

TOPIC 3

Identity Theory

Background: materialism

Materialism is the theory that matter alone exists. It implies a denial of the existence of minds and immaterial states (as well as spirits and divine beings, in so far as these are taken to be immaterial). It was proposed by the ancient Greek atomists (Democritus and Epicurus), but materialists of the modern era include La Mettrie (1709-1751) and Pierre Cabanis (1757-1808).

The terms ‘materialism’ and ‘physicalism’ are often used interchangeably in philosophy of mind, but sometimes the former is used in a more inclusive way than the latter.

Identity Theory

Identity theory, as well as functionalism (we will look functionalism in the next session), are both forms of *reductive materialism*; they try to characterise mental states in non-mental terms. Identity theory holds that mental states are nothing more than neurophysiological states / physical states. From this it can be seen how the problems faced by the dualist are avoided. There is no

separate, distinct mental substance, and so there is no problem of interaction. Identity theory explains the interaction of mind and body as the interaction of physical processes in the brain and parts of the body via the nervous system. Identity theorists argue that it is by means of scientific research that identities between mental events, like the experience of pain, and processes in the nervous system, can be discovered.

An identity theorist might hold:

S feels pain if and only if S's C-fibres are firing.

S believes that John is in Cardiff if and only if S's Neuron No.12 is activated.

These could be expressed as identities between individual states:

S feeling pain = S's C-Fibres firing.

S believing that John is in Cardiff = S's Neuron No.12 being activated.

Or, by indicating property identities:

Feeling pain = having C-Fibres firing.

Believing John is in Cardiff = having neuron No. 12 activated.

(Carroll and Markosian, *An Introduction to Metaphysics*
(CUP, 2010), p.145.)

Some objections

1. How can we know that others have conscious minds at all? You cannot observe another person's state of mind. There is the possibility of zombies, creatures identical to us in every material respect, but altogether lacking conscious experiences. The apparent conceivability of zombies has convinced philosophers like Chalmers that there is an unbridgeable *explanatory gap* between material qualities and the qualities of conscious experience (Chalmers, 1996). Zombies are a counterexample to physicalism in general.

However, Kirk has argued for the impossibility of physically identical Zombies. If the supposed zombie has all the behavioural and neural properties ascribed to it by those who argue for the possibility of zombies against materialism, then the zombie is conscious and so not a zombie (Kirk, 1999).

2. I can know I'm in pain without knowing anything about my brain state. This would not be possible if pain and its brain state was the same thing. But...

... the fact that I can know the oven is hot without knowing that the mean molecule kinetic energy is high does not show that it is false that the mean molecule kinetic energy is high. Likewise, pain might be a brain state, even though I don't know about that brain state.

Putnam claims that the objection misunderstands the argument. What the mind-brain identity theory does is reduce pain to a brain state, in a similar way that temperature can be reduced to mean molecular kinetic energy. Supporters of the theory are not saying that pain is the same as being in a certain pain state. We can allow statements of the form 'pain is A', where 'pain' and 'A' do not have the same meaning (Putnam, 2008, p.258).

3. The multiple realisability argument:

(1) The identity theory says that every mental state is identical with some human neurophysiological state.

(2) If so, then it is impossible for a creature to be in a particular mental state if the creature cannot be in the corresponding neurophysiological state.

(3) However, it seems at least possible that there could be beings that had mental states without having a human

physiology: for example, extraterrestrial intelligences, or computers with AI programs, or creatures like octopi that have a very different evolutionary history than we do.

(4) The possibility of there being such creatures shows that the consequence of identity theory, i.e. (2), is implausible. As such, we should reject the identity theory. (For a discussion of this argument see Putnam, 2008, p.260).

To put it another way, why should we think that the only way something could have desires, beliefs, pains, etc, is if it is in some sort of neurophysiological state? It seems plausible that mental states could be multiply realized (realized by many different sorts of material properties).

See the lecture video to find out about the benefits of identity theory.

Bibliography

- R. Kirk, R., 'Why There Couldn't be Zombies', *Proceedings of the Aristotelian Society*, Supplementary Volume, 73, 1999, pp. 1-16
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- Julien Offray de La Mettrie, *Man a Machine* [1748], *Machine Man and Other Writings*, ed. Ann Thomson (CUP, 1996).