

So, let's move on now to another Cartesian topic: dualism. This is certainly the view for which Descartes is now best known. If you find the word "Cartesian" in a philosophical text, the most likely accompaniment is the word "dualism". Cartesian dualism is fairly straightforwardly stated: he takes the body to be material, made of matter whose essence is extension, and he takes the mind to be made of a completely different substance, immaterial substance, non-material, whose essence is thinking. So, we've got two distinct substances. Now, that's very important to notice. To be a Cartesian, it's not enough to just think mind and body are different or even that mind and body have different properties. You've got to think that they're different substances, and that is a very substantial claim.

Now, in the *Discourse on Method*, Descartes argues something like this: I can doubt that my body exists, I cannot doubt that I exist, therefore I am not identical with my body. Quite a tempting argument, at least to start with. Put yourself in the position of the skeptic, what can I be sure of? Well, the only thing I can be sure of is my own thoughts and my own perceptions. So, I'm absolutely certain that I exist. But when I contemplate my body, if it's all an illusion, I cannot be sure that my body exists. Surely then, my mind and my body must be distinct things. For example, I can imagine myself transported, maybe to an afterlife or something like that, in which I don't have a body, but I still think. I can imagine myself in that situation. So surely, I and my body must be distinct things. It seems quite plausible. But actually, as it stands, this argument is fallacious.

So here's an example. Hesperus and phosphorus are ancient names for Venus. Phosphorus is the Morningstar, Hesperus the evening star. The ancients didn't know that they were the same heavenly body. They are, in fact, Venus. Of course, Venus is quite close to the Sun. It's between us and the Sun, so it only ever appears in the morning or the evening and never in the middle of the night. Okay, so imagine somebody who does not know that Hesperus and phosphorus are the same, and they might present this argument: I can doubt that Hesperus is phosphorus. Indeed, maybe I do doubt that Hesperus is phosphorus. But I can't doubt that phosphorus is phosphorus. Therefore, Hesperus isn't phosphorus because Hesperus and phosphorus have different properties. Okay, one of them I can doubt to be phosphorus. The other one, I can't doubt to be phosphorus. And there's no way that the same thing can have different properties. So that's appealing to a rule called Leibniz's law. Leibniz's law is used in different ways by different people, but this is one particular form of it. If A and B are the same thing, then any property of A must also be a property of B. So if you have $F(A)$, that means F is a property of A, and A and B are the same, $F(B)$ follows. So if F is the property of being doubted by me to exist, A is me, and B is my body, we get Descartes' argument from the *Discourse*. And by suitable substitution, you can get the argument that I just put about Hesperus and phosphorus. But you can see that this is fallacious. If you put the problem, if you count as a property something like being doubted by me to be Prime Minister, you can get, 'I don't doubt that the Prime Minister is the Prime Minister, I doubt that Gordon Brown is the Prime Minister, therefore, Gordon Brown isn't the Prime Minister.' It's very easy to produce lots of examples of fallacies, and the simplest way to avoid it is simply to highlight that being doubted by me to be something is not a genuine property of the object. When I doubt whether Hesperus is phosphorus, my doubt is not a fact about that planet, it's a fact about me. It's about the fact that I am not aware that the appearance of this planet in the morning is an appearance of the same planet that appeared in the evening some weeks ago. It's not a fact about the planet so much as about me. So that argument of Descartes is well known to be fallacious. But he produces a more interesting argument in the *Sixth Meditation*, which is certainly much better, but has questionable premises.

And it goes like this: when I contemplate myself, I can very clearly understand myself as being a thinking, non-extended thing. I can see, at any rate, that I am definitely a thinking thing because here I am thinking. So I'm obviously a thinking thing. And I can have a clear understanding of what thought is, sufficient to enable me to see that I am potentially not an extended thing. I also likewise have a clear understanding of body as extended and not thinking. So when I contemplate a physical object, I'm aware that it is necessarily extended. And I'm also aware that it is not essential to its being, but it be a thinking thing. Indeed, it seems hard to see how a physical, extended body can be a thinking thing. It certainly doesn't seem to be essential to it that it be so. Well if I can clearly understand what it would be for me to be a thinking thing and not extended, and for extended things not to be thinking, well in that case it is possible for God to create a world in which these things that I'm clearly understanding as possibilities are actual truths. And it follows that if God could create me as a thinking thing, distinct from my body as an extended thing, then they must indeed be genuinely distinct things. If they were not distinct, God would not even, God would not be able to create them as separate.

Now, I've mentioned that you've got a very crude argument in the Discourse. In the Meditations, you've got a much more sophisticated argument. But even in the Meditations, Descartes does try to make this move from doubt to knowledge of his essence. So here's a quotation: "What shall I now say that I am when I might be deceived by an evil demon or dreaming? At present I'm not admitting anything except what is necessarily true. I am then in a strict sense only a thing that thinks. That is, I am a mind or intelligence, or intellect, or reason. What kind of thing is that? A thinking thing." So notice what he's doing. He's using his skepticism. Remember, he started out saying, "I'm not going to accept anything except what is completely certain." He then points out that he is certain of his own thinking and his own existence, and moves on to say, "Therefore, I can be sure of that. But that's the only thing I can be sure of. I am a thinking thing." But this is a dubious move. Distinguish two different meanings of "a thinking thing." What do we mean when we say that something is a thinking thing? Well, we could just mean something that thinks. Or we could mean something whose essence is to think, something which is in its own essence a thinking thing, that cannot be anything else, that cannot not think. And those are two very different claims. And the kind of move that Descartes is making here from epistemology to metaphysics, that is, he's arguing from how we come to know something, to what it is, that is, in general, a very suspicious move. Knowing that I'm thinking, it does follow that I am a thinking thing in one sense, if I'm actually thinking. Then I must be something that is capable of thinking, at least, if you don't put too much stress on the word "thing". But it doesn't at all follow that I'm something whose essence is to think. So suppose, for example, I mentioned a couple of lectures ago about John Locke coming out with this speculation that God could make matter think. So imagine God took a stone and made it think, and the stone thinks to itself, "Far, I know I'm a thinking thing". Okay, even the stone only knows that it's a thinking thing, it doesn't know it's an extended thing, because it has the same problems as we do, it's only aware of its own perceptions. It could then conclude that it was something whose essence is to think, and it would be immediately proved wrong when God withdrew from it the power of thinking, and the stone would still exist.

What about the final move of Descartes' argument? This seems rather more defensible, though on the face of it, it might seem dubious. God could have created my mind and body as separate entities. Therefore, it is possible for my mind and body to exist separately. Therefore, my mind and body are in fact distinct things. Now, at first sight, this might seem to be committing exactly the same fallacy that I've just been talking about. It might look as though something metaphysical, a fact about what could be, the actual distinctness of two things, is being inferred from what is just a hypothetical possibility. Well, it's very important that the possibility be understood in the right way. So let me give you an example. Suppose I look up in the sky one

day and I see Hesperus. We come later, I look up and I see phosphorus. Maybe I don't know that anybody's even suggested that these are the same heavenly body, or maybe the thought occurs to me and I say to myself, "Well, it is possible for Hesperus to be snuffed out while phosphorus survives." Maybe I'm thinking of some cosmic catastrophe. That Hesperus could meet with some accident while phosphorus survives. So there's a real possibility of one of them existing without the other. Therefore, they cannot be the same object. Now, actually, there's nothing wrong with that last move. But it depends on how you interpret possibility. Because actually, when I speculate, it is possible for one of them to be snuffed out while the other survives. Actually, you can respond to that by saying, "No, it isn't possible. Unbeknown to you, it isn't possible because they are, in fact, the same object." And if they are, in fact, the same object, then it isn't possible for something to happen to Hesperus without it also happening to phosphorus. But on the other hand, you might be inclined to say, "Well, surely, for the person in that situation, contemplating these two objects, it is a real possibility." Yes, but only epistemologically. When you say, "It is a real possibility," there, what one means is, "For all I know, for all I know, one of the objects could meet with a calamity while the other ones fires." Yes, that's true. But that's a truth about my knowledge. It's not actually true that one of those objects could really meet with a calamity while the other does not, because they are, in fact, the same object. So again, you have to be very careful when you talk about the properties of mind and body and so forth, or indeed, heavenly bodies, are you actually talking about your knowledge of them? Or are you talking about their own properties, essences, etc.? Hesperus and phosphorus are, in fact, the same object, at least that's what we believe, because you might think, "Well, scientists could discover next week that there's been some great hoax and they're not actually the same object after all." Yeah, sure for all we know, in a sense, that could happen. But if they are the same object in fact, then whatever happens to one of them must happen to the other. Okay, so when Descartes says, "I have a clear understanding of myself as something that thinks and need not be extended," all that we should allow him is that for all he knows, he is something that thinks and isn't extended. From that, it doesn't follow that he actually is something that thinks and isn't extended. So Descartes' arguments for dualism are not actually particularly strong ones. If we draw this clear distinction between epistemology and metaphysics, we refuse to draw inferences from the fact that we simply have doubts or don't know things, then it's hard to get to substance dualism.

There are also some major problems for Cartesian dualism. One of them, a famous problem, how can two such distinct substances interact at all? A problem that's very often thrown at Descartes. If I consist of mind and body, and the mind is purely mental, it thinks but it's not extended, and the body is purely extended and doesn't think, how can the two ever come into contact with each other? It seems very hard to understand. Now, this is a real problem for Descartes because Descartes thinks causation is ultimately intelligible. He thinks we ought to be able to make sense of causation. As, for example, when he says that any cause must have as much perfection or reality as its effect, he's claiming to have an insight into how things cause other things. But if we take David Hume's view of causation, then the position is very different. Remember, David Hume came in the wake of people like Newton and Berkeley. And Newton had said, when it came to gravitation, sure, we can't understand, we can't make intelligible why one object attracts another with a force inversely proportional to the square of the distance. But when we look at the way things work in the world, it turns out this is what happens. And Hume realized that and said, quite generally, even with billiard balls, actually, when you think about one billiard ball bashing into another, it's very familiar, so it has that feeling of naturalness about it. Because it's familiar. But if you put yourself in the position of Adam, the first man who's never seen billiard balls before, he would be as mystified by that as we are mystified by gravity. If you think causation just ultimately is a matter of one thing following another, what we call law-like connection, then why shouldn't there be law-like connections between mind and body? So there's a bit of a nice irony here that Hume, of all the philosophers of this period, is probably

most opposed to Descartes. Actually, if you take Hume's view of causation, what looks like a really serious problem for Descartes actually goes away. It doesn't actually go away completely. There is a genuine issue here about how you would even try to formulate the sorts of laws that might hold between a mental substance and a physical substance. Even if you don't go in for the problem of intelligibility, even if you don't demand that the causal laws be intrinsically intelligible or natural, trying to formulate any sort of laws that you might have to connect physical phenomena with mental phenomena is quite a challenge.

Another problem commonly thrown at dualism hinges on the causal closure principle, on the causal closure of physics. The idea of this is that only physical events can cause physical events. So physics is causally closed in the sense that if you want to look for an explanation of any physical phenomenon, you have to look at physical things. Now, it's often said this is a major problem for Cartesian dualism because if you're a dualist, then it looks like you have to deny causal closure. Why? Well, because mental events are causing physical events all the time. I choose to raise my arm, that's a mental choice, and yet it has a physical effect. But if the behavior of my arm is entirely determined by physical causes, what room is there for a distinct mental cause? How can it be some other substance, a mental substance, influencing the behavior of this physical substance? But in fact, I don't think the causal closure principle is nearly as worrying for dualism as many think, because the question is, what basis do we have for believing it? Why should we believe that physics is closed in that way? And we do these experiments in the laboratory, all sorts of very clever experiments that measure things to fantastic precision. Sure, there we might find that everything is explicable in physical terms. But nobody's ever tried to do any sort of realistic experiment on what's actually going on in a human brain when we think. If it were, in fact, the case that there was an immaterial substance there influencing how the atoms move, how on earth would you know? So it looks a bit like a prejudice. The same kind of prejudice that, you know, when Einstein famously said, "God doesn't play dice." In other words, in Einstein's view, everything in the world is physically determined. He was just voicing a prejudice. He didn't have a good reason for saying that. Of course, the progress of science can lead us to think that everything will be explained in due course in terms of physical laws. But the idea that we're anywhere near close to doing that is just fantasy. So I don't actually think that objection is nearly as strong. The causal closure principle seems really to voice more an ambition or an aim of science rather than anything that we've discovered. But even if we do deny the principle, certainly mind-body interaction seems peculiar. More significantly, I think it's hard to see how an immaterial mind could have evolved. I think objections from the theory-theory of evolution are far more worrisome for the dualist. Do animals have minds? At what point in the sequence of evolution do minds appear? Well, do you have to say that minds are all or nothing if you're going to allow a mind to evolve as a separate substance? Does it mean you've got to have separate substance right there at the start, amoebae and so on, microbes?