

Person and number asymmetries in child comprehension of Spanish agreement and object clitics

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Children's comprehension of 3rd-person forms is delayed relative to 1st- and 2nd-person (e.g. Brener 1983, Girouard et al 1997). Some have claimed that children struggle to calculate Implicated Presuppositions (Sauerland 2008) and therefore fail to realize that 3rd-person excludes reference to speaker and hearer. We test children and adults' interpretation of both Spanish agreement and object clitics and conclude that it is not Implicated Presuppositions that slows acquisition of 3rd person, but the challenge of finding an appropriate antecedent.

Background and predictions: Semantically underspecified forms generate Implicated Presuppositions via contrast with more highly specified forms. For example, use of the 3rd person implies that 1st and 2nd person are not possible, generating the presupposition that neither speaker nor hearer is referred to. In a naming task testing comprehension of French subject clitics, Legendre et al (2011) found poorer performance with semantically underspecified person (3rd) and number (plural) forms and concluded that children struggle with Implicated Presuppositions. However, data from adult controls was not included. In this paper we test both adult and child comprehension of Spanish agreement and object clitics. If difficulty with Implicated Presuppositions is truly what separates children from adults, then we expect the same person/number asymmetries among children but ceiling performance from adults. However, if the difficulty lies in locating the appropriate antecedent, differences between adults and children may be smaller when the set of possible antecedents is constrained, and differences may arise between null subject agreement and object clitics, since null forms require more highly salient antecedents than overt forms (Ariel 2001).

Methods: 42 children ages 2;3-6;7 (mean 4;3.5) and 24 adults (11 women) from Mexico were asked to select one picture from an array in which each grammatical person-number combination was depicted performing the same action. In filler items, each actor(s) was depicted performing a different action (see figure 1). All experimenters were female, preventing the use of gender cues on 3rd-person clitics. 30 test items (3 items x 5 person-number forms x 2 blocks), separated by alternating fillers (14 items) and distractors (14 items) were presented in two blocks (agreement, clitics).

Results: See figure 2. Child responses showed the expected person/number asymmetries; however, adults produced a significant number of non-target responses in 3rd-person conditions. In agreement conditions, adults' non-target responses matched the identity of the preceding response significantly more often than their target responses. Children showed a trend in the same direction (figure 3); moreover, matching was significantly more likely for their non-target responses in 3rd-person relative to 1st/2nd-person agreement conditions ($\chi^2(1, N = 115) = 3.83, p = 0.05$). No significant differences arose in clitic conditions for either group.

Conclusion: Contrary to previous assumptions, we find that adults do permit 3rd-person forms to refer to speaker, hearer, or both, and that both child and adult interpretation of null subjects is sensitive to the identity of the most recently selected referent. These results provide evidence, not for the role of Implicated Presuppositions, but for pronoun resolution in child acquisition of 3rd person.

Figure 1: Example test prompts (1) and fillers (2) in agreement (a) and clitic (b) conditions

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|----|----|---|
| 1. | a. | <i>Muéstrame la foto en donde bailo/mos/as/a/n.</i>
show-me the photo in where dance-1S/1P/2S/3S/3P
“Show me the photo where I/we/you(sg)/she/they are dancing.” |
| | b. | <i>Muéstrame la foto en donde Nemo está besándome/nos/te/la/las.</i>
show-me the photo in which Nemo is kissing-1S/1P/2S/3S/3P.
“Show me the photo where Nemo is kissing me/us/you(sg)/her/them.” |
| 2. | a. | <i>Muéstrame la foto en donde hay alguien bailando.</i>
show-me the photo in where there-is someone dancing
“Show me the photo where there is someone dancing.” |
| | b. | <i>Muéstrame la foto en donde Nemo está besando a alguien.</i>
show-me the photo in where Nemo is kissing someone
“Show me the photo where Nemo is kissing someone.” |

Figure 2: Proportion of target responses by children and adults in agreement and clitic blocks

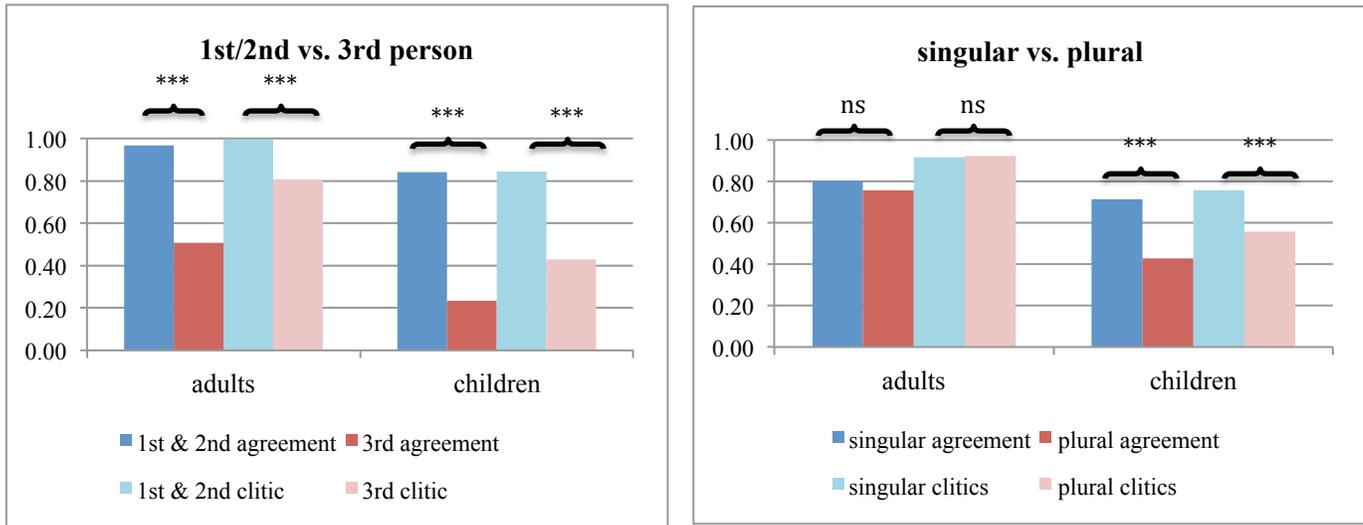


Figure 3: Proportion of responses matching the preceding filler response in 3rd person conditions

		target	non-target	chi-squared
Adults	agreement	0.18 (8/45)	0.53 (23/43)	$\chi^2(1, N = 88) = 12.30, p < 0.001$
	clitic	0.18 (15/83)	0.33 (6/18)	$\chi^2(1, N = 101) = 2.08, p = 0.15$
Children	agreement	0.20 (6/30)	0.37 (33/90)	$\chi^2(1, N = 120) = 2.85, p = 0.09$
	clitic	0.27 (12/45)	0.20 (11/54)	$\chi^2(1, N = 99) = 0.55, p = 0.46$

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