Lecture 9 – Eliminative Materialism

Patricia Churchland – “The Hornswoggle Problem”
Agenda

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Patricia Churchland

• Canadian-American philosopher (born 1943).
• Emeritus professor at UC San Diego.
• Specializes in neurophilosophy, philosophy of mind, and philosophy of science.
The Hard Problem versus the Easy Problems of Consciousness

**The Hard Problem**: the problem of explaining consciousness (or qualia -’what it is like’ to experience something).

- Thomas Nagel: “While an account of the physical basis of mind must explain many things, this [conscious experience] appears to be the most difficult” (Churchland 2).

**Easy Problems**: Churchland gives a list of examples of easy problems: “the nature of short-term memory, long-term memory, autobiographical memory, the nature of representation, the nature of sensory-motor integration, top-down effects in perception -- not to mention such capacities as attention, depth perception, intelligent eye movement, skill acquisition, planning, decision-making, and so forth“ (2).
The Left-Out Hypothesis

• **The Left-Out Hypothesis**: solving all the easy problems would still leave the Hard Problem of consciousness unsolved.

• The left-out hypothesis is a version of a denial of physicalism: explaining all physical facts would still not explain consciousness.

• Dividing up the hard problem from the easy problems of consciousness (“carving up the problem space” in this way) is connected to, supports, (or assumes?) dualism.

• “Conceptualizing a problem so we can ask the right questions and design revealing experiments is crucial to discovering a satisfactory solution to the problem” (Churchland 2).
Sublunary versus Superlunary Physics

• Medieval physicists used to think there was a distinction between sublunary physics (motion of things below the level of the moon) and superlunary physics (motion of things above the level of the moon).

• They thought sublunary physics involved easy problems. Everything in the sublunary realm has a Natural Place. Heavy things fall because they have gravity and their Natural Place is the earth, and things like smoke rise because they have levity their Natural Place is up.

• Superlunary physics was thought to be intractable because superlunary objects have neither gravity nor levity.
Philosophical Zombies

Philosophical zombies (an anaqualiac) support the left-out hypothesis:

• Suppose a person has all the capacities that can be easily explained (attention, short term memory, etc.), but lacks consciousness—qualia.

• “Since the scenario is conceivable, it is possible, and since it is possible, then whatever consciousness is, it is explanatorily independent of those activities” (Churchland 3).

Churchland’s objection:
“Saying something is possible does not thereby guarantee it is a possibility, so how do we know the anaqualiac idea is really possible? To insist that it must be is simply to beg the question at issue” (Churchland 3).
Are Qualia Well-defined?

• Qualia seem to be well-defined when we look at prototypical cases (pain, blueness of a sky, etc.).

• However, once we move beyond these clear cut cases, what exactly constitutes qualia because far from clear.
  • “Limb-position” qualia?
  • Vestibular system (sense of balance and spatial orientation) qualia?
  • Eye-movement qualia?
  • Introspective qualia?
  • Thought qualia?
The Hornswoggle Problem

“My suspicion with respect to The Hard Problem strategy is that it seems to take the class of conscious experiences to be much better defined than it is. The point is, if you are careful to restrict your focus to the prototypical cases, you can easily be hornswoggled into assuming the class is well-defined. As soon as you broaden your horizons, troublesome questions about fuzzy boundaries, about the connections between attention, short term memory and awareness, are present in full, what-do-we-do-with-that glory” (Churchland 4).
Are Easy Problems Really Easier than the Hard Problem?

• We do not really know solutions to so called “easy” problems?

• Take for instance, sensori-motor control. A signature is recognizably the same no matter how it is signed— with hands, foot, mouth, body, etc. “How is ‘my signature’ represented in the nervous system? How can completely different muscle sets be invoked to do the task, even when the skill was not acquired using those muscles? We do not understand the general nature of motor representation” (Churchland 4).

• It’s not just that we are lacking details, but rather we are lacking conceptual and theoretical ideas when it comes to solving “easy” problems.
Argument from Ignorance is a Fallacy

We really do not understand much about a phenomenon P. (Science is largely ignorant about the nature of P.) Therefore: we do know that:
(1) P can never be explained
or
(2) Nothing science could ever discover would deepen our understanding of P.
or
(3) P can never be explained in terms of properties of kind S.
(Churchland 5)
Ignorance is a Epistemological Fact, Not a Metaphysical Fact

“The mysteriousness of a problem is not a fact about the problem, it is not a metaphysical feature of the universe -- it is an epistemological fact about us. It is about where we are in current science, it is about what we can and cannot understand, it is about what, given the rest of our understanding, we can and cannot imagine. It is not a property of the problem itself” (Churchland 7).
Adding “I Cannot Imagine”

• “It is sometimes assumed that there can be a valid transition from ‘we cannot now explain’ to ‘we can never explain’, so long as we have the help of a subsidiary premise, namely, ‘I cannot imagine how we could ever explain...’” (Churchland 6).

• “But it does not help, and this transition remains a straight-up application of argument from ignorance. Adding ‘I cannot imagine explaining P’ merely adds a psychological fact about the speaker, from which again, nothing significant follows about the nature of the phenomenon in question. Whether we can or cannot imagine a phenomenon being explained in a certain way is a psychological fact about us, not an objective fact about the nature of the phenomenon itself” (Churchland 6).
Vitalism

• Churchland’s biology teacher believed in vitalism: the idea that living things possess a non-physical inner force or energy that gives them life.

• “I cannot imagine how you could get living things out of dead molecules. Out of bits of proteins, fats, sugars -- how could life itself emerge? He thought it was obvious from the sheer mysteriousness of the matter that it could have no solution in biology or chemistry” (Churchland 6).
Mary in the Black and White Room

• Is Jackson’s thought experiment of Mary in the black and white room an example of an argument from ignorance relying on a “I cannot imagine” premise?

• I cannot imagine how Mary would know what it is like to see red if she had all the physical facts. Therefore, we can never explain qualia using all the physical information there is.
“The knowledge argument does not rest on the dubious claim that logically you cannot imagine what sensing red is like unless you have sensed red. Powers of imagination are not to the point. The contention about Mary is not that, despite her fantastic grasp of neurophysiology and everything else physical, she could not imagine what it is like to sense red; it is that, as a matter of fact, she would not know. But if physicalism is true, she would know; and no great powers of imagination would be called for. Imagination is a faculty that those who lack knowledge need to fall back on” (Jackson 5).
“The philosophical lesson I learned from my biology teacher is this: when not much is known about a topic, don’t take terribly seriously someone else’s heartfelt conviction about what problems are scientifically tractable. Learn the science, do the science, and see what happens” (Churchland 7).
“My lead-off reservation arises from this question: what is the rationale for drawing the division exactly there? Dividing off consciousness from all of the so-called “easy problems” listed above implies that we could understand all those phenomena and still not know what it was for ..... what? The “qualia-light” to go on?? Is that an insightful conceptualization? What exactly is the evidence that we could explain all the “Easy” phenomena and still not understand the neural mechanisms for consciousness? (Call this the “left-out” hypothesis.) That someone can imagine the possibility is not evidence for the real possibility. It is only evidence that somebody or other believes it to be a possibility. That, on its own, is not especially interesting. Imaginary evidence, needless to say, is not as interesting as real evidence, and what needs to be produced is some real evidence” (Churchland 2).
Eliminative Materialism

• Churchland advocates for a view called **eliminative materialism**, which is a version of physicalism.

• **Eliminative materialism** says our folk psychological terms for mental phenomena (such as thoughts, beliefs, emotions, memories, etc.) will all eventually be replaced by more precise explanations in neuroscientific terms.
Objections to Eliminative Materialism

1. Folk-psychology actually works pretty well for us, so we won’t have any need to replace it with a more accurate, scientific perspective.
   • Ryle’s behaviorism, for instance, argues that we can perfectly talk about other people’s minds in folk-psychological terms—they just describe a special kind of behavior.

2. Eliminative materialism is incoherent because it depends on the language of folk-psychology to make its claims.
   • Eliminative materialism says our concepts, beliefs, and understanding of the mind will be different in the future. But aren’t concepts, beliefs, and understanding part of folk-psychology?
   • If so, then we won’t have any of these at all once all the neuroscience has been done, let alone neuroscientifically-informed versions of them.
Churchland’s Response

Churchland’s response to the incoherence objection:

• A neuroscientific understanding of the mind will not make it impossible for us to think, feel, believe, know, remember etc. just like we do now with our folk-psychological understanding of the mind. E.g., we will not cease to love one another just because we recognize that love is made possible by hormones and receptors.

• Only terms that turn out not to refer to anything that really exists will be fully eliminated. E.g., ‘animal spirits’, a substance Descartes thought flowed through our nerves from our brains to our muscles to produce movement, or the inner life force postulated by vitalism.
Dualist vs. Physicalist Views

**Dualist Views:**
1. Descartes defended **substance dualism**: the mind and body are distinct substances.
2. Jackson defended **property dualism**: mental and physical properties are distinct.

**Physicalist Views:**
1. Ryle defended **behaviorism**: mental states describe a special kind of behavior that sets humans apart from robots and philosophical zombies.
2. Churchland defended **eliminative materialism**: our folk psychological terms for mental phenomena will all eventually be replaced by more precise explanations in neuroscientific terms.