

Philosophy
20
W. Lycan
Spring, 2001

THE MIND-BODY PROBLEM

What are minds, and how are they related to bodies and other physical stuff?

Descartes' Dualism

Descartes contends that a person or human being such as you or me is a two-part composite, of a mind and a body. (Alternatively speaking, the person *is* just the mind but *has* a body.) And according to him, a mind is an entirely immaterial, nonphysical thing, not even located in physical space. Yet what unites a mind with a particular body is that it causally interacts with that body, in a distinctively intimate way.

His main argument is this:

1. I can doubt that my body [or any other physical thing, such as my brain, or anything with any spatial properties] exists.

2. I cannot doubt that my mind exists.

\ 3. My mind is distinct from my body [and from every other physical thing, such as my brain, or anything with any spatial properties]. [1,2]

Thus, your mind and its states are simply *not physical*.

Besides, intuitively and as Shaffer says on pp. 310-11, it does not make sense to ascribe spatial location to minds or mental states. "Where exactly is your wish that you had been able to get that Geography class?" "Where exactly is that smell of fresh-made coffee?" (Someone might say, the smell is where the coffee is, in the pot and wafting in our direction. But the mental, subjective experience of smelling the coffee isn't over there in the coffee pot; it's in your mind, and only in your mind.)

Several objections were made in class.

Objection 1: The Interaction problem. How could a thing so utterly nonphysical as a Cartesian mind directly affect your physical body, or be directly and intimately affected by it? Replies: Descartes first appealed to the pineal gland, as the gateway or locus of mind-body interaction. But (rejoinder by Princess Elizabeth of Bohemia :) the pineal gland is just another physical entity; so that appeal is no answer to the question of how a Cartesian mind could interact with anything physical. Descartes then likened mental causation to the force of gravity; gravity isn't a physical object like a billiard ball or a fist, yet it causes physical motion. But (rejoinders;) gravity is physical in at least the weaker sense that a gravitational field is always the gravitational field of some physical object; also (her Highness again), gravity is physical in Descartes' own favorite sense of being a spatial phenomenon and working according to well known laws of physics. The trouble with Cartesian minds is that they do not have any spatial properties at all.

Objection 2: Cartesian minds fit ill with our otherwise physical and scientific picture of the world, uncomfortably like ghosts or ectoplasm. They are not needed for the explanation of any publicly observable fact, for neurophysiology promises to explain the motions of our bodies in particular and to explain them completely. Ghost-minds are scientific excrescences. Reply: Cartesian minds are not scientific posits, hypothesized to explain physical events. They are known from the inside, and shown to be nonphysical by

Descartes' Doubt argument. If they're scientifically ill-behaved, too bad.

Objection 3, the Implantation problem: Since human beings evolved over aeons, by purely physical processes of mutation and natural selection, from primitive creatures such as one-celled organisms which did not have minds, it is anomalous to suppose that at some point Cartesian minds popped into existence in addition to cells and physical organs. The same point can be put in terms of the development of a single human zygote into an embryo, then a foetus, a baby and finally a child. Reply: Same as to Objection 2. That's a mystery, all right, but Cartesian minds are not scientific entities, so science need not explain them.

Objection 4: It's not just that science can't explain Cartesian minds. It's that Cartesian minds seem to *flout* science. It doesn't seem that immaterial entities could cause physical motion consistently with the conservation laws of physics, such as conservation of motion and conservation of matter-energy; physical energy would have to vanish and reappear inside human brains, which would have to be magic. Reply: It's possible that that does happen, in the inner recesses of human brains. Who says it doesn't? No one has ever shown that it doesn't. Rejoinder: But in view of the generality of physics, that's not very likely, is it?

On p. 305, Shaffer adds two more objections (in addition to 2 above), "the problem of identification" and "the problem of individuation." I replied to the second of those in class (by pointing out that what can make the two parallel minds distinct is that they are paired interactively with different bodies). We've asked you to reply to the "problem of identification" as an exercise.

Evaluating the Doubt argument

Although the argument may at first sound correct, it is not valid. In general, from "I can doubt the existence of X; I cannot doubt the existence of Y," we cannot infer that X and Y are distinct. Compare:

1. I can doubt that the winner of the 1999 All-Ohio Cross-Dressing Contest exists. [Say, because I doubt that there is any such contest.]

2. I cannot doubt that my daughter exists. [Say, because she is standing right in front of me and we are chatting.]

\ 3. My daughter is not the winner of the 1999 All-Ohio Cross-Dressing Contest. [1,2]

That conclusion clearly does not follow. I can doubt the one and not the other so long as I don't know that my daughter is the actual winner of the contest; all that is perfectly consistent with her actually being the winner.

(Don't be distracted by the fact that on Dream / Evil Genius grounds, Descartes would not grant the truth of premise (2). The point is that, whether or not (2) is true, (3) does not follow from (1) and (2).)

Behaviorism

The Behaviorists held that to ascribe a mental state to someone is only to say something about that person's actual or hypothetical behavior. To believe that motorcycles are dangerous is just to say, or be disposed to say, that they are, to avoid them, to recommend them warmly to your enemies, etc. To be in pain is just to behave, or at least be disposed to behave, in the ways we stereotypically associate with pain.

The Behaviorist theory avoids all four of our objections to Cartesian Dualism at one stroke. It also avoids Shaffer's two further objections. (You can easily check that for yourself.)

But. (As always.) Objections to Behaviorism:

Objection 1 (Churchland, p. 319): It seems inescapable that there are, in some sense, inner mental episodes that we know from the inside—thoughts, feelings, experiences, that occur in real time and that aren't constituted either by any actual behavior or simply by the mere truth of a hypothetical "If X were to happen, you would do Y."

Objection 2: The Behaviorist identifies each mental state with a specific behavioral disposition. But that presupposes that every type of mental state has a unique, identifiable behavioral syndrome, and we can't be sure that's true. In particular, the behavioral syndromes associated with a given mental state may vary across cultures—say, when an American is embarrassed, s/he tends to blush and shrink and mumble, while an embarrassed Chinese laughs loudly. Reply: There can't be all that much cultural variation, or actors would not be able to do their thing on stage. And where there is, it's plausible to think that the relevant word, such as “embarrassed,” means something somewhat different as between the two cultures.

Objection 3 (Shaffer's “fundamental objection,” p. 307): The Behaviorist maintains that for a person to be in mental state M just is for that person to have the appropriate behavioral disposition, and vice versa. That entails that it is impossible for anyone to have the appropriate behavioral disposition and yet not be in M. But it is perfectly possible to be behaving in all the right ways and have all the right hypothetical/dispositional properties too, yet not be in the associated mental state. Examples: Inverted spectrum; the Tinfoil Man.

The Identity Theory

U.T. Place and J.J.C. Smart wanted to avoid the bad consequences of Behaviorism, but without falling back into Cartesian Dualism. They did that ingeniously, by hypothesizing that mental states and events are indeed real occurrences and internal to us, but nonetheless physical: mental states and events are neurological states and events (literally) inside our brains. For example (Smart's), perhaps pain is the firing of c-fibers.

This Identity thesis avoids not only the usual objections to Dualism, but our three objections to Behaviorism as well. And it avoids them for the right reasons: Behaviorism went wrong precisely by denying that mental states and events are internal causes of behavior.

Also, as Churchland says (pp. 320-21), there are direct arguments for the Identity Theory. (You can evaluate those for yourself.)

Euphoria!

But nothing's easy (not even in the 1960s).

Objection 1 (Shaffer, pp. 310-11): It “makes no sense at all” to speak of mental states' or events' occurring at real physical locations in space. So the Identity Theory entails something nonsensical. Reply (anticipated by Shaffer, made by Churchland on pp. 322-23): The Identity Theory entails something that sounds funny when you first hear it. But major scientific advances always entail things that would have sounded funny to the unenlightened. Get used to it.

Objection 2 (Churchland, pp. 329-30): The Identity Theory entails that for every type of mental state/event, there is a corresponding physiological type of state/event (with which it is identical). But this leads to a sort of species chauvinism. If pain is identical with, is nothing but, the firing of c-fibers, then in order for any creature to be in pain, the creature must have c-fibers. But there is no reason to think that anything so physiologically specific as c-fibers is required for any creature whatever—mongoose, mollusc, or Martian—to feel pain. The creature need only have some physiological structure of its own that does in it what our c-fibers do in us.

Functionalism

Seizing on that last idea, that of the *job done* in us by physiological activity in the brain, the Functionalist identifies types of mental state/event with functional roles, the psychological roles characteristically played in us by the physiological structures. The Functionalist agrees with the Identity Theorist that every individual mental state/event (every mental “token,” as Churchland puts it) is identical with some physiological state/event token; but s/he denies the Identity Theorist's implication that for every type of mental state/event, there is a corresponding physiological type of state/event. Rather, mental types are to be identified with functional roles.

Shaffer's After-Image objection

Shaffer makes the objection against Smart's Identity Theory, but it would apply against Functionalism as well, and against any theory according to which an experience is merely a physical process or event in one's brain.

Suppose, then, that you are experiencing a red after-image. Now:

1. There is a red thing in the experience.
2. There is no physical red thing outside your head. [Supposition]

But

3. There is no physical red thing inside your head either.

Yet

4. The red thing is either outside your head or inside it.
- \ 5. The red thing is not physical. [1,2,3,4]
- \ 6. Your experience contains a nonphysical thing. [1,5]

- \ 7. Your experience is not, or not entirely, physical. [6]

--which would refute the Identity Theory, Functionalism, et al.

Reply 1: After-imaging is the result of a well-understood physical process. Vision scientists know exactly, and in physical terms, how the after-image is produced. So the after-image is physical after all. Rejoinder: Sure, the after-image has a well-understood physical cause. But being *produced by* something physical doesn't entail *being* physical. The problem is the red object itself, and its redness. The red thing is still not a physical red thing.

Reply 2: In some sense "there is" a red thing involved in your experience of after-imaging. But we often use "there is" without asserting real, actual existence ("There is something I'm thinking of that doesn't really exist: the Easter Bunny"). In order to refute materialism, the argument needs to show that there is a *real, actual* nonphysical thing, and it hasn't done that. Compare: You are hallucinating pink rats. An argument exactly parallel to the After-Image objection would prove that the rats are nonphysical; but rats are physical things. Now, yes, there is a sense in which hallucinated rats are not physical, but it's only that they're not *real*; if they were real they'd be as physical as bricks. The rat argument fails to prove that there are real pink rats. So too, the After-Image argument fails to prove that the red blob is real. And after all, after-images are *illusions*; your visual system tells you there's a red thing before you, when there isn't really one. The alleged red thing is as unreal as the rats. Rejoinder: The blob is not real?? But you're looking right at it. You're directly acquainted with it. Try again to tell yourself it isn't real!

Jackson's Knowledge objection

Mary the brilliant color scientist became scientifically omniscient about color, but could not herself see colors until she was later released from her black-and-white environment.

1. Mary already knew all the objective, scientific facts about color and color vision.
2. Upon her release, she learned something, viz., what it is like to see blue.
- \ 3. There is a fact (the fact of what it's like to see blue) that she came to know, that she had not known before. [1,2]

But

4. If someone knows a fact F1 but does not know F2, then F2 ¹ F1.
 - \ 5. Mary's new fact is not identical with any objective, scientific fact. [1,3,4]
 6. Materialism entails that every mental fact is an objective, scientific fact.
-

\ 7. Materialism is false. [5,6]

Reply 1: Principle (4) is dubious. Adapting Churchland's example (p. 323): You can know that Muhammad Ali is a famous boxer and not know that Cassius Clay is one. But since Ali is Clay—"they" are one person, not two different people—it seems that the fact of Ali's being a famous boxer is the very same fact as that of Clay's being one. Rejoinder: Yet (4) as written still rings true! Comment: Something funny is going on here; the matter needs more investigation.

Reply 2 (Churchland, p. 324): What Mary "learns" or acquires upon her release is not a new fact; her new knowledge is not factual knowledge, but a different kind. She merely "has a prelinguistic representation of redness in her mechanisms for non-inferential discrimination." Interpolation: Hah?? Explanation: What she's acquired is a *capacity to detect red things*; she now is able to tell red things from others directly by sight. She knows *how to* do that, not *that* anything. Rejoinder: But her new knowledge can be expressed in a factual sentence: "This is what it's like to see blue!" And that sentence is a true one.