

‘Alone’ semantics, but not semantics alone

The study of the Romance element *seul/solo/da solo/sozinho* ‘alone’ is relevant for a number of issues in semantics and morpho-syntax; yet, this element is still underinvestigated. In this talk, we focus on the Italian (It) *da solo* and its Brazilian Portuguese (BP) counterpart *sozinho*, which can lead to various interpretations: in (1i) Bruno is physically alone; in (1ii) no one is sharing the bread with Bruno; in (1iii) Bruno eats the bread without other food.

- (1) Bruno mangia il pane **da solo** [It], Bruno come o pão **sozinho** [BP]
 ‘Bruno eats the bread ALONE’
 i. Bruno is alone while eating – spatial interpretation
 ii. Bruno eats the bread by himself – argument sensitive (Bruno is the only agent)
 iii. Bruno does not combine other food with the bread – argument sensitive (the bread is the only theme)

‘Alone’ has been explored with respect to ‘focus’ interpretations in English [1,2] – unavailable in (1) – and its cross-linguistic spatial reading [3], but without focus on Romance. In Italian, some attention has been drawn to the anaphor *da sé* [4]. However, unlike *da solo*, this element lacks spatial interpretations and is solely subject-oriented, thus disallowing (1i) and (1iii).

We propose a twofold treatment of *da solo/sozinho* as an indexical referring to the spatial-social environment of the event – as in (1i) – and as a function applying to predicate arguments resulting in an exclusive interpretation – as in (1ii)-(1iii). Although distinct, these two interpretations share the same core meaning $\neg\exists y \neq x$, in line with [3].

Spatial-alone – This interpretation is restricted to predicates that denote an event happening in a physical space; e.g., events that cannot be associated to the question ‘where?’ disallow the spatial-alone (2). The spatial reading largely relies on socially and pragmatically relevant contexts [3]: (3) is acceptable in a scenario where no one contextually relevant is in Rome with Bruno. Similarly, (1i) can be true if Bruno is eating in a crowded restaurant, but none is sitting at his table. These interpretations are captured by our analysis in (4): the R predicate selects contextually relevant entities, excluded from the location *l* and time *t* where the subject (*x*) is located.

- (2) Bruno ha paura dei ragni [- #dove? - # Bruno ha paura dei ragni da solo] [It]
 Bruno tem medo de aranha [- #onde? - #Bruno tem medo de aranha sozinho] [BP]
 ‘Bruno is afraid of spiders’ [- #where? - # Bruno is afraid of spiders ALONE]

- (3) Bruno è a Roma da solo [It], Bruno está em Roma sozinho [BP]
 ‘Bruno is in Rome ALONE’

- (4) $[[\text{spatial-da solo}]] = \lambda l \lambda x \lambda t: (\text{loc}_t(x) \subset l \wedge \neg \exists y (R(y) \wedge \text{loc}_t(y) \subset l \wedge y \neq x))$

Argumental-alone – Argumental-alone accounts for the exclusive interpretations that are not linked to spatial factors, such as (1ii) and (1iii).

With transitive verbs, *da solo/sozinho* may apply to the subject (1ii) or to the object (1iii), where no other entity is to be understood as agent or theme, respectively.

With intransitive verbs, *da solo/sozinho* applies to the entity denoted by the subject, excluding the existence of an(other) entity as agent/cause of the event. Thus, as the possible negation statements below show, *da solo/sozinho* leads to different interpretations with unergatives (5) or unaccusatives (6) – classified here based on auxiliary selection, *ne*-partition and reduced relatives [5,6].

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| <p>(5) Bruno ha lavorato da solo
 Bruno trabalhou sozinho
 ‘Bruno worked ALONE’
 - no, Bea also worked
 -#no, Bea caused him to work</p> | <p>(6) Bruno è caduto da solo [It]
 Bruno caiu sozinho [BP]
 ‘Bruno fell ALONE’
 - #no, Bea also fell
 - no, Bea caused him to fall</p> |
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Reflexives get a similar interpretation to unaccusatives (7). As (8) shows, argumental-*alone* may also apply to passive constructions, restricting the interpretation of the subject as the only theme of the predicate.

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| (7) | Bruno si ringrazia da solo
Bruno se agradece sozinho
'Bruno thanks himself ALONE'
- #no, Bea also thanks herself
- no, Bea thanks Bruno | (8) | Il vino deve essere bevuto da solo
O vinho deve ser bebido sozinho
'The wine must be drunk ALONE'
- no, it must be drunk with water
- #no, it must be drunk in company | [It]
[BP] |
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We account for this pattern proposing that the interpretation of the argumental-*alone* relies on two main factors: argumental position and agentivity. Firstly, when *da solo/sozinho* applies to a theme, it excludes the existence of an agent acting upon it (6)-(7), unless there is an entity (different from the theme) that is already understood as the agent of the event (1iii),(8). Secondly, with non-agentive predicates, the argumental-*alone* excludes the possibility of an identifiable cause for the event (6).

The possible argumental interpretations of *alone* are summarized in (9):

- (9) a. $\lambda P \lambda e \lambda x: (P(e) \wedge \text{Agent}(e, x) \wedge \neg \exists y (\text{Agent}(e, y) \wedge y \neq x))$
 b. $\lambda P \lambda e \lambda x \lambda z: (P(e) \wedge \text{Agent}(e, z) \wedge \text{Theme}(e, x) \wedge \neg \exists y (\text{Theme}(e, y) \wedge y \neq x))$
 c. $\lambda P \lambda e \lambda x: (P(e) \wedge \text{Theme}(e, x) \wedge \neg \exists y ((\text{Agent}(e, y) \vee \text{Cause}(e, y)) \wedge y \neq x))$

The distribution and interpretations emerging with *da solo/sozinho* can shed light on different theoretical questions in semantics or morpho-syntax. For instance, the analogous interpretations of (6) and (7) lend support to an unaccusative treatment of Romance reflexives. Unlike under the focus interpretation of the French *seul* [7], reflexive verbs with argumental-*alone* match with unaccusatives.

Argumental-*alone* can also provide insights on the semantic characterization of natural reflexives (10), for which *da solo/sozinho* rules out the disjoint reference interpretation which may be exhibited by this class of verbs [8]. In (6) Bruno is understood as the agent of the event regardless of the presence of *da solo/sozinho*. With the natural reflexive 'to depilate', however, a co-reference between agent and patient is obligatory only in (10b). This contrast is evident both in Italian and BP, although only the latter presents a morpho-syntactic difference between the verbs in (7) and (10).

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| (10) a. | Bruno si è depilato
Bruno depilou
'Bruno depilated (himself)'
[context: he went to the beautician] | b. | Bruno si è depilato da solo
Bruno depilou sozinho
'Bruno depilated (himself) ALONE'
[context: #he went to the beautician] | [It]
[BP] |
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Conclusion – Our account sets the grounds for the study of *da solo/sozinho* and its Romance counterparts, an under-researched domain. We present a treatment of *da solo/sozinho* as a social-spatial indexical and as an argumental function that share the same core meaning $\neg \exists y \neq x$ proposed by [3]: it excludes any entity other than its referent from a social-spatial environment or from an argumental position. The different interpretations emerging from this core meaning depend on argument structure and thematic roles associated with the arguments, providing a possible diagnostic for the underlying structure of different constructions.

References: [1] Moltmann (2004). The semantics of together. *NLS*. // [2] Coppock & Beaver (2014). Principles of the exclusive muddle. *JoS*. // [3] Cisneros, Grinsell, Grove, Saebo, Vardomskaya & Zhang (2013). "Alone": an analysis. *Ms*. // [4] Chierchia (2004) A Semantics for Unaccusatives. *The unaccusativity puzzle*. // [5] Burzio (1986). *Italian syntax*. Springer. // [6] Embick (2004). Unaccusative syntax and verbal alternations. *The unaccusativity puzzle*. // [7] Sportiche D. (2014) Assessing Unaccusativity and Reflexivity. *LI*. // [8] Spathas, Alexiadou & Schäfer (2015). Middle Voice and reflexive interpretations. *NLLT*.