

# **Introduction to Philosophy**

Philosophy 110W  
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Class #22 - Consciousness

# Theories of Mind

- Dualism has an account of internal mental states.
  - But resists scientific treatment
- Behaviorism is physicalistic.
  - But denigrates internal processes
- Identity theory embraces the causal interactions in the brain
  - But is chauvinist
- Functionalism avoids the chauvinism of identity theory by abstracting to organization
  - But lacks an account of internal states

# Motivations for Functionalism

- Avoid the identity theorist's chauvinism and non-relational construal of mental states
- Avoid the behaviorist's denigration of internal states
  - "Since mental states interact in generating behavior, it will be necessary to find a construal of psychological explanations that posits mental processes: causal sequences of mental events" (Fodor 454a).
- Type mental states according to behavior
- Abstract away from the particular hardware
- The mind is the software of the brain.
  - "In the functionalist view the psychology of a system depends not on the stuff it is made of (living cells, metal or spiritual energy) but on how the stuff is put together" (Fodor 451).

# Generalizing Over the Hardware

- Functionalist definition of pain
  - A thing is in pain if it has been affected in certain relevant ways, and if it has other concomitant mental and behavioral states (like wincing or crying) which are causally related to it.
- When we are researching the mental states of a particular organism, we will of course look at the specific causal processes involved.
- But, when we generalize to a functionalist theory of mind, we abstract away from physical particulars.
- Ramsification: a logical trick to eliminate irrelevant vocabulary from the theoretical identity sentences of a formal theory of mental states.
- Replace references to the specifically mental parts of this theory, pains and color terms and beliefs, with variables.

# David Lewis on Ramsification

- We are assembled in the drawing room of the country house; the detective reconstructs the crime. That is, he proposes a *theory* designed to be the best explanation of phenomena we have observed: the death of Mr. Body, the blood on the wallpaper, the silence of the dog in the night, the clock seventeen minutes fast, and so on. He launches into his story:
- X, Y and Z conspired to murder Mr. Body. Seventeen years ago, in the gold fields of Uganda, X was Body's partner... Last week, Y and Z conferred in a bar in Reading... Tuesday night at 11:17, Y went to the attic and set a time bomb... Seventeen minutes later, X met Z in the billiard room and gave him the lead pipe... Just when the bomb went off in the attic, X fired three shots into the study through the French windows...
- And so it goes: a long story. Let us pretend that it is a single long conjunctive sentence. The story contains the three names 'X', 'Y' and 'Z'. The detective uses these new terms without explanation, as though we knew what they meant. But we do not. We never used them before, at least not in the senses they bear in the present context. All we know about their meanings is what we gradually gather from the story itself. Call these theoretical terms (T-terms for short) because they are introduced by a theory.

# Psychology

- A psychological theory correlates mental states with inputs and outputs.  
 $T(s_1 \dots s_n, i_1 \dots i_m, o_1 \dots o_k)$ 
  - $i_{7345}$  = having an orange soda can in front of you
  - $s_{2342}$  = seeing the cylindrical orange patch
  - $s_{4873}$  = desiring orange soda
  - $s_{92357}$  = enjoying an orange soda
  - $o_{983}$  = Saying, 'Ahh, I enjoyed that orange soda'
- E.g. Whenever a person is in state  $s_{4873}$  and receives input  $i_{7345}$  so that she develops state  $s_{2342}$ , she also moves into state  $s_{92357}$  and produces output  $o_{983}$ .
- For the identity theorist, the  $s_n$  are human brain states.

# Behaviorist Psychology

- $B(i_1 \dots i_n, o_1 \dots o_m)$
- Look, Ma, no mental state terms!
- Parsimony

# Identity Theory and Multiple Realizability

- $T(s_1 \dots s_n, i_1 \dots i_m, o_1 \dots o_k)$
- To avoid problems of multiple realizability, we want to generalize over the  $s_n$ .
- The functionalist satisfies the multiple realizability condition by claiming that the  $s_1 \dots s_n$  can refer to any kinds of states.
  - ▶ even states of an immaterial soul

# Ramsification

- To generalize, we replace this theory...
  - ▶  $T(s_1 \dots s_n, i_1 \dots i_m, o_1 \dots o_k)$
- ...with this one:
  - ▶  $\exists x_1 \dots \exists x_n T(x_1 \dots x_n, i_1 \dots i_m, o_1 \dots o_k)$
- p is enjoying an orange soda iff  $\exists x_1 \dots \exists x_n T(x_1 \dots x_n, i_1 \dots i_m, o_1 \dots o_k)$  and p is in  $x_{92357}$ 
  - ▶ a functional, causal-role definition of your mental states
- x is in pain iff x has been affected by the kinds of things that cause pain, has other mental states that generally accompany pain, and exhibits the kind of behavior that are associated with pain.
- Pain is whatever has the place that pain has in your life.
  - ▶ preceded by physical or emotional blows
  - ▶ succeeded by characteristic behavior
    - avoidance
    - valiant confrontation
  - ▶ engenders certain other mental states
    - fear or anger or resignation

# Problems with Functionalism

- The central problems with functionalism have to do with its treatment of particular kinds of mental states.
- Remember that we can type mental states into two classes
  - Intentional states (e.g. beliefs)
  - Qualitative State (seeing yellow, feeling pain)
- Leslie is going to talk about one kind of problem for functionalism arising from considerations of qualitative states.

# Consciousness

Leslie

# Qualia Issues

- Materialist theories of mind fail to capture our internal mental lives.
- The behaviorist rejected all first-person evidence as misleading and useless.
- The Identity theorist accepted that internal states were causes of behavior, rather than identical to behavior, but identified the mental states with their neural correlates.
- Both theories work better as third-person accounts of mental states than as first-person accounts.
- Similarly, functionalism has been criticized for failing to account for the way that mental states appear to us, for consciousness.
- absent qualia argument
- inverted qualia: two people could be identical in their behavior, and indeed in their functioning, and yet not share the same phenomenal experience.

# Bats



It will not help to try to imagine that one has webbing on one's arms, which enables one to fly around at dusk and dawn catching insects in one's mouth; that one has very poor vision, and perceives the surrounding world by a system of reflected high-frequency sound signals; and that one spends the day hanging upside down by one's feet in an attic. In so far as I can imagine this (which is not very far), it tells me only what it would be like for me to behave as a bat behaves. But that is not the question. I want to know what it is like for a bat to be a bat. Yet if I try to imagine this, I am restricted to the resources of my own mind, and those resources are inadequate to the task. I cannot perform it either by imagining additions to my present experience, or by imagining segments gradually subtracted from it, or by imagining some combination of additions, subtractions, and modifications. To the extent that I could look and behave like a wasp or a bat without changing my fundamental structure, my experiences would not be anything like the experiences of those animals... The best evidence would come from the experiences of bats, if we only knew what they were like (Nagel, "What is it Like to Be a Bat" p 439).

# Are We Zombies?

- The functionalist might deny that qualia are real.
  - ▶ The radical behaviorist already made this claim.
  - ▶ We thought the claim implausible, but perhaps we should reconsider it.
- Perhaps qualia have no room in our best scientific psychological theory.
  - ▶ There may be nothing that it is like to be us.
  - ▶ It is difficult to see how mature neuroscience can make reference to qualia.
  - ▶ Einstein: science can never give us the taste of soup.
  - ▶ Wittgenstein: nothing would serve as well as something about which nothing could be said.



# Jackson's Epiphenomenalism



- Fred and Mary
  - ▶ knowledge argument
  - ▶ blue bananas
- I think that there are certain features of the bodily sensations especially, but also of certain perceptual experiences, which no amount of purely physical information includes. Tell me everything physical there is to tell about what is going on in a living brain, the kind of states, their functional role, their relation to what goes on at other times and in other brains, and so on and so forth, and be I as clever as can be in fitting it all together, you won't have told me about the hurtfulness of pains, the itchiness of itches, pangs of jealousy, or about the characteristic experience of tasting a lemon, smelling a rose, hearing a loud noise, or seeing the ski (Jackson 127).



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# Chase and Sanborn

from Daniel Dennett

- Both are tasters for, and loved, Maxwell House coffee.
- After a while, both of them realize that they no longer love the same coffee.
- Chase
  - My qualia are the same.
  - My evaluations of those same sensations has shifted.
- Sanborn
  - My qualia have shifted.
- Is it possible to determine whether they are correct or whether they are misdiagnosing themselves?
  - faulty memories
  - perceptual anomalies

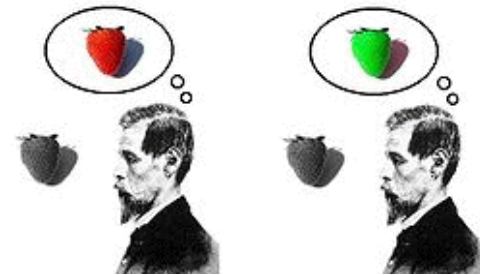


# More Intuition Pumps

- Drinking beer or wine
  - ▶ If tastes are acquired, then what we think about them shifts with our experience.
  - ▶ There is no single way that it tastes, independent of my past experiences.
- Cauliflower pill
  - ▶ Since we never liked cauliflower, it would seem that the pill must change its taste.
  - ▶ Another possibility is that it merely changes the way we feel about the taste.
  - ▶ The latter possibility is scientifically preferable, since it leaves the cauliflower alone.
  - ▶ There is no way that it tastes, independent of my past experiences.
- Phenol-thiol-urea
  - ▶ Whether you find it bitter or tasteless depends on your genes.
  - ▶ If we got rid of all of the humans with a genetic ability to taste it, then we might start to believe that it is intrinsically tasteless.
  - ▶ If we got rid of all the humans with a genetic inability to taste it, then we might think that it is intrinsically bitter.
  - ▶ The taste is thus relational, rather than intrinsic.
- Inverting spectacles
  - ▶ Suppose we pressed them on this question: “Does your adaptation consist in your re-inverting your visual field, or in your turning the rest of your mind upside-down in a host of compensations?” If they demur, may we insist that there has to be a right answer, even if they cannot say with any confidence which it is?... Only a very naive view of visual perception could sustain the idea that one’s visual field has a property of right-side-upness or upside-downness *independent of one’s dispositions to react to it* -“intrinsic right-side-upness” we could call it (Dennett, “Quining Qualia” p 423).

# Consciousness Problems

- Intentions
  - Chinese Room
- Qualia
  - Inverted qualia
  - Absent qualia
    - zombies
    - modal argument



# Two Paths

- One path accepts the reality of qualia, but denies the sufficiency of physicalism.
  - ▶ The insufficiency of physicalism seems to infect all kinds of reductive definitions.
  - ▶ All kinds of physical reductions are denigrated
  - ▶ Descriptions of the wavelength of light omit facts about its effects on perceivers.
- The other path takes physicalism as brute, but omits aspects of conscious experience.
  - ▶ We have to look for appropriate type-identities for mental states.
  - ▶ Type-identity statements (what it is to be a thing of a certain type) must be made with reference to the appropriate regularities.
    - elementary particles in terms of charge
    - species in terms of genetic constitution
    - water in terms of molecular constitution
    - mental states in terms of neuro-psychological laws
    - We're stuck with a non-relational account of mental states.

# Functionalism and AI

- Liberal view of mind
- We might wonder if the difference between machines and human beings has some biological basis.
- Searle argues that there is something essentially biological about mentality.
  - Responding both to claims of machine intelligence and to claims that we can test functionalism by constructing models of human minds.
- To understand minds, according to the functionalist, we can examine computer models and their software.
- Computers and their software work according to purely formal, syntactic manipulation.
- They merely follow algorithms, every step of which can be specified syntactically.

# The Chinese Room



# Searle's Argument

1. Programs are completely describable in terms of their formal, syntactic content.
2. Minds grasp the meanings, or semantics, as well as syntax.
3. Syntax alone can not produce semantics.

So, minds are not merely syntactic manipulators; i.e. minds are not mere programs.

There is more to our minds than algorithmic processing of sensory input toward the production of motor output.

# Summary

- The Chinese room argument shows that functionalism has a problem accounting for our intentional states.
- The absent qualia argument shows that functionalism has a problem accounting for our phenomenal states.
- Only the dualist provided a satisfying first-person account.
- But dualism has an apparently insuperable (and spooky) problem of interaction.
- Functionalism is the most widely supported contemporary theory of mind.

# Ethics

- Understanding consciousness is important for psychology.
- Also, in case we meet the aliens.
- Friends or food?

