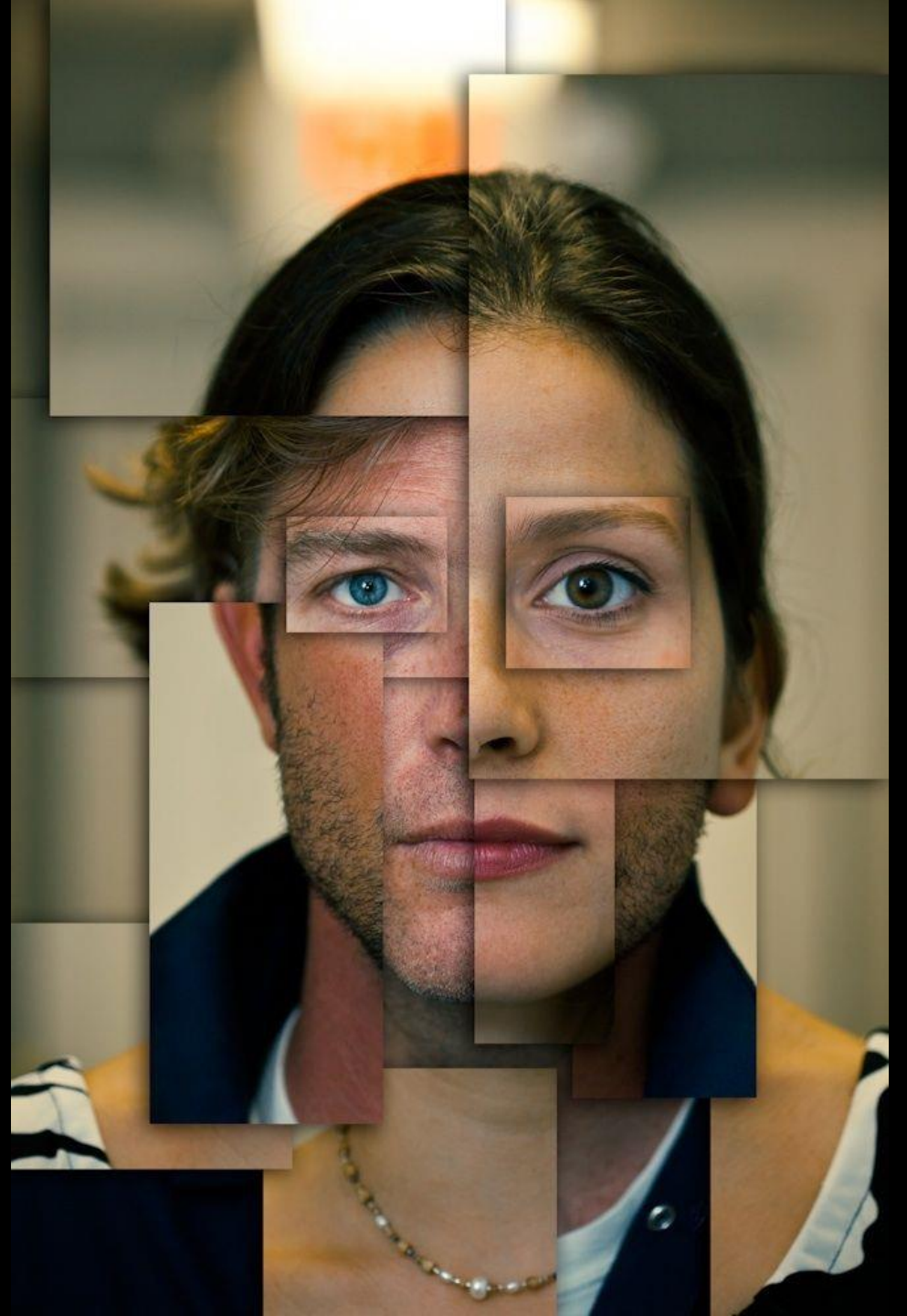
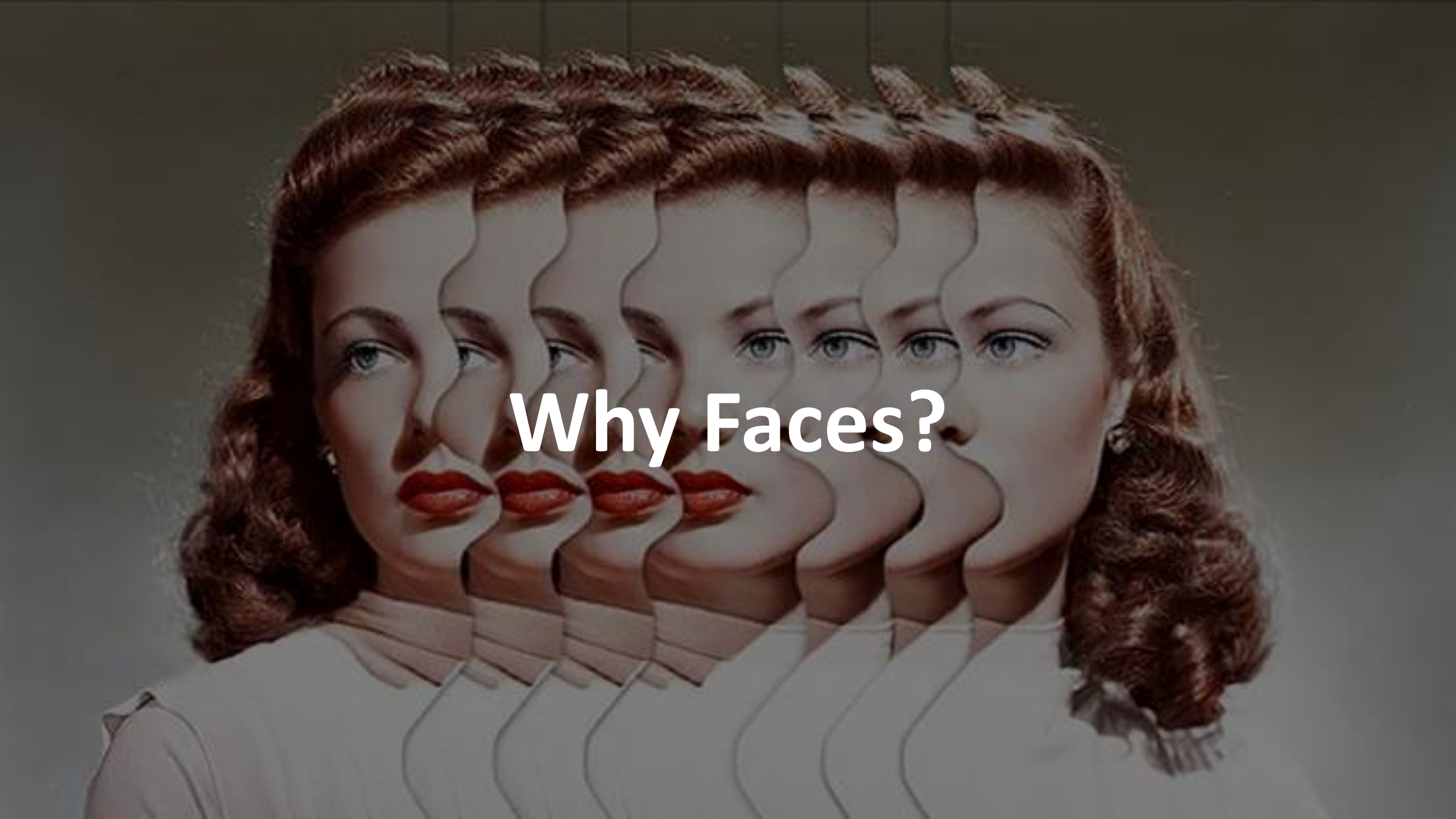


# The Effect of Orientation-Specific Adaptation on Face Recognition

Emily Cruikshank and  
Dr. Nicole Anderson



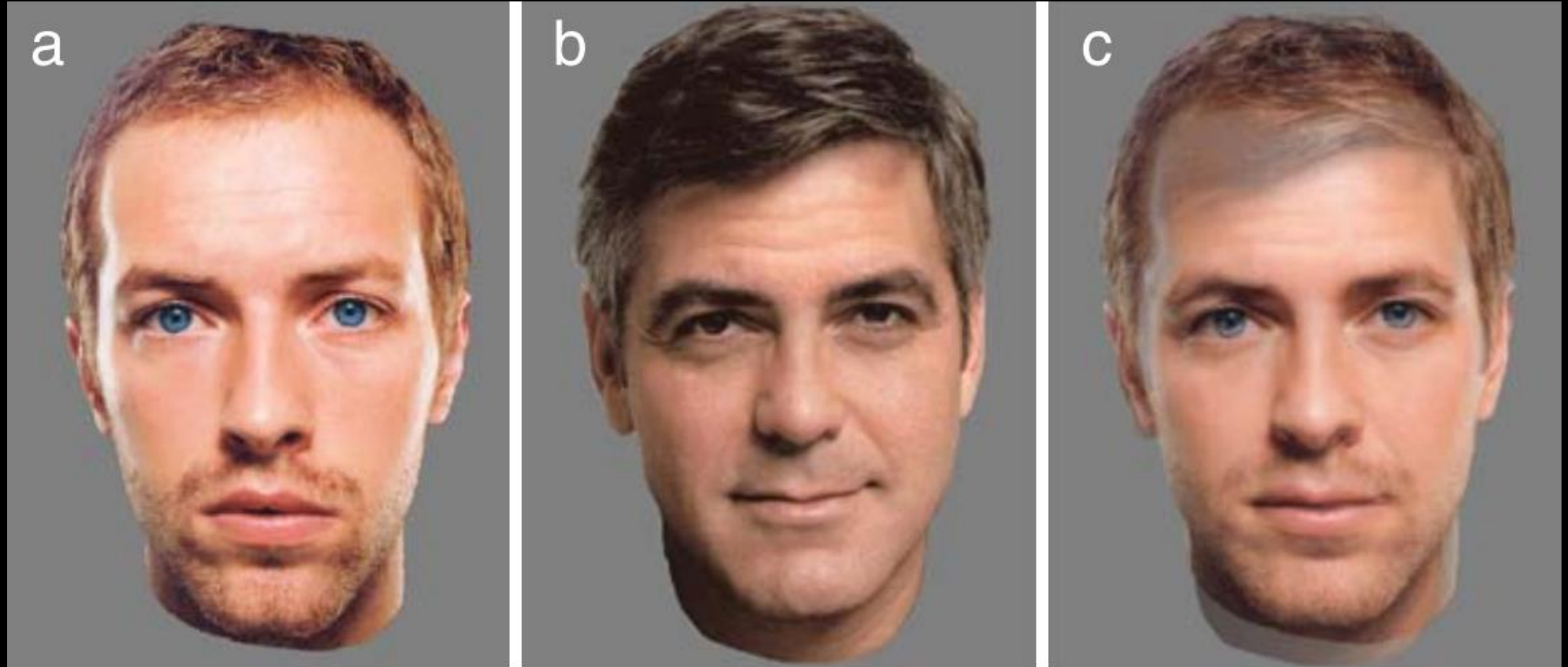


# Why Faces?

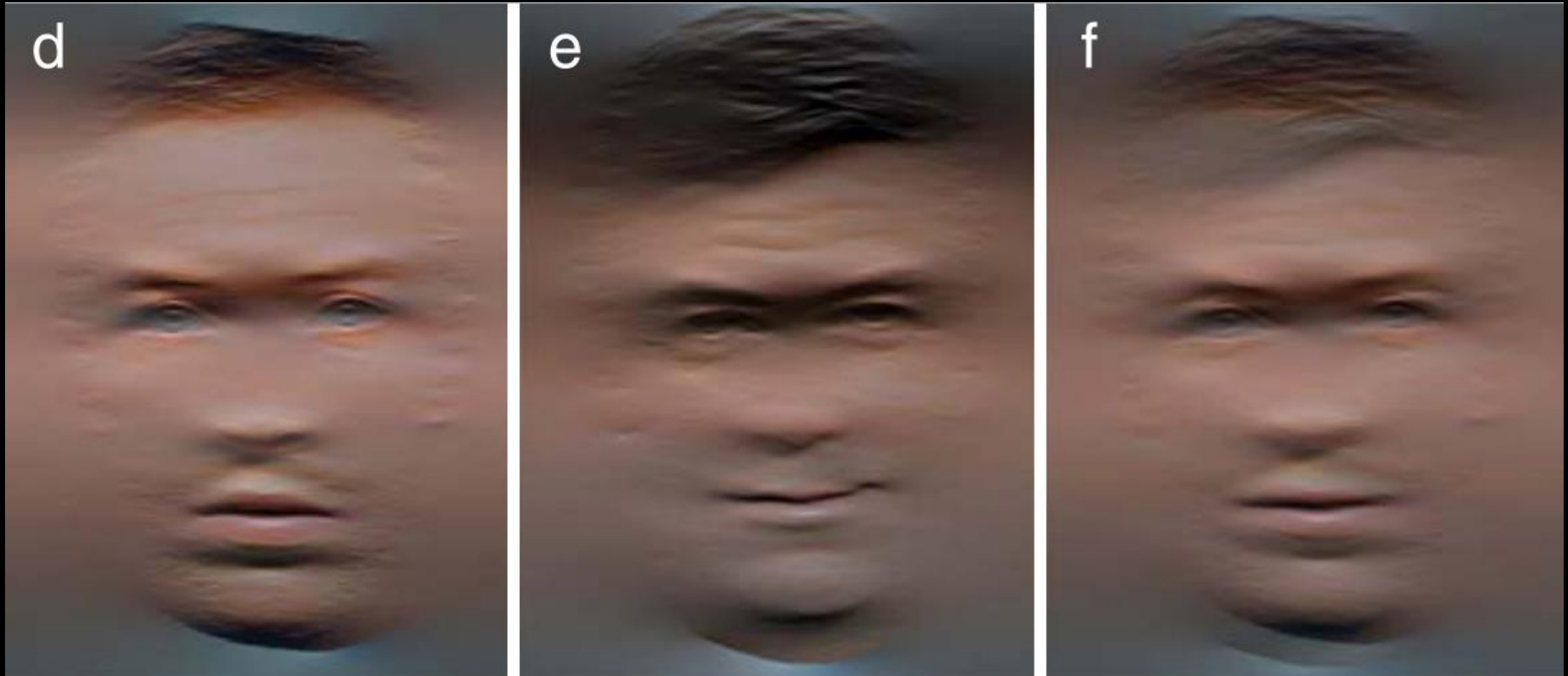
# Selective Adaptation



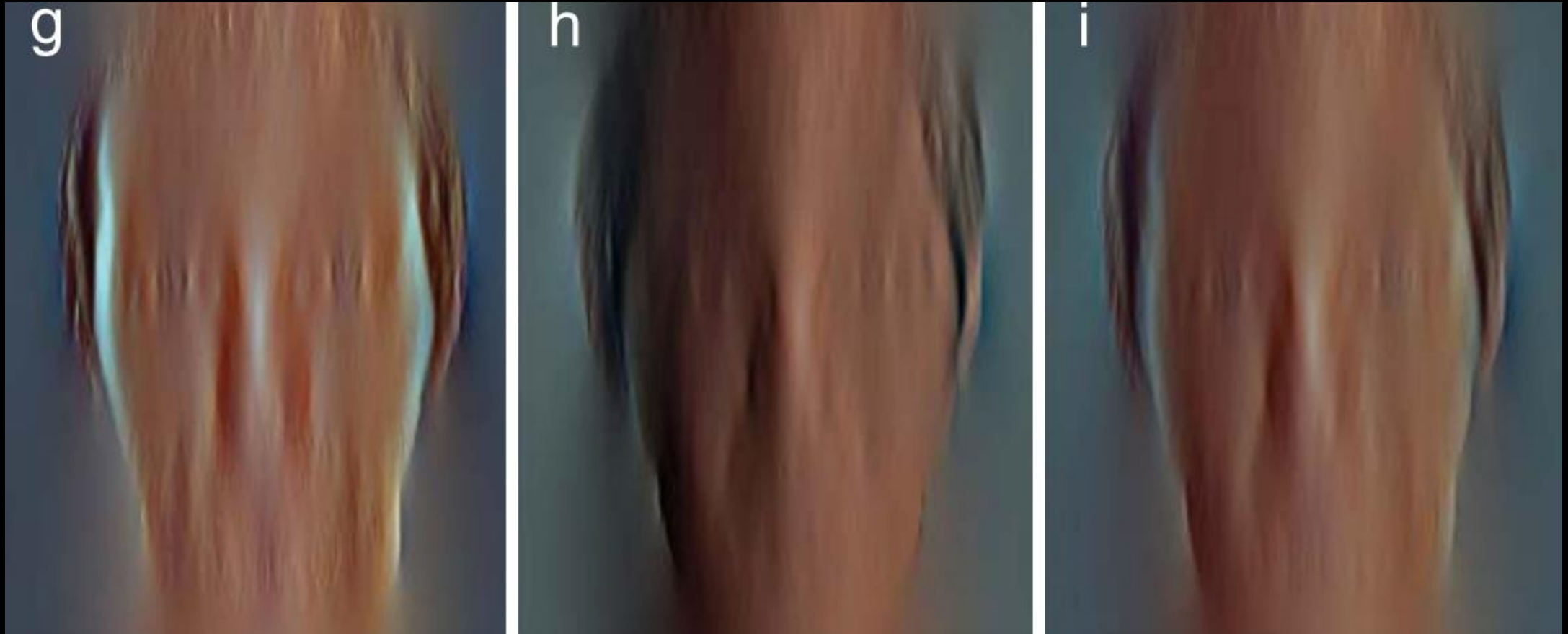
# Dakin & Watt (2009)



# 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%



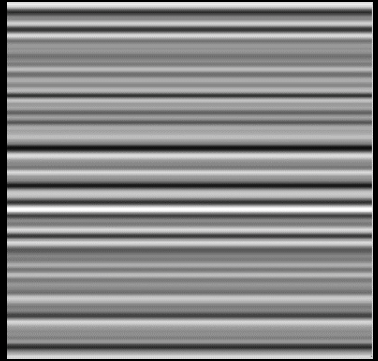
8%



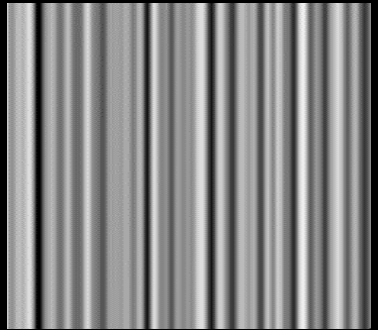
10%



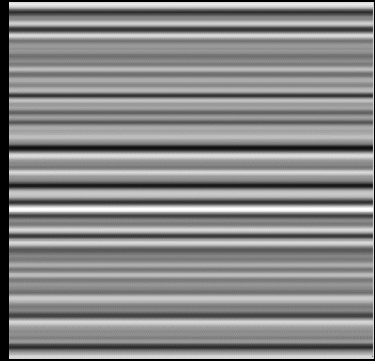
# Adapting Stage



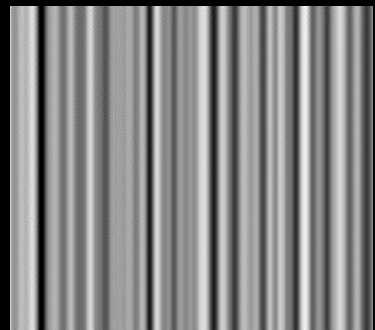
Horizontal Adaptation (1 min)



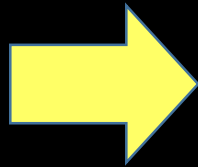
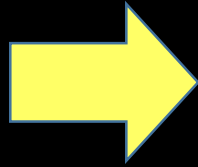
Vertical Adaptation (1 min)



Horizontal Adaptation (5 sec)



Vertical Adaptation (5 sec)



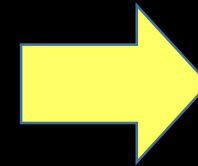
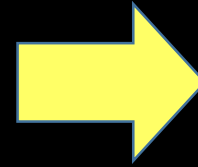
# Testing Stage



Test Stimulus



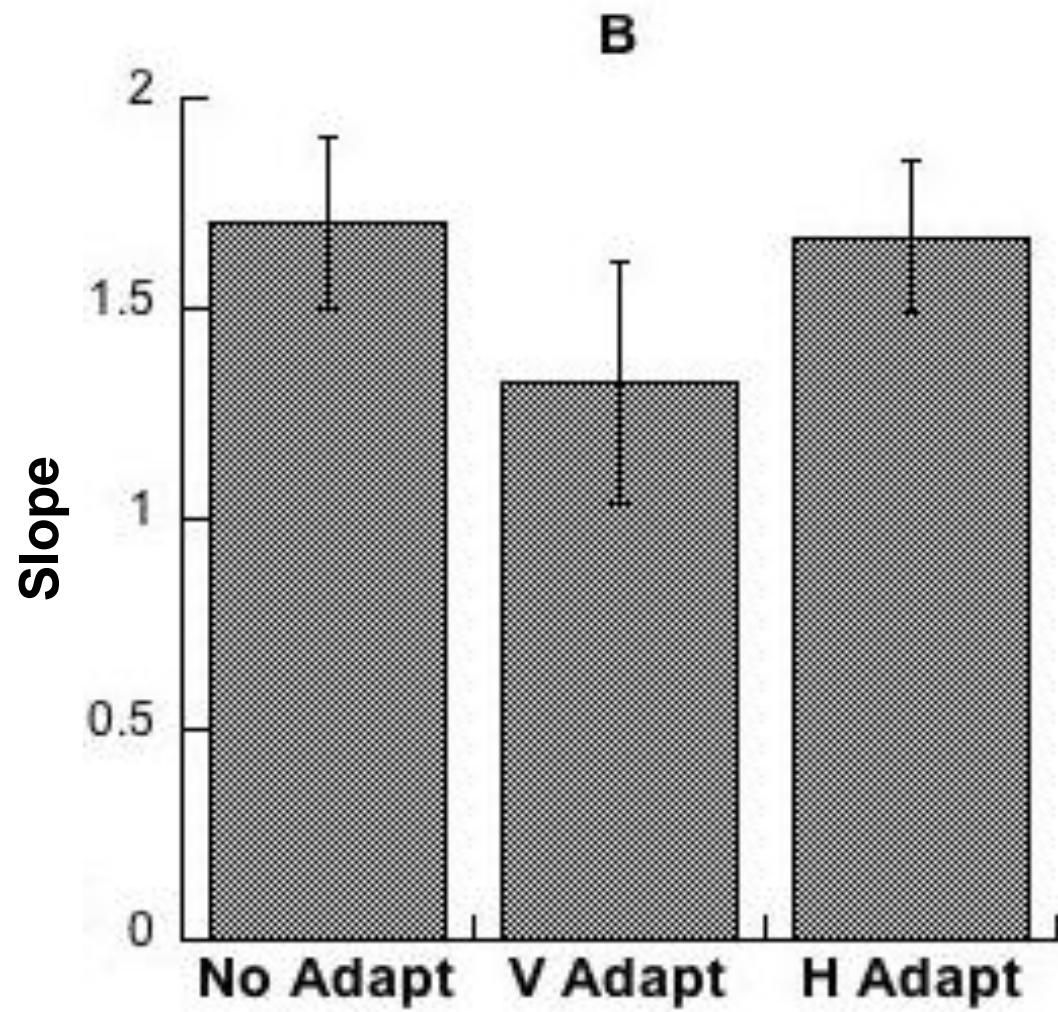
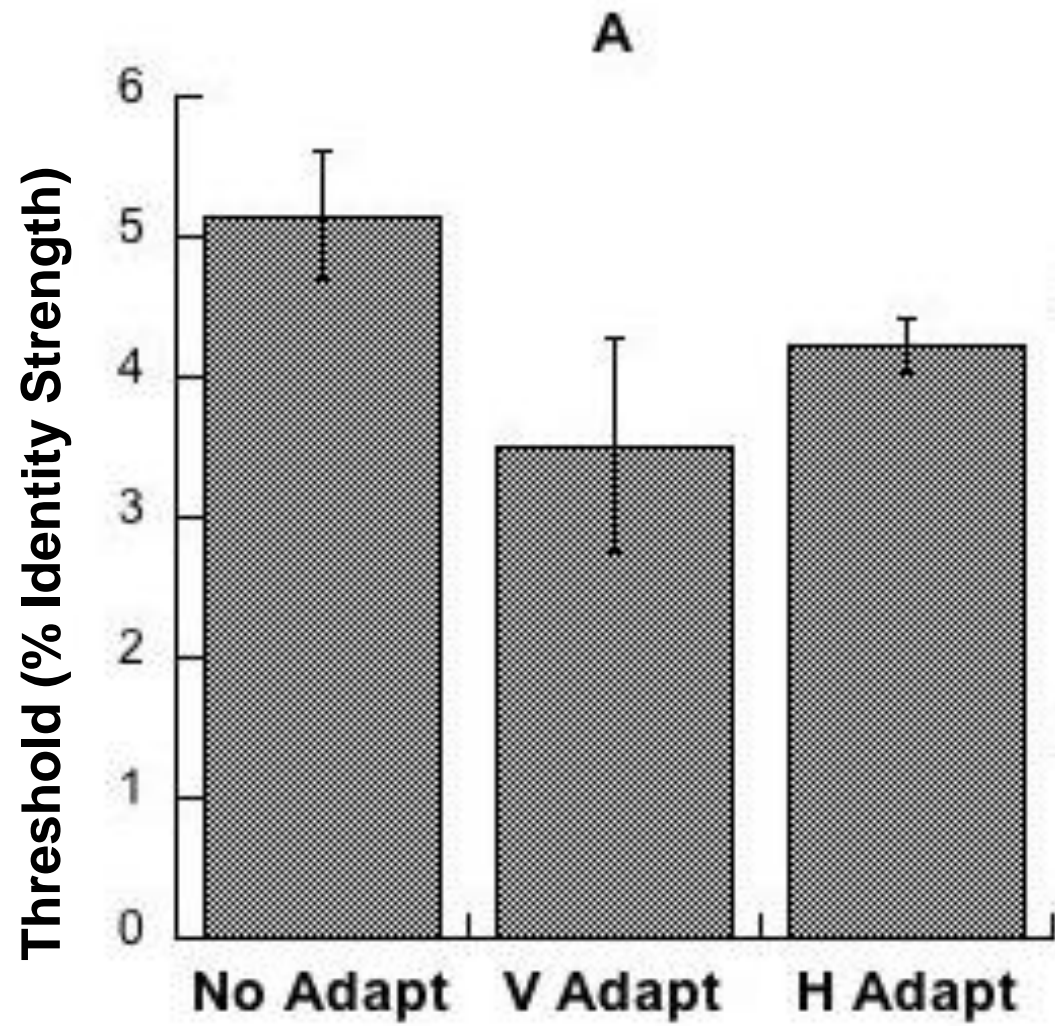
Test Stimulus



Which face was the target?



Which face was the target?



# Experiment 2



-10

-5

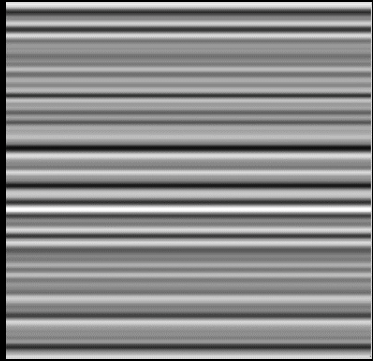
0

5

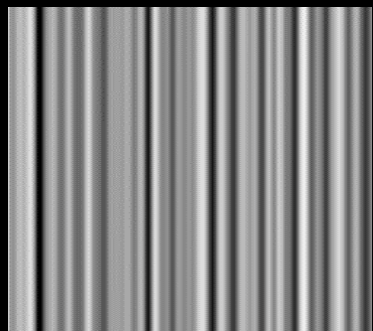
10

Pixel Stretch

## Adapting Stage

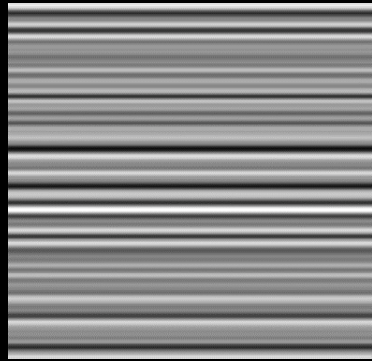


Horizontal  
Adaptation  
(1 min)

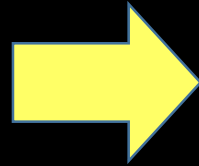


Vertical  
Adaptation  
(1 min)

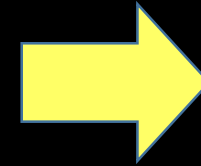
## Testing Stage



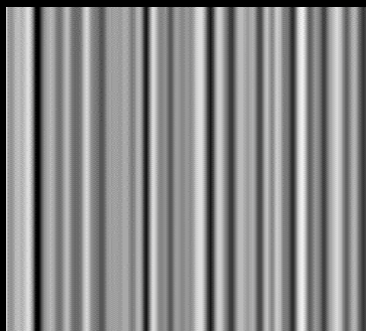
Horizontal  
Adaptation  
(5 sec)



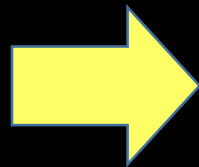
Test Stimulus



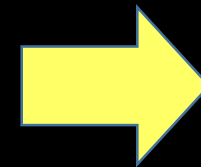
Was the face  
stretched  
horizontally  
or vertically?



Vertical  
Adaptation  
(5 sec)

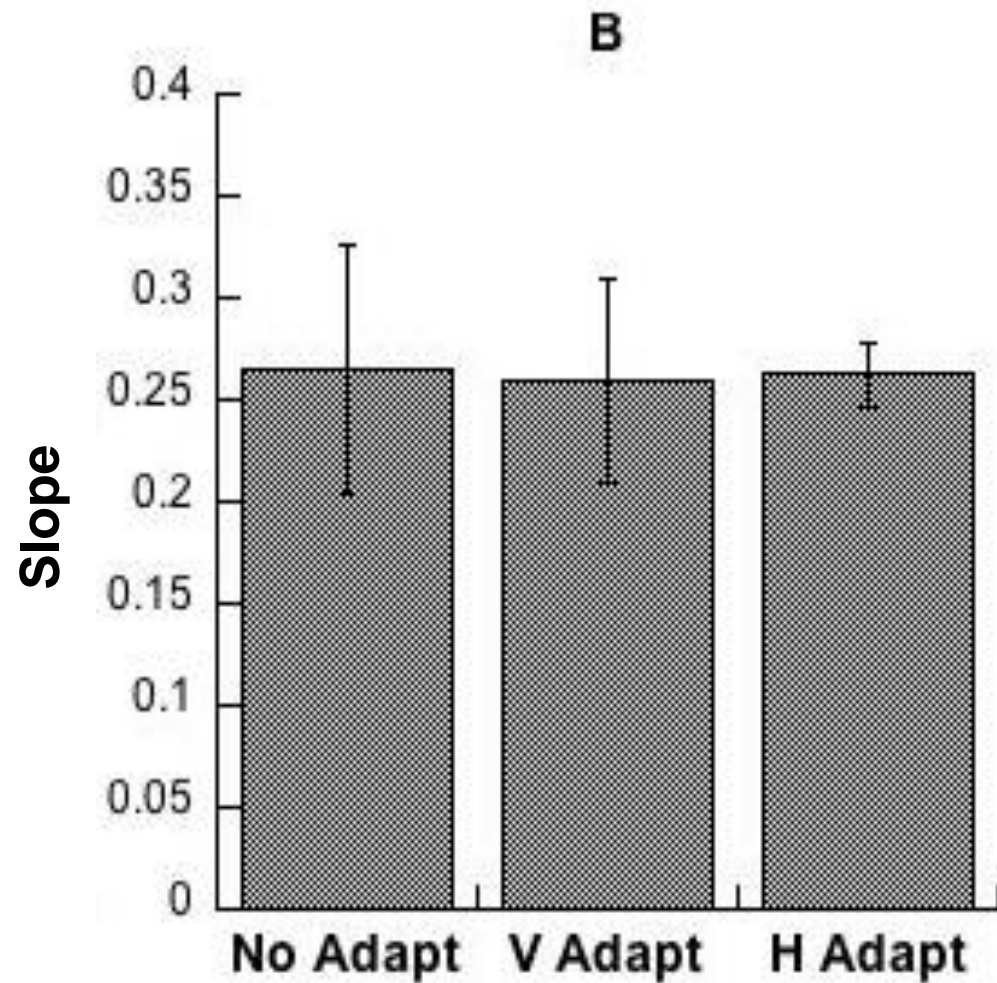
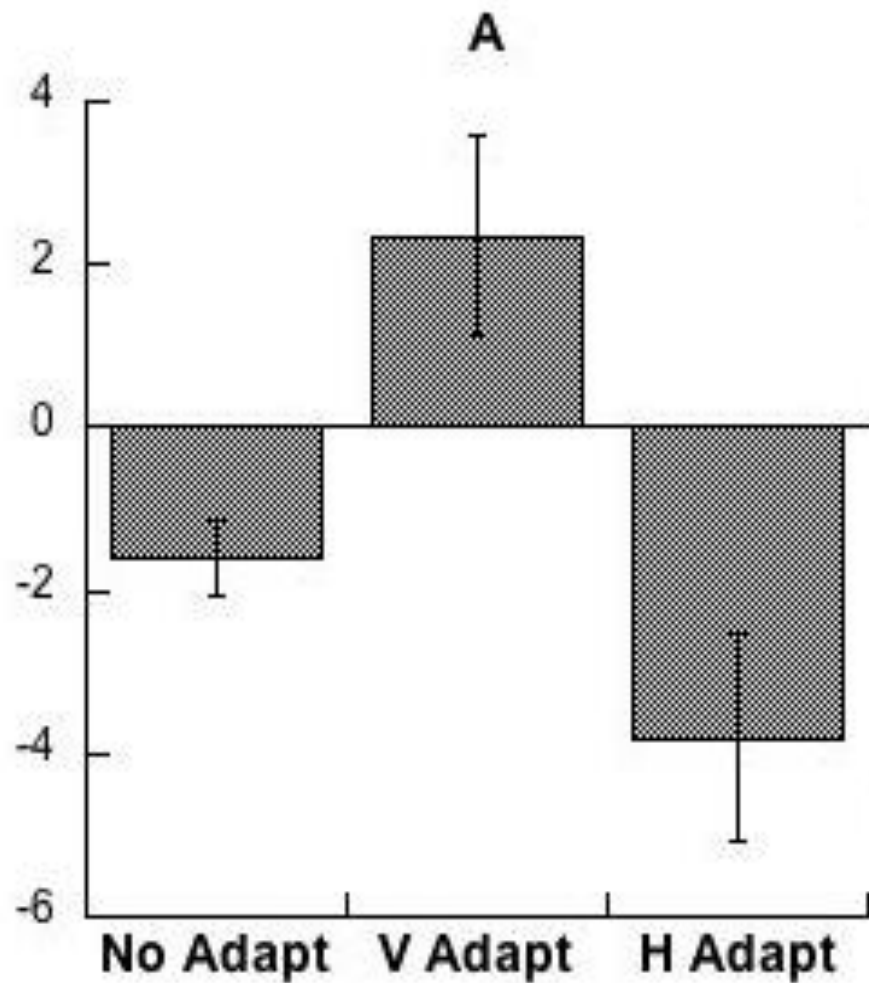


Test Stimulus



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 and has a black paddle, a blue water bottle, and other gear secured with black straps. 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 overall mood is serene and adventurous.

Where to go from here