Cognitive Development 27 (2012) 126–135

Contents lists available at SciVerse ScienceDirect

Cognitive Development

Explaining the errors away: Young children forgive understandable semantic mistakes

Robyn L. Kondrad*, Vikram K. Jaswal

University of Virginia, United States

ARTICLE INFO

Keywords:
Errors
Trust
Testimony
Credibility
False belief

ABSTRACT

Errors differ in degree of seriousness. We asked whether preschoolers would use the magnitude of an informant's errors to decide if that informant would be a good source of information later. Four- and 5-year-olds observed two informants incorrectly label familiar objects, but one informant's errors were closer to the correct answer than the other's (e.g., one referred to a comb as a brush and the other referred to the same comb as a thunderstorm). When informants had an unambiguous view of the objects, children could identify which informant was closer to being correct, but they did not favor novel labels the "closer" informant later provided. When the informants had an ambiguous view of the objects (e.g., only the handle of the comb was visible), children preferred the novel labels provided later by the "closer" informant. Preschoolers are willing to overlook semantic errors that are close to being correct, but only when there is an understandable reason for the speaker's errors.

People usually do their best to tell children (and each other) the truth, or at least what they believe to be true. But for a variety of reasons, including error, ignorance, and deception, people sometimes say things that are incorrect. Recent research has shown that preschoolers are more likely to trust an informant who has been correct in the past over one who has been incorrect (Birch, Vauthier, & Bloom, 2008; Fitneva & Dunfield, 2010; Jaswal, McKercher, & VanderBorght, 2008; Jaswal & Neely, 2006; Koenig, Clement, & Harris, 2004; Koenig & Harris, 2005; Scofield & Behrend, 2008). In the typical paradigm, children hear two informants label several familiar objects. One informant correctly labels each (e.g., calls a ball a "ball"), and the other incorrectly labels each (e.g., calls the ball a "telephone").

* Corresponding author at: Department of Psychology, 102 Gilmer Hall, PO Box 400400, Charlottesville, VA 22904, United States. Tel.: +1 434 806 2454; fax: +1 434 982 4766.
E-mail address: rkondrad@virginia.edu (R.L. Kondrad).

0885-2014/$ – see front matter © 2012 Elsevier Inc. All rights reserved.
doi:10.1016/j.cogdev.2011.11.001

Children as young as 3 prefer new information from the speaker who has been consistently right to information from the one who has been consistently wrong. Given two speakers who both have made mistakes in the past, 4-year-olds favor new information from the one who has made relatively fewer errors (Pasquini, Corriveau, Koenig, & Harris, 2007).

Yet not all errors are equivalent – referring to a comb as a brush, for example, is closer to being correct than referring to it as a thunderstorm. In the present study, we asked whether the magnitude of past errors would influence the likelihood that preschoolers would trust information an informant provided later and whether this varied as a function of how reasonable those errors were given the context.

In the only study to date investigating children's sensitivity to the magnitude of a speaker's errors, Einav and Robinson (2010) found that not until early elementary school did children prefer novel labels from a speaker who had previously been closer to being correct to labels from one who had been further away. For example, 6–7-year-olds were more likely to endorse novel labels from someone who had earlier called a butterfly a bee than someone who called it a car, but 4–5-year-olds were about equally likely to endorse novel labels from either informant.

Einav and Robinson (2010) hypothesized that younger children would be more successful in a domain in which magnitude is more easily quantifiable. In their second study, 4–5-year-olds observed two informants incorrectly report the number of dots on a card, but one was incorrect by one number while the other was incorrect by several. When guessing the number of dots on cards they could not see themselves, children were more likely to rely on testimony from the informant who earlier had been closer to being correct. Einav and Robinson argued that younger children's ability to evaluate credibility on the basis of magnitude information is "more evident when the error magnitude is a clearly quantifiable measure" (p. 227).

We suggest there may be at least one additional explanation why 4–5-year-olds in Einav and Robinson's (2010) first study did not selectively trust the informant whose errors had been closer to being correct. They may have found it difficult to forgive either informant because there was no obvious reason either would have erred in labeling such simple, familiar objects (e.g., butterfly, horse, tiger, dog). The informants had unimpeded visual access to the objects, and they were native, adult speakers of the language. Thus, the relative size of the errors may have mattered less than the fact that errors were made at all. (This has not been an issue in previous studies on selective trust because on any given familiarization trial, one of two informants has always provided the correct familiar label, so the inaccurate speaker could simply be discounted.) If so, young children might selectively trust an informant who has made errors in the past given a plausible explanation for those mistakes (e.g., if the informant had only an ambiguous view of the objects she was asked to label).

Work by Nurmsoo and Robinson (2009a) may clarify why offering an explanation for an informant's errors could influence young children's selective trust. In that study, 3–5-year-olds observed a single puppet claim that an object was green when in fact it was blue. In one condition, the puppet had seen the object and so should have been correct. In a second condition, the puppet had touched the object but had not seen it, so the error was reasonable. Later, children observed the puppet make a claim about the color of another object and had to decide whether to believe the puppet or guess for themselves. Children tended to rely on the puppet's testimony if its earlier error had been reasonable given the context but to guess for themselves if not (see also Robinson & Nurmsoo, 2009; but see Nurmsoo & Robinson, 2009b).

Like Einav and Robinson (2010), we asked whether young children would prefer new information from an informant who had earlier made a series of mistakes close to being correct or information from one whose mistakes were further from the truth. Crucially, in one condition (Ambiguous View) we provided a context that could explain the "close" informant's errors. In this condition, both informants had only a restricted, ambiguous view of the familiar objects. For example, in the case of a comb, only the handle was visible. The "close" informant claimed it was a brush, and the one further from the truth claimed it was a thunderstorm. Both are errors, but mistaking the handle of a comb for that of a brush seems reasonable given the context, compared to mistaking the handle of a comb for part of a thunderstorm. We chose to use the restricted-view paradigm because 4-year-olds can be trained to recognize that someone who has seen only part of an object may