Okay, let's move on to consider the issue of perception in a little more detail. I've suggested that realism can be defended - it can be defended as long as we're prepared to relax the requirement of intelligibility. But that's not the only way in which realism can be attacked. So Locke famously is an indirect realist. When I perceive a tree, there's an idea in my mind that's what's directly perceived. In the sense that I'm directly aware of the idea of the tree in my mind. And I assume that there is a material object which is the cause of this idea. This naturally brings the so-called "veil of perception problem" - how do we know that there really is a material object, as it were, beyond the veil of my ideas? Does this trap me within my ideas? Well, it can seem to do so, particularly if you're tempted by what I shall call the unacceptable interpretation.

Now, it is possible to parody indirect realism like this: Okay, there's a tree out there, I'm looking at the tree, how do we explain it? Well, we explain it by postulating an idea in my mind, an idea of a tree which is in my mind. Okay, so I see the tree by seeing the idea in my mind. Now, what does seeing the idea in my mind amount to? Well, maybe there's a little homunculus, a little "me" in the re looking at a screen, and on the screen is an image of a tree, and that's the idea of the tree. So, I see the tree by the homunculus in here seeing the image of the tree. Now, that clearly is not explanatory because it's explaining perception of the tree in terms of perception of the idea of a tree, and that's not got us anywhere. It's replaced one mystery by another mystery. So, that interpretation, I take it, is clearly wrong. And certainly, that can naturally lead to the following sort of puzzle: you know, if you think about it, what happens when you see a tree? The image on your retina is upside down, right, because of the way the eye works as a camera. And it could seem really puzzling that we don't see the tree as upside down. Why? If you think about it, shouldn't it be so puzzling at all? Why should you expect it to appear upside down, unless you are trapped by the unacceptable interpretation, unless you're thinking that some how that image has to be seen. The projection of that image on to the retina just is part of the process of seeing, and by some intricate mechanism that we vaguely understand but not very well, hopefully in the next fifty, hundred years we'll get to understand it a lot better, we are aware of the tree through by means of this physical process. But it is not because there is some little man in there looking at a screen.

Now, twentieth-century philosophers have tended to prefer to talk about sense data rather than ideas. But beware when you read stuff about sense data, there's always this temptation to think of it in terms of the unacceptable interpretation. It's much better to say that awareness of a sense datum counts as perception of an external object. So it's not that you perceive a sense datum and thus perceive an external object, rather, you are aware of the sense datum. Think of the sense datum simply as the way in which the object appears to you. But how can we know that there really is an object out there, as it were, beyond what we are immediately aware of? How can we prove that causal link?

Well, here is David Hume presenting the problem in his characteristically pithy way: "It is a question of fact whether the perceptions of the senses be produced by external objects resembling them. How shall this question be determined? By experience. Surely," Hume says, "experience is the only way by which we can establish any causal connection." But here, experience is, and must be, entirely silent. The mind has never anything present to it but the perceptions, and cannot possibly reach any experience of their connection with objects. Thus, opposition of such a connection is, therefore, without any foundation in reasoning.

So here's the challenge: once you accept that there is a difference between the object out there and your perception of the object, however you interpret that, a skeptical question can be raised. How do we know that there are any objects there? And what Hume is saying is we only directly perceive, or we're only directly aware of, those perceptions of things as they appear. How can we ever establish a reliable causal connection between the supposed objects out there and our perceptions, if we're only ever acquainted with our own perceptions? We never get the God's eye view to see this correlation between objects and perceptions. So, how can we know that there are any objects?

Well, one attempt that was made, particularly in the 20th century, to get around this, though you can see very much themes of this in Berkeley's work, is the so-called phenomenalism. Phenomenalism is the view that physical objects are logical constructions out of sense data. So, statements about physical objects are to be interpreted in terms of statements about sense data. So, saying that an object is in a particular place is like making a statement about what you would perceive in certain circumstances. So, saying that there is a lectern here is making a statement about the perceptions that I or you would have if we made certain movements. Those perceptions would correspond with the apparent experience of a lectern. And maybe the physical existence of the lectern just is to be analyzed in terms of those perceptions. Well, that's trying to get around the sort of Berkeleyan argument. Berkeley wants to say that you can't make sense of physical objects in abstraction from perceptions. Here is an account that actually aims to analyze physical objects as perceptions. It also is trying to get around the veil of perception problem. If I am acquainted with my own perceptions and if physical objects just are to be analyzed in terms of my perceptions, then it looks as though we can get around that skeptical worry, or at least, it might look like that.

Here again, just as we've seen before, the problem of horizontal skepticism can be raised just as effectively. Phenomenalism is trying to get around a kind of vertical skepticism by saying, well, if we can't prove the existence of this different kind of thing, the physical objects, let's just analyze those in terms of what we do know about, namely our own perceptions. But again, we can raise the problem of induction. Suppose you do analyze the existence of a physical object in terms of perceptions that you would perceive in certain circumstances. You've still got the problem of justifying the claim that those predictions are actually true.

Well, phenomenalism was very popular in the mid-twentieth century, it hasn't been so popular since. Much more popular since J.L. Austin and P.F. Strawson has been to insist that we perceive objects directly. So, the claim is that instead of being indirect realists in the way of Locke, in stead of saying that we perceive objects, as it were, by having ideas of them, each, we should say instead that we perceive them directly. What does that mean? What does it mean to say that we perceive objects directly? Well, in one sense, it seems definitely right, insofar as it counters the unacceptable interpretation. If somebody thinks that we see objects by means of a little man in the head seeing a screen, that's dead wrong. We do not perceive our ideas. We perceive objects. So when I look at a tree, it's the tree that I see, it's not an image of a tree. However, and this is the problem with it, there is no question that my seeing the tree is mediated by a physical process, which involves things like light rays and so on, impacting on my retina, involves signals going up the optic nerve, involves the brain doing all sorts of clever jiggery-pokery, which somehow makes me aware of the tree. Simply insisting that the only thing Isee is the tree, while in that sense, that's true, Ido see the tree, Idon't see an idea of the tree in anything like the same sense, that doesn't actually, unfortunately, help the skeptical problem. Because the skeptic can still perfectly well say, "Look, the experience that you're having, I grant

you, if it is caused by the existence of a tree in the appropriate way, then I grant that you're seeing the tree. I'll even grant that you're seeing it directly, if that's the language you want to use, fine. But how do you know that it is in fact caused by the existence of a tree? How do you know you're not a brain in a vat, etc.?" So, the insistence on direct perception, though it does have some point, I think, particularly in countering the unacceptable interpretation, doesn't really help against the skeptic. It merely gives a verbal solution, as it were, rather than a genuine one.

Well, can we move back to a sort of Lockean position, a Lockean position which accepts that there is a difference between the object itself and how the object appears to us? We have to draw that distinction. We have to be aware that there are potential skeptical worries here, that it is possible logically to distinguish the one from the other, and therefore that it's not a logical impossibility for me to be in the situation of seeing a tree without there actually being a tree there. I could be hallucinating, I could be a brain in a vat, and so on.

Well, to get rid of the unacceptable interpretation, instead of thinking of an idea as a little image of a tree, instead think of the idea as capturing just that, not an object but what it's like to see a tree. Okay, is that still a representative theory of perception? Well, who cares what we call it. A lot of Locke's language can plausibly be understood in that way, not in terms of ideas as little things projected on mental screens, but rather in terms of the way in which we encounter objects. To read more on this (again, we're getting here into some quite deep issues, we're trying to cover them in the compass of a lecture is quite tricky), I think John Mackie's book "Problems from Locke" gives a pretty good discussion of this sort of approach (pages 40-47 to 51, as I've indicated there).

Well, in that case, what we end up doing is going back to a Lockean indirect realism. In a sense, it's indirect. In a sense, not alright. We're not saying that there are these little ideas that are somehow intermediaries. We are rather reflecting the fact that when we perceive objects, there is an experience that it is like perceiving those objects. And one can draw this conceptual distinction between our awareness of them and the existence of them. So, how do we justify the existence of those objects? How do we get around Hume's problem where he says you never experience the link between the objects and the perceptions? So how can you justify the claim that there are any objects there?

Well, we justify the existence of the external objects in terms of their scientific explanatory powers. How things appear to us is explicable in terms of mechanisms that attribute causal powers to these objects. That explain them in terms of physical intermediaries like light rays, like sound waves, and so on. And these explanations do actually enable us to predict the way that things behave. So, as I mentioned earlier, we can think of physical properties, things like size and shape, and so on, as corresponding structurally to our ideas of them. And we do find, in fact, that if we make predictions based on that, the predictions tend to be reliable. By attributing a ball or a block or whatever with a particular size and shape and physical properties corresponding broadly to our conception of them, we can end up with predictions about what we will perceive that end up broadly right.

So, isn't the simplest explanation there, rather than going to Berkeley's God, which is supposedly orchestrating the whole show, to suppose that there really are things out there, something like at least structurally something like our conceptions of them? Now, these

explanations, the causal explanations of how things behave, of how things bring about our perceptions, those explanations are going to have to be in terms of the objects' real qualities. But we can drop the requirement, as we've said, that those real qualities that we attribute must resemble our ideas. We are free to give explanations in terms of things like charge and spin and strangeness and whatever. We should not feel trapped by the paradigm of the 17th and 18th centuries, when so many people were looking for a scientific explanation that would inevitably appeal to real qualities that had ultimately to resemble our ideas. We have to be prepared to accept that the world as it is out there is actually more radically different from our ideas than even the scientists of that time thought it to be.