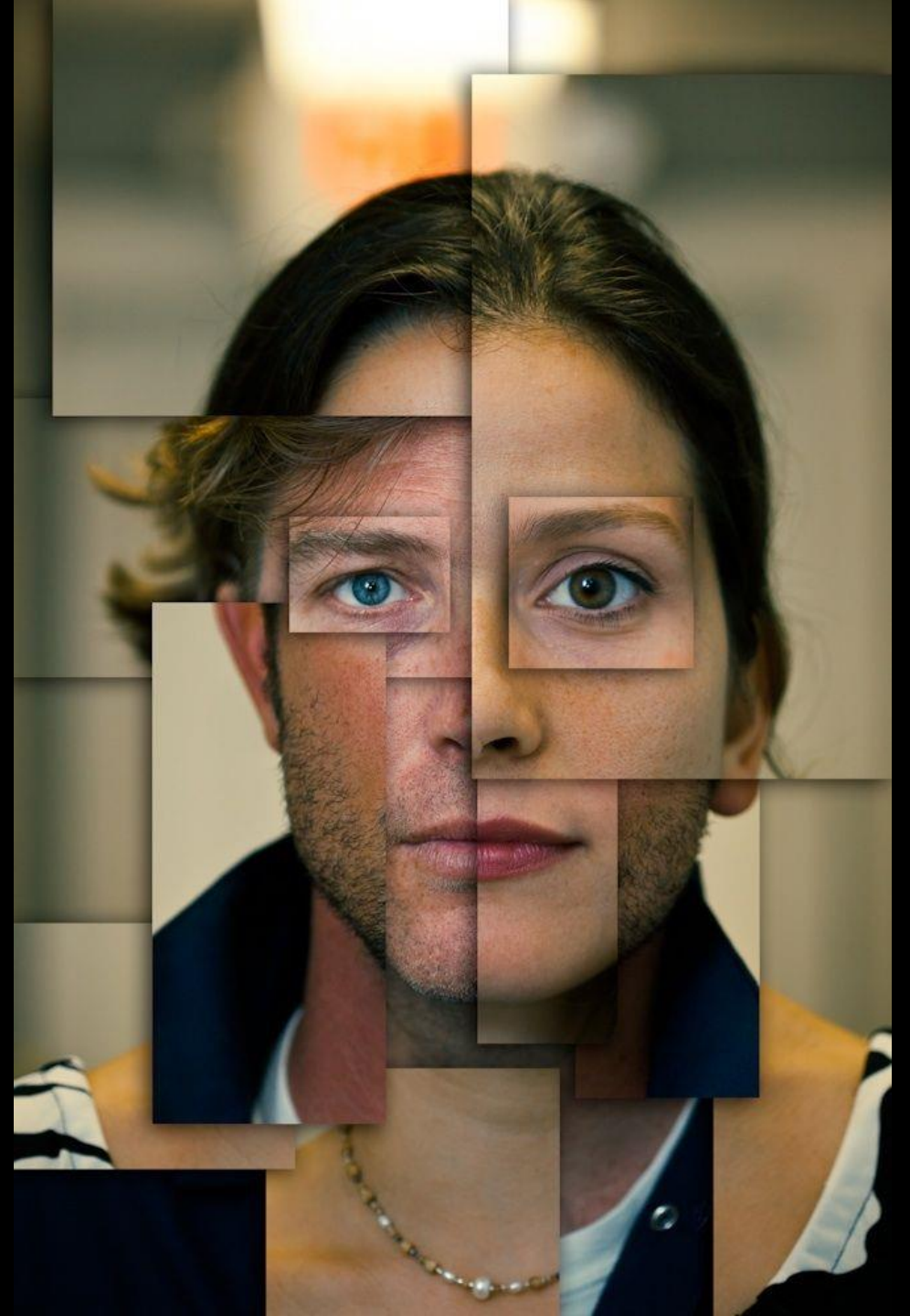
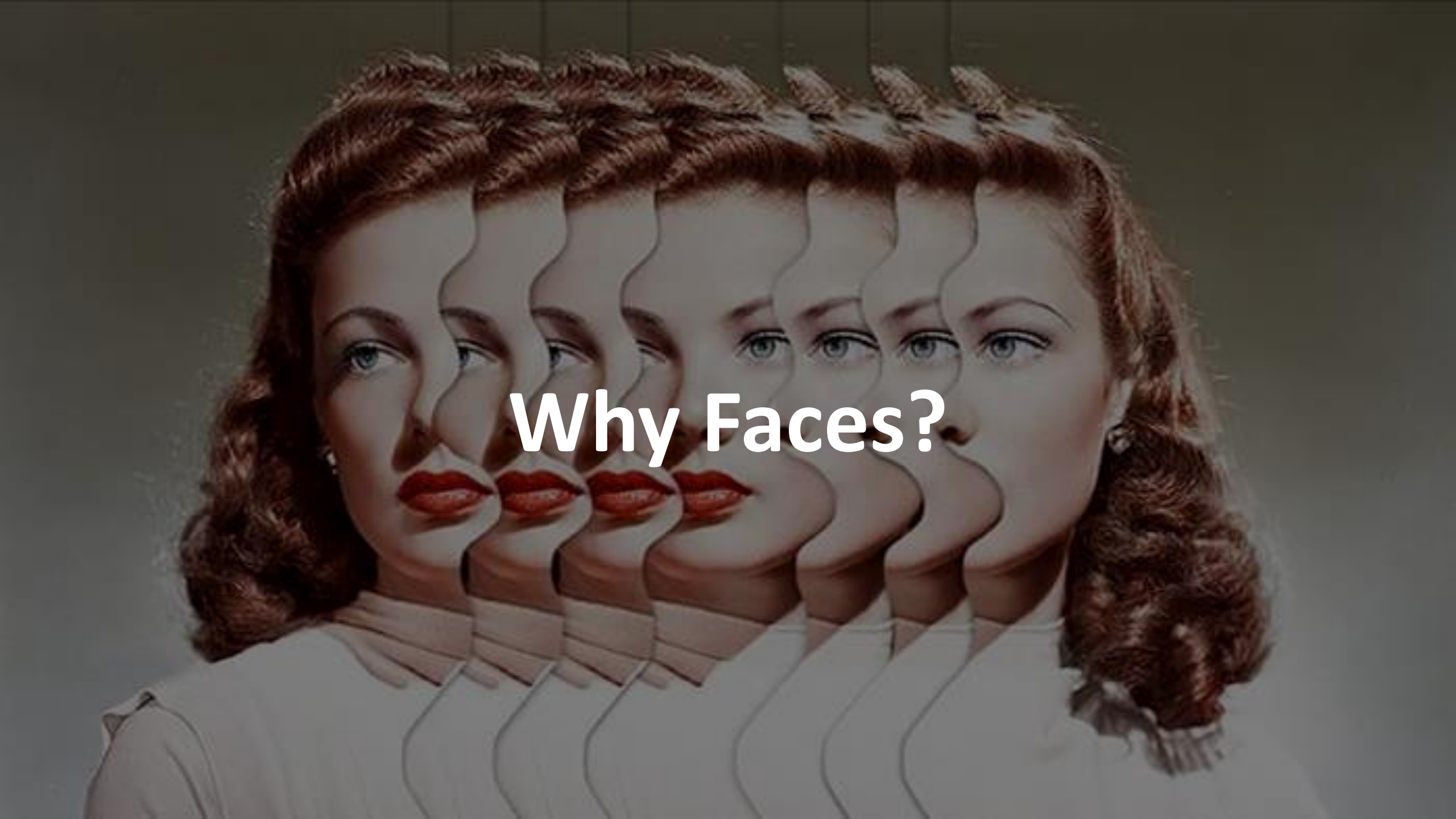


The Effect of Orientation-Specific Adaptation on Face Recognition

Emily Cruikshank and
Dr. Nicole Anderson



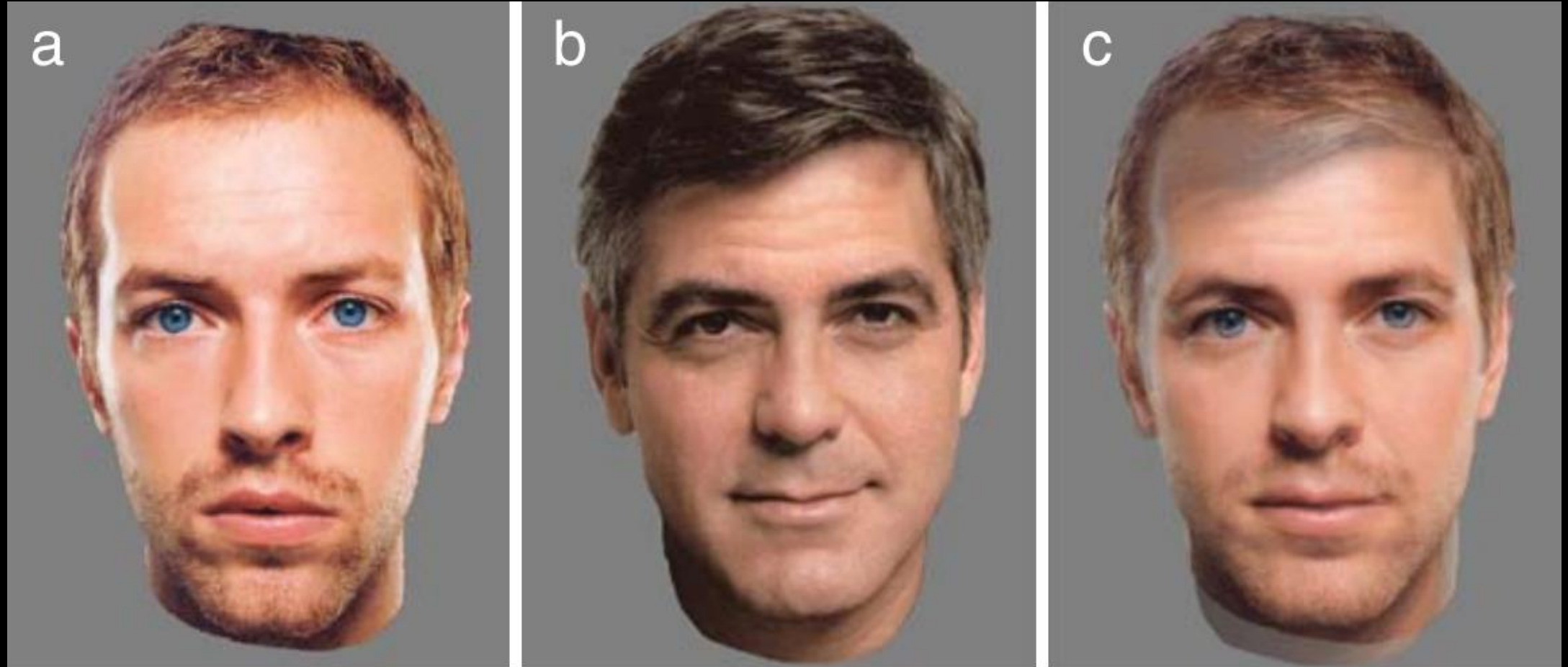


Why Faces?

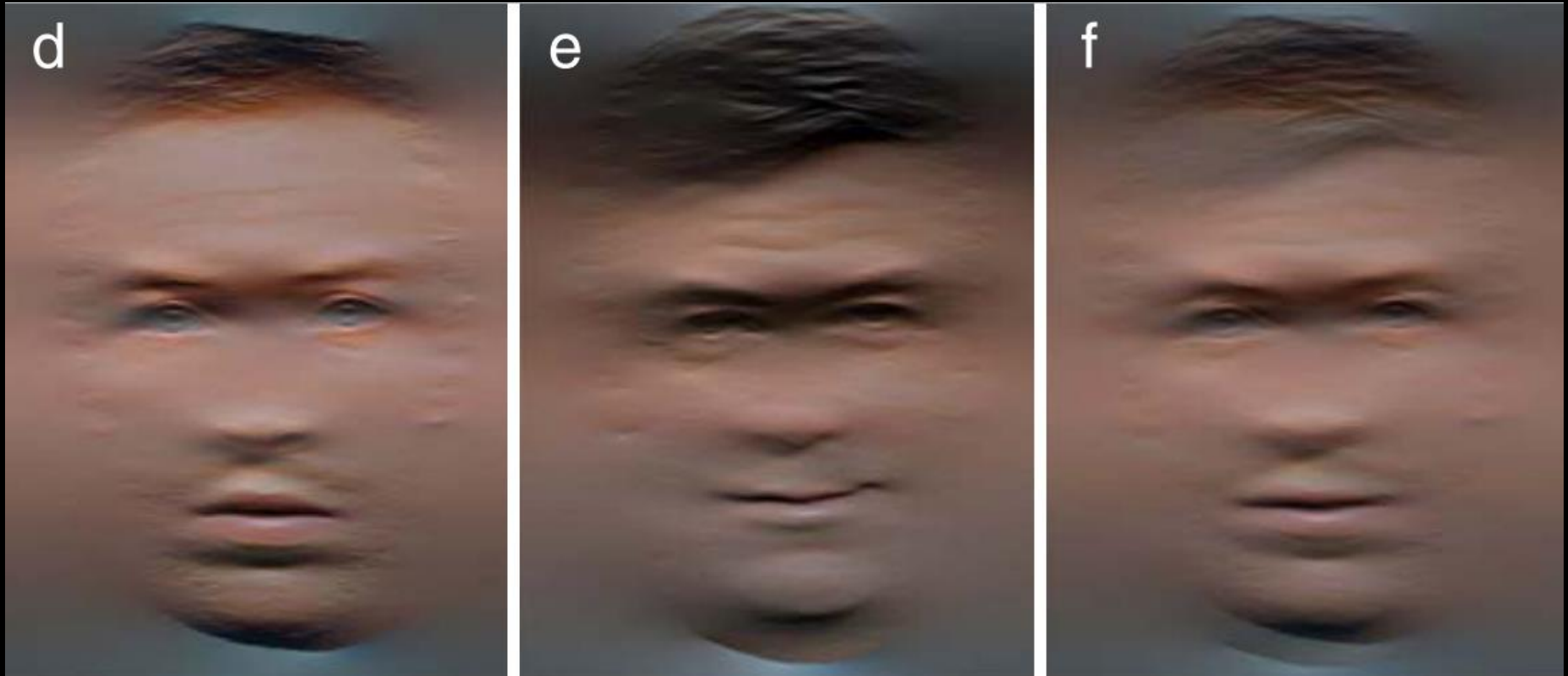
Selective Adaptation



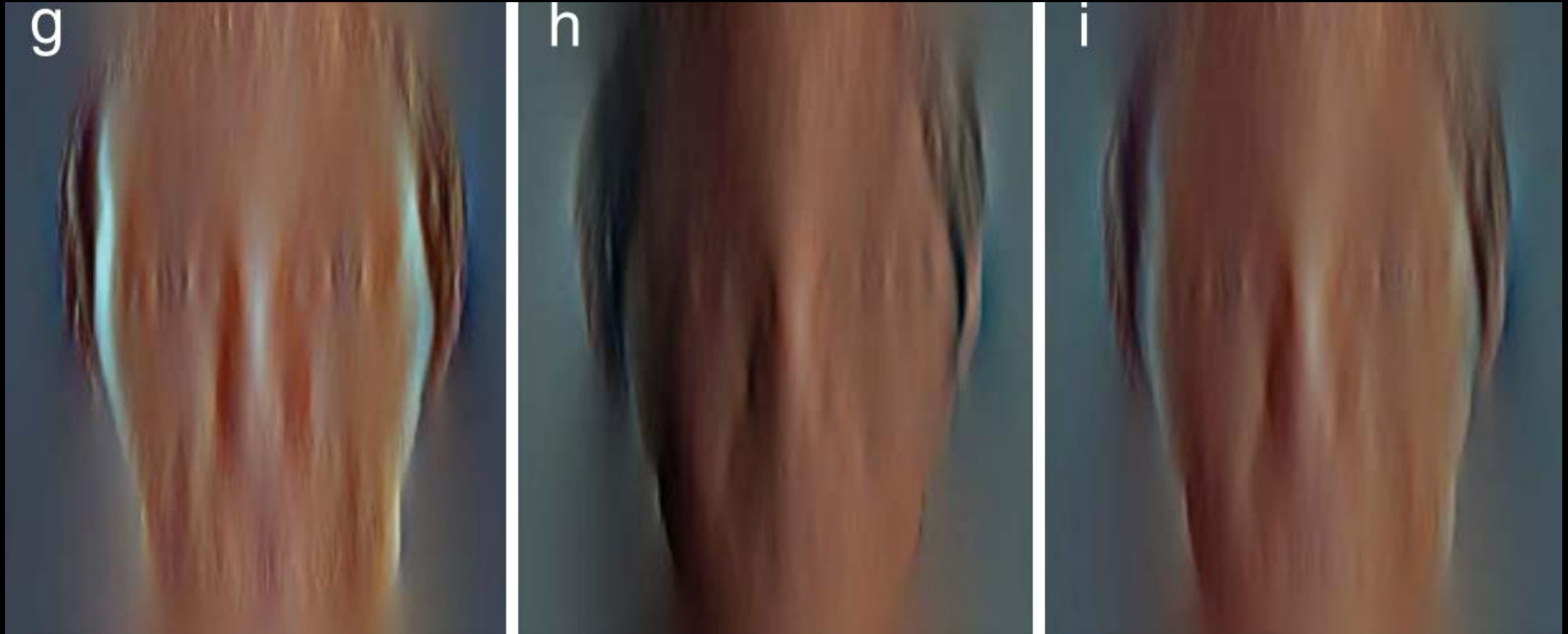
Dakin & Watt (2009)



Dakin & Watt (2009)



Dakin & Watt (2009)



Perceptual Psychology

Perception
controlled by
neurons

Faces are
special

Visual
Adaptation

Face Info in
Horizontal
Bands

**Our
Experiment**

Experiment 1



0%



2%



4%



6%

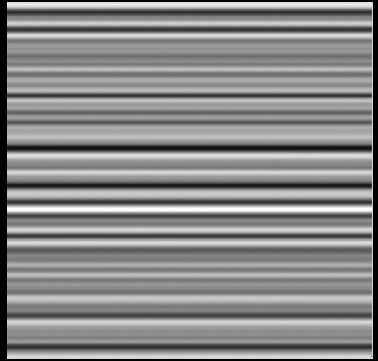


8%

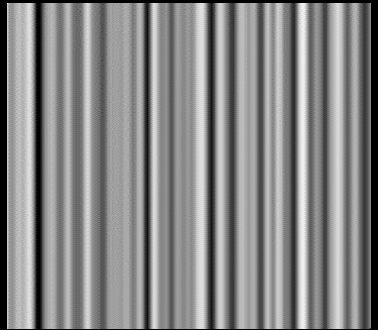


10%

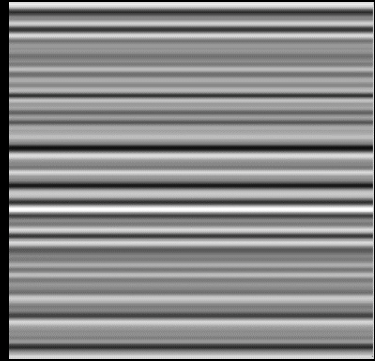
Adapting Stage



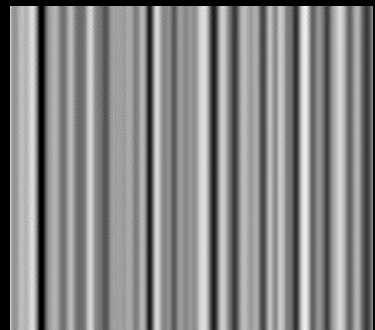
Horizontal Adaptation (1 min)



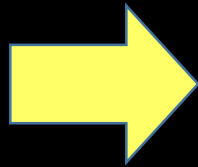
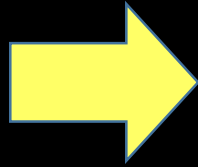
Vertical Adaptation (1 min)



Horizontal Adaptation (5 sec)



Vertical Adaptation (5 sec)



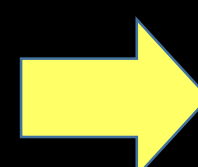
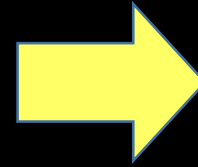
Testing Stage



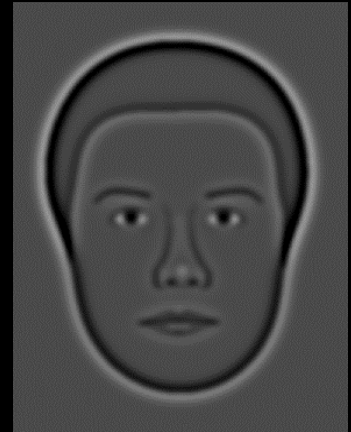
Test Stimulus



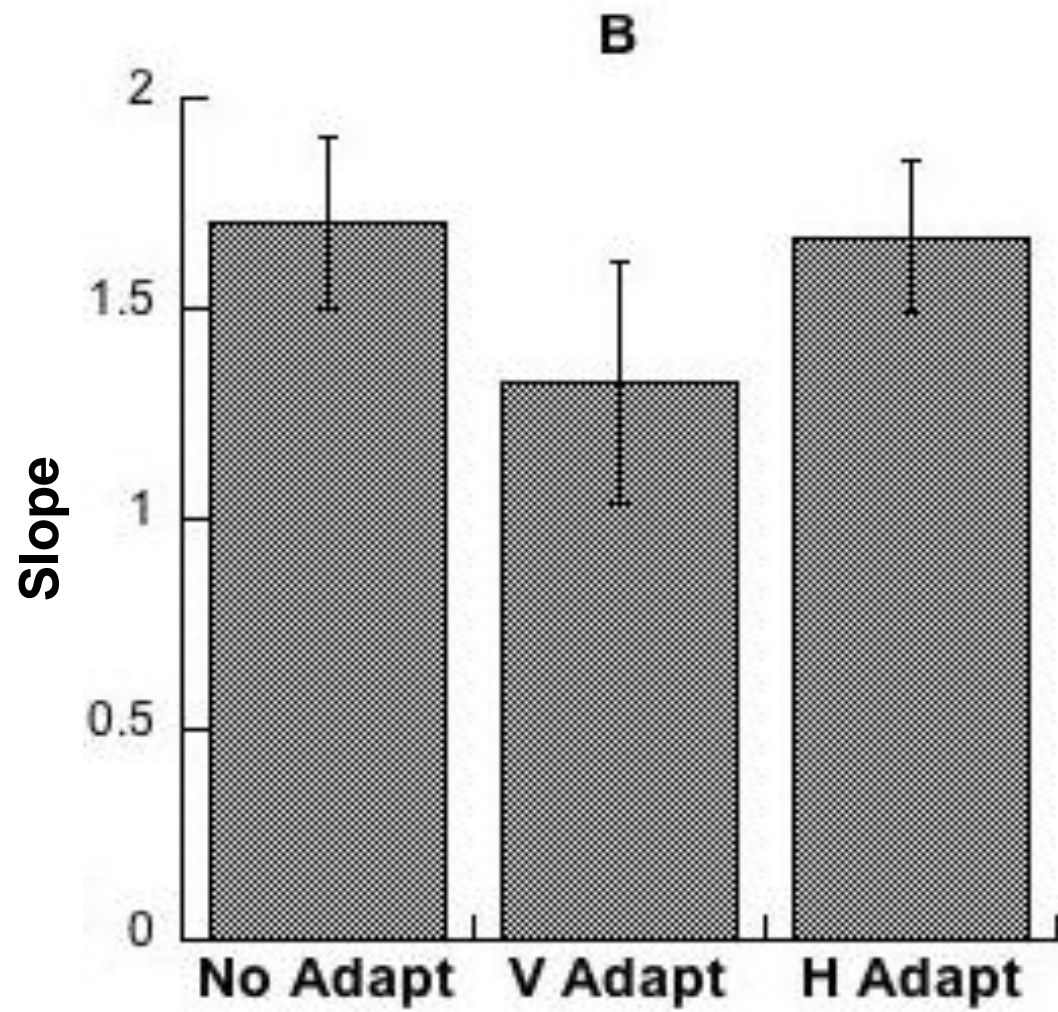
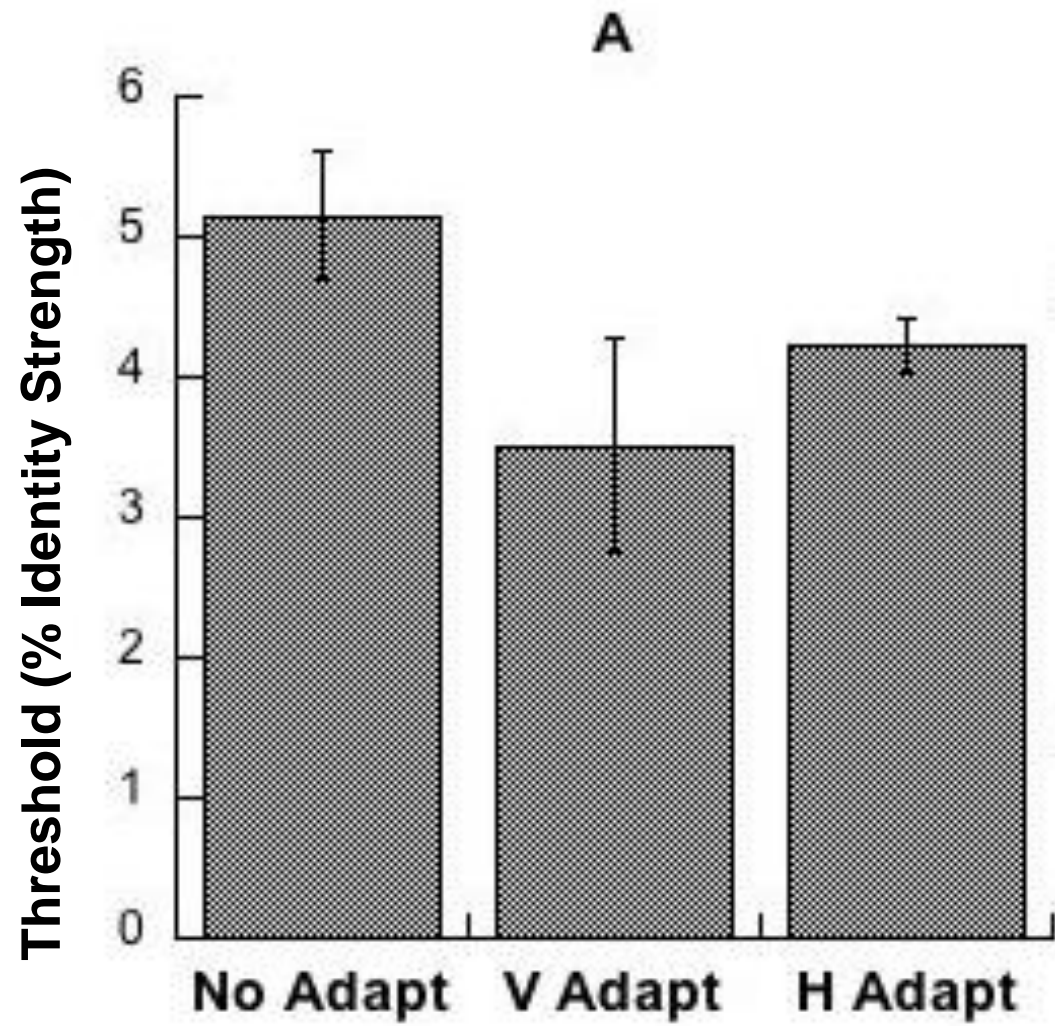
Test Stimulus



Which face was the target?



Which face was the target?



Experiment 2



-10

-5

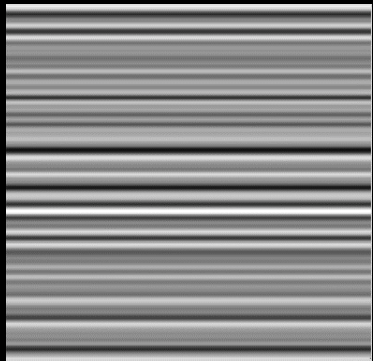
0

5

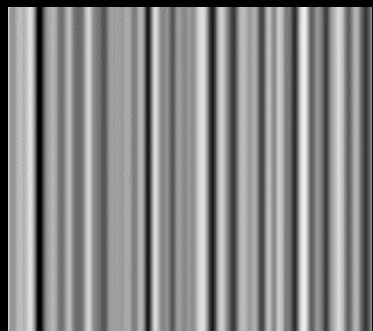
10

Pixel Stretch

Adapting Stage

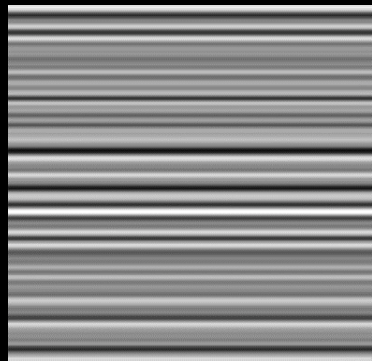


Horizontal
Adaptation
(1 min)

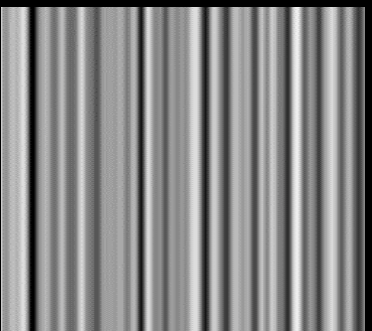


Vertical
Adaptation
(1 min)

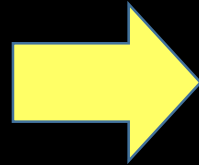
Testing Stage



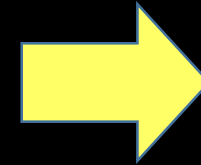
Horizontal
Adaptation
(5 sec)



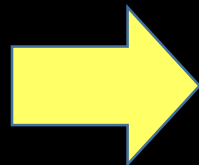
Vertical
Adaptation
(5 sec)



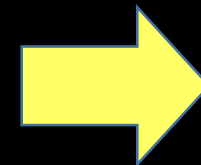
Test Stimulus



Was the face
stretched
horizontally
or vertically?

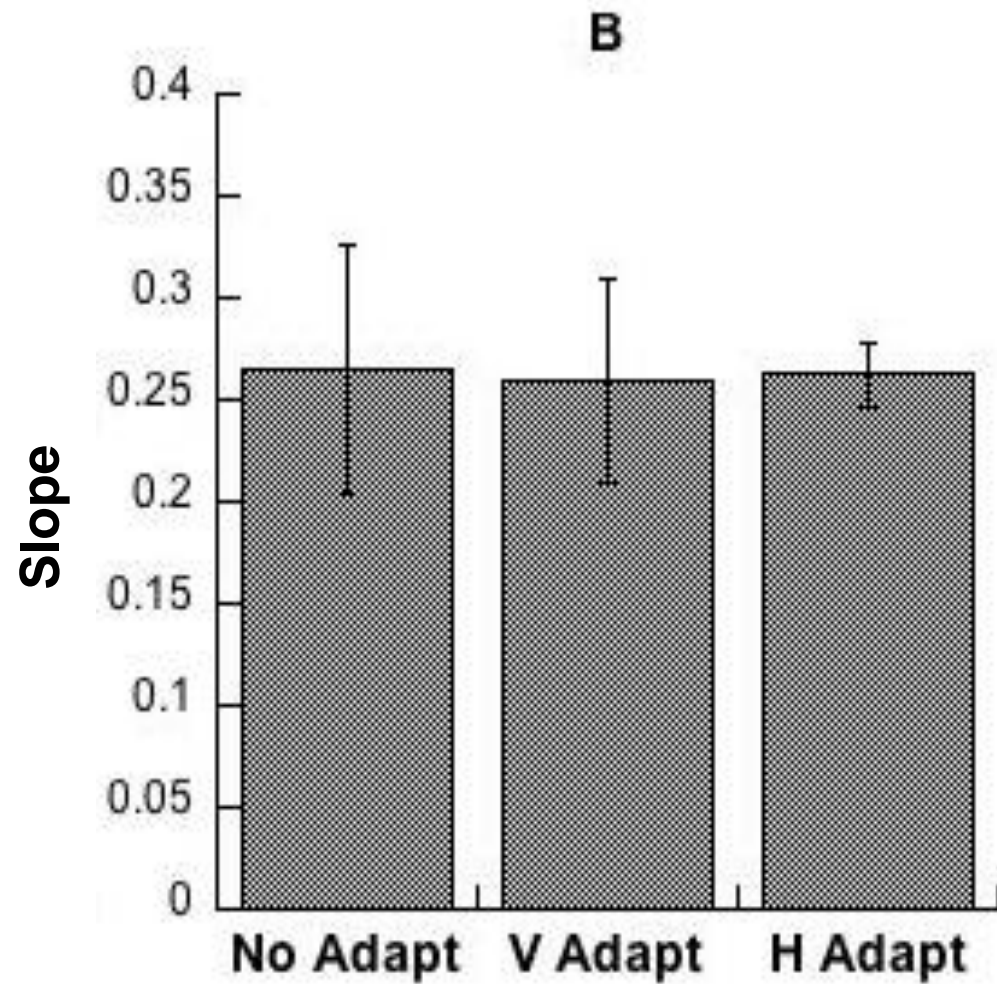
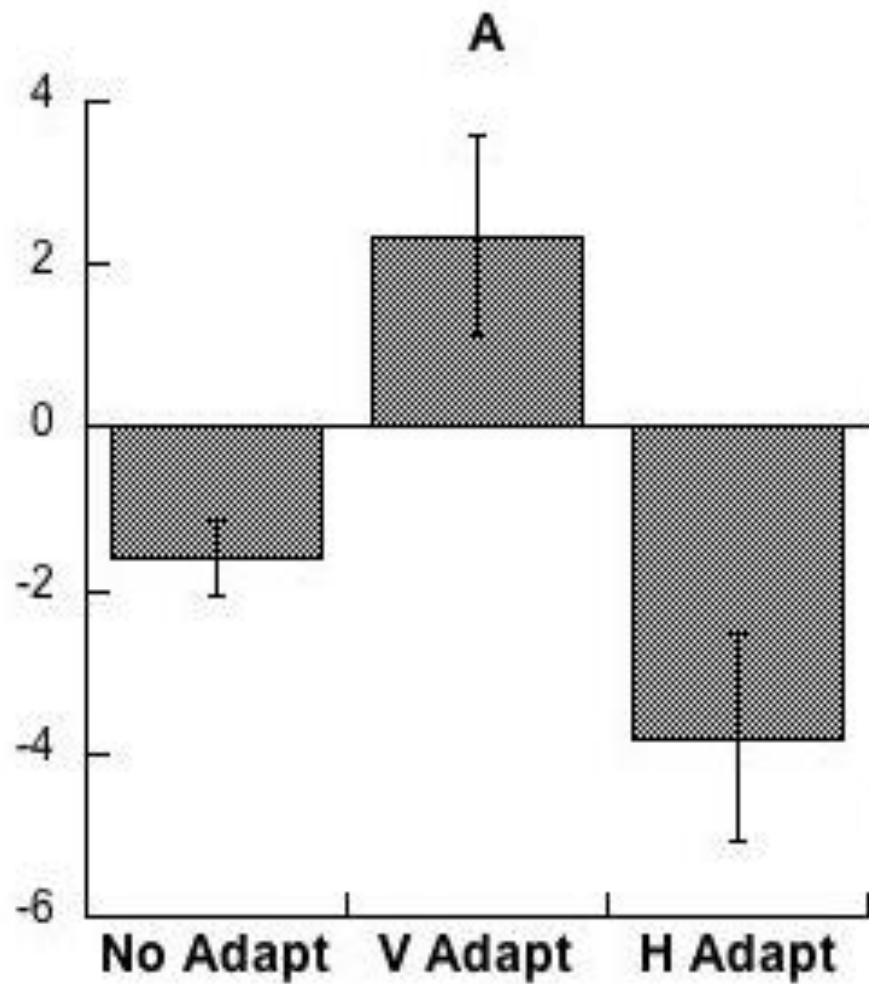


Test Stimulus



Which face
stretched
horizontally
or vertically?

Point of Subjective Equality
(Pixel Stretch)



A first-person perspective from the front of a red kayak on a calm lake. The kayak is orange-red with black gear straps. A black paddle is visible on the left side. The water is still, reflecting the sky and the dark, jagged mountains in the distance. The sky is a mix of orange, yellow, and grey, suggesting a sunset or sunrise. The text "Where to go from here" is centered in white over the middle of the image.

Where to go from here