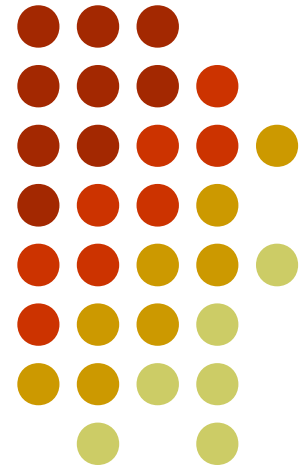


Philosophy of Cognition



Amitabha Mukerjee



Reading:

Stephen Palmer, VISUAL AWARENESS

from Levitin, **Foundations of Cognitive Psychology**

Robert Wilson, PHILOSOPHY

MIT Encyclopedia of the Cognitive Sciences

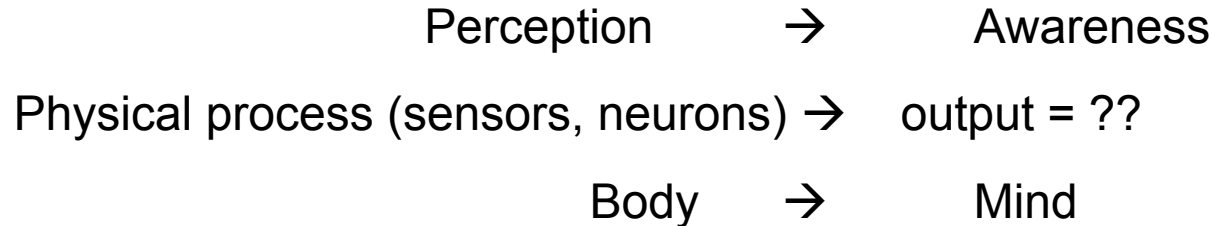
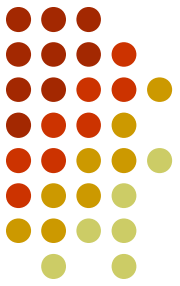
Both at <https://cognet.mit.edu/>

Debates



- Is the mind the same as the brain?
→ **mind-body problem** : dualism vs monism
- Is all of our knowledge based ultimately on the senses, or is some of it innate or *a priori* (e.g. the capacity for language) ?
→ **empiricism vs rationalism**
- Other debates: how do I know the mental state of others (*other minds*)?

What is “Mind”?



Mental Events:

- perception, pain, hope, desire, belief

Sometimes mind is equated with “soul”

Dualism: nature (incl human body) = physical,

human beings are special: composed of both physical and mental stuff

Dualism



- Mind and Body are separate
- How are they different
 - Different substances → **substance dualism** [Cartesian]
 - Q. is “mental substance”? Where is it located? Does it have volume or mass?
 - Different properties → **property dualism**
 - There is only one brain, but it has two properties – physical and mental
 - Mental states cannot be reduced to the physical
 - e.g. Experiences differ from physical objects in that they refer to things (technical name: *intentionality*)
 - mental states may be emergent – arising from complexity of brain
 - Q. But how can a property be independent of the object?

Dualism : Connecting body and mind



- How are the mind and body connected?
 - They are intimately connected!
 - Physical processes (e.g. brain signals) cause sensation of pain, and mental states cause physical effects →
interactionism
 - Descartes: They are connected at the pineal gland – not duplicated in the two lobes
 - Others: requires intervention of God
 - Mental states are a side-effect of physical processes →
epiphenomenalism
 - Mental states do not affect physical states

Monism



- There is no physical world, only mental → **idealism** [Berkeley]
 - Problem: How come different people think alike?
-
- There is no separate mental world, it's all physical → **materialism**
 - view of the vast majority of monists
 - problem: how do mental states arise?
 - mind-body identity
 - behaviourism
 - functionalism

Materialism



- **mind-brain identity**

- all mental events can be ultimately reduced to physical explanation,
- “mental state” is nothing but a “brain state” [not believed by property dualists]
- may be emergentist

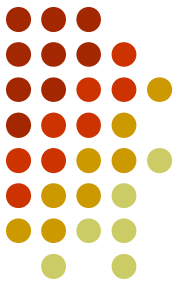
e.g. heat is explained in terms of molecular motion.

→ also called: *reductive materialism*

- some mental events will disappear as important notions, e.g. the “five elements” or panchabhUtas in ayurveda

- → *eliminative materialism*

Functionalism



- Early 19th c. : Emphasis on “mental” → psychology based on introspection
- *Behaviourism* : reject “mental” altogether. An organism is determined by its environment (inputs) and its observable response (output)
 - *John is hungry = John has a propensity to eat*
- **Functionalism:**
 - Mental states determined by the function performed
 - = causal relation between input, output, mental states, and other minds’ mental states
 - *Multiple realizability* : can do same function w different bodies
 - Robots, computers, and aliens can also have mental states
 - Searle’s Chinese room argument

Consciousness



- Key aspect: Role of “consciousness”
 - How important a part of the mind is consciousness?



- Problem for materialism: How is consciousness achieved?
 - Gamma wave theory
- Is consciousness a by product (epiphenomenal)?

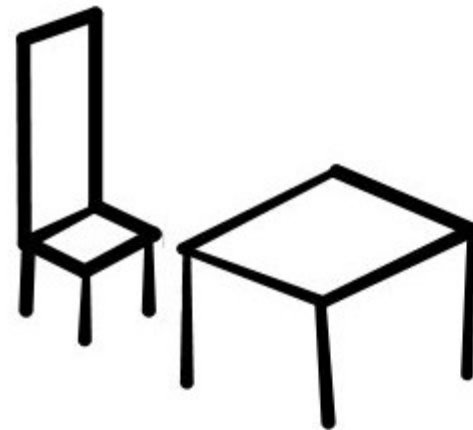
I think therefore I am.
I am therefore I think... Ii think...
I think, and therefore (yawn) -
therefore I am.
I am, therefore I



(YAWN) think.
I think....

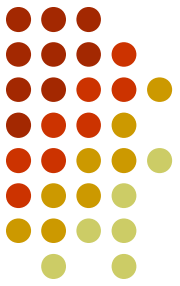


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DJL

Supervenience



- Different Mental events ← must differ in neural activity [Jaegwon Kim 78]
 - But not all neural activity has conscious effects
 - Robots or computers can also have mental states

Other minds



- How to tell if creature or system X has conscious experiences?
- I have direct knowledge only about my consciousness
- Descartes: “Je pense donc je suis “ [I think therefore I am]
- Knowledge of other minds is basis for language
 - Autists lack awareness of others’ feelings
- Reasons for believing in other minds:
 - a) Other people behave similarly in similar circumstances
I may recognize pain in a dogs (but not frogs or worms?)
 - b) Structural similarity - face, eyes, legs, etc.
- Babies appear to recognize “contingently behaving” robots as alive

Visual Awareness



- How do I know your perception of something may not be quite different from mine?
 - e.g. you may have your red-green receptors inverted.
 - Would result in the same behaviour [*“inverted spectrum”*]
 - Spectra in the world are same → sameness of our perception, not the mediating internal experiences
 - L / M = Long/Medium -wavelength cones → may be inverted
- Argument for functionalist stance – architecture may be different





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