

Attraction errors in Subject-Verb agreement. A Study on Italian SLI and TD children.

SV agreement errors are among the possible clinical markers for G-SLIs in Italian (a.o. Leonard et al. 1992, Bortolini et al. 2006). However, whether this deficit is phonological or morphosyntactic in nature is a matter of debate. We aim at shedding light on this issue by testing sensitivity to attraction error configurations by TD and SLI children. *Attraction errors* are typically observed (in adult speakers) when a feature-mismatch is introduced by a third element, as a plural PP modifier that intervenes between the subject and the verb and that “attracts” verbal agreement:

(1) *the threat_{sing} [[to the presidents_{plur}] of the company] were_{plur} ... (Frank et al. 2006)

The study. We manipulate two factors: the Type-of-attractor and the Number-of-attractor. The four conditions are reported in Table 1. To illustrate, consider examples (2) and (3) that differ in the Type-of-attractor:

(2) la nonna_{sing} le_{plur} abbraccia_{sing} [Clitic Pronoun]
the granny them hugs
“the granny hugs them”

(3) la nonna_{sing} [con le collane_{plur}] abbraccia_{sing} le bambine [Prepositional Phrase]
the granny with the necklaces hugs the girls
“the granny with the necklaces hugged the girls”

In (2), the attractor is a plural clitic pronoun (Condition 1), which precedes and c-commands the verb, while in (3) it is a plural PP modifier of the subject noun (Condition 2), which only precedes the verb.

Method. We used a Forced-Choice of Grammatical Form task (Moscati & Rizzi 2014), in which children had to choose the sentence that sounds better between two alternatives, presented after a brief 2-pictures context (Fig. 1). If children can recognize attraction errors, they are expected to prefer (4a) over (4b).

(4)	How	(a)	la nonna _{sing} le _{plur} abbraccia _{sing}	(b)	*la nonna _{sing} le _{plur} abbracciano _{plur}
would	you		the granny them hugs		the granny them hug
say?			“the granny hugged them”		

Materials: The four experimental conditions are given by the interplay of two factors: Type-of-attractor (Type= PP, Cl) and Number-of-attractor (Number=sing, plur). In total we got 24 experimental sentences, 6 for each condition. **Participants.** 19 TD children and 9 G-SLIs, previously evaluated through linguistic (BVL 4-12) and cognitive tests (Raven coloured, WPPSI) took part in the experiment (see Table 2). **Results.** Both groups made more errors when the attractor was a clitic pronoun (Fig. 2). In addition, the performance of SLI children dropped to chance level when the clitic was plural (Fig. 3): they preferred 50% of the times the wrong plural verbal form. Group, Type-of-attractor and Number-of-attractor were used as predictors of a GLM model run in R, that revealed a main effect of Type ($p < .01$), Number ($p < .01$) and Group ($p < .01$) as well a two- ($p < .01$) and a three-way interaction ($p < .05$).

Discussion. Our results show that G-SLI are severely impaired when the intervener is a clitic, especially when it is plural (and the verb is singular). Since problems were observed both with singular and plural verbs, the deficit of G-SLI children cannot be attributed to phonology (plural, but not singular verbs have a marked phonology in Italian). These facts are best interpreted by assuming that children with G-SLI have trouble with the spec-head relation underlying the expression of agreement and specifically with the checking of morphosyntactic features (see also Clahsen 1997, 2008; Tsimpli & Stavrakaki 1999). Furthermore, we claim that plural number has a higher disruptive role due to its semantic complexity and its marked nature.

Tables

Conditions	Attractor's Number	Attractor's Type	Correct Sentence	Wrong Sentence with attract. error
1. Cl-Plur	Plural	clitic	la nonna _{sing} le _{plur} abbraccia _{sing}	... *abbraccia <u>no</u> _{plur}
2. PP-Plur	Plural	PP	la nonna _{sing} [con le collane] _{plur} abbraccia _{sing}	... *abbraccia <u>no</u> _{plur}
3. Cl-Sing	Sing.	Clitic	le nonne _{plur} la _{sing} abbracciano _{plur}	... *abbraccia _{sing}
4. PP-Sing	Sing.	PP	le nonne _{plur} [con la collana] _{sing} abbracciano _{plur}	... *abbraccia _{sing}

Table 1. Experimental conditions

Group	N	Age	Gramm. Comprehension BVL 4-12 raw score
G-SLI	8	4,9	19,5
TD	19	4,9	34,5

Table 2. Participants. Number of Participants, Age and Raw Scores in Grammatical Comprehension assessed through the "Batteria di Valutazione del Linguaggio 4-12" Battery for Language Evaluation 4-12 (Marini et al. 2010).

Figures

Picture 1	Picture 2	Forced Choice:
		<p><i>How would you say?</i></p> <p>(1a) la nonna_{sing} le_{plur} abbraccia_{sing} the granny them hugs <i>"the granny hugged them"</i></p> <p>or</p> <p>(1b) *la nonna_{sing} le_{plur} abbracciano_{plur} the granny them hug</p>

Figure 1. Forced-Choice of Grammatical Form Task.

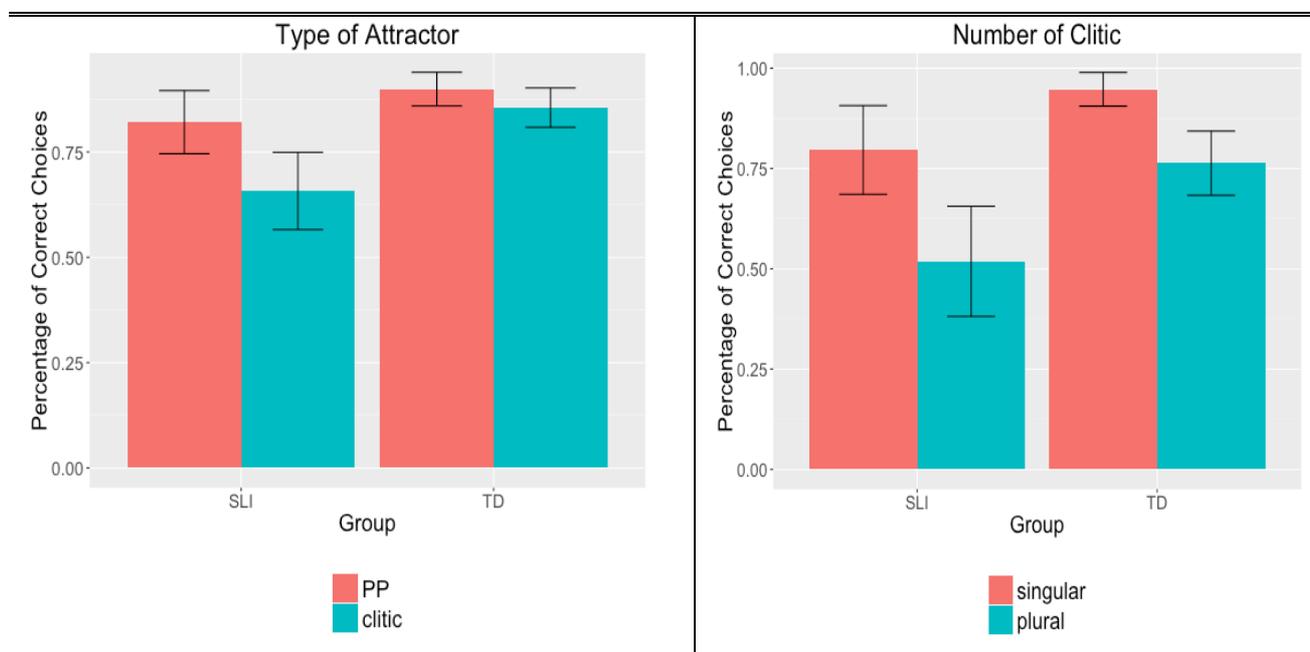


Figure 2. Proportion of correct choices in the SLI and TD group with a clitic or a PP attractor.

Figure 3. Proportion of correct choices in the SLI and TD group with a plural or a singular clitic.