# Kenesei István Nonfinite clauses in derived nominals [In: Christopher Pinon and Péter Siptár (eds.), *Approaches to Hungarian, Vol. 9*, Akadémiai Kiadó, Budapest (megj. alatt)]

#### Nonfinite clauses in derived nominals<sup>\*</sup>

Research Institute for Linguistics of the Hungarian Academy of Sciences and Department of English, University of Szeged ikenesei[at]nytud.hu (November 2003)

### 1. Overview

This paper sets out to show that, contrary to common wisdom, complex event nominals in Hungarian (or CENs hereunder) do not arise through a purely lexical process involving a change in argument structure (demotion, promotion and the like) but are a result of a syntactic derivation that crucially relies on the assumption that CENs have clausal properties. I will first review earlier work demonstrating that undisputed nonfinite clauses in Hungarian exhibit more arguments than had been thought to exist before. The method of acquiring this evidence is introduced and its consequences explained. This move is necessary because similar arguments will be made use of in discussing at least one aspect of CENs, which will point towards the need to accept the clausal derivation. Then new data will be listed showing that CENs, too, have more argument positions than can be accommodated in the previous proposals and that properties of (non)resumption are incompatible with lexical derivation. Finally, a somewhat intricate new analysis will be presented, which is based on den Dikken's (1999) analysis of Hungarian possessive DPs.

#### 2. Nonfinite clauses

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That Hungarian nonfinite constructions are clauses is no longer questioned even in the most traditional quarters of Hungarian linguistics. Although there have been attempts to classify nonfinite verb forms into one or the other of the major word classes or their own separate classes, they have never exerted any influence on the view held by generative linguists that the constructions that they are parts of are indeed clauses, and not, say, adjectival or adverbial phrases.

# 2.1. Undisputed argument structures in nonfinite clauses

There is also general agreement that in some of these nonfinite clauses at least one argument can be covert at Phonetic Form, but visible at the level of Logical Form. One such example comes from a construction containing a simple active converb (or in traditional terms: an adverbial participle).<sup>2</sup>

a. [PRO1 a labdá-t rúg-va] (mi1) haza-men-t-ünk.

the ball-ACC kick-SACVB home-go-PAST-1PL 'Kicking the ball, we went home.'

b. \*[PRO beesteled-ve] haza-men-t-ünk. evening-fall-SACVB home-go-PAST-1PL

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<sup>&</sup>lt;sup>2</sup> Abbreviations: APRT = active/present ('adjectival' or attributive) participle; PPRT = passive/past ('adjectival' or attributive) participle; SACVB = simple active converb (= 'adverbial' participle); PFCVB = perfective converb; OP = empty operator; PV = preverbal prefix; DEV = deverbal nominalizer affix; POSS = possessive affix (marked on the possessed noun)

'(With) evening coming, we went home.' (Cf. the comparable English example: '\*Raining, we went home.')

c. \*[úgy tűn-ve [hogy esik]] haza-men-t-ünk. thus appear-SACVB that is-raining home-go-PAST-1PL 'Appearing that it was raining, we went home.'

In the case of simple active converbs, as in (1a), we face full argument structures with PRO subjects with null or no Case marking and under obligatory control. The PRO subject of the weather verb in (1b) cannot be controlled for obvious reasons: in fact, weather verbs cannot have PRO subjects at all, since PRO is either controlled (whether under obligatory control, i.e., c-command, or nonobligatory control), and then it cannot serve as the nonreferential pronominal subject of the weather predicate, or has arbitrary reference, when it has to be [+human], an option unavailable for the subject of weather verbs. Furthermore, even apparently nonpronominal expletives like igy (literally: 'thus') are prohibited, as shown in (1c). The reason is again simple: although igy is homonymous with the nonproximate deictic manner adverbial, in this type of construction it is a dummy for the nonfactive option of the usual, but often factive, pronominal expletive az 'it', as argued, for instance, in Kenesei (1994) on the basis of examples such as these:

- 2 a. Az látszik, hogy esik. it seems that is-raining 'It is visible that it's raining.'
  - b. Úgy látszik, hogy esik.
    thus seems that is-raining 'It seems that it's raining.'

Another type of converb is the active perfective one, which has the peculiar behavior of allowing for a nominative-marked subject.

3 a. [Péter a labdá-t el-rúg-ván] haza-men-t-ünk. Peter the ball-ACC PV-kick-PFCVB home-go-PAST-1PL '(With) Peter having kicked the ball away, we went home.'

- b. [*pro*<sub>i</sub> beesteled-vén] (mi<sub>j</sub>) haza-men-t-ünk. evening-fall-PFCVB we home-go-PAST-1PL '(With) evening having come, we went home.'
- c. [úgy tűn-vén [hogy esik]] haza-men-t-ünk.
  thus appear-PFCVB that is-raining home-go-PAST-3PL
  '(With it) appearing that it was raining, we went home.'

This type of converb construction has full overt argument structure, with the nominative-marked subject possibly arising due to the somewhat mysterious *-n* affix on the converb, which is reminiscent of the third person singular affix on imperative/subjunctive forms and archaic indicatives, cf.: *men-j-en* 'go-IMP-3SG' or *megy-en* 'go-3SG'. Arguably, nominative in Hungarian correlates well with Agreement, rather than with Tense, as was claimed in relation to another idiosyncratic nonfinite form in Kenesei (1986). At the time this view received strong support from Szabolcsi's (1981, 1984) position concerning the Hungarian possessive construction, later refurbished and systematized in Szabolcsi (1994). Although her arguments and conclusion have been challenged by den Dikken's (1999) recent analysis, which will be presented in more detail below, the fact remains that, discounting possessives, we witness nominative-marked subjects in at least three distinct constructions, two of which are nontensed, where the presence of Agreement is indisputable.

In the perfective converb construction exemplified in (3) weather verbs are perfectly possible, clearly due to the nominative-marked and suppressed expletive *pro*, as in (3b). Moreover, the nonfactive expletive igy can also surface here, giving further support to our position of regarding it as a variant of the general expletive az, see (3c).

#### 2.2. New evidence for more arguments in nonfinite clauses

Nonfinite clauses exhibit more arguments than has been taken for granted before. The reasoning to follow is based on the properties of binding, that is, coreferential expressions containing pronominals and anaphors. As is wellknown, the classical version of the Binding Principle (cf. Chomsky 1981) specifies that pronominals and anaphors are in a complementary distribution with respect to a local domain in the following manner:

- 4 A) Anaphors must be bound in a local domain.
  - B) Pronominals must be free in a local domain.

The example below illustrates the fact that while an anaphor takes a c-commanding antecedent in the local domain marked by the brackets, a pronominal is prevented from choosing an antecedent in a similar configuration. In other words, the anaphors *each other* or *themselves* must have identical reference with the subject *the boys* in their local domain, but the pronominal *them* must not take *the boys* as its antecedent; it can, however, be coreferent with any noun phrase outside this domain, including *the girls* in our example, as shown by the (starred) indices.

5 a. The girls<sub>1</sub> don't know that [the boys<sub>2</sub> can see each other/themselves<sub>2/\*1</sub>] b. The girls<sub>1</sub> don't know that [the boys<sub>2</sub> can see them<sub>1/\*2</sub>]

Note that the exact form of the Binding Principle, or the theoretical developments challenging its coverage, are irrelevant here: all we are interested in is the fact of the complementary distribution between pronominals and anaphors in some well-defined domain, which is unquestionable in these and the following examples.

Having now set the scene, let us introduce the new data from nonfinite clauses. Passive (or more traditionally: past) participle clauses are analyzed in current literature as containing the internal argument as a phonetically null PRO subject coreferent with the head nominal that the nonfinite clause modifies, cf. Laczkó 2000, É. Kiss 2002.<sup>3</sup>

6 [<sub>DP</sub> a [<sub>NP</sub> [<sub>VP</sub> PRO [<sub>PP</sub> János által] [<sub>v</sub> megold-ott]] [<sub>N</sub> feladat]]] the János by solve-PPRT problem 'the problem solved by János'

Sure enough, the nonfinite clause labelled as VP in (6) behaves as a prenominal (restrictive) relative clause, therefore there must be some relationship between an invisible constituent inside it and the head nominal. But it certainly cannot be realized by means of a PRO, which may have two and only two versions as transpires from the literature. PRO can have arbitrary (human) reference, as for instance in the sentence *To bark is dangerous* For anyone to bark is dangerous', an option unavailable for the nonfinite construction above. Or it could be the canonical 'pronominal anaphor', whether under obligatory (as in *Jim<sub>i</sub> wants PRO<sub>i</sub> to leave*), or nonobligatory control (as in the example *PRO to leave would be something that Jim would never dare to do*). But in this latter case PRO must have a full independent DP as its antecedent, rather than a DP, or even less than a DP, that it is sitting inside. The fact that the clause containing the PRO in question is *inside* the DP that it ought to be coreferential with runs counter to the *i-within-i* principle, which rules out precisely this type of configuration.<sup>4</sup>

(ii) [[every man] [who saw himself]]

<sup>&</sup>lt;sup>3</sup> The example is from Laczkó (2000: 410), who works in a Lexical Functional Grammar framework, with a slight change in showing PRO as not absorbed by the verb as is shown by the "SUBJECT = PRO" label below the category V in the original example, but placing it under a distinct node as is customary in Government and Binding Theory.

<sup>&</sup>lt;sup>4</sup> "\*[ $_{\gamma}$  ...  $\delta$  ...], where  $\gamma$  and  $\delta$  bear the same index." (Chomsky 1981: 212). Chomsky then adds footnote 62, which exempts relative clauses from the prohibition, citing the example in (i).

<sup>(</sup>i) [<sub>NPi</sub> [<sub>NPi</sub> The man] [<sub>S'</sub> who<sub>i</sub> [ t<sub>i</sub> saw himself<sub>i</sub>]]]

Note first that the implied identity of the entire NP, the head nominal and the relative pronoun is highly implausible. Secondly, further examples, such as (ii), would throw doubt upon the general applicability of the exemption, but even if we grant that it works, a relative pronoun certainly differs from PRO in its referential properties.

Clearly, the head nominal *every man* is not coreferential with the relative pronoun, let alone with the entire NP, since the semantic reading of the construction is in accordance with the logic of the expression: 'for every *x*, such that *x* is a man, *x* saw *x*'. In other words, the quantifier *every* is outside of the identification carried by the indices.

If then PRO is not a possible candidate to identify the phonetically empty argument in passive participles, then we are left with two choices: either the head nominal is moved out of the clause or we suppose that it is an empty operator, since it is this type of device that can serve as a suppressed relative pronoun. We will follow the latter option here, without attributing any theoretical significance to the choice. The participial clause in (6) will then be rendered as (7), with the empty operator OP coindexed with the head nominal *feladat* 'task'.

7 [<sub>DP</sub> a [<sub>NP</sub> [<sub>VP</sub> OP<sub>i</sub> [<sub>PP</sub> János által] [<sub>v</sub> megold-ott]] [<sub>NPi</sub> feladat]]] the János by solve-PPRT task 'the task carried out by János'

Note that the head nominal is not necessarily the minimal N, but can contain quantifiers (e.g. *minden* 'every'), numerals (e.g. *három* 'three'), or adjectives (e.g. *nehéz* 'difficult'), aligning the prenominal relative clauses with the postnominal ones.<sup>5</sup>

Having clarified the status of the empty subject in these (and other) prenominal participial relative clauses, let us now turn to the occurrence of coreferential pronominals and anaphors inside such constructions. As seen in the examples below, both types of expressions are compatible with the same antecedent.

- 8 a. A lányok<sub>i</sub> elolvasták az [OP egymáshoz<sub>i</sub>/magukhoz<sub>i</sub> ír-t] verseket] the girls read the to-each-other/themselves write-PPRT poems-ACC 'The girls read the poems written to each other/themselves.'
  - b. A lányok<sub>i</sub> elolvasták a [OP hozzájuk<sub>i</sub> ír-t] verseket] the girls read the to-them write-PPRT poems-ACC 'The girls read the poems written to them.'

In (8a) the anaphors must have a local c-commanding antecedent and the only possible choice is the matrix subject *a lányok* 'the girls'. But if the relevant local domain is the matrix clause in (8a), how is it possible for the pronominal in (8b) to corefer with the same matrix subject, when it must not be bound in this very domain. Suppose that the relevant local domain in (8b) is the clause in the inner brackets; then the pronominal is free inside this domain and can choose the matrix subject as its antecedent. But then the anaphors in (8a) must be bound in the same local domain, which in turn contains no possible antecedent: the empty operator stands in for the head noun and there seems to be no room for the agent argument of the verb *ir* 'write'. This state of affairs leaves us no other alternative than provide this place for an empty external argument, i.e., subject, in passive participles.

This move has various consequences. First of all, we have to revise the received view of Hungarian prenominal passive participial clauses, according to which they arise by demoting or suppressing their subjects, which can only be rendered in Hungarian by the equivalent of English *by* adjunct phrases, as the following example illustrates.

- 9 a. A lányok<sub>j</sub> elolvasták a [[OP diákok<sub>i</sub> által egymáshoz<sub>i</sub>/magukhoz<sub>i</sub> ír-t] verseket] the girls read the students by to-each-other/themselves write-PPRT poems-ACC 'The girls read the poems written to each other/themselves by the students.'
  - b. A lányok<sub>i</sub> elolvasták a [[OP diákok<sub>j</sub> által hozzájuk<sub>i</sub> ír-t] verseket] the girls read the students by to-them write-PPRT poems-ACC 'The girls read the poems written to them.'

That overt subjects cannot occur in these clauses is undeniable, and the examples in (9) serve to show by what device they can surface in them. But the empty subject (= external argument) in (8a-b) can easily be the phonetically empty

(i) [<sub>DP</sub> a [<sub>NP</sub> [<sub>VP</sub> OP<sub>i</sub> János által megold-ott] [<sub>NPi</sub> minden/három [<sub>NP</sub> nehéz [<sub>N</sub> feladat]]]]] the János by solve-PPRT every/three difficult problem 'the three/every difficult problem/s solved by János'

If quantifiers, numerals and adjectives project their own QPs, NumPs, and APs, respectively, the labelling changes accordingly.

<sup>&</sup>lt;sup>5</sup> As in the following example:

pronominal anaphor PRO, possibly controlled by the matrix subject. Then the empty operator retains its (original) object position with the proviso that in passive participles accusative marking is missing. If there is no case marking, there can be no overt DP under Visibility: that is why we must have an empty operator.<sup>6</sup> Needless to say, neither is there nominative marking in this type of participle, which is why the only option for the subject is to surface as PRO. The resulting structure is then given below.

# 10 a. A lányok<sub>i</sub> elolvasták az [[OP PRO<sub>i</sub> egymáshoz<sub>i</sub>/magukhoz<sub>i</sub> ír-t] verseket]

# b. A lányok<sub>i</sub> elolvasták a [[OP PRO<sub>i</sub> hozzájuk<sub>i</sub> ír-t] verseket]

As is confirmed by native speakers' intuition, (8b/10b) indeed has the reading assigned: that is, the poems had to be written by someone other than the girls in case the pronominal takes the matrix subject as its antecedent. Also, as an alternative to the reading given in (8/10a), in case of an adequate context it can be interpreted as follows: some people have written poems to each other and the girls read those poems written (by those people) to each other. (Note here that the version with the reflexive is more difficult, if not impossible, to construe with reference to someone other than the girls.) In other words, in neither case is the PRO embedded subject under obligatory control.

Under these circumstances it must be concluded that passive participles do not exhibit the properties of subject demotion or suppression. In this respect at least, they are in line with 'ordinary' passive constructions, which neither demote or suppress their external arguments.<sup>7</sup> What is at work in this subtype of nonfinite clauses is case withdrawal, that is, no assignment of accusative or nominative case is possible here, but nothing prevents phonetically pronominal anaphors and empty operators to be merged in subject and object positions, respectively. We must assume then that a transitive verb (i.e., a v-V complex) has no accusative case to assign, and, consequently, that accusative assignment arises in an interaction of the v-V structure with properties of the Tense head: some nonfinites allow for accusative case; others, including passivization in general, do not.

There is, however, independent evidence to show that subject demotion does take place in Hungarian nonfinite forms, though in an entirely different process. This language abounds in lexical derivational processes, one of which produces middles from transitive verbs. In the examples at hand, transitive agentive ir 'write' becomes the middle ir- $\delta d$ -(ik) ca. 'be written', promoting the object into subject and requiring that the original external argument be suppressed and not even expressible in a *by* adjunct. Unlike the syntactic process of participle formation, the derivation of middles is a true lexical process with a concomitant change in argument structure. Now this middle verb can also serve as the basis of the (so-called) passive participle (as all middles in Hungarian do). But if it is in such a participial clause, anaphors are impossible, although pronominals coreferential with the matrix subject can occur.

<sup>6</sup> Note that these passive/past participles can contain an overt object in case they relativize their subjects, cf.: (i)  $[_{DP} a [_{NP} OP_i sok vers-et ír-t] lány_i]]$ 

 $a [_{NP} [_{IP} OP_i]$ sok vers-et(r-t) $lány_i]$ themany poem-ACCwrite-PPRT girlca. 'the girl having written many poems'

<sup>7</sup> This generalization is due to Marcel den Dikken (personal communication). The familiar example quoted against the demotion or suppression of external arguments is given below, where the PRO subject of the rationale clause is controlled by the external argument of the passivized verb in the matrix clause.

(i) The ship was sunk [PRO to collect the insurance]

Incidentally, the assumption of PRO in nonfinite participial clauses receives support from the fact that it has an arbitrary [+human] interpretation, cf.:

A kutya meg-ugat-ott egy kisfiú-t.

the dog PV-bark-PAST a boy-ACC

'The dog barked at a boy.'

a meg-ugat-ott kisfiú

(ii)

(ii)

the PV-bark-PPRT boy

'the boy barked at (by someone/\*some dog)'

The discussion of further examples, such as *elárasztott terület* 'flooded area' and comparison with *NA* passives would lead us too far afield.

- 11 a. \*A lányok<sub>i</sub> elolvasták [[OP az egymásnak<sub>i</sub>/maguknak<sub>i</sub> ír-ód-ott] verseket] the girls read the to-each-other/themselves write-MID-PPRT poems-ACC 'The girls read the poems written<sub>MID</sub> to each other/themselves.'
  - b. A lányok<sub>i</sub> elolvasták [[OP a hozzájuk<sub>i</sub> ír-ód-ott] verseket] the girls read the to-them write-MID-PPRT poems-ACC 'The girls read the poems written<sub>MID</sub> to them.'

The pronominal can corefer with the matrix subject in (11b) because it is free in its local domain, which cannot be the full (matrix) clause. Consequently, the relevant local domain is the participial clause, whether or not there is a (lexical) subject inside the clause. Since the original external argument has been demoted here and the internal argument has been promoted to subject, there is a subject, namely, the empty operator.

In (11a), in turn, the anaphor must have a local antecedent and although the matrix subject c-commands it, it is not in the local domain of the anaphor. Since the only possible binder is the empty operator, there is no (available) antecedent in (11a). Moreover, we now have independent proof that in (8a/10a) there must be a subject for the anaphor to be bound by in the embedded nonfinite clause.

In what follows, we will make use of the binding properties of participial clauses to draw an analogy with complex event nominals, ultimately to show that the latter also have properties found in nonfinite clauses.

#### 3. Previous analyses of complex event nominals

3.1. The received view

Szabolcsi and Laczkó (1992) and Szabolcsi (1994) in a GB-theoretical approach, and Laczkó (2000a, 2000b) in an LFG framework, make the following, in part overlapping, claims with regard to complex event nominals (CENs):

- 12 a. Their heads are nouns.
  - b. They do not have plural forms.
  - c. They must be definite.
  - d. If they have one or more internal arguments, their external argument is rendered as an adjunct, and if not, it must be suppressed or at most made part of some lexical structure.
  - e. The (or one) internal argument (or, in its absence, the only external argument) is rendered as the possessor in a possessive construction.

The properties listed in (12a-c) are self-explanatory, though they will not be taken for granted here, as will be seen when they will be shown either to be untrue, as (12a), or derived from more general properties, as (12b,c). The examples below illustrate some of the properties presented in (12d-e).

- 13 a. \*a le-vizsgáztat-ás the PV-examine-DEV
  - b. a professzor levizsgáztat-ás-a
  - the professor PV-examine-DEV-POSS 'the professor's examination (= examining the professor)'
  - c. a professzor-nak a dékán által-i levizsgáztat-ás-a the professor-DAT the dean by-AFX PV-examine-DEV-POSS 'the professor's examination by the dean'

As was argued in the first systematic surveys of CENs in Szabolcsi and Laczkó (1992) and Szabolcsi (1994), perfective verbs, marked by preverbal prefixes, trigger processes leading exclusively to CENs, and transitive perfective verbs retain their internal arguments when changed into CENs, as shown by the contrast in (13a-b). The internal argument *a professzor* must be accommodated as the possessor in the possessive DP, the only slot available for it. Other arguments, including the external argument, can be rendered as postpositional premodifiers in the DP, see (13c), or in the somewhat mysterious *való*-construction.<sup>8</sup>

It was already noted in the works cited that a phonetically null external argument is not incompatible with CENs. PRO can either have arbitrary reference or be controlled, as the examples in (14) and (15) illustrate.

- 14 a. a falu eláraszt-ás-a the village flood-DEV-POSS 'the flooding of the village (by someone/\*by some river)'
  - b. Mari megcsíp-és-e Mari sting-DEV-POSS 'Mary's being stung (by someone/\*by some bee)'

- (i) a professzor-nak a dékán által való levizsgáztat-ás-a
  - the professor-DAT the dean by VALÓ PV-examine-DEV-POSS
    - 'the professor's examination by the dean'

<sup>&</sup>lt;sup>8</sup> The *való*-construction has been studied in detail in the generative literature on Hungarian, especially by Anna Szabolcsi in the works cited. *Való* is formally the active/present participle of the copula *van* 'be', and its function is to make possible for a case-marked or postpositional DP to occur as a premodifier inside the DP, cf. the example below, which is a possible version of (13c).

Note that when without the 'attributivizer' *való*, postpositional phrases are changed into premodifiers by the affix -*i*, as seen in (13c).

When an external argument is suppressed, the remainder of the construction is in principle compatible with both a [+human] and a [!human] interpretation for the suppressed argument, as in the English passive *John was hit* 'Someone/something hit John'. But, although both verbs underlying the examples (14a-b) allow [!human] subjects, the CENs illustrated must be interpreted as having [+human] agents. Consequently, the CENs in (14) must contain PRO<sub>arb</sub> with the standard interpretation.

Szabolcsi's second argument for PRO in CENs draws on the properties of control predicates. Among others, they can restrict the thematic role of the controlled argument, as illustrated below.

- 15 a. Péter abbahagyta a kocog-ás-t. Peter stopped the jog-DEV-ACC 'Peter stopped jogging.'
  - b. \*Péter abbahagyta az öreged-és-t.
    Peter stopped the grow.old-DEV-ACC
    'Peter stopped growing old.'

The verb *abbahagy* selects an agentive embedded subject, which is why (15b) is impossible, growing old not being a voluntary action. As a result, the appropriate thematic role must be carried by some entity.

Where this item is located is the next question we have to address. According to Laczkó's (1995, 2000b) proposal couched in the framework of Lexical–Functional Grammar, the external argument is suppressed in the following manner. The 'syntactic' PRO is mapped onto the POSS function in intransitive predicates, cf. (16a), while transitive predicates have a 'semantic', 'lexical' or 'null function' PRO, since in these constructions the POSS function has to be assigned to the object argument, cf. (16b).

- 16 a. Mária elkezdte [az énekl-és-t] Maria began the sing-DEV-ACC' 'Mary began singing.'
  - b. Mária elkezdte [a dal énekl-és-é-t]
    Maria began the song sing-DEV-POSS-ACC
    'Mary began (the) singing (of) the song.'

All sides agree then that overt external arguments cannot occur in CENs, but must be rendered as adjuncts. Whether phonetically null external arguments must be realized in syntax or are relegated to some kind of semantic or lexical level is the next issue we will study. Note that our analysis remains strictly within the bounds of the 'Principles and Parameters Theory', thus our proposals do not necessarily carry over to other models.

# 3.2. Data from binding, antiagreement and negation

First, we present examples of CENs relying on findings related to the binding configurations in section 2.2. Then we introduce new data based on antiagreement phenomena. Finally, some observations on aspect and negation inside CENs are noted in order to argue for the clausal nature of these constructions, before we propose our analysis of CENs in the next section.

The Binding Principles A and B operate the same way in Hungarian possessive DPs as they do in their English counterparts. In other words, both anaphors and pronominals can take a c-commanding DP outside the possessive DP as their antecedents.<sup>9</sup>

17 a. A fiúk<sub>1</sub> látták [egymás<sub>1</sub> rajz-á-t]

the boys saw each-other picture-POSS-ACC 'The boys<sub>1</sub> saw each other<sub>1</sub>'s pictures.'

<sup>&</sup>lt;sup>9</sup> Unless stressed, pronouns in possessives, such as  $\ddot{o}$  in (17b), are regularly dropped in Hungarian. However, for the sake of illustration full forms are presented here.

- b. A fiúk<sub>1</sub> látták [az ő<sub>1</sub> rajz-uk-at] the boys saw the he picture-POSS.PL-ACC 'The boys<sub>1</sub> saw their<sub>1</sub> pictures.'
- If, however, CENs are examined, a different distribution of grammaticality arises.
- 18 a. A fiúk<sub>1</sub> abbahagyták [egymás<sub>1</sub> rajzol-ás-á-t] the boys stopped each-other draw-DEV-POSS-ACC
  - 'The boys stopped drawing each other (lit.: each other's drawing).'
  - b. \*A fiúk<sub>1</sub> abbahagyták [az ő<sub>1</sub> rajzolás-uk-at] the he<sub>1</sub> draw-DEV-POSS.PL-ACC '\*The boys<sub>1</sub> stopped drawing them<sub>1</sub> (lit.: their drawing).'

While the anaphor continues to be apparently bound by the matrix subject in (18a), the pronominal in (18b) must have reference disjoint form that of the matrix subject. This is a scenario reminiscent of, though not equivalent with, the case of (8)-(10). If we followed Laczkó and Szabolcsi, we would have to suppose that the PRO controlled by the matrix subject has no syntactic presence and we are facing an ordinary possessive DP. But if the pronominal were in a possessive DP in (18b), then it should be coreferent with the matrix subject. Since it is not, we must draw the conclusion that the PRO controlled by the matrix subject has an actual syntactic position in the CEN, and since it is controlled by the matrix subject, it binds the pronominal, thus making it illegitimate. Consequently, the pronoun in (18b) cannot be coreferent with the matrix subject, which is the only reading possible here. In (18a), in turn, it is immaterial whether or not there is a syntactically overt PRO. But we will assume, *per analogiam*, that there is one, so the structures proposed for (18) are as illustrated in (19).

- a. A fiúk<sub>1</sub> abbahagyták [PRO<sub>1</sub> egymás<sub>1</sub> rajzol-ás-á-t] The boys<sub>1</sub> stopped PRO<sub>1</sub> drawing themselves<sub>1</sub>
  - b. A fiúk<sub>1</sub> abbahagyták [az PRO<sub>1</sub> ő<sub>2</sub> rajzolás-uk-at] 'The boys<sub>1</sub> stopped PRO<sub>1</sub> drawing them<sub>2</sub>.'

Another piece of evidence demonstrating the difference between ordinary possessive DPs and CENs comes from antiagreement phenomena as presented in den Dikken (1999), which will be made more use of further below. Let it suffice at this point to recall the fundamental distinction in Hungarian possessive DPs with respect to plural lexical versus plural pronominal possessors.

20 a. [<sub>DP</sub> a fiú-k rajz-a/\*-uk] the boy-PL-NOM picture-POSS.3SG/3PL 'the boys' picture'

b. az ő rajz-uk the s/he picture-POSS.3PL 'their picture'

A plural lexical possessor DP is marked for plural, but its possessum is not marked for plural, cf. (20a). A plural pronominal possessor, in turn, is unmarked for plural, but its possessum is marked for plural, cf. (20b).

As has been known since Szabolcsi's early works on this topic, dative possessors can be moved away from the possessum in this language. In this case the possessum has two possible possessive markings available: it could be either marked or unmarked for plural. According to den Dikken's highly plausible analysis, when the possessum is unmarked for plural, the possessor has been moved and there is a trace left in its original position, see (21a). When, however, the possessum is marked for plural, there is no movement, but the possessor is merged in situ and there is a resumptive pronoun in the possessor position inside the DP, see (21b).

21 a. A fiúk-nak<sub>i</sub> jó volt [a *t*<sub>i</sub> rajz-a] the boys-DAT good was the picture-POSS.3SG singular/unmarked agreement

'The boys' picture was good.'

b. A fiúk-nak<sub>i</sub> jó volt [a *pro*<sub>i</sub> rajz-uk] the boys-DAT good was the picture-POSS.3PL 'Idem.'

Clearly, the trace in (21a) triggers a possessive affix unmarked for plurality, while the resumptive pronoun in (21b) behaves just as the standard third person pronoun and activates a plural possessive marker on the possessum.

Now the behavior of CENs does not square with that of possessive DPs. As seen in the sentences below, which exemplify CENs derived from both transitive and unaccusative verbs, only one option is available to them.

22 a. A fiúk-nak<sub>i</sub> veszélyes volt [a *t*<sub>i</sub> lerajzol-ás-a] the boys-DAT dangerous was the draw-DEV-POSS.3SG '(The) drawing (of) the boys was dangerous.'

b. \*A fiúk-nak<sub>i</sub> veszélyes volt [a *pro*<sub>i</sub> lerajzol-ás-uk]

draw-DEV-POSS.3PL

 a. A problémák-nak<sub>i</sub> váratlan volt [a t<sub>i</sub> fel-merül-és-e] the problems-DAT unexpected was the PV-emerge-NOM-POSS.3SG 'The emergence of the problems was unexpected.'

b. \*A problémák-nak<br/>, váratlan volt [a $\textit{pro}_i$  fel-merül-és-ük]

PV-emerge-NOM-POSS.3PL

If CENs were run-of-the-mill possessive DPs in Hungarian, we would have no account for why they cannot exhibit the resumptive pronoun strategy rampant with almost all possessive DPs.<sup>10</sup>

Finally, CENs resemble clauses rather than DPs in at least two further respects. One of them has been hinted at above: most CENs are marked for perfective aspect carried visibly by the preverb, although it is also possible to produce CENs with verbs without prefixal preverbs. It has also been noted that CENs are not possible with stative predicates. Moreover, since the standard deverbative nominalizer affix, which derives nouns from (all) verbs is the same as the one producing CENs, the only waterproof distinction, apart from the *'való*-test', between deverbal nouns and CENs is based on the presence/absence of the preverb.<sup>11</sup> Szabolcsi (1994), in noting this peculiar property of CENs, half-heartedly presents a Davidsonian analysis invoking an event variable, but is sceptical as to its overall applicability to CENs. Aspect is obviously a clausal, rather than a nominal property, and it belongs to the V-I system, rather than the N-D system.

Another clausal characteristic of CENs is negation. There is no negation inside DPs in Hungarian, including possessives, except if the negation scopes over an adjective ! but then it is technically inside an AP, rather than a DP proper. Since postverbal negation is ruled out in this language, the examples contain DPs placed postverbally, or more exactly, following the finite predicate.

24 a. Láttam [a fiúk-nak (\*nem) a rajz-á-t] I-saw the boys-DAT not the picture-POSS-ACC I saw the boys' (\*not) picture.'

b. Láttam [a fiúk-nak a [AP nem egészen új] rajz-á-t] not quite new

'I saw the boys' not quite new picture.'

plural agreement

<sup>&</sup>lt;sup>10</sup> The only exceptions are the possessives whose possessors cannot be removed as listed by Szabolcsi and Laczkó (1992), e.g., *London(-nak) város-a* 'London-DAT city-POSS; the city of London'.

<sup>&</sup>lt;sup>11</sup> The '*való*-test' is based on the use of a PP+*való*, which is possible only in CENs, as was demontstrated by Szabolcsi and Laczkó (1992) and Szabolcsi (1994), cf. fn. 8.

However, negation in CENs is perfectly possible; moreover, the negative word occurs 'inside' the supposed head nominal, that is, between the preverb and the head word.

- 25 Veszélyes volt [a fiúk-nak a le nem rajzol-ás-a]
  - dangerous was the boys-DAT the PV not draw-DEV-POSS
    - '(The) not drawing (of) the boys was dangerous.'

While it is possible to have lexically derived nouns containing the negative word, such as *meg-nem-támadás* 'PV-notattack-DEV; 'noninterference' as in *meg-nem-támadási szerződés* 'pact of noninterference', or *meg-nem-értés* 'PV-notunderstanding; lack of understanding', these are best treated as lexicalized exceptions, although the issue has hardly been studied and any premature conclusion may risk the danger of widely missing the mark.

It is, however, safe to infer from the above that CENs do differ from standard possessive DPs. Possessive DPs contain no local binder for their possessors. CENs, in turn, count as local domains for both anaphors and pronominals, containing a phonetically null external argument. Although both Laczkó and Szabolcsi have tried to account for the phonetically null external argument in CENs, their solutions relied on relegating it to some lexical level, and current research is unanimous in objecting to binding at the level of lexical structure (cf., e.g., Lasnik 1999).<sup>12</sup> CENs differ from possessive DPs also if the possessor is removed from the DP: resumption is possible in case of possessive DPs, but it is not in case of a CEN. While it is too early to say exactly what goes on in CENs, they show signs of being closely related to, if not straightforwardly derived from, some nonfinite clause with a full argument structure, as well as devices to accommodate aspect and negation.

## 4. Analyses and proposals

In this section I will put forward an intricate analysis of complex event nominals in Hungarian, which takes into account the clausal properties of the construction, but does not regard CENs as nonfinite clauses *per se*. In this respect, it is in agreement with Szabolcsi (1994), who argues against considering CENs to be gerunds on the basis of CENs assigning no accusative case and taking adjectives, rather than adverbials, as modifiers. The crux of the proposal is an additional CP/vP phase merged with a possessive 'shell', which provides for the D/N layer in the structure and is modelled after den Dikken (1999).

First, I will review den Dikken's suggestion to revise the analysis of the possessive DP in Hungarian. Then two types of complex event nominals will be illustrated in detail: first one of an unaccusative verb, then another of a transitive verb. Finally some remaining problems will be addressed.

#### 4.1. Den Dikken's possessive DP

In a discussion of traditional problems and new data of the Hungarian possessive construction, den Dikken (1999) draws an analogy with the Dative Shift/Predicate Inversion structure after the pattern introduced in den Dikken (1995). He relies on a distinction between a full and a null form of the dative preposition/case marker in a small clause (SC) construction. If the dative PP is empty-headed, the indirect object PP (IO) moves next to the verb, so that the null P could incorporate into the V head, and the direct object (DO) remains stranded at the right edge of the VP.<sup>13</sup>

<sup>&</sup>lt;sup>12</sup> The arguments for binding at work at S-structure (or its equivalent), rather than D-structure or LF rely on the distinct grammaticality judgements of examples such as below (Lasnik 1999: 137; 177).

<sup>(</sup>i) Some linguists<sub>i</sub> seem to each other<sub>i</sub> [*t* to have been given good job offers]

<sup>(</sup>ii) \*It seems to each other<sub>i</sub> [that some linguists<sub>i</sub> have been given good job offers]

<sup>(</sup>iii) Which book that John<sub>i</sub> read did he<sub>i</sub> like?

<sup>(</sup>iv)  $*He_i$  liked every book that John<sub>i</sub> read.

In (i) the matrix subject can bind the anaphor, but in (ii) it cannot from its D-structure position. In its S-structure position in (iii) *John* is not bound by the pronominal, but it is in (iv), although the quantifier *every* moves in the same position as the wh-phrase in (iii) at LF.

<sup>&</sup>lt;sup>13</sup> Here and below F in FP stands not for 'Focus', as is now customary in the literature on Hungarian, but for 'Functional'.

26 a.  $[_{VP} V [_{SC} DO - [P_{DAT} - IO]]]$ 

b.  $[_{VP} V [_{FP} [_{PP} P_{\emptyset} IO]_i F [_{SC} DO t_i]]]$ 

As is suggested by the name, the operation applies both to Dative Shift, as in (27) and Predicate or Locative Inversion, as in (28), cf. den Dikken (1995:199).

27 a. He [ $_{VP}$  sent [ $_{SC}$  a letter [ $_{PP}$  to the students]]]

b. He [ $_{VP}$  sent [ $_{FP}$  F [ $_{SC}$  a letter [ $_{PP}$  P $_{0}$  the students]]] 6 c. ... [ $_{VP}$  sent [ $_{FP}$  [ $_{PP}$  P $_{0}$  the students] $_{i}$  F [ $_{SC}$  a letter  $t_{i}$ ]]]

28 a. [<sub>IP</sub> ... I [<sub>VP</sub> rolled [<sub>SC</sub> [the baby carriage] [<sub>PP</sub> down the hill]]]] 6
 b. [<sub>IP</sub> [<sub>PP</sub> down the hill]<sub>i</sub> ... I [<sub>VP</sub> rolled [<sub>SC</sub> [the baby carriage] t<sub>i</sub>]]]

It is on the pattern of this apparently wide-ranging regularity that den Dikken (1999) takes issue with Szabolcsi's (1981, 1986, 1994) analysis of possessive DPs, in which a nominative-marked DP moves from a Spec,NP position to a dative-marked Spec,DP position. While arguing against this 'double Case marking' proposal, den Dikken takes advantage of the two positions in Spec,DP and Spec,NP, reanalyzing the latter along the way as Spec,FP, in accordance with his proposal for Dative Shift. Schematically, the underlying structure in (29a) can have either a full dative marked possessor or one with a null case marker. The null-case-marked possessor then moves into Spec,FP to the right of the article in D, as in (29b), while the possessor with overt dative case marking moves into Spec,DP to the left of the article in D, as in (29b), cf. den Dikken (1995:154ff).

29 a.  $[_{DP} D [_{SC} DO [_{PP} P_{DAT/\emptyset} IO]]]$ b.  $[_{DP} D [_{FP} [_{PP} P_{\emptyset} IO]_i F [_{SC} DO t_i]]]]$ c.  $[_{DP} [_{PP} P_{DAT} IO]_i D [_{FP} F [_{SC} DO t_i]]]$ 

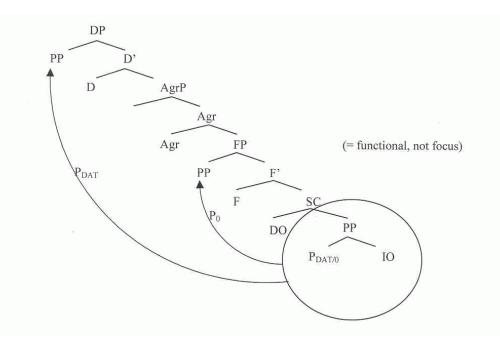
The relevant structures are exemplified in more detail below. In line with den Dikken's (1995, 1999) discussion, the indirect object serves as the Goal/Possessor argument, while the direct object is the Theme/Possessum in the thematic hierarchy. FP is merged with Agr, which hosts the agreement affix always present in Hungarian possessives.

30 a.  $[_{DP}$  Spec D  $[_{AgrP} [_{Agr} - ja] [_{FP} F [_{SC} [_{NP} rajz] [_{PP} P_{DAT/\emptyset} [_{NumP} Num [_{NP} a fiuk]]]]]]$ possessum possessor

b.  $[AgrP - ja [FP P_{\emptyset} a fiúk]_i F [SC rajz ... t_i ...]]]]$ 

c.  $[_{DP}[_{PP}P_{DAT} a fiuk-nak] a [_{AgrP} - ja [_{FP}F [_{SC} rajz ... t_i ...]]]]$ the boys-DAT the POSS picture

'Nominative' possessors thus have  $P_{\emptyset}$  and end up (as PP) in Spec,FP; dative possessors have  $P_{DAT}$  and end up (as PP) in Spec,DP (with no number agreement) or outside the DP (with optional number agreement). Case is assigned by  $P_{DAT/\emptyset}$ . Incidentally, in den Dikken's analysis the possessive affix in the Agr head is realized on the head noun by no syntactic head movement, but in the Phonetic Form by Affix Hopping. Note, however, that Knittel (1998) and, independently of her, É. Kiss (2002) make an interesting proposal based on the distinction between pronominal and 'lexical' possessors. In É. Kiss's terminology, while the former project agreement, the latter make use only of a possessive marker. Incorporating this into den Dikken's structure in (31), his F should be labeled as Poss, and Agr projected only if the possessor is a pronominal. Then pronominal possessors would have to move (through Spec, PossP) into Spec,AgrP, and their possessed nominals into Agr, picking up the agreement affix. 'Lexical' possessors end up in Spec,PossP (the former FP), and their possessed nominals in Poss (the former F). Since Agr is not projected in their case, no affix hopping is called for.



# 4.2. The structure of derived nominals

Our idea of CENs in Hungarian shows a high degree of similarity with van Hout and Roeper's (1998) proposal concerning *-er* and *-tion/-ing* nominalizations, which contain fully projected VPs including functional projections, such as Tense, Aspect, and Voice-Event. For the presence of an AspectP they quote evidence from the well-known contrast illustrated below.

- 32 a. the destruction of the city \*for hours/in an hour b. They destroyed the city \*for hours/in an hour.
- 33 a. the destruction of cities for hours/\*in an hourb. They destroyed cities for hours/\*in an hour.

The resulting structure is schematically represented in (34).

34 ... [NP [N -ing/-tion] TP [ AspP [ Voice-EventP [ VP [ VP ]]]]]

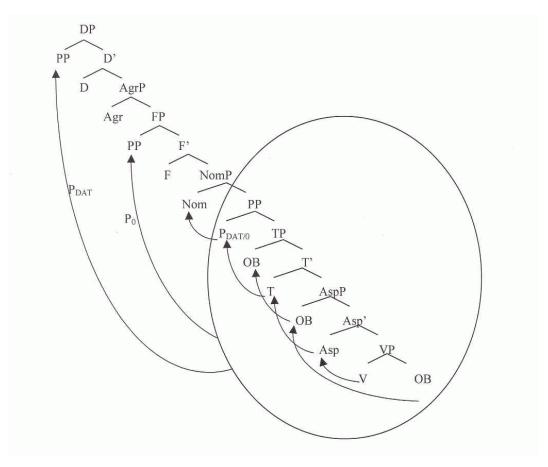
They also argue that vPs inside nominalizations license Agents, thus implicitly, as it were, contradicting Marantz's (1997) conviction that agents in these nominalizations are implied rather than projected.<sup>14</sup>

Having accepted van Hout and Roeper's line of argumentation and amalgamating it with den Dikken's analysis of Hungarian possessives, as well as den Dikken's (to appear) proposal for nominalizations, we make the following proposal for the structure of Hungarian derived nominals containing unaccusative verbs.

<sup>&</sup>lt;sup>14</sup> The contradiction is implicit because van Hout and Roeper (1998) make no reference to Marantz (1997). Agency is argued to be present from examples like *lawn-mower*, which can be both an agent and an instrument, versus *mower of the lawn*, which can only stand for the agent.

Fu, Roeper and Borer (2001) advance strong arguments in favor of VP in CENs, and some, though not all, of their tests seem to work for Hungarian, too. We do not follow them, however, in refusing to posit an IP/layer for reasons ultimately going back to data from binding.

# 35 CEN with VUNACC



 $\begin{bmatrix} DPD & [AgrP[Agr-ja] & [PPF & [NomP - \acute{as} & [PPPDAT/\emptyset & [PP[AgPP[fel] & [VP[v merül] & [DP & a probléma]]]]]] \end{bmatrix} \end{bmatrix} \\ POSS.3SG & DEV & PV & emerge & the problem \end{bmatrix}$ 

Every position in this syntactic structure is well-motivated. First of all, the VP contains an unaccusative verb, thus only the object position is filled. Asp hosts the often necessary preverbal prefix, so characteristic of Hungarian. Note here that the large majority of CENs are perfective for reasons as yet unclear, as was mentioned in section 3.2. For instance, the tensed sentences in (36a,b) are perfectly well-formed, yet their CEN counterparts in (37a,b) are unacceptable, whereas the version with the perfective preverb is fine, cf. (37c).

36 a. Péter ölt.

Peter killed 'Peter has committed murders.'

- b. Péter öli a kacsák-at.
  Peter kills the ducks-ACC
  'Peter is killing (the) ducks.'
- 37 a. \*Péter öl-és-e

Peter kill-NOM-POSS

 b. \*a kacsák (Péter által való) öl-és-e the ducks (Peter by VALÓ) kill-NOM-POSS

c. a kacsák (Péter által való) meg-öl-és-e PV 'the killing of the ducks (by Peter)'

TP and its head Tense is necessary for the EPP-feature attracting the internal argument of the unaccusative verb to move into the Spec, TP subject position. Nom is the position of the (harmonizing) nominalizer affix -As, the terminal of the head-to-head movement (ultimately) of the verb. Thus, the order of movement operations is as follows.

38 Movement operations in  $V_{UNACC}$  nominalizations

1. V to Asp (fel-merül 'emerge [perfective]')

2. Object DP to Spec, AspP

3. V+Asp to T

4. Spec,AspP to Spec,TP (= Object of V<sub>unacc</sub> to Subject position, Case by Agree from P)

5. V+Asp+T to P

6. V+Asp+T+P to Nom ( $\Psi$  felmerül-és 'emerge-DEV = emergence')

7.1. PP with Pø to Spec, FP ('nominative possessor', cf. (30b)), or

7.2. PP with P<sub>DAT</sub> to Spec,DP or outside DP (dative "possessor" cf. (30c))

With move 6 the derived nominal head of the structure is no longer inside the PP; it is practically in the position of the 'possessum' in (30), and the movement of the PP according to the options outlined by den Dikken (1999) are as follows: either (a) the PP headed by  $P_{0}$  moves into Spec,FP resulting in a 'nominative' or unmarked 'possessor', or (b) the PP headed by  $P_{DAT}$  moves into Spec,DP yielding the dative 'possessor' construction, as shown below:

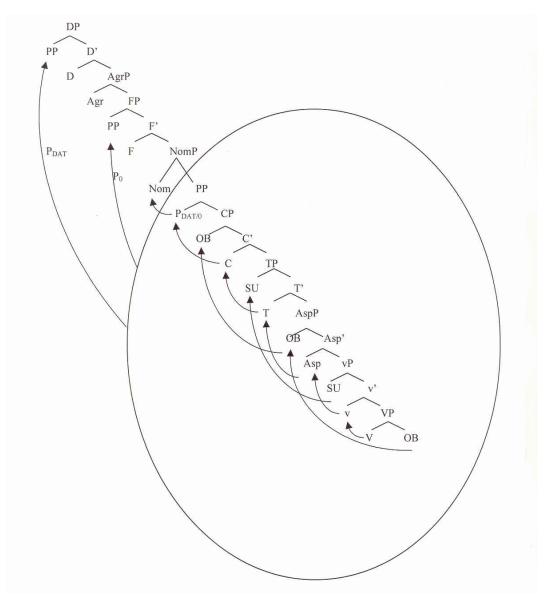
39 a. [DP D [AgrP - ja [FP [PP Pø [DP a probléma]...]] [NomP [fel-merül-és] ...

b. [DP [PP PDAT [DP *a problémá-nak*]...]] D [AgrP -*ja* [FP [NomP*fel-merül-és*] ... the problem-DAT POSS PV-emerge-DEV 'the emergence of the problem'

As was seen above, every category is justified in this structure, and every move is called for. The ensuing structure has the following consequences. (i) The PP is not simply a Case-marked DP but, in effect, a clausal complement to Nom, where no (structural) Case can be assigned clause-internally. Therefore, any overt DP has to move ultimately into a position where it can be Case-marked, which in our case is Spec,TP. Observe that the thematic role of the object DP is determined inside the clause, i.e., by the verb. (ii) Since what moves is a PP with a clausal complement, rather than a PP containing a DP complement, in case the PP is or moves outside the DP, there is no possible resumption by a pronoun since no pronoun can substitute for a clausal argument, cf. (22)-(23).

Finally, let us see CENs formed from transitive verbs, where (at least) two arguments are licensed in the clause inside the DP.

# 40 (37) CEN with $V_{TR}$



 $\begin{bmatrix} DPD \left[ AgrP[Agr-ja] \left[ PPF \left[ NomP - \acute{as} \left[ PPP_{DAT/\emptyset} \left[ TP[AspP le \left[ vP SU \left[ V \left[ vP[v rajzol] \left[ DP a fiik] \right] \right] \right] \right] \right] \right] \right] \\ POSS.3SG DEV PV draw the boys \end{bmatrix}$ 

- 41 Movement operations in V<sub>TR</sub> nominalizations
  - $1. \ V \ to \ v$
  - 2. V to Asp (le-rajzol 'draw [perfective]')
  - 3. Object DP to Spec, AspP
  - 4. V+Asp to T
  - 5. Subject DP to Spec, TP
  - 6. V+Asp+T to C
  - 7. Spec, AspP to Spec, CP (= Object DP to Spec of CP)

8. V+Asp+T+C to P 9. V+Asp+T+P to Nom  $\Psi$  *lerajzol-ás* 'draw-DEV = drawing' 10.1. PP with P<sub>\u03c0</sub> to Spec,FP ('nominative possessor', cf. (30b)), or 10.2. PP with P<sub>DAT</sub> to Spec,DP or outside DP ('dative possessor', cf. (30c))

42 a.  $\left[ _{\text{DP}} a \left[ _{\text{AgrP}} \left[ _{\text{Agr}} - ja \right] \left[ _{\text{FP}} \left[ _{\text{PP}} P_{\emptyset} \left[ _{\text{DP}} a fi \hat{u} k \right]_{k} \left[ _{\text{TP}} P \text{RO}_{j} \left[ t_{i} \left[ _{\text{AspP}} t_{k} \left[ t_{i} \left[ _{vP} t_{j} \left[ V \left[ _{vP} t_{i} \right] \right] \right] \right] \right] \right] \right] \right] \right] \right]$ 

 $F[_{NomP}[_{V} le-rajzol]_{i} - \acute{as}[_{PP} t_{m}]]]$ 

b.  $\left[_{\text{DP}}\left[_{\text{PP}}P_{\text{DAT}}\left[_{\text{DP}}a\,fi\hat{u}k\right]_{k}\right]_{\text{FP}}PRO_{j}\left[t_{i}\left[_{\text{AspP}}t_{k}\left[t_{i}\left[_{\text{VP}}t_{j}\left[V\left[_{\text{VP}}t_{i}\right]\right]\right]\right]\right]\right]_{m}a\left[_{\text{AspP}}\left[_{\text{Asp}}-ja\right]\left[_{\text{FP}}\right]_{m}di$ 

 $F [N_{omP} [v le-rajzol]_i - \acute{as} [PP t_m]]]$ 

Recall that agents must be projected because of the binding facts reported in section 2.2. Once we accept AspectP as the projection of the perfective preverb, TenseP is also called for as the locus of the EPP feature, to be satisfied by the raising of the subject DP into Spec,TP. The verb, in turn, moves into Nom via C and P, allowing the object in Spec of CP to be case-marked by P<sub>DAT/Ø</sub> through Agree. The rest is just as was seen with unaccusatives: if the preposition has no overt case-marking capacity, the PP moves into Spec,FP yielding the 'nominative' CEN; or, if the P carries dative marking, then the PP moves into Spec,DP or outside.

Of course, the subject DP cannot be case-marked in the clause and if it is an overt DP, it will violate Visibility. However, if it is the phonetically null PRO, no problem arises because Tense can assign it the so-called 'minimal case' necessary for its survival. If the subject is phonetically overt, it can in principle abide by Visibility by being case-marked through Agree with P. But since only subjects can be nonovert, the object also has to be overt, violating Visibility in its turn. In other words, just as in the case of the nonfinite clauses illustrated in section 2.2, it is because no case can be assigned inside the clause that only one lexical DP can occur in a clause. The only overt argument is the object if the verb is transitive, but it can be the subject if no obligatory internal argument has to be assigned (structural) case. And indeed that is the case when we have an intransitive predicate with a complement in a CEN, as illustrated below.

 43 a fiúk Pest-re utaz-ás-a the boys Pest-SUB travel-DEV-POSS 'the boys' travelling to Pest'

Binding applies between the argument positions inside the clause, thus the subject always c-commands the object, even though it may end up in a nonargument position by moving out of the CEN proper. Consequently, in the examples (19a,b), repeated below, the PRO controlled by the matrix subject binds the anaphor in (44a), but it cannot bind the pronominal (in 44b), requiring the former to be coreferential, and the latter to have disjoint reference, thus providing the readings attested.

- 44 a. A fiúk<sub>i</sub> abbahagyták [PRO<sub>i</sub> egymás<sub>i</sub> rajzol-ás-á-t] The boys<sub>i</sub> stopped PRO<sub>i</sub> drawing themselves<sub>i</sub>
  - b. A fiúk<sub>i</sub> abbahagyták [az PRO<sub>i</sub> ő<sub>j</sub> rajzolás-uk-at]
    'The boys<sub>i</sub> stopped PRO<sub>i</sub> drawing them<sub>i</sub>.'

### 4.3. Further problems and suggestions

There are a number of problems remaining that are hardly insignificant. As was studied in detail, among others, in Laczkó (2000b), arguments marked by oblique cases are not always omissible in CENs. While we cannot do justice to all the issues arising in this connection, we may try to sketch the outlines of a conceivable solution to at least some of them, noting that they have been notoriously difficult to accommodate in any proposal so far ! without, however, trying to shift the reponsibility for failing to provide an adequate explanation.

Only internal and external arguments can be case-marked in the possessive DP serving as the frame of CENs in Hungarian. Any further arguments, which as a rule are marked by oblique (semantic/inherent) cases are rendered in either of two ways: (a) as a postnominal PP/KaseP, or (b) as a prenominal modifier in a való-construction, cf. fn 6.15

- 45 a. a csomag el-küld-és-e Péter-nek the package PV-send-DEV-POSS Peter-DAT 'the sending of package to Peter'
  - b. a csomag Péter-nek való el-küld-és-e 'idem.'

Note for the record that native speakers judge the (a) type to sharply deteriorate when in any case other than nominative or accusative (*pace* É. Kiss 2002). While the reasons for this state of affairs are also unclear as yet, the extra arguments in both types can be handled along the same lines.<sup>16</sup>

We will argue that if the verb is a three-place (or triadic) predicate, as in the case of verbs of giving, sending, etc., the following options are available for CENs: (a) the internal argument occupies the only structurally casemarked position and a preverb in Spec,AspP stands in for the oblique argument, specifying the direction of the action and changing the oblique argument into an adjunct; (b) with the internal argument in the case-marked position, a PP/KaseP is placed in the Spec,AspP; finally, (c) following the lexical incorporation of the internal argument, the external argument moves into the case-marked position and the oblique argument is lined up as an adjunct again.

46 a. a csomag (Péter-nek való) \*(el)-küld-és-e the package Peter-DAT VALÓ PV-send-DEV-POSS 'the sending of the package to Peter'

b. a csomag  $[_{PP}$  Péter után] (\*el)-küld-és-e Peter after 'the sending of the package on to Peter'

 c. Anna (Péter-nek való) csomag-(\*el)-küld-és-e Anna Peter-DAT VALÓ package-PV-send-DEV-POSS 'Anna's sending of package(s) to Peter'

What is illustrated in (46) by means of the stars and the parentheses is the obligatory occurrence of the preverb and the optional nature of the goal argument in (a), the blocking of the preverb, showing the Spec,AspP position filled by the PP in (b), and again the blocking of the preverb and the optional nature of the goal argument in (c), showing this time the incorporation of the noun and that the goal argument is an adjunct.<sup>17</sup>

We may suppose then that whenever the verb underlying the CEN has an oblique argument in addition to an internal and an external one, the oblique argument will be optional in the corresponding CEN. This holds, incidentally, for both prenominal and postnominal positions. As for postnominal PP/KaseP, it moves out of the CP presumably to an adjunct position in Spec,PP of the  $P_{DAT/\emptyset}$ , just below Nom, which is, in effect, ultimately the right edge of the DP (see tree structure in (40)).

The only subtype of CENs that apparently contradicts this generalization derives from verbs that have preverbs governing an oblique argument. Their structure is complex and is a subject of controversy between primarily Koopman and Szabolcsi (2000) and É. Kiss (1999, 2002). In agreement with É. Kiss, we suppose that the oblique argument is in fact required by the preverb of the category P (= postposition), thus ultimately moving out of a PP.<sup>18</sup>

<sup>16</sup> Marcel den Dikken (personal communication) suggests that the ungrammatical structures may be due to an 'Aover-A' violation in that a PP/KaseP has been moved out of a PP/KaseP, a scenario comparable to English \*To*whom<sub>i</sub> idid you leave after speaking*?

<sup>17</sup> Note that (46a) is marginally OK with the preverb omitted. But even so the oblique argument in the *való*-construction remains optional.

<sup>18</sup> In the examples below, modelled after Laczkó (2000b), the preverb/postposition is alá 'under' and is glossed as

<sup>&</sup>lt;sup>15</sup> For the notion of KaseP, see É. Kiss (2002).

- 47 a. Péter a roncs-ot vet-i vizsgálat alá Peter the wreck-ACC subject-3SG examination under 'Peter subjects the wreck to an examination.'
  - b. Péter a roncs-ot alá vet-i a vizsgálat-nak Peter the wreck-ACC under subject-3SG the examination-DAT 'Peter subjects the wreck to the examination.'
- 48 a. a roncs \*(vizsgálat alá való) vet-és-e the wreck examination under VALÓ subject-DEV-POSS '(the) subjecting (of) the wreck to an examination'
  - b. a roncs \*(vizsgálat-nak való) alá-vet-és-e
    the wreck examination-DAT VALÓ under-subject-DEV-POSS
    'idem'

We can conclude here that the generalization concerning the omissibility of any additional internal argument(s) in CENs can be maintained, and that the arguments to be accommodated here are those of postpositional preverbs.

Oblique arguments of a different source have also been traditionally problematic. Whenever the internal argument is not an object, the oblique argument must occur in a *való*-construction in the CEN, unless placed postnominally.

- 49 a. Anna \*(Péter-rel való) foglalkoz-ás-a Anna Peter-INS VALÓ deal-DEV-POSS 'Anna's dealing with Peter'
  - b. Anna \*(Péter-re való) vár-ás-a Anna Peter-SUB VALÓ wait-DEV-POSS 'Anna's waiting for Peter'
  - c. Anna \*(Péter-ben való) bíz-ás-a Anna Peter-INE VALÓ trust-DEV-POSS 'Anna's trusting in Peter'

Note here that in contradistinction to (45)-(46), the examples in (49) correspond to imperfective/continuous actions, thus representing the 'minority' of CENs referred to in connection with example (36), and also noted previously in the literature. It may very well be the case that the lack of the preverb and the obligatory occurrence of the oblique argument is related, especially in the light of the fact that the verb underlying (49b), *vár* 'wait' does not require an obligatory internal argument except in a CEN.

Descriptively speaking, the case is not complex: if the verb has an internal argument, it must occur overtly in the corresponding CEN. No more argument, whether internal or external, must be overt in the CEN. However, since oblique arguments cannot be (structurally) case-marked by the  $P_{DAT/\emptyset}$  they must be accommodated either, in effect, as a postnominal adjunct unchanged, or prenominally in the *való*-construction. But this descriptive generalization accounts in no way for why oblique arguments have to move out of the CP/vP containing them or how the *való*-construction arises. As our predecessors, we will have to leave these questions for further research.

#### 5. Conclusion

In this paper we set out to revise the standard approach to complex event nominals in Hungarian. CENs have been

such without marking if for 'PV'. The postnominal position of the oblique argument is of course a viable option here too, provided the CEN is in either of the two structural cases, cf.:

<sup>(</sup>i) a roncs alá-vet-és-e a vizsgálat-nak the wreck under-subject-DEV-POSS the examination-DAT

shown to differ from ordinary possessive DPs on several counts. They demonstrate clausal properties when containing anaphors and pronominals: the relevant local domains are not the same as when they occur in possessive DPs. When the putative 'possessor' is removed from a CEN, resumption is not an available strategy in contrast with possessive DPs. Finally, clausal characteristics, such as negation and (perfective) aspect are also observable in CENs, while they of course are missing in possessive, or in fact any, DPs.

These properties, as well as a recent analysis of possessive DPs in Hungarian, induced the proposals put forward subsequently. They were based on a distinction of a morphologically marked and unmarked dative case assigned to possessors, which are then moved to a predeterminer and a postdeterminer position, respectively. We suggested that CENs originate in nonfinite clauses merged with a  $P_{DAT/R}$  case marker, which assigns case to the argument moved by Agree, and with a Nom head, containing the nominalizer affix. The PP itself, which contains the clause is then moved into the predeterminer or postdeterminer position, at this point analogously with ordinary possessives, and the verb moves into the Nom head to pick up the nominalizer affix.

We undertook to reevaluate the received view of CENs, (see (12)), and now we will have to count our marks. With (12) repeated here, we will now add comments listing our hits and misses.

#### 50 a. Their heads are nouns.

- b. They do not have plural forms.
- c. They must be definite.
- d. If they have one or more internal arguments, their external argument is rendered as an adjunct, and if not, it must be suppressed or at most made part of some lexical structure.
- e. The (or one) internal argument (or, in its absence, the only external argument) is rendered as the possessor in a possessive construction.

It transpires from our analysis that the head of a CEN is not a noun *per se*: it is not listed in the Lexicon as a noun (or at all), as would follow from (50a); rather, it 'turns out' to be, or ends up as, a nominal category owing to a syntactic process, cf. Halle and Marantz's (1993) 'late insertion'. Although CENs are nominal in some important sense and can take on case inflection as, for instance, adjectives and numerals do in Hungarian, or gerunds in English, they cannot have plural forms, similarly to numerals in Hungarian, or again gerunds in English.<sup>19</sup> 'Nominalized' verbs in CENs are thus like gerunds in this respect: nonfinite forms having (some, but not all the) nominal properties. Of course CENs must be definite, but that is again not an optional property chosen by the head: it simply follows from the default properties of the (Hungarian) possessive DP. Unless idiosyncratically marked for indefiniteness, the Hungarian possessive construction is always definite, cf. Szabolcsi (1994). Once in the Nom head, the verb behaves much (though not entirely) as a noun should: it takes attributive, rather than adverbial adjuncts as 'modifiers', differing from gerunds in this respect. In other words, from then on a CEN is part of the D!N system.

Now as for (50d,e), it was one of the central assertions of this paper that the external argument is not suppressed or relegated to the lexicon: it is present in the structure, though not phonetically visible. What is ultimately to become the possessor in the DP is an issue resolved by Visibility: a lexical object must have case and no object can be a PRO. This leaves subjects to end up as PRO and therefore objects can be case-marked in the possessor position. While our analysis appears to cover the distribution of external and nonoblique internal arguments, it has nothing radically new to say of oblique obligatory arguments, leaving some problems for future research to resolve.

## References

- Négy (kövér (eger))-et hozt-am.
  four fat mouse-ACC brought-1SG
  T have brought four/four fat ones/four fat mice.'
- (ii) Kövér/\*négy (eger)-ek-et hoztam.
  Tve brought fat/four mice/ones.'

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<sup>&</sup>lt;sup>19</sup> The relevant examples are the elliptical structures illustrated below.

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