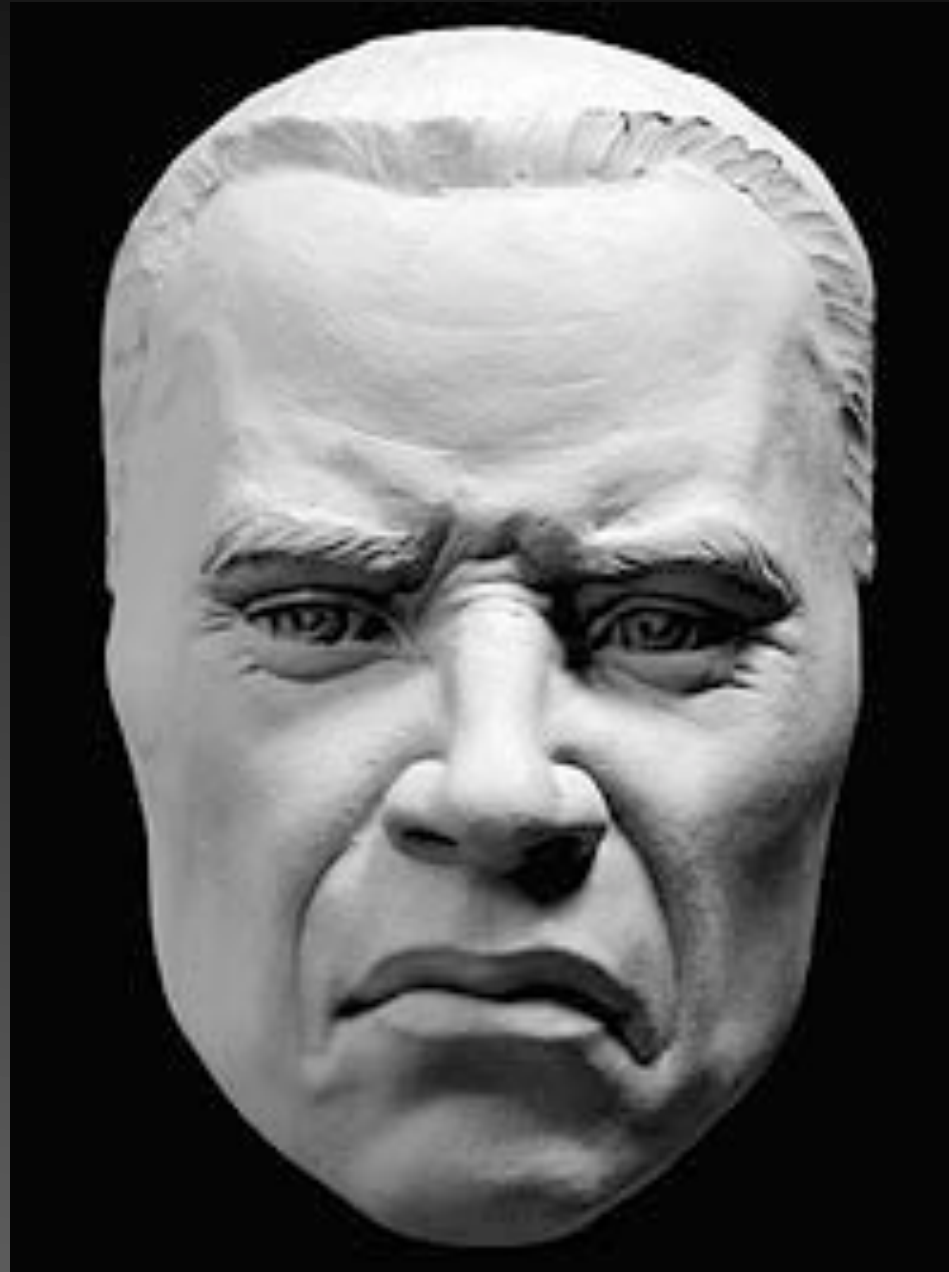
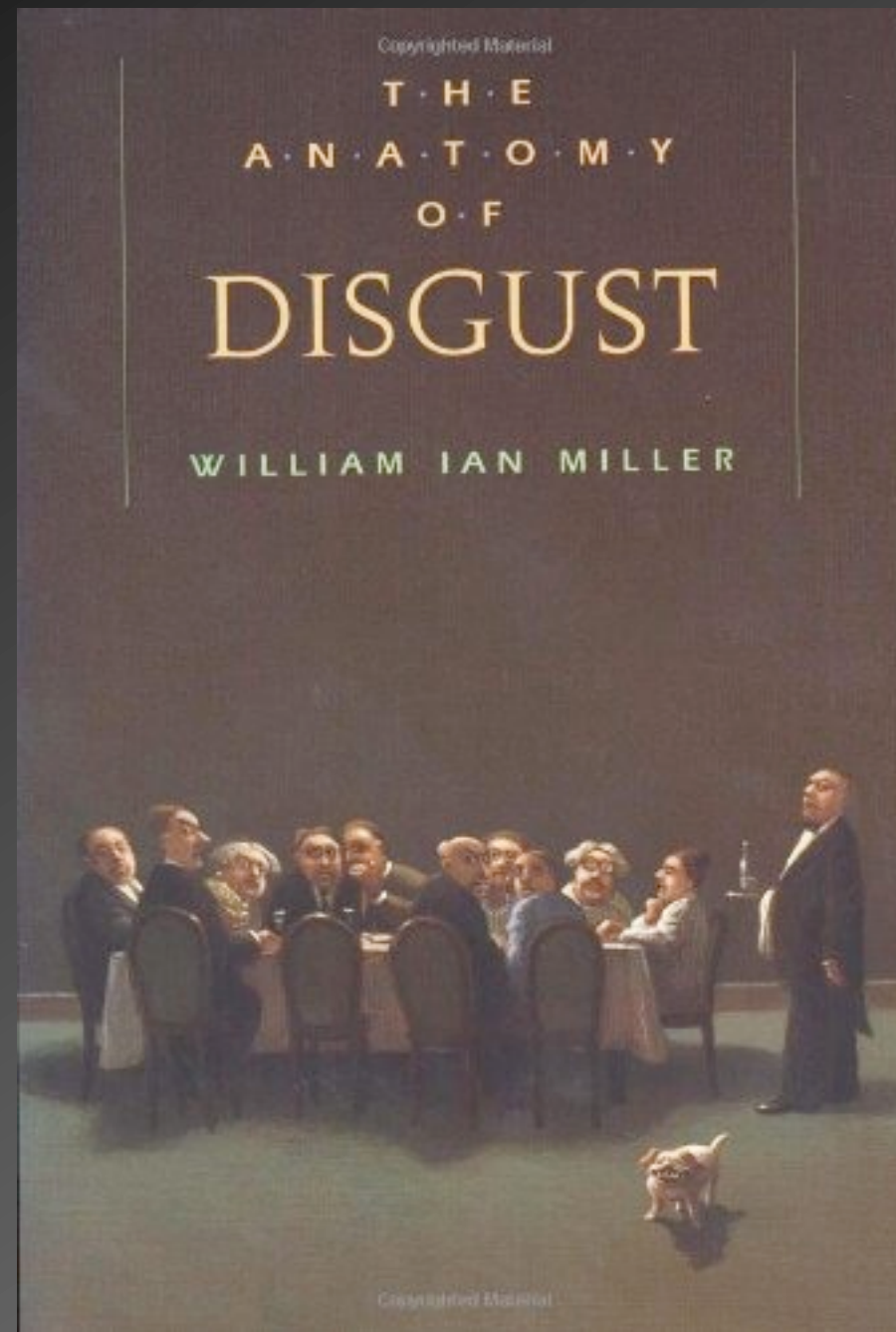


Disgust

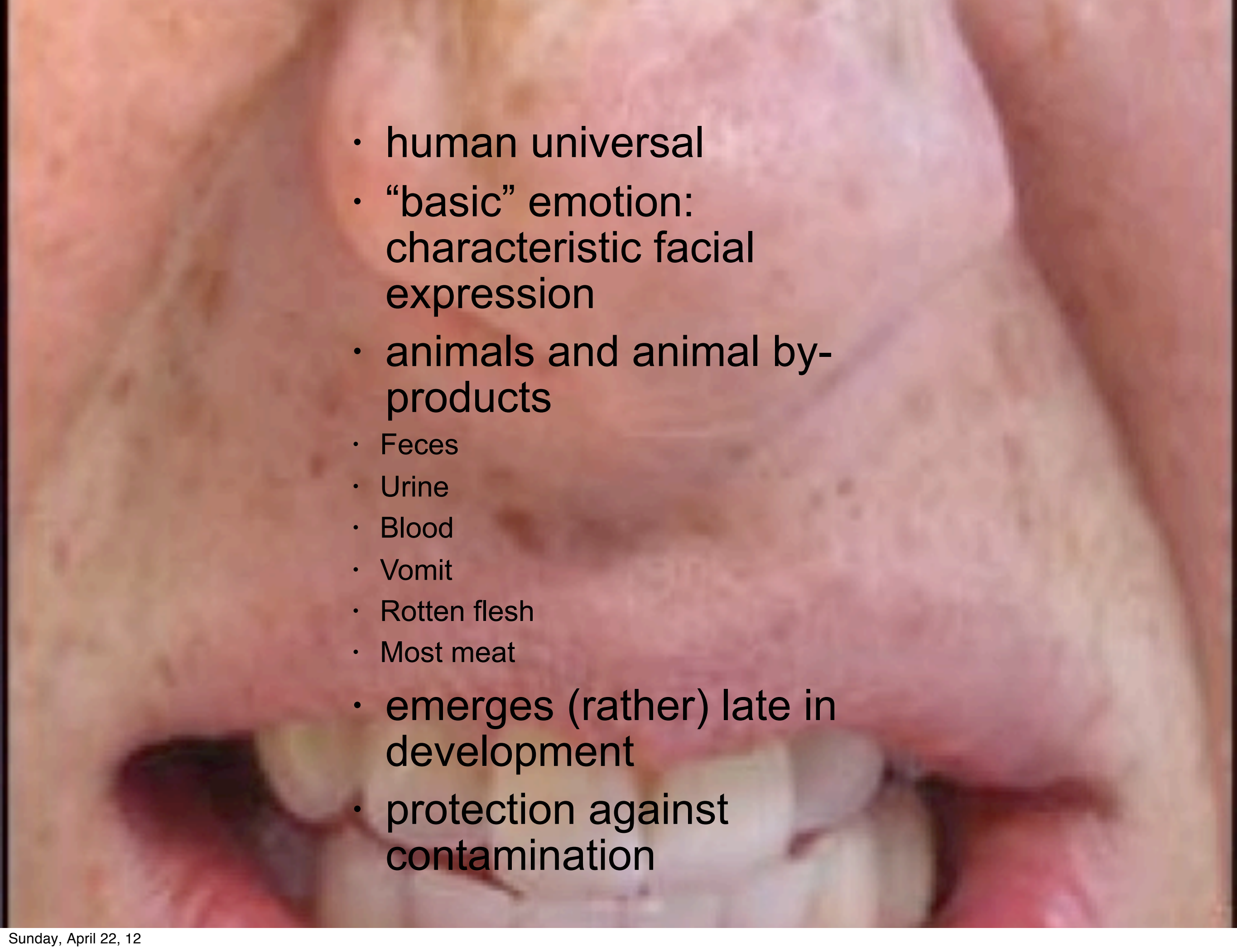


Psychology of Emotion
April 18, 2012
Professor David Pizarro



“A sense of aversion to something perceived as dangerous because of its powers to contaminate, infect, or pollute by proximity, contact, or ingestion.”
(Miller, 1998).

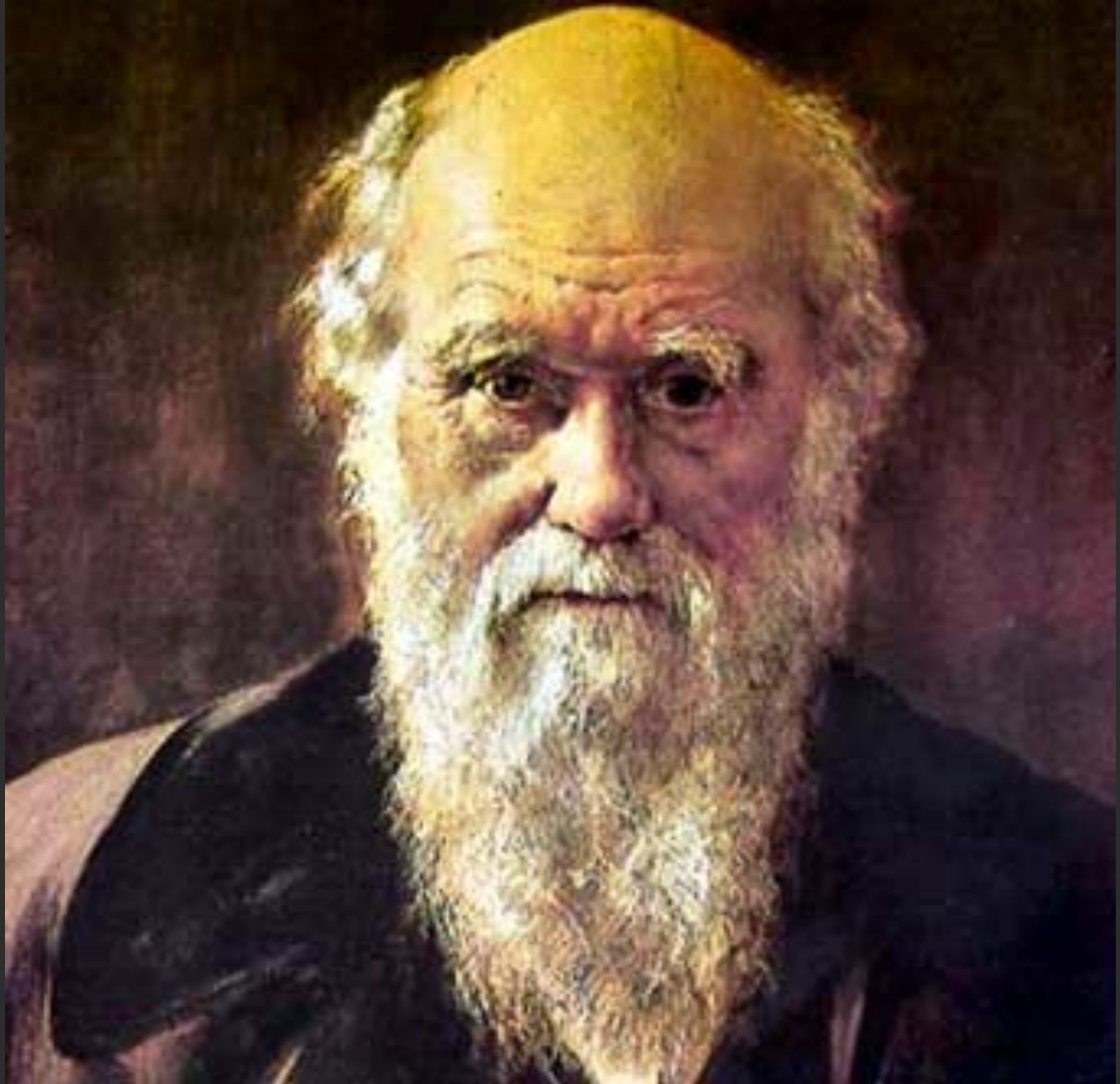


- 
- human universal
 - “basic” emotion:
characteristic facial
expression
 - animals and animal by-
products
 - Feces
 - Urine
 - Blood
 - Vomit
 - Rotten flesh
 - Most meat
 - emerges (rather) late in
development
 - protection against
contamination

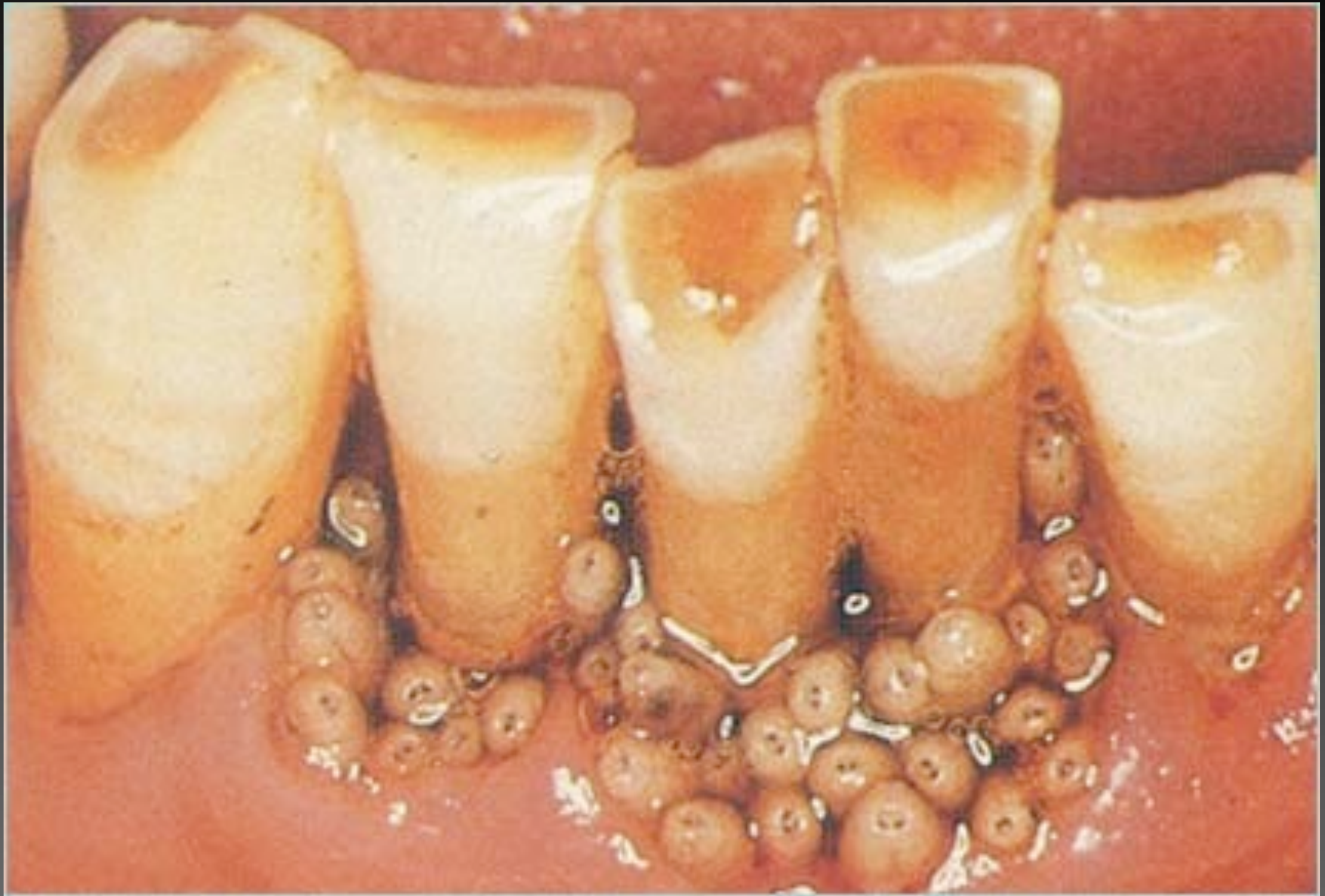
dedicated neural structures?



- brain imaging studies show anterior insula activation
- patients with Huntington's Disease show disgust deficits (recognition of disgust faces, response to foul tastes and smells, self-report)



**easily elicited*







the effects of disgust

- provides strong behavioral motivation to expel, avoid, push-away, get rid of, etc.
- but emotions don't just influence behavior...

...emotions influence judgment

“The emotions are all those feelings that so change men as to affect their judgments, ...such are anger, pity, fear and the like, with their opposites....Take, for instance, the emotion of anger: here we must discover...what the state of mind of angry people is, who the people are with whom they usually get angry, and on what grounds they get angry with them. It is not enough to know one or even two of these points; ...the same is true of the other emotions” (Aristotle, *Rhetoric*, Book 2, Chapter 1).

disgust and *moral* judgment

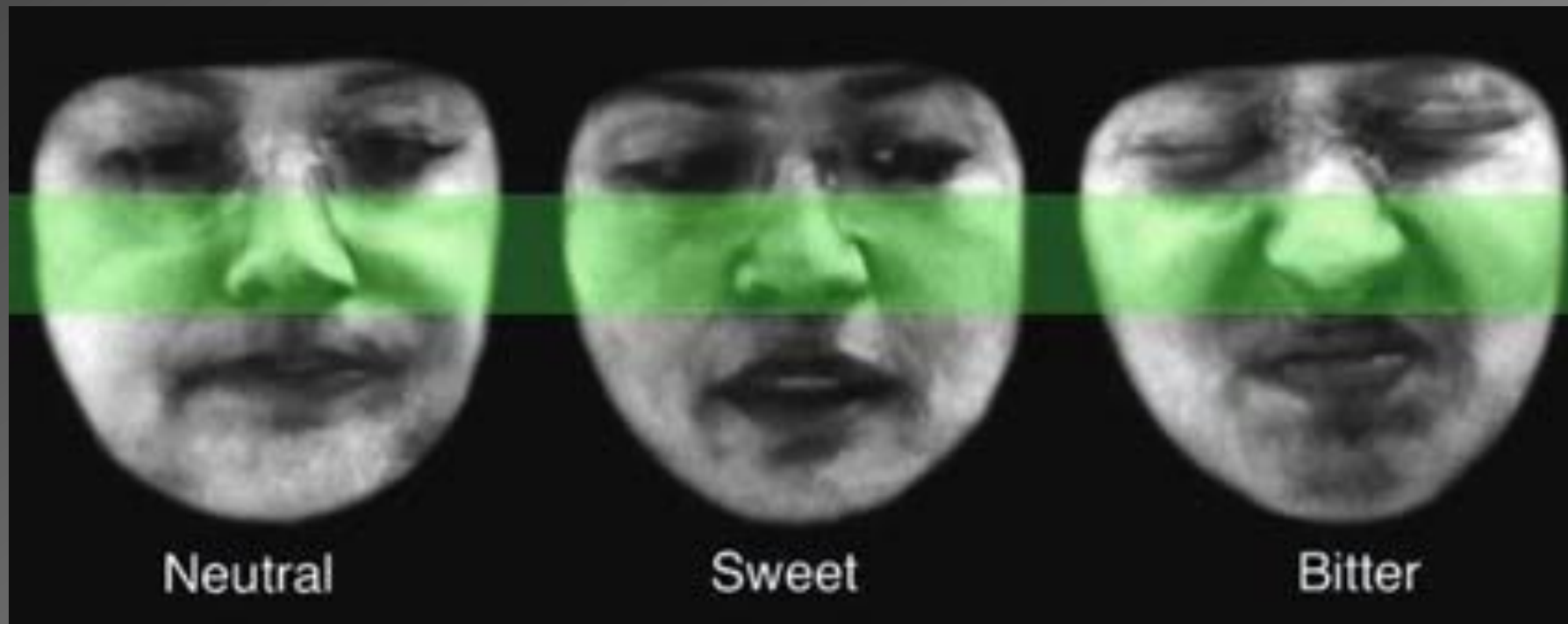
- disgust may be especially implicated in ethical systems which emphasize purity and divinity (Haidt & Graham, 2006)
- in these ethical systems, a cue to “badness” is “dirtiness”.
 - conversely, clean = morally good
- inducing disgust for an individual can lead to a diminished moral respect and/or harsher treatment (Haidt & Wheatley, 2005; Schnall, Haidt & Clore, 2006)

varieties of disgust

- *Core Disgust*--I'm disgusted by rotten meat.
- *Moral Disgust*--"I'm disgusted by G.W."
- Metaphorical?
- Real disgust?
- Recent neurological evidence (Moll et al., 2005), and facial EMG data (Chapman et al., 2009)

distaste --> core disgust --> moral disgust

Chapman et al, *Science*, 2009



disgust readily extends to people



“In Tierra del Fuego a native touched with his finger some cold preserved meat while I was eating at our bivoac; and plainly showed disgust at its softness; whilst I felt utter disgust at my food being touched by a naked savage, though his hands did not appear dirty”

disgust and dirty “others”

“Thus, throughout history, certain disgust properties -- sliminess, bad smell, stickiness, decay, foulness -- have repeatedly and monotonously been associated with... Jews, women, homosexuals, untouchables, lower-class people -- all of those are imagined as tainted by the dirt of the body”

- *Martha Nussbaum*

“Just look at these guys! The louse-infested beards! The filthy, protruding ears, Those stained, fatty clothes...

Jews often have an unpleasant
sweetish odor. If you have a good
nose, you can smell the Jews."

(Nazi Children's Book, 1938)



gays are...

- “worthy of death for their vile...sex practices...”
- “filthy”
- like “dogs eating their own vomit and sows wallowing in their own feces”

-www.godhatesfags.com

evidence: inducing core disgust makes individuals harsh moral judges

- study: dirty desks (Schnall et al)
 - Brought people into the lab to fill out questionnaires asking for moral judgments
 - e.g., Joe stole 50 dollars from his friend
 - Completed them on a dirty, disgusting desk vs. on a clean desk
- study: hypnotic disgust (Haidt & Wheatley)
 - Participants were hypnotized and told to feel flashes of disgust when they read a trivial word
 - Disgust made people more harsh in their judgments of others
- In both cases, people were harsher in their judgments of others.

are people who are *easily
disgusted* more likely to adopt
some of these moral beliefs?

Science Cabaret



disgust sensitivity questionnaire

(Haidt, McCauley, & Rozin, 1994)

- sample items (“core disgust”) :
 - I try to avoid letting any part of my body touch the toilet seat in a public restroom, even when it appears clean.
 - Even if I were hungry, I would not drink a bowl of my favorite soup if it had been stirred by a used but thoroughly washed fly-swatter.
 - While you are walking through a tunnel under a railroad track, you smell urine.
- not the same as other personality measures
- predicts behavior

disgusting politics



disgust & political conservatism

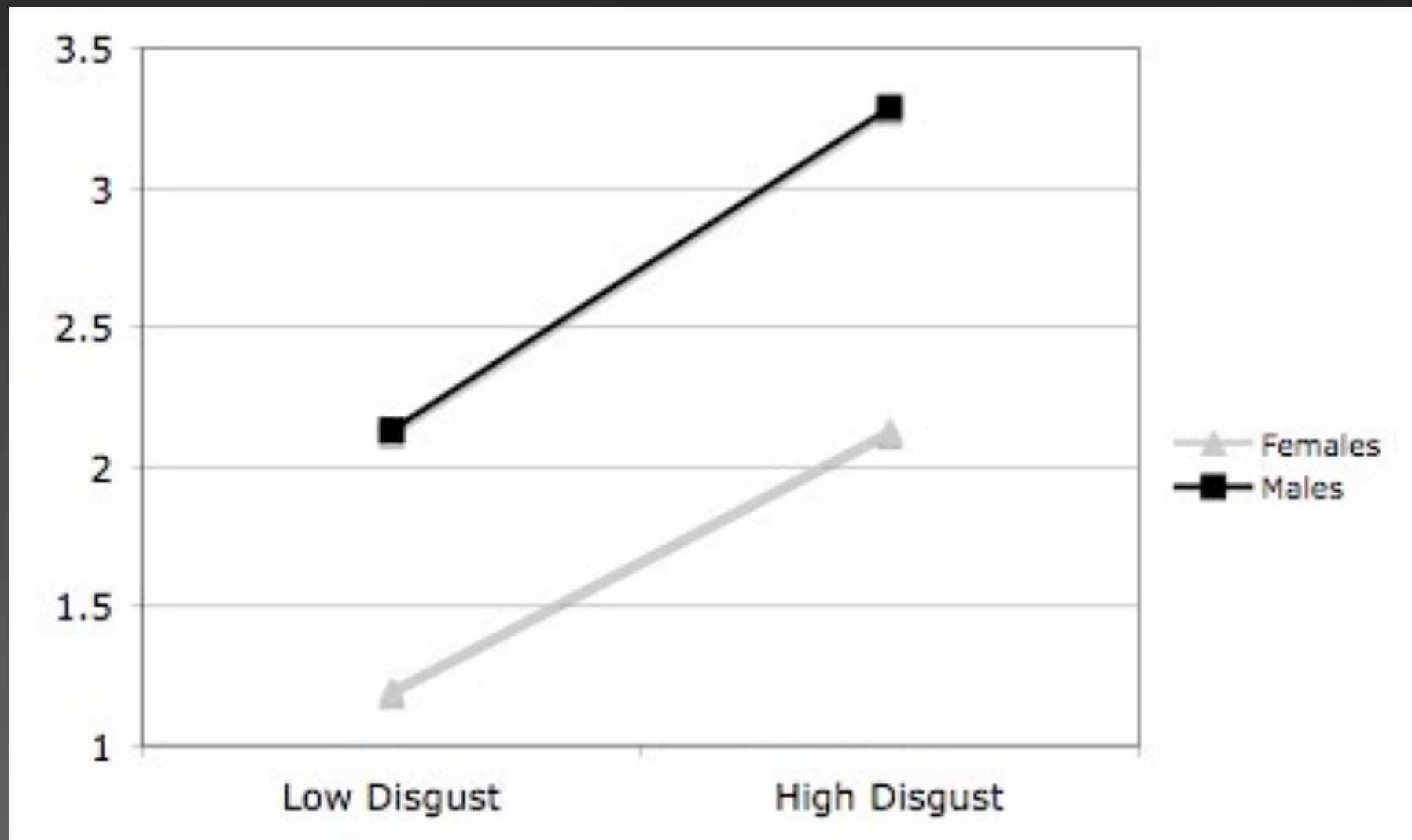
Inbar, Pizarro & Bloom (2009) *Cognition and Emotion*, 23, 714-725.

- N=181 participants from Iowa, Wisconsin, Ohio, Illinois (“swing” states)
 - Disgust Sensitivity correlated with political conservatism, $r(181) = .21, p < .01$.
- N=82 UCI undergrads
 - Disgust Sensitivity correlated with Political Conservatism; $r(82) = .29, p < .01$

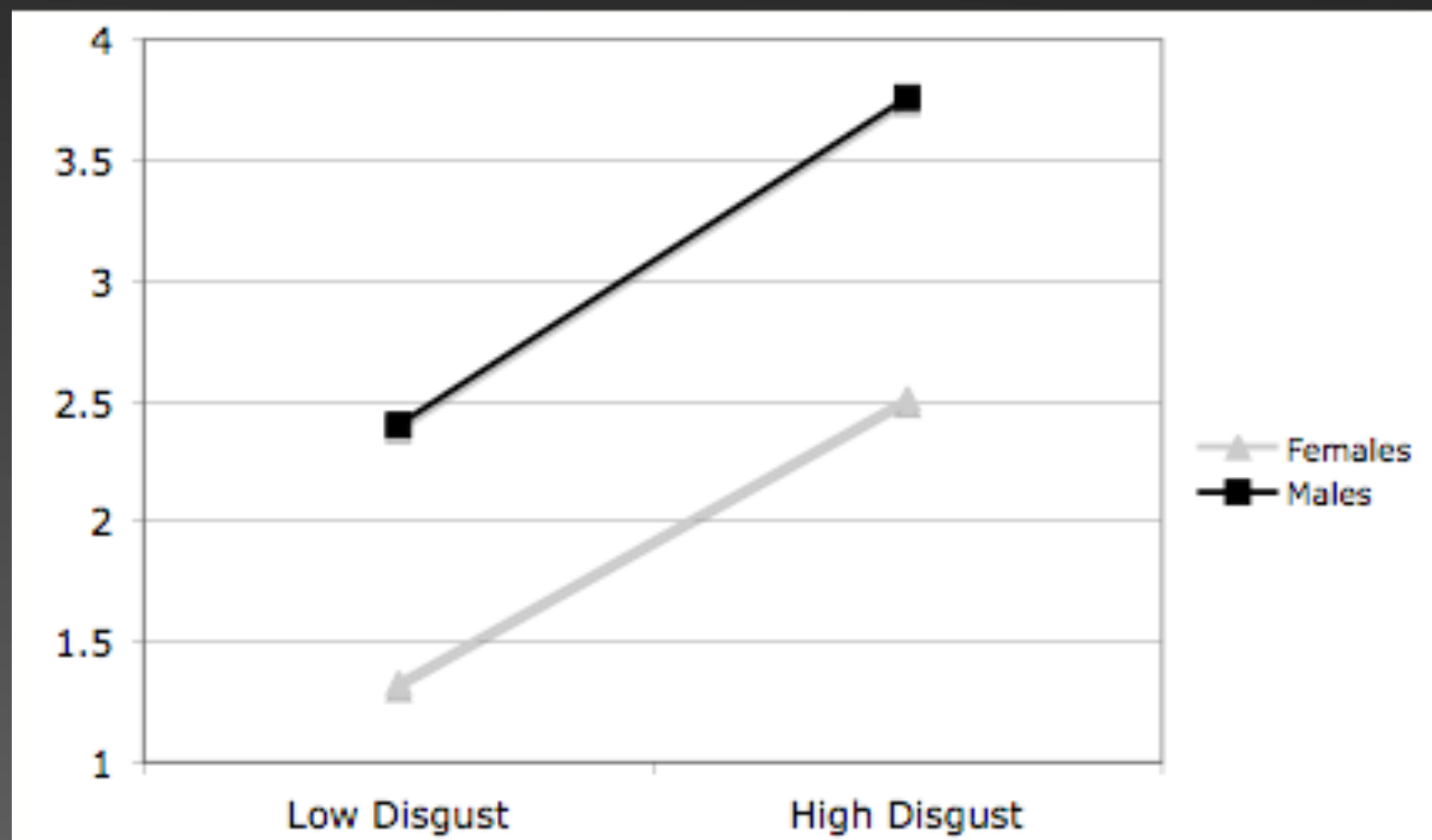
follow-up study (cornell university)

- Full (32-item) DS Scale, better measure of political orientation, asked about specific political beliefs
- DS and Political Conservatism, $r(81) = .26, p < .05$.
- Explained by *sociomoral* beliefs
 - Gay Marriage
 - Abortion

more disgust sensitive = greater
opposition to gay marriage



more disgust sensitive = greater
opposition to abortion



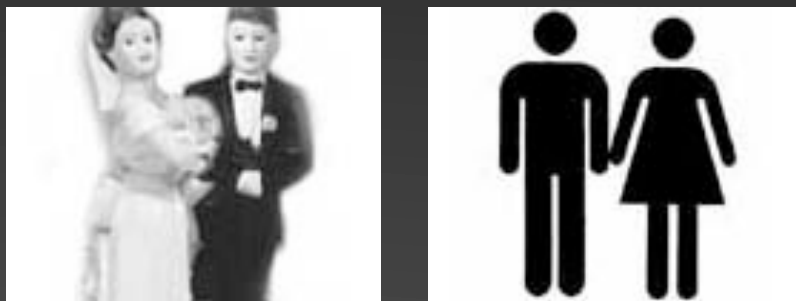
disgust sensitivity not associated with:

- Death Penalty
- Affirmative Action
- Welfare
- Gun-Control

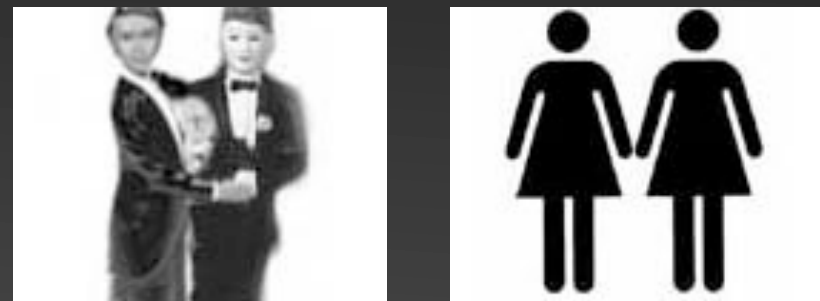
disgust sensitivity predicts *implicit* anti-gay attitudes

Inbar, Pizarro, Knobe & Bloom (2009) *Emotion*, 9, 435-439.

Straight



Gay



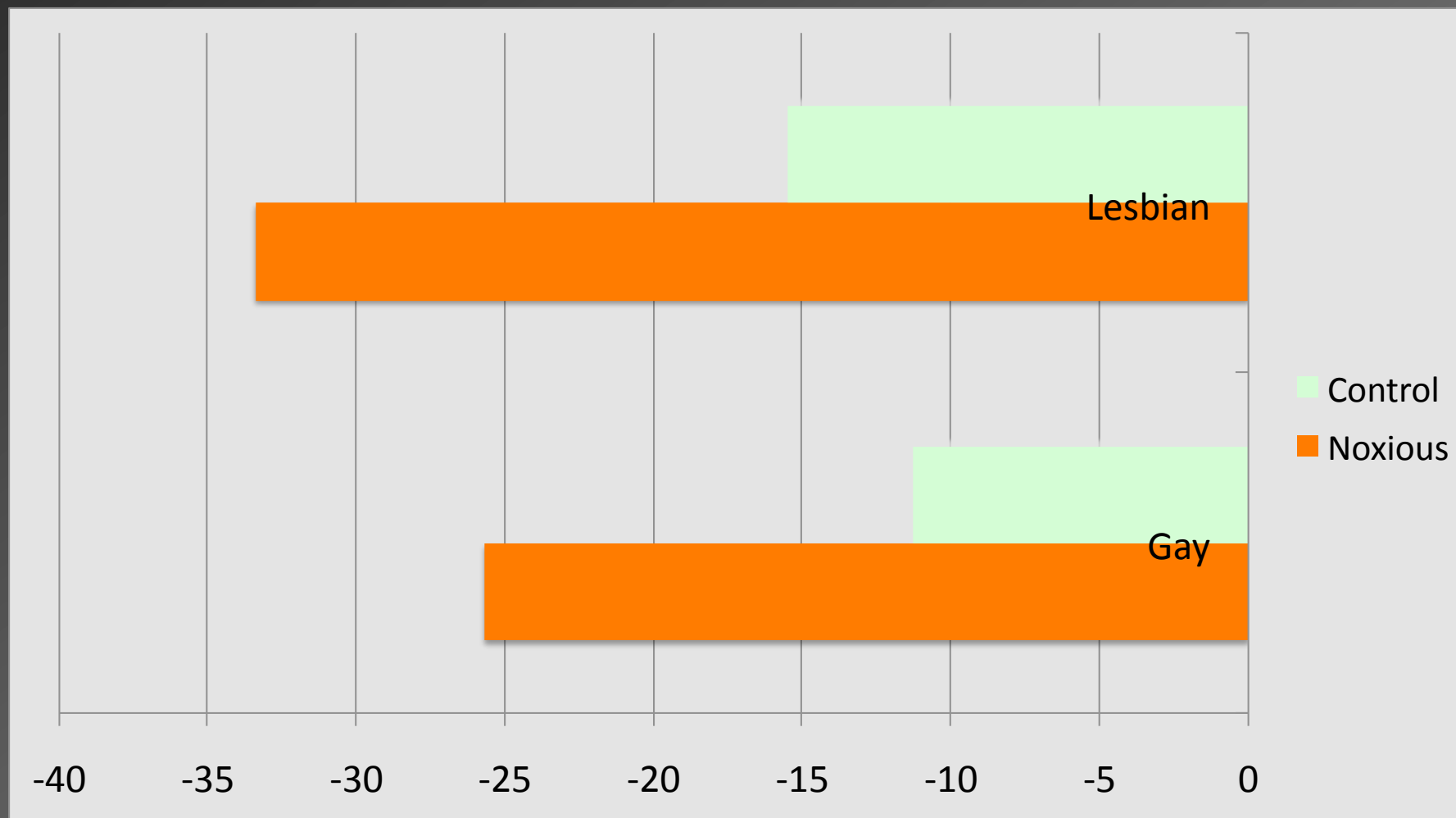
- N = 48 Cornell Undergraduates
- Given Disgust-Sensitivity Scale, Political Items, and Gay/Straight IAT
- Disgust Sensitivity predicts implicit anti-gay attitudes
- Follow-up: disgust sensitivity correlated with the extent to which people perceive encouraging homosexuality as intentional

could manipulating disgust affect anti-gay bias?

- two studies conducted on cornell university undergraduates
- first completed a political attitudes questionnaire
- next completed a gay/lesbian *feeling thermometer*
- manipulation
 - for half of the participants, a foul odor was sprayed in the garbage can of the lab



bad smell = greater anti-gay feelings



*straight-gay diff., standardized

“gut” morality

- The need to protect the body against contaminants likely gave rise to disgust reaction
- Strong, visceral motivation to avoid and expel foul stimuli
- Applied to people, it can lead to harsh judgments and moral rejection when individuals and groups are perceived as disgusting.