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Preschool children's use of cues to generic meaning $\stackrel{\ensuremath{\sigma}}{\leftarrow}$

Andrei Cimpian *, Ellen M. Markman

Department of Psychology, Stanford University, Jordan Hall, Building 420, 450 Serra Mall, Stanford, CA 94305-2130, USA

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Abstract

Sentences that refer to categories – generic sentences (e.g., "Dogs are friendly") – are frequent in speech addressed to young children and constitute an important means of knowledge transmission. However, detecting generic meaning may be challenging for young children, since it requires attention to a multitude of morphosyntactic, semantic, and pragmatic cues. The first three experiments tested whether 3- and 4-year-olds use (a) the immediate linguistic context, (b) their previous knowledge, and (c) the social context to determine whether an utterance with ambiguous scope (e.g., "They are afraid of mice", spoken while pointing to 2 birds) is generic. Four-year-olds were able to take advantage of all the cues provided, but 3-year-olds were sensitive only to the first two. In Experiment 4, we tested the relative strength of linguistic-context cues and previous-knowledge cues by putting them in conflict; in this task, 4-yearolds, but not 3-year-olds, preferred to base their interpretations on the explicit noun phrase cues from the linguistic context. These studies indicate that, from early on, children can use

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Corresponding author. Tel.: +1 650 804 2475.

E-mail address: acimpian@psych.stanford.edu (A. Cimpian).

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contextual and semantic information to construe sentences as generic, thus taking advantage of the category knowledge conveyed in these sentences. © 2007 Elsevier B.V. All rights reserved.

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1. Introduction

It is beyond doubt that, across a wide range of contexts, children's knowledge acquisition relies to a considerable extent on the information provided by others through language (e.g., Harris, 2002; Jaswal, 2004; Koenig, Clément, & Harris, 2004). However, language is particularly influential when the information it expresses is not easily derived through first-hand observation and experience (Harris, 2002). In this paper, we focus on a powerful linguistic means of conveying knowledge: kind-referring generic sentences (or generics), which are sentences that express generalizations about categories (e.g., "Dogs are friendly"). Generics are likely to be important to children's conceptual development for several reasons. First, there are no comparable non-linguistic means of unambiguously conveying that a property applies to a category as a whole (Gelman, 2003; Gelman, 2004). Pointing to any number of friendly dogs cannot substitute for the generic "Dogs are friendly", as the category *dogs* also covers past, future, or hypothetical exemplars (Gelman, 2004). Furthermore, some generic meanings (e.g., that dogs are widespread) cannot even be illustrated by displaying individual examples (Heyer, 1990): No individual dog can be said to be widespread. Second, generics are particularly robust even in comparison to other linguistic devices. For instance, unlike universally quantified sentences (e.g., "All dogs are friendly"), generics are resistant to counterexamples (e.g., Prasada, 2000): "Dogs are friendly" remains true even after an encounter with a mean dog, but "All dogs are friendly" does not. This feature makes generic sentences ideally suited to express properties that are typical or important for a category but that can nevertheless admit exceptions. Third, generics may scaffold children's own inductive inferences (Cimpian & Markman, 2005; Gelman, Star, & Flukes, 2002; see also Cimpian, Arce, Markman, & Dweck, 2007). Consider, for example, the many possible inferences a child could make after seeing a single friendly dog: Is it just this dog that is friendly, or is it dogs in general? Or maybe pets, or furry things? Since the available evidence is logically compatible with an infinity of inductions (Goodman, 1965; Skyrms, 1986), children may use the presence of generic vs. non-generic sentences to decide whether (and how far) they should generalize. Fourth, generic sentences are quite frequent in speech addressed to young children (e.g., Gelman, Coley, Rosengren, Hartman, & Pappas, 1998; Gelman & Tardif, 1998). Last, it is likely that generic meaning can be expressed in all languages (Behrens, 2005; Carlson & Pelletier, 1995; Gelman, 2004).

Despite their potential role in knowledge acquisition and transmission, generic sentences cannot be identified by a simple rule. On the contrary, determining whether a sentence is generic involves attending to a complex system of grammatical,

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