

# Reciprocal anaphors in singular constructions in Hungarian

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## Abstract

This paper discusses a striking and yet unnoticed difference in the grammatical coding of reflexive and reciprocal anaphora in Hungarian. Whereas plural reflexives require a plural subject antecedent and a plural verb, the reciprocal anaphor does not need an antecedent that bears a morphosyntactically expressed plural feature, nor does it require the verb to be in the plural. The emerging empirical picture points to a fundamental difference between the licensing of reflexive and reciprocal anaphors, inasmuch as the plurality that reciprocals feed on need not be a feature available internal to the computational system. These data thus provide further arguments for the differential treatment of reflexive and reciprocal anaphora.

## 1. Introduction

In the introduction to their influential paper, Heim et al. (1991: 63) emphasize that "it is well known that expressions like *each other* and *one another* can cooccur only with plural antecedents..." . A true reciprocal anaphor undeniably requires a plural antecedent, and it is hard to conceive of this constraint as anything else but mandatory. Yet it is not necessarily evident in what sense the antecedent must be plural, and my aim in this paper is to argue that this plurality need not be represented in the computational system. I describe and discuss Hungarian data to substantiate this claim, focussing on constructions in which reciprocal anaphors occur without morphosyntactically plural antecedents but they are still grammatical, unlike plural reflexives, which are ruled out in the self-same contexts. These data have not been discussed so far in the pertinent literature on Hungarian, and together they provide strong evidence for the assumption that the grammar of reciprocal anaphors fundamentally differs from the grammar of plural reflexives. The sole aim of the paper is a systematic presentation of the Hungarian data that points towards this conclusion.

As expected, both plural reflexive anaphors and the reciprocal anaphor can take plural antecedents in Hungarian:<sup>1</sup>

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<sup>1</sup> The Hungarian reciprocal *egymás* 'each other' is the complex of the numeral *egy* 'one' and the distributor term *más* 'other'. The reflexive anaphor *maga* 'oneself' is a highly grammaticalized body part possessive construction,

- (1) a. A gyerek-ek látták egymás-t a tükörben.  
the child-PL saw.3PL each\_other-ACC the mirror.in  
‘The children saw each other in the mirror.’  
a. A gyerek-ek látták maguk-at a tükörben.  
the child-PL saw.3PL themselves-ACC the mirror.in  
‘The children saw themselves in the mirror.’

It is also non-surprising that a singular noun phrase denoting a singular (atomic) individual can antecede a singular reflexive (2b), but not a reciprocal (2a):

- (2) a.\*A gyerek látta egymás-t a tükörben.  
the child saw.3SG each\_other-ACC the mirror.in  
‘\*The child saw each other in the mirror.’  
a. A gyerek látta magát a tükörben.  
the child saw.3SG oneself-ACC the mirror.in  
‘The child saw himself in the mirror.’

Nevertheless, the reciprocal is licensed in constructions in which the plurality of the antecedent is not coded morphosyntactically. I discuss four such Hungarian constructions in this paper: quantified antecedents with a singular noun head (Section 3), singular coordinate noun phrases with singular verbs (Section 4), singular collective noun antecedents (Section 5), and a special case of singular variables acting as local antecedents for the reciprocal (Section 6). We focus on configurations in which the antecedent is the local subject, as they provide very clear evidence that plural reflexives need to be in PLURAL contexts: both the antecedent and the verb must be in the plural for the plural reflexive to be acceptable. Reciprocals are not subject to this restriction.

We start the discussion in Section 2 with one possible confounding factor: as den Dikken et al. (2001) note, same person inclusive anaphora of the singular subject – plural object type is possible in Hungarian. This is a superficial counterexample to our claim that plural reflexive

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with some synchronically available possessive traits (see den Dikken et al. (2001) and Rákosi (2009, 2011) for discussion). Since Hungarian lacks grammatical gender, neither of these pronominals show variation in gender. The reflexive has the full paradigm, but the reciprocal is an invariable form, showing no  $\phi$ -feature-related variation.

anaphors need plural antecedents. I show here that such examples are fundamentally different from the singular contexts we discuss here for reciprocals, and I also argue, contra den Dikken et al. (2001), that this construction is not an instance of true reflexive anaphora, since these reflexives do not function as bound variables. The discussion on reciprocals (Sections 3-6) starts from this vantage point, which allows us to treat the tolerance reciprocal anaphors show towards singular antecedents as a genuine characteristic of their grammar. The paper is concluded with a brief summary in Section 7.

## 2. Inclusive reference reflexives

Den Dikken et al. (2001) call attention to a special case of same person singular-plural anaphora in Hungarian. Consider the following examples from the Hungarian National Corpus (Oravecz et al. 2014) for illustration:

- (3) a. Látom magunk-at ülni az autóban.  
       see.1SG ourselves-ACC sit.INF the car.in  
       ‘I see us sitting in the car.’
- b. Sokszor sajnálom magunk-at.  
       often feel\_sorry.1SG ourselves-ACC  
       ‘I often feel sorry for us.’

The subject antecedent – the speaker in this case – is understood to be included in the denotation of the 1PL anaphor in both sentences, and this kind of inclusive reference anaphora (henceforth: *inclusive anaphora*) is available in second and third person as well. Note that English would have a pronoun in these cases in place of the reflexive, but the preferred choice is the reflexive in Hungarian. Though den Dikken et al. (op. cited fn. 1) raise the possibility that similar examples with non-argument PPs may contain logophoric reflexives rather than true anaphors, they claim explicitly that argument reflexives, like the objects in (3), are true anaphors. Here I want to argue against this assumption, saving thereby the empirical generalisation that plural reflexive anaphors need plural antecedents.

Note first of all that reflexive anaphors in the inclusive anaphora construction cannot be bound variables. As is clear from the paraphrase below (4a), the reflexive here can only be interpreted as a referential pronominal element. In run-of-the-mill reflexive constructions,

where antecedents and reflexives have fully matching  $\varphi$ -features, the bound variable reading is available, as expected (4b).<sup>2</sup> The same is true of reciprocals (4c).

- (4) a. Csak én sajnálom magunk-at.  
 only I feel\_sorry.1SG ourselves-ACC  
 ‘Only I feel sorry for us.’  
 [‘no other people feel sorry for us/\*for themselves’]
- b. Csak mi sajnáljuk magunk-at.  
 only we feel\_sorry.1PL ourselves-ACC  
 ‘Only we feel sorry for ourselves.’  
 [‘no other people feel sorry for themselves’]
- c. Csak mi sajnáljuk egymás-t.  
 only we feel\_sorry.1PL each\_other-ACC  
 ‘Only we feel sorry for each other.’  
 [‘no other people feel sorry for each other’]

Second, this kind of inclusive anaphora is only available if the predicate supports a collective reading on its object argument, and it often occurs in representation-of-the-selves contexts. When this collective construal is not available, inclusive reflexives are not acceptable. Judgements are very clear, for instance, in the case of inherent reflexive verbs, whose object argument can only be a reflexive anaphor and it cannot be a referential pronoun or DP. Consider (5) for illustration:

- (5) a. A gyerek-ek jól viselték maguk-at.  
 the child-PL well behave.3PL themselves-ACC  
 ‘The children behaved themselves.’
- b.\*A gyerek jól viselte maguk-at.  
 the child well behave.3SG themselves-ACC  
 ‘\*The child behaved themselves.’

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<sup>2</sup> Some speakers can also accept the coreference-based interpretation for (4b), but this is orthogonal to our present concerns.

Here the collective reading of the object argument is unavailable, and hence the inclusive anaphora construction is ungrammatical (5b).<sup>3</sup> I will use similar reflexive examples in Sections 3 and 4 below to rule out a potential inclusive anaphora reading in cases where this would be an irrelevant alternative for us.<sup>4</sup>

I finally add that reciprocals are absolutely ungrammatical in inclusive reference anaphora. Thus (6), unlike (3b), is ungrammatical.

- (6) \*Sokszor sajnálom egymás-t.  
 often feel\_sorry.1SG each\_other-ACC  
 ‘\*I often feel sorry for each other.’

The antecedent is not plural here in any sense of the word, and the reciprocal is not licensed therefore. This is different with the examples that we just turn now to discussing, since they involve subject arguments that are morphosyntactically singular, but denote pluralities nevertheless.

### 3. Quantified antecedents

The plural morphology only appears on the noun head in Hungarian if no quantifying expression is present. Quantified noun phrases are morphologically singular in Hungarian, and they do not trigger plural agreement with the verb (see É. Kiss 2012 for a comprehensive discussion). Thus we have the following agreement patterns:

- (7) a. A gyerekek \*látta/látták a kép-et.  
 the child-PL saw.3SG/saw.3PL the picture-ACC.  
 ‘The children saw the picture.’  
 b. Két/Minden/Néhány gyerek(\*-ek) látta/\*látták a kép-et.  
 two/every/some child(\*-PL) saw.3SG/saw.3PL the picture-ACC.  
 ‘Two/All/Some children saw the picture.’

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<sup>3</sup> It is ungrammatical in each person.

<sup>4</sup> In principle, examples like (4b) may have a *distributed inclusive anaphora reading* if the subject is interpreted distributively (‘each one of us on his or her own feels sorry for the self plus the others’, as in *Each of us feels sorry for us*). Arguably, such interpretations require strong contextual support, but they are real nevertheless. This issue merits further discussion, which we do not entertain here since it would not further our immediate goals concerning the comparison of reciprocals anaphors and reflexives that act as true bound variables.

A quantified noun phrase of any kind can only antecede a singular, but not a plural reflexive (8). The noun head of the subject DP, as well as the verb agreeing with it, is singular in this case, and so is then the reflexive.

- (8) a. A két gyerek jól érezte magát-t/\*maguk-at.  
       the two child well felt.3SG oneself-ACC/themselves-ACC  
       ‘The two children felt well.’
- a. Néhány gyerek jól érezte magát-t/\*maguk-at.  
       some child well felt.3SG oneself-ACC/themselves-ACC  
       ‘Some children felt well.’

In contradistinction to plural reflexives, reciprocals are fully grammatical with quantified antecedents. Examples (9a, c-d) are from the Hungarian National Corpus.

- (9) a. A szobában három kisgyerek kergeti egymás-t.  
       the room.in three little.child chase.3SG each\_other-ACC  
       ‘Three little children are chasing each other in the room.’
- b. Néhány szomszéd gyerek nagyon szereti egymás-t.  
       some neighbour child much love.3SG each\_other-ACC  
       ‘Some children from the neighbourhood love each other very much.’
- c. Otthon mindenki szerette egymás-t.  
       home everyone loved.3SG each\_other-ACC  
       ‘At home, everyone loved each other.’
- d. A sokaságban senki se keresi egymás-t.  
       the crowd.in nobody not search\_for.3SG each\_other-ACC  
       ‘Nobody is searching for each other in the crowd.’

The antecedent is a quantified noun phrase in (9a-b), and a pronominal quantifier in (9c-d). Note that both the antecedent and the verb are singular in each sentence in (9), yet the reciprocal is grammatical across the board.<sup>5</sup>

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<sup>5</sup> Most examples of this construction include an antecedent with a numeral. Indeed, (9a) is the most natural way in Hungarian to talk about three kids chasing each other. Quantified phrases with non-numeral quantifiers are best as antecedents of reciprocals if they are d-linked (9b-d).

#### 4. Singular conjoined noun phrases and singular verbs

Two conjoined singular noun phrases can trigger either singular or plural agreement with the verb from a position in the left periphery:<sup>6</sup>

- (10) Kati és Éva látta/látták a képet.  
Kati and Éva saw.3SG/saw.3PL the picture-ACC  
'Kati and Éva saw the picture.'

Such coordinate DP's can antecede a singular reflexive anaphor if the verb is singular, but a plural reflexive is obligatory if the verb is plural. Thus there must be an exact match in  $\phi$ -features between the reflexive anaphor and the verb in this case.

- (11) a. Kati és Éva kihúzta magát/\*magukat.  
Kati and Éva out.drew.3SG herself/themselves  
'Kati and Éva drew themselves up.'  
b. Kati és Éva kihúzták \*magát/magukat.  
Kati and Éva out.drew.3PL herself/themselves  
'Kati and Éva drew themselves up.'

Reciprocals, however, are not picky, as they are grammatical both with singular and plural verbs in this construction:

- (12) Kati és Éva látta/látták egymás-t a tükörben.  
Kati and Éva saw.3SG/saw.3PL each\_other-ACC the picture-ACC  
'Kati and Éva saw each other in the mirror.'

Thus coordinate DPs provide another context in which reciprocals can go with singular antecedents that trigger singular agreement with the verb, unlike reflexive anaphors, which require a plural verb form in this construction, too.

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<sup>6</sup> É. Kiss (2012) argues that plural agreement with the verb is in fact agreement with a resumptive plural *pro* associate of the coordinate DP.

## 5. Singular collective nouns as antecedents

Collective nouns have been reported to be only marginally acceptable antecedents for reciprocals in the literature on English (see de Vries 2018 for an overview).<sup>7</sup> Hungarian collective nouns, when they truly denote a distributable plurality, can act as perfect antecedents for reciprocals. As an operative definition, I take those collective nouns to be fit for this purpose that can license plural cross-clausal anaphora, as in (13):

- (13) A személyzet úgy gondolta, hogy ők már eleget dolgoztak.  
the staff so thought.3SG that they already enough worked.3PL  
'The staff thought that they had worked enough.'

Note that the main verb is singular in (13). Collective nouns never trigger plural agreement with the verb in Hungarian:

- (14) A személyzet fáradt volt/\*voltak.  
the staff tired was.3SG/were.3PL  
'The staff was tired.'

Thus collective nouns do not show any obvious sign of plurality in the local syntactic domain in Hungarian.

Yet they make perfect antecedents for reciprocals, as in the following examples:<sup>8</sup>

- (15) a. A személyzet riadtan nézte egymás-t.  
the staff frightened watch.3SG each\_other-ACC  
'The staff were watching each other frightened.'  
b. A Facebookon szidta egymás-t a család.  
the Facebook.on cursed.3SG each\_other-ACC the family  
'The family were cursing each other on Facebook.'

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<sup>7</sup> Plural agreement with the verb seems to be necessary. The following judgements are as in de Vried (2018), and see also Palmieri (2018: 14).

(i) The couple \*loves/love each other.

<sup>8</sup> Such examples are also easy to find in corpora. The examples in (15) are slightly abbreviated versions of relevant hits found in the Hungarian National Corpus.



- c. A pár az interneten találta meg egymás-t.  
 the couple the internet.on found.3SG PRT each\_other-ACC  
 ‘The couple found each other on the internet.’

The verb must be singular in each case here, too, as has been shown for (14). As we can now expect, only singular reflexive anaphors are licensed in this construction even if we try to force a distributive reading:

- (16) Az egész család jól érezte magát-t/\*maguk-at.  
 the whole family well felt.3SG itself-ACC/themselves-ACC  
 ‘The whole family enjoyed themselves.’

This provides further support for the empirical generalisation that the paper describes: reciprocals may, plural reflexive anaphors may not take singular antecedents in Hungarian.

## 6. Singular variable as a local antecedent

Consider finally the following sentence, modelled on a construction type much discussed in the literature on English reciprocals (see, among others, Heim et al. 1991):

- (17) Péter és Éva az-t gondolja, hogy (\*ő) szereti egymás-t.  
 Péter and Éva that-ACC think.3SG that (s)he love.3SG each\_other-ACC  
 ‘Péter and Éva think that they love each other.’  
 [Péter thinks he loves Éva and Éva thinks she loves Péter.]

Here the two conjoined singular noun phrases trigger singular agreement with the verb, and they antecede a singular *pro*-dropped subject in the subordinate clause. This subordinate subject, in turn, is the local antecedent for the reciprocal. This example has three interesting properties: (i) the local antecedent of the reciprocal is a singular variable, (ii) this antecedent cannot be an overt pronoun, and it must be *pro*-dropped<sup>9</sup>, and (iii) the sentence only supports the broad-scope interpretation of the reciprocal as paraphrased below the example. Most importantly, it shows us once again that Hungarian reciprocals are fine with singular antecedents.

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<sup>9</sup> Hungarian is a *pro*-drop language.

For another like example, consider (18), a quote from the Hungarian writer Frigyes Karinthy.

- (18) Álomban két macska voltam, és (\*én) játszottam egymás-sal.  
dream.POSS.1SG.in two cat was.1SG and I played.1SG each\_other-with  
'I was two cats in my dreams and I was playing with each other.'

Arguably, this is an anecdotal example, and represents a creative use of the language rather than the norm. It does fit, however, the pattern that (17) shows inasmuch as the local antecedent of the reciprocal must be a *pro*-dropped 1SG pronoun, which cannot be spelt out. The intuition on the obligatory nature of *pro*-drop is quite clear, and (18) thus represents a genuine fact about how such reciprocals are licensed in Hungarian, alongside with the more regular example in (17).

## 7. Summary

I hope to have shown in this paper that Hungarian provides obvious evidence for a genuine grammatical contrast between reciprocals and true reflexive anaphors: only reciprocals can take singular subject antecedents. Reflexive anaphors are only grammatical if their subject antecedent is plural and show plural agreement with the verb. This characteristic behaviour of reciprocals is manifest in four Hungarian constructions that we have discussed: (i) quantified antecedents, (ii) conjoined singular noun phrases showing singular agreement with the verb, (iii) collective nouns that denote distributable pluralities, and (iv) singular *pro*-dropped pronominal variables acting as local antecedents. Together these data make a strong argument for the claim that reciprocals do not necessarily require antecedents that have a morphosyntactically relevant plural feature. The plurality they feed on may come from outside of the strict bounds of the computational system.

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### **Acknowledgement**

Project no. 111918 (*New approaches in the description of the grammar of Hungarian pronominals*) has been implemented with the support provided from the National Research, Development and Innovation Fund of Hungary, financed under the K funding scheme.