

Marica De Vincenzi Fellowship final report
Valentina Brunetto, Acquisition of Near-Reflexivity

1. The project

This project was funded by the Fondazione Marica de Vincenzi for the academic year 2013/2014. I conducted my postdoctoral research at the University of Massachusetts Amherst under the supervision of Prof. Roeper. The main goal of the research was to explore children's interpretation of complex or bimorphemic reflexives (e.g. *himself*, *se stesso*, *zichzelf*) in contexts in which the relation between antecedent and anaphor is not of strict identity. Although antecedent and anaphor pick different referents in the context, there is a relation between the two that is more than mere transitivity. Near-reflexivity has received attention over the years (Jackendoff 1992, Lidz 2001, Reuland and Winter 2009) for the theoretical challenge it poses to Binding Theory. Our goal was to gather experimental evidence from young kids (ages 4 and 5) and adults to shed light on the nature of this phenomenon. We argue that previous analyses are unsatisfactory in one important respect: whilst focusing on the lexical and syntactic properties of *self* anaphors (Lidz 2001), they have neglected the pragmatic dimension of near-reflexivity and the conditions for its acceptability, which call for complex interface computations.

2. Are rare constructions mastered late? The case of near-reflexivity.

We addressed the following questions:

- (a) What is the developmental path of near-reflexivity? Does it appear late, e.g. when the broader lexical meanings of self as “representation-of” are acquired, or is it an option made available by UG at the outset of language development?
- (b) What are the syntactic constraints on the interpretation of different classes of reflexives? Do children allow nonadultlike near-reflexive readings with inherent reflexive verbs (English) or monomorphemic anaphors (e.g. Romance clitic *se*)?
- (c) Are children sensitive to contextual changes when interpreting a reflexive? Namely, if there is a bias towards true reflexivity, do children know under which conditions the Real over Statue precedence may be suspended?

A pilot study indicated that near-reflexivity is strongly pragmatically constrained. The stories were originally designed to meet ideals of plausibility so that any possible outcome would be possible.

However, this led to very low acceptance of near-reflexivity.

Sample story: Ariel and her statue got wet. Rapunzel offered Ariel a towel, worried that she might catch a cold. Ariel refuses and instead she puts the towel on her statue.

Q: did Ariel dry herself off?

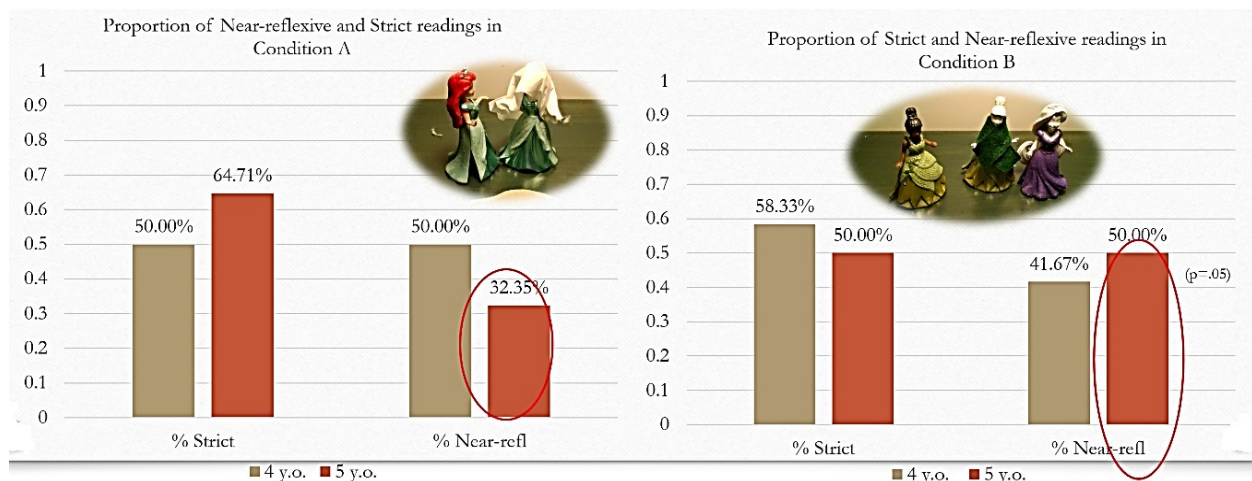
Possible answers:

- yes (liberal: herself=her statue)
- no (strict: herself=Ariel herself)

Children’s comments pointed to the fact that the stories overtly negated the true reflexive outcome. We interpreted these first data as important evidence for the existence of a UG bias towards strict readings. 36 children participated in the final study (5 y.o. group: N=18; 4 y.o. group: N=18), recruited from schools in Amherst and Northampton. The final design involved a 2x2 design, with factors: reflexive category (overt, null); pragmatics (Real vs. Statue; Statue vs. Statue).

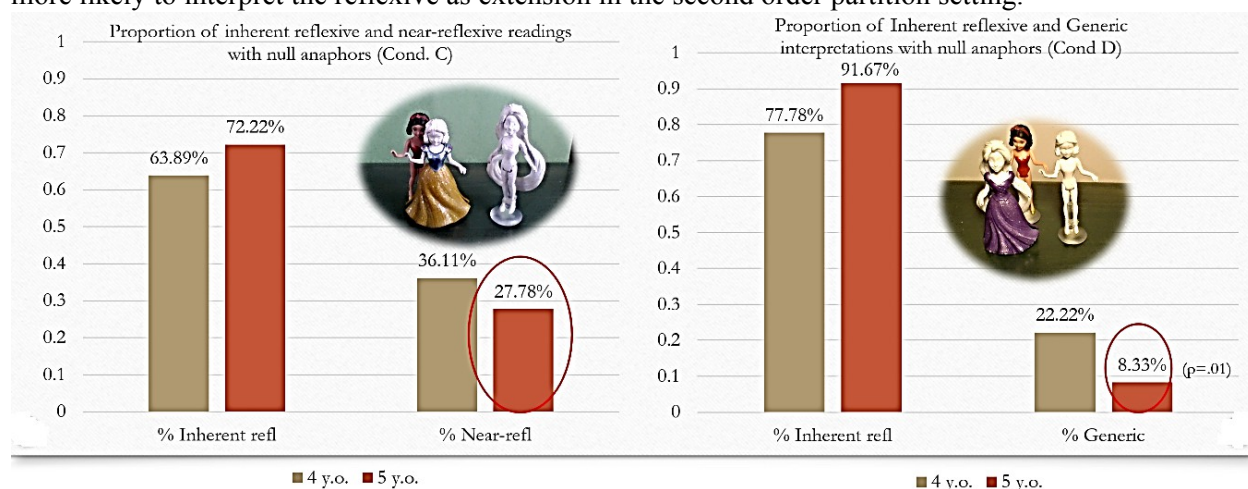
onari Sce	Partition	Outcome	Reflexive	
			Overt	Null
	Real vs. Statue of self	Real	yes	yes
		Statue of self	no? A	no
	Statue of self vs. other statue	Statue of self	yes B	no C
		Statue of other	no	no D

To test the role of the context in licensing near-reflexivity we compared two scenarios (A vs. B). In (A) the context is the neutral, ambiguous context of Jackendoff (1992): a princess and her statue fall in the mud, she takes a towel and dries herself (Real/statue) off. In (B) a contrast is introduced. A princess made a statue of herself and a statue of another princess. She wants to protect them with a scarf in case they might break, but she only has one scarf, so she bundles *herself* up. We speculated that this is the ideal pragmatic premise for near-reflexivity in that it opens up an intermediate partition (Schwarzchild 1996) over extensions, i.e. higher order properties (statue-of-x) rather than over each single individual (Real, Statue1, Statue2), thereby excluding strict reflexivity.



To test the relation between morphological complexity and reflexivity we compared the interpretation of the same predicate with or without the reflexive (B vs. C). The two conditions involved the same scenario and differed minimally as for the form of the anaphor. All the verbs used were optionally inherent reflexive. We hypothesise that UG should block reference to an extension when a null anaphor

(“Cinderella bundles up” (Cinderella/*statue)) is used. To control for possible null pro interpretations (generic, nonreflexive, e.g. Cinderella did some bundling up), we compared scenario C with scenario D, where Cinderella puts the scarf on the other statue. The results showed high acceptance of near-reflexivity since the earliest age tested. Given the extremely rare frequency of such sentences in children’s input, there is good indication that the near-reflexive capacity of complex reflexives is built into their morphology (the pronoun, looking outside the sentence + the *self* morpheme, whose semantics contributes a pragmatic slot). Children did not allow a near-reflexive interpretation with inherent reflexive verbs. We hypothesise that “yes” answers in such case were due to the ambiguity of the proper noun to refer to wither the Real princess or her extension. The data revealed a fascinating developmental scenario, with younger children accepting near-reflexivity in condition (A) and (B) at similar rates (50%) regardless of the pragmatics of the situation. Older children were significantly more likely to interpret the reflexive as extension in the second order partition setting.



3. A theory of partition effects in language acquisition experiments

The second part of the fellowship was dedicated to developing a broader pragmatic theory capturing the findings and the impact of the context in a number of linguistic phenomena. We applied the concept of first and second order partition developed by Schwarzschild (1996) in his treatment of plurals ambiguities (distributivity, cumulativity, reciprocity), to bimorphemic reflexives. We argue that many nonadultlike interpretations which the literature has classically attributed to lack of grammatical knowledge boil down to a difficulty in partitioning the context into second order properties. A starting point is Gülzow and Roeper’s (2009) finding that plural reflexives in child German and English are reported ambiguous between reciprocal and reflexive. We observe that reciprocal interpretations obtain if a plural subject is interpreted collectively as a kind, or property, opposed to another property (“the girls were supposed to help the boys, instead they helped themselves”). In previous studies investigating children’s interpretation of *each other* (Philip, 2000) scalar results have emerged, with children often failing to obey strong reciprocity. We argue that our results support the idea that the Strongest Meaning Hypothesis – intended

as a principle blocking weak semantic interpretations when a logically stronger candidate is available – is not a fixed semantic principle but follows from pragmatic inferences which are negotiated each time we process contextual information. Our generalization holds that a number of grammatical phenomena interface with pragmatics in a systematic way (wh- phrases, quantifiers, reciprocal pronouns, complex reflexives). We speculate that young children may partition the referents in the context in a nonadultlike way, avoiding complex partitions over intermediate sets, as in the classical quantifier spreading errors (“Is every dog eating a bone?” – child answers no, pointing to a rabbit eating a carrot). We apply this hypothesis to our data to explain why younger kids are more liberal in the interpretation of reflexives even in contexts where both Real and extension are relevant referents. In order to gather insight on adults’ judgments about reflexivity we administered an online test to adult native speakers of English on Amazon MTurk. The evidence suggests that the adult grammar allows near-reflexivity in the contexts where a contrast among two statues is introduced (B), to rates as high as 72% (one item). Rates of acceptance in noncontrastive contexts like our condition (A) were low (11%). We conclude that near-reflexivity is not a rare, special meaning of *self* anaphors, but is part of its complex morphology, semantics and pragmatics.

4. Further developments

I wish to thank the Fondazione Marica De Vincenzi for allowing me to start a fruitful collaboration with Tom Roeper and the Acquisition Lab at UMass and I am currently in the process of recruiting Italian children to gather insights into the nature of reflexive clitics and their ability to resist reference to extensions. We hypothesise that complex reflexives (*se stesso*) but not clitics (*si*) allow reference to a statue, but the relation between reflexive clitics and partitions is debated (see Pica and Snyder 1997 and Pica’s earlier work on local anaphora, treating both complex reflexives and clitics as partition triggers). These and the English results will be presented at the BUCLD in November 2014 (poster presentation). This fellowship benefited much from discussions and advice from my host institution as well as Smith College and UConn audiences in various occasions (LARC meetings at UMass, the Psycholinguistics class, UUSLAW conference at UConn). This year at UMass broadened my theoretical background in semantics and psycholinguistics on a significant level. Given the originality of the research, on which even adults’ grammaticality judgments are cloudy, designing this study posed a challenge which required a great deal of humility, linguistic intuitions, piloting and adjustments and represented an important step in my academic development.

Selected References

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