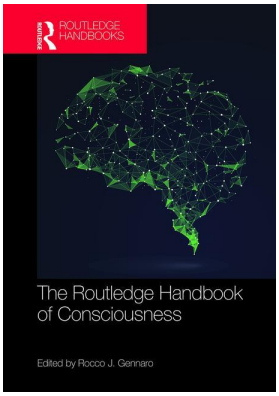

The Routledge Handbook Of Consciousness

Rocco J. Gennaro

Dualism

Publication details
https://www.routledgehandbooks.com/doi/10.4324/9781315676982-5
William S. Robinson
Published online on: 26 Mar 2018

4
DUALISM

William S. Robinson

Dualism is the view that our world contains two irreducible kinds of entities, the physical and the non-physical. Its main contemporary rival is physicalism (also known as "materialism"). According to this view, everything there is, notably including conscious minds, is physical. To understand the distinction between the physical and what is not physical, let us begin with something that is uncontroversially physical – say, a rock. It is uncertain what the very smallest parts of a rock are, but in this article, I'll assume that the Standard Model of physics gives us the *fundamental* physical things. These are particles such as photons, electrons, and quarks. Physical objects, then, are the fundamental physical objects together with everything that is composed exclusively of those. A representative list that can be generated from this definition includes electrons, protons, atoms, molecules, crystals, cells, rocks, corals, bricks, buildings, planets, and stars.

The physical includes more than physical objects. It includes events that happen in physical objects, such as lightning flashes, muscle contractions, and landslides. It includes properties of fundamental physical objects, such as charge, mass, and spin. It includes properties of composites, such as liquidity of water and the temperature of the air. Spatial properties (e.g., distance, shape), temporal properties (e.g., age) and spatio-temporal properties (e.g., velocity) are also physical properties.

The key dualist claim is that when it comes to minds – in particular, our consciousness – we cannot give a full accounting that uses only physical objects and laws among physical events and properties. Dualists hold that something needs to be added to what physical science provides, if we are to have a satisfactory account of everything there is.

There are several versions of dualism, and several kinds of arguments for supposing that dualism is true. The first two sections below introduce the main divisions among dualistic views. Later sections will examine some important arguments.

1 Types of Dualism (A)

"Consciousness," "minds," and "mental" are often applied to a large and somewhat diverse set of items. These include bodily sensations, such as pains and itches; sensations we have during perceptual experiences, such as the ways things look, sound, taste, and so on; beliefs, desires, hopes, fears, and similar states; and selves, conceived as what *has* sensations, experiences, and mental states. Dualistic claims and arguments sometimes concern all of these aspects of the mental, but sometimes concern only one or another aspect.

Substance Dualism claims that our minds are substances that are distinct from any physical substance. The use of the term "substance" in philosophy follows this rule: if A and B are distinct substances, then neither one is required in order for the other to exist. So, substance dualism says that our minds are a kind of thing that could exist without anything physical existing – in particular, without our bodies existing. Of course, while we are alive, we are composites of two substances, mind and body.

Substance dualism leaves open the possibility of survival of our conscious mind after the death of our body. This implication provides a motivation that may lead some to *hope* that substance dualism is true. It does not, however, provide an argument for that view, since survivability after bodily death is itself controversial. Later in this article, we shall look at some arguments for substance dualism that do not rest on a prior assumption of survivability.

A more popular view among contemporary dualists is *property dualism*, the view that there are non-physical properties of events that take place in our bodies. Property dualists hold that instantiation of non-physical properties cannot happen without bodies, but nonetheless, the properties themselves are not physical properties.

To understand this view, we need to understand two ways in which a property can count as "physical." First, the properties of fundamental physical objects are physical. We accept that there are these properties because the physical theories that propose them provide the best explanations of events that we can observe, either in laboratories or in everyday life.

Second, non-fundamental properties are counted as physical if they can be explained by the laws of interaction of fundamental physical properties plus facts about how things are composed. The liquidity of water or alcohol, for example, is explained by their being composed of parts that are able to pass by each other without much resistance. When we can give explanations like this, we can say that a property (liquidity, in this case) has been "reduced to," or "constructed from" physical properties of its parts (in this case, properties of atoms or molecules that are held to compose the liquid). The essential claim of property dualism is that there are some properties that are *not* reducible to (or constructible from) physical properties.

Property dualism does not require a non-physical substance. A property dualist can consistently say that some physical objects or events have both some physical and some non-physical properties. So long as the properties themselves are not reducible, there will be something that actually exists but cannot be fully accounted for solely by physical objects, events, and properties.

Event Dualism understands non-physical properties in the same way as property dualism. Its distinctive claim is that non-physical properties do not need to be instantiated in – need not be properties *of* – objects, physical or otherwise. The smell you experience when entering a bakery, for example, is an instance of a particular odor property. That property is in your stream of consciousness during a certain interval of time, but it is not a property of your brain, nor of an event in your brain, nor of molecules in the air.

When we refer to facts involving a property, we usually attribute the property to a thing – a thing that, we say, "has" the property. So, event dualism may seem puzzling at first sight. Physicists, however, often talk of fields, for example the magnetic field that surrounds the Earth. The strength and direction of that field are properties that differ at different points. We can say that a point in space has a magnetic field of a certain strength and direction. A point, however, is just a location, and neither a point nor a location is a *thing*. Analogously, event dualism proposes that an occurrence of a non-physical property does not require a *thing* to "have" it.

The pull to find a thing to have non-physical properties is a powerful one. It sometimes leads critics of property dualism or event dualism to invent a bearer for non-physical properties, and a popular name for this alleged bearer is "ectoplasm." Readers, Beware! Ectoplasm is a caricature drawn by physicalists. It is supposed to be a special kind of stuff. But property dualists

attribute non-physical properties to physical bearers, i.e. things that also have physical properties, and thus do not need a special kind of "stuff." Event dualists *deny* that there is a "stuff" that has non-physical properties.

2 Types of Dualism (B)

Many arguments concerning dualism depend upon assumptions about causal relations between mental and physical items. This section divides dualisms according to their claims about causation. In making this division, I will adopt the common view that *if* there are causal relations between something physical and something that is mental and non-physical, then the "something physical" is a brain, or a part of a brain, or some events in a brain.

Interactionism says that some brain events cause mental events, and some mental events cause physical events.

To illustrate the first clause, stimulations of our sense organs (when they and the rest of our neural systems are in normal conditions) are held to cause pains, color sensations, sounds, tastes, smells, feelings of pressure, and so on. To illustrate the second clause, in normal conditions our decisions are held to cause our actions, and having a sensation of a particular kind is held to causally contribute to our reporting having that kind of sensation.

Epiphenomenalism says that some brain events cause mental events, but no mental event causes a physical event.

Parallelism says that there are no causal connections either way between physical events and mental events.

An obvious problem for parallelism is to account for why there should be correlations between physical events and mental events. For example, whenever one is cut (in normal conditions, e.g., in absence of an anesthetic), one feels a pain. Why would there be such a regularity, if the cuts are not causing the pains?

Historically, advocates of parallelism have had theological motives, and have explained correlations between the mental and the physical by appealing to agency on the part of a deity. There are very few today who hold the required theological views. The options for dualism that remain standing in current debates are thus interactionism and epiphenomenalism.

On first hearing, epiphenomenalism strikes most people as highly counterintuitive. There are several more formal objections to it, the most important of which are based on evolution, and on self-stultification. The key point about evolution is that a trait can be shaped by natural selection only if it causally contributes to behavior that increases or decreases an organism's fitness. If sensations have no physical effects, it seems that natural selection cannot explain why our sensations are appropriate to our circumstances, or even why we evolved to have any sensations at all.

Self-stultification is held to follow from two assumptions. The first is agreeable to epiphenomenalists, namely: (a) Epiphenomenalists claim to know something about their sensations. The second is a generalization of a principle that uncontroversially holds for perception, namely: (b) A person can know about a thing only if that thing causes the person to form a belief about it. (For example, if an object is not causing your belief that you see it, you don't know it is there, even if you make a lucky guess that it is.) If epiphenomenalists could be forced to accept (b), they would be committed to making knowledge claims that their own view would imply they cannot know.

Epiphenomenalists believe they have adequate responses to these objections.[1] But readers may wonder why anyone would bother to defend epiphenomenalism, when there is a rival view that seems obviously true, namely interactionism. The answer is that there is also a strong objection to interactionism.

This objection arises from the very wide acceptance of the principle of Physical Causal Closure:

(PCC) Every physical event that has a cause has a sufficient physical cause.

Support for this principle comes from the success of physical science and, in particular, success in discovering the details of the mechanisms by which brain parts change their states and influence other brain parts.

Most actions require movement of our bodies. Our bodies are physical objects, and their movements are physical events. So, accepting PCC entitles us to infer that when we act, the movements of our bodies have a sufficient physical cause, if they have any cause at all; and they do seem to have a cause. For example, if I raise my arm to vote for someone, various muscles contract. Those contractions are physical events, and have physical causes, such as release of neurotransmitter molecules into junctions with muscle fibers. That release is caused by events in the neurons coming into muscle tissue from the spinal cord. Those neurons are activated by other neurons that descend into the spinal cord from the brain. And so on. To accept PCC is to accept that there is a continuation of this story that can, in principle, completely explain why my arm goes up, and that consists entirely of a series of physical events in sense organs and in various parts of the brain.

If this account is correct, then no non-physical events are needed to give a causal explanation of our behavior. Moreover, if physical events alone are sufficient to cause our behavior, then non-physical events, even if they are present, do not *make a difference* to our behavior, where making a difference requires that without those mental events, our behavior would not have been what it was. If one accepts that non-physical events do not make a difference to our behavior in the required sense, then one has become an epiphenomenalist in all but name.

To summarize the current debate, consider the following four statements, each of which is currently found plausible by a substantial number of thinkers (and 4 is accepted by all parties).

1 Any complete account of our mentality requires us to include non-physical events. (Dualism)
2 All events that are required for a complete account of our mentality make causal contributions to our behavior. (Mental Efficacy)
3 The only kind of thing that can causally affect a physical event is a physical event. (PCC plus requirement to make a difference)
4 Our behavior consists of changes in our bodies, which are physical events.

This quartet is mutually inconsistent. For example, dualism plus mental efficacy implies that some non-physical property has an effect on our behavior. Since our behavior consists of physical events, this implies that some non-physical property has an effect on some physical event; which contradicts 3.

Since we cannot consistently accept all four of these statements, we must give up at least one of them (and giving up any one is enough to remove inconsistency). Physicalism rejects 1. Interactionism rejects 3. Epiphenomenalism rejects 2.

3 Arguments for Dualism

Perhaps the most famous argument for (substance) dualism was given by Descartes (1596–1650). This argument rests on some claims about *certainty*. Descartes worried that there might be an Evil Genius who gets his jollies from deceiving him. He knew that he could be deceived about many things, including even the existence of his own body. He was aware that some people

suffer from "phantom limb," a condition in which patients feel that they still possess a limb that has in fact been amputated. So, maybe a powerful deceiver could make him feel as if he had a whole body, when in fact he had none at all. But when Descartes asked himself whether he could be deceived when he thinks to himself *I exist*, his answer was that he certainly could not be so deceived. Indeed, he would have to exist in order for an Evil Genius to be deceiving *him*.

The argument itself has been stated in many ways. A simple formulation is this:

D1. I am certain that I exist.
D2. I am not certain that anything physical exists (including what I'm in the habit of thinking of as my own body).
D3. I cannot be certain and uncertain of the same thing at the same time.

Therefore,

D4. I am not the same thing as my body.

Contemporary dualists do not offer this kind of argument. They recognize that D3 is false. So long as we have two names or descriptions, we can indeed be certain and uncertain of the same thing at the same time. For example, one can be sure one has read something written by Mark Twain, but uncertain, or even doubtful, whether one has read anything written by Samuel Clemens. Before the Babylonians discovered that the Morning Star and the Evening Star are the same body (namely, Venus), it would have been entirely reasonable to be certain one was observing the Morning Star, while doubting that one was observing the Evening Star.

A second kind of argument is based on *intentionality*. "Intentionality" is a Latinate word that means *aboutness*. We have beliefs about where the economy is going, about who will get elected, about where various cities are located. We have desires about foods, about potential mates, about social justice, and so on. So, beliefs and desires are about things, and they can be said to have aboutness. Philosophers usually express this point by saying that beliefs and desires have intentionality.

When we intend to act in a certain way, our intention is about our action (or about the result we want to produce). So, our intentions have intentionality. But the term is somewhat confusing, because many things have intentionality that are not intentions; for example, beliefs, desires, doubts, wonderings, and fears.

The intentionality of some of our mental states and events has been taken by some thinkers as providing a reason for dualism. The reason turns on two peculiar properties of aboutness. One is this: A thought (belief, desire, and so on) can be about things that do not exist – for example, fictional entities such as Sherlock Holmes or unicorns, posits of failed theories, such as humors or the luminiferous aether, and even impossible things such as perpetual motion machines or round squares.

The other peculiarity of intentionality comes out in the following argument.

1 Jones believes that Mark Twain wrote *The War Prayer*.
2 Mark Twain is Samuel Clemens.

Therefore,

3 Jones believes that Samuel Clemens wrote *The War Prayer*.

This inference is plainly invalid. If Jones is not aware that 2 is true, the premises will still be true, but 3 may very well be false. The same kind of invalidity occurs whether we talk about what

Jones believes, or what Jones desires, hopes, fears, or knows. To generalize: When dealing with mental states, we cannot count on having a valid argument, even when all we do is replace a term in the first premise by another term that refers to the exact same thing.

Why did I call these properties "peculiar"? Let us first notice that aboutness seems to be a relation. Relations characteristically relate two (or more) items – for example, "X is a brother of Y," or "X is taller than Y." We use the same grammatical form with aboutness: X (e.g., a belief) is about Y (the state of the economy, Sherlock Holmes, etc.).

But wait! Relations are supposed to *relate*. How can a mental state be in a *relation* to something that doesn't even exist?

Regarding the second property, the peculiarity is this. All the relations that we find in our natural sciences allow inferences of the kind that are not allowed when states that have intentionality are involved. For example, if (i) Jones is taller than Mark Twain, and (ii) Mark Twain is Samuel Clemens, it does follow that (iii) Jones is taller than Samuel Clemens. It doesn't matter who believes or doesn't believe what: if (i) and (ii) are true, then (iii) must be true. Similarly, if spoilage caused a cheese to turn green, and green is in fact Aunt Tillie's favorite color, then it follows that spoilage caused the cheese to turn the color that is Aunt Tillie's favorite.

The argument for dualism that is based on intentionality should now be obvious. Relations among physical objects require existence, and allow inferences when we substitute terms that refer to the same thing. Relations between mental states and what they are about do not require existence of what they are about and do not allow inferences, even when all we do is to substitute a term that refers to the same thing. The conclusion is that intentionality is not a physical relation. There must be something very special, and non-physical, about the mind if it can stand in this special sort of "relation" to other things, and even to non-existent things.

This argument would fail if intentionality could be "naturalized," that is, constructed from physical relations. Although proposals for such construction involve very complex networks of relations, and although there are disagreements about details, a majority of contemporary philosophers think that intentionality can be naturalized, and thus they do not accept this argument for dualism.

A third kind of argument rests on claims about *conceivability*, and its relation to possibility. To understand arguments of this kind, we may begin by trying to conceive of a unicorn. What would it be like for there to be one? Well, there would be something that is mostly like a horse, except that it would have a single horn emerging from its forehead. Moreover, its horn would not be held on by glue, or even by a bone graft. A unicorn would have to have its horn naturally – it would have to be a member of a species that regularly produced offspring that would develop horns at roughly the same age.

Are unicorns possible? Well, didn't we just conceive such a possibility? Bulls have horns, narwhals have a single horn. Why couldn't there be unicorns? If we can conceive something in clear detail, as we just did with unicorns, and it is obvious that there is no contradiction in what we are conceiving, isn't that the same as showing that it is really possible?

Unicorns are generally regarded as possible (even though known to be non-actual). But it is controversial how we should answer the general question – whether conceivability, or conceivability with some restriction regarding the clarity and detail of the conception, is enough to establish genuine possibility.

A conceivability principle is a principle that says that conceivability (suitably restricted) is sufficient to establish genuine possibility. A conceivability argument is an argument that has such a principle as a premise. "Suitably restricted" is needed to indicate that care is needed in defining "conceivability." We can make grammatical sentences using the phrases "round square" or "perpetual motion machine," but we cannot provide a clear and detailed account of how

to construct them. A suitably restricted definition of "conceivability" must count these as not genuinely conceivable, despite the fact that we can understand what they are well enough to know they cannot exist.

There are two kinds of conceivability argument that have been proposed in recent decades, one for substance dualism, and one for property dualism. A Conceivability Argument for Substance Dualism (CSD) goes as follows:

CSD1. I can clearly conceive of my stream of consciousness continuing after the destruction of my body.
CSD2. Conceivability implies possibility.

So,

CSD3. It is possible for my stream of consciousness to continue after the destruction of my body.
CSD4. It cannot be that my stream of consciousness continues to exist without *me* existing.

So,

CSD5. It is possible for me to continue to exist after the destruction of my body.
CSD6. It is not possible for the same thing to be both destroyed and to continue to exist at the same time.

So,

CSD7. I am not the same thing as my body.[2]

The same argument would show that I am not the same thing as any of my bodily organs, including my brain. (Just specify that destruction of my body is thoroughgoing, i.e. involves the destruction of all my bodily parts down to their atoms.) It is not remotely plausible that I am the same thing as some physical object outside my body. So, the force of the conclusion can be easily extended to the claim that I am not a physical object of any kind whatsoever.

There are many things to be said about this argument, but I will limit my discussion to likely responses from physicalists. They will have doubts about the first two premises. Regarding the first, they may argue as follows. Unless we beg the question against physicalism (in which case the argument fails) we cannot suppose that we *know* that our stream of consciousness is not dependent upon, or even identical with, events in our brains. If they are identical, then we cannot *really* conceive of our stream of consciousness outlasting the destruction of our brains. So, we do not know that the first premise is true; and so, we do not know, by this argument, that its conclusion is true.

A slightly more accommodating response concedes that this case is not like the round square case. I can not only grammatically *say* "stream of consciousness that survives bodily destruction"; it seems that I can form a robust "picture" of thinking my thoughts, enjoying my memories, and wondering what will happen next, even though I am no longer associated with a body. But then, it can be doubted that the second premise is true. Why ever should we think that forming such a picture shows real possibility? If my thoughts are identical with events in my brain, CSD3 is false. If CSD3 is false, then in whatever sense of "conceivability" it may be in which CSD1 is true, CSD2 (using the same sense of "conceivability") would have to be false.

Proponents of the above argument may respond that the only reason to doubt the first two premises is the question-begging assumption that physicalism is true. Such exchanges of charges of mutual question-begging are never easily resolved.

Another kind of conceivability argument aims to establish property dualism, and is often called the Zombie Argument. To understand this argument, we must distinguish between Hollywood zombies, and zombies as philosophers understand them. Hollywood zombies walk stiffly, stare vacantly, and aim to harm you. In contrast, Zombies in philosophy behave exactly – *exactly* – like a normal person, and they are anatomical duplicates of ordinary human beings. What makes them zombies is that they live in a world with different laws of nature. In their world, unlike ours, brain events do not cause sensations. So, although zombies wince when they're stuck with a needle, they have no pains. They complain of hunger, and eat with all the behavioral signs of pleasure, but they have no hunger pangs, and their foods have no actual tastes for them.

The Zombie Argument goes like this.

Z1. Zombies are conceivable.
Z2. Conceivability implies possibility.

So,

Z3. Zombies are possible.
Z4. If zombies are possible, then some properties in our sensations (painfulness, tastes, colors, and other properties like these) cannot be the same properties as any physical properties.

Remember, zombies are physical duplicates of humans. If our sensations were nothing but physical constructions, zombies would have the same physical constructions, and thus the same sensations that we do. But that would contradict the assumption that we are describing zombies. So, if zombies are so much as possible, our sensations must involve a property that is not reducible to (or constructible from) physical properties.

From Z3 and Z4, it follows that:

Z5. Some properties in our sensations are not the same properties as any physical properties.

So,

Z6. Physicalism is false.[3]

This argument does not say that sensations could exist without brain events – it says only that the latter could exist (in some possible world) without sensations. So, it is not an argument for minds (or, entities that have sensations) that could exist without bodies. It is an argument that our sensations involve properties that, unlike liquidity, cannot be explained through constitution by physical parts plus laws of nature that apply to the relations among such parts.

As in the previous argument, the first two premises of the Zombie Argument are controversial. Physicalists often concede that we do not presently have a theory that explains how sensations of red, or of chocolate taste, or of pain can be constructed from the assumption that they are composed of events in brain parts (events in neurons, for example) plus laws governing the relations among such events. They can offer this lack of theory as a reason that makes Z1 seem plausible, while consistently denying that zombies are *really* conceivable. And with or without this concession, they can either deny that Z2 is true, or deny that we know that Z2 is true.

For dualists, this stance seems question-beggingly ideological. If we have no ghost of an inkling of how sensations of red or chocolate could be constructed out of brain events, it is downright *un*scientific to declare that nonetheless they must somehow be thus constructible.

A fifth argument for (property) dualism is the *Knowledge Argument*. This argument was advanced by Frank Jackson in 1982, and it begins by introducing us to Mary, a brilliant scientist. Her specialty was color vision, and she knew everything that our natural sciences can tell us about that subject.

What was distinctive about Mary, aside from her brilliance and dedication, was that during her whole life she had been confined to a room in which everything was black, white, or some shade of gray. Her TV and educational materials were all black and white. As a result of her confinement, she had never had a color experience. She knew everything there is to know about what happens in people's brains when they look at, say red roses, and everything about what would happen in her own brain if she were to see one. But she had never actually had an experience of red, or of any other chromatic color.

Jackson imagined a day on which Mary is finally to be let out of her room, and allowed to see something red for the first time. The Knowledge Argument concerns this moment, and goes as follows:

KA1. Mary already knows all the physical facts about what will happen in her visual systems when the door is opened.

KA2. Mary will learn a new fact when the door is opened – namely what red is.

So,

KA3. The new fact is not a physical fact.

So,

KA4. Not all facts about the world are physical facts.

The literature in response to this argument is far too large to be summarized here.[4] I will mention just one source of doubt about it that is related to several of the more formal replies that have been made.

KA2 gives "what red is" as the fact that Mary is about to learn. "What it is like to see red" is also a common phrase that is used to identify this fact. Both formulations have this peculiarity: they are not sentences. But facts are usually stated as sentences. For example, it is a fact that *Brazil is in South America*, it is a fact that *water boils at 100° C*, and so on. It is natural to expect a new fact to be stated in the form of a sentence; but it is not clear what sentence properly expresses the fact that Mary is supposed to learn.

This peculiarity leads to a worry. Maybe what happens to Mary is not correctly described as her *learning* (coming to know) a new fact. There is certainly something new that happens to her. What must be allowed by everyone is that, for the first time, *she experiences red*. That is compatible with holding that a red experience is identical with a brain state – for, as again all will agree, her brain has never before been in the state it enters when she first sees something red. Physicalists can hold without contradiction that what happens to Mary is not that she comes to know a new fact, but instead that she comes to stand in a new relation to a fact she already knows. That is, instead of just knowing what state she would be in if she saw something red she is now actually in that state.

These remarks will be as controversial as the more formal replies in the literature. I will close the discussion of the Knowledge Argument by noting that Jackson has subsequently rejected its conclusion. In 1982 (and 1986), he followed the presentation of the Knowledge Argument with a recommendation to adopt epiphenomenalism, as the best view to take, given the conclusion of the Knowledge Argument. Epiphenomenalism, as noted earlier, is

counterintuitive, and Jackson is no longer content to accept it. In a 1996 book (with David Braddon-Mitchell) he defended the Knowledge Argument against several replies in criticism of it. He did not claim to see exactly why it failed, but offered the "There must be a reply" reply to it. That is, he thought that there must be something wrong with the argument, even if we cannot explain what the error is. Naturally, advocates of the Knowledge Argument find this stance unsatisfying. "There must be a solution to a problem for my account (even though I can't think of one)" is not generally accepted as an adequate defense of views in philosophy or in science.

A sixth kind of argument turns on the *Relative Simplicity* of properties in our sensations. To understand this argument, we may begin with a less dramatic version of Jackson's starting point. Consider that congenitally blind people usually know many things about colors, and some know a great deal about light waves, stimulation of retinal cells by light, optic nerves, and visual processing in the brain. Yet it is extremely plausible that something is missing from their experience. They may know that a red light means one should stop, but they have never had the experience that gives "red" its meaning, in normally sighted people. Advising them to repair this lack by studying harder would be an exercise in grim humor.

These remarks can be generalized to apply to congenitally deaf people, who may know about compression waves in the air; and to people who know about molecular structures of molecules they are unable to smell, even though those molecules cause distinctive odor experiences in most people. A few people are born without the ability to experience pain, but that does not affect their intelligence, or their ability to understand anatomy.

The properties to which these considerations apply – colors, sound qualities, scents, flavors, pains and others – are collectively known as *phenomenal qualities* or *qualia*. (The latter is pronounced 'kwah´-lee-uh' and its singular form is "quale," pronounced 'kwah´-lay'.) Qualia are properties, and they are the most intuitive candidates for non-physical properties.

Many qualia have some degree of complexity. For example, some sounds are chords, most colors are mixtures (orange, for example, is a mixture of red and yellow), and cooks are often complimented for the complexity of the tastes of their food. Qualia do not, however, have the same degree of complexity as the physical properties with which they are correlated. For example, they are not as complex as properties of compression waves, or patterns of light energies at various wavelengths, or arrangements of bonding among atoms. Neither are qualia as complex as the multitude of neural events that are required for us to have experiences.

This difference of complexity gives rise to the Relative Simplicity argument for a dualism of properties (i.e., either property dualism or event dualism).

RS1. The physical properties with which qualia are correlated are complex.
RS2. Qualia are relatively simple properties (i.e., they are simple relative to their physical correlated properties).
RS3. No property can be both complex and relatively simple (i.e., no property can be simpler than itself).

So,

RS4. Qualia are not identical with their physical correlated properties.
RS5. Qualia are not identical with physical properties with which they are not at least correlated.

So,

RS6. Qualia are not identical with any physical properties.

Some physicalists resist this conclusion by pointing to water, which is in fact composed of H_2O molecules even though the way it appears to us gives no hint of that. Analogously, they say, RS2 may be false; maybe qualia are not relatively simple properties, but merely appear to us as being so. Dualists, however, think that physicalists who take this line are missing the point of their own analogy. Water has a shiny, clear appearance. Alcohol looks the same; so shiny clarity cannot be the same property as being composed of H_2O. Thus, the pattern in the water case is that when a thing does not appear as what it is, a distinct property is involved in the way it does appear. Applying this pattern to qualia should lead physicalists to say that qualia are complex properties that have a distinct property involved in the way that they appear. But this result concedes the need for properties that are distinct from the complex properties with which they are correlated.

Other physicalists reject the argument from Relative Simplicity of qualia by proposing that experiences have no qualia, but only *represent* properties; and the properties that are represented are all physical properties such as patterns of compression waves, patterns of energies at various wavelengths of light, molecular structures, and so on. Dualists can respond that experience does not represent such properties *as* having the complexity that they actually have, and that relatively simple qualia will have to be introduced in order to explain how a complex property can be represented *as* relatively simple by an experience.

4 Motivations for Dualism

Arguments for dualism aim to support dualism by relying on premises that are at least claimed to be less controversial than dualism. By "motivations" for dualism, I mean reasons for hoping that dualism is true, where those reasons rest on assumptions that are at least as controversial as dualism. We have already seen one such motivation – the fit between dualism and our hope for survival after bodily death.[5] This section introduces three other kinds of motivations.

The first of these concerns the issue of *free will*. If everything is physical, and the physical world is deterministic (i.e., every event has a sufficient cause), then all my actions are determined by a series of causes that stretch back to times as early as you like to consider, up to the big bang. This view of our world seems to leave no room for free will.

Our most powerful physical theory is quantum mechanics, and leading interpretations of that theory hold that some events have no cause. It is widely held, however, that mere quantum mechanical indeterminacy also leaves no room for free will in any meaningful sense. Free will is often connected with the notion of moral responsibility. It is not evident how people could be responsible for their actions if it turned out that whether they did them or not depended on whether some uncaused event in their brains occurred or did not occur.

Some thinkers have concluded that there must be a non-physical self that is capable of making uncaused, but morally responsible decisions. However, it is not evident how this proposal escapes the dilemma that decisions are either caused (which some thinkers take to be incompatible with being morally responsible) or uncaused (and again, not something for which one is responsible).

Many philosophers have held that the traditional notion of free will is confused beyond repair. Others have tried to clarify, and thus rescue, free will. Since the status of free will is highly controversial, one cannot expect reflections upon it to provide a non-controversial argument for or against physicalism.[6]

Another motivation concerns the *unity of consciousness*. This motivation starts with the observation that we generally have more than one quale at a time. For example, when watching a conductor lead an orchestra, we have both visual and auditory experiences. We often have complex non-sensory mental states. For example, we may find a stranger attractive and entertain

strategies of approach, all the while doubting that any approach would be successful and chiding ourselves for our lack of confidence.

Elements of complex mental states of this kind do not seem to us to be mere items on a list. They seem to have a unity with each other, something about them that makes them all obviously *my* perceptions, desires, thoughts and doubts. This unity of our consciousness has seemed to some thinkers to provide a reason for a non-physical self – a self that would explain the sense of unity by being the common possessor of the several mental states. Such a view can allow that different states depend on events in different parts of the brain, while denying that occurrence in the same brain at the same time is sufficient by itself to explain the unity of consciousness.

This view is, however, controversial. An alternative view notes that mental states have many relations among themselves. For example, we may desire what we also see, our thoughts may be about means to satisfy our desires, our lack of confidence may be based on unpleasant memories. This alternative view holds that relations of these kinds among our several mental states are sufficient to bundle them into a unified consciousness.

Similar controversy concerns *personal identity*, the continuity of the same person over a period of time. There is a host of respects in which I am different from what I was when I was 10 years old, but it seems compelling to say that I am the same person. Perhaps there is not a single atom in my brain that was there when I was 10, and the distribution of synaptic connection strengths between my neurons is undoubtedly quite different now from what it was then. If there is something the same about me – something that grounds the fact that I am the same person – then, it seems, it must be a non-physical self whose possession of all my mental states is what makes them all mine.

Once again, an alternative view holds that sameness of me-now and me-at-10 is sufficiently explained by both the existence of a few memories of episodes that happened when I was 10, and the gradualness of the changes as I have aged. To explain this last point a little: If one compares the mental organization of a person at times differing by, say, one month, one can expect a massive – but of course not perfectly complete – overlap of opinions, desires, abilities and memories.

As with unity of consciousness, the issue of what is the best theory of personal identity is controversial. To some thinkers, these features of our mental life suggest a non-physical self. But if we state this suggestion as an argument, the premises will be as controversial as the dualistic conclusion that may be based on them.

5 Conclusion

There is a large literature on the debate between dualism and physicalism. There are replies to everything I have said in the section on arguments, counter-replies to those replies, and so on. The foregoing discussion, however, provides an understanding of what dualism claims, and of the issues that figure most prominently in current discussions of dualism.

Notes

1 For these responses, see the article "Epiphenomenalism" in the online *Stanford Encyclopedia of Philosophy*, and several of the papers referred to therein.
2 For a developed version and defense of this kind of argument, see Swinburne (1997).
3 For a fully developed version and discussion of this kind of argument (including a complication concerning Russellian Monism), see Chalmers (2010, Chs. 5 and 6).
4 Several important papers about the KA are collected in Ludlow *et al.* (2004).

5 This hope may be tempered by reflection on what kind of mind would survive in those who have suffered brain damage due to Alzheimer's disease, strokes, etc. See Gennaro and Fishman (2015) for explanation and discussion of this issue.
6 A good source for issues concerning free will is Kane (2005).

References

Chalmers, D. J. (2010) *The Character of Consciousness*, Oxford: Oxford University Press.
Gennaro, R. J., and Fishman, Y. I. (2015) "The Argument from Brain Damage Vindicated," in M. Martin and K. Augustine (eds.) *The Myth of Afterlife: The Case against Life after Death*, Lanham, MD: Rowman & Littlefield.
Jackson, F. C. (1982) "Epiphenomenal Qualia," *Philosophical Quarterly* 32: 127–136.
Jackson, F. C. (1986) "What Mary Didn't Know," *Journal of Philosophy* 83: 291–295.
Jackson, F. C., and Braddon-Mitchell, D. (2007) *The Philosophy of Mind and Cognition* (2nd edition), Oxford: Blackwell.
Kane, R. (ed.) (2005) *The Oxford Handbook of Free Will* (2nd edition), Oxford: Oxford University Press.
Ludlow, P., Nagasawa, Y. and Stoljar, D. (eds.) (2004) *There's Something About Mary: Essays on Phenomenal Consciousness and Frank Jackson's Knowledge Argument*, Cambridge, MA: MIT Press.
Robinson, W. S., "Epiphenomenalism," *The Stanford Encyclopedia of Philosophy* (Fall 2015 Edition), Edward N. Zalta (ed.), URL = https://plato.stanford.edu/archives/fall2015/entries/epiphenomenalism/.
Swinburne, R. (1997) *The Evolution of the Soul* (revised edition), Oxford: Clarendon Press.

Related Topics

Consciousness, Personal Identity, and Immortality
Consciousness in Western Philosophy
Materialism
Consciousness, Free Will, and Moral Responsibility
Idealism, Panpsychism, and Emergentism
The Unity of Consciousness

Further Reading

Alter, T., and Howell, R. (eds.) (2012) *Consciousness and the Mind-Body Problem*, New York: Oxford University Press.
Chalmers, D. J. (1996) *The Conscious Mind*, Oxford: Oxford University Press. (Foundational source for classification of physicalist and dualist views, and extensive discussion of arguments in this field.)
Kirk, R. (2005) *Zombies and Consciousness*, Oxford: Oxford University Press.
Papineau, D., and Selina, H. (2005) *Introducing Consciousness*, Cambridge: Icon Books. (Papineau's text and Selina's cartoons give a highly accessible introduction to issues about consciousness.)
Robinson, W. S. (2004) *Understanding Phenomenal Consciousness*, Cambridge: Cambridge University Press. (Clarification of many views about consciousness, culminating in an argument for epiphenomenalistic event dualism.)