Some "Why"s of Consciousness

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1 Why do we care?

The word consciousness has become a buzzword in recent years. Everyone wants to know what it is and how it works. The "what it is" question is really less of a philosophical conundrum and more of a definitional concern. Using Chalmers' distinction between hard and easy problems of consciousness, we can divide the meaning of the word into what I will refer to as "cognition" and (following Chalmers' lead) "experience." [1]

Cognition (those things which Chalmer classed as the easy problems) covers functions of the brain like information processing, sensory input, memory, wakefulness, attention – the list goes on. Experience, on the other hand, refers to a more ephemeral aspect of our mental lives. Also called *qualia*, conscious experience means that which is beyond mere functions. It is what red looks like and what cold feels like on the skin and what joy feels like. Thomas Nagel explained it as "what it is like" to be a thing.

There are obvious benefits to a scientific understanding of cognition. If we understand how vision works, maybe we can repair the visual systems of blind people, or make robots that can see. If we understand how information is processed and integrated, perhaps we will make the next leap in artificial intelligence technology that can process and integrate amounts of information orders of magnitude beyond the capabilities of the human brain. A million more reasons exist for us to seek understanding of cognition, not to mention the simple desire to understand that which we do not.

The question that I find more interesting is why we should care about experience. Chalmers clearly does – he advocates a pursuit of a non-reductionist theory of conscious experience [1, p. 23] – and many others since have demonstrated their similar concern, either by trying to further an explanation of conscious experience or by passionately denying its very existence. But I wonder how important this debate really is, even on the

scale of purely philosophical pursuits. Perhaps, like cognition, we might want to understand experience for practical reasons, but this is a dubious proposition. It may be that the real question is why should *scientists* care about experience. If conscious experience cannot be studied scientifically, then what business do scientists have theorizing about it? This is a topic which shall be addressed more later.

2 Why do some people deny the existence of conscious experience?

The physicalist movement in philosophy has inspired many to deny that conscious experience exists at all. Some have referred to it as an "illusion" (whether or not this really constitutes non-existence is a question we will return to later). I am interested in the motivations and justifications behind the denial of something so apparently central to our lives.

2.1 Scientific Evidence, or the Lack Thereof

At the moment, it seems impossible to examine conscious experience from a scientific perspective. One of the most frustrating facets of consciousness is that is not observable in the third person. You cannot open up someone's brain and see the experience happening. There will not be any neurons that are red, or cold, or happy. The one and only consciousness that you can directly observe is your own. This, of course, is a problem, because in order to examine a phenomenon scientifically, we need to be able to somehow observe and quantify it.

In fact, not only can you not observe other peoples' consciousnesses, but you cannot even prove that they *have* consciousnesses (unless you happen to be a telepath). By examining someone's brain you can prove that they have similar neurological machinery to your own. By observing their behavior you can prove that they have a similar level of intelligence and cognitive complexity to your own. But neither these nor countless other observable facts can tell you for certain that they have conscious experience.

By the same token, you cannot prove to anyone else that you are conscious. *You* know that you have conscious experience, but how on Earth would you go about proving that to

another skeptical human? You could assure them, repeatedly, that you are experiencing the world around you in a conscious way. You could stare deeply into their eyes and hope that they see the truth there. You could try to demonstrate your consciousness by expounding on the nature of the universe, or trying to explain what it is like to see the color red, or by performing any number of other tasks requiring complex cognition. But if your friend is a true skeptic, none of this will avail you, for they will fold their arms and respond that you could still be nothing but a zombie, a behavioristic machine.

Based upon this lack of scientific evidence for the existence of conscious experience, many claim that there is no reason to believe in it. This is not the only motivation for denying experience, however.

2.2 Associations with Dualism and Magical Thinking

Long ago mankind created gods to explain that which he could not understand. Why did that mountain spew fire and make the ground tremble? Because you made the volcano god mad by not sacrificing enough goats. Similarly, theories which we now laugh at were created to explain phenomena that scientists at the time found mysterious – for example, the "aether," an analogous substance to air, through which light waves could travel (because sound waves have to travel through something too, right?)

Is not this idea of "conscious experience," of "qualia," of something over, above and beyond the purely physical workings of the brain, just an extension of that kind of mystical explanation? We can't explain the phenomenon with physics, so we just make up something else with a fancy Latin name and sweep the problem under the rug. It is tempting here to draw associations with dualism. Perhaps those who believe in conscious experience are simply hanging on to the dregs of a theory which held that there was *something* special about conscious beings, something *more* than just biological machinery. Were this the case, there might be good reason to dismiss their claims.

3 Why are the physicalists wrong?

Well of course, *you* might not think that they are wrong. But *I* do, and I'm going to try to prove it to you.

3.1 Self-Evidence and the Burden of Proof

Before addressing any more technical concerns, let's take a moment to consider the possibility that conscious experience is self-evident. Let's assume, just for the time being, that you, the reader, have an internal world roughly analogous to mine. If this is the case, then you will likely find it impossible to truthfully deny that you are consciously experiencing the world. Just try. Try, for a moment, to pretend that you are not actually *seeing* the paper (or the screen) in front of you. That you are simply processing visual information, without any qualitative experience. Again, unless you happen to be a philosophical zombie, this will be impossible.

In the debate surrounding conscious experience, it seems that all too often the burden of proof is placed on those claiming that consciousness exists. "Prove to me that people are conscious, go on!" says the physicalist, and of course, his opponent is unable to do so. It is said that the burden of proof rests on the one making the outrageous claim. Given the primary, central nature of conscious experience, is not the claim that it doesn't exist more outrageous than the opposite? There is little that can be done to decide this matter one way or the other, but let us at least consider this possibility as we journey onward.

3.2 Misapplication of Scientific Investigation

Physicalists take the lack of scientific evidence for conscious experience as a reason to deny its existence. However, they fail to understand that experience isn't really the sort of thing that can be investigated scientifically. This fact should not lead us to deny the existence of experience. We believe in plenty of things which cannot be investigated scientifically – for example morality, or beauty.

There is a confusion in kind here between things which are (or would be) amenable to scientific investigation but do not exist, and things which are not amenable to such investigation. For example, unicorns – physical creatures of this kind should be observable, and yet we have never observed any. Thus, we can make the perfectly reasonable claim that they do not exist (or more accurately, that the likelihood of their existence is so low as to be negligible).

Conscious experience is not this kind of a thing. Let's grant, temporarily, that experience does exist. How would an interested scientist go about investigating it? She

might do various scans of human brains using state of the art neurological equipment. In this way she could potentially learn a great deal about the way sensory information is processed, about the way this information is integrated into brain, about how it motivates behavioral responses – about the easy problems. But he would still be unable to demonstrate a single thing about the actual experience of her test subjects.

This is exactly the point Chalmers is making when he differentiates between the easy problems and the hard problem. The mistake physicalists make is drawing, from the fact that science cannot tell us much if anything at all about the hard problem, that the hard problem isn't really a problem at all. Once we decipher the mysteries of the brain itself, say the physicalists, there will be nothing left over and above that; no mysterious "qualia" left to explain.

It is difficult to argue against this point, because it always possible for the opposition to come back and say "Not *yet*! We just don't understand enough of the brain yet, but we will!" Well, perhaps, but this seems highly unlikely. Conscious experience, again, is a different *kind* of thing. To look at it another way, imagine that you were creating an artificial intelligence. It is easy – or at least doable – to imagine how you might create systems of memory, of information integration, of sensual perception. But how would you code joy? Or the color red?

3.3 Misunderstanding of Existence

To equate belief in conscious experience with Cartesian-style dualism requires a misunderstanding of the term "existence." It is possible to believe in the existence of experience without believing in a soul. The usual way is to treat qualia as a property of the physical brain. In the same way as your brain is grey, it is also conscious. In theory, any physical system with enough complexity could develop consciousness. Returning for a moment to the artificial intelligence example above, the programmer might say that conscious experience will emerge once he has coded a sufficiently complex program.

There are several ways a physicalist might respond to this idea. First, they might say that being a property of something doesn't really count as existence – "It's just an illusion." This is a claim easily undermined by pointing out that we have no trouble believing in other properties which exist distinctly from their physical material instantiations. As far back as Aristotle, philosophers have drawn a distinction between material

and form.

Note too the difference between saying something exists *distinctly* and saying it exists *separately*. To say that an entity is distinct from another simply means that it is possible to separate them conceptually. It does *not* imply that they are not somehow related. When we say of something that it exists separately, this implies that the two things have independent existence – one can exist without the other. This is not the case for properties. They exist distinctly but *not* separately, in that they cannot exist without a material thing in which they are instantiated.

A physicalist might accept this, and then respond that if that's the case, then consciousness really is *just* the brain. That is to say, if conscios experience has no separate existence, then it is not a different thing *at all*. Thus, when we learn everything about the way the brain functions, we will know all their is to know about conscious experience. This is perhaps one of the most subtle and interesting arguments for physicalism, but it is still flawed.

An excellent response to the physicalist argument above is to cite Frank Jackson's "Mary" thought experiment. [2] In this thought experiment, Jackson asks us to imagine a scientist who has spent her entire life in a black and white room, never having seen color anywhere. She learns all there is to know, more than we know now, about the physical process of color vision. She knows about wavelengths of light, how they enter the eye and stimulate the retina, and how the optic nerve transmits this information to the brain, and how the brain processes it, and so on. And yet, when she finally exits the room and sees the blue sky for the very first time, will she not be learning something new? Jackson think's she will, and so do I. This argument is intended to show that even after knowing everything about the physical brain, we won't know about conscious experience.

There are two complicating factors that I would like to address. The first is the idea that when we talk about qualities or properties, it is very likely the case that every single one of them is in a way subsumed under conscious experience. That is to say, a physicalist might respond to the Mary argument by accusing Jackson of begging the question. "You're already assuming that there's something beyond the physical workings of the brain!" he might say. This may be true, but how else could we possibly demonstrate that there is something more to know than the purely physical facts about an entity? We could alter the Mary example to say that she knows all the facts there are to know about

apples, but will still not know anything about what "red" looks like until she sees one. But we would run into the same problem. I perceive this attack on the Mary example as unfair, given the self-evidence of conscious experience I discussed earlier. However, the reader will have to draw their own conclusions.

A second complicating factor is the use of the word knowledge. Here we might distinguish between two kinds of knowledge, factual and experiential. A piece of factual knowledge is "light with a wavelength of 600-700 nanometers is what human beings call 'red"'. Experiential knowledge is perhaps best described as a mental picture of what red looks like. Again, we may have to exercise the principle of charity in bypassing potential circularity. But if we do this, then we may see that the trouble is in the idea that it is possible to learn about experiential things through factual knowledge. It is not, in fact, possible to do so, and this is yet another way of stating the fundamental divide that motivates this debate.

4 Conclusions

To briefly recap: There are two main reasons that I see causing people to deny the existence of conscious experience. The first is lack of scientific evidence, and the second is a tendency to associate conscious experience with Cartesian dualism. However, the lack of scientific evidence is due not to the non-existence of consciousness but to its very nature, which is not amenable to scientific investigation. As to comparing experience with the soul, this represents (again) a fundamental misunderstanding of the nature of experience and the way in which it exists. Experience exists more like a property than a material, distinct from but not separate from the brain.

Finally, I hope that in this paper I have not only put forward a moderately strong defense of those who believe in conscious experience, but also generally illustrated some of the difficulties that arise in even discussing this difficult topic.

References

[1] Chalmers, David J. "Facing Up to the Problem of Consciousness." Journal of Consciousness Studies 2.3 (1995): 200-19.

[2] Jackson, Frank. "What Mary Didn't Know." The Journal of Philosophy 83.5 (1986): 291-95.