

Our topic today is the class of answers to the survival question which make reference to immaterial souls. There were four of these:



These theories are importantly different. But they have one thing in common: all are false if there are no such things as immaterial souls.

Last time we discussed some reasons to think that we should not believe in the existence of immaterial souls unless we have a good argument that they exist.

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Properties related to conscious experience include the property of feeling an itch or a pain, or the sensation of seeing red or hearing a loud noise. These properties are sometimes called **phenomenal properties**.

Human beings (obviously) have phenomenal properties — we experience all kinds of sensations.

Suppose that we were wholly physical things (as both the organism view and the brain view say). What would that imply about the nature of our phenomenal properties?

The following principle seems plausible:

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But then it seems to follow from the fact that we have phenomenal properties that

> If we are wholly physical things, then phenomenal properties are physical properties.

We'll now look at an argument that phenomenal properties are **not** physical properties — which, given the above, would show that we are not wholly physical things. We'll now look at an argument that phenomenal properties are **not** physical properties — which, given the above, would show that we are not wholly physical things.

First, let's consider a paradigmatically physical property, like the property of being water. What makes this a physical property?

Let's pretend for simplicity that protons, neutrons, and electrons are the most fundamental physical particles. Suppose now that we start with these basic building blocks and construct some molecules which contain two hydrogen atoms and one oxygen atom. Suppose now that we combine a quantity of these molecules in some container.

Would we have to do anything else to fill the container with water?

It seems clear that we would not. Once you arrange basic particles into H2O molecules, you have made water. It would be **impossible** to have a quantity of H2O without having water. It seems clear that we would not. Once you arrange basic particles into H2O molecules, you have made water. It would be **impossible** to have a quantity of H2O without having water.

Another way of putting this is that once you have fixed all of the facts about the fundamental particles, you have also fixed all of the facts about water.

Let's call the facts about the fundamental physical particles the **basic physical facts**. Then the idea is that the basic physical facts necessitate the water facts.

This seems like a pretty plausible definition of a physical property: a property is physical just in case the basic physical facts necessitate all of the facts about which things have the property.

Consider some more complex properties, like the property of being a cell, or being made of wood, or being a pumpkin. Are these all physical properties, in this sense? Consider some more complex properties, like the property of being a cell, or being made of wood, or being a pumpkin. Are these all physical properties, in this sense?

It seems clear that they are. It is pretty difficult to imagine something which is a molecule for molecule duplicate of a piece of wood which was not itself a piece of wood.

Indeed, at this point it might seem hard to see how **any** property could fail to be a physical property. It might seem that **all** of the facts about the universe are necessitated by the basic physical facts about the universe.

This brings us to the central mystery of consciousness: it looks like phenomenal properties are, in this respect, different from pretty much any other property you can think of. This brings us to the central mystery of consciousness: it looks like phenomenal properties are, in this respect, different from pretty much any other property you can think of.

Consider the following thought experiment from David Chalmers:

"... 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 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."



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We cannot conceive of a molecule-for-molecule duplicate of a basketball which is not spherical, or not rubber, or not bouncy — all of these properties are necessitated by the basic physical properties of the ball. But it seems that we can conceive of a molecule for molecule duplicate of you which lacks your phenomenal properties.

Such a being would be, in Chalmers' sense, a zombie.

Zombies are examples of things which are physical duplicates of conscious beings but which lack consciousness. It seems that we can also, as Chalmers points out, imagine examples of beings which are physical duplicates of conscious beings which have **different** phenomenal properties than the original beings. One example here is the example of **spectrum inversion**.

Here's a representation of the different hues that we represent in visual experience:



Someone who is spectrum inverted relative to you would, when looking at an object, see the hue opposite on the circle to the one that you see.

So, the sort of experience you have when you look at a lime would be the sort of experience your invert would have when looking at a ripe tomato. So, for example, imagine that you are having an experience which feels like this.

Then your invert's experience would feel like this.



But even though your experiences might feel different from the inside, many have thought that spectrum inversion might be undetectable. After all, if someone asks your invert what color bananas are, they'll say the same thing as you — 'yellow.' After all, they've been taught to use the word 'yellow' to apply to just the same things as you. But even though your experiences might feel different from the inside, many have thought that spectrum inversion might be undetectable. After all, if someone asks your invert what color bananas are, they'll say the same thing as you — 'yellow.' After all, they've been taught to use the word 'yellow' to apply to just the same things as you.

More generally, many have thought that it is conceivable that your invert might be a molecule-for-molecule duplicate of you.

If so, examples of spectrum inversion, like the example of zombies, seems to show that it is conceivable that two molecule-for-molecule duplicates could differ in their phenomenal properties.

And that gives us the resources to construct an argument.

If a situation is conceivable, it is possible.

It is possible that two beings be physically the same but differ with respect to their phenomenal properties.

If we are wholly physical things, then phenomenal properties are physical properties.

Phenomenal properties are not physical properties.

It is conceivable that

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We are not wholly physical things.

If we are not wholly physical things then immaterial souls exist.

Immaterial souls exist.

THE CONCEIVABILITY ARGUMENT

 It is conceivable that two beings be physically the same but differ with respect to their phenomenal properties. If a situation is conceivable, it is possible.
3. It is possible that two beings be physically the same but differ with respect to their phenomenal properties. (1,2)
4. Phenomenal properties are not physical properties. (3, definition of 'physical property')
5. If we are wholly physical things, then phenomenal properties are physical properties.
6. We are not wholly physical things. (4,5)
7. If we are not wholly physical things then immaterial souls exist.
C. Immaterial souls exist. (6,7)

If we are not wholly physical things, then presumably we are (at least in part) immaterial souls. So, if the conceivability argument is sound, there are immaterial souls. And if there are immaterial souls, it seems plausible that they would play a role in answering the survival question.

THE CONCEIVABILITY ARGUMENT



Suppose that you don't believe in immaterial souls. How should you respond?

One option is to deny premise (2), and say that sometimes situations can be conceivable, but not genuinely possible.

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Here is a possible counterexample to this premise:

The barber

Deep in the Indiana countryside, there's a small town; and in this town there's a barber. Some of the men in this small town - the industrious ones - shave themselves every morning. But others (the lazy ones) don't; and the barber shaves all of them. (There's no one else around who will do it.) Moreover, he (the barber's a man) never shaves any of the industrious ones - he never shaves any of the men that shave themselves.

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Can you clearly imagine this small town? Is it possible for there to be a town of this sort?



So if he shaves himself, then he doesn't, and if he doesn't, he does.

The barber

This is thus an example of a scenario which, at first glance, seems possible, but then turns out, on closer inspection to be impossible, because it contains a hidden contradiction. Might the someone who does not believe in immaterial souls plausibly say the same thing about the examples of zombies and spectrum inversion?

Maybe. But there are two residual challenges.

The first is just to say what this contradiction could be. It is easy enough to explain what the contradiction is in the story of the barber. But what is contradictory about the zombie or inversion scenarios?

The second is more subtle. And this is to explain why the scenarios seem conceivable in the first place. If phenomenal properties really are physical properties, why is it so easy to imagine cases in which there are phenomenal differences without physical differences? Why are phenomenal properties unlike, for example, density or shape in this way?

A second response would concede that phenomenal properties are not physical properties, but deny that this leads to a belief in immaterial souls.

One way to make this seem plausible is to note that plenty of things besides humans seem to have phenomenal properties. It is controversial exactly where to draw the line between conscious and unconscious organisms, but it seems very plausible that, e.g., frogs are conscious. So the conceivability argument would seem to show that frogs have immaterial souls.

Is this plausible? If not, does it make sense to say that we have non-physical properties despite not having any non-physical parts?

Let's turn now to the case **against** immaterial souls. We're going to talk about two types of arguments.

The most historically influential argument against the view that there are immaterial souls is one originally raised by Princess Elisabeth of Bohemia.

Elisabeth was one of the leading intellectuals of the 17th century. She worked in mathematics and physics as well as philosophy, and was active in German politics. She was known by her siblings as 'The Greek' because she mastered ancient Greek at such a young age.

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Elisabeth pointed out that, if the view that there are immaterial souls is true, then it must happen quite often that the body causes effects in the soul, and that the soul causes effects in the body.

What might be some examples of your body causing effects in your soul?

How about examples of your soul causing effects in your body?

Consideration of examples shows that, if the view that there are immaterial souls is true, then interactions between soul and body must happen all of the time. But Elisabeth argued that these kinds of causal interactions were entirely mysterious.



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If you think about it, the idea that an immaterial soul is constantly interacting with your physical body is kind of weird. Could it really be true that every sensation you feel and every action you undertake involves an interaction between your body and some non-spatial immaterial thing?

If you think not, that would appear to provide a simple argument against the existence of immaterial souls.



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THE INTERACTION ARGUMENT

- If there are immaterial souls, they causally interact with material bodies.
- 2. Immaterial things can't causally interact with material things.
- C. There are no immaterial souls.

Attention naturally focuses on premise (2). Sure, interaction between physical and non-physical things seems a little weird; but is there any way for the defender of the interaction argument to show that it never happens?



Elisabeth gave one defense of this premise:



"it seems every determination of movement happens from the impulsion of a thing moved, according to the manner in which it is pushed by that which moves it ... Contact is required for [this]. ... contact seems to me incompatible with the idea of an immaterial thing."

What's her argument here?

Elisabeth here is considering a special case of causation: putting something in motion. For something to push something else, it seems that the two things must be in contact; and for two things to be in contact, both must occupy space (since being in contact is just a matter of occupying adjacent spaces). Since immaterial minds don't occupy space, it seems that they can't set things in motion — so, for example, my mind's desire for coffee can't be what sends my body down the hallway in search of Elisabeth here is considering a special case of causation: putting something in motion. For something to push something else, it seems that the two things must be in contact; and for two things to be in contact, both must occupy space (since being in contact is just a matter of occupying adjacent spaces). Since immaterial minds don't occupy space, it seems that they can't set things in motion — so, for example, my mind's desire for coffee can't be what sends my body down the hallway in search of

some.

Causal interaction requires contact.
 Immaterial things can't contact material things.
 Immaterial things can't causally interact

with material things.

Descartes replied that while some causation does work through contact, not all does. He gives the example of gravity. The earth interacts with the moon via its gravitational force. But this interaction does not require contact — so why, in general, should we think that contact is required for causal interaction? Elisabeth was skeptical about the idea that the example of gravity could provide a model for the interaction between mind and body. And many philosophers since have been on Elisabeth's side. Let's consider a way of developing her argument further.

This begins with the thought that, if there are such things as souls, and those souls have phenomenal properties, then there must be some laws of nature which connect what happens in brains with the phenomenal properties of souls. Let's call these laws of nature **psychophysical laws**.

It seems that, if you believe in immaterial souls, you have to believe in the existence of psychophysical laws.

The problem is that it seems that these laws would be quite different from any other laws of nature with which we are acquainted. The problem is that it seems that these laws would be quite different from any other laws of nature with which we are acquainted.

Fundamental laws of nature are those which are not explained in terms of any other laws. Consider, for example, Newton's equation



Of course, Newtonian mechanics turns to be false. But if it were true, it would look like a pretty plausible candidate for a fundamental law. This is because it applies universally, and because force, mass, and acceleration all seem like fundamental physical properties. Not all laws are fundamental, in this sense. An example is **Hooke's Law**, which is used widely in science and engineering. This law says that the distance a spring is compressed is proportional to the force applied to it.

This law is not universal; it only holds of some objects and a certain range of forces. For this reason, it does not seem like a plausible candidate to be a fundamental law; there should be some explanation of why it holds in certain circumstances, but not others. Presumably this explanation will be given in terms of more fundamental laws which explain interactions between the particles of which the spring is composed.

Another example of a non-fundamental law: the equations which predict the tides.

With this distinction in hand, let's turn back to psychophysical laws.

Consider the psychophysical law governing having a reddish sensation. It will presumably be of the form

RED. If x has physical property P, then x's soul has a reddish sensation

What is physical property P? It is not going to be any remotely natural physical property. It is going to be a massively complex physical property involving the more than 100 million neurons in the human visual cortex.

Given this, does it seem more likely that RED is a fundamental or non-fundamental law?

The problem is that it is hard to see how the believer in immaterial souls can try to explain RED in more basic terms. After all, 'having a reddish sensation' looks like a simple non-physical property of souls; and it is hard to see how that can be broken down at all. RED. If x has physical property P, then x's soul has a reddish sensation

By contrast, the non-believer in immaterial souls can say that phenomenal properties just **are** complex physical properties. There's thus no need for fundamental psychophysical laws like RED.

For the non-believer in immaterial souls, the only relevant laws are laws about light hitting the retina causing various events in the visual cortex. And these events are presumably governed by the ordinary laws of physics.

This seems to show that the believer in immaterial souls is committed to a much more complicated view of the laws of nature than the materialist.

But we regularly think that simpler theories are to be preferred over lesssimple theories. So this seems to be a strike against the believer in immaterial souls. Here's one way to represent this argument against the believer in immaterial souls who thinks that souls interact with the material world.



How should the believer in immaterial souls respond?

Let's turn to a second class of arguments against soulbased survival theories, which I will call **swapping arguments**.

Let's suppose that the view that there are immaterial souls is true. Then your roommate is (either wholly or in part) an immaterial soul.

Here is something that seems possible: last night, the soul connected to your roommate's body could have been swapped out for a different one which has exactly the same apparent memories and personality.

You would, it seems, have no way of telling whether this happened. So you have no evidence that it did not happen. So, you do not know whether you have the same roommate as you did yesterday.

But of course you **do** know this. So soul-based theories of survival must be false.

But of course you **do** know this. So soul-based theories of survival must be false.

More dramatically, the soul attached to your own body could have been swapped out last night. It seems that you would have no way of knowing whether this happened. After all, the new soul (which you are) could have been given the same personality and apparent memories as the old soul.

So you do not know whether you have been attached to this body for more than a day. But of course you do know that you have been attached to this body for more than a day. So, the view that there are immaterial souls must be false.

Call this the **argument from soul-swapping**. Let's lay out the roommate version.

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out the roommate version.

THE SOUL-SWAPPING ARGUMENT

- 1. If there are immaterial souls, then it is possible that your roommate's body was attached to a different soul this morning than it was last night.
- You have no evidence which rules out the possibility that the soul attached to your roommate's body was swapped out last night.
- 3. If there are immaterial souls, you have no evidence which rules out the possibility that your roommate this morning was a different person than yesterday. (1,2)
- 4. If you have no evidence which rules something out, you should not believe its opposite.
- 5. If there are immaterial souls, you should not believe that your roommate this morning was the same person as yesterday. (3,4)
- 6. You should believe that your roommate this morning was the same person as yesterday.

C. There are no immaterial souls. (5,6)

Here is a somewhat related argument.

Psychology-swapping

Ferdinand is a combination of a soul and a body. Suppose that Ferdinand suffers an accident which entirely changes his psychology. He has none of his former memories, and none of his former personality traits. He used to be very selfish; he's now very generous. He used to be best friends with Jane; now he finds Jane annoying, and prefers to spend time with Maria.

Let's call Ferdinand before the accident "Ferdinand-" and Ferdinand after the accident "Ferdinand+". Psychology-swapping Ferdinand is a combination of a soul and a body. Suppose that Ferdinand suffers an accident which entirely changes his psychology. He has none of his former memories, and none of his former personality traits. He used to be very selfish; he's now very generous. He used to be best friends with Jane; now he finds Jane annoying, and prefers to spend time with Maria.

Let's call Ferdinand before the accident "Ferdinand-" and Ferdinand after the accident "Ferdinand+".

Suppose that Ferdinand- used to occasionally take some cash from your wallet. Ferdinand+ would never do this. Would you be right to blame Ferdinand+ for the actions of Ferdinand-?

It seems plausible that you would not blame Ferdinand+ for these actions. Remember: he has complete amnesia, and his behavior and attitudes now are entirely different. Suppose that Ferdinand- used to occasionally take some cash from your wallet. Ferdinand+ would never do this. Would you be right to blame Ferdinand+ for the actions of Ferdinand-?

It seems plausible that you would not blame Ferdinand+ for these actions. Remember: he has complete amnesia, and his behavior and attitudes now are entirely different.

But if you would not hold Ferdinand+ responsible for the actions of Ferdinand-, that suggests that you are treating Ferdinand+ as a different person than Ferdinand-.

But if they are different people, it looks like soul survival and M + S are incorrect. For there is no obvious reason why the numerically same soul could not be attached to Ferdinand's body throughout this process.

Call this the **psychology-swapping argument** against the view that there are immaterial souls.

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THE PSYCHOLOGY-SWAPPING ARGUMENT

- 1. You should not hold Ferdinand+ responsible for the actions of Ferdinand-.
- 2. If you should not hold A responsible for any of the same actions as B, then A and B are different people.
- 3. Ferdinand+ is not the same person as Ferdinand-. (1,2)
- 4. It is possible that Ferdinand+ and Ferdinand- have the same soul and the same body.

C. Soul survival, materialist survival, and M+S are false. (3,4)

This argument relies on the idea that sufficient differences in psychology are enough to make for a difference in personal identity. Note that while this also rules our M+S, it does not rule out P+S.