No, Science Won't Solve the Great Problems of Philosophy

Julian Friedland · Follow

7 min read · Jan 15, 2020

A popular positivistic line of thinking seems to be cropping up again, declaring that the sciences are on the verge of a paradigmatic shift. One that will merge science and philosophy to finally answer all the great big questions once and for all. Questions such as the ones Philip Ball recently urged science to face in the journal Nature, which he also edits: What is life? What is consciousness? What makes individuals who they are? Why does our universe seem fine-tuned for our existence? How did it all begin? While such questions are undoubtedly important, the truth is, they are essentially philosophical. That is to say, they escape the kind of exactness required of the hard sciences. The upshot is that they are at best only answerable to a limited extent, if they are even answerable at all.

Let's address them one by one.

What is life?

It can seem puzzling that we've still not managed to define such a foundational concept. We're currently busy scouring the heavens for it, confident that we'll be able to recognize it once we find it, and yet, we don't seem to have a clear grasp of what exactly we are looking for. But this is not the result of any failure of science, as Ball seems to think it is. Rather, it is largely because the concept of life encompasses far too many different kinds of things to afford any exact definition uniting them all. As a result, much of this so-called problem is largely conceptual. For as Wittgenstein demonstrates, the meaning of such words is simply a function of their everyday use. We might also ask if it is a failure of mathematics that it has not yet found a precise definition of the word 'number'. Or if it is a failure of social science that it has not discovered the precise definition of the word 'game'. As Wittgenstein would say, we are bewitched at such moments by the idea that there must be some essential definition uniting all the uses of such terms. That there is something hidden behind all these things that we assemble together in a group. But this is a complete illusion. Just as there are infinitely different types of games, some played for fun, others to the death, etc. there is no precise definition for the word 'game'.

One might then wonder how we can use the word 'play' if not to describe something fun. The answer is that this is because you can play war games, you can play dead, you can play the drums, etc. Novel uses of terms arise out of shared contexts in which certain options come to mind. Just the same way as when we reach for a flathead screwdriver to open a paint can, we find a novel use that the tool was not originally designed for. There is no essential trait linking the use of ordinary terms, which is also why some screwdrivers can't actually screw in any screws, some doors don't open, some doctors never cure anyone, and Socrates the greatest philosopher of the Western canon, was known to know nothing at all.

Similarly, the word 'life' denotes too many different kinds of things to have any precise meaning. To say that a cell is living is to say something very different from saying that a mind is alive, a species is alive, a language is alive, or a myth is alive. What does a dead mind or language look like exactly? Are they observable the same way a dead tree is? Words like 'life' are profoundly nuanced and akin to words like 'humanity' and 'personhood' that escape precise definition. Thus, it is not a failure of biology that they do not have any. If we expect science to one day discover them, we'll no-doubt be waiting a very long time.

What is consciousness?

The mysterious aspect of this question stems from observability and precision. What makes it properly philosophical comes firstly from the difficulty of observing the phenomenon to begin with — not unlike the difficulty in observing similarities and differences in personal traits. Mental states are not publicly observable given that they are embedded in the first-person point of view. That is to say, the object of our attention is attention itself. All we have to go on in the study of consciousness is our own individual experience coupled with observations of others' behavior. Secondly, the terms 'consciousness' or 'mind' escape precise definition, as there are varying and often confounding degrees of mentality such as dreaming, aspect blindness, and the theory of the unconscious.

As a result, science can no more physically explain consciousness than it can physically explain any of the individual experiences that make up consciousness in toto. As if it could physically explain what disgust is, or virtue is, or what kind of tea tastes good.

Still, many including Philip Goff are now jumping on the panpsychist bandwagon, declaring that this philosophical theory offers a breakthrough pathway toward developing a science of consciousness. The idea is that all matter is actually mental and that even elementary particles have "a tiny element of consciousness" also sometimes referred to as a kind of subjectivity. He concedes however that this approach is not actually testable while maintaining that it is nevertheless justified by inference to the best explanation — though he provides no argument for why this is. It's not clear why the emergent property position for example might not offer an equally viable if not better explanation. In any case, it's true that some mainstream scientific theories weren't yet testable at their inception — Darwinism being a conspicuous example — though the theory is now definitively proven at the DNA level, demonstrating beyond any doubt our connection to our common ancestors beginning with Neanderthals and extending far beyond. However, what made Darwin's theory nonetheless scientific upon its first articulation is not only that it had great explanatory power but that the fossil record offered potential confirmation. Unfortunately, no theory of consciousness, including panpsychism has yet articulated how it might be confirmed.

What makes individuals who they are?

Personal identity is a philosophical — not scientific — concept. Are identical twins the same person? Yes and no. Am I the same person today as I was when I was five years old? In some ways yes, in many other ways, no. Can we observe the differences and similarities to determine if I am now more the same than different from who I was then? Should some qualities count more than others? Why or why not? Furthermore, the concept is made up of the terms 'identity' and 'personhood', which each escape any precise definition. The idea that science can answer the question of personal identity betrays a lack of awareness of the philosophical depths of the question to begin with.

Why does the universe seem fine-tuned for our existence?

I'm frankly not sure what this question is supposed to mean exactly. It strikes me as putting the cart before the horse by postulating the existence of an intelligent designer who set everything up especially for us. The reality is that the universe is not fine-tuned for our existence. We are fine-tuned to it. The antidote to our captive wonderment at the universe seeming so obviously fine-tuned to our existence is trying to imagine how the universe might seem if it were not so fine-tuned to our existence. Upon discovering that this is entirely impossible, we also discover that the question we started with is perfect nonsense.

How did it all begin?

This is certainly the deepest metaphysical paradox there is. Akin to the question "why did it all begin". Trying to answer it is to initiate an infinite regress given the Augustinian tautology that from nothing, nothing comes. As such it is axiomatically unanswerable. Theoretical physicist Roger Penrose therefore has perhaps the best answer, namely that there was never any beginning and there will never be any end. The universe simply collapses and is reborn via black holes in an infinite series of what he calls eons. Of course, this is not an entirely satisfying answer either given that the idea of any single thing having no beginning offends our logical sensibilities. But the alternative, which is to assume some kind of miraculous beginning is no less problematic. It is arguably more so given that if infinity can go on perfectly fine in one direction, it might extend that way in the other as well. In any case, to expect science to answer what is not only a metaphysical question but a paradoxical one to boot, is to expect miracles indeed.

This doesn't stop Donald Hoffman at MIT however from arguing that evolution has adapted us against perceiving reality as it truly is. Though this may well be — and he is in good company here with Kant who argues that we can never know the thing in itself, prior to our experience — he goes on to claim that we can nevertheless get beyond this horizon with pure mathematics to uncover how the universe actually originated. The problem here is that his first premise refutes his conclusion given that mathematics are presumably also part of the same evolutionary story. This is another Wittgensteinian point echoed in George Lakoff's book *Where Mathematics Come From*. And is also why the fashionable universe-as-simulation theory is self-refuting. For if we can understand that we might be living in a simulation, and potentially prove that it is, haven't we then got hold of a veridical part of reality thereby? As Descartes and Wittgenstein demonstrate, we already have the cognitive tools to know that each of us exists, and thanks to these, we can be sure of much else to boot. How much however, remains a properly philosophical matter, though certainly informed by science.

Ultimately, what makes existential questions such as these important is not so much that they may one day be answered. It is that they push us to better understand what it really means to ask them. And in the end, this is also how Ball seems to interpret them. What he and the new positivists seem to ignore is that such questions are purely philosophical and therefore cannot be properly articulated — let alone resolved — scientifically.

Philosophy | Consciousness | Personal Identity | Simulation Hypothesis | Philosophy Of Science

Follow

Written by Julian Friedland