Personal identity: Physical and psychological continuity theories

A FIRST DISTINCTION
In order to understand what is at issue in personal identity, it is important to distinguish between numerical identity and qualitative identity. Throughout life, we change what we are like as people. In common speech, we often say things like ‘he was a different person after the cancer scare’. This use of ‘different person’ picks out a qualitative change. But it presupposes that there is just one person here, before and after the cancer scare – otherwise, who does ‘he’ refer to? Persons can persist through qualitative change. What it is for a person to persist through time is the question of numerical identity – what does it take for someone to be the same person in this sense?

NECESSARY AND SUFFICIENT CONDITIONS
The syllabus talks about ‘necessary and sufficient conditions’ for being numerically the same person over time. What does this mean?

Necessary and sufficient conditions can be understood in terms of ‘if…then…’ statements (called ‘conditionals’). Such statements relate the truth of two propositions, e.g. ‘it is raining’ and ‘I am getting wet’, as in ‘If it is raining, I am getting wet’. The conditional asserts that if the first statement (known as the antecedent) is true, then the second statement (the consequent) is also true.

Suppose the conditional is true: if it is raining, I am getting wet. Notice that this does not say that it is raining and I am getting wet. Instead, it says that there is a relationship between it raining and my getting wet. Another example: if the planet Mercury didn’t exist, the Earth would be the second planet from the Sun. This obviously does not say that Mercury doesn’t exist!

Here are two conditionals about personal identity:

‘If I am the same person at times $t_1$ and $t_2$, then…’
‘If …, then I am the same person at times $t_1$ and $t_2$.’

One way to fill in the blanks, that we’ll discuss below, is ‘I remember at $t_2$ what I did at $t_1$’. So:

‘If I am the same person at times $t_1$ and $t_2$, then I remember at $t_2$ what I did at $t_1$.’
‘If I remember at $t_2$ what I did at $t_1$, then I am the same person at times $t_1$ and $t_2$.’

Is this always true? That’s what we’ll discuss.
Using necessary and sufficient conditions
Philosophers want to find out is what goes in each of the blanks, so that the conditional always turns out true. If we could do that, we will have discovered something important about personal identity. Why?

Filling in (1) will give a necessary condition: for me to be the same person, something else – the consequent – must be true, e.g. I remember the earlier event. Just by knowing I’m the same person, we will know something else about me. So we give an analysis of personal identity.

Filling in (2) will give a sufficient condition: for me to be the same person, it is enough that the antecedent is true. If we know the antecedent is true, we know that I must be the same person.

It might be that the same statement fills the blanks in (1) and (2). The statement is then both necessary and sufficient for personal identity. In that case we have a complete analysis of personal identity.

PSYCHOLOGICAL THEORIES OF PERSONAL IDENTITY
Locke’s memory theory
John Locke singled out memory as central to personal identity. If I remember doing something, then I am the same person that did that thing. He identifies the self as

that conscious thinking thing… which is... capable of happiness or misery, and so is concerned for itself as far as that consciousness extends.... Person is the name for this self... This personality extends it self beyond present existence to what is past only by consciousness. (An Essay on Human Understanding, Bk II, Ch 27, §17, § 26)

Memory is the ‘extension’ of consciousness to the past. It is only by consciousness that we are able to be persons at all, e.g. to reason and to reflect on ourselves. And our consciousness distinguishes us from other persons. So it is through our consciousness that we remain the same person over time:

as far as this consciousness can be extended backwards to any past action or thought, so far reaches the identity of that person. (Essay Bk II, Ch 27, §9)

Reid’s objection
Thomas Reid objected that I can’t remember everything I’ve ever done in my life, and what I can remember changes over time. He gave this example: suppose an old general has forgotten the time when he was a child when he was punished for stealing apples, but he can remember when he was a soldier and given a medal for bravery in battle. By Locke’s theory, he is the same person as the soldier who received the medal, but not the same person as the boy. But now suppose that when he received the medal, he could remember being punished for stealing apples as a boy. This means that the person who received the medal is the same person who was punished. This leads to a contradiction: the general is the same person as the soldier who received the medal (he remembers it); the soldier who received the medal is the same person as the boy who was punished (he remembers); but the general isn’t the same person as the boy who was punished (he doesn’t remember it)!
This is impossible. Identity is ‘transitive’, i.e. if \( A = B \), and \( B = C \), then \( A = C \). So if the general is the soldier and the soldier is the boy, then the general must be the boy. But because memory changes over time (we forget things), it doesn’t give this result. So personal identity must be something other than memory.

**Revising Locke’s theory**

Rather than say that you are the same person as the person who did the things you can now remember, we need to be more subtle, and not rely just on current memories. Instead, let us use the transitivity of identity to say this: since the general remembers being the soldier, he is the same person as the soldier; since the soldier remembers being the boy, he is the same person as the body; so the general is the same person as the boy – not because he now remembers being the boy, but because he now remembers being the person (the soldier) who could at that time remember being the boy. It is overlapping chains of memory that comprise personal identity.

Personal identity is like a rope – no strand of memory must directly connect all parts of the rope; it is enough that for any part of the rope to be connected to some other part, which is connected to some other part, and so on. Rather than direct connections, we can appeal to continuity.

We can also challenge Locke’s emphasis on memory. Certainly memory is important, but is it everything that makes a person who they are? What about beliefs, desires, character traits? We don’t need to rely on just memories, but can invoke the many types of psychological state that persist through time and have a causal influence on our future psychological states. **Personal identity is psychological connectedness and continuity.**

**IS PSYCHOLOGICAL CONTINUITY NECESSARY OR SUFFICIENT FOR PERSONAL IDENTITY?**

**Duplication: psychological continuity is not sufficient**

In the 1960s TV science-fiction series *Star Trek*, people ‘teletransport’ from the spaceship *USS Enterprise* onto the surface of a planet and back again. The teletransporter ‘reads’ all the information off a person’s body – every cell, every neural connection – destroys that body, and then creates a body in a different location with exactly the same information. So if my psychological properties depend on my brain, say, when a brain with exactly the same neurological properties is created, it has all my memories, emotions, beliefs, and so on. So, according to the psychological theory, that new person is me.

Suppose, however, the teletransporter malfunctioned. Instead of ‘erasing’ the captain, Kirk, onboard the ship, it didn’t erase him, but it also recreated him on the planet’s surface. Which one of these two identical Kirk’s would be the ‘real’ one? If psychological continuity is all that personal identity consists in, are they both Kirk?

This is logically impossible – one person cannot become two persons, even if the two persons are qualitatively identical with the one person. This is because identity consists in numerical identity – and one thing is never two things! So we should say that the two people are duplicates of Kirk, but not Kirk himself.

This is meant to show that psychological continuity is not sufficient for personal identity. If something (a duplicate of me) can have complete psychological continuity with me, but
without being me, then psychological continuity is not enough for personal identity. Personal identity must involve something else.

We can summarise the objection like this: identity does not logically allow for duplication; psychological continuity does logically allow for duplication; therefore psychological continuity cannot be identity. If we think Kirk after teletransportation is the same person as Kirk beforehand, we are confusing qualitative identity with numerical identity.

This isn’t only a problem if the teletransporter duplicates Kirk. Even if it works fine, so there is just one Kirk, now standing on the planet’s surface, this person can’t be the same person as the one that was onboard ship before teletransporting. Why? Well, we’ve argued that he wouldn’t be that person if another Kirk was created by the teletransporter malfunctioning. But whether the person on the planet is the same person as the person who was onboard ship cannot depend on someone else existing or not. We can’t say ‘he is Kirk if the teletransporter didn’t malfunction’ but ‘he isn’t Kirk if the teletransporter did malfunction’. Either he is or he isn’t Kirk, whatever else exists.

This is the idea that identity is ‘intrinsic’, i.e. whether something at a time (a person, an animal, a rock) is identical (over time) with something previous to it depends only on the relations between the two things. It doesn’t depend on anything else.

On connectedness

Reid had a second objection to Locke’s memory theory of personal identity. What is a memory? A memory resembles the original experience, and it is caused by it. But suppose we could copy a memory from my brain of a holiday in Italy and put it in your brain. You ‘remember’ the holiday (from my perspective) – is it really a memory of yours? No, because you are not the person who had the experience. In other words, for a mental state to count as a genuine memory, the person who remembers must be the same person who experienced. To explain memory, we have to assume personal identity. That means that we can’t explain personal identity in terms of memory, or we go around in a circle. You cannot say that memory constitutes personal identity, because a mental state is only a memory if the person who has the memory is the same person as the person who had the experience.

There is a general problem for the psychological continuity theory here. How do we identify the mental states that are related to each other by connectedness and continuity? Our usual way is to identify the person whose states they are. What if we don’t? Well, your mental states and my mental states are connected. For example, if I say what I think and you hear it – we now both have memories based on my thought. So which connections make up personal identity? We can’t say ‘connections between the same person’s mental states’, since ‘same person’ is what we are trying to explain.

One response is that the ‘same person’ is just that person who has the most number of connections between its mental states. If two people have mental states that are psychologically continuous with some previous person’s, the one who is the ‘best candidate’ is the very same person as the previous person. You have far fewer connections to my previous mental states than I do.
We can object that what unites psychological properties into a bundle is not more connections, but a different kind of connection. What makes a memory mine is not that I have many other related memories.

**Hume: no personal identity**

An alternative response, defended by Hume, is that there is no personal identity over time (*A Treatise on Human Nature*, Part IV, Ch. 6). All there is are connections of causal dependence and resemblance. There is no ‘self’, just a sequence of mental states connected in these ways. At any point in time, the mental states in the sequence are not identical with the mental states in the sequence at any other point in time. So there is no real identity, only psychological continuity. We are right to point out that psychological continuity is not enough for personal identity, but we are wrong to think that this is an objection. Personal identity is an illusion created by connectedness; it does not exist.

**PHYSICAL CONTINUITY THEORIES OF PERSONAL IDENTITY**

**The animal theory**

There are two famous versions of physical continuity theories. The first says that being the same person consists in being the same human animal. After all, this is the way we usually re-identify people over time. This doesn’t mean that I can’t lose a limb or even several; but it needs to be fundamentally the same living organism. Of course, at any point in time, my body is a little bit different from how it was before. Over a long period of time, it is made of completely different matter. But it is still the same body, the same organism, because there is physical continuity.

But consider a case in which your brain is transplanted into my body, and my brain is transplanted into your body. Which body are you now ‘in’, the one with my brain or the one with your brain? If all your memories, beliefs, desires, etc. depend primarily on your brain, then our intuition will be that you ‘go’ with your brain. You have had a ‘body transplant’. But according to the animal theory, we have each had a brain transplant: like a liver or heart transplant, the organ is new, the body remains the same animal. So the animal theory says you now have my brain (with all my memories, desires, emotions, etc.) and vice-versa. This doesn’t sound right; it makes more sense to say I have your body than to say that I have your memories.

The objection argues that being the same animal is not necessary – I can become another animal by having my brain transplanted into another body.

**The brain theory**

The second physical continuity theory says that being the same person is a matter of having the same brain. In fact, not even the whole brain. People already undergo surgery in which a significant part of their brain is removed. The remaining brain is often able to ‘pick up’ what the lost part used to do and carry on. So, you need enough of the brain to support those mental characteristics that are important to personhood.

But now consider another thought experiment: your brain and mine are both erased of all psychological properties and then ‘reprogrammed’ so that your brain has all the psychological properties that mine had, and mine has all the psychological properties that yours had. If I ‘go’ with my psychological properties, as the psychological continuity theory says, I now have what was your brain (and body), while you have mine. The brain theory says I have your memories.
This objection argues that the continuity of the brain is neither necessary nor sufficient. It's not necessary, because I am still me although I don’t have the same brain; and it is not sufficient, since what was my brain has continued to exist, but it is no longer me.

We can reply that I don’t go with my psychological properties in this case. We could say the continuity of my brain is sufficient – I am the person with the same brain as before, but completely new memories, traits, etc. Alternatively, we could say the continuity of my brain is necessary, but not sufficient. Personal identity requires psychological continuity as well. In this case, I no longer exist; no person after the reprogramming has both physical and psychological continuity (one has what was ‘my’ brain, but with new psychological properties; another has ‘my’ psychological continuity, but a new brain).

**Solving the duplication problem**

Physical continuity theories can solve the duplication problem that faces psychological continuity theories. The Kirk on the planet is not the same person as the person who was onboard ship because his body is not continuous with that person’s body; it has been newly created.

For him to be the same person, teletransportation would have to involve physical continuity. Suppose the teletransporter, instead of destroying Kirk’s body and building a new one, turns Kirk’s body into energy, beams that energy to the new location, and rebuilds his body from the energy. In this way, teletransportation involves not just psychological continuity, but physical continuity as well.

In this case, the teletransporter can’t malfunction in the way described above – it can’t create two bodies out of the energy of just one body. To build a second body would require new energy; but then we can say, whichever body was created out of new energy is not Kirk, but a duplicate of him.

**Physical and Psychological Continuity Together Are Necessary and Sufficient for Personal Identity**

Our discussion so far has suggested that psychological properties alone are not enough (teletransportation), but also that brain continuity alone is not enough (brain erasing). If we combine both conditions, we solve the objections raised. Perhaps personal identity requires both psychological and physical continuity.

However, there is a problem facing any theory that invokes brain continuity. Suppose members of an alien race exhibited all the characteristics associated with personhood (see the handout on this). However, they don’t have brains. In fact, they don’t have any single bodily organ that performs the functions of brains. Surely this doesn’t matter to whether they are persons. Yet according to our theory, they aren’t persons.

There is also a problem facing any theory that invokes psychological continuity. If psychological continuity is necessary for personal identity, then I am not identical with the new-born baby whose body became my body, because that baby did not have a mind that is psychologically continuous with me. Once the baby has memories, forms beliefs, desires and emotions that last over time, then psychological continuity can slowly get going. But before it has psychological properties there is no psychological continuity, so there is no person.
The animal theory solves both these problems. I am, obviously, the same animal as that baby. And the aliens are persons since they are animals, even if they don’t have brains. However, we objected to the animal theory that if my brain was transplanted to another body, I would continue to exist in the new body, even though I would be a different animal.