It's Immaterial - A Critical Review of the Knowledge Argument

Vishnu Veeravalli *
October 19, 2022

Abstract

What is the relationship between the brain and the mind, the physical and the mental? While Monists believe no such distinction exists, Dualists believe a human to be comprised of some unextended mental substance which is the seat of consciousness and some physical substance. In recent years, the knowledge argument, the idea that it is impossible to know what a color is like without seeing it first, has emerged as a strong case for Dualism. According to Frank Jackson, who proposed the knowledge argument first, even if a person knows all the physical facts about a color and the nature of perception, they will not understand what the color is actually like (its phenomenology) unless they see it for themselves. To defend against the knowledge argument, there are three possibilities: rejecting the premise of the knowledge argument, the abilities hypothesis, and the phenomenal concept strategy. Ultimately, this paper finds the phenomenal concept strategy to be the most successful.

1 The Ground Surveyed

The brain's relation to conscious experience is a problem that has plagued thinkers for generations. How the experience of the taste of sweetness, for example, arises from the triggering of certain neural pathways is, to quote the biologist Thomas Huxley, akin to "a genie appearing when Aladin rubs his lamp". This relationship between mind and body has been crystallized in the mind-body problem, which we might as well call the mind-brain problem. In plain English, it asks how in the world does a mechanical/biological system that is the brain give rise to such a poetic experience as consciousness? There are two potential resolutions: monism and dualism.

1.1 Monism

Monism states that the division between mind and body is an illusion, an invention stemming from the failures of human reasoning. A proponent of this theory

^{*}Advised by: Dr. Alasdair Craig

would suggest that there is only one substance which constitutes things. Most monists believe this substance to be physical, that is matter, and we call such people physicalists accordingly. However, there are those monists who believe the all-comprising substance to be mental - the so-called idealists. The exact difference between mental and physical will be explored later in the paper, but this distinction is intuitive.

1.2 Dualism

As opposed to monism there is dualism, the idea that there are two different substances that make up a person: the physical and the mental. A powerful justification of the dualist position is the knowledge argument [Jac82] (first proposed by Frank Jackson) which seeks to demonstrate that in addition to physical information of a system that can be obtained through an objective analysis, there is non-physical information that can be accessed only through direct experience. In this paper, I examine the knowledge argument in detail, and explore the abilities hypothesis [Lew99] and phenomenal concept [Spe18] strategy as possible responses, finding the latter to be the strongest refutation.

We often use dualities to make sense of the world. Day and night, good and evil, black and white, these Manichean divisions often serve as dissecting meaning from the complexity of nature. And so it is with mind and matter. For much of human history, dualism has served as our intellectual default. The most ancient religious traditions presume the existence of an eternal soul, which is bound by the ephemeral body in this material plane. Eventually, when the body disintegrates, the soul is released from its corporeal fetters. For the brief unison of body and soul, the intertwining of physical and non-physical elements, we walk the earth as human beings. Regardless, the dualist's true conception of self lies in the soul that flies, and so we outlast the body that is tethered.

It is in the "Meditations" of Descartes [Des98] where the dualist position is first spelled out, and his formulation has been very influential. Counterintuitively, the foundation of Descartes' argument is rational doubt - he seeks to secure his own position by being skeptical of it. He rationally doubts the existence of everything under the premise that all the evidence supporting certain beliefs could be misleading. However, according to Descartes, rational doubt is not effective when challenging the existence of himself, for in order to rationally doubt there needs to be a skeptic. To cite his belabored quote, "I think, therefore I am."

This self, however, does not include his body. Descartes can imagine a world in which he exists but has no body, and therefore he does not identify with his physical form. Instead, Descartes claims he is a "thinking thing", what has come to be known as a Cartesian Soul, for he cannot imagine a world in which he exists without a mental life. As dualism as a philosophical movement has progressed, the soul has been replaced by the idea of mentality as a non-physical substance separate from the body entirely.

Due to this natural progression of dualism, it is critical to understand the distinction between brain and mind within the dualist paradigm, for the dualist

does not mean the same thing when referring to each. To a dualist, a brain is the primary cog in the central nervous system, and is present in organisms as simple as worms. On the other hand, a mind is the locus of conscious experience, and seems to only be present in complex organisms. The key qualm of the dualist here is that the nature of mind cannot be captured in a mere physical theory. Mentality, and its key feature of consciousness, the dualist would argue, is more than something that emerges from base physical processes, but a far more fundamental reality.

1.3 Conciousness - What Does it Mean?

What does the word consciousness mean? It is used in numerous contexts. For example, we may say that we are conscious of a fact if we know it. We also use the word conscious to describe whether we are awake or asleep. Used in this way, consciousness becomes awareness of the outside world.

At least by presupposition, there is more to consciousness, namely its phenomenal aspect. As Thomas Nagel describes [Nag74], "...the fact that an organism has conscious experience at all means, basically, that there is something it is like to be that organism". A conscious organism has an internal life which will individualize its experiences. That is to say, if something is conscious, it has subjective experience.

Furthermore, if it is like something to be in a particular mental state, it is said to have phenomenology. Describing exactly what phenomenology is presents a tall task. In a broad sense, phenomenology is a systematized study of subjective experience. The way entities and events appear in our consciousness are grist to phenomenology's mill. The quintessence of phenomenology are known as qualia, individual "nuggets" of a whole subjective experience.

Perhaps a clearer way of understanding phenomenology and qualia is through discussion of propositional attitudes. Some phenomenal experiences have a corresponding mental state with two components: an attitude and a representation of the experience itself. For example, on a cozy summer's day, I might be pleased (attitude) that it is sunny outside (representation of experience). In this illustration, phenomenology is not integral to the experience or mental state. One can imagine lacking a strong attitude towards it being sunny outside, remaining indifferent to this state of affairs. However, there are also experiences with essential phenomenology. In those cases, the corresponding mental state is simply the attitude and there does not seem to be a representation. Take suffering. If you do not experience the subjective character of suffering, then one simply does not suffer. There are also mental states that lack phenomenology entirely. There is nothing it is like, for instance, for me to believe it is Thursday today.

2 The Knowledge Argument

With the ground thus surveyed, we can now proceed with an outline of the knowledge argument [Jac82]. Mary is a scientist, specializing in color, the neu-

rophysiology of the brain and the nature of human perception. Due to her expertise, Mary knows all physical facts about color and how humans see it. While developing her relative omniscience in these fields, she has been brought up in a cell that features only shades of grey. In fact, she was born in this monochrome prison and has never left it for a single moment. For this reason, Mary has never truly had a color experience. She may understand that color is a function of the density and arrangement of atoms in an object, causing the light that hits the object to scatter in certain ways. She also may understand what happens when light hits the retina, and the resulting neural pathways that are triggered. But will she understand what color is actually like, its phenomenology? The knowledge argument would suggest that she does not and never will, unless she steps out of her cell. When she views real color in its unadulterated glory, the knowledge argument states, she gains some new non-physical information regarding color since she already knew all the pertinent physical facts. In addition to its physical description, Mary now understands what color is like and its many qualia

What is meant by non-physical information requires some explanation, for this concept is not immediately obvious. Perhaps it best to begin by discussing what physical information is, for this type is the more intuitive of the two, at least seemingly. Physical information, in a nutshell, is that knowledge which can be derived from the study of physics. Admittedly, things can get a bit hairy with this definition, because in recent years physics has been studying objects that do not fit the historical description of the physical. Nevertheless, physics is the description of the universe in terms of mathematics, detecting and systematizing patterns. The philosopher Alan Watts refers to this tendency as "Natura naturata", or nature natured. Given this description, the non-physical information becomes that which is lost by reduction, those facts of nature which are not easily sorted into any given box or conceptual framework. Reduction is only useful if the lower level phenomena can explain the higher level phenomenon. However, when it comes to the neurophysiology of the brain and consciousness, this remains to be seen. One may notice that non-physical information, such as qualia, are ineffable. If language is a form of communication between people with shared experiences, then phenomenology can never be communicated because the subjective experiences, by definition, are never shared.

3 Responding to The Knowledge Argument

Provided with this description of the knowledge argument, we may now discuss some responses to it.

3.1 The Easy Out

The most obvious objection is to challenge its premise. We may simply deny that Mary knows all physical facts, for, if she did, then there would be nothing learned from the color experience. Omniscience is misrepresented in Mary, we may retort; how can she learn something new if she knows all there is?

I reject the validity of this objection, beginning with an examination of omniscience itself. We know, by definition, what it means to be omniscient. However, even though this description is perfectly clear, we do not know what being omniscient is actually like. There is something to be learned beyond objective descriptions.

3.2 The Abilities Hypothesis

Another possible objection, called the Abilities Hypothesis [Lew99], accepts Mary's omniscience, but denies that she learns anything new. In his paper "What Experience Teaches", David Lewis denies that a phenomenal experience provides any information beyond what can be ascertained through other means. Information, to Lewis, is the elimination of possibilities. If we learn about something, we unravel a portion of its mystery. However, when it comes to phenomenology, there are no other options other than the current experience. That is to say, qualia are so intensely personal that it is impossible to imagine what someone else's subjective experience will be. For this reason, Lewis contends, no new information is learned through phenomenology.

If this is so, what is learned through a subjective experience? According to Lewis [Lew99], we gain the ability to imagine ourselves having that experience. We can enter a mental state similar to the one that we were in when directly undergoing a specific experience. For example, when you see your favorite color for the first time, you gain the ability to imagine it in later instances.

I find this response to be flawed for the following reason. There are many possibilities, subjective in nature, that can be imagined before seeing a color for the first time. For example, there are the prospects of liking a color, disliking it, or remaining rather neutral. Only by directly experiencing the color can it be determined which prospects can be eliminated. Therefore, as the knowledge argument proposes, subjective experience provides a person with new information.

3.3 The Phenomenal Concept Strategy

Finally, there is the phenomenal concept strategy [Spe18], which hinges on the meaning of the word fact. Suppose I know that water vapor is hot. However, I do not understand the thermodynamics behind this statement. I then do some research to find heat is really a measure of the overall kinetic energy of the gas molecules, and that since my sensory system is too coarse to detect each individual particle collision, I feel this general motion as heat. Through this process, I have not learned a new fact, for I always knew that water vapor was hot. Instead, I learned a new concept that describes the same property of matter. In the same way, Mary doesn't learn a new fact when she views the color, but a phenomenal concept of color, which describes the same reality as the physical one.

This response is satisfactory. It is imperative not to confuse the various descriptions of a particular phenomenon with the phenomenon itself. When I describe a tennis ball as round and my friend describes it as yellow, we are referring to the same reality.

4 Conclusion

While the validity of the knowledge argument remains contentious, it does exhume the difficulties of studying phenomenology in a scientifically rigorous manner. In fact, this is part of the allure for dualism. Because science is the study of material things and struggles to capture phenomenology and associated qualia in their entirety, it could be possible these things are not necessarily physical substances, but rather something of their own. When we observe material objects, one thing they share in common is their extension in space. No matter how minuscule, there is a portion of space that they will occupy as long as they exist. Perhaps there are also mental substances which fundamentally differ from the material in the fact that they are not extended in space. If mental substances are in this way non-material, it would be unsurprising that their properties, such as consciousness, cannot be the subject of scientific inquiry.

However, identifying a distinction between physical and non-physical while claiming a unison of the two in the form of human beings presents a significant issue, in particular the pairing problem. According to a dualist, it is the nature of a mind to be unextended. In other words, minds do not exist in space. On the other hand, bodies are material substances and therefore are extended. Given these definitions, it is evident that minds and bodies occupy separate planes of reality. Recollecting another pillar of the dualist position, the non-material mind and the physical body somehow intertwine to form a human being. How would this unison work if minds and bodies exist in worlds that do not overlap?

Perhaps it is just a period of time before we are able to develop a science of phenomenology. As of right now, the greatest challenge of constructing such a science is understanding what physical information may serve as evidence for the subjectivity of experience and how. Certainly, this is a quandary with no obvious resolution, but it would be unfair for the dualist to suggest that the current state of affairs indicates that nothing can be worked out in the future. The field of Philosophy deserves its proper credit, as it has proved effective in reframing questions that previously could not have even begun to be answered into a concrete field of study. David Chalmers has the following to say on the principle he calls Disciplinary Speciation [Cha14]: "...many new disciplines have sprung forth from philosophy over the years: physics, psychology, logic, linguistics, economics, and so on. In each case, these fields have sprung forth as tools have been developed to address questions more precisely and more decisively. The key thesis is that when we develop methods for conclusively answering philosophical questions, those methods come to constitute a new field and the questions are no longer deemed philosophical. "This is simply to note that, if history is any guide, a science of phenomenology is likely to appear in the future.

If one is too stubborn to be swayed by the tide of the ages, they must ask themselves what the objects of phenomenology could be if not for physical ones? Clinging on to the dualist refrain of "nothing physical may explain what it is like to see red," an individual may feel perfectly content asserting the inadequacy of physicalism while themselves eschewing the burden of explanation.

I would like to conclude with the following words of Iris Murdoch "To do philosophy is to explore one's temperament and yet at the same time discover the truth." I encourage each reader to explore their own presumptions and comfort with the conclusions of the knowledge argument while also being skeptical of their own predisposition.

References

- [Cha14] David J. Chalmers. Why isn't there more progress in philosophy? Cambridge University Press, 2014.
- [Des98] Rene Descartes. Meditations. Cambridge University Press, 1998.
- [Gof17] Philip Goff. Conciousness and fundemental reality. Oxford University Press, 2017.
- [Jac82] Frank Jackson. Epiphenomenal qualia. The Philosophical Quarterly, 1982.
- [Lew99] David Lewis. What experience teaches. *Papers in Metaphysics and Epistemology*, 1999.
- [Nag74] Thomas Nagel. What it is like to be a bat. Duke University Press, 1974.
- [Ney08] Alyssa Ney. Defining physicalism. Philosophy Compass, 2008.
- [Spe18] Jeff Speaks. Objections to the knowledge argument. *University of Notre Dame*, 2018.