

Licensing of nominal ellipsis in Hungarian possessives

Eszter Ronai & Laura Stigliano*

Abstract. We argue, based on novel data, that the possessor head (Poss) can license ellipsis of its complement in Hungarian. That is, contra existing claims in the literature, possessor morphology can survive nominal ellipsis and be stranded on the remnant. Adopting Saab & Lipták (2016)'s account of ellipsis licensing, we propose that there is variation in the size of the ellipsis site in Hungarian: nominal ellipsis can be licensed by either Num or Poss. We further propose that nominal ellipsis licensed by Poss can capture a previously unanalyzed variation in the Hungarian possessive pronoun paradigm. Specifically, the two variants of possessive pronouns correspond to two different structures: one is the anaphoric possessive (see Dékány 2015), while the other exists only as a consequence of nominal ellipsis, which, as we show, is a productive possibility.

Keywords. ellipsis; nominal ellipsis; possessives; Hungarian

1. Introduction. In this paper we argue that *nP*-Ellipsis in Hungarian can be licensed not only by the Num(ber) head, as claimed in previous literature, but also by the Poss(essor) head. This is based on novel data that shows that possessor morphology can indeed survive nominal ellipsis and be stranded on the remnant. Furthermore, our proposal for *nP*-Ellipsis allows us to provide a new analysis for the Hungarian possessive pronoun paradigm.

We begin by introducing the basic facts of Hungarian possessive morphology. Following that, we turn to the analysis of nominal ellipsis in Hungarian. In particular, we discuss existing empirical observations, as well as Saab & Lipták (2016)'s proposed analysis.

1.1. NOMINAL MORPHEMES IN HUNGARIAN. The basic order of nominal morphemes in Hungarian is the one in (1), illustrated in the examples in (2) (É. Kiss 2002).

(1) noun – possessedness suffix – number – agreement – case

- (2) a. *játék-a-i-m-at*
toy-POSS-PL-1SG-ACC
'my toys (acc)'
- b. *diák-ja-i-m-at*
student-POSS-PL-1SG-ACC
'my students (acc)'
- c. *könyv-e-i-m-et*
book-POSS-PL-1SG-ACC
'my books (acc)'
- d. *kert-je-i-m-et*
garden-POSS-PL-1SG-ACC
'my gardens (acc)'

* For helpful discussion and feedback, we thank audiences at LSA 95, SICOGG 22, the Morphology & Syntax Workshop at the University of Chicago, and especially Karlos Arregi. All mistakes and shortcomings are our own. Authors contributed equally to this work and are listed alphabetically. Authors: Eszter Ronai, The University of Chicago (ronai@uchicago.edu) & Laura Stigliano, The University of Chicago (laurastigliano@uchicago.edu).

The possessedness suffix (glossed as POSS) indicates that the head noun is a possessum. As (2) demonstrates, depending on the (morpho)phonological environment, this suffix appears in the forms *-a*, *-ja*, *-e* and *-je*. The number suffix (*-i* in (2)) corresponds to the number of the head noun, i.e. the possessum¹. The agreement suffix (*-m* in (2)) corresponds to the person and number of the possessor. Lastly, the case morpheme marks the case of the noun, as shown via the accusative *-at/-et* (depending on vowel harmony) in (2). It is worth noting that when the head noun is singular, the possessedness and agreement suffixes are fused (*-om* in (3)).

- (3) *játék-om-at*
 toy-POSS.1SG-ACC
 ‘my toy (acc)’

1.2. NOMINAL ELLIPSIS IN HUNGARIAN. As (4-a) shows, in non-elliptical sentences number and case marking only show up on the noun. Examples where they appear both on the noun and the adjective, or only on the adjective are ungrammatical, as (4-b)-(4-c) show:

- (4) a. *a piros játék-ok-at*
 the red toy-PL-ACC
 ‘the red toys (acc)’
 b. **a piros-ak-at játék*
 the red-PL-ACC toy
 c. **a piros-ak-at játék-ok-at*
 the red-PL-ACC toy-PL-ACC

In cases of nominal ellipsis, however, affixes that otherwise show up on the noun, e.g. *-okat* (PL-ACC) in (4), appear on the rightmost remnant of the ellipsis site (i.e. the adjective), as shown in (5):

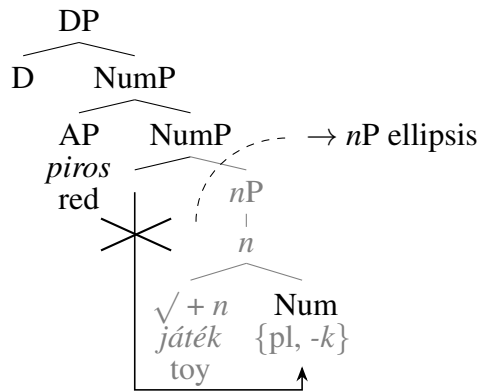
- (5) a. *piros-ak-at* ∅
 the red-PL-ACC
 ‘the red ones (acc)’

Based on such observations, Saab & Lipták (2016) argue that nominal ellipsis in Hungarian targets the *nP*, hence the name *nP-Ellipsis* (or *nPE*). On their proposal, affixes attach to their host via the process of leaning, and ellipsis applies early on the PF branch to bleed such processes. When this happens, the affixes can no longer lower onto the noun. The stranded affixes are thus reattached to a non-canonical host: the rightmost remnant (the adjective in (5)) instead of the noun. This is schematized in (6):

¹ Note that the plural marker of possessed nouns (*-i*) is different from the regular plural marker (*-k*):

- (i) *játék-ok*
 toy-PL
 ‘toys’

(6) *n*PE licensed by Num:



Importantly, on Saab & Lipták (2016)’s analysis, *n*PE can only be licensed by the Num head.

2. Novel empirical generalization. Contra previous literature (i.e. Saab & Lipták 2016 and Kenesei et al. 1998), which claimed that possessive morphology cannot be stranded on the adjectival remnant, in (7) we show that possessor morphology can also survive *n*PE, with the stranded affixes showing up on the adjectival remnant:

- (7) a. Mari kölcsönkérte a te piros játék-od-at és az én kék-**em**-et.
 Mary borrowed the you red toy-POSS.2SG-ACC and the I blue-**POSS.1SG-ACC**
 ‘Mary borrowed your red toy and my blue (toy).’
- b. Mari kölcsönkérte a te piros játék-a-i-d-at és az én
 Mary borrowed the you red toy-POSS-PL-2SG-ACC and the I
 kék-**e-i-m**-et.
 blue-**POSS-PL-1SG-ACC**
 ‘Mary borrowed your red toys and my blue (toys).’

We argue that this difference in judgements is due to the fact that the examples reported in existing literature were remnants presented in isolation, e.g. *a ti érdekes-e-i-tek* ‘your interesting ones’ (fn. 13 in Saab & Lipták 2016). Testing sentences where *n*PE is licensed by an appropriate antecedent, we find that the relevant examples (7) are in fact grammatical—this judgement is shared by 8 native speaker informants.

Parallel examples where the remnant has a second or third person possessor are also grammatical, as (8)-(9) shows (note that the agreement marker for third person is null):

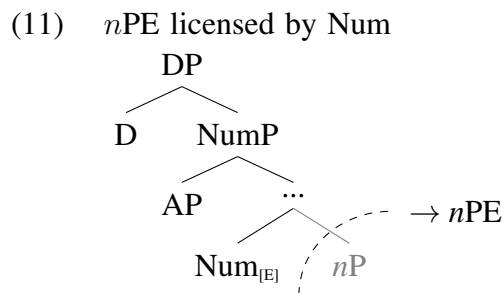
- (8) a. Mari kölcsönkérte az én piros játék-om-at és a te kék-ed-et.
 Mary borrowed the I red toy-POSS.1SG-ACC and the you blue-POSS.2SG-ACC
 ‘Mary borrowed my red toy and your blue (toy).’
- b. Mari kölcsönkérte az én piros játék-a-i-m-at és a te
 Mary borrowed the I red toy-POSS-PL-1SG-ACC and the you
 kék-e-i-d-et.
 blue-POSS-PL-2SG-ACC
 ‘Mary borrowed my red toys and your blue (toys).’
- (9) a. Mari kölcsönkérte a te piros játék-od-at és az ő kék-jé-t.
 Mary borrowed the you red toy-POSS.2SG-ACC and the (s)he blue-POSS-ACC
 ‘Mary borrowed your red toy and her/his blue (toy).’

- b. Mari kölcsönkérte a te piros játék-a-i-d-at és az ő
 Mary borrowed the you red toy-POSS-PL-2SG-ACC and the (s)he
 kék-je-i-t.
 blue-POSS-PL-ACC
 ‘Mary borrowed your red toys and her/his blue (toys).’

Importantly, such examples are also not limited to color adjectives: sentences parallel to (7) (as well as (8) and (9)) are judged to be grammatical (by 6 native speakers) when the adjectives are *long*, *short*, *interesting*, *long*, *English*. This suggests that possessive morphology being stranded under nominal ellipsis is indeed a productive possibility in Hungarian. Some examples are provided below:

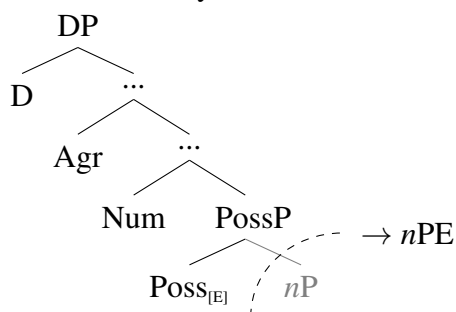
- (10) a. Mari elolvasta az én unalmas esszé-m-et és a te
 Mari read the I boring essay-POSS.1SG-ACC and the you
 érdekes-ed-et.
 interesting-POSS.2SG-ACC
 ‘Mary read my boring essay and your interesting one.’
- b. Mari ellenőrizte az én francia házi-m-at és a te
 Mary checked the I French homework-POSS.1SG-ACC and the you
 angolodat.
 English-POSS.2SG-ACC
 ‘Mary checked my French homework and your English one.’

3. Analysis. Based on the observation that possessor morphology can show up on the adjectival remnant after *nPE*, we argue that it is not only the Num head (that is, “number” in (1)), but also the Poss head (that is, “possessedness” in (1)) that licenses ellipsis of its complement. On Saab & Lipták (2016)’s account of *nPE* in Hungarian, the Num head bears an [E] feature, which triggers ellipsis of its complement, as schematized in (11):



Likewise, we propose that in the cases discussed above (e.g. (7)), Poss is the head bearing the [E] feature, as (12) shows:

(12) *n*PE licensed by Poss



In sum, we argue that both (11) and (12) are possible *n*PE structures in Hungarian; in both cases the material that is elided is *n*PE, but there is variation in the licensing head, which is either Num or Poss.

Crucially, our analysis makes the prediction that the same pattern of alternation should exist in other contexts as well, where the Poss head is present. In what follows, we show that this prediction is borne out in the domain of possessive pronouns.

4. Possessive pronouns. In what follows, we first describe the anaphoric possessive in nouns and pronouns in Hungarian, then move onto a systematic alternation we observe in the pronoun paradigm, which our analysis of *n*PE sheds new light on.

4.1. ANAPHORIC POSSESSIVE IN NOUNS AND PRONOUNS. To fully understand the patterns observed in the Hungarian possessive pronoun paradigm and, in turn, to check the validity of the prediction our possessive *n*PE proposal makes, let us first consider the so-called anaphoric possessive in Hungarian.

The anaphoric possessive *-é* is used in place of regular possessive morphology in cases where the only remnant is the possessor noun, e.g. there is no adjective, as shown in (13-a) (i.a. Dékány 2015 and references therein):

- (13) a. a fiú játék-a
 the boy toy-POSS
 ‘the boy’s toy’
 b. a fiú-é
 the boy-é
 ‘the boy’s one’

The anaphoric possessive *-é* is in complementary distribution with the possessedness suffix (*-ja, -je, -a, -e*). That is, whenever the anaphoric possessive is present, the regular possessedness suffix must be absent:

- (14) a. *a fiú-é-ja
 the boy-é-POSS
 ‘the boy’s one’
 b. *a fiú-ja
 the boy-POSS
 ‘the boy’s one’

The anaphoric possessive is found not only in nouns, but also in possessive pronouns, e.g. *miénk* (ours), *tiétek* (yours), etc. The internal structure of these pronouns is illustrated below:

(15) nominative pronoun – anaphoric possessive – number – agreement – case

(16) mi-é-i-nk
 1PL.PRON-é-PL-1PL
 ‘our ones’

Table 1 shows the full paradigm, including the different forms based on the number and person of the possessor, as well as the number of the possessum. They all follow the template in (15):

	sg possessum	pl possessum		sg possessum	pl possessum
1sg	eny-é-m	eny-é-m-ek		1pl	mi-é-nk mi-é-i-nk
2sg	ti-é-d	ti-é-i-d		2pl	ti-é-tek ti-é-i-tek
3sg	öv-é	öv-é-i		3pl	öv-é-k öv-é-i-k

Table 1. Possessive pronouns

4.2. ALTERNATION IN THE PRONOUN PARADIGM. While the anaphoric possessive has been extensively studied in the literature on Hungarian (see i.a. Bartos 1999, 2000, 2001; Dékány 2015; Laczkó 1995), there exists a systematic alternation in the possessive pronoun paradigm that has received considerably less attention. Specifically, in the first and second persons, the anaphoric possessive *-é* forms of pronouns alternate with forms that contain *-e* instead, e.g. *miénk* vs. *mienk* (ours). The full paradigm is shown in Table 2:

	sg possessum	pl possessum		sg possessum	pl possessum
1sg	eny-é-m/%eny-i-m	eny-é-m-ek/%eny-i-m-ek		1pl	mi-é-nk/mi-e-nk mi-é-i-nk/mi-e-i-nk
2sg	ti-é-d/ti-e-d	ti-é-i-d/ti-e-i-d		2pl	ti-é-tek/ti-e-tek ti-é-i-tek/ti-e-i-tek
3sg	öv-é	öv-é-i		3pl	öv-é-k öv-é-i-k

Table 2. Possessive pronouns: *-é/-e* alternation

To our knowledge, the *-é/-e* alternation has only been briefly discussed by Dékány (2011), who claims that it is a phonological alternation with no syntactic or semantic import. However, this would predict that such a phonological alternation should be found elsewhere in Hungarian, which is not borne out.

Instead, given our proposal that *nPE* can be licensed also by Poss, and not just Num, the alternation in Table 2 can now be understood as a syntactic one, not merely an allomorphic one. In particular, we argue that the *-e* versions of the pronouns exist as a consequence of *nPE*, licensed by the Poss head. In other words, the *-e* pronouns can be derived by adding to the nominative pronoun (e.g. *mi* ‘we’) the suffixes that would ordinarily surface on the noun (e.g. *-enk*, POSS.1PL) —see (Murphy 2018) for a similar account of pronominal inflection in German.

In (17) we reiterate the order of nominal morphemes in Hungarian; crucially, we claim that either the anaphoric possessive or the possessedness suffix (but not both) can be attached after the nominative pronoun. If the anaphoric possessive attaches to the pronoun, we obtain the form in (18), while *nPE* results in the form in (19):

(17) nom. pron. – {anaphoric possessive | possessedness suffix} – num – agr – case

(18) mi-é-i-nk
1PL.PRON-é-PL-1PL
'our ones'

(19) mi-e-i-nk
1PL.PRON-POSS-PL-1PL
'our ones'

5. Open questions. A number of open questions remain. Most notably, there seems to be a difference in what persons allow nominal ellipsis in possessives. When the remnant is an adjective, *nPE* that is licensed by Poss is allowed with all persons, as demonstrated in examples (7), (8), and (9) above. But when the only remnant is the possessor pronoun, Poss-licensed *nPE* is only allowed with first and second persons; the third person form is the invariant *övé* 'his/her', as shown in Table 2. Likewise, when the only remnant is the possessor noun, only the anaphoric possessive can be attached. This is expected given that nouns are third person.

To account for this difference, we propose a restriction on leaning, whereby in Poss-licensed *nPE*, remnant morphology can only attach to possessors that are first or second person pronouns. Note that third person possessive pronouns in Hungarian are also exceptional in other respects, e.g. they exhibit the so-called anti-agreement pattern (É. Kiss 2002). The third person singular (nominative) pronoun is *ő* ('he/she'), and the third person plural is *ők* ('they'). But, as (20-b) shows, *ők* loses its *-k* plural marker when it is used as an overt, caseless possessor:

- (20) a. az ő diák-ja-i-∅
the (s)he student-POSS-PL-3SG
'his/her students'
b. az ő diák-ja-i-k
the (s)he student-POSS-PL-3PL
'their students'

The above example is a case of anti-agreement whereby the possessor lacks the expected number morphology. Additionally, anti-agreement in the third person shows up in the other direction as well. When the possessor is a lexical noun phrase, the possessum is missing the agreement marker *-k*, see (21-b):

- (21) a. a fiú könyv-e-i
the boy book-POSS-PL
'the boy's books'
b. a fiú-k könyv-e-i
the boy-PL book-POSS-PL
'the boys' books'

For more details on the analyses of the anti-agreement patterns, see i.a. Csirmaz (2006); den Dikken (1998); Dikken (1999).

While it is clear that the third person is exceptional in many respects in the domain of possessive morphology, future research will have to further explore precisely how the different patterns are connected.

6. Conclusion. In this paper we show that, contra previous claims in the literature, there are two possible licensors of nominal ellipsis in Hungarian. We propose that it is not only the Num head, but also the Poss head, that can license ellipsis of its complement. Our proposal also makes it possible to offer a novel analysis of the systematic variation in the possessive pronoun paradigm: while the *-é* versions of pronouns arise anaphoric possessive (following the proposal in Dékány 2015), the *-e* versions of pronouns are the result of *n*PE licensed by Poss.

References

- Bartos, Huba. 1999. *Morfoszintaxis és interpretáció: A magyar inflexiós jelenségek szintaktikai háttere* [Morphosyntax and interpretation: The syntactic background of inflectional phenomena in Hungarian]. Budapest: Eötvös Loránd University dissertation.
- Bartos, Huba. 2000. Az inflexiós jelenségek szintaktikai háttere [The syntactic background of inflectional phenomena]. In Ferenc Kiefer (ed.), *Strukturális magyar nyelvtan 3. Morfológia* [Hungarian structural grammar 3. Morphology], 653–762. Budapest: Akadémiai Kiadó.
- Bartos, Huba. 2001. Mutató névmási módosítók a magyarban: egyezés vagy osztozás? [Demonstrative modifiers in Hungarian: agreement or feature sharing?]. In Marianne Barkó-Nagy, Zoltán Bánreti & Katalin É. Kiss (eds.), *Újabb tanulmányok a strukturális magyar nyelvtan és a nyelvtörténet köréből. Kiefer Ferenc tiszteletére barátai és tanítványai* [Recent studies in Hungarian structural grammar and diachronic linguistics. In honour of Ferenc Kiefer, from his friends and students], 19–41. Budapest: Osiris.
- Csirmaz, Aniko. 2006. Anti-agreement: Features and locality. In João Costa & Maria Cristina Figueiredo Silva (eds.), *Studies on agreement* (Linguistic Aktuell/Linguistics Today 86), 76–98. Amsterdam: John Benjamins.
- Dékány, Éva. 2011. *A profile of the Hungarian DP*. University of Tromsø dissertation.
- Dékány, Éva. 2015. The syntax of anaphoric possessives in Hungarian. *Natural Language & Linguistic Theory* 33(4). 1121–1168. <https://doi.org/10.1007/s11049-014-9278-0>.
- den Dikken, Marcel. 1998. (Anti-)agreement in DP. *Linguistics in the Netherlands* 15(1). 95–107. <https://doi.org/10.1075/avt.15.10dik>.
- Dikken, Marcel. 1999. On the structural representation of possession and agreement: The case of (anti-)agreement in Hungarian possessed nominal phrases. In István Kenesei (ed.), *Crossing boundaries: Advances in the theory of Central and Eastern European languages*, 137–178. Amsterdam: John Benjamins.
- É. Kiss, Katalin. 2002. *The Syntax of Hungarian* Cambridge Syntax Guides. Cambridge University Press. <https://doi.org/10.1017/CBO9780511755088>.
- Kenesei, István, Robert Vago & Anna Fenyvesi. 1998. *Hungarian* (Descriptive Grammars Series). London: Routledge.
- Laczkó, Tibor. 1995. *The syntax of Hungarian noun phrases: A lexical-functional approach*. Frankfurt am Main: Peter Lang.
- Murphy, Andrew. 2018. Pronominal inflection and NP ellipsis in German. *The Journal of Comparative Germanic Linguistics* 21(3). 327–379.
- Saab, Andrés & Anikó Lipták. 2016. Movement and deletion after syntax: Licensing by inflection reconsidered. *Studia Linguistica* 70(1). 66–108.