

## Re: reciprocals — Their internal constitution and external distribution

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**1** In languages that have nominal reciprocals, these exhibit peculiar variation in morphosyntax. Comparing Hungarian and a sample of Indo-European languages, this paper aims to provide a detailed perspective on the range of this variation, with the aid of a syntactic analysis which (in the general spirit of Heim *et al.*'s 1991 seminal paper, but in a very different fashion) takes the composition of these expressions seriously, and models their internal structure in the form of a syntax that assigns discrete structural positions to their component parts. For reciprocals of the *one another* type (juxtaposing a numeral and 'other'), a structure is proposed in which the numeral occupies the specifier and the 'other' part sits in the complement position of a head (overt in PPs, silent elsewhere) that mediates the relationship between the two. Reciprocal pronominals with this Spec–Head–Complement structure are prevented from serving as direct arguments of verbs, being construed instead as asyndetic specifiers of a SE clitic pronoun. This outlook on the internal constitution and external distribution of reciprocal pronominals affords a precise comparative perspective and advances the understanding of reciprocals and reciprocity.

**2** The reciprocal pronominals *each other* and *one another* are commonly treated on a par, and thought to belong to the family of anaphors, subject to Condition A of the Binding Theory. There is nothing about the overt morphological make-up of *each other* and *one another* that would lead one to expect them to be anaphors. That no condition reigning in the distribution of anaphoric pronominals should constrain *each other* is shown by (1): unlike genuine anaphors, *each other* can be the subject of a finite clause (albeit prescriptively 'incorrectly'). The contrast between *each other* and *one another* in (1) derives from the fact that *each other* can be part of a single nominal constituent (as in *John was wearing pink; each other player was wearing red*; see (2a)), while *one another* cannot (*\*one another thing*). The syntax of *each other* qua reciprocal expression can be represented as in (2b), with the anaphoricity of *each other* being a function of the variable *x*'s need to have a local antecedent. For *one another*, (2b) is impossible: because *one* and *another* cannot form a single nominal constituent, *one another* is ineligible to serve as the subject of a clause.

- (1) they think that {<sup>1</sup>*each other*/<sup>2</sup>*\*one another*} will win  
(2) a. [<sub>QP</sub> *each* [<sub>NP</sub> *other* [<sub>NP</sub> N]]]      b. [<sub>QP</sub> *each* [<sub>NP</sub> *other* [<sub>NP</sub> MEMBER of *x*'s GROUP]]]

English *one another* behaves on a par in this respect with French *l'un l'autre* 'the one the other', Hungarian *egymás* 'one.other', German *einander* 'one.other' and Dutch *elkaar* 'each.other': see (4). The ill-formedness of (4a) is rooted in the same constituency problem that hobbles (1b). The Hungarian and German numerals/indefinite articles *egy* and *ein* 'one' can occur to the immediate left of *más/ik* and case/gender-inflected *ander* 'other' in *egy más/ik ember* and *ein anderer Mann* 'another man'; but *egy/ein* plus 'bare' *más/ander* cannot form a well-formed DP (*azt hiszik, hogy egy más\*(ik) fog győzni*; *sie denken, dass ein ander\*(er) gewinnen wird* 'they think that another one will win'). Dutch (4d) features *elk* 'each'; but while English 'bare' *other* is possible on its own in *male, female or other*, Dutch 'bare' *ander* cannot be used in this way (*mannelijk, vrouwelijk of ander\*(s)*). Hence despite being a close cognate of *each other*, Dutch *elkaar* is out in (4d).

- (4) a. \*ils pensent que l'un l'autre gagnera      c. \*sie denken, dass einander gewinnen wird  
     they think that the one the other will.win      they think that one.other win will  
     b. \*azt hiszik, hogy egymás győzni fog      d. \*ze denken dat elkaar gaat winnen  
     it they.think that one.other win will      they think that each.other goes win

**3** Reciprocals of the *one another* type are expected to fail not only as subjects but as arguments of verbal predicates altogether. Indeed, French *l'un l'autre* 'the one the other' cannot be used as the object of a verb; it must combine with the argumental clitic *se*, itself vague on the reflexive/reciprocal divide and specified by the (optional) addition of *l'un l'autre*, as illustrated in (5).

Particularly revealing are the ways in which German and Hungarian translate (5). German offers two options: one with *sich* (French *se*), the other with *einander*, near-identical with English *one another*. In (6), *einander* is uninflected for accusative case — contrast this with *sie lieben einen anderen* ‘they love another’. This can be understood if *einander* serves in relation to a silent counterpart to *sich* (itself case-invariant). The relationship between SE and the reciprocal involves specificational asyndetic coordination (cf. Koster 2000, de Vries 2006): see (7). Silent SE cannot expone accusative case; the reciprocal specifying the content of silent SE is not itself the object of the verb, hence receives no case. In German, the relation between SE and *einander* cannot give rise to case concord the way specificational nominal apposition does (Heringa 2012, Ott 2016).

- (5) ils s’aiment beaucoup l’un l’autre  
they SE love much the one the other  
‘they love one another a lot’
- (6) sie lieben *sich/einander* sehr  
they love SE/one.other very  
‘they love one other a lot’
- (7) [<sub>:P</sub> [<sub>Conjunct1</sub> (...) SE (...)] [<sub>:’</sub> : [<sub>Conjunct2</sub> (...) RECIPROCAL (...)]]]

The Hungarian reciprocal pronominal *egymás* ‘one.other’ has exactly the same morphological composition as German *einander* ‘one.other’, but requires case inflection on the second part: (8). Accusative *egymást* in (8) is not the verb’s object: it occurs with the DEF(inite) conjugation, which neither of its component parts can do on its own: (9). The object of *szeretik* in (8) is a silent DEF-controlling SE pronoun (cf. *borotválkozom* ‘shave.1SG.DEF’), with which *egymást* is construed. That *egymás* must inflect for accusative case follows if, in Hungarian, the second conjunct in (7) is an entire clause (IP), in parallel to the clausal Conj1: (10). Conj2 has a silent verb (content-identified by the overt verb in Conj1), a nominative (unmarked) subject, *egy*, and an accusative object, realised as *más*+*-t* ‘other+ACC’: [[<sub>Conj1</sub> “they are in a state of reflexive loving”] [<sub>:’</sub> : “such that” [<sub>Conj2</sub> “one loves the other”]]]. (10) derives the fact that accusative marking is present only on *más*, not (also) *egy* (\**egy-et-más(-t)*): *más* is the object of Conj2 while *egy* is its subject. With Conj2 in (10) as its syntax, *egymás* is banned from subject and object positions: see (4b) and \*INDEF in (8).

- (8) nagyon szeretik/\*szeretnek *egymás*\*(*t*)  
very love.3PL.DEF/\*INDEF one.other.ACC  
‘they love each other very much’
- (9) a. én is akarok/\*akarom *egy*et  
I also want.1SG.INDEF/\*DEF one.ACC  
‘I want one, too’
- b. *mást* hiszek/\*hiszem  
other.ACC believe.1SG.INDEF/\*DEF  
‘I believe something else’
- (10) [<sub>:P</sub> [<sub>Conj1=IP</sub> ... SE ...] [<sub>:’</sub> : [<sub>Conj2=IP</sub> [<sub>Subject</sub> *egy*] [<sub>VP</sub> *v* [<sub>VP</sub> *V*<sub>o</sub> [<sub>Object</sub> *más*+*-t*]]]]]]]

**4** In the (extended) projection of P, the syntax makes room available for both component parts of the complex reciprocal, and SE is not required: French (11–left). The two parts of the reciprocal each serve as dependents of the relational P: (12). As French is head-initial, the two parts occur on opposite sides of P. In Hungarian, whose PPs are head-final, P follows both parts: (11–right). In the history of English, *one another* used to behave like French *l’un l’autre*: (13). Against the background of (12), one can think of the diachronic development of English PP-contained *one another* as a function of movement of P to a position above the position of *one*, as shown in (14) — a case of the *emergence* rather than the *demise* of head movement in the history of English.

- (11) ils (*se*) parlent l’un à/de l’autre  
they SE talk the one to/about the other  
‘they’re talking to/about one another’
- egymás*-sal/-ról beszélnek  
one.other-with/about talk.3PL.INDEF  
‘they are talking with/about one another’
- (12) [<sub>PP</sub> l’un [<sub>P’</sub> P [<sub>P’</sub> l’autre]] [<sub>PP</sub> *egy* [<sub>P’</sub> [<sub>P’</sub> *más*] P]]
- (13) they said *oon* to *an other* that they durste not come and assaylle hem (Caxton, 1474)
- (14) [<sub>xPP</sub> P [<sub>PP</sub> *one* [P [*another*]]]