Give some, keep some: Scalar implicatures and sharing in children

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Language can play a subtle, but crucial role in important social behaviours such as sharing. In communication, hearers make interpretations based on the likely or intended meaning of the speaker. For instance, “John had some cherries” implies that John did not eat all of them. Three- to 5-year-olds, however, often interpret “some” as compatible with “all” (Barner et al., 2011; Katsos & Bishop, 2011; Noveck, 2001; Papafragou & Musolino, 2003; Pouscoulous et al., 2007).

Around this age, children show a shift in distributive justice. Three-year-olds are more selfish when asked to distribute “some” resources than five-year-olds (e.g., Rochat et al., 2009). Since children do not necessarily interpret “some” in the same way as adults, it is possible that their sharing behaviour is influenced by this term.

The direction of the verbs “give” and “keep” might also influence sharing, with the former placing emphasis on another individual and the latter being more self-regarding. To date, sharing studies with requests ask children to give, not to keep or take (e.g., Brownell et al., 2009).

To determine whether 4-year-olds interpret “some” differently depending on whether they or another individual are affected, and whether “giving” is interpreted as more other-regarding than “keeping”, children were asked to either “give some of” an odd number of stickers to another a puppet or to “keep some of” them for themselves when sharing. The amount of stickers children gave to the puppet reflected their sense of fairness.

14 children (5 girls) between 3;9 and 4;3 (mean 4;2) engaged in various activities such as puzzle building with a puppet during six trials. At the end of each trial, children were given five stickers and asked to “give some of” the stickers to the puppet or “keep some of” them for themselves (block design, counterbalanced across
subjects). Their understanding of quantifiers was controlled during tidy up trials, when they had to put “some of” or “all of” the toys in one of two boxes.

Children gave more stickers to the puppet when asked to “give some” than “keep some” ($Z = -2.31, n = 14, \text{ties} = 4, p = 0.02$). Children were as likely to put all of the objects into one box when asked to put “some” away as “all” away ($Z = -1.89, n = 14, \text{ties} = 10, p = 0.13$). However, they did not interpret “some” as meaning “all” in a sharing context. In no case did children give all of the stickers to the puppet, although some did keep all for themselves.

These preliminary results suggest that when asked to give, children are more generous than when asked to keep. They do not interpret “some” as compatible with “all” when they have a personal stake in the outcome. Language, then, has an important influence on prosociality. This study highlights the importance of verbal instructions on prosociality, and might lead to the conclusion that children are more prosocial than they would otherwise be in a nonlinguistic setting. Having a personal stake in a linguistic task can itself have an impact on how pragmatic inferences are derived.

References:


