

Okay, so let's come and look at Locke's views on this. Locke more or less invented this topic and he came up with a discussion that was really impressive, sophisticated, given that he was more or less starting from scratch. He took the view, and it's a very reasonable view, that the appropriate criterion of identity, that is, what it is that constitutes sameness over time, depends on the kind of thing you're talking about.

So suppose you've got a single particle of matter, think of an atom if you like, but think of an atom not constituted in the way that we think of it now, as made up of protons and neutrons and electrons. Think of a single indivisible corpuscle, the kind of thing that Locke or Boyle might have thought or speculated that matter was composed of. Well, the identity of that, at any rate, seems a relatively straightforward matter. As long as it continues in existence, it remains self-identical. So A and B are the same particle of matter if there's a continuous history connecting them. So imagine a particle here at this one part of time, and a particle here at a different time. They are the same particle if and only if there's a continuous trajectory leading from one to the other. Okay, so that seems nice and straightforward.

What about the identity of a body of matter? Suppose, for example, we have a lump of clay. What is it that constitutes the identity of that? Well, that depends on the identity of the particles that constituted it. It's the same body if and only if it's the same collection of particles, even if they're differently arranged. So, if you take a lump of clay and you squash it and move it around, that remains the same lump of clay even though the particles are differently organized. As long as the same particles are there, it's the same lump.

Now, you could raise a query here. What if you take that lump of clay and divide it up, and the different parts of the lump have completely different histories for quite a long time, and then they come back together and the lump is reconstituted? Would you still want to say that's the same lump of clay? I think one isn't so clear on that. You might think that's indeterminate. But, at any rate, in the standard case where the lump all remains together, that's the criterion that Locke thinks we should apply.

Now there's a problem here, and the problem will emerge if you think about what happens as you mold this clay. You mold this clay, and having done so, what do you find on your hands? You find that your hands are dirty, some of the clay has come off on your hands. Is that still the same lump then? Well, strictly no. Strictly no because it no longer consists of exactly the same particles. And I think here we can see the influence of what's called Sorites' argument. I suspect that this is in the back of Locke's mind. These arguments are very famous: the paradox of the heap, for example. How many heaps does it take to make a heap? Or the paradox of the bald man. Okay, a man with just one hair is bald, agreed? Just one hair on his head, that's all. He's bald. Now suppose you take a man who has  $n$  hairs on his head, and suppose, surgically or somehow, you added one hair. Would that be enough to stop him being bald? No, of course not. One hair can't make the difference. If a man with  $n$  hairs is bald, then a man with  $n$  plus one hairs must be bald too. Okay, apply that argument iteratively, and you get the conclusion that a man with a million hairs is bald. So, we get the paradox of the bald man. If a man with just one hair is bald, then a man with two hairs is bald. If a man with two hairs is bald, then a man with three

hairs is bald, and so on. There's nowhere to stop. And this is a major problem with the issue of vagueness. "Bald" is clearly a vague predicate. We've got a vague boundary between being bald and not being bald, and it leads to all sorts of interesting paradoxes. And a lot of philosophers, notably for example Timothy Williamson, who's a professor here at New College, have devoted a lot of energy and a lot of debate to trying to sort these things out. All I want to say here is that I think we can see that issue in Locke's criterion for the sameness of a lump of matter. If you allow just one particle to come off that lump and yet it remains the same lump, then you can see, again, you can iterate. Take another particle off, take another one off, and another, and another, and so on. Or maybe, while you're molding this particular piece of clay, maybe you're molding another piece of clay as well, and parts with little particles from that piece get mixed with this piece. Where do you stop? The obvious way to stop is right at the beginning, to say actually, strictly, even losing one particle of clay makes it a different lump. But that can seem overly strict.

Okay, what about the identity of physical organisms, living things? Well, a plant or an animal isn't just a collection of matter. We clearly do not want to apply the strict criterion that applies to lumps of matter to organisms. Locke describes these as "an organized organization of parts in one coherent body partaking of one common life." So he wants to say that the identity of a living organism over time is constituted by a continuous history of such an organized life. And as I've said already, it's actually part of the essence of being a living thing that you are changing over time in systematic ways. You're eating and excreting and drinking and breathing and all the other things. So it's actually essential to being a living thing that you are, at some points, acquiring new matter and at other points losing matter. But as long as that's part of a continuous life history, we can say correctly that there is a single organism. And likewise, the identity of a man or a woman. Now, we are living organisms, or at least it seems that we are. That's a question we might want to raise when we come to consider the identity of persons. But at least it seems that, as men and women, we have an identity of the same kind as a tree or a dog, or maybe an amoeba. Not so clear. Well, let's put that aside for the moment and come to what Locke has to say about personal identity.

Well, a person is a thinking, intelligent being that has reason and reflection and can consider itself the same thinking thing in different times, which it does only by that consciousness which is inseparable from thinking and essential to it. So notice that Locke is drawing a distinction, a very important distinction, between a human organism and a person. A human organism is a living organism like others, but a person is a thinking, intelligent being. And Locke is here saying that consciousness, which is inseparable from thinking, is the crucial issue. So personal identity over time is going to be something like continuity of consciousness, and that's clearly going to depend on memory. What makes me the same person as myself years ago will be some kind of consciousness, a continuity of consciousness, mediated by memory.

Now, one important point to make here concerns Locke's forensic perspective on this. "Forensic" just means related to law and legal matters and things like desert and punishment. Remember that for people of this time, in the 17th and 18th centuries, a big concern about personal identity was life after death. But also during life, our concept of personal identity is very intimately linked up with these sorts of notions. So it is very natural, irresistible indeed, to be concerned about one's own future. What makes me more concerned about the future in ten years' time, say,

of this organism, as opposed to other organisms or most other organisms, is that that me, I'm concerned about my future in a particularly intimate way. So the notion of personal identity is not just a theoretical notion, it carries very important practical concerns. Likewise, if you believe that there's a punishment in the afterlife for people who've been bad, or rewards for those who've been good, then you're going to see personal identity over the gap between life and death as crucial from the forensic point of view.

Now, put yourself in Locke's shoes. Personal identity, you see, is being a very important notion for this reason. Most previous philosophers have speculated on personal identity as being constituted by a soul. In fact, they pretty much take it as a given that there's an immaterial soul implanted by God, and it's the identity of the soul that matters. But the trouble with appealing to an immaterial soul or immaterial substance is, first of all, we have no access to it. It's very unclear that there is any such stuff, or if there were, how we would know what there is. But also, if you think that souls are constituted by immaterial substance, it's not clear that that really solves the problem because think about physical substance and how that plays a role in our life. Again, we eat, we excrete, the physical substance of our bodies is constantly turning over. Well, let's suppose that we do have souls that are constituted by immaterial substance. How do we know the same isn't true of them? Maybe the immaterial substance gets turned over and metabolized in some way. Who knows? So, if you end up with personal identity depending on immaterial substance, it looks like the result is just going to be complete obscurity, complete ignorance. You may be able to appeal to religion to get you out of that, but it's going to be an appeal to authority, not to any sort of rational understanding.

An interesting thought experiment which brings home the forensic nature of personal identity: a nice thought experiment that Bernard Williams came up with. Imagine that I fall into the hands of a mad scientist. Again, the mad scientist's play a large role in philosophical thought experiments, as you see. So you and I are taken into this laboratory by the mad scientist, and we're told that our brains are going to be switched. So my brain is going to be put into your body, and your brain is going to be put into my body. Well, I hope that, being a decent human individual, you will be concerned about the future of both of the persons who will result. So, would I, of course. But you might be more intimately concerned about one of them than the other. So, which would you be concerned about more, my body, your brain, your body, my brain? Well, I think it's natural to identify with the continuity of the brain. Would you agree? When I wake up after the operation, which person will I identify myself with? I think when I wake up, a different body, better than the old one, I might be quite happy. But I think it'll be the continuity of the brain that is going to be what afterwards seems to matter. And I think also it will be what previously seems to matter. I think when I think forward to which of those two individuals I'm going to be more intimately concerned about, it's going to be the continuity of the brain that does it. Now, again, if we're thinking of things like an afterlife, you can see that there's nothing so simple to hang onto. It's very difficult to see how you can make sense of this continuity of concern over a complete absence of body.

Locke doesn't want to have to appeal to some kind of immaterial substance to do the job, so he brings in consciousness as the solution.