
'the airplane's arrival right above London'

In this example there is a fully-fledged PP expressing the designated argument. Therefore, the account in Laczkó (1995a) would be forced to admit the lexical incorporation of an XP, contrary to the above-mentioned generalization.

In section 3.2 I will propose an alternative solution which does not apply incorporation in the lexicon and which is compatible with the general principles of LFG.

### 2.3. Modifiers in post-head position

In the third construction type, an oblique argument or an adjunct (or even both of them) follow the derived nominal head. In this case they must not be adjectivalized. Consider:

(10) a. János meg-érkez-és-e Budapest-re tegnap
John PERF-arrive-NOM-his Budapest-onto yesterday
'John's arrival in Budapest yesterday'

b. *János meg-érkez-és-e Budapest-re való tegnap
John PERF-arrive-NOM-his Budapest-onto BEING yesterday
'John's arrival in Budapest yesterday'

c. *János meg-érkez-és-e Budapest-re tegnap-i
John PERF-arrive-NOM-his Budapest-onto yesterday-AFF
'John's arrival in Budapest yesterday'

There are several severe restrictions on its occurrence. É. Kiss (to appear) fundamentally makes the following empirical generalizations.

She claims that this type is very rare and it is basically restricted to isolated usage in titles. Consider one of her examples:

(11) Találkoz-ás egy fiatal-ember-rel
meet-NOM a young-man-with
'Encounter with a young man'

She distinguishes two cases in which a constituent occurs after the NP head which is not part of a title. A) As I pointed out in section 2.2, she assumes that all arguments and adjuncts in the NP core are base generated after the head and these constituents have to be moved to a pre-head position so that her Case Constraint should be satisfied. She states that the only exception to this general rule is when the entire DP is in the nominative (because this case in Hungarian has no overt phonological exponent). In such constructions the post-head constituent may, rather marginally, remain in situ. Compare her examples.

(12) a. ??Még a találkoz-ás Péter-rel is elviselhetŒvolt.
even the meet-NOM.nom Peter-with also bearable was
'Even the meeting with Peter was bearable.'

b. *Még a találkoz-ás-t Péter-rel is kibír-tam.
even the meet-NOM-acc Peter-with also stand-past.1sg
'I could even stand the meeting with Peter.'

c. **Még a találkoz-ás-ban Péter-rel is reményked-tem.
even the meet-NOM-in Peter-with also hope-past.1sg
'I hoped even for the meeting with Peter.'

In the examples, É. Kiss uses the particles *még* 'even' and *is* 'also', which according to her always surround single constituents. She intends to ensure in this way that the relevant post-head constituents are within the core NPs and are not extraposed, that is, moved out of the matrix DP. B) The other type she mentions, then, is the extraposition of the post-head constituent. She appears to assume that it is grammatical. However, she does not exemplify it and does not discuss the rather severe restrictions on its use.

It seems to be the case that Type B) is not a classic instance of extraposition. Compare the following English and Hungarian examples.

(13) A student entered the room with long hair.

(14) a. A tegnap-i találkoz-ás Péter-rel egészen elviselhetŒvolt.
the yesterday-AFF meet-NOM.nom Peter-with quite bearable was
'Yesterday's meeting with Peter was quite bearable.'

b. Én is kibír-tam a tegnap-i találkoz-ás-t Péter-rel.
I also stand-past.1sg the yesterday-AFF meet-NOM-acc Peter-with
'I could also stand the meeting with Peter.'

c. Én is reményked-tem a következő találkoz-ás-ban Péter-rel.
I also hope-past.1sg the next meet-NOM-in Peter-with
'I also hoped for the next meeting with Peter.'

The English example in (13) is an ordinary instance of what is normally meant by extraposition. The Hungarian examples are all grammatical in (14). From the discussion of É. Kiss's approach it should be obvious that she would analyse them as containing extraposed constituents. However, in these Hungarian constructions, as opposed to (13), no other element can intervene between the matrix DP and the allegedly extraposed constituent. Compare, for instance, (14b) and (15).

(15) *A tegnap-i találkoz-ás-t én is kibír-tam Péter-rel.
the yesterday-AFF meet-NOM-acc I also stand-past.1sg Peter-with
'I could also stand the meeting with Peter.'

(15) is ungrammatical on the reading on which *Péter-rel* 'Peter-with' is the complement of the head noun *találkozás* 'meeting' and not the (comitative) modifier of the verbal predicate. In the light of these facts, I think the correct generalization is to assume that the post-head constituent is not extraposed but rather right-adjoined to the matrix DP. Naturally, this adjunction analysis is not compatible with É. Kiss's approach as the adjoined constituent is still "in the way" and causes a violation of her Case Constraint. Nevertheless, there appears to be no independent evidence for the alleged extraposed constituents' ever leaving the entire DP. Thus her distinction between (12) and (14) seems vacuous and her explanation circular. Moreover, in my idiolect and according to some informants the examples in (12) are far from being as unacceptable as É. Kiss indicates. It is also noteworthy that when the post-head constituent is expressed by a PP, the acceptability of the construction improves even in a *még* 'even' … *is* 'also' environment, the diagnostic for single constituenthood for É. Kiss. This is problematic for her account. Consider:

(16) Még a tegnap-i összeesküv-és-ről az elnök ellen is megfeledkez-tünk.
even the yesterday-AFF conspire-NOM-about the president against also forget-past.1pl
'We forgot even about yesterday's plot against the president.'

In addition to all this, my general problem with the *még* 'even' … *is* 'also' environment is that it is potentially ambiguous: these particles can be interpreted in two different ways: as modifying either the entire DP including the post-head constituent or only the post-head constituent. And the latter interpretation is the more dominant. This may also contribute to the fact that for several speakers, including É. Kiss, the former interpretation is much less acceptable.

## 3. A new comprehensive account

### 3.1. The adjectivalized type – a modification of Laczkó (1995b)

It is my conviction that the analysis of this type that I offer in Laczkó (1995a) and especially in Laczkó (1995b) is along the right lines. However, as I have pointed out in section 2.1, it cannot capture one intriguing aspect of such constructions: the fact that there can be more than one element within a *való* constituent and they can have either OBL or ADJ functions. Consider (6) repeated here for convenience:

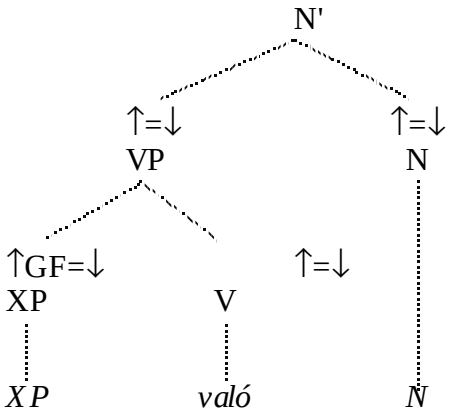
(6) a. János-nak az Edit-tel Budapest-re való meg-érkez-és-e
John-dat the Edith-with Budapest-onto BEING PERF-arrive-NOM-his
'John's arrival, with Edith, in Budapest'

b. János-nak a Budapest-re Edit-tel való meg-érkez-és-e
John-dat the Budapest-onto Edith-with BEING PERF-arrive-NOM-his
'John's arrival in Budapest with Edith'

In Laczkó (1995a, 1995b) I only count with one element within a *való* constituent; therefore, that analysis cannot cover these data. The reason for this is that it annotates the VP node itself with either an OBL or an ADJ function, thus it is incapable of capturing a possible mixture of these function types within the VP, for instance in (6). In the light of examples like this, the correct empirical generalization is that in this construction type the noun head's arguments and adjuncts must be adjectivalized by *való* (and some other participial forms to be discussed below) but not one by one, as a single occurrence of *való* is capable of adjectivalizing several of them.

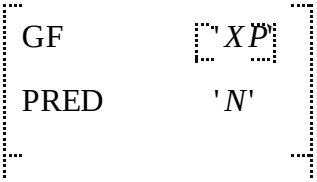
Now I want to propose the following modification of the analysis.[3] Let us annotate the VP node with the ↑=↓ equation, instead of ↑OBL=↓ or ↓ε↑ADJ, and the oblique case-marked DP(s) and/or PP(s) with their appropriate (↑OBL=↓ or ↓ε↑ADJ) equations, instead of ↑=↓. The V node dominating *való* will continue to be associated with ↑=↓. Compare (17) with (5).

(17)




These functional annotations yield the correct f-structure representation. Consider the following simplified schematic structure:

(18)




I would like to make three general remarks on this analysis.

1. The internal structure of the VPs premodifying NP heads is as flat as the propositional core of Hungarian clauses (without the discourse-functional left periphery), which É. Kiss (1998), for instance, also takes to be a VP. The fundamental difference between the two VPs is that the former is strictly right-headed and the latter is left-headed (according to É. Kiss).

2. It is a crucial aspect of the modified account that the premodifying VP has to be annotated with the ↑=↓ equation, as opposed to ↑OBL=↓ or ↓ε↑ADJ, as in Laczkó (1995b). This is definitely a marked aspect of the new approach and I leave the investigation of its consequences for the theory for future research. Its marked nature has to do with the fact that the sister of an N' head has the status of a co-head.[4] The original solution did not pose a problem of this kind;

[3] My thanks are due to András Komlósy because I have benefited greatly from discussions of this issue with him.

[4] For an overview of the default annotations, see Bresnan (to appear).

however, as I pointed out in section 2.1, it failed to describe all the relevant constructions. In the modified version, all we need to do technically is to allow the association of the premodifying VP with any one of the three equations: ↑=↓, ↑OBL=↓ and ↓ε↑ADJ. The well-formedness or ill-formedness of the relevant constructions containing *való* and other (genuine) participles will follow from the general syntactic and semantic principles of the theory. I have already shown why the VP containing *való* has to be annotated with the ↑=↓ equation and not with ↑GF=↓. Let us now consider an example with an ordinary participle heading the VP and the two annotation possibilities.

(19) #a Budapest-re érkez-Œmeg-érkez-és
the Budapest-onto arrive-PART[5] PERF-arrive-NOM
'#the arrival arriving in Budapest'

On the one hand, if the VP containing the participle *érkezŒ* 'arriving' in the c-structure representation of (19) was annotated with the ↑=↓ equation, then both the NP head *megérkezés* 'arrival' and the participle, and, consequently the entire VP (including possible OBL and ADJ constituents), would contribute a PRED feature. However, this kind of rather marked (syntactic) predicate composition is not available in the case of these two and similar Hungarian predicates. This situation is different from that of the syntactic causatives analysed by Alsina (1993). There the simplex predicate is at the same time an argument of the causative predicate. In this case, by contrast, the participle with its PRED feature cannot serve as an argument of the nominal predicate (because the latter takes a theme and a directional argument), and the relationship in the opposite direction is semantically anomalous, also cf. the English gloss in (19). On the other hand, if the VP was annotated with ↑GF=↓, with ↑OBL=↓ in this particular case, then there would arise three problems. First, the constituent associated with the OBL function would have a participial (and not a directional) predicate. Second, the theme argument of the participial predicate would be unidentifiable, and thus the relevant part of the f-structure incomplete: to begin with, it would require some ad hoc machinery to ensure that the NP head *megérkezés* 'arrival' should be identified with the missing theme, the only theoretically possible candidate; furthermore, even if this could be achieved, the construction would be semantically anomalous, cf. the foregoing discussion of the first annotation alternative. Third, if there were more constituents within the VP than one, the ↑GF=↓ annotation would be problematic anyhow, cf. the discussion of a problematic aspect of Laczkó's (1995b) analysis in section 2.1.

3. So far I have only discussed and described the adjectivalizing property of *való*. As should be clear from the discussion, if it solely had this function then it would be restricted to this poorly understood superficial category change to be checked at the level of c-structure. However, there is another important aspect of its use: VPs headed by it can fundamentally premodify NP heads that express complex events. Thus, it also has to encode, in one way or another, this very important combinatorial information which has to be checked in the semantic component of the grammar. In order to appreciate this point, let us take a brief look at the major adjectivalizing elements premodifying either ordinary or derived nominal heads.

The Hungarian copula, *van* 'be' has two present participial counterparts. One of them is *való*, whose use I have been discussing so far. As I have just pointed out, it adjectivalizes the (oblique) arguments and adjuncts of event nominals, whether they are expressed by case-marked DPs or PPs. The other participial form is the suppletive *lévŒ*, and it is best regarded as a true, that is, argument-taking, participial counterpart of the locative version of the copula. A VP headed by this participle can only premodify non-event NP heads, so *való* and *lévŒ* are in complementary distribution, cf.:

(20) a. a ház elŒtt lévŒ/*való garázs
the house in front of BEING garage
'the garage in front of the house'

b. a ház-ban *lévŒ/való találkoz-ás

[5] PART = (present) participial suffix.

the house-in BEING meet-NOM
'the meeting in the house'

There are two additional participial forms that can also be analysed as pure adjectivalizing formatives, just like *való*.[6] They are the present and the past participial counterparts of the verb *történik* 'happen': *történ-Œ* 'happen-ing' and *történ-t* 'happen-ed'. While *való* is compatible with both stative and dynamic event nominal heads, these forms can only be combined with non-stative nominals. Presumably this has to do with the semantics of the input verb *történik* 'happen'. In addition, *történt* must be used with events anterior to the moment of speech, and *történŒ* must be applied if this aspectual relationship is simultaneous or posterior. Consider the following examples.

(21) a. János-nak a csoport-hoz való/*történŒ/*történt tartoz-ás-a
John-dat the group-to BEING/HAPPENING/HAPPENED belong-NOM-his
'John's belonging to the group'

b. az elnök-nek a tegnap-i mise után történt/*történŒ beiktat-ás-a
the president-dat the yesterday-AFF mass after HAPPENED/HAPPENING inaugurate-NOM-his
'the president's inauguration after yesterday's mass'

c. az elnök-nek a holnap-i mise után *történt/történŒ beiktat-ás-a
the president-dat the tomorrow-AFF mass after HAPPENED/HAPPENING inaugurate-NOM-his
'the president's inauguration after tomorrow's mass'

The adjectivizing suffix *-i* is compatible with both event and non-event noun heads; however, it can only attach to the majority of PPs (more precisely, to the heads of PPs) and never to case-marked DPs. Compare:

(22) a. a ház elŒtt-i garázs/találkoz-ás
the house in front of-AFF garage/meet-NOM
'the garage/meeting in front of the house'

b. *a ház-ban-i szoba/találkoz-ás
the house-in-AFF room/meet-NOM
'the room/meeting in the house'

Given these combinatorial facts, the four adjectivalizing elements[7] can be characterized in the following way.

(23)

| | | | |
|---|---|---|---|
| *-i* | [_event] | [_dynamic] | [_anterior] |
| *való* | [+event] | [_dynamic] | [_anterior] |
| *történt* | [+event] | [+dynamic] | [+anterior] |
| *történŒ* | [+event] | [+dynamic] | [–anterior] |

The above specifications have to be encoded in the lexical representations of these elements, and they have to be checked in the semantic component of the grammar. This means that these adjectivalizers do not merely play a role at c-structure, but they also have compatibility properties,

---

[6] Cf. Szabolcsi (1994) and Laczkó (1995b). However, in this case the tests used to establish the purely formative status of *való* do not yield the same straightforward results; therefore, a true participial analysis of *történŒ* and *történt* is a possible alternative to consider. If this latter tact is chosen then the discussion of pure adjectivalizing formatives above has to be restricted to *való* and *-i*.

[7] *LévŒ* does not belong here, because it is a true argument-taking predicate. On *történŒ* and *történt*, see Footnote 6.

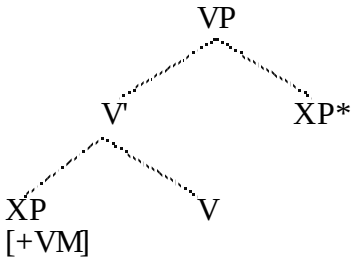
so their presence is also felt at other levels of representation (semantic structure and, consequently, the mediating f-structure).

### 3.2. A new analysis of the unadjectivalized type

In section 2.2 I characterized the unadjectivalized premodifying construction type and briefly mentioned two previous analyses. I pointed out that Szabolcsi's (1994) account is not compatible with the principles of LFG and my proposal in Laczkó (1995a) is problematic because it is forced to admit the lexical incorporation of maximal projections. Below, I will suggest an alternative solution which avoids this problem.

It is generally acknowledged that the verbs occurring in the relevant (syntactic) complex predicates have two important distinguishing features: (i) in a sentence with a neutral intonation pattern, they must be preceded by their designated oblique argument and they together make up a syntactic V'; and (ii) the *aktionsart* of the complex predicate is very often telic, although the verb itself must not contain a perfectivizing preverb. As regards the first feature, É. Kiss (1998), for instance, assumes the following c-structure:

(24)




[+VM] below the XP in V' means that the XP[8] has a special status: it is a "verbal modifier".[9] The properties of this special use of these verbs allowing VM arguments has to be encoded in their lexical forms in one way or another. For the purposes of this discussion I will informally assume that these verbs have a lexical form with the following specification:

(25) verb, V ' VERB <…>'
[+VM]

[+VM] indicates that in a sentence with a neutral intonation pattern the verb must be immediately preceded by its designated argument, and this feature also has to be related to the fact that under clearly specifiable (default) circumstances the interpretation of the construction is telic.[10] Compare the following lexical forms.

(26) a. érkez, V ' ARRIVE <th, dir>'
[+VM] [−r] [−o]

b. meg-érkez, V ' ARRIVE <th, dir>'
[−r] [−o]

The fundamental difference between the two predicates is that the one in (26b) cannot be preceded by the designated directional argument in the specific VM position.[11]

---

[8] Note that this VM position is distinct from the focus position, which precedes the entire VP, cf., for instance, É. Kiss (1998: 42).

[9] For an exhaustive list of argument-types that can serve as verbal modifiers, see Komlósy (1985). For the subset of these types that can be found in unadjectivalized constructions, see Laczkó (1995a).

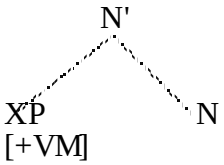
[10] The discussion of these circumstances lies beyond the scope of this paper.

[11] However, this directional argument can precede the verb in other positions, but these instances do not concern us here.

My new analysis of the unadjectivalized type has the following two major components.

A) I assume that in the NP core of the Hungarian DP the "first" N' node dominates a VM node and the head in such a way that the former precedes the latter, cf.:

(27)




Thus I draw a complete structural parallel between the basic V' in VPs and the basic N' in NPs.

B) I propose that the nominal derived from a verb with the [+VM] specification inherits this specification as well. Compare (26) and (28).

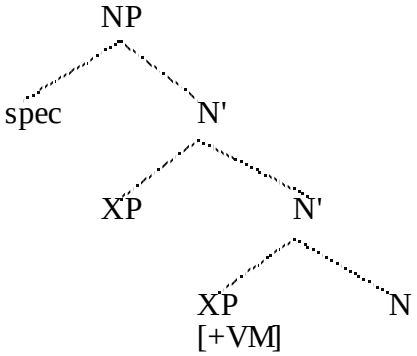
(28) a. érkez-és, N 'ARRIVAL <th, dir>'
[+VM] [−r] [−o]

b. meg-érkez-és, V 'ARRIVAL <th, dir>'
[−r] [−o]

In this way I can capture the empirical generalization that only specific verbs and their nominalized counterparts can (and must) be preceded by a designated argument under normal, that is unmarked, circumstances.

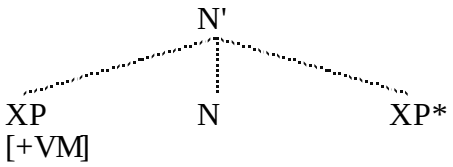
It is noteworthy that there is no parallel between the rest of the NP structure that I assume an the rest of the VP structure that É. Kiss (1998) assumes. Compare É. Kiss's VP structure in (24) with the NP structure I postulate in (29).

(29)




Furthermore, É. Kiss (to appear) draws a parallel between the VP and NP structures. As has been pointed out in section 2.3, she assumes that all the arguments and adjuncts of the noun head are generated in post-head positions and then they are moved into pre-head positions and adjectivalized.[12] However, she does not discuss the unadjectivalized type. If she did, I think she would have to postulate exactly the same pre-head structure as I do in (29). Then the post-head portion of her NP structure would most probably be flat and dominated by the same N' as dominates XP [+VM], cf.:

(30)




[12] For some critical remarks, see section 2.3.

Moreover, although Szabolcsi (1994) is not explicit about the pre-head portion of the NP structure she assumes in her analysis of the unadjectivalized type, I suspect that she has a structure similar to (29) in mind.

Let us now take a look at some of the most salient properties of the unadjectivalized type and compare the three analyses discussed in section 2.2 and in this section with respect to how they can capture these properties.

1. The VM and the N form a phonological word. This can be derived from a salient property of the VM + V combination: it is clearly not a morphological or syntactic word but a phonological one. This is an empirical fact which can be conveniently stated over the postulated V' constituent. That the VM + N combination has the same phonological word status is sufficiently captured by all the three accounts (if we assume that Szabolcsi (1994) has the same NP structure in mind as I have posited in this section, cf. (29)). In my new analysis this correspondence is directly captured by the postulation of parallel V' and N' structures and the inheritance of the [+VM] feature by the derived nominal. In my previous analysis in Laczkó (1995a) the VM + N combination is taken to be a morphological word, hence its phonological wordhood trivially follows.

2. No other element can intervene between the VM and the N, cf.:

(31) a. a váratlan Budapest-re érkez-és
the unexpected Budapest-onto arrive-NOM
'the unexpected arrival in Budapest'

b. *a Budapest-re váratlan érkez-és
the Budapest-onto unexpected arrive-NOM
'the unexpected arrival in Budapest'

Szabolcsi (1994) captures this by the following generalization: the nominalizing suffix raising at LF has to have the minimal complex predicate in its scope. In Laczkó (1995a) this fact is explained again by the assumption that *Budapestre* and *érkezés* form on morphological word in the lexicon and, thus, no other syntactic word may intervene. In the spirit of my new account again we can simply point out that the very same ban on intervention holds for the VM + V combination. This has to be stated, and then this property will be inherited by the VM + N combination.

3. The designated argument and the preverb are in complementary distribution, cf.:

(32) a. a Budapest-re érkez-és
the Budapest-onto arrive-NOM
'the arrival in Budapest'

b. a meg-érkez-és
the PERF-arrive-NOM
'the arrival in Budapest'

c. *a Budapest-re meg-érkez-és
the Budapest-onto PERF-arrive-NOM
'the arrival in Budapest'

Szabolcsi's theory captures this fact by assuming that "the nominalizing suffix must have the smallest possible fully specified conceptual structure in its scope" (1994: 264). In (32a), the designated oblique argument and in (32b) the perfectivizing preverb make up a complex predicate with the verb stem, and thus these complex predicates satisfy Szabolcsi's condition, because complex predicates have fully specified conceptual structures. By contrast, in (32c) only the preverb and the verb stem can be in the scope of the nominalizer as these two elements make up the minimal fully specified conceptual structure. Consequently, the oblique argument is outside its scope and, therefore, it could only be used in an adjectivalized form, cf. (32c) and (1c). On my new account, the ungrammaticality of (32c) can be captured by the now familiar inheritance mechanism. It has to be stated in one way or another that verbal predicates containing a preverb do not allow VMs (cf., for instance, (26)), and this feature of theirs is inherited by their nominal

counterparts (cf. (28)). Laczkó (1995a) refers to the complementarity of the two types of complex predicate formation in the lexicon.

4. The VM in the VM + N combination does not need to, or rather must not, undergo adjectivalization. I think this is the only property of these constructions that is more neatly and more straightforwardly captured in Laczkó (1995b). The explanation is that the relevant complex verb formation and then nominalization takes place in the lexicon and the whole morphological complex is inserted below an $N^0$ node, while adjectivalization is a syntactic phenomenon. Szabolcsi (1994) is not explicit on this point; however, I think both in her analysis and in mine it has to be stipulated that adjectivalization applies to sisters of N's but not sisters of $N^0$s.[13]

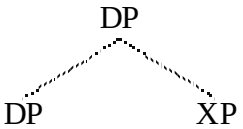
If we just took the four points above into consideration then we could easily conclude that of the three accounts, Laczkó (1995a) was superior because in the first three points it was on a par with the two alternatives and in the fourth it offered a more principled solution. However, this account has two extremely marked features, which are closely related and which strongly call its tenability into question. One of them, already mentioned in section 2.2, is that Laczkó (1995a) is forced to allow the incorporation of maximal projections (e. g., in the case of designated arguments expressed by PPs). This is not compatible with the generally accepted notion of (lexical, that is, morphological) incorporation. The other equally marked aspect of the analysis is that it has to assume that the combination of the verb and the case-marked noun or the entire PP is one morphological word nominalized in the lexicon and then this whole complex is inserted under a single $N^0$ node. Furthermore, as far as the stipulation of adjectivalization in the analysis proposed here is concerned, it appears to be the case that in the characterization of all the three fundamental types some special aspect of the c-structure plays a significant role. A) In the adjectivalized type, on the one hand, adjectivalization is only imposed on sisters of N' constituents and, on the other hand, the VP node is annotated with the $\uparrow=\downarrow$ equation. B) In the unadjectivalized type, which we are now discussing, on the one hand, a VM position is postulated below the N' level and, on the other hand, adjectivalization does not affect this constituent. C) I will assume that in the post-head type, to be discussed in the next section, the postmodifying arguments and adjuncts are right-adjoined to the entire DP.

### 3.3. The post-head type: right-adjunction

In section 2.3 I have pointed out that É. Kiss (to appear) postulates that all arguments and adjuncts are generated after the noun head and they are either preposed and adjectivalized or extraposed. I have argued that on the one hand, the preposing and adjectivalizing process appears to be problematic in the MP framework she applies and, on the other hand, it does not seem to be possible to tell the base-generated and the extraposed constituents apart, because the allegedly extraposed ones and the noun heads cannot be separated by any intervening elements.

In an LFG framework an approach along the lines of É. Kiss (to appear), even if it were unproblematic in MP, cannot be adopted, as no movement is allowed in the theory. In sections 3.1 and 3.2 I have analysed, without movement, the two other construction types in which the arguments precede the head. As far as the post-head type is concerned, I propose that a constituent following the head is generated in a position right-adjoined to the DP, cf.:

(33)




The underlying assumptions are as follows.

- There is no evidence that the post-head constituent ever leaves the domain of the DP (as I have already pointed out, no other element can intervene between this constituent and the noun head).
- Given the extremely severe restrictions on this construction type, it is not reasonable to postulate ordinary argument and adjunct positions after the head. That is why the right-

[13] Cf. Footnote 1.

adjunction analysis can be regarded as more feasible. It is further supported by the fact that the adjoined constituent receives the same kind of strong stress as ordinary appositional constituents.

At this point two related questions arise. A) If Hungarian NPs are (assumed to be) strictly head-final, what is the explanation for right-adjunction? B) If right-adjunction is available, what is the reason for its being extremely limited? My hypothesis is as follows. It is economy that motivates right-adjunction. We have seen that pre-head arguments and adjuncts have to be used in adjectivalized forms (except for the special unadjectivalized type; however, it is drastically confined to the designated argument of nominals derived from a small subset of verbal predicates). By using right-adjunction the necessity of adjectivalization can be avoided. At the same time, because of the otherwise strict head-final nature of the NP, right-adjunction can only be applied if the adjoined constituent can be easily identified as belonging to the DP and not to any other element (for instance, the verbal predicate) of the sentence in which the DP occurs. That is why the overwhelming majority of DPs with a right-adjoined constituent appear at the very end of sentences.

I suggest that the right-adjoined constituents get integrated in the "NP core" by outside-in functional uncertainty. There are two facts that motivate this directionality of functional uncertainty. (A) In Hungarian "NP cores" there are no distinguished positions for ordinary oblique arguments (except for the designated oblique argument in the second construction type; however, that argument may never follow the head). (B) Adjuncts can also follow the NP head. Thus, there is no "starting point" for functional uncertainty within the NP.

## 4. Summary

In this paper I have offered a comprehensive analysis of the three ways of expressing oblique arguments and adjuncts of event nominals in Hungarian.

In the first, and by far the most productive, type the arguments and adjuncts preceding the head have to be adjectivalized by means of either the adjectivizing suffix *-i* (but it can only attach to the majority of postpositions) or *való*, one of the present participial counterparts of the copula *van* 'be'. The account proposed here has been a modified version of Laczkó (1995b). Its most essential aspects are as follows. *Való* is not a true argument-taking predicate: it is a formative element; however, it also carries combinatorial information. In the modified analysis I assume that the VP headed by *való* is annotated with the $\uparrow=\downarrow$ equation, and in this way we can also capture cases in which *való* simultaneously adjectivalizes more than one constituent (for instance, an argument and an adjunct at the same time).

In the second type, which is limited to designated oblique arguments of nominals derived from a small subset of verbal predicates, the oblique argument preceding the head is not adjectivalized. As opposed to Szabolcsi's (1994) GB analysis, raising the nominalizing suffix at LF, and Laczkó's (1995a) lexical incorporation, combining the oblique argument and the verb in the lexicon and nominalizing them there, here I have proposed an entirely new account. I have drawn a parallel between a special V' portion of the Hungarian VP, which dominates a particular VM (verbal modifier) constituent and the V head, and a corresponding N' portion of the NP, which dominates the same VM constituent and the nominal head. Furthermore, I assume that these nominals inherit the distinguishing feature of the input verb to the effect that the VM position has to be filled by the designated oblique argument.

The third type, in which the oblique argument or adjunct follows the head and must not be adjectivalized, is rather rare and it is limited to cases in which we can clearly identify the post-head constituent as belonging to the NP headed by the nominal and not to any other element (for instance the verbal predicate) of the sentence. I have argued that because of these limitations it is not reasonable to postulate ordinary post-head argument and adjunct positions (contra É. Kiss (to appear)). At the same time, I have pointed out that no other element can intervene between the nominal and the post-head constituent; therefore, this is not an instance of ordinary extraposition. Instead, I assume that these post-head constituents are right-adjoined to the DPs in which their nominal heads occur, and they get integrated into the NPs they belong to by outside-in functional uncertainty.

## References


Ackerman, Farrell (1987) *Miscreant Morphemes: Phrasal Predicates in Ugric*. Ph.D. dissertation. University of California at Berkeley.

Alsina, Alex (1993) *Predicate Composition: A Theory of Syntactic Function Alternations*. Ph.D. dissertation. Stanford University.

Bresnan, Joan (to appear) *Lexical-Functional Syntax*. Oxford: Basil Blackwell.

É. Kiss, Katalin (1994) Sentence structure and word order, in: Kiefer, Ferenc – É. Kiss, Katalin eds. *The Syntactic Structure of Hungarian*. San Diego–New York: Academic Press, 1–90.

É. Kiss, Katalin (1998) *Mondattan* (Syntax), in: É. Kiss, Katalin – Kiefer, Ferenc – Siptár, Péter. *Új magyar nyelvtan* (New Hungarian Grammar). Budapest: Osiris, 15–184.

É. Kiss, Katalin (to appear) The Hungarian noun phrase is like the English noun phrase, in: Kenesei, István – Alberti, Gábor eds. *Approaches to Hungarian. Volume 7*. Szeged: JATE.

Komlósy, András (1985) Predicate composition, in: Kenesei, István ed. *Approaches to Hungarian. Volume 1. Data and Descriptions*. Szeged: JATE, 53–78.

Laczkó, Tibor (1995a) *The Syntax of Hungarian Noun Phrases: A Lexical-Functional Approach*. Frankfurt am Main: Peter Lang.

Laczkó, Tibor (1995b) On the status of *való* in adjectivalized constituents in noun-phrases, in: Kenesei, István ed. *Approaches to Hungarian. Volume 5. Levels and Structures*. Szeged: JATE, 125–152.

Pesetsky, David (1985) Morphology and logical form, *Linguistic Inquiry* **16**, 193-246.

Szabolcsi, Anna (1990) Suppressed or PRO subjects? The argument structure of event nominals in Hungarian, in: Kenesei, István ed. *Approaches to Hungarian. Volume 3. Structures and Arguments*. Szeged: JATE, 147–181.

Szabolcsi, Anna (1994) The noun phrase, in: Kiefer, Ferenc – É. Kiss, Katalin eds. *The Syntactic Structure of Hungarian*. San Diego–New York: Academic Press, 179-274.