

## **COSMOLOGIES, SOCIETIES CULTURES**

### **An Integrated Approach to Human Universals, Cultural Differences, and the Evolution of the Human Mind**

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#### **SEQUENCE OF TOPICS AND LECTURES**

##### **I. MIND, MEMORY, AND IDENTITY**

From John Locke to Théodule Ribot: The Blank Slate – Sensationalism and Associationism --  
Hume's 'Bundle Theory' -- Amnesia and Hypermnnesia

##### **II. THE EVOLUTION OF THE JACKSONIAN BRAIN**

The Jacksonian brain – The Origins of Consciousness  
The Triune Brain – The Somatic Marker Hypothesis – The Autonomic Nervous System  
Psychopathology is a window onto the evolutionary history of the brain and  
consciousness -- From epilepsy to autism

##### **III. THE EVOLUTION OF THE SOCIAL BRAIN – AN ANTHROPOLOGICAL PERSPECTIVE**

Bipedalism, encephalization, and fetalization  
Calculating the costs and benefits of big brains --  
Adaptation to what? -- Mind-reading -- A Cognitive Arms Race  
Psychopathology is a window onto the history of the social brain – schizophrenia, autism

##### **IV. THE MIND INSIDE THE BRAIN**

1. Mental modules  
An evolutionary puzzle: The antiquity of mental illness -- Genome Lag and Trade-offs
2. Alternative possibilities: 'theory-theory', simulation, developmental modularity, peripheral and limited modularity
3. The discovery of Mirror Neurons –  
Resonance/Contagion → Empathy/Perspective → Decoupling/Time Travel  
Deception – a challenge to adaptation?  
The technology of functional neuro-imaging –  
A task-driven process – The False Belief Task

##### **V. COMPLETING THE SOCIAL BRAIN: THE 'SELF' versus THE 'EXECUTIVE'**

Planning, coordinating, monitoring, and adjusting – Inhibition – The Frame Problem  
Is there an 'inner-self' concealed in executive function circuitry? – The Impossible Homunculus  
The example of pseudopsychopathic personality disorder

##### **VI. THE EVOLUTION OF EMOTION – consult the addendum (emotion)**

The basic emotions – Darwin and the expression of emotion – The clinical emotions – The cultural emotions

##### **VII. THE GLUE OF SOCIAL LIFE: IS IT EMPATHY? – consult the addendum (mimesis)**

From Rationality to Empathy – Empathy and Sympathy – Insights from the autistic mind: the theory behind the 'extreme male brain'

##### **VIII. THE GLUE OF SOCIAL LIFE: IS IT SOCIAL EXCHANGE?**

Altruism in evolutionary perspective -- Strong reciprocity – Reputation – Altruistic Punishment – Neuroeconomics – Culture, Generosity and Cycles of Exchange

## IX. THE GLUE OF SOCIAL LIFE: A DARKER VIEW OF HUMAN NATURE

*Totem and Taboo* revisited – Evolutionary accounts of religion

*Deep History*

Adaptation and the Ecological Niche – The Constructed Niche – Plasticity – A Neo-Lamarckian perspective

## X. CONCLUSION: ANTHROPOLOGY AND HUMAN NATURE

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### ADDENDUM

#### **EMOTION OUTLINE**

##### ARE EMOTIONS NATURAL KINDS?

A class [“the emotions”] united by distinctive and intrinsic features and similarly divided within this class into constituent emotions [fear, anger, jealousy, etc.]

Basic and complex emotions, homeostatic drives, hedonic states [pleasure and pain], background emotions, mood, temperament

##### THE JAMES-LANGE THEORY OF EMOTIONS

Sub-cortical circuits → somatic changes → somatic appraisals → cognition → action

Each emotion is identified with one type of somatic appraisal

Walter Cannon’s critique and Antonio Damasio: Somatic Marker Hypothesis

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#### **EMOTION CATEGORIES**

##### BASIC EMOTIONS [Darwin, Izard, Ekman]

###### 7 PLUS OR MINUS 2:

The basic 5 are fear, anger, sadness, happiness, disgust

Additional candidates include surprise, contempt, interest, shame

Each emotion is associated with a distinctive facial expression and physiological response

These features are pan human and homologues are found in other primates

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##### COMPLEX EMOTIONS

###### Generalizing emotions:

Formed by suppressing a component of a basic emotion; e.g., *frustration* = anger minus the attribution of responsibility for causing injury, loss, interference

###### Specializing emotions:

Formed by adding a component to a basic emotion; e.g., *grief* = sadness plus a focus

Objectless emotions: No object and therefore no content; e.g., depression, euphoria, anxiety

##### CLINICAL EMOTIONS

Most commonly cited: fear, anxiety, guilt, grief, depression, dysphoria; also irritability, panic, excitability

Emotion terms in the DSMs:

affect: a pattern of observable behaviors that is an expression of a subjectively experienced feeling state [emotion]; quality of affect:

*flat* => *blunted* => *constricted* [absence to mild reduction]

*abile*: abnormal variability, with repeated and abrupt shifts

*ego-dystonic* and *ego-syntonic* affect: Achilles and Sri Lankan Buddhism

mood: pervasive and sustained emotional state

appetitive emotions = sex, hunger, cf. anhedonia

alexithymia

EMOTIONS OF MORAL ASSESSMENT - Is there a universal moral economy?

ANGER	unjustified loss or injury to self
GUILT	self-acknowledged responsibility for unjustified loss, injury, gain
SHAME	devaluation of person-as-a-whole before a moral community
SHAMELESSNESS	moral bankruptcy, banishment

**CULTURE AND EMOTIONS**

EMOTION AS CONTENT -

ABSENCE OF TERMS FOR BASIC EMOTIONS

sadness/anger:	Luganda (Uganda), Ifaluk (Micronesia), Ilongot (Luzon)
shame/embarrassment:	Gidjangali (Australia), Newar (Nepal) Ifaluk (Micronesia), Tahitians
shame/guilt/shyness/embarrassment:	Javanese
shame/shyness/embarrassment/respect:	Pintupi (Australia)
guilt:	Tahitians, Sinhalese, Ilongot (Luzon), Pintupi (Australia), Samoans
<i>Schadenfreude</i> and <i>Weltschmerz</i> :	Anglophones

HYPO-COGNIZED (few distinctions) vs HYPER-COGNIZED emotions (complex distinctions) (M. Spiro, R. Levy)

EMOTION AS PROCESS -

CULTURAL DIFFERENCES - Interpretive schemata [emotion eliciting situation] -- Somatic response: 'autonomic response specificity' [Hinton and Hinton on variations in human physiology]

- Affective phenomenology
- Action scripts -- Fred Bailey on the Tactical Uses of Passion

CULTURALLY UNIQUE EMOTIONS

The Ilongot (Luzon) emotion known as *liget*: This term translates superficially as "anger." In practice, its meaning is embedded in a set of principles and connections with elaborate ramifications for Ilongot social life. *Liget* can be aroused by a communal all-night song fest, pride of accomplishment, or the death of a loved one. It can be manifested in the sweat of hard work and in a powerful urge to engage in head-hunting. It is shown when a man hunts with courage and concentration and when a woman prepares a good meal. It is a highly valued force, vital to social and personal life. (M. Rosaldo)

**EMOTION, EVOLUTION AND THE LIMBIC SYSTEM**

Paul Maclean on the 'triune brain':

Reptilian brain = limbic brain → Paleomammalian brain → Neomammalian brain = neocortex

The limbic system –

Amygdala: locus of affective computation -- Thalamus: processes sensory input -- Hypothalamus: controls bodily urges and appetites -- Hippocampus: memory storage -- Caudate nucleus: 'phylogenetic memory' -- Putamen: processual memory

Joseph LeDoux --

The cognitive high road

Sensory thalamus to the sensory cortex to the amygdala

Fine grained representations of the stimulus

The low road

Quick and dirty: the sensory thalamus directly to the amygdala

By-passes cortical processing and therefore only coarse grained representations of the stimulus

The relationship between the high and low roads is hierarchical: inhibition

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## MIMESIS AND ANTI-MIMESIS

*Mimesis* = imitation / copy / repetition [including memory]

*Specular* = the actor 'sees' himself performing

*Lucid* = the actor is aware of his intentions while performing

### MIMESIS

1. **Simulation** - specular mimesis:

Lucid = malingering and Non-Lucid = factitious traumatic memory

2. **Suggestion / Hypnosis**

With patient's desire = specular but not lucid mimesis

Without patient's desire = non-specular mimesis

Auto-suggestion: e.g. 'memories of the future'

3. **Repetition** - past-present

DSM's 're-experiencing' = intrusive memories and images, flashbacks, re-enactments, dreams and nightmares

FREUD: The transference neurosis =

1. It is an artificial neurosis [according to Freud]

2. It is a meaning that is imposed on the encounter by the analyst

Freud:

1. *Studies on Hysteria* [with Josef Breuer]: hypnosis and abreaction

Limitations: not everyone is hypnotizable, 'cure' is temporary, contamination via suggestion

2. Psychoanalysis = anti-mimesis

Free association and resistance

The transference neurosis: Acting out → working through = mimesis → anti-mimesis

4. **Contagion**

*Vicarious Trauma* and *2d Generation Trauma*

*Witnessing*: specular and lucid mimesis

5. **Metaphor** – trauma [lesion] → kinetic shock → psychological shock [trauma]

**EMPATHY** – cf. sympathy

1. Historical origins: psychological aesthetics - *Einführung*

- Embodied, emotional engagement with art object
- 2. Interpersonal empathy
  - Witnessing
  - Mirror neuron system: sensory-motor
  - Resonance → Empathy: an introjected experience is projected back onto its source

**PROJECTION AND INTROJECTION** – ref. *Object Relations Theory* [Melanie Klein, Wilfred Bion]

1. *Projective identification*: The attempt to control one's own undesirable impulses through the illusion of placing them inside someone else's personality in order to gain some control over them

2. *Introjective identification*: The host personality takes alien aspects to be his or her own. Ref identification with the aggressor

**ANTI-MIMETIC PRACTICES**

- 1. Diegesis – a narrative; a statement of the case
  - Patient recalls and recounts the traumatic scene in full consciousness
- 2. Biological mechanisms?