# Effects of discourse topic on global and local markings in Croatian ditransitives



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## BACKGROUND

This study examines how **Croatian monolingual children** use global markings (object order) and local markings (referring expressions) to convey givenness. **Givenness** here is expressed though **discourse topic**. Previous studies have shown that children signal givenness first on local markers and then on global markers (Hickmann et al. 1996, Mykhaylyk et al. 2013, Anderssen et al. 2014).

The targeted structures are ditransitives as the impact of ordering the arguments should be greater when two objects are used, than when the subject and an object are compared (Arnold 2001).

This study aims to answer the following RQs:

- 1. Do Croatian children use word order to express the topic-comment relationship?
- 2. Are Croatian children more likely to express the discourse topic argument with a referring expression with high accessibility?
- 3. Is the use of a referring expression related to grammatical function (S/DO/IO)?
- 4. Are there any differences between Croatian children and adult controls?

#### / GLOBAL MARKING (GM)

- The GM investigated is the relative order of the objects in a ditransitive sentence: IO-DO vs. DO-IO, in relation to the (discourse) topic comment structure.
- The current study focuses on the continuity of a referent as the discourse topic
- Children do not necessarily place the discourse topic before the comment (Dimroth and Narasimhan 2012)
- Effects of topics are found when the language has a specific mechanism for expressing topic (i.e. Chinese, French)

#### / LOCAL MARKING (LM)

- The LM investigated is the referring expression of the discourse topic: NP, pronoun, clitic, omissions
- New referents are introduced with descriptive forms, pronouns are used for already evoked referents (Arnold 2010)
- Two possible violations of the givenness hierarchy (Gundel et al. 1993): underinformativeness- i.e. the use of pronominal forms when an NP is required; over-informativeness, i.e. the use NPs when the use of pronouns is expected
- Children were more often found to be over-informative (Wittek and Tomasello 2005, Matthews et al. 2006)

## / RESULTS

A comparison of adults and children

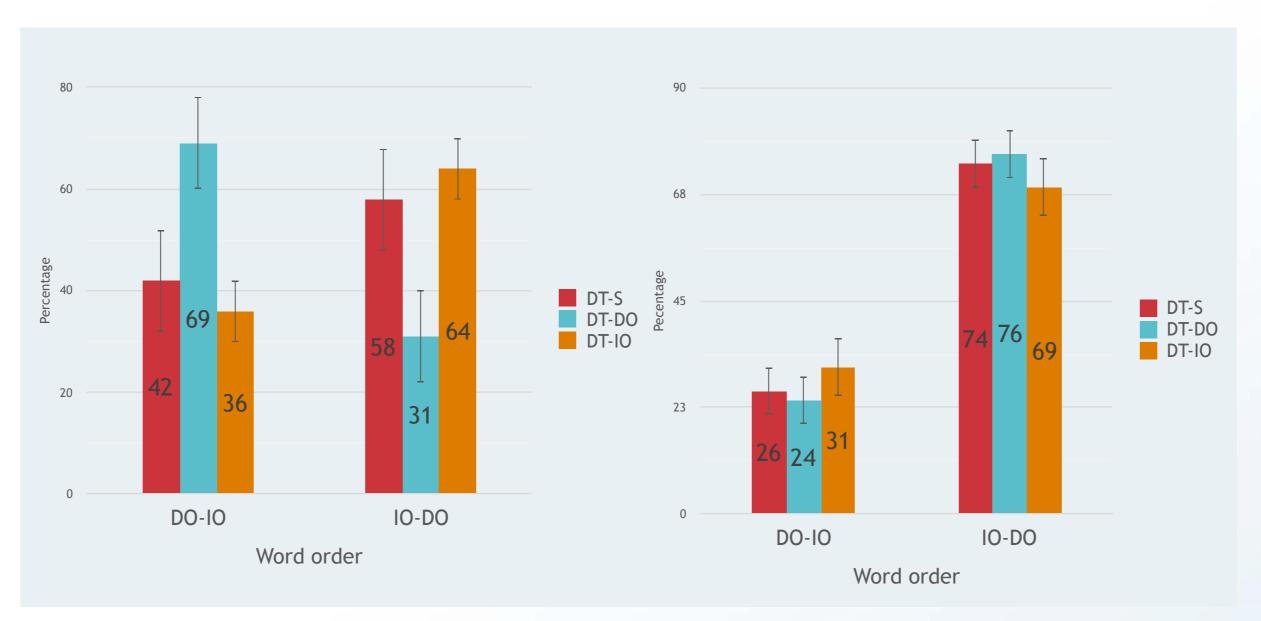
Generalized linear mixed effect models were fit to analyse (i) the word order distribution (NP-NP only) and (ii) the distribution of referring expressions with regard to the discourse topic. The main predictors were object order/referring expression and group (children/adults), whereas the participant and image order were set as random effects.

The first model revealed that the **distribution of the two orders is in favour of IO-DO in the child data** and stays constant across the task (p<0.001). The usage of the adult word orders differs significantly form the children's (p<0.05) and excels when the DO is the DT (p<0.001) as the adults increase their use of DO-IO.

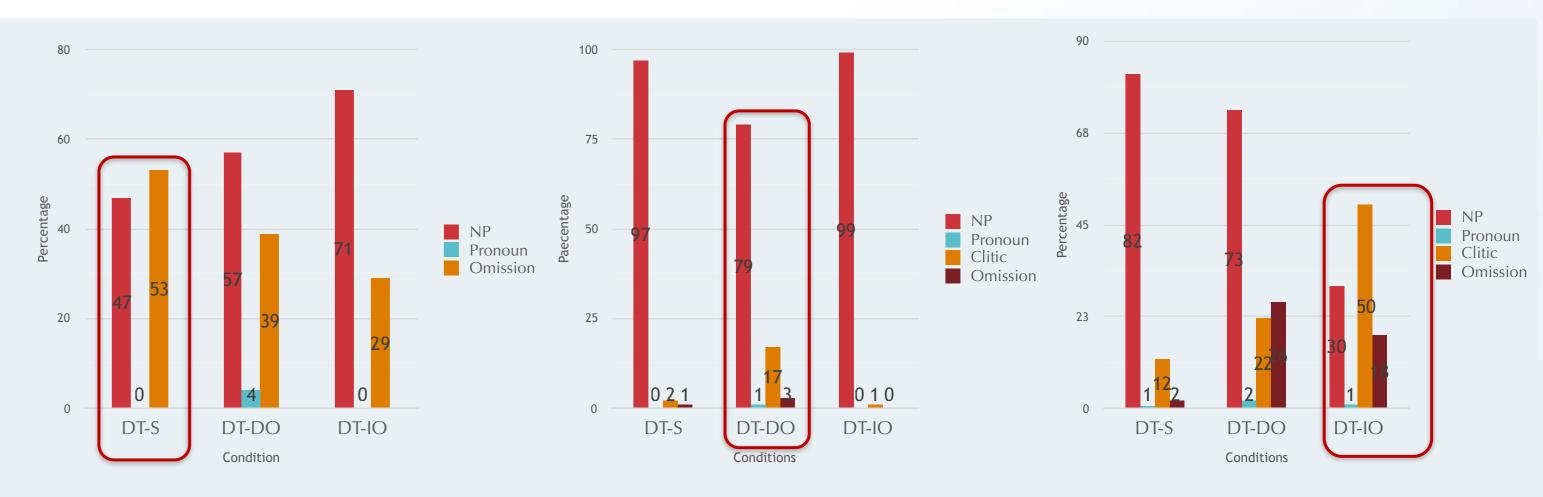
The model analysing the use of REs revealed that the **adults use less NPs** for both objects when these are the DT (DO=p<0.001, IO=p<0.01) than in other conditions, whereas the subject is expressed with an NP equally when it is the DT. The children are significantly more likely to express the subject with an NP (p<0.001) than the adults; the model also revealed that **children reduce the DOs as much as the adults** (p<0.001); as for the adults, the use of reduced REs to express the DT-IO is significant.

#### / GLOBAL MARKINGS ADULTS





## / LOCAL MARKINGS ADULTS



Pairwise comparisons of the expression of an argument when the DT: the DO is the most likely argument to be expressed with an NP when the DT, while the IO is the least likely.

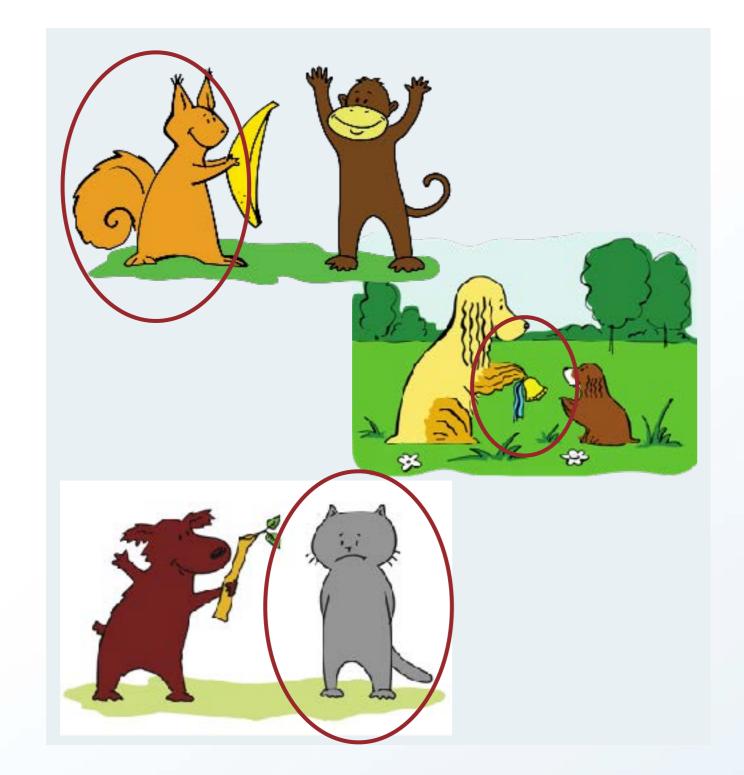
#### / LOCAL MARKINGS CHILDREN



Also in the children's data the IO is the least likely argument to be expressed with an NP when the DT, but the pairwise comparison showed no difference between the likelihood of the S and DO.

# METHODOLOGY

- Participants: 58 monolingual
   Croatian children (range= 3;6-5;1, mean= 4;4) and 36 adult controls (mean age=21)
- Method: semi-structured elicitation task
- Materials: three storybooks, each with a different argument as the discourse topic (S, IO, and DO), each story had 5 target images meant to elicit a ditransitive structure
- Procedure: the experimenter and participants told the stories together



### CONCLUSIONS

The study found that **discourse topic** has an **effect of object order** in **adults** but **not in children**, as they use the **same proportion of IO-DO** in both target conditions. On the other hand, the **discourse topic** argument was more **likely to be reduced** in the child data. Naturally, the adults also singled the topic out with high accessibility expressions. The children were not sensitive to the discourse topic status of the subject, and omitted it at the same rate in all three conditions, even though they were sensitive to the same discourse manipulations for the objects. Overall, children produced more NPs than adults, which is consistent with the results of previous studies which report an **over-informative use of referring expressions**. The study has also found a **relation between argument type and RE** used. For the adults, the IO is the most likely argument to have a reduced expression, and it is very frequently expressed as a clitic or omitted when it is the discourse topic. The subject is the second most likely argument to be reduced, and its expression is divided between NPs and omissions; the DO is the least likely argument to be reduced. Children have a three-way distinction for expressing the IO (NP, clitic, null) and a two-way distinction for the DO and the S (NP and null).

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