Okay, but let's proceed thinking about the powers of matter. I've already said enough about why that was a particularly important issue at the time, and let's move on to a French thinker, a follower of Descartes, an incorrect Cartesian, but someone who went very much out on his own. Particularly influential in France, he's not that well-known these days, but I think you'll find that understanding what he has to say makes it much easier to understand where Berkeley was coming from.

Okay, let's follow a little train of thought. What is it for one thing to cause another? What is it for A to cause B? Or, as Malebranche said, for A to cause B, it must be that when A happens, B necessarily follows. That's what we mean by saying A causes B. There is a necessary connection between A happening and B happening. Again, this is a theme that we'll see coming back with Hume. But now, think about this necessity. Suppose A happens. A might be the motion of one billiard ball towards another. Okay, so we see one billiard ball move towards another and impact with the second one. B is the motion of the second billiard ball as a result. Now, can you imagine the first billiard ball moving towards the second billiard ball and impacting with it, and the second one not moving at all? You can, can't you? No problem. Yeah, it's conceivable. It's logically possible. Yes, the first billiard ball could move without the second one moving, right? There's no necessary connection between them then. So, A causing B, the motion of the first billiard ball, cannot be the real cause of the motion of the second one because there is no such necessary connection between them. Oh well, that's a problem. So, what can be a real cause? The will of an omnipotent being. If God wills something to happen, then, since God is omnipotent, it logically follows that it will happen. There we can see a necessary connection, and that's the only kind of necessary connection there is. So, the only real cause of anything in the universe is God. He had another argument for that which he drew from Descartes, the idea that God's sustaining the world is as much of a task for God as creating it in the first place. So, God is, in effect, recreating the world every instant. So, what God is doing is, in effect, it's like a cartoon film. When you see one billiard ball move towards another, what's actually happening is that God is continuously recreating that billiard ball at different points. And so, again, when the second billiard ball moves off after the contact, that's actually God recreating the second billiard ball in an appropriate sequence of positions.

So, Malebranche used both of these arguments to claim that God is the only real cause in the universe. It's a theory called occasionalism because when one billiard ball touches another, when one billiard ball hits another, the first billiard ball isn't causing the second one to move. Rather, the contact of the two billiard balls is the occasion for God to make the second one move. So, God's the only real cause, and that's occasionalism.

Now, suppose I'm looking at a pair of billiard balls. What is it that brings it about that I see the billiard balls? I see the motion? Well, again, it's entirely conceivable that the balls should move without me seeing them, yes? So, the motion of the balls clearly cannot be what causes me to see them. We've said that a real cause has to necessitate its effect, and there's no necessary connection between the balls being there and my seeing them. So, the reason I see the billiard balls must be that God is creating in me those perceptions. So, God not only is the cause of the billiard balls moving in the way they do, he's also the cause of our perceiving what we do.

Well, in that context, you might think, what's the role of the billiard balls at all? If God is, as it were, creating this cartoon film of billiard balls moving along, and God is directly causing within us the perceptions that correspond to that movement, it looks like the actual physical billiard balls are playing no role at all. Why doesn't God just create directly the ideas in us as though the billiard balls were there and moving? And that, I think, is the best way to understand the theory of George Berkeley, because George Berkeley's theory is essentially like that. So, we get the theory of immaterialism, that there really is no material substance at all. God is responsible for all the perceptions that we see. Berkeley's arguments are different from Malebranche's, but when you come to read Berkeley, as you will in connection with perception, remember this and think of Berkeley's theory as a kind of adaptation of occasionalism.

So, let me finish with a brief outline of Berkeley's view of perception, which is the main argument that he used against Locke. Your arguments related to this. Here is Locke's theory of perception. It's a very commonsensical one. You have a material object over there, on the right. We're perceiving the object, and we do so by means of an idea in our mind. So, we're directly aware of an idea in our mind, and it's the direct awareness of that which leads us to infer the presence of the material object, the tree. What Berkeley does is essentially identify the object with the perception. There is nothing beyond the perception. There is just the perception, created by God. And you can see that that helps, in a way, with the skeptical problem. There is a skeptical problem for Locke. I have this idea in my mind of a tree. How do I know that there's anything behind it? How do I know that there's any real physical object? Well, Berkeley wanted to get rid of that problem by saying all objects are just perceptions in the mind, caused directly by God. He challenges Locke's theory of primary and secondary qualities. I'm not going to go into that in detail. That will make more sense to you when you come to discuss primary and secondary qualities. Think back to this and be aware that Berkeley is presenting his arguments in the context of trying to establish an immaterialist theory.

Very importantly for understanding causation and Hume, which we'll come to next time, Berkeley took a leaf out of Newton's book by going instrumentalist. You might think that if Berkeley denies the existence of any physical objects, he's going to deny the value of physical science. He doesn't. He says physical science is extremely valuable. Just like Newton had postulated the force of gravity with these very simple equations to explain what we perceive, the postulation of forces was extremely valuable, even if there are no such things as forces. They provide instruments for prediction. That, according to Berkeley, is why God has created for us a world in which billiard balls and other things act in such regular ways. They enable us to predict what will happen, to enable us to live our moral lives as God intended. Next time, we will finish this historical survey with David Hume, and we will discuss David Hume's theory of induction, which is the first of the eight topics. See you next time.