Re-thinking the acquisition of Relatives: a new comprehension study with Italian children
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The acquisition of relative clauses (RCs) has been an object of debate among researchers for the past two decades due to contrasting findings regarding production and comprehension. In fact, in a number of early acting-out studies, RC comprehension seemed to be delayed up to the age of 5, in contrast with an early production of these constructions (see (Guasti, 2002) for a summary). Later, (Hamburger & Crain, 1982) showed that the early experimental settings did not satisfy pragmatic conditions for a felicitous use of RCs. By removing these task artefacts, children's performance improved significantly. In more recent works, different methodologies such as picture-selection and agent-selection were used (Arnon, 2005; Friedmann & Novogrodsky, 2004). As we will show, some old and new experimental flaws are still at play in these recent works.

The main purpose of this paper is to present a new experimental design for the assessment of RC comprehension which overcomes a number of shortcomings, both on the methodological and theoretical level. This is crucial in order to understand how children's abilities develop over time and the linguistic phenomena underlying them.

We present data from 3- to 7-year-old monolingual Italian children who were tested on right-branching subject and object RCs. Three sentence types were used, subject relatives (OS) and two types of object relatives (OO and OOp). OO are distinguished from OOp in that the embedded subject is in a pre-verbal position in the former but in a post-verbal position in the latter.

A sample of test sentences is given in (1):

(1)   a.   Indica il cavallo [che sta inseguendo i leoni] (OS)
                Point to the horse that is chasing the lions (PL)
    b.   Indica il cavallo [che i leoni stanno inseguendo] (OO)
                Point to the horse that the lions are chasing
    c.   Indica il cavallo [che stanno inseguendo i leoni] (OOp)
                Point to the horse that <u>are</u> chasing <u>the lions</u>

Participants were instructed to choose one out of three characters, within a picture such as Figure 1 (material was adapted from (De Vincenzi, 1996)). Our Agent selection takes care of both RC pragmatics and its function as a noun modifier. Also, lexical access and processing effects were carefully minimized.

Table 1 summarizes accuracy scores. Results show that children understand OO from the age of 4 (OS, the baseline condition produces ceiling level performance from the youngest age). Moreover, performance on OOp significantly improves between 3-4 and 6-7.

We argue that our results support the idea that early and adult competence grammars are not substantially different. Children's non-target responses are interpreted as grammatical options exploited by an immature performance system (Rizzi, 2005). Nevertheless, children show the same processing effects as adults but amplified by performance factors, likely due to immature computational resources (Guasti *et al.*, 2007).

While these results give reliable evidence for the existence of early grammar knowledge, they are most notable for their methodological implications. Hence, it represents a valid tool for language assessment for both typically and atypically developing populations in that it can shed light on the underlying nature of language disorders. Data from an additional group of children affected by Specific Language Disorder will be also presented.
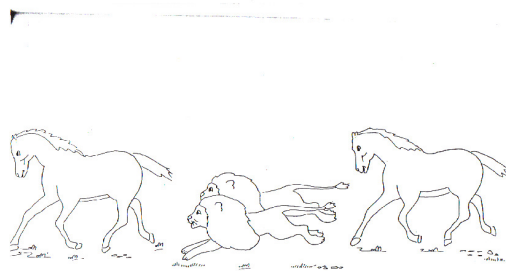
Figure 1: Example of experimental picture

Group	OS mean (SD)	OO mean (SD)	OOp mean (SD)
3 y.o.	7,25 (1,138)	4,25 (2,301)	2,92 (2,314)
4 y.o.	7,41 (1,278)	6,59 (2,123)	4,71 (2,592)
5 y.o.	7,22 (1,121)	5,93 (2,336)	4,33 (2,353)
6 y.o.	7,70 (0,740)	6,84 (1,692)	4,41 (2,179)
7 y.o.	7,48 (1,016)	7,09 (1,881)	5,61 (1,948)

Table 1: Means and standard deviations for each condition across age (out of 8)

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