INTRODUCTION

- Previous research suggests up until the 1st half of the 2nd year of life infants’ understanding of familiar words is contextually restricted (Snyder, Bates, & Bretherton, 1981).
- To develop referential understanding infants must gradually decontextualize words:
  1. Access word meaning absent cues that aid in recognition:
     a. familiar frames
     b. intentional cues
     c. visual referent
  2. Generalize word meaning outside the original referent (Swingley & Fernald, 2002).
- These skills are particularly important for the subsequent naming explosion documented between 18-24-months (McShane, 1979).

THE PRESENT STUDY

- Two experiments investigate the development of referential understanding.
- Tested infants’ ability to reference word meaning presented with continuous speech devoid of intentional cues, familiar frames, and a visual referent.

Experiment 1
- One visual exemplar representing each noun

Experiment 2
- Three visual exemplars representing each noun

METHODS

Subjects
- **Experiment 1**
  - Mean age: 14 months
  - 8 males, 10 females
- **Experiment 2**
  - Mean age: 14.2
  - 3 males, 5 females

Procedure
- Visual fixation procedure – adapted from perception task in Jusczyk & Aslin, 1995
  - 3 phases:
    1. Pretest – animations only, no audio stimuli, fixed duration
    2. Familiarization – repetitions of passages containing two of four familiar words
    3. Test – animations only, no audio stimuli, infant controlled

RESULTS

- Looking times to target (previously presented in passage) and non-target (never heard) animations were averaged separately and compared using paired t-tests.
- To demonstrate recognition, infants must look significantly longer at target vs. non-target animations.

Experiment 1
- Infants looked significantly longer to target animations (p=.02).

Experiment 2
- Infants showed no difference in looking time to target and non-target animations.

DISCUSSION

- In Experiment 1, 14-month-olds can reference word meaning in continuous speech absent a visual referent, and intentional cues.
- In Experiment 2, preliminary results indicate 14-month-olds’ are unable to reference meaning when presented with multiple, varied visual exemplars.
- The presence of a visual referent and/or intentional cues may be necessary to enable infants at this age to generalize word-sound to more diverse referents.
- In a follow up study we will test 17-month-old’s on Experiment 2 to further document the development of referential understanding.
- Overall these results demonstrate the emergence of referential understanding at 14-months.

REFERENCES


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