# On control and binding in Hungarian complex event nominals

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#### Abstract

Laczkó & Rákosi (2019) analyze the binding relations of Hungarian anaphors occurring within possessive DPs. They introduce a new feature: BDD "binding domain delimiter" associated with the lexical form of the definite article. Furthermore, they assume that within Hungarian possessive DPs there are two [–r] grammatical functions available to arguments of complex event nominals: SUBJ and POSS. In this paper we will show that their analysis is on the right LFG-theoretic lines, because it handles the crucial binding facts appropriately. However, we will also demonstrate that it cannot capture some further related phenomena; therefore, we will propose an important modification of their account that will also cover these further cases. In addition to adopting their SUBJ PRO analysis of the external argument of a "transitive" derived nominal, we will subscribe to the view that the by-phrase realizing such an external argument bears the OBL<sub>ag</sub> grammatical function, which is more feasible than a suppression account. Finally, we will explore the treatment of obligatory control into Hungarian DPs from an LFG perspective. We will argue for the anaphoric control approach as opposed the functional control alternative.

#### 1 Introduction

Laczkó & Rákosi (2019), henceforth: L&R19, develop an LFG analysis of the binding relations of Hungarian anaphors when they occur within possessive DPs. Their starting point is the empirical generalization Rákosi (2017, 2020) reports: when either the reflexive or the reciprocal pronoun occurs within a possessive DP, neither of them can be anaphorically bound from outside if this DP contains the definite article. The LFG account of L&R19 has two crucial aspects to it. On the one hand, L&R19 introduce a new feature: BDD "binding domain delimiter" associated with the lexical form of the definite article. On the other hand, following Laczkó (2004, 2009), they assume that within Hungarian possessive DPs there are two [–r] grammatical functions available to arguments of complex event nominals: SUBJ and POSS. Both can be overtly realized by either the nominative or the dative possessor constituent, and, in addition, SUBJ can also be an LFG-style PRO, which can be controlled in the usual way. Our paper will have the following three interrelated objectives.

First of all, as a point of departure, we will show that L&R19's analysis is on the right LFG-theoretic lines, because it handles the crucial binding facts in the possessive DP domain appropriately. This subsumes the treatment of reflexives, and the majority of the uses of the reciprocal in a variety of caseforms, including the nominative possessor use. However, we will also demonstrate that this approach, as it stands, cannot capture the behaviour of the reciprocal functioning as the dative possessor. We will propose an important modification of L&R19's analysis that will also cover this additional case.

Secondly, we will emphasize the fact that the SUBJ PRO analysis of the external argument of a "transitive" derived nominal is indispensable for the treatment of binding and control. As regards its expression by a *by*-phrase, we

will claim that the postulation of its mapping onto the OBL<sub>ag</sub> grammatical function is more feasible than a suppression account.

Thirdly, we will explore the treatment of obligatory control into Hungarian DPs from an LFG perspective, a less studied area, see Szűcs (2019). After discussing the pros and cons for functional vs. anaphoric control, we will argue for the latter.

The structure of the paper is as follows. In section 2 we present the basic facts. In section 3 we give a critical overview of L&R19's analysis. In section 4 we propose a modification of their approach. In section 5 we claim that *by*-phrases in Hungarian DPs are obliques and not suppressed arguments with an adjunct function. In section 6 we argue for anaphoric (as opposed to functional) control into Hungarian event nominal. In section 7 we conclude.

## 2 The definite article and anaphoric possessors (Rákosi 2017, 2020)

The Hungarian possessive noun phrase may include the definite article. It has a complex distribution, but in general, whether it is present or not has no direct influence on the semantics of the possessive noun phrase. If the (unmarked) nominative possessor, for example, is a personal name, then the definite article is largely optional (subject to dialectal variation):

(1)	Szeretem	DP	(a)	Kati	süti-jé-t].
	like.1SG		the	Kate	cake-POSS.3SG-ACC
	'I like Kate	e's cake			

In other possessive constructions, the article may be obligatory or ungrammatical.  $^{1}$ 

Building on the work of Despić (2011, 2015) and Reuland (2011), Rákosi (2017, 2020) argues that this variation in article use has a so far unrecognized binding theoretic dimension in Hungarian. In fact, the definite article plays a syntactically active role in licensing anaphoric possessors in Hungarian: no article can intervene between the possessor and its antecedent if the possessor is a true anaphor. We illustrate this with reciprocal anaphors, our focus in this paper. Consider the following three examples, each containing a reciprocal anaphor acting as the possessor within the object noun phrase:

(2) a. Mi ismerjük [DP(\*/??az) egymás baj-á-t].
 we know.1PL the each\_other problem-POSS.3SG-ACC 'We know each other's problem.'

<sup>&</sup>lt;sup>1</sup> We refer the reader to Szabolcsi (1994), Laczkó (1995), and Alberti & Laczkó (2018), among others, for rich overviews of the syntax of the Hungarian possessive noun phrase.

- b. Mi ismerjük [DP egymás-nak \*(a) baj-á-t]. we know.1PL each\_other-DAT the problem-POSS.3SG-ACC 'We know each other's problem.'
- c. Mi díjaztuk [DP (az) egymás lefest-és-é-t]. we appreciated.1PL the each\_other painting-DEV-POSS.3SG-ACC 'We appreciated the painting of each other.'

While the article is more or less unacceptable in (2a), an example including the unmarked nominative possessor, it is obligatory in (2b) with the dative-marked possessor.<sup>2</sup> In this latter case, the possessor occupies a peripheral position in the possessive noun phrase, preceding the definite article. Thus in neither of these two examples is there an article intervening between the reciprocal possessor and the matrix subject antecedent. The definite article is largely optional in (2c), where the head of the possessive noun phrase is a deverbal nominal. Since it is plausible to assume that such nominalizations include a grammatically active subject (see below), the search for an antecedent does not have to cross the boundaries of the possessive noun phrase, and many speakers tolerate the insertion of the definite article in this case.<sup>3</sup>

Rákosi (2017, 2020) develops a Minimalist account that captures the above data, and which covers anaphoric possessor strategies in Hungarian in general. In particular, he argues that the possessive noun phrase is a binding domain, with a left edge that is directly accessible from the matrix clause (see Despić 2015 for detailed arguments for a cross-linguistic approach along these lines). Thus the dependency between the reciprocal anaphor and the matrix antecedent is local in the syntactic sense in both (2a) and (2b). The use of the article in the nominalization example in (2c) is not constrained by such factors

<sup>&</sup>lt;sup>2</sup> One of the reviewers notes that while we report absolute judgements for (2b), we suggest that there may be some variation in (2a). The article is indeed obligatory in contemporary Hungarian in (2b), and while the judgements concerning (2a) are somewhat less unequivocal, speakers strongly disprefer the article there, and most cannot accept it at all. An examples similar to (2a) was rated at 4.61 without the article in the survey Rákosi (2020: 128-131) conducted, whereas with the article the average rating was 1.87 (on a 5-point Likert-scale, 5: fully acceptable, 1: non-acceptable, N=141).

<sup>&</sup>lt;sup>3</sup> In the questionnaire survey that Rákosi (2020: 128-131) reports, an example analogous to (2c) received the average rating of 4.52 with the article, and 3.12 without it (on a 5-point Likert-scale, 5: fully acceptable, 1: non-acceptable). 35 participants found the version without the article fully acceptable, while 29 rejected it (N=141). Rákosi also notes that the majority of the corpus examples wherein a reciprocal possessor is preceded by the definite article are such that the possessum is a nominalized verbal head. Thus the emerging picture is that the article becomes a more or less acceptable option in the construction that (2c) represents, except for a minority of speakers. One of the reviewers asks whether this variation in article use is related to the variation in (1). At this point, we do not see a clear connection, but we intend to investigate this issue in future work.

since the direct, local antecedent for the reciprocal is within the nominalization itself.

L&R19 put forward an LFG-based account of these phenomena, which describes the grammar of (2a) and other anaphoric possessor constructions not discussed here, under the assumption that the definite article introduces a binding domain delimiting (BDD) feature in Hungarian. One of our main goals in this paper is to augment this analysis to cover the dative construction in (2b), as well as to develop a deeper understanding of the nominalization construction in (2c) and to propose an LFG-theoretic analysis.

#### **3** On L&R19's analysis

Consider (2a) and (2c) repeated here for convenience.

- (2) a. Mi ismerjük [DP(\*/??az) egymás baj-á-t].
   we know.1PL the each\_other problem-POSS.3SG-ACC 'We know each other's problem.'
  - c. Mi díjaztuk [DP (az) egymás lefest-és-é-t]. we appreciated.1PL the each\_other painting-DEV-POSS.3SG-ACC 'We appreciated the painting of each other.'

L&R19 capture the ungrammaticality of (2a) in the presence of the definite article by assuming that the article has a blocking effect: it prevents binding from outside the DP that it heads. They encode this blocking function by employing a special feature: "binding domain delimiter": BDD.<sup>4</sup> They associate it with the lexical form of the article in case it occurs in a possessive DP, see (3), the simplified lexical form representation, which only shows the two crucial aspects of the analysis. The first annotation checks for the possessive DP environment, and the second introduces the new BDD feature.

(3)  $a(z): \dots$ (↑CHECK \_POSS-MORPH)=<sub>c</sub> + (↑BDD)= +

L&R19 assume that the Hungarian reciprocal, *egymás* 'each other, one another', which can have the whole range of nominal case suffixes, is subject to the Minimal Finite Domain Condition, which is to be encoded in its lexical form. This encoding is combined with the BDD feature as a negative off-path

<sup>&</sup>lt;sup>4</sup> One of our anonymous reviewer asks the following question. "How is the Binding Domain Delimiter more than a simple description of the facts?" Our answer is that at this stage it is not more. It serves as an adequate device to formally encode the relevant facts in LFG. In the future we may find other languages exhibiting similar phenomena. Then we may be in a position to make broader generalizations.

constraint:  $\sim(\rightarrow \text{TENSE})$ , see (4), the simplified lexical form of the nominative reciprocal. The BDD feature is added as a negative off-path constraint on possessive DP domains: the path leading to the anaphor cannot contain this feature. For instance, this results in the ungrammaticality of (2a) in the presence of the article, and the construction is grammatical in the absence of the article.

(4) egymás: 
$$(GF^* GF_{pro})$$
  
~ $(\rightarrow TENSE)$   
~ $(\rightarrow BDD)$ 

Consider L&R19's c-structure and f-structure representation of the possessive DP in (2a).



As (2c) demonstrates, the reciprocal can be coreferential with the matrix subject when the DP contains a complex event nominal even in the presence of the definite article. L&R19 assume that in this case, too, the definite article has the same binding domain delimiting function; however, the reciprocal DP is bound within the possessive DP by an LFG-style SUBJ PRO, and in turn this PRO is controlled by the matrix subject from outside the DP. Thus, here the coreference is along the control and binding lines, that is, the reciprocal is not bound from outside the DP. For such an analysis to work, L&R19 subscribe to Laczkó's (2004, 2009) approach, in which the crucial assumption is that within Hungarian possessive DPs there are two [-r] grammatical functions available to arguments of complex event nominals: SUBJ and POSS. Both can be overtly realized by either the nominative or the dative possessor constituent, and, in addition, SUBJ can also be an LFG-style PRO, which can be controlled in the usual way.<sup>5</sup> Consider the analysis of (2c) in this approach.



<sup>&</sup>lt;sup>5</sup> See the argument structure of *lefestés* 'painting' in (7). Laczkó (2004) develops an LMT analysis involving these functions. He also adopts the Subject Condition from the verbal (clausal) domain.

When the definite article is not present in the possessive DP in (2c), the fstructure is the same as in (7), the only difference being that it does not contain the (BDD) feature.



We believe that fundamentally L&R19's approach is appropriate in an LFG framework, because it handles the crucial binding facts in the possessive DP domain satisfactorily. This includes the treatment of reflexives, which we do not discuss here, and the majority of the uses of the reciprocal in a variety of case-forms, including the nominative possessor use. However, the approach as it stands has a significant shortcoming. It cannot fully capture the behaviour of the reciprocal as the dative possessor. Consider (2b), repeated here as (8a) for convenience (with a minor representational adjustment for the sake of ease of minimal pair comparison in (8)), and (8b), by also comparing the latter with (2c).

- (8) a. Mi ismerjük [DP egymás-nak a baj-á-t].
   we know.1PL each\_other-DAT the problem-POSS.3SG-ACC 'We know each other's problem.'
  - b. Mi díjaztuk [DP egymás-nak a lefest-és-é-t]. we appreciated.1PL each\_other-DAT the painting-DEV-POSS.3SG-ACC 'We appreciated the painting of each other.'

(8b) does not pose a problem for L&R19's system, because in the case of complex event nominal heads the presence of the definite article does not make coreference from outside the possessive DP ungrammatical. In this case the reciprocal is bound within the DP by a SUBJ PRO, and in turn this SUBJ PRO

is controlled by the matrix SUBJ. So it does not matter whether the reciprocal possessor is in the nominative as in (2c) or in the dative case as in (8b), the f-structures of both possessive DPs in these examples will be identical except for the case specifications of the possessive reciprocal. By contrast, L&R19's approach predicts (8a) to be ungrammatical, because the f-structure of the possessive DP in this example is the same as that of the possessive DP in (2a) shown in (5b), again, except for the case specifications of the possessive reciprocal. So on the basis of (5b) (8a) should be ruled out, contrary to fact.

### 4 Modification of L&R19's analysis

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We propose the following solution. Dative reciprocal possessors are exempt from the BDD constraint. This can be encoded in the lexical form of the reciprocal as shown in (9).

(9) egymás: ( (GF\* GF<sub>pro</sub>  $\uparrow$ ) GF<sub>ante</sub>) = ( $\uparrow$  ANTECEDENT)  $\sim (\rightarrow \text{TENSE})$ {  $\sim (\rightarrow \text{BDD})$ | ( $\rightarrow$  BDD) & ( $\rightarrow$  POSS CASE =<sub>c</sub> DAT) & ( $\rightarrow$  POSS PRON-TYPE =<sub>c</sub> RECIP) }

We build this exemption into the off-path constraint set of the reciprocal. The first constraint encodes the Minimal Complete Nucleus Condition. The BDD disjunction has the following effect. First disjunct: the path must not contain the BDD feature. Second disjunct: the path contains this feature AND there is a reciprocal possessor in the dative on the path. Consider the c-structure and the f-structure of the possessive DP in (8a) in (10a) and (10b), respectively, and compare them with the corresponding structures in (5).

10)	a.	(↑OBJ)=↓		
		DP		
			_	
	(↑POSS)=↓		^=↓	
	( <b>†</b> CHECK _POSS-		D'	
	$MORPH) =_{c} +$	^=		
	DP	( <sup>†</sup> CHECK <sup>*</sup> POSS-		NP
		$MORPH) =_{c} +$		
	1=↓	$(\uparrow BDD) = +$		1=↓
	D	D		N
	egymásnak	a		baját



This modification of L&R19's analysis appropriately handles the binding properties of possessive DPs with ordinary noun heads containing reciprocal possessors in the dative. However, the following legitimate question arises in this connection. What makes the dative possessor reciprocal different from the nominative possessor reciprocal and the reciprocal in all the other case forms? Our answer is that in Hungarian dative case-marking has a remarkably distinguished status in general and in the context of possessive DPs in particular.

To begin with, the dative in Hungarian has the customary lexical (i.e. "inherent") case use. For instance, in the case of the three-place predicate *ad* 'give' the recipient argument is expressed by a dative DP. In addition, the dative is also a multi-functional non-semantic (i.e. "structural") case. For instance, the overt subject of infinitives receives dative.<sup>6</sup> Moreover, the dative is used to mark the XCOMPs of "raising-to-object" constructions and "contrastive as regards" type topics. It can be considered an all-purpose marker, because in these roles it can be attached not only to noun phrases but also adjectival phrases.

As we have seen, within possessive DPs the possessor can be either dative or nominative, in Spec,DP and in Spec,NP, respectively. In addition, the dative possessor, but not the nominative possessor, can also follow the noun head, as in (11).

(11) a. a baj-a János\*(-nak) the problem-POSS.3SG.NOM John(-DAT) 'John's problem'

Furthermore, dative possessors (but not nominative possessors) can be "extracted" from their host possessive DPs, see (12).

<sup>&</sup>lt;sup>6</sup> Due to lack of space, here we cannot exemplify those uses of the dative that are not directly related to the possessive nominal domain.

(12) (János-nak) Mi ismerjük [DP a baj-á-t] John-DAT we know.1PL the problem-POSS.3SG-ACC jól (János-nak). well John-DAT
'We know John's problem well.'

Finally, in Hungarian clause-level possessive constructions the copula *van* 'be' is used, the possessum is the subject noun phrase in nominative, while the possessor is expressed by a dative-marked DP.<sup>7</sup>

(13) János-nak van pénz-e. John-DAT is money-POSS.3SG.NOM 'John has money.'

We think that the properties of the dative marker discussed above provide at least a partial justification or explanation for why dative reciprocal possessors can be exempt from an otherwise general binding constraint.

In Szabolcsi's (1994) classic GB analysis the possessor is base-generated in Spec,NP, where it receives nominative case. It can stay there, or it can move to Spec,DP, where it acquires dative, which according to Szabolcsi is not a case-marker but an operator marker in the sense that Spec,DP is the same kind of A-bar (operator) position as Spec,CP at the clause level (also see the allpurpose function of the dative as described above). The dative-marked possessor can remain in Spec,DP, or it can be extracted from that position, i.e. the possessor can use the Spec,DP position as an escape hatch, just like *wh*phrases can use Spec,CP as an escape hatch in embedded questions.<sup>8</sup>

A possible LFG alternative of Szabolcsi's extraction operation analysis is to base-generate the dative possessor outside the possessive DP and to provide it with the following annotations.

(14)  $(\uparrow GF POSS) = \downarrow$  $(\downarrow CASE) =_c DAT$ DP

Dative possessor reciprocals can also be involved in "extraction".

<sup>&</sup>lt;sup>7</sup> For an LFG analysis, see Laczkó (2012).

<sup>&</sup>lt;sup>8</sup> In Szabolcsi's approach possessive sentences are existential clauses in which the dative possessor is extracted from a nominative possessive noun phrase.

(15) (Egymás-nak) Mi ismerjük [DP a baj-á-t] each\_other-DAT we know.1PL the problem-POSS.3SG-ACC jól (egymás-nak). well each\_other-DAT 'We know each other's problem well.'

Notice that given the annotated c-structure representation in (14), the fstructure of the possessive DP containing the dative possessor reciprocal in (8a) and that of the possessive DP with an extracted dative possessor reciprocal in (15) are identical. Thus, our proposal handles both configurations in a uniform and equally feasible fashion.

#### 5 No suppression in Hungarian event nominals

In the LFG literature *by*-phrases have received both an "OBL<sub>ag</sub>" analysis and a "suppressed argument and adjunct" analysis at the clausal passive level, see Bresnan (1982) and Bresnan et al. (2016), respectively, for instance.<sup>9</sup> The choice between the two approaches is of particular importance in the context of the account developed in this paper. The reason for this is that it is the cornerstone of the account that there is a SUBJ PRO in the relevant possessive nominal domain for the treatment of binding and control facts. The question is whether we find independent evidence for the postulation of such a PRO. If the answer is in the affirmative then we have two independent motivations for assuming that there is no suppression in Hungarian event nominals, and if a *by*-phrase appears in them, it has an oblique argument function.

It seems to be a rather widely-held, cross-theoretical view in the generative literature on Hungarian that the postulation of a PRO argument is necessary in complex event nominal constructions for the generally used, principled treatment of binding and control phenomena in this domain, see, for instance, Szabolcsi (1992), Laczkó (2004, 2005, 2008, 2009), Kenesei (2005), and Laczkó & Rákosi (2019). Consider Szabolcsi's (1992: 169) classic examples on the basis of which she argues for the PRO (as opposed to the suppression) analysis of the unexpressed external argument.<sup>10</sup>

 $<sup>^{9}</sup>$  Although the suppression approach seems to be the preferred alternative these days, for a relatively recent proposal along the no suppression lines, see Kibort (2004: 360-363), who also argues for the downgraded argument status of *by*-phrases in passive constructions.

<sup>&</sup>lt;sup>10</sup> She claims that Grimshaw's (1990) suppression analysis of English complex event nominals cannot be adopted to the corresponding Hungarian phenomena as there is evidence in Hungarian for assuming that the overtly unexpressed external argument is realized by PRO, and it is not suppressed, see below.

(16) Context: When Peter was visiting Mary, a bee stung Peter.

a.	Péter Peter.NOM	megcsíp-és-e sting-DEV-POSS.3SG	után . after		
	a méh the bee.NO 'The bee die	megdöglött. M died.3SG d after stinging Peter. <sup>3</sup>			
b.	Péter Peter.NOM	méh általi megc bee by sting-	síp-és-e ·DEV-POSS.3SG		
	bosszantotta annoyed.3sG 'Stinging of	Mari-t. Mary-ACC Peter by a bee annoye	d Mary.'		
c.	*Péter Peter.NOM	megcsíp-és-e sting-DEV-POSS.3SG	bosszantotta annoyed.3SG	Mari-t. Mary-ACC	
	'Stinging of Peter annoyed Mary.'				

Szabolcsi's argumentation is as follows. In the case of (16a) it is feasible to assume a PRO agent, which is controlled by the subject of the sentence. As (16c) shows, when there is no controller, the interpretation of the unexpressed external argument is obligatorily [+human], which straightforwardly calls for a PRO<sub>arb</sub> treatment. (16b) demonstrates how the non-human agent can be expressed in complex event nominal constructions.

The discussion above has two dimensions. On the one hand, if we want to capture the control facts of event nominal DPs coupled with the binding phenomena analyzed in this paper, we need a PRO (as opposed to suppression) analysis of the external argument of the derived nominal predicate. On the other hand, and independently from the former scenario, in an "uncontrolled" configuration there is strong evidence for the PRO<sub>arb</sub> (as opposed to the suppression) analysis. From all this it follows that it is much more reasonable to assume that when there is a *by*-phrase in the DP it is an oblique argument rather than an adjunct linked to a suppressed external argument. Also notice that in this scenario we do not even need to assume a  $\emptyset/OBL_{ag}$  GF duality as in the early treatment of passivization in LFG. Here the nature of the duality is that between mapping onto SUBJ-PRO or OBL<sub>ag</sub>.

### 6 Anaphoric control into Hungarian DPs

To round up the discussion about the nature of complex event nominals (CENs) in Hungarian, this section is concerned with the nature of the controlmechanism into these constituents.

According to widely-held assumptions, the implicit subject of complex event nominals is under non-obligatory control (NOC, as opposed to e.g. control into infinitivals). For example, Landau (2013: 40) claims that "the DP layer intervening between the matrix predicate and the complement TP/CP disrupts the OC dependency – plausibly, due to some locality constraint on the syntactic operation establishing OC – giving rise to NOC". This is illustrated by (17), where the subject of the CEN (the examiner, represented as PRO for convenience and expository purposes in the subsequent examples) may either refer to the main clause subject John or to some other person.

(17) Jánosi unta [Kati PRO<sub>i/j</sub> levizsgáztat-ás-á-t]. John felt.bored.by.3SG Kate examine-DEV-POSS.3SG-ACC 'John felt bored by the examination of Kate.'

Landau's ideas are couched in a minimalist framework, so the NOC-effect is explained in terms of the DP-layer, but an LFG-theoretic explanation is equally possible, see the discussion in section 4 of this paper.

Nevertheless, Szűcs (2019) calls attention to the fact that with certain main clause predicates, the referential dependency between the main clause subject and the CEN's subject may be obligatory. This is illustrated by the predicate *abbahagy* 'cease' in (18). The examiner in this case can only be John.

(18) Jánosi abbahagyta [PRO<sub>i/\*j</sub> Kati levizsgáztat-ás-á-t]. John ceased.3SG Kate examine-DEV-POSS.3SG-ACC 'John ceased the examination of Kate.'

In (18) the CEN functions as the object of the main predicate. The same phenomenon may be observed with subject and oblique CENs, shown in (19)-(20), respectively. The "a" examples show the expected NOC pattern, while the "b" examples illustrate the cases where the referential dependency is constrained.

- (19) a. [Kati PRO<sub>i/j</sub> levizsgáztat-ás-a] tetszett János-nak<sub>i</sub>. Kate examine-DEV-POSS.3SG appealed.3SG John-DAT 'The examination of Kate was appealed to John.'
  - b. [Kati PRO<sub>i/\*j</sub> levizsgáztat-ás-a] sikerült János-nak<sub>i</sub>. Kate examine-DEV-POSS.3SG succeeded.3SG John-DAT 'The examination of Kate was a success for John.'
- (20) a. Kérdeztem János-t<sub>i</sub> [PRO<sub>i/j</sub> Kati levizsgáztat-ás-á-ról].
   asked.1SG John-ACC Kate examination-DEV-POSS.3SG-DEL
   'I asked John about the examination of Kate.'

b. Megakadályoztam János-ti [PRO<sub>i/\*j</sub> Kati prevented.1SG John-ACC Kate
levizsgáztat-ás-á-ban].
examination-DEV-POSS.3SG-INE
'I prevented John from examining Kate.'

It is intuitively clear why these contrasts hold: the semantics of the predicates involved differs. While it is certainly possible that anyone's actions may be boring to an observer, one can only cease to do whatever one had been doing. Similarly, any action may appeal to me, but if I am successful in doing something, the doer of that something must be me. The same applies to "ask someone about doing something" vs. "prevent someone from doing something".

The question for an LFG-theoretic account is how to model this difference. It seems uncontroversial that the bare bones of a lexical entry for such predicates should look like these (the parts that are relevant for the CEN-perspective are underlined):

(21) a. verb <(SUBJ)(OBJ)>
 b. verb <(SUBJ)(OBL)>
 c. verb <(SUBJ)(OBJ)(OBL)>

If the respective GFs are CENs, there is a SUBJ inside them, which gets its value via some mechanism. The default case is that there is an f-structural PRO, which may refer to any contextually available entity. This is what is called *arbitrary* anaphoric control.

To get the OC-reading there are essentially two paths that one can take: either one can say that *obligatory* anaphoric control is instantiated (which may ultimately be a shorthand for a purely semantic explanation)<sup>11</sup>, or one can say that functional control is established. Thus the lexical entries may be supplemented in the ways shown in (22 -functional control) and (23 -obligatory anaphoric control).

- (22) a.  $(\uparrow SUBJ) = (\uparrow OBJ SUBJ)$ 
  - b.  $(\uparrow OBL) = (\uparrow SUBJ SUBJ)$
  - c.  $(\uparrow OBJ) = (\uparrow OBL SUBJ)$
- (23) a.  $(\uparrow SUBJ)_{\sigma} = (\uparrow OBJ SUBJ)_{\sigma}$  ANTECEDENT
  - b.  $(\uparrow OBL)_{\sigma} = (\uparrow SUBJ SUBJ)_{\sigma}$  ANTECEDENT
  - c.  $(\uparrow OBJ)_{\sigma} = (\uparrow OBL \ SUBJ)_{\sigma}$  ANTECEDENT

<sup>&</sup>lt;sup>11</sup> We thank Dag Haug at LFG20 for this remark.

While functional control has been primarily associated with raising and longdistance dependency constructions (question formation, topicalization) there has been several proposals in the LFG literature about its availability for equitype control. For instance, while Dalrymple (2001) analyzes all controlconstructions as anaphoric in nature, Falk (2001) proposes that there should be a bifurcation whereby some predicates like *try* instantiate functional control while others like *agree* utilize anaphoric control. Support for this approach is provided for example by the availability of a partial control interpretation for the latter, but not the former predicate, see (24).<sup>12</sup>

- (24) a. \*John<sub>i</sub> tried PRO<sub>i+</sub> to meet at 6.
  - b. John<sub>i</sub> agreed to  $PRO_{i+}$  meet at 6.

Since functional control involves a full syntactic identity of the respective constituents, such referential flexibility is ruled out, while in principle they are available for anaphoric control, which is more akin to run-of-the-mill pronominal dependencies. At the same time Falk notes that "obligatory anaphoric control" (a strict referential identity) is also an option in the theoretical space. So while referential flexibility (e.g. partial control) implies anaphoric control, the lack of such a flexibility may be either the result of functional control or obligatory anaphoric control.

As the contrast that is shown in (17)-(20) also involves the referential options for the implicit subject of the CENs, an analytical suggestion along the lines of functional and anaphoric control is not without merit. Nevertheless, we argue against such a proposal and maintain that all CENs involve anaphoric control, even the ones where the referential possibilities are fixed. That is, the equations in (23), with obligatory anaphoric control are the correct path for the analysis of (18), (19b) and (20b).

First we would like to make a few remarks about some general points about the relevant aspects of the LFG-theoretical analysis of control. Functional control is associated with the grammatical function XCOMP, the predicative complement.<sup>13</sup> However the CENs at hand are definitely not XCOMPs, but SUBJ, OBJ and OBL (respectively). They are nominal in character and possess all the relevant properties (e.g. case-marking) of these grammatical functions. While there is a line of research in LFG which proposes that functional control into other grammatical functions should be allowed (see e.g. Alsina et al. 2008, Patejuk & Przepiórkowski 2014, Szűcs 2018a), this is still a noncanonical move by LFG-standards. Anaphoric control is a subtype of standard pronominal dependencies and as such, it is not associated with a particular grammatical function.

<sup>&</sup>lt;sup>12</sup> See Haug (2013) for more on partial control.

<sup>&</sup>lt;sup>13</sup> According to Asudeh (2002: 42), containing "a grammatical function that is the target of a functional control equation" is the defining property of XCOMP.

Another relevant theoretical point is that in classic LFG, the controller (whether anaphoric or functional) must be a term function (SUBJ, OBJ), see e.g. Bresnan (1982: 354), Dalrymple (2001: 344). The problem is that "oblique control is a very common option in many languages" (Landau 2015: 15), see e.g. (19), or Landau's Hebrew example in (25). Besides, for LFG, Cook (2006) argues for the existence of OBL functional controllers into certain infinitival passives in German (see e.g (26)), and for the existence of oblique functional controllers in general, note the English example in (27).

- (25) Gil kafa alay le'hitpater etmol.
  Gil compelled on.me to.quit yesterday
  'Gil compelled me to quit yesterday.' (Hebrew, Landau 2015: 75)
- (26)weil mir [von der Firma<sub>li</sub> versprochen wurde, den since me by the.DAT company promised was the.ACC Rohrbruch bis Mittag PRO<sub>i</sub> zu reparieren burst.pipe until afternoon to repair 'because it was promised to me by the company that that the burst pipe would be repaired afternoon' (German, Cook 2006: 117)
- (27) John<sub>i</sub> counted on / relied on / called upon Susan<sub>j</sub> PRO<sub>j/\*i</sub> to take care of herself/\*himself/\*oneself.
   (Cook 2006: 115, referencing Culicover & Jackendoff 2005: 433)

It seems then that theoretical considerations cannot really arbitrate between the functional and anaphoric control approaches. Anaphoric control might be said to be more in line with the standard treatment of control into nominals in LFG, but by itself this is hardly a clincher. Thus, empirical matters should weigh in. As it turns out, there is substantial empirical evidence that favors the anaphoric approach over the functional one.

One piece of evidence comes from the assumption that if a predicate can be proven to go with anaphoric control in some (non-CEN) construction it is unlikely for that predicate to switch to functional control in a CEN. Take *sikerül* 'is a success for', from (19b). This predicate also occurs with a controlled infinitival subject. It is also true that in some cases, Hungarian infinitivals can be inflected. But crucially, according to Rákosi (2006: 205-228) the possibility of inflection on infinitives is contingent on the presence of a (covert) subject in the infinitival clause. This covert subject may be the PRO of the CEN, regardless of the actual implementation (c-structure in Chomskyan frameworks or f-structure in LFG). *Sikerül* does occur with an inflected infinitive subject, which suggests that it utilizes anaphoric control in (28). Presumably the same mechanism is present in a CEN.

(28) János-nak sikerült megbuk-ni(a) a vizsgán. John-DAT succeeded.3SG fail-INF(.3SG) the exam.SUP 'John managed to be the only person to fail the exam.'

Moreover, Szabolcsi (2009) shows that this covert subject can be made overt in some circumstances (e.g. focussing in the infinitival clause). This is a very clear indication of anaphoric control, since the controller and the controlled element are distinct entities. Functional control means full identity, which is obviously not applicable in such cases.

(29) János-nak sikerült csak neki megbuk-ni(a) a vizsgán. John-DAT succeeded.3SG only him fail-INF(.3SG) the exam.SUP 'John managed to be the only person to fail the exam.'

Clearly, (29) is an instantiation of anaphoric control. It is a natural assumption that this carries through to CENs, especially given the fact that anaphoric control seems to be the default option anyway, see the theoretical points discussed earlier.<sup>14</sup>

Another piece of evidence for the primacy of anaphoric control in CENs is that partial control seems to be an interpretational option in CENs, e.g. in (30).

(30) [Kati PRO<sub>?i+</sub> levizsgáztat-ás-a] sikerült János-nak<sub>i</sub>. Kate examine-DEV-POSS.3SG succeeded.3SG John-DAT 'The examination of Kate was a success for John.'

This is even true for predicates that are otherwise plausibly analyzed as relying on functional control as regards their infinitival complements. For example, *try* and its Hungarian equivalent *megpróbál* is a prime example for a verb that might be associated with functional control, for instance because of it disallowing partial control readings, as in (24a) and (31a). However, even *megpróbál* possibly allows partial control with a CEN. This is a strong indication of anaphoric control, since as noted, the full identity brought about by functional control is not compatible with such a semantics.

- (31) a. János megpróbálta PRO<sub>i/\*i+</sub> levizsgáztat-ni Katit. John tried.3SG examine-INF Kate.ACC
  'John tried to examine Kate.'
  b. János megpróbálta PRO<sub>i/2i+</sub> Kati levizsgáztatását.
  - John tried.3SG Kate examine-DEV-POSS.3SG-ACC 'John tried examining Kate.'

<sup>&</sup>lt;sup>14</sup> It might be added that anaphoric control is a more flexible mechanism overall, featured in a number of phenomena like partial control, split control (Haug 2013), *tough*-movement (Dalrymple & King 2000), prolepsis (Szűcs 2018b).

We must note that the partial readings in (30) and (31b) are marked with a ? because there seems to be some disagreement about them among native speakers. Note however that partial control is a discourse/context-sensitive phenomenon and "there is no reason to expect categorical intersubjective judgments on such constraints" (Haug 2013, footnote 3).

In sum, both the theoretical and the empirical landscape favor anaphoric control into complex event nominals, so this analysis, formalized in (23), is maintained even for cases where the superficial picture might appear to warrant functional control.

## 7 Conclusion

In this paper we concentrated on certain binding and control phenomena in Hungarian possessive DPs. First of all, we modified Laczkó & Rákosi's (2019) account in order to handle the binding facts of the dative possessor reciprocal. The essence of this modification was that we proposed that this reciprocal should be exempt from the effect of the BDD feature carried by the definite article. Secondly, we subscribed to the general SUBJ PRO (as opposed to the suppression) analysis of the *by*-phrase-less construction type, and we assumed that if the *by*-phrase occurs in the event nominal DP, it has the OBL<sub>ag</sub> GF status. Finally, we argued both on theoretical and empirical grounds for the anaphoric type of control into event nominals.

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