

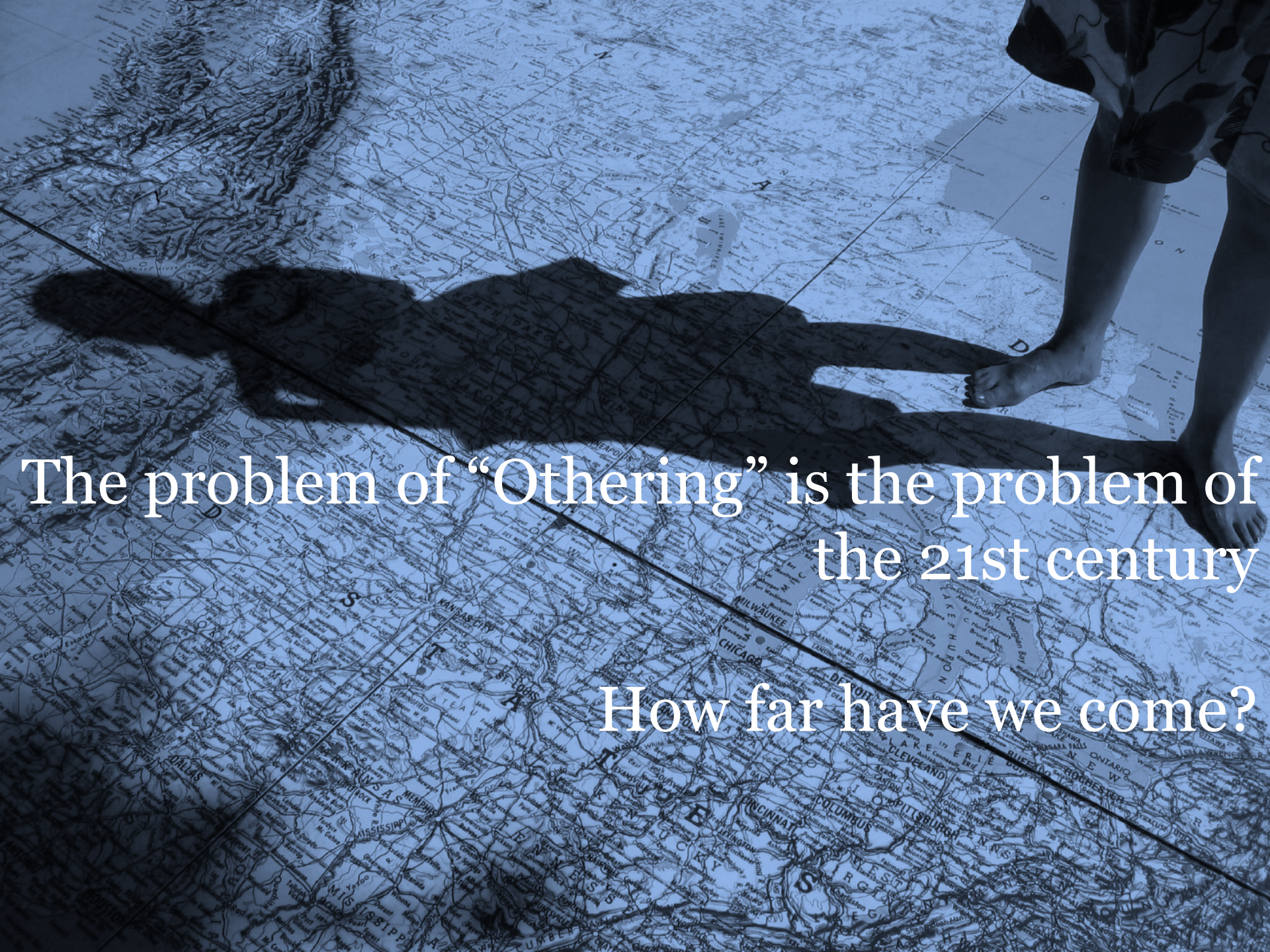
Healing Otherness: Neuroscience, Bias, and Messaging

Tomorrow's Detroit and Detroit's Tomorrow: The Economics of Race Conference 2016

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The problem of “Othering” is the problem of
the 21st century

How far have we come?

To achieve transformative change, we must create an environment in which everyone **belongs**.
Belonging is the greatest gift society can give us.

“Othering,” defined...

We define othering as a set of processes, structures, and dynamics that engender marginality and persistent inequality across any of the full range of human differences. Othering and marginality can occur on a group basis or at the individual level.



Dimensions of othering

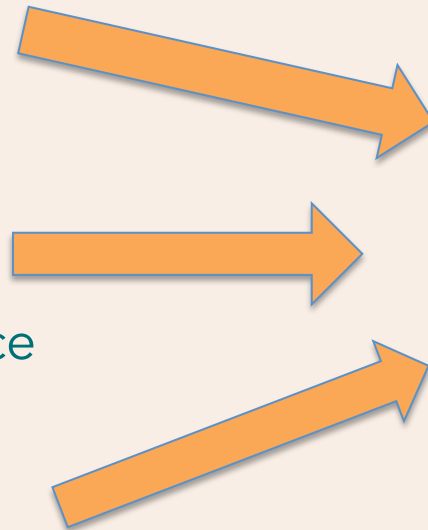
Dimensions include but are **not limited to**, sex, religion, race, ethnicity, socioeconomic status, disability, sexual orientation, and skin tone.



Why do we engage in othering?

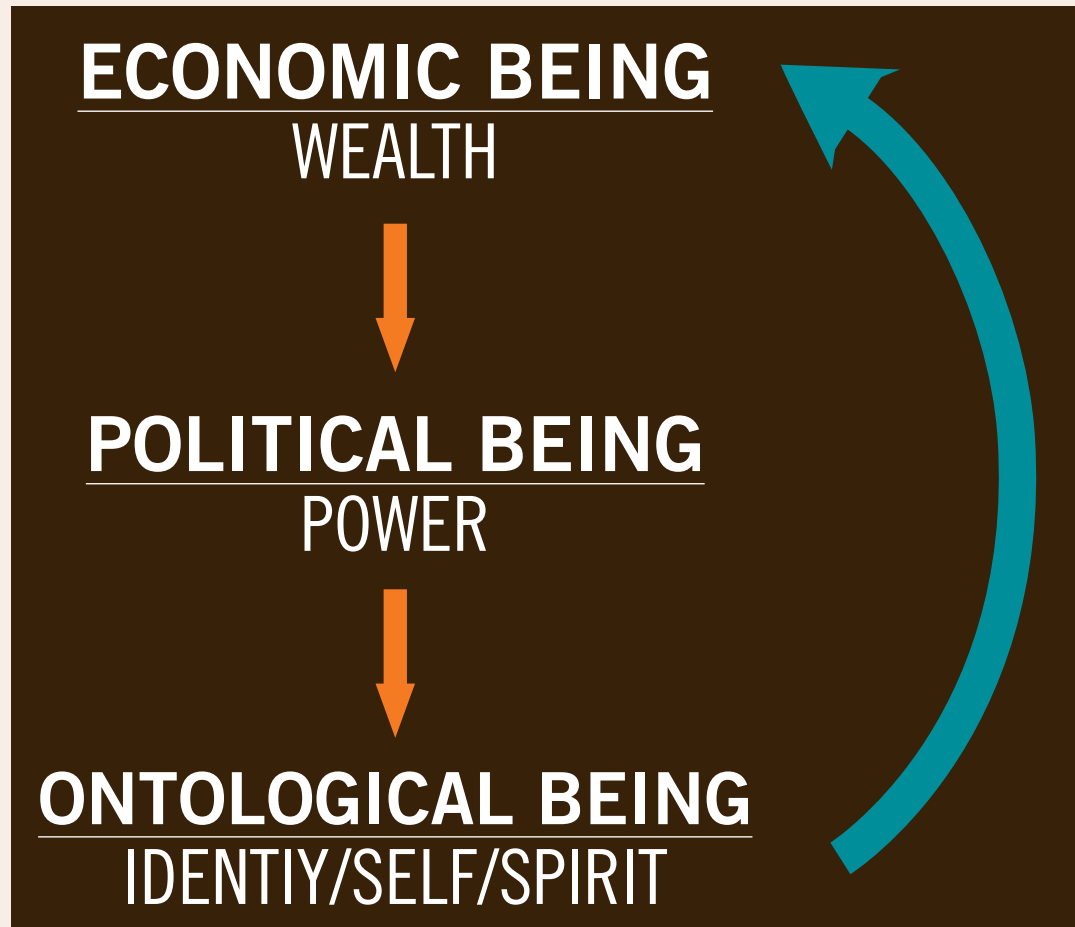
We engage in othering for many reasons, both intentionally and unintentionally. Today, we will focus on some of the unintentional reasons for othering including, but not limited to:

- ❖ Fear & anxiety
- ❖ categorizing
- ❖ stereotyping
- ❖ implicit bias
- ❖ in-group preference
- ❖ racial anxiety
- ❖ confirmation bias
- ❖ stereotype threat



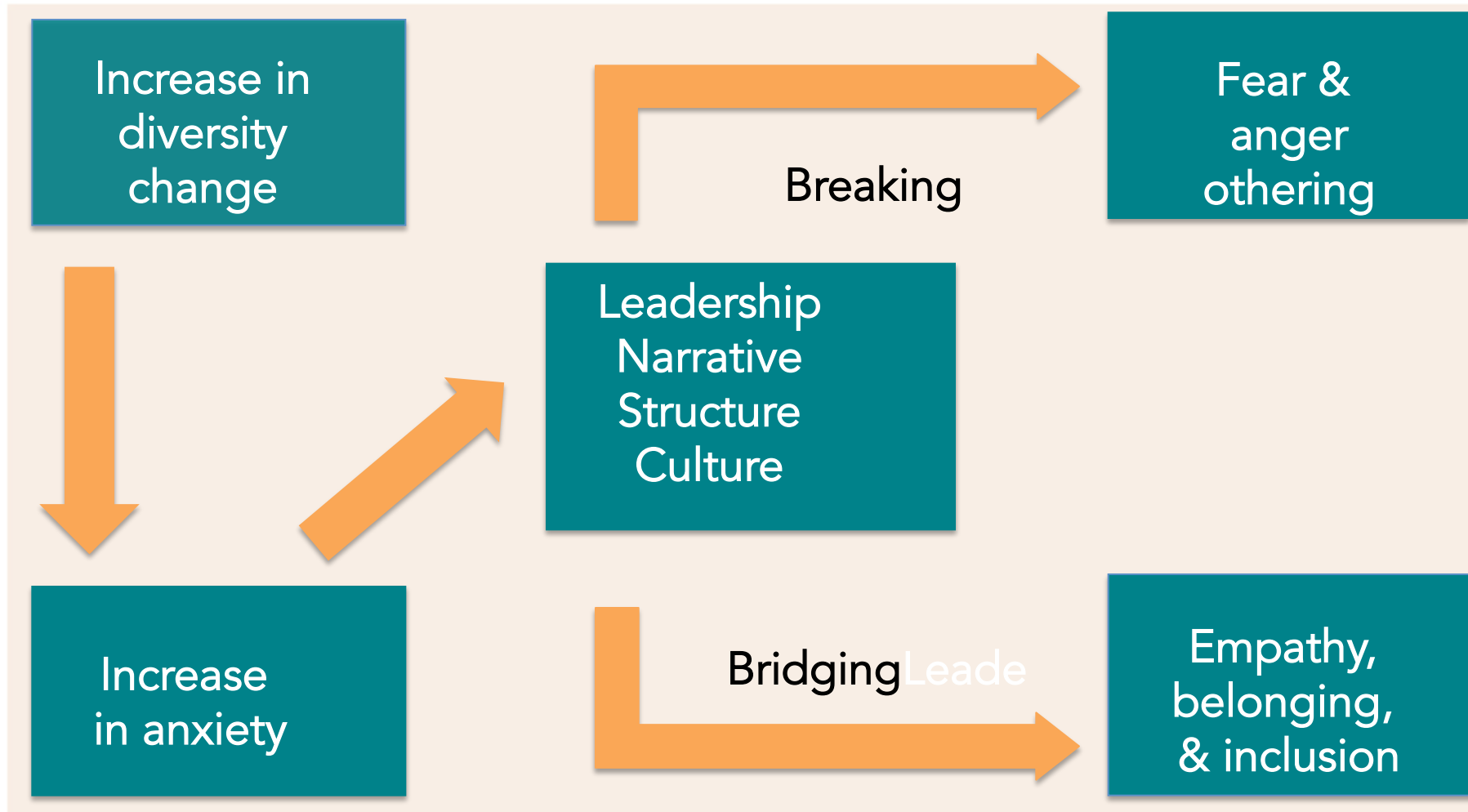
Mind Science

Othering & Political Polarization



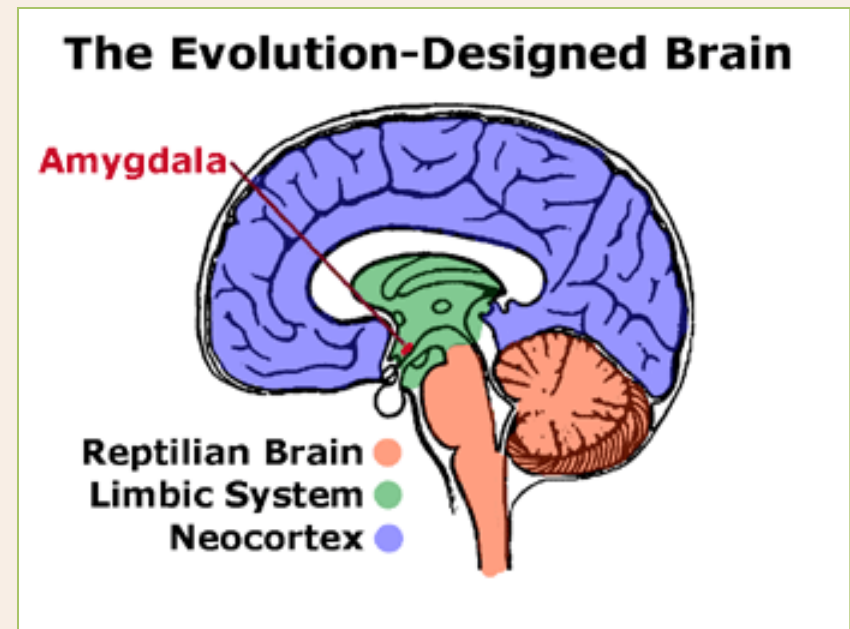
Dominant hierarchy of organizing our sense of self:
What happens when the hierarchy is reversed?

As diversity grows, so does anxiety...



Neurological origins of fear and anxiety.

- ❖ Our limbic system categorizes what we perceive.
 - ❖ The limbic system is a very old part of the brain; it can be found in animals.
 - ❖ It is also very fast.
- ❖ One part of the limbic system, the amygdala, is responsible for strong emotional responses (i.e., fight or flight)

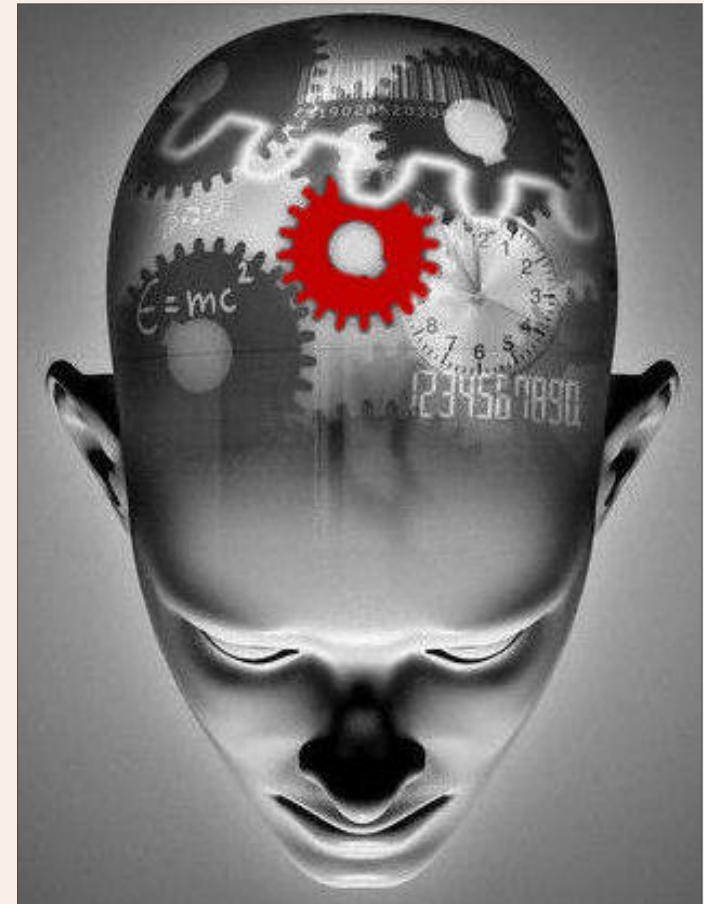


The role of the unconscious mind

The human brain processes 11 million bytes of information per second

- Consciously aware of any 40 of these, at best
- Only 2% of emotional cognition is available to us consciously
- Messages can be framed to speak to our unconscious
- The process of **Othering** occurs in our unconscious network: this can lead to racial, ethnic, or religious bias

See David Brooks, *The Social Animal* (2011)



The role of the unconscious mind, continued...



The subconscious mind uses three processes to make sense of the millions of bits of information that we perceive

1. Sorting into categories
2. Creating associations between things
3. Filling in the gaps when we only receive partial information

Schemas

These three processes together add up to schemas – the “frames” through which our brains help us understand and navigate the world.

Schemas help us organize information into broader categories

- ❖ Meanings associated with those category are then activated

Schemas are social. They exist in our environment, language, and metaphors

- ❖ The unconscious is not just an individual or internal phenomenon

Our brains in action: creating associations.

Please state the *colour of the text*

Blue

Red

Green

Black

Green

Black

Blue

Red

Black

Blue

Green

Red

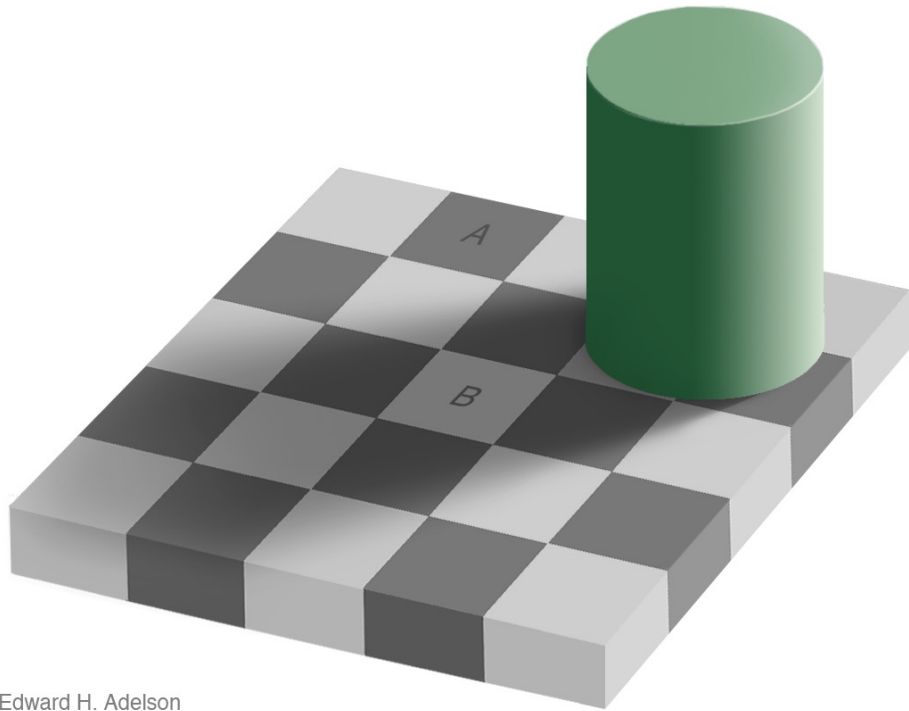
Green

Green

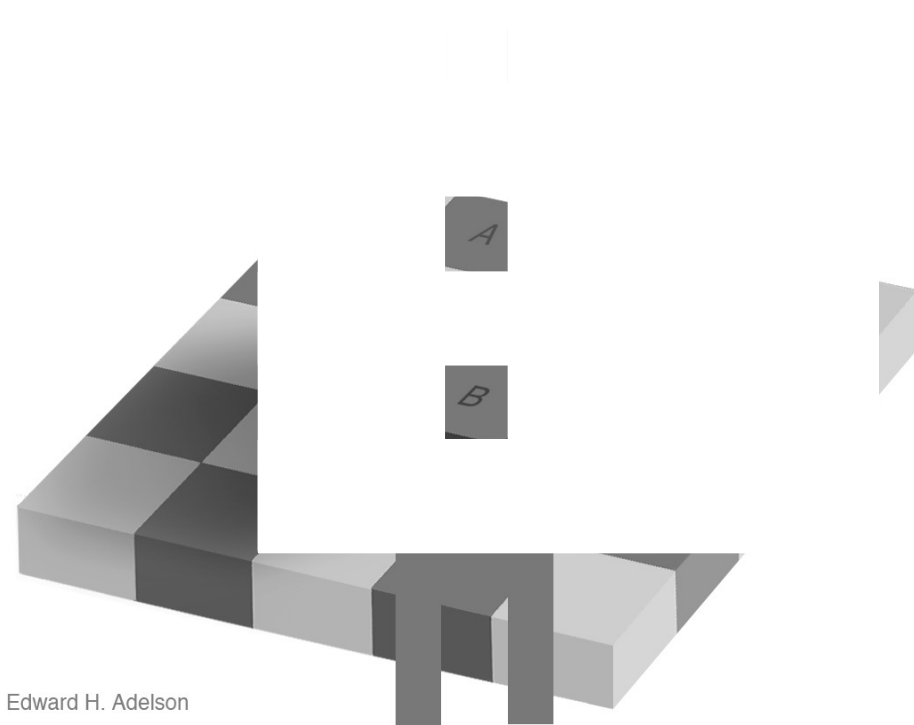
Black

Blue

Which is darker: Square A or Square B?



Edward H. Adelson

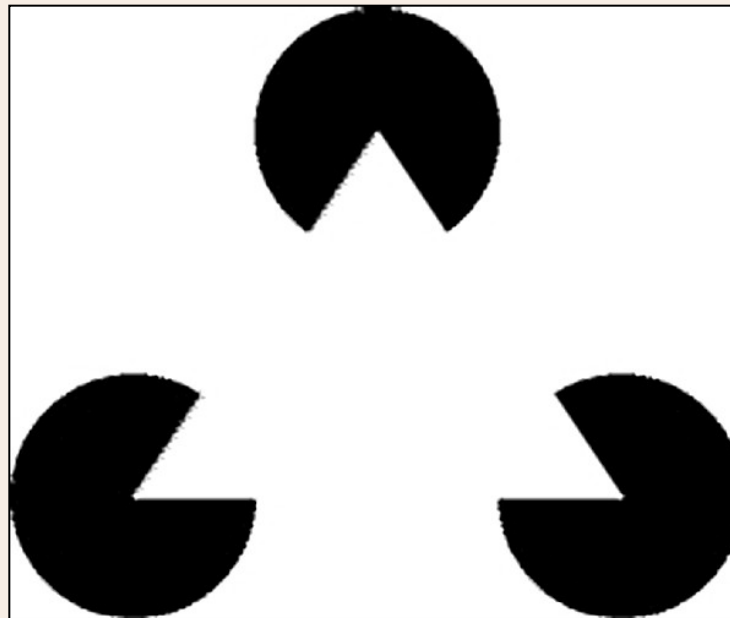


Edward H. Adelson

The Checker Shadow Illusion

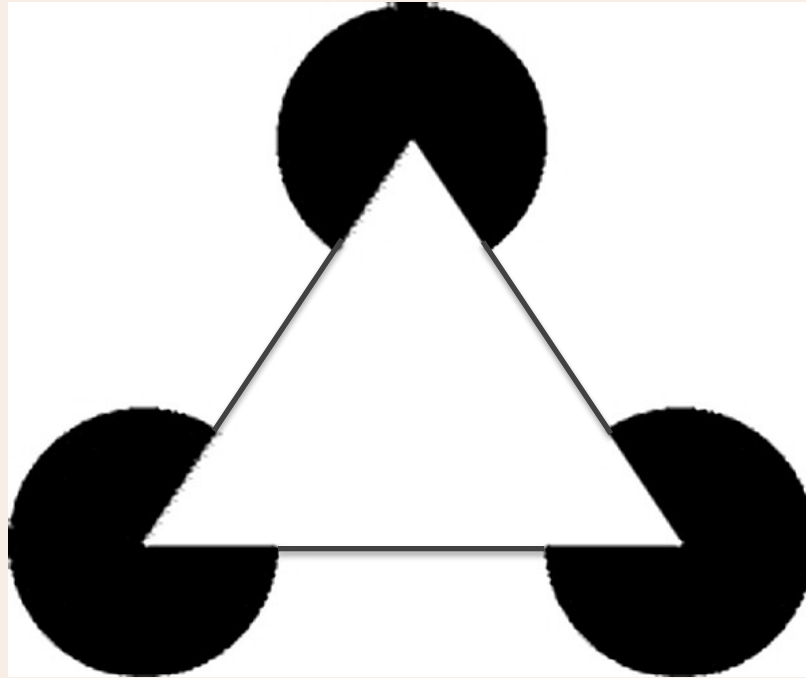
Our brains in action: filling in the gaps.

What shapes do you see?



Our brains in action: filling in the gaps, continued...

Our **subconscious** fills in the lines for us, to form a shape we are familiar with.



Face Priming

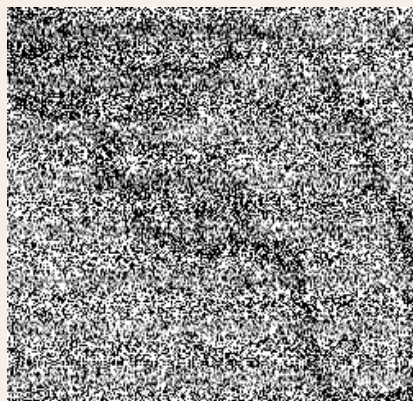


Face Priming (Slow Motion)



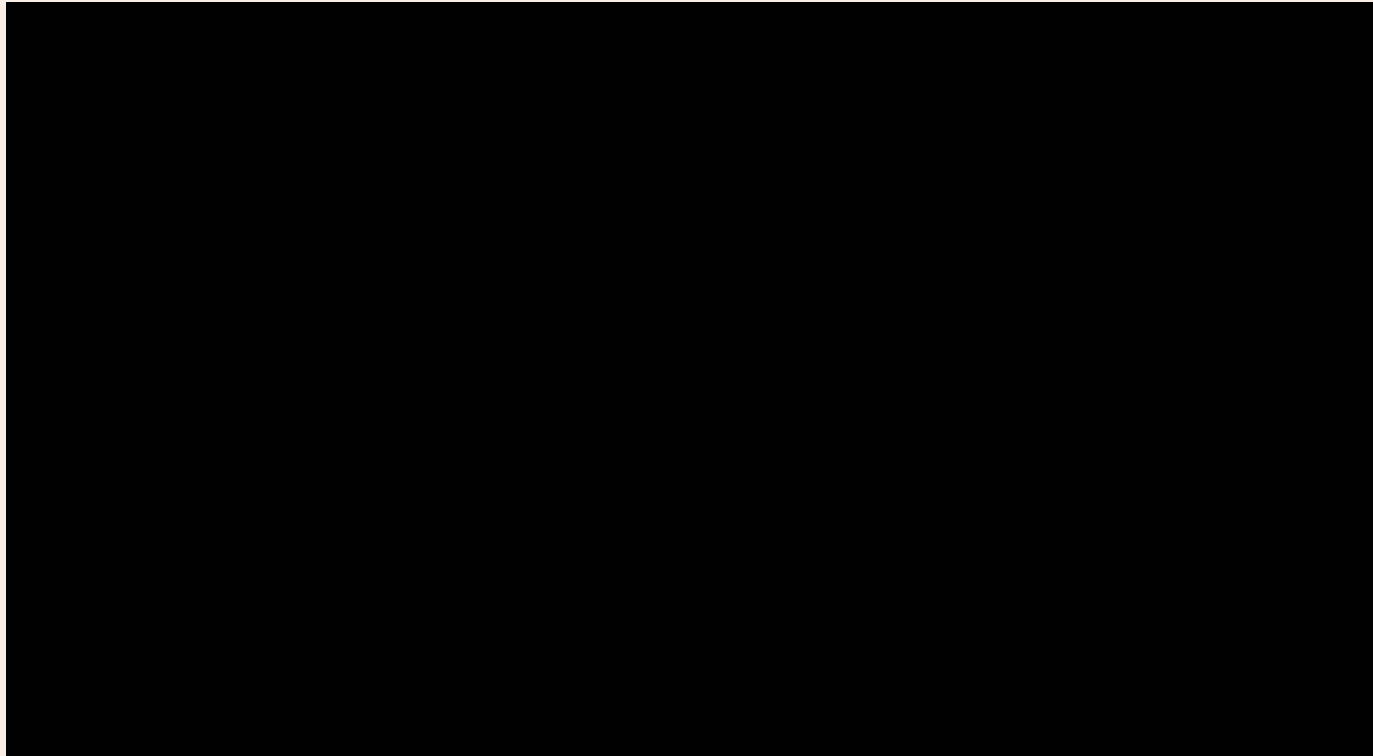
Priming influences what we see

Levels of Degradation



Frame 25

Awareness Test



Implicit bias and society

- ❖ There is a strong connection between the individual and society
- ❖ Bias is social rather than individual.
- ❖ Role of material conditions as primes.



Confirmation bias

Confirmation Bias:

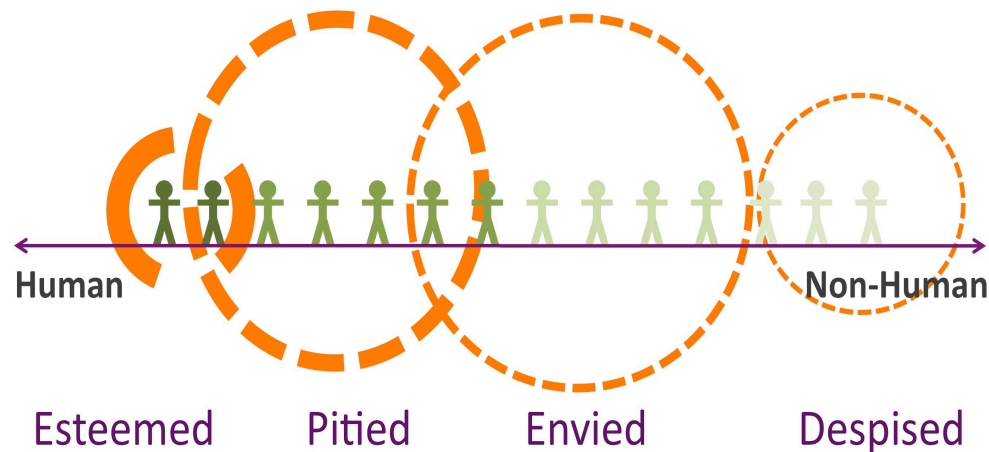
We judge behavior differently depending upon the stereotypes or negative associations.



Group preference

Along with or instead of negative associations toward an out-group, most people tend to hold favorable attitudes toward in-groups. “In-group” preference explains how people can legitimately feel “non-racist” or free from gender stereotypes.

In-Group members: “more human”



Douglas Massey. *Categorically Unequal: The American Stratification System*. NY: Russell Sage Foundation 2007

Competence

Low

High

High

Paternalistic stereotype

low status, not competitive

Admiration

high status, not competitive

Low

Contemptuous stereotype

low status, competitive

Envious stereotype

high status, competitive

Warmth

Susan Fiske's Stereotype Content Model

Stereotypes

- Categorizing People:
 - Schemas about people are referred to as “stereotypes” and we use them all the time.
- Stereotypes:
 - traits associated with a particular group.
- Attitudes:
 - warmth or coldness toward a particular group.



What is stereotype threat?



- When people are aware of a negative stereotype about their group in a domain in which they are identified, their attention is split between the activity at hand and concerns about being seen stereotypically.
- Stereotype threat diverts cognitive resources that could otherwise be used to maximize task performance.

Effects and examples of stereotype threat.

Effects:

- ❖ Elevated levels of anxiety (cardiac functioning)
- ❖ Higher levels of stress (cortisol)
- ❖ Lower working memory
- ❖ Worse performance

Examples:

- ❖ Women and math
- ❖ Blacks on standardized tests
- ❖ Working class and verbal tests
- ❖ “White men can’t jump”
- ❖ “White people are prejudiced”
- ❖ People with disabilities
- ❖ People with mental illness
- ❖ Age

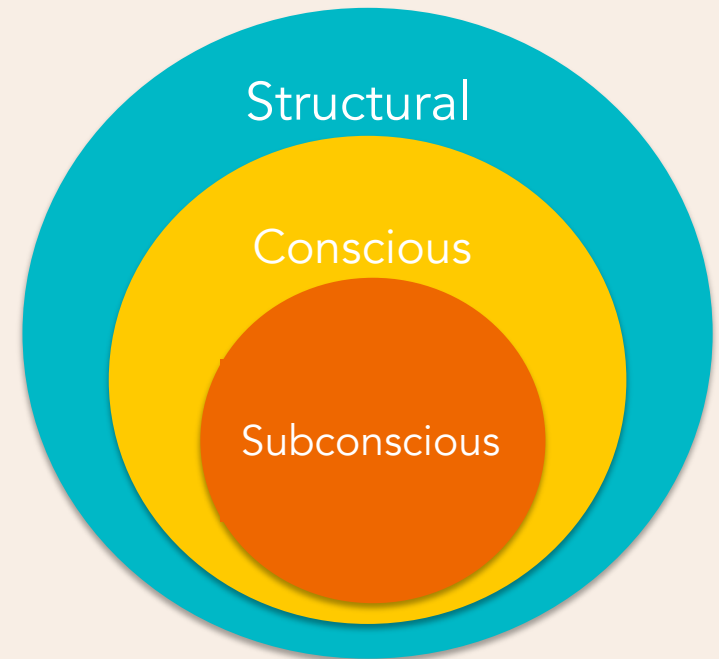
Impact of implicit bias and stereotype threat.

Implicit bias can leak into everyday interactions.

- ❖ Stereotype threat, “the threat of being viewed through the lens of a negative stereotype, or the fear of doing something that would inadvertently confirm that stereotype” (Claude Steele)
- ❖ “Micro-aggressions” and subtle body language affect interpersonal interactions
- ❖ Cumulatively, these interactions reinforce or exacerbate already existing inequalities within and across systems
- ❖ A recent survey found that white college students bought into the trope that Asian Americans are more competent, and blacks and Latinos need to “work harder.” (Park et al. 2015)

Stereotypes & biases: cognitively, we cannot avoid them!

- ❖ Intelligence is associational and emotional: we cannot live without schemas
- ❖ Having biases and stereotypes, however, do not make us racist: it makes us human
- ❖ Working for equity and justice requires engaging at three levels
 - ❖ Structural
 - ❖ The conscious
 - ❖ The unconscious



Racial anxiety



Racial/ other anxiety: The other implicates who we are and our well being.

To recap...

- Bias affects what we see, how we behave, and how we react to certain stimuli.
- Bias affects the structures we create and inhabit.
- Combining uncertain evidence with widespread beliefs underwritten by cultural stereotypes leads to unconscious reasoning or implicit bias.
- Racial anxiety leads to avoidance of interracial interaction.
- Racial anxiety inhibits solidarity between races.
- Stereotype threat can result in the unintentional self-perpetuation of existing stereotypes.
- Stereotype threat depletes cognitive resources that could otherwise be used to maximize task performance, resulting in, among other things, disparities in academic achievement.

Tips for reducing bias and racial anxiety



- ❖ **Direct Intergroup Contact:** Direct interaction between members of different racial and ethnic groups can alleviate intergroup anxiety, reduce bias, and promote more positive intergroup attitudes and expectations for future contact.

Reducing bias and racial anxiety, continued...

- ❖ **Indirect forms of Intergroup Contact:** When people observe positive interactions between members of their own group and another group (vicarious contact), they report lower bias and anxiety, and more positive intergroup attitudes.

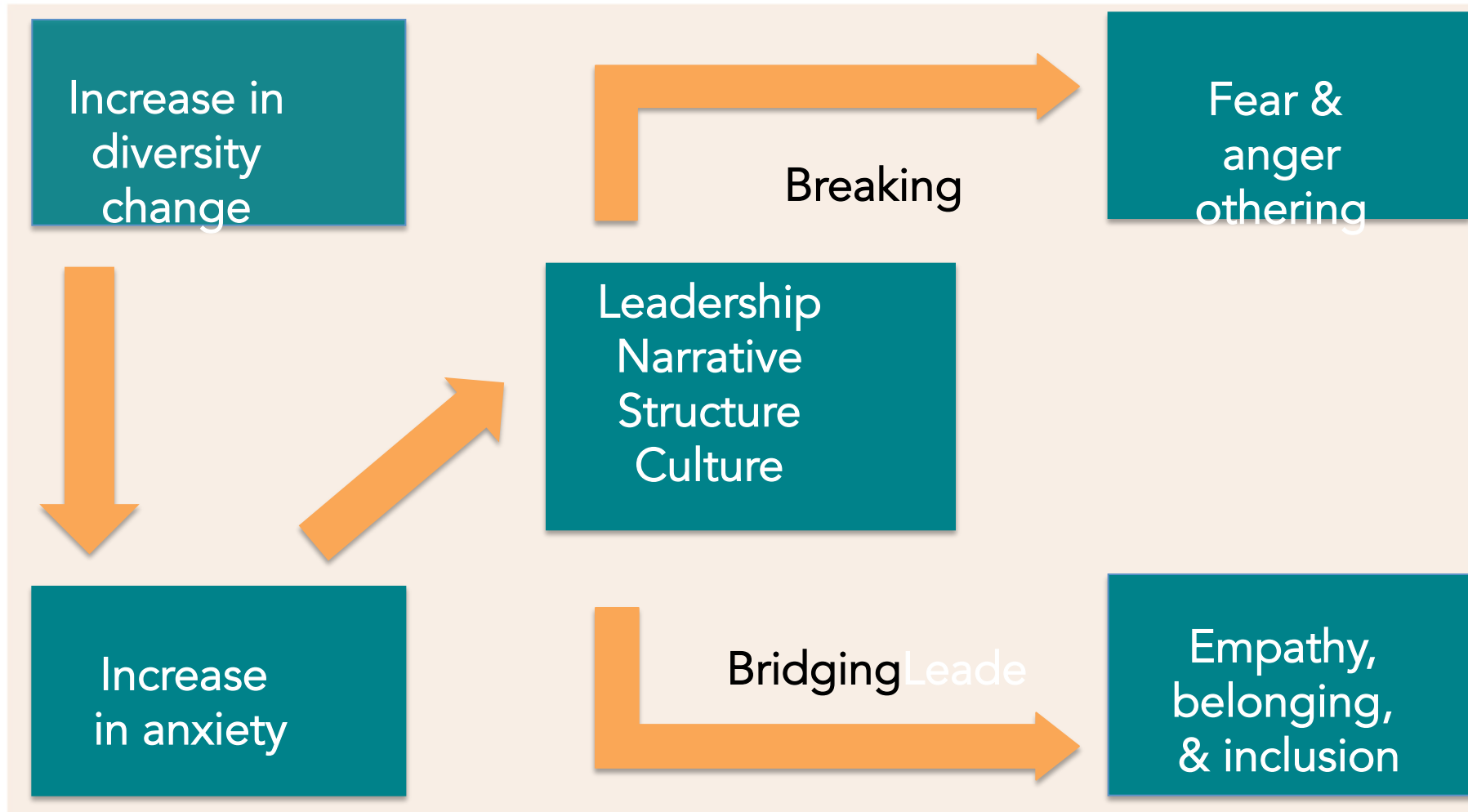


Stereotype threat interventions.

- Social belonging interventions
- Wise criticism
- Behavioral scripts
- Growth mindset
- Value-Affirmation
- Removing triggers



As diversity grows, so does anxiety...



Closing thoughts & remarks

Q&A
QUESTIONS & ANSWERS SESSION



Read *Racing to Justice* today!



RACING TO JUSTICE

*transforming our conceptions of self and other
to build an inclusive society*

john a. powell

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