

*Also by Stephen Law*  
The Philosophy Files


# The Philosophy Gym

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25 SHORT ADVENTURES IN THINKING

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everyone forget about the pension-stealing and focus on the situation in Rwanda instead.

*Le Clerque:* I guess not.

*De Selby:* Right. Yet you sanctimoniously accuse me of getting my priorities all wrong when I raise the issue of animal welfare. I find that odd.

## Conclusion

Many of us think it 'just obvious' that it's morally acceptable to kill and eat other species of animal. I did until I started reading philosophy. But I'm now finding it increasingly difficult to defend my meat-eating lifestyle. If, like me, you eat meat, then you should take the arguments in this chapter seriously. Perhaps our meat-eating can be defended. But the onus is surely on us omnivores to show how.

### What to read next

This chapter looks at one particular moral issue: is it right to kill animals simply to satisfy our taste for their flesh? In Chapter 20, *Is Morality like a Pair of Spectacles?*, I ask a rather different and more fundamental sort of question: what *is* morality, and where does it come from?

### Further reading

The essential read, both accessible and gripping, is:

Peter Singer, *Animal Liberation* (London: Pimlico, 1995).

A short overview of many of the key arguments is provided by:

David DeGrazia, *Animal Rights* (Oxford: Oxford University Press, 2002).

## BRAIN TRANSPLANTS, 'TELEPORTATION' AND THE PUZZLE OF PERSONAL IDENTITY

PHILOSOPHY GYM CATEGORY

WARM-UP

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I was leafing through an old photograph album the other day. As I flicked through the photos, I saw pictures of myself at different stages of my life. There I was at graduation, in my first school uniform and in my cot. I was struck by how much I have changed over the years, both physically and psychologically. My body has become much bigger, for example, and my store of memories has massively increased. And yet it was still myself that I saw in each photo, despite all these changes. What was it, I wondered, about each of the people I saw in the photographs that *made them* all me? What connected all these individuals together as a single person. What's essential so far as *being me* is concerned?

### The Animal Theory

Here's a seemingly plausible answer to my question. When I look at the photographs in my album, I see the same *living organism* each time: a member of the species *Homo sapiens*. I don't mean that it's the same lump of matter in each case. The material out of which my body is made is constantly being replaced, so that only a small fraction of the atoms that went to make up my two-year-old body form part of my body as it is today. What I see in each photograph is rather *the same living creature*, the same *animal*, at different stages of its development. So perhaps what each person is, in essence, is an animal. If that's true, then necessarily each person ends up wherever the relevant animal ends up.

Let's call this theory about what people are and where they end up *the animal theory*. As I say, *prima facie*, the animal theory does sound pretty sensible. At least, that is, until you start thinking about the following sort of case.

## The Brain Transplant Case

One night, while Freyja and Ferne are sleeping, aliens sweep down and land their flying saucer outside Freyja's and Ferne's house. The aliens creep into the two humans' bedrooms, where they perform a complex surgical procedure. They open up Freyja's and Ferne's skullcaps and carefully remove their living brains. With their advanced technology, the aliens then reinstall each brain in the other human's body, taking great care to reconnect all the nerves and other plumbing. They then replace the two skullcaps and use a special technique they have developed to heal all the scars invisibly. Finally, the aliens leave.

Next morning, two people awake. The human in Freyja's bed jumps out of bed and looks down. Her body seems to her to have changed. And when she looks in the mirror she gets a shock. For she sees Ferne's face staring back at her, not the face she remembers. Then she sees what appears to be herself walk in through the door. 'What's going on?' she says. 'Why do you look like me, and I look like you?'

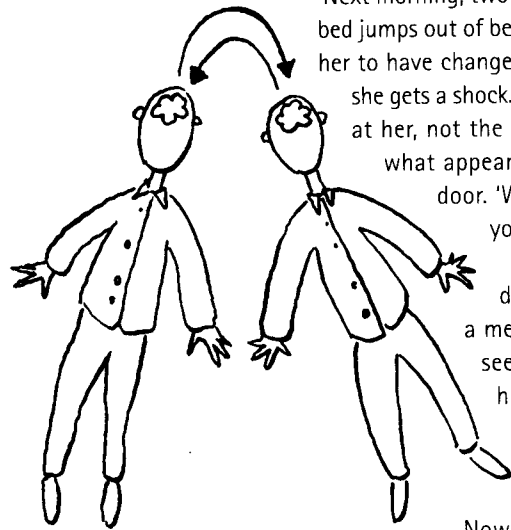
Of course, the kind of operation described in the above story is not yet a medical possibility. Nevertheless, there seems no reason *in principle* why a human brain might not come to be housed in a different animal body. We already transplant organs and limbs. Why not a whole body?

Now ask yourself: where do Freyja and

Ferne end up? Most of us, when asked to test our intuitions on this sort of case, say that *the two people involved have swapped bodies*. Freyja now has Ferne's body and Ferne has Freyja's.

Why is this? After all, if some other organ – the liver, say, or the heart – were switched round, the person would not go with it. What's different about the brain?

The answer, of course, is that it's primarily the brain that determines what a person is like *psychologically*. Your memories, abilities and various personality traits, for example, are largely a product of how your brain is put together – how the neurons are spliced, how the chemicals are balanced, and so on. So when Ferne's



brain is transferred to Freyja's body, so, too, are these psychological properties. Ask the person with Freyja's body who they are and she will say 'Ferne'. For she has all Ferne's memories and various other personality traits. But then surely she has everything that's essential so far as being Ferne is concerned, despite the fact that she now has Freyja's body. That, at least, is how the situation strikes me.

## A Problem for the Animal Theory

But if my intuitions are correct and Freyja and Ferne have swapped bodies, then the animal theory is mistaken. While each of us might happen to stick with the same animal body throughout our existence, it's not *necessary* that we do so. In which case it cannot be correct simply to identify the person with their animal body. You happen to have a particular body, but you could in principle part company with it.

## The Brain Theory

So it appears that the animal theory is false. But what if we were to revise the theory slightly? What if we claim, not that it is the *whole* animal body that is relevant to the identity of a person, but merely a *part* of it: the brain. Our intuitions about the brain swap case don't contradict this revised theory, for, of course, in the brain swap case each person does end up where her brain ends up. So perhaps the theory that you are, essentially, your brain is the right one. Let's call this *the brain theory*.

Few philosophers are prepared to embrace the brain theory. One of the most obvious problems with it is raised by the following tale.

## The Case of the Brain Recorder

This is the *brain recorder*. Place it on someone's head and flip the 'on' switch, and it then scans exactly how that person's brain is put together: how the neurons are intertwined, how the chemicals are balanced, and so on. All this information is then stored. Place the helmet on a *second* person's head and flip the appropriate switch and the recorder then reconfigures this second brain exactly as the first was configured. The neurons in the second brain are re-spliced so as to match exactly the way they are spliced in the first brain. The glands



are re-balanced so as to function in just the same manner, and so on. The result is that the second body ends up with the psychological properties previously associated with the first.

Of course, such a device is currently a technological impossibility. But there seems no reason in principle why such a machine should not be developed.

Now suppose that instead of swapping Freyja's and Ferne's brains round, we use the brain recorder instead. We use it to move Freyja's psychological properties over to Ferne's body, and Ferne's over to Freyja's. The question is: where do Freyja and Ferne now end up?

Intuitively, it seems to me that the right answer is that Freyja ends up with Ferne's body and Ferne ends up with Freyja's. They swap bodies. After all, the person that now has Freyja's body will think she is called 'Ferne'. She will have all Ferne's memories, mental ticks and foibles. But then surely she will have everything that's essential so far as being Ferne is concerned.

And yet notice that no *physical part* of Ferne was moved over to Freyja's body, not even her brain. So it seems the brain theory cannot be correct either. It is in principle possible for a person to part company not only with their original body, but also with their original brain.

### Thinking Tools: Philosophy and Science Fiction

At this point you may be wondering about the use of science fiction stories to draw philosophical conclusions. 'Surely,' you may argue, 'such stories can't tell us anything. After all, they are *not even true*. How can you gain any genuine philosophical insight simply by making up some fantastic tale?'

Here is one traditional answer to this question (I shall leave you to decide whether or not it is adequate). As philosophers, we are interested not just in what happens to be the case, but in what is essential. Scientists investigate how things actually stand – about what the laws of nature are, about how matter is actually arranged, and so on. As philosophers, however, we are interested not merely in what happens to be the case, but in what must be the case no matter what. We want to establish what is *true in principle*.

Now, we can test a given claim about what is true in principle by constructing a science fiction scenario. Consider, for example, the philosophical claim that each person is essentially a particular living body,

so that it is in principle impossible for a person and their body to come apart. It's enough to refute this claim that we can come up with a situation that is *in principle* possible in which a person and their body part company. Whether or not the situation described happens to be a medical or technological or scientific possibility is quite beside the point.

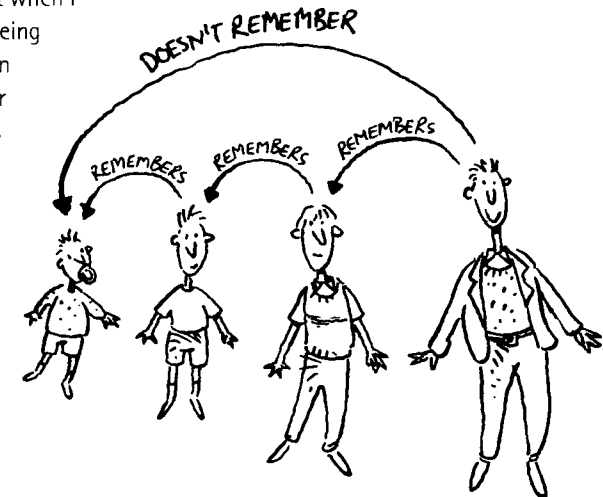
### The Stream Theory

We have seen that while each person has a particular animal body, their identity does not appear to be essentially bound up with that body. Rather, each of us seems essentially tied to various psychological *properties*, properties that could, in principle, pass from one body to another.

Of course, a person's psychological properties can change. Take memory, for example. My store of memories has been added to over the years. And there are plenty of things I have forgotten. In fact, I have no memory at all of when I was two. My personality traits and abilities have also changed dramatically since then. Yet I remain the same person as that two-year-old. Why?

According to many philosophers, the reason I am one and the same person as that two-year-old is not that we are psychologically exactly alike – we aren't – but that we are *psychologically continuous*.

Here's an example of psychological continuity. I can remember nothing of when I was two. But suppose I can remember when I was ten. And suppose that when I was ten I could remember being five. Suppose also that when I was five I could remember being two. Then there is an overlapping series of memories linking me as I am today back to that two-year-old. Psychologically, I'm not exactly like that two-year-old. But we are psychologically continuous.



Let's refer to the theory that it is psychological continuity that determines personal identity as *the stream theory*. We can think of the identity of a person as residing in a stream of properties, a stream that might, in principle, flow from one animal body to another.

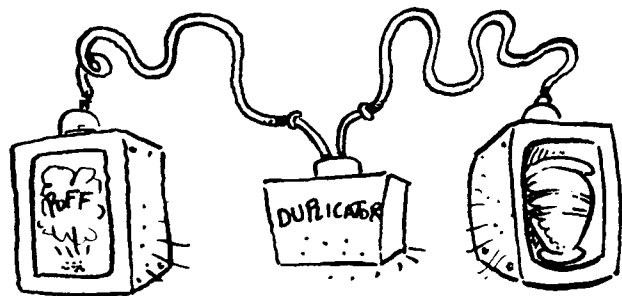
Of course, I'm not suggesting that people do swap bodies. I rather doubt that has ever happened. My point is simply that, on the stream theory, it *could* happen.

## Making Two of 'You'

We have seen that, so far, the stream theory seems rather more plausible than either the animal theory or the brain theory, for it gives intuitively the right result in the brain swap and brain transplant cases.

But there is a notorious difficulty with the stream theory. This difficulty is called *the reduplication problem*, and it's nicely illustrated by another imaginary case.

Suppose a machine is developed that can duplicate physical objects. Let's call this machine *the object copier*. Place an object – a vase of flowers, say – in cubicle A, press the 'start' button and after a short pause there is a flash and a fizzing noise. A perfect atom-for-atom replica of the vase is created in cubicle B.



Unfortunately, in the process of creating the duplicate vase (which is put together out of a store of brand-new molecules), the original vase is instantaneously vaporised, leaving a small heap of ash on the floor of cubicle A.

Now suppose we put *you* inside cubicle A and press the 'start' button. What happens next? On the animal theory, you are killed. For the original animal with which you are supposed to be identical is reduced to a heap of grey ash. It is merely someone *just like you* that materialises in cubicle B.

But on the stream theory we get a different result. The machine doesn't *kill* you; it *transports* you from cubicle A to cubicle B. It is not merely a copy of you, but you yourself that appears in cubicle B. True, you no longer have your original animal body. It's a duplicate body that materialises in cubicle B. But on the stream theory that doesn't matter. As the person that appears in cubicle B possesses all the right psychological properties, they are you. This machine only copies physical objects, but it *transports* people.

Perhaps this strikes you as the right way to describe what occurs: you really do get transported from cubicle A to cubicle B. But now suppose this happens. An additional cubicle, C, is added to the duplicator machine so that, rather than one duplicate body being produced, two now appear. You step into cubicle A and press the 'start' button. Where, if anywhere, do you end up?

We now face a problem. For on the stream theory, as both these future individuals are psychologically exactly like you, it follows that both *are* you. But that is impossible, for it would follow from the fact that they are both identical with you *that they are also identical with each other*, which clearly they are not: there are *two* of them.

This is the reduplication problem, and it constitutes perhaps the most serious difficulty facing the stream theory.

## Thinking Tools: Muddling Two Sorts of 'Identity'

Philosophy undergraduates often become confused at this point in the debate. They say something like the following.

You said to begin with that the object copier produces exact duplicates. So the people that get out after the button is pressed will be exactly the same – they will be identical in every way, both physically and psychologically. Yet now you say that these two individuals are *not* identical – they are *not* the same person. So you have contradicted yourself. In fact, I don't see why we can't say that the two people who get out of the machine *are* both me. What's the problem with that?

This is an understandable confusion. It arises because the expressions 'identical' and 'the same' are used in two quite different ways. Suppose two steel balls are manufactured. These balls are, let's suppose, exactly

similar in all their qualities, right down to the last atom. So there is a sense in which they are 'identical' and 'the same'. But there is also a sense in which they aren't. For the number of balls is two, not one. They are not identical in that sense of 'identity' that requires they be *one and the same ball*. Philosophers distinguish these two senses of 'identical' by calling the first *qualitative identity* and the second *numerical identity*.

Now it's clear that our interest in this chapter is in *numerical identity*. The question we asked right at the beginning was: what makes each of the people I see in my photo album *one and the same person* despite the difference in their *qualities*. And the stream theory is supposed to answer this question. It says that it is sufficient for the *numerical identity* of people that they be connected by a flow of psychological properties. But then it follows, on the stream theory, that the people created in cubicles B and C aren't just qualitatively identical, they are numerically identical, too. As these individuals clearly aren't numerically identical (the number of people is two, not one), it follows that the stream theory is false.

## Adding to the Stream Theory

Can the reduplication problem be dealt with? Perhaps. Some philosophers insist that we need make only a slight modification to the stream theory in order to salvage it. All we need do, they say, is to add the following condition:

If *two* later individuals, who exist at the same time, are *both* psychologically continuous with an earlier individual, then *neither* of those later individuals is numerically identical with the earlier.

How does this condition help solve the reduplication problem? It allows that, in the situation where only *one* person is produced by the object copier, that later individual is identical with the person that entered cubicle A. So far, so good. However, if *two* people are produced, then the above clause kicks in, with the result that neither is identical with the person that stepped into cubicle A. The original person has ceased to exist, and we now have two brand-new people before us. So the reduplication problem is dealt with. For the stream theory, now modified, no longer entails what is patently false: that the two people who step out of cubicles B and C are one and the same person.

Let's call this amended version of the stream theory *the modified stream theory*.

The modification may deal with the reduplication problem. But our troubles aren't over. For the modified stream theory produces highly counter-intuitive results of its own, as the following story illustrates.

## The Duplicator Gun

Suppose that the CIA develop a gun-like machine that is capable of producing a perfect physical atom-for-atom duplicate of whatever object it is pointed at. Point the gun at a glass of water, pull the trigger and an exact atom-for-atom copy of that glass of water immediately materialises in a cubicle attached to the gun. However, unlike the object copier described earlier, the duplicator gun does *not* destroy the object it duplicates. The duplicate and the original both continue to exist.

Suppose that, as you leave home one morning, a CIA operative secretly points the duplicator gun at you from a van parked across the street. The operative pulls the trigger. As she does so, an exact physical duplicate of you is produced inside the van (of course, this person wonders how he just ended up inside a van – he believes that but a second ago he was locking his front door). Unaware of what has happened, the person with your original body wanders off down the street and turns the corner.

Now ask yourself: where, if anywhere, do *you* end up?

According to the modified stream theory, by pointing the duplicator gun at you and pulling the trigger, the CIA operative brings your existence to an end. For there are now *two* individuals around who are exactly like the one that stepped out of the door. At this point, then, the new clause that we just added to the stream theory kicks in, with the result that *neither* of these people count as you.

But this is wrong, surely? Intuitively, it seems right to me to say that it's *you* that walks off down the street and turns the corner, and not merely someone just like you. How can it make any difference to whether or not it's you that some CIA agent has secretly run off a copy of you in the meantime? I don't see how it can. Yet that is what the modified stream theory entails.

Let's now consider a slightly different scenario. Suppose that, just as the copy of you materialises in the van, a piano falls out of a window and squashes you flat. Where do you end up now?

According to the modified stream theory, you are transported to the van. It's not merely someone just like you that materialises in the van, but you yourself. For in

this case there is only one person around psychologically continuous with the person that stepped out of your front door.

But again, this seems wrong. Surely you're dead. For the animal that stepped out of your front door has been squashed flat. The fact that the CIA have produced someone *just like you* in the van doesn't alter this fact.

These two cases pull us strongly back in the direction of the theory with which we started: the animal theory. For, unlike both the stream and the modified stream theory, the animal theory actually gives the *right* verdict in both cases. In the first story, as it is the *same animal* that walks down the street and turns the corner, so it is the same person. In the second story, as that animal is killed, so, too, are you. The fact that a second, duplicate animal is produced elsewhere is quite beside the point.

## A Puzzle

So we find ourselves being pulled in two directions at once. On the one hand, when we consider the brain transplant and brain recorder cases, our intuitions very strongly support the conclusion that the body is irrelevant so far as the identity of the person is concerned. You could, in principle, swap bodies with someone.

But the duplicator gun cases draw out a contrary intuition: that that particular animal body is very relevant indeed to your identity. If we haven't got that particular animal body – the one you have now – then we haven't got you. We have, at best, merely got someone *just like you*.

So which intuition are we to trust? And why? That is a problem with which philosophers are still struggling.

The problem raised in this chapter is brought into sharp focus by my last story. I shall leave you to decide what the narrator should do.

The year is 3222, and I am Joe Jones. At least, I think I am. Let me explain.

The Tifrap Deep Space Mining Corporation introduced the tele-matic three years ago. They use it to 'teleport' employees to and from work here on Borax3 on a daily basis. It would take hundreds of years to reach Borax3 from earth by spacecraft. The tele-matic was developed to allow Tifrap Corp's employees to travel here in a matter of minutes.

Then, today, there was a revelation. It turns out Tifrap Corp has been deceiving its employees. The management originally told us that the

tele-matic transports people to and from Borax3 by flinging their bodies through space at fantastic speed. But they lied. What really happens is this. You get up in the morning and step into a tele-matic machine back on earth. It scans your body. The tele-matic records exactly how your body is put together. This information is then transmitted to Borax3, where a perfect atom-for-atom duplicate body is created. Your original body is then instantaneously vaporised. The person who steps out of the tele-matic on Borax3 is in every respect exactly like the person who stepped into the machine on earth. But they have a brand-new body.

When we were told this morning about how the tele-matic really works, I wasn't too bothered. 'Sure,' I thought. 'Each time I use the tele-matic, I get a new body. But so what? No one gets killed. I might have some sentimental attachment to my original body, but what's the big deal if it did get incinerated? The important thing is that I've survived, isn't it? In fact, I wouldn't even have noticed that my body had been replaced if Tifrap Corp hadn't admitted it.'

But then a worrying thought started to nag at me. Was I Joe Jones? Maybe not. Perhaps I have existed only since this morning when I stepped out of that tele-matic machine over there. Maybe Joe Jones was incinerated when he first stepped into the tele-matic three years ago. Maybe I'm merely someone *just like* Joe Jones. Maybe there's merely been a series of Joe Jones-like people created and then killed by the tele-matic. If so, then Mrs Jones has been a widow these last three years and she never even knew. In fact, I've never even met Mrs Jones. My memories of her are the memories of a dead man.

Tifrap Corp has given all its employees here on Borax3 the option of using the tele-matic to take one last 'return' trip back to earth. In fact, that's the only way we can get home. Travelling by spaceship would take us hundreds of years to get back, by which time we would all be dead.

I miss Mrs Jones. I miss my children – if they are my children. But I don't want to die. So what should I do? Do I step into the tele-matic over there and press the red button? If I do, will I be transported back to earth? Or will I be killed? Will it be me that appears on earth and gets to return to the family of whom I seem to have all these fond memories? Or will I be incinerated, to be replaced by someone merely just like me?

What would you do?

### What to read next

Other philosophical problems concerning the mind can be found in Chapter 8, The Strange Case of the Rational Dentist, Chapter 6, Could a Machine Think?, and Chapter 13, The Consciousness Conundrum.

### Further reading

A clear introduction to the issues raised here can be found in:

Keith Maslin, *An Introduction to the Philosophy of Mind* (Cambridge: Polity, 2001), Chapter 9.

An entertaining discussion of many of the same issues can also be found in Daniel Dennett's paper, 'Where Am I?', which appears as Chapter 39 of:

Nigel Warburton (ed.), *Philosophy: Basic Readings* (London: Routledge, 1999).

## MIRACLES AND THE SUPERNATURAL

PHILOSOPHY GYM CATEGORY

WARM-UP

MODERATE

MORE CHALLENGING

Every age has its reports of miracles and the supernatural. Even today, witnesses are rife. Almost everyone knows someone who claims to have witnessed a miraculous happening – a ghostly visitation, a vivid and highly prophetic dream, objects that appear to have moved by themselves. Given the sheer quantity of evidence provided by such testimony, you might think that there's got to be *something* to it.

Or has there? This chapter introduces some of David Hume's (1711–76) key arguments on the miraculous.

### A Visit to the Psychic

Pat has been to see his psychic.

*Pat:* The Great Mystica really is psychic.

*Bridie:* How do you know?

*Pat:* Well, for a start, there's the testimony of her many satisfied customers. She has hundreds of thank-you letters on her walls.

*Bridie:* The testimony of gullible fools.

*Pat:* You can't seriously maintain it's *all* rubbish, can you? Shouldn't you be more open-minded? There's *so much* evidence concerning the amazing powers of psychics, miracle healers and other supernatural goings-on.

### A Sense in Which 'Miracles Happen'

In fact, as Bridie now points out, there's at least one sense in which we can all agree that 'miracles happen'.

*Bridie:* I don't wish to deny that miracles can and do occur.

*Pat:* Really?