## Reflexivity and reciprocity in Italian: an ambiguous matter

Romance languages express reflexivity (REFL) and reciprocity (REC) with the same form. In Italian, both interpretations are conveyed using the clitic si (1).

(1) Irene e Linda si puniscono Irene and Linda SI punish

I. 'Irene and Linda punish themselves' / II . 'Irene and Linda punish each other'

Several unrelated languages show a parallel pattern [1], raising questions about the relation between REFL and REC. On the one hand, various proposals [2,3,4] suggested that constructions expressing both REFL and REC must be *ambiguous* between these two meanings, thus implying a lexical distinction between the two. On the other hand, recent proposals [5,6,7] claim that forms leading to both REFL and REC are *vague* between these two interpretations, presumably in *all* languages where REFL and REC are designated by the same item. These works rely on the idea that REFL and REC are only two extremes in a larger palette of situations supporting one and the same meaning. In favor of this proposal, [5] claims that the Cheyenne REFL/REC affix *-athe* in (2) allows a so-called 'mixed' interpretation: partially REFL and partially REC, as illustrated by the situations described in (2I-III). Although [5] (as well as [6],[7]]) suggests that this pattern must hold for all other languages expressing REFL and REC with the same form, there is no strong empirical evidence for this assumption. Any claim about the universal relation between REFL and REC must be studied in view of a careful cross-linguistic comparison of their semantic manifestations in many different languages. This paper makes a further contribution to this line of research by concentrating on semantic facts about REFL and REC in Italian.

(2) Ka'ėškóne-ho é-axeen-ahtse-o'o child-PL.AN 3-scratch.AN-ahte-3PL.AN
 I. some children scratched themselves / II. some children scratched each other / III. some children scratched each other and some children scratched themselves

**PROPOSAL** – (i) We provide empirical evidence that 'mixed' readings are not *generally* available in Italian, thus proposing that *si*-constructions are *ambiguous* between REFL and REC. (ii) We note that in certain cases 'mixed' readings do emerge, and we explain them relying on the notion of lexical reflexivity: lexical REFL verbs like *shave* or *wash* have an intrinsic "agent-volitional" meaning that does not require the agent and the patient to coincide [8], thus allowing a 'mixed' interpretation with plural antecedents. Therefore, we argue that assumptions made in the literature about the availability of 'mixed' readings in Italian (and possibly other Romance languages) ignored possible lexical semantic effects due to lexical REFL. After removing this confound, we did not find any substantial evidence for the vagueness approach to the Italian *si* clitic.

**LEXICAL REFLEXIVITY** - Based on [8], we rely on a semantic distinction between *grammatical* and *lexical reflexivity;* examples are from English (a) and Italian (b). Grammatical REFL (3), available with all transitive verbs, requires the agent and the patient to be co-referential: in (3) Jim must be the person who punishes Jim. Lexical REFL is available in the intransitive entry of a limited number of verbs, and it denotes an action which can be performed on the subject either by the subject itself, either by an unspecified agent (if the subject is collaborative): (4) can be uttered if Jim shaved himself at home, or if Jim went to the barber shop to get a shave. We call this latter interpretation *passive-collaborative* (P-Co): note that a situation where Jim was shaved against his will, would not be supported by (4).

(3) a. Jim punished himself
b. Jim si punisce
Jim SI punish
'Jim punishes himself'

(4) a. Jim shaved
b. Jim si rade
Jim SI shave
'Jim shaves'

If lexical REFL verbs allow a P-Co interpretation with a singular antecedent, it follows that with a plural subject, each individual in the antecedent set can perform the action on oneself or have it performed by an external agent (possibly also from the antecedent set). For instance, one of the possible logical interpretations of (5) could have Jim shaving himself, whereas Sam and John shaved each other. The availability of this 'mixed' reading in a language like English, which expresses REFL and REC with different forms, is due to the meaning of lexical REFL entries like *shave*, because such interpretation is disallowed with grammatical strategies: none of the examples in (6) allows a 'mixed' reading.

(5) Jim, Sam and John shaved for the graduation ceremony

**LEXICAL REFLEXIVITY IN ITALIAN** - Although Italian does not make an overt distinction between *grammatical* and *lexical* REFL in finite clauses (3b- 4b), a contrast emerges in causative constructions, where *si* is disallowed **[8,9]**: *radere* 'to shave' (7b) but not *punire* 'to punish' (7a) allows a REFL interpretation without *si*. We take this pattern as independent evidence for Italian verbs that allow REFL interpretations without *si* to be lexical reflexives.

(7) a. Ho fatto punire Jim b. Ho fatto radere Jim Have.1SG made punish Jim Have.1SG made shave Jim

'I caused Jim to be punished'

I. 'I caused Jim to be shaved' / II. 'I caused Jim to shave'

We expect that Italian verbs with a lexical REFL entry allow a P-Co interpretation with a singular antecedent, as well as a 'mixed' interpretation with a plural antecedent. We also expect that transitive verbs do not allow the P-Co interpretation in the singular. To the extent that this is correct, these transitive verbs allow a good probe into REFL/REC vagueness using 'mixed' situations.

**EXPERIMENT -** To test this vagueness in Italian, we used a truth-value judgement task with ten Italian verbs: five transitive verbs (*votare* 'to vote', *ammirare* 'to admire', *criticare* 'to criticize', *punire* 'to punish', *premiare* 'to give a prize') and five lexical reflexive verbs (*lavare* 'to wash', *depilare* 'to epilate', *vestire* 'to dress up', *truccare* 'to apply make up', *pettinare* 'to comb').

- *Materials* Each item consisted of a short, written story, accompanied by a sentence with one of the verbs, to be judged as true or false. Each verb was tested in two scenarios:
- 'mixed' scenario: a story with four individuals A, B, C and D, of which two are carrying out an action on themselves while the other two are carrying out an action on each other, accompanied by a sentence of the following form: 'A, B, C & D si verb'.
- <u>P-Co scenario</u>: a story with an individual A who having an action performed on herself by another person while being collaborative, accompanied by a sentence of the following form: 'A si verb'.
- Participants 373 native Italian speakers took part in the experiment.
- *Procedure* The experiment had a between-subject design in which each participant was exposed to five items (plus fillers). The experiment was run online.
- Results See figure 1 for results. The sentences with lexical REFL verbs (=L in Fig.1) yield high acceptance rates in both 'mixed' and P-Co scenarios, while the sentences with transitive verbs (=T in Fig.1) yield significantly lower acceptance rates. The results strongly support our hypothesis, showing a clear correspondence between the availability of a lexical REFL entry and the acceptability of the 'mixed' reading and the P-Co scenario. We analyze the results using a multilevel logistic regression model.

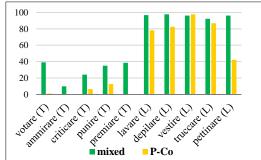


Figure 1. Acceptance rates of target items (in %)

**CONCLUSIONS** - The results provide evidence for an ambiguity between REFL and REC in Italian *si*-clauses. The 'mixed' reading has low acceptance rates with verbs that do not have a lexical REFL entry. Therefore, the possibility of some Italian *si*-clauses to allow a 'mixed' interpretation should not be taken as support for a vagueness assumption, but rather as a property characterizing a restricted number of verbs with the morphological and semantic properties of lexical reflexivity. We provided empirical evidence for the semantics of lexical REFL in Italian, but its effects on the availability of 'mixed' readings could hold cross-linguistically, as (5) hints. Thus, our results not only point out an issue that should be taken into account in further research on the relation between REFL and REC, but they also challenge generalizations made in the existing literature, where these lexical semantic effects were not taken into account, and transitive and lexical REFL verbs have been used interchangeably, as in [5,6].

**REFERENCES:** [1] Heine & Miyashita 2008: 'The intersection between reflexives and reciprocals', in König & Gast, *Reciprocals and Reflexives*; [2] Heine 2000: 'Polysemy involving reflexive and reciprocal markers' in Frajzyngier & Walker, *Reciprocals: Forms and functions*; [3] Gast & Haas 2008: 'On reciprocal and reflexive uses' in König & Gast, *Reciprocals and Reflexives*; [4] Maslova 2008: Reflexive encoding of reciprocity, in König & Gast, *Reciprocals and Reflexives*; [5] Murray 2008: Reflexivity and Reciprocity with(out) Underspecification, *SuB12*; [6] Cable 2012: 'Reflexives, reciprocals and contrast', JoS; [7] Haug & Dalrymple 2018: 'Reciprocal scope revisited', *SALT28*; [8] Doron & Rappaport Hovav 2009: 'A unified approach', *Brill's Annual*; [9] Palmieri et al. 2018: 'Lexical reciprocity vs. grammatical reciprocity', *NELS49*.