

## 12/2 Emotion and social cognition

- o Emotions = effortless and subjective
  - Overly simplistic definition because many cognitive processes are also effortless
  - Physiological component
- o Distinction between cognition and emotion?
  - Motivation drives both
    - Paramecia conditioned maze with negative ion fields- produce mood enhancing effects
    - Cognition, good or bad?
    - Emotion, how good/bad?
  - Shacter and singer: bodily changes + cognitive processes
    - Adrenaline shot (norepinephrine), ½ informed, ½ mislead (vitamin), 10 mins in waiting room with confederate (happy or angry), ask emotional state.

	Informed	Mislead
Happy	Neutral	Happy
Angry	Neutral	Angry

- Emotion= physiological change + appraisal/interpretation
- Neutral/informed: reaction attributed to drug
- Emotion/mislead: reaction attributed to physiological changes
- Gruesome films
  - Appraisal mechanisms (deny/intellectually understand): can watch without physiological changes
- o Brain
  - Limbic system
    - Amygdala: fear/rage, emotional learning
    - Hippocampus: context (seeing a bear in the woods vs in a zoo)
    - Anterior cingulate: attention to emotion vs cognition
      - Damage= inappropriate emotions/lack of emotions
      - Dorsal: cognitive-frontal connection
      - Rostral: emotional-limbic system
    - Hypothalamus: fight/flight ( non essential functions stop)
      - Kluver-bucy syndrome (psychic-blindness): remove amygdala= no fear learning
      - Amount of amygdala activity= amount remembered
    - Nucleus Acumbens: stimulation better than food or sex, wanting not liking
    - Introception: body sense (anorexia: no introception)
    - Orbital frontal cortex: gambling choices/don't learn as quickly from mistakes (damage)

- o Emotional Regulation= appraisal
- o Communicating emotion
  - Facial expressions: R hemisphere activity (expressed more strongly on L side)
  - Prosopagnosia: can read emotion expression cannot recognize or identify
  - Prosody: speech intonation (aprosodia)
- o Emotional experience
  - Valence model: R hemisphere= negative emotions, L hemisphere= positive
    - LHD: catastrophic reaction
    - RHD: euphoric indifference
  - L hemisphere: approach emotions, R hemisphere: withdrawal
    - Anger = not specifically approach or withdrawal- large asymmetry between R-L
    - Increase in L frontal activity not hedonic, eudaimonic (autonomy/mastery)
    - Resilience: increased frontal lobe activity (recover/suppress abilities)