

# The Development of Model-Driven Perception

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## Introduction:

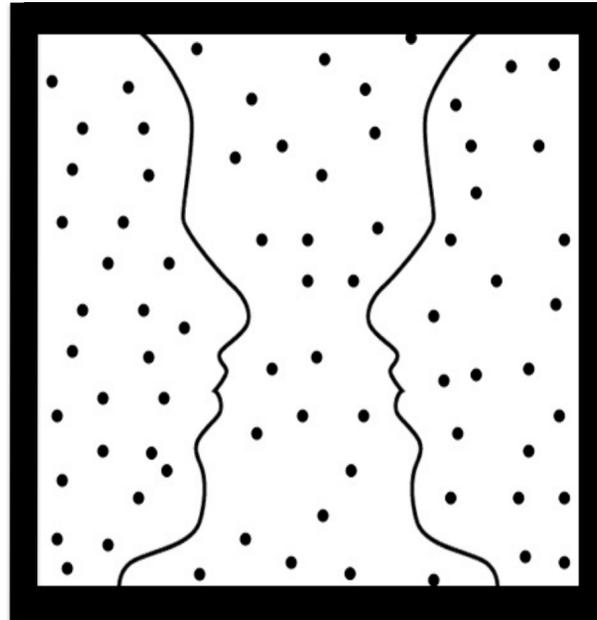
- **Do you see a vase or a face?**
- Adults use visual models created from past information about how the world appears constantly in their everyday lives
- Currently, not much is known about how or when this ability develops
- **When there is movement of the contour lines of the face/vase stimulus, you can be convinced to see either the faces or the vase depending on the movement**
- We also know that adults are able to be primed to see something in a modified way depending on an initial exposure to a particular stimulus.

### The Question:

Are six-month-old infants able to form visual models from priming?

## Method:

- Infants were presented with the face/vase stimulus on both the left and right side of one screen.
- Each infant completed 8 sets
- Each set consisted of five trials:
  - two 5 second pre tests
  - one 10 second priming
  - two 5 second post tests
- Looking behavior (to left or right) was scored live and recorded with a video camera. Scorer was blind to what stimuli the baby was presented with.



## Early Results:

- **Still in the process of collecting data**
- Thus far: data from 26 Matched and 25 Unmatched sets from 7 participants
- As expected, total percent change in looking time remained close to zero (slightly negative) and was positive for the Matched and Unmatched sets, respectively
- **Results indicate that six-month-old infants are able to use visual models constructed through a priming**



## Discussion:

- **Results suggest that infants at six months are capable of performing a degree of top-down processing using previous experiences**
- The priming display influences the way in which the All stimulus is perceived.
  - After seeing the faces, more likely to see All display as faces in the post test
- At what age are infants unable to incorporate past experiences into their current experiences?

All	Vase	All	Vase
Vase	Vase	Face	Face
All	Vase	All	Vase
Matched		Unmatched	

Infants are expected to look more at the "All" condition in post test trials when priming set has "Unmatched" stimuli.

### Take Home Note:

Infants may be capable of top-down processing as early as six months of age