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Neuroscience and Property Dualism

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ABSTRACT

This paper explores neuroscience and psychology as evidence for property dualism. This paper argues that neuroscience and psychology has not provided evidence that the mind is material, and in fact, gives evidence that the mind is a property of the brain. As neuroscience and psychology are newer sciences, there is a possibility that materialistic evidence for the mind could be found; however, this paper argues that for now (and as long as the trend of the sciences continue) that psychology and neuroscience give evidence for property dualism.

KEYWORDS

Property dualism, Occam's Razor, Neuroscience, Psychology, Dualism, Mind

INTRODUCTION

In philosophy of mind, there seems to be a never-ending argument between theories where no one can solve all the problems his/her theory has. This paper cannot solve all the problems with property dualism; however, it can respond to some criticism and provide support for a theory that is often ignored in the conversation of philosophy of mind. Property dualism allows for dualism in context of neuroscience, which is a huge problem with some other theories, such as Cartesian substance dualism, reductionism, and behaviorism. Neuroscience (a normally materialistic field) has not been able to provide a materialist explanation for the mind, furthering the idea that the mind is probably immaterial.

Unsatisfied with arguments for interactionism when it comes to understanding the mind, property dualism offers an alternative to people who are committed to dualism. Property dualism is a theory in philosophy of mind that still posits that the mind and body are separate, but there is not an interaction between them as with the Cartesian substance dualism. Property dualism instead posits that the mind is an immaterial property of the brain. When I say property of the brain, I mean that mind is an immaterial feature of the brain that is separate from the brain as it is its own thing and emerges once a brain gets complex enough. Specifically, qualia and intentional states (the two properties that make up mind) are immaterial properties of the brain, or as Jacqueline (a property dualist) says, “[t]he ineliminable and irreducible properties [that] many thinkers have held to be essential to the mind, as opposed to the body or brain” (Jacquette 1994, 38). Qualia refers to the feelings and attitudes one has while interacting with the world around them. Intentional states are thoughts, doubts, ideas, etc. a person has. These two immaterial properties combined are what we call mind, according to property dualists. Qualia and intentional states also allows for evolutionary emergence of mind from complex material (life emerges from inorganic matter, difference is that immaterial mind emerges from physical brain because it cannot be explained by the complex brain).

Jacquette identifies a few objections to property dualism. The first objection I will focus on in this paper is the eliminativist and reductionist objection. This objection raises the idea of Occam’s Razor, the thought that when competing explanations of a phenomenon exist, the simplest answer that still can fully explain the phenomenon is the theory that should be accepted. Jacqueline responds to the reductionist’s idea that the mind is simply a term we use for certain brain

processes by saying that “[t]here is nothing particularly praiseworthy about a philosophy of mind that is simpler or more economical than its competitors if it is false or explanatorily inadequate” (Jacquette 1994, 40). In other words, Occam’s Razor only applies if mental processes do not need a dualist idea of the irreducible, immaterial substance. Jacquette goes slightly more in-depth with his argument by saying that “if the mind has properties that cannot be eliminated or reduced or explained in behavioral functional terms, then it is necessary after all to include [the immaterial properties of the brain]” (Jacquette 1994, 40).

NEUROSCIENCE AND PSYCHOLOGY

Furthering Jacquette’s argument, the hard and soft sciences have not provided any evidence that would allow for the elimination of the immaterial mind. The brain itself is a very complex thing. The neurosciences have made great strides in trying to understand the brain; however, they have not even come close to explaining the brain (such as understanding where to find Broca’s area, which is the area associated with speech production, but cannot explain why that area is associated or how it works in terms of the mind), which is of itself material. And while the eliminativist denies an immaterial mind (and actually the mind in general), neuroscience cannot yet explain mental states in terms of brain processes, which, again, is the eliminativist’s claim. There is evidence that although parts of the brain specialize (such as Broca’s area for language) not every human has the same area of the brain that specializes. In the case of Broca’s area, the majority of people have the language center of the brain in the left hemisphere, but there are a minority of people who have it in the right hemisphere. This discovery directly contradicts the thinking that specific brain processes correspond to specific “mental states”¹. This evidence from neuroscience seems to pose not only a problem for the reductionist, but for the eliminativist as well. The structure of the brain can be different without abnormal behavior. There have been cases of large sections of the brain, either taken out by surgeons or deteriorated due to a disease, that lived normal lives, and in the cases of deterioration, would not have known about their abnormal brains if it had not been for the brain scans.

1. In order to keep the paper focused, I will not go into much depth about Identity Theory, which is a reductionist view of mind. There are two types of Identity Theory. The stronger of the two is type-type meaning that a brain process corresponds to a mental state, or everyone that has this brain process will have this mental state. I briefly discuss how the science seems to disprove this late in the paper, but due to time, I will be skipping a more in-depth analysis.

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The plasticity of the brain seems to give evidence for a mind that is an immaterial property of the brain. The brain can rewire itself to perform tasks that should not be able to be done according to a healthy brain. The eliminativist and reductionist points of view cannot account for this evidence because they are committed to the idea that either the mind can be reduced to the brain or that there is no mind. In a property dualist point of view, one can account for this plasticity in the brain because mind is a property of the brain. In fact, qualia and intentional states are as much of a property of the brain as the plasticity is. So far neuroscience has not come up with a material explanation of the brain; however, taking the a property dualist stance, the science seems to make sense.

In psychology, while behaviorism was the dominating thought for many years, cognitive psychology has since replaced behaviorism. A main reason for this shift in focus was that there are numerous human behaviors that do not seem to form due to reinforcements that condition the behavior. One example is lying, which is a thing our parents try to condition us not to do. Another example is killing, which is a thing society tries to condition us not to do. These examples are behaviors that arise despite of conditioning. Another reason for shifting focus was that explaining all "mental states" in terms of behavior is difficult, such as the intentional states. For example, a belief is difficult to define in terms of only observable behavior. Cognitive psychology looks at the mental states instead of the behavior using the techniques of behaviorists. Generally speaking, most psychologists acknowledge that mental states are invisible, yet, predictable due to similar behavior in a fixed set of circumstances. Basically, the intentions and qualia are not directly accessible through outside observation, but through self-reporting by the subjects. From these self-reports, intentions and qualia may be better predicted, but there is always the issue of the accuracy of self-reporting because of the human tendency to lie or just act abnormally due to being in an experiment. So while a self-report is the only way to understand the private intentional states and qualia, observable behavior is still what psychologists study most of the time by the ways of carefully constructed experiments, but without the idea that observable behavior is the best and only way to understand the mind. Often a self-report is included with the experiments.

After looking at the sciences, applying Occam's Razor seems only to support property dualism. There seems to be a problem with positing that the mind is merely material that so far neuroscience and psychology cannot explain. If the

mind cannot be material, a dualist point of view must be taken. If a dualist point is taken, Cartesian substance dualism, in the context of looking at other theories, is the most complex and posits the most ideas because it posits that there is an interaction between the immaterial mind and material body/brain, while property dualism does not posit this interaction as, in property dualism, the immaterial mind is a property of the brain, namely intentional states, such as thoughts and beliefs, and qualia, meaning what it means to experience the world around oneself.

To be as clear as possible, if neuroscience comes up with a completely materialistic explanation for the mind, then my paper will have to change. That being said, I do not think that this explanation will come about because of the trend of neuroscience pointing to the separateness of the mind from the body, and I expect that this trend will continue. I also mentioned Identity Theory earlier in my paper. Type-type identity theory does not seem like a threat to my paper as previously stated. Token-token identity theory is not much of a threat either, and is not entirely incompatible with property dualism. Token-token identity theory states that for any single mental thing (qualia and intentional states) it is associated with a single brain process. It does not claim that these will be universal even to that individual. Because property dualism claims that the mind is a product of the brain, it seems to make sense that qualia and intentional states would be associated with brain activity, but not caused by them. If there is a causal connection between them as stricter token-token identity theorists would claim, then my paper would need to be re-evaluated. So far, neuroscience and psychology have not given us any evidence that this causal connection is true.

CONCLUSION

To conclude, property dualism is often a forgotten theory when it comes to the philosophy of mind. Often the conversation turns to materialist theories such as reductionist, eliminativist, and behaviorism. When dualism is discussed, it is often Cartesian substance dualism. Each theory, including property dualism, has its faults; however, while looking in the context of neuroscience, property dualism seems the best fit at the moment because there is not an issue applying the theory when it comes to different structures of the brain people may have and still function as healthy people. Occam's Razor is often used against dualism in general, but especially property dualism. Applying Occam's Razor in the mind discussion does not seem necessary because there are other issues to be looked

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at first, such as neuroscience and psychological evidence; however, if applied property dualism comes out looking as the leading theory.

REFERENCES

Jacquette, Dale. 1994. *Philosophy of Mind*. Lebanon: Prentice Hall.