

Title: Contrastive Inference Abilities in Children.

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Background: What an utterance means is often dependent on what alternatives a speaker could have said but did not. These alternatives are made available by the context of the utterance. By using contrastive inferences, adults can reliably arrive at the intended meaning of an utterance (Kronmuller et al. 2014). What is not clear is how children acquire this skill. Developmental research to date has primarily looked at contrastive inference with adjectives (Davies 2021, Sedivy 2003, Sedivy et al. 1999, Degen & Tanenhaus 2019, Huang & Snedeker 2013) and scalar terms like “or” and “some” (Skordos & Barner 2019, Skordos et al. 2020, Tieu et al. 2016, Daniel & Klaczynski 2006, Noveck 2001, Papafragou & Musolino 2003, Horowitz et al. 2017), largely concluding that children do have the ability to exhaustify, however they typically find it difficult without additional support. We do not know yet how children reason with a simple sentence like “Connie went to the store”. These simple sentences are also often exhaustified and need alternatives in order for that to happen. For example, if we are wondering who went to the store, and the reply is “Connie went to the store” then Connie went, and not Bill, Ted, Mary (or possibly anyone else for that matter).

Research Question: Do children typically exhaustify sentences like “Connie went to the store” in order to derive meaning?

Research Methods: Children aged 4-6 years and adults perform a modified acceptability judgement task. Participants are introduced to a forgetful character “Gary” (see image) and are asked to help him with remembering a story. Then participants hear a short (2-3 sentences) narrative and see an image that relates to the narrative. Gary then asks them about the story. The story always features two characters (e.g. Ted and Connie). In the last sentence of the narrative one of the characters is described doing something (e.g. Connie went to the store). In Critical trials, Gary asks about the person not mentioned. In the Connie/store example, Gary would ask: “Did Ted go to the store?” The rationale is that if participants use contrastive inference, they will have an expectation that the *only* character who went to the store is Connie, and answer ‘no’ to the question. There are two blocks of trials. In the “Simple” block the context sentences that participants are asked to exhaustify will not feature ‘Only’ so that exhaustification is not grammatically forced. In the “Forced” block those sentences will start with ‘only’ (e.g. Only Connie went to the store) in order to grammatically force the exhaustification. In two between-subjects conditions participants will either complete the “Forced” block first followed by the “Simple” block, or the reverse order. Audio responses are recorded and then coded based on whether the participant “exhaustified” or not.



Predictions: It is expected that there will be an order effect in adults. Since “only” forces exhaustification reliably, adult participants who receive the “Forced” block first will be reluctant to fully exhaustify in the “Simple” block later. Adults who received the “Simple” block first might a) exhaustify in the context of the experiment that highlights a specific set of characters (alternatives) or b) might be reluctant to do so unless the exhaustification is forced by “only”.

If children perform similarly to adults, then it raises questions about why children are adult-like in their reasoning with these simple sentences, but not with other linguistic items that also require contrastive inference. If children do not perform in an adult like manner, then many more questions will need to be asked about how contrastive inference is acquired, and what the acquisition trajectory looks like for inferential skills. We are currently collecting data and will have preliminary results by the conference date.

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