Number, Language, and Object Individuation

Lisa Cantrell
Indiana University

Linda B. Smith
Indiana University

Abstract: Recent research has suggested that the number of objects in a set affects the kinds of properties people attend to when speaking and categorizing (Barner & McKeown, 2005; Cantrell & Smith, 2009; Newstead & Coventry 2001). Here we asked whether number also affects the count-mass syntax that speakers use for common objects. Children ages 3-5 years were asked to look at pictures of common items (e.g., chairs, paper, soap) and label them. The images varied in number; children saw objects in sets of 2, 6 or 25. Results showed an effect of number on the kind of language children used. As the number of items increased, children became less likely to use individuating syntax, suggesting that objects in larger sets were seen less as individual entities and more as portions of a continuous mass. These results have theoretical implications for current ideas in number and object representation.