

Re: reciprocals — Their internal constitution and external distribution

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Abstract

In languages that have nominal reciprocals, these expressions exhibit morphosyntactic variation. This paper provides a detailed perspective on the range of this variation with the aid of a syntactic analysis that takes the composition of these expressions seriously, modelling their internal structure in the form of a syntax that assigns discrete structural positions to their component parts. In reciprocals juxtaposing a numeral and an alterity word (such as English *one another*), 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 barred from serving as direct arguments of verbs, being construed instead as asyndetic specifiers of a SE clitic pronoun.

1. Introduction

Ways of expressing reciprocity have been investigated to a much more limited extent than ways of expressing reflexivity, both from a typological perspective and in descriptions of individual languages. The few large-scale studies of reciprocals include Frajzyngier and Walker (2000), König and Gast (2008) and especially Nedjalkov *et al.* (2007).

In many of the world’s languages, reciprocity is expressed with a variety of non-nominal means — for instance, via verb reduplication or a dedicated verbal inflection (such as the *hitpa’el* of Hebrew), or with the aid of adverbial expressions equivalent to English *mutually* or *reciprocally* (for useful discussion of and references to literature addressing verbal and adverbial reciprocals, see, e.g., Safir 2013, Bar-Asher Siegal 2020:Ch. 5, Bar-Asher Siegal 2024, Evans 2008 and Siloni 2008). Such languages do not concern me in this paper, which focuses on those that have dedicated nominal expressions for this purpose. Among languages using nominal elements to express reciprocity, variation in the nature of the elements used and their behaviour in morphosyntax is rife, understudied, and poorly understood from a theoretical point of view.

Apart from the fact that the distinction between reflexive and reciprocal anaphors is often not formally made (thus, French *les enfants s’aiment* ‘the children SE love’ is ambiguous between a reflexive and a reciprocal interpretation),¹ within the set of languages with bipartite nominal expressions for reciprocity we find variation between what Bar-Asher Siegal (2020) calls ‘one-unit constructions’ and ‘two-unit constructions’ — a distinction active in English (*they praised each other* ~ *they each praised the other*) and also, for instance, in Hebrew (one-unit *exad et ha-šeni* ‘one ACC the-second’ ~ two-unit *exad ... et ha-šeni* ‘one ... ACC the-second’).

Bar-Asher Siegal’s term ‘one-unit construction’ does not necessarily make direct reference to syntactic constituency. Indeed, a major point that I wish to argue in this paper is that, although some ‘one-unit’ reciprocals do indeed form a single nominal constituent (English *each other* is a case in point), upon closer inspection many ostensibly ‘one-unit’ reciprocals do not.

The primary empirical focus of this paper is on a sample of Indo-European languages, Hebrew, and Hungarian, whose bipartite reciprocal pronominals all share the fact that their second member is an alterity (‘otherhood’) expression (English *other*, French *l’autre* ‘the other’, Hungarian *más* ‘other’, Hebrew *ha-šeni* ‘the-second’) but which exhibit a range of variation that can be understood with the help of an analysis that takes the bipartite composition of these reciprocals seriously. A key ingredient of the analysis of reciprocals of the *one another* type is the hypothesis that their internal structure is modelled in the form of a syntax in which one part of the complex reciprocal occupies the specifier and the other the complement position of a

¹ On reflexive/reciprocal polysemy, see Kemmer (1993) and Knjazev (1998). Also relevant is the existence of reciprocal/sociative polysemy, discussed in Maslova (2000).

head (overt in PPs, silent elsewhere) mediating the relationship between the two. Reciprocals with this Spec–Head–Complement structure are prevented from serving as direct arguments of verbs, being construed instead as asyndetic specifiers of a clitic or silent pronoun. This integrated outlook on the internal constitution and external distribution of reciprocal pronominals affords a precise comparative perspective and advances the understanding of reciprocals and linguistic reciprocity.

2. The case of *each other* and *one another*: Constituency and distribution

2.1 *Each other can be a nominal constituent but is not an anaphor*

In the generative tradition, reciprocal pronominals such as English *each other* are commonly thought to belong to the family of anaphors, subject to Condition A of the Binding Theory of Chomsky (1981), which requires that anaphors be locally bound (within their ‘governing category’, in the standard formulation of the condition). But the distribution of *each other* defies the expectations raised by Condition A.

Thus, it is a well known fact that *each other* readily occurs in the pronominal possessor position, where reflexive *themselves* cannot be found, as shown by the contrast in (1) and (2).

(1) They like each other’s parents.

(2) *They like themselves’ parents.

And in colloquial English *each other* can also serve as the subject of a finite clause (though this is heavily frowned upon by prescriptivists, whence the ‘!’ diacritic in (3); see Bolinger 1987, Lebeaux 1983).²

(3) a. !They think that each other will win.

b. !They don’t know what each other will do.

(4) a. *They think that themselves will win.

b. *They don’t know what themselves will do.

The grammaticality of (3) is particularly problematic for the standard Binding Theory of Chomsky (1981) if *each other* is subject to Condition A: the local domain for an anaphor in the structural subject position of a finite clause is that finite clause itself, containing the anaphor, the governor of the anaphor (either I or C, depending on which definition of c-command one adopts), and an accessible subject ([+Agr] in I). Chomsky’s definition of ‘governing category’ delivers the right results for the reflexives in (4); but if *each other* is assumed to be subject to Condition A, (3) does not fit. The grammaticality of (1) is also difficult to account for on the basis of the standard Binding Theory if reciprocal pronominals are treated as anaphors: there are strong morphosyntactic parallels between pronominal possessors and subjects of finite clauses (see, e.g., Szabolcsi 1983, Den Dikken 1999, and references there), which make it plausible to assume that ‘Saxon genitives’ occupy the same type of position in DP as nominative subjects do in CP; assuming so, we can derive the ungrammaticality of **I hate myself’s pictures* from Condition A, but the fact that (1) is fine is again irreconcilable with an approach to *each other* as an anaphor.

There is nothing about the overt morphological make-up of *each other* that would lead one to expect it to be an anaphor: neither in its semantics nor in its syntactic distribution is *each other* anaphoric as such; and *other* is not an anaphor in the sense of requiring a local sentence-internal antecedent. I will not treat reciprocal pronominals of the *each other* type as anaphors, therefore, and will not implicate Condition A or any other vehicle intended to rein in the distribution of anaphoric expressions in my analysis of these expressions.

² The finite verb of the embedded clause in (3) is a non-agreeing modal. With an agreeing verb, the judgement on (3) is less stable; cf. Rizzi (1990), Woolford (1999), Haegeman (2004) on the anaphor agreement effect. Lebeaux (1983:724) notes that *each other* qua subject is more natural in an interrogative finite clause (such as (3b)) than in a declarative one (3a). See also the difference between the lefthand examples in (ia) and (ib–d) in fn. 4, below.

2.2 *Silence in the syntax of each other*

The syntax of *each other* qua nominal constituent that I advocate treats *each* in its usual way, as a distributive quantifier, and *other* as a modifier of a noun.³ In (5), this noun is overt, and we are dealing with the structure in (6a). In reciprocal *each other*, the head noun is silent, as in (6b).

- (5) a. This is the only house in our street that doesn't have shutters; each other house does.
 b. The team captain was the only player wearing pink; each other player was wearing red.
 c. They sell coffee for 99 cents on Friday; it costs \$1.50 on each other day of the week.
- (6) a. [QP *each* [NP *other* [NP N_{overt}]]]
 b. [QP *each* [NP *other* [NP N_∅]]]

What facilitates the silence of the head noun modified by *other* is the fact that English *other* can occur 'bare' in singular indefinite contexts, as in (7):

- (7) a. A person's gender can be male, female or *other*.
 b. Something or *other* happened that made things much worse.
 c. Something *other* than money is needed to help her out.

In (7ab), *other* is plausibly treated as a modifier of a silent noun, similarly to *another gender/thing*. If this is right, it lends credence to (6b) as a possible syntax of *each other* in English.

With this in mind, the syntax of *each other* qua reciprocal pronominal can be fleshed out as in (8). In this structure, the anaphoricity of *each other* falls out as a function of the restrictions imposed on the antecedence of the variable *x* in the NP-core of the structure.

- (8) [QP *each* [NP *other* [NP MEMBER of *x*'s GROUP]]]

The structure in (8) not only provides a perspective on the internal constitution of *each other* qua reciprocal and on its anaphoricity, it also reinforces the conclusion that *each other* is (or at least can be) a nominal constituent in syntax, which helps us understand (3).

2.3 *One another is not a nominal constituent*

For *one another*, construal as the subject of a finite clause is considerably less comfortable than it is for *each other*: though sentences of the type in (3') are not entirely non-existent, they both strike speakers as less acceptable and occur much less frequently than sentences such as (3).⁴

³ By dissecting *each other* into its two component parts, the present analysis follows in the footsteps of Heim *et al.*'s (1991) seminal paper. But for Heim *et al.*, *each* and *other* do not form an underlying constituent — and as a consequence, their proposal has no handle on (3). The Heim *et al.* analysis of *each other* is a logically possible syntax for this reciprocal, not necessarily supplanted by or irreconcilable with (8), below.

⁴ The number of tokens of *one another* as the subject of a finite clauses is consistently lower than the number for *each other*. (i) reproduces the relevant figures in COCA (Corpus of Contemporary American English).

(i)	a.	that each other ...	8	that one another ...	0
	b.	what each other ...	87	what one another ...	4
	c.	how each other ...	21	how one another ...	0
	d.	where each other ...	14	where one another ...	1

- (3) a. 'They think that each other will win.
 b. 'They don't know what each other will do.
- (3') a. ?*They think that one another will win.
 b. ?*They don't know what one another will do.

Consonant with this, Bar-Asher Siegal (2020:105) notes that while Danish *hinanden* (comparable to English *each other* on Bar-Asher Siegal's outlook) is allowed in this position, the Hebrew 'one-unit' reciprocal *exad ha-šeni* 'one the-second' is ungrammatical as the subject of a finite clause.⁵

The contrast in (3a)~(3'a) can be derived from the fact that while *each other* is a possible subpart of a well-formed nominal constituent, *one another* arguably is not. For *each other*, a syntax assimilating it to expressions of the type found in (5) is entirely feasible. But there is no way elsewhere in English syntax in which *one* and *another* can form a single nominal constituent. Indeed, the numeral *one* can never precede the indefinite article *a(n)* inside a nominal phrase with an overt head:

- (9) a. one thing
 b. another thing
 c. *one another thing

The postulation of a silent-headed nominal phrase containing *one*, *another* and N_{\emptyset} , on the analogy of (6b), would thus be unsupported.⁶

The conclusion that whereas *each other* can be a nominal constituent, *one another* cannot provides an immediate perspective on the fact that (3) is possible but (3') is not. For something to serve as the subject of a finite clause, it has to be a single nominal constituent. Since the string *one another* cannot form a syntactic constituent, it cannot be the subject of a finite clause.

Before I proceed to a discussion of a context that appears at first to directly contradict the conclusion that *one another* is not a syntactic constituent, I would like to show that when it comes to its inability to serve as the subject of a finite clause, *one another* behaves on a par with French *l'un l'autre* 'the one the other', German *einander* 'one.other' and Dutch *elkaar* 'each.other'.

2.4 French *l'un l'autre*, German *einander*, and Dutch *elkaar* and their non-constituency

The ill-formedness of the French sentences in (10) is rooted in the same lack of constituency that hobbles English (3').

- (10) a. *Ils pensent que l'un l'autre gagnera.
they think that the one the other will.win
 b. *Ils demandent si l'un l'autre gagnera.
they ask if the one the other will.win

It is impossible to squeeze *l'un* 'the one' and *l'autre* 'the other' into a single noun phrase. Two definite articles are, to be sure, accommodable in such complex noun phrases as *la mère de la maire* 'the mother of

⁵ Bar-Asher Siegal (2020:110) adds that some Hebrew speakers are innovating the use of *exad ha-šeni* as a nominative subject. These are reported to be the same speakers who also allow *exad ha-šeni* to occur to the right of a preposition (rather than in the split form that the standard language exhibits; see esp. Landau 2025). I will return to this in section 3.5, below.

⁶ Landau (2025:1407) suggests that English *one another* CAN be analysed as a single constituent, with *one* in the specifier of a DP headed by *an* and *other* as a modifier of a silent-headed nominal in the complement of D. As the ungrammaticality of (9c) shows, such a syntax is otherwise non-existent in English. In the interest of avoiding any kind of *sui generis* syntax for reciprocals, I therefore reject the possibility that *one another* can be represented as a single DP constituent. For Hebrew *exad ha-šeni* 'one the-second', Landau also postulates an underlying representation in which the two component parts form a single constituent; but that constituent, being symmetrical, is necessarily split in the course of the derivation (in standard Hebrew). On this, see also fnn. 13 and 26, below.

the mayoress', *le fantôme de l'opéra* 'the phantom of the opera' and *la destruction de la cité* 'the destruction of the city'. But apart from complex nominals internal to which an argumental relationship between the constituent parts is established, always mediated by *de* 'of', no single noun phrase can contain two definite articles in French.⁷

For German (11), the cause of its ungrammaticality is not exactly the same as that of (3') and (10).

- (11) a. *Sie denken, dass einander gewinnen wird.
 they think that one.other win will
 b. *Sie fragen, ob einander gewinnen wird.
 they ask if one.other win will

While English *one another* is clearly impossible as a syntactic constituent because *one* cannot precede *a(n)* in a DP, the German numeral *ein* 'one' (doubling as the indefinite article) can occur to the immediate left of inflected *ander* 'other' in *ein anderer Mann* 'another man', *eine andere Person* 'another person'. But *ein* plus 'bare', uninflected *ander* cannot form a well-formed DP: the German translation of English (12a) must feature inflection on *ander*. The combination of *ein* and 'bare' *ander* is therefore excluded from the subject position of a finite clause.

- (12) a. They think that another will win.
 b. Sie denken, dass ein ander*(er) gewinnen wird.

Dutch (13) is also ungrammatical, regardless of the choice of V-inflection (see also Hüning 2006:205). This is interesting in light of the fact that the Dutch reciprocal *elkaar* is morphologically just like its cognate *each other*,⁸ which occurs as the subject of a finite clause.

- (13) a. *Ze denken dat elkaar gaat/gaan winnen.
 they think that each.other goes/go win
 b. *Ze vragen of elkaar gaat/gaan winnen.
 they ask if each.other goes/go win

⁷ Notably, while Italian has *quell'ignorante del dottore* 'that ignoramus of.the doctor' (Napoli 1986:203), it does not have **quell'ignorante il dottore* 'that ignoramus the doctor': the presence of *di* is needed to accommodate two definite determiners.

⁸ Dutch *elkaar* and its archaic variant *elkander* (which both behave orthographically like German *einander* in being spelled as a single word; this particular case of univerbation is probably syntactically irrelevant) are the combination of the distributive quantifier *elk* 'each' and *ander* 'other', the latter reduced in the case of *elkaar* to *aar*, via syncope. On *d*-syncope in the *aar* of *elkaar*, see Heeroma (1942:200) (cf. *ader(tje) ~ aar(tje)* 'vein(DIM)', *vader(tje) ~ vaar(tje)* 'father(DIM)', *nader ~ naar* 'nearer, to'). Non-reduced *elkander* occurs in dialects (see the map for 'reciprook pronomen' in Barbiers *et al.* 2005). A non-standard but probably older variant of *elkaar* is *mekaar* (also found in dialects as *mekander*; in Afrikaans, *mekaar* is the standard reciprocal), thought to be historically a reduction of *malkander*, deriving from *manlijk ander* 'manly other' (Verwijs and Verdam 1885–1929; Van den Toorn *et al.* 1997:79). In Middle Dutch, *manlijk* and *haerlijk* (the latter built on the accusative of *si* 'they') co-occur with *ander* in a split construction, with *manlijk/haerlijk* as the subject and *ander*+case as the object: *manlijk gaf anderen trouwe* 'each gave the other his word of honour'; *haerlijk begonde anderen groeten* 'each started to greet the other'; Hüning 2006:201). On the history of expressions of reciprocity in Dutch, and the diachronic shift from *malkander* to *elkander*>*elkaar*, see Hüning (2006) for detailed discussion. An interesting observation that Hüning (2006:209) makes with particular reference to the work of Dirc Potter (15th century) is that *malcanderen* is much more frequent as the integral complement of a preposition (*bij malcanderen* 'with each other') than *elc anderen* (which is generally split in two by P: *elc op andren* 'each on other'), and that *malcanderen* presents the participants as a collective while *elc anderen* yields a distributive interpretation individuating the participants. In present-day Dutch *mekaar* behaves just like *elkaar* in being impossible to use as the subject of a finite clause or as the focus of a cleft: **ze denken dat mekaar gaat winnen* 'they think that RECI will win', **het is MEKAAR die ze haten* 'it is RECI that they hate'.

To the ungrammaticality of (13), Hüning (2006:205) adds that *elkaar* also fails as the focus of a cleft, again in contrast to English *each other*. I find (14) slightly less bad than (13), but I agree with Hüning that it is poor.⁹

- (14) *Het is elkaar die ze (het meest) haten.
it is each.other that they the most hate
 ‘It is each other that they hate (the most).’

The key to the ungrammaticality of (13) and (14) is that while English ‘bare’ *other* is possible in contexts such as those in (7), Dutch ‘bare’ *ander* cannot be used in (15a) and (15c): the marker *-s* (historically the genitival marker) needs to be added. Though *-s* is absent in (15b), the containing noun phrase paraphrasing English *something or other* is introduced by the neuter definite article *het*, making (15b) irrelevant for (**het*) *elkaar*.

- (15) a. Iemands geslacht kan mannelijk, vrouwelijk of *ander*(s)* zijn.
someone’s gender can male female or other(-s) be*
- b. Er is het één of *ander* gebeurd dat de boel een stuk erger heeft
there is the one or other happened that the lot a chunk worse has
 gemaakt.
made
- c. Iets *ander*(s)* dan geld / iemand *ander*(s)* dan hij is nodig
s.th. other(-s) than money / s.o. other*(-s) than he is necessary*
 om haar te helpen.
COMP her to help

The form *anders* occurs as part of a complex indefinite noun phrase, as in (15c), but it does not combine with the distributive quantifier *elk*: **elk anders* is impossible. The forms *elkaar+s* and (archaically) *elkander+s* can serve as the pronominal genitival possessor of a possessive noun phrase (*ze haten elkaars/elkanders ouders* ‘they hate each other’s parents’), but *elkaars* and *elkanders* have no distribution as stand-alone elements. Unlike English ‘Saxon genitives’, Dutch possessive genitives must precede an overt noun; silencing the possessum (whether via ellipsis or through the use of a radically silent noun) is impossible in Dutch possessive nominals (*Jans boek is minder goed dan Piets *(boek)* ‘Jan’s book is less good than Piet’s (book)’), and Dutch genitives do not occur by themselves as predicates of copular sentences either (*dit boek is Jans *(boek)* ‘this book is Jan’s (book)’). Despite the fact that Dutch *elkaar* is a close cognate of English *each other*, therefore, (13) and (14) (in the latter, *elkaar* is underlyingly the subject of *het* ‘it’) are underivable.

3. Argumenthood and the role of P

3.1 Reciprocals as non-subject arguments

Reciprocals such as *one another*, for which it can be argued that they cannot form a single nominal constituent, are expected not only to be unable to serve as subjects of finite clauses but to fail as arguments altogether. For English *one another*, this would at first blush appear to be false: the sentences in (16) are perfectly well-formed. I will return to this in section 3.3, below.

- (16) a. They like one another very much.
 b. They like one another’s parents.
 c. They are fond of one another.
 d. They were talking about/to one another.

⁹ Camil Staps (p.c.) points out that for him, (14) gets a bit better with plural *zijn* instead of *is*, but remains unacceptable.

But Plank (2017:354) writes that ‘especially in its informal spoken form Standard German is very reluctant to actually use *einander* as direct and also indirect object ... and resorts to the reflexive [*sich*] as an ersatz reciprocal in these relations’. König and Kokutani (2006:sect. 4.2) show that *einander* occurs in (in)direct object positions in the cosmas corpus, especially in cases ‘where the preferred interpretation of *sich* in the same position would be a reflexive one’; but they confirm Plank’s assessment that this is rare in the spoken vernacular.¹⁰

For French, the conclusion that its reciprocal pronominal *l’un l’autre* ‘the one the other’ cannot itself serve as an argument of a predicate is confirmed more robustly: *l’un l’autre* cannot be used by itself as the object of a verb; it must be combined with the clitic *se*, the latter serving as an argument whose meaning (vague on the reflexive vs reciprocal divide) is disambiguated by the addition of *l’un l’autre*.¹¹ We see this in the examples in (17). These sentences would also be grammatical without *l’un l’autre* included in them, but in that case they would be ambiguous a reciprocal reading and a reflexive one.

- (17) a. Ils *s’aiment l’un l’autre*.
 they *SE love the one the other*
- b. Ils *s’accompagnent l’un l’autre*.
 they *SE accompany the one the other*
- c. Ils *s’accusent l’un l’autre*.
 they *SE accuse the one the other*
- d. Elles *se contredisent les unes les autres*.
 they.F *SE contradict the ones.F the others.F*

Even for German *einander* and French *l’un l’autre*, however, it might appear to be wrong to assert, in general, that they can never serve as an argument. In constructions containing a preposition, *einander* directly combines (and is spelled as one word) with the preposition, as shown in (18). Similarly, in French (19), featuring the verb *parler* ‘talk’ in combination with an à-PP, *se* is apparently optional, and in (20), with the verb *penser* ‘think’ selecting an à-PP, the use of *se* would even be ungrammatical.

- (18) Sie *reden {mit/über/von}einander*.
 they *talk with/about/of.one.other*
 ‘They are talking to/about one another.’
- (19) Ils (*se*) *parlent l’un à l’autre*.
 they *SE talk the one to the other*
 ‘They are talking to one another.’
- (20) Ils (**se*) *pensent l’un à l’autre*.
 they *SE think the one of the other*
 ‘They are thinking of one another.’

In (18) and the French examples in (19)–(20) without *se*, isn’t the reciprocal an argument of the preposition (or the combination of the verb and the preposition)?

3.2 Reciprocals of the one another type in PPs

Strictly speaking, the answer to this question is ‘no’: *l’un l’autre* in (20) is not one single argument of the preposition. But what *is* true is that the two *parts* of the reciprocal expression, viz., *l’un* ‘the one’ and *l’autre* ‘the other’, each serve as arguments of the relational P. Because *l’un* and *l’autre* are different arguments of

¹⁰ On German *einander* as a prenominal possessor, see section 3.6.

¹¹ See also Belletti’s (1982) observations for Italian *i tuoi colleghi *(si) odiano l’uno l’altro* ‘your colleagues hate each other’. (Vezzosi 2010 reports that Italian has recently grammaticalised an adverbial use of *l’un l’altro*.)

P, they accordingly occur in different argument positions, on opposite sides of P, as in (21).¹² It is thanks to the fact that P is quintessentially a relational category that it is capable of accommodating the two component parts of the bipartite reciprocal expression wholly within its own maximal projection.

(21) [PP *l'un* [P=*à* [*l'autre*]]

So *l'un* ‘the one’ and *l'autre* ‘the other’ each serve a discrete argument role. Even in (21), it is not the case therefore that the reciprocal expression as a whole is a single argument of a predicate.

In French (and the other Romance languages), the use of the reciprocal as a dependent of P gives rise exactly to the surface output generated by the structure in (21): a ‘split’ pattern in which one portion of the reciprocal precedes P (as is expected of a subject) and the other part follows it (as is an object’s wont in a head-initial language). In the history of English, the reciprocal expression *one another* also used to behave in this way: an example of this type is given in (22a) (see also Hüning 2006:209 on the diachrony of Dutch *elkaar*; fn. 8, above). Over time (starting at least as early as the 16th century, judging from (22b)), this pattern mostly gave way to what we see in English today.

- (22) a. They said *oon to an other* that they durste not come and assaylle hem.
(William Caxton, The Recuyell of the Historyes of Troye, 1474)
- b. Aduising it for the best, neuer to make priuy *to one another* of our loues.
(Anthony Munday, The First Book of Primaleon, 1595)

For *each other*, the interception by P of its two component parts is also found in earlier records (see (23a), from 1902); and (23b) is an example found in a 21st-century collection of stories from the American South-East (*The Blue Mountain Review: A Journal of Culture* #10):

- (23) a. They spoke *each to the other*, and no one else heard.
- b. The eyelids slid open, and Dar would swear forever that their eyes had locked and that in that moment they spoke *each to the other*.

Calle Martín’s (2018) assessment that the ‘discontinuous construction’ survived until the 18th century underestimates the staying power of this pattern. But hold-outs such as (23b) notwithstanding, it is clear that present-day English reciprocals as a rule follow P integrally, and are no longer split by P the way they are in French and other Romance languages.

What is behind this difference between present-day English and French, and the diachronic development of English in this regard? We can think of it as a function of movement. In Landau (2025),¹³ a detailed analysis of the facts of Hebrew PP-contained reciprocals is presented according to which it is the first part of the bipartite reciprocal that is undergoing movement, to a position to the left of P, deriving the discontinuous pattern from an underlying P-initial structure.¹⁴ Since my syntax in (21) base-generates the

¹² The structure in (21) may be a simplification: the two arguments of P could be introduced by different heads, just like the two arguments of a transitive/dyadic verb are introduced by different heads (V for the internal argument, *v* or Voice for the external one). (21) could readily be developed further. But for the purposes of the discussion in this paper, it will suffice. What matters here is that *l'un* and *l'autre* are in different argument positions, on opposite sides of the head spelled out as the preposition.

¹³ Landau’s (2025) paper came to my attention only at the final revision stage of the present paper, so I have not had the opportunity to digest its ‘dynamic antisymmetry’ approach to the discontinuous PP-pattern in detail. Landau’s hypothesis that the two portions of (Hebrew) bipartite reciprocals form an exocentric, symmetrical DP that must be broken up by movement may approximate the hypothesis that the two portions of *one another*-type reciprocals form a ‘small clause’, if small clauses are modelled (as in Moro 2000) as symmetrical structures. But for reasons independent of the syntax of reciprocals, I advocate an asymmetrical syntax for small clauses (Den Dikken 2006).

¹⁴ Hebrew, Icelandic and Slovenian all exhibit alternations that are interesting to compare to the diachronic change found in English. Bar-Asher Siegal (2020:sect. 3.5) and Landau (2025:sect. 5.1) report that (substandard) Modern Hebrew is currently in the process of innovating a syntax in which the preposition is placed to the left of the first term of the complex reciprocal, *exad* ‘one’, with the accusative marker either being absent or placed between the two terms: *im exad (et) ha-šeni* ‘with one (ACC) the-second’. Sigurðsson *et al.* (2020) and Messick and Harðarson (2024) report

split pattern, I opt instead for movement of the P-element to a position above the base-generation site of the higher portion of the bipartite reciprocal:

- (24) a. [PP *one* [P [*another*]]] (cf. (21))
 b. [_xPP P [PP *one* [P [*another*]]]]

The head-movement analysis offers a connection to developments in the verbal domain. There is good reason to believe that the Theme argument of verbs originates in SpecVP, to the left of the verb's base position (see, e.g., Hale and Keyser 1993). In Old English and early Middle English, the Theme *qua* object of a transitive verb surfaced in pre-verbal position; but in Modern English, Theme objects follow the verb. This could be an indication that (with the exception of root clauses) V used to stay *in situ* but over time shifted to a position above the Theme:

- (24') a. [_{VP} Theme [V (...)]]
 b. [_xVP V [_{VP} Theme [V (...)]]]

If (24') is a plausible way of modelling the diachronic change in the relative placement of the Theme and V in English, we have a parallel with (24).

Haas (2010:63–8) and Calle Martín (2018:45) characterise *one another* as 'a Late Middle English development of (*the*) *one* + (*the*) (*an*)*other*, where the first element is ... the grammatical subject and the second the object'. The treatment of *one* as a subject and *another* as an object strikes me as correct (see also section 3.5). Bipartite reciprocal expressions such as English *one another* and French *l'un l'autre* take optimal advantage of the relational nature of P by exploiting both the complement of P and its specifier.¹⁵

3.3 Reciprocals of the one another type as objects of transitive clauses

For transitive sentences containing a reciprocal expression as the object of the verb, it would not do to assign the two portions of *one another* the subject and object functions, respectively: (25a) is grammatical but (a) it is not reciprocal,¹⁶ and (b) it leaves no place for the notional subject of a sentence such as (25b) to occupy. So what do we do with the syntax of the version of (25b) featuring *one another*?

- (25) a. One likes the other very much.
 b. They like each other/one another very much. (cf. (16a))

Revealing here are the ways in which German can express the message conveyed by (25b). The language offers two options: (26a), featuring the 'bare' reflexive element *sich* (cf. French *se*, seen in (17) and (19)),

on everyday Icelandic having innovated this pattern over the last 200 years, though standard Icelandic still has P splitting the reciprocal into its two component parts, *hver*^{DUAL}/*hver*^{PLUR} 'each' and *annar* 'other'. (Sigurðsson *et al.* and Messick and Harðarson (see also the references cited there) discuss at length the case behaviour of *hver/hver* in the split and non-split constructions.) Similarly, for Slovenian, Živanović (2016) notes that the standard 'split' pattern alternates with a P-initial syntax in a minority dialect, with some speakers accepting both options. From the English, Hebrew, Icelandic and Slovenian facts, the impression emerges that the P-medial pattern shows a tendency over time to give way to the non-split P-initial order.

¹⁵ German {*mit/über/von*}*einander* 'with/about/of.one.other' in (18) and other univerbations of a preposition, 'one' and the alterity word could either come about via a syntactic derivation similar to (24b) or be the product of a post-syntactic (PF) process (more precisely, a case of morphological merger *cum* local dislocation, in the terminology of Distributed Morphology). For lack of a clear argument either way, I will leave open the question of how P and German *einander* amalgamate.

¹⁶ Camil Staps (p.c.) questions this for cases such as *as long as one respects the other's religiosity*. We may be dealing here with interference from the impersonal pronoun *one*, circumventable by using *one* inside a PP (where the impersonal pronoun *one* does not like to occur): *I will talk to one about the other* is not reciprocal. With (the equivalent of) *one* adorned with a definite article and in the presence of a hanging topic, reciprocity may arise for sentences of the type in (25a) (e.g., Italian *a proposito di quei ragazzi, l'uno non condivide le idee dell'altro* 'as for those guys, the one does not share the other's ideas'; cf. Bar-Asher Siegal 2020:96). I will set such cases aside here.

and (26b), with *einander*, which is nearly morpheme-by-morpheme identical with English *one another*.¹⁷ The thing to note about (26b) (whose syntax matches the version of English (25b) with *one another*) is that *einander* is not inflected for accusative case in present-day German. This is striking when viewed against the background of (27).

- (26) a. Sie mögen *sich* sehr.
 they like SE very
 b. Sie mögen *einander* sehr.
 they like one.other very
 both: ‘They like each other very much.’

- (27) Sie mögen *einen* *anderen*.
 they like an.ACC other.INF
 ‘They like another, they like s.o./s.th. else.’

(27) expresses a non-reciprocal liking relation between the referents of *sie* and ‘some other person or thing’, instead of a reciprocal liking relation between the members of the group denoted by *sie* ‘they’. In (27), case morphology on *ein* and adjectival inflection on *ander* are obligatory.¹⁸

In earlier varieties of German, the reciprocal could be inflected on just *ander* or on both *ein* and *ander* — though never just on *ein* and not on *ander*.¹⁹ But synchronically, reciprocal *einander* is entirely case-invariant. The fact that *einander* does not case-inflect in present-day German is highly significant in connection with the relationship between the reciprocal and the object position in (26b). I develop this further in the next subsection.

3.4 *Asyndetic specification of a reflexive clitic*

For the syntax of (26b), I hypothesise that *einander* serves in relation to a silent object — the silent counterpart to *sich* in (26a). French (17) (e.g., *ils s’aiment l’un l’autre*) is once again relevant here: in (17), *l’un l’autre* ‘one another’ co-occurs with the overt reflexive clitic *se*. In (28), it is the reflexive clitic that gets the accusative case assigned by the verb; but the clitic cannot expone this case overtly (because it is silent or case-invariant).

- (28) [VP V SE_i] [RECIPROCAL_i]

The reciprocal is not itself the object but something which specifies the content of the reflexive object clitic, hence cannot receive case from the verb directly. And in present-day German there is no indirect way for the reciprocal to ‘get’ the case assigned by the verb either.

¹⁷ Recall from section 3.1 that (26b) is rare in spoken German. I return to this at the end of section 3.4, below.

¹⁸ This is not an isolated quirk of the accusative object: the same point can be made, *mutatis mutandis*, for dative, as shown in (i) (which also makes it explicit that the inflections in *ein* and *ander* are not form-identical, whence the difference in the glosses).

- (i) a. Sie helfen *einander*.
 they help one.other
 ‘They help each other.’
 b. Sie helfen *einem* *anderen*.
 they help an.DAT other.INF
 ‘They help another, someone else.’

¹⁹ See <https://en.wiktionary.org/wiki/einander>. Also see Plank (2017:364–5). The example in (i) (taken from Birkenes and Fleischer 2014:29) illustrates inflection on *ander* (or on the entire complex expression) but not on *ein*:

- (i) Er unt sîn wîb chërten fon *einanderen* ir lîp. (Wiener Genesis 724–7)
 he and his wife turned from one.other.INF their body
 ‘He and his wife turned their bodies away from each other.’

It will be instructive to look at this against the background of what we know about how German resolves case in instances of apposition — the juxtaposition of one noun phrase to another, in a specificational relationship. Apposition usually gives rise to case concord in German (see Vater 2006, Heringa 2012, Ott 2016, Onea and Ott 2022 and references cited there for details):

- (29) a. Was kann ich ihm, meinem besten Freund, zum Geburtstag schenken?
what can I him.DAT my.DAT best.INF friend to.the birthday give
 ‘What I can give him, my best friend, for his birthday?’
- b. Ich fand dich im Bett mit ihm, meinem besten Freund.
I found you.ACC in.the bed with him.DAT my.DAT best.INF friend
 ‘I found you in bed with him, my best friend.’

The fact that there is no case inflection on *einander* suggests that the reciprocal is not connected to the silent object via a relationship of apposition. This need not come as a surprise. Apposition involves a relation between a referential expression and a property-denoting expression, the latter plausibly treated as a predicate nominal. Thus, in both *John, my best friend* and *my best friend, John*, *John*, the proper name is referential and *my best friend* denotes a property ascribed to the referent of this proper name — analogously to what we see in the copular sentences *John is my best friend* and *my best friend is John* (the latter an ‘inverse copular sentence’ in the sense of Moro 1997, Den Dikken 2006). But the connection between SE and the reciprocal in (28) cannot be understood in this way. It is impossible to treat either SE or the reciprocal as a predicate of the other: neither ‘bare’ reflexive *sich* nor reciprocal *einander* occurs as a predicate nominal (cf. *manchmal hat man das Gefühl, nicht ganz sich *(selbst) zu sein* ‘sometimes has one the feeling not quite SE self to be, i.e., sometimes one has a feeling of not quite being oneself’; **sie sind einander geworden* ‘they are each other become; intended: they’ve turned into one another’).

If the relationship between SE and the reciprocal in (28) is not a case of close apposition, then what is it? My answer to this question is that it is a case of specificational asyndetic coordination at a level higher than the noun phrase (see Koster 2000, De Vries 2006): the second conjunct in (30) specifies the content of the ‘bare’ reflexive SE contained within the first conjunct: “SE, (or) more precisely/specifically, each other”. The fact that the reciprocal that is construed as an asyndetic specifier of the content of SE is case-invariant in German can now be understood as a consequence of the size of the second conjunct: it is just the reciprocal (i.e., ‘(...)’ in Conjunct₂ is zero in German (26b)); the reciprocal, all by itself, is not in a case dependency with any case-assigning head, and hence remains uninflected.

- (30) [:P [Conjunct1 ... SE ...] [:’ : [Conjunct2 (...) RECIPROCAL]]]

The syntax in (30) is helpful not just for an understanding of the case-invariant nature of German *einander*. It also allows us to comprehend the previously noted fact (Plank 2017:354, König and Kokutani 2006:sect. 4.2) that informal spoken German disprefers *einander* in cases in which *sich* is legitimate. The syntax of (26b) is more complex than that of (26a): *sich* requires just the postulation of an object position; *einander* requires the postulation of a silent SE plus an asyndetic coordination relation with *einander*, as in (30). Whenever (26a) suffices to convey reciprocity, it is chosen instead of (26b); but unambiguously reciprocal (26b) serves well where (26a) is not explicit enough or where *sich* would prefer a reflexive reading.

3.5 Case variation as variation in the size of the second conjunct

Not all languages behave alike with respect to the size of the second conjunct of specificational asyndetic coordination structures involving reciprocals. In some languages, the second conjunct is arguably an entire clause (of which only the reciprocal itself surfaces).

To see this, consider first the fact that the Hebrew ‘one-unit’ reciprocal *exad ha-šeni* ‘one the-second’ and the Hungarian reciprocal *egymás* ‘one.other’, which have the same morphological composition as Ger-

man *einander* ‘one.other’, differ markedly from their German counterpart in requiring accusative case marking when serving as the direct object:^{20,21}

- (31) a. Hem nišku *exad* *(et) *ha-šeni*.
they kissed one ACC the-second
- b. Megcsókolták/*megcsókoltak *egymás*(t)*.
kiss.PST.3PL.DEF/INDEF one.other.ACC
 both: ‘They kissed each other.’

Apart from case marking, another salient property of Hungarian (31b) is that *egymás* controls the definite conjugation of the finite verb: *megcsókolták* (with a long *á*) as opposed to indefinite *megcsókoltak*. This is remarkable in light of the fact that neither of its component parts, *egy* ‘one’ and *más* ‘other’, does so when serving as the accusative object of a transitive verb:

- (32) 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.’

The definiteness agreement facts in (31) and (32) make it clear that the reciprocal *egymás*, when it serves interpretively as the object of a transitive verb, is not itself the direct object in syntax: if it were, it would (in light of (32)) be expected to give rise to indefinite inflection on the verb — regardless of whether *egy* ‘one’ or *más* ‘other’ is the head of *egymás*: both parts are demonstrably indefinite. This goes along with the conclusion drawn for French and German that the reciprocal is not the ‘real’ object of the verb. The ‘real’ object of the verb is silent (and definite), and overt *egymás* in (31b) is construed with it.

In French and (covertly) in German, the ‘real’ object of a transitive verb construed with a reciprocal object is a ‘bare’ reflexive, SE. The closest overt counterpart to French *se* and German *sich* in Hungarian is the suffix *-ik*, usually treated as a mediopassive marker but analysed in Den Dikken (2022) as a SE enclitic. We see *-ik* at work as a reflexiviser in (33a), which is semantically near-equivalent to (33b), featuring the accusative ‘reflexive pronominal’ *magát* (an inalienably possessed noun phrase meaning ‘his/her/its core’).²²

²⁰ Similarly, when Hungarian *egymás* finds itself in a dative case environment, it must inflect for dative, again attached to the right of *más*: (i). Contrast this with German (ia) in fn. 18, above.

(i) Segítenek *egymásnak*.
help.3PL.INDEF one.other.DAT
 ‘They help each other.’

²¹ The Russian reciprocal *drug druga* (see Knjazev 2007, Ressue 2015) and the Finnish reciprocal *toinen toise* (mentioned in Evans 2008 and König and Kokutani 2006), both concatenations of two alterity words (‘other/second’), pattern with Hungarian *egymás* and standard Hebrew *exad ha-šeni* in having the second component of the complex reciprocal inflect for the case expected on the basis of the reciprocal’s grammatical function. (On substandard Hebrew *et exad ha-šeni*, with *et* ‘ACC’ preceding the first part, see Landau 2025:1404.)

Note that though the second component of bipartite reciprocals whose structure is large (*à la* (35)) always bears the case predicted by the reciprocal’s grammatical function, the first part is not necessarily caseless/nominative: in sentences with a ‘quirky case’ subject, the first part is expected to expone the matrix subject’s quirky case.

²² See Rákosi (2002) for important discussion.

- (33) a. János borotválkozik minden nap.
János shave.FREQ.SE every day
- b. János borotválja magát minden nap.
János shave.3SG.DEF himself.ACC every day
 both: ‘János shaves himself every day.’

The hypothesis for (31b) is that it features a silent allomorph of *-ik*. Overt *-ik* does not combine with (in)definiteness inflection. But *-ik* does arguably have a silent allomorph (Den Dikken 2022), and this silent *-ik* interacts with def inflection in an interesting way. The surface distribution of overt *-ik* is confined to simple-present sentences with a third person singular subject. In all other contexts, no *-ik* shows up — but the ghost of *-ik* can still be felt, in the form of a peculiar pattern of inflection on the verb. Almost the entire paradigm of the inherently reflexive verb *borotválkoz-* ‘shave.FREQ’ in (34) (which is representative of the class of *-ik* verbs) evinces INDEF inflection. But in the first person singular, DEF inflection is the prescriptive norm (though INDEF is common in colloquial spoken Hungarian).

- | | | | |
|---------|--|----|--|
| (34) a. | borotválko ^{om} / ^l borotválko ^{zok}
<i>shave.1SG.DEF/INDEF</i>
‘I shave, am shaving’ | d. | borotválko ^{zunk}
<i>shave.1PL.INDEF</i>
‘we shave, are shaving’ |
| b. | borotválko ^{zol}
<i>shave.2SG.INDEF</i>
‘you _{SG} shave, are shaving’ | e. | borotválko ^{ztok}
<i>shave.2PL.INDEF</i>
‘you _{PL} shave, are shaving’ |
| c. | borotválko ^{zik}
<i>shave.IK</i>
‘(s)he shaves, is shaving’ | f. | borotválko ^{znak}
<i>shave.3PL.INDEF</i>
‘they shave, are shaving’ |

Though a complete understanding of this pattern is not within reach, it makes good analytical sense to treat (34a) with DEF *-om* as forming a pair with (34c), except that it has a silent reflexive clitic — the 1SG counterpart to *-ik*. This silent *-ik* can then be thought to give rise to the otherwise mysterious DEF inflection that we see in the *-om* version of (34a). And this may then lead us back to DEF inflection in (31), which on the silent *-ik* approach may then be a function, not of the presumed definiteness of *egymást* (which, recall, cannot be distilled from its component parts: (32)) but of the presence of an abstract SE in the syntax of (31).

With all of this in mind, let me return to the fact that, unlike German *einander*, the reciprocals of standard Hebrew (*exad ha-šeni* ‘one the-second’ in (31a)) and Hungarian (*egymás* ‘one.other’ in (31b)) must inflect for accusative case when serving interpretively as the object of the verb, and that this accusative case inflection manifests itself only on *ha-šeni* ‘the-second’ (in standard Hebrew) and *más* ‘other’, not on *exad* ‘one’ and *egy* ‘one’ (as well).

Using a specificational asyndetic coordination structure to establish the connection between the reciprocal and the silent object, we can account for case inflection on the reciprocal as a function of the size of the second conjunct in (30). For German, the discussion in the foregoing led to the conclusion that the size of the second conjunct is small: just the reciprocal; as a result, the reciprocal is not in a case dependency with anything, and receives default case (which in German is nominative). Suppose now that in Hebrew and Hungarian, the second conjunct contains the reciprocal but is larger in that it also contains (at least) the verb and ‘little *v*’.²³ Then case inflection on the reciprocal will be obligatory, and it will manifest itself only on the alterity word (‘other’).

Concretely, assume that Conjunct₂ in the syntax of Hebrew and Hungarian reciprocal constructions of the type in (31) is an entire clause, in parallel to the overt Conjunct₁, with a subject, realised as *exad/egy* ‘one’, and an object, realised as *et ha-šeni* ‘ACC the-second’/*más+t* ‘other+ACC’. This is depicted in (35) (with Hungarian lexical items used for illustration).

²³ This additional structure is not expected to have any consequences for the interpretation of the reciprocal itself or the sentence as a whole: the extra material (V, ‘little *v*’ and possibly I as well; see (35)) is semantically identified with matching material in the first conjunct, and adds no additional meaning.

(35) [:P [Conjunct1=IP ... V_i ... SE ...] [: : [Conjunct2=IP [Subj *egy*] [vP v [vP V_i=∅ [Obj *más+-t*]]]]]]]

What (35) says is that there is an event, at a certain point in time, involving a reflexive act such that one event participant performs this act on another. This gets the meaning of reciprocity close to right. There is no explicit marking of exhaustivity or symmetry (i.e., ‘each’) — but that is all right because symmetry is arguably not in the semantics of reciprocals but a pragmatic strengthening effect, likely similar to the conversational implicature of exhaustivity in (pseudo-)clefts.²⁴

Morphosyntactically, what (35) gets exactly right is the fact that structural accusative marking is present, and spelled out on *ha-šeni* ‘the-second’ and *más* ‘other’, not (also) *exad/egy* ‘one’. This follows directly from the fact that in Conjunct₂, the object function is played by *ha-šeni/más*, while *exad/egy* is the subject, not in the Agree-domain of accusative-assigning *v*. The syntax in (29) thus derives in a principled way the fact that accusative marking on both portions of the complex reciprocal has never been possible in Hungarian (**egy-et-más-t* ‘one-acc-other-acc’). In the history of German, by contrast, such double hosting of case morphology did occur (recall the text below (27) and the reference given in fn. 19).²⁵

If indeed (35) is a reasonable approximation of the syntax of reciprocal *exad ha-šeni* in standard Hebrew and *egymás* in Hungarian (and similar such bipartite reciprocals in other languages — see fn. 21), this makes it radically impossible for these expressions to occur in subject or object positions. Indeed, the equivalent of (3a) in standard Hebrew and Hungarian is ungrammatical: see (36) (of which (36a) was taken from Landau 2025:1379; see also Bar-Asher Siegal 2020:104–5). And though (31ab) are fine, I have just argued, based on the Hungarian DEF agreement facts, that (31b) does not feature *egymást* in the verb’s direct object position.

²⁴ See Dalrymple *et al.* (1998) for an extensive typology of reciprocal scenarios, several of them non-symmetrical (e.g., serialives such as *the turtles are standing on top of one another* or *the letters of the alphabet follow one another*). Evans (2008) talks at some length about symmetry as a cancellable implicature in reciprocal constructions of languages with non-verbal means of signalling reciprocity (the use of verbal morphology to express reciprocity typically gives rise to a stronger sense of symmetry). Bar-Asher Siegal (2020:sect. 7.7) argues particularly forcefully that the basic meaning of nominal reciprocals regarding symmetry is weak rather than strong, taking a firm stand against the strong symmetry hypothesis advocated by typologists (Lichtenberk 1985; Kemmer 1993) and some semanticists (most notably, Heim *et al.* 1991). Relevant as well is Onea and Ott’s (2022:370) discussion of the default exhaustivity of nominal appositions.

²⁵ A morphological fact that (35) does not immediately deliver on a silver plate is the fact that both component parts of the Hungarian reciprocal *egymás* are unadorned with the nominal suffix *-ik*, unlike what we see when *egy* and *más* serve as separate arguments of a dyadic predicate. Thus, compare (i) with (ii). Den Dikken (2022) treats Hungarian nominal *-ik* (found on ordinal numerals) in the same morphosyntactic way as the *-ik* on verbs, as an instantiation of the clitic SE. It would appear to be very helpful to have this SE=*-ik* represented in the reciprocal to facilitate the anaphoric linking of the reciprocal to the antecedent. If *-ik* is *structurally* present in the subject and object of (35), it must fail to get a PF exponent. In the verbal domain as well, there are several circumstances under which a structurally present SE clitic is forced to remain unexponed. Thus, the reflexive clitic *-ik* is only ever overt in the simple present, and even there it systematically remains silent when the subject is not a third person or when the subject is third person PLURAL. In Romance, too, SE is not always exponed. French and Spanish *se* can occasionally remain silent embedded under causative *faire/hacer* (*elle a fait (se) taire Jean* ‘she made Jean shut up’), and Italian even forces reflexive *si* to be ‘dropped’ under causative *fare* (*Maria ha fatto lavare/*lavarsi Gianni* ‘Maria made Gianni wash himself’; Burzio 1981). I do not understand the lexicalisation restrictions imposed on SE cross-linguistically or within a single language. These restrictions are an important topic for future study. (A more radical approach to the absence of *-ik* from (i) would be to say that SE=*-ik*, even when it combines with a nominal rather than with a verbal host, is always structurally represented on the clausal spine, and that the forced absence of *-ik* in (i) is a consequence of the relatively small size of Conjunct₂ in (35), truncated below the position of SE.)

- (i) Nagyön szeretik egymást/*egy-ik-más-ik-at.
 very like.3PL.DEF one.other.ACC/one-IK-other-IK-ACC
- (ii) Az egy-ik nagyon szereti a más-ik-at.
 the one-IK very like.3PL.DEF the other-IK-ACC

- (36) a. *Ha-yeladim ka'asu še-exad ha-šeni rimu.
the-children were.angry that-one the-other cheated.3PL
 intended: 'The children were angry that each other had cheated.'
- b. *Azt hiszik, hogy egymás győzni fog(nak).
it.ACC think.3PL.DEF that one.other win will(3PL)
 intended: 'They think that each other will win.'

At this point, the astute reader may recall from fn. 5 that Bar-Asher Siegal (2020:110) notes that some Hebrew speakers have started to use *exad ha-šeni* as a nominative subject, and that these speakers also allow *exad ha-šeni* to occur to the right of a preposition or the accusative marker *et* (as in substandard *et exad ha-šeni* 'acc one the-other'). Viewed from the perspective of the present paper's discussion of the syntactic distribution bipartite reciprocals, this must mean that the Hebrew speakers in question have innovated a syntax for *exad ha-šeni* that treats it as a single nominal constituent — perhaps the same structure as that proposed in section 2.2 for English *each other*, given in (6b)/(8). Such a syntax will force Ps and the accusative case particle to surface to the left of the entire string *exad ha-šeni*, and will at the same time permit this string to occupy any positions in which DPs are licit, including the structural subject position of the clause. For more traditional speakers of Hebrew, however, *exad ha-šeni* is not a single nominal constituent: the two component parts of the bipartite reciprocal occupy the subject and non-subject position, respectively, of a complex syntactic structure.²⁶

For PP constructions, the syntax makes room available for both component parts of the complex reciprocal, just as for French *l'un P l'autre*, discussed previously. But while in the case of French and standard Hebrew, the P-element separates the two parts of the reciprocal (*l'un à l'autre* 'the one to the other'), in Hungarian, a postpositional language, it follows the second part and shows up to the right of the entire reciprocal: *egymás- $\{nak/kal/ra/ról/\dots\}$* 'one.other-to/with/towards/from/...'. This is not a quirk of the reciprocal: Hungarian PPs are always head-final on the surface.

3.6 A note on bipartite reciprocals as prenominal possessors

German *einander*, for which section 3.4 proposed a structure of the type in (30) with a small second conjunct, is excluded from the prenominal possessor position. To express the message that ungrammatical (37) seeks to convey, German can resort to an adverbial strategy, as in (38a) (the use of *gegenseitig* 'mutually' is also a common way of disambiguating sentences with object-*sich*: see König and Kokutani 2006:sect. 4.1), or use (38bc), where the alterity word by itself occurs in postnominal position in the (remote/close) company of *jeweils* 'respectively'.²⁷

- (37) *Sie mögen/hassen *einanders* Eltern.
they like/hate one.other.GEN parents
 'They like/hate each other's/one another's parents.'

²⁶ Landau (2025) derives the placement of *et* 'ACC' before the second part by assimilating the syntax of the accusative case particle to that of prepositions that split the Hebrew reciprocal in PPs, treating *et* as the exponent of a case head, 'K', in whose specifier position *exad* lands. I cannot evaluate the ACC=K analysis for Hebrew, but there are languages for which such an approach to structural accusative case can be shown on reasonably strong grounds to be infeasible. Den Dikken and Dékány (2025) show for Udmurt (a Uralic language spoken in Russia) that P-elements (postpositions) that take a simple DP complement obligatorily attract the possessive marker of their possessive-nominal complement up to them, in a process involving clitic climbing. Importantly, such clitic climbing is systematically impossible in the case of accusative-marked possessive nominals, indicating that structural accusative case (at least in Uralic) does not involve a K-head outside DP which can provide a landing-site for movement.

²⁷ Thanks to Katrin Axel-Tober and Kalle Müller for their help with these German data.

- (38) a. [?]Sie mögen/hassen ihre Eltern gegenseitig.
they like/hate their parents mutually
- b. Sie mögen/hassen jeweils die Eltern des/der anderen.
they like/hate respectively the parents of.the_{SG/PL} other.INF
- c. Sie mögen/hassen die Eltern des jeweils anderen.
they like/hate the parents of.the_{SG/PL} respectively other.INF

That (37) is ungrammatical might at first be thought to be a consequence of the fact that SE, the first conjunct of the asyndetic coordination structure in (30), is barred from the prenominal possessor position in German:

- (39) *Sie mögen/hassen *sichs* Eltern.
they like/hate SE.GEN parents

But the equivalent of (39) is also impossible in Dutch (see (40)), and yet Dutch does have a direct translation equivalent for English *they like/hate each other's parents*, as shown in (41).

- (40) *Ze mogen/haten *zichs* ouders.
they like/hate SE.GEN parents
- (41) Ze mogen/haten *elkaars* ouders.
they like/hate each.other.GEN parents

The contrast between German (37) and Dutch (41) must therefore be rooted in something other than the distribution of SE. The allowable size of the *second* conjunct is likely to hold the key.

In German, the second conjunct of the asyndetic specification structure underlying constructions with *einander* is small, providing no case assigner for the reciprocal. Consequently, genitive case cannot be locally assigned to the reciprocal in the prenominal possessor position. Nor can the reciprocal play host in the PF component to a genitival case marker that attaches to the entire asyndetic coordination structure in (30): unlike in English, the genitive in German is not a phrasal suffix or clitic (there is no equivalent of *the Queen of England's hat* with a prenominal possessor). And of course exponence of the genitive case particle on silent SE (the first conjunct of the asyndetic coordination structure) is impossible as well. In possessive noun phrases featuring *einander* as the prenominal possessor, there is, therefore, nothing to host the obligatory genitival case particle: SE is silent, the entire :P is too large to host *-s*, and the second conjunct makes no case assigner available for the reciprocal. This is why (37) fails.

That variation in the size of the second conjunct of (30) is indeed a likely factor behind variation in the grammaticality of bipartite reciprocals that do not form a nominal constituent as prenominal possessors is suggested by the facts of Hungarian *egymás* 'one.other'. This reciprocal is grammatical in both of the prenominal possessor positions of the language's possessive DP, with unmarked ('nominative') case or, to the left of the definite determiner, with dative case — but the latter is appreciably less good than the former (something to which I return later in this section):

- (42) a. Szeretik/utálják *egymás* szüleit.
like/hate.3PL.DEF one.other parents.ACC
- b. [?]Szeretik/utálják *egymásnak* a szüleit.
like/hate.3PL.DEF one.other.DAT the parents.ACC
 both: 'They like/hate each other's parents.'

For Hungarian, we have previously established that the second conjunct of the asyndetic coordination structure of its non-constituent bipartite reciprocal is large. In (35), above, the second conjunct is an entire clause, accommodating case assignment to the second component of the reciprocal (*mást* 'other.ACC'). For (42) we do not need a whole clause, but we do want a PP. This PP then serves to specify the content of SE, which is itself PP-contained because, *qua* possessor, it is enveloped in the predicate for the possessum. The structure is depicted in (43).

- (43) [DP D [RP [POSS'UM *szülei*] [R' relator [POSS'OR=:P [Conjunct1=PP [POSS'OR SE] P_{DAT}] [': :
[Conjunct2=PP [*egy*] [P' [*más*] P_{DAT}]]]]]]]]]

The entire :P is the possessor of the possessive noun phrase. Its first conjunct is a PP containing silent SE, which gets its content specified by the second conjunct, another PP, accommodating both *egy* and *más*. When P in the second conjunct is spelled out as DAT -*nak*, we obtain *egymásnak*. In that case (as is generally true for dative possessors in Hungarian), the possessor is placed in SpecDP, surfacing to the left of the definite article, as in (42b). When P is silent, the possessor is situated in a position between D and RP (as is generally the case for unmarked, ‘nominative’ possessors in Hungarian), delivering (42a).

That (42b) is marked compared to (42a) is an effect of the fact that only one of the conjuncts of the conjunction phrase in SpecDP is explicitly marked for case. Relevant in this connection is the pair in (44a) and (44b):

- (44) a. [János és Mari] szülei
János and Mari parents
 ‘[János and Mari]’s parents’
 b. *[[János és Mari]nak] a szülei
János and Mari.DAT the parents

It is perfectly fine for two unmarked (‘nominative’) possessors to be coordinated and placed in the prenominal possessor position. But when the conjoined possessors precede the determiner *a* ‘the’, it is impossible to mark dative case only after the second conjunct: (44b) is ungrammatical. This weighs down on (42b), where silent SE is not case-marked. That (42b) is nonetheless not as bad as (44b) has to do with the fact that not only is there no case-marking on the first conjunct (SE), the first conjunct as a whole is silent in (42b), hence it could not have been marked for case in the first place. This partially amnesties the violation to which (44b) falls prey.

If this account of the German and Hungarian facts is on the right track, it lends support for the idea that bipartite reciprocals that cannot form a single nominal constituent are asyndetic coordinate structures. It also brings into focus again the idea that languages differ with respect to the size of the second conjunct of this asyndetic coordination: in German, the second conjunct cannot be large enough to accommodate all of *ein*, *ander* and the possessor’s case, causing (37) to fail; in Hungarian, the second conjunct can be larger, licensing a reciprocal possessor.

Unlike in the case of German *einander*, it is grammatical to use the Dutch reciprocal *elkaar* and English *one another* as reciprocal prenominal possessors.²⁸ The discussion of the contrast between German and Hungarian in the preceding paragraphs directs us towards the conclusion that the asyndetic coordination structure for *elkaar* and *one another* can accommodate a relatively large second conjunct, able to contain a case assigner for the reciprocal. I am not aware of any independent evidence that this is the case.

One general question therefore remains: Are there any independent indications that there is a difference in the size of Conjunct₂ in (30) between individual languages with bipartite reciprocals which cannot form a single nominal constituent (*one another/einander/elkaar/l’un l’autre/egymás*)? Put differently, how can we tell apart small and large(r) containers for asyndetically coordinated reciprocals, other than by inspecting the environments in which these expressions are grammatical? This is a pressing question from the perspective of language acquisition and historical linguistics (on the latter, see Bar-Asher Siegal 2020). Unfortunately, I must leave it unanswered here for want of ideas.

4. Conclusion

With a focus on a sample of Indo-European languages, Hebrew, and Hungarian, I have canvassed some of the peculiar variation in the morphosyntax of bipartite nominal expressions of reciprocity. The centrepiece

²⁸ Of course, *each other* is, too — but this is unrevealing: as we saw in sections 2.1 and 2.2, *each other* can form a single nominal constituent; nominals of any complexity are licit in the ‘Saxon genitive’ position in English: [*the Queen of England*]’s hat, [*the man who I ran into at the office*]’s accent.

of this paper is an analysis which models their internal structure in the form of a syntax that assigns discrete structural positions to their component parts, exploiting the syntax of Spec–Head–Complement structures, (overt or silent) SE clitic pronouns, and asyndetic specification, with variation in the size of the specificational conjunct.

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