The Enigma of Consciousness

Apologetics Note #1

The dominant worldview in the university today is what is called *physicalism*,[1] *scientific naturalism*, or simply *naturalism*. It is the view that the physical world is all that exists and that everything can be explained in terms of mindless physical processes. This worldview is assumed by most to be not merely a speculative interpretation, but rather *the* worldview of science. Hence to believe otherwise is thought to be either uninformed or to fly in the face of the evidence. As philosopher John Searle puts this conviction:

> Given what we know about the details of the world, … this world view … is not simply up for grabs along with a lot of competing world views. Our problem is not that somehow we have failed to come up with a convincing proof of the existence of God or that the hypothesis of an afterlife remains in serious doubt, it is rather that in our deepest reflections we cannot take such opinions seriously. When we encounter people who claim to believe such things, we may envy the comfort and security they claim to derive from these beliefs, but at bottom we remain convinced that either they have not heard the news or they are in the grip of faith. We remain convinced that they must separate their minds into separate compartments to believe such things. When I lectured on the mind-body problem in India and was assured by several members of my audience that my views must be mistaken, because they personally had existed in their earlier lives as frogs or elephants, etc., I did not think, "Here is evidence for an alternative world view," or even "Who knows, perhaps they are right." My insensitivity was much more than mere cultural provincialism: Given what I know about how the world works, I could not regard their views as serious candidates for truth.[2]

Some people, including a number of Christians, suggest that in this "postmodern" age, scientific naturalism has lost its dominance in the academy, but unfortunately this is not so. Scientific naturalism is the dominant worldview in philosophy and all the natural sciences. And even where postmodernism is strong in the academy, it is often fueled by the naturalistic conviction that the ultimate causes of human thought and behavior are physical processes.

Physicalism can and ought to be critiqued in a variety of ways. In this essay the focus will be on the difficulty physicalism faces in being able to give an adequate account for conscious experience.[3]

Consider the following quote from philosopher J.J.C. Smart:

> It seems to me that science is increasingly giving us a viewpoint whereby organisms are able to be seen as physicochemical mechanisms: it seems that even the behavior of man himself will one day be explicable in mechanistic terms. There does seem to be, so far as science is concerned, nothing in the world but increasingly complex arrangements of physical constituents. All except one place: in consciousness. That is, for a full description of what is going on in a man you would have to mention not only the physical

[1] "Physicalism" is now generally preferred over "materialism" because the latter tends to connote that all that exists is matter. "Physicalism" is able to encompass both matter and energy.

[2] John R. Searle, *The Rediscovery of the Mind* (Cambridge, MA: MIT Press, 1992), pp. 90-91.

[3] In what follows I will be discussing the enigma of consciousness as it relates to its experiential character. Two other aspects of conscious experience that I don't discuss here but which also constitute major difficulties for the physicalist worldview are: 1. the "intentional" character of much conscious experience; that is, the conundrum for physicalism of how any physical entity can make intrinsic reference to something beyond itself, and 2. the holistic character of conscious experience, namely the fact that there is a unity to most experiential states which is difficult to explain given the mechanistic and atomistic model of reality still prevalent in most versions of physicalism. (Intentionality here is a technical term referring to any mental state which intrinsically makes reference to something beyond itself.)

> processes in his tissues, glands, nervous system, and so forth, but also his states of consciousness: his visual, auditory, and tactual sensations, his aches and pains. That these should be *correlated* with brain processes does not help, for to say that they are *correlated* is to say that they are something "over and above." You cannot correlate something with itself. . . . So sensations, states of consciousness, do seem to be the one sort of thing left outside the physicalist picture . . .

But Smart goes on to say, "That everything should be explicable in terms of physics … except the occurrence of sensations seems to me to be frankly unbelievable."[4]

According to the physicalist all of reality is physical. Hence, it follows that conscious mental states—if they exist at all—must in fact be nothing more than physical states or processes of the brain. If all reality is physical, then there can be no facts other than physical facts.[5]

But this raises an enigma. What is one to make of the qualitative feel of what it is like to be in pain? What is one to make of the experience of the color of red, or of the taste of a sweet strawberry? To use a phrase from philosopher Thomas Nagel, there is in each of these cases "something it is like" to have the experience in question. It seems difficult to deny that subjective experience is in some sense real, but if one grants that such "qualia"[6] are real, how can these be incorporated into the physicalist worldview?

As it turns out, there is no easy solution to this problem. Lots of "solutions" have been proffered, but none that even most physicalists have found convincing. The problem is severe enough that many physicalists have argued, and continue to argue, that qualia, in fact do not exist, that there is no reality to the subjective experience of, say, pain.

I will come back to this in a moment, but one particularly interesting way of putting the issue comes from philosopher Frank Jackson.

> Mary is a brilliant scientist who is, for whatever reason, forced to investigate the world from a black and white room via a black-and-white television monitor. She specializes in the neurophysiology of vision and acquires, let us suppose, all the physical information there is to obtain about what goes on when we see ripe tomatoes, or the sky, and use terms like *red*, *blue*, and so on. She discovers, for example, just which wavelength combinations from the sky stimulate the retina, and exactly how this produces *via* the central nervous system the contraction of the vocal chords and expulsion of air from the lungs that results in the uttering of the sentence "The sky is blue."… What will happen when Mary is released from her black-and-white room or is given a color television monitor? Will she learn anything or not? It seems obvious that she will learn something about the world and our visual experience of it. But then it is inescapable that her previous knowledge was incomplete. But she had *all* the physical information. *Ergo* there is more to have than that, and Physicalism is false.[7]

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[4] J. J. C. Smart, "Sensations and Brain Processes," in *The Philosophy of Mind,* edited by V. C. Chappell (Englewood Cliffs, NJ: Prentice-Hall, 1962), p. 161.

[5] It might be thought that the physicalist could accept that there are non-physical facts without abandoning physicalism. Couldn't a physicalist, for instance, accept that there are mathematical facts or facts of logic? The status of mathematical truths is in fact a difficult question, and it is related to the question as to whether mathematicians *discover* mathematical truths. I will not pursue this issue, but it is worth noting that many mathematicians are Platonists with regard to mathematical truths, namely maintaining that the reality of such truths is independent of the existence of mathematicians who might entertain them. (Physicalism rejects any such notion as this.) But however the physicalist may treat mathematical "facts," the dilemma with regard to conscious experiential states is that they do not seem to be abstractions. If by "facts" we mean truths about what is real, then the physicalist must either deny that there are any qualia, that is, experiential facts, or he must contend that they are in reality physical facts.

[6] "Qualia" is the philosopher's term for the qualitative or felt character of an experience— i.e. what it is like to the subject of the experience to have the experience.

[7] Frank Jackson, "Epiphenomenal Qualia," *Philosophical Quarterly* 32: (1982), p. 128.

How do physicalists respond to this kind of example? One response, as I mentioned above, is to deny that qualia exist at all. Thus, philosopher Daniel Dennett contends that although "there seem to be qualia," they do not in fact exist. All that exists are "discriminative states,"[8] physical states of the brain brought about by sensory input such as light of a particular frequency striking the eye, and "dispositional properties," the disposition to engage in particular behaviors in particular contexts. For example, when one is asked about color, there is the disposition to "...express verbal judgments alluding to the 'color' of various things"[9]. Within Dennett's theory, "'Qualia' have been replaced by complex dispositional states of the brain."[10]

One response to Dennett is to point out that generally when we say, "X doesn't exist, it just seems to," we are relying on a distinction between reality and appearance. Thus, looking across a desert on a hot day, it can appear that there is a lake in the distance, when in fact there is no lake. But when we are asking whether qualia exist, the issue is whether the subjective experience itself exists. The issue is not whether appearance corresponds to reality, but whether there is even the appearance. Given this, Dennett's claim can be restated as, "Seemings don't really exist, they just seem to," or "Appearances don't really exist, they just appear to."

Doubtless Dennett would try to avoid this criticism by insisting that he is not using "seem" in a way that presumes conscious "seeming." He would surely contend that what he intends is the claim that qualia do not really exist, we just *tend to think* they do. But if Dennett makes this response, one is left with the following problem. If we tend to think that something exists, whether or not it does, we must know what it is to which we are referring. In the case of qualia, the answer which we are inclined to give is that we are referring to the qualitative character of particular experiences that one has when one, say, feels pain, or sees red, or tastes something sweet. But if qualia in fact do not exist, then we do not have the requisite experiences; if qualia do not exist, then what intelligible reference or content could the word "qualia" have? In short, Dennett's denial of the existence of qualia is intelligible only on the supposition that we have the experiences which according to the denial we do not have. In effect, if Dennett's denial of qualia were true, then we could not know what qualia are and we would not know what is being denied. In other words, Dennett's denial is intelligible only if it is false.

Other physicalists will say that qualia are real, that we do have subjective experiences, but they will then go on to say that these experiences do not constitute facts of a non-physical sort. There are several ways in which they develop this thesis.

Some contend that the experience of, say, red is simply a neural state that represents the range of light frequencies labeled "red." On this thesis, the subjective experience of redness does not just *correlate* with a neural state; it *is* that neural state. What makes this neural state an experience of red is that it represents a particular range of light frequencies.

This response, however, does not get one very far. It yet remains utterly mysterious as to how a neural state can *be* the subjective experience. Saying that the neural state "represents" the range of light frequencies labeled "red," does not give one any reason to expect that such representation will be (or would entail) the subjective experience of red. For that matter, one has no reason to expect that there could be any subjective (conscious) experience at all. This is so unless the concept of

[8]Daniel C. Dennett, Consciousness Explained (Boston: Little, Brown & Co., 1991), p. 372.
[9]Ibid. p. 373.
[10]Ibid. p. 431.

"representation" already has subjective awareness implicit in it. But if so, then the enigma of consciousness is just pushed back into the concept of representation.

Others have suggested that what makes subjective experiences seem like non-physical facts is that such experiences are the apprehension of physical facts in a first-person rather than a third-person perspective. On this thesis, Mary (in the example above) does not become aware of a new fact when she sees a red apple; rather, she becomes aware of a physical fact of which she was already aware. The only difference is that this time she has first-person access to that same fact.

This move, however, does not explain what first-person access is, nor does it explain why such access should have a qualitative feel to it. Suppose that Mary, in seeing a red apple is simply becoming aware of the onset of the neural state in herself that she had previously learned about in black and white videos and books. Why should direct access to this physiological fact have the particular experiential character that it does have, or why should it have any experiential character to it at all?

Finally, there are those who maintain that qualia are real but they are in fact just "high-level" properties of physical systems like the brain, such as desires, perceptions, and beliefs. On this view, all subjective experiential states genuinely exist, but they are nonetheless physical. People are typically puzzled at how a neural system could be an experiential state, but proponents of this view would say that these people have been overly influenced by dualistic ways of thinking about mind and body. For this reason, they would say, people conceive of neural states as the arranging of neurons and the patterns of neural firings, and do not see that desires, perceptions, and beliefs can also be neural states. The most well known proponent of this solution to the mind-body problem is philosopher John Searle. His contention is that

> Consciousness is a higher-level or emergent property of the brain in the utterly harmless sense of "higher-level" or "emergent" in which solidity is a higher level property of H_20 molecules when they are in a lattice structure (ice), and liquidity is similarly a higher-level emergent property of H_20 molecules when they are, roughly speaking, rolling around each other (water). Consciousness is a mental, and therefore physical, property of the brain in the sense in which liquidity is a property of systems of molecules.[11]

The difficulty, however, with such examples as solidity and liquidity is that they are simply the properties of the relative motion and positions of molecules. As properties they are reducible to such motions just as air pressure is. Yet consciousness does not seem reducible or understandable simply in terms of the motions of molecules (or for that matter electrochemical processes) in the brain.

Searle does suggest other examples of properties which he claims do not fall into either the category of being obviously mental or obviously physical: "...balance-of-payment problems, ungrammatical sentences, reasons for being suspicious of modal logic, my ability to ski, the state government of California, and points scored in a football game."[12] But nearly all[13] of the examples seem to be entities or properties which exist only by virtue of their having a place in the conceptual framework of conscious beings. Consider the score of a football game. Imagine a football game

[11]John R. Searle, op.cit.., p. 14.
[12]John R. Searle, op.cit., p. 25.
[13]What constitutes having the ability to ski is partly relative to the standards we as humans establish regarding what is to count as competence in skiing. But, apart from that, the ability to ski is largely a dispositional property, namely the propensity and capacity to do specified things under specified conditions. For example, the fragility of a glass is its tendency to break under specifiable conditions. Dispositional properties which do not involve conscious states of agents are physical properties in a fairly non-controversial way.

played by robots and watched by a stadium filled with robots. Imagine that they all do what people are supposed to do but have no conscious experiences or thoughts. Would there be in such a scenario such a thing as *the score* of the game? It seems there would not. The reality of the score of the game is one which is relative to beings for whom the notion of the score has conscious significance.

The inadequacy of Searle's examples does not demonstrate that his thesis is false, but it does seem to indicate that consciousness does not fit neatly into the conceptual framework and conceptual categories currently employed within the natural sciences. Searle's contention, and his examples designed to bolster that contention, do not seem to help us at all in conceiving how consciousness could ever arise in a physical system.

Where does that leave the physicalist? It leaves her with an enigma for which no adequate solution has yet been proposed. According to the worldview of scientific naturalism, all that exist is matter and energy and all that transpires is the unfolding of blind physical processes. The dilemma is that if this commitment is to apply across the board it must apply to human beings and sentient animals, as well. The dilemma does not appear to lie in the complexity of the organizational structure of humans and other animals, but in the fact that the conceptual framework embraced by the scientific naturalist seems utterly incapable of accounting for the reality of conscious mental states.

Unfortunately most people who have bought into the worldview of scientific naturalism or who have been strongly influenced by it have never thought much about this enigma. If the topic is raised, many will respond by saying, "I don't know how it happens, but obviously it does. That complex biochemical machines can be conscious is evident from the fact that we (and other sentient animals) are conscious." They would conclude, "We don't yet have a scientific explanation for how it happens, but given the track record of the sciences, we should assume that one day the enigma will be solved."

The enigma of consciousness, however, is not just another as-yet-unsolved mystery awaiting scientific explanation. I have already responded to this in a number of ways, but consider the following: Suppose that we come to understand precisely what it is that distinguishes those states of the brain which correlate with consciousness from those that do not. And further, suppose that we come to understand what precise features give rise to one sensation or mental state rather than another. This would be an impressive achievement, but if all we had discovered were the correlations between neural structure and/or processes and the existence of conscious mental states, we would be no nearer to resolving the enigma. We would in one sense have a scientific explanation of consciousness, but if it still remained utterly mysterious as to why those neural states gave rise to consciousness, then the enigma would remain. And what makes the enigma now particularly acute from a scientific standpoint is that, given our current scientific conceptual categories, it seems impossible to imagine how future understanding of brain function could remove the enigma. Nothing in our current theories of physics or chemistry seems to offer the resources needed to lead us to expect that consciousness would arise from any physical system.

It is, of course, possible that the seeming inadequacy of current scientific conceptual categories could be just that, only *seemingly* inadequate. It is possible that we are just overlooking something, or that the requisite understanding is simply blocked by some conceptual bias. I have discussed a few of the attempts to resolve the enigma along such lines, but obviously I have not shown that all such attempts would fail. One can at least say this: if something seems inconceivable, given the conceptual resources at one's disposal, one has reason to suspect that the inadequacy lies with the conceptual

resources themselves. One should be open to the possibility that a different conceptual framework may be needed.

At this point, one might suggest, "Maybe what is needed to solve the enigma of consciousness is a conceptual revolution in physics." And to this my response is, "That may well be." It is worth noting that conceptual revolutions have been important in the advance of science itself. Before the development of the theory of electromagnetism, many assumed that all physical events could be accounted for in terms of Newtonian mechanics. What was needed was the conceptual breakthrough ushered in by Maxwell and others. Other conceptual revolutions occurred with the development of special and general relativity and with the development of quantum mechanics.

However if a conceptual revolution occurs, it would likely entail a further eroding of the mechanistic model of physical reality (quantum theory has already significantly eroded it), and in its place will be a theory that is likely much more holistic. Furthermore, it would need to be a holism that makes room for the reality of conscious mental states. We do not know what specific shape such a conceptual revolution would take, but to the extent that it reintroduces mind into the metaphysical scheme of things, it will be a conceptual framework which is more amenable to the Christian worldview.

If such a revolution does not take place, what alternative is there? This essay has not argued for or against mind-body dualism (either a substance dualism or a property dualism), but there are many who argue that the enigma of consciousness points one in the direction of such a solution. I will not discuss that option here.

The overall point of this essay has been to argue that the enigma of consciousness constitutes good reason to think that the currently dominant worldview of scientific naturalism is inadequate. This does not imply that the Christian worldview is correct, but to the extent to which we can help wean people from the presumption that the worldview of scientific naturalism is dictated by the natural sciences—to that extent we will have removed a significant barrier to people's taking the Christian worldview seriously.