

Okay, now we come to John Locke. John Locke was a huge philosophical influence for centuries, both in political theory and in theoretical philosophy. He was undoubtedly the biggest philosophical influence on the 18th century, so when you come to later philosophers, Locke's shadow is there throughout. He's famous as the first British empiricist - Locke, Berkeley, Hume. He was at Christchurch for a long time, but he fled overseas to Holland and then came back at the time of the Glorious Revolution in 1688. Very soon afterward, he published his "Essay Concerning Human Understanding" and his "Two Treatises of Government," both enormously influential works in their different spheres.

Now, Locke was a friend of Boyle. I've mentioned that Boyle was working in Oxford; Locke was in Oxford. He thought that Boyle's theory of corpuscularianism was the best currently available. And if you read Locke, it's very useful to have in mind the comparison with Boyle. The terminology is slightly different. Boyle talked about universal matter, that is, the stuff out of which all the corpuscles are made. Locke talked about pure substance in general. Boyle talked about matter being impenetrable. Locke talked about solidity. Again, he wanted to say that the underlying substance has primary qualities - shape, size, movement, texture, and solidity. The secondary qualities - the sensory qualities that we detect through our five senses - they are in bodies only as powers to produce ideas in us. So if I see something that's yellow, what in the body is nothing like my idea of yellow. Rather, the body has a corpuscular structure which gives it a power to cause that idea of yellow in me. That's what it is for something to be yellow.

Now, Locke is famously an empiricist. The word 'empiricist' is used an awful lot, and it can be rather confusing when you hear people say, "Oh, well, there are rationalists and there are empiricists." So the rationalists are Descartes, Leibniz, Spinoza, and the empiricists are Locke, Berkeley, and Hume. This is very, very simplistic. Essentially, an empiricist is someone who puts a lot of weight on experience - experience as opposed to pure reason. But there are different respects in which one can be an empiricist. Locke, most notably, is an empiricist in that he thinks that all our ideas are derived from experience. Every idea we have, use as it were copied from what we sense or experience. Whereas Descartes thought that some of our ideas were implanted right from the very beginning - the idea of God, the idea of extension. According to Descartes, those are there innately in our minds. Whereas Locke would want to say that we get the idea of God from experience. Through experience, we get to know other people, we get the idea of power, we get the idea of knowledge, we get the idea of goodness. And then we can form the idea of God by extrapolating these and forming the idea of a perfectly good, knowledgeable, powerful being.

Okay, so that's one kind of empiricism. Another kind of empiricism has to do with where we get our knowledge. And that's different, right? Somebody could say that we have certain innate ideas, but all our knowledge about them comes from experience. But Locke is an empiricist pretty much in both ways. He thinks that all our ideas are derived from experience, and he thinks that surely all of our knowledge comes from experience. Whereas Descartes thought that we have some innate ideas and also thought that some knowledge that we had could come from pure reason without experience. Locke is characteristically modest. He thinks that because all our knowledge comes from experience, it's inherently fallible. We can't look inside our minds and

find there a perfect faculty of reason that's going to tell us with certainty how things will behave. We just learn by experience how things behave, and obviously, that is fallible.

We presume that substances have a real essence - an underlying structure that gives rise to their observed properties. But we don't really know anything about that. We just have to make do with what we know of substances. We have to rely on defining them in terms that we can understand. So for example, suppose you try to think what we mean by the word 'gold.' What's gold? Well, we find lumps of gold around the world - nuggets and so forth - and they seem to behave in a similar way in their weight, in their malleability, in their color, in how they react to other substances like dissolving in aqua regia if you're imprudent enough to put your ring in a beaker of it. So we suppose that there is something that is common to these - some real essence. But in practice, we cannot know what the real essence is. We can't penetrate into the nature of substances. We don't have microscopic eyes. So we have to make do with knowing things like the color, the malleability, the density, and so forth. That is how we have to understand substances.

Locke is also a probabilist, whereas Descartes had an ideal of perfect knowledge - absolutely incontrovertible certainty. Locke said that most of the time we have to make do with probability.

So one important thing that we'll see is pretty important for understanding Hume is the issue of induction. Locke thought that our reason works in two different ways. Suppose we go through a mathematical proof. We start with certain premises, and then, by logical deduction, step after step after step, we come to a particular conclusion. That's an example of demonstration. And the way demonstration works is that using our reason, we see the infallible connection between the premises and the intermediate steps and then the next intermediate step. We see these connections with our reason. What about a probable argument? A probable argument is where all we can achieve is probability. So, for example, when we're working out what the weather might be tomorrow, we start from certain bits of evidence. We go step by step through the argument in the same sort of way. But instead of having infallible connections to guide us, we just have probable connections. So our reason enables us to see these probable connections and thus reach reasonable beliefs.

But there are some respects in which Locke goes towards the rationalist side. I've said that the simplistic distinction between empiricists and rationalists really can be misleading. Here's an example: a famous quotation from Locke. "If we could discover the texture and so forth of the minute constituent parts of bodies, we should know, without trial, several of their operations." In other words, if we did have microscopic eyes, if we could look into the microstructure of gold or whatever it is, we could know, without trial, without experiment, the way it was going to behave. He seems to be suggesting that we could have this kind of perfect rational insight into how things behave if only we were able to penetrate their structure. That is actually quite a rationalistic claim. It's claiming that we can know, or it seems to be claiming that we can know, some of the laws of how things behave a priori, without experience, without experiment.

Another example, a typical example, is the proof of the existence of God. Locke thought that you could prove the existence of God by a sort of cosmological argument. There must be a first cause of the universe, and because matter by itself can never give rise to thought, it follows that the first cause of the universe must be a thinking thing. But Locke included an interesting speculation in his essay, and it was very, very controversial. He speculated that although matter by itself could never give rise to thought - remember, this is a very, very important theme at the time, it's the key argument against Hobbes, that matter cannot give rise to thought - and Locke agrees with that, but nevertheless, he speculates that God could make matter think, if he wanted to. So although a stone by itself could never just think, if God could implant in the stone the power of thought, why not? God's omnipotent. God can do anything. Why shouldn't he make matter think? Well, this stirred up a hornet's nest. All these people who've been arguing against Locke - against Hobbes - accused Locke of impiety. This was a monstrous suggestion. The idea that matter could, even in principle, think. That even God could make matter think. Then you can see in the light of what we've said why it's a particularly sensitive issue. I've mentioned that Locke was very agnostic. He didn't think that we could penetrate the nature of things. We had to rely on their superficial qualities, what we could observe through the senses. That didn't give us knowledge about underlying realities. You can see that that's a bit of a problem with personal identity. What is it that makes me now the same person as I was a day ago or a year ago or ten years ago? Well, we can't look into the essence of ourselves any more than we can look into the essence of gold. So this is a major problem - how do we make sense of morality if we cannot understand what it is that makes one person the same person throughout their life? And what about the afterlife? Given that when I die, my body will decay, what is it about me that makes me in the afterlife the same person as me now? Again, this was considered a crucial issue because divine retribution - punishment for ills done in this life or reward for goodness - is considered a crucial part of the moral and religious world. So when we come to personal identity, which we will do in a later lecture, bear this in mind. It's a particularly crucial issue for someone who takes Locke's sort of view of the universe.