

Neuroscience and Psychoanalysis WAWI Sept-Nov 2018
Christina Sekaer MD PhD

Outline and Bibliography

1. Introduction

Discussion and video on example of brain plasticity
Brief slide overview of brain anatomy
Video clip from Secrets of the Brain by V. Ramachandran

2. Controversy as to the value of neuropsychology to psychoanalysis

Readings: The Case Against Neuropsychology by R. Blass and Z. Carmelli
The Case for Neuropsychology by Yorem Yovell, Mark Solms and Aikaterine Fodopoulou

3. Levels of Perception – Vision as an example of how complex systems in the brain work

Readings: “How the Brain Constructs Perceptions” by Regina Pally – Chapter 2 in the Mind
Brain Relationship

4. Post Traumatic Stress Disorder

History of psychology of trauma: Charcot, Janet, Freud, van der Kolk
shell shock, traumatic neurosis, PTSD
Anatomy: roles of hippocampus and amygdala
Neurochemical changes: HPA axis, steroids, nor-epinephrine
Yovell: meanings of traumatic memory
Reading a. Yovell, Yorem “From hysteria to PTSD” (2000) J. Neuropsychology p 171-181

5. Autism

Introduction to perceptual aspects of autism with focus on visual social perception
Spectrum of autistic problems with overlap to narcissistic difficulties
Temple Grandin as example of articulate Aspergers self descriptions
Readings: a. Raley, J. Autistic Echoes Chapter 6 in Shadow Syndromes, Bantam
Books, NY 1997
b. Grandin, T. “Autism, A Personal Perspective” in CNS Spectrums 2 (5) 1997 p. 18-24
Suggested: Elijah’s Cup by Paradis, Born on a Blue Day personal stories

6. Empathy and Mirror Neurons

Discovery of mirror neurons, a look at early research
Definition of and function of mirror neurons
Probable role of mirror neurons in empathy (cognitive and emotional)
Readings To Be Decided – such as Hickok article on the myth of mirror neurons

7. Emotional Systems and Motivation

Readings not yet decided:: Emotion and Motivation Chapter 4 The Brain and the Inner World
O. Turnbull and M.Solms
And/or Further readings in The Archeology of Mind by Jaak Panksepp Norton (2012)
And/Or Discussion and clinical examples of Brockman’s approach
The Centrality of Affect Chapter 5 Richard Brockman A Map of the Mind (1998)

8. Memory and Connectionism

Implicit: procedural, emotional, memory; Explicit semantic, episodic memory
Role of hippocampus, amygdala, basal ganglia, limbic system; A look at associative verbal networks
A look at neural networks and categorization by parallel processing
Assigned readings: a. Forms of Memory: Reworking Early Experiences Chapter 2 from
Infant Research and Neuroscience at Work, Judith Rustin Norton (2013)
b. excerpt from The Talking Cure on parallel distributed processing
Susan Vaughn, Columbia Univ. Press, NY 1997 **on wawi website.**