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Remarks on binding and control data in Hungarian Complex Event Nominals

Abstract

This article makes some remarks about binding and control data in Hungarian Complex Event Nominals (CENs). Taking Kenesei (2005) and Laczkó (2000, 2005, 2008, 2009) as starting point, I argue that binding and control patterns in CENs are affected by the following: i) the (non-)exhaustivity entailment of the control predicate; ii) logophoricity; iii) the pragmatics of the non-obligatorily controlled PRO subjects. For the most part, the emerging view does not contradict, but rather enriches and qualifies the aforementioned accounts. CENs are independent syntactic units for the purposes of binding and control. Most apparent counter-examples can be explained in terms of i)-iii). However, there are some residual data which might lead to a shift in the background assumptions.

Keywords: complex event nominals, binding, control

1 Introduction

Complex Event Nominals¹ (CENs) have been shown to preserve the argument-structure of their base-verbs, so the original arguments of the verbal base have to be part of the sentence structure at some syntactic level. This is also an assumption of Laczkó (2000, 2005, 2008, 2009) and Kenesei (2005) who have analyzed CENs in Hungarian in considerable detail. Two basic examples are shown in (1). (Following Laczkó (2009), the DEV in the glosses codes “deverbal derivational suffix”. In particular, it refers to the *-ás/-és* suffix that is associated with CENs in Hungarian.)

- (1) a. *a professzor nevet-és-e*
 the professor laugh-DEV-POSS.3SG
 ‘the laughing of the professor’

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- b. *a professzor levizsgáztat-ás-a* (*a dékán által*)
 the professor examine-DEV-POSS.3SG the dean by
 ‘the examination of the professor (by the dean)’

The mapping of the arguments is strictly determined by syntactic/semantic composition. (1a), taken from Laczkó (2000: 307), is an example with an intransitive base-verb (*nevet* ‘laugh’). In the CEN-construction, the original subject is realized as a possessor. In (1b), there is a transitive base-verb (*levizsgáztat* ‘examine’). Here, the original object is the possessor in the CEN. The original subject argument of (1b) (the person who does the examination) may optionally be expressed by an *által* ‘by’-phrase.² Note that even if the *által*-phrase is not present, there is still an understood external argument. Even without the *által*-phrase in (1b), the professor is obligatorily interpreted as the examinee, even though world knowledge then would rather favor the interpretation where the professor is the examiner.³

Data from control and binding form a prominent part of the analysis of Hungarian CENs⁴ and my goal in this paper is to critically evaluate the pertinent data and supplement them with various factors that Kenesei and Laczkó did not or only lightly consider. The central issues are the following:

- i. Does a CEN in Hungarian constitute an independent domain for the purposes of binding?
- ii. If the answer to (i) is positive, how can this position be supported with binding and control data?

What emerges is a picture that does not contradict, but rather enriches and qualifies Kenesei’s and Laczkó’s work. In particular, although there are some examples that appear to be problematic for their proposals, upon further scrutiny these turn out to be explicable in terms independent factors: lexical semantic properties, logophoricity and pragmatic considerations.

The paper is structured as follows. Section 2 summarizes the basic picture of control and binding in Hungarian CENs, as outlined in Kenesei’s and Laczkó’s research. In section 3, I discuss three factors that add some complexities to this view. Section 4 concludes.

2 Binding and control in CENs – basic assumptions

In this section, I summarize the most important aspects of binding and control in Hungarian CENs, as presented in Kenesei (2005) and Laczkó (2000, 2005, 2008, 2009).

Following standard assumptions, both authors agree that there is a syntactically represented subject argument in CENs. In this paper, I will represent this element as “PRO”. This follows

² See Laczkó (2008: 112–113) for some discussion of *által* (‘by’).

³ The presence of the external argument can also be seen by its ability to saturate a secondary predicate (Safir (1987)). In (i), *rosszindulatú* ‘ill-disposed’ is associated with the examiner.

(i) *a professzor rosszindulatú levizsgáztatása*
 the professor ill-disposed examine-DEV-POSS.3SG
 ‘the ill-disposed examination of the professor’

⁴ For other aspects of the issue (agreement patterns, aspect, negation, case-marking, argument-structural processes) the reader is referred to the original works.

generative conventions, but should not be seen as theoretical or analytical commitment on my part to a particular theoretical framework.⁵ So in (2), the PRO stands for the examiner.

- (2) *a* *PRO* *professzor* *levizsgáztat-ás-a*
 the professor examine-DEV-POSS.3SG
 ‘the examination of the professor’

Furthermore, both Laczkó and Kenesei agree that while this PRO argument is present, it is not under obligatory control (OC). Such a PRO in non-obligatorily controlled (NOC) clauses may receive its reference from the discourse. Thus in (3), the event participant who does the examining may be the dean, but there are other interpretational possibilities as well, depending on the context. In obligatory control environments like (4), the PRO is always identified with the appropriate matrix argument (the subject (*the dean*) in (4)). This pattern is consistent with general assumptions about control, as a nominal layer is assumed to block the OC mechanism.⁶

- (3) *A* *dékán_i* *élvezte* [*a* *PRO_{ij}* *professzor* *levizsgáztat-ás-á-t*].
 the dean enjoyed.3SG the professor examine-DEV-POSS.3SG-ACC
 ‘The dean enjoyed the examination of the professor.’

- (4) *A* *dékán_i* *megpróbálta* *PRO_{i/*j}* *levizsgáztatni* *a* *professzort*.
 the dean tried.3SG examine-INF the professor.ACC
 ‘The dean tried to test the professor.’

As for binding, both Kenesei and Laczkó assume some formulation of standard Binding Theory (for the respective theoretical frameworks, see footnote 5). This is stated in (5).

- (5) Principle A: anaphors (reflexives and reciprocals) must be bound in their local domain.
 Principle B: pronominals must be free in their local domain.

Crucial for this picture is the assumption that CENs constitute a binding domain. That is, the CEN may be regarded as a self-contained unit (not dependent on other parts of the sentence) for control and binding. This may be modelled either by assuming that the CEN is always a DP (regardless of the presence/absence of a determiner)⁷ or, from an LFG perspective, assuming that it forms a Minimal Complete Nucleus (a functional structure that contains a PRED and all of its argument functions, including a SUBJ). As this paper is empirically oriented, I remain neutral on this issue, but still indicate with brackets that CENs are independent syntactic domains.

⁵ Kenesei works in the framework of the Minimalist Program, so this PRO argument is represented in the syntactic tree. Laczkó’s research is couched in Lexical-Functional Grammar, thus for him, the same element is to be found in the functional-structure of sentences.

⁶ “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.” (Landau 2013: 43). DPs are also standardly assumed to be binding domains.

⁷ The presence/absence of the determiner is also a dimension that may complicate the analysis of CENs in Hungarian. The present paper does not discuss this, but see Rákosi (to appear) for discussion about the interaction of anaphoric possessors and determiners in Hungarian.

As we will see in the following sections, several factors appear to blur this setup and some data even seem to contradict it. However, upon closer scrutiny, it turns out that most of the problematic data just lie outside the scope of the aforementioned proposals.

3 Additional factors in CENs

3.1 Exhaustivity in control

Example (6), discussed both by Kenesei (2005: 171) and Laczkó (2009: 349), appears to contradict the claim that the NOC-PRO is not under obligatorily control.

- (6) A *fiúk_i abbahagyták [PRO_{i/*j} egymás_i rajzol-ás-á-t].*
 the boys stopped.3SG each.other draw-DEV-POSS.3SG-ACC
 ‘The boys stopped drawing each other.’

Here, the subject argument of *rajzolás* (‘drawing’) seems to be tied to the main clause subject, barring a *j*-index on the PRO. Why should this be the case?

The puzzle can be solved if we consider the meaning of the main verb, *abbahagy* ‘stop’. Semantically, one can only stop doing what one (and not some other person) had been doing. In other words, the subject in the complement of *stop* is exhaustively controlled, on the semantic level. This is certainly true for the verb *stop* in a standard, obligatory control example like (7), and it seems that whatever the explanation is for this property of this verb, it is carried over to the nominalized version, with a NOC-PRO.

- (7) *John stopped PRO_{i/*i+} talking.*

If we replace the main verb of (6) with one that does not have this semantic entailment, we get a sentence whereby the PRO is able to get a reference that is disjoint from the matrix subject. That is, the indexing in (8) is entirely possible: the sentence means that the boys enjoyed that the speaker and his partners drew each other.

- (8) A *fiúk_i élvezték [PRO_j egymás_j rajzol-ás-á-t].*
 the boys enjoyed.3SG each.other draw-DEV-POSS.3SG-ACC
 ‘The boys enjoyed drawing each other.’

The same phenomenon can also be observed with nonsubject-control predicates. *Megenged* (*valakinek valamit*) ‘allow (sy to do sg)’ is an (indirect) object-related counterpart of *abbahagy* (‘stop’): if I allow someone do something, the doer must be the main clause indirect object. In a somewhat contrived paraphrase, I cannot allow you that someone else may do something. By way of contrast, I can promise you that someone does something. Therefore, in the CEN-complement of *megígér* ‘promise’, the reference of the PRO subject may be disjoint from that of the matrix object. Accordingly, specifying the agent with a *by*-phrase is possible only in the latter case.

- (9) a. *János megengedte nekem_i [PRO_{i/*j} Kati lerajzol-ás-á-t]*
 John allowed.3SG I.DAT Kate draw.DEV-POSS-3SG-ACC
 (*Anna_j által).
 Ann by
 ‘John allowed me the drawing of Kate (*by Ann)’.
- b. *János megígérte nekem_i [PRO_{ij} Kati lerajzol-ás-á-t]*
 John promised.3SG I.DAT Kate draw-DEV-POSS.3SG-ACC
 (Anna_j által).
 Ann by
 ‘John promised me the drawing of Kate (by Ann)’.

While (9b) might be slightly odd due to pragmatic reasons, the contrast with (9a) is very clear. Thus, we can conclude that the reason for the failure of PRO in (6) to get a [j]-index is just a by-product of the particular semantics of *abbahagy* ‘stop’.⁸ While this detail has eluded the attention of Kenesei (2005) and Laczkó (2009), the analyses themselves are not affected by the oversight.

3.2 Logophoricity

At first sight, (10) (taken from the Hungarian National Corpus) seems to be problematic from the perspective of Kenesei (2005) and Laczkó (2009), as there seems to be no binder for *magam* ‘myself’ in the sentence.

- (10) *A világ megváltoz-ás-á-t csak [a magam megváltoz-ás-a]*
 the world change-DEV-POSS.3SG-ACC only the myself change-DEV-POSS.3SG
teszi lehetővé.
 makes possible.TRANSL
 ‘The change of the world is only possible through the change of myself.’

However, Reinhart & Reuland’s (1993) seminal paper discusses a number of cases where a reflexive seems to be exempt from Principle A and thus may remain unbound. Two examples are shown in (11).

- (11) a. *There were five tourists in the room apart from myself.*
 b. *It angered him that she tried to attract a man like himself.*

Research on this issue leads to the direction that such uses of anaphors are often tied to logophoricity, the phenomenon whereby instead of syntactic constraints like classic binding principles (5), it is mental state, perspective or discourse prominence that determines the antecedent of some anaphor or pronoun. This is also what happens in (10): *magam* ‘myself is

⁸ A similar, but ultimately unrelated phenomenon may also be observed in obligatory-control contexts, under the label “partial control”, e.g. *John_i wanted/*tried PRO_{i+} to walk together*. Importantly, this differs from NOC in that in partial control, the matrix subject must be a subset of the reference of the PRO. See Landau (2013: 155–172).

not a standard reflexive, but a logophoric item. Thus Principle A is not violated, it is simply avoided. Let us see this issue in some detail.

As Kenesei and Laczkó are primarily concerned with Hungarian CENs in relation to standard Binding Theory, logophoricity lies outside their investigations. As we will see, once it is considered, the empirical landscape is extended.

In the discussion in Kenesei (2005) and Laczkó (2008, 2009), the anaphors in CENs are locally bound, in accordance with Binding Theory. We can illustrate this with (12), which is modelled after Laczkó (2008: 210). For clarity of presentation, the relevant indexing options are presented separately.

- (12) a. [*A nyilak_k egymásra való PRO kilő-vés-e* *idegesíti a fiúkat_i.*
 the arrows each.other való⁹ shoot-DEV-POSS.3SG annoys the boys
 ‘Shooting the arrows at each other annoys the boys.’
 b. PRO_i – each other_i c. PRO_j – each other_j
 c. PRO_i – each other_k d. PRO_i – each other_k

If the zero pronominal is controlled by the matrix object, the anaphors are coreferent with that (i-i), if the PRO is controlled by someone else, the PRO is tied to that (j-j). A third, related option is that the binder is some element within the CEN (the possessor in (11) (i-k, j-k) – note that this is still local binding, just not by the PRO).

However, as is clear from (10-11), anaphors do not always need to be bound: in logophoric environments, they are licensed by discourse/perspective. Hence, (13) should also be added to the range in (12b-e).

- (13) a. [PRO – anaphor] (no sentence-internal antecedent for the PRO)
 b. antecedent_i – [PRO_j – anaphor_i]
 c. antecedent_i – [PRO_i – anaphor_j]

For the configuration in (13a), see (14), which is from the Hungarian National Corpus.

- (14) *A demokráciához hozzátartozik [PRO egymás meghallgat-ás-a].*
 the democracy.to belongs each.other listen-DEV-POSS.3SG
 ‘Listening to each other is part of democracy.’

This example clearly shows the self-contained nature of CENs as the sentence does not include a controller for the subject of the CEN. The reference of the PRO-anaphor pair must then be determined by the context, that is, on a logophoric basis. The default choice is when the PRO and the anaphor are co-referent, but this does not necessarily have to be the case, as further examples will demonstrate.

(10), repeated here as (15a) is an example with a reflexive. Here, *magam* ‘myself’ is the sole argument of an intransitive CEN, so here not even a PRO binder is possible. Replacing the first person reflexive with a second person one degrades the sentence, as the speaker’s

⁹ It must be noted that even though *való* may be glossed as ‘being’ the grammatical behavior of these items is quite different. In CENs, *való* is a grammatical formative that licenses the appearance of complements and adjuncts of the base-verb. For discussion, see Laczkó (1995).

perspective, being the default point of view, is generally much more accessible than the hearer's. *Magad* 'yourself' may be licensed if the 2SG logophoric center is explicitly introduced, as in (15b).

- (15) a. *A világ megváltoz-ás-á-t csak [a magam (/?magad)*
 the world change-DEV-POSS.3SG-ACC only the myself yourself
megváltoz-ás-a] teszi lehetővé.
 change-DEV-POSS.3SG makes possible.TRANSL
 'The change of the world is only possible through the change of myself.'
- b. *Szerinted a világ megváltoz-ás-á-t [a magad*
 in.your.opinion the world change-DEV-POSS.3SG-ACC the yourself
megváltoz-ás-a] teszi lehetővé.
 change-DEV-POSS.3SG makes possible.TRANSL
 'In your opinion, change of the world is only possible through the change of yourself.'

(13b-c), with the PRO and the anaphor contra-indexed, are clear instances of uses that are exempt from standard Binding Theory, as the antecedent is not the locally available PRO, but some distant element of the sentence. Some examples for this are shown in (16) and (17).

- (16) *Ez az izgatottság_i nem [a PRO_j maga_i megszüntet-és-é-t]*
 this the excitement not the itself eliminate-DEV-POSS.3SG-ACC
kívánta, hanem a fokozódását.
 wished.3SG but the intensification.ACC
 'This excitement did not wish for its elimination, but for its intensification.'
- (17) a. *A fiúk_i látták [PRO_j egymás_i megviccel-és-é-t].*
 the boys saw.3PL each.other prank-DEV-POSS.3SG-ACC
 'The boys saw each other's pranking.'
- b. *A fiúk_i látták [PRO_i egymás_j megviccelését].*

(16) is an example from the Hungarian National Corpus. While elimination by itself might be an interpretation, a more plausible option is that somebody else does something that causes the excitement to cease to exist.

(17a) could describe a situation whereby the boys see that somebody else plays pranks on their (the boys) fellows. So members of the boy-group eyewitness how other members fall victim of pranks.

Interestingly, adding a first person logophoric center does not decrease the acceptability of the sentence:

- (18) *Úgy érzem, a fiúk_i látták [PRO_j egymás_i megviccel-és-é-t].*
 so feel.1SG the boys saw.3PL each.other prank-DEV-POSS.3SG-ACC
 'I feel that the boys saw each other's pranking.'

This is surprising for the following reason. We saw in (15) that a first person logophoric center is the most prominent one. So it should disrupt the logophoric dependency between

egymás ‘each other’ and the boys in (18), as the interpretation of *egymás* should gravitate towards the first person matrix subject. Yet this does not happen: (17) is entirely natural.

I cannot give a definite explanation here but the following options seem to be available. The less radical one is that the notion of logophoric center needs to be refined in order to allow for the boys to be recognized as such in (18).

Alternatively, one may hypothesize that *egymás* (‘each other’) is not logophoric in this example. This, however, has far-reaching consequences. If *egymás* ‘each other’ is just a run-of-the-mill anaphor, it is locally bound by *a fiúk* ‘the boys’. This casts doubt on the presence of the PRO and the CEN being a self-contained domain for binding. This would be a major shift in the analysis of CENs, one that reaches beyond the ambitions of this paper. Research should be carried out on this matter in the future.

(17b) is about a situation where the boys play a prank on some other group and they (the boys) see this. If the binder of the anaphor is not the main clause subject, *egymás* (‘each other’) must include the speaker, as a discourse-salient participant.

Admittedly, this interpretation is rather hard to get. This effect could result from difficulty of construal, as there is something odd about the situation whereby the boys see them(selves) doing something. If we replace the verb with *unják* ‘be.bored.3PL’, the meaning of the sentence becomes more plausible.

- (19) A *fiúk_i* *unják* [az *PRO_i* *egymás_j* *megviccel-és-é-t*].
 the boys be.bored.3PL the each.other prank-DEV-POSS.3SG-ACC
 ‘The boys are bored by each other’s pranking.’

While these interpretations are possible, they do strike as odd. Why should this be the case? Part of the answer may be that the logophoric uses of anaphors are always a marked option compared to regular binding, the latter being the default interpretational mechanism. Hence, if a local antecedent is available, binding by this local antecedent is preferred over the logophoric interpretation. This militates against contra-indexing the PRO and the anaphor. We will return to this issue in section 4.

With such considerations in mind, let us now look at Kenesei’s related remark (2005: 166) that the j-j indexing is rather difficult to get with the reflexive in (20a). (20b) is a CEN-version of the sentence and the same situation arises.

- (20) a. ?A *fiúk_i* *elolvasták* [a *PRO_j* *magukhoz_j* *írt* *verseket*].
 the boys read.PAST.3PL the themselves.to written poems.ACC
 ‘The boys read the poems written to themselves.’
 b. ?A *fiúkat_i* *idegesíti* [a *PRO_j* *magukhoz_j* *való* *versír-ás*].
 the boys.ACC annoys the themselves.to való poem.write-DEV
 ‘The boys are annoyed by the poem-writing to themselves.’

As already noted, logophoric interpretations are best if they represent the perspective of the speaker, who is the most prominent discourse participant. *Maguk* ‘themselves’ is third person, which is actually the least accessible person, so it is expected that *maguk* is dispreferred in (20) as a logophor. If we replace it with *magunk* ‘ourselves’, (20) becomes much better, see (21).

- (21) a. A *fiúk elolvasták [a PRO magunkhoz írt verseket].*
 the boys read.PAST.3PL the ourselves.to written poems.ACC
 ‘The boys read the poems written to ourselves.’
- b. A *fiúkat idegesíti [a PRO magunkhoz való versír-ás].*
 the boys.ACC annoys the ourselves.to való poem.write-DEV
 ‘The boys are annoyed by the poem-writing to ourselves.’

On top of this there is a formal problem: both *the boys* and *themselves* are third person plural noun phrases, which makes the referential distinction more difficult, due to processing reasons. Thus, a first person subject in (22) also improves the sentence considerably.

- (22) a. *Eolvastam [a PRO_j magukhoz_j írt verseket].*
 read.PAST.1SG the themselves.to written poems.ACC
 ‘I read the poems written to themselves.’
- b. *Engem idegesít [a PRO_j magukhoz_j való versír-ás].*
 me annoys the themselves.to való poem.write-DEV
 ‘I am annoyed by the poem-writing to themselves.’

The upshot of this discussion is that once logophoricity is taken into account, the interpretation of the anaphors extends to a larger range than it is apparent from Kenesei (2005) and Laczkó (2000, 2005, 2008, 2009). However, apart from the though-provoking phenomenon discussed in connection with (18), the basic analyses presented in these works are still valid.

3.3 The pragmatics of NOC-PRO

In the spirit of Landau (2013: 256), in this section I use “pragmatic” as a broad label for the conceptual or information-structure-related properties of the NOC-PRO.

Both Kenesei and Laczkó subscribe to the view that the NOC-PRO must have a +HUMAN reference. However, according to Landau (2013: 246–256) logophoricity and information structure also play a role, so a more complete formulation is the following:

- (23) NOC-PRO is +HUMAN and [+LOGOPHORIC *or* +TOPICAL].

Let us consider these features in some detail. Take the +HUMAN restriction first. (24a), from Laczkó (2008: 112) is a typical PRO_{arb(itrary)} example. The PRO (according to the standard view) can only be interpreted as referring to humans, not e.g. animals. (24b) is the CEN-version of this sentence, and the same appears to hold.

- (24) a. *PRO_{arb} to cross the street here is dangerous.*
- b. *[Az úton való PRO_{arb} átmén-és] veszélyes itt.*
 the street.on való cross-DEV dangerous here
 ‘Crossing the street is dangerous here.’

Upon further inspection, it seems plausible that the +HUMAN restriction is just illusory, arising as a by-product of logophoricity: humans, as opposed to nonhumans, are typically conceptualized as conscious beings. Accordingly, it is humans and not nonhumans that are easily construed as logophoric/perceptual centers.

In fact, Laczkó (2008: 124–125) mentions that in the review of that article, István Kenesei discusses example (25), where the subject of *megcsípése* ‘stinging’ is non-human. The same phenomenon may be observed in (26), which is from the Hungarian version of David Attenborough’s series “Life on Earth” (1979), episode 10. There, it is dolphins who recognize each other.

- (25) *A méhék tudják, hogy [Anna megcsíp-és-e] veszélyes.*
 the bees know.3PL that Ann sting-DEV-POSS.3SG dangerous.
 ‘The bees know that the stinging of Ann is dangerous.’

- (26) Context: speaking about dolphins’ communicative signals.
Megint mások [egymás felismer-és-é-t] teszik lehetővé
 yet others each.other recognize-DEV-POSS.3SG-ACC make.3PL possible
nagyobb távolságról.
 larger distance.from
 ‘Others (i.e. other sounds) make recognizing each other from a larger distance possible.’

Laczkó (2008: 124–125) argues that in (25), the bees get a “personified or humanized” interpretation, so (24) does not count as a genuine counter-example. Presumably, the same would apply to (26). The problem is that with the lack of clear criteria for a “personified or humanized” interpretation, this claim is not falsifiable, as any potential counter-example could be cast aside in this manner. A +ANIMATE or +SENTIENT (e.g. for intelligent robots) feature restriction may be more appropriate, but the more general point is that the referent should be one the perspective of which can be assumed.

This brings us to the logophoric nature of the NOC-PRO, which may be illustrated with (27), which Landau (2013: 245) cites from Kuno (1974).

- (27) a. *John said to Mary_i that it would be easy PRO_i to prepare herself_i for the exam.*
 b. **John said about Mary_i that it would be easy PRO_i to prepare herself_i for the exam.*

In (27a), *Mary* expresses the goal of the communication. As such, her mental state/perspective is involved in the event, thus she may be co-indexed with the PRO (which binds the reflexive). In (27b), *Mary* has a subject matter semantic role and her mental state is not evoked. Accordingly, *Mary* does not control the PRO, leaving the anaphor unbound (the exempt, logophoric use of the anaphor is unavailable for the same reason, *Mary* not being a logophoric center).

According to (23), non-logophoric elements can still control NOC-PRO, if they are topical. This may be behind the contrast in (28) (from Landau 2013: 251), as indefinites (introducing new discourse referents) are much harder to construe as topics than definites. Also note that while the dolphins are not sentence-topics in (26) above, they are recently mentioned

discourse-topics, which fact probably contributes to their ability to act as controllers of the NOC-PRO.

- (28) a. *[After PRO_i collecting some money], a bank account was opened by the landlord_i.*
 b. **[After PRO_i collecting some money], a bank account was opened by a businessman_i.*

Admittedly, the exact working-mechanism and interaction of these factors are not sufficiently studied and much more work is needed to establish solid generalizations. For example, an apparent complication is that the “*said about X*”-phrase is thought of as a topic-diagnostic for X by some researchers (e.g. Reinhart (1981)). Nevertheless, this does not enable *Mary* to function as a controller in (27b).

As the subjects of CENs are NOC-PROs, we expect to observe these effects. Moreover, Hungarian is a discourse-configurational language, with designated structural positions for topics. As a result, in principle it is well-suited for such enquiries. For our purposes it is enough to adopt the view that in Hungarian neutral sentences, preverbal, left-peripheral referential elements are interpreted as topics.¹⁰

It was noted in section 3.2 that apart from the preference for regular, local binding, there could be an additional factor behind the dispreferred nature of contra-indexation in (17)/(19), repeated here as (29).

- (29) a. *A fiúk látták / unják [PRO egymás megviccel-és-é-t].*
 the boys saw.3PL be.bored.3PL each.other prank.DEV-POSS-3SG-ACC
 ‘The boys saw/are bored by each other’s pranking.’
 b. ?a fiúk_i – [PRO_i – each other_j] c. ?a fiúk_i – [PRO_j – each other_i]

From our “pragmatic” perspective, note that we have two elements in (29) which are sensitive to such factors: the (logophorically interpreted) anaphor and the NOC-PRO. The DP *a fiúk* ‘the boys’ functions as an experiencer argument in the topic position of the sentence, so according to (23), it is a perfect controller for the NOC-PRO.¹¹ Thus having a j-index on PRO is dispreferred. This, coupled with the noted preference for regular binding, instantly provides a strong incentive for an [i-i] indexing for PRO and the anaphor.

If we opt for the marked option of regarding the anaphor as an exempt one, we should interpret it logophorically. However, the referents of *the boys* are logophoric centers, so assuming a different one for the anaphor ([i-j] or [j-i] index) results in having to maintain a double perspective, potentially causing an additional processing burden. J-j is better in this respect: even though the logophoric center is not the main clause subject, at least it is consistent with respect to the anaphor and the PRO.

If this line of thinking is along the right lines, we should be able to manipulate the control/binding patterns in CENs by modulating the mental states and the discourse functions

¹⁰ For an extensive overview of Hungarian sentence-structure in LFG framework, see Laczkó (2017).

¹¹ Landau (2013: 247) remarks that “experiencer arguments figure (...) commonly as NOC controllers; an experiencer argument is one whose mental perspective is necessarily invoked”. See the contrast below.

- i. a. *[PRO_i having just arrived in town], the main hotel seemed to Bill_i to be the best place to stay.*
 b. **[PRO_i having just arrived in town], the main hotel collapsed on Bill_i.*

in sentences with CENs. While the conclusions in this section are tentative, and should be subject to empirical testing, there does seem to be some merit to the aforementioned considerations even at this point.

Consider the sentences in (30), which are based on (29), but a subject-oriented adverb is added to the beginning.

- (30) a. *Szerintem_j a fiúk_i unják [az PRO egymás megviccel-és-é-t].*
 in.my.opinion the boys be.bored.3PL the each.other prank.DEV-POSS-3SG-ACC
 ‘In my opinion, the boys are bored by each other’s pranking.’
 PRO_j – egymás_j PRO_j - egymás_i ?PRO_i – egymás_j
- b. *Szerintem_j a fiúk_i unják [a PRO magunk megviccel-és-é-t].*
 in.my.opinion the boys be.bored.3PL the ourselves prank.DEV-POSS-3SG-ACC
 ‘In my opinion, the boys are bored by our own pranking.’
 PRO_j – magunk_j *PRO_j – magunk_i ??PRO_i – magunk_j

Szerintem (‘in.my.opinion’) has explicitly introduced a new logophoric center to the sentence (the 1SG speaker). By this phrase acting as some sort of a “cognitive anchor”, now it is easier to have a [j]-index on either the PRO or the anaphor in (30a). The j-j index is entirely natural, it means that the boys are bored by the fact that the speaker’s company play pranks on each other. [J-i] means that they speaker and the speaker’s company play pranks on the boys, and the boys are bored by this. [I-j], where the boys play pranks on the speaker’s company (and the boys are bored by this) is still the hardest to get, but it is more easily available than in (19).

The reflexive seems more restricted. It is a simple feature-conflict under [j-i] (remedied by using a matching reflexive, *maguk* ‘themselves’,¹² but I have no ready explanation for the question marks on i-j. A point to consider here is that, the reciprocal has no “competition” for expressing the same sort of meaning, while a logophoric reflexive has: personal pronouns, or other, specialized reflexive items like *ön-maga* (approx. ‘own-self’, see Rákosi (2009)) or *jómaga* (approx. ‘good-self’, see Rákosi (2013)).¹³ In any case, this is not directly relevant to the point at hand, which is the interpretation of NOC-PRO. As we can see, introducing a new logophoric center can indeed facilitate the disjoint interpretation of the PRO subject of CENs.

Another way to achieve this effect is to replace the main verb with one that assigns a theta role to the relevant argument that does not imply mental involvement. For this purpose, let us try *érint* (‘affect’) and compare it with *zavar* ‘bother’. The first one has a patient object, while the latter one has an experiencer object.¹⁴ We expect that giving different indices to the sentence-internal controller (the boys) and PRO should be easier with *érint*.

- (31) a. *A fiúkat_i eléggé zavarja [PRO_j egymás_j megviccel-és-e].*
 the boys.ACC quite bothers each.other prank-DEV-.POSS.3SG
 ‘Pranking each other bothers the boys quite a bit.’

¹² Note that unlike reciprocals, reflexives are marked for person and number.

¹³ This has been pointed out to me by György Rákosi (p.c.).

¹⁴ It has to be noted that the subject of *érint* (‘affect’) may also be interpreted as an experiencer. It is crucial to interpret *érint* ‘affect’ here in the non-experiencer sense, that is, when the event has some effect on the patient, but the patient is unaware of this.

- b. A *fiúkat_i* *eléggé érinti* [*PRO_j* *egymás_j* *megviccel-és-e*].
 the boys.ACC quite affects each.other prank.DEV-POSS.3SG
 ‘Pranking each other affects the boys quite a bit.’

Here, my own intuition detects a preference for (31b), but the effect is not particularly drastic. However, the constituent *the boys* is topical in both sentences, so it is a fully eligible candidate as a controller, under the restriction outlined in (23). To eliminate this, let us remove *the boys* from the sentence-initial topic-position, as in (32).

- (32) a. [*PRO_j* *egymás_j* *megviccel-és-e*] *eléggé zavarja a fiúkat_i*.
 each.other prank-DEV-POSS.3SG quite bothers the boys.ACC
 ‘Pranking each other bothers the boys quite a bit.’
- b. [*PRO_j* *egymás_j* *megviccel-és-e*] *eléggé érinti a fiúkat_i*.
 each.other prank-DEV-POSS.3SG quite bothers the boys.ACC
 ‘Pranking each other affects the boys quite a bit.’

Again, pending careful empirical testing, caution should be exercised with drawing conclusions but it seems to me that the indicated reading is more accessible in (32b) than in (32a). The contrast is strongest when (31a) and (33b) are compared. In the former, *a fiúk* ‘the boys’ is +LOGOPHORIC and +TOPICAL while the latter case is just the opposite in terms of these properties. This makes *the boys* a likely controller for the PRO of the CEN in the first one and an unlikely one in the second. Of course, explicitly adding a first person perspective further enhances the j-j reading. In (33), j-j is clearly preferred over the one where *the boys* are tied to the PRO and the anaphor.

- (33) *Szerintem* [*PRO_j* *egymás_j* *megviccel-és-e*] *eléggé érinti a fiúkat_i*.
 in.my.opinion each.other prank-DEV-POSS.3SG quite affects the boys.ACC
 ‘In my opinion, pranking each other affects the boys quite a bit.’

In conclusion of this section, we can say that the pragmatic considerations discussed here do not affect the core of the analyses put forward in Kenesei (2005) and Laczkó (2000, 2005, 2008, 2009), but they provide an interesting subtlety.

4 Conclusion

In this paper, I discussed three factors that affect the analysis of the control and binding patterns of Complex Event Nominals (CENs) in Hungarian: semantic exhaustivity, logophoricity and the pragmatics of the non-obligatorily controlled PRO. The article does not contradict the accounts of Kenesei (2005) and Laczkó (2000, 2005, 2008, 2009). Nevertheless, it was shown that the overall picture is more complex than the one that emerges from their investigations. My main claims are as follows, in the form of a Laczkó-style list.

- I. The semantic nature of the main predicate (in particular, the entailment of exhaustivity) affects the interpretation of CENs. Therefore, some predicates may interfere with the indexing patterns of the otherwise non-obligatorily controlled PRO.

- II. CENs are likely to be binding domains. The following two issues are to be highlighted here.
- IIa. Most apparent counter-examples may be explained in terms of logophoricity, the discourse/perspective-based interpretation of anaphors. These cases are exempt from standard Binding Theory.
- IIb. In some cases, (see (18)), the logophoric explanation is not uncontroversial. Such examples may (or may not) lead to the rethinking of the background assumptions behind the analysis of CENs (them being a binding domain, including an unexpressed subject).
- III. As the NOC-PRO is +HUMAN and [+LOGOPHORIC *or* +TOPICAL], modulating the predicate and/or the information-structure of the sentence with a CEN affects the interpretation of this unexpressed subject.

As is clear from the discussion, the exploration of Complex Event Nominals needs the consideration of a complex web of factors that ranges from morphosyntax to information-structure.

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