

## Emotions

## Next Wed Exam (rough breakdown)

- INTRO: 4
  - BRAIN: 9
  - FREUD: 9
  - SKINNER: 9
  - COG DEV: 9
  - LANGUAGE 9
  - PERCEPTION/ATTENTION: 9
  - MEMORY: 9
  - LOVE: 7
  - EVOLUTION 4
  - RATIONALITY 4
  - EMOTION: 18
- = 100%

## Next Wed Exam

- Lectures
- Gray textbook
- Norton readings (less detail)

See old exam for examples ...

[Check out most recent syllabus](#)

## Review sessions

- Monday, 2/26, 4-6 PM
- Tuesday, 2/27, 6-8 PM

Dunham labs 220

## William James on human instincts

To the psychologist alone can such questions occur as: Why do we smile, when pleased, and not scowl? Why are we unable to talk to a crowd as we talk to a single friend? Why does a particular maiden turn our wits upside-down? The common man can only say: "*Of course* we smile, *of course* our heart palpitates at the sight of the crowd, *of course* we love the maiden ...

## William James on human instincts

And so, probably, does each animal feel about the particular things it tends to do in the presence of certain objects ... To the lion it is the lioness which is made to be loved; to the bear, the she-bear. To the broody hen, the notion would probably seem monstrous that there should be a creature in the world to whom a nestful of eggs was not the utterly fascinating and precious and never-to-be-too-much-sat-upon object which it is to her ...

## The wrong theory of emotions

### Life is impossible without emotions

- Evolved mechanisms that set goals and priorities
- Shaped by cultural context
- But universal roots ...

## Outline

1. Facial expressions
  - The case of smiling
2. Non-social emotions
  - The case of fear
3. Feelings toward kin
4. Feelings toward non-kin

## 1. Universal feelings; universal faces

### Make a face

- Lower your brows and draw them together
- Tense your lower and upper eyelids
- Stare. Your eyes can bulge somewhat
- Press your lips together, with the corners straight or down

### Make a face (II)

1. Raise the corners of your lips back and up
2. Raise your cheeks
3. Raise your lower eyelids (if you can)

Smiles are universal

There are different types of smiles

Smiles are social signals

- Bowlers
- Olympic gold-medal winners

Two types of smiles

- Happiness smile (Duchenne smile)
  - “Pan am” smile, or greeting smile
- 10-month-olds
- Happy vs. unhappy couples
- College yearbook photos

**A third smile**

*Coy smiles, Appeasement smiles*

- entail gaze/face aversion
- often with self-touch
- in situations with potential for negative evaluation of self
- related to embarrassment
- related to a desire to affiliate

2. Non-social emotions:  
The case of fear

Fear

Spiders, snakes, heights, storms, large animals, darkness, blood, strangers, humiliation, deep water, leaving home alone

-- what do these have in common?

NOT: guns, cars, electrical outlets

What are non-human primates afraid of?

What are children in Chicago afraid of?

Social emotions

Altruism towards kin

Are animals merely survival machines?

- Not according to evolutionary theory
- Gene A: makes an animal care for its offspring
- Gene B: makes an animal care only for itself
- Gene A wins
- It is reproduction that matters

## Forget about the animal for a moment ...

- Take the perspective of the ...
  - cold virus
  - toxoplasmosis parasite
  - rabies virus
- Animals are the vehicles that these organisms exploit to reproduce

## Take the perspective of the gene

## Take the perspective of the gene

- Which genes survive?
  - Those that make the most copies of themselves
  - Animals are “vehicles” through which genes reproduce
- “An animal is merely the genes’ way of making another gene”

## Selfish genes lead to altruistic animals

- To the extent that evolution operates at the level of the genes, there is no hard-and-fast distinction between oneself and another

## Haldane's

- "Would you lay down your life for your brother?"
- "No, but I would gladly give my life for three brothers, or five nephew first cousins"

## Haldane's math

- "Would you lay down your life for your brother?"  
(who has 50% of your genes)

## Haldane's math

- "Would you lay down your life for your brother?"  
(who has 50% of your genes)
- "No, but I would gladly give my life for three brothers (150%), or five nephews (125%), or nine first cousins (112.5%)

Choose:  
You die or your three brothers  
die

- Gene A: makes an animal choose to die
- Gene B: makes an animal choose for its brothers to die
- Gene A wins

When a new male takes over a pride (by killing or driving out the previous male) ...  
-- he kills all remaining cubs  
-- pregnant lionesses undergo spontaneous abortions

Animals have evolved to be  
nice to kin

- Particularly their children (50% of genes)
- And particularly birds and mammals
- Quality, not quantity
- Long period of dependence prior to sexual maturity
- Two types of psychological mechanisms:
  - how parents respond to children
  - how children respond to parents

Baby attachment to the parent

- The cupboard theory (Skinner)
- Innate attachment (Bowlby)
  - positive: drawn to mom for comfort and social interaction
  - negative: fear of strangers

Harlow: Wire mothers vs. cloth mothers