

# WHAT HAPPENS WHEN CHILDREN'S 'LITERAL' AND 'REALITY' BIASES CLASH?



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## INTRODUCTION

Between 4 and 7, children show robust preferences for literal interpretations and realistic outcomes (e.g., Weisberg et al., 2013; Winner, 1993). Traditionally studied separately, these preferences clash during metaphor comprehension, as literal interpretations are often unrealistic (like in the "frog with the umbrella").

## QUESTION

We explore the interplay of these preferences to see which information (literal vs. realistic) children prioritize in a metaphor comprehension task.

## METHOD

4- to 8-year-old Norwegian children hear a realistic story and choose 1 of 3 pictures to match 10 different scenarios (6 experimental trials referencing a metaphorical statement and 4 fillers).

Picture options include a metaphorical image, a contextually irrelevant distractor, and a competitor image (between-subjects: either a relevant distractor or a literal image). Literal images are those consistently rated as more "pretend" than the metaphorical images in a prior norming study.

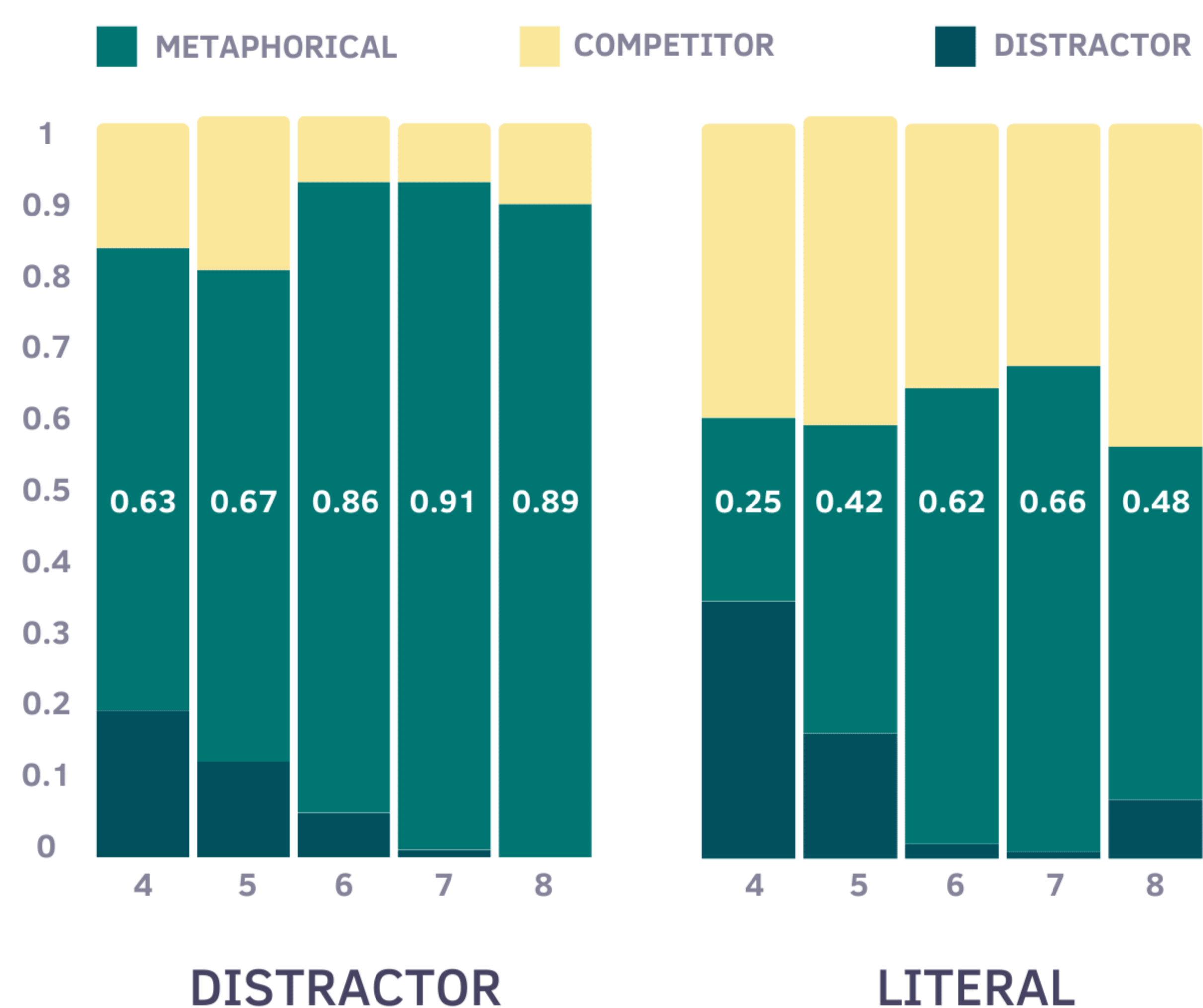
## EXAMPLE STIMULI

"...the frog with the umbrella..."



## PRELIMINARY PICTURE SELECTION RESULTS

Planned sample = 21 per age group / condition. Plotted data is from approx.  $n = 18$  per age group / condition and of experimental trials only.



Note: Competitor image = a relevant distractor in DISTRACTOR and a pretend-rated literal image in LITERAL. Numbers in graphs correspond to metaphorical picture selections only.

## DISCUSSION & NEXT STEPS

When there was no conflicting literal information all children were able to derive contextually appropriate interpretations. When literal options were available, younger children privileged this information over the real-world congruence of the metaphorical images. We are currently exploring the online interplay of these preferences by analyzing children's looks to images before and after the metaphor (e.g., after *frog & umbrella*), and are recruiting adults to see whether they are less influenced by literal alternatives. Understanding children's expectations of 'literal' and 'real' will help specify how their understanding of the world influences their conceptual development.

