Differential object marking makes Spanish object relative clauses easier

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Object relative clauses (ORCs) are typically difficult for children to comprehend (Tavakolian 1981; Friedmann et al. 2009 a.o.). Still, some language-specific morphosyntactic cues can make ORCs easier (Adani et al. 2010; Belletti et al. 2012; Guasti et al. 2012). We argue that Spanish differential object marking (DOM) belongs to such a set of cues, and eases children's comprehension of ORCs. Our hypothesis is that DOM facilitates children's comprehension because it unambiguously indicates the object status of a constituent: constituents marked by DOM can be nothing but direct objects. As such, the parser can rely on this cue and accurately assign theta-roles to the nominals at stake, leading to a correct interpretation of ORCs. Further, we argue that this strategy is grammar-based, and predict that DOM is only effective once it is acquired. If, instead, DOM is not acquired, we predict the child parser to simply neglect it and encounter the usual difficulties associated with ORCs. Two experiments run with Spanish monolingual children support these predictions, showing significant DOM-effects only with children who fully integrated DOM in their grammar. Altogether, evidence is provided that ameliorations to ORCs hinge on grammatical properties (as claimed by Rizzi 2018), and not on frequency (e.g. Diessel et al. 2009) or cognitive strategies (Gordon et al. 2004).

In Spanish, DOM is (roughly) realised on [specific; animate] direct objects (Aissen 2003; Leonetti 2004) by means of an *a* morpheme preceding the constituent to mark (1). In ORCs, DOM (optionally) precedes the relativiser *que* (2).

(1) El niño saluda a Pedro
    The boy greet.3sg DOM Peter
    The boy greets Peter

(2) El niño al que saluda Pedro
    The boy DOM.the that greet.3sg Peter
    The boy that Peter greets

To test our hypothesis, two experiments were run with 57 Spanish children aged 4, 5, and 6. Both were built on a sentence-picture matching task, along the lines of Friedmann et al. (2009). The first experiment tested the comprehension of SRCs like (3) and ORCs like (4), to appreciate whether SRCs are easier than ORCs in Spanish, too.

(3) El niño que saluda al futbolista
    The boy that greet.3sg DOM.the footballer
    The boy that the greets the footballer

(4) El niño que saluda el futbolista
    The boy that greet.3sg the footballer
    The boy that the footballer greets

The second experiment tested the comprehension of 2 types of ORCs, varying with respect to the absence (5) or presence (6) of an overt *a* morpheme in front of the relativiser *que* (i.e. DOM).

(5) El niño que saluda el futbolista
    The boy that greet.3sg the footballer
    The boy that the footballer greets

(6) El niño al que saluda el futbolista
    The boy DOM-the that greet.3sg the footballer
    The boy that the footballer greets

Furthermore, we assessed whether children acquired DOM by administering a sentence-repetition-task (SRT) which included 9 DOM-structures in different syntactic configurations. In the analysis, each child was assigned a score from 1 to 9 based on the number of successful repetitions of these target-structures. This score reflects the participants' degree of mastery of DOM-grammar at the time of the experiment.

The results show that SRCs were overall better comprehended than ORCs (**Fig. 1**), which is an expected, yet so far unconfirmed result. Moreover, we found that the presence of DOM significantly increases children's accuracy rates (**Fig. 2**). However, only children who achieved

the best performances in the production of DOM in the SRT could benefit from the presence of DOM. In **Fig. 3**, we show that the predicted accuracy of ORCs disambiguated by DOM is proportional to the level of DOM-mastery (based on the scores of the SRT), meaning that DOM is only effective when acquired.

Taken together, these results provide: i) novel evidence that a subject-object asymmetry holds in children's comprehension of Spanish RCs, extending the empirical coverage of such a broad generalisation; ii) support to the hypothesis that Spanish DOM ameliorates the comprehension of ORCs; and iii) novel insights on the very nature of ameliorating cues in intervention effects. Specifically, our data support the idea that an ameliorating cue is only effective when it is fully acquired and successfully related to its function in the grammar. In light of this, accounts that interpret ameliorations to ORCs as the effect of frequency computations and/or general cognitive, non-language-specific strategies are seemingly excluded. Rather, we claim that the mechanisms underlying the alleviation of intervention effects need to be interpreted as part of our grammar.
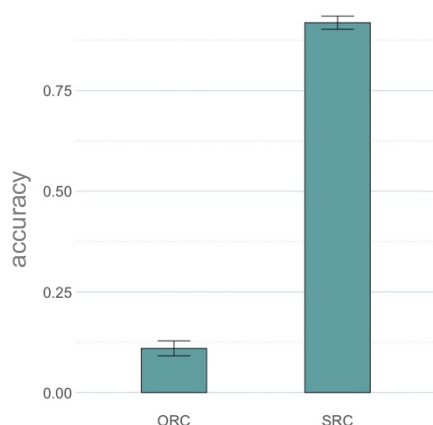

Fig.1
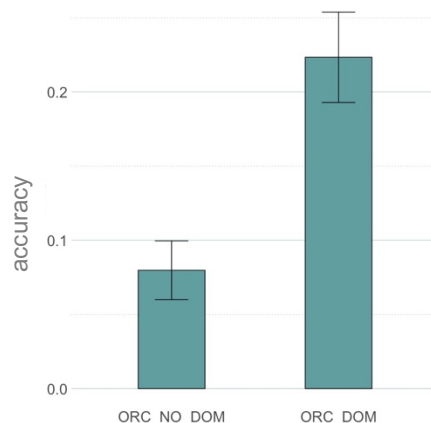Children's accuracy of subject- and object- RCs

Fig.2
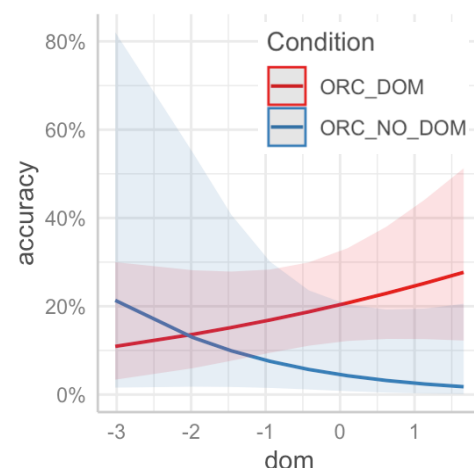Children's accuracy of ORCs with and without DOM

Fig.3
Predicted probabilities of accuracy based on DOM mastery

Selected references

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