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Infants are born with five senses: sight, hearing, taste, smell and touch, through which they come to understand the world around them and interact with the environment effectively. However, the role of visual information in early conceptual development has been stressed. In this paper, we would argue that auditory information should also play a part. For instance, the sound of an animal can be one of the essential cues for us to determine what the animal is. This study, therefore, was an attempt to examine the extent to which preschool children use auditory information in drawing inductive inferences about animals.

In a recent study by Wong (dissertation), 4-year-old children's use of auditory and visual information has been compared. They were found to be more likely to draw inferences about natural kinds based on the similarity of auditory information than on shape similarity. The importance of auditory information has been shown.

However, some would argue against the importance of perceptual information no matter whether it is visual or auditory. A series of studies by Gelman et al. (e.g, Gelman & Coley, 1990) have shown that children as young as 3 years of age were able to go beyond perceptual cues and use conceptual information, such as category labels, to make judgments. They tended to rely more on labels than on perceptual appearance to draw inferences about animals.

Despite of these findings, the role of category labels has been questioned. A study by Mak, Vera and Lo (under preparation) has shown that young children's use of labels seems to be rather limited. Preschool children tended to use motion information more often than category labels to make categorical judgments.

Following this line of argument together with the evidence that infants are not only sensitive to sound but also show good ability in sound detection, discrimination and localization (e.g., Leventhal & Lipsitt, 1964; Wormith, Pankhurst, & Moffitt, 1975), it is reasonable to believe that preschool children would be more likely to use the sound of animals than category labels to draw inductive inferences.

The present study was a 2 (similar & different sound) x 2 (similar & different label) between-subject factorial design. Two hundred and forty 4-year-old children participated. In the experiment, each child was tested individually. Children were presented with 2 pairs of animal stimuli ("cat" and "dog"), one pair at a time (a target and a test animals which shared similar appearance). The children were first taught a new property about the target and were then asked to infer if the property was also true for the test animal.

Results provide supports for our hypothesis, showing that 4-year-olds tended to use auditory information significantly more often than verbal labels to draw inductive inferences about the animal stimuli. This finding is consistent with those in Mak et al.'s study, suggesting that the role of category labels may not be as important as Gelman et al. have suggested and that of auditory information cannot be ignored.

Although children's use of perceptual and conceptual information has been compared in this study, we are not suggesting that they play distinct roles in children's conceptual development. On the contrary, we do believe that information of shape, sound and labels interact to guide children's categorical judgment. This, however, remains to be determined in future studies.

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