

**ON THE (UN)BEARABLE LIGHTNESS OF
BEING AN LFG STYLE COPULA
IN HUNGARIAN**

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Abstract

This paper develops the first comprehensive LFG analysis of the five most important types of copula constructions in Hungarian. I basically adopt Dalrymple et al.'s (2004) programmatic view, which admits diversity both in c-structure and in f-structure across and within languages, and which postulates that the “postcopular” constituent can be the functional cohead of the copula, in which case the copula itself is only a formative, it can have the open XCOMP function and it can also have the closed PREDLINK function. (This contrasts with Butt et al.'s (1999) and Attia's (2008) uniform PREDLINK approach at the f-structure level.) On the basis of the behavior of the construction types in question, I employ the functional cohead device, the PREDLINK tool (but not as the only uniform tool); however, (contrary to Dalrymple et al. (2004)) I claim that there is no need for the XCOMP treatment. At the same time, I also argue that in the case of some construction types, it is most appropriate to assume that the postcopular constituent has an OBL function.

1 Introduction

Copula constructions (CCs) in Hungarian have received relatively little attention in the Chomskyan generative literature and practically no attention in the LFG literature.¹ In this paper, I propose an outline of the first comprehensive LFG analysis of the five most salient Hungarian CCs, partially reflecting on and capitalizing on empirical and theoretical generalizations and analyses in the relevant LFG literature (e.g., Butt et al. 1999, Dalrymple et al. 2004, Nordlinger & Sadler 2007, Attia 2008, Sulger 2009). This may also result in a meaningful typological and theoretical contribution to LFG's understanding and handling CCs across languages.

The following Hungarian CCs will be analyzed here.

- (1) *Az igazgató okos/tanár volt.* [attribution or
the director.NOM clever/teacher.NOM was classification]
'The director was clever / a teacher.'
- (2) *Az igazgató a szóvivő volt.* [identity]
the director.NOM the spokesman.NOM was
'The director was the spokesman.'
- (3) *Az igazgató a szobá-ban volt.* [location]
the director.NOM the room-in was
'The director was in the room.'

¹ For a recent overview of the GB/MP analyses of certain types of Hungarian CCs, see Dalmi (2010).

- (4) *Voltak boszorkány-ok (a Föld-ön).* [existence]
 were witch-PL.NOM the Earth-on
 ‘There were witches (on the Earth).’
- (5) *Az igazgató-nak volt szóvivő-je.* [possession]
 the director-DAT was spokesman-his.NOM
 ‘The director had a spokesman.’

The structure of the paper is as follows. In section 2, I offer a brief overview of the main LFG approaches to CCs. In section 3, first I present my view of how CCs are best treated in an LFG framework, and then I develop my analysis of the five Hungarian CC types exemplified in (1)-(5). This is followed by a summary and some concluding remarks in section 4.

2 Fundamental LFG approaches

The two main general LFG strategies for the treatment of CCs across languages are best illustrated by Butt et al. (1999) and Dalrymple et al. (2004). In the former approach, CCs are handled in a uniform manner functionally. The copula is always taken to be a two-place predicate, and the two arguments it subcategorizes for have the following two grammatical functions: there is a subject (SUBJ) (which is uncontroversial in any analysis of these constructions), and the other constituent is uniformly assigned a special, designated function designed for the second, “postcopular” argument of the predicate: PREDLINK. By contrast, in Dalrymple et al.’s (2004) approach, the two-place predicate, SUBJ and PREDLINK version is just one of the theoretically available options. In addition, they postulate that the copula can be devoid of meaning (and, hence, argument structure) and it can serve as a pure carrier of formal verbal features: tense and agreement. Finally, it can also be a one-place predicate of the “raising” type: assigning the XCOMP function to its propositional argument and also assigning a non-thematic SUBJ function. When the postcopular constituent has the PREDLINK function, it is closed in the sense that if it has a subject argument, this argument is never realized outside this constituent. For obvious reasons, the XCOMP and the PREDLINK types involve two semantic (and functional) levels (tiers): the copula selects the relevant constituent as an argument. By contrast, when the copula is a mere formative, the two elements are at the same level (tier): the postcopular constituent is the real predicate and the copula only contributes morphosyntactic features. In LFG terms, they are functional coheads. All this is summarized in Figure 1.

postcopular constituent		
open		closed
main PRED , the copula is a formative: functional coheads (single-tier)	XCOMP of the copula main PRED: 'be <XCOMP>SUBJ' (double-tier)	PREDLINK of the copula main PRED: 'be <SUBJ,PREDLINK>' (double-tier)

Figure 1. Three types of copular constructions

In (7), (8) and (9) I show schematically how the English sentence in (6) can be analyzed along these three different lines.

(6) *She is small.*

(7) $\left[\begin{array}{l} \text{PRED} \quad \text{'small } \langle (\uparrow\text{SUBJ}) \rangle \text{' } \\ \text{TENSE} \quad \text{present} \\ \text{SUBJ} \quad \text{'she' } \end{array} \right]$

(8) $\left[\begin{array}{l} \text{PRED} \quad \text{'be } \langle (\uparrow\text{XCOMP}) \rangle (\uparrow\text{SUBJ}) \text{' } \\ \text{TENSE} \quad \text{present} \\ \text{SUBJ} \quad \text{'she' } \\ \text{XCOMP} \quad \left[\begin{array}{l} \text{PRED} \quad \text{'small } \langle (\uparrow\text{SUBJ}) \rangle \text{' } \\ \text{SUBJ} \quad \text{---} \end{array} \right] \end{array} \right]$

(9) $\left[\begin{array}{l} \text{PRED} \quad \text{'be } \langle (\uparrow\text{SUBJ}) (\uparrow\text{PREDLINK}) \rangle \text{' } \\ \text{TENSE} \quad \text{present} \\ \text{SUBJ} \quad \text{'she' } \\ \text{PREDLINK} \quad \text{'small' } \end{array} \right]$

One of the most important properties of this approach is that it allows for diversity both in c-structure and in f-structure. Dalrymple et al. (2004) is programmatic: it proposes these three analytical possibilities and assumes that there can be variation across languages and also across constructions within the same language. Only a careful analysis of any single CC in any

language can reveal which type it belongs to. Falk (2004) and Nordlinger & Sadler (2007) subscribe to this view and develop their respective analyses in this spirit. By contrast, Attia (2008), inspired by Butt et al. (1999), argues for a generalized PREDLINK approach to CCs within and across languages. Naturally, this means diversity in c-structure and robust uniformity in f-structure, and, for obvious reasons, it radically simplifies the analysis of CCs in the realm of grammatical relations and f-structure. It is in this sense that I consider this PREDLINK approach “light”. In addition, the single-tier (formative) use of the copula is also “light” in an obviously different sense.² As I will point out when I present my analysis, the PREDLINK lightness in this domain inevitably puts the burden of capturing significant differences of various kinds between CCs on other components of grammar.

3 Analysis of the five Hungarian CC types

Before presenting the details, I discuss the most important general aspects of my analysis.

My approach is along the lines (i.e. analytical philosophy) pursued by Dalrymple et al. (2004), Falk (2004), and Nordlinger & Sadler (2007), as opposed to the path argued for and followed by Butt et al. (1999), Attia (2008) and Sulger (2011). This means that I find it more appropriate to allow for variation in terms of categories, functions, and construction types within and across languages in the CC domain rather than to develop a generalized and unified analysis for the overwhelming majority of CCs within and across languages. In my view, it is more in the spirit of LFG, I consider it is more appealing intuitively, and, furthermore, it is my conviction that the variation and the variety Hungarian CCs exhibit call for a varied and multidimensional treatment.

Naturally, this is not to deny the tenability and potential advantages of the unified approach (“PREDLINK light”); however, I will show that in the case of the investigation of CC phenomena we gain much more by accommodating rich parametric variation in several dimensions. My claim is that although it is elegant to have a uniform treatment at f-structure, it is also the job of f-structure to efficiently feed semantics, and my approach is more useful in this respect. At this point I would also like to emphasize that I do not reject the PREDLINK analysis as such: in the case of two Hungarian CCs (out of the five discussed in this paper) I myself develop a PREDLINK account.

In addition to the PREDLINK strategy, I also employ the single-tier (functional cohead) version. It is important in this connection that in certain Hungarian CCs the copula must be absent in certain cases. Such a fact by

² The title of this paper has been inspired by the title of the following book: Milan Kundera, *The Unbearable Lightness of Being*, 1985, Faber & Faber (translated from Czech by Michael Henry Heim).

itself is taken to justify the single-tier analysis in a number of approaches. However, my claim is that the possibility/necessity of having the zero copula (at least in certain paradigmatic slots) is neither a sufficient nor a necessary condition for a single tier analysis. Consider the following two sides of this \pm zero-copula-coin.

(A) Compare my accounts in sections 3.1 and 3.2 in this respect: both CC types exhibit exactly the same copula-absence behavior; however, I analyze the former in the single-tier, functional cohead manner, while I develop an analysis of the latter along the double-tier, PREDLINK lines.

(B) The obligatory presence of the copula does not necessarily rule out the single-tier analysis: see the more recent LFG analysis of English passive constructions (the copula is merely a formative element without a PRED feature).³

Contrary to Dalrymple et al. (2004) (and the views of the overwhelming majority of LFG practitioners), I claim that there is no real need for the double-tier XCOMP analysis of CCs in general. I make this claim on the basis of Dalrymple et al.'s (2004) argumentation (by pointing out that it is not very convincing) and on the basis of the relevant Hungarian facts. I hasten to add that I do not exclude the possibility that certain CC phenomena may call for an XCOMP analysis as the most plausible (or maybe the only feasible) analysis.

Let us take a look at Dalrymple et al.'s (2004) two arguments in favour of XCOMP in certain CCs.

(A) When the English copula is combined with an adjectival “raising” predicate, the well-known control relationships can be captured by dint of the standard LFG control apparatus if the AP is assumed to have the XCOMP function, rather than the PREDLINK function. The crucial aspects of these two different analyses of (10) are shown in (11) and (12).

(10) *It is likely to rain.* (cf. *It seems to rain.*)

(11) a. *is*, V ‘be < (\uparrow XCOMP) > (\uparrow SUBJ)’
(\uparrow SUBJ) = (\uparrow XCOMP SUBJ)

b. *likely*, A ‘likely < (\uparrow XCOMP) > (\uparrow SUBJ)’
(\uparrow SUBJ) = (\uparrow XCOMP SUBJ)

³ For instance, Bresnan (2001) adopts this analysis, as opposed to the classical XCOMP analysis in Bresnan (1982).

- (12) a. *is*, V ‘be < (↑PREDLINK) > (↑SUBJ)’
 b. *likely*, A ‘likely < (↑COMP) > (↑SUBJ)’
 (↑COMP SUBJ) = ((PREDLINK↑) SUBJ)

As (12b) shows, only a rather unusual control equation could handle this relation on the PREDLINK account of the copula, while nothing special is required on the XCOMP account, see (11). I fully agree with Dalrymple et al. (2004): the PREDLINK analysis is too costly, and I find this an important argument against a uniform PREDLINK approach to CCs (contra Attia’s (2008) claim to the contrary). However, notice that this is only an argument against the PREDLINK account: a simple single-tier analysis allows for exactly the same standard LFG way of capturing the relevant control relationships. Compare (13) and (14).

- (13) a. *is*, V
 (↑TENSE) = present
 (↑SUBJ PERS) = 3
 (↑SUBJ NUM) = sg
 b. *likely*, A ‘likely < (↑XCOMP) > (↑SUBJ)’
 (↑SUBJ) = (↑XCOMP SUBJ)

- (14) *seems*, V ‘seem < (↑XCOMP) > (↑SUBJ)’
 (↑SUBJ) = (↑XCOMP SUBJ)
 (↑TENSE) = present
 (↑SUBJ PERS) = 3
 (↑SUBJ NUM) = sg

As these representations demonstrate, on this single-tier account, *is likely* gets exactly the same analysis as *seems* (as is to be expected): the PRED feature is contributed by *likely* and *seem*, respectively, and the general morphosyntactic verbal features are provided by *is* and *-s*, respectively.

(B) Dalrymple et al.’s (2004) second argument is based on subject-adjective agreement in languages like French and Norwegian. Consider their French examples in (15) and their two alternative representations capturing the relevant agreement facts. Needless to say, the PREDLINK approach creates unnecessary complications, as shown in (17).

- (15) a. *Elle* *est* *petite*.
 she.F.SG is small.F.SG
 ‘She is small.’
 b. *Il* *est* *petit*.
 he.M.SG is small.M.SG
 ‘He is small.’

(16) *petite* (↑PRED) = ‘small < SUBJ >’
(↑SUBJ NUM) =c sg
(↑SUBJ GEND) =c fem

(17) *petite* (↑PRED) = ‘small’
((PREDLINK↑) SUBJ NUM) =c sg
((PREDLINK↑) SUBJ GEND) =c fem

My comment is the same as in the case of the previous point: this is an absolutely valid argument against the PREDLINK analysis in such cases, but the single-tier analysis is at least as unmarked and straightforward in LFG terms as the XCOMP analysis. Moreover, it may even be taken to be more compelling inasmuch as the adjective imposes its agreement constraints on the subject of the sentence directly (and not through the mediation of an XCOMP style control relationship).

Let me also add that according to several LFG practitioners the XCOMP analysis of the copula in passive sentences in English type languages is no longer tenable, see Footnote 3.⁴

So far, I have pointed out that in my approach I employ both the single-tier analysis and the (double-tier) PREDLINK analysis. In the double-tier domain, however, I reject the use of the XCOMP analysis. At the same time, I will also argue that in this latter domain it is reasonable to assume that in the case of certain CCs the second argument has the OBL (and not the PREDLINK) function. Notice that even with this additional grammatical function in my system the number of the fundamental types of CCs is smaller than that in Dalrymple et al.’s (2004) system. Consider:

(18) Dalrymple et al. (2004):
a. single-tier, functional cohead (open)
b. double-tier, PREDLINK (closed)
c. double-tier, XCOMP (open)

(19) here:
a. single-tier, functional cohead (open)
b. double-tier, PREDLINK or OBL (closed)

Before I present my analysis, I show the most essential features of the account of each type in (20).

⁴ The main motivation for dropping the XCOMP analysis and replacing it with the single-tier, functional cohead analysis has been to represent the f-structures of passive sentences in copular passive languages like English and non-copular passive languages like Malayalam in a uniform fashion.

- (20) a. attribution/classification: single-tier, cohead (section 3.1)
 b. identity: double-tier, PREDLINK (section 3.2)
 c. location: double-tier, OBL (section 3.3)
 d. existence: double-tier, OBL (section 3.4)
 e. possession: double-tier, PREDLINK (section 3.5)

Although it would be logical to discuss (20b) and (20e) next to each other, because I propose a PREDLINK analysis for both, I find it more important to discuss (20a,b) and (20c,d) next to each other, because these types exhibit some basic Hungarian copula use differences more transparently.

3.1 Attribution or classification

Consider the following examples ((1) is repeated here for convenience).

- (1) *Az igazgató okos/tanár volt.*
 the director.NOM clever/teacher.NOM was
 ‘The director was clever / a teacher.’
- (21) a. *Az igazgató tanár. ⇔ Én tanár vagyok.*
 the director.NOM teacher.NOM I.NOM teacher.NOM am
 ‘The director is a teacher.’ ‘I am a teacher.’
- b. *Az igazgató nem okos. ⇔ Én nem vagyok okos.*
 the director.NOM not clever I.NOM not am clever
 ‘The director isn’t clever.’ ‘I am not clever.’

As (21a) shows, in this type the copula must be absent if the sentence is in the present tense and the subject is 3rd person, singular; and the same holds for 3rd person plural subjects (which is not exemplified here). In these paradigmatic slots, negation is done by simply inserting the negative particle *nem*, see (21b). It is a further property of this construction that in neutral sentences, the AP/NP has to occupy the immediately preverbal (precopular) position.⁵

⁵ This is the famous VM (verbal modifier) position in Hungarian, normally occupied by separable verbal particles, typically reduced (non-referential) arguments or secondary predicates. This preverbal position is only available to VMs in neutral sentences, because in non-neutral sentences the focussed element must precede the verb immediately, and the VM (if there is one in the sentence) must follow the verb. In other words: VMs and focussed constituents fight for the same immediately preverbal position. Following Laczkó & Rákosi (2011) and others (cited in that paper), I assume, without any justification here, that this special, Janus-faced position is [Spec,VP].

Let us consider predicative APs first. Given the fact that under certain circumstances the copula must be systematically absent, in the spirit of Dalrymple et al. (2004) and Nordlinger & Sadler (2007), we could immediately opt for a single tier analysis. However, as I pointed out above, in my view this fact by itself is not a sufficient condition for a single-tier analysis (for further details, see section 3.2). Thus, in my approach, I need additional (and independent) support for this analysis. This evidence is provided by the fact that Hungarian predicatively used adjectives clearly satisfy Dalrymple et al.'s (2004) criterion for a predicate capable of taking a subject argument. Consider the sentence in (22).

- (22) *János okos-nak tart-ja Péter-t.*
 John.NOM clever-DAT hold-PRES.3SG Peter-ACC
 'John considers Peter clever.'

This is unquestionably a functional control construction: the verb has a SUBJ and an XCOMP argument (realized by the predicative AP bearing dative case in this construction type) and it has a non-thematic OBJ, which can only obey the coherence condition if it functionally controls the AP's thematic SUBJ. It is further evidence for this single-tier analysis that in this construction type (the infinitival form of) the copula cannot even be inserted, as opposed to the English counterpart. Compare the Hungarian example and its English translation in (23).

- (23) **János okos-nak tart-ja le-nni Péter-t.*
 John.NOM clever-DAT hold-PRES.3SG be-INF Peter-ACC
 'John considers Peter to be clever.'

The analysis of the NP in this type as the main argument-taking predicate seems to be less intuitive and less unproblematic. In this connection, Attia (2008), agreeing with Dalrymple et al. (2004), for instance, claims that common nouns should not be taken to have an argument structure containing a subject argument.⁶ However, in Hungarian such predicative noun phrases can be involved in exactly the same functional control constructions as predicative APs,⁷ cf. (22) and (24), which lends considerable support to an analysis along these argument-taking lines.

⁶ Dalrymple et al. (2004) point out that in Japanese, adjectives can be used without the copula, but nouns cannot, and this provides partial motivation for them only to analyze adjectives as argument-taking predicates as opposed to nouns in Japanese CCs. By contrast, the corresponding Hungarian facts are partially different, which can justify a partially different approach.

⁷ For instance, both categories have the same dative marking.

- (24) *János géniusz-nak tart-ja (*le-nni) Péter-t.*
 John.NOM genius-DAT hold-PRES.3SG be-INF Peter-ACC
 ‘John considers Peter (to be) a genius.’

Also note that the nominal predicate must be non-specific. This fact enables us to define the required (categorial) environment for a predicative (argument-taking) noun: it must occur within an NP and never within a (referring) DP. In (25) and (26), I show the most important lexical aspects of my analysis, using the XLE style formalism. Both lexical forms contain representations capturing the non-zero-copular use of these predicates, and I abstract away from the encoding (and constraining) of tense and agreement.

- (25) *okos* A, { (↑ PRED) = ‘clever < (↑ SUBJ) >’ predicative use
 (↑ NUM) must have number
 @FOCUSorVM focus ⇔ VM macro
 | (↑ PRED) = ‘clever’ attributive use
 ~(↑ NUM)}. no number feature

The disjunction encodes the predicative vs. the attributive uses of the adjective.⁸ It is a fundamental contrast between the two uses that the adjective always has a number feature in the former and never in the latter. The @FOCUSorVM macro captures the FOCUS vs. VM complementarity outlined in Footnote 5: in neutral (non-focussed) sentences the predicative AP must precede the verb. (Technically, this is encoded by dint of XLE’s CHECK feature device in the macro.)⁹

- (26) *tanár* N, { (↑ PRED) = ‘teacher < (↑ SUBJ) >’ predicative use
 (↑ SPECIFIC) = – non-specific
 @(CAT ↑ NP) c-structure category: NP
 @FOCUSorVM focus ⇔ VM macro
 | (↑ PRED) = ‘teacher’}. non-predicative use

In (26), the disjunction encodes the contrast between the predicative, argument-taking and the ordinary use of a noun. As I pointed out above, non-specificity is intimately related to the predicative use, as is indicated in the first member of the disjunction, and there is also a constraining equation associated with the NP node in the preverbal position: (↓ SPECIFIC) = c –.

⁸ In the vein of the (I think) majority LFG opinion, in the attributive representation the adjective does not subcategorize for a SUBJ argument. From the perspective of the present paper this issue is not relevant anyhow.

⁹ The behavior of these CCs is even more complex, because the predicative adjective itself can be the focussed element. Space limitations prevent me from discussing this issue here. Suffice it to say that this particular phenomenon can be captured along the lines proposed in King (1997).

The @ (CAT ↑ NP) template restricts the category of the nominal predicate to NP (that is, the predicative noun cannot occur in a DP). The function of the @FOCUSorVM macro in (26) is the same as in (25).

3.2 Identity

Consider the following examples ((2) is repeated here for convenience).

(2) *Az igazgató a szóvivő volt.* [identity]
 the director.NOM the spokesman.NOM was
 ‘The director was the spokesman.’

(27) a. *Az igazgató a szóvivő.*
 the director.NOM the spokesman.NOM
 ‘The director is the spokesman.’

b. *A szóvivő az igazgató.*
 the spokesman.NOM the director.NOM
 ‘The spokesman is the director.’

c. *Az igazgató nem a szóvivő (volt).*
 the director.NOM not the spokesman.NOM was
 ‘The director is/was not the spokesman.’

d. *A szóvivő nem az igazgató (volt).*
 the spokesman.NOM not the director.NOM was
 ‘The spokesman is/was not the director.’

(28) a. *Én a szóvivő vagyok.*
 I.NOM the spokesman.NOM am
 ‘I am the spokesman.’

b. *Én a szóvivő voltam.*
 I.NOM the spokesman.NOM was.1SG
 ‘I was the spokesman.’

c. **A szóvivő én volt.*
 the spokesman.NOM I.NOM was.3SG
 cca. ‘The spokesman was me.’

In this type, two entities, typically expressed by definite 3rd person DPs, are equated, and as the examples in (27) show, often either of the two DPs can be taken to be the subject and agree with the copula. However, when one of the DPs is not 3rd person (that is, when it is a 1st or 2nd person pronoun)

only that DP can function as the subject, see (28). This type and the attribution/classification type share all of the following properties. The copula must be absent if the sentence is in the present tense, and the subject is 3rd person singular, see (27a,b), and the same holds for 3rd person plural subjects (which is not exemplified here). In these paradigmatic slots, negation is done by simply inserting the negative particle *nem*, see (27c,d). In this type, in neutral sentences, the non-subject constituent has to occupy the immediately preverbal (precopular) position.

I propose that this type is most appropriately analyzed in a two-tier approach, despite the fact that the copula must be absent in the present tense, 3SG/PL paradigmatic slots. Thus, here I adopt Butt et al.'s (1999) and Attia's (2008) analysis. The copula is a two-place predicate subcategorizing for a SUBJ and a PREDLINK. Given the nature (semantics) of this construction type, the function (semantics) of this predicate is to equate (or, literally, link) two entities. And, as I pointed out above, there are cases in which the two 3rd person definite DPs can take these two grammatical functions interchangeably. It also has to be encoded in the lexical form of this copula that if one of the DPs is not 3rd person, then it must be the SUBJ and never the PREDLINK.¹⁰

Even when the copula is not present in the sentence in this type, I postulate that this unexpressed copula is the main predicate. I follow Dalrymple et al.'s (2004) analysis of a Russian construction in this vein, and I assume that the properties of the missing copula are introduced by LFG style (phrase-)structural means:

$$\begin{array}{l}
 (29) \quad S \rightarrow \text{DP} \quad \text{VCop} \vee \quad \varepsilon \quad \text{DP} \\
 \quad \quad (\uparrow\text{SUBJ})=\downarrow \quad \uparrow=\downarrow \quad (\uparrow\text{PRED})=\text{'be<SUBJ,PREDLINK>'} \quad (\uparrow\text{PREDLINK})=\downarrow \\
 \quad \quad \quad \quad \quad \quad \quad \quad \quad (\uparrow\text{TENSE})=\text{present} \\
 \quad \quad \quad \quad \quad \quad \quad \quad \quad (\uparrow\text{SUBJ PERS})=3 \\
 \quad \quad \quad \quad \quad \quad \quad \quad \quad (\uparrow\text{SUBJ NUM})=\{\text{sg} \mid \text{pl}\} \\
 \quad \quad \quad \quad \quad \quad \quad \quad \quad (\uparrow\text{SUBJ PERS})=(\uparrow\text{PREDLINK PERS}) \\
 \quad \quad \quad \quad \quad \quad \quad \quad \quad (\uparrow\text{SUBJ NUM})=(\uparrow\text{PREDLINK NUM}) \\
 \quad \quad \quad \quad \quad \quad \quad \quad \quad (\uparrow\text{SUBJ SPECIFIC})=c+ \\
 \quad \quad \quad \quad \quad \quad \quad \quad \quad (\uparrow\text{PREDLINK SPECIFIC})=c+
 \end{array}$$

In this rule the overt copula (VCop) is in complementary distribution with the special ε (epsilon) symbol, which does not appear in the c-structure representation as an empty category; instead, it contributes its annotations solely to the relevant f-structure. In all the other paradigmatic slots, the appropriate form of the copula encodes all the relevant functional information in its lexical entry.

¹⁰ The simplest and most straightforward way of carrying this out is to use the following constraint: $\sim(\uparrow\text{PREDLINK PERS}) = \{1 \mid 2\}$.

3.3 Location

Consider the following examples ((3) is repeated here for convenience).

- (30) *Az igazgató a szobá-ban van.*
the director.NOM the room-in is
'The director is in the room.'
- (3) *Az igazgató a szobá-ban volt.*
the director.NOM the room-in was
'The director was in the room.'
- (31) *Az igazgató nincs a szobá-ban.*
the director.NOM isn't the room-in
'The director isn't in the room.'
- (32) *(Én) nem vagyok a szobá-ban.*
I.NOM not am the room-in
'I am not in the room.'
- (33) *Az igazgató nem volt a szobá-ban.*
the director.NOM not was the room-in
'The director wasn't in the room.'

The most important properties of this CC are as follows. The copula is normally overt even in the present.3SG/3PL cases, see (30), which exemplifies the present.3SG instance. As is usual in other CCs as well, ordinarily negation takes the form of combining the negative particle and the copula, see (32) and (33). However, in the present.3SG/3PL cases negation is expressed by a special suppletive form (*nincs* 'isn't' and *nincsenek* 'aren't'), see (31), which exemplifies the present.3SG instance. The subject constituent has to be specific, and, in neutral sentences, the locative constituent has to occupy the immediately preverbal (precopular) position, the VM position, see (3) and (30). It is also noteworthy that the locative constituent is not predicative in Hungarian, as opposed to predicative APs and NPs in the attribution/classification type, see section 3.1. For instance, it cannot be the PRED of an XCOMP in a raising construction. Compare (34) with (22), (23) and (24).

- (34) **János a szobá-ban tart-ja*
John.NOM the room-in hold-PRES.3SG
(*le-nni*) *az igazgató-t.*
be-INF the director-ACC
'John considers the director (to be) in the room.'

From this fact it follows that the locative constituent in this CC type cannot be analyzed as open: it does not allow the only open version my system applies, the single-tier, functional cohead analysis, but its behavior shown in (34) would not justify the two-tier, XCOMP analysis, either. In theory, it would be possible to assign the PREDLINK function to this locative constituent. However, my alternative solution here is the OBL_{loc} function on the basis of the following considerations. This CC expresses a genuine locative relationship; therefore, it is reasonable to feed semantics directly in terms of grammatical function choice and f-structure representation.¹¹ Furthermore, as I argue in the next section, the parallel between locative and existential CCs can be captured in a straightforward manner along these lines. In addition, although I myself do accept and use the PREDLINK function in the analysis of certain CC types, in my view this is really motivated and justifiable if it can be assumed that the copula has a genuine “linking” function (semantics). Thus, I take this function (name) at face value.¹²

I represent the lexical form of the locative copula in the following way.

- (35) *van*, V (↑PRED) = ‘BE_{loc} < (↑SUBJ), (↑OBL_{loc}) >’
 (↑SUBJ SPECIFIC) =c +
 @FOCUSorVM_OBL.

This copula is a two-place predicate, its SUBJ argument must be specific, and its second argument receives the OBL_{loc} function. The @FOCUSorVM_OBL macro captures the fact that in non-focussed sentences the predicate’s OBL argument must occupy the preverbal VM position.

3.4 Existence

Consider the following examples ((4) is repeated here for convenience).

- (36) *Vannak boszorkány-ok (a Föld-ön).*
 are.3PL witch-PL.NOM the Earth-on
 ‘There are witches (on the Earth).’
- (4) *Voltak boszorkány-ok (a Föld-ön).*
 were witch-PL.NOM the Earth-on
 ‘There were witches (on the Earth).’

¹¹ It is worth pointing out that Bresnan (2001) and Falk (2004) analyze corresponding locative CCs (in English and in Hebrew, respectively) in exactly the same fashion, assuming that the constituent in question has the OBL function.

¹² My account of identity CCs uses this function (see section 3.2), and I also use it in my analysis of possession CCs (see section 3.5).

(37) *Nincs-enek boszorkány-ok (a Föld-ön).*
 isn't-PL witch-PL.NOM the Earth-on
 'There aren't witches (on the Earth).'

(38) *Nem voltak boszorkány-ok (a Föld-ön).*
 not were.3PL witch-PL.NOM the Earth-on
 'There weren't witches (on the Earth).'

In this CC, the copula, as a strict rule, must always be overt, even in the present.3SG/3PL cases, see (36), which exemplifies the present.3PL instance. As is usual in other CCs as well, ordinarily negation takes the form of combining the negative particle and the copula, see (38). However, in present.3SG/3PL negation is expressed by a special suppletive form (*nincs* 'isn't' and *nincsenek* 'aren't'), see (37), which exemplifies the present.3PL instance. The subject constituent must be non-specific. In reality, this CC does not occur in ordinary neutral sentences for the following reason. Even when there is no focussed constituent, the copula itself is the first element and it receives focal stress, see (4) and (36). Very often, this CC does not contain an overt locative constituent, but even in that case the interpretation is that the (non-specific) subject exists in a particular world.

There are, thus, significant similarities and dissimilarities between location and existence CCs. Below I list them.

- In both types, the copula is best treated as a two-place predicate.
- In both types, the second argument is best assigned the closed OBL_{loc} function.
- In the location CC the argument is strictly obligatory, while in the existence CC it is absolutely optional.
- In the location CC the subject must be specific, while in the existence CC it must be non-specific.
- In neutral location CC sentences the OBL_{loc} argument must occupy the preverbal (= precopular) VM position, while in "neutral" existence CC sentences there is no VM option, to begin with, and the copula must receive focal stress.

In my analysis, the existential copula has the following lexical form.

(39) *van*, V $(\uparrow PRED) = 'BE_{exist} < (\uparrow SUBJ), ((\uparrow OBL)) >'$
 $(\uparrow SUBJ \text{ SPECIFIC}) = c -$
 $\{ (\uparrow FOCUS)$
 $| (\uparrow PRED \text{ FN}) = (\uparrow_i FOCUS) \}.$

The first two lines should be straightforward on the basis of the discussion above. As regards the FOCUS disjunction, it reads as follows: (i) there is a focussed constituent in the sentence (first disjunct); (ii) the copula itself is in focus (second disjunct). The latter case is very special, because the copula is

the (functional) head of the entire sentence, so if it received the FOCUS discourse function in the regular LFG way then this would mean that the entire sentence was in focus. However, it is just the predicate that is focussed. This interpretation is encoded, in an XLE way, by the equation in the second conjunct. It is only the copula, its function name (FN), that is in focus (without its arguments), and this focus is represented in information structure (\uparrow_i), rather than in f-structure. I have adopted this treatment of focussing predicates from King (1997).¹³

3.5 Possession

Consider the following examples ((5) is repeated here for convenience).

- (40) *Az igazgató-nak van szóvivő-je.*
 the director-DAT is spokesman-his.NOM
 ‘The director has a spokesman.’
- (5) *Az igazgató-nak volt szóvivő-je.*
 the director-DAT was spokesman-his.NOM
 ‘The director had a spokesman.’
- (41) *Az igazgató-nak nincs szóvivő-je.*
 the director-DAT isn’t spokesman-his.NOM
 ‘The director doesn’t have a spokesman.’
- (42) *Az igazgató-nak nem volt szóvivő-je.*
 the director-DAT not was spokesman-his.NOM
 ‘The director didn’t have a spokesman.’
- (43) a. *az igazgató okos szóvivő-je*
 the director.NOM clever spokesman-his
 ‘the director’s clever spokesman’
- b. *az igazgató-nak az okos szóvivő-je*
 the director-DAT the clever spokesman-his
 ‘the director’s clever spokesman’

In Hungarian, possession is expressed at the sentence level by this peculiar possession CC. First of all, it has a very special agreement pattern. The possessed noun phrase is the subject and its head is inflected in exactly the same way as the noun head of possessive DPs (that is, DPs containing possessor constituents): compare all the sentence level examples in (5), (41), (42) with (43). The possessor in the CC is obligatorily expressed by a DP in the dative case, see (5), (41), (42).¹⁴ The possessed noun phrase is always 3SG

¹³ Also see Footnote 9.

¹⁴ Within a DP expressing possession, the dative marking of the possessor is only an option, cf. (43a) and (43b).

or 3PL, and it agrees with the copula in this respect (this is ordinary subject-verb agreement). However, this subject also agrees with the dative possessor for person and number in the same way as the possessed noun head agrees with the (nominative or dative) possessor within possessive DPs: compare, again, (5), (41), (42) with (43).¹⁵

Some additional properties of this CC are as follows.

- The possessed noun (the subject) is, as a rule, indefinite.
- The copula is strictly obligatory, just like the copula in existence CCs, see section 3.4.
- In “neutral” possession CC sentences the dative possessor is typically a topic, and, more importantly, the copula always gets focal stress, just like the copula in existence CCs, see section 3.4.
- The negation pattern of the copula in this CC type follows that of the copula in location and existence CCs.

I believe that this special CC type is, again, best analyzed along the PREDLINK lines. My intuitive assumption is that the function of the copula here is to link the possessor and the possessed entity at the clause level. In other words, the copula “raises” the possessive relationship which can also be expressed within DPs to a sentential, predicational level.

I propose the following lexical form for the possession copula.

$$(44) \quad \text{van, V } (\uparrow\text{PRED}) = \text{'BE}_{\text{poss}} < (\uparrow\text{SUBJ}) (\uparrow\text{PREDLINK}) >'$$

$$\quad (\uparrow\text{SUBJ DEF}) = \text{c} - \quad \text{possessee} \quad \text{possessor}$$

$$\quad (\uparrow\text{PREDLINK CASE}) = \text{c dat}$$

$$\quad \{ (\uparrow\text{FOCUS})$$

$$\quad | (\uparrow\text{PRED FN}) = (\uparrow_i \text{FOCUS}) \}.$$

The first two equations about the indefiniteness of the SUBJ (possessee) and about the case constraint of the PREDLINK (possessor) should be straightforward. The FOCUS disjunction here is the same as I postulated in the case of the existence copula in the previous section.

A remark is in order here about the (very special) agreement pattern between the subject and the dative argument in this CC. So far it has been typically assumed in the literature that the dative possessor argument is an OBL. However, this assumption has been criticized by pointing out that it is highly unusual across languages for an OBL to agree with the SUBJ. Now, if we assume that the possessor has the PREDLINK function, this agreement

¹⁵ It is noteworthy that in her GB framework Szabolcsi (1994) treats these possessive sentences as existential sentences. The possessive noun phrase is the sole argument of the existential copula, and the dative marked possessor is obligatorily extracted from the DP. Although such an analysis could also be easily captured in LFG, I claim that my alternative account is more plausible. For lack of space I cannot argue for this in the present paper.

relationship can be argued to be much more justified. It simply follows from the very nature of PREDLINK: it can (or must) enter into an agreement relationship with SUBJ.¹⁶

4 Conclusion

In this paper I have developed the first comprehensive LFG analysis of the five most important types of copula constructions in Hungarian. The most significant general aspects of my approach are as follows.

- I subscribe to the view, advocated by Dalrymple et al. (2004) and Nordlinger & Sadler (2007), that the best LFG strategy is to examine all CCs individually and to allow for diversity and systematic variation both in c-structure and in f-structure representations across and even within languages. This means that I reject Butt et al.'s (1999) and Attia's (2008) uniform PREDLINK approach at the f-structure level.
- I argue against the two-tier, open, XCOMP analysis of CCs.
- I employ the following analysis types:
 - (i) single-tier, functional cohead (open);
 - (ii) double-tier, PREDLINK or OBL (closed).

Figure 2 (next page) summarizes the most important properties of the five Hungarian CCs and the crucial aspects of my analysis.

Let me conclude this paper with an additional short comment. Interestingly, my claim that the location CC has to be treated differently is (further) independently supported by the fact that out of the five versions of the Hungarian copula analyzed in this paper, it is only the locative version that has a productively used participial counterpart. Compare the location use in (45a) with the attribution use and the possession use in (45b) and (45c), respectively.

- (45) a. *a szobá-ban lévő igazgató*
 the room-in being director
 literally: 'the director being in the room'
- b. **az okos lévő igazgató*
 the clever being director
 literally: 'the director being clever'

¹⁶ In this connection, it is also important that in the XLE implementation of LFG such (special) agreement facts can be rather easily and straightforwardly accommodated. In possessive DPs the tags associated with the noun stem (encoded by the relevant inflectional elements) contribute the following types of equations: (\uparrow POSS PERS) = ... and (\uparrow POSS NUM) = ... In this particular instance of PREDLINK-SUBJ agreement, we only have to introduce the following alternative annotations: ((SUBJ \uparrow) PREDLINK PERS) = ... ((SUBJ \uparrow) PREDLINK NUM) = ...

c. *a szóvivő-je lévő igazgató
 the spokesman-his being director
 intended meaning: ‘the director having a spokesman’

CC TYPE	PR3: COP	PR3: NEG	COPULA’S FUNCTION	ARGUMENT STRUCTURE	VM	OTHER TRAITS
ATTR/CLASS	–	<i>nem</i>	formative	–	AP/NP	NP: –spec
IDENTITY	–	<i>nem</i>	predicate	<S, PL>	SUBJ	S: +spec, interch.
LOCATION	+	<i>nincs</i>	predicate	<S, OBL>	OBL	S: +spec
EXISTENCE	+	<i>nincs</i>	predicate	<S, (OBL)>	–	S: –spec cop: FOC
POSSESSION	+	<i>nincs</i>	predicate	<S, PL>	–	S: –def S&PL agr. cop: FOC

Figure 2. Properties and analyses of Hungarian CCs¹⁷

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References

- Attia, Mohammed. 2008. A unified analysis of copula constructions. In: Butt, Miriam & King, Tracy H. (eds.) *Proceedings of the LFG '08 Conference*. University of Sydney. On-line publication: 2008 CSLI Publications, ISSN 1098-6782, <http://csli-publications.stanford.edu/LFG/13/>, 89-108.
- Bresnan, Joan. 1982. The passive in lexical theory. In: Bresnan, Joan (ed.) *The Mental Representation of Grammatical Relations*. Cambridge: The MIT Press. 3-84.
- Bresnan, Joan. 2001. *Lexical-Functional Syntax*. Oxford: Blackwell.

¹⁷ I use the following abbreviations in this figure: cop = copula, attr/class = attribution/classification, pr3:cop = is the copula present in the present tense and 3rd person paradigmatic slots? pr3:neg = how is negation expressed in pr3? VM = what element occupies the VM position (if any) in neutral sentences? S = SUBJ, PL = PREDLINK, interch = the two arguments’ grammatical functions are interchangeable in the 3rd person, spec = specific, def = definite, FOC = FOCUS, agr = agreement.

- Butt, Miriam, Tracy H. King, María-Eugenia Niño & Frédérique Segond. 1999. *A Grammar Writer's Cookbook*. Stanford, CSLI.
- Dalmi, Gréte. 2010. *Copular Sentences, Predication and Cyclic Agree*. Habilitation dissertation. Loránd Eötvös University, Budapest.
- Dalrymple, Mary, Helge Dyvik & Tracy H. King. 2004. Copular complements: Closed or open? In: Butt, Miriam – King, Tracy H. (eds.) *Proceedings of the LFG '04 Conference*. University of Canterbury, New Zealand. On-line publication: 2004 CSLI Publications, ISSN 1098-6782, <http://csli-publications.stanford.edu/LFG/9/lfg04.html>, 188-198.
- Falk, Yehuda N. 2004. The Hebrew present-tense copula as a mixed category. In: Butt, Miriam & King, Tracy H. (eds.) *Proceedings of the LFG '04 Conference*. University of Canterbury, New Zealand. On-line publication: 2004 CSLI Publications, ISSN 1098-6782, <http://csli-publications.stanford.edu/LFG/9/lfg04.html>, 226-246.
- King, Tracy H. 1997. Focus domains and information structure. In: Butt, Miriam & King, Tracy H. (eds.) *Proceedings of the LFG '97 Conference*. University of California, San Diego. On-line publication: 1997 CSLI Publications, ISSN 1098-6782, <http://csli-publications.stanford.edu/LFG/2/lfg97.html>.
- Laczkó, Tibor & Rákosi, György. 2011. On particularly predicative particles in Hungarian. In: Butt, Miriam & King, Tracy H. (eds.) *Proceedings of the LFG '11 Conference*. Hong Kong: Hong Kong University. On-line publication: 2011 CSLI Publications, ISSN 1098-6782, <http://csli-publications.stanford.edu/LFG/16/lfg11.html>, 299-319.
- Nordlinger, Rachel & Sadler, Louisa. 2007. Verbless clauses: Revealing the structure within. In: Grimshaw et al. (eds.) *Architectures, Rules and Preferences: A Festschrift for Joan Bresnan*. Stanford: CSLI Publications, 139-160.
- Rosén, Victoria. 1996. The LFG architecture and “verbless” syntactic constructions. In: Butt, Miriam & King, Tracy H. (eds.) *Proceedings of the LFG '96 Conference*. Rank Xerox, Grenoble. On-line publication: 1996 CSLI Publications, ISSN 1098-6782, <http://csli-publications.stanford.edu/LFG/1/>.
- Sulger, Sebastian. 2011. A parallel analysis of have-type copular constructions in have-less Indo-European languages. In: Butt, Miriam & King, Tracy H. (eds.) *Proceedings of the LFG '11 Conference*. Hong Kong: Hong Kong University. On-line publication: 2011 CSLI Publications, ISSN 1098-6782, <http://csli-publications.stanford.edu/LFG/16/lfg11.html>, 299-319.
- Szabolcsi, Anna. 1994. The noun phrase. In: Kiefer, Ferenc & É. Kiss, Katalin (eds.) *The Syntactic Structure of Hungarian. Syntax and Semantics 27*. New York: Academic Press, 179-274.