

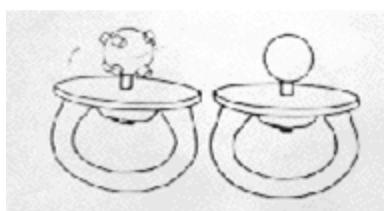
# Nativist views & early infant abilities

## Cross-Modal Integration (Andrew Meltzoff)

**Meltzoff and Moore (1977)** videotaped 12-21 day-old babies as they watched an adult experimenter perform different facial expressions (tongue protrusion, lip protrusion, mouth opening). Observers who were blind to the research aim later watched the videos and coded the babies' own facial expressions. It was found that the babies' facial expression matched the experimenter's significantly more often than would happen by chance.



- What conclusion might be drawn from these findings about infants' cognitive abilities?
- Why did the researchers ensure that the observers were blind to the research aim?
- What additional precautions are they likely to have included in their research design?



**Meltzoff and Borton (1979)** gave babies (average age 29 days) one of two different dummies to suck. The dummies had different shapes: one was smooth, the other was textured. The infants were then shown the dummies side-by-side and an observer recorded how long they spent looking at each one. Infants spent significantly more time (71%) looking at the dummy they had in their mouths.

- What conclusion might be drawn from these findings about infants' cognitive abilities?
- What precautions would the researchers need to take to ensure their data were valid?

## Core Knowledge (Renee Baillargeon, Elizabeth Spelke)

Baillargeon et al (1985; 1987) showed babies (3-5 months) moving tableaux representing interactions between simple objects (a box and 'drawbridge', a truck rolling down a slope). Some of the tableaux were physically possible and some were physically impossible. The babies' direction of gaze was recorded as they were presented with each tableau. They spent significantly more time looking at the 'impossible' events.

- What conclusions have Baillargeon and Spelke drawn from studies like these?
- How do Baillargeon's findings relate to Spelke's theory of Innate Core Knowledge?
- Considering the design of the 'possible' and 'impossible' events, what would the researchers need to ensure in order for their conclusions to be valid?

## General issues

- Research into infant cognition relies heavily on direction of gaze as a DV. What issues does this raise?
- Innate abilities often imply evolutionary influences. Can an evolutionary perspective easily account for any of these findings?
- The (neo-) nativist view is often seen as opposed to the Piagetian interactionist view, but it isn't entirely. Which of the following statements would a neo-nativist and a Piagetian agree and disagree on? To what extent?
  - Babies are born already in possession of some schemas;
  - Experiences cause infants to adapt the schemas they have;
  - An infant's understanding is readily observable in its actions.