Dear David Chalmers:

In your short 16 June 2022 interview with Robert Lawrence Kuhn, you sum up your recent radical position. You are driven to believe that consciousness is something nonphysical that acts on the natural world by collapsing the Schrödinger wavefunction because that seems to be the only way to explain it that doesn't deny the causal completeness of the physical world. But there is a less radical alternative.

Since you were responsible for the widespread recognition of the hard problem of mind, I take your recent radical position as evidence of how hard it is to solve the problem. All naturalists want to believe that consciousness will be reduced to the brain studied in science, but since physics discovers a tightly closed system of causes, they seem forced to believe that consciousness is epiphenomenal. In your 1996 book, you pointed out that epiphenomenalism makes it hard to explain our knowledge of consciousness, and it seems that the intractability of that problem has driven you to defend an interpretation of quantum mechanics that has been almost universally rejected by physicists ever since it was defended by Eugene Wigner. So, I am asking you to consider an epiphenomenalist solution to the hard problem of mind that explains how we know that we are conscious.

You are not mistaken in believing that solving the hard problem of mind depends on solving the problems of quantum physics. But quantum physics is problematic because it is an incomplete description of the natural world. The probabilistic character of quantum laws comes from overlooking a hidden variable, and the variable is hidden from physics because it depends on something that it is literally unthinkable in modern physics. I predict that

when physicists recognize what it is, they will solve all the problems of modern physics and trigger a scientific revolution.

The problems of modern physics will be solved by the discovery that space is a substance that interacts with matter. This ontological theory has been hidden from physics for centuries by its assumption that laws of physics are the deepest possible knowledge about the natural world. The secret sauce that has made physics so successful for centuries is the use of mathematics to formulate its laws. But that method has trapped physicists inside a box and caused intractable problems in modern physics, and when physicists give up the assumption that mathematics is known by a faculty of rational intuition and consider how the truth of mathematics can be explained by its correspondence to the world, they will begin to think outside that box. If the natural world is constituted by substances with powers that enable them to interact with one another as they endure through time, interactions of substances constitute change, and since all the regularities generated by interactions of space and matter are quantitative, scientists will infer that space and matter constitute the natural world because that is the best explanation of the “unreasonable effectiveness” of mathematics in discovering laws of physics. Furthermore, the reduction of physics to ontology will be confirmed when they discover more specific powers by which interactions of space and matter generate all the regularities described by laws of physics, because that will solve the problems of modern physics.

I believe that physicists are the verge of making this discovery, and when they do, they will discover that the outcomes of quantum measurements are not determined by consciousness but, rather, by a way that space interacts with matter. But what is more, this ontological discovery will reveal that matter exists as many particular bits that coincide with parts of space, and the way

that interactions of space and matter generate the regularities described by laws of physics will reveal a kind of efficient cause not recognized by physics. Recognition of this second kind of efficient cause will give biologists a more complete understanding of the cause of evolution that enables them to show that a series of inevitable of stages of evolution, caused by a series of levels of natural organization, brings beings like us into existence on suitable planets throughout the universe. The level of organization responsible for the stage at which the mammalian brain evolves will reveal that the function of its basic structure is to serve as a faculty of naturalistic imagination, and that will enable neural scientists to use the homology between the anatomically distinct hindbrain, midbrain, and forebrain of the reptilian brain and three distinct thalamocortical circuits in the mammalian forebrain to determine how the mammalian brain is a faculty of imagination.

This solves what you call the easy problem of mind, but it does not solve the hard problem. That is the problem of explaining how consciousness, as the phenomenal character of experience, is part of the natural world, and explaining the basic structure of the mammalian brain as a faculty of imagination does not, by itself, explain, for example, the spatial configurations of sensory qualia (such as colors and sounds) that are immediately present when we perceive the natural world. But it can be explained by a further consequence of the discovery that matter is a substance that coincides with parts of space.

Since matter is a substance, scientists can assume that a purely phenomenal way of existing in itself is part of its essential nature. That is, the existence of a primitive qualitative property of some kind is what it is like to be every bit of matter in the world, though such “qualia” are presumably primitive in the case of the simplest bits of matter. No such assumption enables physicalists to explain how consciousness is part of the natural world because

physicalism is atomistic, and any phenomenal intrinsic property a physical particle may have is something it keeps to itself. So, even if physical particles had phenomenal intrinsic properties, they would not explain the complex phenomenal properties that are immediately present. But this assumption does enable spatio-materialism to explain how consciousness is part of the natural world because bits of matter coincide with parts of space. Since species of matter will be distinguished by the spatiotemporal structures of their coincidence with space, a single bit of matter can have a kind of spatiotemporal structure that is complex enough to explain the configurations of sensory qualia in phenomenal space that are immediately present when we perceive the natural world. If the faculty of imagination is responsible for their structure, there is one and only one bit of matter helping constitute the mammalian brain that fills this bill. It is the species of field matter that mediates the electromagnetic interactions among ions accelerated in the firings of neurons. Their firings in serving as a faculty of imagination impose a spatiotemporal structure on this field matter (called the electromagnetic field in physics), and since matter has a phenomenal intrinsic property, what it is like to be that particular bit of matter can explain the immediate presence of configurations sensory qualia in phenomenal space. In sum, consciousness is what it is like to be a bit of field matter that helps constitute the mammalian brain.

This is a form of panpsychism. But it entails epiphenomenalism, and the problem it poses about how we know we are conscious is, I believe, what turned you away from epiphenomenalist explanations of consciousness. What it is like to be a mammal is just the immediate presence of phenomenal properties, and since that can't cause anything to happen in the brain that is not fully determined by efficient causes, everything we know and say about consciousness is caused by brain states. But with this

ontological explanation of consciousness, there is a way to explain how we know we are conscious. The problem of epiphenomenalism points to an illusion inherent in consciousness that can cause it.

The unity of consciousness makes it seem to that we are inside consciousness. Since we are mammals, everything we know and describe seems to be a phenomenal property, so we naturally assume that the immediate presence of phenomenal properties is what causes our knowledge of them. This is false. But it is not just a belief that we can give up when we learn that it is false. It is an illusion, like an optical illusion, that persists after recognizing that it is false. Being located in a phenomenal world is what it is like to be conscious. I call it the illusion of intuitionism because what is false about it can be described as the belief that knowledge depends on objects given in faculties of intuition. While the immediate presence of phenomenal properties cannot be the cause of what we know and say about consciousness, the illusion inherent in it can, and surprisingly, knowledge of consciousness has a historical cause.

Ontological scientists will use the illusion of intuitionism to explain the history of Western philosophy as an exchange of metaphysical arguments that leads to the discovery that we are conscious. But the discovery was made in the problematic form of mind-body dualism. When Descartes argued, I think, therefore I am, he was describing the illusion of intuitionism, and since the illusion is caused by the unity of consciousness, he concluded that unity was essential to the substance he called mind. He offered proofs of the existence of a world external to mind, and since he used the clear and distinct ideas of mathematics to describe its nature, he discovered that it has a divisibility that is just opposite to the unity of mind. The substance constituting mind had to be radically different from the substances constituting a

world in which substances exist outside one another in space, and since their ontological incompatibility precluded explaining how mind and body interact, it doomed modern metaphysics. But it was the discovery that we are conscious.

This historical explanation of our knowledge of consciousness also explains why the problem of mind is so hard for physicalists. They start with the external world discovered by Descartes because scientists are naturalists who assume the existence of the natural world, and since a science based on physics cannot explain how consciousness is part of the natural world, it cannot explain knowledge of consciousness. When physicalists claim to know they are conscious, they are falling for the illusion of intuitionism, and the belief that knowledge is caused by the immediate presence of phenomenal properties is incompatible with the completeness of physical causes. Ironically, physicalism is also caused by the illusion of intuitionism. The use of mathematics as a language for describing regularities about change depends on the assumption that it is known by a faculty of rational intuition, which can also be traced to Descartes, and the assumption that mathematically formulated laws of nature are the deepest possible knowledge of the natural world entails monism and the kind of divisibility that is incompatible with the unity of mind. That is the obstacle that this explanation of consciousness overcomes by starting with the prediction of the discovery about space being a substance.

You are right to believe that the hard problem of mind requires a radical solution. But the solution required is not as radical as assuming that consciousness is the efficient cause that collapses the Schrödinger wavefunction. My hope is that seeing how a panpsychist epiphenomenalism can solve the hard problem will entice you to consider my argument. The solution of the hard problem of mind is only part of it. The complete argument is

presented in detail in a trilogy, Naturalistic Reason, that I am self-publishing as I send you this message.

The first volume, Unification of Physics, describes ontological mechanisms that explain all the laws of physics in quantitative detail. The second volume, the Unification of Science, shows how the ontological reduction of physics reveals a kind of efficient cause, not recognized by physics, that works together with physical causes in a way that will enable all the specialized sciences to explain completely the regularities they study. That reveals that the overall course of evolution on suitable planets includes a series of inevitable stages that brings about the existence of beings like us, and the third volume, the Unification of Science and Philosophy, uses this ontological explanation of how consciousness as part of the natural world to explain Western civilization as a distinct stage in the evolution of life caused by the exchange of metaphysical arguments in which consciousness is discovered and science begins. It shows how this way of solving the mind-body problem turns ontological science into a cognitive power that knows Reality behind Appearance, so the trilogy is called Naturalistic Reason.

There may be incomplete or mistaken arguments in this trilogy. But I am confident that the discovery about space will cause a scientific revolution. And since I know this sounds too good to be true, let me say something about its origin and scope. I have been working on this argument, pretty much on my own, for over 45 years, including 30 years teaching philosophy at American University and more than 20 years since retiring from teaching. As a philosopher, I have written the detailed argument with a rigor that justifies expecting it to stand up to scrutiny in the rational pursuit of truth. I am writing to you and a few others because I want to make what I have discovered public. I am about to turn 83, and since I have been given the leisure to enjoy a life spent in

this exceptionally fulfilling way, I believe that making it public is my duty. I am hoping that as someone who believes in the rational pursuit of truth, you will help give this argument a public hearing.

Even those who believe in the rational pursuit of truth will be reluctant to take up a detailed all-inclusive explanation of the natural world in three volumes, so I am offering a simpler way of learning more about it. An executive summary of the argument is presented in a short (150 page) book titled Sapere Aude that I am also self-publishing now. I am including a free Amazon link to an eBook version of it. (See below.) And there is more information about this argument at natReason.com, including an introduction to the trilogy, a Table of Contents for it, a bookstore, and more information about me. I would be happy to answer any questions you may have and very grateful to learn about any problems that you think casts doubt on it. You can reach me personally at phillphscribner@yahoo.com.