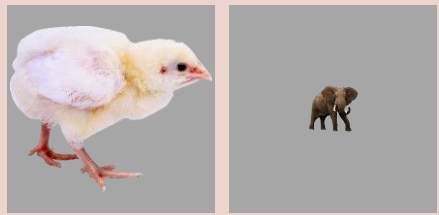# How big should this object be? Perceptual influences on viewing-size preferences

Yi-Chia Chen[1,2], Arturo Deza[1,3], & Talia Konkle[1] ([1]Harvard University, [2]UCLA, [3]MIT)

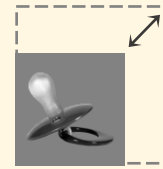VISION SCIENCES LABORATORY

Question

Looks wrong!
Why?

Possibilities

Conflict with **Knowledge**? **Perceptual** Disfluency?

Small   !

Stimuli: Texforms

Texture Synthesis Algorithm

Freeman & Simoncelli, 2011
Long, Yu, & Konkle, 2018

Local Pooling region

- Preserve coarse shape & texture
- **Unrecoganizable** (~~knowledge~~)
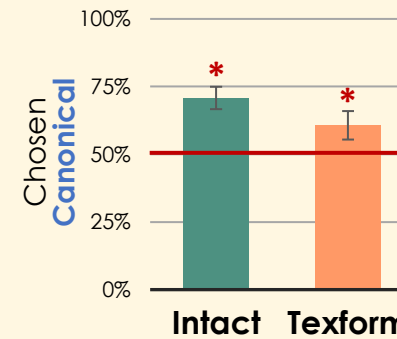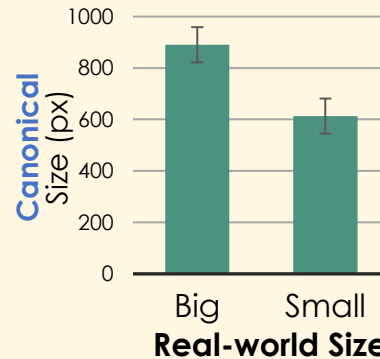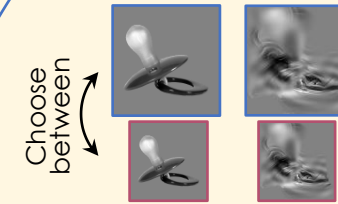

Experiment (N = 15)

Similar size preference
For **unrecognizable** texture?

1. Adjustment
Intact images
Size preference

Subjects' Adjustments

2. Forced Choice
Canonical vs.
Bigger/Smaller?

Choose between
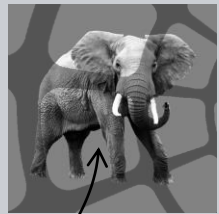

Canonical Size (px)

Big   Small
Real-world Size

Chosen **Canonical**

Intact   Texform

Conclusions

Size preference **Without** Knowledge access

Visual features can Drive canonical size

Replication (N = 15)

Different stimuli

Chosen **Canonical**

Intact   Texform