Lexical reciprocity vs. grammatical reciprocity: the case of Italian

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Two common cross-linguistic strategies give rise to reciprocity. In the lexical (L) strategy, reciprocity is due to the specific meanings of intransitive entries like meet, marry and kiss. Another strategy involves reciprocal operators. Unlike L-reciprocity, this grammatical (G) strategy is productive: reciprocal items like each other occupy NP positions within complex VPs where the verb has no reciprocal meaning, as seen in punish each other, run after each other or consider each other guilty.

English distinguishes L and G reciprocity on the surface as in involves reciprocal operators. Unlike L-reciprocity, this grammatical (G) strategy is productive:

\begin{align*}
\text{(Reciprocal forms:)} \\
\text{L-recip.:} & \quad \text{Gianni e Maria si sono lasciati/consultati} \\
\text{G-recip.:} & \quad \text{Gianni e Maria si sono puniti/ringraziati}
\end{align*}

and (1a) look identical. However, as the glosses show, (1a), but not (1b), has two reciprocal readings:

\begin{align*}
\text{(1a): 2-event reading (‘G&M left/consulted each other’)) or 1-event reading (‘G&M broke up/conferred’)} \\
\text{(1b): only a 2-event reading – ‘G&M punished/thanked each other’}
\end{align*}

The study of Romance languages has led to intriguing hypotheses about cross-linguistic variations in the expression of reciprocity [9,5,i.a.]. However, while evidence suggesting two strategies as in (1a) has been occasionally observed, the little theoretical work that has been done on the topic has not been systematically applied to account for the differences between the two strategies.

This paper studies new evidence on L/G reciprocity in Italian, supporting the treatment of the clitic *sì* as a purely syntactic licensor of intransitivity (cf. [7,10,1] on other languages). Reciprocal meanings are derived by specific lexically collective verbs or by a general grammatical mechanism: a covert operator licensed by *sì* or an overt adverbial (*a vicenda* ‘mutually/in turns’). L-reciprocity is analyzed using irreducible events [4], while G-reciprocity involves a quantificational operator [3] taking scope over different events. This systematically accounts for the distribution of different reciprocal meanings with causatives, the preposition *con* (‘with’), and the adverbial *a vicenda*.

The **L/G distinction** between Italian reciprocals is supported by four tests:

\begin{enumerate}
\item[(T1)] Following [4,11], we observe that verbs with an L-reciprocal reading lead to ambiguity between one/two-event readings (1a), while other transitives only support a 2-event reading (1b). The adverb *a vicenda* acts as a disambiguator that selects the 2-event reading: unlike (1a), the sentence *G e M si sono lasciati a vicenda* is unambiguous (‘G&M left each other’) and isn’t true if Gianni left a passive Maria.
\item[(T2)] Causatives (2) rule out *sì*, allowing passive readings for all transitives. By contrast, reciprocity appears with verbs that have an L-reciprocal reading (2a), but not with other transitives (2b):
\begin{align*}
\text{(2) a.} & \quad \text{Ho fatto lasciare/consultare Gianni e Maria} \\
\text{b.} & \quad \text{Ho fatto punire/ringraziare Gianni e Maria}
\end{align*}

Passive: (2a)= ‘I made G and M be left/consulted’ (2b)=‘I made G and M be punished/thanked’

\begin{align*}
\text{L-recip.:} & \quad \text{‘I made G and M break up/confer’} \\
\text{G-recip.:} & \quad \text{‘I made G&M leave/consult each other’}
\end{align*}

\begin{align*}
\text{(T3) Similarly to English (‘the couple broke up/has punished each other’), L-reciprocity appears with singular terms like *coppia* ‘couple’ (3a), while G-reciprocity is unacceptable in the singular (3b):} \\
\text{(3) a.} & \quad \text{la coppia si è lasciata/consultata} \\
\text{b.} & \quad \text{#la coppia si è punita/ringraziata}
\end{align*}

\begin{align*}
\text{(3a)} & \quad \text{‘the couple broke up/consulted each other’} \\
\text{(3b)} & \quad ?\text{the couple punished/thanked each other’}
\end{align*}

\begin{align*}
\text{(T4) As in Hebrew [11], L-reciprocals support discontinuity (4a), but simple transitives do not (4b):} \\
\text{(4) a.} & \quad \text{Gianni si è lasciato/consultato con Maria} \\
\text{b.} & \quad \text{*Gianni si è punito/ringraziato con Maria}
\end{align*}

\begin{align*}
\text{(4a)} & \quad \text{‘G broke up/conferred with M’} \\
\text{(4b)} & \quad \text{‘G is punished/thanked with M’}
\end{align*}
\end{enumerate}

These tests identify many L-reciprocal verbs like *consultarsi* ‘consult’, *scontrarsi* ‘collide’, *sposarsi* ‘marry’, *battersi* ‘battle’, and, in some varieties, *baciararsi* ‘kiss’ and *abbracciarsi* ‘hug’.

The **purely syntactic function of *sì***. We propose that *sì* is an intransitivity marker that does not carry any specific meaning. This proposal is supported by contrasts as the one between (5) and (6):
(5) G e M si/*∅ puniscono a vicenda (6) Ho (*si) fatto (*si) punire (*si) G e M a vicenda
G and M SI punish mutually have.1sg made punish G and M mutually
‘G&M punish each other (in turns)’ ‘I have made G&M punish each other (in turns)’

In main clauses, a vicenda only appears with si (5). However, surprisingly, in causative clauses, a vicenda derives G-reciprocity without si (6). Unlike (5), a vicenda in (6) is necessary for G-reciprocity (cf. (2b)). If si and a vicenda both carried a G-reciprocal meaning that saturated an argument similar to each other, one of them must have been ruled out in (5). Alternatively, if si but not a vicenda denoted such a reciprocal saturator, no G-reciprocal reading would be expected when si is absent as in (6). We conclude, in agreement with [7]’s analysis of French se, that si is a purely syntactic marker of intransitivity, which resides in Voice. Reciprocal meanings are carried by an L-reciprocal verbal meaning (2a,3a,4a) or by a G-reciprocal operator. In matrix clauses, the G-operator is covert (1b) or overt (a vicenda in (5)). Covert reciprocity in (1b) is licensed by si, which must be spelled out in main clauses due to the availability of a Voice position. In causatives, the absence of si makes covert G-reciprocity impossible (2), but overt G-reciprocity (a vicenda) is still allowed (6).

Semantics. Three semantic properties distinguish L-reciprocity from G-reciprocity: one-event readings (T1), acceptance of singular number (T3), and discontinuous constructions (T4). All three properties are accounted for following [4]’s proposal that L-reciprocals, like all lexical collectives, involve predication over single events, whereas G-reciprocity involves event quantification. Formally, we use a Davidsonian framework where an L-reciprocal verb like lasciarsi has two readings:

\[ \text{break\_up: an L-reciprocal unary predicate over events and singular/plural entities, or, isomorphically, a} \]
\[ \text{function of type } \varepsilon(\dot{e}) \text{ – from events to functions from singular/plural entities to truth-values} \]

\[ \text{leave: a transitive binary predicate over events and pairs of singularities, or, isomorphically, a} \]
\[ \text{function of type } \varepsilon(e(\dot{e})) \]

Crucially, the events of type e that these denotations range over are irreducible: if they include subevents with relevant properties, these subevents are not accessible for grammatical operators. One-event readings (T1) of sentences like (1a) are modelled by the \( \varepsilon(\dot{e}) \) reading of the verb:

\[ \exists e. \text{break\_up}(e, g+m) - \text{there is an event } e \text{ where the break\_up predicate holds of the sum } g+m \]

2-event reciprocity with transitives is obtained by a G-reciprocity operator, mapping binary predicates over atoms to \( \dot{e} \) predicates over pluralities. An event-based version of strong-reciprocity [3] is:

\[ \text{REC} = \lambda R_{\dot{e}(\dot{e})}, \lambda x. \forall y.e. x. \forall z.e. x. y \neq z \rightarrow \exists e. R(e, y, z) = \text{denotation of covert reciprocity/la vicenda} \]

In REC, quantification over members of the plurality x takes scope over the event quantifier. Accordingly, transitives, possibly with a vicenda, lead to a two-event reading as in (1a):

\[ \text{REC(leave)}(g+m) = \forall y.e.g.m. \forall z.e.g.m. y \neq z \rightarrow \exists e. \text{leave}(e, y, z) = \exists e. \text{leave}(e, g, m) \land \exists e. \text{leave}(e, m, g) \]

= there is an event in which G left M, and there is a (possibly different) event where M left G.

Availability of singular number (T3) as in (3a) is modeled as a lexical property of L-reciprocal entries like break\_up, formalized using the following meaning postulate:

\[ \forall e. \forall x. \forall y. \forall z. [\text{break\_up}(e, y+z) \land x = \uparrow(y+z)] \rightarrow \text{break\_up}(e, x) \]

= every breakup of a sum \( y+z \) constitutes a breakup of any impure atom \( x \) [8] made of that sum

This predicts singular impure atoms in L-reciprocal readings, like the atom denoted by la coppia in (3a). By contrast, the collective predicate derived by the REC operator does not embody any predication over impure atoms. This accounts for the lack of G-reciprocity in (3a) and (3b).

Discontinuous reciprocity with con (T4) is analyzed using event modification. The preposition con adds a participant to the agent in any one-place predicate P over events and pluralities (cf. [11]):

\[ \text{CON} = \lambda x. \lambda P_{\dot{e}(\dot{e})}, \lambda \dot{e}, \lambda y, P(e', x+y) = \text{CON}(x') \text{ is a function that adds } x' \text{ to the } y \text{ argument of } P \]

L-reciprocal meanings like break\_up (4a) are directly modified by con without a reciprocal operator:

\[ \exists e. \text{CON}(m)(\text{break\_up})(e,g) = \exists e. (\dot{e}, \lambda \dot{e}, \lambda y, \text{break\_up}(e', m+y))(e,g) = \exists e. \text{break\_up}(e, m+g) \]

By contrast, in (4b), to obtain reciprocity, the REC operator takes scope over the existential closure of the event, like other quantifiers [6]. Since CON(m) (=denotation of con Maria) takes an argument of type \( \varepsilon(\dot{e}) \), it applies neither to the input of REC (type \( \varepsilon(e(\dot{e})) \) nor to its output (type t). In a fuller system, the meaning of REC is detached from existential closure, to allow event modification in cases like they hit each other in the garden. This is obtained using the proposal in [2], preserving our account of discontinuous con reciprocals.
References