

## **CLASSES 19–20: FROM MIND(S) TO BRAIN(S)**

### **THE MIND AND THE BRAIN**

- different ideas about the relationship
  - “The mind is secreted by the brain.”
  - “The mind is what the brain does.”
- phrenology
- 1850s: aphasiology (Broca, Wernicke)
  - What are the different characteristics?
  - Broca's is not just a production problem:  
What kinds of sentences are problems for them? What does this tell us?
- other “weird” disorders:  
foreign accent syndrome, banananomia, split brain tasks, hemispherectomy in kids
- huge granularity problem
- everything lights up during every task:
  - subtraction methodology is very difficult
  - aphasia / amusia double dissociations even though loci are shared
  - Broca's aphasics can in many cases still sing; therapy gives melody to phrases
- upshot: when people tell you we'll “crack the brain/mind” soon, they're just wrong

### **FODOR / POEPEL**

- Why do we care where stuff happens in the brain?
- rationalism vs. empiricism; nativism vs. connectionism
- Why are brain studies compelling?
- Poeppel: Localization is worthwhile because sometimes it's right!
  - there's something to phrenology
  - Penfield homunculus (Penfield & Rasmussen, *The Cerebral Cortex of Man*, 1950)
  - Ramachandran's work (e.g., *Phantoms in the Brain*, 1998; *The Emerging Mind*, 2003)
- What's the best thing that could happen?
- What's the worst thing that could happen?