QUALIA IN A MATERIALIST THEORY

A Thesis
Presented to the
Faculty of
San Diego State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Philosophy

by
Karen Michelle Hull
Spring 2013
SAN DIEGO STATE UNIVERSITY

The Undersigned Faculty Committee Approves the

Thesis of Karen Michelle Hull:

Qualia in a Materialist Theory

__________________________
Robert Francescotti, Chair
Department of Philosophy

__________________________
Steven Barbone
Department of Philosophy

__________________________
Douglas Deutschman
Department of Biology

48 Dec 2012
Approval Date
ABSTRACT OF THE THESIS

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by
Karen Michelle Hull
Master of Arts in Philosophy
San Diego State University, 2013

Many philosophers argue that the existence of qualia, the distinctive character of some conscious experiences, undermines materialist theories of the mind because they do not account for the subjective aspects of consciousness. This paper discusses qualia in detail and also how various theories of the mind regard qualia. Some of the major dualist arguments that attempt to answer the mind-body problem are examined, along with materialist responses to these arguments. This paper argues that despite the dualists’ objections, qualia can be incorporated into a materialist theory of the mind, and that the most promising theory to explain qualia, and consciousness generally, is a materialist one.
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ACKNOWLEDGEMENTS

I am indebted to the members of my committee for their guidance and encouragement throughout this five-year endeavor. I also thank my fiancé, Michael Bruce, for many years of patience and support during this project. Special thanks are owed to my family for their support and especially my father, Gregory Hull, who has always encouraged my endeavors.
CHAPTER 1

INTRODUCTION

One of the questions that dominate the philosophy of mind concerns the mind-body problem: are the mind and the body one and the same or separate entities, and if separate, how do they relate to each other? Though modern science suggests that we are purely physical beings without a metaphysically distinct mind or soul, there remains controversy about how exactly the mind can be fully explained by our physical constitutions. Perhaps the most puzzling issue of all is the problem of *qualia*: the way that certain mental phenomena “feel” that can neither be fully communicated nor observed by anyone other than the individual with the experience. This problem has led some philosophers to conclude that there must be non-physical properties of the body that constitute the mind. Others suppose that one day we will have the ability to explain all aspects of mental activity through science and that the mind remains a purely physical part of the body. Others still deny that any such problem exists at all. Disagreement centers around these questions: What are qualia? Is there a metaphysical distinction between qualia and other aspects of the mind? And, is it possible to explain all aspects of the mind, even qualia, in physical terms?

In previous centuries René Descartes’ substance dualism—a view arguing that there exists an immaterial soul\(^1\)—was commonly accepted, but today materialism is the more widely accepted and perhaps even assumed view of the mind’s existence by scientists and philosophers. Materialism is the view that all things that exist are material things and that

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therefore the mind is ultimately a physical thing (either identical with the brain or otherwise), meaning that there is no “soul” in the sense of an immaterial, metaphysically distinct aspect of our being. A materialist view would suggest that we are entirely physical beings and that unlocking the mysteries of our consciousness lies in the study of the brain.

But in more recent history, a problem has been raised for materialism. If it is true that the mind is the body (or part of the body, like the brain), then we should be able to access the mind by study of the body. But if we were to study the brain of a person extensively, would we be able to capture the person’s mental experience? Some, such as Thomas Nagel, argue that the answer here is no, even with the most exhaustive analysis possible of the brain, we would still not have access to the qualitative characteristics of the person’s experience, also known as qualia.

Qualitative states, or *qualia*, are argued by some to be the subjective way that certain experiences are perceived, such as the taste of chocolate, the smell of the ocean, or the pain of a headache. Though we may know certain physical aspects of sensory experience—for example, which wavelengths of light are associated with the perception of colors—the way that those colors appear to the individual, or the way it “feels” to see the color blue, is something that only that individual can know. Qualia are private and are not fully describable or able to be communicated to anyone besides the person who is having the experience.

The issue of qualia is problematic for materialism because if all mental states are physical states of one form or another, they should be describable in an entirely physical language, at least theoretically. Though we might not know exactly which physical states realize our mental states, it should be at least theoretically possible to detail all the relevant

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information in physical terms, maybe by a scientist who could examine our brain when we have the experience or an omniscient being. It is not necessary for a scientist actually to be able to generate a report of our private mental experiences at this time; the issue is that if this cannot even theoretically be communicated, then materialism must be false.

But, the materialist may say, we describe our sensory experiences all the time; surely we can communicate the “what it feels like” aspect of our mental experiences. However, we only successfully do so (or at least seem to do so) when we describe something similar to what another person has experienced. Think about how sensory experience is described: it is usually by comparisons to other sensory experiences with similes and metaphors, or it is in abstract language meant to convey a certain emotional response, or it is described in terms of an effect produced by the sensory experience. In describing our experiences, we attempt to evoke in another person an impression of having the experience herself. If one person describes to another the sound of a guitar, it will be a successful communication if both are familiar with guitars, or at least musical instruments. But to describe the sound of a guitar accurately to a person who has never heard anything like it, or to a person who has never heard anything at all, and to communicate the experience such that the other person can imagine what it is really like seems to be at least a daunting, if not impossible, challenge.

In response to these problems, a new kind of dualism has been proposed called “property dualism.” Substance dualism holds that there are two distinct substances, the mental and the physical, with the physical substances exemplifying physical properties and mental substances exemplifying mental properties. In contrast, property dualism says that mental states are non-physical properties of our physical selves, or that mental states have non-physical properties, and that both mental and physical properties are exemplified by the
physical. In this way, the property dualist can avoid the problems associated with substance dualism, namely that it is generally regarded to be incompatible with modern physics.

Mentioned previously, Nagel famously argued that a thorough examination of a bat’s brain would bring us no closer to understanding the qualitative character of a bat’s sensory experience. Because bats use echolocation (a process of emitting sounds and listening to echoes to determine the position, size, and shape of objects), it is impossible for a human being to imagine what this fully must be like; we are entirely lacking this sensory experience, and consequently it is inaccessible to us. While we can in some sense understand that bats possess this ability and use it to navigate and find bugs to eat without the aid of sight, our understanding is only academic; we cannot really imagine what that is like. Nagel explains:

> Fundamentally an organism has conscious mental states if and only if there is something that it is like to be that organism—something it is like for the organism. We may call this the subjective character of experience. It is not captured by any of the familiar, recently devised reductive analyses of the mental, for all of them are logically compatible with its absence. It is not analyzable in terms of any explanatory system of functional states, or intentional states. (Thomas Nagel, “What Is It Like to Be a Bat?” in Philosophy of Mind: Classical and Contemporary Readings, ed. David J. Chalmers [New York: Oxford University Press, 2002], 219)

According to Nagel’s argument, there is a subjective nature to consciousness that makes it inaccessible to any being other than that particular individual with the conscious experience and the specific point of view of an individual is what defines consciousness. As Nagel explains, there is no way for one individual fully to grasp, through objective study or through communication, what any experience is like for another individual. In a similar way, a sighted person could not describe what it is like to see to a person who has been blind since birth. It is this “what it feels like” aspect of our sensory experiences and emotions that is captured by the term “qualia.”
Another major argument in the qualia debate is from Frank Jackson, who asks us to imagine that there is a unique individual, Fred, who can see two colors where we only see one. Within the spectrum of the colors that we call “red,” Fred sees both red and an additional color. It is not merely a shade of red but a color as different from red as yellow is from blue. Simply combining any two colors that we already know cannot create it. When presented with a collection of ripe tomatoes, Jackson says, Fred can separate them into two groups and categorize them into the same two groups again after they have been re-combined.

In this thought experiment, though we can prove that Fred’s ability is real, we can never understand what this color looks like or what it is like to see this color. Examining Fred’s brain while he views the color, dissecting the parts of his visual system, or listening to Fred’s description of the color would bring us no closer to experiencing what he does. Even if Fred had an unprecedented mastery of language and vocabulary, nothing that he could possibly say could give us an impression of the experience. He might say things such as, “It’s my favorite color of all,” or “It’s a beautiful, calming color that reminds me of a sunset over the ocean,” or “It’s nothing like red or any other color. If we combined it with red, it would create something entirely new.” None of these statements would be of any help.

In addition to Jackson’s and Nagel’s thought experiments, there are other thought experiments meant to demonstrate the obstacles faced when attempting to provide a physical account of qualia. One such thought experiment is the zombie argument, most famously attributed to David Chalmers: that a person who is physically, behaviorally, functionally, and neurologically identical to another, conscious person may nevertheless lack consciousness, or

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at least the subjective, what-it’s-like aspect of consciousness (and therefore be a zombie).\footnote{David J. Chalmers, \textit{The Conscious Mind: In Search of a Fundamental Theory} (New York: Oxford University Press, 1996), 94-96.}

The intuition that such creatures are logically possible is the basis for the argument that fixing the physical characteristics of a human does not fix the subjective conscious states. The logical possibility of this strengthens the position of the property dualist.

Other arguments regarding qualia are those that purport an explanatory gap between our scientific knowledge of the physical and the subjective viewpoints of conscious beings. Though Nagel’s argument might be interpreted similarly, it differs in that Nagel hopes for a scientific theory that can account for the what-it’s-likeness of conscious experience. Those such as Joseph Levine,\footnote{Joseph Levine, “Materialism and Qualia: The Explanatory Gap,” \textit{Pacific Philosophical Quarterly} 64 (1983): 354-361.} who argue for the explanatory gap, however, claim that it is incommensurable. There is no possible scientific theory that can account for this the argument says; though Levine believes consciousness is physical, he claims that it cannot be accounted for in physical terms due to the epistemic gap.

Additionally, there are those who argue that there are no such things as qualia. In particular, while Daniel Dennett acknowledges the reality of conscious experience, he challenges the reality of qualia.\footnote{Daniel C. Dennett, “Quining Qualia,” in \textit{Philosophy of Mind: Classical and Contemporary Readings}, ed. David J. Chalmers (New York: Oxford University Press, 2002), 226-246.} As Dennett explains, qualia are held to be “ineffable, intrinsic, private, and directly or immediately apprehensible in consciousness.”\footnote{Ibid., 229.} By a series of thought experiments, Dennett argues that upon scrutiny, qualia fit none of these descriptions and that in fact, “there simply are no qualia at all.”\footnote{Ibid., 227.}
Whichever route we choose to take with regard to the existence of qualia, there remain puzzling questions. In addition to the question of whether qualia are physical or non-physical, we must come up with an account of what qualia are, which Dennett has proven to be problematic. Among individuals, our preferences differ greatly when it comes to matters concerning private sensory experience: favorite foods, color preference, taste in music, etc. This raises questions regarding whether individuals have different experiences or whether they experience the same qualia but genuinely have different preferences for one sensation or another. We must also account for sensory experiences changing over time within the same individual; though I greatly enjoy the taste of wine now, I must have either had a radically different sensory experience when I tasted it for the first time or I must have undergone a complete change of opinion regarding the quale of the taste of wine. Dennett raises this issue and the question of how we could ever know what has really changed with the example of career coffee tasters Chase and Sanborn, who find that they no longer enjoy the taste of Maxwell House coffee but differ in what they think has brought about the change.9

Another challenge raised by accepting a view that qualia exist is a new problem of other minds. The problem of other minds is a result of substance dualism; if we suppose that substance dualism is true and there exists an immaterial mind that is separate from the body, we can never know for sure that an individual has a mind at all since we are unable to examine the supposed immaterial mind. With property dualism, we may know for sure that a person has a brain, but since qualia are held to be private, we could not know for sure that one person’s qualia were the same as another’s or even that one particular person had any qualia at all. For example, Martine Nida-Rumelin raised the possibility that a person could be

9 Ibid., 231-238.
born with his perceptions of red and green switched.\textsuperscript{10} Such a person could go his entire life being functionally the same as any other person but have radically different experiences in color perception.

If we pursue a path that holds that there are no qualia, this seems to deny our intuitions regarding our own mental experiences. Perhaps one reason why consciousness is such a fascinating subject is that it seems so clearly obvious to an individual that he or she does, in fact, have intense and varied sensory experiences that are entirely separate from whatever can be accounted for by the study of the brain. The argument that it just seems to be true that qualia are distinct from the physical might not be a sound one, but it is ostensibly self-evident enough to make it difficult to refute.

In the coming chapters, I will discuss many of the major arguments that address the mind-body problem and argue that the best answer to the issue of accounting for qualia is a materialist one. In Chapter 2, I discuss the different views in the field of philosophy of mind and how they may or may not account for qualia. In Chapter 3, I discuss four of the major dualist arguments: the “what it’s like” argument, the knowledge argument, the explanatory gap argument, and the zombie argument, particularly as set forth by Nagel, Jackson, Levine, and Chalmers, respectively. In Chapter 4, I present materialist responses to these arguments, specifically those by Dennett, Lewis, and Churchland, among others. In Chapter 5, I respond to some of the dualist arguments and offer an explanation of how consciousness could be accounted for within a materialist theory of mind.

CHAPTER 2

QUALIA AND THEORIES OF THE MIND

Many theories of the mind attempt to answer the mind-body problem by describing what the mind and body are, and whether they are the same or separate. The following is an exposition of some of these theories, including dualist and materialist theories and an explanation of how qualia are considered (or not) under these views.

2.1 DUALISM

Dualism is the belief that the mind and the body are distinct from each other in some sense. Under this theory, the body is physical but the mind, or perhaps just some aspects of the mind, is non-physical. There are two major types of dualism: substance dualism and property dualism.

2.1.1 Substance Dualism

To the central question of the mind-body problem, substance dualism answers that the mind is a non-physical entity, separate from but somehow connected to the body and just as “real” as the physical body but existing in some non-physical realm. Substance dualism is most famously attributed to Descartes, who explained that the mind, or soul, is equally as real as our physical bodies and capable of existing on its own:

There is a great difference between a mind and a body in that a body, by its very nature, is always divisible. On the other hand, the mind is utterly indivisible. For when I consider the mind, that is, myself insofar as I am only a thinking thing, I cannot distinguish any parts within me; rather, I understand myself to be manifestly one complete thing. Although the entire mind seems to be united to the entire body, nevertheless, were a foot or an arm or any other bodily part to be amputated, I know that nothing has been taken away from the mind on that account. Nor can the faculties of willing, sensing, understanding, and so on be called “parts” of the mind, since it is
According to Descartes, the mind and body are separate entities of different types. The mind being immaterial and capable of existing without the body is compatible with the ideas associated with many religions of an afterlife in which the soul survives the body’s death and continues to exist in another spiritual realm.

Along with the rest of consciousness, qualia would be considered immaterial things under substance dualism. Though we may not be able to observe the immaterial soul in the same way that we can observe our physical states, the theory holds that the mind is a different substance from the physical body. Thus, the theory would argue that qualia are just one aspect of the non-physical soul of a person. Being immaterial, the mind is not subject to the same laws as physical things, the substance dualist would say. In fact, the substance dualist may use the argument that we experience qualia to support his theory that the mind is immaterial, perhaps arguing that the fact that our mental experiences seem so intense is a powerful motivator for the claims entailed by substance dualism. In fact, a substance dualist might argue that Descartes’ famous “I think, therefore I am” could be interpreted to encompass the experiences of qualia under “I think” and not just rational thought.

The challenge for substance dualism is in explaining how the mind and body should interact. Ryle describes the challenge of Descartes’ interactionism:

Even when ‘inner’ and ‘outer’ are construed as metaphors, the problem how a person’s mind and body influence one another is notoriously charged with theoretical difficulties. What the mind wills, the legs, arms and the tongue execute; what affects the ear and the eye has something to do with what the mind perceives; grimaces and smiles betray the mind’s moods and bodily castigations lead, it is hoped, to moral improvement. But the actual transactions between the episodes of the private history and those of the public history remain mysterious, since by definition they can belong
In addition to this concern, the fundamental laws of physics tell us that the physical world is causally closed, making it difficult to account for how the non-physical mind and physical body might interact. For these reasons, substance dualism is a much less commonly held theory of the mind by philosophers today.

2.1.2 Property Dualism

Unlike substance dualism, property dualism states that there are non-physical mental properties but no non-physical substances. Under property dualist theories, consciousness is irreducible to the physical but could not exist as a separate entity from the body. Instead, qualia are emergent, non-physical properties of the physical. The arguments by Jackson, Nagel, and Chalmers that will be discussed throughout are all examples of property dualist views.

One specific type of property dualism is epiphenomenalism, which holds that mental events are affected by physical events but that the mental has no causal effect on the physical. Though the theory of epiphenomenalism concerns mental states generally, a version of this argument such as Jackson’s focuses on qualia in particular as a mental event that is affected by, but has no effect upon, physical events. As Jackson explains, “Qualia cause nothing physical but are caused by something physical.”

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has argued, qualia are by-products, natural and unavoidable consequences of the activity of the brain, but not necessary features of its function.\footnote{12}

An important point about epiphenomenalism is to note that, due to the fact that the mental has no effect on physical under this theory, the epiphenomenalist must explain how it is that our physical actions are not directly caused by mental states when it seems somewhat obvious that they are—for example, it seems that when we experience pain, we flee from or defend ourselves against what is causing the pain, sometimes by a seemingly unconscious and reflexive action. Under Jackson’s view, there are other physical processes—brain states—correlated with qualia that are the cause of these types of actions:

It is supposed to be just obvious that the hurtfulness of pain is partly responsible for the subject seeking to avoid pain, saying ‘It hurts’ and so on. But, to reverse Hume, anything can fail to cause anything. No matter how often $B$ follows $A$, and no matter how initially obvious the causality of the connection seems, the hypothesis that $A$ causes $B$ can be overturned by an over-arching theory which shows the two as distinct effects of a common underlying causal process. (Frank Jackson, “Epiphenomenal Qualia” in *Philosophy of Mind: Classical and Contemporary Readings*, ed. David J. Chalmers [New York: Oxford University Press, 2002], 276)

Long before Jackson, Thomas H. Huxley also argued for this view:

It is quite true that, to the best of my judgment, the argumentation which applies to brutes holds equally good of men; and, therefore, that all states of consciousness in us, as in them, are immediately caused by molecular changes of the brain-substance. It seems to me that in men, as in brutes, there is no proof that any state of consciousness is the cause of change in the motion of the matter of the organism. If these positions are well based, it follows that our mental conditions are simply the symbols in consciousness of the changes which takes place automatically in the organism; and that, to take an extreme illustration, the feeling we call volition is not the cause of a voluntary act, but the symbol of that state of the brain which is the immediate cause of that act. (Thomas H. Huxley, “On the Hypothesis that Animals are Automata, and its History” in *Philosophy of Mind: Classical and Contemporary Readings*, ed. David J. Chalmers [New York: Oxford University Press, 2002], 30)

\footnote{12 Ibid., 276-278.}
As we will see in the coming chapters, this particular view holds its own challenges when it comes to accounting for this complicated causal relationship between the physical and non-physical.

### 2.2 Materialism

In contrast to dualism, monism holds that the body and mind are not metaphysically distinct from each other and that there is only one metaphysical “type” of substance or property. In the case of materialism, the arguments claim that there is only the physical and that this includes the mind itself as well as all properties of the mind. In particular, I include explanations here of identity theory, logical behaviorism, functionalism, and eliminative materialism.

#### 2.2.1 Identity Theory

Identity theory is one version of materialism. The central claim is that mental states are identical with brain states and that any mental state we experience is not just caused by or correlated with or exemplified by a brain state, but it is itself a brain state. U.T. Place is one philosopher who argues that conscious states are brain states:

> The statement “Consciousness is a process in the brain,” although not necessarily true, is not necessarily false. “Consciousness is a process in the brain” in my view is neither self-contradictory nor self-evident; it is a reasonable scientific hypothesis, in the way that the statement “Lightning is a motion of electrical charges” is a reasonable scientific hypothesis. (U.T. Place, “Is Consciousness a Brain Process?” in *Philosophy of Mind: Classical and Contemporary Readings*, ed. David J. Chalmers [New York: Oxford University Press, 2002], 56)

J.J.C. Smart also uses the lightning analogy to defend identity theory:

> Consider lightning. Modern physical science tells us that lightning is a certain kind of electrical discharge due to ionization of clouds of water-vapor in the atmosphere. This, it is now believed, is what the true nature of lightning is. Note that there are not two things: a flash of lightning and an electrical discharge. There is one thing, a flash of lightning, which is described scientifically as an electrical discharge to the earth from a cloud of ionized water-molecules. The case is not at all like that of explaining
a footprint by reference to a burglar. We say that what lightning really is, what its true nature as revealed by science is, is an electric discharge. (It is not the true nature of a footprint to be a burglar.) (J.J.C. Smart, “Sensations and Brain Processes” in Philosophy of Mind: Classical and Contemporary Readings, ed. David J. Chalmers [New York: Oxford University Press, 2002], 63)

According to identity theory, then, qualia are brain states, as all mental states are. We may have different concepts of the mental state and the brain state, but the referent is the same according to this theory (explained further by Place’s explanation of the “‘is’ of definition” and the “‘is’ of composition”).

As we know that the brain states are, at the very least, intimately related to aspects of consciousness, if not identical to consciousness, it is easy to imagine why this theory could seem likely to be true. The theory comes in two forms: “type” identity theory and “token” identity theory. According to type identity theory, one type of physical state is identical to one type of qualitative state. One objection to this version of the theory is that it seems to exclude the possibility of other beings having certain qualia, such as pain, since according to the type-identity theory, tokens of the same mental type are tokens of the same physical type. Therefore, according to those who object to this theory, other beings that do not possess the same physical makeup could not have the same qualitative experiences as humans. The alternative is “token” identity theory (argued for by Jerry Fodor and Hilary Putnam, among others), meaning that tokens of the same mental type can be tokens of different physical types. Thus, other beings besides humans could then be thought to have qualitative experiences under this theory, as it holds that qualitative states are multiply realizable.

13 Place, 55-56.

2.2.2 Logical Behaviorism

Logical behaviorism holds that, in the words of Rudolf Carnap, “all sentences of psychology describe physical occurrences, namely, the physical behavior of humans and other animals.” Logical behaviorists argue that statements about the mind are translatable to statements about an individual’s behavior and that there is no need to explain the mind with reference to internal thought processes. The logical behaviorist would say that when we say that an individual has a certain mental state we are really making a statement about that individual’s behavior, both actual and potential.

Gilbert Ryle argues that statements about mental states are statements about dispositions to behave in certain ways. Ryle explains:

To say that a person knows something, or aspires to be something, is not to say that he is at a particular moment in process of doing or undergoing anything, but that he is able to do certain things, when the need arises, or that he is prone to do and feel certain things in situations of certain sorts. This is, in itself, hardly more than a dull fact (almost) of ordinary grammar. (Gilbert Ryle, The Concept of Mind [London: Hutchinson & Company, 1949], 116)

Therefore, the logical behaviorist would argue that qualia are behavioral states and phenomenal experience can be explained by a thorough account of behavior. For example, the logical behaviorist would say that when we say a person is in pain, then what we mean is that he will cry out, complain, move away from what is causing the pain, and so on. If a person is in pain but attempting to hide it, then it is his potential behavior that accounts for his state of being in pain—the way the person would behave were it not for the competing desire (also described in terms of behavior, actual and potential) to hide the fact that he is in

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pain. Dualists and some materialists feel that logical behaviorism leaves something out, namely, the experience of consciousness.

2.2.3 Functionalism

Another form of materialism is functionalism, which argues that mental states are functional states and that a being is in mental state X if that state occupies the causal role of mental state X. According to functionalism, mental states are defined by their functional roles in relation to behavior, sensory inputs, and other mental states. For functionalists, the physical composition of a being is irrelevant. Whether the being in question is a human or an alien, it may have the same mental states, because mental states are held to be multiply realizable under functionalism. What is important in describing the mind for functionalists is the functional role of the mental state, not the physical makeup of the being in question. Hilary Putnam developed a version known as “machine state functionalism,” which compared mental states to the functions of a computer. Putnam argued that mental states are functional states of the entire organism and not merely one aspect of the organism.

Functionalism attempts to answer some of the limitations of behaviorism while maintaining its objectivity. According to behaviorism, accounts of mental states can only include descriptions of an individual’s behavior, and not other mental states. Because mental states seem to be interdependent, this is seen as a limitation of behaviorism. Thus, functionalism avoids this problem by including references to other mental states as part of the functional role of mental states.

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A critique raised by Ned Block is that any version of functionalism is guilty of either liberalism or chauvinism when it comes to mental states; all versions of the theory will either ascribe mental states to a being that should not be considered to be conscious or regard a being as non-conscious because of a lack of the proper physical makeup or functional role, when it seems the being is conscious. In particular, Block provides a thought experiment to show the liberalism of functionalism, asking us to imagine that the nation of China exemplifies the complicated functional role of a mental state, an idea extremely complicated and unlikely in practice but nonetheless possible. Would the entire nation of China, then, be conscious? If functionalism is true, then the answer would be yes, but this seems highly dubious.

2.2.4 Eliminative Materialism

A more extreme version of materialism is eliminativism, or eliminative materialism. Any view that denies the existence of something can be considered to be eliminativist, and in this case it is the existence of some types of mental states, or all mental states, that is denied. Eliminative materialism holds the radical claim that we can eliminate talk of mental states from our account of the mind.

An eliminativist may wish to eliminate only the phenomenal states as Dennett does in “Quining Qualia” or may be an eliminativist about other mental states, such as Churchland in “Eliminative Materialism and the Propositional Attitudes.” Here Churchland refers to our

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19 Ibid., 96-97.
20 Dennett, “Quining Qualia.”
common sense understanding of intentional states as “folk psychology” and argues that it does not hold up as a theory, particularly because it fails to account for many types of mental phenomena and because it is stagnant. Instead, Churchland argues that it is possible, at least theoretically, to give a thorough account of human life without making reference to the intentional states of the mind, including thoughts, beliefs, etc. Furthermore, if we can account for all physical states without thoughts, beliefs, etc., then there is presumably no reason to posit the existence of such things.

Many philosophers, both dualist and materialist, feel that eliminative materialism fails because the existence of mental states seems to be obvious. Such philosophers might say that regardless of whether mental states are useful concepts, we experience them nonetheless and a theory of the mind must include them.

2.3 PANPSYCHISM

Panpsychism is the theory that all things have mental properties, and it could be either a dualist theory, arguing that all physical things have mental properties, or a monist theory, arguing that all things are mental. As detailed by David Skrbina in *Panpsychism in the West*, this theory takes many forms, and all that is entailed by a panpsychist theory is that there is some kind of conscious element in everything, including both living beings and non-living things. These theories range from the radical claim that all things are conscious in the way that humans are to the somewhat less controversial idea that all things have the potential for consciousness.

Like substance dualism, qualia could be used as an argument in favor of panpsychism; perhaps it could be argued that consciousness is irreducible, and therefore a

fundamental element of our universe, and that all things contain an element of consciousness in some sense. However, the idea that things normally not thought to be conscious have mental properties is not one that is widely accepted, and thus panpsychism is not a commonly held theory. Additionally, the complications of dualism regarding the causal nature of non-physical mental properties are a problem for the panpsychist as well, unless the idealist argument that all things are mental and non-physical is embraced.

2.4 Conclusion

These are just some of the theories that attempt to respond to the mind-body problem, and they do not all necessarily attempt to explain what qualia are. In the following chapter, I examine in more detail some of the arguments that favor dualism.
CHAPTER 3

DUALIST ARGUMENTS

The following are several of the major arguments in philosophy of mind: the “what it’s like” argument as put forth by Nagel, the knowledge argument as argued by Jackson, Levine’s explanatory gap argument, and Chalmers’ zombie argument. The goal of each of these arguments is to demonstrate that there is something that materialism leaves out and that the theory is insufficient to explain consciousness. With the exception of Levine’s explanatory gap argument, each claims that a form of property dualism is true, and the goal of their arguments is to demonstrate that consciousness cannot be identical with, or reduced to, physical states. In Levine’s case, though there is no metaphysical claim, his goal is to show a deficiency with materialist theories as they currently stand. In each case, the argument is meant to demonstrate that there are some elements of consciousness—perhaps qualia—that are left out of a materialist theory.

3.1 The “What It’s Like” Argument

Previously discussed in Chapter 1, one of the most famous arguments concerning qualia comes from Nagel’s “What Is It Like to Be a Bat?”23 In this article, as the title suggests, Nagel invites us to imagine what it might be like to be a bat, chosen because they use sonar to sense objects in their environment. The process by which bats use sonar is entirely foreign to us as we experience nothing of the sort. Of consciousness, Nagel says:

It occurs at many levels of animal life, though we cannot be sure of its presence in the simpler organisms, and it is very difficult to say in general what provides evidence of

23 Nagel.
it […]. But no matter how the form may vary, the fact that an organism has conscious experience at all means, basically, that there is something it is like to be that organism […]. But fundamentally an organism has conscious mental states if and only if there is something that it is like to be that organism—something it is like for the organism. (Thomas Nagel, “What Is It Like to Be a Bat?” in Philosophy of Mind: Classical and Contemporary Readings, ed. David J. Chalmers [New York: Oxford University Press, 2002], 219)

Nagel explains that there is, presumably, a point of view, a certain “what it’s like” quality to being a bat—something that we can only begin to imagine in a crude way, as our senses are so vastly different. Our access to the bat’s use of sonar is through objective study, and we can examine bats in a laboratory setting extensively. We could even observe the bat’s brain directly and observe its sonar abilities at work and see what is happening in the brain of the bat during this process. However, Nagel argues, even the most exhaustive study of a bat would only yield objective data. We would still not gain access to the “what it’s like” quality of the bat’s consciousness. As Nagel explains, “bat sonar, though clearly a form of perception, is not similar in its operation to any sense that we possess, and there is no reason to suppose that it is subjectively like anything we can experience or imagine.” Nagel argues that because there is an aspect of a bat’s consciousness that humans cannot access through objective study, materialism, at least thus far, fails to account for this particular “what it’s like” aspect of consciousness.

If one objects that we could, indeed, imagine what it might be like to be a bat, Nagel explains:

It will not help to try to imagine that one has webbing on one’s arms, which enables one to fly around at dusk and dawn catching insects in one’s mouth; that one has very poor vision, and perceives the surrounding world by a system of reflected high-frequency sound signals […]. In so far as I can imagine this (which is not very far), it tells me only what it would be like for me to behave as a bat behaves. But that is not the question. I want to know what it is like for a bat to be a bat. Yet if I try to imagine

24 Ibid., 220.
Despite his argument that scientific scrutiny cannot account for the “what it’s like” aspect of being a bat, Nagel expresses optimism that someday science will be able to explain the point of view that is missing in our current methodology. He argues that there is a “general problem of subjective and objective” that must be addressed before a materialist account of consciousness might be successful, but that such a theory may be possible.\textsuperscript{25}

Though Nagel does not use the word “qualia” in this essay, the particular aspects of consciousness with which he is concerned can be interpreted as qualia, as they are the subjective experiences of what it is like to be a given individual being that he addresses. Qualia are effectively the “what it’s like” quality of experience that Nagel discusses here. In Nagel’s argument, the point of view of the bat is inaccessible through our usual means of examination of the bat. Nagel’s argument can be extended to the case of humans, as well; we could thoroughly examine the brain of a person and still not have access to the specific point of view, the “what it’s like” quality of that person’s experience (which, of course, may or may not be quite similar to our own experience). And so in this argument, Nagel shows that qualia are necessarily subjective and cannot be accessed through objective means, claiming that materialism cannot account for the “what it’s like” aspect of being a bat within our current understanding of the mind from an objective point of view.

\textsuperscript{25} Ibid., 225.
3.2 The Knowledge Argument

In “Epiphenomenal Qualia,” Jackson argues for epiphenomenalism, a form of property dualism. Jackson has two famous thought experiments concerning Fred and Mary, both of which are intended to show that a person could know all the objective facts about a particular thing and still not know the phenomenal facts about that thing.

Jackson’s first thought experiment, previously mentioned in Chapter 1, is of a man named “Fred” who sees a fourth primary color called “red 2.” Where we see red, Fred actually sees two different colors, but the extra color is just as different from the others as red is from blue and not merely a different shade of red. Fred is able to demonstrate his ability to perceive this extra color by reliably and consistently separating red objects into two categories. In this way, we can be sure that Fred’s perception of this color and his experience when seeing the color are very real. However, nothing that Fred can say or do will allow us, the observers, to know what this color looks like or to have any information about it other than what we can see Fred do. If we were to study Fred’s brain extensively, we might be able to learn more about how his perception of color differs from ours and perhaps learn how and why he perceives this extra color, but it seems that we still would be missing that essential piece of information of what this color actually looks like.

Jackson’s second thought experiment concerns Mary, who spends her entire life in a room that is entirely black and white. Though she possesses the ability to see color, she never actually does see anything in color, and thus she does not know what it is like to have that experience, as she knows only the physical facts and not the qualitative experience of seeing colors. Throughout her life, Mary studies color science extensively and comes to know every

26 Jackson, “Epiphenomenal Qualia.”
27 Ibid., 274.
possible fact about the physical aspect (which, of course, the materialist would maintain is the only aspect) of color science, including everything that there is to know about human perception of color, wavelengths, etc. However, she herself has still not seen color. Now, imagine that for the first time Mary sees the color blue. Has Mary learned something? Does Mary now possess extra information about color, color science, or the human perception of color? Jackson argues that the answer is “yes.” And indeed it does seem as though a change has happened concerning Mary’s knowledge of color or at the very least she has gained some experience that will deepen her understanding of the subject. The materialist must maintain that Mary does not gain any additional knowledge or information when she sees the color blue, because she already knew all of the physical facts about color science prior to her first experience of seeing color.

In “What Mary Didn’t Know,” Jackson explains that the information Mary gains is that regarding the experiences of others:

The trouble for physicalism is that, after Mary sees her first ripe tomato, she will realize how impoverished her conception of the mental life of others has been all along. She will realize that there was [...] something about these people she was quite unaware of. All along their experiences (or many of them, those got from tomatoes, the sky, [...] had a feature conspicuous to them but until now hidden from her (in fact, not in logic). But she knew all the physical facts about them all along; hence, what she did not know until her release is not a physical fact about their experiences. But it is a fact about them. That is the trouble for physicalism. (Frank Jackson, “What Mary Didn’t Know,” The Journal of Philosophy 83 [1986], 292-293)

In Jackson’s thought experiments, he shows that the physical facts of color science are not exhaustive of the facts of color science. Therefore, Jackson argues, physical facts in general do not represent all the facts, and thus, materialism fails. As Jackson says:

The conclusion in each case is that the qualia are left out of the physicalist story. And the polemical strength of the Knowledge argument is that it is so hard to deny the central claim that one can have all the physical information without having all the information there is to have. (Frank Jackson, “Epiphenomenal Qualia” in Philosophy
It is from these thought experiments that Jackson offers his view of epiphenomenalism. Unlike Nagel, Jackson is a property dualist and does not believe that materialism could ever account for the subjective nature of consciousness. Epiphenomenalism, as discussed in Chapter 2, holds that the subjective aspects of consciousness, or qualia, are by-products of the material; they are immaterial but supervene on the material, thus depending on the material for their existence.

### 3.3 THE EXPLANATORY GAP ARGUMENT

The explanatory gap argument, argued most notably by Levine,\(^{28}\) states that there is a gap between our subjective experience of consciousness and our objective understanding of consciousness, as described previously in Chapter 2. The explanatory gap argument is not necessarily a dualist one, and, in fact, the argument can be the basis for different conclusions regarding the metaphysical nature of consciousness. First, a philosopher may claim there is an explanatory gap but that it is merely of an epistemic nature and that materialism is still compatible with the explanatory gap, as has been argued by Block and Stalnaker\(^{29}\)—this also describes Levine’s own position, though he is more agnostic about drawing metaphysical conclusions despite remaining a materialist. Additionally, this argument can be taken to show that there is an ontological gap, resulting in dualism, and arguably this is the basis for the arguments by Jackson and Chalmers discussed here.

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\(^{28}\) Levine.

Levine begins with Kripke’s argument concerning the necessity of identity statements. Kripke argues that identity statements with rigid designators on both sides of the identity claim, such as “pain is the firing of C-fibers” (statement 1) and “water is H2O” (statement 2) are necessarily true if true at all. Kripke argues that there is a felt contingency about the first statement that is not the case with the second and thus concludes that mental states are not identical to physical states. Levine adds to this list statement 3: “to be in pain is to be in state F” to add a functionalist description of mental states.

Levine’s argument, like Kripke’s, is that statements 1 and 3 seem to be contingent, while statement 2 (“water is H2O”) seems more necessary. While we can accept that statement 2 is true in all possible worlds, it seems entirely conceivable that there are possible worlds in which pain is neither the firing of C-fibers nor to be in state F. Argues Levine:

> There is more to our concept of pain than its causal role, there is its qualitative character, how it feels; and what is left unexplained by the discovery of C-fiber firing is why pain should feel the way it does! For there seems to be nothing about C-fiber firing which makes it naturally “fit” the phenomenal properties of pain, any more than it would fit some other set of phenomenal properties. Unlike its functional role, the identification of the qualitative side of pain with C-fiber firing (or some property of C-fiber firing) leaves the connection between it and what we identify it with completely mysterious. One might say, it makes the way pain feels into merely a brute fact. (Joseph Levine, “Materialism and Qualia: The Explanatory Gap,” *Pacific Philosophical Quarterly* 64 [1983]: 356)

Where Levine’s argument differs from Kripke’s is that he makes an epistemic claim about these statements, saying of statement 2, “whatever there is to explain about heat is explained by its being the motion of molecules,” while the same is not true of the other statements.

Levine’s conclusion, therefore, is that something is left out of identity statements that

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31 Ibid., 48.
32 Ibid., 144-155.
33 Ibid., 358.
concern mental states that makes these claims different from other types of identity statements, and thus we have an explanatory gap when it comes to explaining mental states in physical terms. Though a materialist, Levine sees this as a major problem for materialism. He sees the denial of the intuition that there is a contingency about identity regarding mental states as the only way to maintain materialism:

There is only one way in the end that I can see to escape this dilemma and remain a materialist. One must either deny, or dissolve, the intuition which lies at the foundation of the argument. This would involve, I believe, taking more of an eliminationist line with respect to qualia than many materialist philosophers are prepared to take.34 (Joseph Levine, “Materialism and Qualia: The Explanatory Gap,” Pacific Philosophical Quarterly 64 [1983]: 354-361)

Thus, Levine feels that there is an apparent contingency about identifying qualia with brain states that does not exist with other identity statements, and for, Levine qualia are an obstacle to materialism. To uphold materialism would be to accept that our intuitions regarding this matter are not in alignment with the metaphysical views that we may simultaneously hold.

3.4 THE ZOMBIE ARGUMENT

One of the major dualist arguments is David Chalmers’ zombie argument.35 Zombies here are understood to mean beings that look and behave exactly like other (conscious) people but in fact are lacking at least some conscious states (and possibly all conscious states). Because such beings are metaphysically possible, Chalmers says, conscious experience is not reducible to physical states. The metaphysical possibility of a zombie world in which all physical aspects of humans are the same as those in our own, but qualia do not


exist, is thought by Chalmers to refute the materialist’s position. Chalmers presents his argument as follows:

1. It is conceivable that there be zombies.
2. If it is conceivable that there be zombies, it is metaphysically possible that there be zombies.
3. If it is metaphysically possible that there be zombies, then consciousness is non-physical.
4. Consciousness is non-physical.\textsuperscript{36}

Thus, according to this argument, the metaphysical possibility of such beings as zombies shows that consciousness is not a physical phenomenon, and, therefore, materialism is false.

Since Chalmers’ definition of a zombie is a being that is lacking at least some conscious states, we might suppose that a zombie lacks consciousness entirely or lacks only qualia. In either case, we can easily apply his argument to qualia specifically. Thus, a zombie could be a being with no qualia but with other conscious states—perhaps intentional states, such as thoughts and beliefs. Chalmers argues that such a being is logically possible and therefore metaphysically possible. Presumably, we can also extend the argument to suppose that some or all zombies might be missing consciousness entirely.

To the materialists’ counterargument that zombies are not actually conceivable, Chalmers offers a strong defense to persuade us that zombies are indeed conceivable. He claims that if we can imagine artificially created beings that function as we do without consciousness, then the idea of physically identical beings that lack consciousness should also be possible:

Instead of considering physically identical zombies, we can consider functionally identical zombies: say, functionally identical creatures that have silicon chips where we have neurons and that lack consciousness. […] If it is conceivable that a

\textsuperscript{36} Chalmers, “Consciousness and Its Place in Nature,” 249.
functional isomorph lacks these features, then it will almost certainly be conceivable that a physical isomorph lacks these features. (David J. Chalmers, “Phenomenal Concepts and the Explanatory Gap,” in *Phenomenal Concepts and Phenomenal Knowledge: New Essays on Consciousness and Physicalism*, ed. Torin Alter and Sven Walter [New York: Oxford University Press, 2007], 167-194)

Chalmers’ zombies, as described, lack qualia, as “there is nothing it is like to be a zombie.” Thus, this argument, if successful, would show that qualia are non-physical, as there could be beings physically identical to us that lack qualia.

### 3.5 Conclusion

These three thought experiments have contributed to our concept of qualia. All make compelling arguments regarding the nature of qualia, particularly as a non-physical aspect of consciousness. Though each of these arguments may ultimately serve different purposes by their authors—after all, Nagel suggests that materialism may eventually account for all aspects of consciousness while Jackson and Chalmers do not—they serve another purpose too, which is to help us understand qualia and to produce an accurate account of it. Additionally, each thought experiment raises questions that will be instrumental in the discussion of what are qualia.

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CHAPTER 4

MATERIALIST RESPONSES TO DUALIST ARGUMENTS

Thus far, I have reviewed arguments that claim that our subjective experience of qualia cannot be accounted for by scientific study of the physical. These arguments largely rest on the intuition that there is something to our conscious experiences that is not captured by our understanding of the brain through scientific disciplines. They then go on to draw conclusions that the mind and the body are not identical, or at least that study of the physical could never fully account for consciousness. The materialist arguments presented here provide counterpoints to the dualists’ claims discussed in the previous chapter.

4.1 RESPONSE TO THE “WHAT IT’S LIKE” ARGUMENT

Nagel’s “what it’s like” argument, intuitive as it may seem, is not immune to criticism from materialists. Though Nagel does not declare outright that science could never account for the “what it’s like” aspect of consciousness, he does maintain that we are not in a position to do so yet, concluding, “it seems unlikely that any physical theory of mind can be contemplated until more thought has been given to the general problem of subjective and objective.”38 This sheds sufficient skepticism on our ever being able to capture consciousness fully within the bounds of objective, physical research. The strength of Nagel’s argument lies in its intuitive nature, as many of us feel that there is a subjective aspect of consciousness not captured within our knowledge of the physical. The idea that nothing is known to us more

38 Nagel, “What Is It Like to Be a Bat?” 225.
than our own consciousness, perhaps most famously appearing as Descartes’ argument that the existence of the self can be known from the fact that a person has thoughts and perceptions,\textsuperscript{39} is certainly not new. It may even be argued that dualist inclinations begin with the idea that nothing is more obvious than our own subjective consciousness.

Dennett argues against assigning any significance to this intuition in “Quining Qualia.”\textsuperscript{40} Indeed, he criticizes even the idea of the term “qualia,” saying, “‘qualia’ is a philosophers’ term which fosters nothing but confusion, and refers in the end to no properties or features at all,” and he equates our concept of qualia to the now-obsolete idea of \textit{élan vital}.\textsuperscript{41} To Dennett, the very intuition is misguided:

My claim, then, is not just that the various technical or theoretical concepts of qualia are vague or equivocal, but that the source concept, the “pretheoretical” notion of which the former are presumed to be refinements, is so thoroughly confused that even if we undertook to salvage some “lowest common denominator” from the theoreticians’ proposals, any acceptable version would have to be so radically unlike the ill-formed notions that are commonly appealed to that it would be tactically obtuse—not to say Pickwickian—to cling to the term. Far better, tactically, to declare that there simply are no qualia at all. (Daniel Dennett, “Quining Qualia” in \textit{Philosophy of Mind: Classical and Contemporary Readings}, ed. David J. Chalmers [New York: Oxford University Press, 2002], 227)

Through a series of “intuition pumps,” Dennett casts doubt on all those things that qualia are held to be: ineffable, intrinsic, private, and “directly or immediately apprehensible in consciousness.”\textsuperscript{42} For example, Dennett presents the case of Chase and Sanborn, previously referenced in Chapter 1. Chase and Sanborn are coffee tasters who find that over time they no longer enjoy the Maxwell House coffee that they have tasted for years. However, while Chase declares that he no longer likes the taste of Maxwell House coffee,

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\textsuperscript{39} Descartes, \textit{Meditations on First Philosophy}, 17-24.

\textsuperscript{40} Dennett, “Quining Qualia.”

\textsuperscript{41} Ibid., 227-230.

\textsuperscript{42} Ibid., 229.
Sanborn feels that the problem is that his “tasters” have changed, not that he no longer enjoys that particular taste he once did. Which one of them is right? Are they both right? Is it possible that one of them might be wrong and mistaken about his own qualia? Not only is this thought experiment easy to imagine, but many of us may see parallels with our own qualitative experiences; perhaps there are tastes that we used to enjoy but no longer do, or perhaps we have “acquired” tastes for foods or beverages previously deemed unappetizing. How are we to determine whether it is our preferences or “tasters” that have changed; and even if we could decide, how could we know we were right?

It seems that qualia are ephemeral and can change over time, and/or that our memories surrounding qualia are not reliable, and that qualia are difficult to document, to study, or even to discuss. Regardless of whether qualia are physical or not, their very nature, and possibly even existence, can be called into question. Even if we are not willing to go so far as to agree with Dennett’s declaration that we are better off abandoning the notion of qualia, the fact that the very nature of qualia is called into question is a good reason to think that we know too little about them to conclude that they could not possibly be physical. Though this is not necessarily a point in favor of materialism, at the very least doubt may be cast on those arguments that appeal to the forceful and omnipresent nature of qualia to declare that they could not possibly be reducible to the physical.

### 4.2 Response to the Knowledge Argument

As discussed in the previous chapter, the knowledge argument claims that there is information, or knowledge, that can only be gained through experience. The conclusion of this type of argument is that materialism fails because not all facts are physical facts and therefore there are non-physical facts. Jackson’s thought experiment of Mary, who gains
knowledge that she previously did not have upon seeing color for the first time after spending her entire life studying color science in a black and white room, illustrates this argument. Jackson concludes that the physical facts are not exhaustive of all the facts and that there is information gained when Mary sees color for the first time that she could not have gained solely in her studies.

However, the claim that new information is gained when one experiences a quale is in question, as it is far from obvious that what is gained is information or facts. While Jackson argues that Mary has information upon seeing color for the first time that she did not have before she saw color, a possible objection is that she has gained something else, such as firsthand experience, which is distinct from information. This is the path David Lewis takes when he argues that it is not knowledge in the sense of “knowing that” that Mary gains but knowledge in the sense of “knowing how.”

Lewis argues that the knowledge argument presented by Jackson rests upon the “hypothesis of phenomenal information.” This hypothesis, according to Lewis, holds that there is such a thing as phenomenal information that could be gained by Mary’s seeing color for the first time. Lewis argues against the hypothesis of phenomenal information by pointing out that it contains a circular argument:

What might the subject matter of phenomenal information be? If the Hypothesis of Phenomenal Information is true, then you have an easy answer: it is information about experience. More specifically, it is information about a certain part or aspect or feature of experience. But if the Hypothesis is false, then there is still experience (complete with all its parts and aspects and features) and yet no information about experience is phenomenal information. So it cannot be said in a neutral way, without presupposing the Hypothesis, that information about experience is phenomenal information. For if the Hypothesis is false and Materialism is true, it may be that all


44 Ibid., 284.
the information there is about experience is physical information, and can very well be presented in lessons for the inexperienced. (David Lewis, “What Experience Teaches” in Philosophy of Mind: Classical and Contemporary Readings, ed. David J. Chalmers [New York: Oxford University Press, 2002], 285)

Additionally, Lewis uses the analogy of a device, such as a clock radio, that can recognize patterns and use them to create templates to apply to future examples. Such an analogy may be illustrative of how we gain abilities according to his theory.

As Lewis has explained, the hypothesis of phenomenal information assumes that there is such a thing as phenomenal information to be gained by firsthand experience. But, as Lewis argues, if materialism is true, then there is still experience but no phenomenal information. Lewis argues that we are not forced to accept the hypothesis of phenomenal information and presents an alternative in the form of the “ability hypothesis”:

If you have a new experience, you gain abilities to remember and to imagine. After you taste Vegemite, and you learn what it’s like, you can afterward remember the experience you had. […] Further, you gain an ability to recognize the same experience if it comes again […] the information gained is not phenomenal, and the ability to gain information is not the same thing as information itself. (David Lewis, “What Experience Teaches” in Anthology, ed. David J. Chalmers [New York: Oxford University Press, 2002], 292)

In contrast to the hypothesis of phenomenal information, the ability hypothesis holds that Mary gains abilities to recognize, to remember, and to imagine a particular phenomenal experience, or particular phenomenal experiences, when she sees color for the first time. As Lewis explains, “it should be no surprise that lessons won’t teach you what an experience is like. Lessons impart information; ability is something else. Knowledge-that does not automatically provide know-how.”

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47 Ibid., 293.
4.3 RESPONSE TO THE EXPLANATORY GAP ARGUMENT

The explanatory gap argument put forth by Levine and others, discussed in Chapter 3, claims that there is something left out of statements like “pain is C-fibers firing” that is specific to identity statements about consciousness. Some who appeal to an explanatory gap (including Levine himself) remain ultimately materialists with respect to beliefs about the ontology of consciousness, while maintaining the claim that consciousness cannot be accounted for in physical terms. Nevertheless, this argument is a still a threat to materialism; even explanatory gap arguments that are purely epistemic attempt to show, in Levine’s words, “a very undesirable consequence for materialism.”48

Churchland offers a powerful argument against explanatory gap arguments in “The Rediscovery of Light.”49 Though Churchland is arguing against many arguments and not Levine’s specifically, his argument is directly against “anti-reductionist” arguments, and Levine’s claims that consciousness cannot be explained in physical terms would fall into this category of arguments that claim consciousness defies explanation by physical accounts.

Churchland offers an analogy comparing these anti-reductionist arguments, specifically those by Searle, Jackson, Chalmers, and Nagel, to previously held beliefs about the irreducibility of light. As we now know that these previously held ideas about light’s being irreducible to the physical were false, the comparison shows that dualist arguments may be equally misguided in claiming that consciousness is similarly irreducible. Churchland also opposes the idea of qualia generally, claiming that qualia are merely “discriminational simples” whose apparent irreducibility in no way suggests that they are non-physical:

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Too much has been made of these “simples,” for the existence of such
discriminable but inarticulable features is entirely inevitable. Such features must
exist, if only to prevent an infinite regress of features discriminated by
constituting sub-features discriminated by constituting sub-subfeatures, and so on.
And their existence is inevitable even on wholly physicalist conceptions of
cognition. (Paul Churchland, “The Rediscovery of Light” in Philosophy of Mind:
Classical and Contemporary Readings, ed. David J. Chalmers [New York:
Oxford University Press, 2002], 368)

As Churchland argues, the seeming irreducibility of qualia does not show that there is
a resistance to the reduction of consciousness to the physical; rather, Churchland’s argument
is that there must be such features as it would not make sense that there be infinitely
reducible features of the mind. To Churchland, the fact that such features should exist does
not show that there is anything non-physical about consciousness, nor does it show that
consciousness resists scientific explanation.

Churchland goes on to explain that our knowledge about consciousness does not
necessarily correspond with what is reality:

Accordingly, we should not be tempted to find anything physically irreducible or
ontologically special about such inarticulable features. They need reflect nothing
more than the current and perhaps changeable limits of the person’s capacity for
epistemic and semantic articulation, the current limits, that is of the person’s
knowledge of the world’s fine structure and his own epistemic access to it. Most
importantly there is no reason to expect that the current limits of the typical person’s
knowledge must mark the boundary of a distinct ontological domain. (Paul
Churchland, “The Rediscovery of Light” in Philosophy of Mind: Classical and
Contemporary Readings, ed. David J. Chalmers [New York: Oxford University Press,
2002], 369)

Churchland here argues that the leap from epistemological claim to metaphysical claim, such
as those seen in the arguments put forth by Jackson, Chalmers, and Nagel, are unjustified, as
our general knowledge and intuition may be a poor guide to metaphysical reality. On this
topic, Churchland and Levine may actually agree, as Levine remains a materialist in spite of
the epistemic issue of the ontological gap. However, this is a compelling argument against
those dualist claims that use the explanatory gap as a starting point in claiming that the mind and body are distinct.

**4.4 Response to the Zombie Argument**

As discussed in the previous chapter, one type of argument presented by property dualists relies on conceivability of a world in which humans who are physically identical to humans in our world lack some aspect of consciousness as we know it; these zombies might lack consciousness entirely or have some kind of consciousness but lack qualia as we experience them. In particular, Chalmers claims that zombies are conceivable, and, therefore, consciousness is not physical.\(^{50}\) As Chalmers argues, if such a scenario is conceivable and does not contain a logical contradiction, then materialism is false, since consciousness is not physical if it is logically possible that beings physically identical to us who lack consciousness could exist.

John Searle offers an argument that the conceivability of zombies does not suffice for their possibility.\(^{51}\) Searle accepts the logical possibility of a being that behaves as though it is conscious without actually having consciousness, but he does not accept that Chalmers’ zombies are possible:

> Chalmers takes the argument one step further, in a direction I would not be willing to go. He asks us to imagine a case where the whole system is physically identical to a normal human being down to the last molecule but is without any conscious states at all. On my view such a case would be impossible because we know that the structure and function of the brain are causally sufficient to produce consciousness. (John R. Searle, *The Mystery of Consciousness* [New York: The New York Review of Books, 1997], 147)

Searle goes on to say that the argument is invalid:

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\(^{50}\) Chalmers, The Conscious Mind, 94-96.

If I imagine a miraculous world in which the laws of nature are different, I can easily imagine a world which has the same microstructure as ours but has all sorts of different higher-level properties. I can imagine a world in which pigs can fly, and rocks are alive, for example. But the fact that I can imagine these science-fiction cases does not show that life and acts of flying are not physical properties and events. So, in extending the zombie argument Chalmers produces an invalid version. The original version was designed to show that behavior and functional organization by themselves are not sufficient for consciousness. Chalmers uses it to show that in a different world, where the laws of nature are very different, you could have all your physical features intact but no consciousness. From this he concludes that consciousness is not a physical property. That conclusion does not follow. (John R. Searle, *The Mystery of Consciousness* [New York: The New York Review of Books, 1997], 147-148)

4.5 Conclusion

The materialist arguments recounted here suggest that we need not accept the dualists’ claims that objective scientific research cannot account for qualia. In the next chapter, I analyze these arguments.
CHAPTER 5

A DEFENSE OF MATERIALISM

So far, I have reviewed arguments that the mind and body are distinct entities, arguments that propose that the mind and body are the same, and arguments that claim that there is an epistemic gap in our knowledge of consciousness. In this chapter, I analyze some of these dualist arguments and also explain how materialism might be able to explain consciousness fully despite these concerns. What I intend to demonstrate is that the arguments that claim that qualia could never be accounted for under materialism do not hold up to enough scrutiny to give us good reason to abandon the optimism that scientific research could describe qualia in the physical world.

As we have seen, dualists argue that the mind could not be reduced to the physical because objective research could never capture the subjective nature of consciousness, while some materialists argue that such an account could be possible. One thing that is generally agreed upon is that we do not have a full scientific account of consciousness at this time. Therefore, the question becomes one of what is possible, with most materialists on the optimistic side of a scientific theory. The claim of some dualists that science will not be able to integrate the subjective and objective into an explanation of consciousness is then, in a sense, a much stronger claim than the argument of some materialists that science will someday be able to find the solution. There is sufficient skepticism of qualia’s being metaphysically distinct from the brain and plenty of research left to do in the neuroscience realm, and thus there is no reason to conclude just yet that qualia are definitively non-physical.
5.1 PROBLEMS WITH CONCEIVABILITY ARGUMENTS

Perhaps the most compelling of dualist arguments are those arguments that are based on the purported conceivability of the separation of body and mind. Such arguments ask us to imagine one without the other, to agree that such a thing is conceivable, and to draw conclusions from this intuition that the two must not be one and the same. The argument is simple yet persuasive. As the dualist in this case would argue, conceivability entails possibility and such a thing is clearly conceivable. The materialist is left to argue that either such a thing only seems conceivable or that conceivability does not suffice for possibility.

While conceivability may generally suggest possibility, in this case, the thing that we are asked to conceive of may be something that we actually cannot fully imagine. Thus, it may seem that we can conceive of Chalmers’ zombies when, in reality, we are conceiving of something slightly different. I can certainly conceive of a being that appears to have the same conscious states as anyone else but in fact does not; however, that is not the same thing as a being with all the same physical properties, including the brain, as any other person and also not having the same conscious states. I do not possess enough knowledge of the brain and its neurological workings and how they affect consciousness (or, perhaps, the fact that they are consciousness) to say that I can conceive of all the same physical processes with the absence of consciousness.

However, I may still claim that I am able to conceive of zombies. The reason this situation is possible is because when most of us imagine zombies, we are merely imagining a being that appears just as we appear, that behaves just as we behave, and perhaps even has a brain just as we have brains. Most of us are not imagining the very detailed physical processes of the brain, which are an extremely important element of conceiving of zombies,
as these elements of our physical being would be at least integral to consciousness, if not identical to consciousness, if materialism is true.

We can interpret this problem in one of two ways: either zombies are not conceivable, or the conceivability of zombies does not mean that zombies are possible. If the fact that when most of us attempt to conceive of zombies we are not fully imagining them means that we are not conceiving of zombies, then we might say that zombies are not actually conceivable. If the fact that we are able to imagine zombies even on a superficial level means that they are conceivable, then it can be argued that the conceivability of zombies does not mean that they are possible, because our conception of them is not complete. Therefore, either zombies are not really conceivable, or the conceivability of zombies does not suggest the possibility of zombies. Either way, we cannot conclude that consciousness is non-physical from conceivability arguments.

To apply this argument to Kripke’s and Levine’s example of an identity statement that seems more obviously necessary than identity statements about mental states, we know that heat is molecular motion and that the phenomenon of heat is identical with the physical “fact” of the motion of molecules. However, if asked whether I could conceive of heat without the presence of molecular motion, I would have to say “yes,” as I have not directly observed the motion of molecules, so to imagine one without the other seems possible. However, a physicist with more knowledge of these particles might disagree, saying that such a thing is inconceivable and thus impossible. Therefore, my ability to conceive of such a thing is not a compelling argument that heat is actually not molecular motion. Similarly, a neuroscientist with more familiarity of the brain might say that Chalmers’ zombie is, in fact, inconceivable and thus impossible, and perhaps our knowledge of the brain may someday
increase to the point where we could readily acknowledge that the firing of neurons and consciousness are one and the same, if some version of identity theory is true.

To use a very basic example, the concept of a round square is regarded as both inconceivable and logically impossible. But a person who does not fully understand either squares or the concept of roundness may think that she is able to conceive of a round square. While certainly most of us understand squares, roundness, and why round squares are not conceivable, this analogy can be extended to more complex concepts. It may be that what we find to be conceivable is merely a superficial depiction of the concept in question.

Let us temporarily imagine, for the sake of argument, that materialism is true and consciousness is physical. If that were the case, then zombies might be conceivable, but would, in fact, not be metaphysically possible, since to say they were possible would contradict the fact that consciousness is physical—that is, to say that there could be a possible world in which there were creatures physically identical to us, but lacking the consciousness we do, would be a contradiction, as such creatures could not be both physically identical to us and yet have (physical) consciousness that was not identical to ours. But it is possible that we might still imagine zombies to be conceivable; since our own conscious experience alone does not give us sufficient insight to deduce whether it is a physical or non-physical process, it seems entirely possible that we lack the insight into what is logically possible in terms of our own consciousness. Thus, it is conceivable that there could be a world in which materialism is true and where many humans find the idea of a philosophical zombie to be conceivable; and if materialism is, in fact, true, then this would describe our present situation. Therefore, once again the conceivability of zombies does not show that consciousness is non-physical. Just as Levine takes Kripke’s metaphysical claims
and creates an epistemic argument, I believe that Chalmers’ argument only shows that our concept of consciousness is separate from our concept of our physical being.

5.2 Subjectivity and Ineffability

In addition to conceivability claims, many arguments that claim that qualia are metaphysically distinct from the brain rely on the idea that qualia are ineffable. Indeed, it seems that the purported ineffability of qualia is a central idea. As previously discussed, this is the idea that it is impossible for one person to communicate her particular phenomenal experience to another person who has not had the same experience. This is not to merely say that we lack the right vocabulary to communicate such ideas but rather that it is not even possible in theory for such subjective experiences to be communicated.

Taken at first glance, this is a compelling argument for the dualist. However, even if we concede that qualia are ineffable, how does that demonstrate that they are non-physical? The dualist might respond that all physical things are things that can be communicated or described, but instead of re-examining our conception of the brain and the physical world, it might be simply a matter of re-examining the idea that all physical things can be communicated about as ideas from one person to another. Certainly it seems that consciousness is a very specific and special kind of phenomenon, one that is perhaps ineffable by nature, but it does not follow that this phenomenon is therefore not physical.

5.3 A Successful Materialist Theory

What might a successful materialist theory look like? Many of the philosophers who argue for dualist theories would say that a successful materialist theory would be one that addresses the subjectivity of consciousness. It seems that in order to satisfy the dualist, such a
theory would need to incorporate the point of view of the individual. Such a theory would need to show that qualia are, somehow, observable.

One possible route for the materialist to take in answering the dualists’ requirement for such a theory to address the subjectivity of consciousness is to take an eliminativist approach. Though a common objection to eliminativist theories is that they leave out qualia or the subjective aspect of consciousness, if such a theory could explain that all aspects of consciousness are accounted for elsewhere, then this could prove successful. For example, much like Dennett’s comparison of our concept of qualia to the concept of *élan vital*,\(^{52}\) it may be that as we learn more about the brain, we realize that, as Dennett has claimed, “qualia” is an unnecessary term that does not describe anything that is not already described by a thorough understanding of the brain. Thus, in this scenario, what we had previously thought of as an unobservable phenomenon—qualia—would turn out to be observable after all.

However, for many dualists an eliminativist approach is not satisfying because it denies something that is seemingly obvious—namely, that there are unique, subjective qualities to our conscious experiences. For some dualists, an argument claiming that we simply do not need a theory of the mind that includes qualia, be they physical or non-physical, would not satisfy the demand to explain a feature of the mind that seems to be a prevalent part of our conscious experiences. The dualist may argue that there is something that needs explanation, whether it is the “what it’s like” nature of sensory experiences as Nagel argued, or the apparent knowledge gained by conscious experiences as argued by Jackson.

\(^{52}\) Dennett, “Quining Qualia,” 227-230.
Instead, a materialist theory that would satisfy the demand for explanation of the subjective needs to explain what qualia are, rather than arguing that there are no qualia or that qualia are irrelevant. The most promising avenue of a successful theory of mind that includes these subjective experiences would be a more complete type identity theory. If neurological research could show a relation between specific brain states and specific phenomenal states, then this would enable us to make identity statements regarding mental states and to prove a satisfactory account of qualia. If type identity theory were true, then those identity statements would be necessarily true under Kripke’s argument concerning identity statements with rigid designators. The theory would then state that the intuition about the “felt contingency” of these statements, argued by Kripke and Levine, is simply misguided. Perhaps these scientific discoveries could also help to ease that felt contingency and show that mental states are identical to brain states.

As with Churchland’s analogy in “The Rediscovery of Light,” it is only through scientific discovery that we can change our understanding of phenomena such as light or consciousness. Thus far, those unconvinced by identity theory object that something is left out, but a more robust theory that incorporates actual evidence of specific brain states could show that qualia are physical.

5.4 Conclusion

Though many dualist arguments are persuasive, they rest upon intuitions regarding the mind that do not necessarily reflect metaphysical reality. While we may not have all of the scientific research necessary to show definitively that conscious states are brain states, materialism, particularly type identity theory or some variation thereof, remains the most promising theory in responding to the mind-body problem. As with other scientific
discoveries that showed that seemingly non-physical phenomena were actually very much physical, it is likely that consciousness too can be show to be physical, with nothing “left out” of the materialist explanation.
CHAPTER 6

CONCLUSION

There are many compelling problems associated with qualia that would make one inclined to believe that consciousness must be separate from the physical body, and many persuasive dualist arguments rely on these issues with consciousness to show that it must not be physical. But under closer examination, it is still possible for a materialist theory, particularly along with scientific discoveries, to demonstrate that consciousness is physical.

In Chapter 1, the concept of qualia was introduced and the implications of this concept for the mind-body problem were recounted. Qualia, those subjective and currently indescribable ways that conscious experiences feel, present a problem to contemporary philosophers who wish to claim that only physical things exist. Philosophers have taken different paths in addressing qualia, with some claiming that qualia are evidence that the mind and body are not one and the same, while others claim that qualia can be explained as physical phenomena.

In Chapter 2, various theories of mind were recounted, along with how the theories address, or might address, the phenomena of qualia. Dualist theories, including substance dualism and property dualism, argue that the mind and body are not the same and that there are at least some non-physical properties of the mind, if not that the mind is a separate substance entirely. Materialist theories, including identity theory, behaviorism, functionalism, and eliminative materialism, claim that all things (including the mind) are physical. Dualist theories generally consider qualia to be non-physical or to be non-physical
properties of the physical, while materialists generally claim that qualia are physical or wish to eliminate talk of qualia entirely.

Chapter 3 discussed four major types of arguments: the "what it’s like” argument, the knowledge argument, the explanatory gap argument, and the zombie argument. Nagel’s "what it’s like” argument using the analogy of the bat shows that qualia are subjective and cannot be accessed by objective means. Jackson’s knowledge argument, with the thought experiments concerning Fred and Mary, claims that there is non-physical information that is gained when one experiences a quale. Levine’s explanatory gap argument takes the metaphysical argument from Kripke concerning the necessity of identity statements and turns it into an epistemic argument, showing that there is an explanatory gap within materialism. Chalmers’ zombie argument claims that the conceivability of zombies shows that materialism is false.

In Chapter 4, I described some of the materialist arguments that directly object to the arguments detailed in Chapter 3 or could be interpreted to argue against the dualist arguments. Dennett’s arguments in “Quining Qualia,” particularly the thought experiment of Chase and Sanborn, are objections to arguments like Nagel’s that assign significance to qualia. Lewis objects to the knowledge argument on the ground that information is not gained by experience, but abilities, and that there is no such thing as phenomenal information. I have used Churchland’s argument from “The Rediscovery of Light,” arguing that the purported irreducibility of concepts such as consciousness is no barrier to materialism, to contrast with Levine’s explanatory gap argument. I then described Searle’s objection to the zombie argument in which Searle claims that Chalmers’ argument is invalid.
In Chapter 5, I offered objections to arguments that depend on the conceivability of the separation of the physical and mental to show that materialism is false. In particular, I argued against the zombie argument, saying that it is only our concepts that are not identical and that our powers of conceivability are not sufficient to show what is and is not metaphysically possible or true. I also argued that the fact that we can imagine materialism’s being true and zombies’ being conceivable shows that the conceivability of zombies does not prove that materialism is false. Additionally, I questioned whether the ineffability and subjectivity of qualia are evidence in any way that they are non-physical and posited that some version of thorough type identity theory may be a successful materialist argument to explain qualia.

Some questions remain, such as how physical research could encompass the subjective point of view of the individual? How could the subjective be made to be objective? Perhaps, as Nagel argued, we need a shift in how we view the world and the brain. There are also limitations that materialism still faces, namely the task of explaining how scientific explanation can actually capture qualia with all the nuances we believe they have, and it is arguable that we can never truly explain that. In order for the materialist successfully to show with complete certainty that materialism can account for such a thing, a scientific theory will need to assist us in explaining exactly what consciousness is, qualia and all.
REFERENCES


