

9.00. Intro to Psychology

Professor John Gabrieli

9.00. Intro to Psychology

Objective: Scientific study of human nature/mind/behavior

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brain

perception

cognition

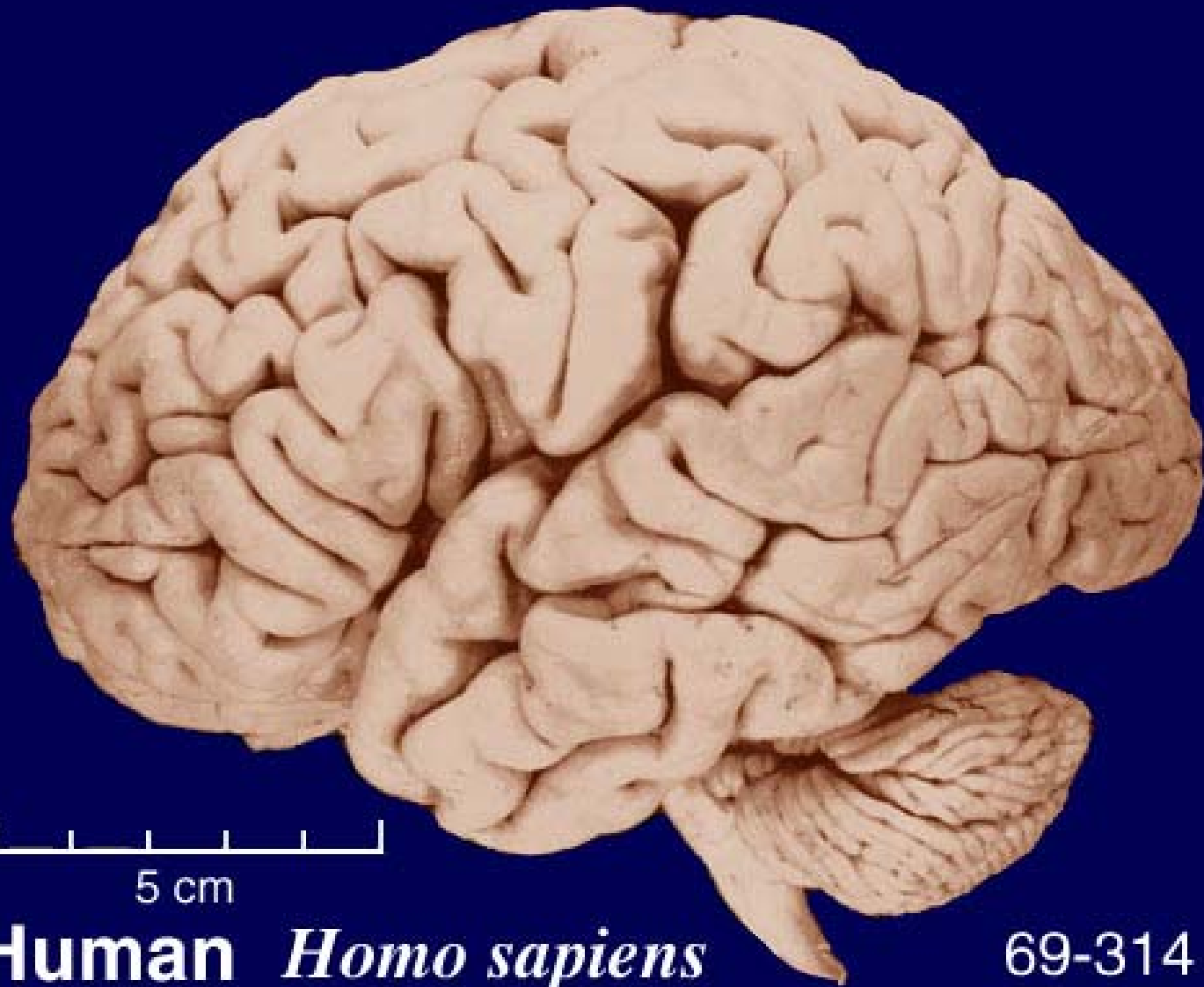
emotion

personality

development

social interaction

psychopathology



5 cm

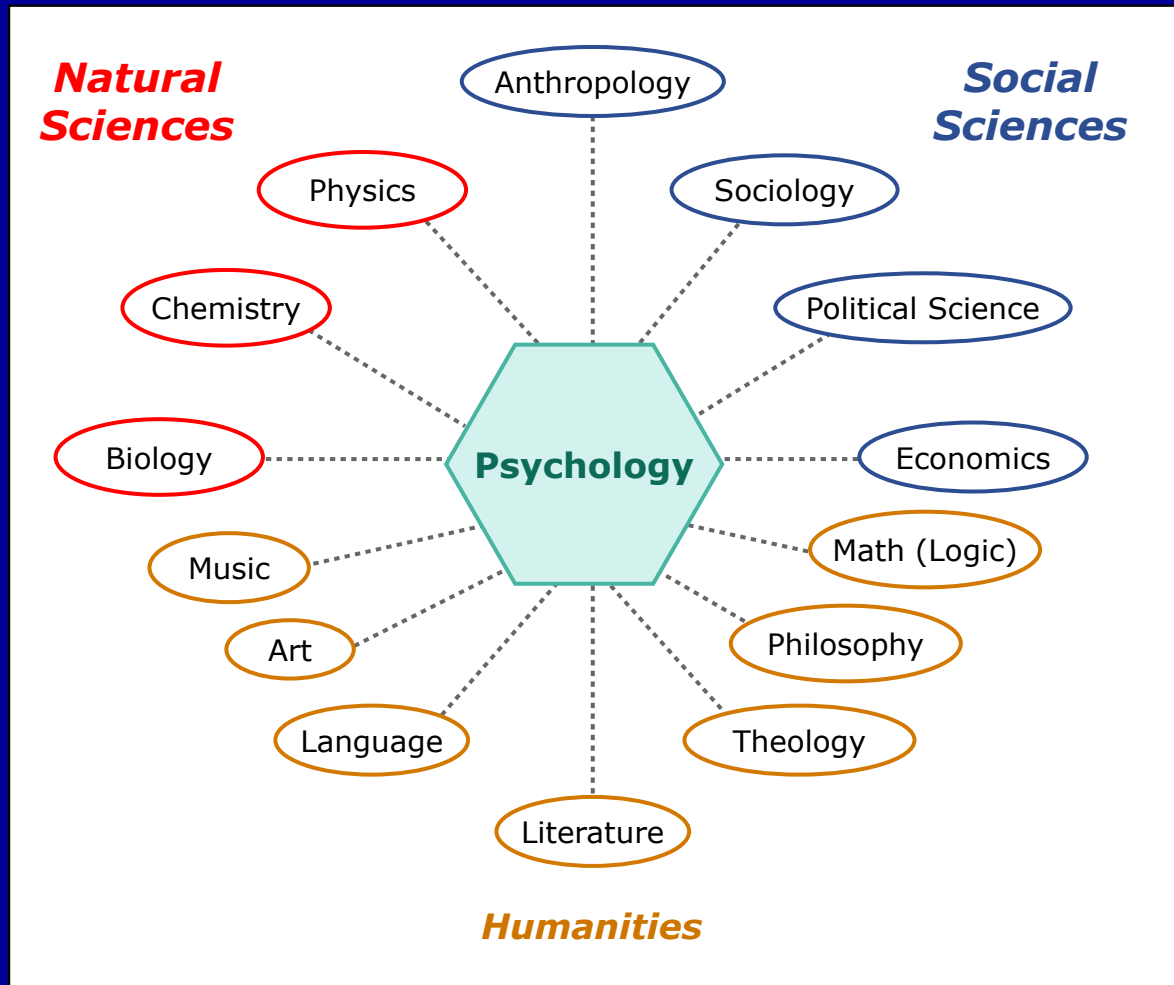
Human *Homo sapiens*

69-314

Univ. of Wisconsin-Madison Brain Collection

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and <http://brainmuseum.org>, supported by the US National Science Foundation.

A Psychocentric View



After Peter Gray, "The Value of Psychology 101 in Liberal Arts Education: A Psychocentric Theory of the University." *Observer (APS)*, October 2008.

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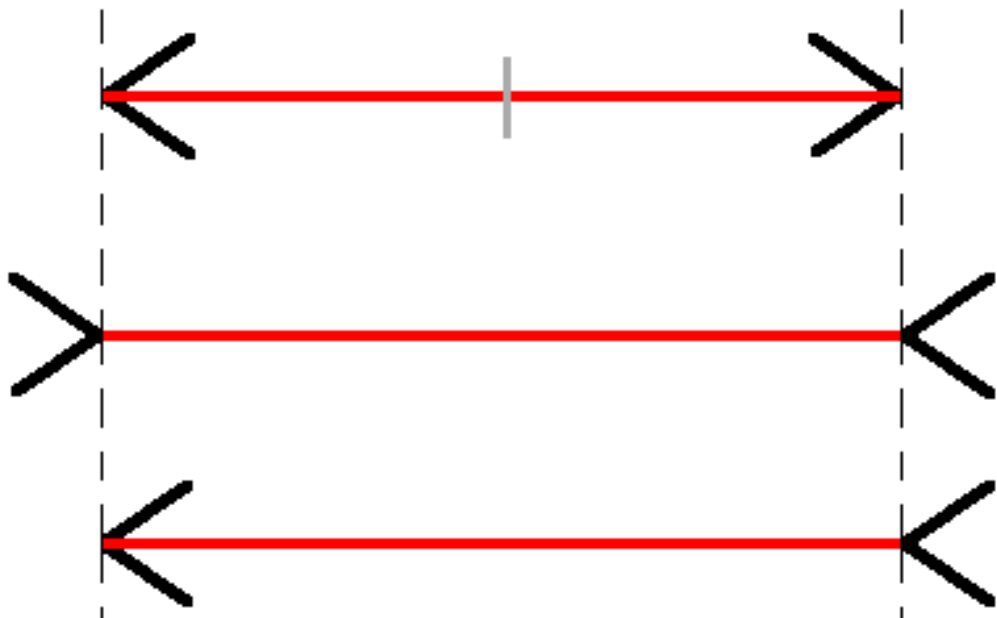
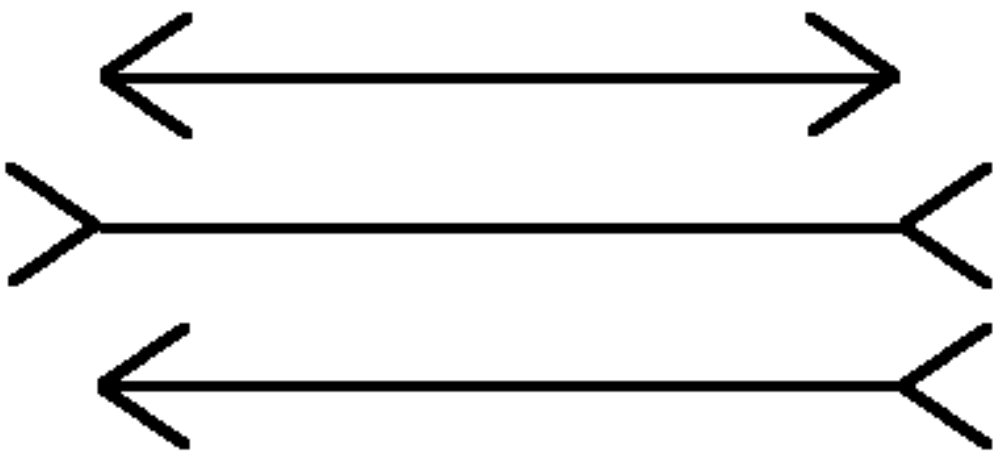
how our minds make our worlds

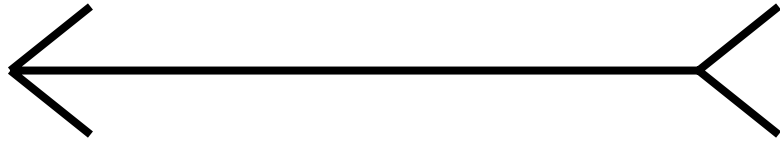
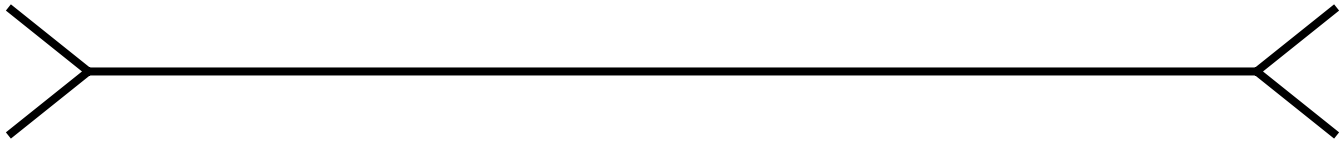
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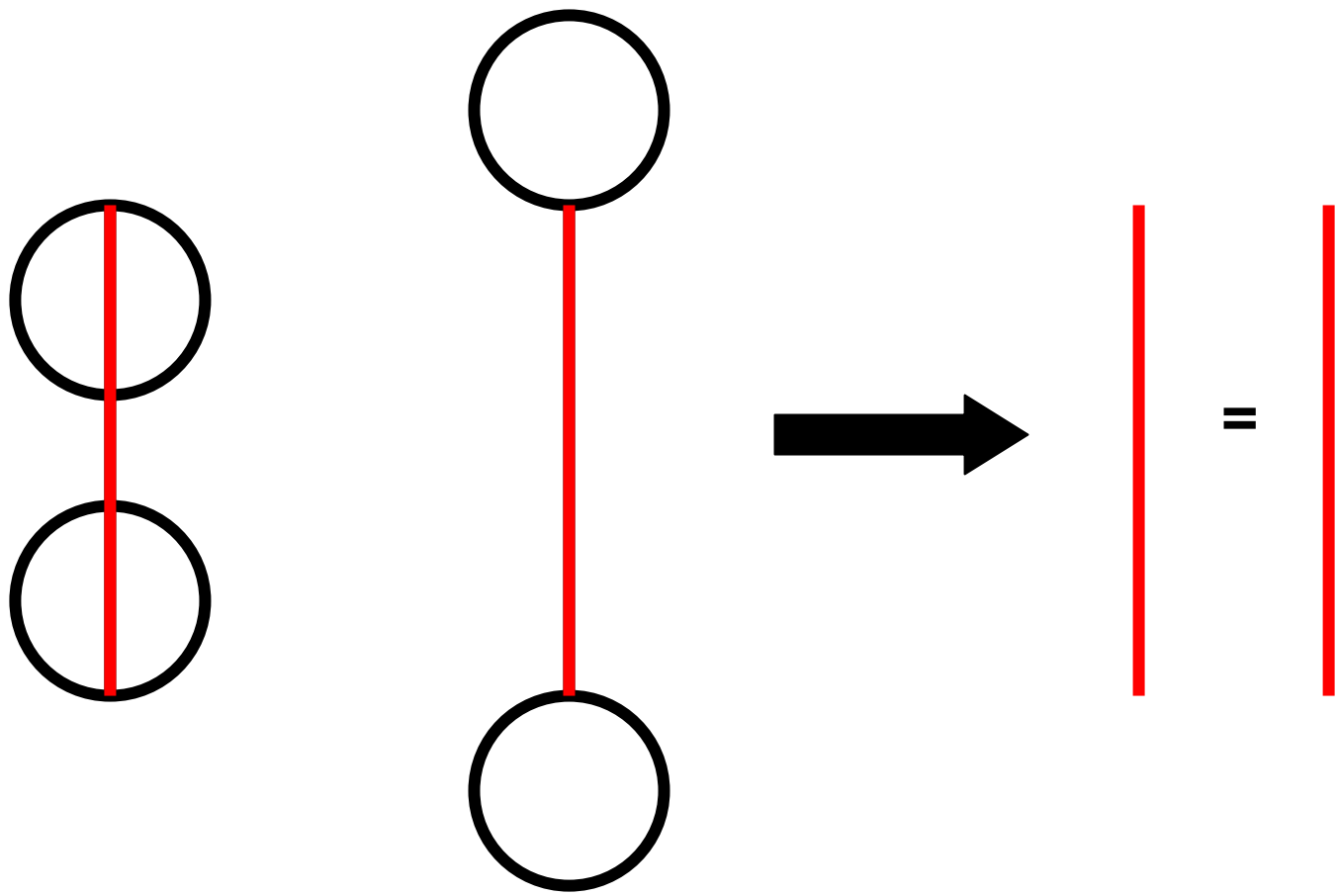
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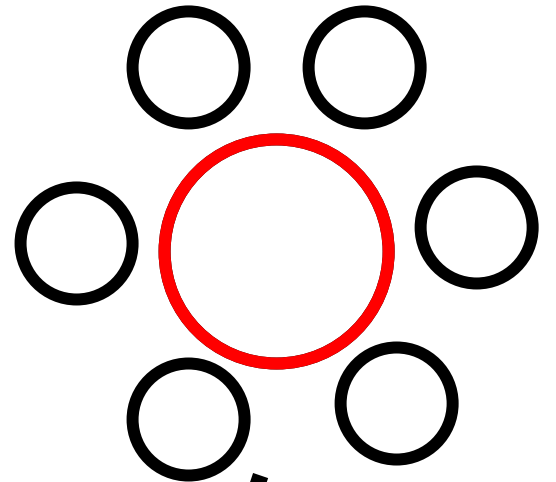
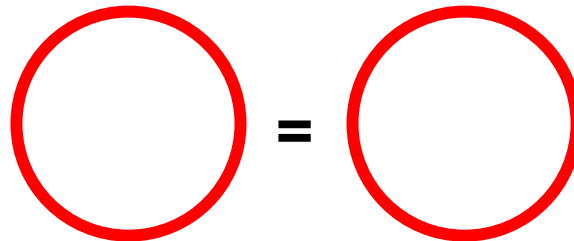
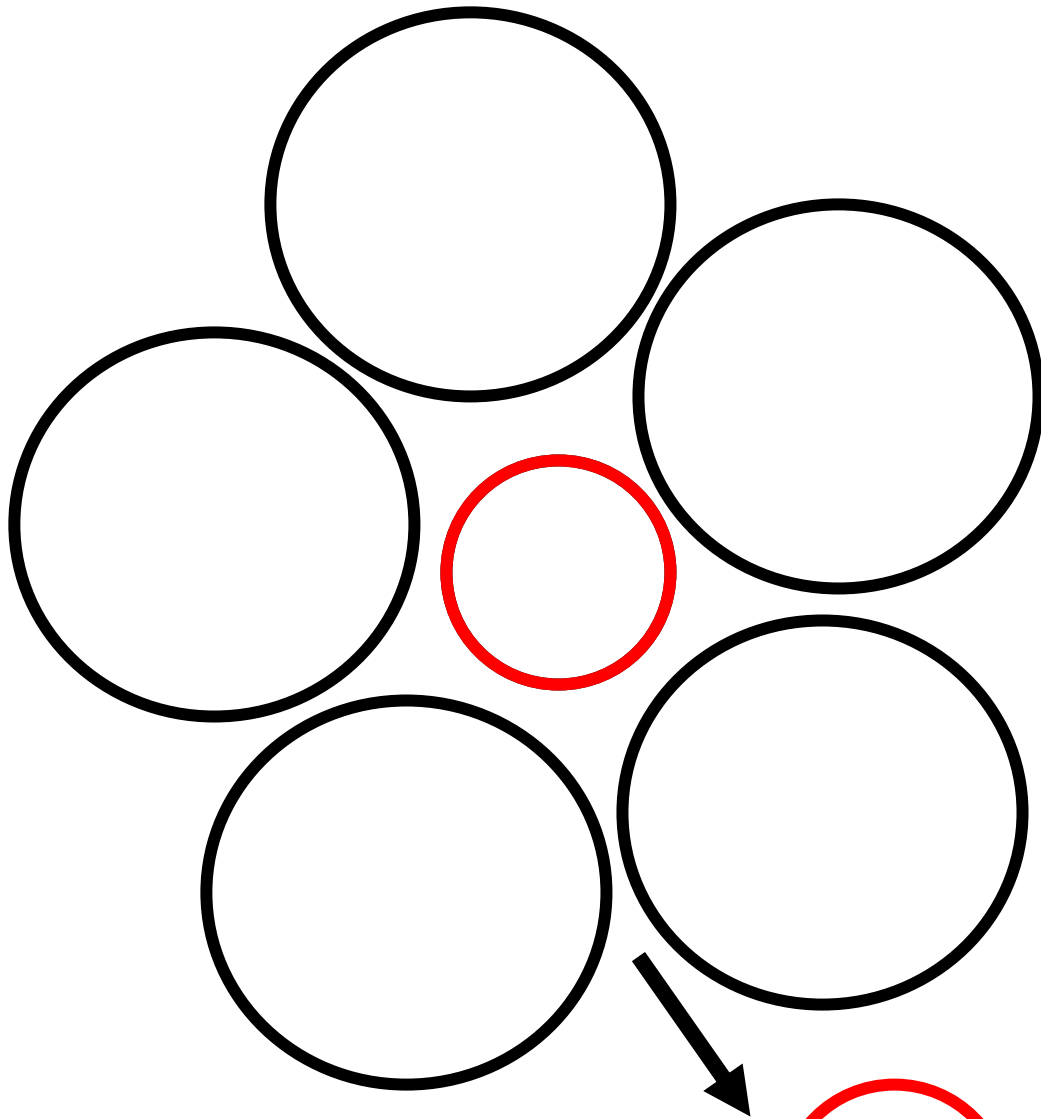
how our minds make our worlds

what we see

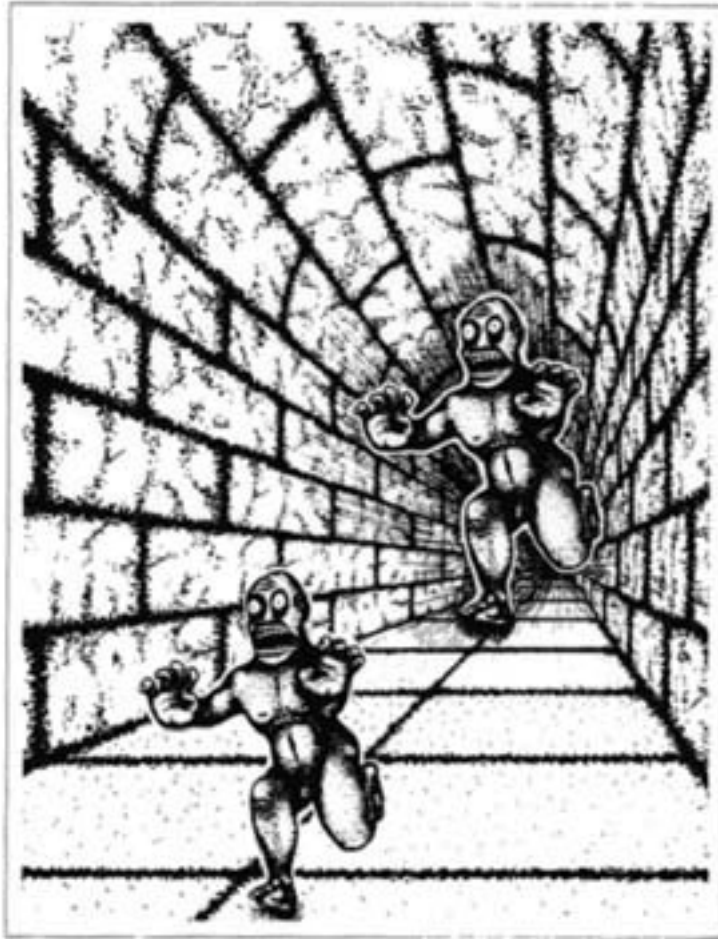




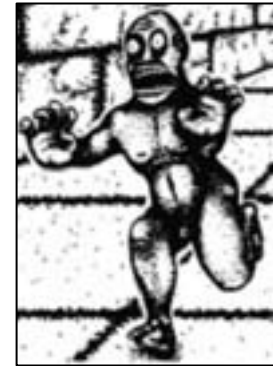




Ebbinghaus

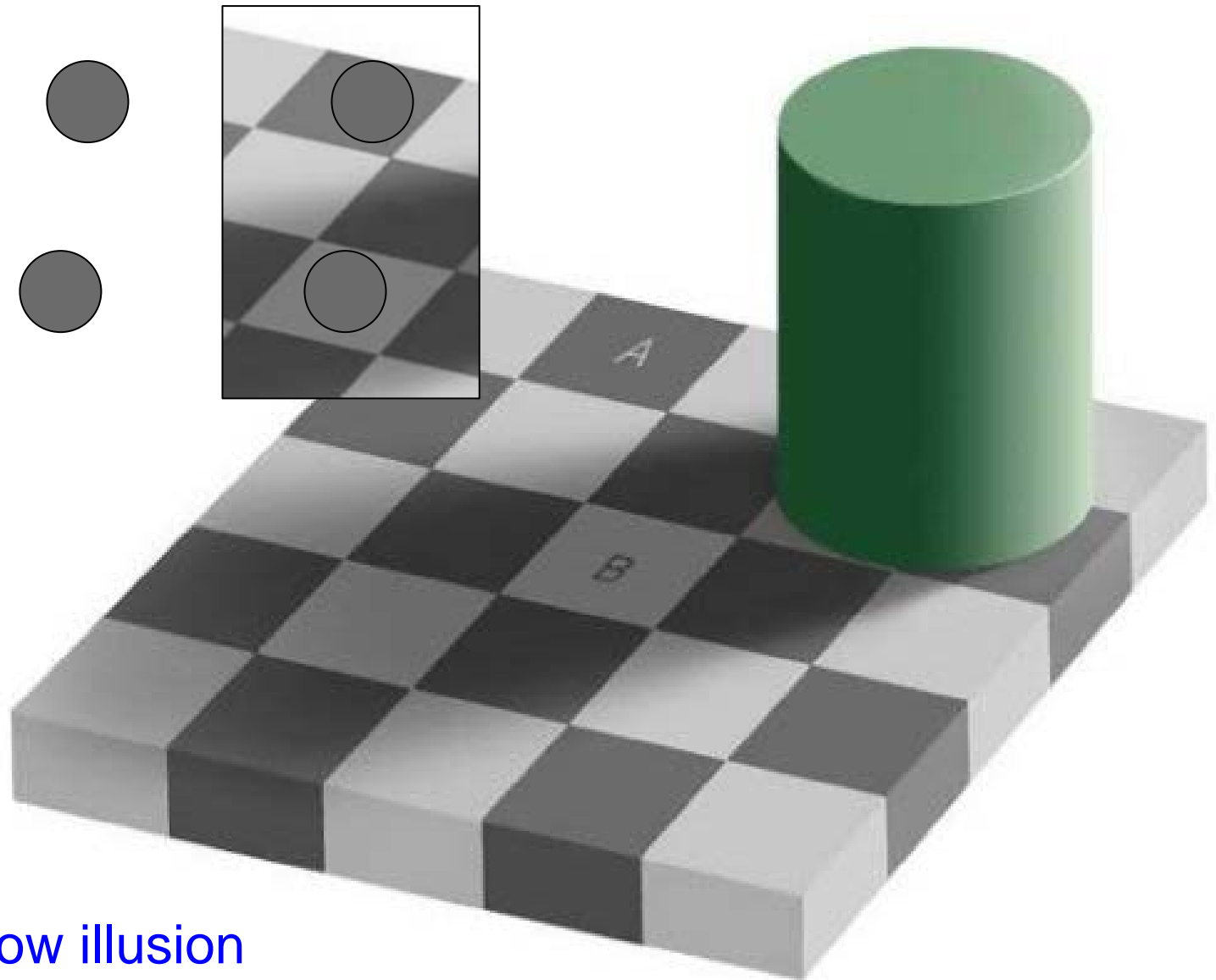


A1 TERROR SUBTERRA



Source: Shepard, R. *Mind Sights: Original Visual Illusions, Ambiguities, and Other Anomalies, With a Commentary on the Play of Mind in Perception and Art*. W H Freeman & Co, 1990. © W H Freeman & Co. All rights reserved. This content is excluded from our Creative Commons license. For more information, see <http://ocw.mit.edu/fairuse>.

Checker-shadow illusion



Checker-shadow illusion

Visual/Optical Illusions

Criss-Cross Effect

The Koffka Ring

White's Illusion

Simultaneous Contrast Effect

Illusions cont'd

Shepard's Tables

Stepping Feet

Shading, Depth, and Faces

Memory for a Picture

10 questions

Memory for a Picture

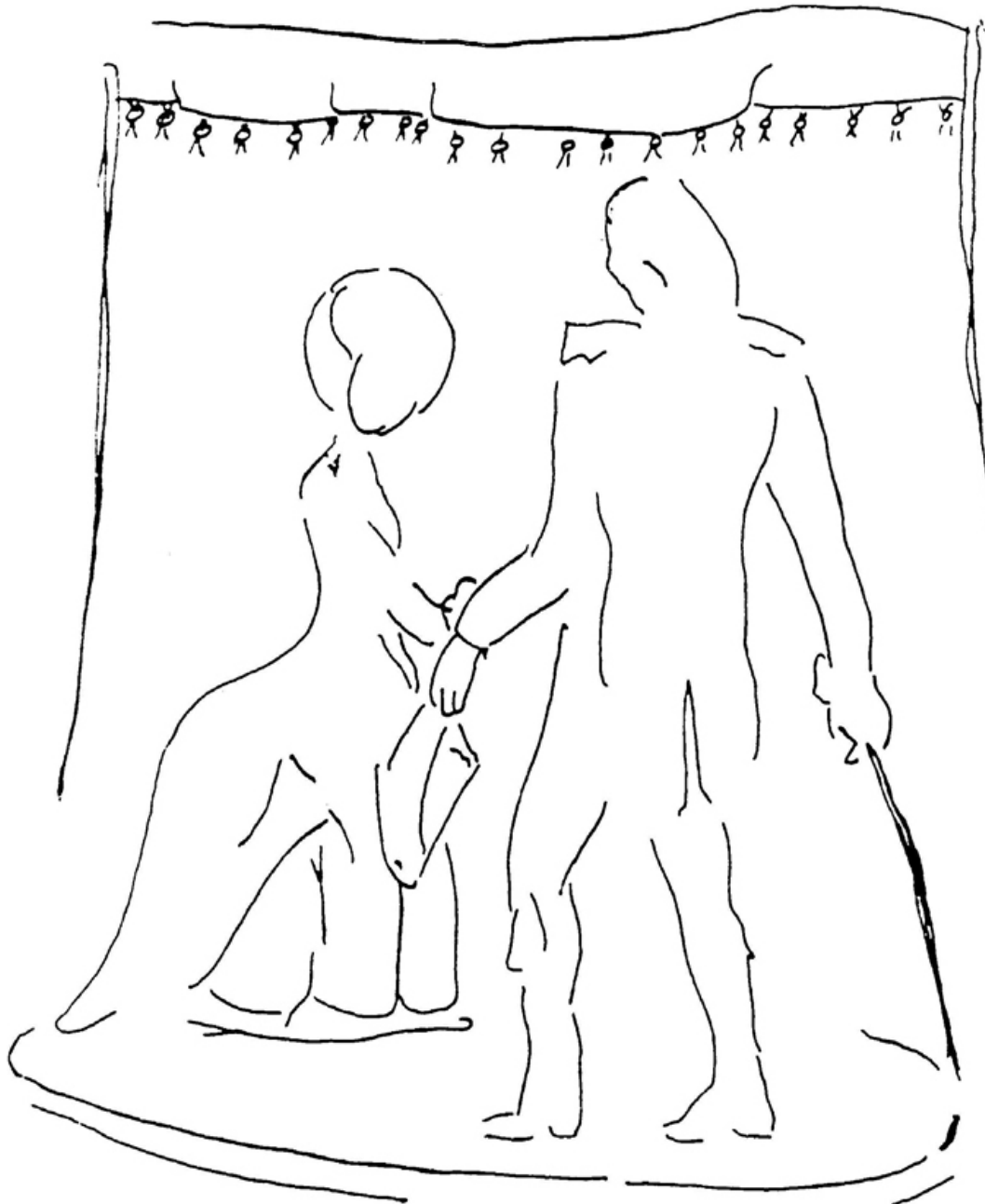
Group A:

You are going to look briefly at a picture and then answer some questions about it. The picture is a rough sketch of a poster for a trained seal act. Do not dwell on the picture. Look at it only long enough to “take it all in” once. After that, you will answer *yes* or *no* to a series of questions.

Memory for a Picture

Group B:

You are going to look briefly at a picture and then answer some questions about it. The picture is a rough sketch of a poster for a costume ball. Do not dwell on the picture. Look at it only long enough to “take it all in” once. After that, you will answer *yes* or *no* to a series of questions.



Source: Weiten, Wayne. *Psychology: Themes and Variations*. Cengage Learning, 2010. © Cengage Learning. All rights reserved. This content is excluded from our Creative Commons license. For more information, see <http://ocw.mit.edu/fairuse>.

In the picture was there:

YES

NO

1. An automobile?

2. A man?

3. A woman?

4. A child?

5. An animal?

6. A whip?

7. A sword?

8. A man's hat?

9. A ball?

10. A fish?

Memory for a Picture

Group A:

You are going to look briefly at a picture and then answer some questions about it. The picture is a rough sketch of a poster for a *trained seal act*. Do not dwell on the picture. Look at it only long enough to “take it all in” once. After that, you will answer *yes* or *no* to a series of questions.

Group B:

You are going to look briefly at a picture and then answer some questions about it. The picture is a rough sketch of a poster for a *costume ball*. Do not dwell on the picture. Look at it only long enough to “take it all in” once. After that, you will answer *yes* or *no* to a series of questions.

13

13

A TEST OF ATTENTION & COUNTING!

**HOW MANY TIMES DO THE PEOPLE IN
THE WHITE SHIRTS PASS THE
BASKETBALL?**

A TEST OF ATTENTION & COUNTING!

Watch video at

<http://www.youtube.com/watch?v=vJG698U2Mvo>

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how our minds make our worlds

what we *hear*

What is he saying?

McGurk Effect Demo

<http://www.youtube.com/watch?v=aFPtc8BVdJk>

What is he saying?

McGurk Effect Demo

- Most adults (98%) think they hear "**DA**"
- In reality, you
 - *hear* the sound "**BA**"
 - see the lip movements "**GA**"

H. McGurk & J. MacDonald, Nature, 1976

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what we *know*

**Which is farther east:
San Diego or Reno?**

**Which is farther north:
Philadelphia or Rome, Italy?**

**Which is farther north:
Atlanta or Chicago?**

**Which is farther north:
Portland or Toronto?**

**Which is further west:
Miami, Florida or Santiago, Chile?**

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what we learn and remember

**LISTEN TO THE WORDS,
THEN WRITE DOWN THE WORDS
YOU REMEMBER**

Automaticity

- Power
- Peril

**ONE WAY
NOT DO
ENTER**



**PARIS
IN THE
THE SPRING**

HOW MANY F's?

FINISHED FILES ARE THE RE-
SULT OF YEARS OF SCIENTIF-
IC STUDY COMBINED WITH
THE
EXPERIENCE OF MANY YEARS

Stroop Effect

Word Set #1

RED	GREEN	BLUE	YELLOW	PINK
ORANGE	BLUE	GREEN	BLUE	WHITE
GREEN	YELLOW	ORANGE	BLUE	WHITE
BROWN	RED	BLUE	YELLOW	GREEN
PINK	YELLOW	GREEN	BLUE	RED

Word Set #2

RED

GREEN

BLUE

YELLOW

PINK

ORANGE

BLUE

GREEN

BLUE

WHITE

GREEN

YELLOW

ORANGE

BLUE

WHITE

BROWN

RED

BLUE

YELLOW

GREEN

PINK

YELLOW

GREEN

BLUE

RED

There are 30 people in a group. You get the month and date of each person's birthday. What is the approximate probability that two of the people will have the exact same birthday?

- a) 90%**
- b) 70%**
- c) 50%**
- d) 30%**
- e) 10%**

COGNITIVE & AFFECTIVE FORECASTING

- **think about your future**

AFFECTIVE FORECASTING

- think about your future

*most people think about
achieving & succeeding rather
than fumbling or failing*

AFFECTIVE FORECASTING

- if I don't get tenure, I will be sad... if I do get tenure I will be happy
two years later - no difference
- if I win the lottery, I will be happy!
a year or two later, no difference

AFFECTIVE FORECASTING

- if I don't get tenure, I will be sad... if I do get tenure I will be happy
two years later - no difference
- if I win the lottery, I will be happy!
a year or two later, no difference
- accident leading to quadriplegia or paraplegia - return to typical ratings in 3 months

Mispredicting Affective and Behavioral Response to Racism - Kawakami et al., Science, 2009

- **Racism is condemned**
- **Blatant racism still occurs**
 - 33% of whites report hearing anti-black slurs in workplace**

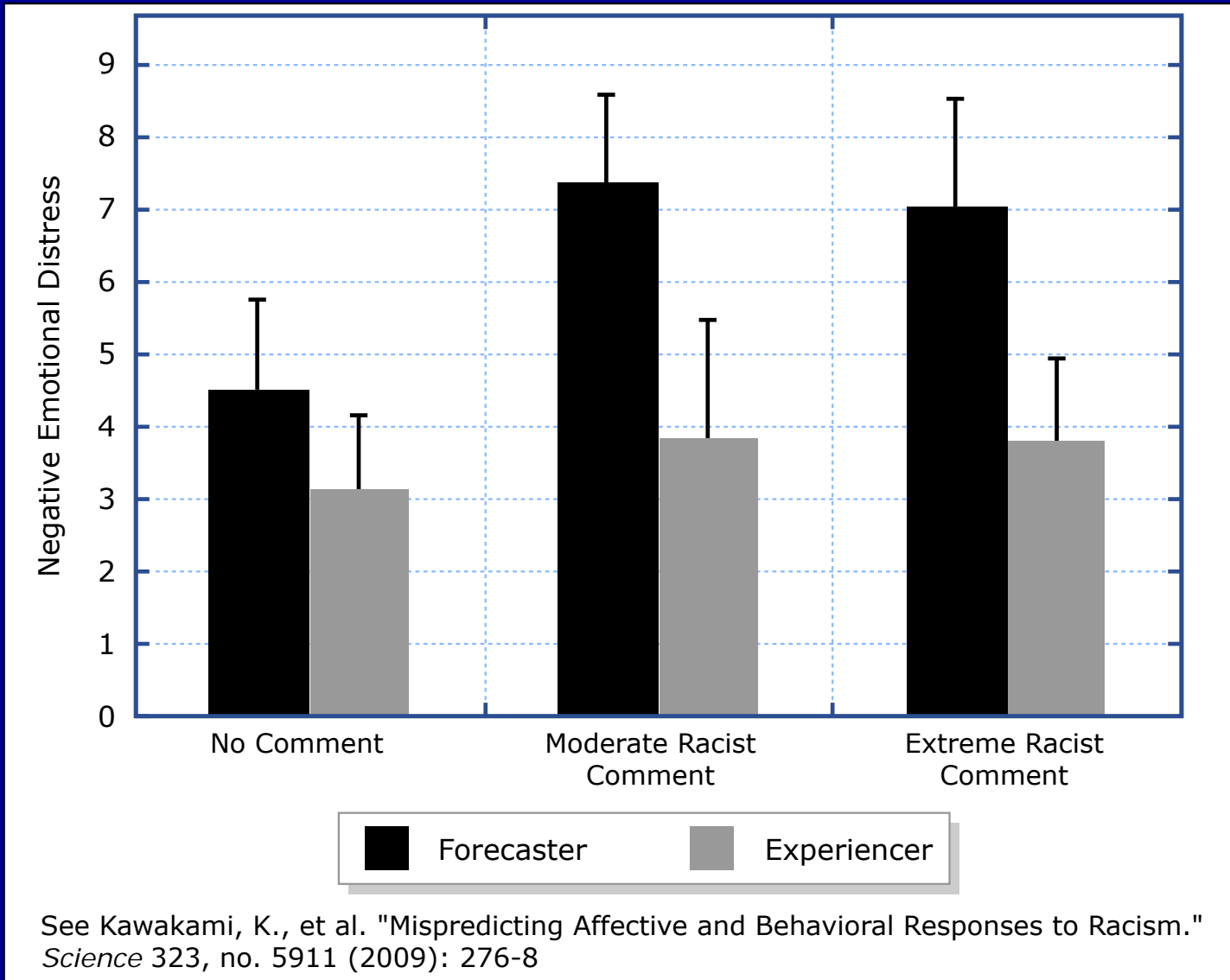
Mispredicting Affective and Behavioral Response to Racism

- two groups - “forecaster” or “experiencer”
- you enter room - see a black male & a white male - black male leaves room to get cell phone, gently bumps white male knee
 - control - nothing else
 - moderate slur “Typical, I hate it when black people do that”
 - extreme slur “clumsy N word”

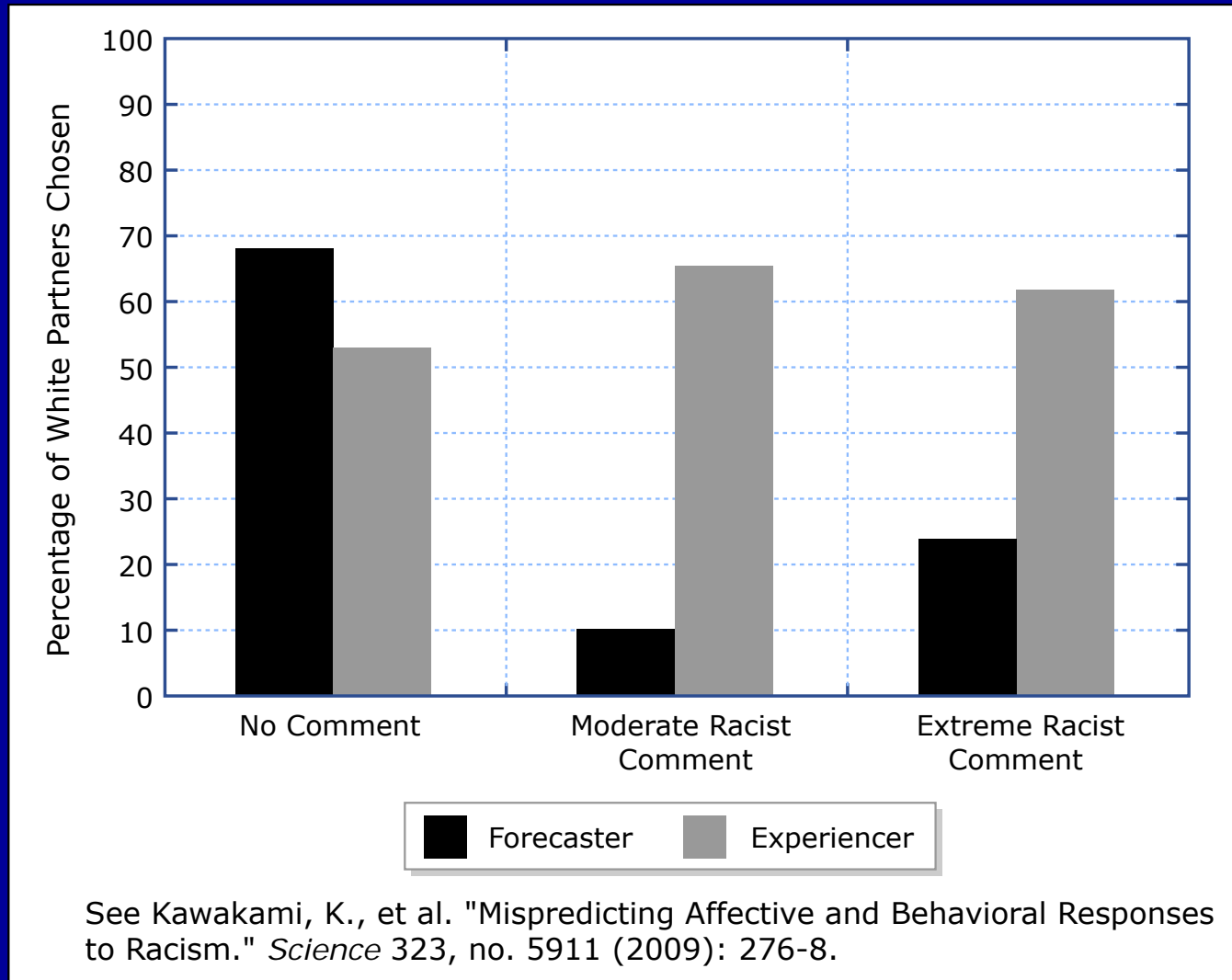
Mispredicting Affective and Behavioral Response to Racism

- two groups - “forecaster” or “experiencer”
 - control - nothing else
 - moderate slur “Typical, I hate it when black people do that”
 - extreme slur “clumsy N word”
- black male returns, experimenter gives survey on current feelings, asks you to pick a partner for anagram task

A Gap Between Attitudes & Actions



A Gap Between Attitudes & Actions



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- what we *see & hear*
- what we *remember*
- what we *know*
- how we *think*
- how we *feel*
- how we *act*

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