

The syntax of Greek discontinuous reciprocals*

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Syntax

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ABSTRACT: We provide the first detailed description and analysis of the understudied Greek discontinuous reciprocal reconstruction. Reciprocals in Greek are apparently bipartite, consisting of a quantificational distributor (‘the one’) and a reciprocator (‘the other’). We show that, in Greek, this bipartiteness runs deep: the two parts are syntactically independent, with the reciprocator having the syntax of a plain anaphor, while the distributor behaves as a floating quantifier. Once we turn to how these elements establish relations between themselves and their antecedent, we find that Greek counterexamples movement- or Agree-based approaches to the issue: both elements can occur in positions inaccessible to movement/Agree. Finally, given that the reciprocator can occur in embedded subject position, the Greek data also argue against recent attempts to reduce the binding domain to phases, instead supporting a more traditional definition in terms of the smallest XP containing the anaphor and a subject.

1 INTRODUCTION

In languages like English, reciprocals such as *each other* look like a single element on the surface in that they form a constituent and cannot be split. From a semantic point of view, however, they have been analyzed as consisting of two parts. In particular, since at least [Heim et al. \(1991\)](#), many analyses of reciprocals maintain that reciprocals are bipartite: reciprocity reduces to the combination of a quantificational distributor (e.g. *each*) with a separate, properly anaphoric element. In addition, it is often assumed that the distributor

*Acknowledgments to be added.

undergoes (covert) movement to a high position, such as to the antecedent to quantify over it.¹ Interestingly, the Modern Greek reciprocal (1) wears this bipartiteness on its sleeve: it consists of (what look like) two nominals, *o enas* ‘the one’ and *o alos* ‘the other’. Adopting the terminology of Heim et al. (1991), we will refer to the former element as the *distributor* and to the latter as the *reciprocator*, and will translate them jointly as ‘each other’.^{2, 3}

¹But see Williams (1991) for evidence against Heim et al.’s (1991) treatment of English *each other*. In fact, the proper analysis of English *each other* is orthogonal to the questions pursued in this paper.

²The Greek reciprocal construction is understudied and only mentioned in passing in previous literature, e.g., Mackridge (1985: 89); Lapata (1998); Holton et al. (2012: 564ff). To the best of our knowledge, this is the first detailed syntactic analysis of the construction.

We will in what follows focus on the syntactic properties of the Greek reciprocal construction and leave a detailed exploration of the semantic composition for future research, although we will briefly come back to interpretive aspects in section 5 below. For previous work on the semantics of discontinuous/scattered reciprocals, see Arregi (2001), LaTerza (2014), Kobayashi (2019, 2021).

Judgments come from the native speaker author and have been confirmed with two more native speakers of Greek. Judgments for the data in section 3 were additionally confirmed by two speakers at a major linguistics conference. As is typical, we use diacritics like ‘*’ to indicate relative contrasts in acceptability, rather than absolute judgments; we do, however, note variations in judgments between consultants where they have occurred.

³In addition to (1), there are a few more strategies to express reciprocity in the language, each with very different properties. Firstly, the language has verbal reciprocals, which obligatorily co-occur with the nonactive morphology also born by passives, unaccusatives, and their ilk. With naturally disjoint verbs, this morphology is accompanied by the reciprocal prefix *alilo-* (i); with naturally reciprocal verbs, nonactive morphology appears on its own (ii).

(i) I monaçi alilo- stiriz- onde.
the.NOM.PL monk.NOM.PL RECIP support 3PL.NONACT
‘The monks support each other.’

(ii) I monaçi sinandj- unde stin eklisia.
the.NOM.PL monk.NOM.PL meet 3PL.NONACT in.the church
‘The monks meet in church.’

These verbal reciprocals have very different properties from the construction of interest in this paper. They are obligatorily monoclausal, unlike the discontinuous reciprocal, see below; they are syntactically intransitive and semantically monadic; they also can only denote relations between the agent and the theme, in stark contrast to the discontinuous reciprocal, which can denote reciprocity across a range of thematic roles/grammatical functions. For Greek verbal reflexives and reciprocals, see among many others Rivero (1992).

In addition, a verbal reciprocal may appear with a singular subject and a comitative PP, as in (iii); see Dimitriadis (2008) for discussion. This type of example is sometimes referred to as a discontinuous reciprocal; note that we use this term differently, to refer to the reciprocal of interest in the main text.

(iii) O Janis alilo- stiriz- ete / sinandj- ete #(me ti Maria).
the.NOM John.NOM RECIP support 3SG.NONACT meet 3SG.NONACT with the Maria
‘John and Mary support each other/meet.’

- (1) I monaçi stirizun o enas ton
 the.NOM.PL monk.NOM.PL support.3PL the.M.NOM one.M.NOM the.M.ACC
 alo.
 other.M.ACC
 ‘The monks_i support each other_i.’

In this paper, we provide strong evidence for the bipartite nature of the Greek reciprocal construction, showing that the distributor and reciprocator are syntactically independent. In addition, we show that the construction as a whole is subject to intricate locality restrictions that parallel those obeyed by anaphors, suggesting that the construction is subject to the Binding Theory. Importantly, though, the locality restrictions on both elements clearly argue against establishing their relationship with the antecedent by means of (overt or covert) movement or Agree, since both elements can occur in domains that are inaccessible to movement/Agree (namely, islands). Rather, our data speak in favor of a more traditional definition of the binding domain that is defined by the presence of a (distinct and accessible) subject. Finally, we argue that the different locality restrictions on distributor and reciprocator fall out naturally once the reciprocator is analyzed as a plain anaphor and the distributor as a floating quantifier; this syntactic bipartiteness carries over to the interpretation of reciprocals, where floating quantifier and reciprocator are interpreted as a distributive and a differentiating element, respectively.

This paper is organized as follows. In section two, we provide basic information about the construction. In section three, we discuss locality constraints on both reciprocal elements, while in section four we discuss the nature of the distributor. Section five addresses how all elements of the construction fit together, and section six concludes.⁴

Finally, there is a variable-binding-like reciprocal construction that superficially resembles the discontinuous reciprocal of interest in this paper; see footnote 10. For a brief comment on semantic differences between the different reciprocal constructions, see footnotes 11 and 27 below.

⁴A discontinuous reciprocal construction which is at least superficially similar to the one in Greek is found in several other Indo-European languages, including at least Icelandic (Everaert 1990; Sigurðsson et al. 2022); Italian (Belletti 1982), see (i) below; Spanish (Arregi 2001); Brazilian Portuguese (Kobayashi 2019, 2021); French (Kayne 1975: 355-369); Romanian, Bulgarian, Polish, Ukrainian (LaTerza 2014: 119-121); Serbo-Croatian (Despić 2011: section 2.5); and, possibly, English, see (ii):

- (i) I miei amici parlano l'uno dell'altro
 the my friends speak.3PL the.one of.the.other
 ‘My friends_i talk about each other_i.’ *Italian* (Belletti 1982: 101)

- (ii) The boys were each hitting the other.

The construction is heavily understudied in most of these languages as well. There seem to be some important cross-linguistic parallels, especially with respect to the lexical elements used (‘the one’, ‘the other’, ‘each’), the

2 BASIC DATA

In this section, we illustrate the basic properties of the Greek reciprocal construction, concerning agreement, case, configurational restrictions, possible grammatical functions and constituency.

2.1 AGREEMENT AND CASE

As already mentioned, the Greek reciprocal is bipartite, consisting of the distributor *o enas* ‘the one’ and the reciprocator *o alos* ‘the other’. (2), repeated from above, shows that the distributor agrees with the plural antecedent in case (here nominative), while the reciprocator behaves as the ‘real’ argument, bearing the expected case of the structural position where the reciprocal is interpreted (in this case, the accusative typical of direct objects).

- (2) I monaçi stirizun o enas ton
the.NOM.PL monk.NOM.PL support.3PL the.M.NOM one.M.NOM the.M.ACC
alo.
other.M.ACC
‘The monks_i support each other_i.’

While the antecedent is obligatorily plural (where plurality can also arise through the coordination of two singular DPs), the reciprocal parts are necessarily singular. Furthermore, the reciprocal parts are always third person, while the plural antecedent can also be first or second person (a *pro* in (3)):

- (3) Iđame / iđate o enas ton alo.
see.PST.1PL see.PST.2PL the.M.NOM one.M.NOM the.M.ACC other.M.ACC
‘We_i/y’all_i saw each other_i.’

In addition, both reciprocal parts agree with the plural antecedent in gender: compare the masculine inflection in (2) with feminine in (4).⁵

pattern in PPs (where the reciprocal elements are preferably split), and with respect to restrictions in ditransitives (see footnote 7). Given that we have only limited information about the various languages, we will not attempt to provide a comparison.

Reflexive and reciprocal constructions with case-copying are also attested in unrelated languages, for instance many Dravidian languages (see [Messick & Ragotham 2022](#) for Telugu and others). While these constructions bear some similarities to the reciprocal construction in Indo-European, they also seem to be different in crucial ways since they are composed of different elements (usually a pronominal element and an intensifier).

⁵The two reciprocal parts never mismatch in gender. If the antecedent consists of DPs of different genders, the reciprocal parts will bear the gender that would result under resolution at the &P-level, e.g., masculine if

- (4) I / kapçes kaloyries stirizun i mia
 the.NOM.PL some.NOM.PL nun.NOM.PL support.3PL the.F.NOM one.F.NOM
 tin ali.
 the.F.ACC other.F.ACC
 ‘The/some nuns_i support each other_i.’

As shown in (4), the antecedent can also be indefinite, but this does not affect the reciprocal parts, which are obligatorily morphosyntactically definite.

2.2 C-COMMAND

The three components of the reciprocal construction (antecedent, distributor, and reciprocator) must be configured in particular ways relative to each other. First, the distributor must c-command the reciprocator, (5):⁶

- (5) *I monaçi stirizun o alos ton
 the.NOM.PL monk.NOM.PL support.3PL the.M.NOM other.M.NOM the.M.ACC
 ena.
 one.M.ACC
 ‘*The monks support the other each.’

Second, the plural antecedent must c-command both reciprocal elements, (6) (see also [Lap-](#)

masculine and feminine are combined, as in (i). The order within &P has no impact on this (see [Adamson & Anagnostopoulou to appear](#) for gender resolution in Greek).

- (i) I Maria ke o Janis katiyorisan { o enas ton
 the.NOM John.NOM and the.NOM Mary.NOM accuse.PST.3PL the.M.NOM one.M.NOM the.M.ACC
 alo / *i mia ton alo / *o enas tin
 other.M.ACC the.F.NOM one.F.NOM the.M.ACC other.M.ACC the.M.NOM one.M.NOM the.F.ACC
 ali / *i mia tin ali }.
 other.F.ACC the.F.NOM one.F.NOM the.F.ACC other.F.ACC
 ‘[Mary and John]_i accused each other_i.’

⁶We point out in this connection that there are examples where Greek *o enas* and *o alos* are used to pick out members of a pair, in the absence of c-command and thus in the absence of reciprocity (i).

- (i) I Maria ke i Ana piyan i mia sto panepistimo ke
 the.NOM Maria.NOM and the.NOM Anna.NOM go.PST.3PL the.NOM one.NOM to.the university and
 i ali sti dulja.
 the.NOM other.NOM to.the work
 ‘One of Mary and Anna went to the university and the other went to work.’ (cf. [Kayne 1975: 359](#))

ata 1998, *modulo* the possibility that the antecedent is embedded within a PP, see (9) below; on possible movement of the reciprocal, see section 2.4 below). Consequently, in (6b), only the entire DP but not the possessor can act as the antecedent of the reciprocal.

- (6) a. *O enas ton alo stirizi tus
 the.M.NOM one.M.NOM the.M.ACC other.M.ACC support.3SG the.ACC.PL
 monaxus.
 monks.ACC.PL
 ‘*Each other supports the monks.’
- b. [I skili [ton monaxon]_i]_j stirizun [o
 the.NOM.PL dog.NOM.PL the.GEN.PL monk.GEN.PL support.3PL the.M.NOM
 enas ton alo]_{j/*i}.
 one.M.NOM the.M.ACC other.M.ACC
 ‘[[The monks’]_i dogs]_j support [each other]_{j/*i}.’

2.3 ORIENTATION/GRAMMATICAL FUNCTION

Both the antecedent and the reciprocator can bear various grammatical functions. Thus, the antecedent can also be a non-subject, e.g., a DO in (7):

- (7) Sistisa tis fititries ti mia stin
 introduce.PST.1SG the.F.ACC.PL student.F.ACC.PL the.F.ACC one.F.ACC to.the.F.ACC
 ali.
 other.F.ACC
 ‘I introduced the students_i to each other_i.’

In (7), the distributor agrees in case with the antecedent, thereby bearing accusative. The antecedent, and, consequently, the distributor, can also be a genitive within DP as in (8), where additionally the reciprocator occurs within a PP:

- (8) iðame tin epiθesi ton stratigon tu enos
 see.PST.1PL the.ACC attack.ACC the.GEN.PL general.GEN.PL the.M.GEN one.M.GEN
 ston alo.
 to.the.M.ACC other.M.ACC
 ‘We saw the generals_i’ attack on each other_i.’

Antecedents can also occur in PPs as in (9) where, interestingly, the distributor is governed by the same preposition:

- (9) Milisa stus fitites ston ena ja
 speak.PST.3SG to.the.ACC.PL student.ACC.PL to.the.M.ACC one.M.ACC about
 ton alo.
 the.M.ACC other.M.ACC
 ‘I talked to the students_i about each other_i.’

Thus, the antecedent, and, accordingly, the distributor, can have various grammatical functions.⁷

As for the reciprocator, it can occur as a DO bearing accusative as in the introductory examples. Examples (7)–(9) show that it can occur within PPs. (10) shows that the reciprocator can also be an IO and thus bear genitive case:

- (10) Eðiksan o enas tu alu tus
 show.PST.3PL the.M.NOM one.M.NOM the.MGEN other.M.GEN the.ACC.PL
 pinakes.
 painting.ACC.PL
 ‘They_i showed each other_i the paintings.’

As shown in (11), the reciprocator can also occur as a genitive within DP, either functioning as a possessor, (11a) (cf. also footnote 7) or as thematic argument of the noun, e.g., theme as in (11b) (see Lapata 1998: ex. (4); we will come back to the variable positions of the distributor).

- (11) a. I monaçi thavmazun (o enas) ta
 the.NOM.PL monk.NOM.PL admire.3PL the.M.NOM one.M.NOM the.ACC.PL
 rasa (o enas) tu alu
 stole.ACC.PL the.M.NOM one.M.NOM the.M.GEN other.M.GEN

⁷There is a curious restriction in that the antecedent cannot be an IO when the reciprocator is accusative/the DO (or nominative, as with DAT>NOM experiencers). This is part of a more general restriction on reciprocals in ditransitives: the reciprocator cannot be the DO even if bound by the subject of a ditransitive verb. An IO antecedent is possible, though, with inherent-genitive assigning monotransitives and the reciprocator occurring in a PP:

- (i) Epiteþika tis Marias ke tu Jani tu enos sto domatio
 attack.PST.1SG the.GEN Mary.GEN and the.GEN John.GEN the.M.GEN one.M.GEN in.the.ACC room.ACC
 tu alu.
 the.M.GEN other.M.GEN
 ‘I attacked [Mary and John]_i in each other_i’s room.’

Interestingly, the restriction in ditransitives has been observed in other languages with discontinuous reciprocals; see Belletti (1982: 117) and Sigurðsson et al. (2022: 12).

- ‘The monks_i admire each other_i’s stoles.’
- b. I stratiji perimenun (o enas) [tin
the.NOM.PL general.NOM.PL await.3PL the.M.NOM one.M.NOM the.M.ACC
katastrofi (o enas) tu alu].
destruction.ACC the.M.NOM one.M.NOM the.M.GEN other.M.GEN
‘The generals_i await each other_i’s destruction.’

As we will see in (14a) below, the reciprocator can also be nominative if it occurs as the subject of an embedded clause.

The reciprocal construction also occurs in small clauses. In (12a), the antecedent is the subject and the reciprocator the small clause subject, while in (12b) the antecedent is the small clause subject and the reciprocator occurs inside the complement of the small clause predicate:

- (12) a. I kaloyries teorun i mia tin
the.NOM.PL nun.NOM.PL consider.3PL the.F.NOM one.F.NOM the.F.ACC
ali eksipni / *eksipnes.
other.F.ACC smart.F.ACC smart.F.ACC.PL
‘The nuns_i consider each other_i smart.’
- b. teorō tis kaloyries θimomenes ti mia
consider.1SG the.ACC.PL nun.ACC.PL anger.PTCP.F.ACC.PL the.F.ACC one.F.ACC
me tin ali
with the.F.ACC other.F.ACC
‘I consider the nuns_i angry at each other_i.’

2.4 CONSTITUENCY

There is strong evidence suggesting that the two reciprocal parts do not form a constituent (*pace* Holton et al. 2012: 585).

First, as shown in examples (7)–(9) and (11), they can be split by prepositions or parts of a DP. The examples in (14a) and (15a) below show that they can also be split by complementizers. In fact, in some cases, the two parts *must* be split; this is the case, for instance, with the PP in examples (7) and (12b). The parts of the reciprocals must also be split by complementizers, as discussed in sections 3 and 4; see (31a) below. In the case of complementizers, the obligatoriness of splitting is presumably due to the fact that, as we argue below, the reciprocator and distributor are subject to different locality constraints.

In addition, the two parts never behave like a constituent. For instance, they cannot be moved as a unit, as shown by (13a), which is based on (1), and by (13b), based on (7):

- (13) a. *[O enas ton alo] stirizun i
the.M.NOM one.M.NOM the.M.ACC other.M.ACC support.3PL the.NOM.PL
monaçi.
monk.NOM.PL
Intended: ‘It is each other that the monks support.’
- b. ?*[ton ena ston alo] sistisa tus
the.M.ACC one.M.ACC to.the.M.ACC other.M.ACC introduced.1SG the.ACC.PL
fitites.
students.ACC.PL
Intended: ‘It was to each other that I introduced the students.’

Taken together, these observations strongly suggest that distributor and reciprocator cannot form a constituent at any point of the derivation.

3 LOCALITY CONSTRAINTS

In this section we focus on locality in the reciprocal construction. We will first argue that the sensitivity of the construction to the presence of a subject suggests that the construction contains an anaphoric element that is subject to the Binding Theory, namely, the reciprocator. Secondly, we will show that the relationship between the plural antecedent and the two reciprocal elements is not established by means of movement or Agree, as the two can be separated by islands.

3.1 THE CONSTRUCTION IS SUBJECT TO THE BINDING THEORY: THE RELEVANCE OF SUBJECTS

Our argument in favor of subjecting the Greek reciprocal construction to the Binding Theory is based on its sensitivity to the presence of a subject. This sensitivity can be demonstrated with reference to a set of striking facts in the clausal domain.

Firstly, the relationship between antecedent and reciprocator can cross a clause boundary, but it cannot cross an embedded subject. This fact gives rise to a subject-object asymmetry: while the reciprocator can be an embedded subject and thus bear nominative (14a), it cannot occur as an embedded non-subject, e.g., object (14b):

- (14) a. I monaçi pistevun o enas [oti
the.NOM.PL monk.NOM.PL believe.3PL the.M.NOM one.M.NOM COMP
o alos sevete ton iyumeno].
the.M.NOM other.M.NOM respect.3SG the.ACC abbot.ACC
‘[The monks]_i think that [each other]_i respects the abbot.’

- b. *I monaçi pistevun o enas [oti
 the.NOM.PL monk.NOM.PL believe.3PL the.M.NOM one.M.NOM COMP
 o iyumenos sevete **ton alo**.
 the.NOM abbot.NOM respect.3SG the.M.ACC other.M.ACC
 ‘[The monks]_i think that the abbot respects [each other]_i.’

The same contrast obtains if the reciprocator occurs as a genitive possessor/argument within DP:

- (15) a. I monaçi pistevun o enas [oti
 the.NOM.PL monk.NOM.PL believe.3PL the.M.NOM one.M.NOM COMP
 [ta rasa **tu alu**] ine omorfa].
 the.NOM.PL stole.NOM.PL the.M.GEN other.M.GEN be.3PL beautiful.NOM.PL
 ‘The monks_i believe that each other_i’s stoles are beautiful.’
- b. ?*I monaçi pistevun o enas [oti
 the.NOM.PL monk.NOM.PL believe.3PL the.M.NOM one.M.NOM COMP
 i kaloyries eklepsan ta rasa **tu**
 the.NOM.PL nun.NOM.PL steal.PST.3PL the.ACC.PL stole.ACC.PL the.M.GEN
alu.
 other.M.GEN
 ‘The monks_i believe that the nuns stole each other_i’s stoles.’

Secondly, the influence of a subject is also seen in small clauses. (12a) showed that the reciprocator can be a small clause subject when the antecedent is the matrix subject. (12b) showed that the reciprocator can also be a non-subject within the small clause if the antecedent is the subject of the small clause. (16) complements this observation: in (16a), as in (12b), the reciprocator is bound by the small clause subject; importantly, it cannot be bound by the matrix subject across the small clause subject (16b)

- (16) a. I monaçi teorun tis kaloyries
 the.NOM.PL monk.NOM.PL consider.3PL the.ACC.PL nun.ACC.PL
 θimomenes ti mia me tin ali.
 anger.PTCP.F.ACC.PL the.F.ACC one.F.ACC with the.F.ACC other.F.ACC
 ‘The monks_i consider the nuns_j angry at [each other]_j.’
- b. *I monaçi teorun o enas tis
 the.NOM.PL monk.NOM.PL consider.3PL the.M.NOM one.M.NOM the.ACC.PL
 kaloyries θimomenes me ton alo.
 nun.ACC.PL anger.PTCP.F.ACC.PL with the.M.ACC other.M.ACC
 ‘The monks_i consider the nuns_j angry at [each other]_i.’

The same pattern is found in ECM constructions: the reciprocator can be the ECM subject if the antecedent is the matrix subject as in (17a). The reciprocator can also occur as the object of the ECM clause, if the antecedent is the ECM subject, (17b). Crucially, however, the reciprocator cannot be the object of the ECM clause if the antecedent is the matrix subject, (17c).⁸

- (17) a. I monaçi iðan apo makria o enas
 the.NOM.PL monk.NOM.PL see.PST.3PL from afar the.M.NOM one.M.NOM
 ton alo na klevi to ðiskopotiro.
 the.M.ACC other.M.ACC COMP steal.3SG the.ACC chalice.ACC
 ‘The monks_i saw [each other_i steal the chalice] from afar.’
- b. I monaçi iðan apo makria tis kaloyries
 the.NOM.PL monk.NOM.PL see.PST.3PL from afar the.ACC.PL nun.ACC.PL
 ti mia na zoğrafizi tin ali.
 the.F.ACC one.F.ACC COMP paint.3SG the.F.ACC other.F.ACC
 ‘The monks saw [the nuns_i paint each other_i] from afar.’
- c. *I monaçi iðan apo makria (o enas)
 the.NOM.PL monk.NOM.PL see.PST.3PL from afar the.M.NOM one.M.NOM
 tis kaloyries (o enas) na zoğrafizun ton
 the.ACC.PL nun.ACC.PL the.M.NOM one.M.NOM COMP paint.3PL the.M.ACC
 alo.
 other.M.ACC
 ‘The monks_j saw [the nuns paint each other_j] from afar.’
- d. ?Tis kaloyries ti mia na zoğrafizi tin
 the.ACC.PL nun.ACC.PL the.F.ACC one.F.ACC COMP paint.3SG the.F.ACC
 ali, i monaçi ðen tis iðan.
 other.F.ACC the.NOM.PL monk.NOM.PL NEG 3PL.F.ACC see.PST.3PL
 ‘As for the nuns painting each other, the monks didn’t see them.’

⁸The data also provide evidence that the accusative-bearing external argument of the embedded predicate indeed functions as a subject at some level of representation, viz., that it is raised from the embedded clause. This is an important result in light of the controversy about Greek ECM, which is sometimes reanalyzed in terms of Control (see [Kotzoglou 2017](#) for recent discussion and references). This observation converges with the results in [Alexiadou & Anagnostopoulou 2021](#): 78, who show that perception verbs can take an ECM-clause whose negatively quantified (accusative) subject is licensed by negation in the ECM clause). If the accusative DP were base-generated in the matrix clause, it should pattern with objects, which, as shown in (18) below, however, do not intervene between a reciprocator below it and the subject. Given that the accusative DP in (17) follows a matrix adverbial, it will be in the embedded clause; this and the fact that the entire ECM clause can be fronted including the subject, see (17d), rules out Control.

(17c) again shows the relevance of an intervening subject.⁹

Importantly the restrictions documented in this section cannot be reduced to standard A-intervention given that a plural subject can be related to a reciprocator within a PP across a direct object, see (18):

- (18) I fitites sistisan to Joryo o
 the.NOM.PL student.NOM.PL introduce.PST.3SG the.ACC George.ACC the.M.NOM
 enas ston alo.
 one.M.NOM to.the.M.ACC other.M.ACC
 ‘The students_i introduced George to each other_i.’

Rather, they are very much reminiscent of the constraints familiar from Binding Theory where subjects (in the sense of the highest specifier of a given projection) play a privileged role and delimit the portion of the clause within which binding must be established.¹⁰

Note that our data suggest that it is the reciprocator that is subject to these constraints

⁹Another place in the grammar that would allow us to demonstrate the relevance of subjects for binding comes from nominals, as in the following classic example from Chomsky (1981: 213):

- (i) They heard (*my) stories about each other.

(i) yields the following expectation: in principle, we expect that a reciprocal embedded within a noun phrase should be able to be bound by a nominal external to that DP only when the noun phrase lacks a possessor/subject as in (ii):

- (ii) I stratiji perimenun (o enas) tin epiθesi mu
 the.NOM.PL general.NOM.PL await.3PL the.M.NOM one.M.NOM the.ACC attack.ACC 1SG.GEN
 ston alo.
 on.the.M.ACC other.M.ACC
 ‘The generals_i await my attack on each other_i.’

We have unfortunately not been able to establish clear contrasts with the Greek reciprocal construction in such examples. While binding by the DP-external antecedent in the presence of a possessor is less acceptable than in the absence of a possessor, the speaker variation we have encountered within and across speakers suggests that it is not categorically ruled out. This empirical result in fact seems to be similar to the situation in English, see Bruening (2006) for discussion and references. We will therefore, in what follows, set such cases aside.

¹⁰There exists a construction superficially similar to that of interest in this paper, which involves the distributor *o enas* in an A-position, as in (i). Much like its English counterpart, this construction has very different locality properties from (1); notably, as (i) shows, it can cross an intervening subject (compare the data in section 3.1), thus being reminiscent less of local anaphora and more of variable binding. In fact, this construction seems to not respect syntactic locality more generally. See Jackendoff (1990: 435) for data and references on its English counterpart.

- (i) Se afto to monastiri, o enas monaxos pistevi oti o iyumenos
 in this the monastery the.NOM one.NOM monk.NOM believe.3SG COMP the.NOM abbot.NOM

and thus, is subject to Condition A of the Binding Theory. Thus, it is the plural antecedent that binds the reciprocator. How the distributor fits in and how the locality constraints between antecedent and distributor can be understood will be addressed in section 4.

3.2 EVIDENCE AGAINST MOVEMENT/AGREE

We will now discuss further locality constraints in the reciprocal construction and assess their consequences for how the link between the different elements is established.

We begin with the reciprocator, which, given the effect of subjects, we are treating as being subject to Condition A of the Binding Theory. In much of the current literature on binding it is assumed that antecedent and anaphor are linked via a syntactic mechanism that accounts for both the sharing of phi-features and the locality constraints, viz., movement or Agree.

There are different forms of this idea. In one type of approach, anaphors do not exist independently, but rather result from movement of the antecedent with its lower copy being spelled out as (part of) the anaphor (Hornstein 2001, Drummond et al. 2011). In another type of movement approach, the antecedent forms a big DP together with the anaphor and strands it during the derivation (Kayne 2002). Both types of approaches predict that locality constraints on Condition A reduce to constraints on A-movement. A variant of the movement approach assumes that (some component of) the local reflexive (covertly) moves to the predicate of its clause/T/the vP-region by means of head- or phrasal (A-)movement, see, e.g., Lebeaux (1983: 726), Hestvik (1995), Reuland (2011), Ahn (2015).

More recently, it has been attempted to reduce binding to Agree, such that there is an Agree relationship between antecedent and anaphor, e.g., in the form of (upward) Agree, possibly via a mediating head (e.g. Kratzer 2009; Hicks 2009; Reuland 2011; Antonenko 2011; Wurmbrand 2017; Murphy & Meyase 2022; Paparounas & Akkuş 2023). Some approaches also combine movement of the reflexive and Agree, see, e.g., Rooryck & Wyngaerd (2011).

Turning to the distributor, in Heim et al. (1991), the relationship between the two involves covert movement of the distributor to the position of the antecedent (see also Belletti 1982 for covert movement in the Italian equivalent of the Greek reciprocal construction).

protimai ton alo.
prefer.3SG the.ACC other.ACC
'In this monastery, each monk believes that the abbot prefers the other.'

This usage (as well as usages of *o alos* without a *c*-commanding antecedent) is thus distinct from the usage of *the other* as an anaphor subject to Condition A. This situation is reminiscent of the many other cases where anaphoric elements are ambiguous between Condition A-obeying and other (e.g., referential) uses, as with, for example, English possessive pronouns.

One can also imagine an overt movement analysis, where the two are generated together and the distributor is stranded by movement of the antecedent. The latter may be the more straightforward means to ensure agreement in gender and case. In their analysis of Icelandic reciprocals, [Sigurðsson et al. \(2022\)](#) claim that the two movements (covert and overt) co-occur.¹¹

We will now show that any conceivable movement or Agree account will fail for both relationships because they are not subject to well-established constraints on movement/Agree within the language. We will also see that the locality constraints differ for distributor and reciprocator, in that the constraints are stricter for the former. We will address this asymmetry in section 4.

3.2.1 ISLANDS

Various pieces of data show that the reciprocator and, to some extent, the distributor, can occur in domains that are opaque to movement within the language.

The first pair of examples show that both elements can occur in coordination, either as one of the conjuncts, (19a), or embedded within a conjunct, (19b):¹²

¹¹ The motivation for LF-movement comes from scope ambiguities as in (i) (cf. [Heim et al. 1991](#) and references therein):

- (i) John and Mary said they like each other.

In one reading (call it *collective reporting*, the narrow reading), both John and Mary said that John likes Mary and Mary likes John. In another reading (call it *distributed reporting*, the wide-scope reading), John said that he likes Mary and Mary said that she likes John (but it is not necessarily the case that either of them said that the other person likes them). The distributed reading is taken to involve LF-movement of the distributor across the matrix predicate. Interestingly, the Greek reciprocal construction shows the same ambiguity; the example in (ii) is grammatical on both narrow and wide readings of the distributor.

- (ii) O Janis ke i Maria ipan oti aresun o enas
 the.NOM John.NOM and the.NOM Mary.NOM say.PST.3PL COMP please.3PL the.NOM one.NOM
 ston alo.
 to.the.ACC other.ACC
 ‘John and Mary said that they like each other.’

Note that, unlike the discontinuous reciprocal, the verbal reciprocals mentioned in footnote 3 do not license the scope ambiguity; this is one of many interpretive differences among the two constructions, alongside conditions on event structure such as simultaneity ([Dimitriadis 2008](#)) and, possibly, differences in the type of reciprocity denoted (strong versus weak).

¹²Note that the use of a collective verb, which requires syntactic plurality, rules out a clausal-coordination-plus-ellipsis parse; given that ‘gather the principal’ is ungrammatical in isolation, there cannot be deletion of ‘gather’ in the second conjunct. Rather, we must be dealing with DP coordination.

- (19) a. I maθites mazepsan o enas ton
 the.NOM.PL student.NOM.PL gather.PST.3PL the.M.NOM one.M.NOM the.M.ACC
 alo ke ton ðiefθindi stin taksi.
 other.M.ACC and the.ACC principal.ACC in.the.ACC classroom.ACC
 ‘The students_i gathered each other_i and the principal in the classroom.’
- b. I maθites mazepsan [ton kaθijiti o
 the.NOM.PL student.NOM.PL gather.PST.3PL the.ACC professor.ACC the.M.NOM
 enas tu alu] ke ton ðiefθindi stin
 one.M.NOM the.M.GEN other.M.GEN and the.ACC principal.ACC in.the.ACC
 taksi.
 classroom.ACC
 ‘The students_i gathered each other_i’s professor and the principal in the class-
 room.’

Under a movement analysis, there would be asymmetric extraction of/from a conjunct, in violation of the Coordinate Structure Constraint (Ross 1967).

We have already seen several examples involving the reciprocal inside PPs, which are islands for extraction quite generally in Greek (see, e.g., Merchant 2000 for P-stranding in *wh*-movement and sluicing). The following pair shows that the reciprocator can occur even in adjunct PPs. The distributor is, however, more restricted in that it cannot occur within all PPs (but see (21) below).

- (20) a. I monaçi iðan ta fiðja (o
 the.NOM.PL monk.NOM.PL see.PST.3PL the.ACC.PL snake.ACC.PL the.M.NOM
 enas) [ðipla (?o enas) ston alo].
 one.M.NOM next the.M.NOM one.M.NOM to.the.M.ACC other.M.ACC
 ‘[The monks]_i saw the snakes next to each other_i.’
- b. I monaçi trone kala o enas [eksetias
 the.PL.NOM monk.PL.NOM eat.3PL well the.M.NOM one.M.NOM because
 (?o enas) tu alu].
 the.M.NOM one.M.NOM the.M.GEN other.M.GEN
 ‘The monks_i eat well because of each other_i.’

While the distributor could occur only marginally within PP in the previous examples, it can do so perfectly easily once it occurs within possessed DPs that in turn are embedded within PPs, (21a), even if these PPs are adjuncts, (21b).¹³

¹³One of our consultants finds the lower instance of *o enas* less acceptable in (21b).

- (21) a. I fitites milisan (o enas) [ston
 the.NOM.PL student.NOM.PL talk.PST.3PL the.M.NOM one.M.NOM to.the.ACC
 kaθijiti (o enas) tu alu].
 professor.ACC the.M.NOM one.M.NOM the.M.GEN other.M.GEN
 ‘The students_i talked to each other_i’s professor.’
- b. I monaçi zun kala (o enas) [xari
 the.NOM.PL monk.NOM.PL live.3PL well the.M.NOM one.M.NOM grace
 stin kalosini (o enas) tu alu].
 to.the.ACC kindness.ACC the.M.NOM one.M.NOM the.M.GEN other.M.GEN
 ‘The monks_i live well thanks to each other_i’s kindness.’

Furthermore, the reciprocator (but not the distributor) can occur within relative clauses. In the following pair it occurs as the subject of the relative clause, (22a), or as a possessor of the subject of the relative clause, (22b):

- (22) a. I monaçi θa fane o enas [to
 the.NOM.PL monk.NOM.PL FUT eat.3PL the.M.NOM one.M.NOM the.ACC
 fajito pu eçi ftiaksi o alos].
 food.ACC that have.3SG make.PFV.3SG the.M.NOM other.M.NOM
 ‘The monks_i will eat the food that each other_i has made.’
- b. I monaçi θa fane o enas [to
 the.NOM.PL monk.NOM.PL FUT eat.3PL the.M.NOM one.M.NOM the.ACC
 fajito pu eçi ftiaksi i mitera tu
 food.ACC that have.3SG make.PFV.3SG the.NOM mother.NOM the.M.GEN
 alu].
 other.M.GEN
 ‘The monks_i will eat the food that each other_i’s mother has made.’

An anaphoric element inside a strong island may initially seem unusual and one may therefore be tempted to treat such cases as instances of logophoric binding, which might explain the apparent insensitivity to strict locality. Importantly, however, there is solid evidence against treating the reciprocator as a logophor here. We find the same subject-object asymmetry as with complement clauses: while the reciprocator can occur as (part of) an embedded subject as in (22), it cannot occur as embedded object, (23a) or as a part thereof, (23b):

- (23) a. *I monaçi çeretisan o enas [tin
 the.NOM.PL monk.NOM.PL greet.PST.3PL the.M.NOM one.M.NOM the.ACC

kaloyria pu ayapai ton alo].
 nun.ACC that love.3SG the.M.ACC other.M.ACC
 ‘The monks_i each greeted the nun that loves the other_i.’

- b. *I monaci çeretisan o enas [tin
 the.NOM.PL monk.NOM.PL greet.PST.3PL the.M.NOM one.M.NOM the.ACC
 kaloyria pu ayapai tin mitera tu alu].
 nun.ACC that love.3SG the.ACC mother.ACC the.M.GEN other.M.GEN
 ‘The monks_i each greeted the nun that loves the other_i’s mother.’

Thus, the reciprocator inside relative clauses is also subject to a binding domain that crucially refers to the presence of a subject.

More evidence against logophoric binding of the reciprocator in relative clauses comes from the following pair with an inanimate antecedent that displays the same subject/object asymmetry:

- (24) a. Afta ta poðilata jimnastikis fortizonde to
 these.NOM the.NOM bicycle.NOM.PL exercise.GEN charge.PASS.3PL the.NNOM
 ena apo [tin enerjia pu parayi to
 one.N.NOM from the.ACC energy.ACC that produce.3SG the.N.NOM
 alo / parayun i troçi tu
 other.N.NOM produce.3PL the.N.NOM.PL wheel.NOM.PL the.N.GEN
 alu].
 other.N.GEN
 ‘[These exercise bicycles]_i charge from the energy that [each other]_i/[each other]_i’s wheels produce.’
- b. *Afta ta poðilata jimnastikis fortizonde to
 these.NOM the.NOM bicycle.NOM.PL exercise.GEN charge.PASS.3PL the.N.NOM
 ena apo [tin enerjia pu ðinun i
 one.N.NOM from the.ACC energy.ACC that give.3PL the.NOM.PL
 ðiaðromi tu alu / stus troçus
 treadmill.NOM.PL the.N.GEN other.N.GEN to.the.ACC.PL wheel.ACC.PL
 tu alu].
 the.N.GEN other.N.GEN
 ‘[These exercise bicycles]_i charge from the energy that the treadmills give [each other]_i/ [each other]_i’s wheels.’

One can also construct examples with inanimate antecedents where the reciprocator is located inside an adjunct PP:

- (25) I planites ine skotini simera o enas
 the.NOM.PL planet.NOM.PL be.3PL dark.NOM.PL today the.M.NOM one.M.NOM
 [eksetias tu ðoriforu tu alu].
 because the.GEN satellite.GEN the.M.GEN other.M.GEN
 ‘The planets_i are dark today because of each other_i’s satellites.’

We can thus conclude that the reciprocator (and to some extent also the distributor) can occur inside islands, which renders a movement account highly unlikely.^{14,15}

There are yet more facts that argue against a movement relationship. First, the fact that the reciprocator can be an embedded subject rules out both A-movement-based and head-movement-based accounts of binding. A-movement is ruled out given that cross-clausal A-movement (like raising) is restricted to so-called subjunctive clauses in Greek (see [Alexiadou & Anagnostopoulou 2002](#)), while head-movement is generally thought to be clause-bound. Second, the fact that the reciprocator can occur as a subconstituent of DP also rules out implementations in terms of A-movement or head-movement given that both movement types are blocked from applying to this domain, in Greek and beyond.¹⁶ Third, movement

¹⁴Further evidence against logophoric binding in the reciprocal construction comes from the impossibility to bind without c-command, (6), obtaining even in the presence of a discourse referent/empathy locus. In addition, there is no long-distance binding, see (14) and (15). Finally, split antecedents are not possible, as shown in (i):

- (i) *O Janis eðikse sto Joryo ton ena ston
 the.NOM John.NOM show.PST.3SG the.ACC George.ACC the.M.ACC one.M.ACC to.the.M.ACC
 alo ston kaθrefti.
 other.M.ACC in.the.ACC mirror.ACC
 ‘*John_i showed George_j [each other]_{i+j} in the mirror.’

¹⁵We note that the exact nature of locality constraints on the reciprocal is a possible point of cross-linguistic variation. For instance, the reciprocator of the Brazilian Portuguese reciprocal largely overlaps in its distribution with its Greek counterpart, the reciprocator occurring within *wh*- (i) and adjunct (ii) islands in both languages. These commonalities seem to co-exist with important differences, however; the Brazilian Portuguese reciprocator can occur as the object of a relative clause ([Kobayashi 2019](#): ex. (15)), contrasting with the Greek facts (23).

- (i) Ta koritsça rotisan to ena [ti efaje to alo].
 the.NOM.PL girl.NOM.PL ask.PST.3PL the.NOM one.NOM what eat.PST.3SG the.NOM other.NOM
 ‘The girls_i asked what each other_i ate.’
- (ii) ?Ta ayorja klene to ena [epiði efije to alo].
 the.NOM.PL boy.NOM.PL cry.3PL the.NOM one.NOM because leave.PST.3SG the.NOM other.NOM
 ‘The boys_i are crying because each other_i left.’

¹⁶As pointed out to us by an anonymous reviewer, the reciprocator can be embedded quite deeply within DP,

analyses for both distributor and reciprocator also fail for the cases where the antecedent is within a PP, see ex. (9), as this would require movement to a non-commanding position, in violation of the extension condition/cyclicity. A final argument only affects the spell-out approach: not only does the reciprocator mismatch the antecedent in number (and potentially in person if the antecedent is first or second person, alongside definiteness if the antecedent is non-definite), it also has inherent interpretive content (namely differentiation, see section 5). It is wholly unclear how an element with such properties could ever arise from spelling out a lower copy of the antecedent.¹⁷

3.2.2 MORE EVIDENCE AGAINST STRANDING OF THE DISTRIBUTOR

We have already seen some evidence that argues against a movement dependency between antecedent and distributor (either covert movement of the distributor or stranding by move-

casting further doubt on the availability of an analysis based on movement (or Agree, see below):

- (i) I stratiji perimenun o enas ta nea tis
 the.NOM.PL general.NOM.PL await.3PL the.M.NOM one.M.NOM the.ACC.PL news.ACC.PL the.GEN
 katastrofis tis polis tu alu.
 destruction.GEN the.GEN city.GEN the.M.GEN other.M.GEN
 ‘The generals_i await the news about the destruction of each other_i’s city.’

¹⁷While the arguments against a movement analysis involving the reciprocator seem uncontroversial, one may be more sceptical about the arguments relating to the distributor, especially if it is assumed that it undergoes covert movement to its antecedent. To some extent, this depends on how this movement is conceived of. Both Belletti (1982: 116) and Heim et al. (1991: 66) analyze it as an association rule (adjoining it to its antecedent) distinct from QR. One automatic consequence of this is that it will invariably fail to satisfy the extension condition (even if it were to apply in narrow syntax). In addition, since it is a special rule taking place at LF, it is not quite clear what its (locality) properties would be. This in itself may render movement of this type a suboptimal solution. If this instance of covert movement were conceived of as Quantifier Raising, however, things may be different given that its locality profile may slightly deviate from that of overt movement. The PP examples discussed in this section may be a case in point: given that PPs are often permeable to QR, not only prepositional datives but potentially also adjunct PPs in inverse linking contexts (cf. *Someone from every city hates it*), one cannot a priori rule out the same possibility for *o enas*. Interestingly, Tanaka (2020) presents experimental evidence against QR from PP-adjuncts, suggesting that our data with *o enas* inside adjunct PPs are relevant after all. Irrespective of the situation with PPs, QR will not be sufficient to account for *o enas* inside coordination, recall ex. (19b), since QR is well-known to be subject to the coordinate structure constraint: Fox (2000: 51f.) shows that while a universally quantified DP can undergo QR across a QP in subject position in a simple sentence, (ia) it cannot do so, if the QP is within a VP that is coordinated with another VP, (ib):

- (i) a. A student likes every professor. $\exists \succ \forall \forall \succ \exists$
 b. A student likes every professor and hates the dean. $\exists \succ \forall \forall^* \succ \forall \succ \exists$

We therefore conclude that any covert movement analysis affecting the distributor will be problematic.

ment of the antecedent). The following examples explicitly argue against a stranding analysis, and, under certain assumptions, against covert movement as well. In both of the following examples, the distributor is related to the subject but occurs below the base position of the subject. In (26a), repeated from above, it occurs within a PP complement; in (26b), also repeated from above, it occurs below a direct object. In both configurations, the base position of the subject in Spec,vP, ensured by the postverbal subjects in (26), is separated from the distributor by other constituents.

- (26) a. Milisan i fitites ston kaθijiti o
 talk.PST.3PL the.NOM.PL student.NOM.PL to.the.ACC professor.ACC the.M.NOM
enas tu alu.
 one.M.NOM the.M.GEN other.M.GEN
 ‘The students_i talked to each other_i’s professor.’
- b. Sistisan i fititries ti Maria
 introduce.PST.3SG the.F.NOM.PL student.F.NOM.PL the.ACC Mary.ACC
i mia stin ali.
 the.F.NOM one.F.NOM to.the.F.ACC other.F.ACC
 ‘The students_i introduced Mary to each other_i.’

3.2.3 AGAINST AGREE

The data from subsection 3.2.1 equally argue against establishing the relationship between antecedent and distributor/reciprocator by means of Agree given that Agree is usually assumed to be subject to the same island constraints:¹⁸ In addition, Agree can normally not target constituents embedded within PPs and DPs. Furthermore, while Modern Greek allows cross-clausal agreement with embedded subjects in complements of raising predicates, as with overt movement, this is restricted to subjunctive clauses (Alexiadou & Anagnostopoulou 2002). Also, the fact that both reciprocal parts do not agree with the antecedent in number (and possibly person and definiteness) severely complicates an Agree analysis.¹⁹ Finally, we do not generally find intervention effects/minimality effects in binding; this is arguably an argument problematizing Agree-based approaches to binding more generally

¹⁸One possible exception is coordination, where agreement with the first/closest subject is possible in many languages, including Modern Greek. However, one of our coordination examples, (19b), involves both elements being embedded in a DP within the first conjunct, in which case Agree would clearly not be an option.

¹⁹At first sight, the agreement mismatches may be less of an issue in a movement-as-stranding analysis if a partitive structure is adopted underlyingly, possibly with a silent preposition, cf. *each (of) ...*. However, while such a structure could take care of the number-person-definiteness mismatches between distributor and antecedent, it arguably predicts the wrong case on the antecedent (genitive) and should lead to singular agreement on the predicate, contrary to fact.

(see e.g. Bruening 2021; Charnavel & Sportiche 2016). It is usually possible to relate an anaphor to an antecedent across an intervening DP, as long as the binding domain is respected. For instance, in (27), repeated from above, a reciprocator within PP is related to a subject antecedent across a direct object.

- (27) I fitites sistisan ti Maria o
 the.NOM.PL student.NOM.PL introduce.PST.3SG the.ACC Mary.ACC the.M.NOM
 enas ston alo.
 one.M.NOM to.the other
 ‘The students_i introduced Mary to each other_i.’

There are what could be termed intervention effects in binding, but those are always triggered by subjects (in the relevant sense), not by any c-commanding DP as would be expected under Agree.

We thus conclude that an Agree analysis is not promising either to establish the relationship between antecedent and distributor/reciprocator. For more arguments against establishing all binding dependencies by means of Agree, see also, e.g., Charnavel & Sportiche (2016: 65–71) and Bruening (2021: 431ff.). See especially ? for the suggestion that only some binding dependencies are mediated by Agree.²⁰

3.3 THE BINDING DOMAIN

Before concluding this section, we briefly return to the binding domain we find in Greek reciprocals. In the previous subsections, we have seen ample evidence that the locality restrictions cannot be reduced to either movement or Agree. There remains the possibility, though, that while neither movement nor Agree is involved, the binding domain could still be derived from independent syntactic mechanisms. One such proposal was recently advanced in Charnavel & Sportiche (2016: 71–80), who claim that the binding domain should be related to phasehood: an anaphor must be bound within a spell-out domain, which for our purposes we can equate with the finite TP (we will thus abstract away from the details

²⁰Yet another argument against Agree arises from the observation that the reciprocal parts can show agreement in natural gender with the antecedent:

- (i) Ta koritsça ayapun i mia tin ali.
 the.N.NOM.PL girl.N.NOM.PL love.3PL the.F.NOM one.F.NOM the.F.ACC other.F.ACC
 ‘The girls_i love each other_i.’ <https://tinyurl.com/2p82u3ja>

Note that semantic feminine agreement is not possible in subject-predicate constructions as in ‘The girl is smart’, where, arguably, Agree is involved. This asymmetry follows if Agree can only target grammatical gender features, while binding can also target the natural gender features of a DP, like other anaphoric processes in the language.

of their proposal which in fact requires certain departures from standard assumptions). All that matters in the present context is that the reciprocator can occur as the (possessor of the) subject of a finite complement/relative/adjunct clause, recall examples (14a), (15a), (22a), (22b), (24a) and those in fn. 15. Given that there is a finite CP boundary between antecedent and reciprocator, the two are not contained in the same spell-out domain (they are separated by the phasal C-head that introduces the complement/relative/adjunct clause).

It thus seems that reducing the binding domain to phasehood fails for our reciprocal data. Rather, they are compatible with a more traditional definition closer to Chomsky (1981) as in (28) (see also Bruening 2021):

(28) **Binding Domain**

The smallest XP containing the anaphor and a distinct and accessible subject (where subject is a DP in Spec,vP/TP/PredP).

The restriction to a distinct and accessible subject is intended to cover two distinct cases: requiring a distinct subject ensures that the binding domain of an anaphor in the embedded subject position/as a small clause subject/ECM-subject is extended to the matrix clause (since the anaphor is not distinct from itself). Requiring an accessible subject ensures that anaphors contained within an embedded subject cannot be bound by the containing subject (traditionally a violation of the *i*-within-*i*-filter) but rather need an antecedent in the matrix TP. Anaphors that are in the same clause as their antecedent (TP or small clause), e.g., anaphors in direct or indirect object position, within DP or PP, can be bound under *c*-command.

We do not wish to claim that the definition in (28) holds for all languages, at least not without any qualification. It is well-known that anaphor binding is more constrained in many languages in that it does not tolerate plain anaphors (contained) in embedded subject position (see, e.g., Charnavel & Sportiche 2016). One could conclude from this that binding domains can simply differ cross-linguistically. Alternatively, and this is probably the more interesting option, one could hold on to the more inclusive definition in (28) and try to relate more constrained distributions in other languages to independent factors. One such factor is the presence/absence of agreement. It has been argued that anaphors are only banned from embedded subject position if that is a position of agreement (the so-called Anaphor Agreement Affect, see e.g. Woolford 1999). This constraint will automatically block anaphors from occurring in embedded subject position in many languages, viz., those with subject-verb agreement. It also correctly predicts the possibility of such anaphors in languages without any visible subject-verb agreement like Thai and Mandarin Chinese. Importantly, at least some of those reflexives can be shown to be plain/non-exempt anaphors, e.g., the Chinese subject anaphor discussed in Haddad (2007), suggesting that a more liberal binding domain as in (28) is not restricted to Greek. At the same time, given that Greek has subject

verb agreement, the presence of agreeing subject anaphors may seem unexpected. Next to *o alos* above, a clear case are agreeing nominative reflexives in dative-nominative configurations ('John.DAT pleases self.NOM'). The exceptional behavior of Greek can perhaps be related to the fact that the reflexive is a full-fledged DP (with the genitive possessor expressing person, number and gender of the antecedent), lit. 'the his self', and the same holds for *o alos*.²¹ While this may account for the wider distribution of reciprocals in Greek, it does not seem to be generally true that anaphors can occur in embedded subject position in Greek. Examples with the reflexive have been reported in the literature (Woolford 1999: 273), but there is some reason to believe that these are emphatic and/or exempt. Given space constraints, we will leave further exploration of the reflexive-reciprocal asymmetry and more general questions about cross-linguistic variation in binding domains for future research.²²

²¹The following example shows that *o alos* can indeed trigger agreement. With a feminine antecedent, *o alos* as an embedded subject can trigger feminine agreement on a predicative adjective:

- (i) i kalogries pistevun i mia oti i ali ine
 the.NOM.PL nun.NOM.PL believe.3PL the.F.NOM one.F.NOM that the.F.NOM other.F.NOM be.3SG
 eksipni / *eksipnos
 clever.F.NOM clever.M.NOM
 'The nuns_i think that each other_i are clever.'

²²Distributional asymmetries between reflexives and reciprocals are by no means unheard of. The very same asymmetry regarding occurrence in embedded subject position has, in fact, been observed for English in Lebeaux (1983). Examples like *We didn't know what each other wanted* are well attested; Bruening (2006) argues that such reciprocals are not exempt and thus must be covered by the Binding Theory. The literature has generally attempted to relate such distributional asymmetries to independent properties of the elements involved. Regarding the embedded subject position, LF A-movement of reflexives was postulated, which would lead to an ECP violation. The scopal nature of reciprocals (and concomitant LF-movement/QR of part thereof, recall Heim et al. 1991) in turn has been taken to be responsible for the (more or less robust) absence of non-local binding of reciprocals, see Everaert (2008). As pointed out to us by a NELS reviewer, LF-movement could also account for the fact that, at least in English, reciprocals in subject position are most acceptable in embedded questions as in the example above and rather degraded in declaratives (cf. ??*We didn't think that each other would leave early*). In declaratives, LF-movement of *each* to the matrix Spec,vP would be blocked by Scope Economy (Fox 2000), as it would not give rise to new scope options. In embedded questions, however, movement to matrix Spec,vP would be licensed as the reciprocal can take scope over the wh-operator (cf. Fox 2000: 64; *One girl knows what every boy bought for Mary*). Subsequent LF-movement to a position above the matrix subject would then be possible, thereby licensing the reciprocal interpretation.

Apart from these asymmetries, reflexives and reciprocals in Greek pattern the same. They are both sensitive to intervening subjects in small clauses and ECM-constructions (Anagnostopoulou & Everaert 1999) and both can occur in PPs (Angelopoulos & Sportiche to appear); reflexives cannot occur as possessors within DP, but this seems to be an independent fact arising from competition with pronominal possessors (Cardinaletti & Starke 1993). We therefore see no reason to treat reflexives and reciprocals as elements of wholly distinct kinds. Rather, the most parsimonious solution would seem to subject both to Condition A of the Binding Theory and relate the distributional asymmetries to independent properties.

4 THE DISTRIBUTOR AS A FLOATING QUANTIFIER

In this section, we argue that the distributor is a floating quantifier,²³ based on two observations. Firstly, it is a quantificational scope-taking element; secondly, its distribution, including its locality restrictions, mirror those of the *bona fide* floating distributive quantifier *kaθ-enas* ‘each-one’, which is transparently morphologically related to the reciprocal’s distributor.

Note firstly that, like the *bona fide* quantifier, the distributor *o enas* is interpretively quantificational, as shown by its interaction with other scope-taking elements in the clause (recall also the variable binding-like data in fn. 10). We illustrate in (29) (adapted from Kobayashi 2019: ex. (11), see also Kobayashi 2021: 737, ex. (7)). In (29a), the distributivity contributed by *o enas* can optionally scope above the numeral *two*, giving rise to an ambiguity; (29b) clarifies that the position of *o enas* modulates this ambiguity, with higher-merged *o enas* not being able to scope below the numeral.

- (29) a. O Janis ke o Kostas θa ðosun ðio
 the.NOM John.NOM and the.NOM Kostas.NOM FUT give.3PL two
 ðora o enas ston alo.
 present.ACC.PL the.NOM one.NOM to.the.ACC other.ACC
 ‘Janis and Kostas_i will give two presents to each other_i.’
 ✓2>Dist (total of 2 gifts being given)
 ✓Dist>2 (total of 4 gifts being given)
- b. O Janis ke o Kostas θa ðosun o
 the.NOM John.NOM and the.NOM Kostas.NOM FUT give.3PL the.NOM
 enas ðio ðora ston alo.
 one.NOM two present.ACC.PL to.the.ACC other.ACC
 ‘Janis and Kostas_i will give two presents to each other_i.’
 ✗2>Dist (total of 2 gifts being given)
 ✓Dist>2 (total of 4 gifts being given)

Alongside their shared quantificational nature, there are numerous distributional parallels between the distributor and the *bona fide* floating quantifier.

To begin, we note that *kaθenas*, which usually occurs with a definite article, also requires a c-commanding antecedent with which it agrees in case and gender (but not number, *kaθe-*

²³A similar strategy is pursued in Belletti (1982: 114ff., (20)-(34)) for Italian, who, however, compares the distributor with the floating quantifier *tutti* ‘all’ (which is more restricted than Greek *kaθenas*, viz. cannot occur within DPs or PPs).

For information on the interpretive properties of Greek *o kaθenas*, including its presuppositional and strongly distributive nature that makes it a close analogue of English *each*, see Giannakidou (2012: 309-317).

nas being necessarily singular). (30a) illustrates obligatory case/gender agreement;²⁴ (30b) shows that *kaθenas* can case/gender-match and distribute over a c-commanding nominal (here *the friends of the monks*), but not a DP embedded within that nominal (i.e., just *the monks*).²⁵

- (30) a. I monaçi ipčan { o kaθenas /
 the.NOM.PL monk.NOM.PL drink.PST.3PL the.M.NOM each.M.NOM
 *ton kaθena / *tu kaθenos / *i kaθemia }
 the.M.ACC each.M.ACC the.M.GEN each.M.GEN the.F.NOM each.F.NOM
 đio potirja krasi.
 two glass.ACC.PL wine
 ‘The monks each drank two glasses of wine.’
- b. I fili ton monaxon ipčan {
 the.NOM.PL friend.NOM.PL the.GEN.PL monk.GEN.PL drink.PST.3PL
 o kaθenas / *tu kaθenos } đio potirja krasi.
 the.M.NOM each.M.NOM the.M.GEN each.M.GEN two glass.ACC.PL wine
 ‘The monk’s friends each drank two glasses of wine.’

The distributional parallels extend much further than the basic configurational facts illustrated in (30). Firstly, the distributor *o enas* must occur in the same finite clause as the plural antecedent (while the reciprocator need not). The same is true of *kaθenas*:

- (31) a. I monaçi ipan (o enas) [oti
 the.NOM.PL monk.NOM.PL say.PST.3PL the.M.NOM one.M.NOM COMP
 (*o enas) ta rasa tu alu
 the.NOM one.M.NOM the.NOM.PL stole.NOM.PL the.M.GEN other.M.GEN
 ine omorfa].
 be.3PL beautiful.NOM.PL
 ‘The monks_i said that each other_i’s stoles are beautiful.’
- b. I monaçi ipan (o kaθenas) [oti
 the.NOM.PL monk.NOM.PL say.PST.3PL the.M.NOM each.M.NOM COMP
 (*o kaθenas) đio kaloyries eftasan sto
 the.M.NOM each.M.NOM two nun.NOM.PL arrive.PST.3PL in.the.ACC

²⁴Interestingly, the parallelism extends to the obligatory repetition of the preposition if the antecedent is a PP, recall ex. (9).

²⁵Note that like English *each*, Greek *kaθ-enas* can occur both in what is usually called an adverbial position and right-attached to a DP (so-called binomial ‘each’). The relevant comparison for our purposes is the former use; our examples are constructed in such a way that a binomial each interpretation is ruled out (*kathenas* is either unconnected to an XP or follows definite XPs, which are not compatible with binomial each).

monastiri].

monastery.ACC

'The monks each said that two nuns arrived at the monastery.'

Second, both can occur right before or within DPs:

- (32) a. I monaçi θavmazun (o enas) ta
the.NOM.PL monk.NOM.PL admire.3PL the.M.NOM one.M.NOM the.ACC.PL
rasa (o enas) tu alu.
stole.ACC.PL the.M.NOM one.M.NOM the.M.GEN other.M.GEN
'The monks_i admire each other_i's stoles.'
- b. I monaçi frondizun (o kaθenas) tin
the.NOM.PL monk.NOM.PL take.care.3PL the.M.NOM each.M.NOM the.ACC
avli (o kaθenas) mias eklisias.
yard.ACC the.M.NOM each.M.NOM one.GEN church.GEN
'The monks each take care of the courtyard of one church.'

Third, both can occur immediately before or within (certain) PPs:

- (33) a. I monaçi iðan ta fiðja (o
the.NOM.PL monk.NOM.PL see.PST.3PL the.ACC.PL snake.ACC.PL the.M.NOM
enas) [ðipla (?o enas) ston alo].
one.M.NOM next the.M.NOM one.M.NOM to.the.M.ACC other.M.ACC
'[The monks]_i saw the snakes next to each other_i.'
- b. I monaçi iðan ta fiðja (o
the.NOM.PL monk.NOM.PL see.PST.3PL the.ACC.PL snake.ACC.PL the.M.NOM
kaθenas) [ðipla (?o kaθenas) se mia petra].
each.M.NOM next the.M.NOM each.M.NOM to one.ACC stone.ACC
'[The monks] each saw the snakes next to a stone.'

Recall from above that the distributor can only occur in some PPs but not in others. While we have no answer as to why different PPs behave differently, the distribution of *kaθenos* seems to match that of the distributor very closely.

Finally, both *o enas* and *kathenas* cannot occur next to the antecedent:

- (34) a. *I monaçi o enas ayapai / ayapane
the.NOM.PL monk.NOM.PL the.M.NOM one.M.NOM love.3SG love.3PL
ton alo.
the.M.ACC other.M.ACC
'The monks_i love each other_i.'

- b. *I monaçi o kaθenas ipčan dio
 the.NOM.PL monk.NOM.PL the.M.NOM each.M.NOM drink.PST.3PL two
 potiria krası.
 glass.ACC.PL wine.ACC
 ‘The monks each drank two glasses of wine.’

Given these significant parallels, we conclude that the distribution of the distributor can be understood by treating it as a floating universal/distributive quantifier.^{26,27}

²⁶We have assumed that in the Greek reciprocal construction it is the plural DP that functions as the antecedent of the reciprocator, viz., binds it. One could imagine, however, as proposed in [Belletti \(1982\)](#) for the Italian reciprocal construction, that it is the distributor that binds the reciprocator and that the locality restrictions on the reciprocator arise indirectly via the locality restrictions on the distributor. We find this alternative proposal implausible given that the distributor, as a quantificational element, only needs to c-command the reciprocator (which thus accounts for the data in 2.2 above; recall also the construction in fn. 10, where only c-command is required); it is unclear why this should come with a locality restriction and thus should be interrupted by intervening subjects (in [Belletti 1982](#) this follows from the stipulation that distributor and reciprocator form a chain). By treating the plural DP as the antecedent and the reciprocator as the anaphor it binds, the locality restrictions not only follow straightforwardly but also correspond closely to the distribution of other anaphors both in Greek and elsewhere (*modulo* the occurrence in embedded subject position). We have not managed to tease apart the two options syntactically, though. In principle, if the distributor is the binder, it should make a difference whether it occurs above or below an intervening subject. However, this expectation is not borne out as shown in (i) on the basis of an ECM example:

- (i) *I monaçi iðan (o enas) tis kaloyries (o
 the.NOM.PL monk.NOM.PL see.PST.3PL the.M.NOM one.M.NOM the.ACC.PL nun.ACC.PL the.M.ACC
 enas) na zoğrafızun ton alo.
 one.M.ACC COMP paint.3PL the.M.ACC other.M.ACC
 ‘The monks_j saw the nuns paint each other_j.’

One may be tempted to interpret (i) as evidence against the distributor functioning as the binder (given that no subject intervenes when the distributor occurs in the low position after the ECM-subject). However, corresponding examples based on *o kathenas* are equally ungrammatical:

- (ii) ðio proponites iðan (o kaθenas) tis aθlitries (?*o
 two coach.NOM.PL see.PST.3PL the.NOM each.M.NOM the.F.ACC.PL athlete.F.ACC.PL the.M.NOM
 kaθenas) na pernun metalia.
 each.M.NOM COMP take.3PL medal.ACC.PL
 ‘Two coaches each saw the athletes win medals.’

Thus, (i) is inconclusive as it could be ungrammatical because the distributor cannot float in the lower position.

²⁷Given that the Greek discontinuous reciprocal allows interpretations other than just strong reciprocity, *o enas* is best treated as a weakly distributive element. This distinguishes it from *o kathenas*, which is strongly distributive. *o kathenas* could, in principle, be itself combined with *o alos*, leading to a truth-conditionally distinct interpretation (strong reciprocity). Tellingly, *o kathenas* cannot occur in contexts of weaker reciprocity (see [Dalrymple et al. 1998](#)):

5 PUTTING THE PARTS TOGETHER

The analysis we have developed so far accounts for the distribution of the two reciprocal parts by treating the distributor as a floating quantifier and the reciprocator as a plain anaphor. Importantly, from a purely syntactic point of view, nothing forces the simultaneous presence of both reciprocal parts. Thus, one may ask what rules out sentences with either only *o enas* or *o alos* present. Another issue concerns the partial mismatch in ϕ -features (and possibly definiteness) between the plural antecedent and the reciprocal parts.

Answers to both questions will likely relate to a large extent to the semantics of reciprocals. While we will not aim at providing an explicit compositional semantics of the construction, we believe that attributing semantic import to both constituent parts of the reciprocal will go a long way towards explaining why both parts must co-occur: in the absence of either distribution or differentiation, there will simply be no way to derive a reciprocal interpretation (*modulo* the case of verbal reciprocals, where reciprocity independently seems to be derived by a single element, see footnote 3).²⁸

We believe the assimilation of the reciprocal’s constituent parts to independent elements, namely floating quantifiers and anaphors, can insightfully account for certain morphosyntactic properties of these parts. For instance, that the distributor is obligatorily morphosyntactically definite and third-singular cannot be an accident if, as we have argued, it is a floating quantifier, since the *bona fide* floating quantifier of the language is also obligatorily definite and third-singular. The obligatory sharing of gender between the floating quantifier and the nominal it distributes over is equally shared between the *bona fide* quantifier and

-
- (i) Ta vivlia ine stivaymena to (#kaθ-)ena pano sto
the.NOM.PL book.NOM.PL be.3PL pile.PTCP.PL the.NOM each-one.N.NOM over to.the.N.NOM
alo.
other.N.NOM
‘The books_{*j*} are stacked on top of each other_{*j*}.’

²⁸That the reciprocal involves quantification/distributivity is made evident by (29) above, where the scope of distributivity interacts with other scope-taking elements in the sentence. Note further that the association of *o enas* with distributivity is supported additionally by the variable binding-like construction mentioned in footnote 10, where the same element is again crucially involved in deriving reciprocal interpretations. That being said, we leave the exact nature of the connection between *o enas* and distributivity for future work: for instance, it may well be that, instead of this element effecting distributivity itself, it stands in a dependency with an abstract distributive operator. At any rate, the bipartiteness follows straightforwardly under a compositional approach to reciprocals as in work originating in Heim et al. (1991); a polyadic quantifier approach to the semantics of reciprocity (e.g. Dalrymple et al. 1998) is also compatible with the bipartite syntax of the construction, as long as at least some semantic import is afforded to *the other* (see, e.g., Kobayashi 2019, 2021) We believe different possible interpretive approaches of this kind will leave our core syntactic account unchanged; what seems crucial in deriving the reciprocal interpretation is c-command, witness (i) of footnote 6, where a lack of c-command between distributor and reciprocator leads to a non-reciprocal reading.

the distributor of the reciprocal (see below for a possible technical implementation).

In addition, we believe that certain morphosyntactic properties of the reciprocal's parts can be connected to aspects of the interpretation of these elements. Such considerations likely apply to the reciprocator; here, on approaches where the reciprocator is assigned the interpretation of a definite description (Beck 2001), its morphosyntactic appearance as a definite is expected. Once again, though, the availability of this type of approach will depend on the specific properties of the semantic analysis; there exist approaches, for instance, where the reciprocator is not interpretively definite. See also Kobayashi (2021: 736, ex. (4)) for the claim that number is interpreted on the reciprocator in Brazilian Portuguese.

What this leaves, then, is the sharing of gender features between reciprocator and antecedent. This phenomenon follows straightforwardly, we believe, once we take the reciprocator to be an anaphoric element, as we have done above. This type of gender matching seems to be a general property of co-reference broadly construed, encompassing phenomena such as local binding, donkey anaphora, and cross-sentential anaphora. In much of the semantic literature on *other*, notably Heim et al. (1991), this intuition has been implemented by positing a null proform in the structure of the differentiator, which will be subject to general constraints of coreference with definite discourse antecedents. Note that this is an NP proform, which is why it only agrees in gender with the antecedent (other features being projected outside of NP/nP).

A similar approach suggests itself for the distributor. To see why, consider first what analysis of floating quantification is required by the Greek data.

Given the evidence against movement of the distributor to the antecedent or it being stranded by the antecedent, our analysis of the distribution of the floating quantifier commits us to an adverbial analysis of the distributor/floating quantifier, viz., it is adjoined to some projection of VP/NP (see, e.g., Fitzpatrick 2006). This equally holds for *o kathenas*, which can also occur below the base-position of its antecedent, recall examples (32b), (33b).

One of the challenges for an adverbial analysis is to capture the agreement facts. The standard strategy is to posit a null proform after the quantifier that is co-indexed with the antecedent, i.e. [_{DP} each *pro*]. For the Greek reciprocal, this would straightforwardly account for agreement in gender, but it would not for case agreement. However, there are other configurations where case agreement obtains without there being a direct syntactic link between antecedent and agreeing element, viz., depictives. It can be shown that depictives, like the distributor and *o kathenas*, can occur in positions that are clearly below the base-position of their antecedent. In (35), for instance, the subject-oriented depictive occurs after the base position of the IO, which in turn follows the postverbal subject in its base position in Spec,vP. Given that the depictive precedes the DO, an analysis in terms of right-adjunction of the depictive to vP, which would put it in the vicinity of the subject antecedent, is not available either:

- (35) eðikse o Janis tis Marias protos to
 show.PST.3SG the.NOM John.NOM the.GEN Mary.GEN first.M.NOM the.ACC
 vivlio.
 book.ACC
 ‘John was the first to show Mary the book.’

Thus, whatever ensures case-agreement in (35) can be thought to ensure case-agreement in the reciprocal construction and with *o kathenas* as well.²⁹

In summary, both the bipartiteness of the Greek discontinuous reciprocal construction as well as some of its morphosyntactic properties can be motivated under different semantic accounts of reciprocals (viz., number and possibly definiteness of the reciprocator). The remaining properties can be related to the general treatment of such elements in the language (viz., number and definiteness of the distributor, agreement in gender on both elements and case on the distributor).

6 CONCLUSIONS

In this paper we have investigated the syntax of the understudied discontinuous reciprocal construction in Modern Greek, whereby the distributor ‘the one’ and the reciprocator ‘the other’ are independent constituents. Our main focus has been on the intricate locality properties of the two elements. We have argued that the distributional pattern of the reciprocator, especially its sensitivity to the presence of a structural subject, suggest that it is subject to Condition A of the Binding Theory and is thus best analyzed as a plain anaphor. As for the distributor, which requires a more local relationship with the antecedent, we have proposed that it should be analyzed as a floating quantifier since it shows not only quantificational force, but also a distribution that perfectly mirrors that of the floating quantifier *o kathenas* ‘the each-one’. We have shown that the distributional properties of the two reciprocal elements, viz., the fact that they can occur inside islands, strongly argue against establishing the relationship with the antecedent by means of Agree or movement (contrary to much of

²⁹The analysis in Fitzpatrick (2006) seems to crucially rely on the quantifier semantically binding (and thus c-commanding) the trace left by movement of the antecedent. Given that, in our data, cf., e.g., ex. (32)–(33), the quantifier can originate below the base position of the antecedent, a solution of this type is not applicable. In fact, to the best of our knowledge, stranding data of this type have not been reported for other languages and thus are of great importance for the debate.

The challenges posed by the Greek reciprocal and quantifier float data bear similarities to those presented by binomial *each* in various languages (including Modern Greek) where the quantifier also occurs below the base-position of the NP it agrees with and quantifies over and where an LF-movement analysis is similarly counter-exemplified by the fact that the quantifier can occur within islands. See Zimmermann (2002) for comprehensive discussion.

the recent literature on binding and floating quantifiers). Moreover, the size of the binding domain, especially the possibility of the reciprocator to occur in embedded subject position, speaks against reducing the binding domain to phasehood, instead supporting more traditional definitions of the binding domain as the smallest XP containing the anaphor and a distinct and accessible subject. Finally, we have sketched how the bipartite syntax of the Greek reciprocal may relate to common proposals on the interpretation of reciprocals.

REFERENCES

- Adamson, Luke James & Elena Anagnostopoulou. to appear. Interpretability and Gender Features in Coordination: Evidence from Greek. In *Proceedings of WCCL39*, Somerville, MA: Cascadilla Proceedings Project.
- Ahn, Byron Thomas. 2015. *Giving Reflexivity a Voice: Twin Reflexives in English*. Los Angeles, CA: UCLA Doctoral dissertation.
- Alexiadou, Artemis & Elena Anagnostopoulou. 2002. Raising without infinitives and the role of agreement. In Artemis Alexiadou, Elena Anagnostopoulou, Sjeff Barbiers & Hans-Martin Gärtner (eds.), *Dimensions of movement*, 17–30. Amsterdam: John Benjamins.
- Alexiadou, Artemis & Elena Anagnostopoulou. 2021. Rethinking the nature of nominative case. In András Bány, Theresa Biberauer, Jamie Douglas & Sten Vikner (eds.), *Syntactic architecture and its consequences III: Inside syntax*, 69–93. Berlin: Language Science Press.
- Anagnostopoulou, Elena & Martin Everaert. 1999. Toward a More Complete Typology of Anaphoric Expressions. *Linguistic Inquiry* 30(1). 97–119.
- Angelopoulos, Nikos & Dominique Sportiche. to appear. Treating Greek *o eaftos mu* as a regular anaphor: Theoretical Implications. *Linguistic Inquiry*.
- Antonenko, Andrei. 2011. *Feature-Based Binding and Phase Theory*. Stony Brook, NY: Stony Brook University Doctoral dissertation.
- Arregi, Karlos. 2001. Spanish reciprocals. Handout from the MIT/UConn/UMass Semantics Workshop.
- Beck, Sigrid. 2001. Reciprocals are Definites. *Natural Language Semantics* 9(1). 69–138.
- Belletti, Adriana. 1982. On the anaphoric status of the reciprocal construction in Italian. *The Linguistic Review* 2(2). 101–138.
- Bruening, Benjamin. 2006. What is the Right Binding Theory? Handout of talk given at SUNY Stony Brook, September 29, 2006.
- Bruening, Benjamin. 2021. Generalizing the Presuppositional Approach to the Binding Conditions. *Syntax* 24(4). 417–461.
- Cardinaletti, Anna & Michal Starke. 1993. The Typology of Structural Deficiency: A Case

- Study of the Three Classes of Pronouns. In Henk C. van Riemsdijk (ed.), *Clitics in the Languages of Europe*, 145–233. Berlin: Mouton de Gruyter.
- Charnavel, Isabelle & Dominique Sportiche. 2016. Anaphor Binding: What French Inanimate Anaphors Show. *Linguistic Inquiry* 47(1). 35–87.
- Chomsky, Noam. 1981. *Lectures on government and binding*. Dordrecht: Foris.
- Dalrymple, Mary, Makoto Kanazawa, Yookyung Kim, Sam McHombo & Stanley Peters. 1998. Reciprocal Expressions and the Concept of Reciprocity. *Linguistics and Philosophy* 21(2). 159–210.
- Despić, Miloje. 2011. *Syntax in the absence of determiner phrase*. Storrs, CT: University of Connecticut Doctoral dissertation.
- Dimitriadis, Alexis. 2008. The event structure of irreducibly symmetric reciprocals. In Johannes Dölling, Tatjana Heyde-Zybatow & Martin Schäfer (eds.), *Event Structures in Linguistic Form and Interpretation*, 327–354. Berlin: De Gruyter.
- Drummond, Alex, Dave Kush & Norbert Hornstein. 2011. Minimalist Construal: Two Approaches to A and B. In Cedric Boeckx (ed.), *The Oxford Handbook of Linguistic Minimalism*, 396–426. Oxford: Oxford University Press.
- Everaert, Martin. 1990. Nominative anaphors in Icelandic: morphology or syntax? In Werner Abraham, Wim Kosmeijer & Erich Reuland (eds.), *Issues in Germanic Syntax*, 277–305. Berlin: De Gruyter Mouton.
- Everaert, Martin. 2008. Domain restrictions on reciprocal interpretation. In König Ekkehard & Gast Volker (eds.), *Reciprocals and Reflexives*, 557–576. Berlin, New York: De Gruyter Mouton.
- Fitzpatrick, Justin. 2006. *The Syntactic and Semantic Roots of Floating Quantification*. Cambridge, MA: MIT Doctoral dissertation.
- Fox, Danny. 2000. *Economy and semantic interpretation*. Cambridge, MA: MIT Press.
- Giannakidou, Anastasia. 2012. The Landscape of Greek Quantifiers. In Edward L. Keenan & Denis Paperno (eds.), *Handbook of Quantifiers in Natural Language*, 285–346. Dordrecht: Springer Netherlands.
- Haddad, Youssef A. 2007. Subject Anaphors: Exempt or Not Exempt? *Linguistic Inquiry* 38(2). 363–372.
- Heim, Irene, Howard Lasnik & Robert May. 1991. Reciprocity and Plurality. *Linguistic Inquiry* 22(1). 63–101.
- Hestvik, Arild. 1995. Reflexives and ellipsis. *Natural Language Semantics* 3(2). 211–237.
- Hicks, Glyn David. 2009. *The derivation of anaphoric relations*. Amsterdam: John Benjamins.
- Holton, David, Peter Mackridg & Irene Philippaki-Warbuton. 2012. *Greek: A Comprehensive Grammar*. Milton Park, Abingdon, Oxon; New York, NY: Routledge.

- Hornstein, Norbert. 2001. *Move!: a minimalist theory of construal*. Malden, MA: Blackwell.
- Jackendoff, Ray. 1990. On Larson's Treatment of the Double Object Construction. *Linguistic Inquiry* 21(3). 427–456.
- Kayne, Richard S. 1975. *French Syntax: The Transformational Cycle* (Current Studies in Linguistics 6). Cambridge, MA: MIT Press.
- Kayne, Richard S. 2002. Pronouns and their Antecedents. In Samuel David Epstein & T. Daniel Seely (eds.), *Derivation and Explanation in the Minimalist Program*, 133–166. Oxford: Blackwell.
- Kobayashi, Filipe Hisao. 2019. Scattered Reciprocals. Workshop on Cross-Linguistic Semantics of Reciprocals.
- Kobayashi, Filipe Hisao. 2021. Composing reciprocity: An analysis of scattered reciprocals. In Joseph Rhyne, Kaelyn Lamp, Nicole Nicole Dreier & Chloe Kwon (eds.), *Semantics and Linguistic Theory*, vol. 30, 734–752.
- Kotzoglou, George. 2017. Quasi-ECM constructions in Greek: Further arguments for a control analysis. In *Selected Papers of ISTAL 22*, 299–315.
- Kratzer, Angelika. 2009. Making a Pronoun: Fake Indexicals as Windows into the Properties of Pronouns. *Linguistic Inquiry* 40(2). 187–237.
- Lapata, Maria. 1998. Anaphoric binding in Modern Greek. In Miriam Butt & Tracy Holloway King (eds.), *Proceedings of the LFG98 conference*, 15. Stanford: CSLI.
- LaTerza, Christopher. 2014. *Distributivity and plural anaphora*. College Park, MD: University of Maryland Doctoral dissertation.
- Lebeaux, David. 1983. A Distributional Difference between Reciprocals and Reflexives. *Linguistic Inquiry* 14(4). 723–730.
- Mackridge, Peter. 1985. *The Modern Greek language: a descriptive analysis of standard Modern Greek*. Oxford: Oxford University Press.
- Merchant. 2000. Islands and LF-movement in Greek sluicing. *Journal of Greek Linguistics* 1(1). 41–64.
- Messick, Troy & Sreekar Raghobham. 2022. On case-copying reflexives: Implications for antecedent-anaphor feature matching. Ms. Rutgers University.
- Murphy, Andrew & Savio Meyase. 2022. Licensing and anaphora in Tenyidie. *Glossa: a journal of general linguistics* 7(1). 1–59.
- Paparounas, Lefteris & Faruk Akkuş. 2023. Anaphora and agreement in the Turkish DP: Delimiting binding-through-Agree. *Natural Language & Linguistic Theory* <https://doi.org/10.1007/s11049-023-09583-4>.
- Reuland, Eric J. 2011. *Anaphora and language design*. Cambridge, MA: The MIT Press.
- Rivero, María-Luisa. 1992. Adverb incorporation and the syntax of adverbs in Modern Greek. *Linguistics and Philosophy* 15(3). 289–331.

- Rooryck, Johan & Guido J. vanden Wyngaerd. 2011. *Dissolving binding theory*. Oxford: Oxford University Press.
- Ross, John R. 1967. *Constraints on variables in syntax*. Cambridge, MA: MIT Doctoral dissertation.
- Sigurðsson, Halldór Ármann, Jim Wood & Einar Freyr Sigurðsson. 2022. *Hvor* ‘Each’ Reciprocals and Distributives in Icelandic: E-Raising + Short Main Verb Movement. *Linguistic Inquiry* 53(3). 571–588.
- Tanaka, Misako. 2020. Similarities and Differences between Quantifier Raising and Wh Movement Out of Adjuncts. *Syntax* 23(2). 152–184.
- Williams, Edwin. 1991. Reciprocal scope. *Linguistic Inquiry* 22(1). 159–173.
- Woolford, Ellen. 1999. More on the Anaphor Agreement Effect. *Linguistic Inquiry* 30(2). 257–287.
- Wurmbrand, Susi. 2017. Feature sharing or how I value my son. In Claire Halpert, Hadas Kotek & Coppe van Urk (eds.), *A Pesky Set: Papers for David Pesetsky*, 173–182. Cambridge, MA: MIT Press.
- Zimmermann, Malte. 2002. *Boys buying two sausages each: On the syntax and semantics of distance-distributivity*. Utrecht: LOT/Netherlands Graduate School of Linguistics.