

Problems for the dualist

Last time we discussed Descartes' argument for dualism about personal identity: the view that persons, like you and me, are immaterial things distinct from our bodies. Today we'll turn our attention away from this argument for dualism and ask instead how we should understand the relationship between persons and the material world, if dualism is true.

The central question to be asked is: can persons causally interact with the material world, if dualism is true? That is, can immaterial souls stand in causal relations to events in the material world?

It must be said that it certainly **seems** as though we can interact with material things. Consider the following examples:

I walked down the hall because I wanted some coffee.

The sharp pain made me jump.

The novocaine shot was supposed to make me feel better, but it really hurt.

Each of these is a perfectly ordinary sort of sentence, and each of these sentences asserts a causal relation between a certain **physical event** - me walking down the hall, jumping, the administration of a novocaine shot - and a certain **mental event** - the desire for coffee, a feeling of pain.

If we take these sentences at face value, and we are dualists, we'll be inclined to say that the immaterial mind can cause changes in the material world, and can also be affected by events in the material world. This view is known as **interactionist dualism**.

Most dualists throughout history (including Descartes) have been interactionist dualists - partly because claims like the above really seem to be true. But not all dualists have been interactionists.

This is because many have seen the idea of causal connections between immaterial minds and the material world as unacceptably mysterious. Indeed, this was one of the first objections Descartes' contemporaries pressed against his view. One of the most persistent and influential advocates of this objection was Princess Elisabeth of Sweden, who in a letter of 1643 pressed the following objection on Descartes:

For 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, or else, depends on the qualification and figures of the superficies of the latter. Contact is required for the first two conditions, extension is required for the third. You entirely exclude extension from your notion of the soul, and contact seems to me incompatible with an immaterial thing.



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Elisabeth here is considering a special case of causation: putting something in motion. How something is caused to go in motion, she says, depends on the manner in which it is pushed. But 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 desire for coffee can't be what sends my body down the hallway in search of some.

We'll return to some other worries about the possibility of mind-body interaction below; now let's ask what possibilities are open to the dualist if, for reasons like those raised by Elisabeth, he does not want to be an interactionist dualist.

Any dualist who is not an interactionist dualist has some explaining to do. After all, there is an impressive correlation between the mind and the body; mental events like me desiring to raise my arm do seem to usually go together with physical events like my arm going up. The interactionist has a ready explanation of this correlation: events of the first sort typically **cause** events of the latter sort. Is there any alternative?

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One alternative was defended by Leibniz, and is sometimes called **the theory of pre-established harmony**.

Leibniz thought that minds could cause changes in themselves - so that, for example, I can cause myself to think a certain thought - and that material things can cause changes in themselves, but that there can be no causal relations between the mind and any material thing. Hence the correlation we observe is a matter of there being a certain harmony between the mental and material realms which is due not to causal interaction between those realms, but to its been having arranged as such by God.

A yet more extreme view was defended a follower of Descartes, Nicolas Malebranche. According to Malebranche, **all** events are caused directly by God - so that minds cannot even cause changes in themselves.

Many find the views of Malebranche and Leibiz very difficult to accept; and they find them difficult to accept precisely because it is very hard for us to believe that, when I get a shot at the doctor's office, I feel pain **because that needle pierced my skin in a certain way**. Many think that, unless the dualist can make sense of genuine causal relations of this sort, we should find dualism unacceptable.

So let's return to dualist interactionism, and ask whether it really is so difficult for the dualist to make sense of mind-body interactions. Remember Elisabeth's objection: that something's being set in motion depends on its being in contact with something pushing it, and that immaterial things cannot be in contact with material things. Can't the dualist simply reply that this rests on an overly restrictive view of causation? Why not think that sometimes x can cause changes in y without x and y being in contact? Indeed, many think that we get examples of this sort of **action at a distance** even within the physical world (though whether this is so depends on one's interpretation of quantum mechanics).

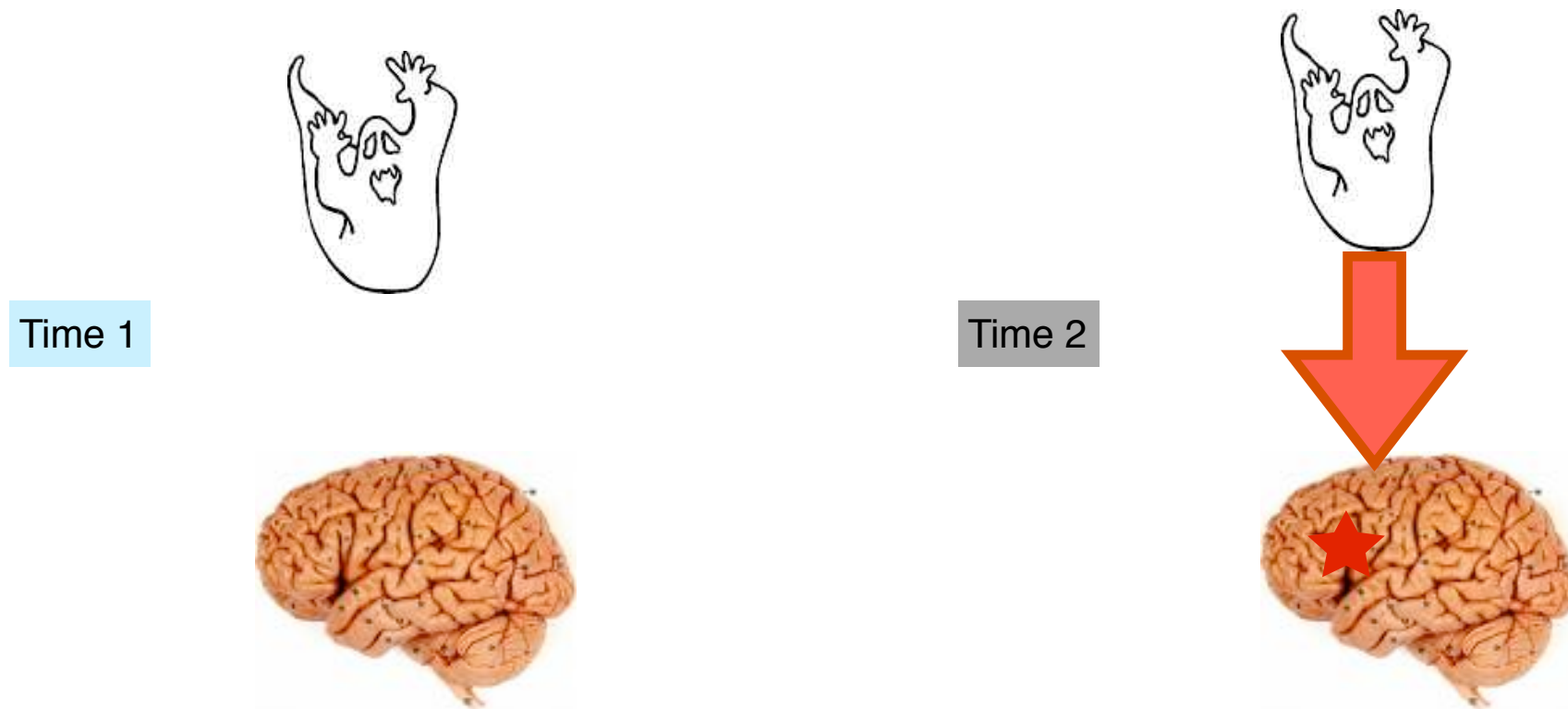
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One way to do so is to argue that the dualist is committed to the violation of certain fundamental physical laws, such as the **law of the conservation of energy**. This law says that the total energy of a closed physical system is constant; that the total energy of such a system may be neither increased nor decreased, but only transformed.

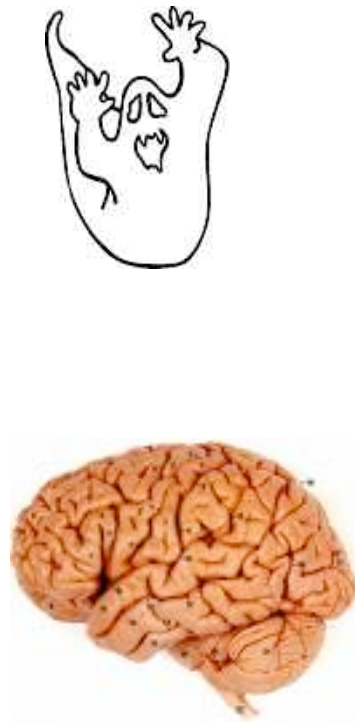
It seems, at first glance, that the interactionist dualist should be committed to denying this fundamental principle of physics. For consider a case in which an immaterial soul causes a change in the physical world - say, a case in which an immaterial soul causes a neuron to fire in the brain.



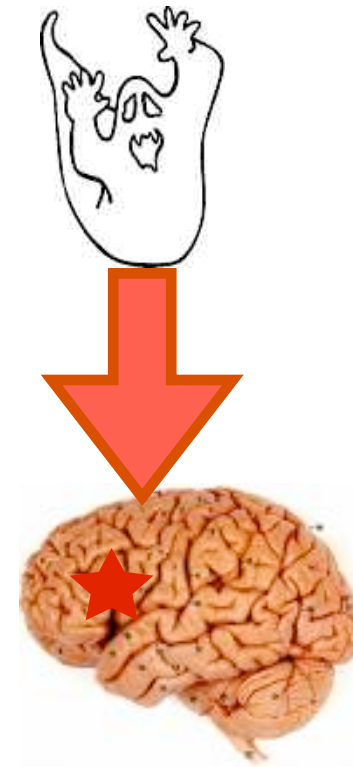
Now consider the physical system of which the brain is a part, at time 1 and then at time 2. Won't those two physical systems differ in their total energy? After all, everything is the same in those physical systems other than the activity of this neuron; and if it fires at one time but not the other, mustn't this involve a change in energy?

The dualist might deny this, and say that what we have here is just a change in the distribution of energy across this physical system - perhaps because the change in the energy of the neuron is compensated for by changes in energy elsewhere in the brain. But, one might wonder, why should this be true? Why should the soul affecting a single neuron always involve changes in other parts of the physical system?

Time 1



Time 2



Now consider the physical system of which the brain is a part, at time 1 and then at time 2. Won't those two physical systems differ in their total energy? After all, everything is the same in those physical systems other than the activity of this neuron; and if it fires at one time but not the other, mustn't this involve a change in energy?

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The dualist might also say that the law of the conservation of energy only applies to **closed physical systems** - systems which are isolated from any outside causal influence. But the physical system which includes the brain is not a closed physical system, since it is in causal contact with an immaterial soul which is not itself part of the system.

This sort of reply involves giving up on a principle which some find quite plausible: the **causal closure of the physical world**. According to one version of this principle, it says that any physical event which has a cause at all has a physical cause. Can the dualist plausibly give up this principle? If this principle is false, should we expect to find experimental verification of the kind of violations of closure which interactionist dualism should lead us to expect?

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The problem with this sort of view is that it seems to make the mental cause - the causal work done by the immaterial mind - wholly unnecessary. If I was caused to walk down the hallway towards the coffee pot by some physical cause, then, it seems, my so doing doesn't really **depend** on my having a certain desire; and then it seems we're just denying that the mind has genuine causal power.

The **materialist** will be quick to point out that we can solve this problem by identifying mental states, like desires, with physical states - presumably complex states of the brain. Then the mental cause is also a physical cause, since the mental state is a physical state. But the dualist, of course, can't say this.

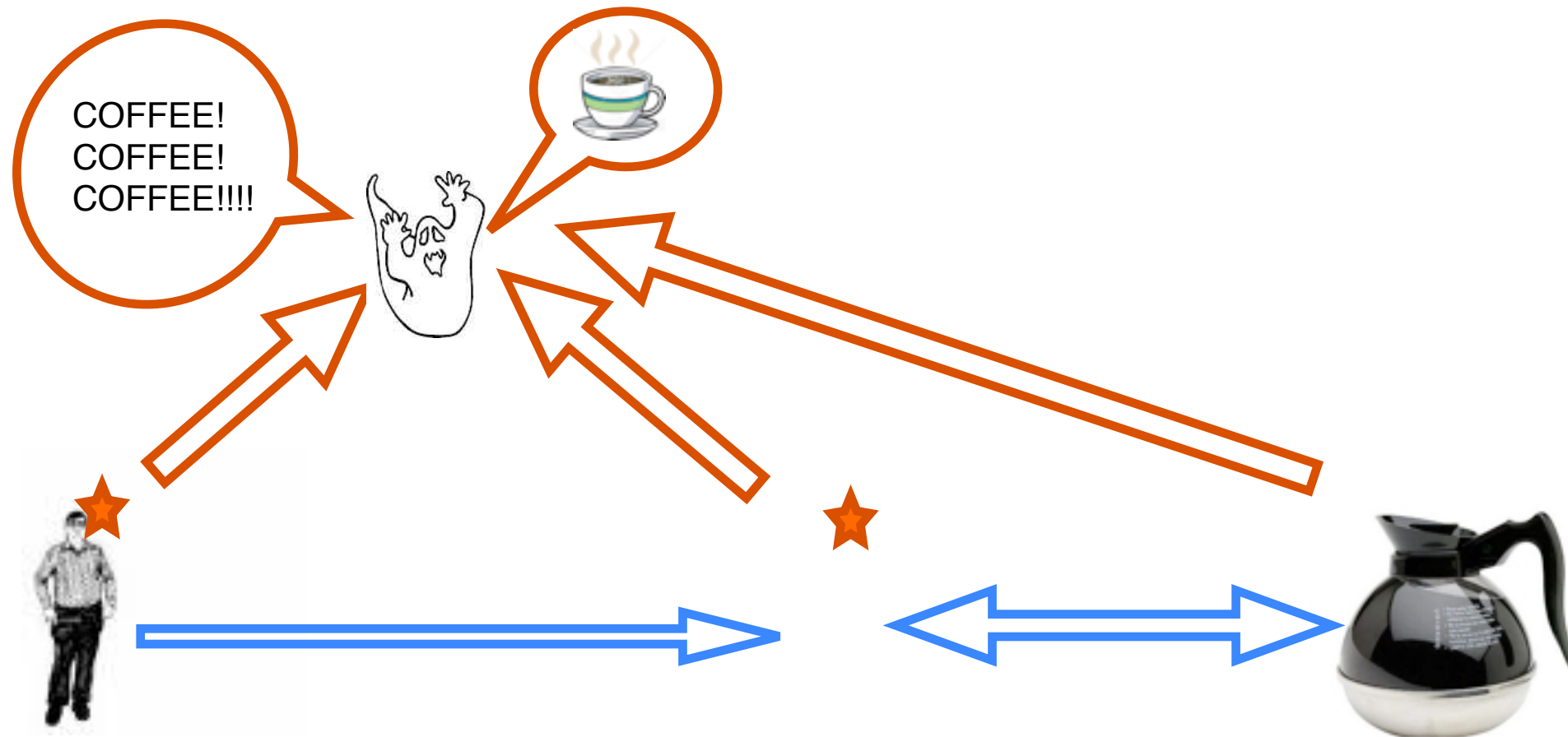
It is worth emphasizing that the problems we are now discussing - about the violation of conservation laws, and the causal closure of the physical - are only a problem for the idea that the mind can cause changes in the material world. These arguments do not, it seems, pose any problems for the idea that material events can cause changes in the mind.

This might suggest that mind-to-body causal relations are more problematic than body-to-mind causal relations; and this, in turn, might suggest a view for the dualist. Perhaps we should avoid the interactionist dualist idea that immaterial minds can cause changes in the material world, and also avoid the extreme views of Leibniz and Malebranche that there can be no causal interaction between body and mind. Perhaps instead we should take the view that there are such causal relations, but that they only ever go in one direction: from body to mind.

This form of dualism is called epiphenomenist dualism, or just **epiphenomenalism**. How should the epiphenomenist think about the example above, of me going down the hallway when I want some coffee?

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First, my brain enters a state which causes in my immaterial mind the desire for coffee.

This brain state also causes my body to walk down the hallway.

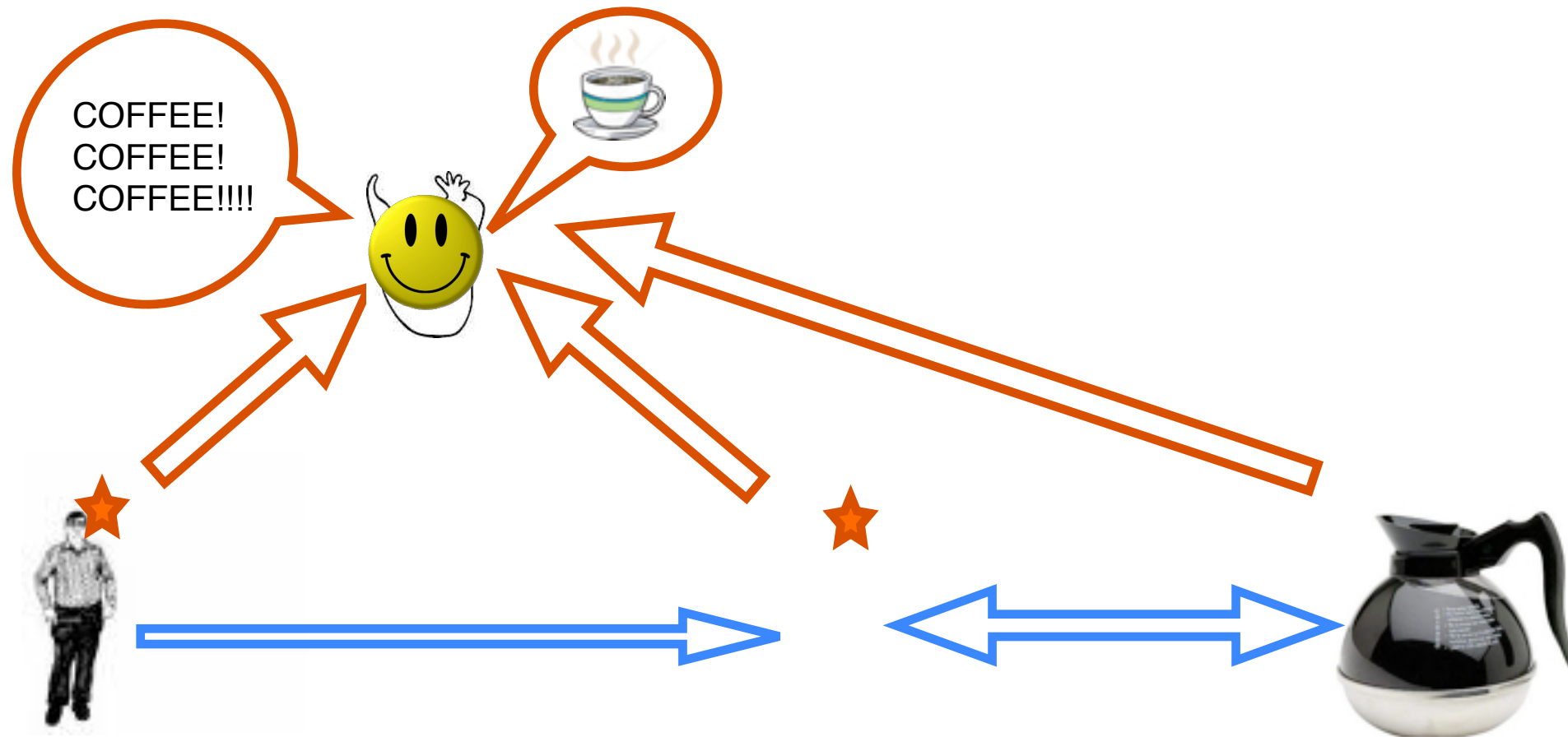
During this time, my visual system is interacting with the coffee pot at the end of the hallway, which is causing changes in my brain which in turn cause visual sensations in my immaterial mind.

Finally, the states of my brain conspire to cause me to drink some of the coffee.

... and the physical interaction with the caffeine in the coffee causes further brain states, which then cause feelings of pleasure in my immaterial mind.

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The thing to note about this epiphenomenalist view about mind-body interaction is that there are no “downward” arrows: there is no causation from the mind to the material world. My desire for coffee is, of course, correlated with my walking down the hall; but this is because they have a **common cause** - a certain brain state - rather than because the desire causes the movement.

On this view, the mind functions in something like the way a scoreboard does in a football game. Consider the relationship between touchdowns, the score on the scoreboard increasing by 7, and kickoffs. Events of the score on the scoreboard increasing by 7 are reliably correlated with kickoffs - such events are always followed by kickoffs, so long as there is time still on the clock. But they don't cause the kickoffs - rather, both are caused by some prior event on the field, namely the preceding touchdown. The scoreboard registers what is happening on the field without causing it. The same, for the epiphenomenalist, goes for the mind and the material world.

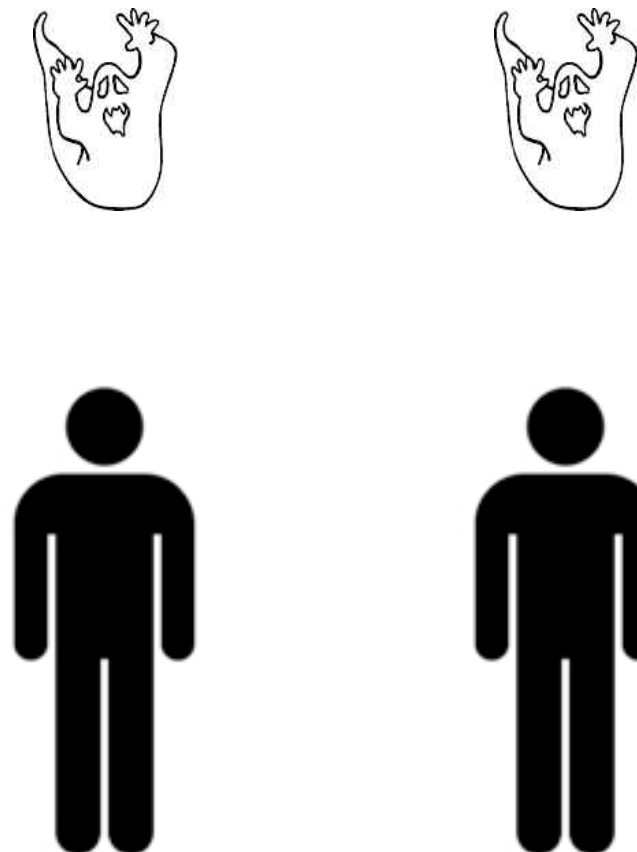
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Is this an acceptable view of the relationship between mind and body?

Whether or not we find epiphenomenalism intuitively plausible, as it turns out there are plausible arguments which seem to show, not just that causal relations from an immaterial mind to the material world are problematic, but also that there can be no causal relations from the material world to an immaterial mind. (So, if these arguments are successful, they pose problems for both the interactionist and the epiphenomenalist dualist, but not for the believer in pre-established harmony.)

Suppose that we have two immaterial souls, and two bodies.



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Now suppose that, at exactly the same moment, the two bodies each undergo an event of being stuck with a needle.

And, at exactly the same moment, the two immaterial minds feel just the same pain.

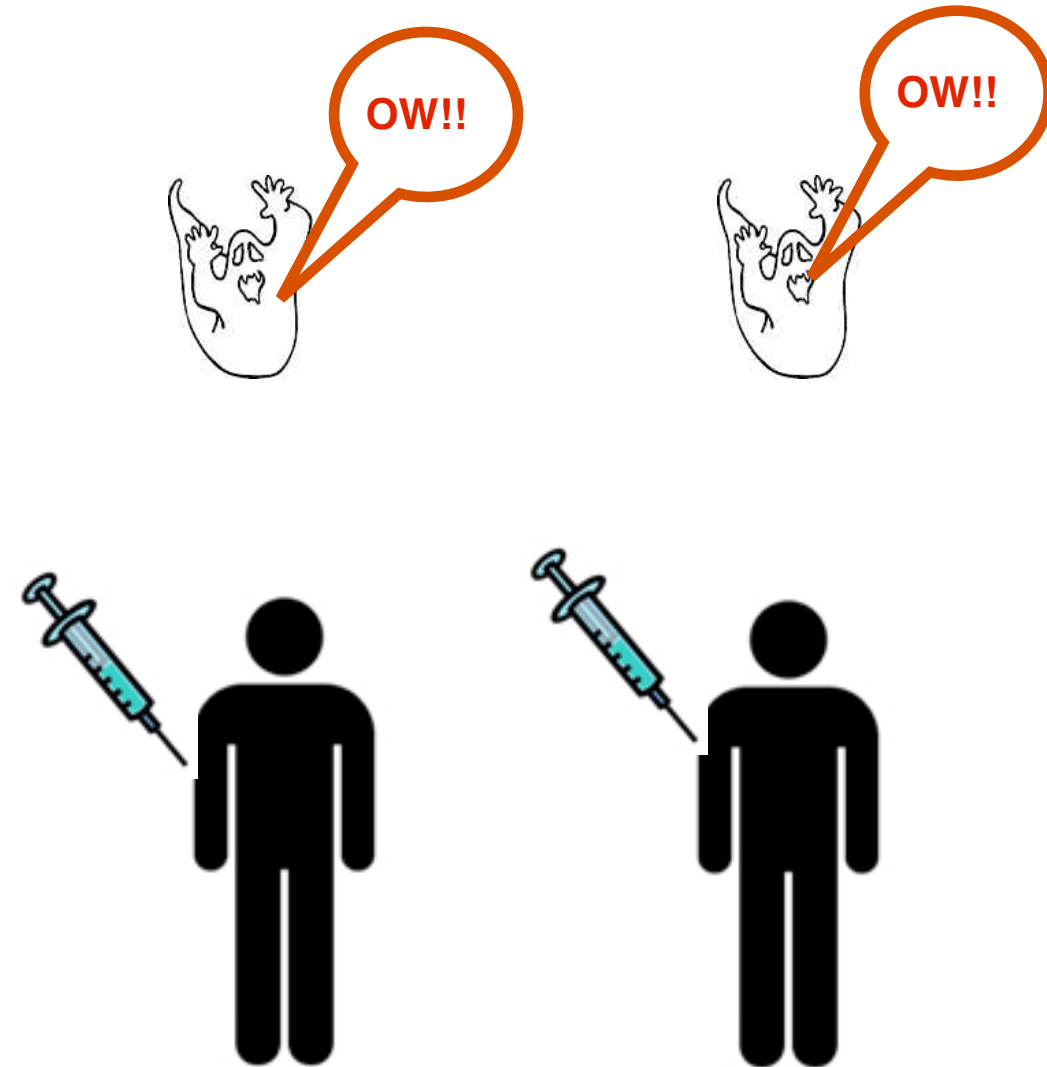
The question is: which body is associated with which soul?
Or, to put the question another way: which body's pain is each soul feeling?

It is tempting to assume that the body on the left is associated with the soul on the left - but of course this can't be right, since souls, we're assuming, are not located in space and hence **can't** be on the left or on the right; we're just representing them as such because it is very hard to draw things that are not spatially located.

One might say: we can tell which soul is associated with which body by looking at other events in the careers of the relevant bodies and souls; perhaps five minutes ago one of the bodies was tickled with a feather and the other was not. All we have to do is look and see which immaterial mind experienced tickling sensations at that time!

But now imagine that the bodies and souls have just the same careers; the souls always feel the same things at the same times, and the bodies are subjected to just the same external stimuli at the same times.

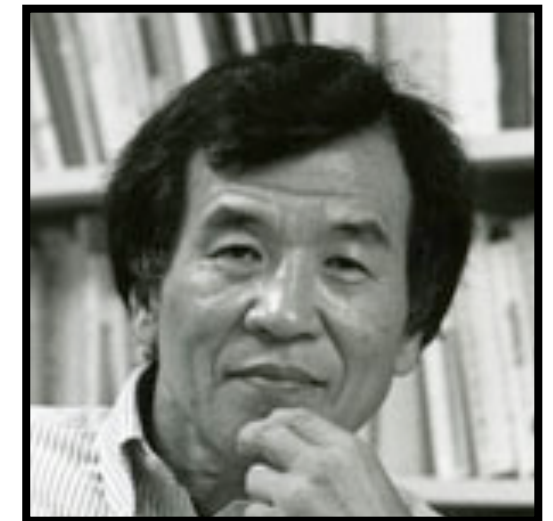
The problem here is not really that we can't **tell** which body is associated with which soul; the problem is that it seems that there can be no fact of the matter about which body is associated with which soul - **nothing could make it the case that one of the bodies belongs to one soul, rather than the other.**



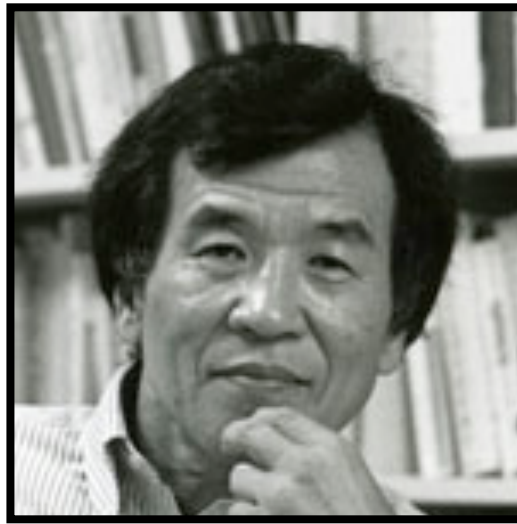
This is called the “pairing problem,” and is due to the contemporary Korean-American philosopher Jaegwon Kim.

The challenge to the dualist is to explain what it takes for one immaterial soul to be “paired” with a body - for one body to be the body of a particular soul.

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Suppose that we have two guns, which fire at exactly the same moment.



Suppose that, a moment later, one bullet hits a target, and the other does not.



By analogy with the example of soul-body interactions, we can ask: given that the guns fired at the same time, and that the bullets hit at the same time, how can we tell which bullet came from which gun? What makes it the case that one gun is paired with one bullet, rather than the other?

But this question has a very easy answer. Each of the bullets, over an interval of time, traced a path through space from a gun to its stopping point. A gun is associated with that bullet whose history can be traced, through space, back to the barrel of the gun.

The point to notice here is that we solve the “pairing problem” for guns using spatiotemporal relations: relations between where the bullet was at one time, and then at another time, and then at another time. **And this is exactly what the dualist can’t appeal to**, since the dualist is someone who takes the mind to be an immaterial thing, and hence not spatially located. It is for this reason that Kim takes the pairing argument to show that we can only make sense of causal relations between things which are spatially located. If this is right, then both interactionist and epiphenomenalist dualisms must be rejected.