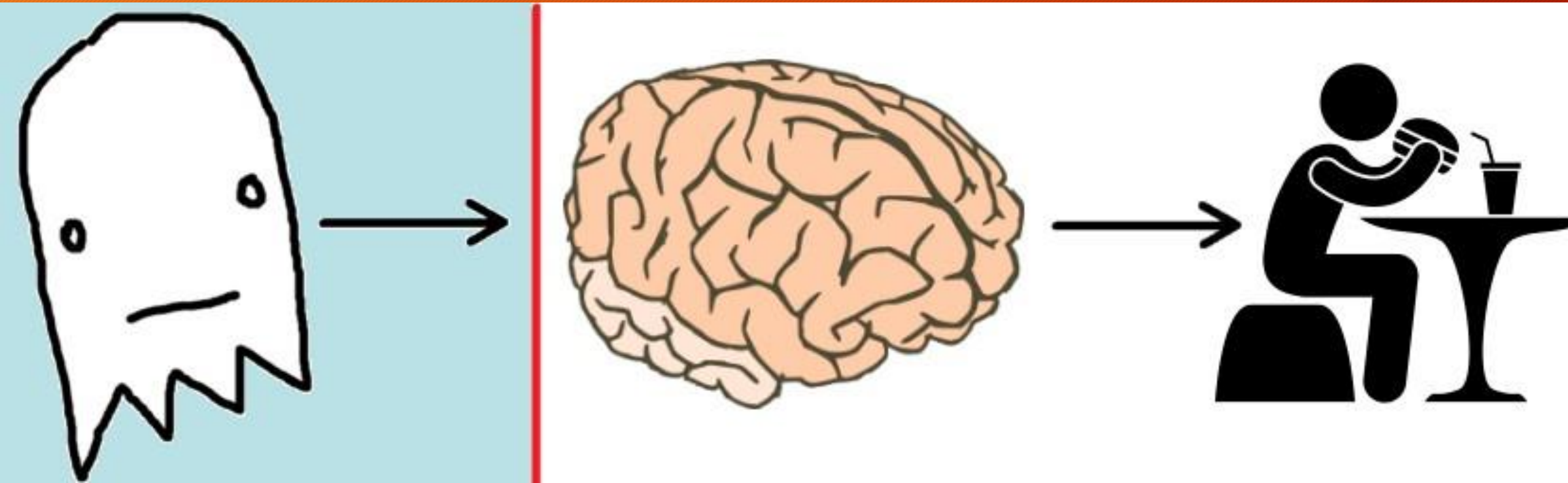


Dualism



Plato's Dualism

- It seems fair to say that some such dualism of the mental and the material is entrenched in our ordinary thinking.
- It is part of folklore in many cultures and of most established religions that, as Plato claimed, each of us has a soul, or spirit, that survives bodily death and decay, and that we are really our souls, not our bodies, in that when our bodies die we continue to exist in virtue of the fact that our souls continue to exist.
- And it is our souls in which our mentality inheres; thoughts, consciousness, rational will, and other mental acts, functions, and capacities belong to souls, not to material bodies.

Two Varieties of Dualism

- Dualist views come in two main varieties:
- *Interactionism* holds that the mental and physical are fundamentally distinct but interact in both directions.
- *Epiphenomenalism* holds that the mental and physical are fundamentally distinct and that physical states affect mental states, but denies that mental states affect physical states.

Interactionism

- In the history of philosophy, the most important dualist view is the interactionism of René Descartes.
- Descartes' main important work is his *Meditations on First Philosophy*.
- This is a series of six meditations. In the first meditation, Descartes attempts to cast doubt on all of his beliefs and finds that he cannot be certain that the external world exists.
- In the second meditation, he finds that there is one thing he can be certain of: his own mind, and thus his own existence ("I think, therefore I am").
- He concludes that he is fundamentally "a thing that thinks."
- In the third through fifth meditations, Descartes infers the existence of God and uses this to justify his belief in the external world (since God would not deceive him).
- In the sixth meditation, he reflects on the difference between the mental and the physical and concludes that they are fundamentally distinct.

Descartes' Arguments

- He uses a number of arguments here:
- One can be certain about the mental but not about the physical;
- the mind is indivisible while any physical entity is divisible;
- and most famously, one can imagine oneself existing without a body, so one must be distinct from one's body and likewise from any physical entity.
- The *Meditations* argue for the distinctness of mind and body but do not say much about their relationship.

A. Dualism

- This question is addressed in more depth in Descartes' *Passions of the Soul* (chapter 2), which discusses the interaction between mind and body.
- Humans have a rational soul, which receives perceptions as "passions" from the brain and performs actions through acts of will that affect the brain.
- Sensation and movement between the brain and the soul via the pineal gland (a small gland centrally located in the brain).
- On this picture, mind and body involve separate substances but interact in both directions.

A. Dualism

- Descartes' views about the mind have been highly influential, but today they are widely rejected.
- Many objections have been raised to the idea that a nonphysical mind controls the movement of a physical body.
- It is not clear just how a nonphysical substance and a physical substance can interact.
- The idea that the pineal gland mediates this interaction has long since been rejected on neurological grounds, and it is unclear whether any better causal model could exist.
- Further, it is often held that the interaction cannot be reconciled with physics, which postulates a closed network of physical interactions, with no room for a nonphysical mind to play any role.

A. Dualism

- In reaction to objections of this sort, some have endorsed epiphenomenalism, accepting the distinction of mind and body but denying any causal role for mind in the physical world.
- Such a view is first proposed by Thomas Huxley. Huxley addresses Descartes' view that mechanical events are *causa physica*, whose behavior is controlled entirely by their brain and which look random altogether.
- Huxley explains that consciousness, or *causa mentis*, is the first aspect of this view, but does not have the second. That is, agents' behavior is controlled entirely by their brain, but they have mental experiences.
- On this view, the mind is a sort of by-product of the brain that has no effect on it. As far as it is active, Huxley explains that the state goes for humans.

Epiphenomenalism

- But epiphenomenalism is strongly counter to common sense.
- Intuitively, it is hard to accept that our thoughts and feelings have no effect on our behavior.
- If mind has no effect on behavior, then it has no effect on what we say about the mind, so it seems that one could remove the mind and we would go on talking about it just the same.



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Epiphenomenalism

- In reaction to objections of this sort, some have embraced epiphenomenalism, retaining the distinctness of mind and body but denying any causal role for mind in the physical world.
- Huxley addresses Descartes' view that nonhuman animals are mere automata, whose behavior is controlled entirely by their brain and which lack minds altogether.
- Huxley suggests that contemporary evidence favors the idea that animals' behavior is controlled entirely by their brain but does not favor that they have minds nevertheless.
- On this view, the mind is a sort of by-product of the brain that has no effect on it.

Epiphenomenalism

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- Intuitively, it is hard to accept that our thoughts and feelings have no effect on our behavior.
- If mind has no effect on behavior, then it has no effect on what we say about the mind, so it seems that one could remove the mind and we would go on talking about it just the same.

Substance Dualism

- In any case, the dualist view of persons that Descartes defended is a form of substance dualism.
- Substance dualism is the thesis that there are substances of two fundamentally distinct kinds in this world, namely, minds and bodies and that a human person is a composite entity consisting of a mind and a body, each of which is an entity in its own right.
- Dualism of this form contrasts with monism, according to which all things in the world are substances of one kind, our world is fundamentally material, consisting only of bits of matter and complex structures made up of bits of matter, all behaving in accordance with physical laws.
- This is materialism, or physicalism.

Substance Dualism

- But what is a substance? Traditionally, two ideas have been closely associated with the concept of a substance.
- First, a substance is something in which properties “inhere”; that is, it is what has, or instantiates, properties.
- Linguistically, this idea is sometimes expressed by saying that a substance is the subject of predication, something to which we can attribute predicates while it cannot in turn be predicated of anything else.

Substance Dualism

- Second, and this is more important for us, a substance is thought to be something that has the capacity for independent existence.
- Descartes himself wrote, “The notion of a substance is just this—that it can exist by itself, that is without the aid of any other substance.”
- The major tenets of Cartesian substance dualism:
 - 1. There are substances of two fundamentally different kinds in the world, mental substances and material substances—or minds and bodies.
 - The essential nature of a mind is to think, be conscious, and engage in other mental activities; the essence of a body is to have spatial extensions (a bulk) and be located in space.

Substance Dualism

- 2. A human person is a composite being (a “union,” as Descartes called it) of a mind and a body.
- 3. Minds are diverse from bodies; no mind is identical with a body.
- 4. Minds and bodies causally influence each other. Some mental phenomena are causes of physical phenomena and vice versa.

Arguments for Substance Dualism

- There are four kinds of arguments for substance dualism:
- (1) Leibniz's law arguments,
- (2) The explanatory gap argument
- (3) The conceivability argument
- (4) the knowledge argument

Leibniz's Law Arguments

- At the heart of substance dualism is the idea that your mind and your brain are two distinct things, not one and the same thing. That is, the idea of the nonidentity of two things.
- Central to the logic governing these ideas is “Leibniz’s law.”
- We can represent Leibniz’s law as the indiscernibility of identicals, the principle says that:
 - if x and y are one and the same, then x and y must have all of their properties in common. And
 - if there is some property that the one has and the other lacks, then x and y are distinct. They are two distinct things, not one and the same thing.

Leibniz's Law Arguments

- If there are one or more properties that your mind has and your body lacks, or that your body has and your mind lacks, then it follows by Leibniz's law that your mind and your body are distinct.
- A similar kind of reasoning attempts to show that the mind is not identical to any physical thing—any physical body, object, or system.
- Crucial to such lines of reasoning is to identify some property that minds have and physical things lack, or vice versa.
- There are several ways in which different approaches to substance dualism might try to characterize the very different natures of minds and physical bodies.

Leibniz's Law Arguments

- The first alleged difference originates with Descartes. He holds that physical bodies are spatial and that minds are not.
- Some substance dualists hold that, in contrast to physical bodies, it makes no sense at all to describe a mind as having spatial parts.
- Of course, many physicalists will resist this dualist line of thought about spatial parts and spatial locations.
- They may hold that even though it is not apparent where your belief or sensation is, nonetheless, in reality, it does have a spatial location, perhaps in the cerebral cortex of your brain.

Leibniz's Law Arguments

- The second alleged contrast is - that we can trace back to Descartes- that minds are thinking things and that physical objects are unthinking things.
- Thinking is a rational process or activity. It is the process or activity of reasoning. Descartes holds that only mental substances are capable of performing this activity or undergoing this process.
- In contrast, every physical object, no matter how fancy or complicated, is necessarily an unthinking thing.
- Of course, many proponents of neuroscience and artificial intelligence disagree with such a view.

Leibniz's Law Arguments

- A third alleged contrast is property of “aboutness,” also known as intentionality, that held by some dualists to be a property that only nonphysical things can have.
- Intentionality appears to be a sort of relation. You think about the Azadi Tower, and this looks to be a relation between you and the Azadi Tower.
- However, if thinking about is a relation, it looks to be a very strange relation.
- We can also think about things in the far future and the distant past.
- Perhaps strangest of all is our ability to think about things that do not even exist.
- Given how strange intentionality is, it is difficult to see how something that's purely physical, like a brain, can have it and thereby be related to things that don't exist in space and time.

Leibniz's Law Arguments

- A fourth alleged contrast is that only mental substances can bear properties that are “phenomenal.”
- There is something it is like to be a conscious human being.
- The tanginess of the sensation seems not to be a property of the lemon itself—the lemon doesn't taste itself.
- The tanginess doesn't even need the lemon to exist, since we can have hallucinatory taste sensations.
- Where do such phenomenal properties reside? A substance dualist offers that such properties cannot reside in merely physical objects.

Leibniz's Law Arguments

- A fifth alleged contrast is a difference in how they are known.
- Physical bodies seem to be known via the senses. However, the senses can be deceived, and, thus, sometimes something that seems to exist really doesn't.
- If it is possible that you are wrong in believing something, then you can't be sure that you're right.
- Arguably, while you can be wrong about the existence of physical objects, you can't be wrong about the existence of your own mind.
- If you think that you are thinking, you are guaranteed to be correct. And if you are thinking, then your mind must exist.
- According to this line of thought, your mind is known with certainty to exist even though no physical object is known with certainty to exist.

Leibniz's Law Arguments

- We can take any one of the five differences, combine it with Leibniz's law, and create an argument for substance dualism.
- Recall for example, the claim that minds but not bodies have the special epistemological feature of being known for certain to exist.
- Arguably, one knows for certain that one's mind exists, but one does not know for certain that any physical bodies exist.
- So the mind has the property of being known with certainty to exist, while every physical body lacks that property.
- It would seem to follow by Leibniz's law that the mind must be distinct from every physical body.

Intensional fallacy

- What is the intensional fallacy? Note that we are here spelling “intensional” with an “s”—it is not to be confused with “intentional” spelled with a “t.”
- This problem can be spelled out in terms of the following analogy:
- Recall the story about the Superman.
- Superman and Clark Kent are one and the same person. However, the character Lois Lane doesn’t know that Clark Kent and Superman are one and the same.
- Consider the following bad argument about Superman, an argument that abuses Leibniz’s Law:



Intensional fallacy

- Premise 1: Superman has the property of being believed by Lois to be bulletproof.
- Premise 2: Clark Kent lacks the property of being believed by Lois to be bulletproof.
- Premise 3: If Superman has a property that Clark Kent lacks then, by Leibniz's law, Clark and Superman are two distinct people.
- Conclusion: Clark and Superman are two distinct people.

Intensional fallacy

- Why is the above argument an abuse of Leibniz's law?
- In order for Leibniz's law to be used correctly, the relevant properties have to be properties of the things we are seeking to identify or distinguish.
- However, what Lois believes about Superman isn't really a property of Superman. Similarly, Lois's belief that Clark isn't bulletproof isn't a property of Clark.
- This bad form of reasoning is known as the intensional fallacy.
- we can describe the intensional fallacy as involving a confusion between, properties that something really has, with properties it has only under some description.
- What we think about something may be very different from what really truly is going on with that thing.

Intensional fallacy

- Some Leibniz's law arguments for dualism commit this fallacy.
- For instance, a version of a Leibniz's law argument that goes like this:
- Premise 1: My mind has the property of being known with certainty.
- Premise 2: No physical thing has that property.
- Premise 3: By Leibniz's law, if my mind has a property that no physical thing has, then my mind is not identical to any physical thing.
- Conclusion: My mind is not identical to any physical thing.

Explanatory Gap Arguments

- Explanatory gap arguments identify some aspect of the mind that cannot be explained in terms of physical substances and then conclude that this aspect of the mind must be due to the mind's being a nonphysical, wholly mental substance.
- Take, for example, an explanatory gap argument of Descartes' concerning language.
- Descartes thinks that the ability of producing and understanding language could never be explained in terms of the functioning of a purely physical system—no machine, no matter how elaborate, could engage in an intelligent conversation with an adult human. Even if a machine made sounds that superficially seemed like speech, it couldn't understand anything it said.

Explanatory Gap Arguments

- We can see Descartes as saying that there is an explanatory gap between physical substances and the intelligent use of language.
- Further, we see him concluding from the explanatory gap that there must be a substantial gap—that there is a distinction here between two distinct things. On the one hand are mental things, which are the proper basis for the understanding of language, and on the other hand are physical things, which cannot themselves engage in intelligent conversation.
- The intelligent use of language is not the only thing that a dualist can appeal to in attempting an explanatory gap argument. They may instead focus on the phenomenal aspects of our mental lives, especially as they arise in connection with conscious sensory perception.

Explanatory Gap Arguments

- This idea is grounded in the difference between the easy problems and the hard problem:
- The easy problems concern the explanation of behavioral and cognitive functions, but the hard problem does not.
- One can argue that by the character of physical explanation, physical accounts explain only structure and function, where the relevant structures are spatiotemporal structures, and the relevant functions are causal roles in the production of a system's behavior.
- Furthermore, one can argue that explaining structures and functions does not suffice to explain consciousness. If so, no physical account can explain consciousness.

Explanatory Gap Arguments

- 1. Physical accounts explain at most structure and function.
- 2. Explaining structure and function does not suffice to explain consciousness.
- _____
- 3. No physical account can explain consciousness.

Explanatory Gap Arguments

- If this is right, then while physical accounts can solve the easy problems (which involve only explaining functions), something more is needed to solve the hard problem.
- It would seem that no reductive explanation of consciousness could succeed.
- And if we add the premise that *what cannot be physically explained is not itself physical* (this can be considered an additional final step of the explanatory argument), then materialism about consciousness is false, and the natural world contains more than the physical world.

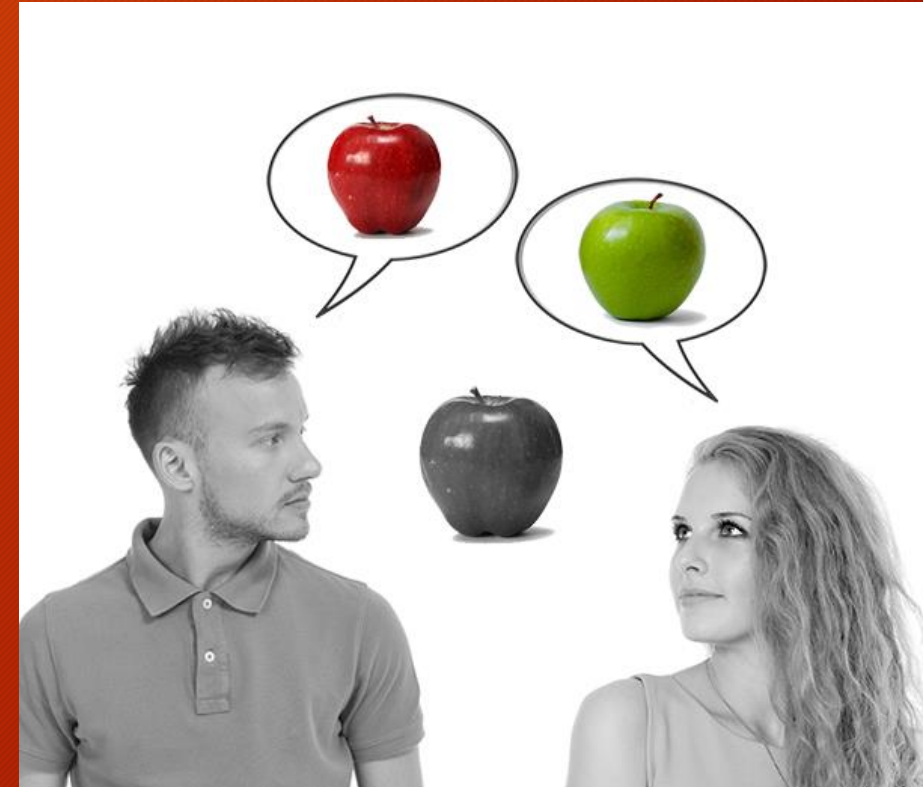
The Conceivability Argument

According to this argument, it is conceivable that there be a system that is physically identical to a conscious being but that lacks at least some of that being's conscious states.



Such a system might be a zombie: a system that is physically identical to a conscious being but that lacks consciousness entirely.

It might also be an invert, with some of the original being's experiences replaced by different experiences, or a partial zombie, with some experiences absent, or a combination thereof.



The Conceivability Argument

- These systems will look identical to a normal conscious being from the third-person perspective.
- In particular, their brain processes will be molecule-for-molecule identical with the original, and their behavior will be indistinguishable.
- But things will be different from the first-person point of view. What it is like to be an invert or a partial zombie will differ from what it is like to be the original being. And there is nothing it is like to be a zombie.



The Conceivability Argument

- There is little reason to believe that zombies exist in the actual world, but many hold that they are at least conceivable.
- we can coherently imagine zombies, and there is no contradiction in the idea that reveals itself even on reflection.
- Likewise, many hold that the same goes for a zombie world: a universe physically identical to ours but in which there is no consciousness.
- Something similar applies to inverts and other duplicates.
- From the conceivability of zombies, proponents of the argument infer their metaphysical possibility.

The Conceivability Argument

- Zombies are probably not naturally possible: they probably cannot exist in our world with its laws of nature. But the argument holds that zombies could have existed, perhaps in a very different sort of universe.
- From here, it is inferred that consciousness must be nonphysical.
- If there is a metaphysically possible universe that is physically identical to ours but that lacks consciousness, then consciousness must be a further, nonphysical component of our universe.
- If God could have created a zombie world, then (as Kripke puts it) after creating the physical processes in our world, he had to do more work to ensure that it contained consciousness.

The Conceivability Argument

- We can put the argument in its simplest form as follows:
 - 1. It is conceivable that there are zombies.
 - 2. If it is conceivable that there are zombies, it is metaphysically possible that there are zombies.
 - 3. If it is metaphysically possible that there are zombies, then consciousness is nonphysical.
 - _____
 - 4. Consciousness is nonphysical.

The Conceivability Argument

- A somewhat more general and precise version of the argument appeals to P, the conjunction of all microphysical truths about the universe, and Q, an arbitrary phenomenal truth about the universe. (Here, ‘&’ represents ‘and’ and ‘~’ represents ‘not.’)
- 1. It is conceivable that $P \ \&\sim\ Q$.
- 2. If it is conceivable that $P \ \&\sim\ Q$, it is metaphysically possible that $P \ \&\sim\ Q$
- 3. If it is metaphysically possible that $P \ \&\sim\ Q$, then materialism is false.
- _____
- 4. Materialism is false.

The Knowledge Argument

- According to the knowledge argument, there are facts about consciousness that are not deducible from physical facts.
- Someone could know all of the physical facts, be a perfect reasoner, and still be unable to know all of the facts about consciousness on that basis.
- Frank Jackson's canonical version of the argument (Jackson 1982) provides a vivid illustration.

The Knowledge Argument

- Mary is a neuroscientist who knows everything there is to know about the physical processes relevant to color vision. But she has been brought up in a black-and-white room and has never experienced red.
- Despite all her knowledge, it seems that there is something very important about color vision that Mary does not know. She does not know what it is like to see red.
- Even complete physical knowledge and unrestricted powers of deduction do not enable her to know this.
- Later, if she comes to experience red for the first time, she will learn a new fact of which she was previously ignorant: she will learn what it is like to see red.



The Knowledge Argument

- Jackson's version of the argument can be put as follows:
 - 1. Mary knows all the physical facts.
 - 2. Mary does not know all the facts.
 - _____
 - 3. The physical facts do not exhaust all the facts.
- One can put the knowledge argument more generally:
 - 1. There are truths about consciousness that are not deducible from physical truths.
 - 2. If there are truths about consciousness that are not deducible from physical truths, then materialism is false.
 - _____
 - 3. Materialism is false.

The Shape of the Arguments

- Explanatory gap argument
 - 1. Physical accounts explain at most structure and function.
 - 2. Explaining structure and function does not suffice to explain consciousness.
 - 3. No physical account can explain consciousness.
- The conceivability argument
 - 1. It is conceivable that $P \ \& \sim Q$.
 - 2. If it is conceivable that $P \ \& \sim Q$, it is metaphysically possible that $P \ \& \sim Q$.
 - 3. If it is metaphysically possible that $P \ \& \sim Q$, then materialism is false.
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 - 3. Materialism is false.

- These last three sorts of argument are closely related. They all start by establishing an *epistemic* gap between the physical and the phenomenal domains.
- Each denies a certain sort of close *epistemic* relation between the domains: a relation involving what we can know or conceive or explain.
- In particular, each of them denies a certain sort of epistemic entailment from physical truths P to the phenomenal truths Q : deducibility of Q from P or explainability of Q in terms of P or conceiving of Q upon reflective conceiving of P .

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- Perhaps the most basic sort of epistemic entailment is a priori entailment, or implication.
- All of these three arguments can be seen as making a case against the claim that P implies Q.
- If a perfect reasoner who knows only P cannot deduce that Q (as the knowledge argument suggests), or if one can rationally conceive of P without Q (as the conceivability argument suggests), then it seems that P does not imply Q.
- The explanatory argument can be seen as turning on the claim that an implication from P to Q would require a functional analysis of consciousness and that the concept of consciousness is not a functional concept.

The Shape of the Arguments

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 3. If it is metaphysically possible that $P \& \neg Q$, then materialism is false.
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 1. There are truths about consciousness that are not deducible from physical truths.
 2. If there are truths about consciousness that are not deducible from physical truths, then materialism is false.
 3. Materialism is false.

- After establishing an *epistemic* gap, these arguments proceed by inferring an *ontological* gap.
- The conceivability argument infers from conceivability to metaphysical possibility; the knowledge argument infers from failure of deducibility to difference in facts; and the explanatory argument infers from failure of physical explanation to non-physicality.
- One might say that these arguments infer from a failure of epistemic entailment to a failure of ontological entailment.
- It is widely agreed that materialism requires that P necessitates all truths. So if there are phenomenal truths Q that P does not necessitate, then materialism is false.

The Shape of the Arguments

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- We might call these arguments *epistemic* arguments against materialism.
- Epistemic arguments arguably descend from Descartes' arguments against materialism.
- The general form of an epistemic argument against materialism is as follows:
 - 1. There is an epistemic gap between physical and phenomenal truths.
 - 2. If there is an epistemic gap between physical and phenomenal truths, then there is an ontological gap, and materialism is false.
 - _____
 - 3. Materialism is false.