

# Naturalism and the Mind-body Problem

John M. DePoe

The mind-body problem is a particularly difficult problem for naturalism. A strict naturalist is committed to believing that all reality is material/physical or reducible to the material/physical realm. Our immediate, introspective awareness of the realm of consciousness, thoughts, and other qualitative mental experiences seems to lie outside the purview of a naturalistic worldview. In this essay, I will show the main attempts to "naturalize" the mind, and show how they fail. Since the mind seems to include fundamentally immaterial and non-physical elements, we have good reasons to reject naturalism.

## Reductive Materialism

One of the first attempts to naturalize the mind tried to reduce mental entities to material/physical entities. Reductive accounts do not deny that the mind and mental concepts exist. The "mind" exists, on reductive accounts, but it is reducible/identifiable to certain material/physical things. Two exemplifications of this approach are philosophical behaviorism and type identity theories.

### Philosophical Behaviorism

Philosophical behaviorism, which was championed by Gilbert Ryle in his classic work in philosophy of mind, [The Concept of Mind](#), attempts to explain the alleged immaterial aspects of the mind in terms of observable behavior. Philosophical behaviorism follows from this sort of reasoning:

1. Every mental sentence (i.e., sentence using mental terms) can be analyzed by, or shown to be equivalent in meaning to, a sentence that uses only behavior terms and other nonmental terms.  
Hence,
2. We need not use mental terms and mental sentences for purposes of describing behavior.  
Hence,
3. We need not assume that mental terms refer to anything mental.  
So,
4. We are justified in believing that there are no mental entities.

This straightforward argument follows from the first premise, so we need to ask whether (1) is true. Philosophical behaviorists point to examples like someone's believing he is thirsty, which is shown to be equivalent to "thirsty behavior." The behavior, they claim, is all that is needed to explain the belief. Hence, there is no need to appeal to anything over and above the natural to explain the mind.

The problem with premise (1), however, is that it is clear that there is more to the mind than is describable by behavior analysis. Consider mental experiences that have no behavior that corresponds to them. I might secretly have thoughts about my metaphysics professor in a ballerina's tutu without exhibiting any behavior of this belief. Likewise, there are situations where a person's behavior does not correspond to one's mental state. "Super-Spartans" (as they have been dubbed in the philosophical

literature) might be in excruciating pain, and bravely continue acting as if they aren't in pain. Similarly, actors may pretend they are in devastating pain while feeling no pain. The fundamental problem with philosophical behaviorism is that it delimits knowledge of mental states to observable behavior. This can be illustrated by a well-known joke. Two behaviorists just finished having sex, and one tells the other, "It was good for you, how was it for me?" Since all mental concepts must be explained by behavior, the behaviorist cannot appeal to his own mental experience to understand his mental state - he needs the empirical data of his behavior to inform him of what his mental state actually was. This, of course, is ridiculous. Philosophical behaviorism is virtually extinct in contemporary philosophy because of these insurmountable problems.

### Identity Theories

Another attempt to naturalize the mind comes from type identity theories of mind, which were put forward most prominently by U. T. Place, David Armstrong, and J. J. C. Smart. Identity theorists argued that the mental features of the mind are identical with the material/physical features of the brain. This approach was a significant improvement on philosophical behaviorism since it could explain instances where no behavior corresponds with mental states. When someone has a mental state, there is a physical brain state that corresponds to it, and identity theorists contend that these are one and the same entity. There is no need to postulate anything more than the physical brain state to explain the apparent mental state.

Identity theorists are on to something that is right and something that is wrong. There is clearly some type of correlation between one's mental states and physical brain states. What is dubious in this train of thought is leaping to the conclusion that since there is a correlation, the two states are identical. Moreover, we have good reason to suppose that mental states and brain states are not the same thing. This is made explicit by an application of **Leibniz's Law for the Indiscernability of Identicals**. This law states that for some  $x$  and  $y$ , if  $x$  is identical with  $y$ , then for some property  $P$ ,  $x$  has property  $P$  if and only if  $y$  has property  $P$ . [Technically put:  $(x)(y) ((x=y) \rightarrow (P)(Px \leftrightarrow Py))$ .] The clincher, here, is to see that mental states and brain states have incompatible properties, which shows they cannot be one and the same thing. Consider a few of these incompatible properties:

Mental State	Brain State
First person experience	Third-person observation
Private access for the subject	Public access for all
Does not have physical properties	Has several physical properties (location, electrical properties, chemical properties, etc.)
Has intentionality (it is about something)	Does not have intentionality
Can stand in logical relations to other mental states	Does not stand in logical relations
Possesses a "raw feel"	Does not have a "raw feel"

Since the properties of mental states and brain states are incompatible, identity theorists cannot establish their thesis. When confronted with this problem, identity theorists just seem to appeal obstinately to their dogmas. For example, J. J. C. Smart once wrote, "So sensations, states of consciousness, do seem to be the one sort of thing left outside the physicalist picture, and for various reasons I just cannot believe that this can be so" ("Sensations and Brain Processes," *Philosophical Review* 68 (1959)). Since identity theories only have recourse to this sort of stubborn attitude against the evidence that mental states are different from mental states, identity theories have become virtually non-existent among contemporary philosophers of mind.

## Non-Reductive Materialism

For the reasons I've given above, reductive accounts of the mind are not highly regarded in contemporary philosophy of mind. This has resulted in wide acceptance of non-reductive attempts to naturalize the mind. Since the strategies employed to reduce and identify the mind with what is physical proved to be failures, the new trend is to explain the mind in naturalistic terms without recourse to reductions or identifications.

### Eliminative Materialism

One extreme non-reductive account of the mind eliminates the non-physical aspects of the mind on the grounds that it is explanatorily useless. This view is known as eliminative materialism, and it has been defended by eminent philosophers such as Paul Churchland and Richard Rorty. Eliminative materialists contend that the non-physical aspects of the mind are unnecessary postulates. In fact, the non-physical/non-material mental states alleged to exist on a non-physical worldview are considered to be vestiges from earlier philosophical views that are no longer viable. Eliminativists see their theory as a competing explanatory hypothesis of the mind. What explains why someone gets a drink of water? According to traditional accounts, referred to as folk psychological theories, a person gets a drink of water because (in this circumstance) she is thirsty. Eliminativists contend that these sorts of explanations utterly fail. The reason why someone gets a drink, they claim, is because of the way one's brain's neurons are firing. The only causes needed to explain the effect are a person's physical brain neurons, chemicals, etc. There's no need to talk about the mental phenomenon of "being thirsty," everything is explained in the description of the brain's physical properties.

So what is to be done with mental states that are not physical brain states, like being thirsty, having beliefs, feeling pain, etc? Eliminativists, being true to their name, say they must be eliminated. They acknowledge that this may seem a bit extreme, but since folk psychological entities are completely useless, we must discard them as an explanatory thesis. They say this is parallel to the scientific evidences that led people ultimately to deny the existence of caloric, phlogiston, witches, and ether. People once believed in such entities, but now that we have attained scientific explanations for what these old "folk theories" were aimed to explain, we've discarded them. Similarly, eliminativists claim that we do not need to postulate mental states whatsoever - everything about the mind can be explained by brain states.

Eliminative materialism's radical, innovative theory has several significant problems. First of all, it fails to accord with the most fundamental evidence anyone has for the mind - one's own experience. In other words, eliminativism rejects the existence of mental states, but we all know from our own experience that we have mental states. My beliefs, desires, feelings, and other facets of consciousness are not explanatory postulates to explain behavior. These mental experiences are fundamentally self-presenting. If these are supposedly incompatible with the dictates of eliminative materialism, then we are in a position to reject eliminativism, not our mental states.

A second problem with eliminativism is that folk psychology is not a superfluous explanatory thesis that ought to be rejected. According to many critics of eliminative materialism (e.g., Daniel Dennett, John Searle, William Lycan), folk psychology is wildly successful at explaining and predicting human behavior. It makes much more sense to say that someone got a drink of water because she was thirsty than it does to say someone got a drink of water because the neuro-chemicals in the brain were firing with specific physical properties. Folk psychology enjoys huge successes in explaining why people do what they do.

A third problem with eliminative materialism is that it seems to fall into self-refutation. Recall that eliminativism calls for the elimination of folk psychological explanations such as beliefs. But if beliefs do not exist, on what grounds are we supposed to believe that eliminative materialism is true? Since

eliminativism is a theory, not a physical entity, how can it be true? Here, eliminativists claim a new vocabulary will come when the revolution occurs that eliminates folk psychology. At this point it becomes difficult to take eliminativists seriously. They wish to continue to use arguments to convince people to change their beliefs, even though these entities do not exist on their view. Using reasons to disprove reason is inconsistent to say the least. If they can't use arguments and reasons to change one's beliefs (which they claim don't exist), then on what grounds ought one to say eliminativism is true? Nothing seems forthcoming at this point, and eliminativism seems to be caught in the embarrassing circumstance of self-refutation or incoherence.

### Functionalism

Perhaps the most widely held view in philosophy of mind today is functionalism. Functionalism is not a materialist/physicalist view of the mind *per se*, but it is probably the most popular way to cash out physicalism today. Functionalism gives an account of the mind in terms of causal relations. Functionalism isn't interested in the substances that make up the mind and body. Rather, functionalism gives an account of the conditions that realize what we call the mind. Functionalists are physicalists insofar as they claim all that is needed to realize the mind are physical components.

Functionalists hold that the mind can be explained by identifying the input-output functions of organisms. It is by virtue of the causal roles of the input-output functions that mental states are realized. Functionalists do not discriminate as to what can realize mental states, since on their view what characterizes mental states are input-output functions, it is possible for mental states to be realized by a number of possible functional systems. For example, functionalists are typically advocates of strong Artificial Intelligence (AI). After all, a computer that has a sufficiently complex set of inputs and outputs would be no different from humans (in degree), according to functionalists. Moreover, it is important to note that for functionalists mental states exist only in virtue of their causal roles in the functional systems; mental states are not known in themselves from one's own immediate awareness.

The standard criticism of functionalism is known as **the problem of inverted spectrum**. Suppose someone's eyes malfunction so that he sees colors that are perfectly inverted from the rest of the population. Even though he has different internal perceptions (he sees green when everyone else sees red), he functions exactly the same as everyone else who sees colors the same way. If mental states are supposed to be explained solely by their input-output causal functions, functionalists are forced to say that someone with an inverted color spectrum has the same mental state as those people who have a normal color spectrum. But we know seeing green is different from seeing red, so the two mental states are not the same. The relevant point, here, is that there is more to mental states than input-output functions.

A second problem with functionalism is that its definition of mental states is too loose, which is evident in the types of functional systems that could realize a "mental state" on its terms. Ned Block pointed out that the nation of China could have a mental state, if functionalism were true. Suppose we set up a way for the entire population of China to communicate and work together to provide inputs and outputs that operated functionally. It seems that we would be forced, on functionalists' logic, to say that the nation of China has mental states, which is absurd. John Searle has questioned whether a group of well-trained pigeons could realize a functionalist criteria of causal inputs and outputs to realize a mental state. The possibilities for realizing mental states on functionalist criteria seem endless and ridiculous.

Another serious criticism of functionalism is that it attempts to get meaning out of syntax without recourse to semantics. This criticism highlights the difficulty incurred by trying to create semantic meanings only through symbolic syntax. John Searle famously illustrated this point with his "[Chinese Room Argument](#)." In the argument Searle assumes that an English-speaker (who knows only English)

is locked in a room with a rule book and basket of Chinese symbols. When someone slides a Chinese sentence under the door, the person in the room looks in the rule book, which explains what kind of Chinese symbols to send back to the people on the other side. Thus, the person is functionally communicating in Chinese, although the person has no clue what any of it means. This shows how a correct manipulation of syntax does not entail there is any corresponding meaning or semantics. Our mental states, however, are not just syntactical inputs and outputs, there is meaning and intentionality in our mental states. So, functionalism seems woefully inadequate to account for the mind.

## Conclusion

This has been a broad overview of the main attempts by physicalists/materialists to account for the mind. All of these attempts to naturalize the mind failed to take the mind seriously. In fact, one gets the impression that naturalistic theories are not trying to account for the mind by examining the data, phenomena, and experiences that we have of the mental realm, and come up with a theory of mind from the body of evidence. Rather, one gets the impression that these views have already reached a conclusion about what exists and are desperately trying to make the data fit their conclusion. The strategy seems to be to acknowledge that a robust theory of the mind is incompatible with naturalism, and then to try to explain away the aspects of the mental that don't fit with naturalism. Rather than deny the immediate and obvious knowledge we have about our own mental experience, I think this gives good reason to reject naturalism.

## For Further Reading

### Online

["Consciousness,"](#) by Robert Van Gulick in the *Stanford Encyclopedia of Philosophy*.

["Identity Theory of Mind,"](#) by J. J. C Smart in the *Internet Encyclopedia of Philosophy*.

["The Unity of Consciousness,"](#) by Andrew Brook in the *Internet Encyclopedia of Philosophy*.

["Functionalism,"](#) by Janet Levin in the *Internet Encyclopedia of Philosophy*.

["Eliminative Materialism,"](#) by William Ramsey in the *Internet Encyclopedia of Philosophy*.

["Dualism,"](#) by Howard Robinson in the *Internet Encyclopedia of Philosophy*.

["Qualia,"](#) by Michael Tye in the *Internet Encyclopedia of Philosophy*.

[Volume 2.3 of PCID Journal.](#)

[David Chalmers's website.](#)

[newdualism.org](#)