**Mind-brain type identity theory: objections**

This handout follows the one on ‘Mind-brain type identity theory’. You should read that handout first.

**THE MULTIPLE REALIZABILITY OF MENTAL STATES**

The most famous objection to type identity theory was developed by Putnam. He argues that mental properties are not *identical* to physical properties because the *same* mental property can be related to *different* physical properties. For example, the brain states that relate to pain may well be different in different species, in humans and birds, say, but pain is the same mental state. If this is true, there are creatures who, when they are in pain, have different physical properties from us when we are in pain. Therefore, ‘being in pain’ cannot be exactly the same thing as having a particular physical property. This is the argument from ‘multiple realizability’.

As Putnam presents it, this is an empirical argument, but it is a very plausible one. It becomes yet more plausible when we consider other mental states and non-terrestrial species. If there are aliens, given that they evolved completely separately from us, if they have mental states, it is extremely unlikely that they will have the same physical states as us. But according to type identity theory, to have a particular mental state just is to have a particular physical state. So the theory is making a very implausible prediction.

The argument can also be rephrased as an a priori argument from conceivability:

1. It is conceivable, and therefore possible, for a being with quite a different physical constitution from us to have the same thoughts or sensations.
2. But it is inconceivable, and therefore impossible, for something both to have and not have a certain property.
3. Therefore, mental properties can’t be the same as physical properties.

The identity theorist could respond that we should talk about ‘human pain’, that this is a different property from ‘dog pain’. Or again, if there are intelligent aliens who have thoughts, but different brains, we should talk of ‘human thoughts’ and ‘alien thoughts’. But this doesn’t seem plausible - pain is pain because of *how it feels*; thought is thought because of *what is thought*. A dog and a human being in pain share something in common, which we identify as the mental property ‘being in pain’. If an alien believes that snow is white, and so do I, we have the same type of thought, whatever our physiology.

We can rephrase the argument from multiple realizability in a different way again. It is conceivable that someone has a particular type of mental state without having the brain state with which, identity theory claims, it is identical. Therefore, the mental state can exist in the absence of the brain state. Therefore,
it cannot be the brain state.

(This is not to say that there is no relation between mental and physical properties. It is just to argue that the relation is not identity. For instance, we can accept that mental states are correlated with brain states in human beings, while also allowing that in different species, the same type of mental state is correlated with a different type of physical state.)

THE DIVISIBILITY ARGUMENT

Descartes' argued that the mind cannot be identical to the brain because the mind is not divisible while the brain is.

However, type identity theorists can present the objection that we considered previously, namely that the divisibility argument assumes that the mind is a 'thing' which can be divisible or not. This assumption begs the question against type identity theory, which maintains that the 'mind' should be understood in terms of mental properties possessed by the brain. There are many properties that it does not make sense to talk of as literally spatially divisible or not. For instance, the brain has a particular temperature. 'Being 35°C' is not a spatially divisible property, yet it is a physical property. So even if mental properties are not spatially divisible, they could still be identical with physical properties of the brain.

THE LOCATION PROBLEM

We can, however, develop the thought underlying the divisibility argument.

1. If mental states are identical to brain states, then they must share all their properties in common. This is Leibniz's principle of the indiscernibility of identicals: if 'two' things are really 'one' thing, then the 'two' things must be indiscernible, i.e. you cannot have quantitative identity without qualitative identity.
2. Second, a brain state, understood as the firing of particular neurons in the brain or the existence of certain neural connections, has certain spatial properties. In particular, it has a precise location in space, occurring in a certain part of the brain or as a certain pattern or shape across many parts of the brain. We can also talk about the spatial relations (up, down, left, right) between the neurones involved and therefore between 'parts' of the brain state. We can also talk about the spatial relations between one brain state and another. Brain states of the prefrontal and frontal cortices occur a few inches closer to your forehead than brain states of the visual cortex.
3. However, mental states do not have such spatial locations. For example, neuroscientists have associated activity in the prefrontal and frontal cortices with thoughts and activity in the visual cortex with visual experience. But my thoughts are not literally a few inches closer to my forehead than my visual experience! Or again, my hopes are not literally about 18 inches above my heart. Mental states are not spatially located in the same sense that brain states are.
4. Therefore, mental states cannot be identical with brain states.

Put more briefly,

1. If mental states are identical to brain states, then they must share all their
properties in common.
2. Brain states have a precise spatial location, and stand in spatial relations to both other spatial locations and other physical objects.
3. Mental states are not located in space, at least in the same way.
4. Therefore, mental states are not brain states.

Smart’s response
Smart considers a version of this objection. His response is that because we don’t currently say that experiences have any spatial properties, attributing spatial properties to them sounds odd. But it is an empirical discovery that mental states, in fact, have these properties. If they are brain states, then they do have a spatial location. The objection begs the question.

We can reply, however, that this can’t be right, because it makes no sense to say that my thoughts are, e.g. closer to my auditory experiences than to my visual experiences, or my fears are two feet away from my stomach. It is simply grammatically incorrect.

Smart replies that this is just a matter of linguistic convention. We could add to our current grammatical rules to allow us to talk of experiences in spatial terms.

Ryle would object that Smart’s solution involves a category mistake. It is not ‘merely’ a linguistic convention that we don’t talk about the spatial location of thoughts or visual experiences. We should no more accept such claims than the claim that the number ‘4’ is a green triangle. This can’t be a matter of empirical discovery, because numbers are not the kind of thing that can take shape. Likewise, mental states are not the kind of thing that can have precise spatial locations. We might want to say that there is a correlation between a particular mental state and a brain state that has a spatial location. But this doesn’t show that the mental state itself is spatially located.

The identity theorist can reply that we should change our understanding of what ‘makes sense’ on the basis of scientific discoveries. For instance, they might argue that the correlation between mental states and brain states is best explained by their identity. If we reject type-identity theory, our metaphysics becomes more complicated - we cannot reduce mental properties to physical properties.